



BUILDING CONSENT NUMBER 240378

Section 51, Building Act 2004

Form 5

The Building

Street address of building:	8 Palm Avenue, Nelson
Legal description of land where building is located:	Lot 1 DP 9002
Building name:	
Location of building within site/block number:	
Level/unit number:	

The Owner

Name of owner:	Prae Joo
Mailing address:	8 Palm Avenue, Stoke, Nelson 7011
Street address/registered office:	
Phone number:	
Mobile:	022 417 5468
Email:	jamesjoo114@gmail.com
First point of contact:	Agent

The Agent

Name of agent:	Chris Pyemont
Mailing address:	3 Wensley Road, Richmond 7020
Phone number:	
Mobile:	021 0278 4729
Email:	chris@cparchitects.nz

Building Work

The following building work is authorised by this building consent: Construct Bathroom in Existing Garage
--

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

This building consent is subject to the following conditions:

This building consent is subject to section 90 of the Building Act 2004: agents authorised by the building consent authority for the purposes of this section are entitled, at all times during normal working hours or while building work is being done, to inspect (a) land on which building work is being or is proposed to be carried out; and (b) building work that has been or is being carried out on or off the building site; and (c) any building.

Compliance Schedule

A compliance schedule is not required for the building.

Attachments

Copies of the following documents are attached to this building consent:

- Advice Notes
- Required Inspections and Documentation



Manager Building

Mark Hunter

On behalf of Nelson City Council

Date: **26 July 2024**



ADVICE NOTES BUILDING CONSENT 240378

This building consent is subject to the following advice notes:

In accordance with section 52 of the Building Act 2004, this building consent will lapse 12 months from the date of issue unless building work has commenced or an extension to this period has been arranged.

Site Safety: Please ensure all appropriate site safety measures are provided throughout the contract works to comply with NZ Building Code Clause F5 and all occupational safety and health requirements.



REQUIRED ITEMS FOR BUILDING CONSENT 240378

Before Council can issue a code compliance certificate, you will need to ensure the following inspections are completed and that you have provided the documentation requested.

Please phone: 03 546 0334 and leave a message on the inspection booking line detailing the required inspection, date & time, contact details and LBP details and we will text confirmation of your booking or ring if required.

Please apply for the code compliance certificate via the simpli portal.

Inspections Required

No	Inspection Name	Notes
1	IE05 Underslab drainage	Underslab drainage. Sewer or stormwater drains under approved test prior to filling any trenches.
1	IE06 Drainage sewer or stormwater	Sewer or stormwater drains under approved test prior to the filling of any trenches.
1	IF06 Residential alterations structural pre-line	IF06 (Residential Alterations Only) Structural and pre-lining when any insulation is in place, including any plumbing works under test.
1	IF14 Residential post line first layer	Post lining, when all brace elements/first layer fire wall fixings, tiled shower areas are complete prior to the installation of skirtings, cornice, waterproof membranes and prior to wall stopping.
1	II06 Final - Residential	Residential final inspection. When all building consent requirements are complete.
5	Total Inspections	

Documentation

The following documents must be provided before Council will book a final inspection.
All documents must clearly state the building consent number and site address.

Documents Required	Notes
Code compliance certificate application (form 6)	Apply for code compliance certificate through the simpli portal
Pressure test certificate	Licensed certified plumber to provide.
As built drainage plan	Registered drainlayer to provide a colour as built drainage plan to Council, which includes a north point.
Energy works certificate - electrical	Registered electrician to provide Certificate of Compliance (CoC).
Energy works certificate - gas	Certifying gasfitter to provide Certificate of Compliance (CoC).



Collaborating with other users in the Simpli portal

The collaboration feature allows multiple people to work on a submission together.

Select a submission or consent

Submission Ref	Building Consent Authority	Application
NELSON001086	Nelson City Council	Building Consent - Form 2

Go to the **Collaborators** section

Click the 'Invite Collaborator' button

Collaborator	Role	Email	Permission	Invite Status	Notifications?
No items to display					

Enter the email address of the person being invited OR select a person previously invited from the dropdown list

Choose the permission you want your collaborator to have

Choose a role for your collaborator

Decide if you want your collaborator to receive notifications about the submission

Click 'Invite' to send your collaboration invite

Invite Collaborator

Type in the collaborators email address

Or select a previous collaborator

Permission

☐ View Only

☒ View & Edit

☐ View, Edit & Manage

Role *

-- None --

Subscribe to Notifications?

☐ Yes ☒ No

Invite **Cancel**

An email invite is sent to the person you want to collaborate with.

Your collaborator must have a portal account before being able to accept your invite

If they don't have a portal account they can register on the login page. The link in the email takes them to the right page

The person you invited can accept or decline the invitation

You will receive an email notification of your collaborator accepting your invite



Collaboration Invite

Application:	Building Consent - Form 2
Status:	Draft
Submission Ref:	NELSON03353
BCA:	Nelson City Council
Site Address:	Fifeshire Crescent, Stepneyville

You have been invited by Nelson City Council to collaborate. You are receiving this as you are the owner

Review

Decline

If you don't have an account you'll have to sign up. Once logged on you will need to click the **ACCEPT** button before you gain access to the submission.

If you decline the request a notification will be sent to the person who submitted the request that you have declined.

You can view all your collaborators on the [Collaborators](#) page.

Here you can change the way your collaborator is set up, remove the collaborator, or re-send pending collaboration invitations

Invite Status	Notifications?	
Pending	Yes	 
Accepted	Yes	
Pending	Yes	  
Pending	Yes	  

For more help with the Simpli portal, including a video on adding collaborators, visit <https://simpli.govt.nz/customer-help-home>



Applying for a code compliance certificate in the Simpli portal

Select consent

My Submissions (18)	My Consents (3)	My Collaborations (5)	My Templates	My Arch
Consent Number ▲	Submission Ref ▲	Building Consent Authority ▲	Application ▲	
200357	NELSON001953	Nelson City Council	Blank Form (Testing)	

On the [Summary Details](#) page

Click the '+ Apply for CCC' button

Check the details, then click [Begin](#)

[Summary Details](#) Application Form

+ Apply for CCC

Follow the onscreen instructions

Complete all sections - each section will turn green once all of the required information is input

Yellow sections require more information

Who Owns The Building

Who Is The Applicant

The application can be saved at any point, and returned to later

Save & Close

Draft applications can be deleted from the [Summary Details](#) page

✕ Delete Draft

The application will stay in draft until it is submitted

Code Compliance Certificate - Form 6

Draft

Submitted

Once all sections are green, click [Review & Submit](#) to send the application to Council

Review & Submit

For more help with the Simpli portal, visit <https://simpli.govt.nz/customer-help-home>

LEGEND

BOUNDARY

SS WASTEWATER

FFL +4.0

FFL = FINISHED FLOOR LEVEL
FGL = FINISHED GROUND LEVEL
METRES ABOVE NZVD 2016

HARDSTAND AREA

ZONES

SNOW = N3
EXPOSURE = C
EARTHQUAKE = 2
WIND REGION = A
LEE ZONE = No
TOPO CLASS = T1
GROUND ROUGHNES = Urban
SITE EXPOSURE = Sheltered
WIND ZONE = M

Lot 1 DP 9002
SITE AREA: 607m²

AREAS:

EXISTING HOUSE = 113m²
EXISTING GARAGE = 53.5m²

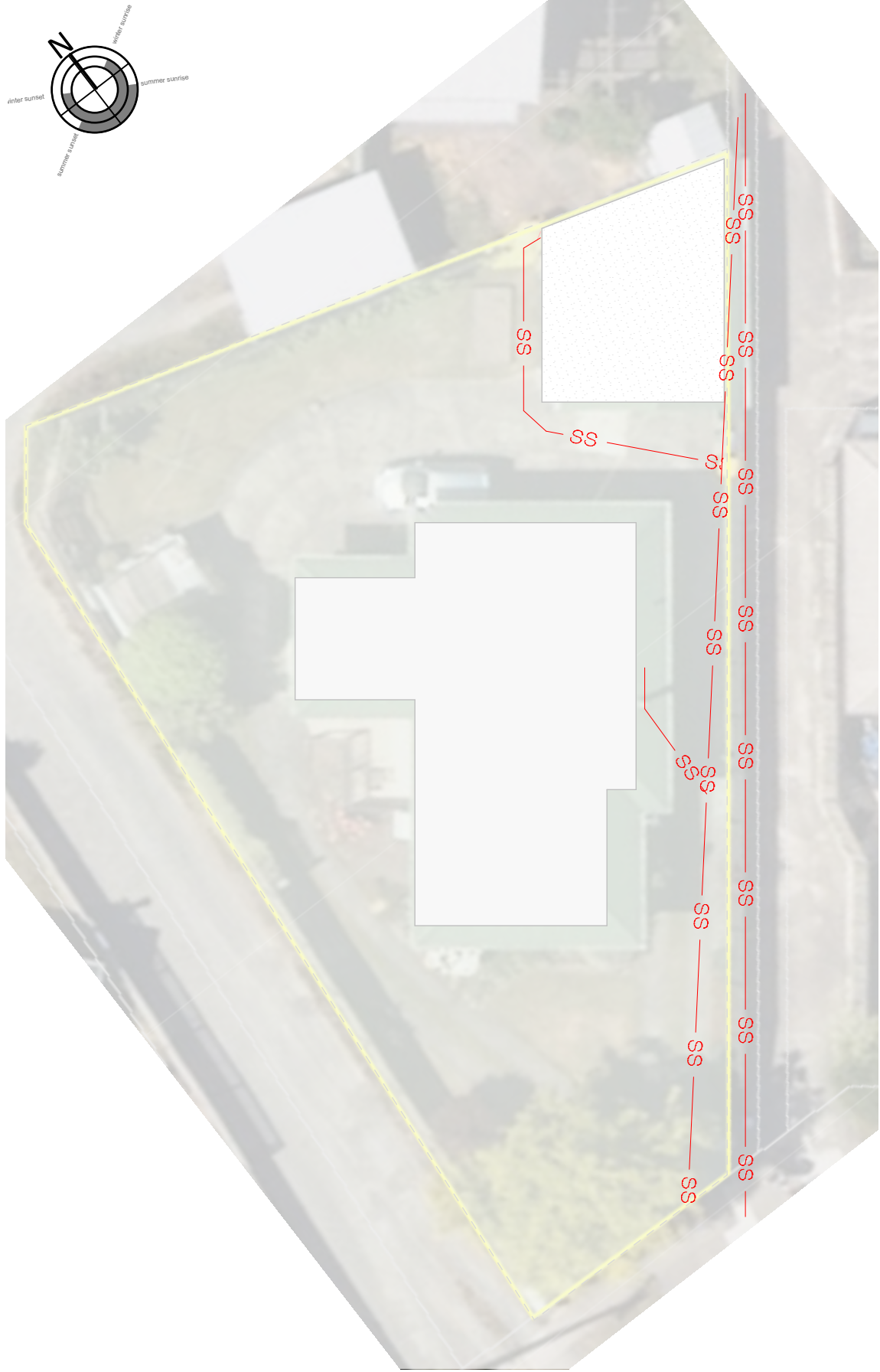
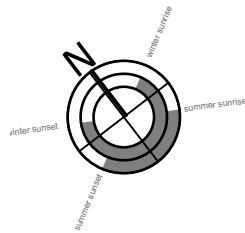
SEDIMENT CONTROL

NO SEDIMENT CONTROL PLAN HAS BEEN PROVIDED DUE TO THE NEGLIGABLE SCOPE OF GROUND WORKS PROPOSED IN THIS CONSENT

SITE (NCC):

ZONE:	RESIDENTIAL
MAX BUILDING COVERAGE:	40%
MAX BUILDING HEIGHT:	7.5m
SETBACKS:	1.5m ROAD/FRONT
(INC GUTTERS AND EAVES)	1m OTHERS (WALL < 12m LONG) (TO AVOID FIRE RATING) 1.5m OTHERS

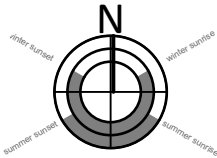
GARAGE SET BACK 1m FURTHER THAN HOUSE IF WITHIN 4M OF ROAD (FRONT YARD)



Site Plan

1:200

BC240378 Nelson City Council



Site Location Plan

1:500

A PRINTED COPY OF THE APPROVED BUILDING CONSENT DOCUMENTS, PLANS AND SPECIFICATIONS MUST BE RETAINED ON SITE AT ALL TIMES.



CHRIS PYEMONT ARCHITECTS

Chris Pyemont: Architect / + 64 21 027 84729
3 Wensley Rd, Richmond, Nelson, New Zealand
chris@cparchitects.nz / www.cparchitects.nz



Te Kāhui
Whaihangā
NZIA Practice
2020

Check all dimensions on site.
Do not scale from plans. If in
doubt consult architect. Read in
conjunction with all consultants
drawings.

DETAIL DESIGN

BATHROOM
JOO, JAMES
8 PALM AVENUE STOKE

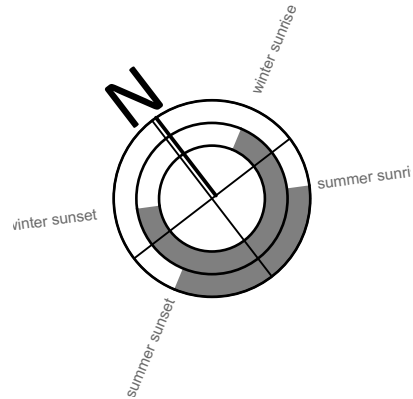
Site Plan

ISSUED: 1/7/2024

SCALE: @ A3

SHEET C1

JOB 188



LEGEND

- INTERCONNECTED SMOKE ALARM
- WATER SUPPLY
- METER BOX
- DIST BOARD

INSULATED TIMBER FRAMED WALL

TIMBER FRAMED WALL

CONCRETE MASONRY

CONCRETE MASONRY WITH 45mm STRAPING AND INSULATION

DPM CONCRETE

TIMBER FRAMING

ALL INTERNAL WALLS TO BE FRAMED WITH 90x45 SG8 STUDS @ 600 CRS NOGS @ 1200 CRS 2.1m CEILING.

DOOR AND WINDOW NOTES

GLAZING TO CONFORM TO NZS 4223.

STRUCTURAL FIXINGS

NAIL PLATES - CLOSED AND ROOF SPACES = CONTINUOUSLY COATED GALVANIZED STEEL

WIRE DOGS & BOLTS - CLOSED AND ROOF SPACES = HOT-DIPPED GALVANIZED STEEL

ALL OTHER STRUCTURAL FIXINGS - CLOSED = MILD STEEL (UNCOATED, NON-GALVANIZED)

EXPOSURE ZONE B & C

ALL STEEL CONNECTIONS IN CONTACT WITH H3 TREATED TIMBER EXPOSED TO ATMOSPHERE WITHIN 600mm OF GROUND TO BE STAINLESS STEEL. ALL ENCLOSED STEEL CONNECTIONS TO BE GALV STEEL

SCHEDULE OF TIMBER TREATMENT

H1.2. FRAMING PROTECTED FROM WEATHER, ABOVE GROUND, AND ALSO EXPOSED TO GROUND ATMOSPHERE.

- ROOF AND CEILING FRAMING
- INTERIOR WALL FRAMING
- WALL FRAMING

H3.2. FRAMING EXPOSED TO WEATHER ABOVE GROUND WITH A RISK OF TRAPPED WATER

-EXTERNAL RAFTERS AND BEAMS
ALL WALL FRAMING SHALL BE PRESERVATIVE TREATED H1.2 UNLESS OTHERWISE STATED ALL OTHER FRAMING TIMBER (INCLUDING FLOOR, ROOF, DECK, ETC.) SHALL HAVE A MINIMUM GRADE OF SG8.

WORK TO BE COMPLETED UNDER SCHEDULE 1 OF NZ BUILDING ACT

EXEMPTED BUILDING WORK: BUILDING WORK FOR WHICH BUILDING CONSENT NOT REQUIRED REFER TO ITEMS HIGHLIGHTED WITH DASHED RED LINE

PART 1.1 GENERAL REPAIR, MAINTENANCE AND REPLACEMENT OF BUILDING PARTS

PART 1.2 PENETRATIONS THROUGH BUILDING COMPONENTS

PART 3.3 INTERNAL WALLS AND DOORS IN EXISTING BUILDING

PART 3.4 INTERNAL LININGS AND FINISHES IN EXISTING DWELLING

PART 5.1 THERMAL INSULATION

WET AREA WALL LININGS

WET AREAS WALL LININGS FINISHED WITH SEMI-GLOSS, OR GLOSS PAINT. AS PER ACCEPTABLE SOLUTION E3/AS1 3.1.2 WALLS (c).
BATH TO HAVE 150mm HIGH CERAMIC OR STONE TILE SURROUND HAVING 6% MAXIMUM WATER ABSORPTION, WATERPROOF GROUTED JOINTS, AND BEDDED WITH AN ADHESIVE SPECIFIED BY THE TILE MANUFACTURER AS BEING SUITABLE FOR THE TILES, SUBSTRATE MATERIAL AND THE ENVIRONMENT OF USE.

LIGHTING & ELECTRICAL

ELECTRICAL AND LIGHTING LAYOUT TO BE AGREED WITH CLIENT ON SITE
RECESSED DOWNLIGHTS

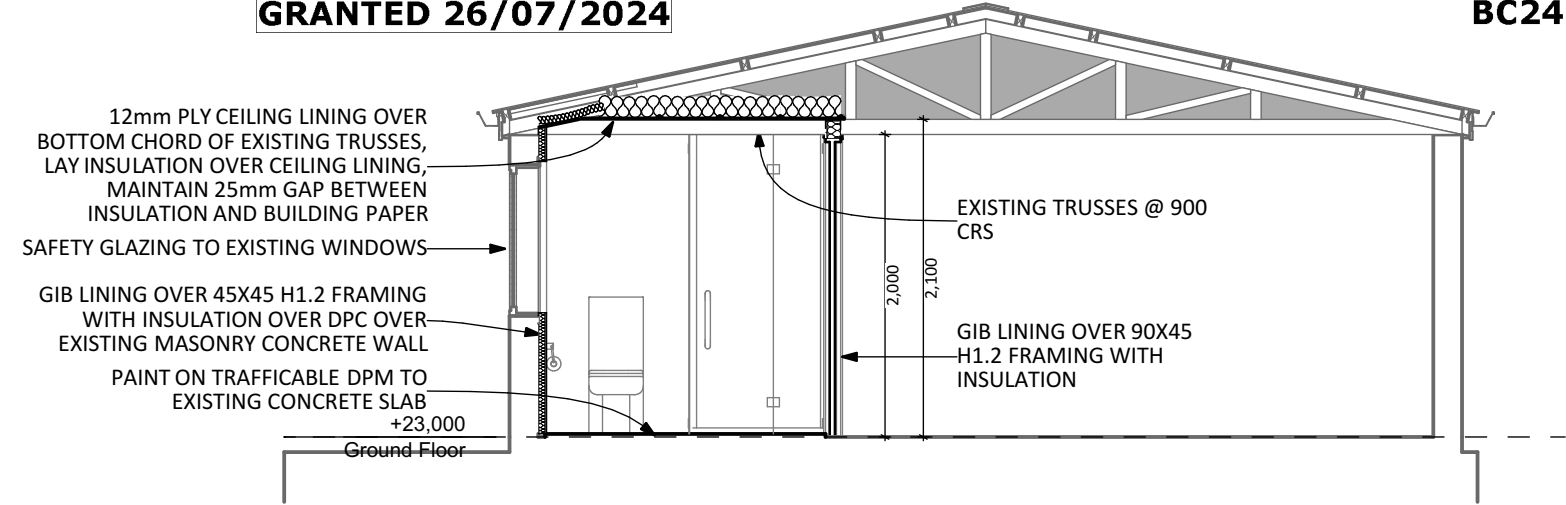
ALL RECESSED LUMINAIRES TO BE I.C. RATED
ENTRANCE LIGHTING

EXTERNAL LIGHTING TO ENTRANCE TO COMPLY WITH D1/AS1

FLOORING / DPM

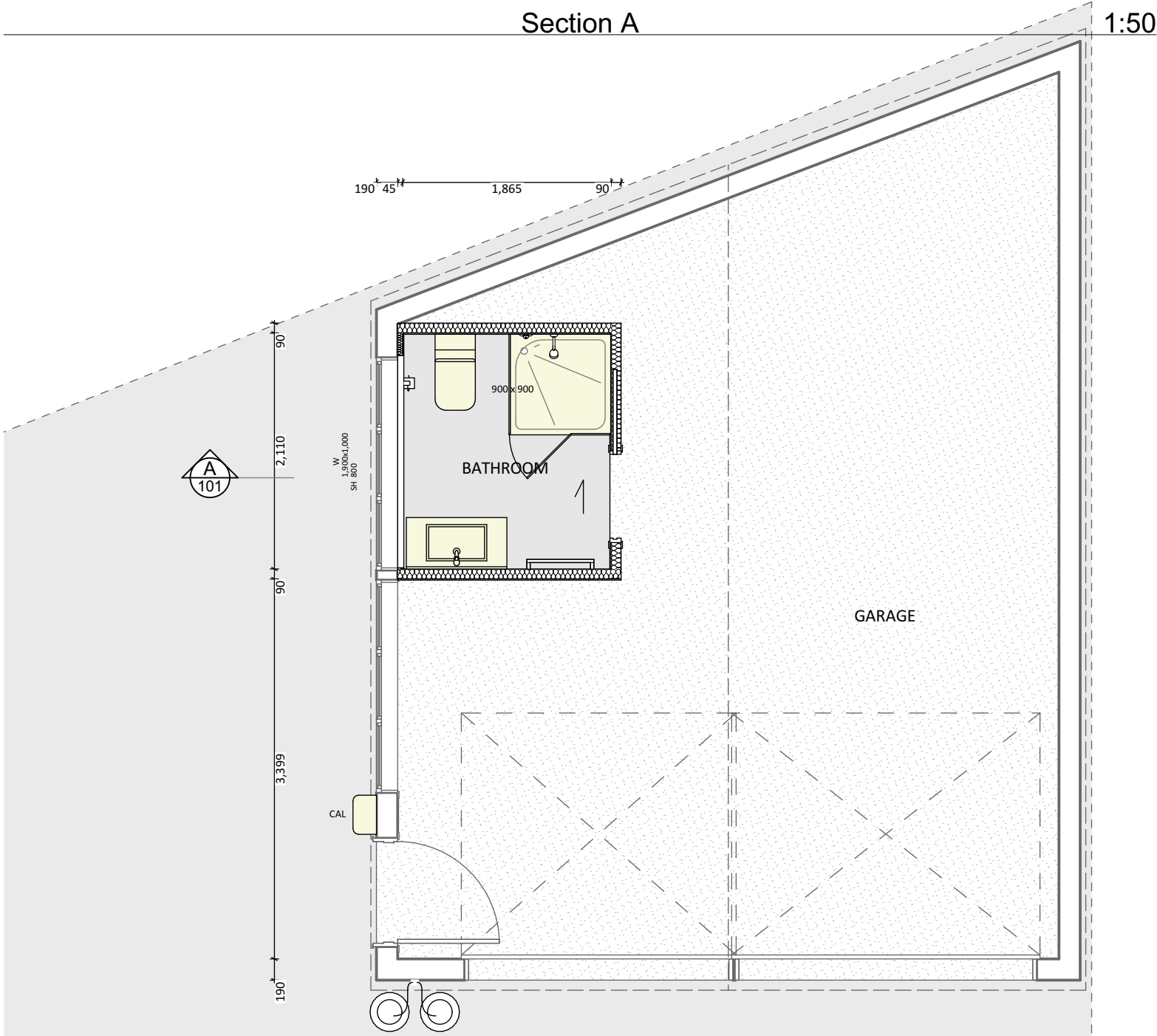
ALL FLOORING AND JOINTS IN FLOORING WITHIN 1.5m OF ANY TAP SHALL BE IMPERVIOUS AND SEALED TO COMPLY WITH G3/AS1 NZBC
ARDEX DPM SYSTEM

ALL CHANGE IN DIRECTIONS (FLOOR TO WALL, WALL TO WALL ETC) REQUIRE A SMALL BEAD OF ARDEX RA88 EPOXY TO CREATE A SMALL COVE BEFORE APPLYING ARDEX WPM 300. THE CHANGE IN DIRECTION AREAS MUST ALSO HAVE ARDEX DECKWEB INCLUDED IN TO THE FIRST COAT OF THE ARDEX WPM 300. THE ARDEX WPM 300 IS APPLIED TO THESE AREAS WHILST STILL WET THE ARDEX DECKWEB TO BE PLACED INTO THE MEMBRANE AND WETTED OUT. SECOND COAT OF THE ARDEX WPM 300 SHOULD BE INSTALLED AND FINISHED IN THE OPPOSITE DIRECTION FROM THE FIRST, E.G. FIRST COAT EAST WEST DIRECTION SECOND COAT NORTH SOUTH DIRECTION. THERE SHOULD BE NO PENETRATIONS OF THE FINISHED MEMBRANE FOR INCLUDING FIXINGS FOR JOIST, TOP/BOTTOM PLATES, AND STRAPPING. THIS SHOULD BE GLUE FIXED USING ARDEX RA88 STRUCTURAL REPAIR EPOXY.



Section A

1:50



Proposed Floor Plan

1:50



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2020

Check all dimensions on site.
Do not scale from plans. If in
doubt consult architect. Read in
conjunction with all consultants
drawings.

DETAIL DESIGN
BATHROOM
JOO, JAMES
8 PALM AVENUE STOKE

LEGEND

TIMBER FRAMED WALL TO REMAIN

ITEM TO BE REMOVED (ie. WALL, FLOOR, WINDOW etc.)

DEMOLITION NOTES

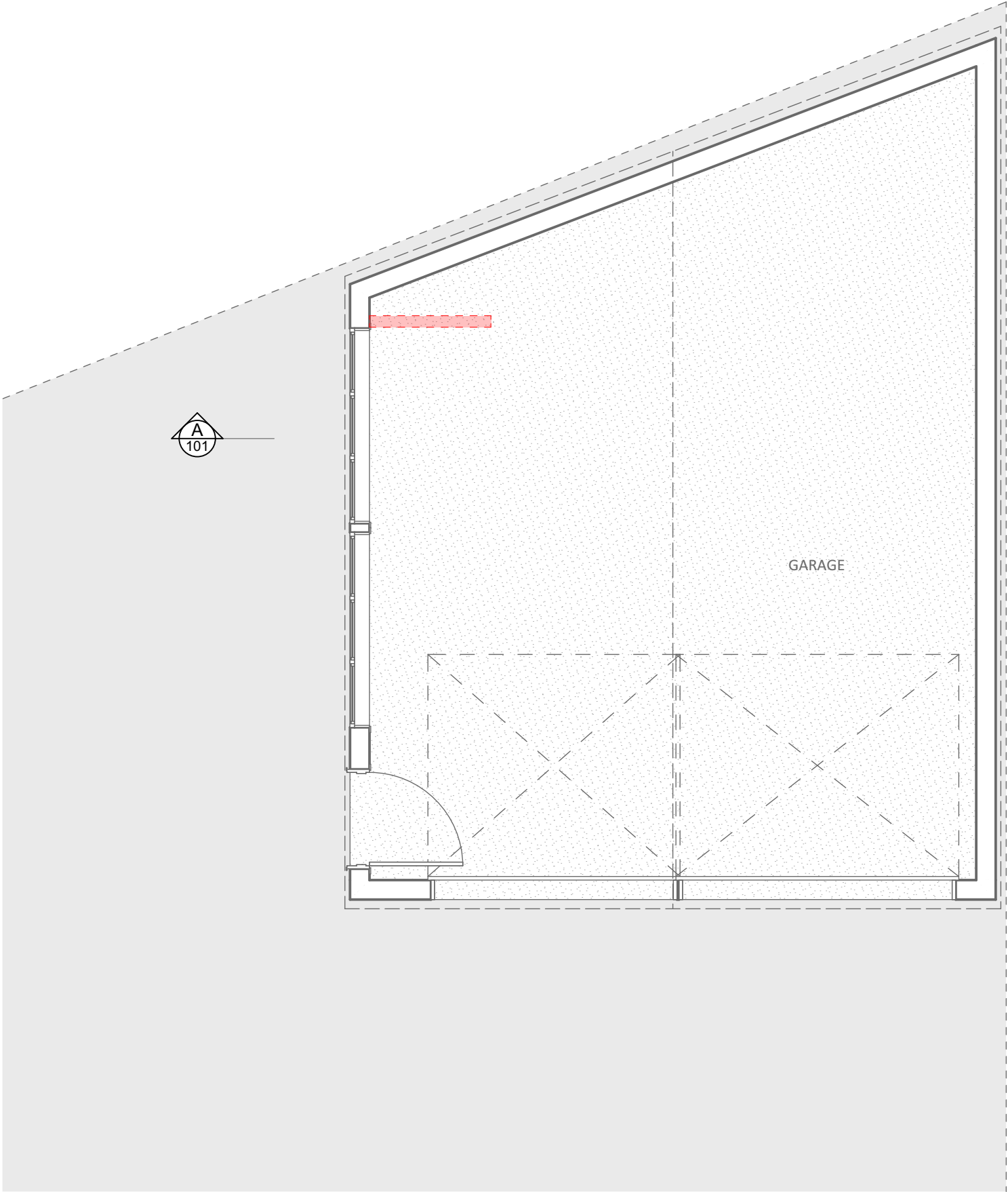
ENSURE TO PROP ALL STRUCTURES TEMPORARILY THAT REQUIRE SUPPORT DURING THE PROCESS OF DEMOLITION.
CHECK WITH OWNER FOR ANY ITEMS TO BE SALVAGED AND/OR RE-USED. ENSURE SAFE, SECURE AND WEATHERPROOF STORAGE FOR ITEMS TO BE RE-USED OR SALVAGED.
CONTRACTOR IS RESPONSIBLE FOR CORRECT & APPROPRIATE DISPOSAL OF ITEMS FOR DEMOLITION.
ENSURE APPROPRIATE SITE SAFETY MEASURES ARE IN PLACE FOR DEMOLITION HAZARDS
MAKE GOOD ALL REMAINING CONSTRUCTION ELEMENTS AT DOWNTAKINGS

ASBESTOS

IT IS UNLIKELY THAT THERE IS ASBESTOS ONSITE HOWEVER IN THE EVENT THAT ASBESTOS IS DISCOVERED IN AREAS OF DEMOLITION ON SITE ALL APPROPRIATE MEASURES WILL BE TAKEN TO ENSURE IT IS SAFELY REMOVED IN LINE WITH HEALTH AND SAFETY AT WORK (ASBESTOS) REGULATIONS 2016

GRANTED 26/07/2024

BC240378 Nelson City Council



Demolition Plan

1:50



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NZIA Practice
2020

Check all dimensions on site.
Do not scale from plans. If in
doubt consult architect. Read in
conjunction with all consultants
drawings.

DETAIL DESIGN
BATHROOM
JOO, JAMES
8 PALM AVENUE STOKE

Demolition Floor Plan
ISSUED: 1/7/2024
SCALE: @ A3
SHEET 102

JOB 188

----- WASTE PIPE
----- SS WASTE WATER

⊗ EXTRACT

FFL FINISHED FLOOR LEVEL
FGL FINISHED GROUND LEVEL
GT GULLY TRAP (1 MIN ORG FOR G13)
IL INVERT LEVEL
IP INSPECTION POINT
LID LID LEVEL
TV TERMINAL VENT
AAV AIR ADMITTANCE VALVE
SS SANITARY SEWER

GT GL = - 0.75 / IL = - 1.15
DP GL = - 0.75 / IL = - 1.15

PLUMBING NOTES
EXTRACT FANS AND DUCTS

SHOWERS AND BATHS FLOW RATE = 25L/sec

VALVES

TEMPERING VALVE TO BE INSTALLED TO CONTROL TEMPERATURE DELIVERY OF HOT WATER
PRESSURE REDUCING, RELIEF VALVES AND TEMPERING VALVES TO BE INSTALLED
DOUBLE NO-RETURN VALVE TO PREVENT BACKFLOW CONTAMINATION OF POTABLE WATER SUPPLY
AIR ADMITTANCE VALVE TO BE LOCATED WHERE ACCESSIBLE

PENETRATIONS

ALL PENETRATIONS THRU EXTERNAL FABRIC OF GARAGE ARE LESS THAN 100mm IN DIA THUS ARE TO SCHEDULE 1 OF NZ BUILDING ACT

PIPE SIZE & GRADIENT

AS PER G13 AS1&2 NZBC

100Ø UPVC SEWER	MIN	GRADIENT	1:100.
BRANCH DRAINS TO SOIL FIXTURES			1:60
100Ø UPVC STORMWATER	MIN	GRADIENT	1:100.
150Ø UPVC STORMWATER TO TYPE 2 SUMP	MIN	GRADIENT	1:100.
SANITARY FIXTURE OR APPLIANCE	DISCHARGE PIPE (mm)	GRADIENT MIN (mm)	
Basin / Vanity	40Ø	1:40	
Bathtub	40Ø	1:40	
Shower	40Ø	1:40	
Water Closet Pan	100Ø	1:40	

CONCRETE STRENGTH

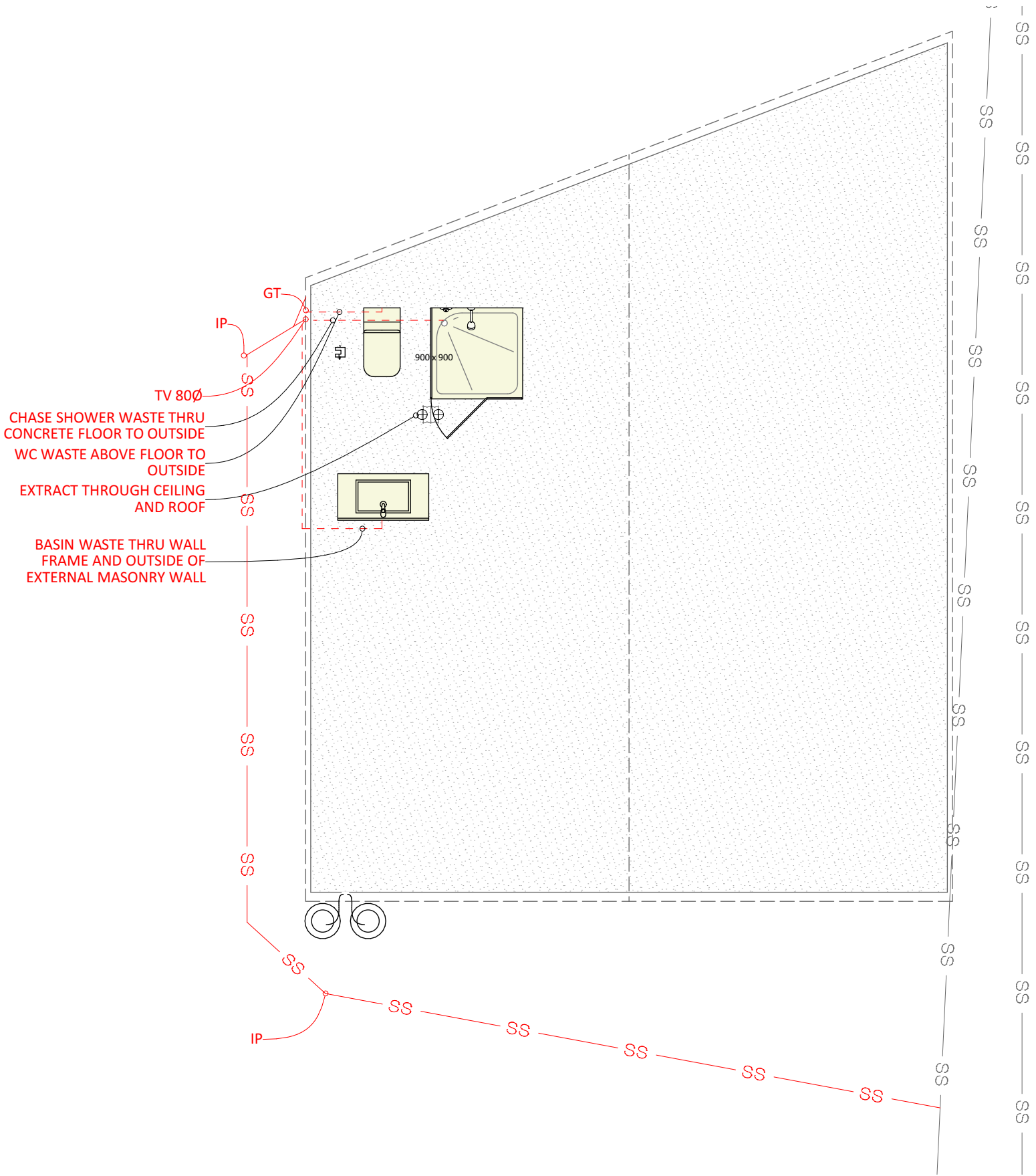
THE MINIMUM SPECIFIED 28-DAY CONCRETE STRENGTH SHALL BE:
(A) 17.5 MPa FOR UNREINFORCED CONCRETE APPLICATIONS, OR REINFORCED CONCRETE EITHER NOT EXPOSED TO WEATHER OR EXPOSED TO THE WEATHER IN ZONE B AS NOTED ON SITE PLAN.

STEEL REINFORCING COVER

SE62 FLOOR SLAB REINFORCING SHALL EXTEND TO A MINIMUM EXTERNAL COVER OF:
(A) AGAINST GROUND 75mm
(B) AGAINST FORMWORK 50mm
(C) TOP COVER TO MESH 30mm
STEEL REINFORCING MESH SHALL HAVE A COVER OF 30mm MINIMUM FROM THE TOP SURFACE OF THE GROUND SLAB AND SHALL BE PLACED IN SUCH A MANNER AS TO AVOID DAMAGE TO THE DPM ON PROPRIETARY CHAIRS. REINFORCING MESH SHALL COMPLY WITH AS/NZS 4671

LPG GAS BOTTLES

TO BE INSTALLED BY A SUITABLY QUALIFIED PERSON TO G10/AS1 OR AS/NZS5601.1 AND AS/NZS 5601.2.GAS BOTTLES TO BE SEISMICALLY RESTRAINED WITH CHAINS FIXED TO WALLS WITH STEEL BRACKETS AND TO BE INSTALLED ON A FIRM, LEVEL AND NON-COMBUSTABLE BASE



Plumbing Plan

1:50



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2020

Check all dimensions on site.
Do not scale from plans. If in
doubt consult architect. Read in
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DETAIL DESIGN
BATHROOM
JOO, JAMES
8 PALM AVENUE STOKE

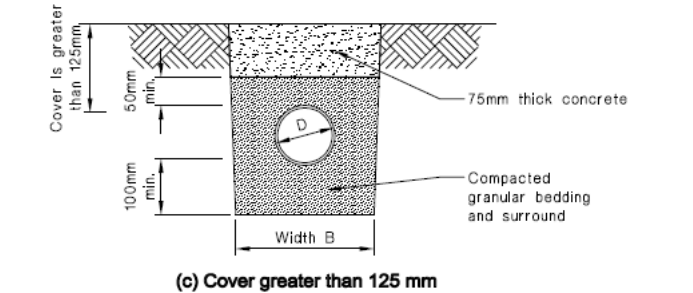
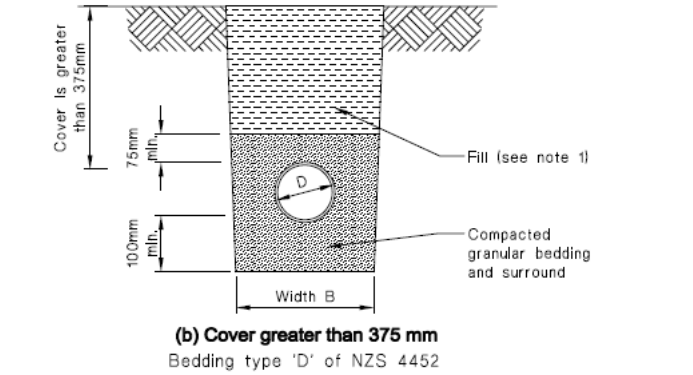
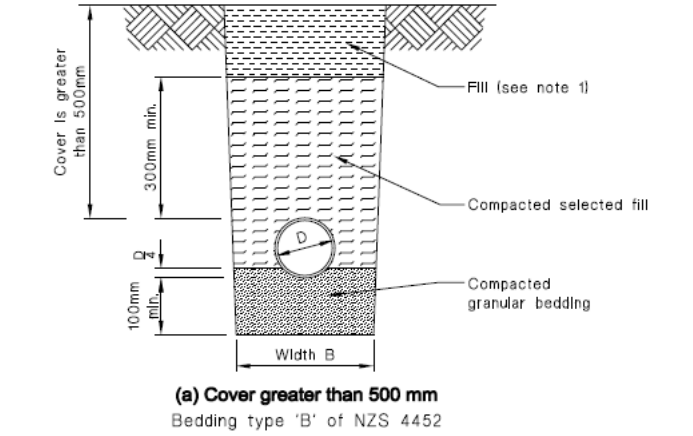
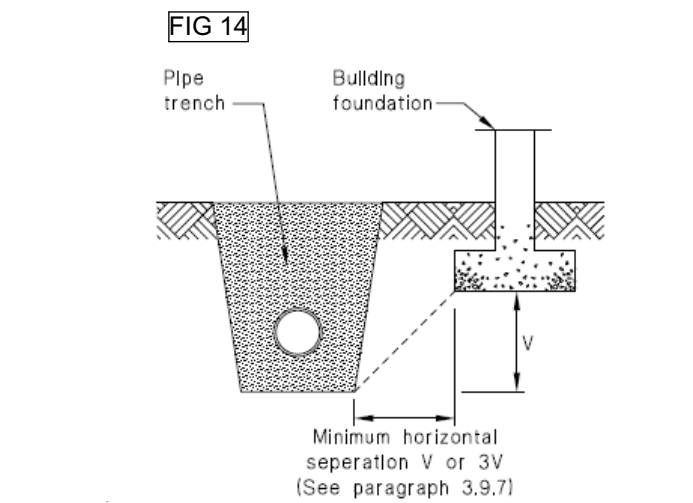
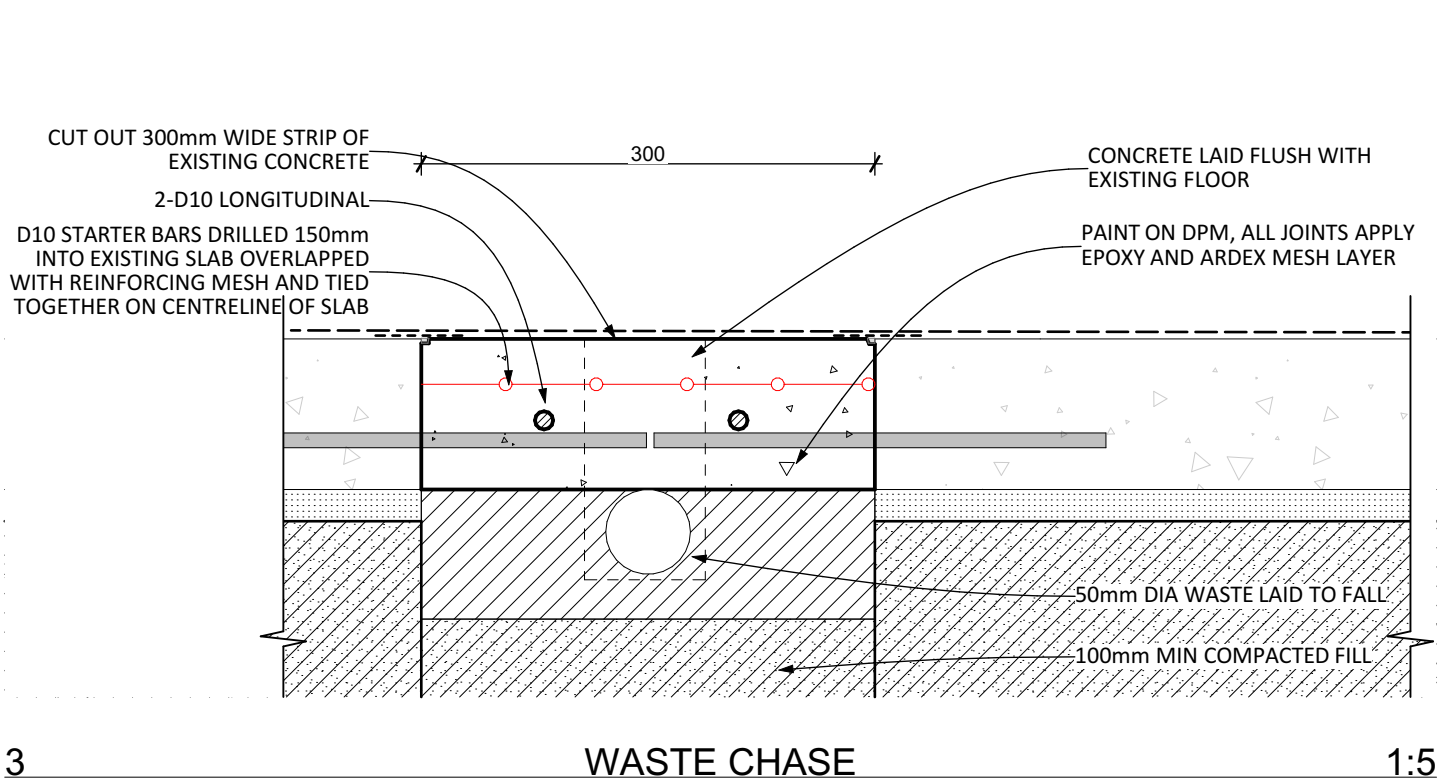


FIG 14



5 ARDEX JUNCTION 1:5

6 VANITY TOP 1:5



6 VANITY TOP 1:5

WET AREA WATERPROOFING

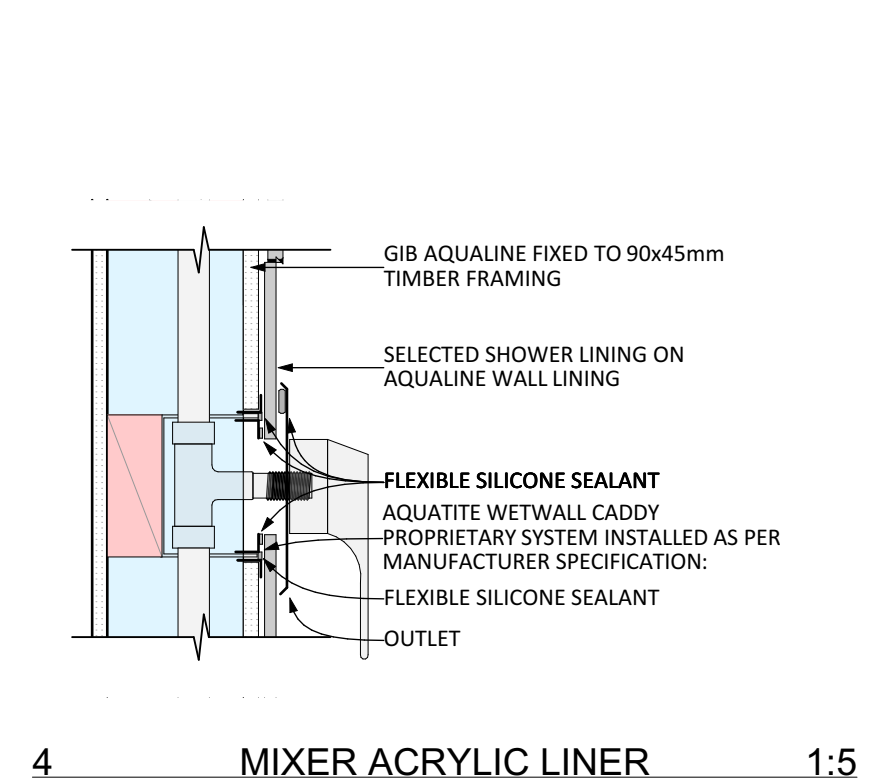
BOND BREAKER - CLASS 3 MEMBRANE

SHEET TITLE

DWG NO. AWW-12

DATE 06.05.2019

SCALE 1:1 @ A4



7 WASTE CHASE 1:5

WET AREA WATERPROOFING

BOND BREAKER - CLASS 3 MEMBRANE

SHEET TITLE

DWG NO. AWW-12

DATE 06.05.2019

SCALE 1:1 @ A4

8 WASTE CHASE 1:5

9 WASTE CHASE 1:5

10 WASTE CHASE 1:5



CHRIS PYEMONT ARCHITECTS

Outline Specification: New Bathroom

Address: 8 Palm Avenue, Stoke

1 July 2024

A PRINTED COPY OF THE APPROVED
BUILDING CONSENT DOCUMENTS,
PLANS AND SPECIFICATIONS MUST
BE RETAINED ON SITE AT ALL TIMES.



Selections

1. Exterior Construction and Finishes

Construction and demolition waste and recycling management

- Recycling management plan to be implemented
- All construction waste to be separated for recycling
 - Metal; Sims
 - Gib board: Nelson recovery centre
 - Cardboard: Richmond recovery centre
 - Treated timber: Habitat for Humanity
 - Glass: 5R Solutions
- All subcontractors are responsible for their own waste and recommended that they review with supplier's minimisation of packaging; recycled or re-usable. Provide confirmation at time of tendering. Refer following examples.
 - Resene paint
 - Marley PVC
 - Nexan electric reels
- Substitute plastic covers with recyclable or re-usable tarpaulins/covers for protecting building materials and construction or request building supply company to accept clean folded covers for recycling ie currently available with ITM
- Audit construction on regular basis to ensure all recycling protocols are being met in recycling management plan

Excavation

- Trenching for waste water
- Erosion protection: catchment pits, swales, stabilised entrance, driveway drain as required

Demolition

- Items for re-use
 - Hardware
- Items to be returned to owner
 - To be confirmed on site with owner

Structure

- Internal walls
 - 90x45 SG8 H1.2 studs @ 600 crs, H3.2 bottom plates
 - 45sq SG8 H3.2 strapping

External Cladding

- Walls
 - General
 - Thermakraft Supercourse 500 DPC



2. Interior Construction, Fittings and Finishes

Floor

- Concrete
 - 100mm Reinforced concrete slab, SE62 mesh 20 MPa
 - 150mm compacted hardfill
 - 25mm crusher dust / sand blinding
 - DPM Thermathene Black DPM
 - DPC Thermathene Supercourse

Wall lining

- 10mm Gib wall lining to workshop side
- 10mm Gib aqualine to all bathroom side
- Level 4 finish

Ceiling lining

- 12mm UT Ecoply B face

Floor coverings

- Ardex WPM 300

Tiling

- Ardex WPM002 water proofing behind tiling
- Bathroom
 - Tiled splashback to vanity

Interior doors

- Solid core paint finish: 1980 high leaf
- H1.2 radiata clear jambs
- Hardware
 - To client selection
 - Locking hardware to all bathrooms
 - Flush pulls to cavity sliders

Trims

- 60x12 H1.2 radiata clear skirting paint finish
- 40x12 H1.2 radiata clear architrave paint finish

Hardware

- To client selection

**Insulation**

- Pink Batts Wall
 - 90mm R2.8 @ 600/400 crs or
- Pink batts Ceiling superbatts
 - R6.0 245mm 460mm wide
- Recticel PIR 40mm strapped wall

Glass

- Toughened safety glass
 - Bathroom mirrors 4mm 1100 High and width of vanity
 - Retrofit existing windows
- 11mm toughened safety glass shower screens with aluminium channel fixings
 - Ensuite to have fixed panel at each end with sliding door – floor to ceiling

Finish

- Paint finish throughout
- Interiors
 - Plasterboard walls non-wet area:
 - Prep - Refer to [SIPDS No. 1](#) Interior Wallboard and [Spec Sheet 1:1/1](#)
 - 1 coat of Resene Broadwall Waterborne Wallboard Sealer [D403](#)
 - (Option A) 2 coats of Resene SpaceCote Low Sheen [D311](#) – This option for additional durability/wipe ability.
 - (Option B) 2 coats of Resene Zylone Sheen - low sheen [D302](#)
 - Plasterboard walls and ceilings – wet area:
 - Prep - Refer to [SIPDS No. 1](#) Interior Wallboard and [Spec Sheet 1:1A/1](#)
 - 1 coat of Resene Waterborne Sureseal - pigmented sealer [D42a](#)
 - (Option A) 2 coats of Resene SpaceCote Low Sheen Kitchen & Bathroom [D311K](#) – Low Sheen Option
 - (Option B) 2 coats of Resene Lustacryl Kitchen & Bathroom [D310K](#) – Semi Gloss Option
 - Doors and trims:
 - Prep - Refer to [SIPDS No. 2](#) Timber and [Spec Sheet 2:9/1](#)
 - 1 coat of Resene Quick Dry - Primer Undercoat [D45](#)
 - 2 coats of Resene Lustacryl - semi-gloss waterborne enamel [D310](#)
 - (Option B) 3 coats of Resene Qristal ClearFloor 2K – satin [D506a](#)
 - (Option C) 3 coats of Resene Polythane - moisture cured clear gloss [D53](#) – This option for Hardwood Only

2. Services – TBC by client

**Electrical**

- Waterproof fittings as required to comply with AS/NZS 3000:2000
- 2 x double outlet sockets
- 1 x Extract fan

Lighting

- 24 x LED recessed lights to interior
- 2 x wall mounted updown lights @ entry
- 1 x LED strip light over vanity
- 1 x PIR sensors

Drainage

- Connect to existing wastewater system

Sanitaryware

- Bathroom
 - Proprietary shower with mixer plus shower hose on rail
 - Surface mounted basin on vanity with tapware and chrome bottle trap waste
 - towel rail
 - Back to wall WC

Plumbing

- Install tempering valve. Check water temperature at taps is 50 degrees Celsius or less.
- Pipework
 - Copper or Polybutylene
- Rinnai Infinity



CHRIS PYEMONT ARCHITECTS

General

General

CONTRACT

This general section refers to requirements under which this work will be constructed. This does not form any building contract.

MODS SCHEDULES PRODUCER STATEMENTS

This specification is to be read and followed in conjunction with the drawing set.

Provide Producer Statements for the following: **Waterproofing, Glazing**

SMOKE ALARMS

Contractor is to install where required smoke alarms to comply with building code.

CODES OF CONDUCT

Contractors are to comply with "An Agreement for Contractor Services" and the roles and responsibilities for contractors.

REFERENCED DOCUMENTS

Documents listed below are, when referred to in the text, part of this specification. However, this specification takes precedence in the event of it being at variance with and requiring a higher standard than any cited document.

Acts and Regulations

Building Act 2004

Gas Regulations 1993

Health and Safety act 2015

Electricity Regulations 1997

Plumbers, Gasfitters and Drainlayers Act 1976

New Zealand Electrical Codes of Practice (ECP)

New Zealand Building Code acceptable solutions

B1/AS1 Structure - general

D1/AS1 Access routes

E1/AS1 Surface water

E2/AS1 External moisture

F7/AS1 Domestic smoke alarms

G10/AS1 Piped services - Gas

G12/AS1 Water supplies

G13/AS2 Foul water - Drainage

New Zealand Standards

AS/NZS 1748

Mechanically stress - Graded for structural purposes

AS/NZS 2642

Polybutylene pipe systems

AS/NZS 2269

Plywood - Structural

AS/NZS 2589

Gypsum linings - Application and finishing

AS/NZS 3000

Electrical installations (known as the Australian/NZ Wiring Rules)

AS/NZS 3500.2

Plumbing and drainage - Sanitary plumbing and drainage

AS/NZS 3500.3

Plumbing and drainage - Stormwater drainage

AS/NZS 4129

Fittings for polyethylene pipes for pressure applications

AS/NZS 4130

Polyethylene (PE) pipes for pressure applications

AS/NZS 4671

Steel reinforcing materials

NZS 3104

Specification for concrete production

NZS 3109

Concrete construction

NZS 3114

Concrete surface finishes

NZS 3501

Specification for copper tubes for water, gas and sanitation

NZS 3602

Timber and wood-based products for use in building

NZS 3604

Timber framed buildings

NZS 3631

New Zealand national timber grading rules



NZS 4223.1	Glazing in buildings - Glass selection and glazing
NZS 4223.3	Glazing in buildings - Human impact safety requirements
NZS 4223.4	Glazing in buildings - Wind, dead, snow and live actions
NZS 4251.1	Solid plastering - Cement plasters for walls, ceilings and soffits
NZS 5261	Gas installation
NZS 6803	Acoustics - Construction noise

MANUFACTURERS AND SUPPLIERS

Manufacturers and supplier's requirements, instructions, specifications or details are those issued by them for their particular material, product or component and are the latest edition.

BUILDING CONSENT

Obtain the original or copies of the Building Consent form and documents from the owner and keep on site. Liaise with the BCA and/or the building certifier for all required notices and all inspections required during construction to ensure compliance. Return the consent form and documents to the owner on completion.

INSPECTIONS

Do not proceed with work noted on the Building Consent for inspection until it has been inspected and passed by the BCA inspector.

PRODUCER STATEMENTS

When producer statements verifying construction are required, provide copies to both the BCA and the owner. Provide producer statements in the form required by the BCA.

CODE COMPLIANCE CERTIFICATE

Provide documentation that the Owner requires to obtain a Code Compliance Certificate for the consented work. Provide Certificates of Compliance for electrical and gas work carried out.

HEALTH AND SAFETY

Make the works safe and provide and maintain a safe working environment. Ensure that all those working on or visiting the site are aware of the rules governing site safety, are properly supervised and are not unnecessarily exposed to hazards.

PROGRAMME

Provide a programme for the contract works, including the work of separate contractors being carried out concurrently with this contract. Form of programme: A dated bar chart, identifying the contract work's critical path and all key dates for the provision of labour, materials and elements. Supply a copy of the programme, and any updates to the owner.

WORKING HOURS

Work on site is restricted to between 0800 to 1800, Monday to Friday, excluding statutory holidays. Work outside these hours may be permitted, with prior approval in writing by the owner.

RESTRICTIONS

- Do not:
- smoke on site
 - light rubbish fires on the site
 - bring dogs on to or near the site
 - bring radios/audio players on to the site.

CLEAN

Clean and wash down external surfaces to remove dirt, debris and marking. Clean interior surfaces including floors, glass, cabinetwork, joinery, sanitary and hardware items.

Demolition**SURVEY EXISTING BUILDING**

Carry out a thorough survey and examination of the building to ensure the extent, sequence, technique and method of demolition proposed can be safely and efficiently carried out.

MATERIAL FROM DEMOLITION

Material from the demolition becomes the property of the contractor except for items designated for reuse or removal by others. Remove redundant materials from the site as work proceeds.

DISCONNECT SERVICES

Before commencing demolition, arrange with NUO's to disconnect services and remove associated fittings and equipment.

PROTECTION



- SUPPORT**
Protect retained parts of existing buildings, site and site structures, trees and shrubs.
Support and brace the existing structure during the cutting of new openings or the replacement of structural parts. Prevent debris from overloading any part of the structure. Do not remove supports until the new work is strong enough to support the existing structure. Ensure all work remains structurally stable and sound.
- TEMPORARY SCREENS**
Erect screens to prevent penetration of weather, dust and dirt.
- SALVAGE ITEMS**
Carefully dismantle and safely store salvage items where directed; for removal, use on the site, or until completion of the works.

Preparation and Groundwork

- PROTECT EXISTING**
Protect from damage existing buildings, structures, roads, paving and services nominated on the drawings as being retained, throughout the course of the work.
- PROTECT TREES**
Protect from damage all trees, shrubs, natural site features and existing landscaped areas nominated on the drawings as being retained, throughout the course of the work.
- SURFACE PREPARATION**
To NZS 3604, 3.5 Site preparation, remove all turf, vegetation, trees, topsoil, stumps and rubbish from the area being built on.
- UNDERGROUND ELEMENTS AND SERVICES**
Break out and remove underground elements and redundant services. Report for instructions when unexpected voids, made-up ground or services are encountered. Seal off the ends of drains or remove to NUO approval.

Concrete

- REINFORCEMENT**
Bars to AS/NZS 4671, grade 300 deformed. Welded reinforcing mesh to AS/NZS 4671. Mild drawn steel tying wire not less than 1.2 mm diameter.
- CONCRETE**
Strength as selected. Ready-mix normal grade, maximum aggregate size 19 mm to NZS 3104. Site mixed prescribed grade, using either separate batching of sand and coarse aggregate, or builder's mix, to NZS 3104.
- COVER**
Minimum cover to reinforcing as shown on the drawings and to NZS 3109, clause 2.7. Fix chairs for top reinforcement in slabs at 1.0 metre centres. Cover tolerances to NZS 3109, clause 3.8.
- CURING OF CONCRETE**
Keep damp for not less than seven days. Ensure curing of slabs commences as soon as possible after final finishing, by the use of continuous water sprays, or ponding. Alternately, apply a curing membrane. Ensure any membrane used will not affect subsequent applied finishes.

Timber framing

- TIMBER FRAMING GENERALLY**
Species, grade and level of treatment to NZS 3602, tables 1 to 3 Requirements for wood-based building components..., and moisture content to NZS 3602, table 4 Allowable moisture content..... Grading to NZS 3631. Mechanical stress grading acceptable as an alternative to visual grading.
- ATTENDANCE**
Provide and fix blocks, nogs, openings and other items as required by others.
- EXECUTION GENERALLY**
To NZS 3604 except as varied in this specification. To include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs). Set out framing in accordance with the requirements of NZS 3604 and as required to support sheet linings and claddings.
- INSTALL FLOOR, WALL AND ROOF FRAMING**



Floors and bottom plates framed and fastened to NZS 3604, section 7 Floors. Frame walls to required loading and bracing complete with lintels, sills and nogs, all fabricated and fastened to NZS 3604, section 8 Walls. Frame roof to required loading and bracing complete with valley boards, ridge boards and purlins to NZS 3604, section 10 Roof framing.

Interior linings

FRAMING MOISTURE CONTENT

Maximum allowable moisture content to NZS 3602, table 4 Allowable moisture content.....

PROTECT

Protect joinery, fittings and finishes already in place from water staining or damage from lining installation.

Ensure building is weatherproof before lining work commences.

SPECIAL PLASTERBOARD LININGS

Line wet area walls with water resistant plasterboard sheets using adhesive and nail fixing to studs at centres to suit the surface finish. Form bracing panels using high density plasterboard sheets fixed with clout-washers and clouts and to conform to NZS 3604, 5.5 Wall bracing design, and 13.5 Structural ceiling diaphragms. Form sound rated panels following the sheet manufacturer's specifications and details for the required sound rating. Form fire rated panels following the sheet manufacturer's specifications and details for the required fire rating.

FIX PLASTERBOARD EXTERNAL ANGLES

Fix full length to external corners, with clouts at 100 mm each side staggered.

PLASTERBOARD JOINTING AND STOPPING

Fill joint recess with bedding compound, centre the paper tape, apply second coat of bedding compound followed by a coat of finishing compound. Allow to dry and lightly sand off. Fill nail holes and flush up external angles with two successive coats of bedding compound followed by a coat of finishing compound. Allow to dry and lightly sand off. All to the plasterboard manufacturer's requirements.

LEVELS OF FINISH

Provide levels of finish to standards laid down by AS/NZS 2589 as follows:

Level 4: For Paint finishes

INSTALL TRIM

Scribe and fit reveal linings to exterior timber joinery, architraves to interior joinery, skirtings to walls and timber beads to wall/ceiling junctions.

Interior doors and trim

DOORS GENERALLY

Hollow core unless as selected.

DOOR HINGES

Type:	loose-pin zinc-plated steel
Size:	89 mm
Material:	zinc-plated steel
Number:	3 hinges per door

DOOR HARDWARE

As selected, use existing where possible

FIT HARDWARE

Fit hardware selected and provided, all in accordance with the hardware manufacturer's requirements.

Painting & Paper hanging

PAINT

As selected and to the paint manufacturer's standards for exterior and/or interior primers, undercoats, sealers, stains, clear coatings, solvent-borne and water-borne paints.

PROTECT

Cover up adjoining surfaces and areas liable to damage or over-painting.

REMOVE HARDWARE



CHRIS PYEMONT ARCHITECTS

Remove hardware and door/window furniture and replace on completion. Do not paint over permanently attached hinges, or any hardware items which cannot be removed.

PRIMING AND SEALING

Ensure that priming and sealing work needed before or during construction is carried out when required.

SELECTIONS

Confirm all selections, colours and finishes for both paint and wallpaper with the owner.

PAINT APPLICATION

Apply paint by brush and/or roller to suit the location of the coating and to the paint manufacturer's requirements. Do not spray on site without express permission.

MANUFACTURER'S MANUALS

Refer to the paint manufacturers' manuals and follow their preparation, sequence and application requirements applying to each system. Ensure all paint coats in any system are supplied by the same manufacturer.

FINISHED PAINT SURFACES

Finished paint surfaces to show uniformity of gloss and colour, with the correct thickness for each coat, and freedom from painting defects. Ensure finished work is clean and free of any disfigurement.

REPLACE

Replace hardware without damage to the hardware or the adjoining surfaces.

Water system

QUALIFICATIONS

Carry out work by or under the direct supervision of a person registered under the Plumbers, Gasfitters and Drainlayers Act 1976.

INSULATION FOR HOT WATER PIPES

Preformed closed cell foam.

EXECUTION GENERALLY

Carry out work and tests as applicable to NZBC G12/AS1.

INSTALL COPPER WATER SUPPLY

Size the piping layout to eliminate loss of pressure at any point by simultaneous draw-off. Run pipes in straight runs, firmly fixed to falls, with long radius bends and jointed by brazing or with crox fittings, all to NZBC G12/AS1, 5.0 Water supply. Conceal piping, insulate hot water pipework and pressure test before the wall linings are fixed.

PENETRATIONS

Provide and fit collars and escutcheon plates to match pipework at penetrations through constructions.

COMPLETION

Pressure test to ensure no leakage and leave in proper working order. Clean tapware and fittings.

Sanitary Plumbing

QUALIFICATIONS

Carry out work by or under the direct supervision of a person registered under the Plumbers, Gasfitters and Drainlayers Act 1976.

UPVC WASTE, SOIL AND VENT PIPES

uPVC pipe, complete with fittings brand-matched to the pipe manufacturer's requirements.

EXPOSED PIPES AND TRAPS

As selected and to the following details:

- chrome plate on copper pipes and associated copper and brass fittings
- white polybutylene or PVC, including all associated fittings.

EXECUTION GENERALLY

Carry out sanitary plumbing work and tests as applicable to:

- NZBC G13/AS1
- AS/NZS 3500.2

INSTALL TRAPS, WASTE AND VENT PIPES



CHRIS PYEMONT ARCHITECTS

Connect waste outlets to traps and run waste pipes and back vents concealed, sized and fixed to AS/NZS 3500.2. Discharge wastes into the drainage system stack, soil pipe, or gully trap as shown. Bird proof mesh to roof vents and vermin proof mesh to untrapped waste pipes.

ENSURE

Ensure all sanitary plumbing fittings and pipework are complete and operational.
Assess the condition and suitability of all existing services prior to connection.

Sanitaryware, tapware, & accessories**QUALIFICATIONS**

Carry out work by or under the direct supervision of a person registered under the Plumbers, Gasfitters and Drainlayers Act 1976.

INSTALL SANITARYWARE

Fit and install sanitaryware and associated screens, elements and hardware, plumb, true to line and rigid, to the fixture manufacturer's requirements. Supply standard chrome plated brass wastes and plastic plugs on chrome plated chains with all basins, tubs and baths.

INSTALL TAPWARE

Install tapware in accordance with the tap manufacturer's requirements. Flush out on completion. Check that washers or ceramic discs are operating correctly.

TEST

Test soil and waste disposal systems to ensure no leakage exists and leave in working order.

ENSURE

Ensure all sanitary plumbing fittings and pipework are complete and operational.

Electrical**COMPLY**

Comply with the Electricity Regulations 2010, AS/NZS 3000 and the New Zealand Electrical Codes of Practice for listed and prescribed work and with the NUO's requirements. Apply for the service connection. Arrange for the required inspections of listed work. Pay all fees.

QUALIFICATIONS

Carry out work by or under the direct supervision of a holder of a practising certificate under the Electricity Regulations 2010.

CERTIFICATE OF COMPLIANCE

Supply a certificate of compliance to the owner, as required by the Electricity Regulations 1997. Allow the NUO to view before the meter installation, listed work inspection, polarity check and livening of supply.

CABLES

Tough plastic sheathed copper conductors. Minimum sizes are indicated below. Increase these as necessary due to method of installation, cable length or load.

Lighting circuits: 1.5 mm² on 10-amp MCBs for domestic construction

Power circuits: 1.5 mm² on 16-amp MCBs for domestic construction

ELECTRICAL ACCESSORIES

As selected and to the following details:

Switch units: Minimum 16-amp, 230 volt flush polycarbonate units. For number of switches per unit, dimmer units, neon (indicator or toggle) units, locator units and 2-way units refer to the electrical drawings.

Switched socket units: 10-amp, 230 volt flush polycarbonate 3 pin combined switch units.

Stove/range socket outlet and switch: 32-amp, 230 volt flush polycarbonate 3 pin combined switch unit, with remote isolating switch.

CABLING

Install with a maximum of 10 light outlet units or 6 switched socket units on any circuit. Separate circuits for all electric heating appliances. All cabling runs concealed. No TPS cable laid directly in concrete. Locate holes in timber framing for the passage of cables at the centre line of the timber member.

INSTALL SWITCH AND SOCKET UNITS

Fit single and double switch units and socket units level and plumb where shown on the drawings. Install at the following heights (to the centre of the unit) unless shown otherwise on the drawings or to match existing.



CHRIS PYEMONT ARCHITECTS

Switch Units: To match existing
Socket Units: 150 mm above work benches.
400 mm elsewhere.

Mount switches vertically and socket units horizontally. Label switch units which control electrical equipment by engraving on the rocker switch.

INSTALL LIGHT FITTINGS

Install selected light fittings in the locations and heights shown on the drawings and in accordance with the fitting manufacturer's requirements.

INSTALL SMOKE ALARMS

Install alarms to NZBC F7/AS1, 3.3 Location of smoke alarms, and to manufacturer's requirements, fitted neatly and without damage to the surrounding finish.

ELECTRIC POWERED FITTINGS AND EQUIPMENT

Install and wire selected fittings and equipment to the Electricity Regulations 2010 and the individual fittings and equipment manufacturer's requirements. Refer to the drawings for required layouts and locations for equipment.

COMPLETION

Leave all fittings, lamps and tubes operational, with equipment and diffusers clean.



CHRIS PYEMONT ARCHITECTS

Products

A PRINTED COPY OF THE APPROVED
BUILDING CONSENT DOCUMENTS,
PLANS AND SPECIFICATIONS MUST
BE RETAINED ON SITE AT ALL TIMES.



ARDEX WPM 300

Water-Based Epoxy Moisture Barrier (HydrEpoxy)

Compliant to AS/NZS4020.2018 - Potable Drinking Water

Excellent adhesion to most substrates including damp surfaces
and green concrete

Water resistant, prevents rising damp, efflorescence and
withstands hydrostatic pressure

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ARDEX WPM 300

Water-Based Epoxy Moisture Barrier

PRODUCT DESCRIPTION

ARDEX WPM 300 (HydrEpoxy) is a two component water-based epoxy primer/barrier coating. ARDEX WPM 300 (HydrEpoxy) is extremely versatile and can be used within a variety of applications.

FEATURES

- Compatible with damp surfaces and green concrete
- Potable drinking water compliant - AS4020.2018 and SS375-2001
- Can be overcoated with a variety of decorative or industrial finishing coatings
- Can withstand 250kPa of hydrostatic pressure - equivalent to a 25 metre head of water
- Prevents rising damp and the formation of efflorescence when used as a single coat barrier

COMMON SUBSTRATES

- Brick
- Stone
- Screed
- Timber
- Masonry
- Concrete
- Concrete Block

For further substrate types please contact ARDEX Technical Services (technicalservices@ardexaustralia.com).

TYPICAL APPLICATIONS

- As a low water vapour transmission coating and as a barrier/seal coating over freshly laid or damp concrete.
- As a hydrostatic pressure resistant waterproofing coating to prevent water seepage or dampness penetration through to the interior of walls and floors.
- As a waterproofing moisture barrier or barrier coating over freshly laid hardened (green) concrete, prior to the application of conventional levelling compounds, carpet and tile adhesives.
- As a waterproofing coating in tanking applications, including potable water containment.
- As a barrier seal coating over damp, green or efflorescence producing concrete prior to overcoating with conventional building coatings.
- As a primer for ARDEX Liquid Applied Waterproofing Membranes and ARDEX Tile Adhesives in specific applications.
- When masonry or concrete substrate moisture content is measured at greater than 80% relative humidity (ASTM F2170) or exceeds 15g/m²/24hrs (ASTM F1869) when tested in accordance with AS1884 or AS3740, ARDEX WPM 300 (HydrEpoxy) shall be considered as the nominated primer/coating.

SUBSTRATE PREPARATION

By way of mechanical method and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to application. Prepare surface to leave sound, clean, free from sharp edges, loose or other materials which may damage the subsequent coating, membrane, or levelling compound.

Surface defects such as holes, non-structural cracks or other minor surface deformities should be filled accordingly with an ARDEX WPM 405 sand/cement mortar or ARDEX WPM 300 epoxy mortar.

ARDEX WPM 300 epoxy mortar mix ratio:

- 1 x part mixed ARDEX WPM 300 (HydrEpoxy)
- 1 x part Portland cement
- 3 x part ARDEX Primer Sand

Spalling concrete must be treated accordingly with the ARDEX Concrete Repair range such as ARDEX BR 345, please review the respective product data sheets on treating spalling concrete.

MIXING

Each component must be individually mixed to form a homogenous state. Do not use the same mixing paddle for each component. Combine the two components and thoroughly mix in the ratio of 1:1 by volume until a homogeneous blend is obtained. Only mix as much as may be used within the pot life and avoid excessive aeration during mixing.

APPLICATION METHOD

When the product is to be applied to dry or highly porous surfaces, spray the surface with a fine mist of water prior to application. Any free standing water must be removed prior to application.

Floors – Spread the material using a squeegee or stiff nylon broom to ensure the material is worked into the prepared surface. Finish application using a medium to long nap roller to achieve required coverage.

Walls – Apply the product by roller ensuring the material is worked into the prepared surface and to achieve required coverage.

When spraying ARDEX WPM 300 (HydrEpoxy), the addition of 10% water during the first coat will assist surface penetration and spray application.

A one coat application is generally used for efflorescence and rising damp requirements, or as a primer for subsequent ARDEX Liquid Applied Membranes.

A two coat application is generally used for general waterproofing requirements as a moisture barrier or when waterproofing negative side walls is required.

ARDEX WPM 300

Water-Based Epoxy Moisture Barrier

TILING APPLICATIONS

Substrates such as screeds and renders should be normally allowed to dry for 7 days prior to the fixing of ceramic tiles. Alternatively, two coats of ARDEX WPM 300 (HydrEpoxy) are applied at 3.0m²/L per coat. Where ceramic tiles are to be installed, the second coat can be sand seeded. Whilst the second coat is wet, ARDEX Primer Sand or clean dry sand of 0.5mm diameter shall be broadcast over the surface at a rate of 700g/m² to achieve at least 90% coverage. After 24 hours minimum cure the excess sand shall be swept and vacuumed from the surface prior to tiling application. Curing times will vary depending on substrate temperatures and ambient air conditions.

FLOORING APPLICATIONS

ARDEX WPM 300 (HydrEpoxy) is an effective moisture barrier for damp concrete subfloors prior to the installation of floor coverings or waterproof membranes. The relevant standards criteria which apply are;

- Where concrete surfaces are damp defined in AS1884-2021 and also AS3740-2021, as exceeding 80% relative humidity when measured using the ASTM F2170 methodology, or exceeds 15gm/sqm/24hrs when measured using the ASTM F1869 methodology. A two coat application of ARDEX WPM 300 (HydrEpoxy) with a dry film thickness of 0.3mm meets the AS1884-2021 requirement for moisture barriers and has a WVTR of less than 10gms/sqm/24hrs when tested to ASTM E96.
- Where concrete surfaces are damp, defined in AS2455-2019 as exceeding 75% relative humidity when measured using inslab testing methodology, or exceeds 70% relative humidity when measured on the slab surface.

Two coats are applied at 3.0m²/L per coat. Where smoothing cements are to be installed, the second coat can be sand seeded. Whilst the second coat is wet, ARDEX Primer Sand or clean dry sand of 0.5mm diameter shall be broadcast over the surface at a rate of 700g/m² to achieve at least 90% coverage. After 24 hours minimum cure the excess sand shall be swept and vacuumed from the surface prior to sub-flooring application. Curing times will vary depending on substrate temperatures and ambient air conditions.

Alternatively the surface of ARDEX WPM 300 (HydrEpoxy) can be coated with ARDEX P82 or ARDEX P9 primers prior to the application of smoothing cements. A single coat of ARDEX WPM 300 (HydrEpoxy) applied at 2.5m²/L acts a moisture stop ('green slab seal') for 'green concrete' not subject to rising damp or permanent moisture.

CURING

Allow final coat to cure for 24 hours minimum before applying water based adhesives, mortars, levelling compounds, decorative coatings or other surface treatments. Care is necessary to ensure the coating is not damaged in any way during subsequent treatments.

Curing times will vary depending on substrate moisture content, substrate temperatures and ambient air conditions.

TECHNICAL DATA

CHARACTERISTICS	NOMINAL VALUE
Colour	Grey or Black
Finish	Semi-gloss (matt with aging)
Volume solids	44%
Mixing ratio	1:1 (Part A:Part B) by volume
Coverage	Must be applied at a rate of 1.5m ² /L in total (equivalent to two coats at 3.0m ² /L per coat) to achieve an effective moisture barrier
Wet film thickness	300 micrometers (0.3mm) per coat
Recoat time	4 hours @ 25°C & 50% R.H.
Full cure	7 days @ 25°C & 50% R.H.
Pot life	2 hours @ 25°C 1 hour @ 35°C
VOC content	26g/L
Moisture Vapour Transmission	<10g/m ² /24hrs

PRODUCT THINNING

The first coat may be thinned with water as required depending on the porosity of the prepared surface to be coated to ensure optimum penetration. Up to 5% for dense surface, and up to 20% for more porous surfaces.

Thinning of the second coat is to be avoided since this increases the difficulty in achieving the required dry film thickness. A third coat can be applied as required.

COVERAGE

3.0m²/L per coat (undiluted).

The recommended wet film thickness specified produces a nominal dry film thickness of 150 microns per coat or 300 microns for two coats on the surface. The apparent dry film thickness may reduce depending on the porosity of the substrate, however the product absorbed by the substrate still forms part of the waterproofing function.

PACKAGING

4L kit (2L Part A & 2L Part B)

20L kit (10L Part A & 10L Part B)

CLEANING

Wash all equipment in water or water/detergent immediately on completion.

ARDEX WPM 300

Water-Based Epoxy Moisture Barrier

SHELF LIFE

ARDEX WPM 300 (HydrEpoxy) has a shelf life of 24 months when stored in the original, unopened packaging in a dry place at 23°C and 50% relative humidity.

SAFETY DATA

This product may cause irritation and an allergic reaction to the skin. It may cause serious eye injury and irritation to the respiratory system. Toxic to aquatic life with long lasting effects. In case of contact with the eyes rinse with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, eye and face protection. Avoid inhaling fumes/vapours. Ensure adequate ventilation during mixing and application. Store locked up. Check with your local Council regarding the disposal of contents, dispose of packaging thoughtfully and recycle where possible. Keep out of the reach of children. Call the Poisons Information Centre on 0800 764 766 (NZ) or call a doctor if you feel unwell. Additional information is in the Safety Data Sheet (SDS) at ardex.co.nz

LIMITATIONS

Tiling can commence after 24 hours cure of ARDEX WPM 300 (HydrEpoxy) although should not exceed a maximum of five days. Installer is to ensure that there is no surface contamination during this period. Sand blinding of the wet ARDEX WPM 300 (HydrEpoxy) surface with ARDEX Primer Sand eliminates these timing issues and is best practice for external tiling jobs.

The product should be applied whilst the surface temperature and ambient temperature is between 10°C–35°C. The product will cease to cure below 10°C. Curing time will also be adversely affected in situations where relative humidity is >85%.

In enclosed areas, ventilation must be provided during curing cycle to enable adequate evaporation of the water. Care should be taken when sandwiching adhesives between ARDEX WPM 300 (HydrEpoxy) and floor coverings to ensure the water vapour transmission of the covering is sufficient to allow the solvent to escape from flooring adhesives.

ARDEX WPM 300 (HydrEpoxy 300) is not classified as a trafficable coating.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

GUARANTEE

ARDEX New Zealand Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX New Zealand Ltd, 15 Alfred Street, Onehunga, Auckland 1061; Toll Free: 0800 227 339; Email: info@ardexnz.com) and provide evidence of your purchase of the product within 14 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the New Zealand Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the New Zealand Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure". For a copy of the full guarantee/warranty details, please contact ARDEX New Zealand.

DISCLAIMER

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Product Data Sheet

SUPERCOURSE 500

Synthetic Damp Proof Course

Supercourse 500 is a general damp-proof course (DPC) used to prevent moisture transfer between building materials. It is also used as a concealed flashing for masonry veneer cladding.

Manufactured using a single layer of black polyethylene, Supercourse 500 is tough, high-impact and tear resistant. It is a suitable moisture impermeable alternative to bituminous DPC.

Smarter products. Better buildings.
thermakraft.co.nz



Supercourse 500

Synthetic Damp Proof Course

Supercourse 500 comes in twelve roll sizes:

Product Code	Roll Size	Rolls Per Carton
SPC05030	50mm x 30m	42
SPC07530	75mm x 30m	24
SPC09030	90mm x 30m	24
SPC10030	100mm x 30m	18
SPC14030	140mm x 30m	12
SPC15030	150mm x 30m	12
SPC20030	200mm x 30m	6
SPC25030	250mm x 30m	6
SPC30030	300mm x 30m	6
SPC40030	400mm x 30m	
SPC50030	500mm x 30m	
SPC100030	1000mm x 30m	

Scope of Use

- Supercourse 500 intended for use as a damp-proof course separating timber and wood-based products and metal from concrete, masonry elements or clay bricks.
- Can also be used to separate timber jack studs or bearers from concrete or timber piles.
- Supercourse 500 can be used as a concealed flashing in masonry veneer walls.

General

- Unaffected by LOSP or other solvent based treated timber. However, LOSP or other solvent based treated timber must have sufficient time for the solvent chemical to flash off in well ventilated area. Recommended minimum 7 days.
- Available in 12 product width sizes.

Limitations

- Maximum weather or UV exposure is 30 days.
- Supercourse 500 is NOT a window flashing tape and NOT a thermal break product.

Compliance

When Supercourse 500 is used and installed as a damp-proof course and/or concealed flashing behind masonry veneer walls, the product will meet or contribute to meeting the following provisions of the NZBC:

- Clause B2 Durability: Performance B2.3.1 (a), not less than 50 years and B2.3.2.
- Clause E2 External Moisture: Performance E2.3.2 and E2.3.3. When used as a flashing as part of a masonry veneer cladding system, Supercourse 500 will contribute to meeting the requirement of E2.3.2. When used as a damp-proof course, Supercourse 500 will meet the requirements of E2.3.3.
- Clause F2 Hazardous Building Materials: Performance F2.3.1. Supercourse 500 meets this requirement and will not present a health hazard to people.

More details can be found in Supercourse 500 BRANZ Appraisal 329 (2016)

Durability

Supercourse 500 is expected to have a serviceable life in excess of 50 years when it is:

- Installed in accordance with Thermakraft's literature and BRANZ Appraisal.
- Not over exposed to the weather or UV (not more than 30 days).
- Never exposed to chemicals or solvents that will degrade or affect polyethylene material.

Product Warranty

Standard Thermakraft warranty applies. Refer to Thermakraft Warranty Statement for further details. This is available online at thermakraft.co.nz or call **0800 806 595**.

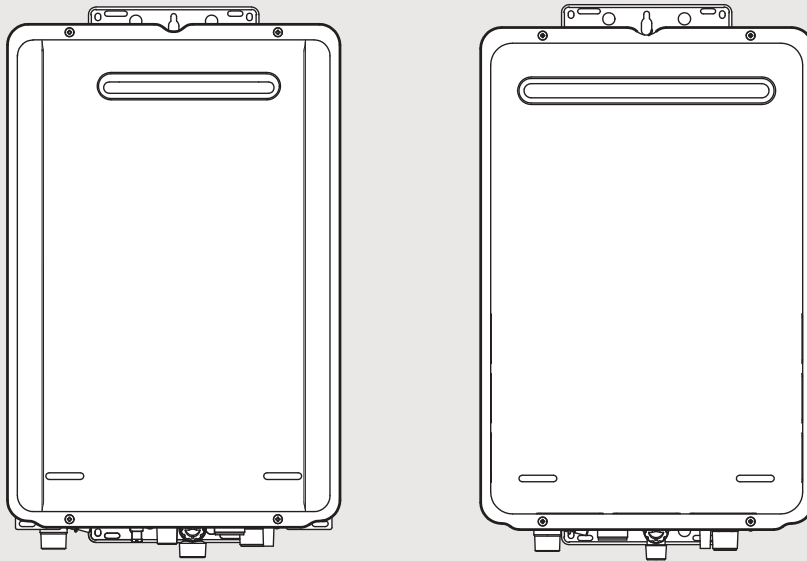
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Suitable for the following Rinnai INFINITY models:

- A16 (REU-A1620WG-ZK)
- A20 (REU-A2024WG-ZK)
- A24 (REU-A2426WG-ZK)
- A26 (REU-A2626WG-ZK)
- EF26 (REU-E2626W-ZK)



INFINITY EF26 and A-Series continuous flow water heaters

Installation guide

Rinnai

Important

This appliance must be installed in accordance with:

- Manufacturer's installation instructions
- Current AS/NZS 3000, AS/NZS 3500, AS/NZS 5601.1 and G12/AS1

For use with Natural Gas or Universal LPG as indicated on the appliance.

Not suitable as a spa or swimming pool heater.

Not suitable for hydronic applications.

Not suitable for commercial or solar applications.

Not suitable for locations greater than 1000 m above sea level.

Appliance must be installed, commissioned and serviced by an authorised person, being in New Zealand a licensed gasfitter.

Warning

Improper installation, adjustment, alteration, service and maintenance can cause property damage, personal injury or loss of life.

For more information about buying, using, and servicing of Rinnai appliances call: 0800 RINNAI (0800 746 624).

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Before installation

Unpack the appliance and check for damage. DO NOT install any damaged items.

Check all components and that the correct gas type has been supplied.

Get an overview of the steps required before starting the installation. Failure to follow these instructions could cause a malfunction of the appliance. This could result in serious injury and property damage.

These instructions apply only to the continuous flow water heater models listed on the front of this guide.

Specification

Designed and made in Japan, the Rinnai INFINITY EF26 and A-Series are continuous flow gas hot water heaters with inbuilt frost protection. The EF26 is a condensing model. They have electronic ignition and require electricity to operate. They are factory preset to 55 °C (maximum set temperature is 65 °C).

Scope of use

Suitable for **residential** applications only. They are designed to be externally mounted on an outside wall and located as close as practicable to the most frequently used hot water outlet(s), to reduce the delay for hot water delivery.

They are not suitable as a spa or swimming pool heater, and for hydronic heating. They are also not suitable as a gas boost for solar installations as the temperature cannot be set high enough.

Hard or acidic water will need to be treated to use this product.

Specification summary

	A16 REU-A1620WG-ZK	A20 REU-A2024WG-ZK	A24 REU-A2426WG-ZK	A26 REU-A2626WG-ZK	EF26 REU-E2626W-ZK
Thermal efficiency	80.5%	80.5%	81%	80.5%	91.5%
Hot water capacity	1.5-20 L/min	1.5-24 L/min	1.5-26 L/min	1.5-26 L/min	1.5-26 L/min
Hot water capacity at a 25° rise	16 L/min 960 L/h	20 L/min 1200 L/h	24 L/min 1440 L/h	26 L/min 1560 L/h	26 L/min 1560 L/h
Input	16.3-124 MJ/h	19.9-156 MJ/h	16.3-184 MJ/h	16.3-199 MJ/h	16.3-175 MJ/h
Output	27.8 kW	34.9 kW	42.0 kW	44.5 kW	44.5 kW
Weight	13 kg	14 kg	15 kg	15 kg	18 kg
Water, nominal operating pressure	120-1000 kPa	160-1000 kPa	200-1000 kPa	200-1000 kPa	220-1000 kPa
Ingress protection	IPX4	IPX4	IPX4	IPX4	IPX5
Power consumption:					
- Normal	47 W	58 W	56 W	65 W	63 W
- Standby	2 W	2 W	2 W	2 W	2 W
- Frost protection	68 W	68 W	68 W	68 W	92 W

Safety devices

- Flame failure
- Boil-dry protection
- Overheat protection (OHS)
- Fusible link
- Pressure relief valve
- Combustion fan rpm check

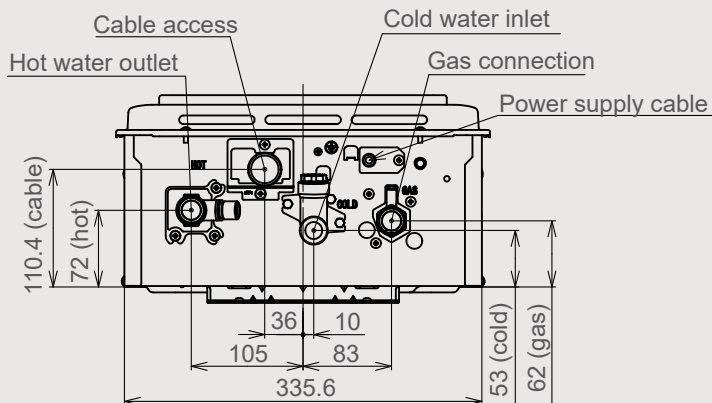
Line pressures

- NG 1.13-3.0 kPa
- LPG 2.75-3.0 kPa

The maximum line pressure is 3.5 kPa, with the maximum standing pressure under abnormal intermittent conditions 5.0 kPa. In the case of commercial metering (i.e. 35-37 kPa coming in), there may be a requirement to regulate the incoming line pressure down.

Connections and fittings

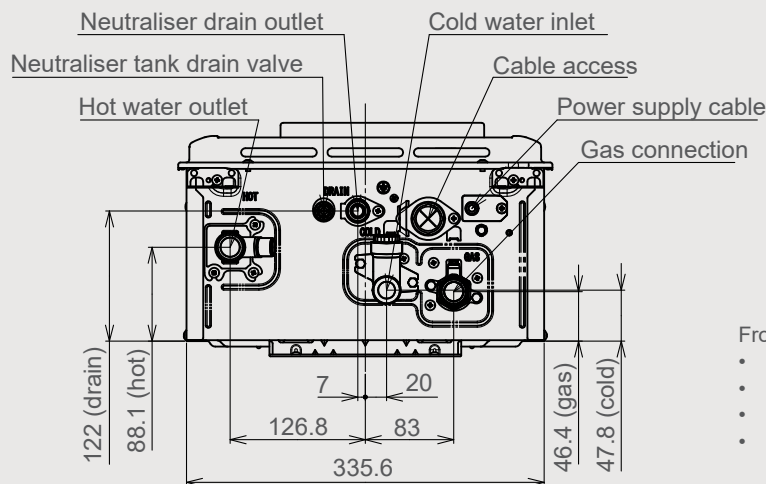
A-Series



From bottom of unit:

- Hot 41 mm (A16 39 mm)
- Cable 29 mm
- Gas 40 mm
- Cold 50 mm

EF26



From bottom of unit:

- Hot 41 mm
- Cable 26 mm
- Gas 38 mm
- Cold 50 mm

		Hot	Cold	Gas	Condensate
A16 external	REU-A1620WG-ZK	R $\frac{1}{2}$ (15 mm)	R $\frac{1}{2}$ (15 mm)	R $\frac{3}{4}$ (20 mm)	N/A
A20 external	REU-A2024WG-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	N/A
A24 external	REU-A2426WG-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	N/A
A26 external	REU-A2626WG-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	N/A
EF26 external	REU-E2626W-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{1}{2}$ (15 mm)

Service connection points

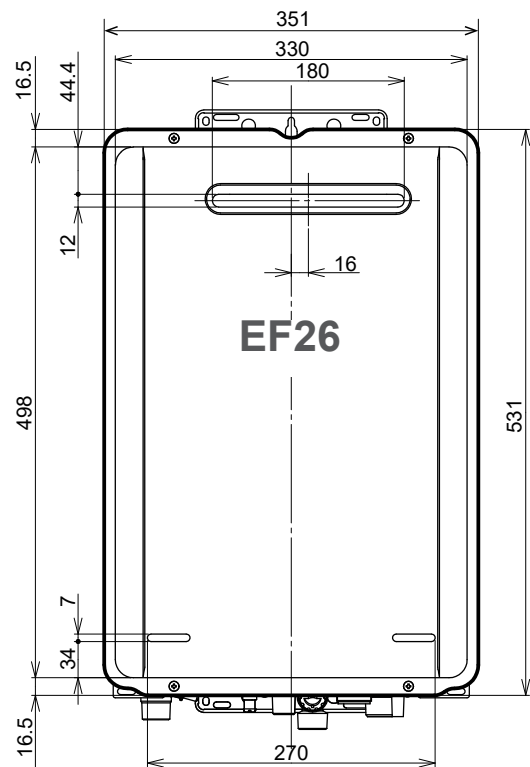
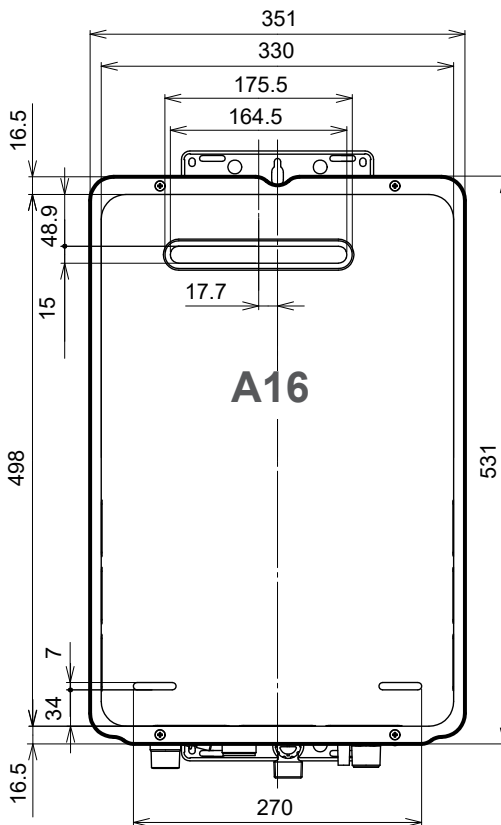
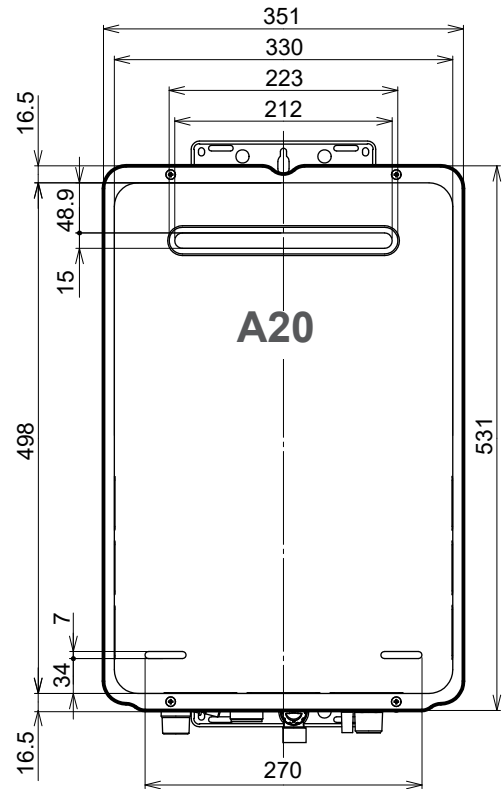
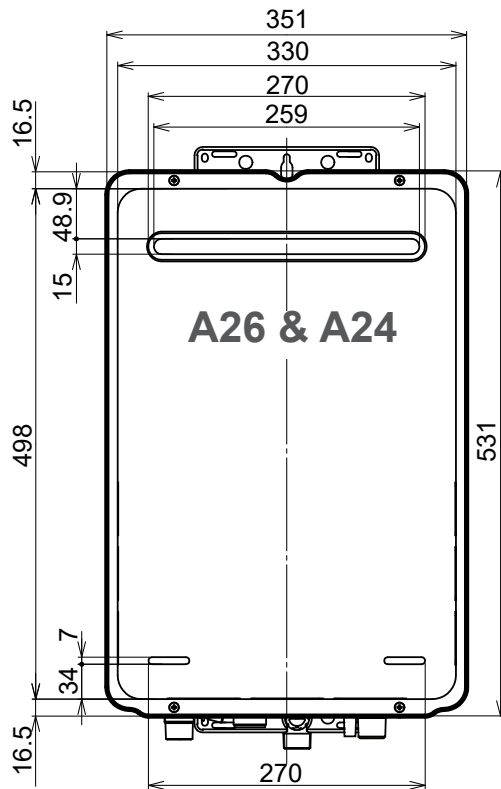
An approved full flow isolation valve and disconnection union **MUST BE** fitted to the cold water inlet. A non-return valve is not required unless stipulated by local regulations.

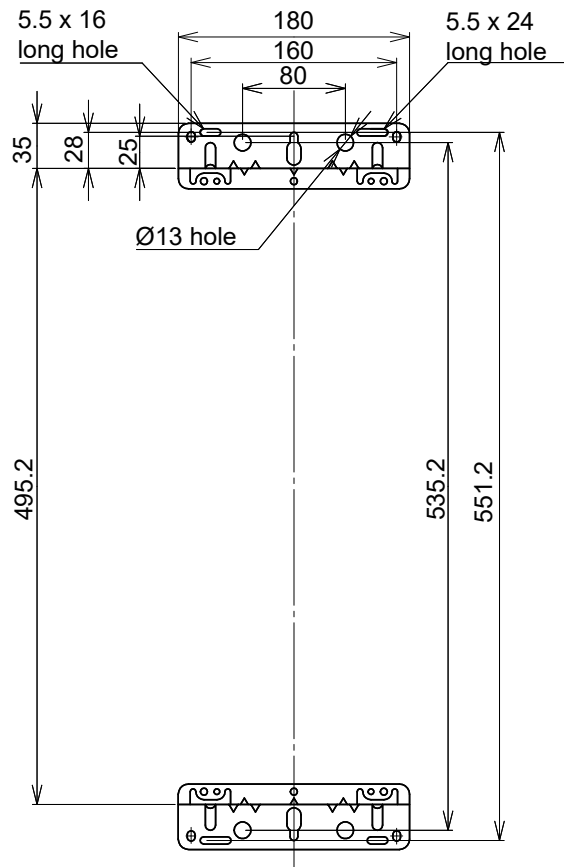
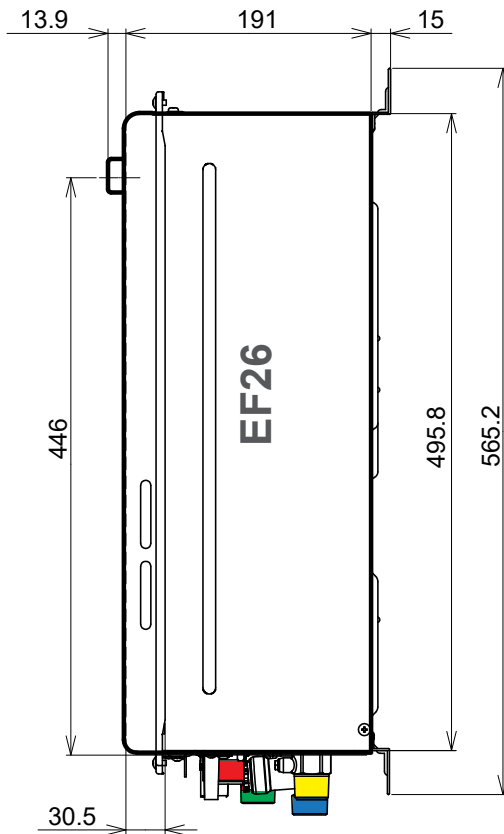
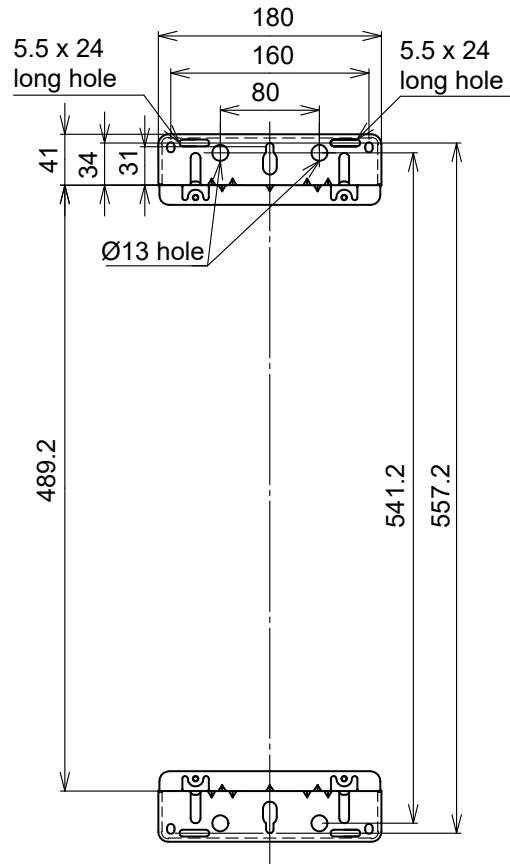
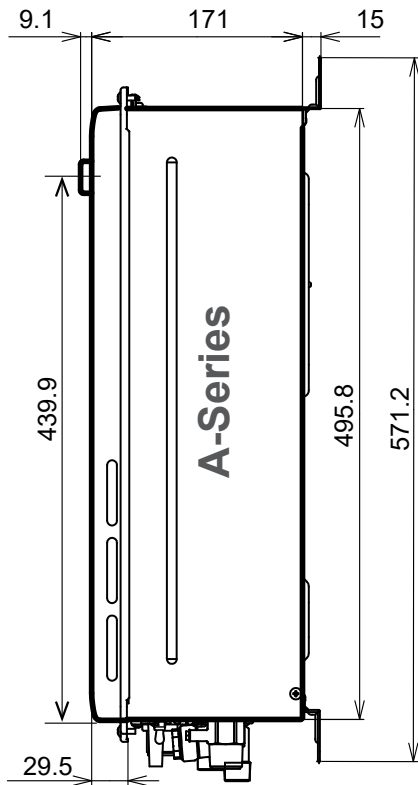
Isolation valves **MUST NOT** be fitted directly the appliance.

It may be necessary to fit a temperature limiting device for delivery to areas used primarily for the purposes of personal hygiene, refer page on 'Water delivery temperature' for more information.

Purge gas and cold water supply lines to remove air and swarf before final connection. Swarf in the gas or water supplies may cause damage, a common problem, which is not covered by warranty.

Dimensions (mm)





Appliance location

This appliance is designed for outdoor installations only. It **MUST BE** located above ground in open air with natural ventilation, without stagnant areas, where gas leakage and products of combustion can be rapidly dispersed by wind and natural convection.

This appliance **MUST BE** placed as close as possible to the most frequently used hot water outlet(s) to minimise the delay for hot water delivery¹. For installations where the distance between the water heater and outlets is considerable, a flow and return system can be used to minimise the waiting time for hot water delivery. Alternatively multiple appliances can be strategically placed to serve outlets with minimal delay.

An AC 230 V, 10 A earthed power point must be provided adjacent² to the appliance. This power point must be weatherproof. It must be clear of the gas and water connections to the appliance and also the flue exhaust and water pressure relief valve. The power cord of the appliance is 1.5 m long.

All appliances **MUST BE** installed to ensure access can be gained without hazard or undue difficulty for maintenance and servicing. Sufficient clearances shall allow access and removal of all serviceable components. Appliances should not be mounted more than 2.5 m above the ground or floor level unless the customer can arrange permanent and safe access, or can provide another means of safe access.

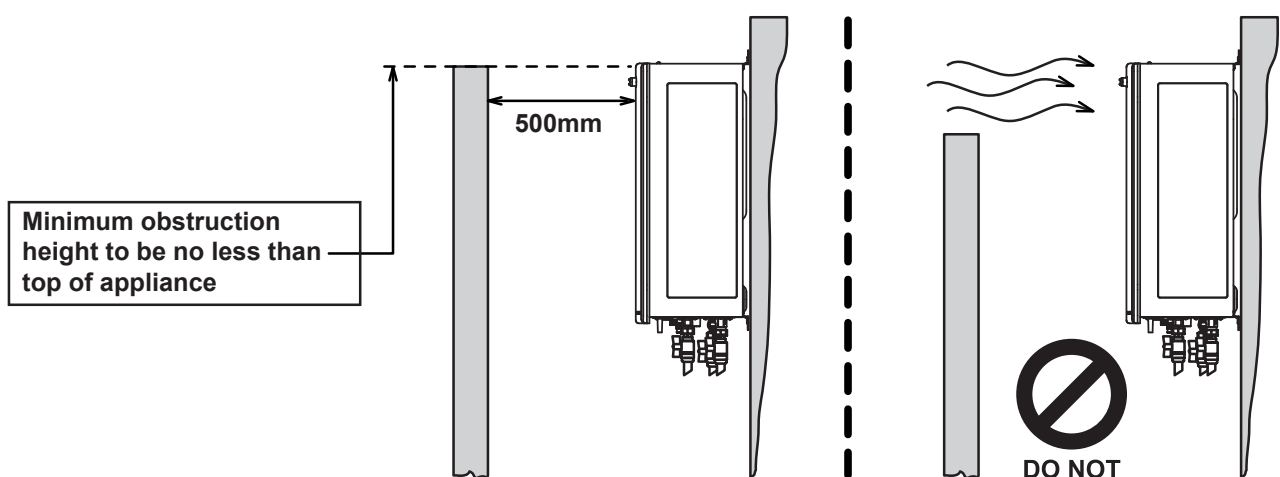
The appliance **MUST BE** mounted on a vertical structure with the water and gas connections on the underside pointing downwards.

Location of the flue terminal **MUST BE** in accordance with Section 6 and Figure 6.2 of AS/NZ 5601.

The E26 / A-Series are suitable for installations up to 1000 m above sea level. They are not suitable for alpine areas.

Horizontal obstructions

AS/NZS 5601 states a minimum horizontal clearance of 500 mm between a building structure and obstruction facing the terminal. At 500 mm the obstruction needs to be the full height of the unit, as shown below, and not a partial obstruction. A partial obstruction of less than 1 m could result in wind pushing the flue gases back into the flue terminal.



There **MUST** be **NO** partial obstructions to the appliance front cover or any other part of the appliance casing. This will avoid the appliance from failing to operate under windy conditions.

¹ Rinnai recommend a maximum pipe run of 10 m.

² Power point can be within the pipe cover if a pipe cover is installed—must comply with AS/NZS Wiring rules

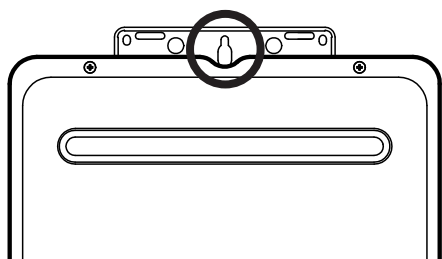
General installation information

Securing the Rinnai INFINITY

The wall structure on which units are mounted **MUST BE** capable of supporting the weight of the appliance and associated pipe work.

Ensure that suitable fixing screws or bolts are used to secure the unit to the wall, in accordance with AS/NZS 5601 section 6. Wooden plugs shall not be used.

The top bracket has a keyhole slot so that the appliance can be positioned by hanging it on one screw. Once in position the appliance can be secured with appropriate fixings.



The appliance can be mounted directly against the wall or structure. There is no need to use non-combustible sheeting or leave an air gap between the appliance back panel and the wall or structure to meet the temperature hazard requirements of AS/NZS 5601.

Pipe sizing

If the gas pipe sizing is insufficient the appliance won't perform properly. Gas pipe sizing must consider the gas input into this appliance as well as other gas appliances in the premises. The gas meter and regulator must be specified for this gas rate.

An approved sizing chart such as the one in AS/NZS 5601 should be used. Refer specification for gas consumption details.

Water pipe sizing and layout should be performed in accordance with AS/NZS 3500. All hot water pipe work should be insulated to optimise performance and energy efficiency.

Water supply

The appliance is intended to be permanently connected to the water mains.

Refer specification for operational water pressure limitations. Approved pressure limiting valves may be required if the maximum rated water supply pressures are exceeded. To achieve the rated flow, the minimum water supply pressures must be met.

The water heaters will operate at lower pressures but will not achieve the rated flow. Contact Rinnai for gravity fed or low pressure installations.

Water chemistry and impurity limits are detailed in the operation guide within the warranty section. Most metropolitan water supplies fall within these requirements.

If you are unsure about the water quality contact your water authority. If sludge or foreign matter is present in the water supply, a suitable filter or strainer is required in the water supply to the water heater to prevent unwarranted damage and loss of performance.

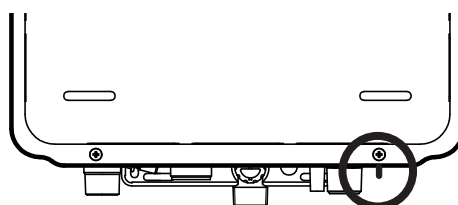
Frost protection

Frost protection operates automatically, as long as the appliance is connected to the electrical power supply, by activating when the temperature inside the unit drops below 3.5 °C¹, and turns off once the temperature inside the unit reaches 7 °C¹.

¹ Approximate temperatures

Frost protection thermistor

The EF26 and A-Series models have an external thermistor to control frost protection. It is a small black indicator located on the bottom right hand side of the unit, directly underneath the cover screw (circled below). The frost protection thermistor needs to be exposed to the outside air to correctly function—do not insulate the frost protection circuit will not work correctly.



Water delivery temperature

Requirements of AS/NZS 3500 MUST BE considered regarding the temperature limitations of hot water supplied to areas used primarily for personal hygiene. The temperature of these areas may be limited to 55 °C or less.

If the appliance is to deliver water primarily for the purposes of personal hygiene in an early childhood centre, school, nursing home or similar facility as defined in AS/NZS 3500.4, a Temperature Limiting Device (TLD), such as a tempering valve may be required, even if the appliance is set to 55 °C or less. For these types of applications contact Rinnai.

Requirements for Rinnai INFINITY units installed without controllers

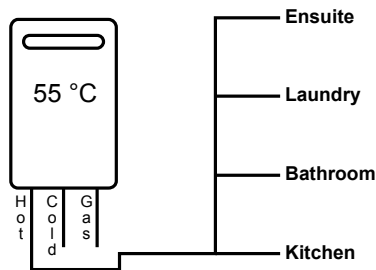


Diagram 1 - 55 °C Appliance

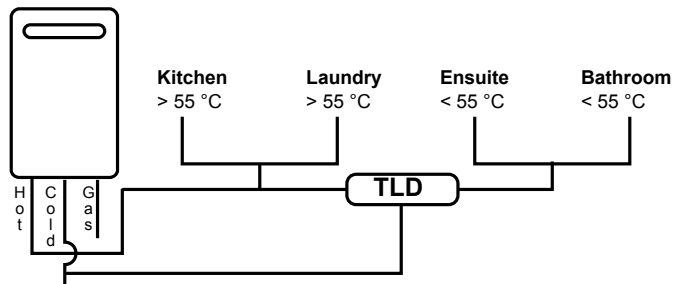


Diagram 2 - Not a 55 °C Appliance
(TLD = Temperature Limiting Device)

When the Rinnai INFINITY is set to deliver water at a temperature higher than 55 °C, it will be necessary to fit a Temperature Limiting Device for delivery to areas used for the purposes of personal hygiene.

Controller installation

The maximum number of controllers that can be fitted is **four**, refer water controller configurations section below.

General information

Other manufacturers water controllers are NOT compatible with Rinnai water heaters. Water controllers MUST NOT be used with any solar boost water heater. Rinnai water controllers bought in from other countries are not compatible with Rinnai appliances sold in New Zealand.

Water controllers and transceivers (for those with wireless controllers) DO NOT contain serviceable parts and must only be serviced by an authorised person.

Master controller

Only one master controller can be designated as a 'master' water controller. This water controller is normally used in the kitchen. The remaining controllers are 'sub-controllers' and are for use in bathrooms, toilets, and laundries. The temperature limit for all sub-controllers is 50 °C, this is a safety feature, to reduce the risk of burns in these areas. A master controller MUST NOT be installed in a bathroom.

Water controller configurations

- A maximum of four Compact controllers (MC-601) can be fitted.
- Only one master controller can be installed. This can be a Kitchen Deluxe¹ (MC-100V), or any other Compact controller (MC-601).

¹ When a Kitchen Deluxe controller is fitted, it will always function as a master controller, this is the default setting and cannot be changed.

- In addition to a master controller, up to three additional controllers can be fitted

Controller location

- Do not install water controllers near a heat source, such as a cook top, stove or oven. Heat steam, smoke, and hot oil may cause damage.
- Do not install water controllers outdoors unless protection from water/dust ingress and sunlight are provided.
- Do not install water controllers in direct sunlight.
- Do not install water controllers against a metal wall unless the wall is earthed in accordance with AS/NZS 3000.
- Water controllers must not be installed where chemicals such as benzene, alcohol, turpentine, hydrogen sulphide, ammonia, chlorine or other similar chemicals are in use.

The water controller is water resistant, however excessive exposure to water may result in damage. Durability is improved when positioned OUTSIDE the shower recess.

- Avoid direct exposure to water or steam as these may cause the controller to malfunction.
- Water controllers must be installed in shaded and clean locations. They should be fitted out of reach of children (suggested height 1.5 m from the floor), and installed at least 400 mm above the highest part of a sink, basin or bath.

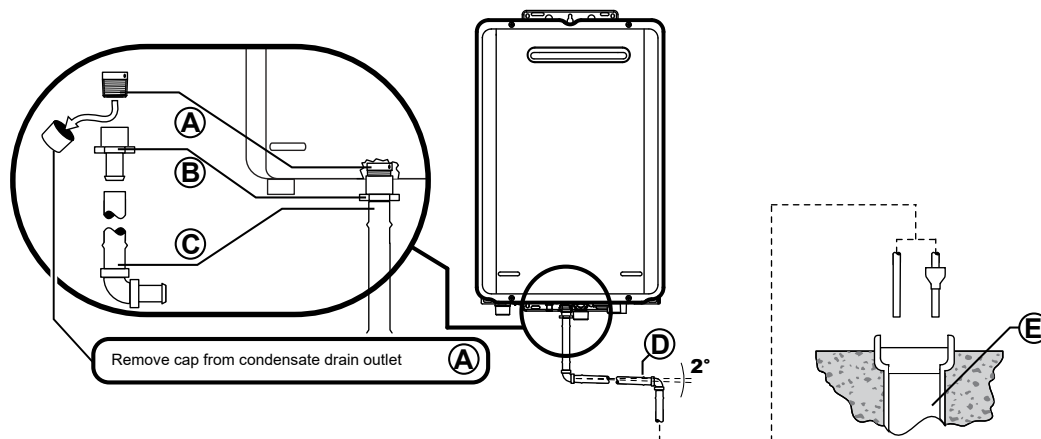
When cleaning your water controller use only a damp cloth and mild detergent.

EF26 condensate neutraliser tank and drain

The Rinnai INFINITY EF26 water heater generates condensate continuously at a rate of up to 5 litres per hour as a by-product of a highly efficient gas burner. This condensate has been neutralised by having an inbuilt condensate neutraliser kit.

Important considerations for the neutraliser drain pipe

The content of AS/NZS 3500 'Temperature / Pressure Relief and Expansion Control Valve Drain Lines' has been used as a guide in preparing the information below.



A. Water heater drain outlet connection, R $\frac{1}{2}$ " (15 mm) BSP male. Condensate / neutraliser drain outlet connection, $\frac{1}{2}$ " (15 mm) BSP male nylon.

N.B: The black plastic shipping cap **MUST BE** removed from the condensate / neutraliser drain outlet prior to water heater operation.

B. PE R $\frac{1}{2}$ " BSP (15 mm) female to barbed irrigation system connector (13-19 mm) or equivalent plastic fitting¹.

C. Drain pipe and fittings to match B.

D. Continuous fall of at least 2° from water heater to discharge point. Lengths and bends in accordance with the table below.

Lengths and changes of direction				
Max. length (m)	9	8	7	6
Max. changes of direction greater than 45°	3	4	5	6

E. Suitable points of discharge are deemed to be drains, sewers or pits. **DO NOT** discharge onto electrical connections, earth stakes, copper pipes, concrete paths or into a pond.

Installation

The drain line **MUST NOT** discharge onto electrical connections, earth stakes, copper pipes, concrete paths or into a pond.

The point of discharge from each drain line shall be located so that the release of condensate / neutraliser does not cause a nuisance, is readily discernible and incurs no risk of damage to the building.

There shall be no tap, valve or other restrictions in any line.

Each line shall fall continuously from the valve to the approved point of discharge.

Drain lines shall not discharge into a storage water heater safe tray.

The end of the condensate line shall be:

- Not lower than 200 mm or higher than 300 mm above an unpaved surface; or
- Not lower than 75 mm, or higher than 300 mm above a gravel pit not less than 100 mm in diameter in a paved surface.
- Where discharging over a tundish or gully trap, drain lines shall have an air gap of a size at least twice the diameter of the drain line.

¹ Non-PE plastics will fail over time due to contact with the acidic condensate. Damage caused by installation of non-PE plastics will not be covered by warranty.

Interconnection of condensate drain lines

Condensate / neutraliser drain lines from multiple water heaters may be joined together provided they conform with the requirements detailed on the previous page.

Common stack discharge

Where individual water heaters are installed in a multi-storey building, the condensate / neutraliser drain lines may discharge into a common stack, subject to the following:

- The discharge from the common stack is to a tundish, having a discharge line, that is not less than the size of the common stack, directly connected to a fixture trap, and installed in connection with any adjacent soil or waste stack.
- The discharge point of the common stack is such that any discharge is readily visible and will not cause any nuisance.
- The common stack is vented by extending the pipe upwards, above the roof level.

Tundish drain lines

The drain line from any tundish shall not be less than DN 20 or less than one size larger than that of the largest drain line discharging into a tundish. Tundish drain lines shall comply with the requirements detailed on the previous page.

Areas subject to freezing

In areas where water pipes are prone to freezing, the drain pipe from any valve shall be insulated and not exceed 300 mm in length. It shall discharge into a tundish through an air gap of not less than 75 mm and not more than 150 mm measured from the outlet of the drain pipe to the rim of the tundish.

Commissioning

AS/NZS 5601.1, clauses 2.6.8 and 6.11.2, states that every part of a gas installation shall be commissioned prior to initial use. It is the installer's responsibility to ensure all current AS/NZS 5601 requirements are met. The URL's provided are links to short videos on how key steps are performed.



The appliance operation must be tested after installation. Ensure the building occupants do not have access to the hot water outlets during this procedure.

Please note

The Rinnai INFINITY EF26 and A-Series come with a factory preset outlet temperature of 55 °C. The high and low gas operating

pressures are also factory preset. Under normal conditions the operating pressures do not require adjustment during installation. Make adjustments **ONLY** if the unit is not operating correctly and all other possible causes for incorrect operation have been eliminated.

Inlet supply pressure to the appliance **MUST BE** checked and set within the operating parameters of the appliance in all instances.

If the appliance can not be adjusted to perform correctly call 0800 RINNAI (0800 746 624) for assistance.

Commissioning steps

1	Flush water pipes and gas line	Before final connection of the water heater , flush the gas, hot and cold water supply lines. Swarf in the gas or water supplies may cause damage, a common problem, which is not covered by warranty.
2	Connect the gas line	
3	Purge the gas line of air	
4	Final connection test	
5	Check supply pressure	Operate ALL other gas appliances at their maximum rate. With all gas appliances on maximum the supply pressure must read between 1.13-3.0 kPa on Natural gas and on LPG 2.75-3.0 kPa. If the pressure is lower, the gas supply is inadequate and the appliance will not operated to specification. It is the installer's responsibility to check the gas meter, service regulator and pipe work for correct operation and sizing, and rectify as required.
6	PCB settings checked	Refer sideways flue diverter information on the next page and the PCB interface layout and functions page. PCB settings checked if the factory default temperature has been changed. Dip switch settings checked if a sideways flue diverter is fitted.  Short video: http://rinnai.co.nz/007
7	Operate and test for gas leaks	Replace the appliance front cover otherwise the unit won't operate correctly, and operate and test for gas leaks using an electronic leak detector.
8	Operational test	Confirm the water flow and hot water delivery temperature using a thermometer. If water controllers are fitted, it is necessary to test their operation through the complete range of functions, refer separate instructions provided with the water controllers.

9 Check cold water inlet filter

Inspect and clean the water inlet filter. This may need to be repeated to ensure the filter remains clear, especially on new installations.

▶ Short video: <http://rinnai.co.nz/006>

If you feel the customer is capable of doing this check it would be beneficial to show them how to inspect and clean the water filter as well.

10 Customer handover

After testing is completed, explain to the customer the function and operation of the water heater and water controllers (if fitted).

Also talk to them about:

- The gas, power, and water connections
- How frost protection works
- Procedure for draining the water heater
- Where to find the data plate
- Maintenance and servicing

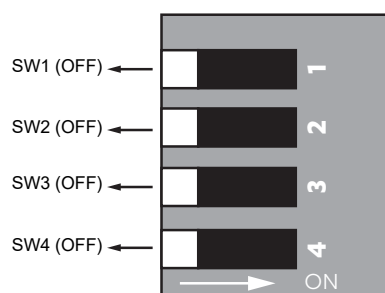
If the customer is not there try and contact them by phone to discuss these important points.

Ensure the installer details section is completed in the operation guide, the commissioning checklist has been completed and signed, and that the guide and checklist are left with the customer.

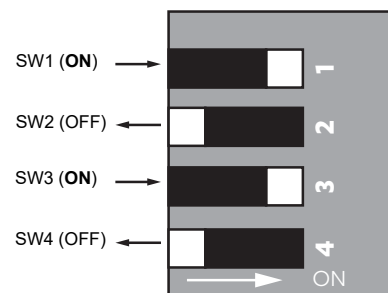
Sideways flue diverter dip switch changes

When delivered ex-factory, by default SW1, SW2, SW3, and SW4 of the DipSW are set to the OFF position.

If a sideways flue diverter is installed onto the water heater, SW1 and SW3 of the DipSW must be set to the ON position.



Default dip switch settings as they are ex-factory.



Dip switch settings required for a sideways flue diverter installation.

The dip switch change for a sideways flue diverter is required to increase the combustion fan speed, which helps overcome the friction losses from having a sideways flue diverter installed on the water heater.

PCB interface and dip switch settings

The PCB interface and dip switch settings must only be changed by a licensed gasfitter. They have been provided as there may be a requirement to change the temperature of the water delivered from the water heater or change the dip switch settings if fitting a sideways flue diverter.



Care must be taken when changing the temperature or dip switch settings as they can be easily switched or bumped into the wrong position. Fully check the operation of the water heater before leaving including the temperature of the water delivered.

The cover of the water heater will need to be removed to carry out this operation. As this will expose live mains voltage wiring **please disconnect the power supply before removing the front cover.**

We wish to draw your attention to the requirements of the New Zealand Building Code and compliance document G12. This requires that water delivered to sanitary fixtures be no more than 55 °C. Increasing the water heater set temperature will require that you protect all sanitary fixtures to which the appliance is plumbed with suitable tempering valves or something similar.

Rinnai will accept no liability for issues arising out of the use of this information.

If you have any doubts about the performance of the water heater, please contact Rinnai by phoning 0800 RINNAI (0800 746 624).

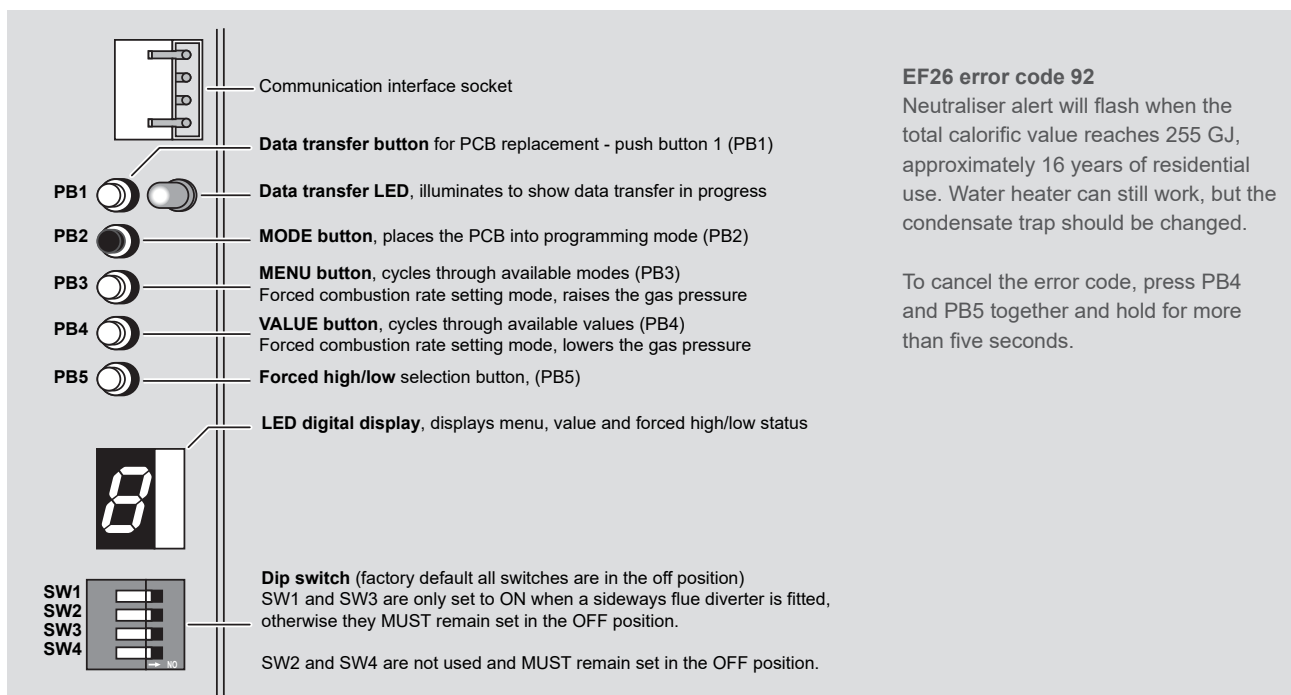
The following information details settings for the Rinnai INFINITY EF26 and A-Series models only. They are not applicable for other models.

Basic operation of the PCB interface

- To place the PCB into programming mode press PB2 until the LED digital display shows 1, noting that the current set value will be displayed shortly afterwards.
- To alter a value press PB4, each press of the button will select the next available value.
- To change to another menu, press PB3, each press of the button will select the next available menu.
- To exit the programming mode and save the selected settings press PB2 until the LED display goes blank.

Note:

- If no buttons are pressed the PCB will automatically exit programming mode after 10 mins.
- Exiting programming mode sets the value last viewed as the current value.



Menu	Menu description	Value							
		A	b	C	d	E	F	H	J
1	Gas type	ULPG	NG	N/A	N/A	N/A	N/A	N/A	N/A
2	Model	2626	2426	2024	1620	N/A	N/A	N/A	N/A
3	Fixed / Max. temp	55 °C	65 °C	60 °C	50 °C	42 °C	40 °C	N/A	N/A
4	OFF water flow rate	+ 3 °C	+ 6 °C	N/A	N/A	N/A	N/A	N/A	N/A
5	50 °C delivery adjustment temp.	0	N/A to NZ—Australian models only					+1 °C	+2 °C
6	Remote controller safe program	ON	OFF	N/A	N/A	N/A	N/A	N/A	N/A
7	OHS	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A
8	EF26 only Condensation prevention on manifold	Default							
9	A24/A26 only Fan revolution	180 Hz	100 Hz	Setting change to reduce fan noise if customer states unit is too noisy (Ver. 7, PCB label G)					
0	Post fan time	65 sec	120 sec	240 sec	480 sec	To reduce the HEX temp. after combustion			

If the settings are changed, please note these on this sheet for future reference. These will be needed if a PCB replacement is required and a manual data transfer is needed.

 Dark shaded sections = default setting

Parameter setting notes

- 2: Values in Menu 2 cannot be adjusted.
- 4: Menu 4 OFF water flow rate
The temperature of the outgoing hot water is monitored by a built-in sensor. If the temperature of the outgoing hot water rises more than 3 °C (default, or 6 °C if 4b) above the selected temperature shown on the digital monitor or the preset limit when water controllers are fitted, the burner will automatically go out.
- 6: Menu 6 Remote controller safe program
Factory default is ON. If a controller has been continuously connected for more than six hours, the PCB automatically defaults to controller only mode, making the assumption that the water heater will always be connected to and operated by a controller. This means if a controller is disconnected, the inbuilt safe program will only allow the unit to deliver a maximum temperature of 42 °C. If this safe program is not needed, change menu 6 from A (ON) to b (OFF).
- 7: OHS for solar applications
N/A for New Zealand models, this is for Australian models only that have different temperature settings. Please remember that the A-Series and the EF26 are not suitable and will not be warranted for solar applications.
- 8: Prevention of condensation on the manifold (EF26 only)
If exhaust gases go back into the combustion chamber, condensation on the manifold nozzle causes error 11. To prevent this, the post-fan time (fan revolution after combustion) can be controlled as follows.

8	Prevention of condensation on the manifold	A	b	C	d
	Post fan time	Outside temp. > 15 °C → 15 sec. Outside temp. ≤ 15 °C → 120 sec.	15 sec	240 sec	480 sec
	Post fan revolution	X (Hz), X depends on the model, e.g. 180 Hz	X (Hz)	X(Hz) + 50 Hz	X(Hz) + 50 Hz

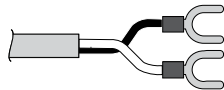
A-Series controller communication cables

Wired water controllers operate at an extra low voltage (12 V DC) which is supplied from the water heater, a 10 m long communication cable is supplied for connection to the water heater. Only Rinnai supplied communication cables may be used.

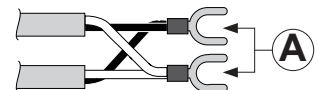
The water heater end of the cables is fitted with spade terminals. Only two pairs of cables (four spade connectors in total) may be terminated. When attaching three or four cables it is necessary to join the cable terminators as shown below.

For each pair cut off the existing spade connectors and re-terminate each pair into a new spade connector (A). Spade connectors are available from your local electrical component retailer

Single cables can be used when terminating up to two communication cables.



Paired cables are to be used when terminating three or four communication cables.

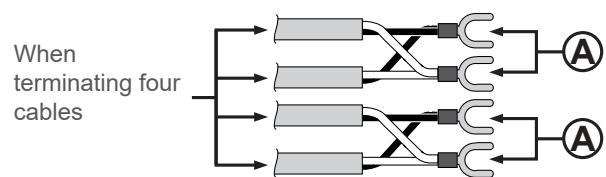
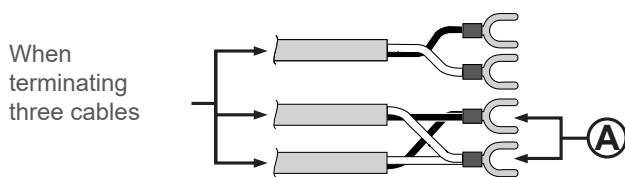


Connecting one or two communication cables

Follow steps one through five below to terminate the cables to the water heater.

Connecting three or four communication cables

To connect three or four cables, separate all the cables to be fitted into pairs.

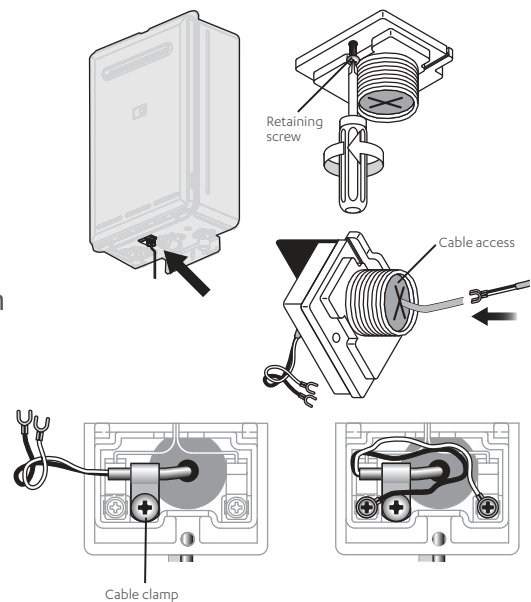


Follow steps one through five below to terminate the joined cable pairs to the water heater.

1. Isolate the power supply by switching the power point off and removing the power plug of the water heater from the electric power socket.
2. Removing the retaining screw of the cable connector at the base of the unit.
3. Swing the cable connector door open and thread the cable through the weather seal of the cable access hole, allowing sufficient cable length so that the sheath of the cable can be secured with the cable clamp supplied with the transceiver.
4. Loosen the screw terminals and connect the cable spade connectors to these terminals and re-tighten.

Polarity is not important, either wire colour can be connected to either terminal.

5. Return the cable connector to the original position, taking care not to damage the cable wires in the process, and replace the retaining screw.



EF26 controller communication cables

Wired water controllers operate at an extra low voltage (12 V DC), which is supplied from the water heater. A 10 m long communication cable is supplied for connection to the water heater. Only Rinnai supplied communication cables may be used.

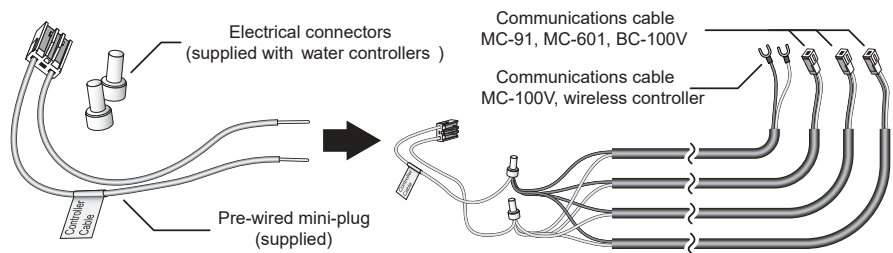


Connecting communication cables to the mini-plug

DO NOT attempt to connect water controller cables to the mini-plug when it is plugged into the PCB unless the power to the water heater is switched OFF, otherwise damage to electrical components may occur.

Water controllers are connected to the PCB by a dedicated pre-wired mini-plug.

Standard electrical cable connectors can be used to terminate the water controller wires to those on the mini-plug. The existing spade connectors, of the communication cables, will need to be removed prior to termination. Controllers are not polarity sensitive, however to avoid confusion it is recommended that like coloured wires be terminated together.

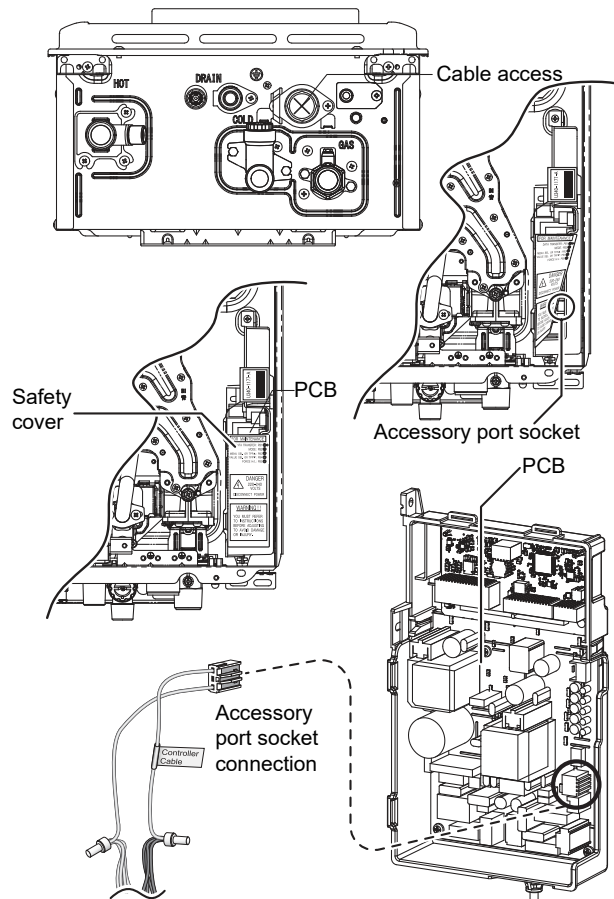


Connecting communication cables to the PCB (refer image below)

DO NOT attempt to connect the mini-plug or water controller cables to the water heater unless the power to the water heater is switched OFF, otherwise damage to electrical components may occur.

1. Isolate the power supply by switching the power point off and removing the water heater plug from the power socket.
2. Remove the front cover of the appliance.
3. Insert the mini-plug and the connected water controller cables through the cable access at the base of the appliance. Ensure the cable connectors are located inside the appliance for protection.
4. Locate the PCB (bottom right of the appliance), and carefully move the plastic safety cover out of the way.
5. Locate the accessory port socket (bottom front of PCB).
6. Plug the mini-plug into the accessory port socket, the plug and socket are keyed so that they can only be plugged into the one direction).

7. Proceed with the water controller installation and connect the communication cables to the controllers.



Rinnai.co.nz

Tel: 0800 746 624
<http://www.youtube.com/rinnainz>
<http://facebook.com/rinnainz>

Installation guide

U340-1336X02(00)
REU-A/E(NZ)



Wet Area Systems

Specification and installation manual

CBI 5113

FEBRUARY 2021.



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RESIDENTIAL AND NON-RESIDENTIAL APPLICATIONS. BATHROOMS, LAUNDRIES, TOILETS AND KITCHENS.

Protection from internal moisture is an important consideration when designing interior lining systems for homes, multi-unit apartments, educational, healthcare and commercial applications.

The New Zealand Building Code sets out minimum standards for wet area spaces in residential dwellings. However, often higher levels of performance and protection from internal moisture is demanded.

The GIB® Wet Areas System specification and installation manual provides internal lining options and details for specifiers, builders and building owners.

USE ONLY THE CURRENT SPECIFICATION

This manual supersedes the publication GIB Aqualine® Wet Area Systems March 2007. Winstone Wallboards Ltd accepts no liability for reliance upon publications that have been superseded.

If you are unsure whether this is the current publication, call the GIB® Helpline on 0800 100 442 or go to gib.co.nz

BEWARE OF SUBSTITUTION

The performance of GIB® Wet Area Systems requires accurate design detailing and construction practices. All GIB® Systems have been developed specifically for New Zealand conditions and independently tested, assessed or appraised, to ensure the required level of performance. It is important to use GIB® components where specified and to closely follow the specified design details and construction practices, to be confident that the required level of performance and quality is achieved on site.



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This publication

This publication is a best practice guide to the design and construction of wall and ceiling linings in wet areas with intermittent water exposure within residential and non-residential buildings, as covered by NZ Building Code Clause E3 Internal Moisture.

The information is designed to be helpful to designers, contractors and home-owners wishing to achieve a result that is easy to incorporate into modern design, simple and clear to construct, and that will satisfy the needs, requirements and expectations of both the NZ Building Code and the end user.

Wet areas in the home often require relatively frequent and expensive renovation or repair, often because of the ingress of water to the structure of the building.

To form a complete wet area system it is important to specify compatible materials and systems, designed to cope with conditions that are common in wet areas, and to ensure correct installation using best practice.

WET AREAS

Generally, wet areas are described as spaces to where fresh water is reticulated, such as bathrooms, toilets, laundries and kitchens. Within wet areas the following requirements apply;

1. NZBC Clause E3.3.4 states that wall surfaces adjacent to sanitary fixtures or sanitary appliances must be impervious and easily cleaned.
2. NZBC Clause E3.3.6 states that surfaces of building elements likely to be splashed must be constructed in a way that prevents water splash from penetrating behind linings or into concealed spaces.

NZ Building Code Clause E3 also refers to other requirements not covered in this publication, such as ventilation, condensation control and overflow management. Ongoing maintenance of wet areas is also important to maximise service life.

GIB AQUALINE®, GIB TOUGHLINE® AQUA AND GIB WEATHERLINE®

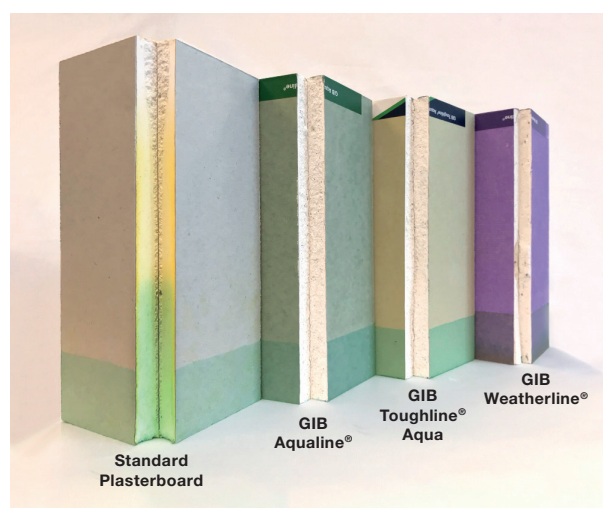
Although able to cope with infrequent short-term exposure, standard gypsum plasterboard will have a shortened life expectancy when frequently exposed to water or a high moisture environment.

The NZ Building Code does not call for water resistant linings in wet areas but it is desirable to specify lining materials which will maintain their integrity longer when exposed more frequently to moisture, and to one-off events such as leaks or flooding.

GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® feature a water-resistant polymer impregnated core, designed for wet area applications. These core formulations not only resist penetration of moisture through the lining into the framing behind, but also resist water “wicking” up the core, a common cause of long-term damage where a water-resistant lining has not been used.

WATER ABSORPTION TEST

The illustrations below show how GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® compare with standard plasterboard after soaking for two-hours in green dye.



WHERE TO USE GIB® WET AREA LININGS

In order to prolong the life expectancy of the space it is highly desirable to include wet area linings in situations where there is an increased risk of water or moisture damage. Applications include walls and ceilings in bath and shower rooms, and walls in laundries, toilets and kitchens.

BENEFITS

- Water resistant and durable linings help protect against water damage
- Proven substrate for paint, wallpaper, waterproofing membranes, tiles, sheet vinyl and rigid sheet shower linings
- Suitable for both residential and non-residential applications
- Dimensionally stable and an excellent substrate for ceramic tiles
- Conventional jointing methods
- Easy to cut and form openings
- Contains glass fibres and other additives to increase strength and fire resistance
- May be used in GIB® Bracing, GIB® Fire Rated and GIB Noise Control® Systems (see Compliance with the NZ Building Code, Clauses B1, C3 and G6). Consult the appropriate GIB® literature for installation details

HANDLING AND STORAGE

- GIB® plasterboard must be stored under cover, stacked flat and clear of the floor with sufficient support to avoid sagging
- GIB® plasterboard must be handled as a finishing material

LIMITATIONS

- GIB® wet area linings must not be used for bracing purposes in shower cubicles or above baths. For more information refer to page 9 of this manual
- Do not use GIB® wet area linings where exposed for extended periods to humidity levels above 90% RH, such as in group shower or steam rooms, or where exposed to moisture and chlorine rich environments such as in indoor swimming pools
- GIB® wet area linings used in a bathroom or other high humidity environment must not be directly applied to solid plaster (gypsum or cement), wood-based sheet linings or similar materials, masonry or concrete, without strapping or steel furring channels
- GIB® wet area linings must not be installed over a vapour barrier or a wall acting as a vapour barrier
- Cracked or damaged sheets must never be used
- GIB Aqualine® or GIB Toughline® Aqua must not be used in external applications
- GIB® plasterboard must not be exposed to temperatures in excess of 52°C for prolonged periods. Heat-generating devices may include halogen lighting, cooking elements, radiant heating, solid fuel exhausts and fire surrounds. Consult the appliance manufacturer for installation details

Table 1: GIB® Wet Area linings sheet dimensions and weights

Product	Sheet face colour	Thickness (mm)	Sheet width (mm)	Edge Type	Sheet length (mm)						Max. Weight (kg/m²)
					2400	2450	2700	3000	3600	4800	
GIB Aqualine®	Green	10	1200	TE/TE							8.0
			1200	TE/SE							
			1350	TE/SE							
		13	1200	TE/TE							11.5
GIB Toughline® Aqua	Mauve	13	1200	TE/TE							11.9
GIB Weatherline®	Purple	10	1200	SE/SE							9.0
		13	1200	SE/SE							11.5

BOARD SUBSTITUTION OPTIONS

Acceptable GIB Aqualine® alternatives	
10mm GIB Aqualine® can be replaced with:	10mm GIB Weatherline® 13mm GIB Toughline® Aqua
13mm GIB Aqualine® can be replaced with:	13mm GIB Weatherline® 13mm GIB Toughline® Aqua

GIB® Wet Area System construction details in this manual refer to the use of GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® sheets may also be used in place of GIB Aqualine®.

FLEXIBLE SHEET VINYL – SHOWERS AND OTHER WET AREAS

- GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® are suitable substrates for flexible vinyl wall finishes in wet areas of residential, commercial or institutional buildings
- Framing requirements and installation procedures are presented in this literature, except that the lining gap at the floor is no more than 5mm when a pencil cove detail is used
- The installation of galvanised steel reinforcing angles behind internal lining corners is recommended for sheet vinyl applications in showers or shower over bath situations
- The lining must be jointed and stopped to a paint quality finish (Level 4) – trowel marks can telegraph even through a commercial grade 2mm vinyl
- A commercial grade vinyl is recommended in commercial or institutional bathrooms and showers
- In areas directly exposed to liquid water, all joints in flexible sheet vinyl must be heat welded
- Installation of flexible vinyl must be carried out strictly in accordance with the specifications provided by the suppliers/ manufacturers of the vinyl

RIGID SHEET SHOWER LININGS

- The wall surface must be free of dust before installation of the lining
- Avoid lining joints as much as possible and where necessary flush with plaster to achieve a level surface
- Do not pre-seal or paint areas which are to be covered by the rigid shower linings
- The suppliers of thin (usually 2-3mm) and rigid acrylic shower linings commonly recommend direct adhesive fixing to wall linings using solvent-based adhesives
- Care must be taken to ensure that rooms are adequately ventilated
- Water temperature changes will cause movement of the thin acrylic sheet, which in turn will stress the adhesive and wall lining substrate
- Consult the supplier of the shower lining for full installation details
- Suppliers of rigid sheet acrylic shower linings recommend a minimum of 24 hours for the adhesive to cure fully prior to the shower being put into service

WATERPROOF MEMBRANE SYSTEMS AND TILING

- A waterproof membrane system must be applied to lining materials used as a substrate for ceramic tiles in a shower or shower over bath situation
- The wall surface in a shower or shower over bath situation is not complete and ready for tiling until coated with a waterproof membrane system over the lining and once penetrations for shower mixers, taps and associated fittings are sealed
- The installation of galvanised steel reinforcing angles behind internal lining corners is required for tiled wall applications in showers or shower over bath situations
- In-situ waterproofing membrane materials manufactured to AS/NZS 4858:2004 “Wet Area Membranes” are recommended and must be applied to manufacturer’s recommendations. Typically, these types of membrane systems are not suitable for paint and wallpaper finishes
- Waterproof membrane systems must be fully cured and dry prior to application of tiling adhesives
- Preformed sheet membranes are also available and may be more suitable where curing times or specialist skills are an issue
- The details shown in this manual are generic in nature. For accurate detailing, follow the specifications provided by the supplier of the proprietary waterproof membrane system

For further information on tiling consult the BRANZ Good Practice Guide – Tiling.

PENETRATIONS AND SEALANTS

As leaks and water ingress typically occur at junctions between building elements and at penetrations, it is essential that particular attention is given to these details at the time of installation. Lack of attention to detail can result in water damage that could remain undetected for a long time.

- Ensure that all cut-outs for pipe penetrations are made neatly, and slightly oversize, with a hole saw. These penetrations should be of a diameter no more than 12mm greater than that of the pipe
- Shower mixer and tap penetrations should be sealed with an appropriate flange system to prevent the passage of moisture into the wall cavity. Refer to New Zealand Building Code Clause E3 Internal Moisture November 2020 for examples of acceptable options
- Sealants should be of a mould inhibiting type and be paintable. Neutral cure silicones will generally meet these requirements
- Surfaces should be dry and free from dust before application, a minimum of a 4mm joint width provided and the depth should not exceed the width
- Apply a bead of sealant to the full depth of the lining in the following locations:
 - Around all tap/pipe bodies
 - The gap between the bath rim and the bottom edge of the wet area lining
 - Between the upstand of preformed shower bases and the bottom edge of the lining
 - Where an impervious junction is required at the floor/wall line, carefully seal the gap between the bottom edge of the board and the finished floor. Leave a 5-10mm gap at the bottom of the wall lining for this purpose, ensuring the gap is free from dirt and dust
- Do not locate shower heads or taps on fire rated or intertenancy walls. Should this be unavoidable always use tested and approved proprietary penetration seals

RENOVATIONS

Bathrooms, kitchens and laundries are the most renovated rooms in the house, partly due to fashion considerations and partly because of damage sustained by ingress of water and moisture.

When renovating these rooms it is often easier and more cost-effective to remove the existing linings and replace them. This allows for a new start in the room and offers sound substrates for new surfaces such as tiling and painting, where otherwise flaking paint or damaged plasterboard may compromise good and sound finish or practice. At the very least re-lining will:

- Allow for inspection of framing where damage may have occurred and provide the opportunity to repair such damage
- Allow plumbing and electrics to be checked and altered or replaced where required
- Provide the opportunity to install thermal and acoustic insulation, water-resistant linings, and propriety plumbing penetration flange systems where appropriate
- Make the job easier

MAINTENANCE

Lack of maintenance is frequently the cause of premature and often expensive failure of components and building elements within wet areas.

It is important to regularly inspect and repair any potential problem before it becomes expensive to reinstate. Good maintenance should include:

- Ongoing ventilation. At the very least, good passive ventilation (e.g. window vents); but good active ventilation (e.g. extraction fans) of an appropriate size for the room is recommended
- Impervious coatings and surfaces should be checked for wear and damage and maintained and re-coated before ingress of water to the substrate occurs
- Regular cleaning with appropriate cleaners so that build-up of matter, such as mould, is well controlled
- Sealants at junctions and penetrations should be checked for adhesion on a regular basis and replaced where adhesion failure to substrates occurs
- Where pipe leaks have become evident, however small, they should be repaired promptly and any area around such leaks dried out completely before any other repairs are carried out

Compliance with the NZ Building Code

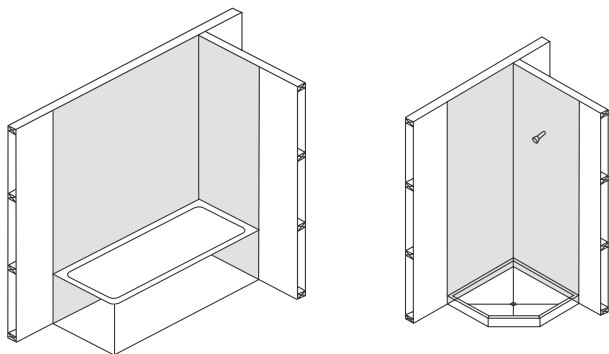
STRUCTURE – CLAUSE B1

The design and material specification for steel and timber framing used in GIB® Wet Area systems must be in accordance with the performance requirements of NZ Building Code Clause B1 (Structure).

Bracing elements are required to have a durability of 50 years. GIB® bracing elements are not to be located in shower cubicles or behind baths because of durability requirements, the likelihood of renovation, and practical issues associated with fixing bracing elements to perimeter framing members, such as at bath and shower tray locations.

Otherwise, GIB® Bracing Systems can be used in water-splash areas, provided these are maintained impervious for the life of the building.

GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® can be used in place of GIB® Standard plasterboard in GIB® bracing elements. They can also be used in place of GIB Braceline® in GIB® bracing elements 900mm or longer, provided the perimeter of the element is fixed with GIB® Grabber 32mm x 6g screws at 100mm centres, using the GIB Braceline® corner fixing pattern. Refer to the GIB® Bracing System literature.



No bracing in the shaded areas.

DURABILITY – CLAUSE B2

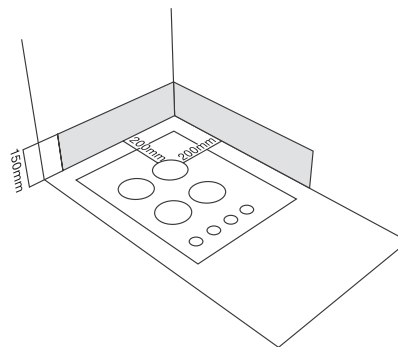
When installed and maintained in accordance with this literature, GIB® Wet Area systems tiled or vinyl covered have a serviceable life of at least 15 years. They comply with the requirements of NZ Building Code Clause B2 (Durability) for use in wet areas directly exposed to liquid water, e.g. showers, showers over baths and splash-backs.

When used as a general wet area lining and maintained under normal dry internal conditions, GIB® Wet Area Systems have a serviceable life of at least 50 years and comply with NZ Building Code Clause B2 (Durability) for use within toilets, kitchens, bathrooms and laundries not directly exposed to liquid water.

FIRE AFFECTING AREAS BEYOND THE SOURCE – CLAUSE C3

GIB® Fire Rated Systems provide passive fire protection in accordance with the requirements of NZ Building Code Clause C3. When GIB Aqualine® or GIB Toughline® Aqua is substituted into fire rated systems in place of the equivalent thickness GIB Fyrelite®, the Fire Resistance Rating (FRR) of that system will be maintained.

The protection of combustible surfaces surrounding gas cooking appliances is covered by the latest version of AS/NZS 5601.1.



As a guide the following options are acceptable for wall surfaces within 200mm of the periphery of a gas element to a height of 150mm above the element for the full dimension (width and depth) of the cooktop surface area:

- 5mm tiles on GIB® plasterboard
- 5mm toughened glass on GIB® plasterboard
- or any system that can be demonstrated to meet the specific requirements of AS/NZS 5601.1

GIB® plasterboard products must not be exposed to temperatures in excess of 52°C for sustained periods. Check with the appliance manufacturer that this requirement will be met. It would be unusual for surfaces outside 200mm to exceed 52°C for sustained periods.

INTERNAL MOISTURE – CLAUSE E3

The New Zealand Building Code Clauses that relate to wall surfaces are;

E3.3.4 - Wall surfaces adjacent to sanitary fixtures or sanitary appliances must be impervious and easily cleaned.

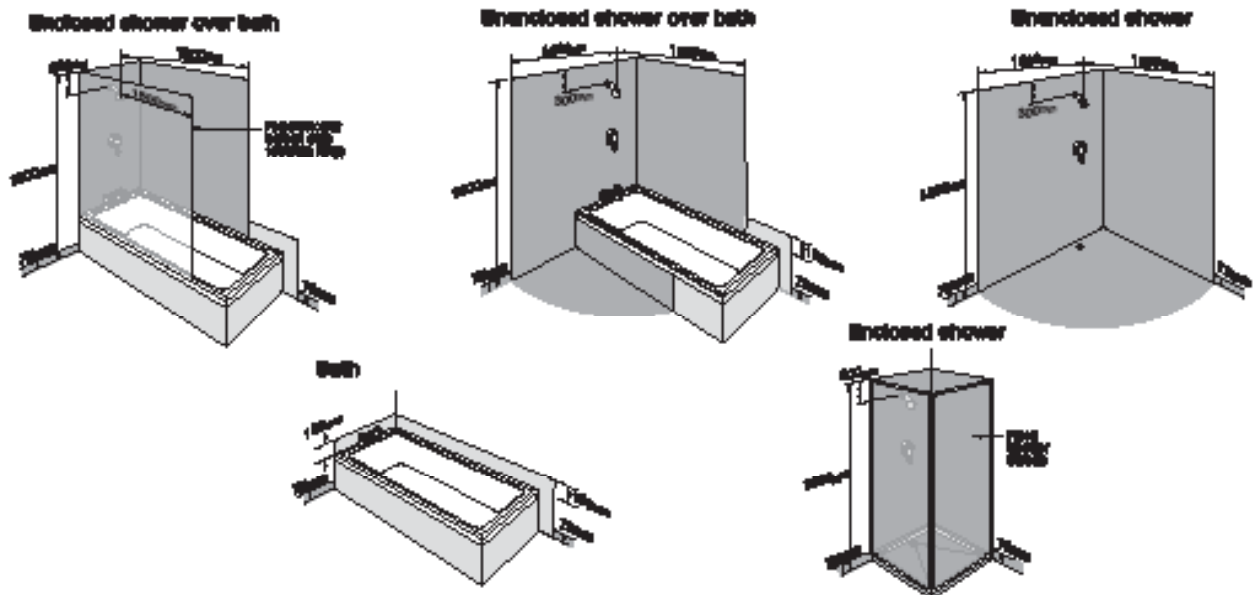
E3.3.5 - Surfaces of the building elements likely to be splashed or become contaminated in the course of the intended use of the building, must be impervious and easily cleaned.

E3.3.6 - Surfaces of building elements likely to be splashed must be constructed in a way that prevents water splash from penetrating behind linings or into concealed spaces.

New Zealand Building Code Acceptable Solution E3/AS2 substantially refers to the Waterproof Membrane Association Incorporated (WMAI) Code of Practice for Internal Wet Area Membrane Systems (IWAM), August 2020.

The IWAM Code of Practice refers to wet area membranes and over-surfaces that are easy to clean and suggests an extent as outlined below for a typical bathroom application. For further details refer to the IWAM Code of Practice which also lists suitable rigid sheet materials and tiling membranes.

Shaded areas in the diagrams below represent the minimum extent of wall surfaces requiring impervious sheet materials or waterproof membrane systems prior to tiling.



HAZARDOUS BUILDING MATERIALS – CLAUSE F2

At no stage during its serviceable life does GIB Aqualine® constitute a health hazard. It therefore meets the provisions of NZ Building Code Clause F2 (Hazardous Building Materials). Dust resulting from the sanding of stopping compounds may be a respiratory irritant and the use of a suitable facemask is recommended.

VENTILATION – CLAUSE G4

NZ Building Code Clause G4 (Ventilation) requires buildings to have a means of collecting or otherwise removing steam generated from laundering, utensil washing, bathing or showering. To prolong the life of interior linings and surface finishes and to minimise the risk of moisture related problems such as condensation and mould growth, adequate heating, thermal insulation and mechanical ventilation must be provided in kitchens, bathrooms and laundries.

AIRBORNE AND IMPACT SOUND – CLAUSE G6

GIB® Noise Control Systems can be used to provide ratings for Sound Transmission Class (STC) and Impact Insulation Class (IIC) in accordance with the requirements of NZ Building Code Clause G6 (Airborne and Impact Sound). When GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline® is substituted into GIB® Noise Control systems in place of the equivalent thickness GIB® Standard plasterboard or GIB Fyrelite®, the STC and IIC rating of that system will be maintained. When GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline® is substituted in place of the equivalent thickness GIB Noiseline®, a small performance loss may occur. For further information refer to the GIB Noise Control® Systems literature or contact the GIB® Helpline 0800 100 442.

TIMBER WALL FRAMING

Framing dimensions must comply with the requirements of NZS 3604:2011.

- The moisture content of timber framing shall be 18% or less at the time of lining
- Studs shall be spaced at 600mm centres maximum for both 10mm and 13mm GIB® plasterboard
- Nogs to be evenly spaced with a maximum spacing of 1350mm. Alternatively, nogs may be staggered 150mm maximum either side of a horizontal joint line
- Nogs are not required behind horizontal joints except in shower situations or specific fire or noise control systems

FASTENERS

- Minimum 32mm x 6g GIB® Grabber® High Thread screws.

FASTENER CENTRES

- 300mm centres to top and bottom plates and to perimeter studs
- Single fasteners to each stud where the horizontal joint crosses the studs

- Place fasteners 12mm from sheet edges and 18mm from sheet ends
- Daubs of GIBFix® adhesive at 300mm centres to intermediate studs
- Do not place adhesive at sheet edges or under fasteners. Sheet edges at door or window openings can be adhesive fixed unless forming part of the perimeter of a bracing element

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

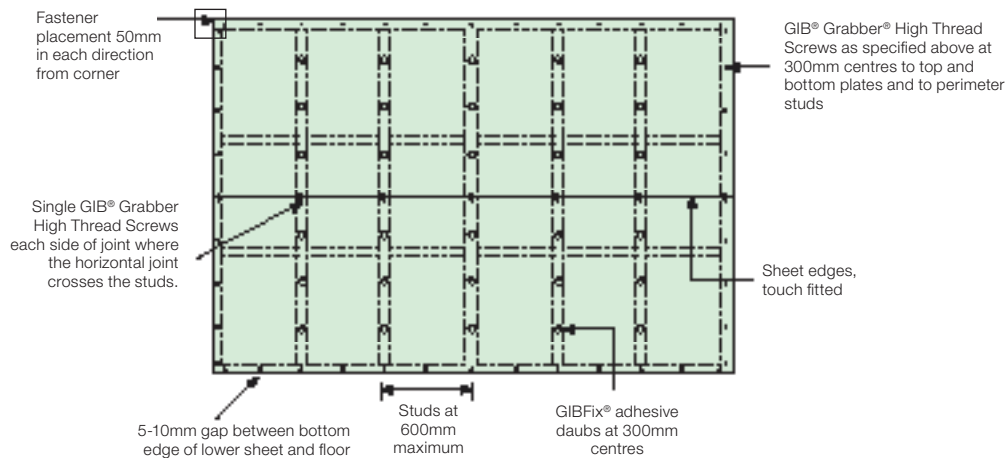
LINING

- Use minimum 10mm GIB® plasterboard
- Install the sheets leaving a 5-10mm gap at the floor line to allow for movement of the framing members and to allow for cleaning dirt and rubbish before sealing
- Sheets to be touch fitted.

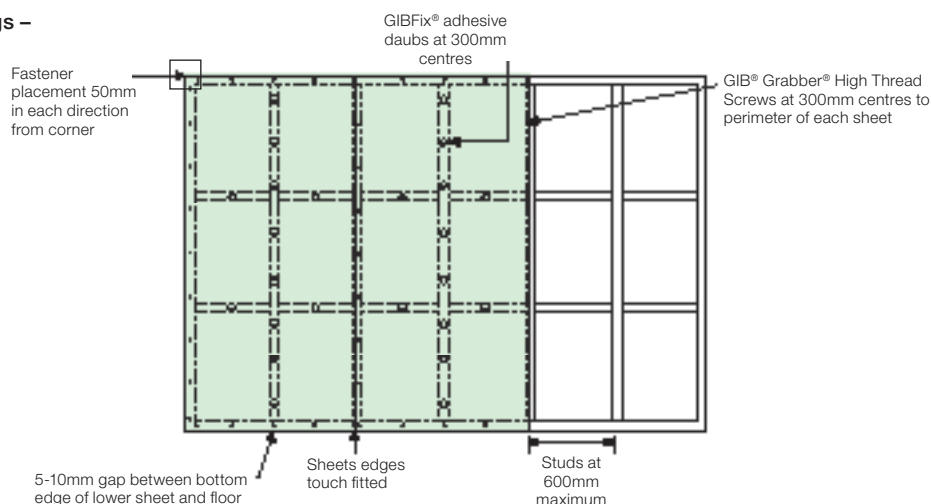
JOINTING

- Jointing shall be carried out in accordance with the instructions in the GIB® Site Guide.

Fastening the Linings – Horizontal Fixing Only



Fastening the Linings – Vertical Fixing Only



STEEL WALL FRAMING

The minimum sheet thickness for fixing on light gauge 0.55mm base metal thickness (BMT) steel framing is 13mm GIB® plasterboard. For bracing, noise control or fire rating applications consult the relevant GIB® technical publication.

Steel frame for residential construction is in accordance with NZBC B1/AS1 9.1 NASH Standard Part 2 Light Steel Framed Buildings, or by specific design. 10mm GIB plasterboard is commonly used on minimum 0.75mm BMT residential steel framing.

FASTENERS

- Minimum 25mm x 6g GIB® Grabber® Self Tapping Screws.

FASTENER CENTRES

- 300mm centres to top and bottom channels and to end studs
- Single screws to each stud where the horizontal joint crosses the studs
- Place fasteners 12mm from sheet edges and 18mm from sheet ends

- Daubs of GIBFix® All-Bond adhesive or screws at 300mm centres to intermediate studs
- Do not place adhesive at sheet edges or under fasteners.
- Sheet edges at door or window openings can be adhesive fixed.

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

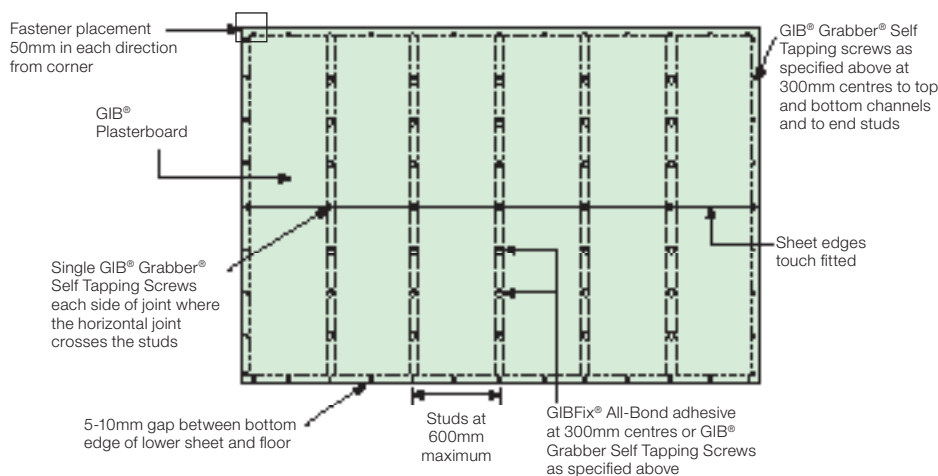
LINING

- Lay the sheets, leaving a 5-10mm gap at the floor line.
Note: If friction fitted steel studs have been used, sheets must be fitted hard to the floor. Ensure floor is cured and dry
- Sheets to be touch fitted.

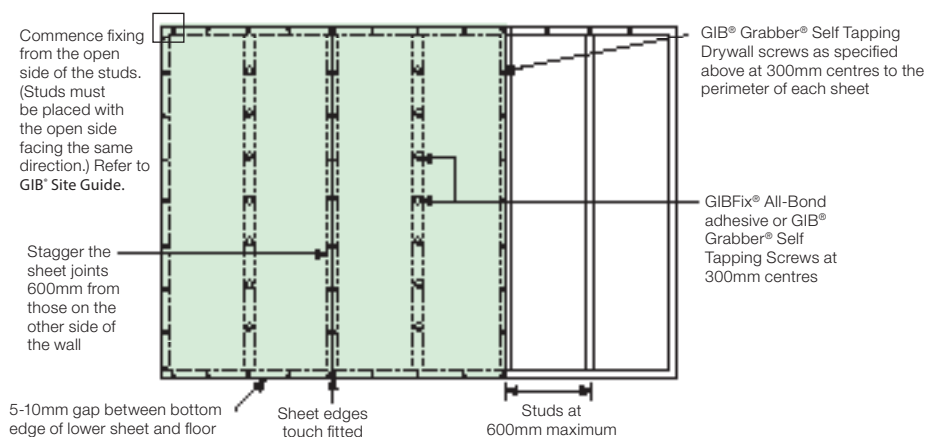
JOINTING

- Jointing shall be carried out in accordance with the instructions in the GIB® Site Guide

Fastening the Linings – Horizontal Fixing



Fastening the Linings – Vertical Fixing



TIMBER WALL FRAMING

Framing dimensions and spacing must be appropriate for the tile weight and comply with the requirements of NZS 3604:2011 Timber Framed Buildings, or relevant specific design Standard.

NOGS

For impact protection in shower cubicles or shower over bath situations it is important that all sheet joints are made on solid framing. This may require vertical fixing or the installation of additional nogs. Also provide nogs:

- Adjacent to each pipe penetration and behind sink and tub flashings
- Between all studs above bath flanges and preformed shower bases

CORNER REINFORCING

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum
- 32 x 32 x 0.55mm NZ18 or 45 x 45 x 0.55mm GIBFix® Angle. Angles need to be temporarily held in place until secured by the lining fixings.

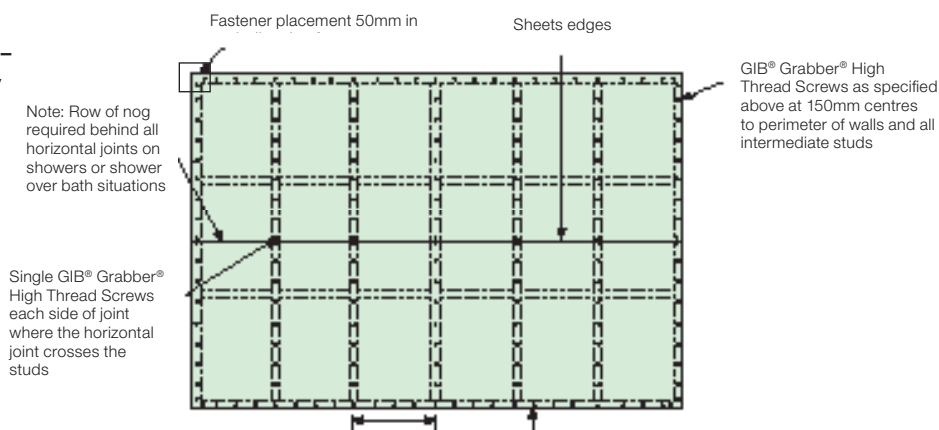
FASTENERS

- Minimum 32mm x 6g GIB® Grabber® High Thread Screws

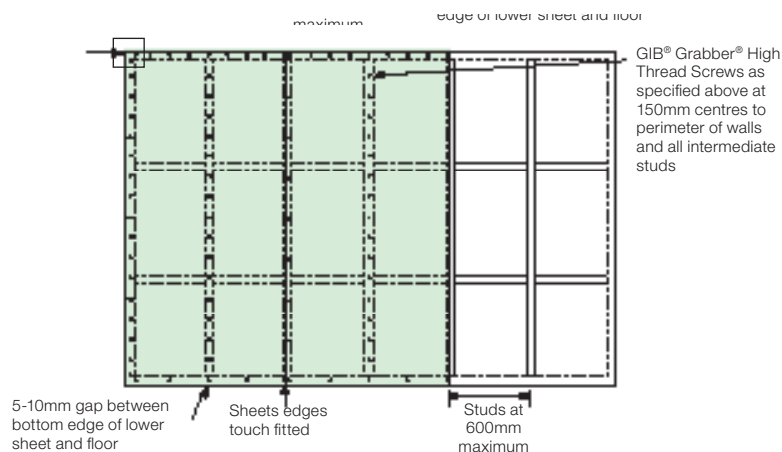
FASTENER CENTRES

- 150mm centres to perimeter of wall and all intermediate studs
- Adhesive is not to be used in place of mechanical fasteners
- Place fasteners 12mm from sheet edges and 18mm from sheet ends

Fastening the Linings – Horizontal Fixing Only



Fastening the Linings – Vertical Fixing Only



- Single fasteners to each stud where the horizontal joint crosses the studs
- Where relevant, fastener lengths must comply with the requirements of GIB® Fire Rated Systems or GIB® Noise Control Systems

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

LINING AND TILE WEIGHTS

- Use minimum 10mm GIB® plasterboard
- For maximum permitted tile weights refer to pg 16 of this manual
- GIB® Wet Area linings may be fixed vertically or horizontally
- Sheets are touch fitted
- Provide a 5-10mm gap at the wall/floor junction and between the bottom edge of the lining and any bath rim or preformed shower base to allow for placement of sealant
- Do not tile on the resilient side of GIB Rail® or STWC Acoustic Clip (ST001) and channel noise control system
- GIB® Wet Area linings are suitable for tiling full height of walls, but if a wall is to be partially tiled (e.g. half high), only the area of wall under the tiles needs to be fixed as required for tiled areas. The remainder of the wall may be fixed as for non-tiled areas

JOINTING

- Jointing shall be carried out in accordance with the instructions of the GIB® Site Guide

STEEL WALL FRAMING

Framing dimensions and spacing must be appropriate for the tile weight and comply with the requirements of NASH Standard Part 2:2019 Light Steel Framed Buildings, or relevant specific design Standard.

- Linings are placed hard to floor, bedded into a sealant bead
- Steel framing for tiling to have a minimum base metal thickness (BMT) of 0.75mm

NOGS

For impact protection in shower cubicles or shower over bath situations it is important that all sheet joints are made on solid framing. This may require vertical fixing or the installation of additional nogs. Also provide nogs:

- Adjacent to each pipe penetration and behind sink and tub flashings
- Between all studs above bath flanges and preformed shower bases

CORNER REINFORCING

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum
- 32 x 32 x 0.55mm NZ18 or 45 x 45 x 0.55mm GIBFix® Angle. Angles need to be temporarily held in place until secured by the lining fixings

FASTENERS

- Minimum 32mm x 6g GIB® Grabber® Self Tapper screws

FASTENER CENTRES

- 150mm centres to perimeter of wall and all intermediate studs
- Adhesive is not to be used in place of mechanical fasteners
- Single screws to each stud where the horizontal joint crosses the studs
- Place fasteners 12mm from sheet edges and 18mm from sheet ends.

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

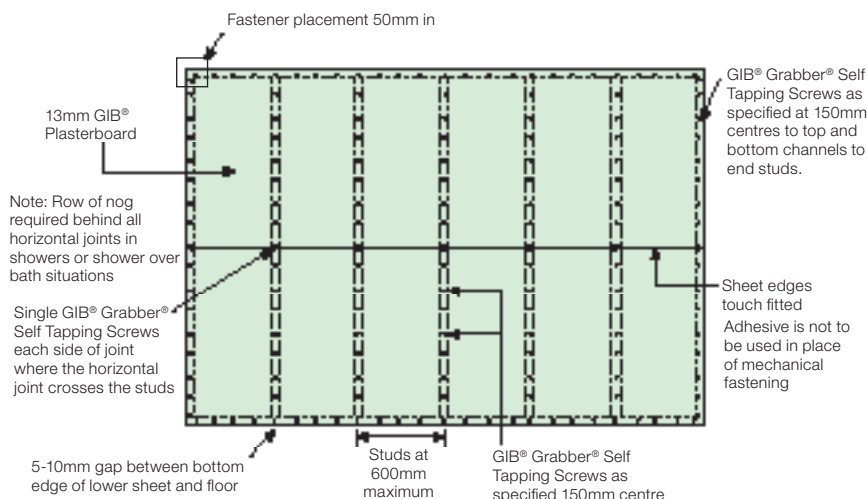
LINING AND TILE WEIGHTS

- Use minimum 13mm GIB® plasterboard
- For maximum permitted tile weights refer to pg 16 of this manual
- GIB® Wet Area linings may be fixed vertically or horizontally
- Sheets are touch fitted
- Provide a 5-10mm gap at the wall/floor junction and between the bottom edge of the lining and any bath rim or preformed shower base to allow for placement of sealant
- Do not tile on the resilient side of GIB Rail® or STWC Acoustic Clip (ST001) and channel noise control system
- GIB® Wet Area linings are suitable for tiling full height of walls, but if a wall is to be partially tiled (e.g. half high), only the area of wall under the tiles needs to be fixed as required for tiled areas. The remainder of the wall may be fixed as for non-tiled areas

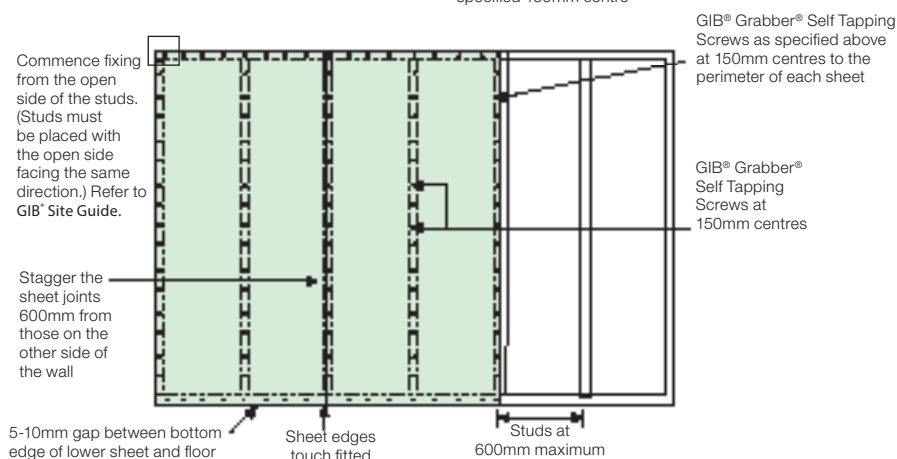
JOINTING

- Jointing shall be carried out in accordance with the instructions of the GIB® Site Guide

Fastening the L Horizontal Fixi



Fastening the Linings – Vertical Fixing Only

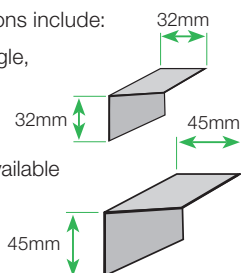


METAL ANGLES FOR TILED INTERNAL CORNERS

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum 32 x 32 x 0.55mm galvanised metal angle.

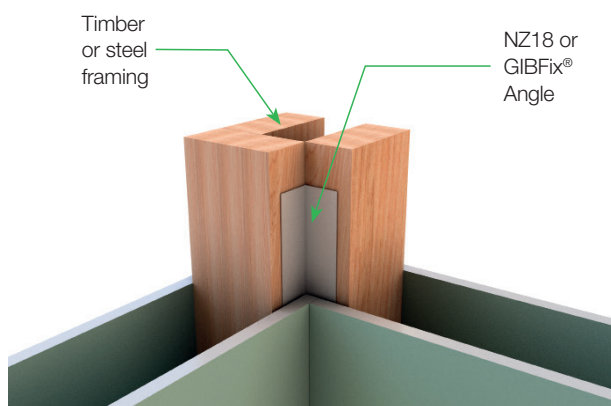
- Suitable GIB® metal angle options include:

- GIB® Rondo® NZ18 metal angle, available length: 3.0m



- GIBFix® Angle metal angle, available lengths: 2.4m and 2.7m

- Angles need to be temporarily held in place until secured by the lining fixings
- Minimum height of the metal angle is 1800mm



WATERPROOF MEMBRANE SYSTEMS

A waterproof membrane system must be applied to all lining materials used as a substrate for ceramic tiles in a shower or shower over a bath application, or any other tiled application exposed to frequent water splash.

For further information see p10.

TILES AND TILE WEIGHTS

In areas likely to be directly exposed to water, tiles may be ceramic, porcelain or stone must comply with the over-surface finish requirements of the IWAM Code of Practice and be bedded with a suitable tile adhesive on the waterproof membrane system. See page 10 for the minimum extent of wall surfaces requiring impervious sheet materials or waterproof membrane systems prior to tiling.

Smaller mosaic tiles are often lighter, but the integrity of grout joints might be more prone to impact, whilst heavier tiles are larger and have less and deeper grout and sealant joints. For more information also see AS 3958:2007 Ceramic tiles – Guide to the installation of ceramic tiles.

Table 2: Recommended maximum tile weights

Maximum Tile Weights for GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline®			
Stud Centre (maximum)	Fasteners Centre (maximum)	Lining Thickness	Tile Weight
600mm maximum	150mm maximum	10mm	26kg/m ²
		13mm	40kg/m ²

ADHESIVE AND GROUT WEIGHTS

The weight of adhesive and grout can vary depending on the type of tile and the installation process used. The maximum tile weights stated in table 2 are conservative and refer to the tile weight excluding grout and adhesive used. An additional 3kg/m² has been factored into tile adhesion testing on top of the above stated tile weights to account for adhesive and grout weight used during the installation of the tile.

CEILING FRAMING

Framing dimensions and spacing must comply with the requirements of NZS 3604:2011, NASH for steel or relevant NZ Standard.

For noise control or fire rating applications consult the relevant GIB® technical publication.

FASTENERS

- Steel battens – 25mm x 6g GIB® Grabber® Self Tapping screws
- Timber battens or Joists – 32mm x 6g GIB® Grabber® High Thread screws

ADHESIVES

- Steel battens - GIBFix® All-Bond
- Timber battens - GIBFix® All-Bond or GIBFix® One

FASTENERS CENTRES

- Single screws to the edges and centre of the sheets across each batten
- Single screw at 600mm maximum to the perimeter of the ceiling
- Screws to be 12mm from sheet edges
- Daubs of adhesive at 200mm centres between the screws
- Do not place adhesive at sheet edges or under fasteners, this may lead to screw pops

LINING

- The lining shall be fixed at right angles to the battens or joists
- Commence fixing from the centre of the sheets outwards.
- Sheets to be touch fitted
- Use long length sheets to minimise sheet end butt joints.
- Back-block sheet end butt joints
- See GIB® Site Guide for sheet edge backblocking requirements

BATTEN SPACINGS

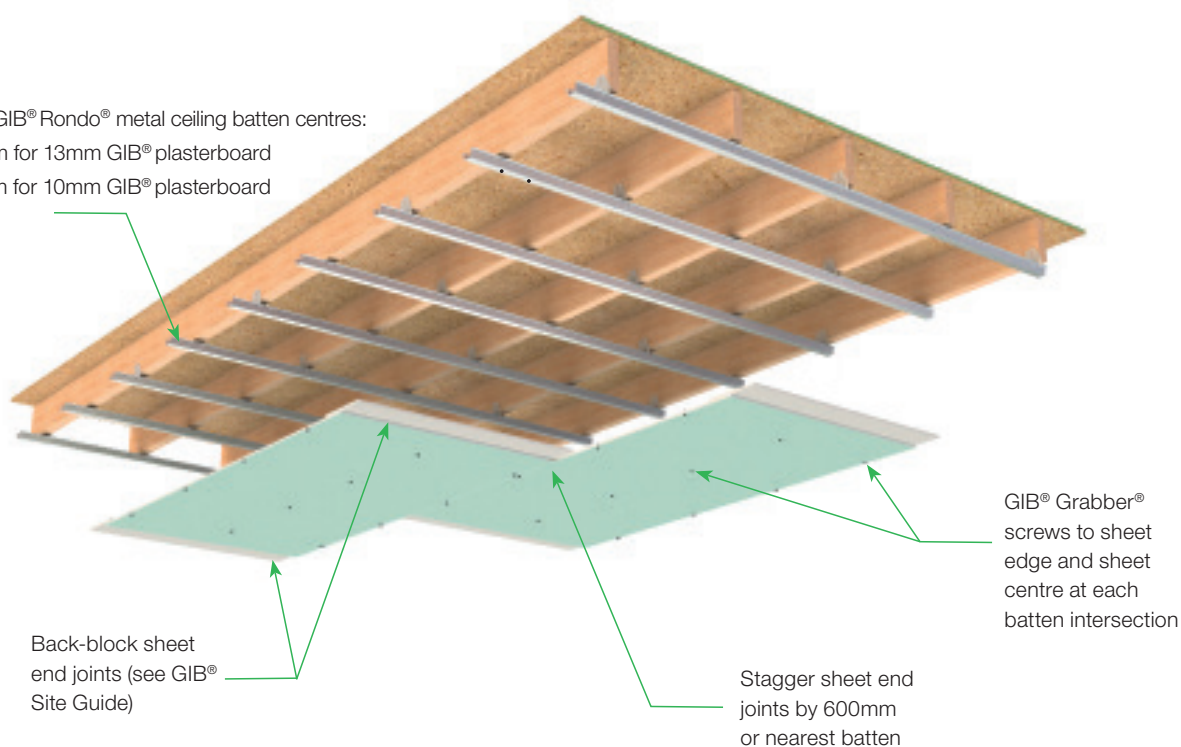
- 13mm GIB® plasterboard – 600mm centres maximum
- 10mm GIB® plasterboard – 450mm centres maximum

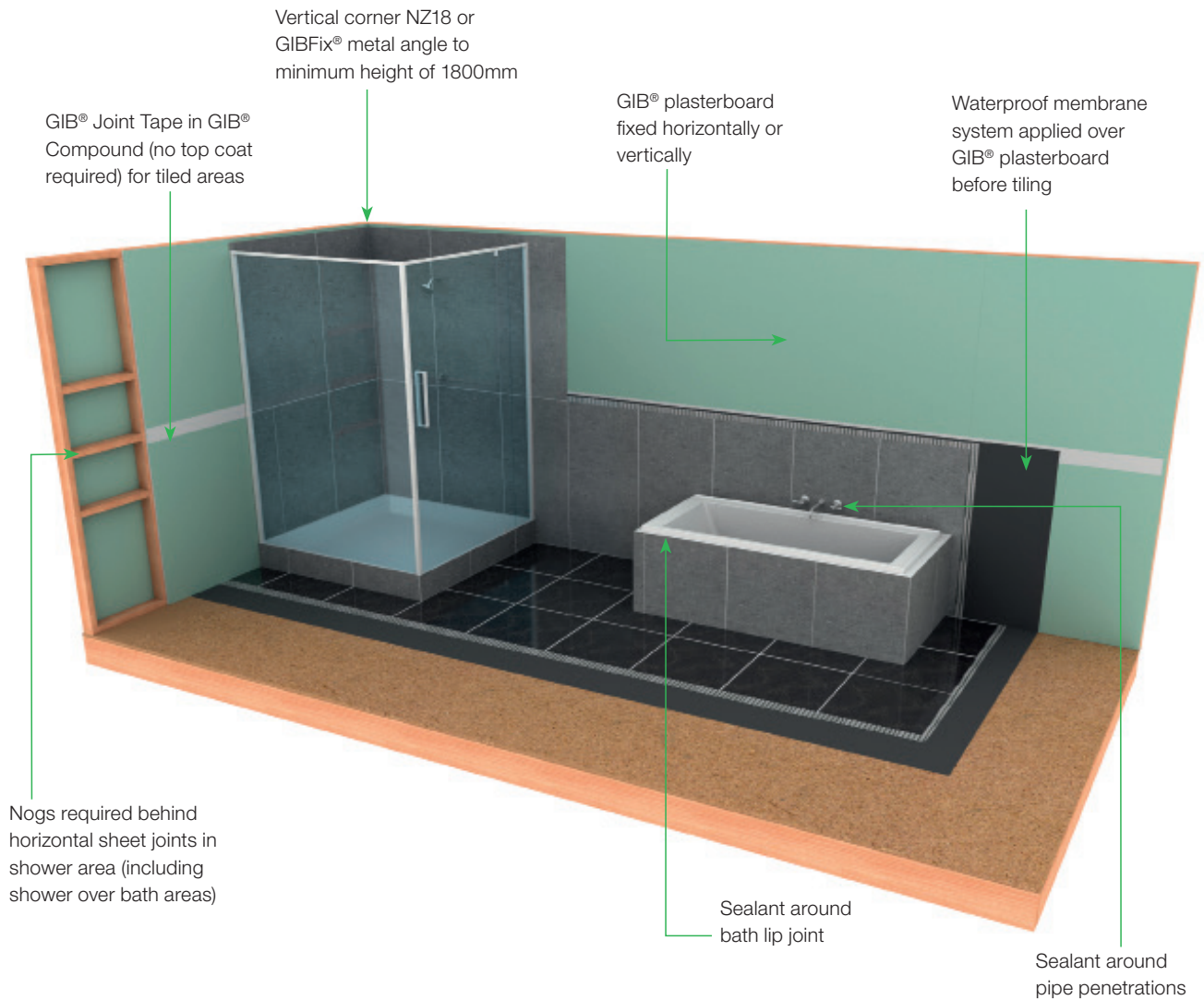
JOINTING

- All sheet joints must be paper tape reinforced and stopped in accordance with instructions in the GIB® Site Guide
- Do not fix tiles to GIB® plasterboard ceilings

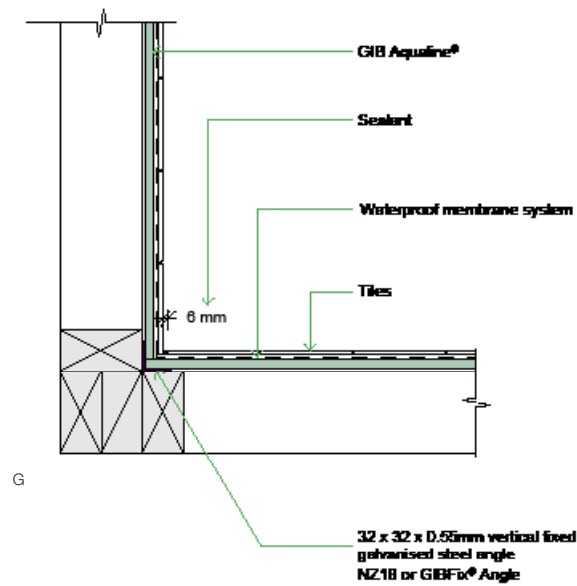
Maximum GIB® Rondo® metal ceiling batten centres:

- 600mm for 13mm GIB® plasterboard
- 450mm for 10mm GIB® plasterboard

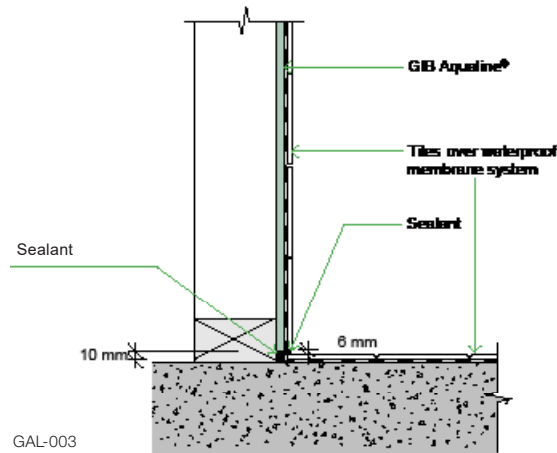




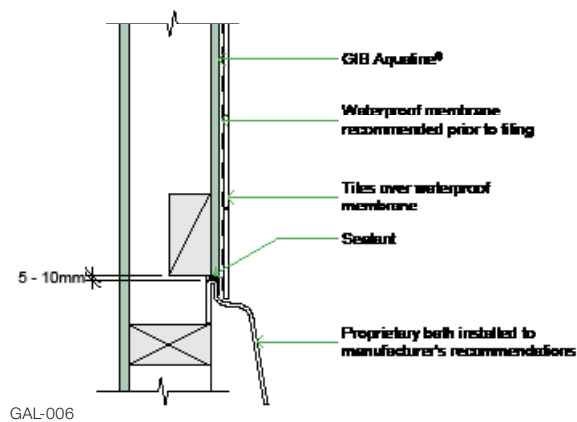
A: TILED INTERNAL CORNER



B: CERAMIC FLOOR LINING JUNCTION



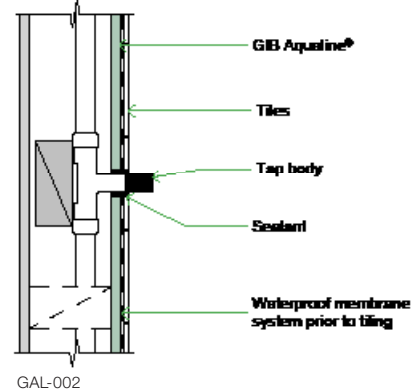
C: BATH LINING JUNCTION



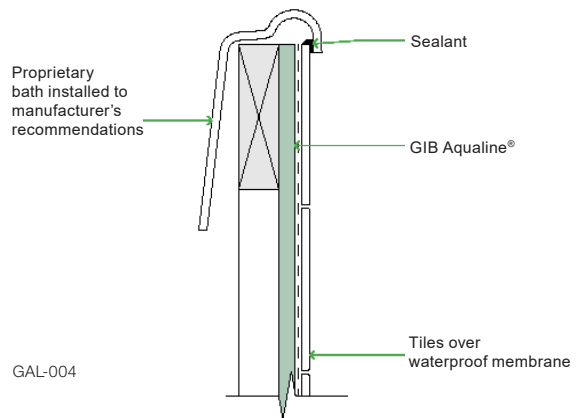
G: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

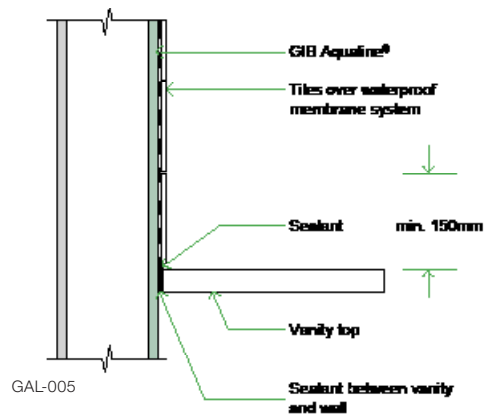
D: SEALING WET AREA PENETRATION



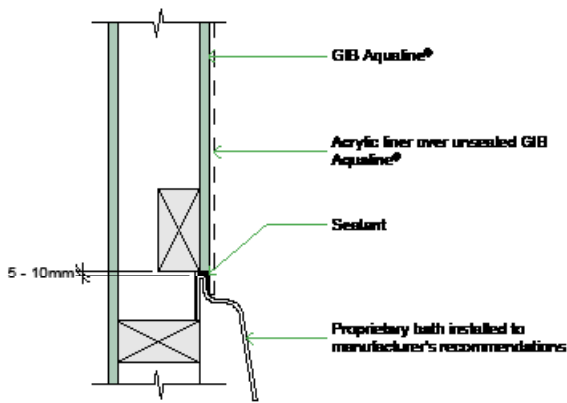
E: BATH CRADLE LINING DETAIL



F: VANITY TOP LINING JUNCTION

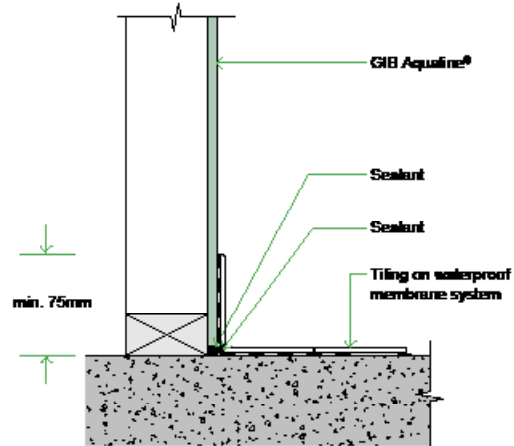


A: BATH LINING JUNCTION



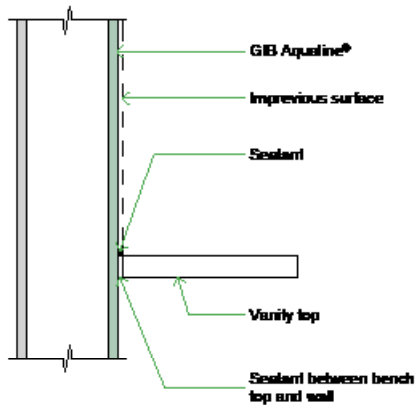
GAL-011

D: CERAMIC FLOOR SKIRTING LINING JUNCTION



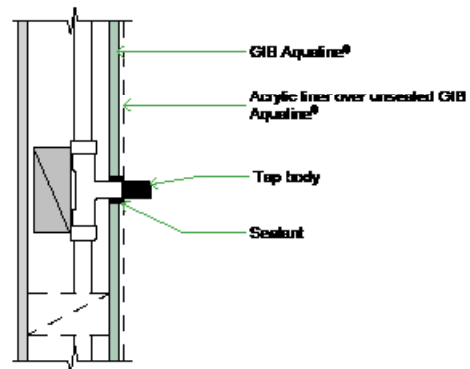
-001

B: VANITY TOP LINING JUNCTION



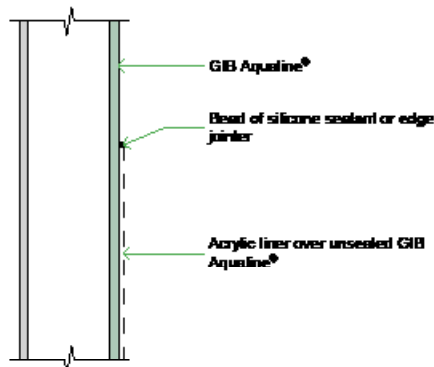
GAL-023A

E: SEALING SEMI WET AREA PENETRATION



GAL-019

C: UNSEALED PLASTERBOARD LINING



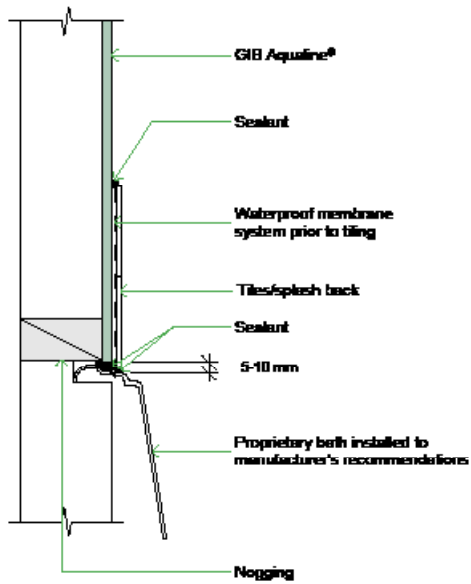
GAL-028

F: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

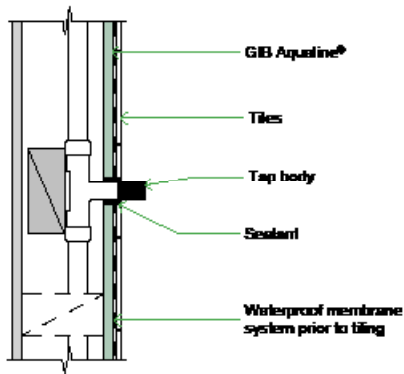


A: BATH LINING JUNCTION



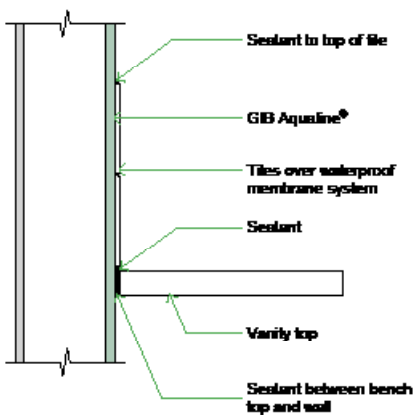
GAL-009

B: SEALING SEMI WET AREA PENETRATION

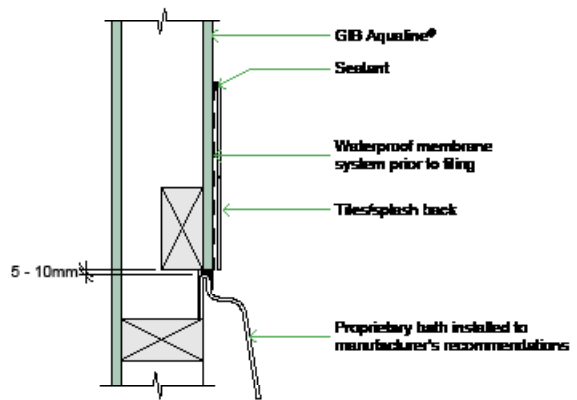


GAL-020

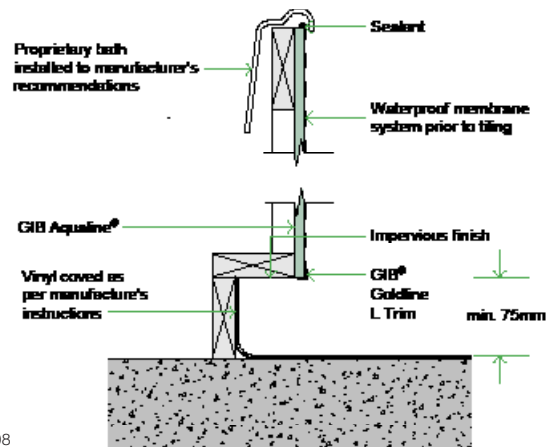
C: VANITY TOP LINING JUNCTION



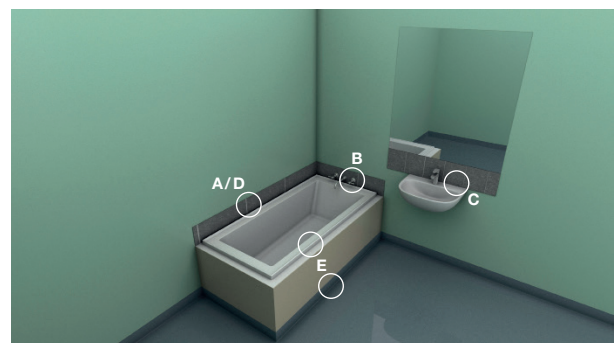
D: BATH LINING JUNCTION



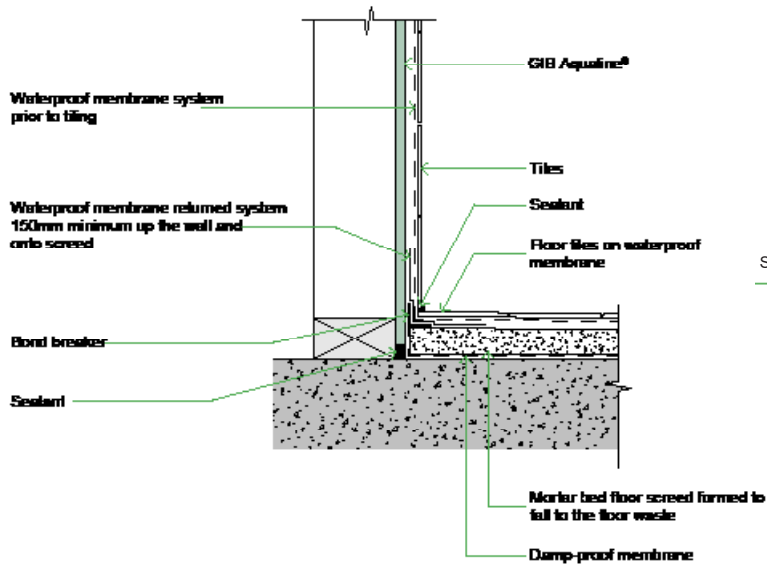
E: CRADLE VINYL LINING JUNCTION



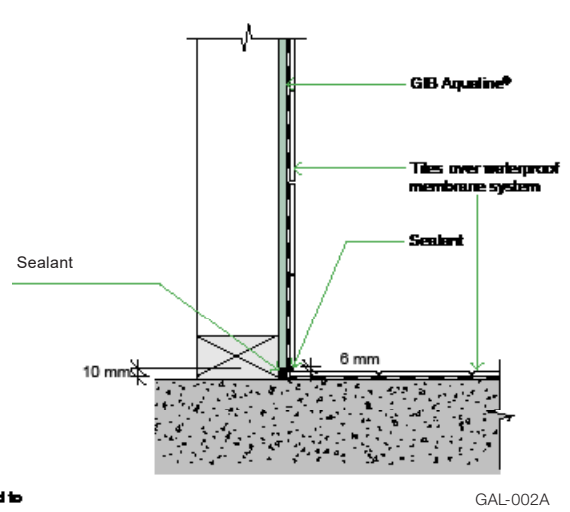
GAL-008



A: MORTAR UNDER CERAMIC FLOOR LINING JUNCTION



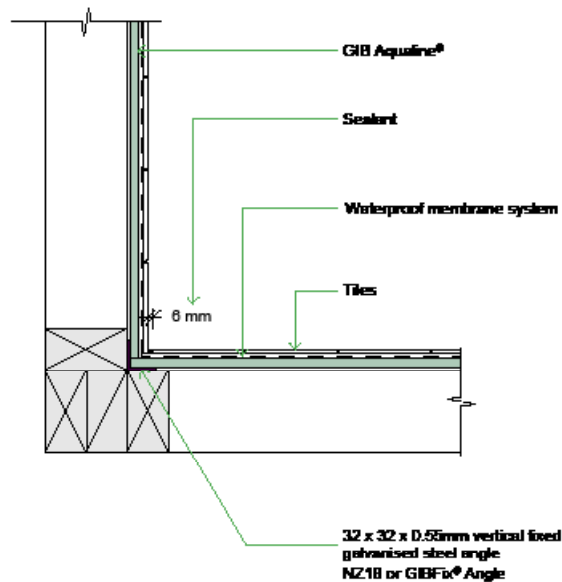
C: CERAMIC FLOOR LINING JUNCTION



PREFORMED SHOWER BASE JUNCTIONS

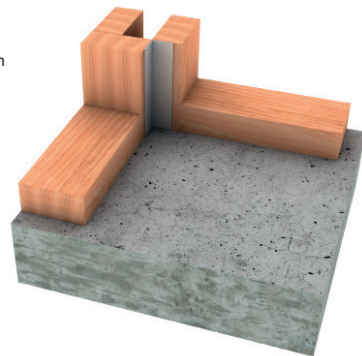
Refer to the shower base manufacturer for proprietary shower tray installation detailing including wet wall lining junction detailing.

B: TILED INTERNAL CORNER



D: TILED INTERNAL CORNER METAL ANGLE POSITION

Refer to page 16 of this publication for specification and installation guidance.

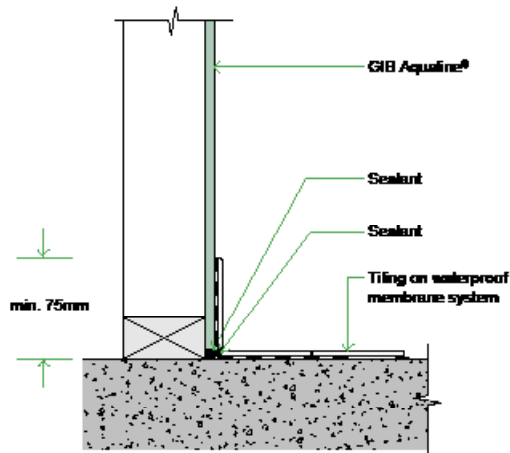


E: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

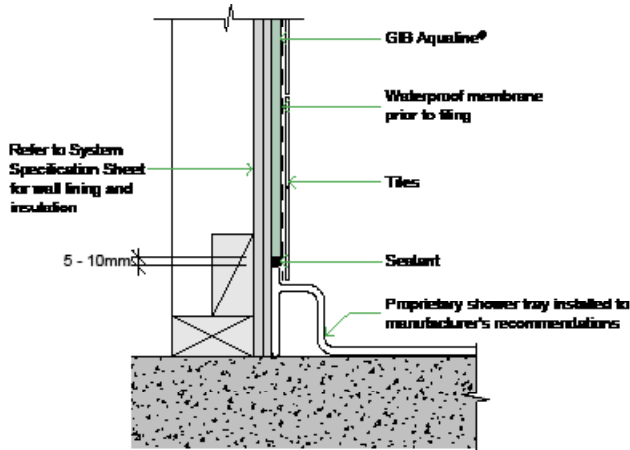


A: CERAMIC FLOOR SKIRTING LINING JUNCTION



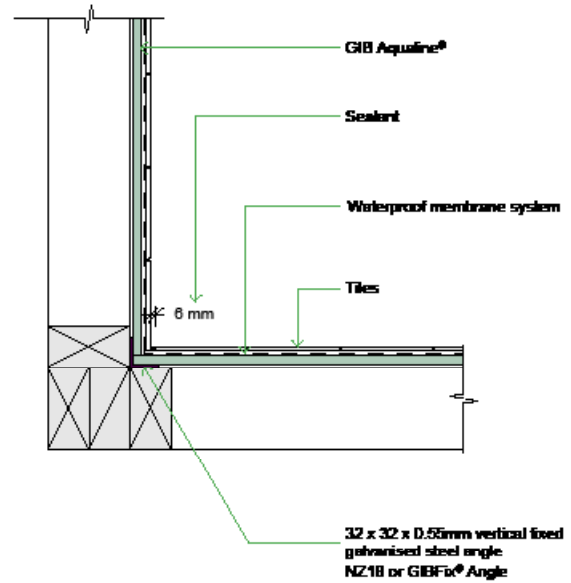
GAL-C...

B: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION



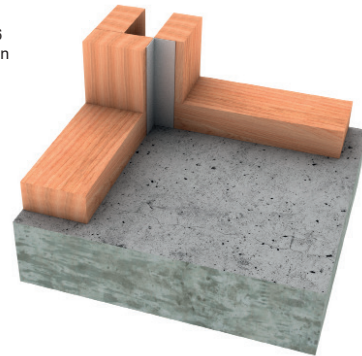
GAL-016

C: TILED INTERNAL CORNER



D: TILED INTERNAL CORNER METAL ANGLE POSITION

Refer to page 16 of this publication for specification and installation guidance.

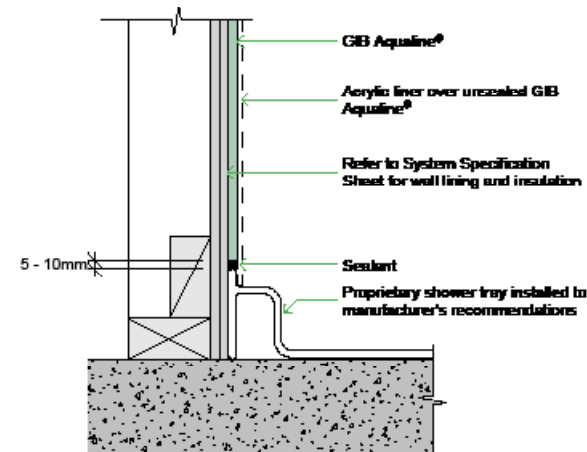


E: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

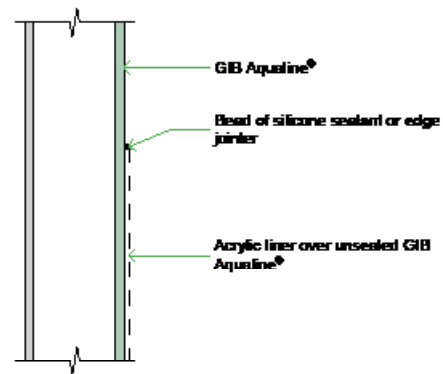


A: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION



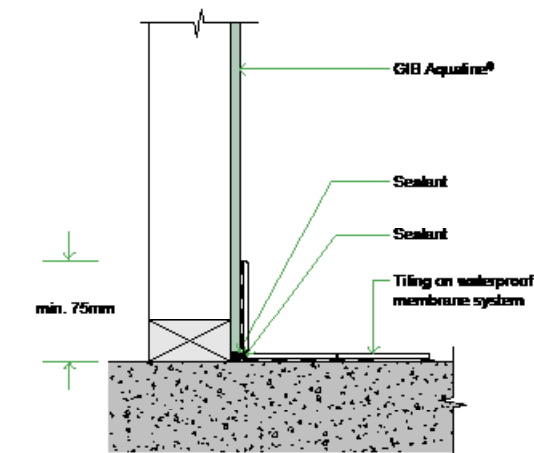
GAL-028

C: UNSEALED PLASTERBOARD LINING



GAL-028

B: CERAMIC FLOOR SKIRTING LINING JUNCTION



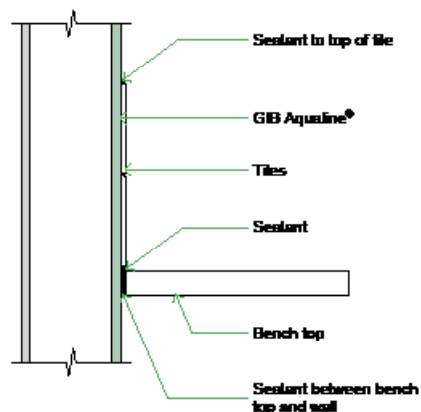
GAL-028

D: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

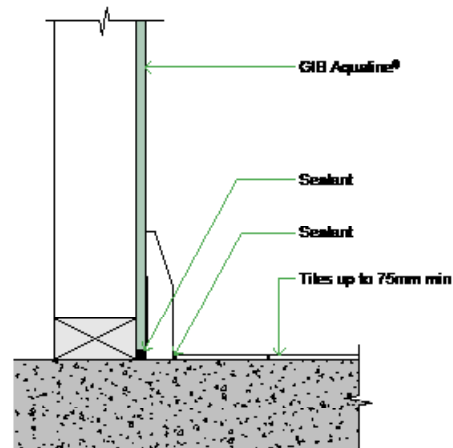


A: BENCH TOP LINING JUNCTION



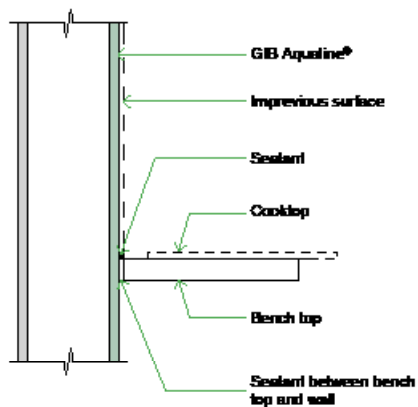
GAL-1

CERAMIC FLOOR SKIRTING LINING JUNCTION



GAL-001A

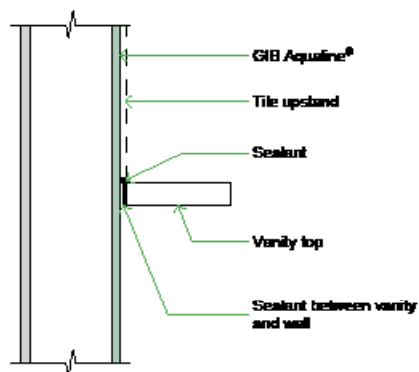
B: COOKTOP LINING JUNCTION



GAL-023B

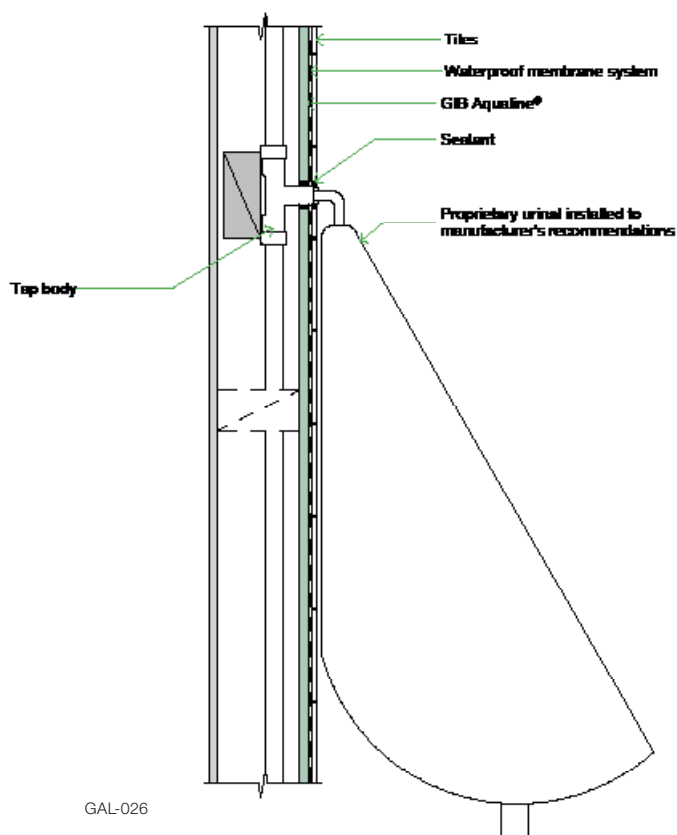


A: VANITY TOP LINING JUNCTION



GAL-022

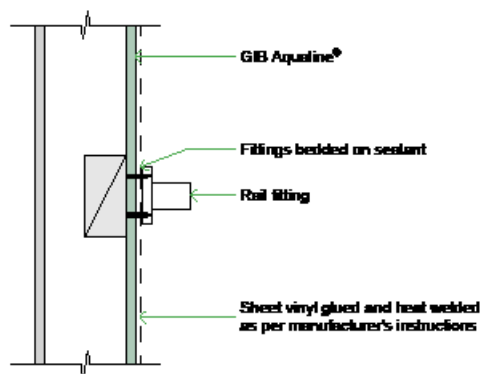
B: SEALING WET AREA PENETRATION LINING JUNCTION



GAL-026

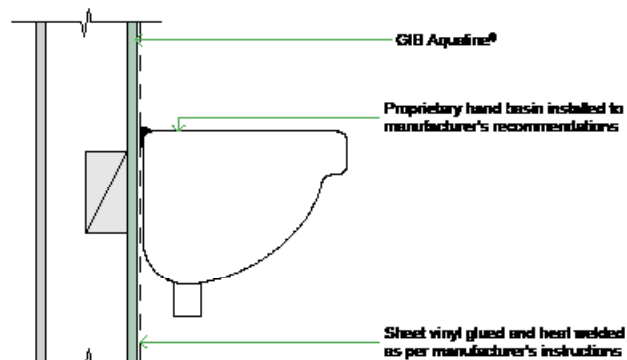


A: SURFACE MOUNTED WITH NOG



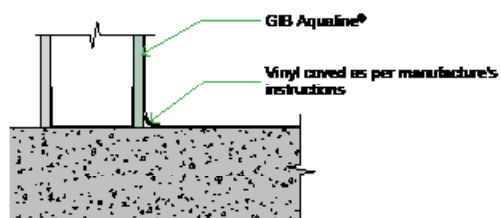
GAL-027

C: BASIN LINING JUNCTION

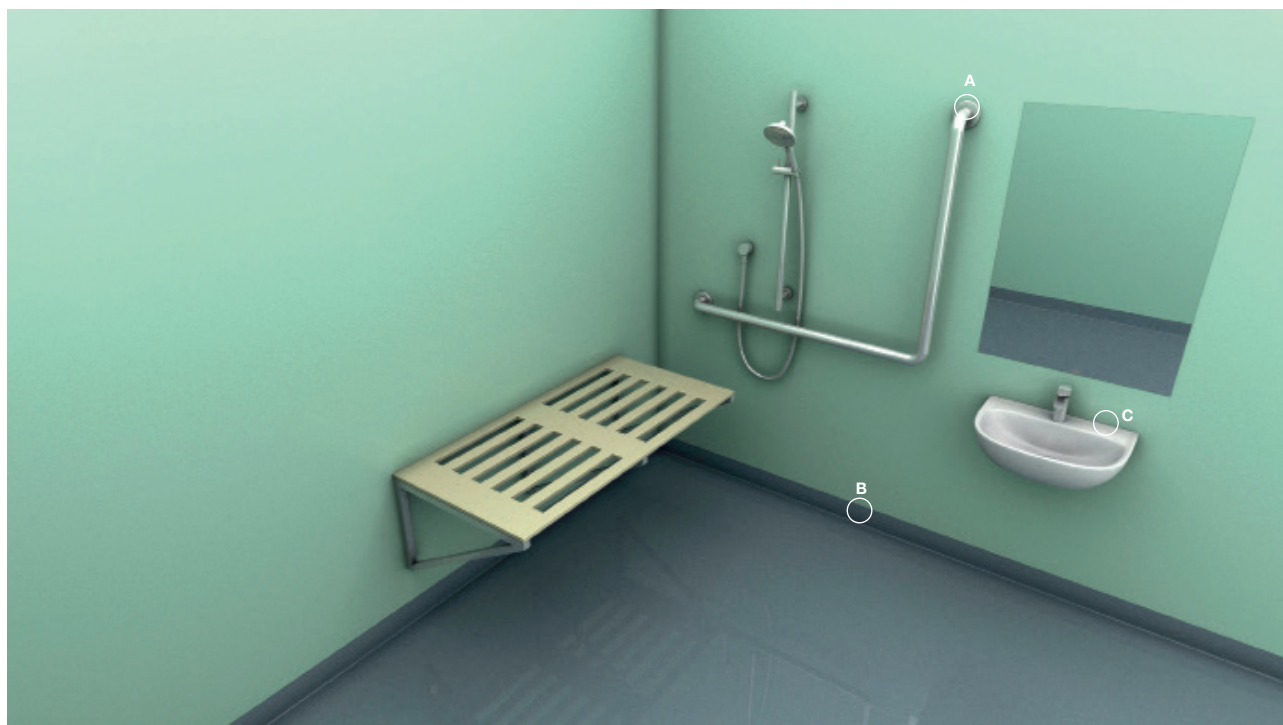


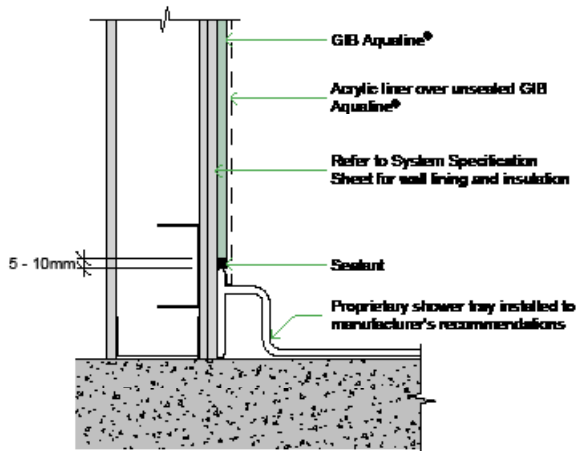
GAL-025

B: VINYL FLOOR LINING JUNCTION

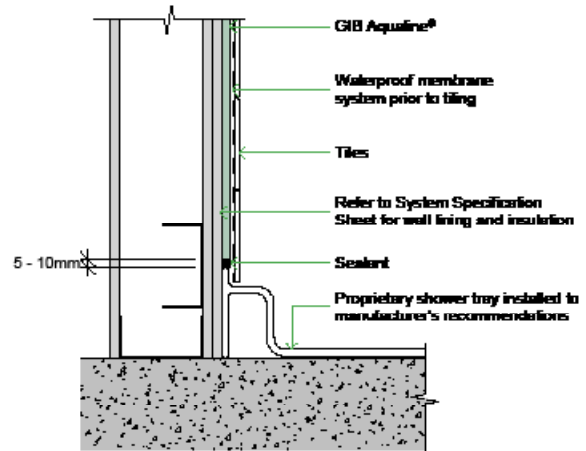
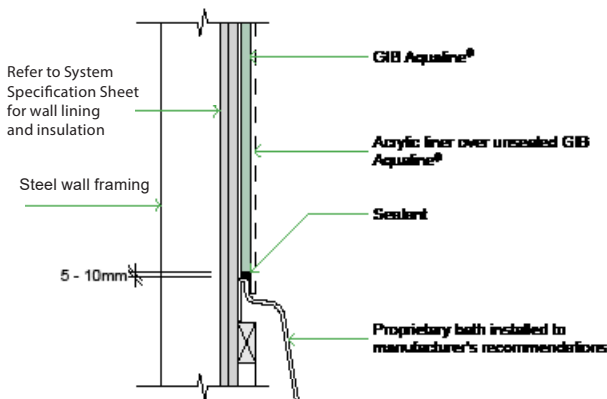


GAL-VUUA

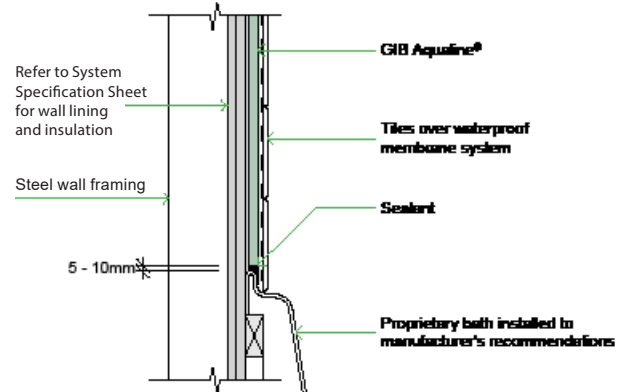


A: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION


GAL-017

C: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION

B: BATH DOUBLE LINING JUNCTION


GAL-013

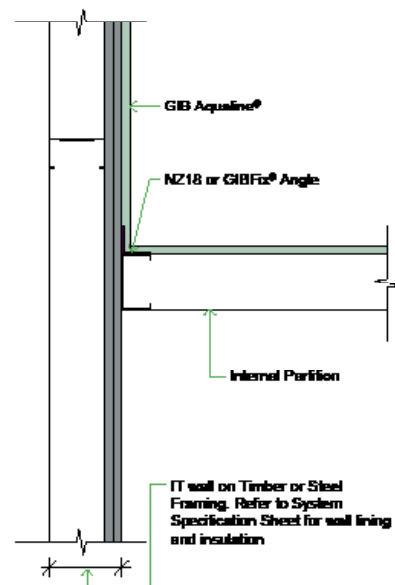
D: BATH DOUBLE LINING JUNCTION


GAL-014

GIB® WET AREA SYSTEMS FIRE RESISTANCE AND NOISE CONTROL PERFORMANCE

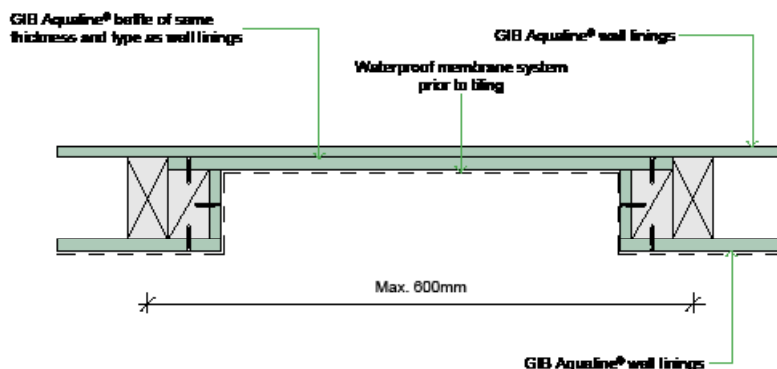
Given recesses required for shower trays, bath upstands, etc., and the likelihood of renovations during the service life of the building, it is recommended that GIB® Wet Area linings in water splash areas are installed in addition to and over required fire and noise control systems in commercial or multi-residential applications.

Do not tile on the resilient side of a GIB Rail® or Acoustic Resilient Mount (ST-001) and channel noise control system.

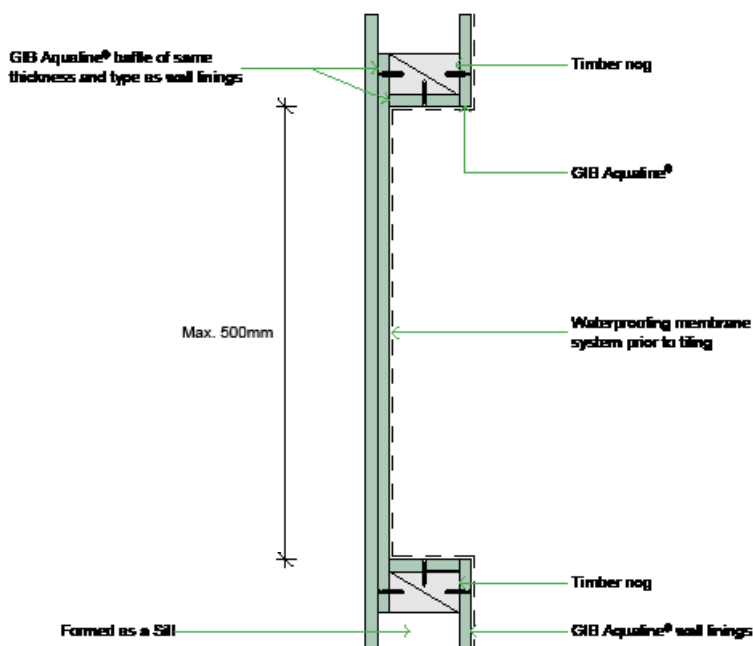
E: INTERTENANCY WALL AND WET AREA WALL JUNCTION


GAL-031C

TIMBER FRAME TILE RECESS

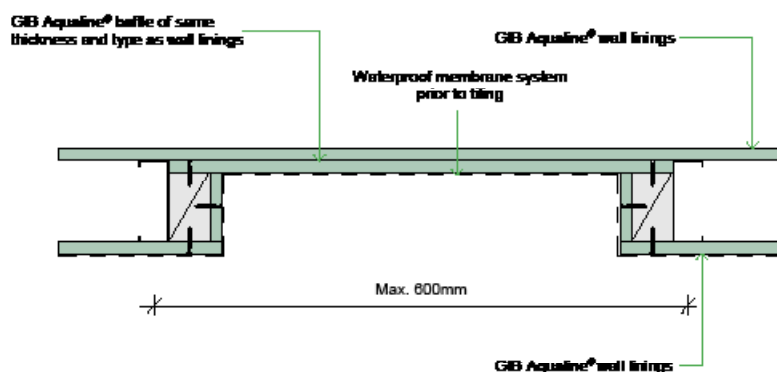


Larger recesses can be accommodated depending on specific framing layout provided 500mm is not exceeded in at least one direction.

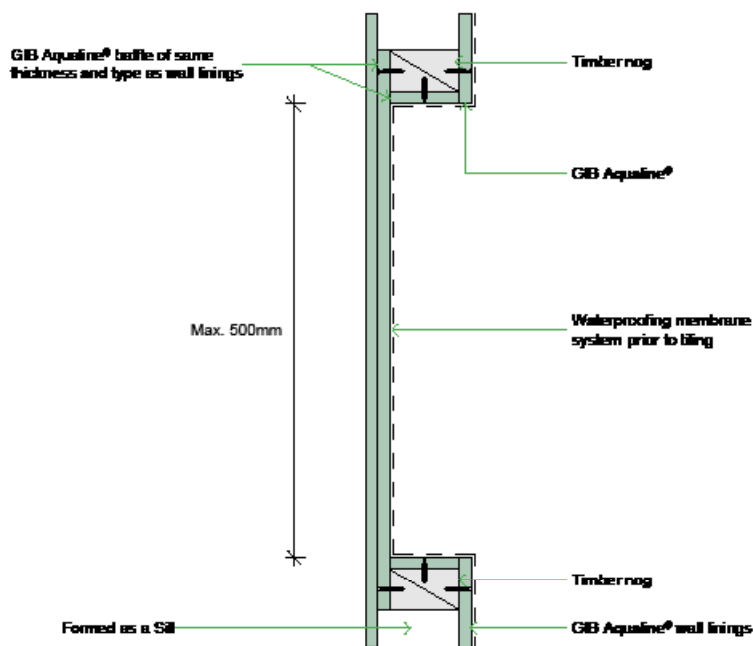


GAL-029B

STEEL FRAME TILE RECESS



Larger recesses can be accommodated depending on specific framing layout provided 500mm is not exceeded in at least one direction.



GAL-030

GIB® Wet Area Systems, February 2021

LIMITATIONS

Winstone Wallboards Ltd accepts no liability if the GIB® Wet Area Systems and junction details are not installed in strict accordance with instructions contained within this publication.

USE ONLY THE CURRENT SPECIFICATION

This publication may be superseded by a new publication. Winstone Wallboards accepts no liability for reliance upon publications that have been superseded. You should check the GIB® website to ensure you are using the current publication. If you are unsure whether this is the current publication, simply call the GIB® Helpline on 0800 100 442.

SUBSTITUTION

GIB® Wet Area Systems have been specifically designed and tested to achieve the stated performance levels. To maintain the GIB® Product and System Warranty, all system components detailed in this publication must be used when specifying and installing GIB® Wet Area Systems.

TRADEMARKS

The names GIB®, GIB Fyreline®, GIB Ultraline®, GIB Toughline®, GIB Braceline®, GIB Noiseline®, GIB Aqualine®, GIB Weatherline®, GIB Tradeset®, GIB Plus 4®, GIB-Cove®, GIB Lite Blue®, GIBFix®, GIB® Quiet Stud®, GIB Rail®, GIB Barrierline®, GIB X-Block®, GIB Fire Soundseal®, GIB Clip®, the colour mauve for GIB Toughline®, the colour blue for GIB Braceline®, GIB Noiseline®, the colour pink for GIB Fyreline®, the colour green for GIB Aqualine®, the colour purple for GIB Weatherline® and the shield device are registered trademarks of Fletcher Building Holdings Limited.

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FOR MORE INFORMATION VISIT

gib.co.nz

OR CALL THE GIB® HELPLINE

0800 100 442

Conditions Report



View All Conditions (<https://nelsoncity.sharepoint.com/sites/ecm-propertyhub/SitePages/NMapConditions.aspx?q=Filename:"Property Condition C1402">)

LINZ ID	Address	Condition Number	Condition Description	Diagram	Links
3606809	8 Palm Avenue, Nelson	C1402	Air Plan	N	Open in SharePoint (https://nelsoncity.sharepoint.com/sites/ecm-propertyhub/SitePages/NMapConditions.aspx?q=Filename:"Property Condition C1402")

Inspectors: Required Docs for Checking AND Minor Variations

Processors Amendment Application

Tab 1 – Statutory Forms

1



Building Consent - Form 2 - NELSON177686

Submission Details	
Submission Ref	NELSON177686
Status	Vetting
Project Description	Form bathroom in existing garage
Date Submitted	Thu 11 Jul 2024, 10:57 AM
Building Consent Authority	Nelson City Council
Site Address	8 Palm Avenue, Stoke, Nelson 7011
Submitter	Chris Pyemont

Building Consent - Form 2

Application for project information memorandum and/or building consent
[Section 33](#) or [section 45](#), Building Act 2004

- How to complete this form:
- 1. Completed sections turn green
 - 2. The submit button become available after all sections has been completed
 - 3. Required fields are marked with an asterisk (*)
 - 4. You can save and close the application if you need to complete it later
 - 5. The review and submit buttons takes you to the final step before you submit the application.

NELSON

What Are You Applying For

What are you applying for. Select all that apply. *

☒ Building Consent

☐ National Multiproof Building Consent

☐ Project Information Memorandum (PIM)

☐ Staged Building Consent

What Building Work Are You Doing

What type of building work are you doing *

☒ Residential	☐ Multi-Residential	☐ Commercial / Industrial
--	---	---

Residential *

☐ New detached dwelling	☒ Plumbing works	☐ Major alterations / additions - any work that includes altering or attaching to the exterior of a building
☒ Minor alterations - any internal work that does not include altering the exterior of the building	☐ Garage / detached carport	☐ Seismic strengthening
☐ Other		

Select all applicable boxes. If your building work is not listed, select Other and provide details.

Does the design feature a modular component by an accredited manufacturer as per the BuiltReady scheme?

☐ Yes	☒ No
---------------------------	-------------------------------------

Where Is The Building Work

What is the street address *

8 Palm Avenue, Stoke	
----------------------	--

Legal Description *	Deposited Plan	
LOT 1	DP 9002	

Building Name	Location of building within site/block including near street access

Are you building in a zone that requires a land-use Resource Consent *

☐ Yes	☒ No	
---------------------------	-------------------------------------	--

Is the subdivision of an existing site involved *

☐ Yes	☒ No
---------------------------	-------------------------------------

Does the building or site have any cultural or heritage significance, or is it a marae? *

☐ Yes	☒ No
---------------------------	-------------------------------------

Who Owns The Building Or Land

Owner name *

Prae Joo

Owner title

Mr

If the property is owned by an organisation, capture the organisation's name.

Owner's contact person

Owner email address *

jamesjoo114@gmail.com

Required if the owner is an organisation

Owner contact number *

0224175468

Owner mobile number

Owner's street address *

8 Palm Ave, Stoke

Owner mailing address *

8 Palm Ave, Stoke

Proof of Ownership

The [Building \(Forms\) Regulations 2004](#) requires evidence of ownership to be provided, proof of ownership less than 3 months old ensures the ownership is current.

Proof of ownership *

☒ Record of Title (RT)

☐ Other

Click [here](#) to request a RT from from Land Information New Zealand.

Request a Record of Title (RT) from the Building Consent Authority (BCA) or Council *

☐ Yes

☒ No

Check with the Building Consent Authority (BCA) before requesting a RT directly from them.

Who Is The Applicant

Is the application being made on behalf of the owner *

☒ Yes

☐ No

Agent Contact Information

Please note that the nominated first point of contact must be in New Zealand.

Who should the invoice be sent to? *

☒ Owner

☐ Agent

☐ Other

Who is the first point of contact for further correspondence *

☐ Owner

☒ Agent

☐ Other

Who should invoices be made out to? *

Prae Joo

Agent name *

Chris Pyemont

Agent title

Mr

If the agent is an organisation, capture the organisation's name

Agent's contact person

Agent's relationship to owner *

Architect

Required if the agent is an organisation

Agent email address *

chris@cparchitects.nz

Agent contact number *

02102784729

Agent mobile number

Agent's street address *

3 Wensley Road, Richmond

Agent mailing address *

3 Wensley Road, Richmond

Who's Involved In The Build

Please supply names, registration and contact details of the designer, architect, structural engineer and other key individuals involved in your project (such as carpenter, plumber, gasfitter).

For commercial applications, the details of the fire safety designer who produced the 'fire report' must be provided.

Select who's involved *

☒ Licensed Building Practitioner

☐ Other

Are non licenced building practitioners involved in the project? Select Other and provide their details.

Licensed Building Practitioner/s (LBP)

Name *

Chris Pyemont

Email address *

chris@cparchitects.nz

Street address

3 Wensley Road, Richmond

Licensed Building Practitioner *

Designer

Licence class *

Brick and Block Laying

Carpentry

Design 1

Design 2

Design 3

External Plastering

Foundations

Roofing

Site 1

Site 2

Company

Chris Pyemont

Contact number *

02102784729

Mailing address

Other

LBP registration number *

4337

Select one or more licence classes in the list

What Are The Specifics Of The Site

What is the wind zone *

☐ Low

☒ Medium

☐ High

☐ Very High

☐ Extra High

☐ Specific Design

What is the exposure zone *

☐ Low(B)

☒ Medium(C)

☐ High/Sea spray(D)

Does the proposed building work cover two or more allotments *

☐ Yes

☒ No

Are there public drains on the site *

☐ Yes

☒ No

Is the site subject to natural or created hazards such as erosion, subsidence, flooding, slips, cut and fill or contamination *

☐ Yes

☒ No

Are there any alterations to land contours (e.g. earthworks) *

☐ Yes

☒ No

Are there new or altered connections to public utilities *

☒ Yes

☐ No

Are there new or altered locations and/or external dimensions of buildings *

☐ Yes

☒ No

Is there new or altered access for vehicles *

☐ Yes

☒ No

Is the building work over or adjacent to any road or public place *

☐ Yes

☒ No

Does the building work involve the disposal of storm-water or wastewater *

☒ Yes

☐ No

Is the building work over any existing drains or sewers or in close proximity to wells or water mains *

☐ Yes

☒ No

Are there any other matters known to the applicant that may require authorisation from the territorial authority *

☐ Yes

☒ No

What Are The Details Of The Building Work

Provide a full description of the building work *

Form bathroom in existing garage

Estimated value of the building work (including GST) *

\$ 35000

What is the intended life of the building *

☒ 50+ years

☐ Limited Life

Proposed Use

You must select at least one of the following seven proposed use 'types'. Where you select Housing, Communal residential or Communal non-residential, you must also specify a proposed use 'sub type'

☐ Housing

☐ Communal residential

☐ Communal non-residential

☐ Commercial

☐ Industrial

☒ Outbuildings

☐ Ancillary

Will the building work affect an existing building and/or parts of an existing building *

☒ Yes

☐ No

Year first constructed *

1956

Current lawful established use *

Dwelling garage

Will the building work result in a change of use of the building *

☐ Yes

☒ No

If you are unsure how to determine if a change of use will occur, please refer to the guidance provided by the Ministry of Business, Innovation and Employment: [Change of use and alterations](#)

If applicable, list building consents previously issued for this project

Consent number	Additional information
----------------	------------------------

No items to display

When listing the building consents add information such as the stages of the building work, or a short description of the work undertaken into the additional information.

Total number of floor levels *

1

Levels below ground (if applicable)

Total floor area (all levels) *

166m2

Proposed new total floor area (all levels) *

166m2

Is the building used for anything other than a single household unit? *

☐ Yes

☒ No

If this consent includes any residential units. How many new residential units will be created? *

0

Does the project include Restricted Building Work *

☒ Yes

☐ No

Are you applying for Owner/Builder exemption to complete the Restricted Building Work *

☐ Yes

☒ No

CERTIFICATE OF DESIGN WORK

Your building consent application needs to include a Certificate of Design Work.

- These forms can be completed online by:
- Complete and submit this application
 - Navigate to the forms section in the submitted consent application
 - Select "New Submission"
 - Complete all additional submissions.

Have you discussed this project with the Building Consent Authority prior to applying?

☒ Yes

☐ No

Meeting reference number

Provide relevant information discussed with the BCA prior to applying

Formation of bathroom onto an existing un-reinforced slab ok under section 112.

Does the building work involve a swimming pool?

☐ Yes

☒ No

Does the building work involve any Recladding?

☐ Yes

☒ No

NOTE:

- Unless otherwise noted below, your application will be assessed under Acceptable Solutions.
- You are required to indicate what code clause(s) your building work complies with.
- If you are using another means of compliance, please provide details of the standard(s) that your building work complies with and the means of compliance in the space provided.

You can view building related standards on the [Standards New Zealand](#) website.

☒ * I understand that this application is to be assessed against Acceptable Solutions, unless otherwise stated in this section.

☐ B - Stability

☐ C - Protection from fire

☐ D - Access

☒ E - Moisture

- ☐ E1 - SURFACE WATER
- ☒ E2 - EXTERNAL MOISTURE
- ☒ E3 - INTERNAL MOISTURE

Verification Methods	Alternative Solutions	Additional information
<i>Include relevant code clauses and means of compliance</i>	<i>Include relevant code clauses and means of compliance or details of any waiver and modifications (including applicable code clauses)</i>	

☒ F - Safety of users

- ☐ F1 - HAZARDOUS AGENTS ON SITE
- ☒ F2 - HAZARDOUS BUILDING MATERIALS
- ☐ F3 - HAZARDOUS SUBSTANCES AND PROCESSES
- ☐ F4 - SAFETY FROM FALLING
- ☒ F5 - CONSTRUCTION AND DEMOLITION HAZARDS
- ☐ F6 - VISIBILITY IN ESCAPE ROUTES
- ☐ F7 - WARNING SYSTEMS
- ☐ F8 - SIGNS
- ☐ F9 - RESTRICTING ACCESS TO RESIDENTIAL POOLS

Verification Methods	Alternative Solutions	Additional information
<i>Include relevant code clauses and means of compliance</i>	<i>Include relevant code clauses and means of compliance or details of any waiver and modifications (including applicable code clauses)</i>	

☒ G - Services and facilities

- ☒ G1 - PERSONAL HYGIENE
- ☐ G2 - LAUNDERING
- ☐ G3 - FOOD PREPARATION AND PREVENTION OF CONTAMINATION
- ☒ G4 - VENTILATION
- ☐ G5 - INTERIOR ENVIRONMENT
- ☐ G6 - AIRBORNE AND IMPACT SOUND
- ☐ G7 - NATURAL LIGHT
- ☐ G8 - ARTIFICIAL LIGHT
- ☐ G9 - ELECTRICITY
- ☐ G10 - PIPED SERVICES
- ☐ G11 - GAS AS AN ENERGY SOURCE
- ☒ G12 - WATER SUPPLIES
- ☐ G13 - FOUL WATER
- ☐ G14 - INDUSTRIAL LIQUID WASTE
- ☒ G15 - SOLID WASTE

Verification Methods	Alternative Solutions	Additional information
<i>Include relevant code clauses and means of compliance</i>	<i>Include relevant code clauses and means of compliance or details of any waiver and modifications (including applicable code clauses)</i>	

☐ H - Energy efficiency

☐ Specific Buildings

What Specified Systems Are In The Building?

Does your building work involve or affect any Specified Systems (SS)? *

☐ Yes

☒ No

Have You Attached All Required Documentation

Document Upload Process

Only one document can be uploaded against each document category. You need to merge all documents into a single PDF per category (e.g. all architectural plans must be merged into a single document).

Several free online PDF merger tools are available on the [internet](#) one such tool is [Smallpdf](#). With Smallpdf, you can merge documents into a single file.

For a full list of the document categories and what should be included in each category click [here](#).

Click [here](#) for help and frequently asked questions.

Document Categories for Residential Applications

The following document categories are associated with a residential application:

- Architectural Plans
- Architectural Specifications

If you have selected structural requirement/s for the application, the following document categories will also be available.

- Structural Plans
- Structural Specifications

Do you have structural engineering documents? *

☐ Yes

☒ No

☒ * I have the documentation ready and combined into the appropriate categories

Do you have any other documents not related to the above categories? *

☒ Yes

☐ No

Declaration

Privacy Information

The information you have provided on this form is required so that your application can be processed under the Building Act 2004. The Council, Territorial Authority (TA) or Building Consent Authority (BCA) collates statistics relating to building work and has a statutory obligation to provide information to third parties. The information is stored on a public register, which must be supplied to whoever requests the information. Under the Privacy Act 2020, you have the right to see, and correct personal information Councils, TAs and BCAs holds about you.

You can view the Simpli [Privacy Statement here](#)

In providing this information, you agree to your details being used for customer surveys carried out by the Council, BCA or TA.

Terms of Use

By making this submission you agree to the Simpli portal [terms and conditions](#).

Your application fees

The Council, BCA or TA may charge fees for your application. These will include statutory levies to BRANZ and the Ministry of Business, Innovation & Employment.

A fee schedule can be found on the BCA's website, refer to the link in the details panel on the right. Your fees will be advised when the BCA accepts your submission.

You must not commence the building work until the consent has been issued and uplifted.

☒ *** I acknowledge and agree with the above statements.**

Name *

Chris Pyemont

Date *

01/07/2024

Submitter Declaration

Submitter Name

Chris Pyemont

Date

11/07/2024

I understand that by ticking the following boxes, I am agreeing to the following statements:

- ☒ *** As the agent I confirm that I am submitting this application on behalf of and with the authority of the owner and confirm that all the information within the application is, to the best of my knowledge, true and correct.**
- ☒ *** I request that you issue a building consent for the building work described in this application.**



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy




 R.W. Muir
 Registrar-General
 of Land

Identifier **NL4C/211**
Land Registration District **Nelson**
Date Issued 18 February 1975

Prior References
 NL128/79

Estate Fee Simple
Area 607 square metres more or less
Legal Description Lot 1 Deposited Plan 9002
Registered Owners
 Prae Joo

Interests
 K3131 Building Line Restriction
 12751128.3 Mortgage to ASB Bank Limited - 15.8.2023 at 1:35 pm

Approved: <i>William Gable</i> <i>L. Sneddon</i> Owner Pursuant to Sec 351 of the M.C.A. 1954, the Nelson City Council hereby approves this subdivision and certifies that it complies with the requirements and provisions of its Operative District Scheme. Dated this <u>22nd</u> day of <u>January</u> 1974 <i>L. Sneddon</i> Council Clerk <i>G. Gable</i> Acting Town Clerk		PALM AVENUE LEGAL BY T. 51150 Total Area 1488 m. Comprised in C.T. 128-79 W. Sneddon I, HUGH GOURDIE of NELSON Registered Surveyor and holder of an annual practicing certificate being satisfied that this plan has been made from surveys executed by me or under my direction, that both plan and survey are correct and have been made in accordance with the regulations under the Surveyors Act 1968 Dated at <u>Nelson</u> this <u>15th</u> day of <u>January</u> 1974 Signature of <u>H. Gourdie</u> Field Book 1972 p. 12 & 19 Traverse Book 57 p. 82 Reference Plans Examined <u>D. Sneddon</u> Correct Approved as to Survey <u>22</u> / <u>2</u> / <u>75</u> Chief Surveyor Deposited this <u>22nd</u> day of <u>January</u> 1974 Received <u>19002</u> Instructions	
		LOCAL AUTHORITY NELSON CITY Surveyed by <u>L. & H. GOURDIE</u> 2774 Scale <u>1:300</u> Date <u>NOV. 1974</u>	
LAND DISTRICT NELSON SURVEY BLK. & DIST. VII WAIMEA NZMS 189A SHEET NO. NN.		LOTS 1 & 2 BEING SUBDIVISION OF LOT 5 D.P. 3776	

Printed by Stirling Printers Ltd. Auckland, New Zealand



Form 2A

Memorandum from licensed building practitioner: Certificate of design work Section 45 and Section 30C, Building Act 2004

Please fill in the form as fully and correctly as possible.

If there is insufficient room on the form for requested details, please continue on another sheet and attach the additional sheet(s) to this form.

THE BUILDING

Street address: 8 Palm Avenue

Suburb: Stoke

Town/City: Nelson

Postcode: 7010

THE OWNER

Name(s): Prae Joo

Mailing address: As above

Suburb:

PO Box/Private Bag:

Town/City:

Postcode:

Phone number: 0224175468

Email address: jamesjool14@gmail.com

BASIS FOR PROVIDING THIS MEMORANDUM

I am providing this memorandum in my role as the: Please tick the option that applies (✓)	
()	sole designer of all of the RBW design outlined in this memorandum – I carried out all of the RBW design myself – no other person will be providing any additional memoranda for the project
()	lead designer who carried out some of the RBW design myself but also supervised other designers – this memorandum covers their RBW design work as well as mine, and no other person will be providing any additional memoranda for the project
(✓)	lead designer for all but specific elements of RBW – this memorandum only covers the RBW design work that I carried out or supervised and the other designers will provide their own memoranda relating to their specific RBW design
()	specialist designer who carried out specific elements of RBW design work as outlined in this memorandum – other designers will be providing a memorandum covering the remaining RBW design work

IDENTIFICATION OF DESIGN WORK THAT IS RESTRICTED BUILDING WORK (RBW)

I Chris Pyemont carried out / supervised the following design work that is restricted building work

PRIMARY STRUCTURE: B1

Design work that is restricted building work	Description	Carried out/ supervised	Reference to plans and specifications
<i>Tick (✓) if included Cross (X) if excluded</i>	<i>[If appropriate, provide details of the restricted building work]</i>	<i>[Specify whether you carried out this design work or supervised someone else carrying out this design work]</i>	<i>[If appropriate, specify references]</i>

Primary structure

All RBW Design () work relating to B1		() Carried out () Supervised	
Foundations and subfloor framing (✓)		(✓) Carried out () Supervised	
Walls ()		() Carried out () Supervised	
Roof ()		() Carried out () Supervised	
Columns and beams ()		() Carried out () Supervised	
Bracing ()		() Carried out () Supervised	
Other ()		() Carried out () Supervised	

EXTERNAL MOISTURE MANAGEMENT SYSTEMS: E2

All RBW design () work relating to E2		() Carried out () Supervised	
Damp proofing (✓)		(✓) Carried out () Supervised	
Roof cladding or roof cladding system ()		() Carried out () Supervised	
Ventilation system () (for example, subfloor or cavity)		() Carried out () Supervised	
Wall cladding or wall cladding system ()		() Carried out () Supervised	

Waterproofing ()		() Carried out () Supervised	
Other ()		() Carried out () Supervised	

FIRE SAFETY SYSTEMS: C1 – C6

Emergency () warning systems, evacuation and fire service operation systems, suppression or control systems, or other		() Carried out () Supervised	
---	--	-----------------------------------	--

Note: The design of fire safety systems is only restricted building work when it involves small-to-medium apartment buildings as defined by the Building (Definition of Restricted Building Work) Order 2011.

Note: continue on another page if necessary.

WAIVERS AND MODIFICATIONS

Waivers or modifications of the building code are required () Yes (✓) No

If Yes, provide details of the waivers or modifications below:

Clause	Waiver/modification required
<i>[List relevant clause numbers of building code]</i>	<i>[Specify nature of waiver or modification of building code]</i>

Note: continue on another page if necessary.

ISSUED BY

Name: Chris Pyemont	LBP or Registration number: 4337
The practitioner is a: () Design LBP (✓) Registered architect () Chartered professional engineer	
Design Entity or Company (optional): CP Architects Ltd	
Mailing address (if different from below):	
Street address / Registered office: 3 Wensley Rd,	
Suburb:	Town/City: Richmond
PO Box/Private Bag:	Postcode: 7020
Phone number: 02102784729	Mobile:
After Hours:	Fax:
Email address: chris@cparchitects.nz	Website:

DECLARATION

I Chris Pyemont [name of practitioner] , LBP,

state that I have applied the skill and care reasonably required of a competent design professional in carrying out or supervising the Restricted Building Work (RBW) described in this form, and that based on this, I also state that the RBW:

- Complies with the building code; or
- ~~Complies with the building code subject to any waiver or modification of the building code recorded on this form.~~



Signature:

Date: 01/07/24



BUILDING CONSENT NUMBER 240378

Section 51, Building Act 2004

Form 5

The Building

Street address of building:	8 Palm Avenue, Nelson
Legal description of land where building is located:	Lot 1 DP 9002
Building name:	
Location of building within site/block number:	
Level/unit number:	

The Owner

Name of owner:	Prae Joo
Mailing address:	8 Palm Avenue, Stoke, Nelson 7011
Street address/registered office:	
Phone number:	
Mobile:	022 417 5468
Email:	jamesjoo114@gmail.com
First point of contact:	Agent

The Agent

Name of agent:	Chris Pyemont
Mailing address:	3 Wensley Road, Richmond 7020
Phone number:	
Mobile:	021 0278 4729
Email:	chris@cparchitects.nz

Building Work

The following building work is authorised by this building consent: Construct Bathroom in Existing Garage
--

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

This building consent is subject to the following conditions:

This building consent is subject to section 90 of the Building Act 2004: agents authorised by the building consent authority for the purposes of this section are entitled, at all times during normal working hours or while building work is being done, to inspect (a) land on which building work is being or is proposed to be carried out; and (b) building work that has been or is being carried out on or off the building site; and (c) any building.

Compliance Schedule

A compliance schedule is not required for the building.

Attachments

Copies of the following documents are attached to this building consent:

- Advice Notes
- Required Inspections and Documentation



Manager Building

Mark Hunter

On behalf of Nelson City Council

Date: **26 July 2024**



ADVICE NOTES BUILDING CONSENT 240378

This building consent is subject to the following advice notes:

In accordance with section 52 of the Building Act 2004, this building consent will lapse 12 months from the date of issue unless building work has commenced or an extension to this period has been arranged.

Site Safety: Please ensure all appropriate site safety measures are provided throughout the contract works to comply with NZ Building Code Clause F5 and all occupational safety and health requirements.



REQUIRED ITEMS FOR BUILDING CONSENT 240378

Before Council can issue a code compliance certificate, you will need to ensure the following inspections are completed and that you have provided the documentation requested.

Please phone: 03 546 0334 and leave a message on the inspection booking line detailing the required inspection, date & time, contact details and LBP details and we will text confirmation of your booking or ring if required.

Please apply for the code compliance certificate via the simpli portal.

Inspections Required

No	Inspection Name	Notes
1	IE05 Underslab drainage	Underslab drainage. Sewer or stormwater drains under approved test prior to filling any trenches.
1	IE06 Drainage sewer or stormwater	Sewer or stormwater drains under approved test prior to the filling of any trenches.
1	IF06 Residential alterations structural pre-line	IF06 (Residential Alterations Only) Structural and pre-lining when any insulation is in place, including any plumbing works under test.
1	IF14 Residential post line first layer	Post lining, when all brace elements/first layer fire wall fixings, tiled shower areas are complete prior to the installation of skirtings, cornice, waterproof membranes and prior to wall stopping.
1	II06 Final - Residential	Residential final inspection. When all building consent requirements are complete.
5	Total Inspections	

Documentation

The following documents must be provided before Council will book a final inspection.
All documents must clearly state the building consent number and site address.

Documents Required	Notes
Code compliance certificate application (form 6)	Apply for code compliance certificate through the simpli portal
Pressure test certificate	Licensed certified plumber to provide.
As built drainage plan	Registered drainlayer to provide a colour as built drainage plan to Council, which includes a north point.
Energy works certificate - electrical	Registered electrician to provide Certificate of Compliance (CoC).
Energy works certificate - gas	Certifying gasfitter to provide Certificate of Compliance (CoC).



Collaborating with other users in the Simpli portal

The collaboration feature allows multiple people to work on a submission together.

Select a submission or consent

Submission Ref	Building Consent Authority	Application
NELSON001086	Nelson City Council	Building Consent - Form 2

Go to the **Collaborators** section

Click the 'Invite Collaborator' button

Collaborator	Role	Email	Permission	Invite Status	Notifications?
No items to display					

Enter the email address of the person being invited OR select a person previously invited from the dropdown list

Choose the permission you want your collaborator to have

Choose a role for your collaborator

Decide if you want your collaborator to receive notifications about the submission

Click 'Invite' to send your collaboration invite

Invite Collaborator

Type in the collaborators email address

Or select a previous collaborator

Permission

☐ View Only

☒ View & Edit

☐ View, Edit & Manage

Role *

-- None --

Subscribe to Notifications?

☐ Yes ☒ No

Invite **Cancel**

An email invite is sent to the person you want to collaborate with.

Your collaborator must have a portal account before being able to accept your invite

If they don't have a portal account they can register on the login page. The link in the email takes them to the right page

The person you invited can accept or decline the invitation

You will receive an email notification of your collaborator accepting your invite



Collaboration Invite

Application:	Building Consent - Form 2
Status:	Draft
Submission Ref:	NELSON03353
BCA:	Nelson City Council
Site Address:	Fifeshire Crescent, Stepneyville

You have been invited by Nelson City Council to collaborate. You are receiving this as you are the owner

Review

Decline

If you don't have an account you'll have to sign up. Once logged on you will need to click the **ACCEPT** button before you gain access to the submission.

If you decline the request a notification will be sent to the person who submitted the request that you have declined.

You can view all your collaborators on the [Collaborators](#) page.

Here you can change the way your collaborator is set up, remove the collaborator, or re-send pending collaboration invitations

Invite Status	Notifications?	
Pending	Yes	 
Accepted	Yes	
Pending	Yes	  
Pending	Yes	  

For more help with the Simpli portal, including a video on adding collaborators, visit <https://simpli.govt.nz/customer-help-home>



Applying for a code compliance certificate in the Simpli portal

Select consent

My Submissions (18)	My Consents (3)	My Collaborations (5)	My Templates	My Arch
Consent Number ▲	Submission Ref ▲	Building Consent Authority ▲	Application ▲	
200357	NELSON001953	Nelson City Council	Blank Form (Testing)	

On the [Summary Details](#) page

Click the '+ Apply for CCC' button

Check the details, then click [Begin](#)

[Summary Details](#) [Application Form](#)

[+ Apply for CCC](#)

Follow the onscreen instructions

Complete all sections - each section will turn green once all of the required information is input

Yellow sections require more information

Who Owns The Building

Who Is The Applicant

The application can be saved at any point, and returned to later

Draft applications can be deleted from the [Summary Details](#) page

The application will stay in draft until it is submitted

[Save & Close](#)

[✕ Delete Draft](#)

Code Compliance Certificate - Form 6

[Draft](#) [Submitted](#)

Once all sections are green, click [Review & Submit](#) to send the application to Council

[Review & Submit](#)

For more help with the Simpli portal, visit <https://simpli.govt.nz/customer-help-home>

Official Use Only

APPLICATION FOR EXTENSION OF TIME

HOW IT WORKS

You need to start your building work within 12 months of receiving your building consent, or your consent will lapse.

If you need an extension, talk to your council before the 12-month timeframe is up. If the consent has lapsed and you still want to do the work, you will have to re-apply for consent.

HOW TO SUBMIT YOUR APPLICATION

Check with the relevant Council/ Building Consent Authority (BCA) for more information on how to submit this form. Electronic submissions may be available with the applicable Council / BCA on the [simpli.govt.nz](https://www.simpli.govt.nz) website. Fields marked with * are required.

1. PROPERTY INFORMATION

Street address of the building <i>For structures that do not have a street address, state the nearest street intersection and the distance and direction from that intersection</i>	
8 palm avenue, Stoke , Nelson 7011	
Consent Number	Issued by <i>(name of building consent authority)</i>
240378	Nelson City Council

2. OWNER AND AGENT INFORMATION

Owner		Applicant <i>If the application is made on behalf of the owner</i>	
Name of Owner:	Prae joo	Name of Applicant:	
Contact person: <i>If the owner is not an individual</i>	-	Contact person: <i>If the Applicant is not an individual</i>	
Email:	Jamesjoo114@gmail.com	Email:	
Mobile:	022417468	Mobile:	
Alternative Phone:	-	Alternative Phone:	
Street address:	8 palm Avenue, Stoke.	Street address:	
Mailing Address: <i>If different from street address</i>	8 palm avenue,Stoke Nelson 7011	Mailing Address: <i>If different from street address</i>	

The first point of contact	☐ Applicant	☒ Owner
-----------------------------------	------------------------------------	---

3. THE APPLICATION

What are you applying for?

- ☐ Extension of time to issue Code Compliance Certificate, **or**
☒ Extension of time to commence work

Why is an extension required?			
I'm too busy with other projects and I need more time to complete this project.			
(New) Start Date:	16/07/2025	Expected Completion:	16/07/2026

4. ACKNOWLEDGEMENTS

The information you have provided on this form is required so that your application or the building consent it relates to can be processed under the Building Act 2004. The Council, Territorial Authority (TA) or Building Consent Authority (BCA) collates statistics relating to building work and has a statutory obligation to provide information to third parties. The information is stored on a public register, which must be supplied to whoever requests the information. Under the Privacy Act 2020, you have the right to see and correct personal information the Council, TA and BCA hold about you.

In providing this information, you agree to your details being used for customer surveys carried out by the Council, TA or BCA.

All the information contained in the application is, to the best of my knowledge, true and correct.

Name:	Prae joo
Signature: <i>Digital signatures acceptable</i>	
Date:	16/07/25



Extension of Time - NELSON217403

Submission Details

Submission Ref	NELSON217403
Status	Accepted
Building Complexity	R1
Is Complete	Yes
Date Submitted	Mon 1 Dec 2025, 2:18 PM
Building Consent Authority	Nelson City Council
Site Address	8 Palm Avenue, Nelson
Parent Consent Number	240378
Submitter	James (PRAE Joo)
Legal Description	Lot 1 DP 9002

Extension of Time

Extension of Time

[Section 52](#) or [section 93](#), Building Act 2004

How to complete the application form:

1. Each section within the form will turn green when the minimum required information has been completed, a red asterix (*) marks items that are mandatory.
2. All sections must be completed before you can submit the application, the submit button at the bottom of the form will not be available until all sections of the form have been completed and green.
3. The application can be saved and closed at any stage at the bottom of the form, this allows you to come back to the application at a later date without losing any of the information you have already completed.

Building Consent Information

Building consent number *

240378

Issued by *

Nelson City Council

Date Issued: *

26/07/2024

What Are You Applying For

Please select, to indicate which type of extension of time you are applying for. *

☒ Extension of time to commence works, building work not commenced within 1 year

☐ Extension of time to issue Code Compliance Certificate, building work commenced but not completed within 2 years

Where Is The Building

What is the street address *

8 Palm Avenue, Nelson

Legal description *

LOT 1

Deposited Plan

DP 9002

Building Name

Location of building within site/block including near street access

Who Owns The Building Or Land

Owner name *

Prae Joo

Owner title

Mr

Owner email address: *

jamesjoo114@gmail.com

Owner contact number: *

0224175468

Owner mobile number

Owner mailing address *

8 Palm Ave, Stoke

Who Is The Applicant

Applicant

☐ Owner

☒ Agent

Choose the relevant selection. If you are the owner, your contact details have already been captured.

Who is the first point of contact for further correspondence *

☐ Owner

☒ Agent

☐ Other

Who is the first point of contact for invoicing *

☐ Owner

☐ Agent

☐ Other

Payee name for the invoice *

Prae Joo

Agent Contact Information

Please note that the nominated first point of contact must be in New Zealand.

Agent name *

Chris Pyemont

Agent title

Mr

Agent email address *

chris@cparchitects.nz

Agent contact number *

02102784729

Agent mobile number

Agent mailing address *

3 Wensley Road, Richmond

Why Is An Extension Of Time Required

Reason time extension is required *

Unable to complete the job on time due to other commitments, such as work and business obligations

Please outline why you require an extension of time. Please note that an extension of time is considered on a case by case basis, if you are unsure how long you need, and/or you need longer than 12 months. Please contact the Building Consent Authority that you are applying to before submitting the extension of time application.

Date work is expected to start *

01/03/2026

Please indicate by selecting a date when the work is proposed to be started.

Have You Got Supporting Documentation To Attach

Extension of Time Supporting Documentation

If you have any documentation you would like to attach to support your application, please attach here.

Extension of Time Supporting Documentation

Declaration

Privacy Information

The information you have provided on this form is required so that your application can be processed under the Building Act 2004. The Council, Territorial Authority (TA) or Building Consent Authority (BCA) collates statistics relating to building work and has a statutory obligation to provide information to third parties. The information is stored on a public register, which must be supplied to whoever requests the information. Under the Privacy Act 2020, you have the right to see, and correct personal information Councils, TAs and BCAs hold about you.

In providing this information, you agree to your details being used for customer surveys carried out by the BCA, TA or BCA.

Your application fees

The Building consent Authority will charge fees for your consent application. These will include statutory levies to BRANZ and the Ministry of Business, Innovation & Employment.

A fee schedule can be found on the BCA's website, refer to the link in the details panel on the right. Your fees will be advised when the BCA accepts your submission.

☒ *** I request that you issue an extension of time under section 52 of the Building Act 2004, I have not commenced the building work within 1 year of the Building Consent being issued.**

Submitter Declaration

Submitter Name

PRAE Joo

Date

01/12/2025

I understand that by ticking the following boxes, I am agreeing to the following statements:

☒ *** As the agent I confirm that I am submitting this application on behalf of and with the authority of the owner and confirm that all the information within the application is, to the best of my knowledge, true and correct.**

☒ *** oc.service.extension.declaration**

Tab 2 – Checklists, Conditions, Inspections, Calculations

2

GoGet Processing Summary Report

Consent No: 240378

Site Address: 8 Palm Avenue, Nelson

Description: Construct Bathroom in Existing Garage

Checklist/Elements	Status	Notes	Processed By
<u>GENERAL</u>	Pass		Sharon Medcalf
Processor Competency	Pass		SHM
Building Classification	Pass	An assessment of the building work has been correctly classified as: R1	SHM
Processor Competency	Pass	Processor is competent to complete all processing tasks for this consent.	SHM
MagiQ Overseer	Correct	Correct in MagiQ	SHM
Ownership Confirmation	Pass		SHM
Record of Title	Pass	The Record of Title is up to date, within 3 months of issue. Record of Title information matches content supplied in Building Consent application form. Applicant/Owner matches the name on the Title.	SHM
Wind Zone	N/A	internal alterations	SHM
Corrosion Zone	N/A	internal alterations	SHM
Snow Load	N/A	internal alterations	SHM
Siting	N/A	internal alterations	SHM
The building	Pass		SHM
Year first constructed	Pass	Original building constructed circa 1956	SHM
Multi-unit or staged building	Not appl	Not applicable as building is not multi-unit or staged	SHM
<u>CONFLICT OF INTEREST</u>	Pass		Sharon Medcalf
Conflict of interest check	Pass		SHM
Conflict of interest statement	Yes	BC is not a conflict of interest.	SHM
Actions to address conflict of interest	N/A		SHM
<u>Amendment to Building Consent</u>	N/A		Sharon Medcalf
<u>Minor Works</u>	N/A		Sharon Medcalf
<u>A1 - Classified Uses</u>	Pass		Sharon Medcalf
A1 prompts	Pass		SHM
Classified use(s) applicable to this building	Pass	2.0.2 Detached Dwelling	SHM
<u>B1 - Structure</u>	Pass		Sharon Medcalf
Specific Engineer Design	N/A		SHM
Compliance paths	Pass		SHM
NZS 3604	Pass	Unless noted otherwise the structural elements have been assessed against the generic prescriptions and design tables of NZS 3604 - Timber-framed buildings.	SHM
NZS 4229	N/A		SHM
Site requirements	N/A	internal alterations only	SHM
Deck structure	N/A		SHM
Foundations and sub-floor framing	N/A		SHM
Floors	N/A		SHM
Walls	Pass		SHM
Studs	Pass	Studs in load and non-load bearing walls framing are sized appropriately given the wind zone, their loaded dimension, height and spacing.	SHM
Lintels	Pass	Lintels over openings in wall framing have been	SHM

Checklist/Elements	Status	Notes	Processed By
		sized appropriately given the building elements they support, their loaded dimension, and their span.	
Plates	Pass	Top and bottom plates are sized appropriately, and have adequate strengthening where required.	SHM
Bracing	Pass	new framing to form bathroom	SHM
Posts	N/A		SHM
Roof structure	N/A		SHM
Other compliance paths	N/A		SHM
<u>B2 - Durability</u>	Pass		Sharon Medcalf
B2 Prompts	Pass		SHM
Material compatibility	Pass	Materials in contact are compatible, with consideration given to the corrosion zone.	SHM
Concrete and concrete masonry	N/A		SHM
Timber treatment	Pass	The wood-based building components required to achieve 50 year durability comply with table 1 NZS 3602 as modified by B2/AS1. The wood-based building components required to achieve 15 year durability comply with table 2 NZS 3602 as modified by B2/AS1. The Framing timber is specified to be separated from the concrete or concrete masonry with a bituminous damp-proof course (DPC) or other suitable impervious material.	SHM
Steel fixings and fastenings	N/A		SHM
Engineered elements	N/A		SHM
Plumbing materials	Pass	Given the water supply and drainage principles used in the plumbing design appropriate materials are used for water supply and drainage pipes. Access to water heaters, tanks and valves are appropriate.	SHM
Other compliance paths	N/A		SHM
<u>C1-6 - Protection From Fire C/AS1</u>	N/A	see F7 below	Sharon Medcalf
<u>C1-6 - Protection From Fire C/AS2</u>	N/A		Sharon Medcalf
<u>C1-6 - Protection From Fire C/VM2</u>	N/A		Sharon Medcalf
<u>D1 - Access Routes</u>	N/A		Sharon Medcalf
<u>D2 - Mechanical Installations For Access</u>	N/A		Sharon Medcalf
<u>E1 - Surface Water</u>	N/A	no changes	Sharon Medcalf
<u>E2 - External moisture</u>	N/A	no changes to building envelope proposed	Sharon Medcalf
<u>E3 - Internal Moisture</u>	Pass		Sharon Medcalf
E3 Prompts	Pass		SHM
Prevention of fungal growth	Pass	Prevention of condensation has been considered by assessing the correct balance between interior temperature and ventilation.	SHM
Overflow	N/A		SHM
Impervious surfaces	Pass	Details have been provided for surfaces to be impervious, easily cleaned, and for the prevention of water penetration into concealed spaces where the surface is adjacent to sanitary fixtures and appliances or likely to be splashed.	SHM
Shower enclosures	Pass	A proprietary shower tray and/or walls is proposed. The shower tray, & wall finishes satisfy the performance for impervious and easily cleaned surfaces in areas exposed to watersplash.	SHM
Wet area membrane	N/A		SHM
Other compliance paths	N/A		SHM

Checklist/Elements	Status	Notes	Processed By
<u>F1 - Hazardous Agents On Site</u>	N/A	none identified	Sharon Medcalf
<u>F2 - Hazardous Building Materials</u>	Pass		Sharon Medcalf
Asbestos	N/A		SHM
Glazing	Pass		SHM
Manifestation (visual bar)	N/A		SHM
Glazing requirements	N/A		SHM
Bathrooms	Pass	Glazing in bathrooms, including glazing in the shower enclosure, is specified to be compliant with NZS 4223.3.	SHM
Balustrades	N/A		SHM
Other compliance paths	N/A		SHM
<u>F3 - Hazardous Substances And Processes</u>	N/A	none identified	Sharon Medcalf
<u>F4 - Safety From Falling</u>	N/A		Sharon Medcalf
<u>F5 - Construction and Demolition Hazards</u>	Pass		Sharon Medcalf
F5 Prompts	Pass		SHM
Consent addendum	Pass	Compliance with F5 Site Safety is to be noted in the consent addendum.	SHM
Other compliance paths	N/A		SHM
<u>F6 - Visibility In Escape Routes</u>	N/A		Sharon Medcalf
<u>F7 - Warning Systems</u>	N/A	garage only	Sharon Medcalf
<u>F8 - Signs</u>	N/A		Sharon Medcalf
<u>F9 - Means Of Restricting Access To Residential Pools</u>	N/A		Sharon Medcalf
<u>G1 - Personal Hygiene</u>	Pass		Sharon Medcalf
Provision of sanitary fixtures	Pass		SHM
General sanitary fixture requirements	Pass	An adequate number of sanitary fixtures with appropriate space dimensions have been provided given the building use, user group, occupancy, and type of fixtures provided.	SHM
Privacy Residential	Pass		SHM
Location	Pass	As sanitary fixtures in a household unit, there is at least one door provided between the toilets and the food preparation / storage areas.	SHM
Privacy Commercial	N/A		SHM
Accessible toilets	N/A		SHM
Accessible showers	N/A		SHM
Other compliance paths	N/A		SHM
<u>G2 - Laundering</u>	N/A	no changes	Sharon Medcalf
<u>G3 - Food Preparation And Prevention Of Contamination</u>	N/A	no changes	Sharon Medcalf
<u>G4 - Ventilation</u>	Pass		Sharon Medcalf
G4 Prompts	Pass		SHM
Natural ventilation	Pass	Sufficient natural ventilation is provided to occupied spaces by openable windows and/or doors of an adequate area. Contaminated air is disposed of in a way which avoids nuisance to people and other property.	SHM
Mechanical ventilation	Pass	Sufficient mechanical ventilation is provided to occupied spaces by an extract with an adequate air flow rate. shown sheet 103	SHM
Gas fuelled appliances	Pass	Additional ventilation is provided, where required,	SHM

Checklist/Elements	Status	Notes	Processed By
		to gas fuelled appliances.	
Other compliance paths	N/A		SHM
<u>G5 - Interior Environment</u>	N/A		Sharon Medcalf
<u>G6 - Airborne and Impact Sound</u>	N/A	single dwelling with garage	Sharon Medcalf
<u>G7 - Natural Light</u>	Pass		Sharon Medcalf
G7 Prompts	Pass		SHM
Means of providing natural light	Pass	There are windows to habitable spaces that have an area no less than 10% of the floor area.	SHM
Visual awareness	Pass	At least 50% of the glazed area providing natural light is clear glazing falling within the visual awareness zone.	SHM
Other compliance paths	N/A		SHM
<u>G8 - Artificial Light</u>	Pass		Sharon Medcalf
G8 Prompts	Pass		SHM
Artificial lighting	Pass	There is adequate lighting, as per specifications	SHM
Other compliance paths	N/A		SHM
<u>G9 - Electricity</u>	Pass		Sharon Medcalf
G9 Prompts	Pass		SHM
Energy works certificate	Pass	An energy works certificate will be required upon completion.	SHM
Electrical switches and outlets in buildings intended for use by persons with disabilities	N/A		SHM
Other compliance paths	N/A		SHM
<u>G10 - Piped Services</u>	Pass		Sharon Medcalf
G10 Prompts	Pass		SHM
Energy works certificate	Pass	A gas energy works certificate will be required upon completion.	SHM
Other compliance paths	N/A		SHM
<u>G11 - Gas as an Energy Source</u>	Pass		Sharon Medcalf
G11 Prompts	Pass		SHM
Energy works certificate	Pass	The gas appliance is being installed and documentation nominates compliance with the relevant standard.	SHM
Other compliance paths	N/A		SHM
<u>G12 - Water Supplies</u>	N/A	No changes proposed to existing potable water supply	Sharon Medcalf
<u>G13 - Foul Water</u>	Pass		Sharon Medcalf
Compliance path	Pass		SHM
Scope	Pass	Compliance documents used in this assessment are: G13/AS1 Sanitary Plumbing G13/AS2 Drainage	SHM
Connections	Pass	Existing drainage plans have been checked to ensure the feasibility of the connections proposed	SHM
G13/AS1 Sanitary Plumbing	Pass		SHM
Sanitary plumbing	Pass	The discharge pipe layout, sizes, and falls are appropriate given types of sanitary fixtures, the fixture loading, and the developed lengths of pipe runs. Fixture and branch vent pipes are shown where required to ensure the functionality of water traps and the drainage system. shown sheet 103	SHM

Checklist/Elements	Status	Notes	Processed By
G13/AS2 Drainage	Pass		SHM
Drainage	Pass	The drainage pipe layout, sizes, and falls are appropriate given the fixture loadings. Gully traps are shown where required, with at least one gully serving as an overflow relief gully with adequate height difference to the lowest sanitary fixture. The drainage system shows appropriate venting to ensure that the overall system is adequately vented.	SHM
Grease traps	N/A		SHM
G13/AS3 - AS/NZS 3500.2-Sanitary plumbing and drainage	N/A		SHM
On-site waste water	N/A		SHM
Specific Engineer Design	N/A		SHM
Other compliance paths	N/A		SHM
<u>G14 - Industrial Liquid Waste</u>	N/A		Sharon Medcalf
<u>G15 - Solid Waste</u>	N/A		Sharon Medcalf
<u>H1 - Energy Efficiency</u>	Pass		Sharon Medcalf
H1 Prompts	Pass		SHM
Climate zone	Pass	R values are correct for the climate zone (zone 3)	SHM
Small building envelope thermal performance	Pass	Pink batts R2.8 to new walls, R6.0 to ceiling	SHM
Hot water system efficiency (housing)	Pass	There is adequate thermal insulation to the hot water supply to the sink, with the pipe run not exceeding allowable limits.	SHM
Energy Efficiency Commercial and Communal non-residential buildings	N/A		SHM
Thermal Efficiency Large Commercial Buildings >300m	N/A		SHM
Other compliance paths	N/A		SHM
<u>S26 - WARNINGS AND BANS</u>	Pass		Sharon Medcalf
Warnings	Pass		SHM
Building products and building methods	None of the	None of the building methods or building products in the proposal are subject to a current warning.	SHM
Bans	Pass		SHM
Building products and building methods	None of the	None of the building methods or building products in the proposal are subject to a current ban	SHM
<u>s30A-s30H - National multiple-use approvals</u>	N/A		Sharon Medcalf
<u>s67 - Waivers and modifications</u>	N/A		Sharon Medcalf
<u>s71-s73 - Building on land subject to natural hazards</u>	N/A		Sharon Medcalf
<u>s75 - Construction of building on 2 or more allotments</u>	N/A		Sharon Medcalf
<u>s84 - Restricted building work</u>	N/A	All LBP details as per Form 2	Sharon Medcalf
<u>s87A and s90D - Restricted work carried out by owner-builders</u>	N/A		Sharon Medcalf
<u>s100 - Requirements for compliance schedule</u>	N/A		Sharon Medcalf
<u>s112 - Alterations to existing buildings</u>	N/A	residential	Sharon Medcalf
<u>s113 - Buildings with specified intended lives</u>	N/A		Sharon Medcalf
<u>s115 - Change of use</u>	N/A		Sharon Medcalf
<u>s133AT - Alterations to buildings subject to EPB notice</u>	N/A		Sharon Medcalf

Checklist/Elements	Status	Notes	Processed By
<u>Certificate of acceptance (s96)</u>	N/A		Sharon Medcalf
<u>Schedule 1 - Discretionary exemption</u>	N/A		Sharon Medcalf
<u>PIM Only</u>	N/A		Sharon Medcalf
<u>PROCESSING SIGN OFF CHECKLIST</u>	Pass		Sharon Medcalf
All consents (ex PIMs)	Pass		SHM
Locations complete	Yes	All other GoGet locations are marked as "complete".	SHM
Internal specialist reviews (GoGet locations)	N/A		SHM
Required inspections	Yes	Required inspections identified and added	SHM
Required documents	Yes	Required documents identified and added	SHM
Advice notes	Yes	Advice notes correctly identified and added to Form 5	SHM
Conditions	N/A		SHM
Engineer inspections	N/A		SHM
Sec 37 Is a resource consent required for this building work	N/A		SHM
Sec 67	N/A		SHM
Sec 72	N/A		SHM
Sec 75	N/A		SHM
Sec 113	N/A		SHM
Year first constructed	Yes	Year building first constructed recorded in MagiQ	SHM
Additional charges	N/A		SHM
Current lawfully established use	Yes	Current lawfully established use is recorded in consent	SHM
Multi-unit project	N/A		SHM
Compliance Schedule	N/A	The building contains no specified systems.	SHM
Consent files	Yes	Documents stamped Documents filed in correct order Documents superseded	SHM
Processing summary	Pass	All checklist items are signed off and there are no fails Processing summary has been saved	SHM
Timesheet	Yes	Time recorded in MagiQ Job Costing against consent number	SHM
Decision to Refuse to Grant	N/A		SHM
Decision to Grant Building Consent	Grant	The building consent authority is satisfied on reasonable grounds that the provisions of the building code would be met if the building work were properly completed in accordance with the plans and specifications that accompanied the application.	SHM
Create and Review Form 5	Pass	Form 5 has been generated and all relevant information included	SHM
Commercial only (ex PIMs)	N/A		SHM

I am satisfied on reasonable grounds that the provisions of the Building Code will be met if the building work in relation to the attached application is properly completed in accordance with the attached plans and specifications.

Signed: _____ Date: 26 July 2024 11:57 am
Sharon Medcalf

Tab 3 – Correspondence

3



8 April 2026

P Joo
8 Palm Avenue
Stoke
Nelson 7011

Dear Applicants

Code compliance certificate reminder (Building Act 2004, section 93)

Building Consent Application: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project Description: **Construct Bathroom in Existing Garage**

The above building consent was granted almost two years ago, and on the two year anniversary (26 July 2026), we have a legal obligation¹ to decide whether we can issue a code compliance certificate (CCC) or not.

If the building work is finished:

1. Apply for code compliance certificate (Form 6)
2. We will schedule your final inspection

Once compliance with the building consent is established, outstanding costs will be invoiced, and all charges must be paid before CCC is issued.

If you are still in the process of building, and you haven't obtained a CCC by 26 July 2026:

- We will make the decision not to issue CCC at that point in time²
- Continue with your building work, booking the required inspections as you go
- When work is finished you must apply for a code compliance certificate

If you have any queries regarding this letter, contact Building on 03 546 0334 or visit nelson.govt.nz. Thank you for your prompt attention.

Yours sincerely

Building Control Administration

Notes:

A code compliance certificate (CCC) confirms that the Building Consent Authority is satisfied on reasonable grounds that the finished building work complies with the approved building consent.

¹ Our legal obligation - Section 93 of the Building Act 2004 requires us, the Building Consent Authority, to decide whether we can issue code compliance certificate (CCC) on a consent or not. We refer to this as the section 93 decision.

The Building Act 2004 requires the owner to apply for CCC as soon as work is complete. Also:

- It is important for when you come to sell your property as it shows that the building works were carried out properly
- Your insurance company may need a copy of your certificate
- The longer the project is delayed, the more complex it becomes to issue CCC, and this may lead to additional costs.

² You may choose to apply for an extension of time via the Simpli portal to delay the CCC decision, however you will be invoiced a fee equivalent to the current hourly rate. *Note: You will need to create an account in simpli.govt.nz if you haven't already registered.*



7 April 2026

jamesjoo114@gmail.com

Dear Applicant

Building Consent Lapse Reminder

Building consent: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project: **Construct Bathroom in Existing Garage**

Our records show that the above consent was issued on 26 July 2024 and there have been no site visits carried out by Council Building Inspectors to date.

Section 52 of the Building Act 2004 states that a building consent will lapse 12 months from the date of issue if no building work has started, or no extension approved. Your current work start extension will expire on the **22/05/2026**. As stated in the Extension letter, no further extensions will be given. A work start inspection has been scheduled for **7 May 2026**.

The following options are available to you:

- If work has started, phone **03 546 0334** and request an inspection or reschedule the current inspection;
- If you are not going ahead with the work, reply to this email to acknowledge that the consent will automatically lapse.

If we have not undertaken an inspection, the above building consent will automatically lapse on **22/05/2026** and will no longer be of effect. Council does not send out any further reminders.

If you allow the consent to lapse, you will need to submit a new building consent application should you wish to go ahead with your project at a later date, therefore it is important to act now.

Yours sincerely

Building Control Administration

REQUIRED INSPECTIONS FOR BUILDING CONSENT 240378

The following inspections are required to be undertaken by Council before a code compliance certificate can be issued.

Inspections Required

No	Inspection Name	Notes
1	IE05 Underslab drainage	Underslab drainage. Sewer or stormwater drains under approved test prior to filling any trenches.
1	IE06 Drainage sewer or stormwater	Sewer or stormwater drains under approved test prior to the filling of any trenches.
1	IF06 Residential alterations structural pre-line	IF06 (Residential Alterations Only) Structural and pre-lining when any insulation is in place, including any plumbing works under test.
1	IF14 Residential post line first layer	Post lining, when all brace elements/first layer fire wall fixings, tiled shower areas are complete prior to the installation of skirtings, cornice, waterproof membranes and prior to wall stopping.
1	II06 Final - Residential	Residential final inspection. When all building consent requirements are complete.
5	<i>Total Inspections</i>	



15 December 2025

P Joo
8 Palm Avenue
Stoke
Nelson 7011

Dear Applicant

Building Consent Extension of Time to Start Work

Building Consent Number: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project Description: **Outbuildings**

Nelson City Council has considered your request for an extension of time to commence work on this building consent.

An extension has been granted until *22 May 2026*. **A Building Inspector will attend site prior to this date to confirm that work has started.** The extension has been approved for the following reason:

Work start extension approved to 22/05/2026 (6 months as per standard BCA procedure), as there has not been any changes to the Building Act and Building Code since this consent was issued, which could affect compliance. A site inspection will be scheduled prior to the expiry of this extension to check work has commenced.

You must ensure that work has started, and a building inspection occurs prior to the expiry date above. Otherwise under section 52 of the Building Act 2004, the building consent will automatically lapse and be of no effect. **You will not receive any further Council reminder letters.**

If you allow the consent to lapse, you will need to re-apply for a building consent should you wish to go ahead with your project at a later date.

Yours sincerely

Mark Hunter
Manager Building

Prae Joo
8 Palm Avenue
Stoke
Nelson 7011

Tax Invoice

GST Reg No: 10-730-295
Invoice Date: 8/12/2025
Customer No: BC240378
Tax Invoice No: 141652
Due Date: 20/01/2026
Order No:

Qty	Description	Rate	GST	Amount
	BC240378: 8 Palm Avenue Description of Works: Construct Bathroom in Existing Garage			
1	Application for Extension of Time	201.90	26.33	201.90

Subtotal	175.57
GST	26.33
Total Amount	\$201.90
Less Credit	201.90CR
Net Due	\$0.00

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www.nelson.govt.nz/customer-accounts





7 April 2026

jamesjoo114@gmail.com

Dear Applicant

Building Consent Lapse Reminder

Building consent: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project: **Construct Bathroom in Existing Garage**

Our records show that the above consent was issued on 26 July 2024 and there have been no site visits carried out by Council Building Inspectors to date.

Section 52 of the Building Act 2004 states that a building consent will lapse 12 months from the date of issue if no building work has started, or no extension approved. Your current work start extension will expire on the **22/05/2026**. As stated in the Extension letter, no further extensions will be given. A work start inspection has been scheduled for **7 May 2026**.

The following options are available to you:

- If work has started, phone **03 546 0334** and request an inspection or reschedule the current inspection;
- If you are not going ahead with the work, reply to this email to acknowledge that the consent will automatically lapse.

If we have not undertaken an inspection, the above building consent will automatically lapse on **22/05/2026** and will no longer be of effect. Council does not send out any further reminders.

If you allow the consent to lapse, you will need to submit a new building consent application should you wish to go ahead with your project at a later date, therefore it is important to act now.

Yours sincerely

Building Control Administration

REQUIRED INSPECTIONS FOR BUILDING CONSENT 240378

The following inspections are required to be undertaken by Council before a code compliance certificate can be issued.

Inspections Required

No	Inspection Name	Notes
1	IE05 Underslab drainage	Underslab drainage. Sewer or stormwater drains under approved test prior to filling any trenches.
1	IE06 Drainage sewer or stormwater	Sewer or stormwater drains under approved test prior to the filling of any trenches.
1	IF06 Residential alterations structural pre-line	IF06 (Residential Alterations Only) Structural and pre-lining when any insulation is in place, including any plumbing works under test.
1	IF14 Residential post line first layer	Post lining, when all brace elements/first layer fire wall fixings, tiled shower areas are complete prior to the installation of skirtings, cornice, waterproof membranes and prior to wall stopping.
1	II06 Final - Residential	Residential final inspection. When all building consent requirements are complete.
5	<i>Total Inspections</i>	



3 November 2025

jamesjoo114@gmail.com

Dear Applicant

Building Consent Lapse Reminder

Building consent: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project: **Construct Bathroom in Existing Garage**

Our records show that the above consent was issued on 26 July 2024 and there have been no site visits carried out by Council Building Inspectors to date.

Section 52 of the Building Act 2004 states that a building consent will lapse 12 months from the date of issue if no building work has started, or no extension approved. Your current work start extension will expire on the **26 December 2025**. An inspection has been scheduled for 12 December 2025 to confirm if work has started.

The following options are available to you:

- If work has started, phone **03 546 0334** and request an inspection or reschedule the current inspection;
- If you need more time to start work, apply for an extension of time via the [simpli portal](#) (see note below). You will be invoiced an application fee of \$201.90;
- If you are not going ahead with the work, reply to this email to acknowledge that the consent will automatically lapse.

If we have not undertaken an inspection, the above building consent will automatically lapse on and will no longer be of effect. Council does not send out any further reminders.

If you allow the consent to lapse, you will need to submit a new building consent application should you wish to go ahead with your project at a later date, therefore it is important to act now.

Note: You will need to create an account in simpli.govt.nz if you haven't already registered; please use the email address jamesjoo114@gmail.com to register.

Yours sincerely

Building Control Administration

REQUIRED INSPECTIONS FOR BUILDING CONSENT 240378

The following inspections are required to be undertaken by Council before a code compliance certificate can be issued.

Inspections Required

No	Inspection Name	Notes
1	IE05 Underslab drainage	Underslab drainage. Sewer or stormwater drains under approved test prior to filling any trenches.
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1	IF14 Residential post line first layer	Post lining, when all brace elements/first layer fire wall fixings, tiled shower areas are complete prior to the installation of skirtings, cornice, waterproof membranes and prior to wall stopping.
1	II06 Final - Residential	Residential final inspection. When all building consent requirements are complete.
5	<i>Total Inspections</i>	



28 July 2025

P Joo
8 Palm Avenue
Stoke
Nelson 7011

Dear Applicant

Building Consent Extension of Time to Start Work

Building Consent Number: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project Description: **Outbuildings**

Nelson City Council has considered your request for an extension of time to commence work on this building consent.

An extension has been granted until **26 December 2025. A Building Inspector will attend site prior to this date to confirm that work has started.** The extension has been approved for the following reason:

Work start extension approved to 26/12/2025 (6 months as per standard BCA procedure), as there has not been any changes to the Building Act and Building Code since this consent was issued, which could affect compliance. A site inspection will be scheduled prior to the expiry of this extension to check work has commenced.

You must ensure that work has started, and a building inspection occurs prior to the expiry date above. Otherwise under section 52 of the Building Act 2004, the building consent will automatically lapse and be of no effect. **You will not receive any further Council reminder letters.**

If you allow the consent to lapse, you will need to re-apply for a building consent should you wish to go ahead with your project at a later date.

Yours sincerely

Mark Hunter
Manager Building

Tax Invoice

Prae Joo
8 Palm Avenue
Stoke
Nelson 7011

GST Reg No: 10-730-295
Invoice Date: 21/07/2025
Customer No: BC240378
Tax Invoice No: 136454
Due Date: 20/08/2025
Order No:

Qty	Description	Rate	GST	Amount
	BC240378: 8 Palm Avenue Description of Works: Construct Bathroom in Existing Garage			
1	Application for Extension of Time	201.90	26.33	201.90
Subtotal				175.57
GST				26.33
Total Amount				\$201.90
Less Credit				201.90CR
Net Due				\$0.00

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Civic House
110 Trafalgar Street
PO Box 645
Nelson 7040
Phone (03) 546-0200
E-mail customer.service@ncc.govt.nz

Customer No: BC240378
Prae Joo
Invoice No: 136454



Do you wish to receive your invoices via email? Please email us!



Total Due: **\$0.00**

Electronic payments can be made to bank account 03 0703 0325055 00
Using your customer number as the reference.



3 June 2025

jamesjoo114@gmail.com

Dear Applicant

Building Consent Lapse Reminder

Building consent: **240378**
Site Address: **8 Palm Avenue, Nelson**
Project: **Construct Bathroom in Existing Garage**

Our records show that the above consent was issued on 26 July 2024 and there have been no site visits carried out by Council Building Inspectors to date.

Section 52 of the Building Act 2004 states that a building consent will lapse 12 months from the date of issue if no building work has started.

The following options are available to you:

- If work has started, phone **03 546 0334** and request an inspection;
- If you need more time to start work, apply for an extension of time via the [simpli portal](http://simpli.govt.nz) (see note below). You will be invoiced an application fee of \$197.50;
- If you are not going ahead with the work, reply to this email to acknowledge that the consent will automatically lapse.

If we have not approved a written request for an extension of time, or undertaken an inspection, the above building consent will automatically lapse on **26 July 2025** and will no longer be of effect. Council does not send out any further reminders.

If you allow the consent to lapse, you will need to submit a new building consent application should you wish to go ahead with your project at a later date, therefore it is important to act now.

Note: You will need to create an account in simpli.govt.nz if you haven't already registered; please use the email address jamesjoo114@gmail.com to register.

Yours sincerely

Building Control Administration

REQUIRED INSPECTIONS FOR BUILDING CONSENT 240378

The following inspections are required to be undertaken by Council before a code compliance certificate can be issued.

Inspections Required

No	Inspection Name	Notes
1	IE05 Underslab drainage	Underslab drainage. Sewer or stormwater drains under approved test prior to filling any trenches.
1	IE06 Drainage sewer or stormwater	Sewer or stormwater drains under approved test prior to the filling of any trenches.
1	IF06 Residential alterations structural pre-line	IF06 (Residential Alterations Only) Structural and pre-lining when any insulation is in place, including any plumbing works under test.
1	IF14 Residential post line first layer	Post lining, when all brace elements/first layer fire wall fixings, tiled shower areas are complete prior to the installation of skirtings, cornice, waterproof membranes and prior to wall stopping.
1	II06 Final - Residential	Residential final inspection. When all building consent requirements are complete.
5	<i>Total Inspections</i>	

Tax Invoice

Prae Joo
8 Palm Avenue
Stoke
Nelson 7011

GST Reg No: 10-730-295
Invoice Date: 30/07/2024
Customer No: BC240378
Tax Invoice No: 123595
Due Date: 20/08/2024
Order No:

Qty	Description	Rate	GST	Amount
	BUILDING CONSENT 240378 : 8 Palm Avenue, Nelson			
	Owner: P Joo			
	Processing		78.34	600.63
	BRANZ Levy		0.00	35.00
	Insurance Levy		14.06	107.80
	Administration (hourly rate)		77.28	592.50
	Inspection Fees		128.80	987.50
	System Fee		19.17	147.00
	Quality Assurance Levy		16.30	124.95

Subtotal	2,261.43
GST	333.95
Total Amount	\$2,595.38
Less Credit	3,066.50CR
Net Due	\$471.12CR

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Civic House
110 Trafalgar Street
PO Box 645
Nelson 7040
Phone (03) 546-0200
E-mail customer.service@ncc.govt.nz

Customer No: BC240378
Prae Joo
Invoice No: 123595



Do you wish to receive your invoices via email? Please email us!



Total Due: **\$471.12CR**

Electronic payments can be made to bank account 03 0703 0325055 00
Using your customer number as the reference.

Tab 4 – Geotech,
Engineer Report,
PS1 & 2

4

Tab 5 – Plans & Details

5

LEGEND

BOUNDARY

SS WASTEWATER

FFL +4.0

FFL = FINISHED FLOOR LEVEL
FGL = FINISHED GROUND LEVEL
METRES ABOVE NZVD 2016

HARDSTAND AREA

ZONES

SNOW = N3
EXPOSURE = C
EARTHQUAKE = 2
WIND REGION = A
LEE ZONE = No
TOPO CLASS = T1
GROUND ROUGHNES = Urban
SITE EXPOSURE = Sheltered
WIND ZONE = M

Lot 1 DP 9002
SITE AREA: 607m²

AREAS:

EXISTING HOUSE = 113m²
EXISTING GARAGE = 53.5m²

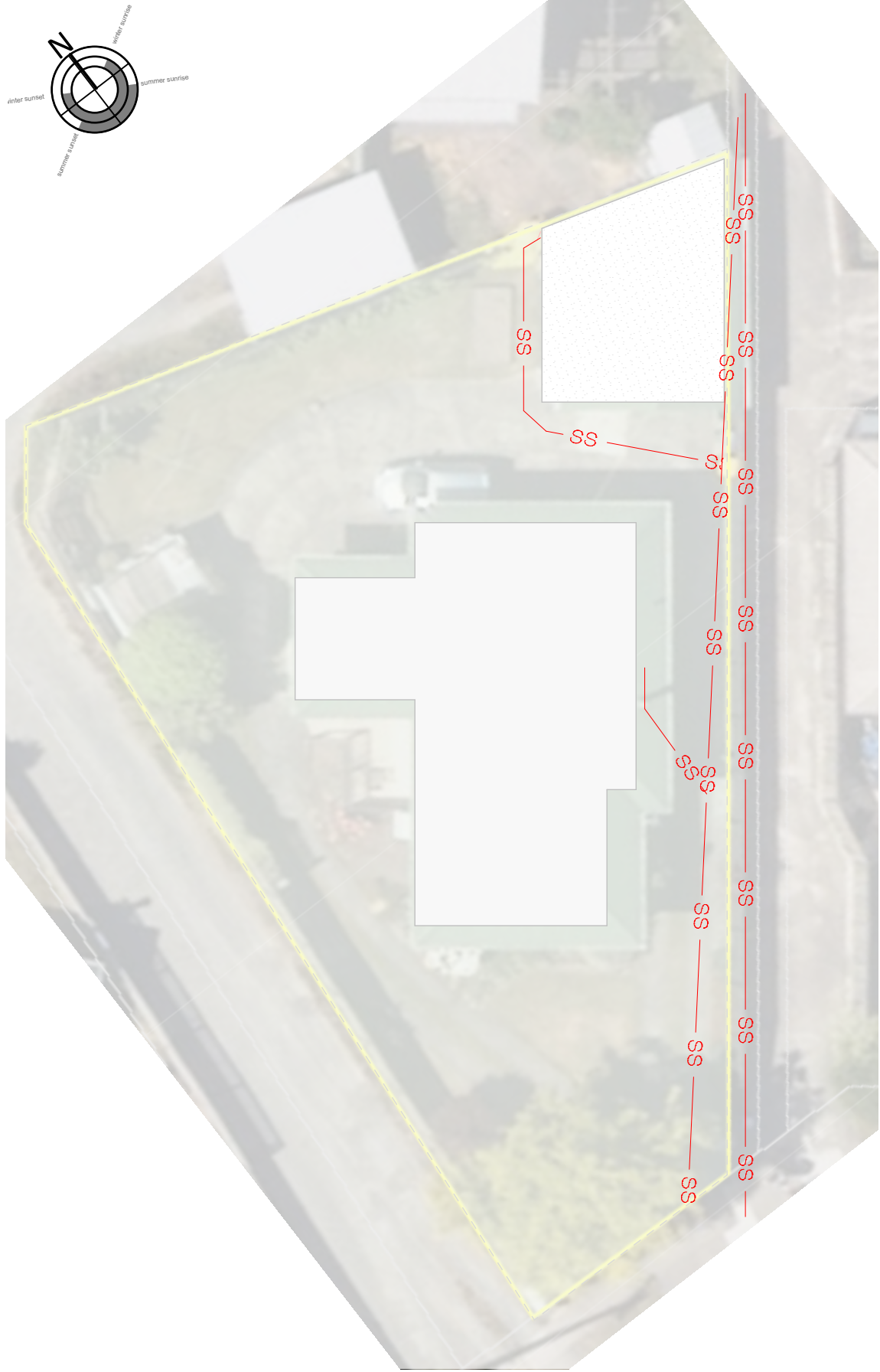
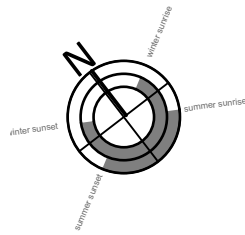
SEDIMENT CONTROL

NO SEDIMENT CONTROL PLAN HAS BEEN PROVIDED DUE TO THE NEGLIGABLE SCOPE OF GROUND WORKS PROPOSED IN THIS CONSENT

SITE (NCC):

ZONE:	RESIDENTIAL
MAX BUILDING COVERAGE:	40%
MAX BUILDING HEIGHT:	7.5m
SETBACKS:	1.5m ROAD/FRONT
(INC GUTTERS AND EAVES)	1m OTHERS (WALL < 12m LONG) (TO AVOID FIRE RATING) 1.5m OTHERS

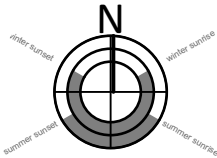
GARAGE SET BACK 1m FURTHER THAN HOUSE IF WITHIN 4M OF ROAD (FRONT YARD)



Site Plan

1:200

BC240378 Nelson City Council



Site Location Plan

1:500

A PRINTED COPY OF THE APPROVED BUILDING CONSENT DOCUMENTS, PLANS AND SPECIFICATIONS MUST BE RETAINED ON SITE AT ALL TIMES.



CHRIS PYEMONT ARCHITECTS

Chris Pyemont: Architect / + 64 21 027 84729
3 Wensley Rd, Richmond, Nelson, New Zealand
chris@cparchitects.nz / www.cparchitects.nz



Te Kāhui
Whaihangā
NZIA Practice
2020

Check all dimensions on site.
Do not scale from plans. If in
doubt consult architect. Read in
conjunction with all consultants
drawings.

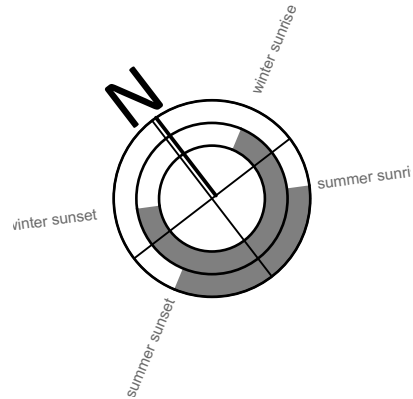
DETAIL DESIGN

BATHROOM
JOO, JAMES
8 PALM AVENUE STOKE

Site Plan

ISSUED: 1/7/2024
SCALE: @ A3
SHEET C1

JOB 188



- LEGEND**
- INTERCONNECTED SMOKE ALARM
 - WATER SUPPLY
 - METER BOX
 - DIST BOARD

- INSULATED TIMBER FRAMED WALL
- TIMBER FRAMED WALL
- CONCRETE MASONRY
- CONCRETE MASONRY WITH 45mm STRAPING AND INSULATION
- DPM
- CONCRETE

TIMBER FRAMING
ALL INTERNAL WALLS TO BE FRAMED WITH 90x45 SG8 STUDS @ 600 CRS NOGS @ 1200 CRS 2.1m CEILING.

DOOR AND WINDOW NOTES
GLAZING TO CONFORM TO NZS 4223.

STRUCTURAL FIXINGS
NAIL PLATES - CLOSED AND ROOF SPACES = CONTINUOUSLY COATED GALVANIZED STEEL

WIRE DOGS & BOLTS - CLOSED AND ROOF SPACES = HOT-DIPPED GALVANIZED STEEL

ALL OTHER STRUCTURAL FIXINGS - CLOSED = MILD STEEL (UNCOATED, NON-GALVANIZED)

****EXPOSURE ZONE B & C****
ALL STEEL CONNECTIONS IN CONTACT WITH H3 TREATED TIMBER EXPOSED TO ATMOSPHERE WITHIN 600mm OF GROUND TO BE STAINLESS STEEL. ALL ENCLOSED STEEL CONNECTIONS TO BE GALV STEEL

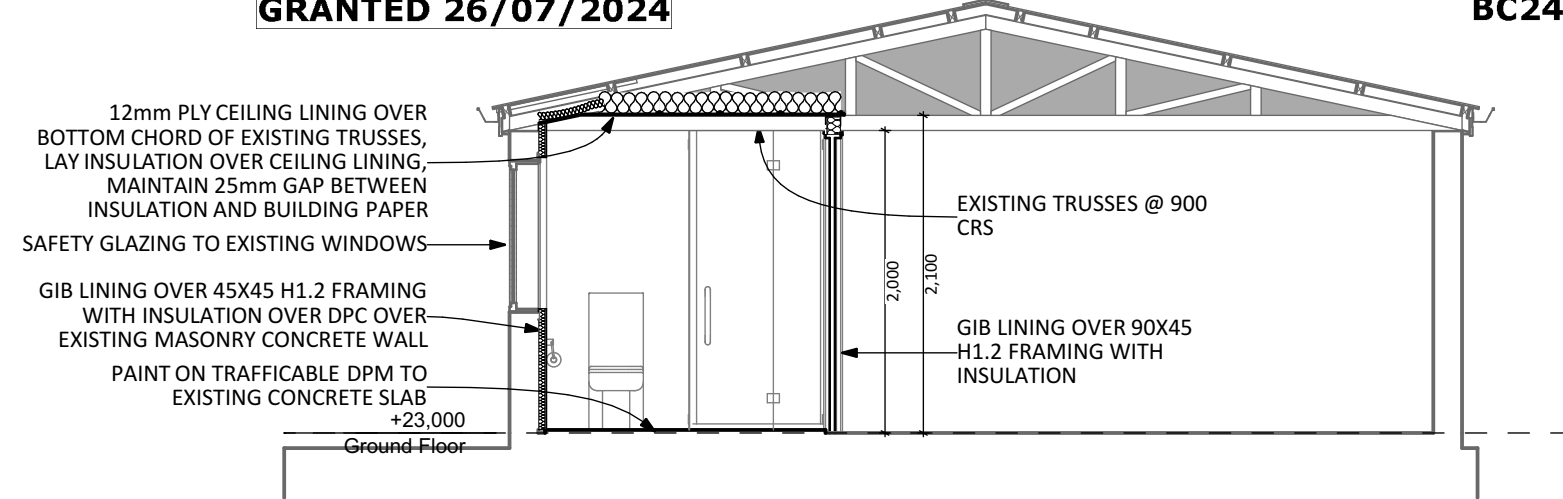
SCHEDULE OF TIMBER TREATMENT
H1.2. FRAMING PROTECTED FROM WEATHER, ABOVE GROUND, AND ALSO EXPOSED TO GROUND ATMOSPHERE.
-ROOF AND CEILING FRAMING
-INTERIOR WALL FRAMING
-WALL FRAMING
H3.2. FRAMING EXPOSED TO WEATHER ABOVE GROUND WITH A RISK OF TRAPPED WATER
-EXTERNAL RAFTERS AND BEAMS
ALL WALL FRAMING SHALL BE PRESERVATIVE TREATED H1.2 UNLESS OTHERWISE STATED ALL OTHER FRAMING TIMBER (INCLUDING FLOOR, ROOF, DECK, ETC.) SHALL HAVE A MINIMUM GRADE OF SG8.

WORK TO BE COMPLETED UNDER SCHEDULE 1 OF NZ BUILDING ACT
EXEMPTED BUILDING WORK: BUILDING WORK FOR WHICH BUILDING CONSENT NOT REQUIRED REFER TO ITEMS HIGHLIGHTED WITH DASHED RED LINE
PART 1.1 GENERAL REPAIR, MAINTENANCE AND REPLACEMENT OF BUILDING PARTS
PART 1.2 PENETRATIONS THROUGH BUILDING COMPONENTS
PART 3.3 INTERNAL WALLS AND DOORS IN EXISTING BUILDING
PART 3.4 INTERNAL LININGS AND FINISHES IN EXISTING DWELLING
PART 5.1 THERMAL INSULATION

WET AREA WALL LININGS
WET AREAS WALL LININGS FINISHED WITH SEMI-GLOSS, OR GLOSS PAINT. AS PER ACCEPTABLE SOLUTION E3/AS1 3.1.2 WALLS (c).
BATH TO HAVE 150mm HIGH CERAMIC OR STONE TILE SURROUND HAVING 6% MAXIMUM WATER ABSORPTION, WATERPROOF GROUTED JOINTS, AND BEDDED WITH AN ADHESIVE SPECIFIED BY THE TILE MANUFACTURER AS BEING SUITABLE FOR THE TILES, SUBSTRATE MATERIAL AND THE ENVIRONMENT OF USE.

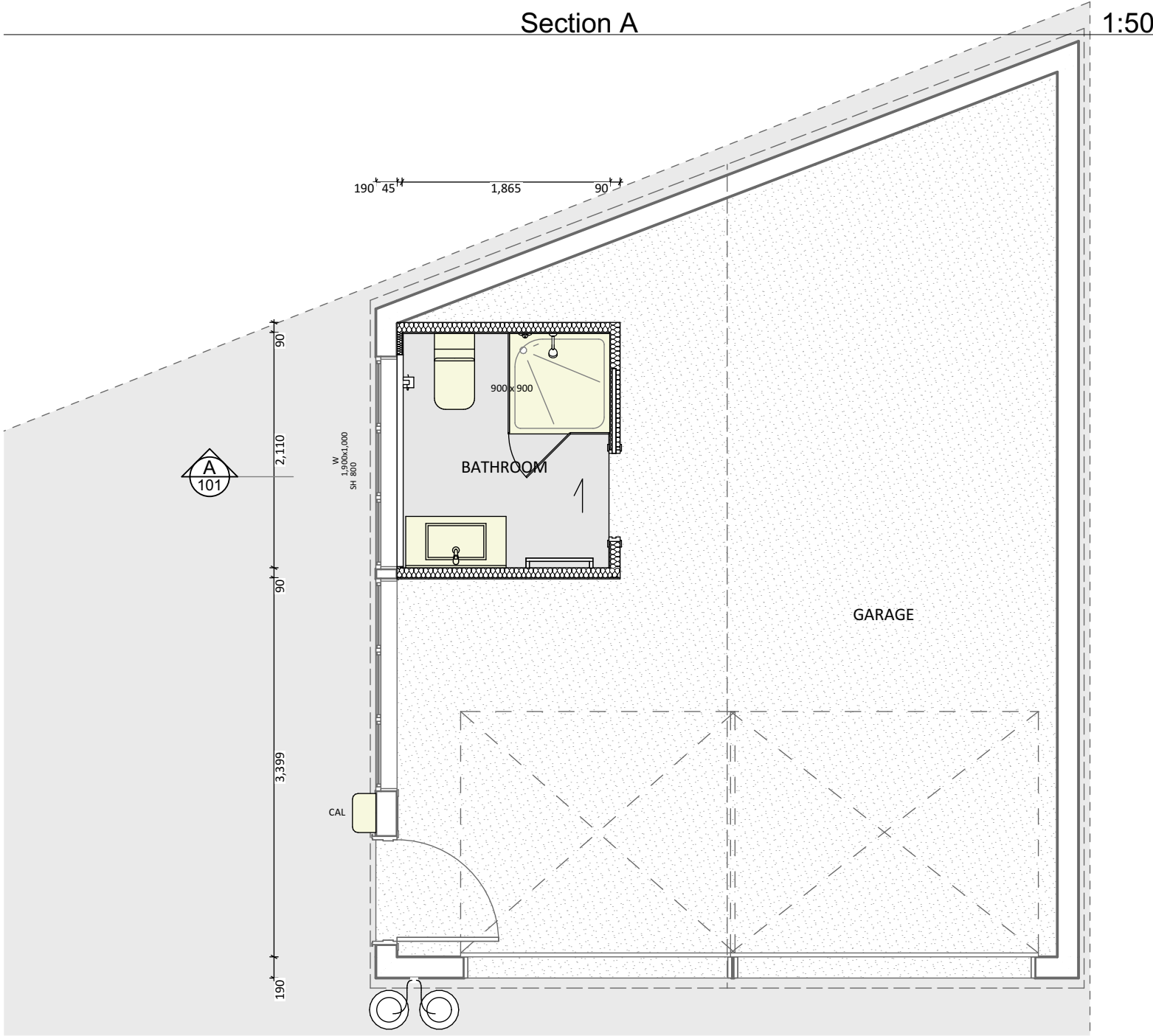
LIGHTING & ELECTRICAL
ELECTRICAL AND LIGHTING LAYOUT TO BE AGREED WITH CLIENT ON SITE
RECESSED DOWNLIGHTS
ALL RECESSED LUMINAIRES TO BE I.C. RATED
ENTRANCE LIGHTING
EXTERNAL LIGHTING TO ENTRANCE TO COMPLY WITH D1/AS1

FLOORING / DPM
ALL FLOORING AND JOINTS IN FLOORING WITHIN 1.5m OF ANY TAP SHALL BE IMPERVIOUS AND SEALED TO COMPLY WITH G3/AS1 NZBC ARDEX DPM SYSTEM
ALL CHANGE IN DIRECTIONS (FLOOR TO WALL, WALL TO WALL ETC) REQUIRE A SMALL BEAD OF ARDEX RA88 EPOXY TO CREATE A SMALL COVE BEFORE APPLYING ARDEX WPM 300. THE CHANGE IN DIRECTION AREAS MUST ALSO HAVE ARDEX DECKWEB INCLUDED IN TO THE FIRST COAT OF THE ARDEX WPM 300. THE ARDEX WPM 300 IS APPLIED TO THESE AREAS WHILST STILL WET THE ARDEX DECKWEB TO BE PLACED INTO THE MEMBRANE AND WETTED OUT. SECOND COAT OF THE ARDEX WPM 300 SHOULD BE INSTALLED AND FINISHED IN THE OPPOSITE DIRECTION FROM THE FIRST, E.G. FIRST COAT EAST WEST DIRECTION SECOND COAT NORTH SOUTH DIRECTION. THERE SHOULD BE NO PENETRATIONS OF THE FINISHED MEMBRANE FOR INCLUDING FIXINGS FOR JOIST, TOP/BOTTOM PLATES, AND STRAPPING. THIS SHOULD BE GLUE FIXED USING ARDEX RA88 STRUCTURAL REPAIR EPOXY.



Section A

1:50



Proposed Floor Plan

1:50



LEGEND

- TIMBER FRAMED WALL TO REMAIN
- ITEM TO BE REMOVED (ie. WALL, FLOOR, WINDOW etc.)

DEMOLITION NOTES

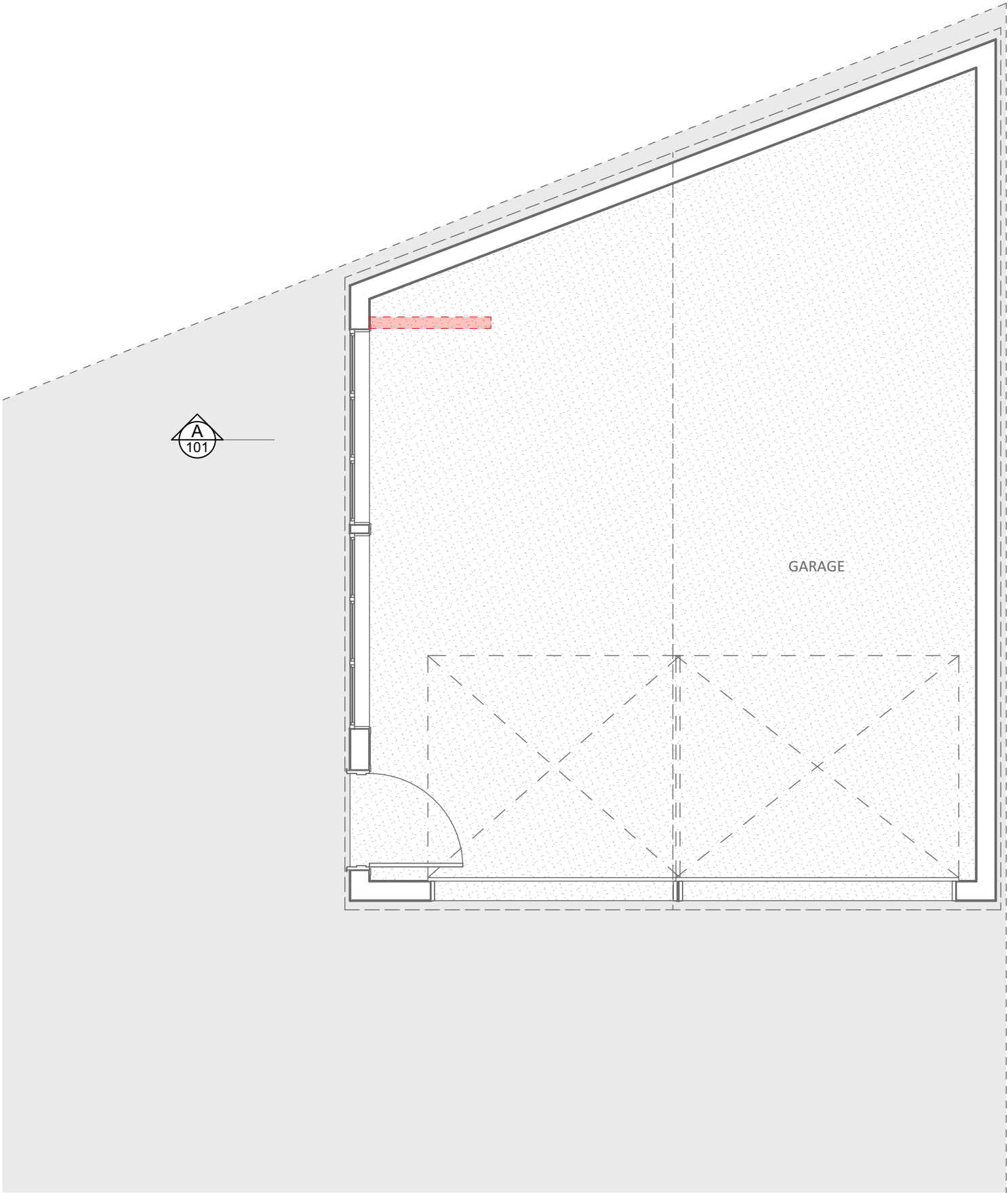
ENSURE TO PROP ALL STRUCTURES TEMPORARILY THAT REQUIRE SUPPORT DURING THE PROCESS OF DEMOLITION.
CHECK WITH OWNER FOR ANY ITEMS TO BE SALVAGED AND/OR RE-USED. ENSURE SAFE, SECURE AND WEATHERPROOF STORAGE FOR ITEMS TO BE RE-USED OR SALVAGED.
CONTRACTOR IS RESPONSIBLE FOR CORRECT & APPROPRIATE DISPOSAL OF ITEMS FOR DEMOLITION.
ENSURE APPROPRIATE SITE SAFETY MEASURES ARE IN PLACE FOR DEMOLITION HAZARDS
MAKE GOOD ALL REMAINING CONSTRUCTION ELEMENTS AT DOWNTAKINGS

ASBESTOS

IT IS UNLIKELY THAT THERE IS ASBESTOS ONSITE HOWEVER IN THE EVENT THAT ASBESTOS IS DISCOVERED IN AREAS OF DEMOLITION ON SITE ALL APPROPRIATE MEASURES WILL BE TAKEN TO ENSURE IT IS SAFELY REMOVED IN LINE WITH HEALTH AND SAFETY AT WORK (ASBESTOS) REGULATIONS 2016

GRANTED 26/07/2024

BC240378 Nelson City Council



Demolition Plan

1:50



Te Kāhui
Whaihanga
NZIA Practice
2020

Check all dimensions on site.
Do not scale from plans. If in
doubt consult architect. Read in
conjunction with all consultants
drawings.

DETAIL DESIGN
BATHROOM
JOO, JAMES
8 PALM AVENUE STOKES

Demolition Floor Plan
ISSUED: 1/7/2024
SCALE: @ A3
SHEET 102

JOB 188

----- WASTE PIPE
----- SS WASTE WATER

⊗ EXTRACT

FFL FINISHED FLOOR LEVEL
FGL FINISHED GROUND LEVEL
GT GULLY TRAP (1 MIN ORG FOR G13)
IL INVERT LEVEL
IP INSPECTION POINT
LID LID LEVEL
TV TERMINAL VENT
AAV AIR ADMITTANCE VALVE
SS SANITARY SEWER

GT GL = - 0.75 / IL = - 1.15
DP GL = - 0.75 / IL = - 1.15

PLUMBING NOTES
EXTRACT FANS AND DUCTS

SHOWERS AND BATHS FLOW RATE = 25L/sec

VALVES

TEMPERING VALVE TO BE INSTALLED TO CONTROL TEMPERATURE DELIVERY OF HOT WATER
PRESSURE REDUCING, RELIEF VALVES AND TEMPERING VALVES TO BE INSTALLED
DOUBLE NO-RETURN VALVE TO PREVENT BACKFLOW CONTAMINATION OF POTABLE WATER SUPPLY
AIR ADMITTANCE VALVE TO BE LOCATED WHERE ACCESSIBLE

PENETRATIONS

ALL PENETRATIONS THRU EXTERNAL FABRIC OF GARAGE ARE LESS THAN 100mm IN DIA THUS ARE TO SCHEDULE 1 OF NZ BUILDING ACT

PIPE SIZE & GRADIENT

AS PER G13 AS1&2 NZBC

100Ø UPVC SEWER MIN GRADIENT 1:100.
BRANCH DRAINS TO SOIL FIXTURES 1:60
100Ø UPVC STORMWATER MIN GRADIENT 1:100.
150Ø UPVC STORMWATER TO TYPE 2 SUMP MIN GRADIENT 1:100.

SANITARY FIXTURE OR APPLIANCE	DISCHARGE PIPE (mm)	GRADIENT MIN (mm)
Basin / Vanity	40Ø	1:40
Bathtub	40Ø	1:40
Shower	40Ø	1:40
Water Closet Pan	100Ø	1:40

CONCRETE STRENGTH

THE MINIMUM SPECIFIED 28-DAY CONCRETE STRENGTH SHALL BE:

(A) 17.5 MPa FOR UNREINFORCED CONCRETE APPLICATIONS, OR REINFORCED CONCRETE EITHER NOT EXPOSED TO WEATHER OR EXPOSED TO THE WEATHER IN ZONE B AS NOTED ON SITE PLAN.

STEEL REINFORCING COVER

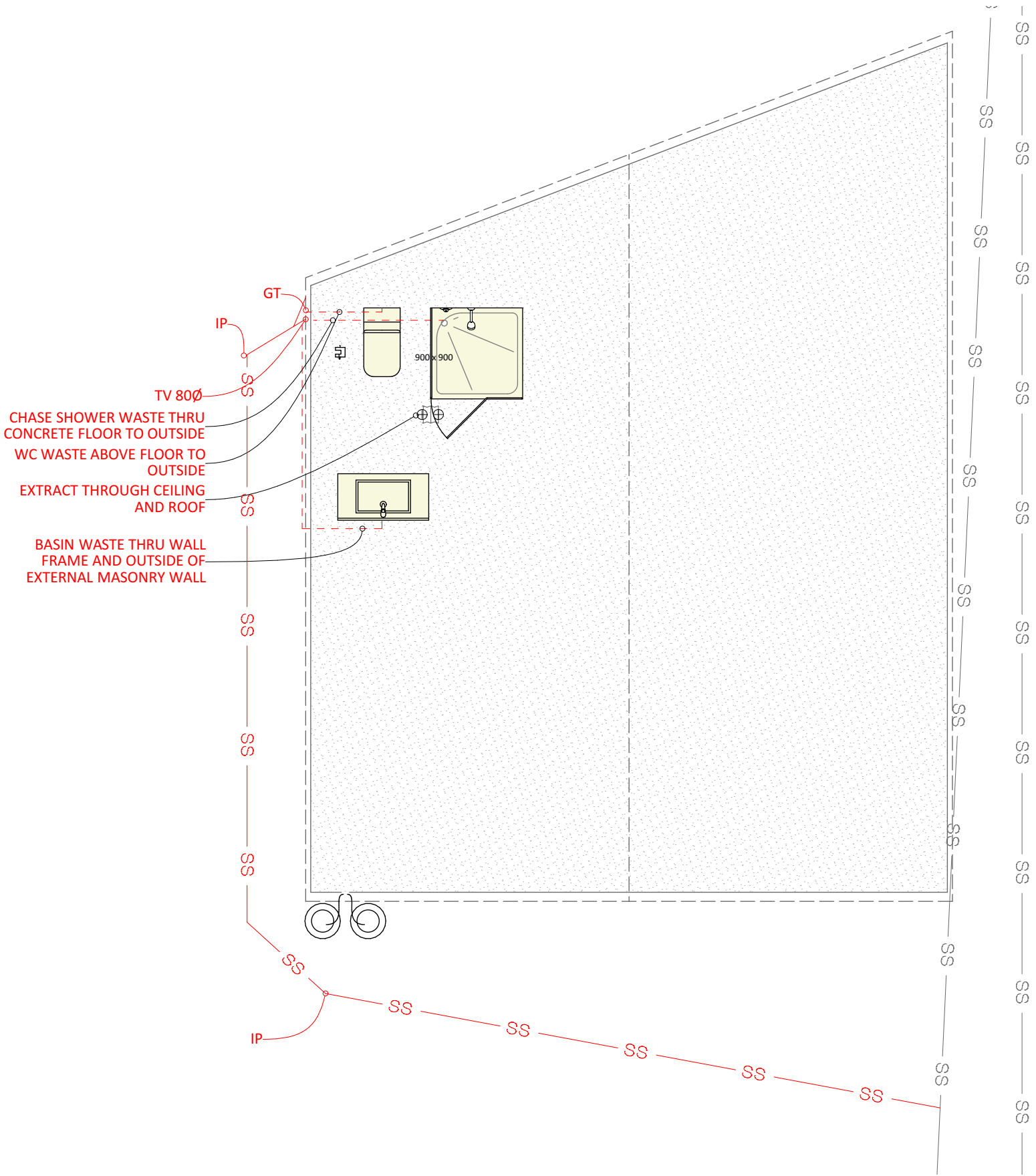
SE62 FLOOR SLAB REINFORCING SHALL EXTEND TO A MINIMUM EXTERNAL COVER OF:

- (A) AGAINST GROUND 75mm
- (B) AGAINST FORMWORK 50mm
- (C) TOP COVER TO MESH 30mm

STEEL REINFORCING MESH SHALL HAVE A COVER OF 30mm MINIMUM FROM THE TOP SURFACE OF THE GROUND SLAB AND SHALL BE PLACED IN SUCH A MANNER AS TO AVOID DAMAGE TO THE DPM ON PROPRIETARY CHAIRS. REINFORCING MESH SHALL COMPLY WITH AS/NZS 4671

LPG GAS BOTTLES

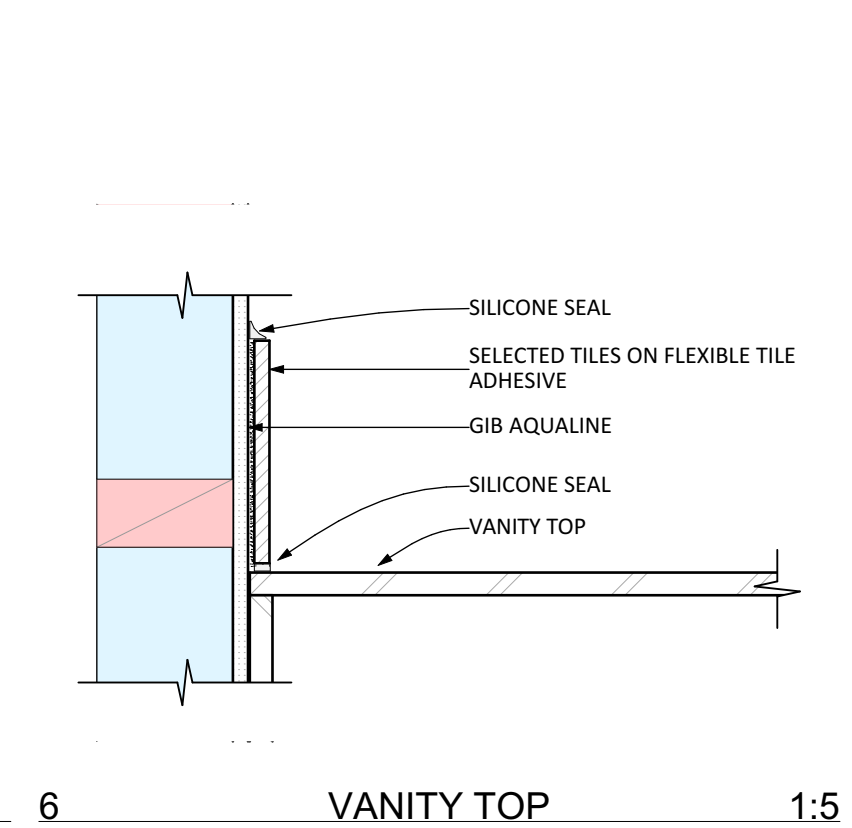
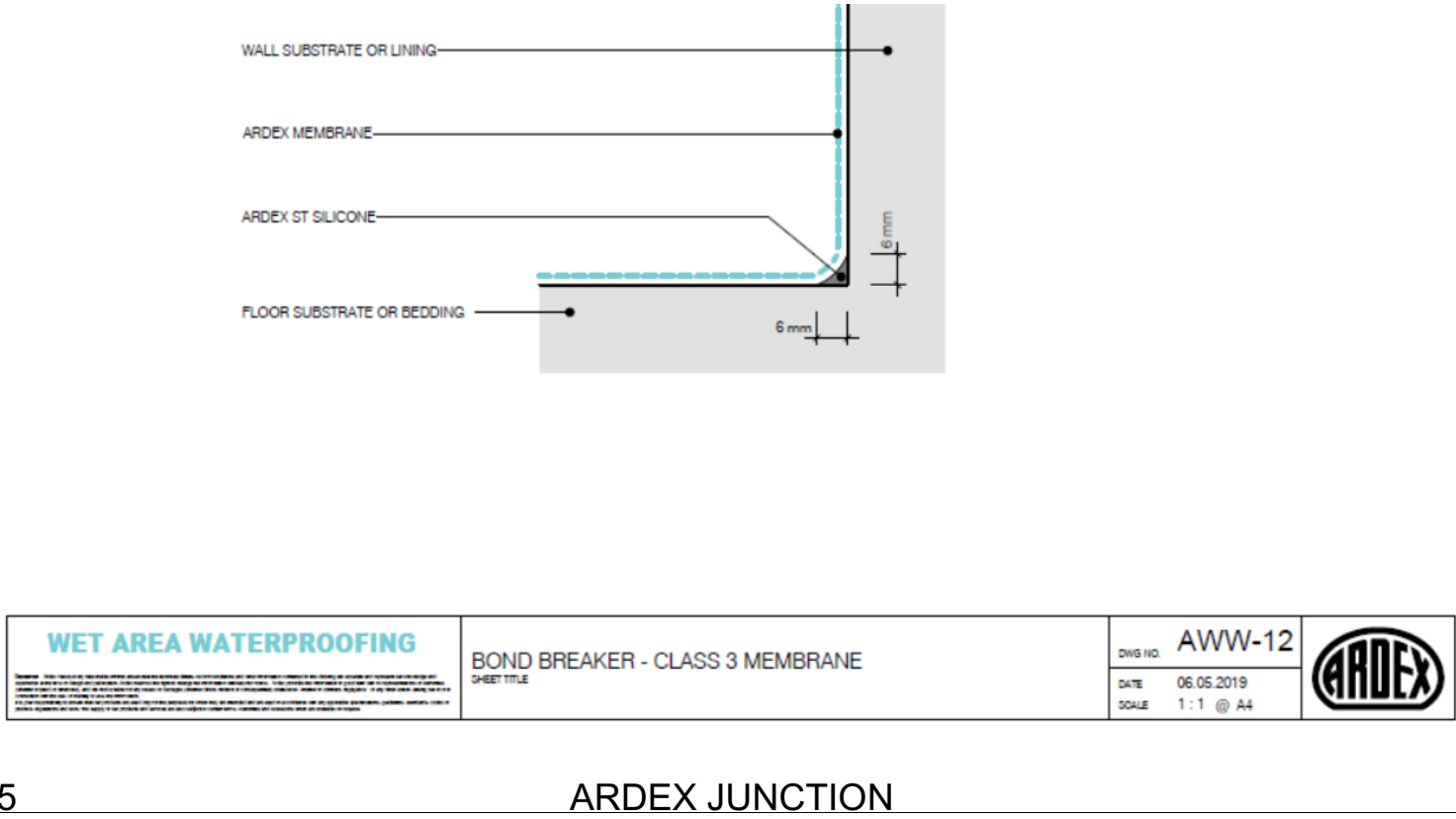
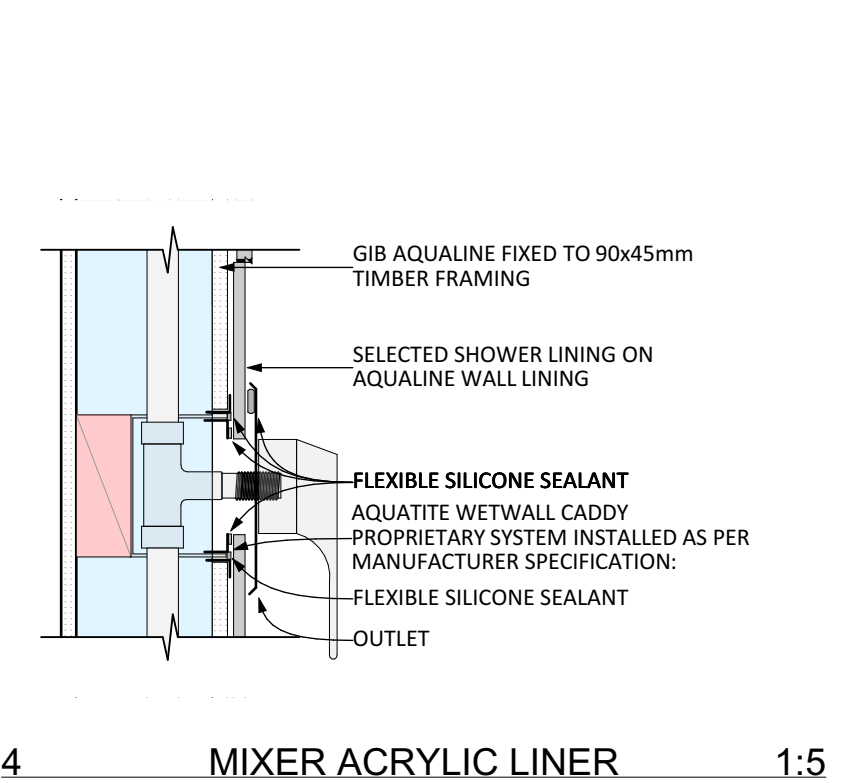
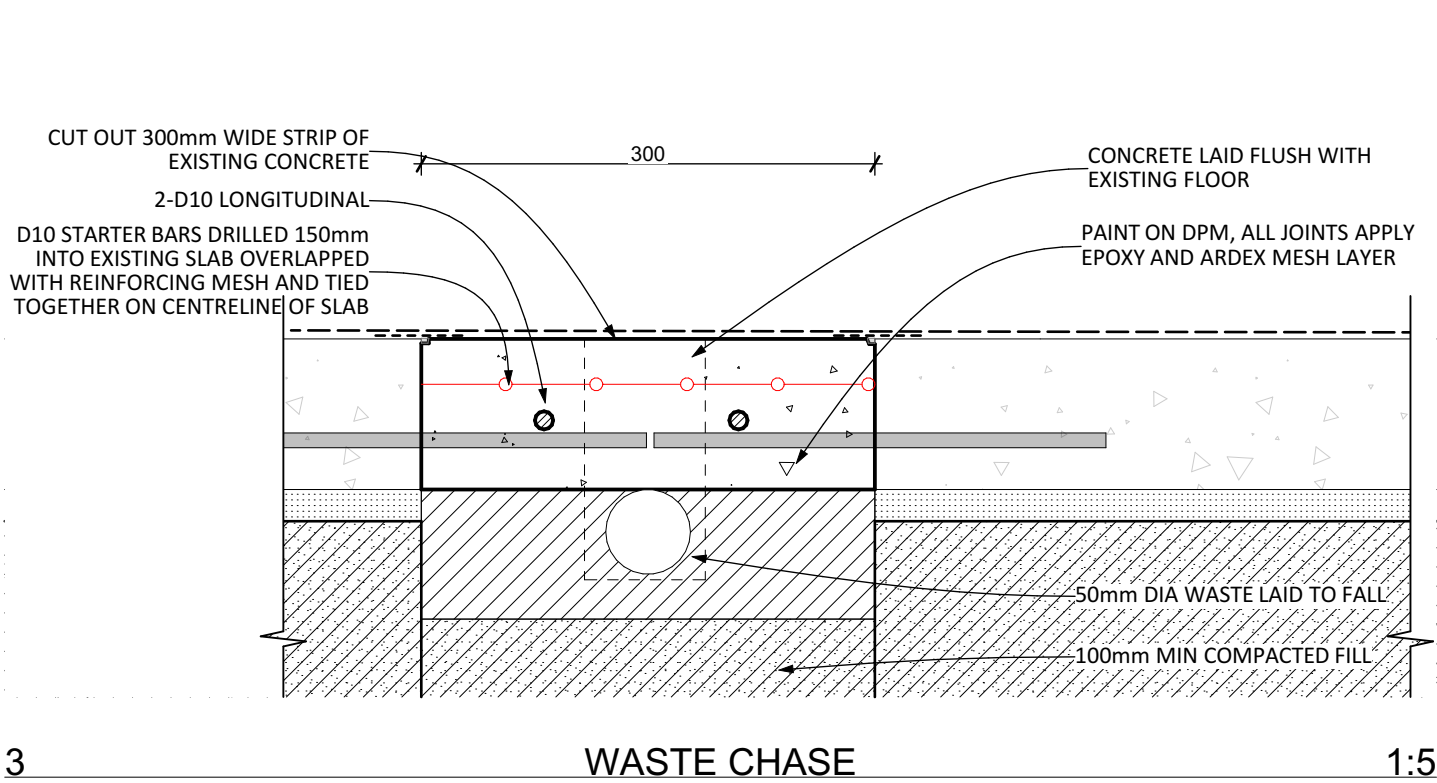
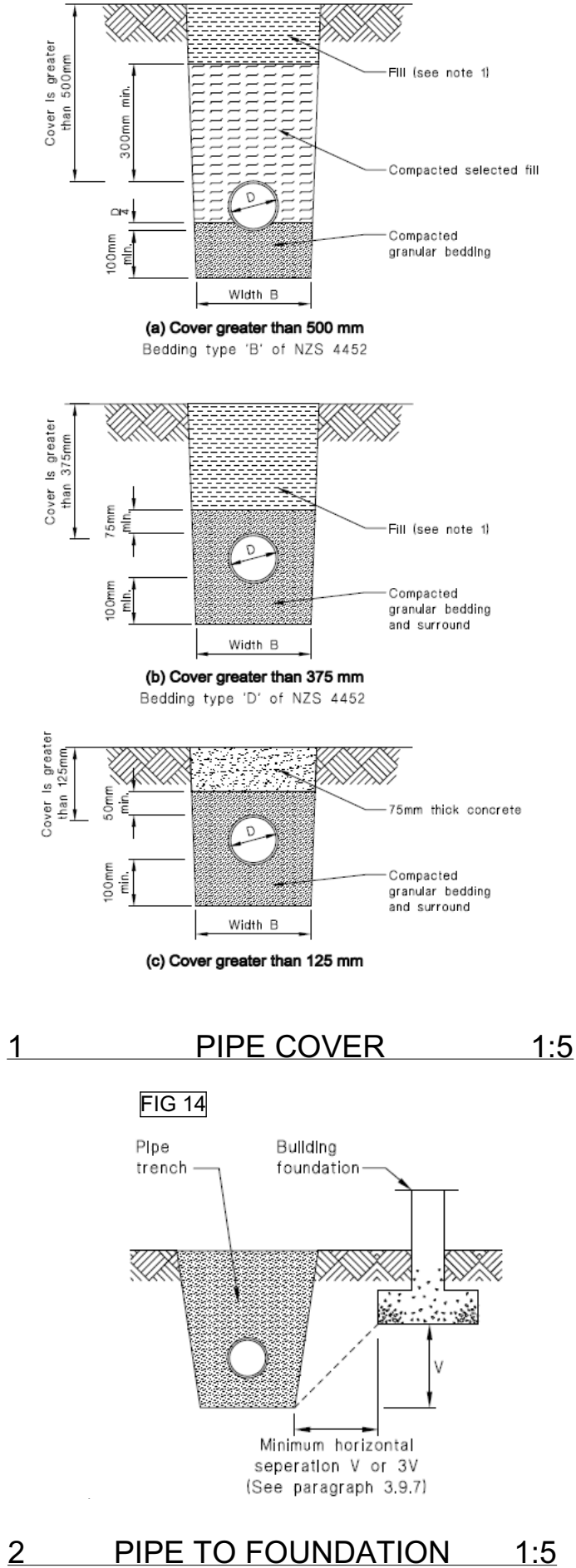
TO BE INSTALLED BY A SUITABLY QUALIFIED PERSON TO G10/AS1 OR AS/NZS5601.1 AND AS/NZS 5601.2.GAS BOTTLES TO BE SEISMICALLY RESTRAINED WITH CHAINS FIXED TO WALLS WITH STEEL BRACKETS AND TO BE INSTALLED ON A FIRM, LEVEL AND NON-COMBUSTABLE BASE



Plumbing Plan

1:50





Tab 6 – Specifications

6



CHRIS PYEMONT ARCHITECTS

Outline Specification: New Bathroom

Address: 8 Palm Avenue, Stoke

1 July 2024

A PRINTED COPY OF THE APPROVED
BUILDING CONSENT DOCUMENTS,
PLANS AND SPECIFICATIONS MUST
BE RETAINED ON SITE AT ALL TIMES.



Selections

1. Exterior Construction and Finishes

Construction and demolition waste and recycling management

- Recycling management plan to be implemented
- All construction waste to be separated for recycling
 - Metal; Sims
 - Gib board: Nelson recovery centre
 - Cardboard: Richmond recovery centre
 - Treated timber: Habitat for Humanity
 - Glass: 5R Solutions
- All subcontractors are responsible for their own waste and recommended that they review with supplier's minimisation of packaging; recycled or re-usable. Provide confirmation at time of tendering. Refer following examples.
 - Resene paint
 - Marley PVC
 - Nexan electric reels
- Substitute plastic covers with recyclable or re-usable tarpaulins/covers for protecting building materials and construction or request building supply company to accept clean folded covers for recycling ie currently available with ITM
- Audit construction on regular basis to ensure all recycling protocols are being met in recycling management plan

Excavation

- Trenching for waste water
- Erosion protection: catchment pits, swales, stabilised entrance, driveway drain as required

Demolition

- Items for re-use
 - Hardware
- Items to be returned to owner
 - To be confirmed on site with owner

Structure

- Internal walls
 - 90x45 SG8 H1.2 studs @ 600 crs, H3.2 bottom plates
 - 45sq SG8 H3.2 strapping

External Cladding

- Walls
 - General
 - Thermakraft Supercourse 500 DPC



2. Interior Construction, Fittings and Finishes

Floor

- Concrete
 - 100mm Reinforced concrete slab, SE62 mesh 20 MPa
 - 150mm compacted hardfill
 - 25mm crusher dust / sand blinding
 - DPM Thermathene Black DPM
 - DPC Thermathene Supercourse

Wall lining

- 10mm Gib wall lining to workshop side
- 10mm Gib aqualine to all bathroom side
- Level 4 finish

Ceiling lining

- 12mm UT Ecoply B face

Floor coverings

- Ardex WPM 300

Tiling

- Ardex WPM002 water proofing behind tiling
- Bathroom
 - Tiled splashback to vanity

Interior doors

- Solid core paint finish: 1980 high leaf
- H1.2 radiata clear jambs
- Hardware
 - To client selection
 - Locking hardware to all bathrooms
 - Flush pulls to cavity sliders

Trims

- 60x12 H1.2 radiata clear skirting paint finish
- 40x12 H1.2 radiata clear architrave paint finish

Hardware

- To client selection

**Insulation**

- Pink Batts Wall
 - 90mm R2.8 @ 600/400 crs or
- Pink batts Ceiling superbatts
 - R6.0 245mm 460mm wide
- Recticel PIR 40mm strapped wall

Glass

- Toughened safety glass
 - Bathroom mirrors 4mm 1100 High and width of vanity
 - Retrofit existing windows
- 11mm toughened safety glass shower screens with aluminium channel fixings
 - Ensuite to have fixed panel at each end with sliding door – floor to ceiling

Finish

- Paint finish throughout
- Interiors
 - Plasterboard walls non-wet area:
 - Prep - Refer to [SIPDS No. 1](#) Interior Wallboard and [Spec Sheet 1:1/1](#)
 - 1 coat of Resene Broadwall Waterborne Wallboard Sealer [D403](#)
 - (Option A) 2 coats of Resene SpaceCote Low Sheen [D311](#) – This option for additional durability/wipe ability.
 - (Option B) 2 coats of Resene Zylone Sheen - low sheen [D302](#)
 - Plasterboard walls and ceilings – wet area:
 - Prep - Refer to [SIPDS No. 1](#) Interior Wallboard and [Spec Sheet 1:1A/1](#)
 - 1 coat of Resene Waterborne Sureseal - pigmented sealer [D42a](#)
 - (Option A) 2 coats of Resene SpaceCote Low Sheen Kitchen & Bathroom [D311K](#) – Low Sheen Option
 - (Option B) 2 coats of Resene Lustacryl Kitchen & Bathroom [D310K](#) – Semi Gloss Option
 - Doors and trims:
 - Prep - Refer to [SIPDS No. 2](#) Timber and [Spec Sheet 2:9/1](#)
 - 1 coat of Resene Quick Dry - Primer Undercoat [D45](#)
 - 2 coats of Resene Lustacryl - semi-gloss waterborne enamel [D310](#)
 - (Option B) 3 coats of Resene Qristal ClearFloor 2K – satin [D506a](#)
 - (Option C) 3 coats of Resene Polythane - moisture cured clear gloss [D53](#) – This option for Hardwood Only

2. Services – TBC by client

**Electrical**

- Waterproof fittings as required to comply with AS/NZS 3000:2000
- 2 x double outlet sockets
- 1 x Extract fan

Lighting

- 24 x LED recessed lights to interior
- 2 x wall mounted updown lights @ entry
- 1 x LED strip light over vanity
- 1 x PIR sensors

Drainage

- Connect to existing wastewater system

Sanitaryware

- Bathroom
 - Proprietary shower with mixer plus shower hose on rail
 - Surface mounted basin on vanity with tapware and chrome bottle trap waste
 - towel rail
 - Back to wall WC

Plumbing

- Install tempering valve. Check water temperature at taps is 50 degrees Celsius or less.
- Pipework
 - Copper or Polybutylene
- Rinnai Infinity



CHRIS PYEMONT ARCHITECTS

General

General

CONTRACT

This general section refers to requirements under which this work will be constructed. This does not form any building contract.

MODS SCHEDULES PRODUCER STATEMENTS

This specification is to be read and followed in conjunction with the drawing set.

Provide Producer Statements for the following: **Waterproofing, Glazing**

SMOKE ALARMS

Contractor is to install where required smoke alarms to comply with building code.

CODES OF CONDUCT

Contractors are to comply with "An Agreement for Contractor Services" and the roles and responsibilities for contractors.

REFERENCED DOCUMENTS

Documents listed below are, when referred to in the text, part of this specification. However, this specification takes precedence in the event of it being at variance with and requiring a higher standard than any cited document.

Acts and Regulations

Building Act 2004

Gas Regulations 1993

Health and Safety act 2015

Electricity Regulations 1997

Plumbers, Gasfitters and Drainlayers Act 1976

New Zealand Electrical Codes of Practice (ECP)

New Zealand Building Code acceptable solutions

B1/AS1 Structure - general

D1/AS1 Access routes

E1/AS1 Surface water

E2/AS1 External moisture

F7/AS1 Domestic smoke alarms

G10/AS1 Piped services - Gas

G12/AS1 Water supplies

G13/AS2 Foul water - Drainage

New Zealand Standards

AS/NZS 1748

Mechanically stress - Graded for structural purposes

AS/NZS 2642

Polybutylene pipe systems

AS/NZS 2269

Plywood - Structural

AS/NZS 2589

Gypsum linings - Application and finishing

AS/NZS 3000

Electrical installations (known as the Australian/NZ Wiring Rules)

AS/NZS 3500.2

Plumbing and drainage - Sanitary plumbing and drainage

AS/NZS 3500.3

Plumbing and drainage - Stormwater drainage

AS/NZS 4129

Fittings for polyethylene pipes for pressure applications

AS/NZS 4130

Polyethylene (PE) pipes for pressure applications

AS/NZS 4671

Steel reinforcing materials

NZS 3104

Specification for concrete production

NZS 3109

Concrete construction

NZS 3114

Concrete surface finishes

NZS 3501

Specification for copper tubes for water, gas and sanitation

NZS 3602

Timber and wood-based products for use in building

NZS 3604

Timber framed buildings

NZS 3631

New Zealand national timber grading rules



NZS 4223.1	Glazing in buildings - Glass selection and glazing
NZS 4223.3	Glazing in buildings - Human impact safety requirements
NZS 4223.4	Glazing in buildings - Wind, dead, snow and live actions
NZS 4251.1	Solid plastering - Cement plasters for walls, ceilings and soffits
NZS 5261	Gas installation
NZS 6803	Acoustics - Construction noise

MANUFACTURERS AND SUPPLIERS

Manufacturers and supplier's requirements, instructions, specifications or details are those issued by them for their particular material, product or component and are the latest edition.

BUILDING CONSENT

Obtain the original or copies of the Building Consent form and documents from the owner and keep on site. Liaise with the BCA and/or the building certifier for all required notices and all inspections required during construction to ensure compliance. Return the consent form and documents to the owner on completion.

INSPECTIONS

Do not proceed with work noted on the Building Consent for inspection until it has been inspected and passed by the BCA inspector.

PRODUCER STATEMENTS

When producer statements verifying construction are required, provide copies to both the BCA and the owner. Provide producer statements in the form required by the BCA.

CODE COMPLIANCE CERTIFICATE

Provide documentation that the Owner requires to obtain a Code Compliance Certificate for the consented work. Provide Certificates of Compliance for electrical and gas work carried out.

HEALTH AND SAFETY

Make the works safe and provide and maintain a safe working environment. Ensure that all those working on or visiting the site are aware of the rules governing site safety, are properly supervised and are not unnecessarily exposed to hazards.

PROGRAMME

Provide a programme for the contract works, including the work of separate contractors being carried out concurrently with this contract. Form of programme: A dated bar chart, identifying the contract work's critical path and all key dates for the provision of labour, materials and elements. Supply a copy of the programme, and any updates to the owner.

WORKING HOURS

Work on site is restricted to between 0800 to 1800, Monday to Friday, excluding statutory holidays. Work outside these hours may be permitted, with prior approval in writing by the owner.

RESTRICTIONS

- Do not:
- smoke on site
 - light rubbish fires on the site
 - bring dogs on to or near the site
 - bring radios/audio players on to the site.

CLEAN

Clean and wash down external surfaces to remove dirt, debris and marking. Clean interior surfaces including floors, glass, cabinetwork, joinery, sanitary and hardware items.

Demolition**SURVEY EXISTING BUILDING**

Carry out a thorough survey and examination of the building to ensure the extent, sequence, technique and method of demolition proposed can be safely and efficiently carried out.

MATERIAL FROM DEMOLITION

Material from the demolition becomes the property of the contractor except for items designated for reuse or removal by others. Remove redundant materials from the site as work proceeds.

DISCONNECT SERVICES

Before commencing demolition, arrange with NUO's to disconnect services and remove associated fittings and equipment.

PROTECTION



- SUPPORT**
Protect retained parts of existing buildings, site and site structures, trees and shrubs.
Support and brace the existing structure during the cutting of new openings or the replacement of structural parts. Prevent debris from overloading any part of the structure. Do not remove supports until the new work is strong enough to support the existing structure. Ensure all work remains structurally stable and sound.
- TEMPORARY SCREENS**
Erect screens to prevent penetration of weather, dust and dirt.
- SALVAGE ITEMS**
Carefully dismantle and safely store salvage items where directed; for removal, use on the site, or until completion of the works.

Preparation and Groundwork

- PROTECT EXISTING**
Protect from damage existing buildings, structures, roads, paving and services nominated on the drawings as being retained, throughout the course of the work.
- PROTECT TREES**
Protect from damage all trees, shrubs, natural site features and existing landscaped areas nominated on the drawings as being retained, throughout the course of the work.
- SURFACE PREPARATION**
To NZS 3604, 3.5 Site preparation, remove all turf, vegetation, trees, topsoil, stumps and rubbish from the area being built on.
- UNDERGROUND ELEMENTS AND SERVICES**
Break out and remove underground elements and redundant services. Report for instructions when unexpected voids, made-up ground or services are encountered. Seal off the ends of drains or remove to NUO approval.

Concrete

- REINFORCEMENT**
Bars to AS/NZS 4671, grade 300 deformed. Welded reinforcing mesh to AS/NZS 4671. Mild drawn steel tying wire not less than 1.2 mm diameter.
- CONCRETE**
Strength as selected. Ready-mix normal grade, maximum aggregate size 19 mm to NZS 3104. Site mixed prescribed grade, using either separate batching of sand and coarse aggregate, or builder's mix, to NZS 3104.
- COVER**
Minimum cover to reinforcing as shown on the drawings and to NZS 3109, clause 2.7. Fix chairs for top reinforcement in slabs at 1.0 metre centres. Cover tolerances to NZS 3109, clause 3.8.
- CURING OF CONCRETE**
Keep damp for not less than seven days. Ensure curing of slabs commences as soon as possible after final finishing, by the use of continuous water sprays, or ponding. Alternately, apply a curing membrane. Ensure any membrane used will not affect subsequent applied finishes.

Timber framing

- TIMBER FRAMING GENERALLY**
Species, grade and level of treatment to NZS 3602, tables 1 to 3 Requirements for wood-based building components..., and moisture content to NZS 3602, table 4 Allowable moisture content..... Grading to NZS 3631. Mechanical stress grading acceptable as an alternative to visual grading.
- ATTENDANCE**
Provide and fix blocks, nogs, openings and other items as required by others.
- EXECUTION GENERALLY**
To NZS 3604 except as varied in this specification. To include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs). Set out framing in accordance with the requirements of NZS 3604 and as required to support sheet linings and claddings.
- INSTALL FLOOR, WALL AND ROOF FRAMING**



CHRIS PYEMONT ARCHITECTS

Floors and bottom plates framed and fastened to NZS 3604, section 7 Floors. Frame walls to required loading and bracing complete with lintels, sills and nogs, all fabricated and fastened to NZS 3604, section 8 Walls. Frame roof to required loading and bracing complete with valley boards, ridge boards and purlins to NZS 3604, section 10 Roof framing.

Interior linings

FRAMING MOISTURE CONTENT

Maximum allowable moisture content to NZS 3602, table 4 Allowable moisture content.....

PROTECT

Protect joinery, fittings and finishes already in place from water staining or damage from lining installation. Ensure building is weatherproof before lining work commences.

SPECIAL PLASTERBOARD LININGS

Line wet area walls with water resistant plasterboard sheets using adhesive and nail fixing to studs at centres to suit the surface finish. Form bracing panels using high density plasterboard sheets fixed with clout-washers and clouts and to conform to NZS 3604, 5.5 Wall bracing design, and 13.5 Structural ceiling diaphragms. Form sound rated panels following the sheet manufacturer's specifications and details for the required sound rating. Form fire rated panels following the sheet manufacturer's specifications and details for the required fire rating.

FIX PLASTERBOARD EXTERNAL ANGLES

Fix full length to external corners, with clouts at 100 mm each side staggered.

PLASTERBOARD JOINTING AND STOPPING

Fill joint recess with bedding compound, centre the paper tape, apply second coat of bedding compound followed by a coat of finishing compound. Allow to dry and lightly sand off. Fill nail holes and flush up external angles with two successive coats of bedding compound followed by a coat of finishing compound. Allow to dry and lightly sand off. All to the plasterboard manufacturer's requirements.

LEVELS OF FINISH

Provide levels of finish to standards laid down by AS/NZS 2589 as follows:

Level 4: For Paint finishes

INSTALL TRIM

Scribe and fit reveal linings to exterior timber joinery, architraves to interior joinery, skirtings to walls and timber beads to wall/ceiling junctions.

Interior doors and trim

DOORS GENERALLY

Hollow core unless as selected.

DOOR HINGES

Type:	loose-pin zinc-plated steel
Size:	89 mm
Material:	zinc-plated steel
Number:	3 hinges per door

DOOR HARDWARE

As selected, use existing where possible

FIT HARDWARE

Fit hardware selected and provided, all in accordance with the hardware manufacturer's requirements.

Painting & Paper hanging

PAINT

As selected and to the paint manufacturer's standards for exterior and/or interior primers, undercoats, sealers, stains, clear coatings, solvent-borne and water-borne paints.

PROTECT

Cover up adjoining surfaces and areas liable to damage or over-painting.

REMOVE HARDWARE



CHRIS PYEMONT ARCHITECTS

Remove hardware and door/window furniture and replace on completion. Do not paint over permanently attached hinges, or any hardware items which cannot be removed.

PRIMING AND SEALING

Ensure that priming and sealing work needed before or during construction is carried out when required.

SELECTIONS

Confirm all selections, colours and finishes for both paint and wallpaper with the owner.

PAINT APPLICATION

Apply paint by brush and/or roller to suit the location of the coating and to the paint manufacturer's requirements. Do not spray on site without express permission.

MANUFACTURER'S MANUALS

Refer to the paint manufacturers' manuals and follow their preparation, sequence and application requirements applying to each system. Ensure all paint coats in any system are supplied by the same manufacturer.

FINISHED PAINT SURFACES

Finished paint surfaces to show uniformity of gloss and colour, with the correct thickness for each coat, and freedom from painting defects. Ensure finished work is clean and free of any disfigurement.

REPLACE

Replace hardware without damage to the hardware or the adjoining surfaces.

Water system

QUALIFICATIONS

Carry out work by or under the direct supervision of a person registered under the Plumbers, Gasfitters and Drainlayers Act 1976.

INSULATION FOR HOT WATER PIPES

Preformed closed cell foam.

EXECUTION GENERALLY

Carry out work and tests as applicable to NZBC G12/AS1.

INSTALL COPPER WATER SUPPLY

Size the piping layout to eliminate loss of pressure at any point by simultaneous draw-off. Run pipes in straight runs, firmly fixed to falls, with long radius bends and jointed by brazing or with crox fittings, all to NZBC G12/AS1, 5.0 Water supply. Conceal piping, insulate hot water pipework and pressure test before the wall linings are fixed.

PENETRATIONS

Provide and fit collars and escutcheon plates to match pipework at penetrations through constructions.

COMPLETION

Pressure test to ensure no leakage and leave in proper working order. Clean tapware and fittings.

Sanitary Plumbing

QUALIFICATIONS

Carry out work by or under the direct supervision of a person registered under the Plumbers, Gasfitters and Drainlayers Act 1976.

UPVC WASTE, SOIL AND VENT PIPES

uPVC pipe, complete with fittings brand-matched to the pipe manufacturer's requirements.

EXPOSED PIPES AND TRAPS

As selected and to the following details:

- chrome plate on copper pipes and associated copper and brass fittings
- white polybutylene or PVC, including all associated fittings.

EXECUTION GENERALLY

Carry out sanitary plumbing work and tests as applicable to:

- NZBC G13/AS1
- AS/NZS 3500.2

INSTALL TRAPS, WASTE AND VENT PIPES



CHRIS PYEMONT ARCHITECTS

Connect waste outlets to traps and run waste pipes and back vents concealed, sized and fixed to AS/NZS 3500.2. Discharge wastes into the drainage system stack, soil pipe, or gully trap as shown. Bird proof mesh to roof vents and vermin proof mesh to untrapped waste pipes.

ENSURE

Ensure all sanitary plumbing fittings and pipework are complete and operational.
Assess the condition and suitability of all existing services prior to connection.

Sanitaryware, tapware, & accessories**QUALIFICATIONS**

Carry out work by or under the direct supervision of a person registered under the Plumbers, Gasfitters and Drainlayers Act 1976.

INSTALL SANITARYWARE

Fit and install sanitaryware and associated screens, elements and hardware, plumb, true to line and rigid, to the fixture manufacturer's requirements. Supply standard chrome plated brass wastes and plastic plugs on chrome plated chains with all basins, tubs and baths.

INSTALL TAPWARE

Install tapware in accordance with the tap manufacturer's requirements. Flush out on completion. Check that washers or ceramic discs are operating correctly.

TEST

Test soil and waste disposal systems to ensure no leakage exists and leave in working order.

ENSURE

Ensure all sanitary plumbing fittings and pipework are complete and operational.

Electrical**COMPLY**

Comply with the Electricity Regulations 2010, AS/NZS 3000 and the New Zealand Electrical Codes of Practice for listed and prescribed work and with the NUO's requirements. Apply for the service connection. Arrange for the required inspections of listed work. Pay all fees.

QUALIFICATIONS

Carry out work by or under the direct supervision of a holder of a practising certificate under the Electricity Regulations 2010.

CERTIFICATE OF COMPLIANCE

Supply a certificate of compliance to the owner, as required by the Electricity Regulations 1997. Allow the NUO to view before the meter installation, listed work inspection, polarity check and livening of supply.

CABLES

Tough plastic sheathed copper conductors. Minimum sizes are indicated below. Increase these as necessary due to method of installation, cable length or load.

Lighting circuits: 1.5 mm² on 10-amp MCBs for domestic construction

Power circuits: 1.5 mm² on 16-amp MCBs for domestic construction

ELECTRICAL ACCESSORIES

As selected and to the following details:

Switch units: Minimum 16-amp, 230 volt flush polycarbonate units. For number of switches per unit, dimmer units, neon (indicator or toggle) units, locator units and 2-way units refer to the electrical drawings.

Switched socket units: 10-amp, 230 volt flush polycarbonate 3 pin combined switch units.

Stove/range socket outlet and switch: 32-amp, 230 volt flush polycarbonate 3 pin combined switch unit, with remote isolating switch.

CABLING

Install with a maximum of 10 light outlet units or 6 switched socket units on any circuit. Separate circuits for all electric heating appliances. All cabling runs concealed. No TPS cable laid directly in concrete. Locate holes in timber framing for the passage of cables at the centre line of the timber member.

INSTALL SWITCH AND SOCKET UNITS

Fit single and double switch units and socket units level and plumb where shown on the drawings. Install at the following heights (to the centre of the unit) unless shown otherwise on the drawings or to match existing.



CHRIS PYEMONT ARCHITECTS

Switch Units: To match existing
Socket Units: 150 mm above work benches.
400 mm elsewhere.

Mount switches vertically and socket units horizontally. Label switch units which control electrical equipment by engraving on the rocker switch.

INSTALL LIGHT FITTINGS

Install selected light fittings in the locations and heights shown on the drawings and in accordance with the fitting manufacturer's requirements.

INSTALL SMOKE ALARMS

Install alarms to NZBC F7/AS1, 3.3 Location of smoke alarms, and to manufacturer's requirements, fitted neatly and without damage to the surrounding finish.

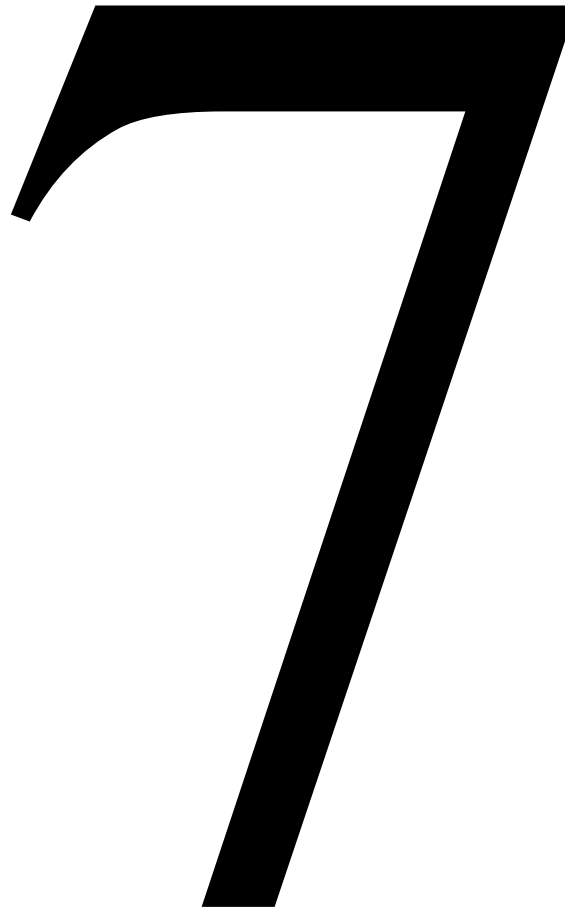
ELECTRIC POWERED FITTINGS AND EQUIPMENT

Install and wire selected fittings and equipment to the Electricity Regulations 2010 and the individual fittings and equipment manufacturer's requirements. Refer to the drawings for required layouts and locations for equipment.

COMPLETION

Leave all fittings, lamps and tubes operational, with equipment and diffusers clean.

Tab 7 – Technical Info





CHRIS PYEMONT ARCHITECTS

Products

A PRINTED COPY OF THE APPROVED
BUILDING CONSENT DOCUMENTS,
PLANS AND SPECIFICATIONS MUST
BE RETAINED ON SITE AT ALL TIMES.



ARDEX WPM 300

Water-Based Epoxy Moisture Barrier (HydrEpoxy)

Compliant to AS/NZS4020.2018 - Potable Drinking Water

Excellent adhesion to most substrates including damp surfaces
and green concrete

Water resistant, prevents rising damp, efflorescence and
withstands hydrostatic pressure

ARDEX New Zealand Ltd
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Onehunga, Auckland 1061
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ardex.co.nz

ARDEX WPM 300

Water-Based Epoxy Moisture Barrier

PRODUCT DESCRIPTION

ARDEX WPM 300 (HydrEpoxy) is a two component water-based epoxy primer/barrier coating. ARDEX WPM 300 (HydrEpoxy) is extremely versatile and can be used within a variety of applications.

FEATURES

- Compatible with damp surfaces and green concrete
- Potable drinking water compliant - AS4020.2018 and SS375-2001
- Can be overcoated with a variety of decorative or industrial finishing coatings
- Can withstand 250kPa of hydrostatic pressure - equivalent to a 25 metre head of water
- Prevents rising damp and the formation of efflorescence when used as a single coat barrier

COMMON SUBSTRATES

- Brick
- Stone
- Screed
- Timber
- Masonry
- Concrete
- Concrete Block

For further substrate types please contact ARDEX Technical Services (technicalservices@ardexaustralia.com).

TYPICAL APPLICATIONS

- As a low water vapour transmission coating and as a barrier/seal coating over freshly laid or damp concrete.
- As a hydrostatic pressure resistant waterproofing coating to prevent water seepage or dampness penetration through to the interior of walls and floors.
- As a waterproofing moisture barrier or barrier coating over freshly laid hardened (green) concrete, prior to the application of conventional levelling compounds, carpet and tile adhesives.
- As a waterproofing coating in tanking applications, including potable water containment.
- As a barrier seal coating over damp, green or efflorescence producing concrete prior to overcoating with conventional building coatings.
- As a primer for ARDEX Liquid Applied Waterproofing Membranes and ARDEX Tile Adhesives in specific applications.
- When masonry or concrete substrate moisture content is measured at greater than 80% relative humidity (ASTM F2170) or exceeds 15g/m²/24hrs (ASTM F1869) when tested in accordance with AS1884 or AS3740, ARDEX WPM 300 (HydrEpoxy) shall be considered as the nominated primer/coating.

SUBSTRATE PREPARATION

By way of mechanical method and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to application. Prepare surface to leave sound, clean, free from sharp edges, loose or other materials which may damage the subsequent coating, membrane, or levelling compound.

Surface defects such as holes, non-structural cracks or other minor surface deformities should be filled accordingly with an ARDEX WPM 405 sand/cement mortar or ARDEX WPM 300 epoxy mortar.

ARDEX WPM 300 epoxy mortar mix ratio:

- 1 x part mixed ARDEX WPM 300 (HydrEpoxy)
- 1 x part Portland cement
- 3 x part ARDEX Primer Sand

Spalling concrete must be treated accordingly with the ARDEX Concrete Repair range such as ARDEX BR 345, please review the respective product data sheets on treating spalling concrete.

MIXING

Each component must be individually mixed to form a homogenous state. Do not use the same mixing paddle for each component. Combine the two components and thoroughly mix in the ratio of 1:1 by volume until a homogeneous blend is obtained. Only mix as much as may be used within the pot life and avoid excessive aeration during mixing.

APPLICATION METHOD

When the product is to be applied to dry or highly porous surfaces, spray the surface with a fine mist of water prior to application. Any free standing water must be removed prior to application.

Floors – Spread the material using a squeegee or stiff nylon broom to ensure the material is worked into the prepared surface. Finish application using a medium to long nap roller to achieve required coverage.

Walls – Apply the product by roller ensuring the material is worked into the prepared surface and to achieve required coverage.

When spraying ARDEX WPM 300 (HydrEpoxy), the addition of 10% water during the first coat will assist surface penetration and spray application.

A one coat application is generally used for efflorescence and rising damp requirements, or as a primer for subsequent ARDEX Liquid Applied Membranes.

A two coat application is generally used for general waterproofing requirements as a moisture barrier or when waterproofing negative side walls is required.

ARDEX WPM 300

Water-Based Epoxy Moisture Barrier

TILING APPLICATIONS

Substrates such as screeds and renders should be normally allowed to dry for 7 days prior to the fixing of ceramic tiles. Alternatively, two coats of ARDEX WPM 300 (HydrEpoxy) are applied at 3.0m²/L per coat. Where ceramic tiles are to be installed, the second coat can be sand seeded. Whilst the second coat is wet, ARDEX Primer Sand or clean dry sand of 0.5mm diameter shall be broadcast over the surface at a rate of 700g/m² to achieve at least 90% coverage. After 24 hours minimum cure the excess sand shall be swept and vacuumed from the surface prior to tiling application. Curing times will vary depending on substrate temperatures and ambient air conditions.

FLOORING APPLICATIONS

ARDEX WPM 300 (HydrEpoxy) is an effective moisture barrier for damp concrete subfloors prior to the installation of floor coverings or waterproof membranes. The relevant standards criteria which apply are;

- Where concrete surfaces are damp defined in AS1884-2021 and also AS3740-2021, as exceeding 80% relative humidity when measured using the ASTM F2170 methodology, or exceeds 15gm/sqm/24hrs when measured using the ASTM F1869 methodology. A two coat application of ARDEX WPM 300 (HydrEpoxy) with a dry film thickness of 0.3mm meets the AS1884-2021 requirement for moisture barriers and has a WVTR of less than 10gms/sqm/24hrs when tested to ASTM E96.
- Where concrete surfaces are damp, defined in AS2455-2019 as exceeding 75% relative humidity when measured using inslab testing methodology, or exceeds 70% relative humidity when measured on the slab surface.

Two coats are applied at 3.0m²/L per coat. Where smoothing cements are to be installed, the second coat can be sand seeded. Whilst the second coat is wet, ARDEX Primer Sand or clean dry sand of 0.5mm diameter shall be broadcast over the surface at a rate of 700g/m² to achieve at least 90% coverage. After 24 hours minimum cure the excess sand shall be swept and vacuumed from the surface prior to sub-flooring application. Curing times will vary depending on substrate temperatures and ambient air conditions.

Alternatively the surface of ARDEX WPM 300 (HydrEpoxy) can be coated with ARDEX P82 or ARDEX P9 primers prior to the application of smoothing cements. A single coat of ARDEX WPM 300 (HydrEpoxy) applied at 2.5m²/L acts a moisture stop ('green slab seal') for 'green concrete' not subject to rising damp or permanent moisture.

CURING

Allow final coat to cure for 24 hours minimum before applying water based adhesives, mortars, levelling compounds, decorative coatings or other surface treatments. Care is necessary to ensure the coating is not damaged in any way during subsequent treatments.

Curing times will vary depending on substrate moisture content, substrate temperatures and ambient air conditions.

TECHNICAL DATA

CHARACTERISTICS	NOMINAL VALUE
Colour	Grey or Black
Finish	Semi-gloss (matt with aging)
Volume solids	44%
Mixing ratio	1:1 (Part A:Part B) by volume
Coverage	Must be applied at a rate of 1.5m ² /L in total (equivalent to two coats at 3.0m ² /L per coat) to achieve an effective moisture barrier
Wet film thickness	300 micrometers (0.3mm) per coat
Recoat time	4 hours @ 25°C & 50% R.H.
Full cure	7 days @ 25°C & 50% R.H.
Pot life	2 hours @ 25°C 1 hour @ 35°C
VOC content	26g/L
Moisture Vapour Transmission	<10g/m ² /24hrs

PRODUCT THINNING

The first coat may be thinned with water as required depending on the porosity of the prepared surface to be coated to ensure optimum penetration. Up to 5% for dense surface, and up to 20% for more porous surfaces.

Thinning of the second coat is to be avoided since this increases the difficulty in achieving the required dry film thickness. A third coat can be applied as required.

COVERAGE

3.0m²/L per coat (undiluted).

The recommended wet film thickness specified produces a nominal dry film thickness of 150 microns per coat or 300 microns for two coats on the surface. The apparent dry film thickness may reduce depending on the porosity of the substrate, however the product absorbed by the substrate still forms part of the waterproofing function.

PACKAGING

4L kit (2L Part A & 2L Part B)

20L kit (10L Part A & 10L Part B)

CLEANING

Wash all equipment in water or water/detergent immediately on completion.

ARDEX WPM 300

Water-Based Epoxy Moisture Barrier

SHELF LIFE

ARDEX WPM 300 (HydrEpoxy) has a shelf life of 24 months when stored in the original, unopened packaging in a dry place at 23°C and 50% relative humidity.

SAFETY DATA

This product may cause irritation and an allergic reaction to the skin. It may cause serious eye injury and irritation to the respiratory system. Toxic to aquatic life with long lasting effects. In case of contact with the eyes rinse with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, eye and face protection. Avoid inhaling fumes/vapours. Ensure adequate ventilation during mixing and application. Store locked up. Check with your local Council regarding the disposal of contents, dispose of packaging thoughtfully and recycle where possible. Keep out of the reach of children. Call the Poisons Information Centre on 0800 764 766 (NZ) or call a doctor if you feel unwell. Additional information is in the Safety Data Sheet (SDS) at ardex.co.nz

LIMITATIONS

Tiling can commence after 24 hours cure of ARDEX WPM 300 (HydrEpoxy) although should not exceed a maximum of five days. Installer is to ensure that there is no surface contamination during this period. Sand blinding of the wet ARDEX WPM 300 (HydrEpoxy) surface with ARDEX Primer Sand eliminates these timing issues and is best practice for external tiling jobs.

The product should be applied whilst the surface temperature and ambient temperature is between 10°C–35°C. The product will cease to cure below 10°C. Curing time will also be adversely affected in situations where relative humidity is >85%.

In enclosed areas, ventilation must be provided during curing cycle to enable adequate evaporation of the water. Care should be taken when sandwiching adhesives between ARDEX WPM 300 (HydrEpoxy) and floor coverings to ensure the water vapour transmission of the covering is sufficient to allow the solvent to escape from flooring adhesives.

ARDEX WPM 300 (HydrEpoxy 300) is not classified as a trafficable coating.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

GUARANTEE

ARDEX New Zealand Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX New Zealand Ltd, 15 Alfred Street, Onehunga, Auckland 1061; Toll Free: 0800 227 339; Email: info@ardexnz.com) and provide evidence of your purchase of the product within 14 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the New Zealand Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the New Zealand Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure". For a copy of the full guarantee/warranty details, please contact ARDEX New Zealand.

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable New Zealand and Australian Standards, our instructions and recommendations, and only for the uses they are intended. We also reserve the right to update information without prior notice to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request.

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Product Data Sheet

SUPERCOURSE 500

Synthetic Damp Proof Course

Supercourse 500 is a general damp-proof course (DPC) used to prevent moisture transfer between building materials. It is also used as a concealed flashing for masonry veneer cladding.

Manufactured using a single layer of black polyethylene, Supercourse 500 is tough, high-impact and tear resistant. It is a suitable moisture impermeable alternative to bituminous DPC.

Smarter products. Better buildings.
thermakraft.co.nz



Supercourse 500

Synthetic Damp Proof Course

Supercourse 500 comes in twelve roll sizes:

Product Code	Roll Size	Rolls Per Carton
SPC05030	50mm x 30m	42
SPC07530	75mm x 30m	24
SPC09030	90mm x 30m	24
SPC10030	100mm x 30m	18
SPC14030	140mm x 30m	12
SPC15030	150mm x 30m	12
SPC20030	200mm x 30m	6
SPC25030	250mm x 30m	6
SPC30030	300mm x 30m	6
SPC40030	400mm x 30m	
SPC50030	500mm x 30m	
SPC100030	1000mm x 30m	

Scope of Use

- Supercourse 500 intended for use as a damp-proof course separating timber and wood-based products and metal from concrete, masonry elements or clay bricks.
- Can also be used to separate timber jack studs or bearers from concrete or timber piles.
- Supercourse 500 can be used as a concealed flashing in masonry veneer walls.

General

- Unaffected by LOSP or other solvent based treated timber. However, LOSP or other solvent based treated timber must have sufficient time for the solvent chemical to flash off in well ventilated area. Recommended minimum 7 days.
- Available in 12 product width sizes.

Limitations

- Maximum weather or UV exposure is 30 days.
- Supercourse 500 is NOT a window flashing tape and NOT a thermal break product.

Compliance

When Supercourse 500 is used and installed as a damp-proof course and/or concealed flashing behind masonry veneer walls, the product will meet or contribute to meeting the following provisions of the NZBC:

- Clause B2 Durability: Performance B2.3.1 (a), not less than 50 years and B2.3.2.
- Clause E2 External Moisture: Performance E2.3.2 and E2.3.3. When used as a flashing as part of a masonry veneer cladding system, Supercourse 500 will contribute to meeting the requirement of E2.3.2. When used as a damp-proof course, Supercourse 500 will meet the requirements of E2.3.3.
- Clause F2 Hazardous Building Materials: Performance F2.3.1. Supercourse 500 meets this requirement and will not present a health hazard to people.

More details can be found in Supercourse 500 BRANZ Appraisal 329 (2016)

Durability

Supercourse 500 is expected to have a serviceable life in excess of 50 years when it is:

- Installed in accordance with Thermakraft's literature and BRANZ Appraisal.
- Not over exposed to the weather or UV (not more than 30 days).
- Never exposed to chemicals or solvents that will degrade or affect polyethylene material.

Product Warranty

Standard Thermakraft warranty applies. Refer to Thermakraft Warranty Statement for further details. This is available online at thermakraft.co.nz or call **0800 806 595**.

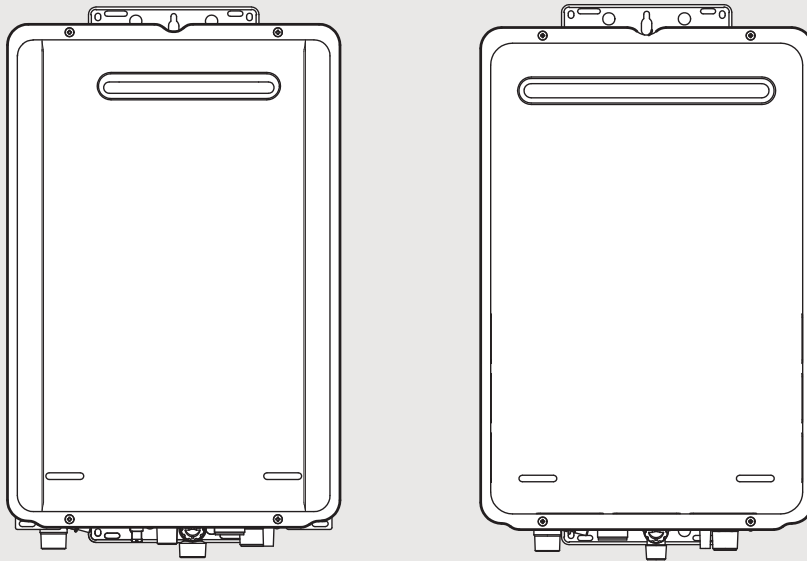
Thermakraft Limited / 0800 806 595

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Suitable for the following Rinnai INFINITY models:

- A16 (REU-A1620WG-ZK)
- A20 (REU-A2024WG-ZK)
- A24 (REU-A2426WG-ZK)
- A26 (REU-A2626WG-ZK)
- EF26 (REU-E2626W-ZK)



INFINITY EF26 and A-Series continuous flow water heaters

Installation guide

Rinnai

Important

This appliance must be installed in accordance with:

- Manufacturer's installation instructions
- Current AS/NZS 3000, AS/NZS 3500, AS/NZS 5601.1 and G12/AS1

For use with Natural Gas or Universal LPG as indicated on the appliance.

Not suitable as a spa or swimming pool heater.

Not suitable for hydronic applications.

Not suitable for commercial or solar applications.

Not suitable for locations greater than 1000 m above sea level.

Appliance must be installed, commissioned and serviced by an authorised person, being in New Zealand a licensed gasfitter.

Warning

Improper installation, adjustment, alteration, service and maintenance can cause property damage, personal injury or loss of life.

For more information about buying, using, and servicing of Rinnai appliances call: 0800 RINNAI (0800 746 624).

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EF26 condensate neutraliser tank and drain.....	12
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Sideways flue diverter dip switch changes	15
PCB interface and functions	16
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Before installation

Unpack the appliance and check for damage. DO NOT install any damaged items.

Check all components and that the correct gas type has been supplied.

Get an overview of the steps required before starting the installation. Failure to follow these instructions could cause a malfunction of the appliance. This could result in serious injury and property damage.

These instructions apply only to the continuous flow water heater models listed on the front of this guide.

Specification

Designed and made in Japan, the Rinnai INFINITY EF26 and A-Series are continuous flow gas hot water heaters with inbuilt frost protection. The EF26 is a condensing model. They have electronic ignition and require electricity to operate. They are factory preset to 55 °C (maximum set temperature is 65 °C).

Scope of use

Suitable for **residential** applications only. They are designed to be externally mounted on an outside wall and located as close as practicable to the most frequently used hot water outlet(s), to reduce the delay for hot water delivery.

They are not suitable as a spa or swimming pool heater, and for hydronic heating. They are also not suitable as a gas boost for solar installations as the temperature cannot be set high enough.

Hard or acidic water will need to be treated to use this product.

Specification summary

	A16 REU-A1620WG-ZK	A20 REU-A2024WG-ZK	A24 REU-A2426WG-ZK	A26 REU-A2626WG-ZK	EF26 REU-E2626W-ZK
Thermal efficiency	80.5%	80.5%	81%	80.5%	91.5%
Hot water capacity	1.5-20 L/min	1.5-24 L/min	1.5-26 L/min	1.5-26 L/min	1.5-26 L/min
Hot water capacity at a 25° rise	16 L/min 960 L/h	20 L/min 1200 L/h	24 L/min 1440 L/h	26 L/min 1560 L/h	26 L/min 1560 L/h
Input	16.3-124 MJ/h	19.9-156 MJ/h	16.3-184 MJ/h	16.3-199 MJ/h	16.3-175 MJ/h
Output	27.8 kW	34.9 kW	42.0 kW	44.5 kW	44.5 kW
Weight	13 kg	14 kg	15 kg	15 kg	18 kg
Water, nominal operating pressure	120-1000 kPa	160-1000 kPa	200-1000 kPa	200-1000 kPa	220-1000 kPa
Ingress protection	IPX4	IPX4	IPX4	IPX4	IPX5
Power consumption:					
- Normal	47 W	58 W	56 W	65 W	63 W
- Standby	2 W	2 W	2 W	2 W	2 W
- Frost protection	68 W	68 W	68 W	68 W	92 W

Safety devices

- Flame failure
- Boil-dry protection
- Overheat protection (OHS)
- Fusible link
- Pressure relief valve
- Combustion fan rpm check

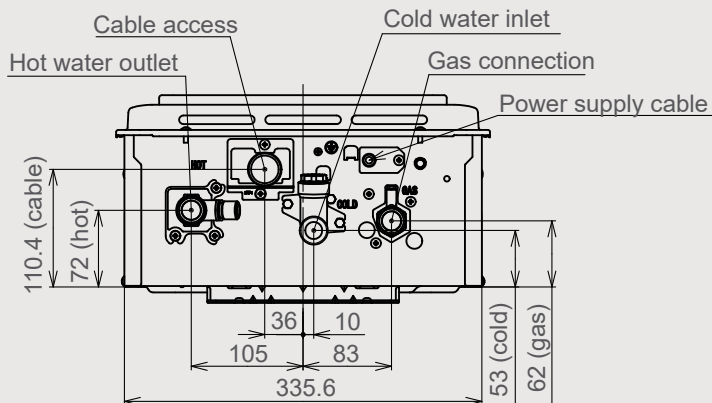
Line pressures

- NG 1.13-3.0 kPa
- LPG 2.75-3.0 kPa

The maximum line pressure is 3.5 kPa, with the maximum standing pressure under abnormal intermittent conditions 5.0 kPa. In the case of commercial metering (i.e. 35-37 kPa coming in), there may be a requirement to regulate the incoming line pressure down.

Connections and fittings

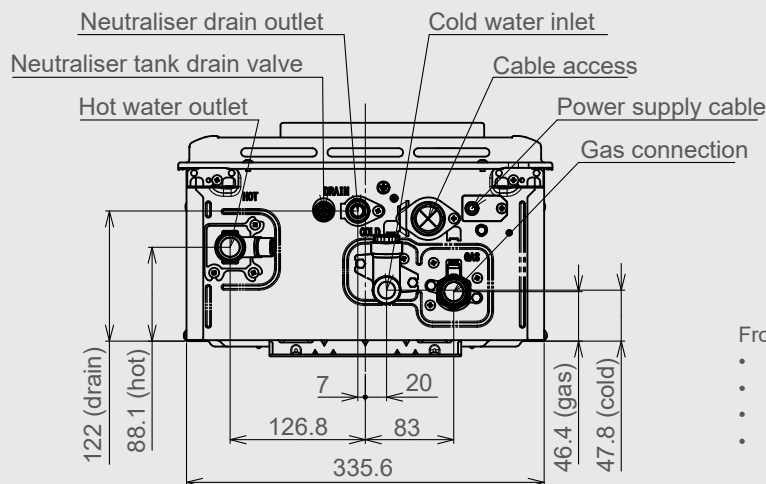
A-Series



From bottom of unit:

- Hot 41 mm (A16 39 mm)
- Cable 29 mm
- Gas 40 mm
- Cold 50 mm

EF26



From bottom of unit:

- Hot 41 mm
- Cable 26 mm
- Gas 38 mm
- Cold 50 mm

		Hot	Cold	Gas	Condensate
A16 external	REU-A1620WG-ZK	R $\frac{1}{2}$ (15 mm)	R $\frac{1}{2}$ (15 mm)	R $\frac{3}{4}$ (20 mm)	N/A
A20 external	REU-A2024WG-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	N/A
A24 external	REU-A2426WG-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	N/A
A26 external	REU-A2626WG-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	N/A
EF26 external	REU-E2626W-ZK	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{3}{4}$ (20 mm)	R $\frac{1}{2}$ (15 mm)

Service connection points

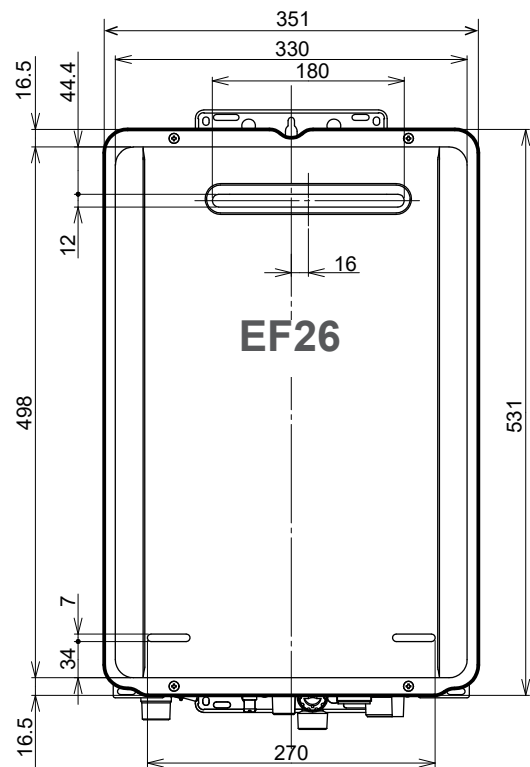
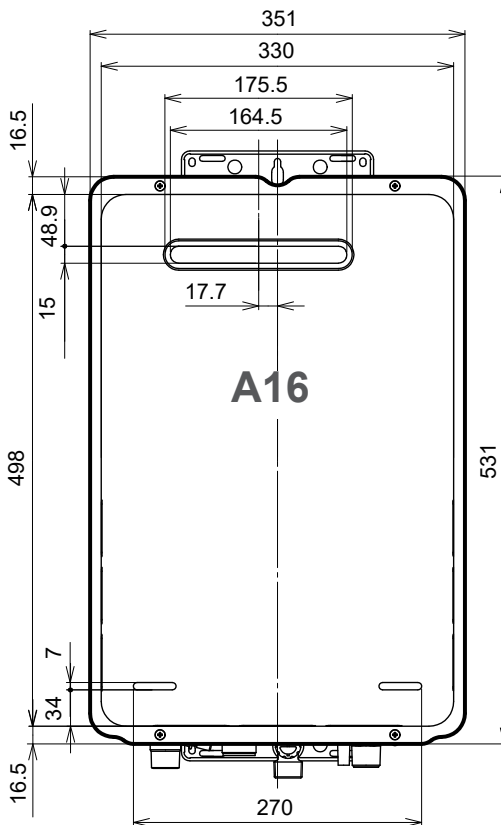
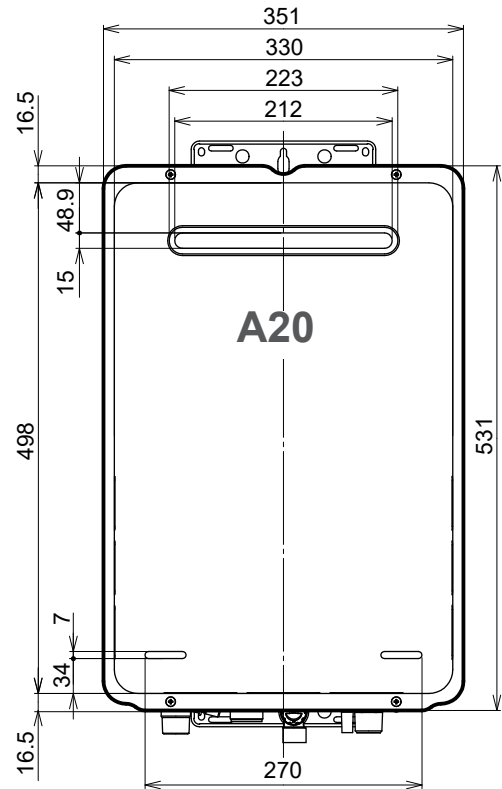
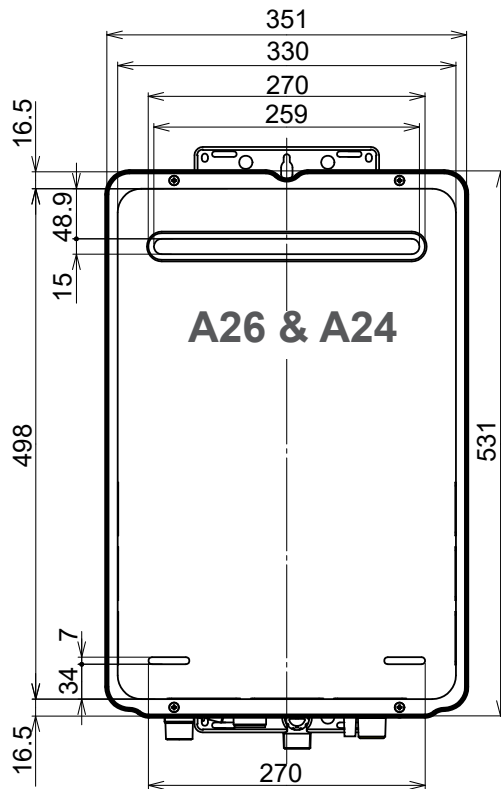
An approved full flow isolation valve and disconnection union **MUST BE** fitted to the cold water inlet. A non-return valve is not required unless stipulated by local regulations.

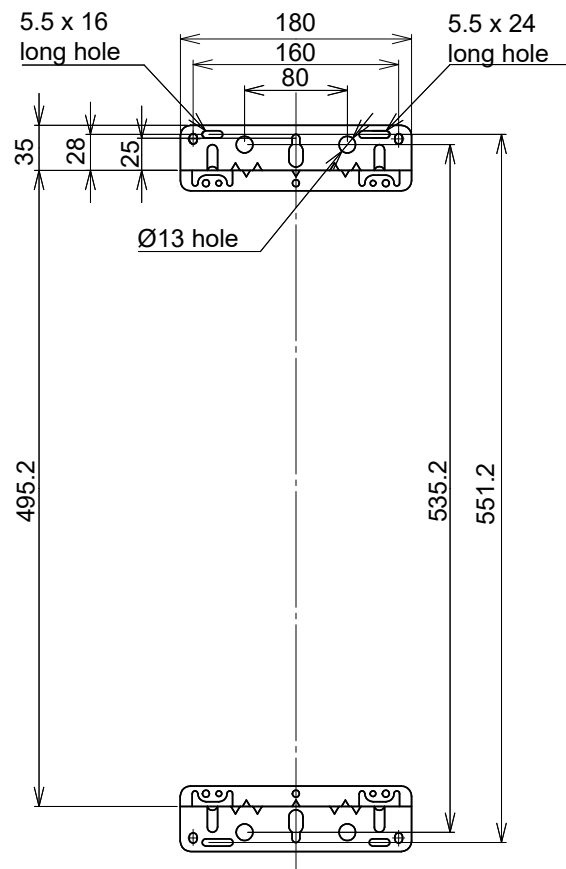
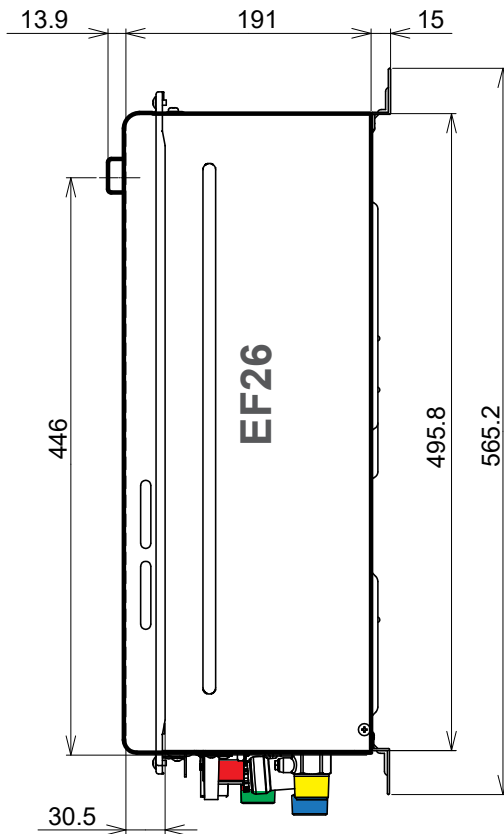
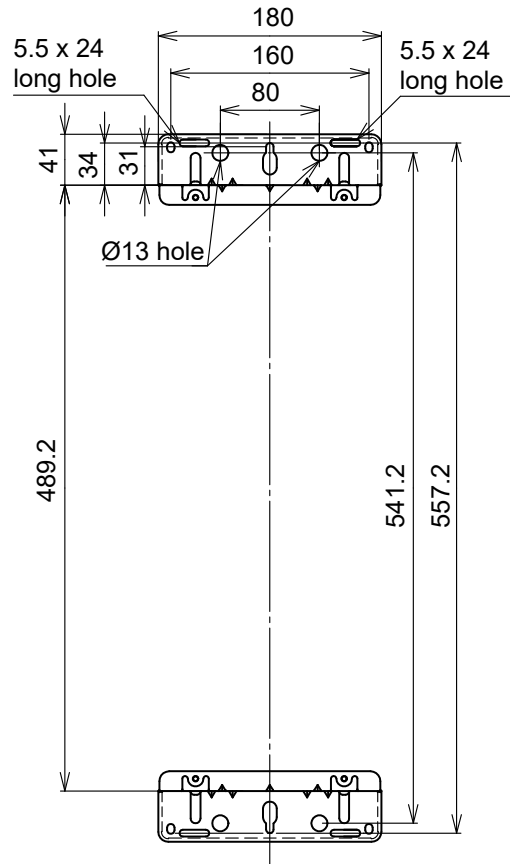
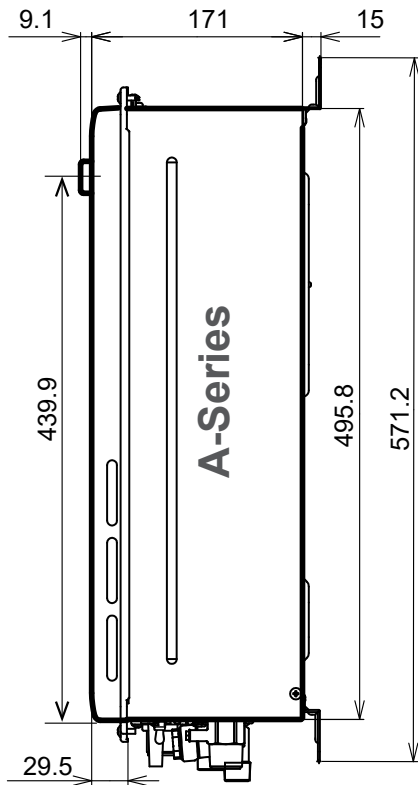
Isolation valves **MUST NOT** be fitted directly to the appliance.

It may be necessary to fit a temperature limiting device for delivery to areas used primarily for the purposes of personal hygiene, refer page on 'Water delivery temperature' for more information.

Purge gas and cold water supply lines to remove air and swarf before final connection. Swarf in the gas or water supplies may cause damage, a common problem, which is not covered by warranty.

Dimensions (mm)





Appliance location

This appliance is designed for outdoor installations only. It **MUST BE** located above ground in open air with natural ventilation, without stagnant areas, where gas leakage and products of combustion can be rapidly dispersed by wind and natural convection.

This appliance **MUST BE** placed as close as possible to the most frequently used hot water outlet(s) to minimise the delay for hot water delivery¹. For installations where the distance between the water heater and outlets is considerable, a flow and return system can be used to minimise the waiting time for hot water delivery. Alternatively multiple appliances can be strategically placed to serve outlets with minimal delay.

An AC 230 V, 10 A earthed power point must be provided adjacent² to the appliance. This power point must be weatherproof. It must be clear of the gas and water connections to the appliance and also the flue exhaust and water pressure relief valve. The power cord of the appliance is 1.5 m long.

All appliances **MUST BE** installed to ensure access can be gained without hazard or undue difficulty for maintenance and servicing. Sufficient clearances shall allow access and removal of all serviceable components. Appliances should not be mounted more than 2.5 m above the ground or floor level unless the customer can arrange permanent and safe access, or can provide another means of safe access.

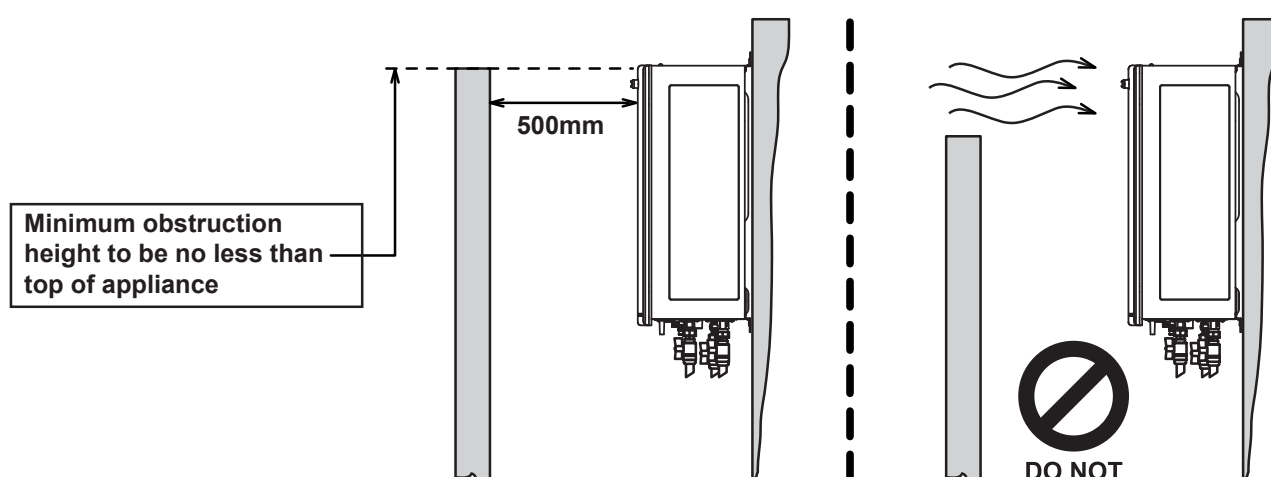
The appliance **MUST BE** mounted on a vertical structure with the water and gas connections on the underside pointing downwards.

Location of the flue terminal **MUST BE** in accordance with Section 6 and Figure 6.2 of AS/NZ 5601.

The E26 / A-Series are suitable for installations up to 1000 m above sea level. They are not suitable for alpine areas.

Horizontal obstructions

AS/NZS 5601 states a minimum horizontal clearance of 500 mm between a building structure and obstruction facing the terminal. At 500 mm the obstruction needs to be the full height of the unit, as shown below, and not a partial obstruction. A partial obstruction of less than 1 m could result in wind pushing the flue gases back into the flue terminal.



There **MUST** be **NO** partial obstructions to the appliance front cover or any other part of the appliance casing. This will avoid the appliance from failing to operate under windy conditions.

¹ Rinnai recommend a maximum pipe run of 10 m.

² Power point can be within the pipe cover if a pipe cover is installed—must comply with AS/NZS Wiring rules

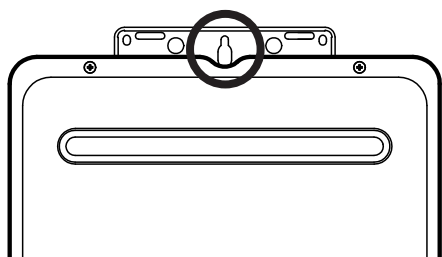
General installation information

Securing the Rinnai INFINITY

The wall structure on which units are mounted **MUST BE** capable of supporting the weight of the appliance and associated pipe work.

Ensure that suitable fixing screws or bolts are used to secure the unit to the wall, in accordance with AS/NZS 5601 section 6. Wooden plugs shall not be used.

The top bracket has a keyhole slot so that the appliance can be positioned by hanging it on one screw. Once in position the appliance can be secured with appropriate fixings.



The appliance can be mounted directly against the wall or structure. There is no need to use non-combustible sheeting or leave an air gap between the appliance back panel and the wall or structure to meet the temperature hazard requirements of AS/NZS 5601.

Pipe sizing

If the gas pipe sizing is insufficient the appliance won't perform properly. Gas pipe sizing must consider the gas input into this appliance as well as other gas appliances in the premises. The gas meter and regulator must be specified for this gas rate.

An approved sizing chart such as the one in AS/NZS 5601 should be used. Refer specification for gas consumption details.

Water pipe sizing and layout should be performed in accordance with AS/NZS 3500. All hot water pipe work should be insulated to optimise performance and energy efficiency.

Water supply

The appliance is intended to be permanently connected to the water mains.

Refer specification for operational water pressure limitations. Approved pressure limiting valves may be required if the maximum rated water supply pressures are exceeded. To achieve the rated flow, the minimum water supply pressures must be met.

The water heaters will operate at lower pressures but will not achieve the rated flow. Contact Rinnai for gravity fed or low pressure installations.

Water chemistry and impurity limits are detailed in the operation guide within the warranty section. Most metropolitan water supplies fall within these requirements.

If you are unsure about the water quality contact your water authority. If sludge or foreign matter is present in the water supply, a suitable filter or strainer is required in the water supply to the water heater to prevent unwarranted damage and loss of performance.

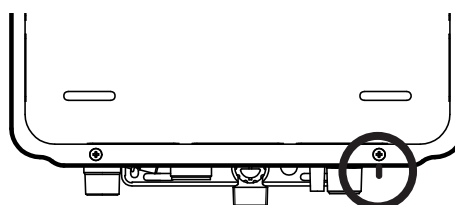
Frost protection

Frost protection operates automatically, as long as the appliance is connected to the electrical power supply, by activating when the temperature inside the unit drops below 3.5 °C¹, and turns off once the temperature inside the unit reaches 7 °C¹.

¹ Approximate temperatures

Frost protection thermistor

The EF26 and A-Series models have an external thermistor to control frost protection. It is a small black indicator located on the bottom right hand side of the unit, directly underneath the cover screw (circled below). The frost protection thermistor needs to be exposed to the outside air to correctly function—do not insulate the frost protection circuit will not work correctly.



Water delivery temperature

Requirements of AS/NZS 3500 MUST BE considered regarding the temperature limitations of hot water supplied to areas used primarily for personal hygiene. The temperature of these areas may be limited to 55 °C or less.

If the appliance is to deliver water primarily for the purposes of personal hygiene in an early childhood centre, school, nursing home or similar facility as defined in AS/NZS 3500.4, a Temperature Limiting Device (TLD), such as a tempering valve may be required, even if the appliance is set to 55 °C or less. For these types of applications contact Rinnai.

Requirements for Rinnai INFINITY units installed without controllers

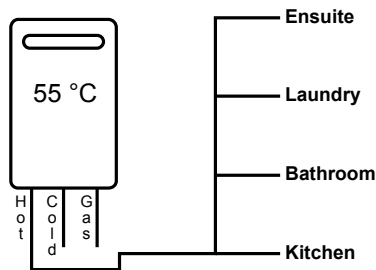


Diagram 1 - 55 °C Appliance

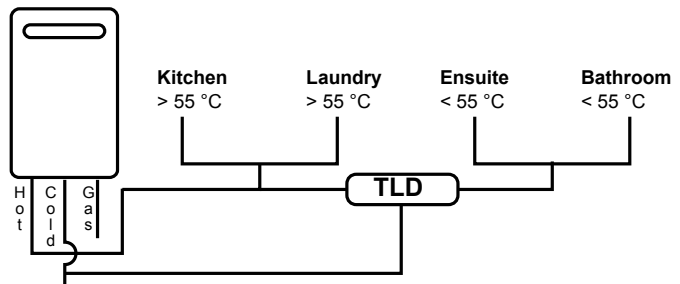


Diagram 2 - Not a 55 °C Appliance
(TLD = Temperature Limiting Device)

When the Rinnai INFINITY is set to deliver water at a temperature higher than 55 °C, it will be necessary to fit a Temperature Limiting Device for delivery to areas used for the purposes of personal hygiene.

Controller installation

The maximum number of controllers that can be fitted is **four**, refer water controller configurations section below.

General information

Other manufacturers water controllers are NOT compatible with Rinnai water heaters. Water controllers MUST NOT be used with any solar boost water heater. Rinnai water controllers bought in from other countries are not compatible with Rinnai appliances sold in New Zealand.

Water controllers and transceivers (for those with wireless controllers) DO NOT contain serviceable parts and must only be serviced by an authorised person.

Master controller

Only one master controller can be designated as a 'master' water controller. This water controller is normally used in the kitchen. The remaining controllers are 'sub-controllers' and are for use in bathrooms, toilets, and laundries. The temperature limit for all sub-controllers is 50 °C, this is a safety feature, to reduce the risk of burns in these areas. A master controller MUST NOT be installed in a bathroom.

Water controller configurations

- A maximum of four Compact controllers (MC-601) can be fitted.
- Only one master controller can be installed. This can be a Kitchen Deluxe¹ (MC-100V), or any other Compact controller (MC-601).

¹ When a Kitchen Deluxe controller is fitted, it will always function as a master controller, this is the default setting and cannot be changed.

- In addition to a master controller, up to three additional controllers can be fitted

Controller location

- Do not install water controllers near a heat source, such as a cook top, stove or oven. Heat steam, smoke, and hot oil may cause damage.
- Do not install water controllers outdoors unless protection from water/dust ingress and sunlight are provided.
- Do not install water controllers in direct sunlight.
- Do not install water controllers against a metal wall unless the wall is earthed in accordance with AS/NZS 3000.
- Water controllers must not be installed where chemicals such as benzene, alcohol, turpentine, hydrogen sulphide, ammonia, chlorine or other similar chemicals are in use.

The water controller is water resistant, however excessive exposure to water may result in damage. Durability is improved when positioned OUTSIDE the shower recess.

- Avoid direct exposure to water or steam as these may cause the controller to malfunction.
- Water controllers must be installed in shaded and clean locations. They should be fitted out of reach of children (suggested height 1.5 m from the floor), and installed at least 400 mm above the highest part of a sink, basin or bath.

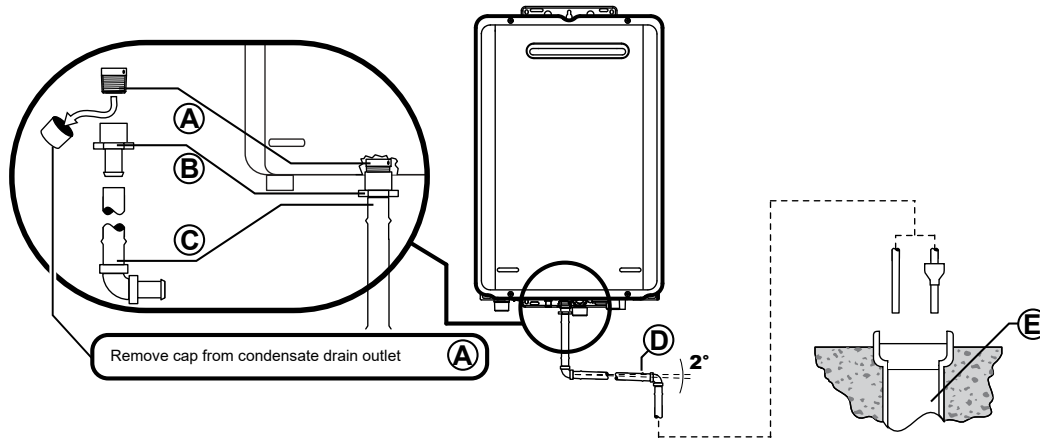
When cleaning your water controller use only a damp cloth and mild detergent.

EF26 condensate neutraliser tank and drain

The Rinnai INFINITY EF26 water heater generates condensate continuously at a rate of up to 5 litres per hour as a by-product of a highly efficient gas burner. This condensate has been neutralised by having an inbuilt condensate neutraliser kit.

Important considerations for the neutraliser drain pipe

The content of AS/NZS 3500 'Temperature / Pressure Relief and Expansion Control Valve Drain Lines' has been used as a guide in preparing the information below.



A. Water heater drain outlet connection, R $\frac{1}{2}$ " (15 mm) BSP male. Condensate / neutraliser drain outlet connection, $\frac{1}{2}$ " (15 mm) BSP male nylon.

N.B: The black plastic shipping cap **MUST BE** removed from the condensate / neutraliser drain outlet prior to water heater operation.

B. PE R $\frac{1}{2}$ " BSP (15 mm) female to barbed irrigation system connector (13-19 mm) or equivalent plastic fitting¹.

C. Drain pipe and fittings to match B.

D. Continuous fall of at least 2° from water heater to discharge point. Lengths and bends in accordance with the table below.

Lengths and changes of direction				
Max. length (m)	9	8	7	6
Max. changes of direction greater than 45°	3	4	5	6

E. Suitable points of discharge are deemed to be drains, sewers or pits. **DO NOT** discharge onto electrical connections, earth stakes, copper pipes, concrete paths or into a pond.

Installation

The drain line **MUST NOT** discharge onto electrical connections, earth stakes, copper pipes, concrete paths or into a pond.

The point of discharge from each drain line shall be located so that the release of condensate / neutraliser does not cause a nuisance, is readily discernible and incurs no risk of damage to the building.

There shall be no tap, valve or other restrictions in any line.

Each line shall fall continuously from the valve to the approved point of discharge.

Drain lines shall not discharge into a storage water heater safe tray.

The end of the condensate line shall be:

- Not lower than 200 mm or higher than 300 mm above an unpaved surface; or
- Not lower than 75 mm, or higher than 300 mm above a gravel pit not less than 100 mm in diameter in a paved surface.
- Where discharging over a tundish or gully trap, drain lines shall have an air gap of a size at least twice the diameter of the drain line.

¹ Non-PE plastics will fail over time due to contact with the acidic condensate. Damage caused by installation of non-PE plastics will not be covered by warranty.

Interconnection of condensate drain lines

Condensate / neutraliser drain lines from multiple water heaters may be joined together provided they conform with the requirements detailed on the previous page.

Common stack discharge

Where individual water heaters are installed in a multi-storey building, the condensate / neutraliser drain lines may discharge into a common stack, subject to the following:

- The discharge from the common stack is to a tundish, having a discharge line, that is not less than the size of the common stack, directly connected to a fixture trap, and installed in connection with any adjacent soil or waste stack.
- The discharge point of the common stack is such that any discharge is readily visible and will not cause any nuisance.
- The common stack is vented by extending the pipe upwards, above the roof level.

Tundish drain lines

The drain line from any tundish shall not be less than DN 20 or less than one size larger than that of the largest drain line discharging into a tundish. Tundish drain lines shall comply with the requirements detailed on the previous page.

Areas subject to freezing

In areas where water pipes are prone to freezing, the drain pipe from any valve shall be insulated and not exceed 300 mm in length. It shall discharge into a tundish through an air gap of not less than 75 mm and not more than 150 mm measured from the outlet of the drain pipe to the rim of the tundish.

Commissioning

AS/NZS 5601.1, clauses 2.6.8 and 6.11.2, states that every part of a gas installation shall be commissioned prior to initial use. It is the installer's responsibility to ensure all current AS/NZS 5601 requirements are met. The URL's provided are links to short videos on how key steps are performed.



The appliance operation must be tested after installation. Ensure the building occupants do not have access to the hot water outlets during this procedure.

Please note

The Rinnai INFINITY EF26 and A-Series come with a factory preset outlet temperature of 55 °C. The high and low gas operating

pressures are also factory preset. Under normal conditions the operating pressures do not require adjustment during installation. Make adjustments **ONLY** if the unit is not operating correctly and all other possible causes for incorrect operation have been eliminated.

Inlet supply pressure to the appliance **MUST BE** checked and set within the operating parameters of the appliance in all instances.

If the appliance can not be adjusted to perform correctly call 0800 RINNAI (0800 746 624) for assistance.

Commissioning steps

1	Flush water pipes and gas line	Before final connection of the water heater , flush the gas, hot and cold water supply lines. Swarf in the gas or water supplies may cause damage, a common problem, which is not covered by warranty.
2	Connect the gas line	
3	Purge the gas line of air	
4	Final connection test	
5	Check supply pressure	Operate ALL other gas appliances at their maximum rate. With all gas appliances on maximum the supply pressure must read between 1.13-3.0 kPa on Natural gas and on LPG 2.75-3.0 kPa. If the pressure is lower, the gas supply is inadequate and the appliance will not operated to specification. It is the installer's responsibility to check the gas meter, service regulator and pipe work for correct operation and sizing, and rectify as required.
6	PCB settings checked	Refer sideways flue diverter information on the next page and the PCB interface layout and functions page. PCB settings checked if the factory default temperature has been changed. Dip switch settings checked if a sideways flue diverter is fitted.  Short video: http://rinnai.co.nz/007
7	Operate and test for gas leaks	Replace the appliance front cover otherwise the unit won't operate correctly, and operate and test for gas leaks using an electronic leak detector.
8	Operational test	Confirm the water flow and hot water delivery temperature using a thermometer. If water controllers are fitted, it is necessary to test their operation through the complete range of functions, refer separate instructions provided with the water controllers.

9 Check cold water inlet filter

Inspect and clean the water inlet filter. This may need to be repeated to ensure the filter remains clear, especially on new installations.

▶ Short video: <http://rinnai.co.nz/006>

If you feel the customer is capable of doing this check it would be beneficial to show them how to inspect and clean the water filter as well.

10 Customer handover

After testing is completed, explain to the customer the function and operation of the water heater and water controllers (if fitted).

Also talk to them about:

- The gas, power, and water connections
- How frost protection works
- Procedure for draining the water heater
- Where to find the data plate
- Maintenance and servicing

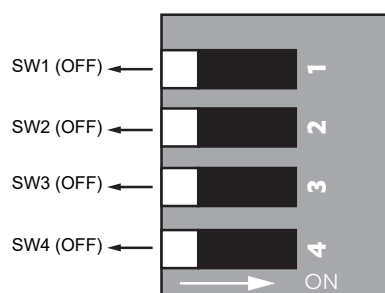
If the customer is not there try and contact them by phone to discuss these important points.

Ensure the installer details section is completed in the operation guide, the commissioning checklist has been completed and signed, and that the guide and checklist are left with the customer.

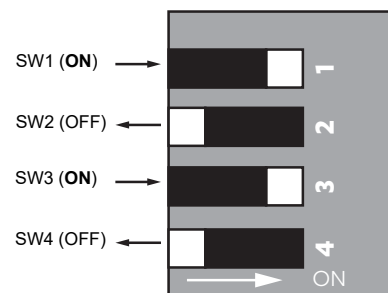
Sideways flue diverter dip switch changes

When delivered ex-factory, by default SW1, SW2, SW3, and SW4 of the DipSW are set to the OFF position.

If a sideways flue diverter is installed onto the water heater, SW1 and SW3 of the DipSW must be set to the ON position.



Default dip switch settings as they are ex-factory.



Dip switch settings required for a sideways flue diverter installation.

The dip switch change for a sideways flue diverter is required to increase the combustion fan speed, which helps overcome the friction losses from having a sideways flue diverter installed on the water heater.

PCB interface and dip switch settings

The PCB interface and dip switch settings must only be changed by a licensed gasfitter. They have been provided as there may be a requirement to change the temperature of the water delivered from the water heater or change the dip switch settings if fitting a sideways flue diverter.



Care must be taken when changing the temperature or dip switch settings as they can be easily switched or bumped into the wrong position. Fully check the operation of the water heater before leaving including the temperature of the water delivered.

The cover of the water heater will need to be removed to carry out this operation. As this will expose live mains voltage wiring **please disconnect the power supply before removing the front cover.**

We wish to draw your attention to the requirements of the New Zealand Building Code and compliance document G12. This requires that water delivered to sanitary fixtures be no more than 55 °C. Increasing the water heater set temperature will require that you protect all sanitary fixtures to which the appliance is plumbed with suitable tempering valves or something similar.

Rinnai will accept no liability for issues arising out of the use of this information.

If you have any doubts about the performance of the water heater, please contact Rinnai by phoning 0800 RINNAI (0800 746 624).

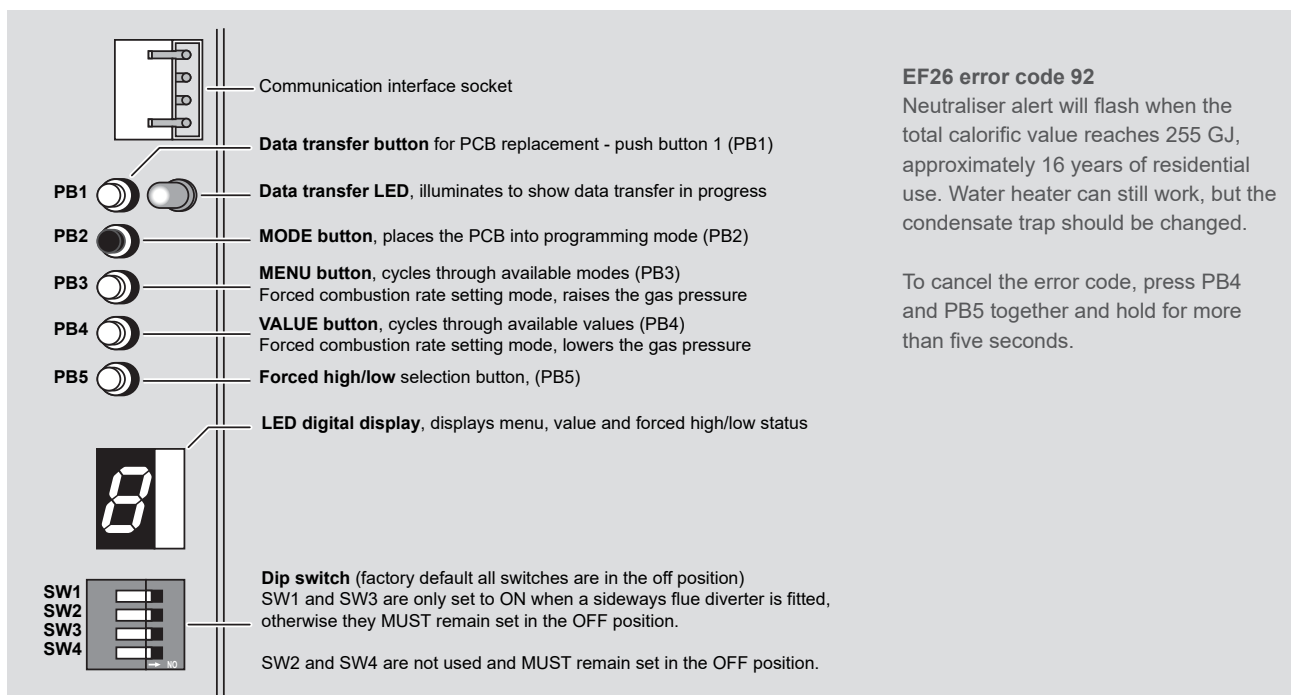
The following information details settings for the Rinnai INFINITY EF26 and A-Series models only. They are not applicable for other models.

Basic operation of the PCB interface

- To place the PCB into programming mode press PB2 until the LED digital display shows 1, noting that the current set value will be displayed shortly afterwards.
- To alter a value press PB4, each press of the button will select the next available value.
- To change to another menu, press PB3, each press of the button will select the next available menu.
- To exit the programming mode and save the selected settings press PB2 until the LED display goes blank.

Note:

- If no buttons are pressed the PCB will automatically exit programming mode after 10 mins.
- Exiting programming mode sets the value last viewed as the current value.



Menu	Menu description	Value							
		A	b	C	d	E	F	H	J
1	Gas type	ULPG	NG	N/A	N/A	N/A	N/A	N/A	N/A
2	Model	2626	2426	2024	1620	N/A	N/A	N/A	N/A
3	Fixed / Max. temp	55 °C	65 °C	60 °C	50 °C	42 °C	40 °C	N/A	N/A
4	OFF water flow rate	+ 3 °C	+ 6 °C	N/A	N/A	N/A	N/A	N/A	N/A
5	50 °C delivery adjustment temp.	0	N/A to NZ—Australian models only					+1 °C	+2 °C
6	Remote controller safe program	ON	OFF	N/A	N/A	N/A	N/A	N/A	N/A
7	OHS	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A
8	EF26 only Condensation prevention on manifold	Default							
9	A24/A26 only Fan revolution	180 Hz	100 Hz	Setting change to reduce fan noise if customer states unit is too noisy (Ver. 7, PCB label G)					
0	Post fan time	65 sec	120 sec	240 sec	480 sec	To reduce the HEX temp. after combustion			

If the settings are changed, please note these on this sheet for future reference. These will be needed if a PCB replacement is required and a manual data transfer is needed.

 Dark shaded sections = default setting

Parameter setting notes

- 2: Values in Menu 2 cannot be adjusted.
- 4: Menu 4 OFF water flow rate
The temperature of the outgoing hot water is monitored by a built-in sensor. If the temperature of the outgoing hot water rises more than 3 °C (default, or 6 °C if 4b) above the selected temperature shown on the digital monitor or the preset limit when water controllers are fitted, the burner will automatically go out.
- 6: Menu 6 Remote controller safe program
Factory default is ON. If a controller has been continuously connected for more than six hours, the PCB automatically defaults to controller only mode, making the assumption that the water heater will always be connected to and operated by a controller. This means if a controller is disconnected, the inbuilt safe program will only allow the unit to deliver a maximum temperature of 42 °C. If this safe program is not needed, change menu 6 from A (ON) to b (OFF).
- 7: OHS for solar applications
N/A for New Zealand models, this is for Australian models only that have different temperature settings. Please remember that the A-Series and the EF26 are not suitable and will not be warranted for solar applications.
- 8: Prevention of condensation on the manifold (EF26 only)
If exhaust gases go back into the combustion chamber, condensation on the manifold nozzle causes error 11. To prevent this, the post-fan time (fan revolution after combustion) can be controlled as follows.

8	Prevention of condensation on the manifold	A	b	C	d
	Post fan time	Outside temp. > 15 °C → 15 sec. Outside temp. ≤ 15 °C → 120 sec.	15 sec	240 sec	480 sec
	Post fan revolution	X (Hz), X depends on the model, e.g. 180 Hz	X (Hz)	X(Hz) + 50 Hz	X(Hz) + 50 Hz

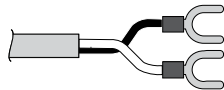
A-Series controller communication cables

Wired water controllers operate at an extra low voltage (12 V DC) which is supplied from the water heater, a 10 m long communication cable is supplied for connection to the water heater. Only Rinnai supplied communication cables may be used.

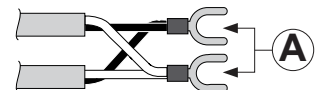
The water heater end of the cables is fitted with spade terminals. Only two pairs of cables (four spade connectors in total) may be terminated. When attaching three or four cables it is necessary to join the cable terminators as shown below.

For each pair cut off the existing spade connectors and re-terminate each pair into a new spade connector (A). Spade connectors are available from your local electrical component retailer

Single cables can be used when terminating up to two communication cables.



Paired cables are to be used when terminating three or four communication cables.

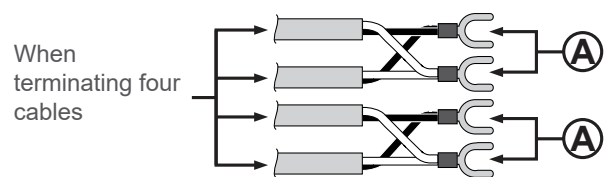
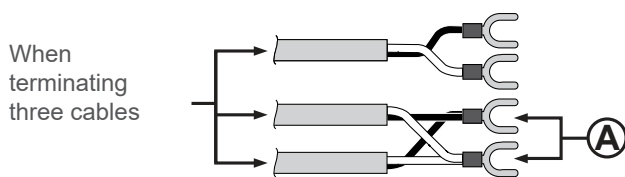


Connecting one or two communication cables

Follow steps one through five below to terminate the cables to the water heater.

Connecting three or four communication cables

To connect three or four cables, separate all the cables to be fitted into pairs.

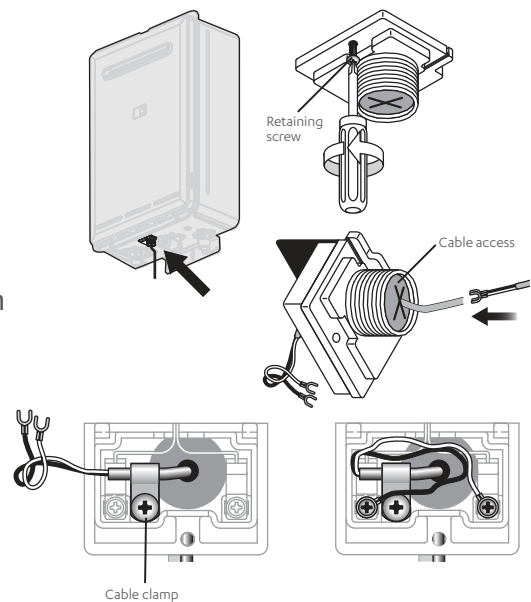


Follow steps one through five below to terminate the joined cable pairs to the water heater.

1. Isolate the power supply by switching the power point off and removing the power plug of the water heater from the electric power socket.
2. Removing the retaining screw of the cable connector at the base of the unit.
3. Swing the cable connector door open and thread the cable through the weather seal of the cable access hole, allowing sufficient cable length so that the sheath of the cable can be secured with the cable clamp supplied with the transceiver.
4. Loosen the screw terminals and connect the cable spade connectors to these terminals and re-tighten.

Polarity is not important, either wire colour can be connected to either terminal.

5. Return the cable connector to the original position, taking care not to damage the cable wires in the process, and replace the retaining screw.



EF26 controller communication cables

Wired water controllers operate at an extra low voltage (12 V DC), which is supplied from the water heater. A 10 m long communication cable is supplied for connection to the water heater. Only Rinnai supplied communication cables may be used.

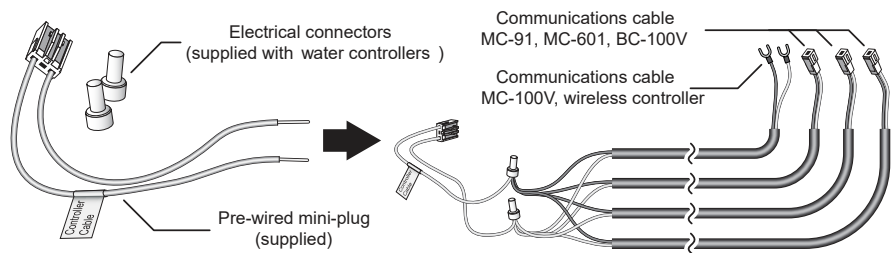


Connecting communication cables to the mini-plug

DO NOT attempt to connect water controller cables to the mini-plug when it is plugged into the PCB unless the power to the water heater is switched OFF, otherwise damage to electrical components may occur.

Water controllers are connected to the PCB by a dedicated pre-wired mini-plug.

Standard electrical cable connectors can be used to terminate the water controller wires to those on the mini-plug. The existing spade connectors, of the communication cables, will need to be removed prior to termination. Controllers are not polarity sensitive, however to avoid confusion it is recommended that like coloured wires be terminated together.

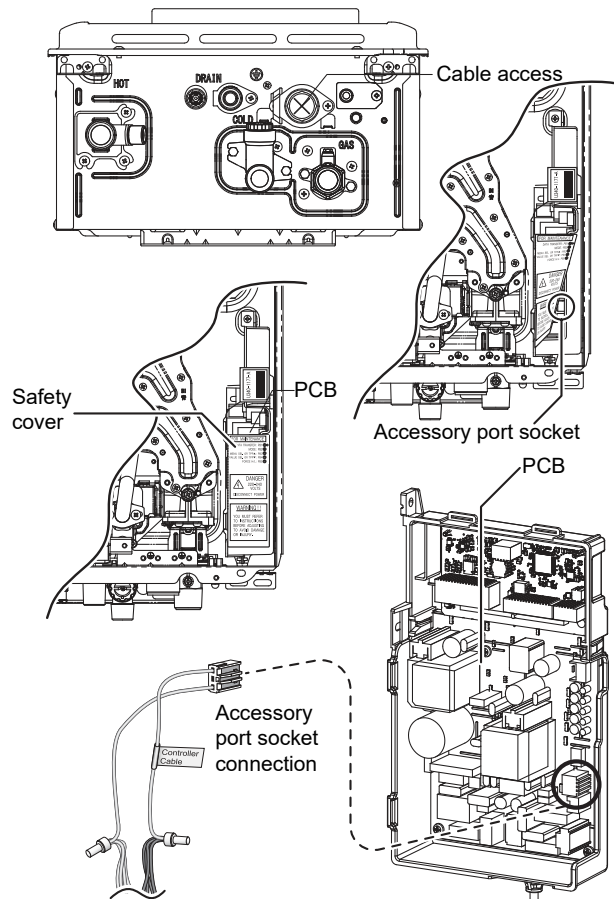


Connecting communication cables to the PCB (refer image below)

DO NOT attempt to connect the mini-plug or water controller cables to the water heater unless the power to the water heater is switched OFF, otherwise damage to electrical components may occur.

1. Isolate the power supply by switching the power point off and removing the water heater plug from the power socket.
2. Remove the front cover of the appliance.
3. Insert the mini-plug and the connected water controller cables through the cable access at the base of the appliance. Ensure the cable connectors are located inside the appliance for protection.
4. Locate the PCB (bottom right of the appliance), and carefully move the plastic safety cover out of the way.
5. Locate the accessory port socket (bottom front of PCB).
6. Plug the mini-plug into the accessory port socket, the plug and socket are keyed so that they can only be plugged into the one direction).

7. Proceed with the water controller installation and connect the communication cables to the controllers.



Rinnai.co.nz

Tel: 0800 746 624
<http://www.youtube.com/rinnainz>
<http://facebook.com/rinnainz>

Installation guide

U340-1336X02(00)
REU-A/E(NZ)



Wet Area Systems

Specification and installation manual

CBI 5113

FEBRUARY 2021.

NATIONAL SUPPORT

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GIB® HELPLINE

0800 100 442

RESIDENTIAL AND NON-RESIDENTIAL APPLICATIONS. BATHROOMS, LAUNDRIES, TOILETS AND KITCHENS.

Protection from internal moisture is an important consideration when designing interior lining systems for homes, multi-unit apartments, educational, healthcare and commercial applications.

The New Zealand Building Code sets out minimum standards for wet area spaces in residential dwellings. However, often higher levels of performance and protection from internal moisture is demanded.

The GIB® Wet Areas System specification and installation manual provides internal lining options and details for specifiers, builders and building owners.

USE ONLY THE CURRENT SPECIFICATION

This manual supersedes the publication GIB Aqualine® Wet Area Systems March 2007. Winstone Wallboards Ltd accepts no liability for reliance upon publications that have been superseded.

If you are unsure whether this is the current publication, call the GIB® Helpline on 0800 100 442 or go to gib.co.nz

BEWARE OF SUBSTITUTION

The performance of GIB® Wet Area Systems requires accurate design detailing and construction practices. All GIB® Systems have been developed specifically for New Zealand conditions and independently tested, assessed or appraised, to ensure the required level of performance. It is important to use GIB® components where specified and to closely follow the specified design details and construction practices, to be confident that the required level of performance and quality is achieved on site.



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This publication

This publication is a best practice guide to the design and construction of wall and ceiling linings in wet areas with intermittent water exposure within residential and non-residential buildings, as covered by NZ Building Code Clause E3 Internal Moisture.

The information is designed to be helpful to designers, contractors and home-owners wishing to achieve a result that is easy to incorporate into modern design, simple and clear to construct, and that will satisfy the needs, requirements and expectations of both the NZ Building Code and the end user.

Wet areas in the home often require relatively frequent and expensive renovation or repair, often because of the ingress of water to the structure of the building.

To form a complete wet area system it is important to specify compatible materials and systems, designed to cope with conditions that are common in wet areas, and to ensure correct installation using best practice.

WET AREAS

Generally, wet areas are described as spaces to where fresh water is reticulated, such as bathrooms, toilets, laundries and kitchens. Within wet areas the following requirements apply;

1. NZBC Clause E3.3.4 states that wall surfaces adjacent to sanitary fixtures or sanitary appliances must be impervious and easily cleaned.
2. NZBC Clause E3.3.6 states that surfaces of building elements likely to be splashed must be constructed in a way that prevents water splash from penetrating behind linings or into concealed spaces.

NZ Building Code Clause E3 also refers to other requirements not covered in this publication, such as ventilation, condensation control and overflow management. Ongoing maintenance of wet areas is also important to maximise service life.

GIB AQUALINE®, GIB TOUGHLINE® AQUA AND GIB WEATHERLINE®

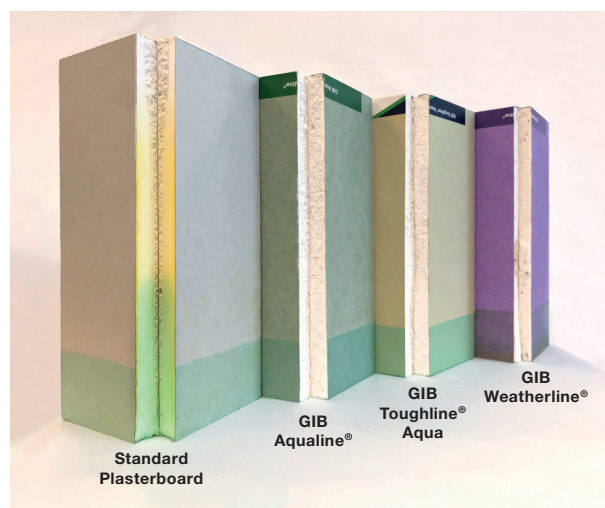
Although able to cope with infrequent short-term exposure, standard gypsum plasterboard will have a shortened life expectancy when frequently exposed to water or a high moisture environment.

The NZ Building Code does not call for water resistant linings in wet areas but it is desirable to specify lining materials which will maintain their integrity longer when exposed more frequently to moisture, and to one-off events such as leaks or flooding.

GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® feature a water-resistant polymer impregnated core, designed for wet area applications. These core formulations not only resist penetration of moisture through the lining into the framing behind, but also resist water “wicking” up the core, a common cause of long-term damage where a water-resistant lining has not been used.

WATER ABSORPTION TEST

The illustrations below show how GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® compare with standard plasterboard after soaking for two-hours in green dye.



WHERE TO USE GIB® WET AREA LININGS

In order to prolong the life expectancy of the space it is highly desirable to include wet area linings in situations where there is an increased risk of water or moisture damage. Applications include walls and ceilings in bath and shower rooms, and walls in laundries, toilets and kitchens.

BENEFITS

- Water resistant and durable linings help protect against water damage
- Proven substrate for paint, wallpaper, waterproofing membranes, tiles, sheet vinyl and rigid sheet shower linings
- Suitable for both residential and non-residential applications
- Dimensionally stable and an excellent substrate for ceramic tiles
- Conventional jointing methods
- Easy to cut and form openings
- Contains glass fibres and other additives to increase strength and fire resistance
- May be used in GIB® Bracing, GIB® Fire Rated and GIB Noise Control® Systems (see Compliance with the NZ Building Code, Clauses B1, C3 and G6). Consult the appropriate GIB® literature for installation details

HANDLING AND STORAGE

- GIB® plasterboard must be stored under cover, stacked flat and clear of the floor with sufficient support to avoid sagging
- GIB® plasterboard must be handled as a finishing material

LIMITATIONS

- GIB® wet area linings must not be used for bracing purposes in shower cubicles or above baths. For more information refer to page 9 of this manual
- Do not use GIB® wet area linings where exposed for extended periods to humidity levels above 90% RH, such as in group shower or steam rooms, or where exposed to moisture and chlorine rich environments such as in indoor swimming pools
- GIB® wet area linings used in a bathroom or other high humidity environment must not be directly applied to solid plaster (gypsum or cement), wood-based sheet linings or similar materials, masonry or concrete, without strapping or steel furring channels
- GIB® wet area linings must not be installed over a vapour barrier or a wall acting as a vapour barrier
- Cracked or damaged sheets must never be used
- GIB Aqualine® or GIB Toughline® Aqua must not be used in external applications
- GIB® plasterboard must not be exposed to temperatures in excess of 52°C for prolonged periods. Heat-generating devices may include halogen lighting, cooking elements, radiant heating, solid fuel exhausts and fire surrounds. Consult the appliance manufacturer for installation details

Table 1: GIB® Wet Area linings sheet dimensions and weights

Product	Sheet face colour	Thickness (mm)	Sheet width (mm)	Edge Type	Sheet length (mm)						Max. Weight (kg/m²)
					2400	2450	2700	3000	3600	4800	
GIB Aqualine®	Green	10	1200	TE/TE							8.0
			1200	TE/SE							
			1350	TE/SE							
		13	1200	TE/TE							11.5
GIB Toughline® Aqua	Mauve	13	1200	TE/TE							11.9
GIB Weatherline®	Purple	10	1200	SE/SE							9.0
		13	1200	SE/SE							11.5

BOARD SUBSTITUTION OPTIONS

Acceptable GIB Aqualine® alternatives	
10mm GIB Aqualine® can be replaced with:	10mm GIB Weatherline® 13mm GIB Toughline® Aqua
13mm GIB Aqualine® can be replaced with:	13mm GIB Weatherline® 13mm GIB Toughline® Aqua

GIB® Wet Area System construction details in this manual refer to the use of GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® sheets may also be used in place of GIB Aqualine®.

FLEXIBLE SHEET VINYL – SHOWERS AND OTHER WET AREAS

- GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® are suitable substrates for flexible vinyl wall finishes in wet areas of residential, commercial or institutional buildings
- Framing requirements and installation procedures are presented in this literature, except that the lining gap at the floor is no more than 5mm when a pencil cove detail is used
- The installation of galvanised steel reinforcing angles behind internal lining corners is recommended for sheet vinyl applications in showers or shower over bath situations
- The lining must be jointed and stopped to a paint quality finish (Level 4) – trowel marks can telegraph even through a commercial grade 2mm vinyl
- A commercial grade vinyl is recommended in commercial or institutional bathrooms and showers
- In areas directly exposed to liquid water, all joints in flexible sheet vinyl must be heat welded
- Installation of flexible vinyl must be carried out strictly in accordance with the specifications provided by the suppliers/ manufacturers of the vinyl

RIGID SHEET SHOWER LININGS

- The wall surface must be free of dust before installation of the lining
- Avoid lining joints as much as possible and where necessary flush with plaster to achieve a level surface
- Do not pre-seal or paint areas which are to be covered by the rigid shower linings
- The suppliers of thin (usually 2-3mm) and rigid acrylic shower linings commonly recommend direct adhesive fixing to wall linings using solvent-based adhesives
- Care must be taken to ensure that rooms are adequately ventilated
- Water temperature changes will cause movement of the thin acrylic sheet, which in turn will stress the adhesive and wall lining substrate
- Consult the supplier of the shower lining for full installation details
- Suppliers of rigid sheet acrylic shower linings recommend a minimum of 24 hours for the adhesive to cure fully prior to the shower being put into service

WATERPROOF MEMBRANE SYSTEMS AND TILING

- A waterproof membrane system must be applied to lining materials used as a substrate for ceramic tiles in a shower or shower over bath situation
- The wall surface in a shower or shower over bath situation is not complete and ready for tiling until coated with a waterproof membrane system over the lining and once penetrations for shower mixers, taps and associated fittings are sealed
- The installation of galvanised steel reinforcing angles behind internal lining corners is required for tiled wall applications in showers or shower over bath situations
- In-situ waterproofing membrane materials manufactured to AS/NZS 4858:2004 “Wet Area Membranes” are recommended and must be applied to manufacturer’s recommendations. Typically, these types of membrane systems are not suitable for paint and wallpaper finishes
- Waterproof membrane systems must be fully cured and dry prior to application of tiling adhesives
- Preformed sheet membranes are also available and may be more suitable where curing times or specialist skills are an issue
- The details shown in this manual are generic in nature. For accurate detailing, follow the specifications provided by the supplier of the proprietary waterproof membrane system

For further information on tiling consult the BRANZ Good Practice Guide – Tiling.

PENETRATIONS AND SEALANTS

As leaks and water ingress typically occur at junctions between building elements and at penetrations, it is essential that particular attention is given to these details at the time of installation. Lack of attention to detail can result in water damage that could remain undetected for a long time.

- Ensure that all cut-outs for pipe penetrations are made neatly, and slightly oversize, with a hole saw. These penetrations should be of a diameter no more than 12mm greater than that of the pipe
- Shower mixer and tap penetrations should be sealed with an appropriate flange system to prevent the passage of moisture into the wall cavity. Refer to New Zealand Building Code Clause E3 Internal Moisture November 2020 for examples of acceptable options
- Sealants should be of a mould inhibiting type and be paintable. Neutral cure silicones will generally meet these requirements
- Surfaces should be dry and free from dust before application, a minimum of a 4mm joint width provided and the depth should not exceed the width
- Apply a bead of sealant to the full depth of the lining in the following locations:
 - Around all tap/pipe bodies
 - The gap between the bath rim and the bottom edge of the wet area lining
 - Between the upstand of preformed shower bases and the bottom edge of the lining
 - Where an impervious junction is required at the floor/wall line, carefully seal the gap between the bottom edge of the board and the finished floor. Leave a 5-10mm gap at the bottom of the wall lining for this purpose, ensuring the gap is free from dirt and dust
- Do not locate shower heads or taps on fire rated or intertenancy walls. Should this be unavoidable always use tested and approved proprietary penetration seals

RENOVATIONS

Bathrooms, kitchens and laundries are the most renovated rooms in the house, partly due to fashion considerations and partly because of damage sustained by ingress of water and moisture.

When renovating these rooms it is often easier and more cost-effective to remove the existing linings and replace them. This allows for a new start in the room and offers sound substrates for new surfaces such as tiling and painting, where otherwise flaking paint or damaged plasterboard may compromise good and sound finish or practice. At the very least re-lining will:

- Allow for inspection of framing where damage may have occurred and provide the opportunity to repair such damage
- Allow plumbing and electrics to be checked and altered or replaced where required
- Provide the opportunity to install thermal and acoustic insulation, water-resistant linings, and propriety plumbing penetration flange systems where appropriate
- Make the job easier

MAINTENANCE

Lack of maintenance is frequently the cause of premature and often expensive failure of components and building elements within wet areas.

It is important to regularly inspect and repair any potential problem before it becomes expensive to reinstate. Good maintenance should include:

- Ongoing ventilation. At the very least, good passive ventilation (e.g. window vents); but good active ventilation (e.g. extraction fans) of an appropriate size for the room is recommended
- Impervious coatings and surfaces should be checked for wear and damage and maintained and re-coated before ingress of water to the substrate occurs
- Regular cleaning with appropriate cleaners so that build-up of matter, such as mould, is well controlled
- Sealants at junctions and penetrations should be checked for adhesion on a regular basis and replaced where adhesion failure to substrates occurs
- Where pipe leaks have become evident, however small, they should be repaired promptly and any area around such leaks dried out completely before any other repairs are carried out

Compliance with the NZ Building Code

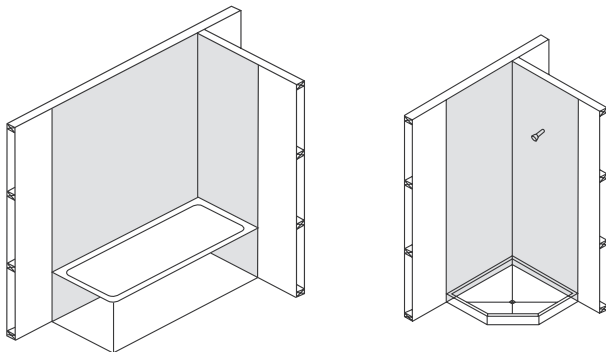
STRUCTURE – CLAUSE B1

The design and material specification for steel and timber framing used in GIB® Wet Area systems must be in accordance with the performance requirements of NZ Building Code Clause B1 (Structure).

Bracing elements are required to have a durability of 50 years. GIB® bracing elements are not to be located in shower cubicles or behind baths because of durability requirements, the likelihood of renovation, and practical issues associated with fixing bracing elements to perimeter framing members, such as at bath and shower tray locations.

Otherwise, GIB® Bracing Systems can be used in water-splash areas, provided these are maintained impervious for the life of the building.

GIB Aqualine®, GIB Toughline® Aqua and GIB Weatherline® can be used in place of GIB® Standard plasterboard in GIB® bracing elements. They can also be used in place of GIB Braceline® in GIB® bracing elements 900mm or longer, provided the perimeter of the element is fixed with GIB® Grabber 32mm x 6g screws at 100mm centres, using the GIB Braceline® corner fixing pattern. Refer to the GIB® Bracing System literature.



No bracing in the shaded areas.

DURABILITY – CLAUSE B2

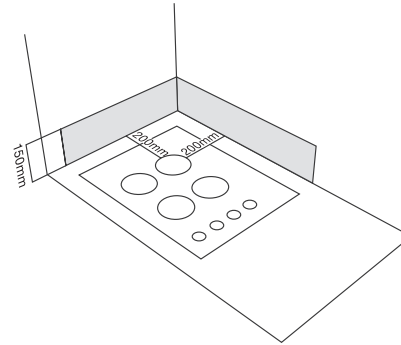
When installed and maintained in accordance with this literature, GIB® Wet Area systems tiled or vinyl covered have a serviceable life of at least 15 years. They comply with the requirements of NZ Building Code Clause B2 (Durability) for use in wet areas directly exposed to liquid water, e.g. showers, showers over baths and splash-backs.

When used as a general wet area lining and maintained under normal dry internal conditions, GIB® Wet Area Systems have a serviceable life of at least 50 years and comply with NZ Building Code Clause B2 (Durability) for use within toilets, kitchens, bathrooms and laundries not directly exposed to liquid water.

FIRE AFFECTING AREAS BEYOND THE SOURCE – CLAUSE C3

GIB® Fire Rated Systems provide passive fire protection in accordance with the requirements of NZ Building Code Clause C3. When GIB Aqualine® or GIB Toughline® Aqua is substituted into fire rated systems in place of the equivalent thickness GIB Fyrelite®, the Fire Resistance Rating (FRR) of that system will be maintained.

The protection of combustible surfaces surrounding gas cooking appliances is covered by the latest version of AS/NZS 5601.1.



As a guide the following options are acceptable for wall surfaces within 200mm of the periphery of a gas element to a height of 150mm above the element for the full dimension (width and depth) of the cooktop surface area:

- 5mm tiles on GIB® plasterboard
- 5mm toughened glass on GIB® plasterboard
- or any system that can be demonstrated to meet the specific requirements of AS/NZS 5601.1

GIB® plasterboard products must not be exposed to temperatures in excess of 52°C for sustained periods. Check with the appliance manufacturer that this requirement will be met. It would be unusual for surfaces outside 200mm to exceed 52°C for sustained periods.

INTERNAL MOISTURE – CLAUSE E3

The New Zealand Building Code Clauses that relate to wall surfaces are;

E3.3.4 - Wall surfaces adjacent to sanitary fixtures or sanitary appliances must be impervious and easily cleaned.

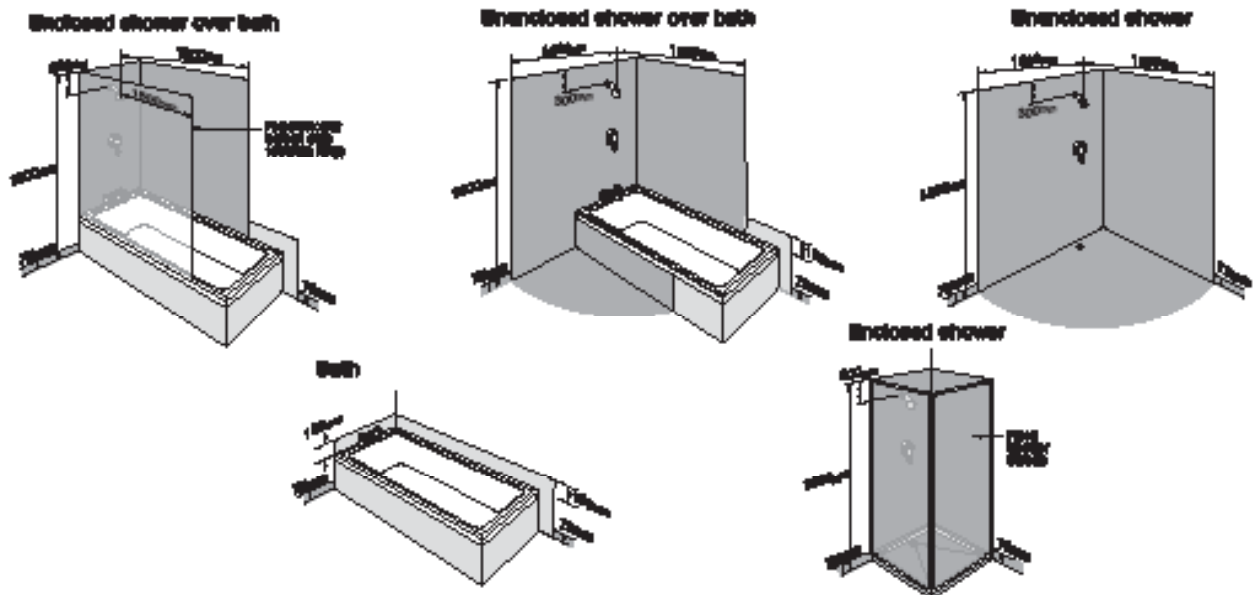
E3.3.5 - Surfaces of the building elements likely to be splashed or become contaminated in the course of the intended use of the building, must be impervious and easily cleaned.

E3.3.6 - Surfaces of building elements likely to be splashed must be constructed in a way that prevents water splash from penetrating behind linings or into concealed spaces.

New Zealand Building Code Acceptable Solution E3/AS2 substantially refers to the Waterproof Membrane Association Incorporated (WMAI) Code of Practice for Internal Wet Area Membrane Systems (IWAM), August 2020.

The IWAM Code of Practice refers to wet area membranes and over-surfaces that are easy to clean and suggests an extent as outlined below for a typical bathroom application. For further details refer to the IWAM Code of Practice which also lists suitable rigid sheet materials and tiling membranes.

Shaded areas in the diagrams below represent the minimum extent of wall surfaces requiring impervious sheet materials or waterproof membrane systems prior to tiling.



HAZARDOUS BUILDING MATERIALS – CLAUSE F2

At no stage during its serviceable life does GIB Aqualine® constitute a health hazard. It therefore meets the provisions of NZ Building Code Clause F2 (Hazardous Building Materials). Dust resulting from the sanding of stopping compounds may be a respiratory irritant and the use of a suitable facemask is recommended.

VENTILATION – CLAUSE G4

NZ Building Code Clause G4 (Ventilation) requires buildings to have a means of collecting or otherwise removing steam generated from laundering, utensil washing, bathing or showering. To prolong the life of interior linings and surface finishes and to minimise the risk of moisture related problems such as condensation and mould growth, adequate heating, thermal insulation and mechanical ventilation must be provided in kitchens, bathrooms and laundries.

AIRBORNE AND IMPACT SOUND – CLAUSE G6

GIB® Noise Control Systems can be used to provide ratings for Sound Transmission Class (STC) and Impact Insulation Class (IIC) in accordance with the requirements of NZ Building Code Clause G6 (Airborne and Impact Sound). When GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline® is substituted into GIB® Noise Control systems in place of the equivalent thickness GIB® Standard plasterboard or GIB Fyrelite®, the STC and IIC rating of that system will be maintained. When GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline® is substituted in place of the equivalent thickness GIB Noiseline®, a small performance loss may occur. For further information refer to the GIB Noise Control® Systems literature or contact the GIB® Helpline 0800 100 442.

TIMBER WALL FRAMING

Framing dimensions must comply with the requirements of NZS 3604:2011.

- The moisture content of timber framing shall be 18% or less at the time of lining
- Studs shall be spaced at 600mm centres maximum for both 10mm and 13mm GIB® plasterboard
- Nogs to be evenly spaced with a maximum spacing of 1350mm. Alternatively, nogs may be staggered 150mm maximum either side of a horizontal joint line
- Nogs are not required behind horizontal joints except in shower situations or specific fire or noise control systems

FASTENERS

- Minimum 32mm x 6g GIB® Grabber® High Thread screws.

FASTENER CENTRES

- 300mm centres to top and bottom plates and to perimeter studs
- Single fasteners to each stud where the horizontal joint crosses the studs

- Place fasteners 12mm from sheet edges and 18mm from sheet ends
- Daubs of GIBFix® adhesive at 300mm centres to intermediate studs
- Do not place adhesive at sheet edges or under fasteners. Sheet edges at door or window openings can be adhesive fixed unless forming part of the perimeter of a bracing element

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

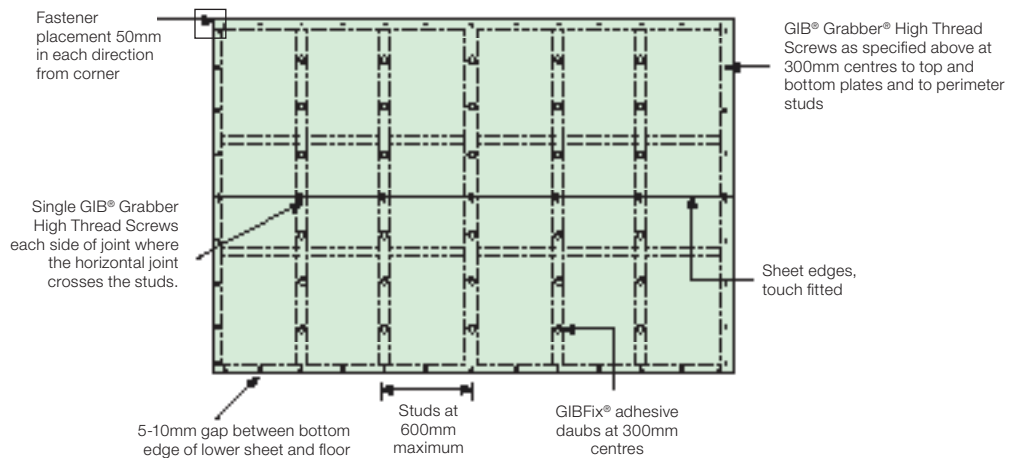
LINING

- Use minimum 10mm GIB® plasterboard
- Install the sheets leaving a 5-10mm gap at the floor line to allow for movement of the framing members and to allow for cleaning dirt and rubbish before sealing
- Sheets to be touch fitted.

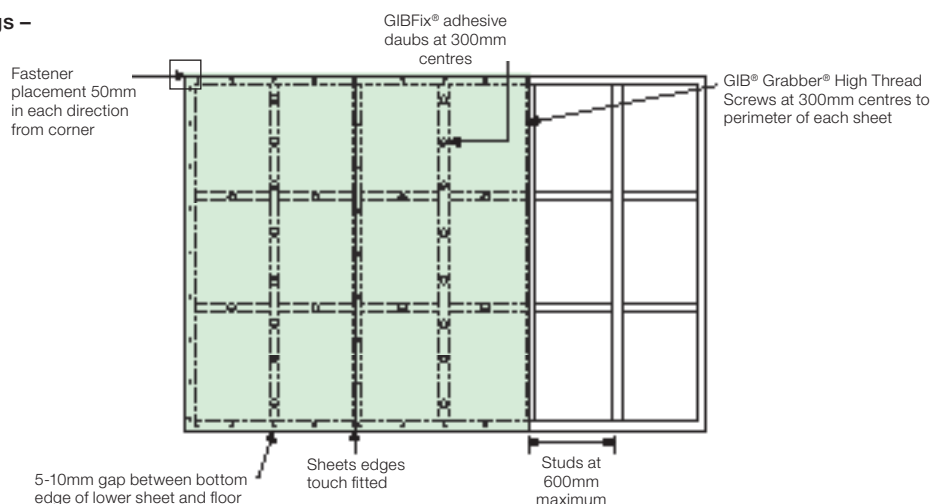
JOINTING

- Jointing shall be carried out in accordance with the instructions in the GIB® Site Guide.

Fastening the Linings – Horizontal Fixing Only



Fastening the Linings – Vertical Fixing Only



STEEL WALL FRAMING

The minimum sheet thickness for fixing on light gauge 0.55mm base metal thickness (BMT) steel framing is 13mm GIB® plasterboard. For bracing, noise control or fire rating applications consult the relevant GIB® technical publication.

Steel frame for residential construction is in accordance with NZBC B1/AS1 9.1 NASH Standard Part 2 Light Steel Framed Buildings, or by specific design. 10mm GIB plasterboard is commonly used on minimum 0.75mm BMT residential steel framing.

FASTENERS

- Minimum 25mm x 6g GIB® Grabber® Self Tapping Screws.

FASTENER CENTRES

- 300mm centres to top and bottom channels and to end studs
- Single screws to each stud where the horizontal joint crosses the studs
- Place fasteners 12mm from sheet edges and 18mm from sheet ends

- Daubs of GIBFix® All-Bond adhesive or screws at 300mm centres to intermediate studs
- Do not place adhesive at sheet edges or under fasteners.
- Sheet edges at door or window openings can be adhesive fixed.

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

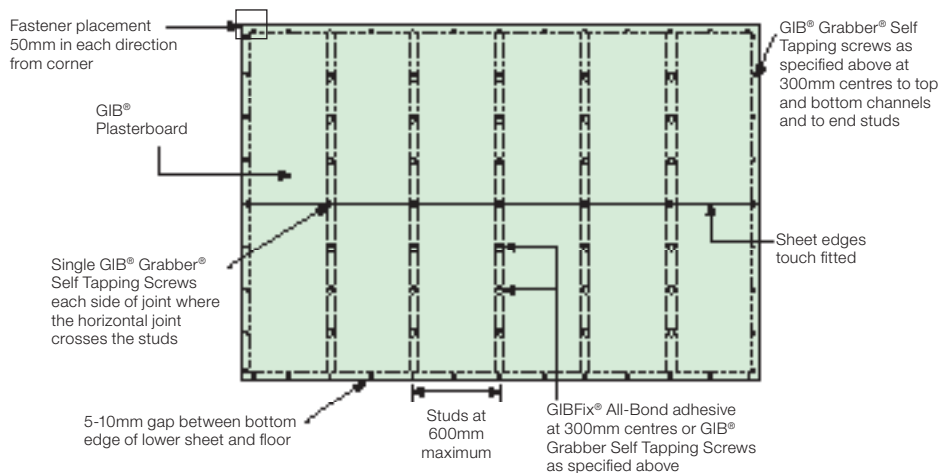
LINING

- Lay the sheets, leaving a 5-10mm gap at the floor line.
Note: If friction fitted steel studs have been used, sheets must be fitted hard to the floor. Ensure floor is cured and dry
- Sheets to be touch fitted.

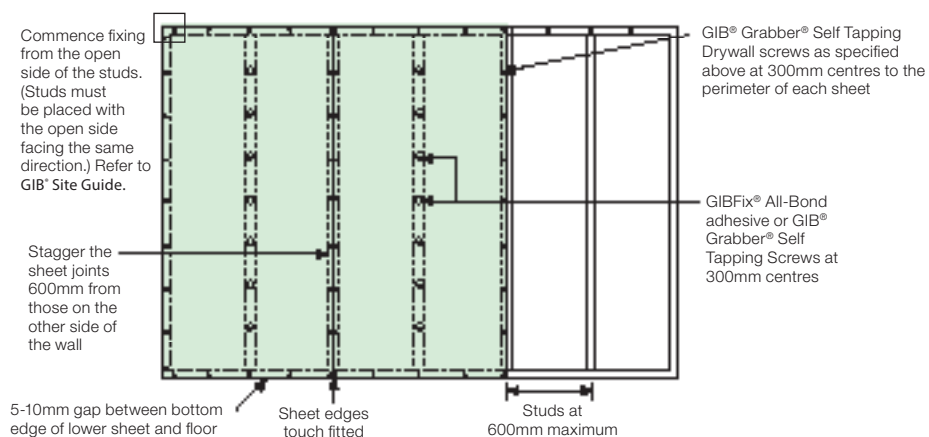
JOINTING

- Jointing shall be carried out in accordance with the instructions in the GIB® Site Guide

Fastening the Linings – Horizontal Fixing



Fastening the Linings – Vertical Fixing



TIMBER WALL FRAMING

Framing dimensions and spacing must be appropriate for the tile weight and comply with the requirements of NZS 3604:2011 Timber Framed Buildings, or relevant specific design Standard.

NOGS

For impact protection in shower cubicles or shower over bath situations it is important that all sheet joints are made on solid framing. This may require vertical fixing or the installation of additional nogs. Also provide nogs:

- Adjacent to each pipe penetration and behind sink and tub flashings
- Between all studs above bath flanges and preformed shower bases

CORNER REINFORCING

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum
- 32 x 32 x 0.55mm NZ18 or 45 x 45 x 0.55mm GIBFix® Angle. Angles need to be temporarily held in place until secured by the lining fixings.

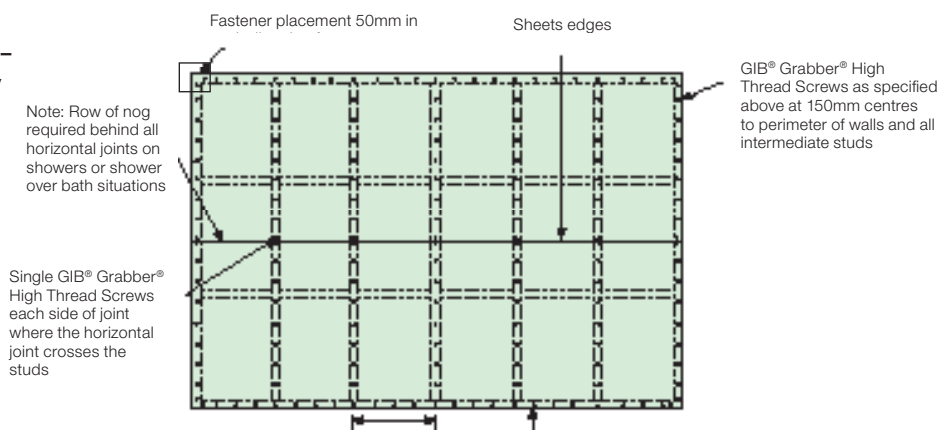
FASTENERS

- Minimum 32mm x 6g GIB® Grabber® High Thread Screws

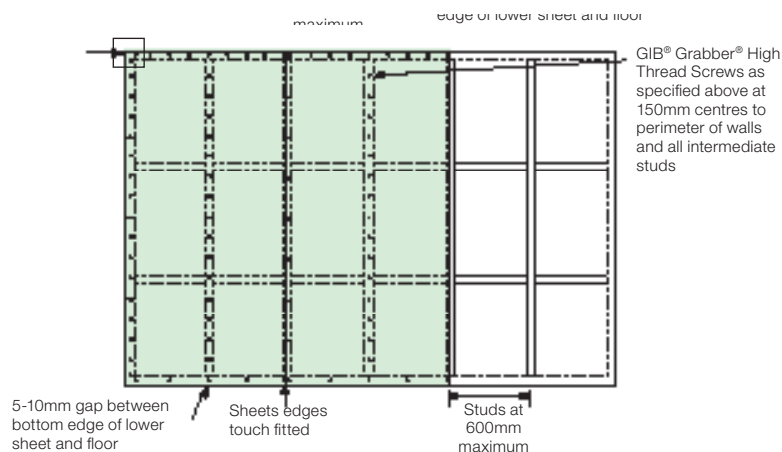
FASTENER CENTRES

- 150mm centres to perimeter of wall and all intermediate studs
- Adhesive is not to be used in place of mechanical fasteners
- Place fasteners 12mm from sheet edges and 18mm from sheet ends

Fastening the Linings – Horizontal Fixing Only



Fastening the Linings – Vertical Fixing Only



- Single fasteners to each stud where the horizontal joint crosses the studs
- Where relevant, fastener lengths must comply with the requirements of GIB® Fire Rated Systems or GIB® Noise Control Systems

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

LINING AND TILE WEIGHTS

- Use minimum 10mm GIB® plasterboard
- For maximum permitted tile weights refer to pg 16 of this manual
- GIB® Wet Area linings may be fixed vertically or horizontally
- Sheets are touch fitted
- Provide a 5-10mm gap at the wall/floor junction and between the bottom edge of the lining and any bath rim or preformed shower base to allow for placement of sealant
- Do not tile on the resilient side of GIB Rail® or STWC Acoustic Clip (ST001) and channel noise control system
- GIB® Wet Area linings are suitable for tiling full height of walls, but if a wall is to be partially tiled (e.g. half high), only the area of wall under the tiles needs to be fixed as required for tiled areas. The remainder of the wall may be fixed as for non-tiled areas

JOINTING

- Jointing shall be carried out in accordance with the instructions of the GIB® Site Guide

STEEL WALL FRAMING

Framing dimensions and spacing must be appropriate for the tile weight and comply with the requirements of NASH Standard Part 2:2019 Light Steel Framed Buildings, or relevant specific design Standard.

- Linings are placed hard to floor, bedded into a sealant bead
- Steel framing for tiling to have a minimum base metal thickness (BMT) of 0.75mm

NOGS

For impact protection in shower cubicles or shower over bath situations it is important that all sheet joints are made on solid framing. This may require vertical fixing or the installation of additional nogs. Also provide nogs:

- Adjacent to each pipe penetration and behind sink and tub flashings
- Between all studs above bath flanges and preformed shower bases

CORNER REINFORCING

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum
- 32 x 32 x 0.55mm NZ18 or 45 x 45 x 0.55mm GIBFix® Angle. Angles need to be temporarily held in place until secured by the lining fixings

FASTENERS

- Minimum 32mm x 6g GIB® Grabber® Self Tapper screws

FASTENER CENTRES

- 150mm centres to perimeter of wall and all intermediate studs
- Adhesive is not to be used in place of mechanical fasteners
- Single screws to each stud where the horizontal joint crosses the studs
- Place fasteners 12mm from sheet edges and 18mm from sheet ends.

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB® technical publication.

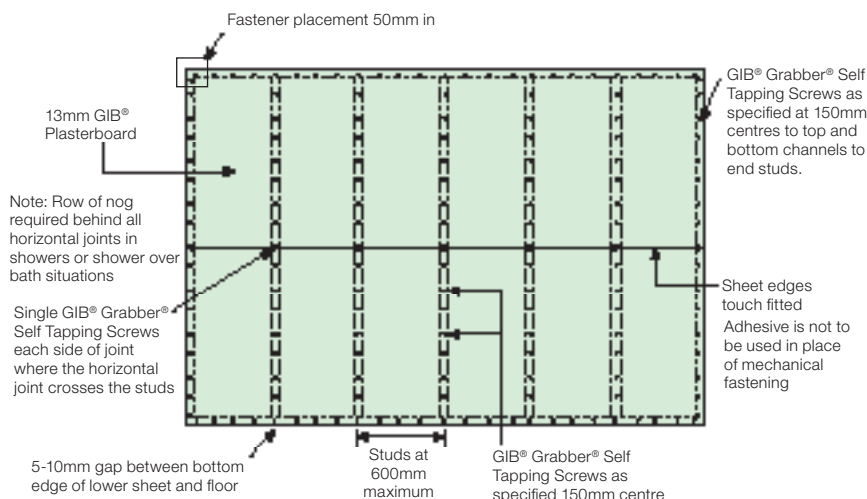
LINING AND TILE WEIGHTS

- Use minimum 13mm GIB® plasterboard
- For maximum permitted tile weights refer to pg 16 of this manual
- GIB® Wet Area linings may be fixed vertically or horizontally
- Sheets are touch fitted
- Provide a 5-10mm gap at the wall/floor junction and between the bottom edge of the lining and any bath rim or preformed shower base to allow for placement of sealant
- Do not tile on the resilient side of GIB Rail® or STWC Acoustic Clip (ST001) and channel noise control system
- GIB® Wet Area linings are suitable for tiling full height of walls, but if a wall is to be partially tiled (e.g. half high), only the area of wall under the tiles needs to be fixed as required for tiled areas. The remainder of the wall may be fixed as for non-tiled areas

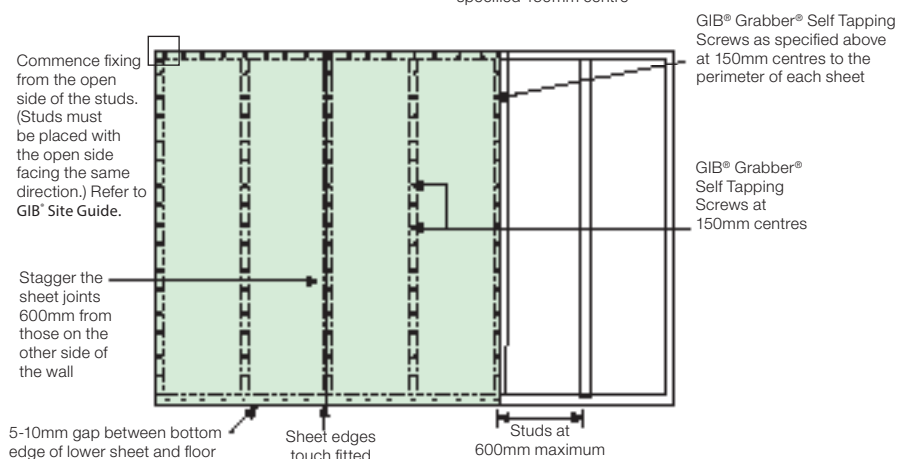
JOINTING

- Jointing shall be carried out in accordance with the instructions of the GIB® Site Guide

Fastening the L Horizontal Fixing



Fastening the Linings – Vertical Fixing Only

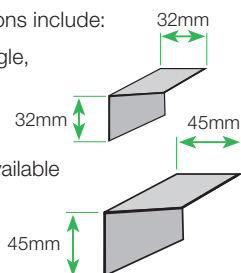


METAL ANGLES FOR TILED INTERNAL CORNERS

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum 32 x 32 x 0.55mm galvanised metal angle.

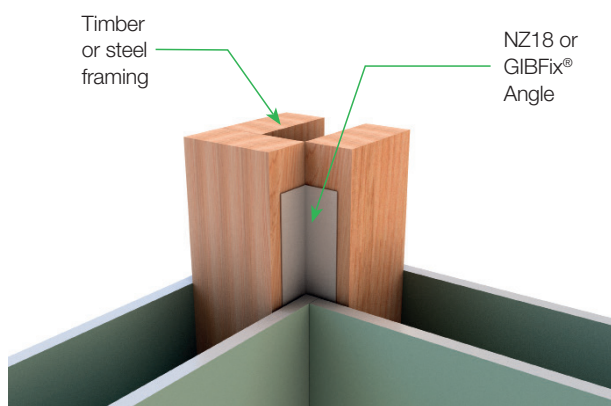
- Suitable GIB® metal angle options include:

- GIB® Rondo® NZ18 metal angle, available length: 3.0m



- GIBFix® Angle metal angle, available lengths: 2.4m and 2.7m

- Angles need to be temporarily held in place until secured by the lining fixings
- Minimum height of the metal angle is 1800mm



WATERPROOF MEMBRANE SYSTEMS

A waterproof membrane system must be applied to all lining materials used as a substrate for ceramic tiles in a shower or shower over a bath application, or any other tiled application exposed to frequent water splash.

For further information see p10.

TILES AND TILE WEIGHTS

In areas likely to be directly exposed to water, tiles may be ceramic, porcelain or stone must comply with the over-surface finish requirements of the IWAM Code of Practice and be bedded with a suitable tile adhesive on the waterproof membrane system. See page 10 for the minimum extent of wall surfaces requiring impervious sheet materials or waterproof membrane systems prior to tiling.

Smaller mosaic tiles are often lighter, but the integrity of grout joints might be more prone to impact, whilst heavier tiles are larger and have less and deeper grout and sealant joints. For more information also see AS 3958:2007 Ceramic tiles – Guide to the installation of ceramic tiles.

Table 2: Recommended maximum tile weights

Maximum Tile Weights for GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline®			
Stud Centre (maximum)	Fasteners Centre (maximum)	Lining Thickness	Tile Weight
600mm maximum	150mm maximum	10mm	26kg/m ²
		13mm	40kg/m ²

ADHESIVE AND GROUT WEIGHTS

The weight of adhesive and grout can vary depending on the type of tile and the installation process used. The maximum tile weights stated in table 2 are conservative and refer to the tile weight excluding grout and adhesive used. An additional 3kg/m² has been factored into tile adhesion testing on top of the above stated tile weights to account for adhesive and grout weight used during the installation of the tile.

CEILING FRAMING

Framing dimensions and spacing must comply with the requirements of NZS 3604:2011, NASH for steel or relevant NZ Standard.

For noise control or fire rating applications consult the relevant GIB® technical publication.

FASTENERS

- Steel battens – 25mm x 6g GIB® Grabber® Self Tapping screws
- Timber battens or Joists – 32mm x 6g GIB® Grabber® High Thread screws

ADHESIVES

- Steel battens - GIBFix® All-Bond
- Timber battens - GIBFix® All-Bond or GIBFix® One

FASTENERS CENTRES

- Single screws to the edges and centre of the sheets across each batten
- Single screw at 600mm maximum to the perimeter of the ceiling
- Screws to be 12mm from sheet edges
- Daubs of adhesive at 200mm centres between the screws
- Do not place adhesive at sheet edges or under fasteners, this may lead to screw pops

LINING

- The lining shall be fixed at right angles to the battens or joists
- Commence fixing from the centre of the sheets outwards.
- Sheets to be touch fitted
- Use long length sheets to minimise sheet end butt joints.
- Back-block sheet end butt joints
- See GIB® Site Guide for sheet edge backblocking requirements

BATTEN SPACINGS

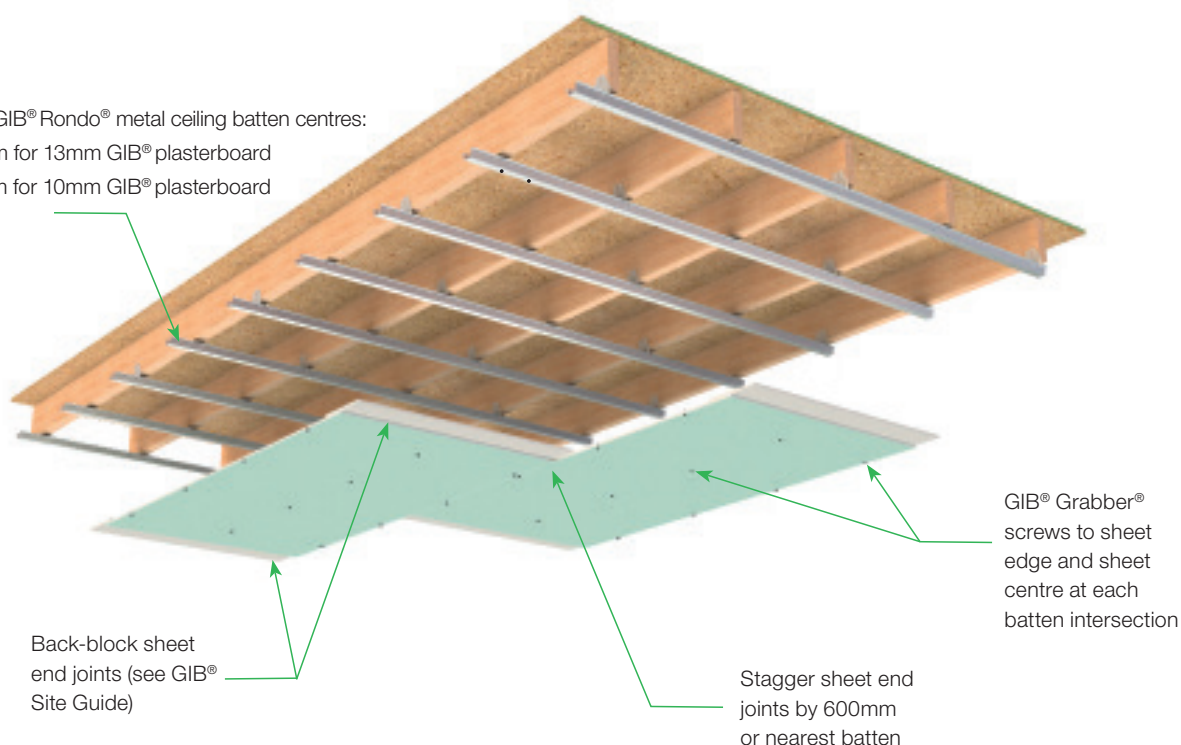
- 13mm GIB® plasterboard – 600mm centres maximum
- 10mm GIB® plasterboard – 450mm centres maximum

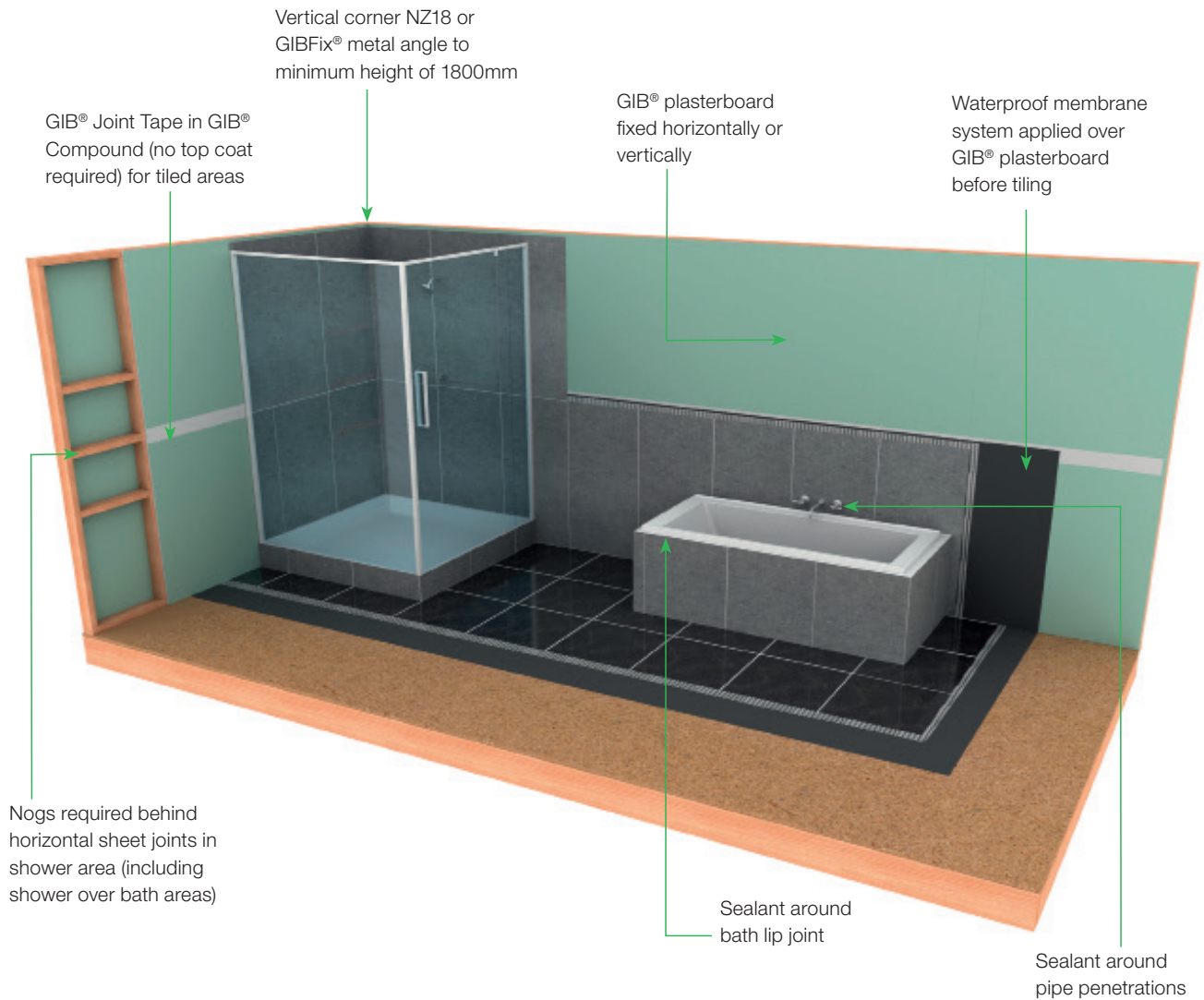
JOINTING

- All sheet joints must be paper tape reinforced and stopped in accordance with instructions in the GIB® Site Guide
- Do not fix tiles to GIB® plasterboard ceilings

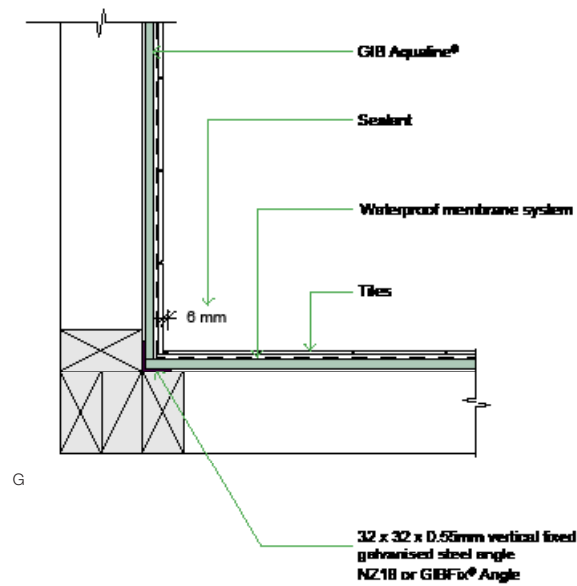
Maximum GIB® Rondo® metal ceiling batten centres:

- 600mm for 13mm GIB® plasterboard
- 450mm for 10mm GIB® plasterboard

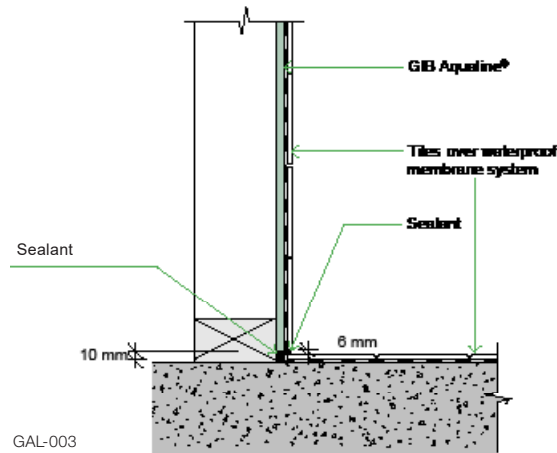




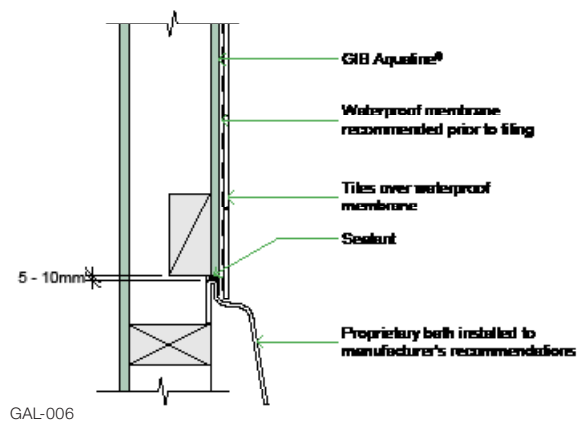
A: TILED INTERNAL CORNER



B: CERAMIC FLOOR LINING JUNCTION



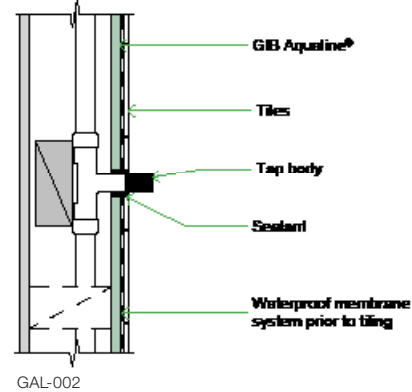
C: BATH LINING JUNCTION



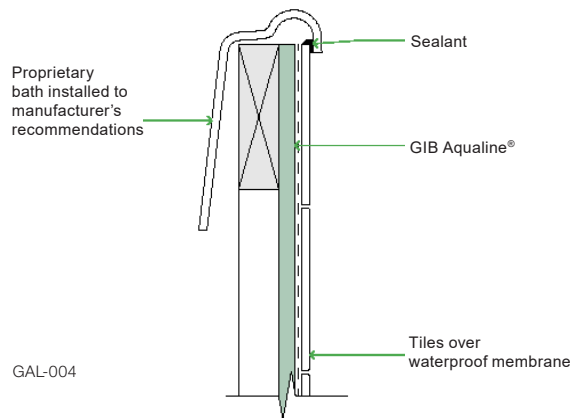
G: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

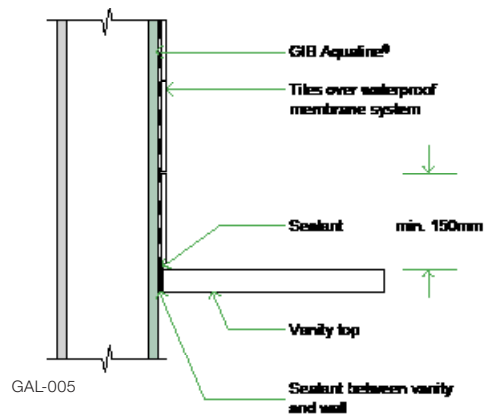
D: SEALING WET AREA PENETRATION

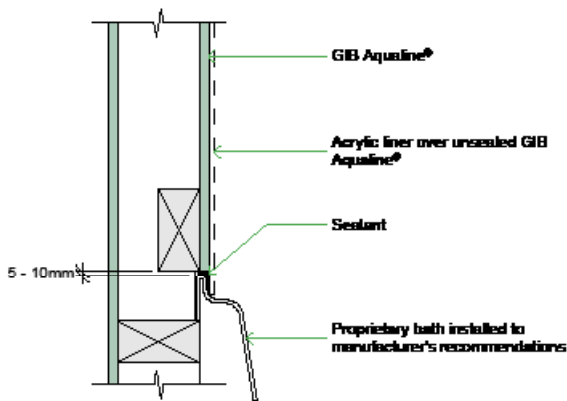


E: BATH CRADLE LINING DETAIL

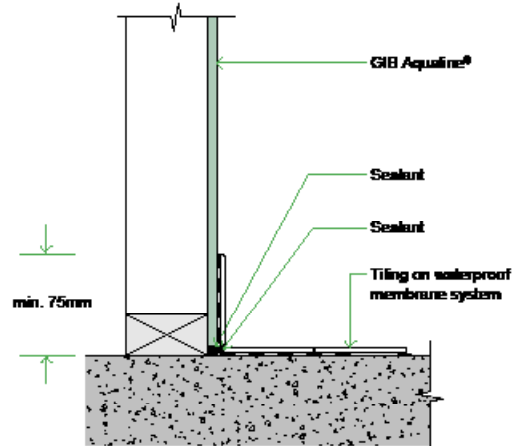


F: VANITY TOP LINING JUNCTION

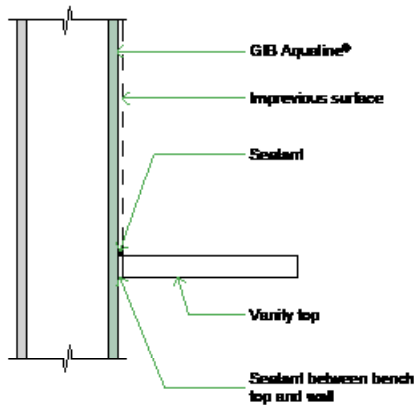


A: BATH LINING JUNCTION


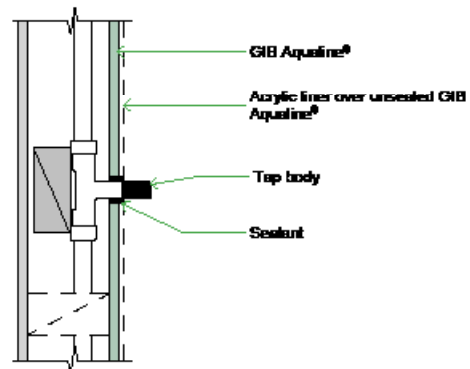
GAL-011

D: CERAMIC FLOOR SKIRTING LINING JUNCTION


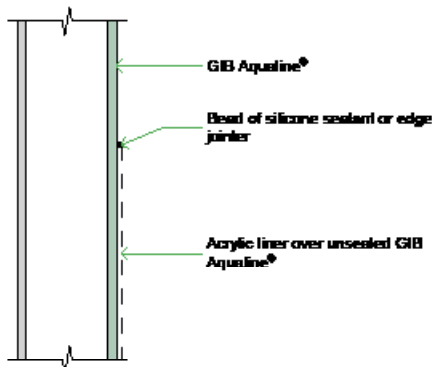
-001

B: VANITY TOP LINING JUNCTION


GAL-023A

E: SEALING SEMI WET AREA PENETRATION


GAL-019

C: UNSEALED PLASTERBOARD LINING


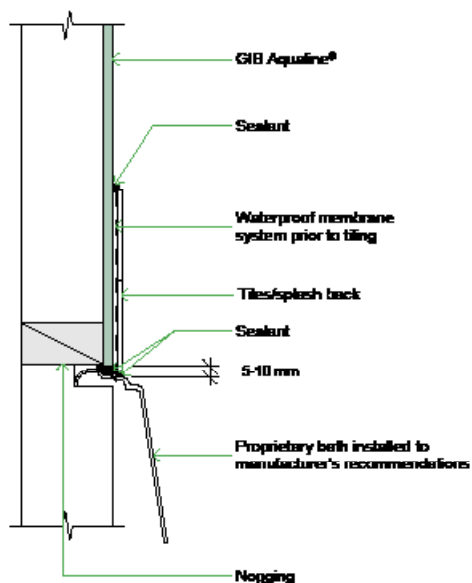
GAL-028

F: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

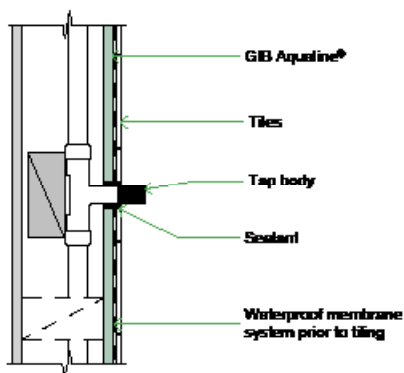


A: BATH LINING JUNCTION



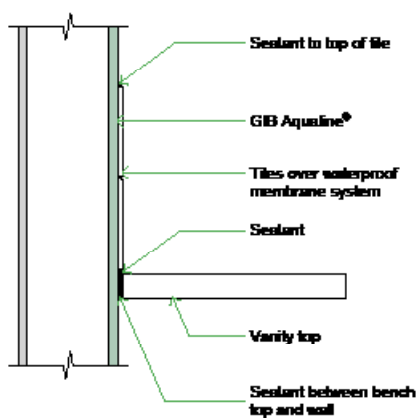
GAL-009

B: SEALING SEMI WET AREA PENETRATION

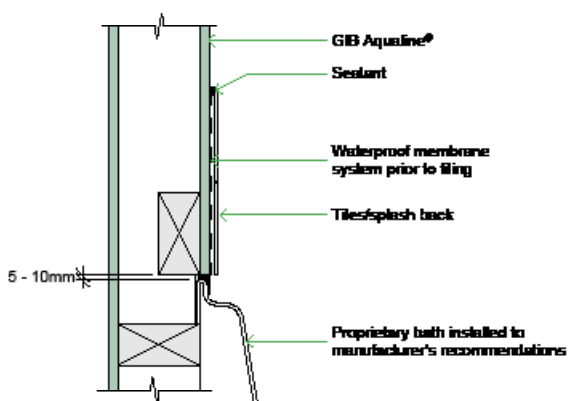


GAL-007

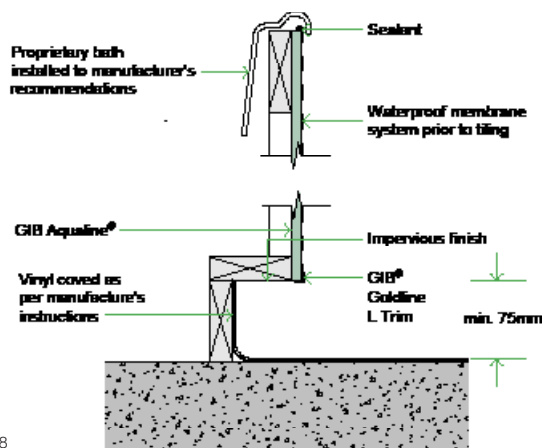
C: VANITY TOP LINING JUNCTION



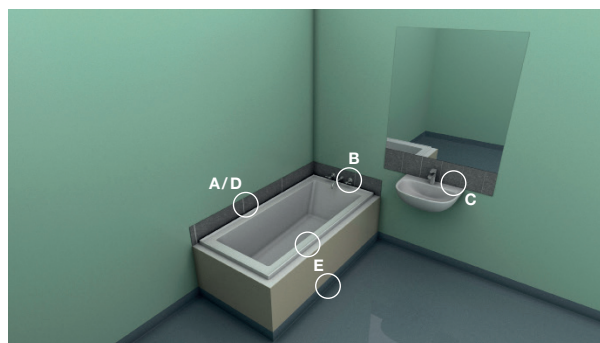
D: BATH LINING JUNCTION



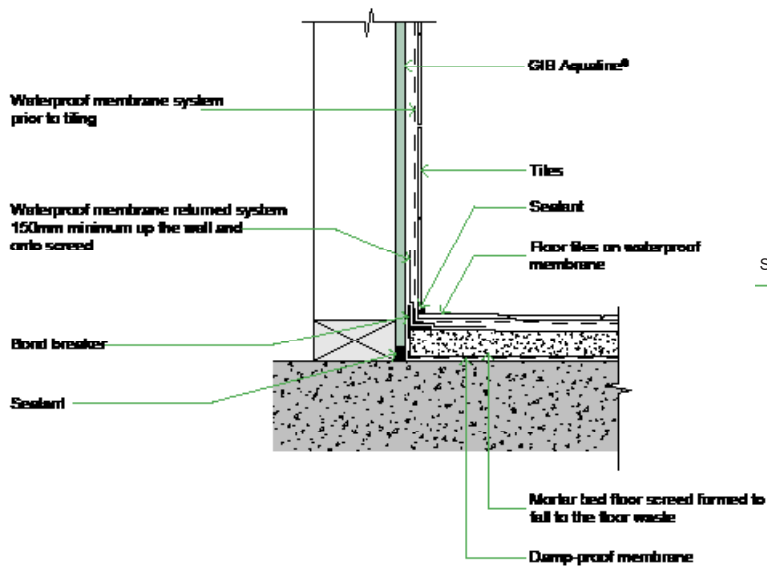
E: CRADLE VINYL LINING JUNCTION



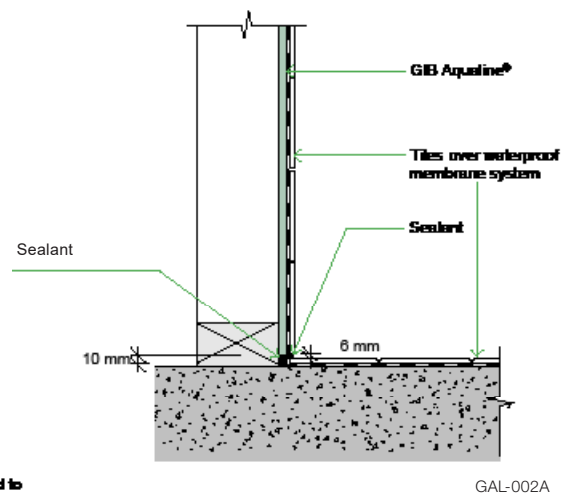
GAL-008



A: MORTAR UNDER CERAMIC FLOOR LINING JUNCTION



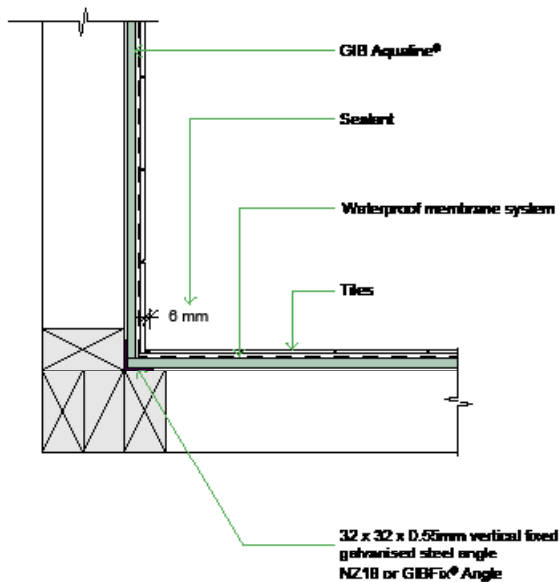
C: CERAMIC FLOOR LINING JUNCTION



PREFORMED SHOWER BASE JUNCTIONS

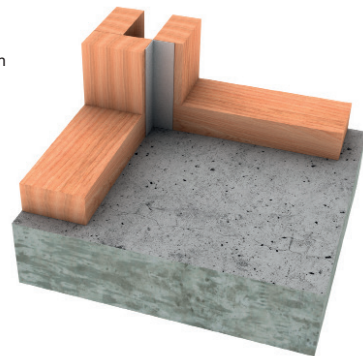
Refer to the shower base manufacturer for proprietary shower tray installation detailing including wet wall lining junction detailing.

B: TILED INTERNAL CORNER



D: TILED INTERNAL CORNER METAL ANGLE POSITION

Refer to page 16 of this publication for specification and installation guidance.

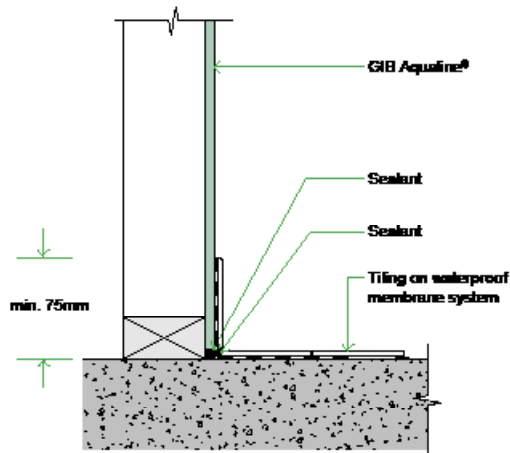


E: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

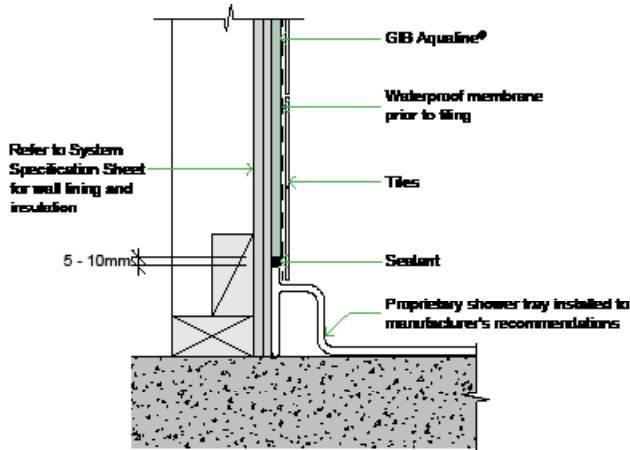


A: CERAMIC FLOOR SKIRTING LINING JUNCTION



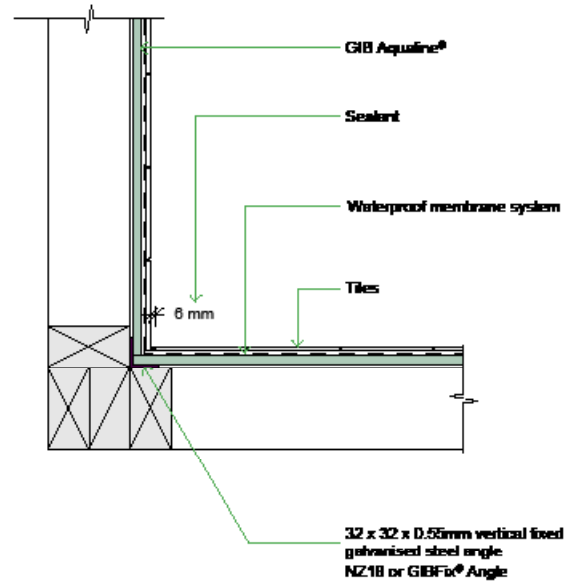
GAL-C...

B: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION



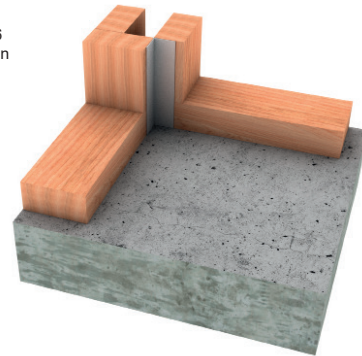
GAL-016

C: TILED INTERNAL CORNER



D: TILED INTERNAL CORNER METAL ANGLE POSITION

Refer to page 16 of this publication for specification and installation guidance.

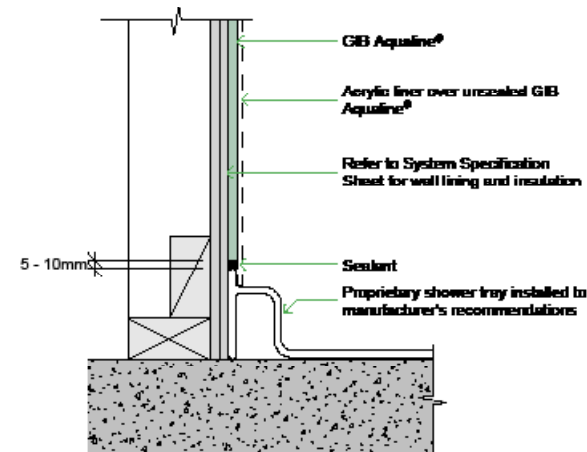


E: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

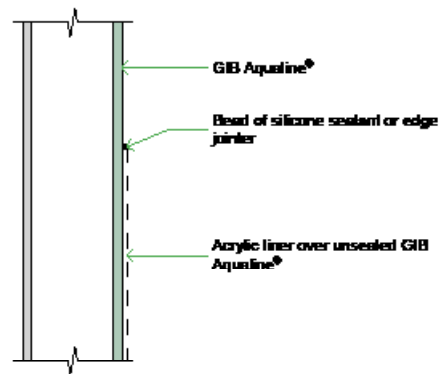


A: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION



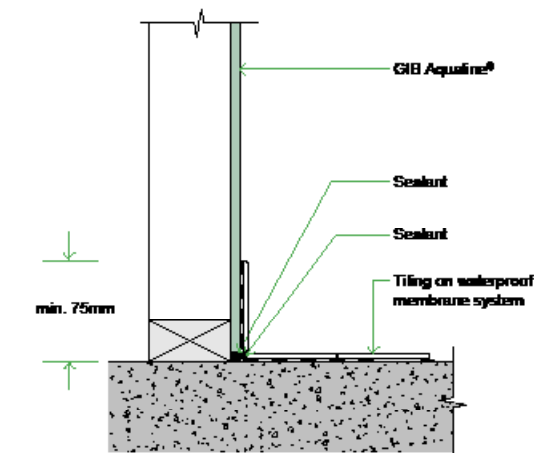
GAL-028

C: UNSEALED PLASTERBOARD LINING



GAL-028

B: CERAMIC FLOOR SKIRTING LINING JUNCTION



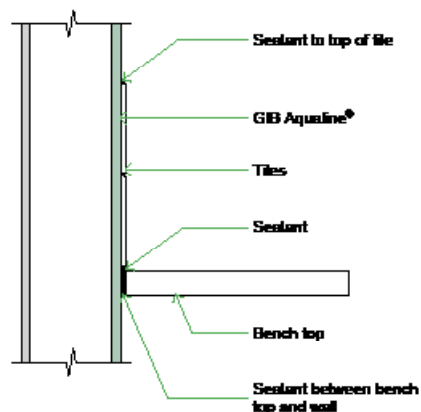
GAL-028

D: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.

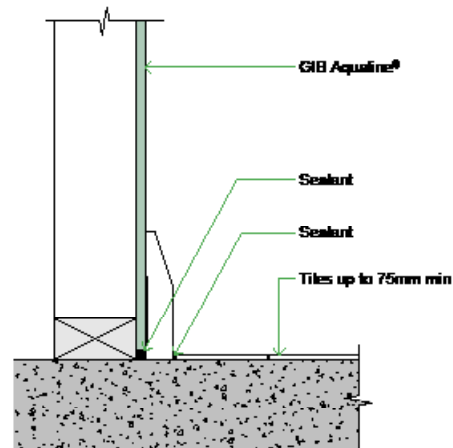


A: BENCH TOP LINING JUNCTION



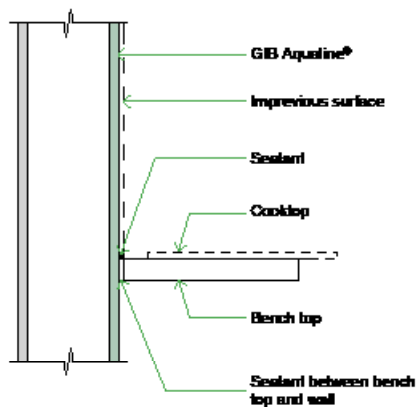
GAL-1

CERAMIC FLOOR SKIRTING LINING JUNCTION



GAL-001A

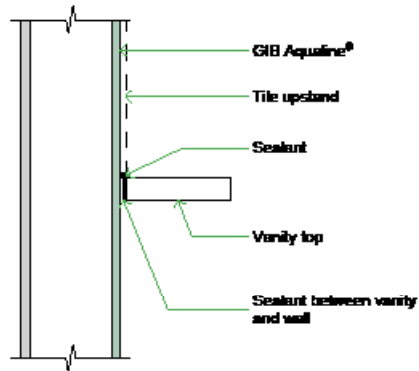
B: COOKTOP LINING JUNCTION



GAL-023B

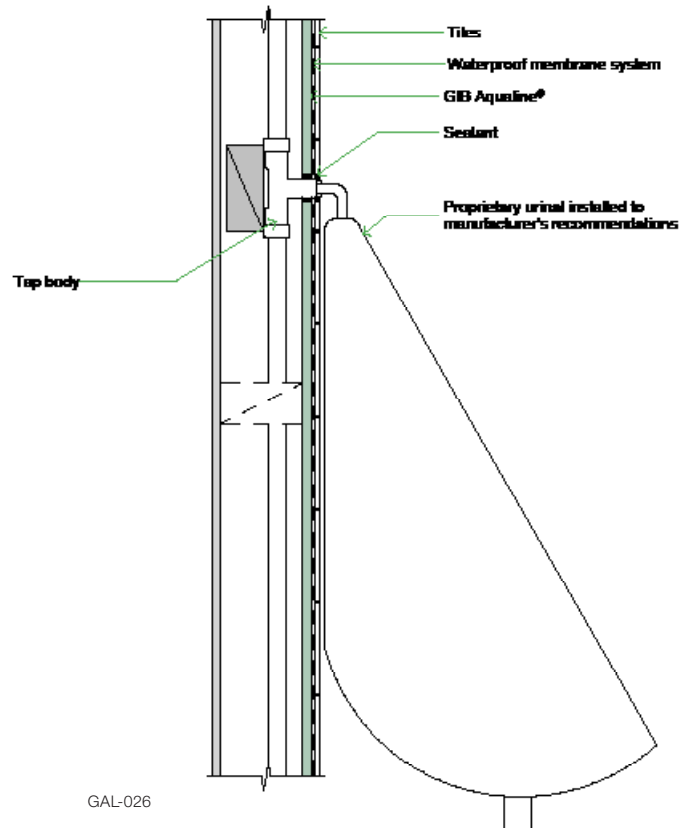


A: VANITY TOP LINING JUNCTION



GAL-022

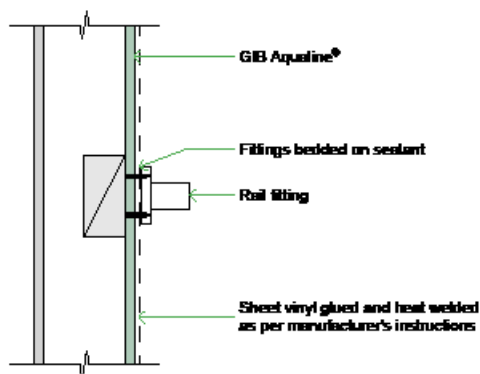
B: SEALING WET AREA PENETRATION LINING JUNCTION



GAL-026

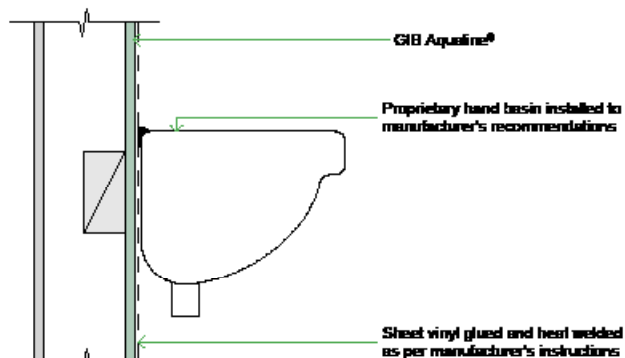


A: SURFACE MOUNTED WITH NOG



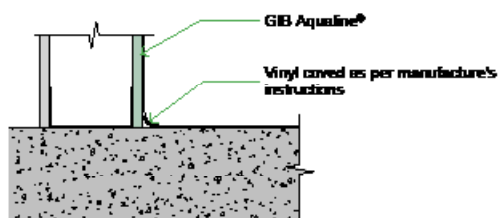
GAL-027

C: BASIN LINING JUNCTION

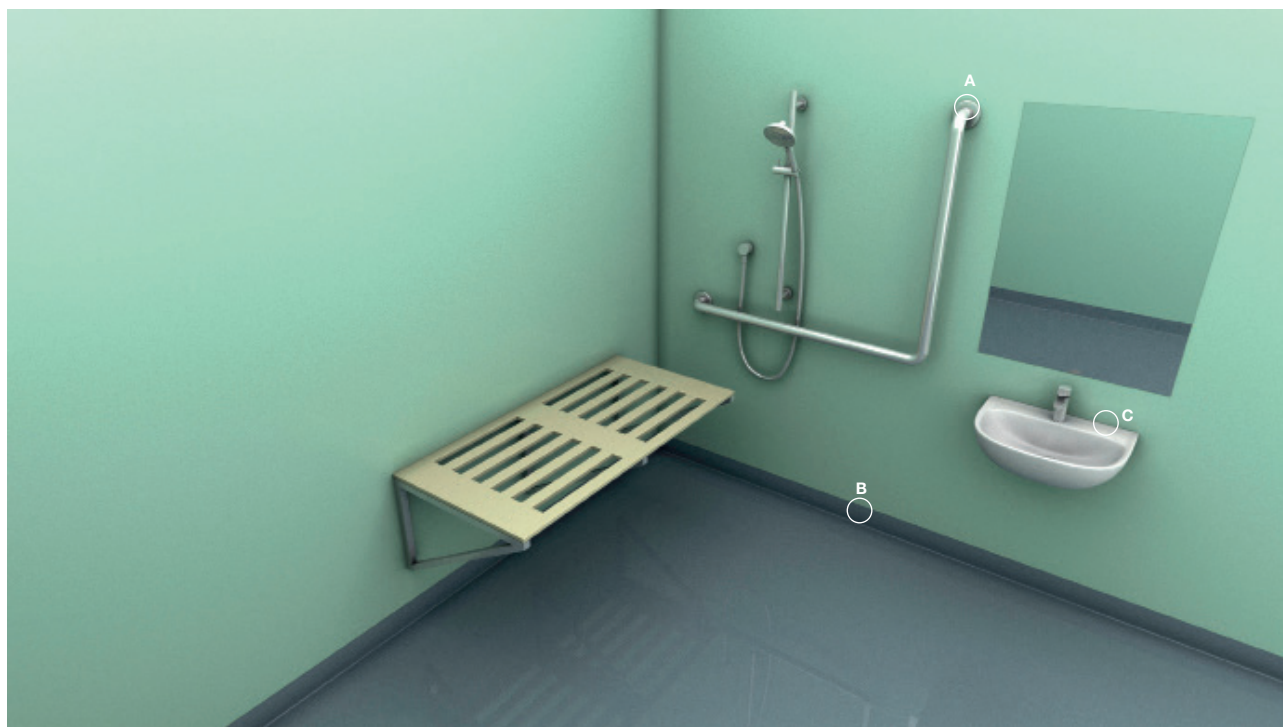


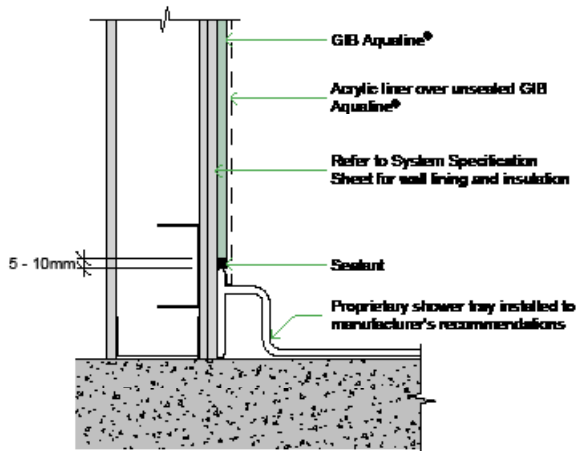
GAL-025

B: VINYL FLOOR LINING JUNCTION

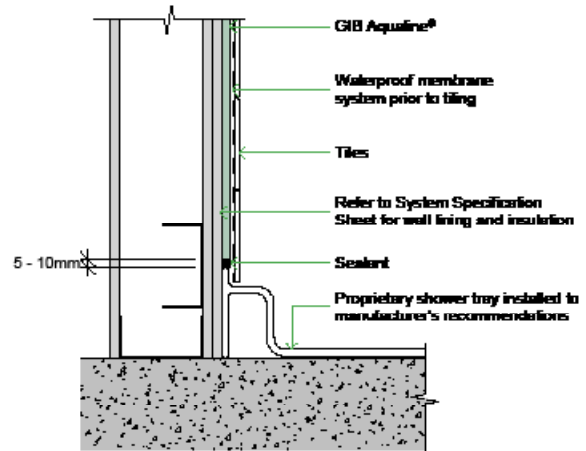
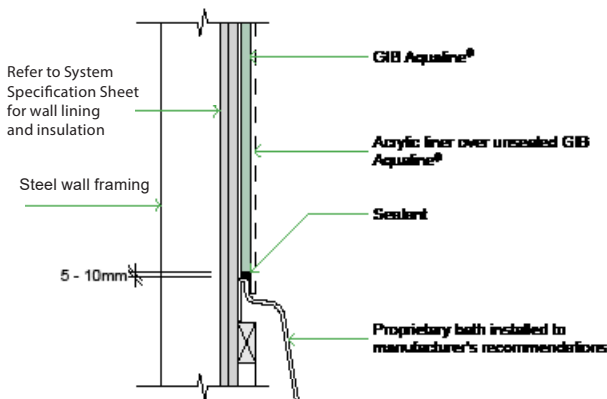


GAL-000A

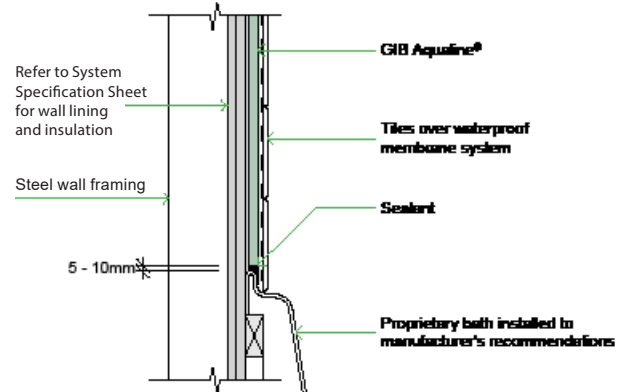


A: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION


GAL-017

C: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION

B: BATH DOUBLE LINING JUNCTION


GAL-013

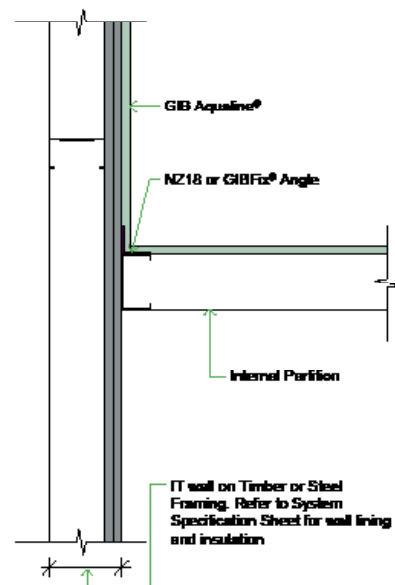
D: BATH DOUBLE LINING JUNCTION


GAL-014

GIB® WET AREA SYSTEMS FIRE RESISTANCE AND NOISE CONTROL PERFORMANCE

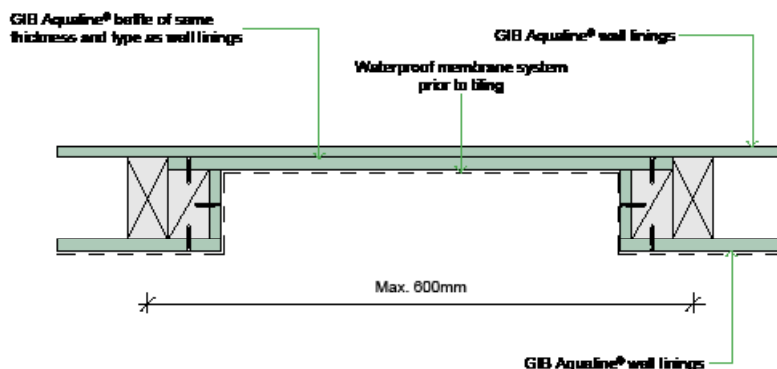
Given recesses required for shower trays, bath upstands, etc., and the likelihood of renovations during the service life of the building, it is recommended that GIB® Wet Area linings in water splash areas are installed in addition to and over required fire and noise control systems in commercial or multi-residential applications.

Do not tile on the resilient side of a GIB Rail® or Acoustic Resilient Mount (ST-001) and channel noise control system.

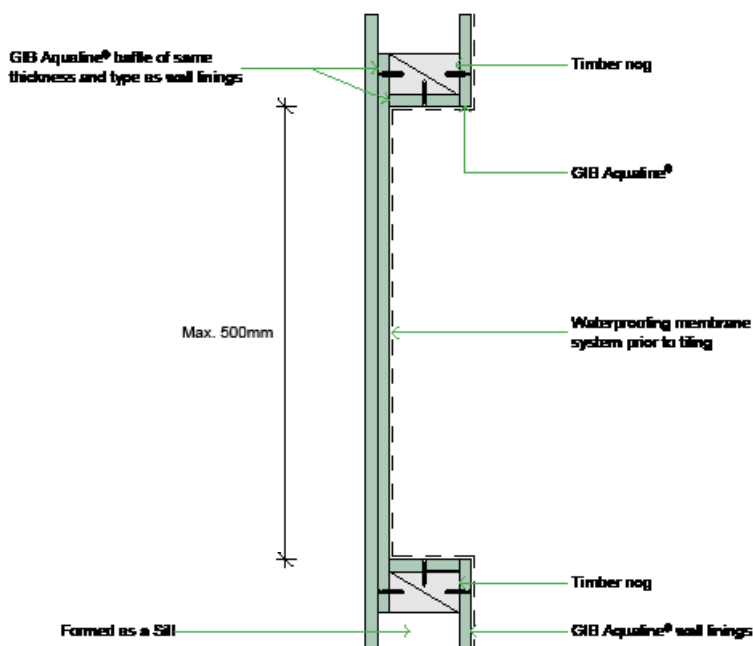
E: INTERTENANCY WALL AND WET AREA WALL JUNCTION


GAL-031C

TIMBER FRAME TILE RECESS

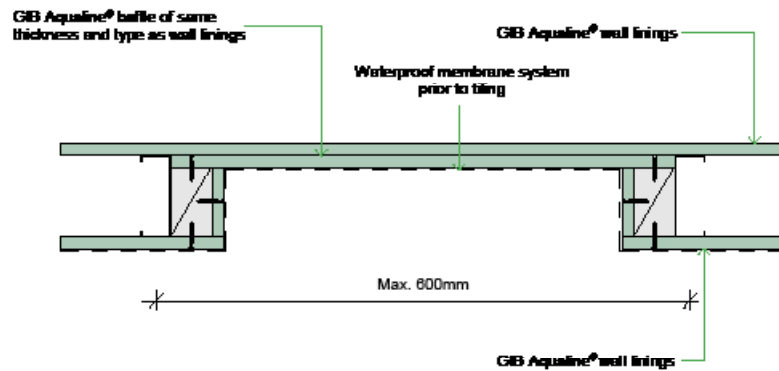


Larger recesses can be accommodated depending on specific framing layout provided 500mm is not exceeded in at least one direction.

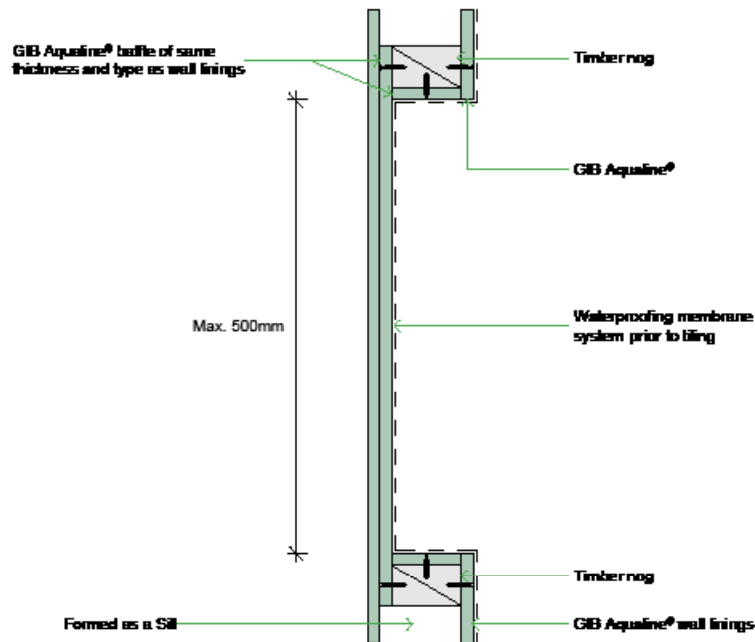


GAL-029B

STEEL FRAME TILE RECESS



Larger recesses can be accommodated depending on specific framing layout provided 500mm is not exceeded in at least one direction.



GAL-030

GIB® Wet Area Systems, February 2021

LIMITATIONS

Winstone Wallboards Ltd accepts no liability if the GIB® Wet Area Systems and junction details are not installed in strict accordance with instructions contained within this publication.

USE ONLY THE CURRENT SPECIFICATION

This publication may be superseded by a new publication. Winstone Wallboards accepts no liability for reliance upon publications that have been superseded. You should check the GIB® website to ensure you are using the current publication. If you are unsure whether this is the current publication, simply call the GIB® Helpline on 0800 100 442.

SUBSTITUTION

GIB® Wet Area Systems have been specifically designed and tested to achieve the stated performance levels. To maintain the GIB® Product and System Warranty, all system components detailed in this publication must be used when specifying and installing GIB® Wet Area Systems.

TRADEMARKS

The names GIB®, GIB Fyreline®, GIB Ultraline®, GIB Toughline®, GIB Braceline®, GIB Noiseline®, GIB Aqualine®, GIB Weatherline®, GIB Tradeset®, GIB Plus 4®, GIB-Cove®, GIB Lite Blue®, GIBFix®, GIB® Quiet Stud®, GIB Rail®, GIB Barrierline®, GIB X-Block®, GIB Fire Soundseal®, GIB Clip®, the colour mauve for GIB Toughline®, the colour blue for GIB Braceline®, GIB Noiseline®, the colour pink for GIB Fyreline®, the colour green for GIB Aqualine®, the colour purple for GIB Weatherline® and the shield device are registered trademarks of Fletcher Building Holdings Limited.

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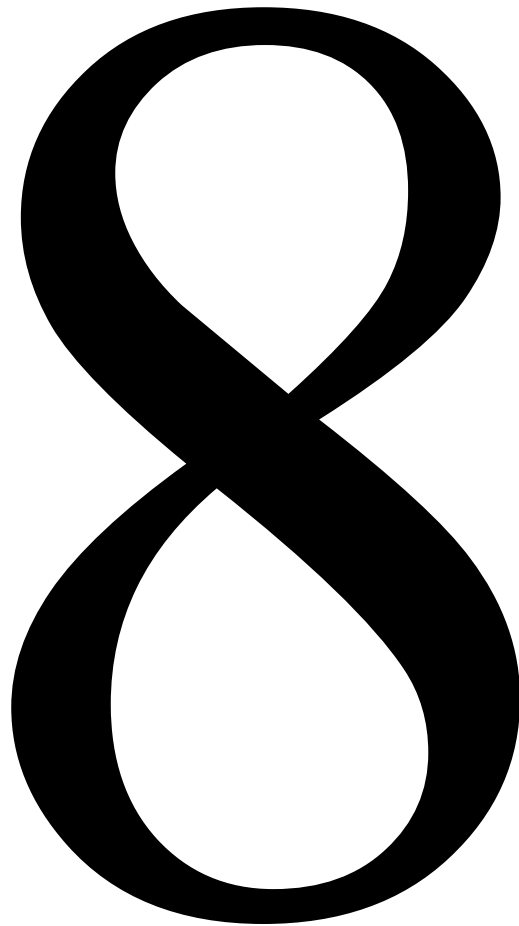
FOR MORE INFORMATION VISIT

gib.co.nz

OR CALL THE GIB® HELPLINE

0800 100 442

Tab 8 – Superseded Plans



Building Consent - Form 2 - NELSON177686

Submission Details

Submission Ref	NELSON177686
Status	Vetting
Project Description	Form bathroom in existing garage
Date Submitted	Thu 11 Jul 2024, 10:57 AM
Building Consent Authority	Nelson City Council
Site Address	8 Palm Avenue, Stoke, Nelson 7011
Submitter	Chris Pyemont

Building Consent - Form 2

Application for project information memorandum and/or building consent
[Section 33](#) or [section 45](#), Building Act 2004

How to complete this form:

1. Completed sections turn green
2. The submit button become available after all sections has been completed
3. Required fields are marked with an asterisk (*)
4. You can save and close the application if you need to complete it later
5. The review and submit buttons takes you to the final step before you submit the application.

NELSON

What Are You Applying For

What are you applying for. Select all that apply. *

- | | |
|---|---|
| ☒ Building Consent | ☐ Project Information Memorandum (PIM) |
| ☐ National Multiproof Building Consent | ☐ Staged Building Consent |

What Building Work Are You Doing

What type of building work are you doing *

☒ Residential	☐ Multi-Residential	☐ Commercial / Industrial
--	---	---

Residential *

☐ New detached dwelling	☒ Plumbing works	☐ Major alterations / additions - any work that includes altering or attaching to the exterior of a building
☒ Minor alterations - any internal work that does not include altering the exterior of the building	☐ Garage / detached carport	☐ Seismic strengthening
☐ Other		

Select all applicable boxes. If your building work is not listed, select Other and provide details.

Does the design feature a modular component by an accredited manufacturer as per the BuiltReady scheme?

☐ Yes	☒ No
---------------------------	-------------------------------------

Where Is The Building Work

What is the street address *

8 Palm Avenue, Stoke	
----------------------	--

Legal Description *

LOT	1
-----	---

Deposited Plan

DP	9002
----	------

Building Name

--

Location of building within site/block including near street access

--

Are you building in a zone that requires a land-use Resource Consent *

☐ Yes	☒ No	
---------------------------	-------------------------------------	--

Is the subdivision of an existing site involved *

☐ Yes	☒ No
---------------------------	-------------------------------------

Does the building or site have any cultural or heritage significance, or is it a marae? *

☐ Yes	☒ No
---------------------------	-------------------------------------

Who Owns The Building or Land

Owner name *

Owner title

If the property is owned by an organisation, capture the organisation's name.

Owner's contact person

Owner email address *

Required if the owner is an organisation

Owner contact number *

Owner mobile number

Owner's street address *

Owner mailing address *

Proof of Ownership

The [Building \(Forms\) Regulations 2004](#) requires evidence of ownership to be provided, proof of ownership less than 3 months old ensures the ownership is current.

Proof of ownership *

☒ Record of Title (RT) ☐ Other

Click [here](#) to request a RT from from Land Information New Zealand.

Request a Record of Title (RT) from the Building Consent Authority (BCA) or Council *

☐ Yes ☒ No

Check with the Building Consent Authority (BCA) before requesting a RT directly from them.

Who Is The Applicant

Is the application being made on behalf of the owner *

☒ Yes☐ No

Agent Contact Information

Please note that the nominated first point of contact must be in New Zealand.

Who should the invoice be sent to? *

☒ Owner☐ Agent☐ Other

Who is the first point of contact for further correspondence *

☐ Owner☒ Agent☐ Other

Who should invoices be made out to? *

Prae Joo

Agent name *

Chris Pyemont

Agent title

Mr

If the agent is an organisation, capture the organisation's name

Agent's contact person

Agent's relationship to owner *

Architect

Required if the agent is an organisation

Agent email address *

chris@cparchitects.nz

Agent contact number *

02102784729

Agent mobile number

Agent's street address *

3 Wensley Road, Richmond

Agent mailing address *

3 Wensley Road, Richmond

Please supply names, registration and contact details of the designer, architect, structural engineer and other key individuals involved in your project (such as carpenter, plumber, gasfitter).

For commercial applications, the details of the fire safety designer who produced the 'fire report' must be provided.

Select who's involved *☒ Licensed Building Practitioner☐ Other

Are non licenced building practitioners involved in the project? Select Other and provide their details.

Licensed Building Practitioner/s (LBP)**Name ***

Chris Pyemont

Company

Chris Pyemont

Email address *

chris@cparchitects.nz

Contact number *

02102784729

Street address

3 Wensley Road, Richmond

Mailing address**Licensed Building Practitioner ***

Designer

Other**License class ***

Brick and Block Laying ▲

Carpentry

Design 1

Design 2

Design 3

External Plastering

Foundations

Roofing

Site 1

Site 2 ▼

Select one or more licence classes in the list

LBP registration number *

4337

What Are The Specifics Of The Site

What is the wind zone *

☐ Low ☒ Medium ☐ High ☐ Very High ☐ Extra High ☐ Specific Design

What is the exposure zone *

☐ Low(B) ☒ Medium(C) ☐ High/Sea spray(D)

Does the proposed building work cover two or more allotments *

☐ Yes ☒ No

Are there public drains on the site *

☐ Yes ☒ No

Is the site subject to natural or created hazards such as erosion, subsidence, flooding, slips, cut and fill or contamination *

☐ Yes ☒ No

Are there any alterations to land contours (e.g. earthworks) *

☐ Yes ☒ No

Are there new or altered connections to public utilities *

☒ Yes ☐ No

Are there new or altered locations and/or external dimensions of buildings *

☐ Yes ☒ No

Is there new or altered access for vehicles *

☐ Yes ☒ No

Is the building work over or adjacent to any road or public place *

☐ Yes ☒ No

Does the building work involve the disposal of storm-water or wastewater *

☒ Yes ☐ No

Is the building work over any existing drains or sewers or in close proximity to wells or water mains *

☐ Yes ☒ No

Are there any other matters known to the applicant that may require authorisation from the territorial authority *

☐ Yes ☒ No

What Are The Details Of The Building Work

Provide a full description of the building work *

Form bathroom in existing garage

Estimated value of the building work (including GST) *

\$ 35000

What is the intended life of the building?

☒ 50+ years

☐ Limited Life

Proposed Use

You must select at least one of the following seven proposed use 'types'. Where you select Housing, Communal residential or Communal non-residential, you must also specify a proposed use 'sub type'

☒ **Housing**

Housing selections *

☒ Detached dwellings

☐ Multi-unit dwelling

☐ Group dwelling

☐ **Outbuildings**

☐ **Ancillary**

Will the building work affect an existing building and/or parts of an existing building *

☒ Yes

☐ No

Year first constructed *

1956

Current lawful established use *

Dwelling garage

Will the building work result in a change of use of the building *

☐ Yes

☒ No

If you are unsure how to determine if a change of use will occur, please refer to the guidance provided by the Ministry of Business, Innovation and Employment: [Change of use and alterations](#)

If applicable, list building consents previously issued for this project

Consent number	Additional information
----------------	------------------------

No items to display

When listing the building consents add information such as the stages of the building work, or a short description of the work undertaken into the additional information.

Total number of floor levels *

1

Levels below ground (if applicable)

Total floor area (all levels) *

166

m2

Proposed new total floor area (all levels) *

166

m2

Is the building used for anything other than a single household unit? *

☐ Yes

☒ No

If this consent includes any residential units. How many new residential units will be created? *

0

Does the project include Restricted Building Work *

☒ Yes

☐ No

Are you applying for Owner/Builder exemption to complete the Restricted Building Work *

☐ Yes

☒ No

CERTIFICATE OF DESIGN WORK

Your building consent application needs to include a Certificate of Design Work.

These forms can be completed online by:

- Complete and submit this application
- Navigate to the forms section in the submitted consent application
- Select "New Submission"
- Complete all additional submissions.

Have you discussed this project with the Building Consent Authority prior to applying?

☒ Yes

☐ No

Meeting reference number

Provide relevant information discussed with the BCA prior to applying

Formation of bathroom onto an existing un-reinforced slab ok under section 112.

Does the building work involve a swimming pool?

☐ Yes

☒ No

Does the building work involve any Recladding?

☐ Yes

☒ No

What Clauses Of The Building Code Does Your Work Comply With

NOTE:

- Unless otherwise noted below, your application will be assessed under Acceptable Solutions.
- You are required to indicate what code clause(s) your building work complies with.
- If you are using another means of compliance, please provide details of the standard(s) that your building work complies with and the means of compliance in the space provided.

You can view building related standards on the [Standards New Zealand](#) website.

☒ * I understand that this application is to be assessed against Acceptable Solutions, unless otherwise stated in this section.

☐ B - Stability

☐ C - Protection from fire

☐ D - Access

☒ E - Moisture

- ☐ E1 - SURFACE WATER
- ☒ E2 - EXTERNAL MOISTURE
- ☒ E3 - INTERNAL MOISTURE

Verification Methods	Alternative Solutions	Additional information
<i>Include relevant code clauses and means of compliance</i>	<i>Include relevant code clauses and means of compliance or details of any waiver and modifications (including applicable code clauses)</i>	

☒ F - Safety of users

- ☐ F1 - HAZARDOUS AGENTS ON SITE
- ☒ F2 - HAZARDOUS BUILDING MATERIALS
- ☐ F3 - HAZARDOUS SUBSTANCES AND PROCESSES
- ☐ F4 - SAFETY FROM FALLING
- ☒ F5 - CONSTRUCTION AND DEMOLITION HAZARDS
- ☐ F6 - VISIBILITY IN ESCAPE ROUTES
- ☐ F7 - WARNING SYSTEMS
- ☐ F8 - SIGNS
- ☐ F9 - RESTRICTING ACCESS TO RESIDENTIAL POOLS

Verification Methods	Alternative Solutions	Additional information
<i>Include relevant code clauses and means of compliance</i>	<i>Include relevant code clauses and means of compliance or details of any waiver and modifications (including applicable code clauses)</i>	

☒ G - Services and facilities

- ☒ G1 - PERSONAL HYGIENE
- ☐ G2 - LAUNDERING
- ☐ G3 - FOOD PREPARATION AND PREVENTION OF CONTAMINATION
- ☒ G4 - VENTILATION
- ☐ G5 - INTERIOR ENVIRONMENT
- ☐ G6 - AIRBORNE AND IMPACT SOUND
- ☐ G7 - NATURAL LIGHT
- ☐ G8 - ARTIFICIAL LIGHT
- ☐ G9 - ELECTRICITY
- ☐ G10 - PIPED SERVICES
- ☐ G11 - GAS AS AN ENERGY SOURCE
- ☒ G12 - WATER SUPPLIES
- ☐ G13 - FOUL WATER
- ☐ G14 - INDUSTRIAL LIQUID WASTE
- ☒ G15 - SOLID WASTE

Verification Methods

Include relevant code clauses and means of compliance

Alternative Solutions

Include relevant code clauses and means of compliance or details of any waiver and modifications (including applicable code clauses)

Additional information

☐ H - Energy efficiency☐ Specific Buildings

What Specified Systems Are In The Building?

Does your building work involve or affect any Specified Systems (SS)? *

☐ Yes☒ No

Document Upload Process

Only one document can be uploaded against each document category. You need to merge all documents into a single PDF per category (e.g. all architectural plans must be merged into a single document).

Several free online PDF merger tools are available on the [internet](#) one such tool is [Smallpdf](#). With Smallpdf, you can merge documents into a single file.

For a full list of the document categories and what should be included in each category click [here](#).

Click [here](#) for help and frequently asked questions.

Document Categories for Residential Applications

The following document categories are associated with a residential application:

- **Architectural Plans**
- **Architectural Specifications**

If you have selected structural requirement/s for the application, the following document categories will also be available.

- **Structural Plans**
- **Structural Specifications**

Do you have structural engineering documents? *

☐ Yes

☒ No

☒ * I have the documentation ready and combined into the appropriate categories

Do you have any other documents not related to the above categories? *

☒ Yes

☐ No

Privacy Information

The information you have provided on this form is required so that your application can be processed under the Building Act 2004. The Council, Territorial Authority (TA) or Building Consent Authority (BCA) collates statistics relating to building work and has a statutory obligation to provide information to third parties. The information is stored on a public register, which must be supplied to whoever requests the information. Under the Privacy Act 2020, you have the right to see, and correct personal information Councils, TAs and BCAs holds about you.

You can view the Simpli [Privacy Statement here](#)

In providing this information, you agree to your details being used for customer surveys carried out by the Council, BCA or TA.

Terms of Use

By making this submission you agree to the Simpli portal [terms and conditions](#).

Your application fees

The Council, BCA or TA may charge fees for your application. These will include statutory levies to BRANZ and the Ministry of Business, Innovation & Employment.

A fee schedule can be found on the BCA's website, refer to the link in the details panel on the right. Your fees will be advised when the BCA accepts your submission.

You must not commence the building work until the consent has been issued and uplifted.

☒ *** I acknowledge and agree with the above statements.**

Name *

Date *

Chris Pyemont

01/07/2024

Submitter Declaration

Submitter Name

Chris Pyemont

Date

11/07/2024

I understand that by ticking the following boxes, I am agreeing to the following statements:

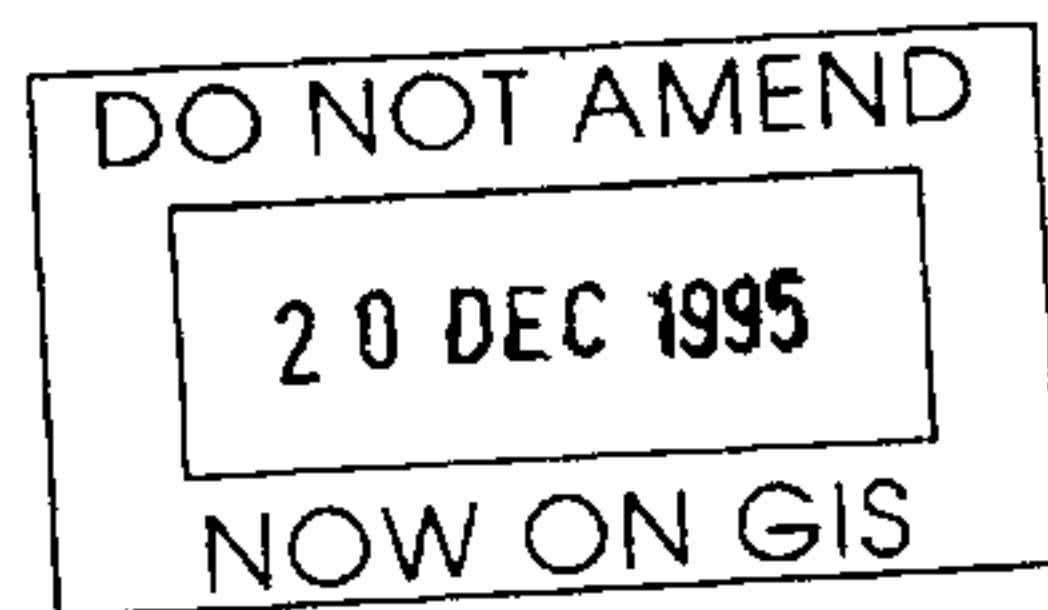
- ☒ *** As the agent I confirm that I am submitting this application on behalf of and with the authority of the owner and confirm that all the information within the application is, to the best of my knowledge, true and correct.**
- ☒ *** I request that you issue a building consent for the building work described in this application.**

Lot 5 D.P. 5037

Palm Ave. Street No. 8

STILES-

Owner	Insp. Date	Description of Work	Inspector
Mr. R. Way	14-12-60		

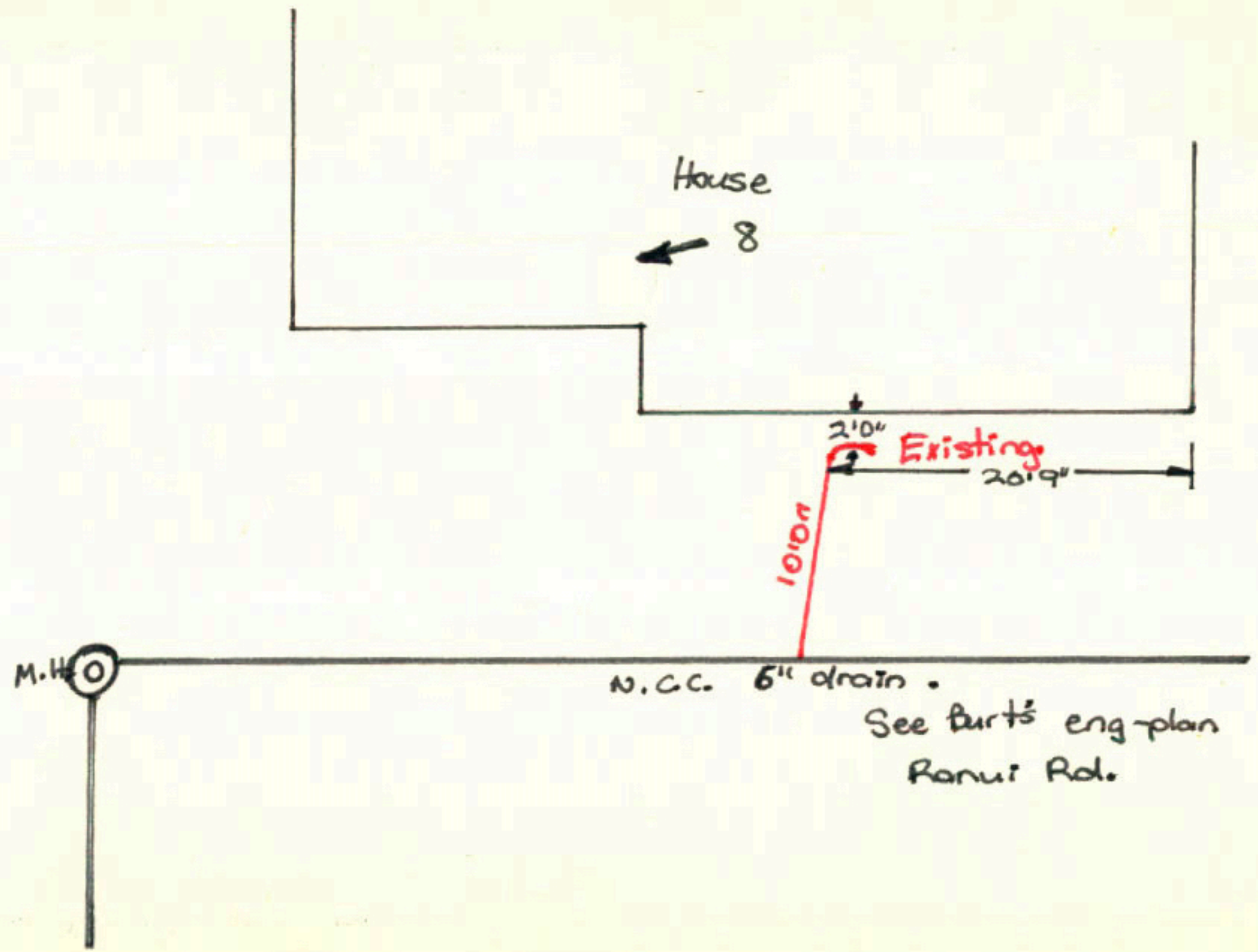


Drainlayer C. Roper

Drainage Card, City Engineers Department, Nelson

Palm Avenue.

Ranui Road.



See Burt's eng-plan
Ranui Rd.

PPR 121149

Permit No. C125612

Palm
 STREET ROAD *8* HOUSE No.
 LOT *5* D.P. *5037*
 FRONTAGE

Date Approved *21-10-15*
 Date Issued *8-11-75*

OWNER

BUILDER

WORK

Mr Suddon
20 Ave

Max Suddon
Well St

Evelyn

Subject to

Designation of Household Unit

Maximum Number of Occupants

Area..... *14x40* Value..... *\$576*

Foundation..... *As Bld* Walls..... *gab* Roof..... *gab*

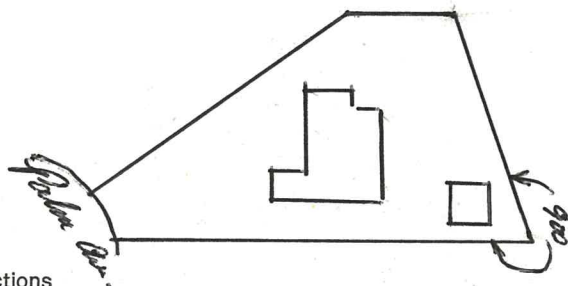
Remarks

Exterior Lining

Interior Lining

Completed

Site Plan



Inspections

Date

Instructions to Builder

Completed

Excavation

Foundations

Framework

Date of Final Inspection..... *8-11-85*

Mark

Inspector

Enterprise

PROCESSED

Nelson City Council

PERMIT No. **G.125612**

BUILDING APPLICATION FORM

Date 20th Oct 75

To the City Engineer,
NELSON,

Sir,
I hereby apply for permission to

erect
alter
convert
reinstate
demolish

Garage

for Mr. Sneddon
(Owner)

of 8 Palm Ave
(Owner's Address)

according to locality plans, detailed plans, elevations, cross sections and specifications of building deposited herewith, IN DUPLICATE.

PARTICULARS OF LAND:—

Valuation Roll No. _____
Lot 5 D.P. 5037 Section _____ Blk. _____
Street No. 8, Palm Avenue Street.
(If allotted)
Frontage 10200, Area 607 m²

PARTICULARS OF BUILDING:—

Foundations concrete Walls galv metal Roof galv metal
Area of Ground Floor _____ square feet.
Total Area of Existing Outbuildings _____ square feet.
Total Area of Proposed Outbuildings 14-4 square feet. metres

CONCERNING THIS APPLICATION:

Dispensations, Conditional Use, or Specified Departures granted, or preliminary check prior to this application.

APPROVAL DATE: _____

NAME OF APPLICANT: _____

ESTIMATED COST:—

Building \$ 576-00
Plumbing and Drainage \$ _____
Total \$ 576-00

Use of Building: e.g. Flats—Rental or Ownership
Commercial or Industrial—Specify exact uses _____

Builder MAX BENNETT,

Postal Address HILL ST, SOUTH,

RICHMOND.

Telephone No. 8858 Signature of Builder M K Bennett

For Office Use Only

Builder's Plan & Specifications _____

Subdivision Plan _____

Block Plan _____

Notified owner of advisability of submitting a proposal to:—

Waimea Elect. P.B. ☐ Labour Dept. ☐

FEES:

Building \$ 3-00
B.R. Levy \$ _____
Plumbing and Drainage \$ _____
Sewer Connection \$ _____
Water Fee \$ _____
Water Connection \$ _____
Crossing \$ _____
Damage Deposit \$ 20-00
Access Deposit \$ _____
Special Deposit \$ _____
Total \$ 23-00

Receipt No. 641794

Date Paid 3/11/75

Nelson City Council — SCALE OF FEES

BUILDING

NELSON CITY COUNCIL FEE (excludes Plumbing and Drainage).

ESTIMATED VALUE OF BUILDING WORK		FEE
		\$ c.
Not Exceeding \$20		.50
Over	\$20 and not exceeding \$200	1
"	\$200 " " \$400	2
"	\$400 " " \$600	3
"	\$600 " " \$800	4
"	\$800 " " \$1000	5
"	\$1000 " " \$1200	6
"	\$1200 " " \$1400	7
"	\$1400 " " \$1600	8
"	\$1600 " " \$1800	9
"	\$1800 " " \$2000	10
"	\$2000 " " \$2500	12
"	\$2500 " " \$3000	14
"	\$3000 " " \$3500	16
"	\$3500 " " \$4000	18
"	\$4000 " " \$5000	21
"	\$5000 " " \$6000	24
"	\$6000 " " \$7000	27
"	\$7000 " " \$8000	30
"	\$8000 " " \$9000	33
"	\$9000 " " \$10000	36
"	\$10000 " " \$12000	40
"	\$12000 " " \$14000	44
"	\$14000 " " \$16000	48
"	\$16000 " " \$18000	52
"	\$18000 " " \$20000	56
"	\$20000 " " \$25000	64
"	\$25000 " " \$30000	72
"	\$30000 " " \$35000	80
"	\$35000 " " \$40000	88
"	\$40000 " " \$50000	98
"	\$50000 " " \$60000	108
"	\$60000 " " \$70000	118
"	\$70000 " " \$80000	128
"	\$80000 " " \$90000	138
"	\$90000 " " \$100000	148
"	\$100000 " " \$120000	158
"	\$120000 " " \$140000	168
"	\$140000 " " \$160000	178
"	\$160000 " " \$180000	188
"	\$180000 " " \$200000	198
"	\$200000 " " \$240000	210
"	\$240000 " " \$280000	220

For every \$40000 or part thereof in excess of \$280000 an additional fee of \$10

Note: FEES PAYABLE ONLY AFTER APPROVAL OF APPLICATION

PLUMBING AND DRAINAGE

		FEE
		\$ c.
Not Exceeding \$10		.10
Over	\$10 and not exceeding \$20	.25
"	\$20 " " \$50	.50
"	\$50 " " \$100	1
"	\$100 " " \$200	2
"	\$200 " " \$300	3
"	\$300 " " \$400	4
"	\$400 " " \$600	5
"	\$600 " " \$800	6
"	\$800 " " \$1000	7
"	\$1000 " " \$1200	8
"	\$1200 " " \$1400	9
"	\$1400 " " \$1600	10
"	\$1600 " " \$1800	11
"	\$1800 " " \$2000	12

For every \$200 or part thereof in excess of \$2000 an additional fee of \$1

NOTE: If new connection to sewer is required an additional fee of \$2 is chargeable.

BUILDING RESEARCH ASSOCIATION LEVY

LEVY ON TOTAL VALUE (including Plumbing and Drainage)
Including and exceeding \$3,000 — 50c per \$1000
plus 50c per part \$1000

FEES PAYABLE FOR SPECIAL DUTIES

NATURE OF DUTY	FEE
	\$ c.
For inspection required in the case of proposed structural alterations before drawings and other documents are submitted for approval	2.00
For inspecting old timber before reusing the same in a new building	2.00
For any inspection that may be deemed necessary in connection with any building or work in respect of which no fee has otherwise been paid	1.00

APPLICANTS ARE REMINDED :

DAMAGE DEPOSITS will be:—

Work under \$200 No Deposit
Demolitions, New Dwellings, Flats, \$40.00
Etc. As Assessed
Commercial and Industrial Work \$20.00
Domestic Alterations, Accessory Buildings, Swimming Pools, Etc.
Permits are also required for occupation of foot-paths for building or other operations and for permanent excavation where the slope of the ground is more than 16° (i.e. 1 in 3.5). Application should be made on the appropriate forms (available at the City Engineer's Department).

DEMOLITIONS:

No person shall demolish or remove any building or any substantial part of a building unless written notification has been given. Building Application Form should be used for this.

GAS AND WATER SERVICES

WATER SERVICES:

½" Domestic Service	\$35
¾" Domestic Service	\$50
1" Domestic Service	Chargeable

Services over 1" and metered Services will be installed at cost with a minimum charge not less than above.

GAS SERVICE:

From gas main to boundary is free.
A base charge of \$20.00 per Dwelling.
(For further details see Application Form.)

CROSSINGS

(Minimum Width 12 ft.)

Residential Crossings:

In existing concrete kerb and channel, or in concrete kerb	\$1 per Foot
In sealed kerb or wooden kerb	\$4 per Crossing

Industrial and Commercial Crossings:

Work done by applicant to Council Specifications	No Charge
Work done by Council	At Cost

PRELIM. CHECK NO ☐ NELSON CITY COUNCIL

Dates: Rec'd; 20.10.75 Notific. by; 28.10.75

2nd copy plans detached ☐

BUILDING INSPECTION SHEET

Locality 8 PALM AVENUE,

Lot 5 D.P. 5037.

Application for; TO ERRECT A GARAGE.

Owner; SNEDDON. MR.

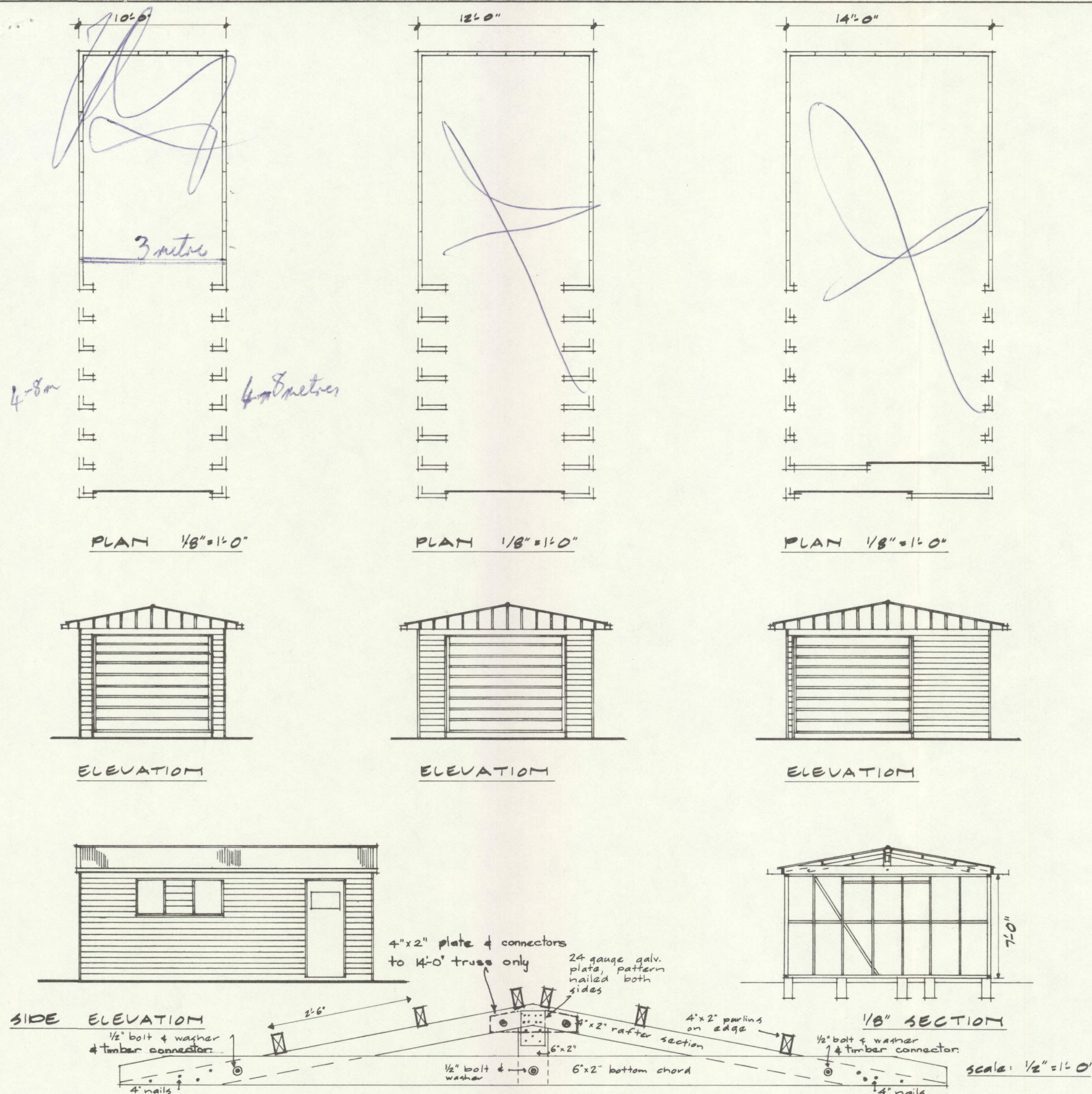
Builder; MAY BENNETT.

NON/COMPLIANCE		APPROVED	
DATE	DATE	INITIALS.	
FORM & DATA.		1	
21/10		RTH	
ELECTRICITY DEPT.		2	
LEGAL.		3	
21/10		R	
TOWN PLANNING.		4	
21/10		R	
BYLAWS (General)		5	
21/10		R	
HEALTH, PLUMBING and DRAINAGE.		6	
21/10		MB	
FIRE REQUIREMENTS		7	
21/10		MB	
EGRESS		8	
21/10		MB	
CHIEF FIRE OFFICER		9	
N/A			
BUILDING BYLAWS		10	
21/10/75		MB	
		11	
		12	
		Amendments Required	
		Tel;	
		Letter;	
		Date;	
		Initials	
		PERMIT MAY BE ISSUED.	
		J. Bell Lea	
		21-10-75	

tumbley

N.C.C plan No.

issued



Truss as used for 14'-0" span placed directly over stud at 8'-0" & 6'-0" crs. to suit length of building
 Truss as used for 12'-0" span scaled down from above with same size members
 Truss as used for 10'-0" span scaled down from above with same size members except 4"x2" bottom chord

SPECIFICATIONS:

Foundations: 8"x6" concrete piles at 4'-0" and 2'-0" centres under studs or continuous concrete dwarf walls or complete floors.

Dampcourse: 2 ply d.p.c. under all plates

Framing: All timber is borix treated machine gauged radiata
 All framing is housed i.e. studs checked into plates & noggs checked into studs

Studs at 2'-0" centres } Building up to 200 sq. ft. - 3"x2"
 Top and bottom plates and noggs } Building over 200 sq. ft. - 4"x2"

Wall braces: 3"x2" cat in on edge

Door beams: minimum 6"x2" with minimum of 1/2" check in at each end

Roof trusses & purlins as per detail drawing placed over studs at 6'-0" & 8'-0" crs. to suit

Dragon ties: 2"x2" at 45° over top plates to each corner

Roofing: 26 g. galv. corr. iron single sheets

Ridging: 26 g. galv. lead edged

Walls: 26 g. galv. metal weatherboards

Spouting: 24g. galv. iron gutters fixed ea side.

Downpipes: 3"x2" galv. iron

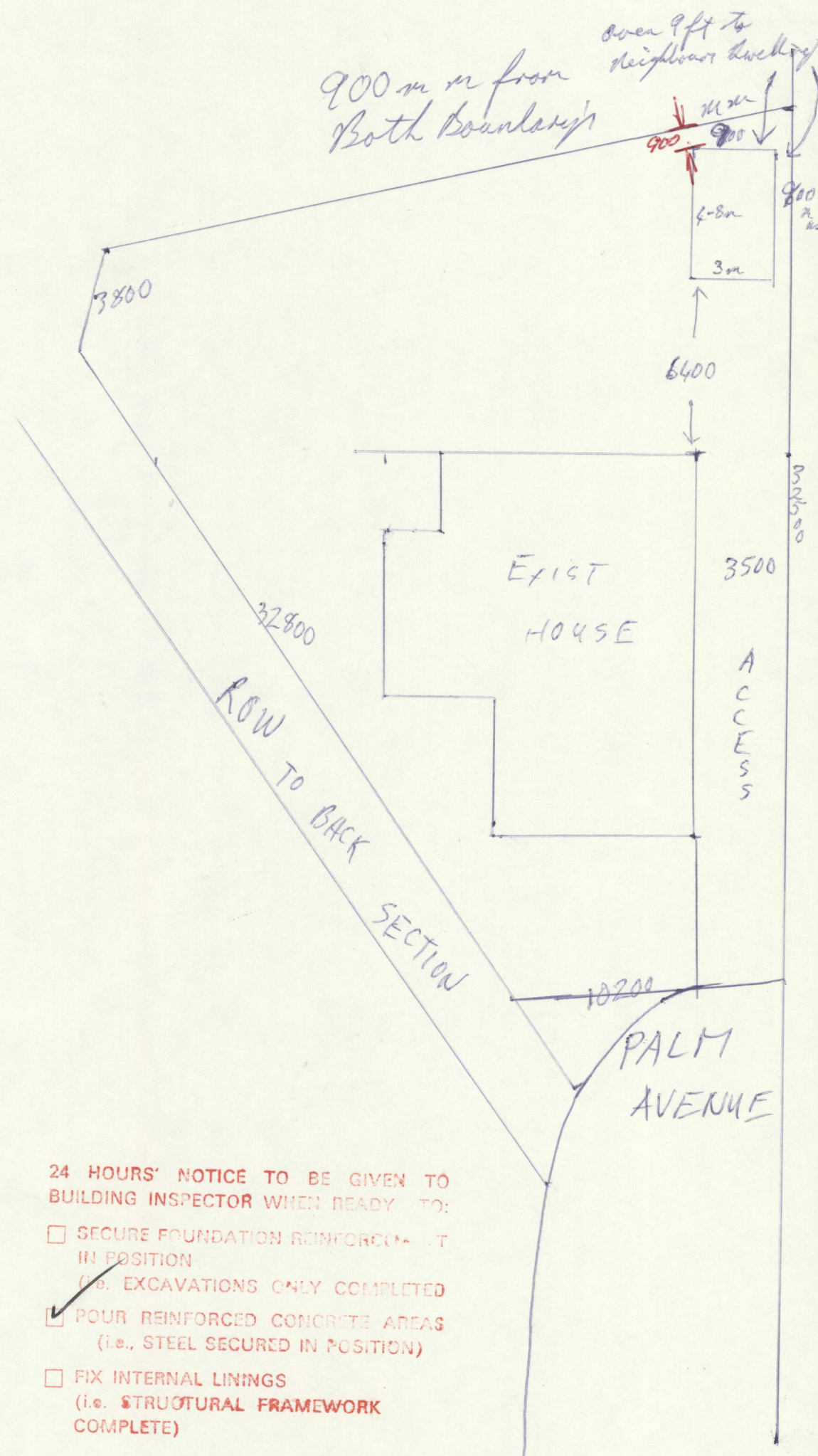
Doors:

24g. & 26g. galv. metal doors on overhead gear or galv. roller doors

CARAGE, SHED at 8 PALM AVE for MR SNEDDON

SKYLINE GARAGES

manufactured by Skyline Buildings Ltd.,
 64 A Wall's Rd., Penrose, Auckland. Ph. 598.821



24 HOURS' NOTICE TO BE GIVEN TO BUILDING INSPECTOR WHEN READY TO:

- ☐ SECURE FOUNDATION REINFORCEMENT IN POSITION
- ☒ EXCAVATIONS ONLY COMPLETED
- ☒ POUR REINFORCED CONCRETE AREAS (i.e. STEEL SECURED IN POSITION)
- ☐ FIX INTERNAL LININGS (i.e. STRUCTURAL FRAMEWORK COMPLETE)

site plan 1-200
 1/8" = 1'-0"



Nelson City Council

P.O. BOX 645, NELSON. PHONE: 81-059.

PPR 121149

PROCESSED

PERMIT NO:

8098132

Date Issued

10-5-84
3-5-84

APPLICATION FOR BUILDING PERMIT TO INSTALL SPACE HEATER

APPLICATION TO INSTALL:

KENT LOC FIRE SPD

FOR:

M.J. BUTCHER

(Owner) of

8. PALM AVE STOKK

(Owner's)

(Address)

PARTICULARS OF LAND: Valuation Roll No. —

Lot No. 1

DP 9002

Address

8. PALM AVE STOKK

Note: Applicant to be aware that if a wetback is involved a separate Plumbing Permit is to be obtained and the work carried out by a Registered Plumber.

Estimated value of work including labour and materials:

\$

\$

Total

\$

990.00

Applicant's Name (Builder or Owner)*
(Strike out whichever does not apply)

M.J. BUTCHER

Postal Address

8. PALM AVE STOKK

Phone.

77638

Signature of Applicant

M.J. Butcher

MANUFACTURERS INSTALLATION INSTRUCTION SHEETS ARE TO BE SUBMITTED WITH ALL APPLICATIONS FOR SPACE HEATER AND POT BELLY PERMITS.

PERMIT FEE \$12.00

FOR OFFICE USE ONLY

DEPARTMENT	DATE	NOT APPROVED	DATE	APPROVED
PLUMBING & DRAINAGE			4.5.84	TS
BUILDING			4-5-84	ML

Permit may be issued

G. Beckley
4-5-84

Receipt No.

9027

INV 6506

4/5/84

0370.5410. \$ 12.00

Date Paid

7-5-84

DATE: 21-Aug-12 CONDITION No: C1402

STREET ADDRESS: All properties contained in Airshed B2 (consult Fig A2.2B in Air Plan)

DIAGRAM: No

LEGAL DESCRIPTION: Various

PROPERTY OWNER
or SUBDIVIDER: Various

SCHEME PLAN No: NA

NCC PLAN No: Air Quality Plan

AUTHORITY: Principal Adviser, City Development (see David Jackson or Richard Frizzell)

REASON FOR CONDITION:

(Abbreviated) This property may contain a domestic spaceheater or open fire that falls under the rules set out in the Council's Air Quality Plan. Under rule AQR.24.1, within the Urban Area the use of open fires must cease on or before 1 January 2008 (except that any 'Jetmaster' type open fire (including Warmington brands) may continue until 1 January 2013). Discharge to air from open fires is prohibited after that date. In addition, within Airshed B2 (as defined in the air plan) the use of existing enclosed burners installed before 1991 was phased out by 1 Jan 2010 and burners installed between 1991-95 by 1 Jan 2012. This is necessary to meet the targets imposed by the National Environmental Standards for air quality.

CONDITION:

The Air Quality Plan states that within this airshed (Airshed B2 – consult Fig A2.2 in Air Plan) no discharge from domestic-type fires may occur after the cessation date below.

Type of heating appliance	Cessation Date May no longer be used from:
Open fires (‘Jetmaster’ type Open Fires)	1/01/2008 (1/01/2013)
Burners installed before 1991	1/01/2010
Burners installed between 1991 and 1995	1/01/2012

Council approved wood burners may only be installed in place of an existing 'lawfully installed' burner (rule AQR.25). (continues next page)

If you live in Airshed B2 (Stoke) and are either building a new home or do not have an existing enclosed wood burner, you can apply for a building consent to install an ultra-low emission wood burner (ULEB) (rule Aqr.26A)

NOTE: In buildings that currently do not have a solid fuel burner, a limit of 999 ULEBs applies in Airshed B2.

For further information on other approved burner options refer to the NCC website:
<http://www.nelson.govt.nz/environment/air-quality/approved-burners/>

Note: rule AQR.25A contains special transitional provisions for houses in former Rural Areas which have become part of the Urban Area since the Air Quality Plan was notified in August 2003.

Amended: 1 October 2018

Date Entered: 21-Aug-12

General Property Information: 1964028100

Property

Valuation No	1964028100
Location	8 Palm Avenue, Nelson
Legal Description	LOT 1 DP 9002
Area (Hectares)	0.0607

Rates

Government Valuation

Land	325,000
Improvements	275,000
Capital Value	600,000

Current Rates Year 2026 to 2027

Planning/Resource Management

No information located

Building

26/07/24	BUILDING CONSENT 240378 : Construct Bathroom in Existing Garage : Work started 24/04/26
31/08/01	BUILDING CONSENT 010841 : Install a spaceheater : Code Compliance Certificate issued 12/02/02
4/05/84	BUILDING PERMIT B098132 INSTALL WOODBURNER : APPROVED KENT LOGFIRE
3/12/81	BUILDING PERMIT K081777 ERECT GARAGE : APPROVED F/INSPECT - 04/05/83
21/10/75	BUILDING PERMIT G125612 ERECT GARAGE : APPROVED F/INSPECT - 08/11/75
5/06/56	BUILDING PERMIT 2919 ERECT DWELLING : APPROVED
	PIM APPLICATION 240378T : Construct Bathroom in Existing Garage : Territorial Planning Check Completed 24/07/24

Licences

No information located

Sewer and Drainage

No information located

Land and Building Classifications

No information located

Transport

No information located

Special Land Features

No information located

Swimming Pools

No information located

Natural Hazards

No information located

Other

2/11/19 SERVICE REQUEST 1947911 : Noise - Stereo/Party/Bands

11/03/14 LIM APPLICATION L140125L140125 : LAND INFORMATION MEMORANDUM

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PPR 121149

PALM AVE.

STREET
ROAD

8

HOUSE
No.

Permit No. K081777

LOT 1 D.P. 9002

Date Approved 1-12-81

FRONTAGE

Date Issued 25-1-82

OWNER

BUILDER

WORK

G. THOMSON.

C. ROSS

GARAGE

Subject to

Designation of
Household Unit

Maximum Number
of Occupants

Area 45.36 Value 3,500

Foundation CONC Walls Block Roof IRON

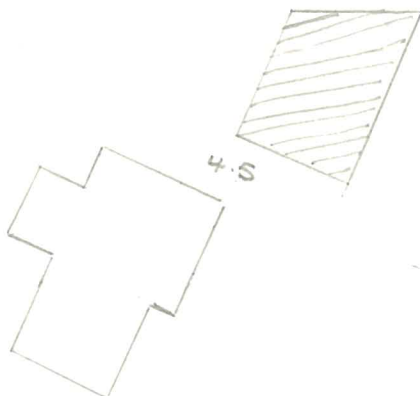
Remarks

Exterior Lining

Interior Lining

Completed

Site Plan



Inspections

Date	Instructions to Builder
11-10-82	Setline on Fair course blocks laid steel qtr.
4-5-83	Completed

Excavation

Foundations

Framework

Date of Final Inspection 4-5-83

Inspector

PROCESSED



Nelson City Council

P.O. BOX 645, NELSON. PHONE: 81-059.

BUILDING APPLICATION FORM

Permit No:

K081777

Date:

APPLICATION TO: Erect Install GARAGE
Alter Reinstate
Convert Demolish

FOR G. THOMSON (Owner) of 8 PALM AVENUE, STOKE (Owner's Address)

according to the plans and specifications deposited herewith, IN DUPLICATE (see over for drawing requirements).

PARTICULARS OF LAND: Valuation Roll No.

Lot No. 1 ~~15~~ D.P. 9002 ~~5037~~

Address 8 PALM AVENUE, STOKE

Total Area of Lot 607 m²

PARTICULARS OF BUILDING

Concerning this application, Dispensations, conditional use, or Specified Departures granted or Preliminary Check prior to this application.

Approval Date _____

Name of Applicant _____

Use of Building
e.g. Flats - Rental, Ownership, Town House, Commercial or Industrial.
Specify exact uses.

Foundations	<u>CONCRETE</u>
Walls	<u>BLOCK</u>
Roof	<u>IRON</u>
A. Area of ground floor of all existing buildings	<u>115.</u> m ²
B. Area of ground floor this proposal	<u>45.36</u> m ²
C. Total area of ground floor (A. and B.)	<u>160.36</u> m ²
Estimated value of work including labour and materials:	
Building	\$ <u>3000.00</u>
Plumbing & Drainage	\$ <u>500.00</u>
Total	\$ <u>3500.00</u>

Applicant's Name (Builder or Owner)* C. ROSS Strike out whichever does not apply.

Postal Address 120 SONGER ST, STOKE

Telephone No. 77114

Signature of Applicant [Signature]

NOTE: Be sure you supply all the information required and complete the application form fully; this will save you time in the long run.

See reverse side for information on plan and other requirements.

FOR OFFICE USE ONLY

Receipt No. 67710

Building.....	\$ <u>25.00</u>
Building Research Levy ..	\$ <u>4.00</u>
Damage Deposit.....	\$ <u>20.00</u>
Water Connection.....	\$ _____
Other.....	\$ _____
TOTAL	\$ <u>49.00</u>

Date Paid 13. 1. 82

DRAWING STANDARDS FOR BUILDING PERMITS

1. Prints only will be accepted with the application, as errors can creep in if there are two originals.
2. All plans should be clearly and competently drawn to metric scales.
Site plan - 1 : 50, 1 : 100, 1 : 200
Floor plan and elevations, etc. 1 : 100, 1 : 50
Structural details to be drawn clear of floor plan and elevations, and are to be to a larger scale; i.e. 1 : 10/1 : 25
3. Site Plan must show --
 - (a) Section in relation to the street and give a north point.
 - (b) All buildings on the site, their use, dimensions, distance between buildings and distance to boundaries.
 - (c) Sewer and stormwater drains, ground and invert levels, gradients and point of discharge.
 - (d) Location of required off-street parking and gradient and surfacing of access from street formation.
4. Floor plan to be fully detailed and all dimensions given.
5. Elevations to show details of external finishes, size and type of windows.
Height of buildings above ground level to be dimensioned.
Give sufficient levels around boundaries of site and formations of buildings to assess daylight admission.
6. Cross Sections giving full details of foundations and framing.
7. Specifications must be sufficient to provide, in conjunction with the plans, a clear understanding of what is proposed.

BUILDING PERMIT FEES

Estimated value of work excluding plumbing and drainage

Not Exceeding	Fee
\$	\$
1000	12
2000	17
3000	25
4000	35
5000	42
6000	52
7000	55
8000	60
9000	65
10000	70
12000	76
14000	83
16000	90
18000	97
20000	105
25000	120
30000	140
35000	155
40000	170
50000	205
60000	240
70000	265
80000	295
90000	315
100000	345
120000	360
140000	380
160000	400
180000	415
200000	430

For every \$50,000 or part thereof in excess of \$200,000, add \$20.

Space Heaters

A building permit is required for the installation of any appliance with a chimney or flue, and if a wet back is involved a plumbing permit must be obtained, by a registered plumber.

Building Research Association Levy

Levy is on Total Value (including plumbing and drainage)

Less than \$3,000 No fee

\$3000 and above \$1 per \$1000 or part thereof

Permits are also required for occupation of footpaths for buildings. Applications should be made on the appropriate form (available at the City Engineer's Department).

Applicants are reminded the Damage Deposits will be charged on all work over \$1000 in value.

Domestic alterations, accessory buildings, swimming pools, etc. \$20

New dwellings, flats, demolitions, etc. \$40

Commercial and industrial work as assessed.

Demolitions

No person shall demolish or remove any building or any substantial part of a building unless written notification has been given. Building Application Form shall be used for this purpose.

A separate permit is required for plumbing and drainage.

NOTE: FEES PAYABLE ONLY AFTER APPROVAL OF APPLICATION

BUILDING INSPECTION SHEET

DATE REC'D 30/10 NOTIFY BY 10/11

Prelim. Check No.

2nd Copy Plans detached.

Application for: BREXIT GARAGEOwner: G. THOMSONBuilder: C. ROSSLot. 81 D.P. ~~13~~ 9002 LOCALITY. 8 PALM AVENUEApplication form completed ☐Special conditions on specific sites ☐Area of new buildings or additions ☐Street NP allocated ☐Application accompanying: plumbing, drainage, water, crossing ☐Bldg. Reg. Cert. ☐

DEPARTMENT	date	not approved	date	approved
TOWN PLANNING.			30/10	RM
<u>ELECTRICITY DEPT.</u>				
PLUMBING & DRAINAGE	2/11	*	30/11	WS
SERVICES <i>services</i>	13/11/81	X	2/12/81	MLO
HEALTH				
ACCESS & GRADING,				
& FLOOR LEVELS				
STRUCTURAL			3/11	✗
CHIEF FIRE OFFICER				
BUILDING.	2/11	MR	1/12	MR
DANGEROUS GOODS				
WATER.				

Amendments required, notified by _____ Permit may be issued *✗* *date* 3/12/81

Tel: _____ Letter: _____ Initials: _____

see reverse side for comments:

Reminder to applicant:

TOWN PLANNING

Legal

Site check / Street number / Amalg. of titles

Building lines / Street widening lines

Dispensation / Conditional use / Specified departure

Conditions, if any, complied with

Service lanes and R.O.W.

General Check

Zoning and use

Building coverage

Maximum height

Daylight admission

Minimum yard requirements

Front

Rear

Side

Maximum density

Open space. Living courts / Service courts / Communal courts

Separation distance

Method of attachment for flats

Conversion of dwelling houses to use apartment houses

Accessory buildings

Gross floor area Shops / Offices / Industrial buildings

Parking / Loading

Access to site and parking / Turning

Verandahs

Sign compliance

General appearance of building

Remarks:

ELECTRICITY DEPT.

PLUMBING & DRAINAGE (SOIL & SW SEWERS 100mm dia.)

Please note that a 150ø Public Sewer lies in the property and proposed garage will be sited over this sewer. This is permitted but it must be noted that the local Government Act permits local Authority the right of access to the sewer at all times in order to carry out any such work on the sewer as may be required. See Survey Plan

Stormwater drain for garage to be outside line of building. How where existing stormwater drain discharges to.

3
BUILDING

CLARIFY DETAIL AT TOP OF BLOCK WALL

HEALTH

ACCESS & GRADING, & FLOOR LEVELS

STRUCTURAL

CHIEF FIRE OFFICER

SERVICES (Soil and Sw. sewers over 100 dia, and waterways).

Show the public sewer on plan.

DANGEROUS GOODS

WATER



Nelson City Council

P.O. BOX 645, NELSON. PHONE: 81-059.

In reply refer to

ref:

Mr C. Ross
120 Songer Street
STOKE

Dear Sir,

Your application for a building permit
to erect a garage
for Mr G. Thomson
at 8 Palm Avenue, Stoke has been checked.

The proposal does not comply with the require-
ments of the Nelson City Bylaws and District Plan-
ning Code in the following respects:-

Plumbing & Drainage

Please note that a 150 ϕ public sewer lies in the property
and proposed garage will be sited over this sewer. This is
permitted but it must be noted that the Local Government
Act permits local authority the right of access to the sewer
at all times in order to carry out any such work on the
sewer as may be required. (See Survey Plan).

Stormwater drain for garage to be outside line of building.
Show where existing stormwater drain discharges to.

Building

CLARIFY DETAIL AT TOP OF BLOCK WALL.

AMENDED DATE 13/11/81

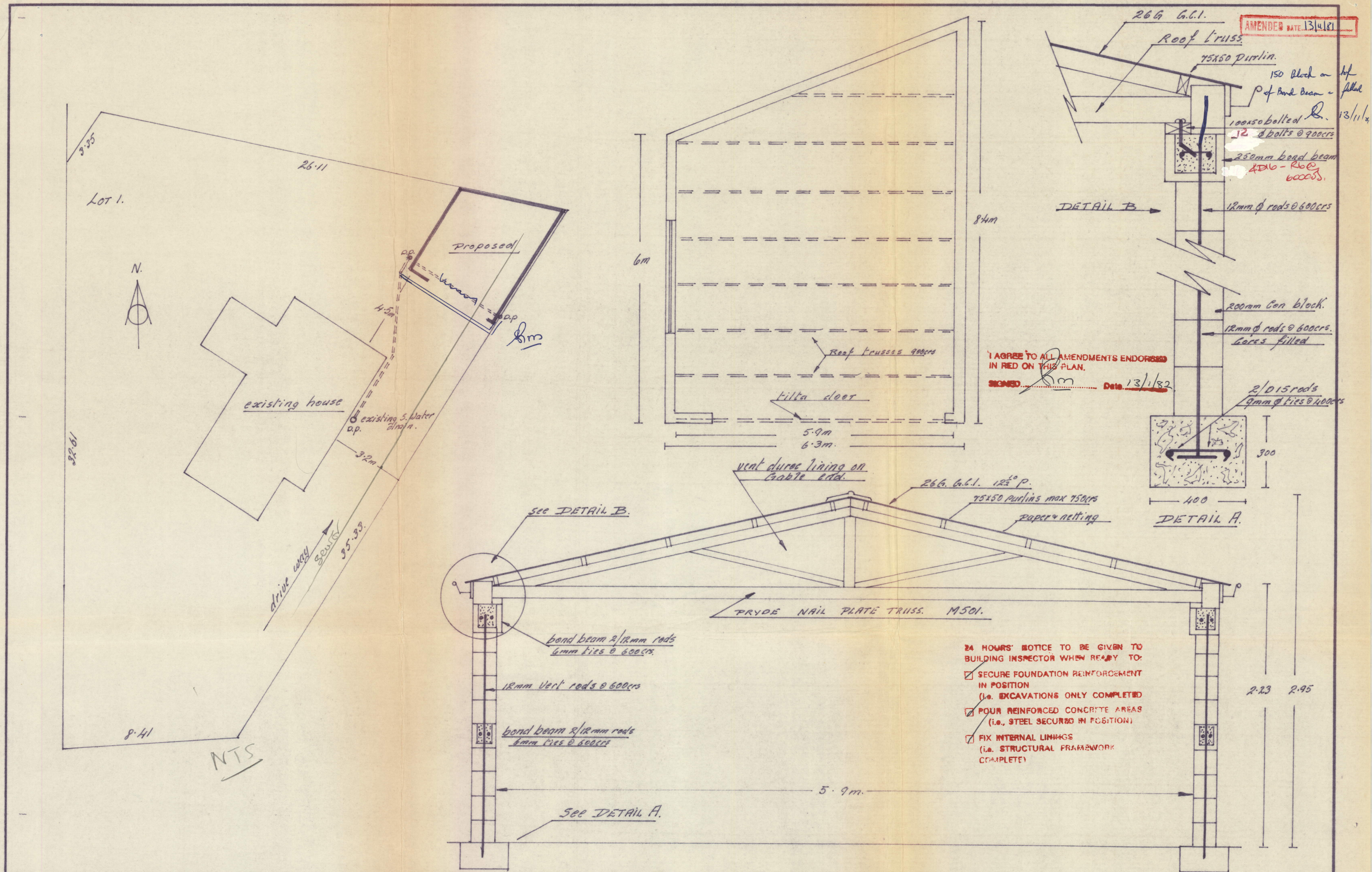
When your plans and specifications have been
amended to conform with the above, approval of your
application will again be considered.

Yours faithfully,
G. A. Toynbee
CITY ENGINEER

per:

P. N. Thornton

(P. N. Thornton)



PROPOSED GARAGE

for MR G. THOMSON, No. 8 PALM AVENUE, STOKE

DRAWN A.H. CHING
TRACED

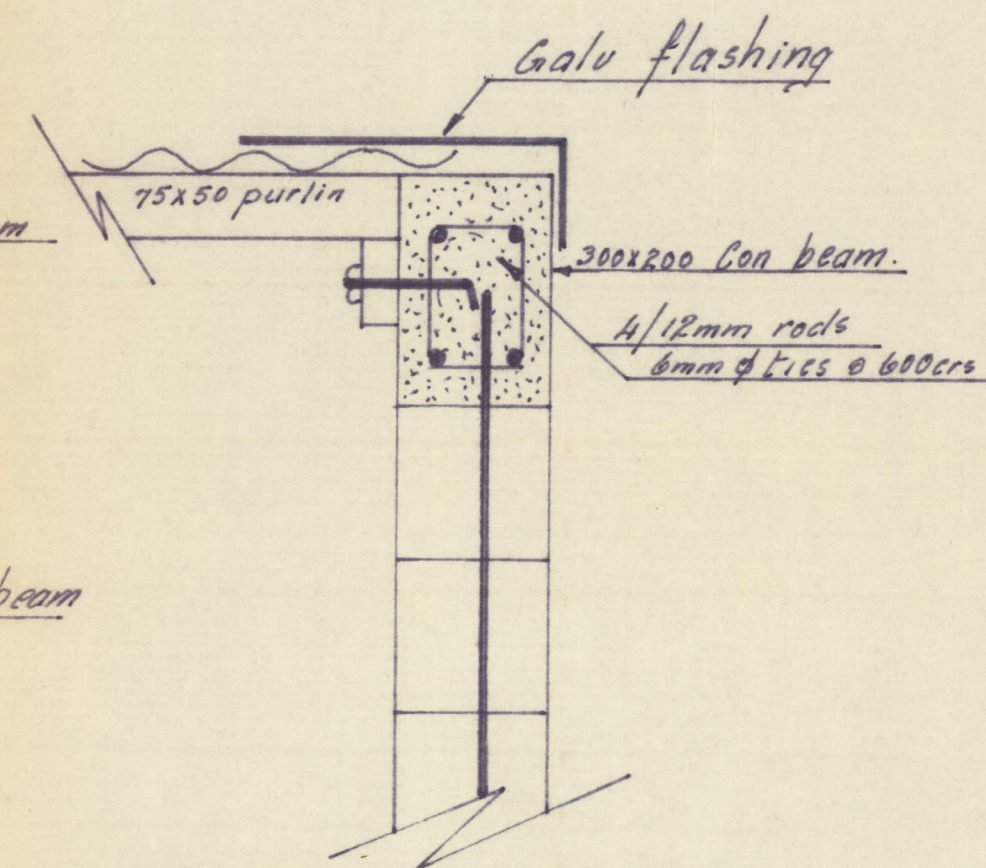
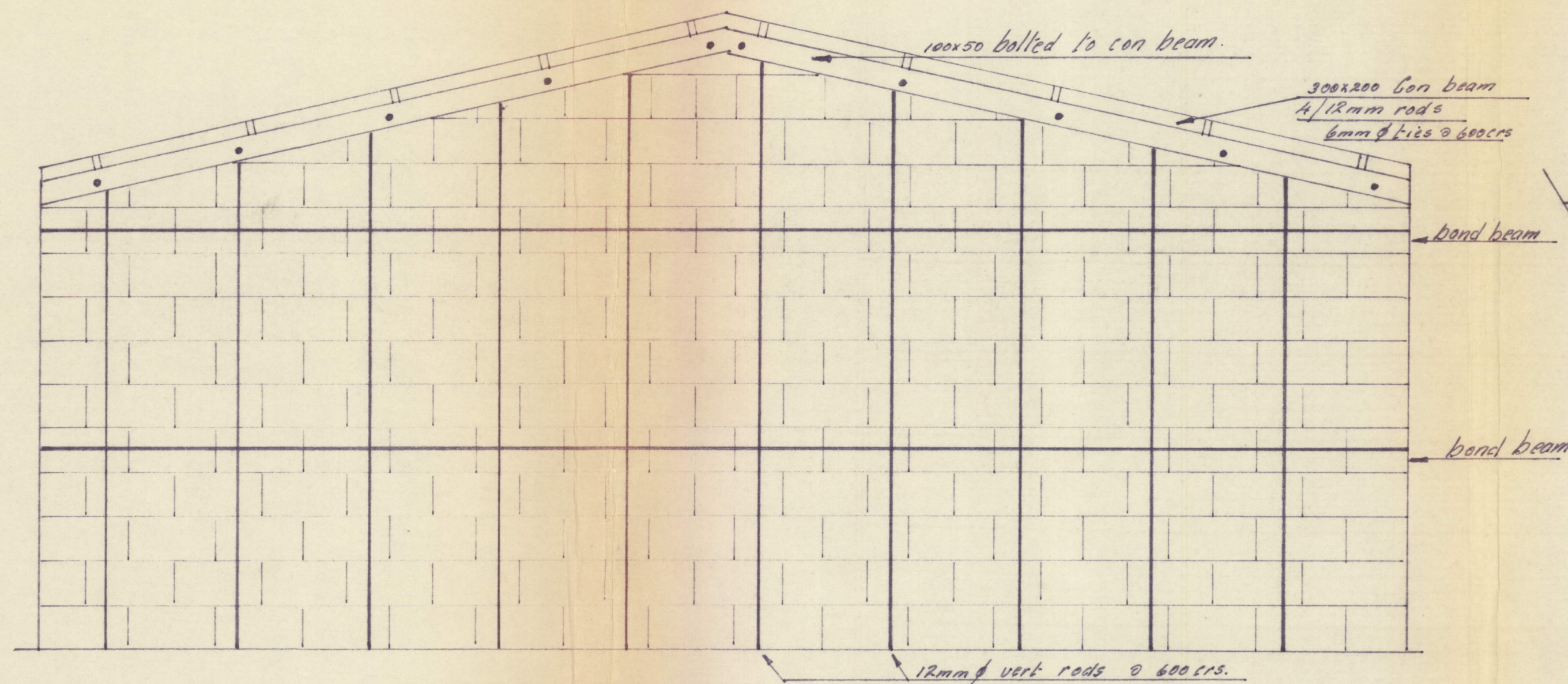
CHECKED
DATE 7-10-81

SCALE 1:50
1:20
1:10

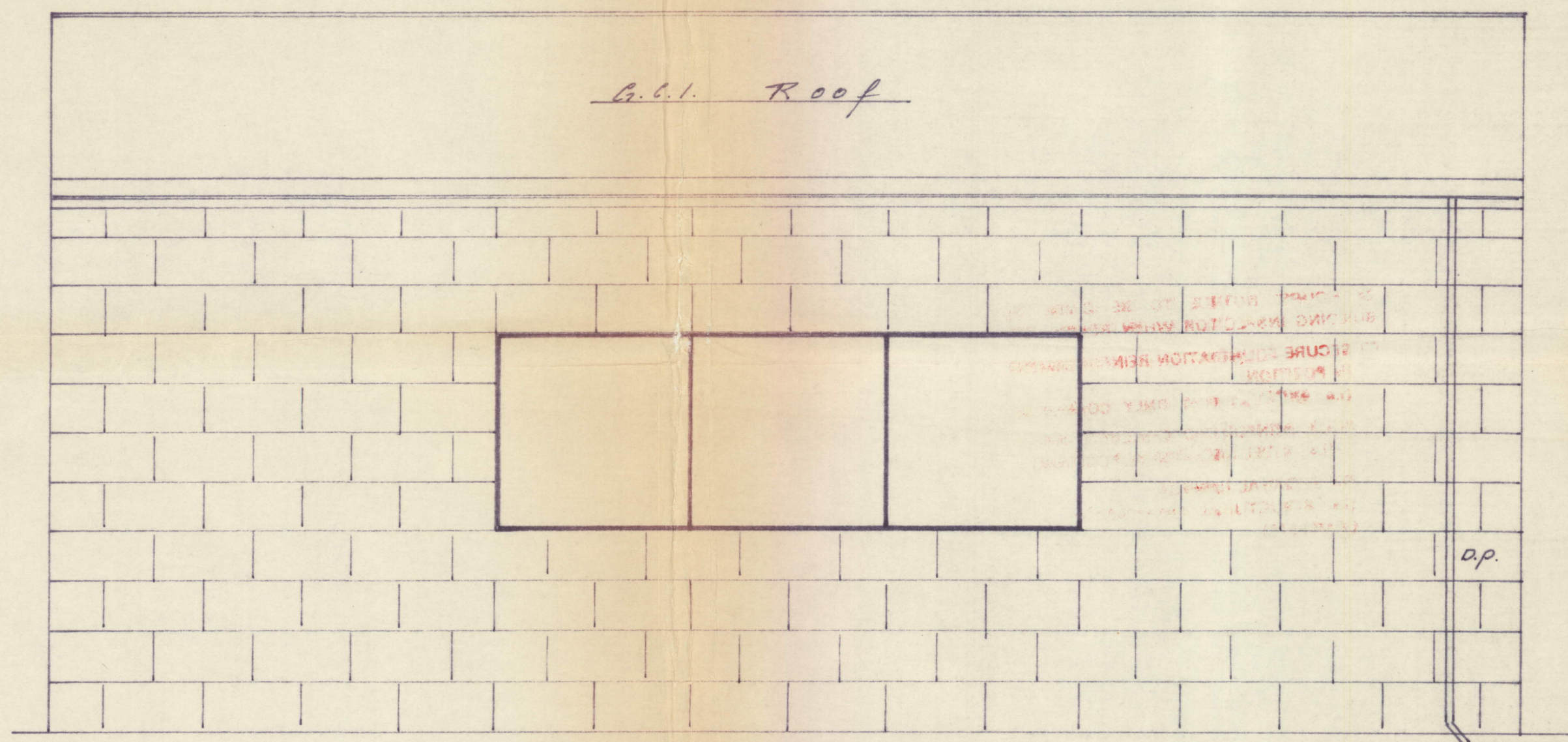
SHEET

1 of 2.

SERIES OF
REF



Detail of beam at top of Gable wall.



NORTH ELEVATION

- 24 HOURS' NOTICE TO BE GIVEN TO BUILDING INSPECTOR WHEN READY TO:
- ☒ SECURE FOUNDATION REINFORCEMENT IN POSITION (i.e. EXCAVATIONS ONLY COMPLETED)
 - ☒ POUR REINFORCED CONCRETE AREAS (i.e. STEEL SECURED IN POSITION)
 - ☒ FIX INTERNAL LININGS (i.e. STRUCTURAL FRAMEWORK COMPLETE)

PROPOSED GARAGE
for MR G. THOMSON, No 8 PALM AVENUE, STOKE

DRAWN A.H.CHING CHECKED
TRACED DATE 7-10-81 SCALES 1:20

SHEET
2 of 2
SERIES OF
REF

Waimea County Council.
BUILDING PERMIT.

Nº 2919 Engineer's Office,
Nelson, *January 6th* 19 *56*
To Mr. *R. M. Hay*
3 Leaman St. Nelson
In pursuance of your application for permit to

Erect Dwelling - 2 x 6 x 8.
on Lot No. *5* D.P. *5037*

Section No. *Pt 52*

Blk. No. *Suburban Heights S.D.*, for

Mr. *R. M. Hay*

of *Palm Avenue, Stoke*

permission is hereby granted you to carry out the work as proposed in your application, and in accordance with the plans, particulars, and other documents submitted to me, such work to be subject at any time during progress to my inspection and to be carried out in strict conformity with all requirements of the Waimea County Council By-law No. 3, dated the first day of May, 1948, and all other By-laws for the time being in force and of all Acts of Parliament and regulations respectively affecting such work and subject to Building Controller's Permit No. _____ and subject to Building Emergency Regulations, 1939 and subsequent Building Construction Control Notices.

Dwellings: The location of dwellings must be approved by the Building and Sanitary Inspector before work is commenced.

B. J. Hay
D. J. Hay
3084
s. co. - 9191
R. J. Hay
Building Inspector
for Waimea County Council.

PPR 121149

WAIMEA COUNTY COUNCIL

PROCESSED

Application for Building Permit.Date 28 May 1956

To the Building Inspector,
of the WAIMEA COUNTY COUNCIL,
NELSON.

Sir,

Erect
alter

I hereby apply for permission to ~~convert~~
reinststate
demolish

New House

~~Garage~~

in Palm Avenue Road Stoke Riding
for R. M. Way of 5 Tasmann Street Nelson
(owner) (address)

according to locality plan and detailed plans, elevations, cross-
sections, and specifications of building deposited herewith, in
duplicate,

Particulars: Lot No. 5 D.P. 50.37
of Land: Section No. PT Sec 22 Blk. Suburban St. District S.D.
Area: 0 acres 1 roads 18-9 perches.

Particulars: Foundations: Continuous House walls Weather Board
of Building: Roof: 9 to 10 m. gable ground floor area 1220 sq. ft.

Area of outbuildings included in this application 575 sq. ft.
Area of existing outbuildings: sq. ft.

Estimated Cost Building: House £2400 ~~Garage £1175~~ Plumbing & Drainage & 225
of Building: Total & £2800 2625

Proposed purposes for which every part of building is to be used or
occupied (describing separately each part intended for use or
occupation for a separate purpose)

..... Dwelling

Proposed use or occupancy of other part of building:

nature of ground on which building is to be placed and of the subjacent
strata Shingle

Yours faithfully,

Signature of Applicant

Address

Builder's Name R. M. Way

N.B.

The locality plan must show position of building on Section
and distances from roads, boundaries etc.

S P E C I F I C A T I O N .

O F

New Residence, Palm Avenue, Stoke, for

R.M. Way. Esq.

SUMMARY OF TRADES

GENERAL

ROOFER

CONCRETOR

PLUMBER & DRAINLAYER

PLASTERER

ELECTRICIAN

CARPENTER & JOINER

PAINTER & DECORATOR

TIMBER TREATMENT:

Flooring and Weatherboarding: If Heart is not available, non heart pretreated by an approved process may be used.

PAPERHANGING:

Before papering or painting Fibrous plaster shall be first treated with "Santobrite" or other approved anti-mould treatment.

THE CONTRACTOR:

Shall conform with the provisions of Acts as relating to the works and By-laws of the Local Authorities, and shall pay all fees to such Authorities in respect of the works. The Contractor shall arrange for the inspection of and testing of plumbing work by the Inspector of the said Authorities. The building shall be insured from time to time to its full value until handed over, and is to insure workmen against accident and to hold the Proprietor free from any such liabilities.

CONCRETOR

CONTINUOUS FOUNDATIONS (Concrete):

All external foundation walls shall be continuous concrete 5" thick taken well down on to the solid, with a minimum height above ground level of 18". Basement door shall be provided and hung with T hinges and a socket bolt. Reinforce walls with $\frac{3}{8}$ " diam. rod top and bottom.

PILES:

Internal piles to be in rows 5'6" apart and 4'6" centres between the piles. The piles shall be set into the ground, taken well down on to the solid. Minimum depth of pile in ground 12".

WAINEA COUNTY COUNCIL
THESE ARE THE PLANS SPECIFICATIONS REFERRED TO
IN BUILDING PERMIT NO. 2919.
DATED June 5th 1956
BUILDING INSPECTOR.
[Signature]

All piles shall be of concrete and shall be provided with galv. wire ties or bolts for securing sleeper plates. Where the distance between the ground and the underside of the sleeper exceeds 2'0" , the sleeper shall be supported off jack studs. Or, alternatively, the piles shall be reinforced with four $\frac{1}{4}$ " rods, placed at each corner of the piles.

CHIMNEY FOUNDATIONS:

Chimney foundations shall be poured in concrete, with a hardcore centre. Minimum thickness of concrete round the hardcore 6". Four $\frac{1}{2}$ " rods shall be provided in the foundation and shall be of sufficient length to project 40 diam. above the hearth line.

FLOORS AND STEPS:

Shall be poured in concrete with hardcore centres where practicable. Concrete round hardcore shall be 6" minimum thickness. Steps shall finish with 7" rises and 14" treads. Finish off floors while laying with 2 to 1 compo. trowelled in. Finish with $\frac{1}{2}$ " plaster to approval.

SHOWER BASE:

Terrazzo.

STEPS:

Render and straighten the floors and steps with 3 to 1 of cement and sand plaster not less than $\frac{3}{4}$ " thick and finished with wood float to a straight and even surface. Slightly round nosing to steps, and weather treads $\frac{3}{4}$ " and floors 1" in 10'0".

AIR VENTS:

Base and Chimney: Provide and fix 12" x 9" galv. wire vent in foundation walls, finished to match base. Plaster exterior concrete to foundations and chimney with $\frac{1}{2}$ " coat and finish off to approved surface. Foundation walls and chimney to be given two good coats approved colour-wash in tints as selected.

BRICKLAYER:

The chimney shall be built in the position where shown on Plan. Bricks shall be selected and of good quality. Chimneys shall be in concrete, minimum thickness 6", reinforced with $\frac{3}{8}$ " or $\frac{1}{2}$ " rods, running continuous from the foundations to the top of the chimney, with built in 8" flue liners. Surround to open fire to be of chipped brick of good quality to a design to the approval of the Proprietor. All the facing

brickwork shall be pointed black. Brickwork shall be cleaned down with a weak acid solution. Fireplace shall be lined with firebricks and pointed up with fine cement. Hearth to be raised and finished with red quarry tiles. Provide and install a Colonial type grate set on brick hobs.

CARPENTER & JOINER

DAMP PROOF COURSE:

All timber supported on or in contact with concrete shall be protected by 3-ply Malthoid or damp course.

TIMBER SCHEDULE:

<u>Designation</u>	<u>Size</u>	<u>Quality, etc.</u>
Sleepers	4" x 3"	B.Ht.Rimu or Matai.
Plates on Concrete walls	4" x 2"	" " " " "
Floor Joists(18"Centres)	5" x 2" & 8" x 2"	" " " " "
Bottom wall plates	4" x 2"	B.A.H.
Door and window studs to openings up to 3'1"	4" x 2" and to conform with Standard Inst.	
Wall studs	4" x 2"	B.A. 8 ft. lengths.
(Minor partitions)	3" x 2"	" " " " "
Dwangs to partitions	4" x 1½"	
Dwangs to ceilings	2" x 2"	
Dwangs to outer walls	4" x 1½"	Plaster wall
Braces - external walls	6" x 1"	B.A. Rimu
Braces - internal walls	4" x 1"	" " "
Ceiling joists	4" x 2"	" " "
Rafters	4" x 2"	" " " (2'0" centres)
Stringers under rafters	5" x 2" or 4" x 3"	" " "
Roof bracing	4" x 2"	" " Every third pair rafters.
Eaves and bearers	4" x 2"	
Flooring	4,5,6" x 1"	Dressing A Dry or Ht.
Skirting and Architraves	3" or 4"x ¾"	" " " " "

All interior finishing timbers to be Rimu dry, D.A.quality.

OPENING TRIMMERS:

Up to 3'1" wide	4" x 2"
From 3'1" to 4'6"	4" x 3"
From 4'6" to 6'8"	5" x 2"
From 6'8" to 10'0"	8" x 2"

FOUNDATION FRAMING:

Sleeper plates shall be set on edge at not more than 5'6" centres. Borne directly on Foundation blocks, they shall be secured with wire and staples, or bolts. Wall plates on concrete walls shall be drilled for $\frac{3}{8}$ " rods or bolts, which shall be bent over plates and stapled.

Floor joists shall be gauged 5" x 2", sleeper plates to a uniform level with laps not less than 4" in length well spiked together. Two joists shall be provided under all major partitions running parallel with floor joists.

FRAMING GENERALLY:

Unless specified to the contrary, framing timbers generally shall be spaced at not more than 18" centres. The whole of the building shall be properly framed, and the various sections spiked together. Cut true and square. Plates and sleepers shall be halved together at joints and angles, and dovetailed and halved at intersections, which in all cases shall be over solid bearing.

WALL FRAMING:

Studs shall be 4" x 2" and 4" x 3", housed $\frac{3}{8}$ " into top and bottom plates. Braces shall be cut flush with face on studs at an angle of approx. 45 degrees, each bay having not less than one brace. Where this bracing is not obtainable on short sections of external walls, dog-leg bracing shall be cut into studs. External angles to weatherboard or lath and plaster sheeted walls shall be framed with three studs. Wood packing blocks shall be used to secure the sections together. To all lined walls provide three rows of dwangs.

CEILING JOISTS:

Ceiling joists shall be 4" x 2" spaced at not more than 20" and lapped, and well spiked together at passings. Joists spanning more than 8'0" shall be secured to ceiling runners, well spiked to each joint. The runners shall not be suspended from or strutted to roof timbers. Between ceiling joists, cut in noggings on the flat round all margins and at all edges of plaster sheets.

ROOF FRAMING:

All roofs shall be set at a pitch as indicated on the Drawings. Rafters shall be set in lapped lengths, birds-mouthed over and securely spiked to wall plates. Provide stringers as previously specified set on edges extending the full length of the roof under all rafters, and securely fix to walls at ends. Strut and brace roof at 4'0" centres, secure struts and braces to a 4" x 2" bearer plate fixed to ceiling joists over partition walls.

FASCIA BOARD:

Fix fascia boards (previously primed, including all joints) to a straight, level line at end of rafters. All joints to be mitred and return mitred on external angles.

PLASTER ON MESH WALLS (EXTERNAL):

Dwang all walls 2'0" centres horizontally. Adequate ventilation shall be provided by boring $\frac{3}{4}$ " holes in the dwangs and plates or dwang shall be fixed on their flat.

FLOORING:

Cover all floors with 4" x 1" T & G or Heart Rimu D.A. timber, squared and tightly cramped into position and double nailed with floor brads and punched. All bye wood to be removed. Form mitred margins to hearths, etc.

INTERNAL WALL LINING:

Line the walls of Lounge, Bedrooms, Hall and Sunroom with $\frac{3}{8}$ " Fibrous plaster sheets or Gibraltar Board. Joints to painted walls to be covered with battens. Line interior of all cupboards with linings as for wall linings. Line walls to Kitchen, Bathroom, W.C., Shower and Laundry with $\frac{1}{8}$ " hardboard, with joints covered with 1" rounded battens. Line front of Bath with $\frac{1}{8}$ " hardboard and provide toe space. Line behind all Kitchen cupboards with hardboard.

CEILINGS:

Line the ceilings of Lounge, Sunroom, Bedrooms, Hall and Kitchen with $\frac{1}{2}$ " PINEX sheets. All linings to walls and ceilings shall be fixed with flat head galv. nails; all to be punched below surfaces and left ready for stopping. Line Laundry, Bathroom, Shower and W.C. with $\frac{1}{8}$ " hardboard sheets, cover all joints with $\frac{7}{8}$ " half-round cover battens and corners with $\frac{7}{8}$ " quarter-round. Finish all ceilings throughout with a stock run 4" x 2" scotia mould. Finish all external angles to plastered walls

with 1" x $\frac{3}{8}$ " wood fillet. Line the ceilings to Porches as for soffits.

STOPPING:

All joints, nail holes, and other imperfections (other than those to be covered with battens) shall be stopped with plaster of paris by an approved competent plasterer.

DOOR JAMBS - INTERNAL:

Door jambs shall be of selected material, dressing "A" quality, out of 6" x $1\frac{1}{2}$ " material. Rebated to take the doors. All to be hand dressed and sandpapered to a smooth finish.

ARCHITRAVES:

Architraves shall be rounded out of 3" x $\frac{3}{4}$ " material, mitred returned round all window and door openings.

SILL BOARDS:

Shall be out of 4" x 1" finished material checked into mullions and styles, and finished with 3" x 1" bevelled aprons underneath.

SKIRTING:

Shall be same as specified for Architraves. Finish all walls, other than matchlined or Polite walls, with skirting which shall be scribed to the floors and return mitred on all external angles.

JOINERY

DOORS:

All doors shall be standard pattern out of B.A. Rimu or Heart Matai, and hung on $1\frac{1}{2}$ pairs of steel butts ($3\frac{1}{2}$ " for 6'6" doors and 3" for 6'0" doors).

Doors shall be of the following sizes:

Front entrance door	6'6" x 2'10" x $1\frac{3}{4}$ "	finished thickness (as shown on Drawings).
Other doors	6'6" x 2'8" x $1\frac{3}{4}$ "	finished thickness (Glazed as shown).
W.C. Door	6'4" x 2'4" x $1\frac{3}{8}$ "	finished thickness (flush pane).
Wardrobes & Linen cups.	6'0" x 2'0" x $1\frac{1}{8}$ "	" " " " " "
All other doors	6'6" x 2'8" x $1\frac{3}{4}$ "	" " " " " "
Doors marked G.T.	6'6" x 2'8"	Top panel glazed.

All internal doors shall be fitted with mortice latch sets, P.C. 14/6d. each. External doors shall be fitted with mortice lock sets or night latch and handle of good quality. P.C. 22/- each. Wardrobe doors to be fitted with catches and pulls.

WINDOW FRAMES:

Styles and heads shall be out of 5" x 2" rebated for sashes with double checked sills out of 8" x 2" Heart Rimu or Matai. Sills shall be fitted with metal trays to weather out past the plaster coat under the sills.

SASHES:

Shall be constructed of Oregon or similar quality material. All sashes throughout shall be $1\frac{3}{4}$ " finished thickness, moulded, rebated and grooved, and shall be Whitco type as shown on Drawings. Heights of sashes generally to be 2'8" glass line from the floor. Kitchen, Laundry and Bathroom sashes shall be set at 3'8" glass line from the floor.

CUPBOARDS:

All Kitchen cupboards, and Shaving cabinet (20" x 10" with two $\frac{1}{2}$ " shelves) shall be constructed out of 1" material, dressed $\frac{7}{8}$ " finished thickness; all cupboards shall be according to the best known methods of Joinery practice.

All shelving shall be conveniently spaced and shall be full width of cupboards. Hot water cupboards and Safe shall be provided with 2" x 1" slat shelves, to be made removable, and vents top and bottom.

Bins Drawers shall be built into position shown on Plan. Bins shall be of a removable tilting type. Sub-divide one drawer into three compartments with divisions of $\frac{3}{8}$ " finished thickness. The back and sides of drawers shall be properly framed, and dovetailed together.

Note: Stainless Steel.

CUPBOARD DOORS:

Shall be approved flush type doors or single panel type, to the approval of the Proprietor.

Shaving cabinet door shall be fitted with a P.G. mirror of good silvering quality. All cupboard doors shall be fitted and hung with $2\frac{1}{2}$ " steel butts, with chrome plated catches, pulls, etc. average value 5/- each door.

WARDROBES:

Wardrobes to be fitted with shelf above and full length rail.

ROOFER.

ROOF:

To be of Iron. All laps primed before fixing.

PLUMBER & DRAINLAYER

The Plumber shall carry out all work according to the requirements and By-laws of the Local Authority and Health Department Inspector. All work shall be carried out by a registered plumber.

All water piping shall be $\frac{1}{2}$ " for Cold water and $\frac{3}{4}$ " for Hot. Hot and Cold water supply shall be taken to Sink, Basin, Bath, Tubs, Copper and Shower. Cold water only to Hose taps (2) and to Lavatory basin flushing cistern. Provide and install Hot water cylinder of 35 gallon capacity, and of good make and lagged. Provide and install a concrete supply tank, complete with overflow and tray, to supply Hot water cylinder (capacity 20 gals.) Shower, Sink, Bath, Basin and Tubs shall be provided with streamlined chrome plated taps.

BATH:

A 5'6" Bath, similar to the standard type porcelain bath.

TUBS:

Reinforced concrete tubs to be fitted on wood stand.

W.C. PAN:

Provide and fit a standard type Lavatory pan, to be set on to concrete foundations. Pan shall be complete with polished hinged seat and low-down type flushing cistern, all to be connected up.

SHOWER HEAD:

Chrome plated.

WASTE PIPES:

Provide and fix waste pipes, and provide vents where demanded.

FLASHINGS:

Flash all windows and doors, and flash generally to make the building weathertight. See also "Window Frames", Page 7.

SPOUTING & DOWNPIPES:

Provide and fix 24 gauge Iron Galv., jointed and erected to manufacturers specifications.

DRAINLAYER

Drains shall be laid from all gully traps and closet to connect to City Sewer. They shall be laid complete with all terminal vents, inspection traps, etc.

ELECTRICIAN

All installations shall be made in a safe, sound and practical manner, in conformity with modern practice, and shall comply with the Regulations as laid down by the local Supply Authorities and to the satisfaction of their Inspector.

All cutting, drilling and fitting work necessary for the installations shall be included in this work, and no structural or finished work shall be endangered.

Wiring shall be taken to the points indicated on the Plan. All conduit shall be concealed from view. All switches shall be flush type, good quality; switches in Laundry, Bathroom and W.C. shall be approved tumbler type, mounted on bakelite base. Provide for light points and power points.

PAINTER

All materials shall be of approved, good quality manufacture. Materials shall be applied strictly in accordance with the manufacturers instructions. All work shall be of the highest standard, performed by skilled tradesmen. Apply materials and protect work from disfiguration brought about by any cause whatsoever.

All exposed woodwork, internally and externally, shall be stopped with good quality linseed oil putty.

All external wood and metal work to windows, fascias, eaves, doors, etc. shall be given one undercoat and two finishing coats of good quality approved paint. External faces of Back and Front doors and sashes to be treated similarly.

The walls of the Living Room, Hall and Bedrooms are to be glue sized and prepared for papering. Allow for papering these walls with paper of average value of 10/- per roll. The ceilings of these rooms shall receive one coat of glue size and two coats of waterbound distemper of an approved colour.

Kitchen, Laundry, Bathroom and W.C. walls and ceilings shall be given two undercoats and a finishing coat of enamel of approved colour.

Architraves, skirtings, door and general interior trim to be papered rooms shall be oiled, stained and given a coat of knotting, and varnished also to clinker brick surround.

GLAZING:

Glaze all sashes with 24 oz. glazing quality glass, properly bedded in putty, sprigged, face puttied and cleaned down. Glaze doors marked G on Plan, also Bathroom, W.C. and Shower windows with an approved obscure glass.

All work specified hereinbefore mentioned, shall be done in a tradesmanlike manner and finished complete throughout.

WAINEA COUNTY COUNCIL.

THESE ARE THE PLANS SPECIFICATIONS REFERRED TO

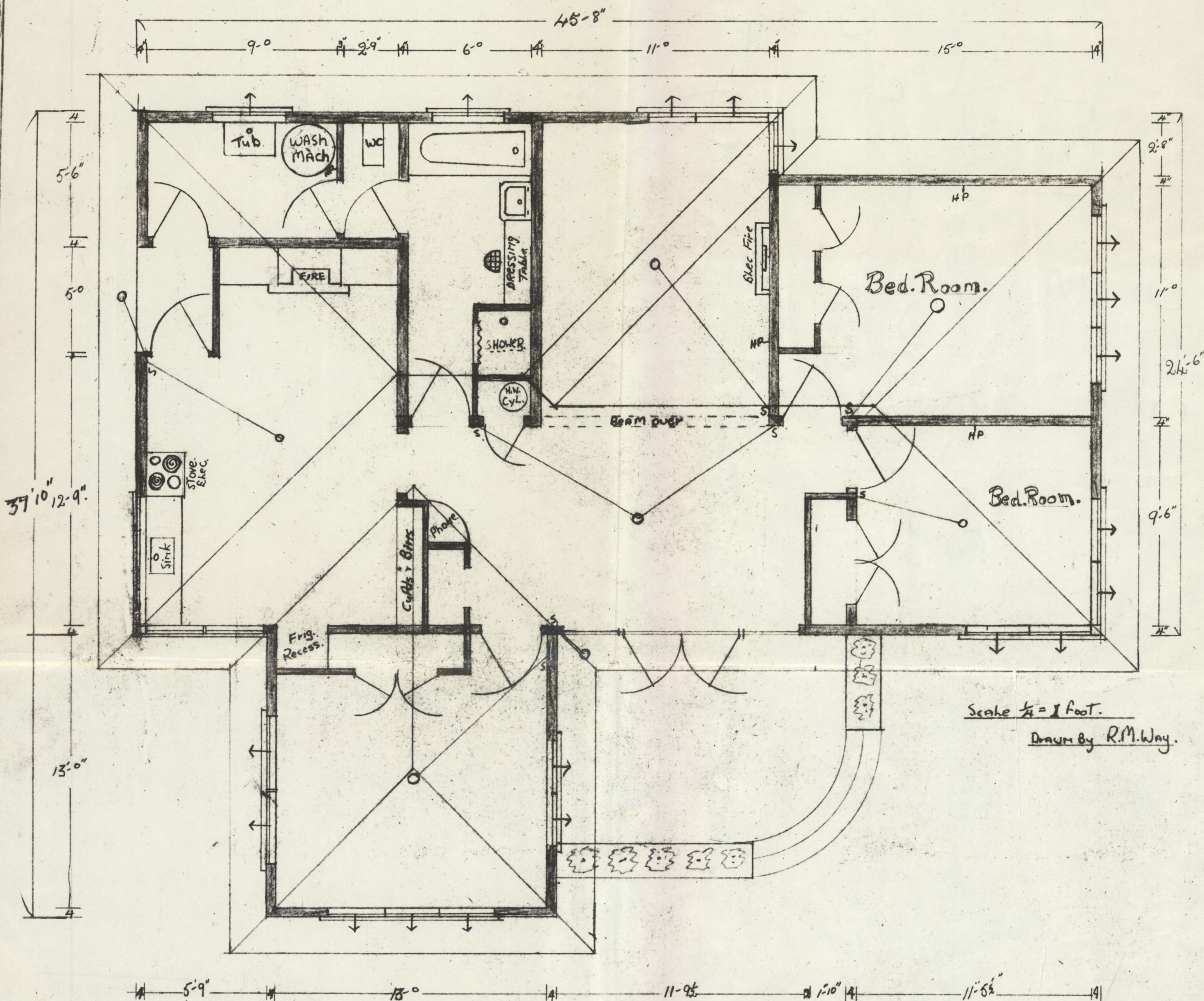
IN BUILDING PERMIT NO. 29, 9.

DATED Jan 5th 1956

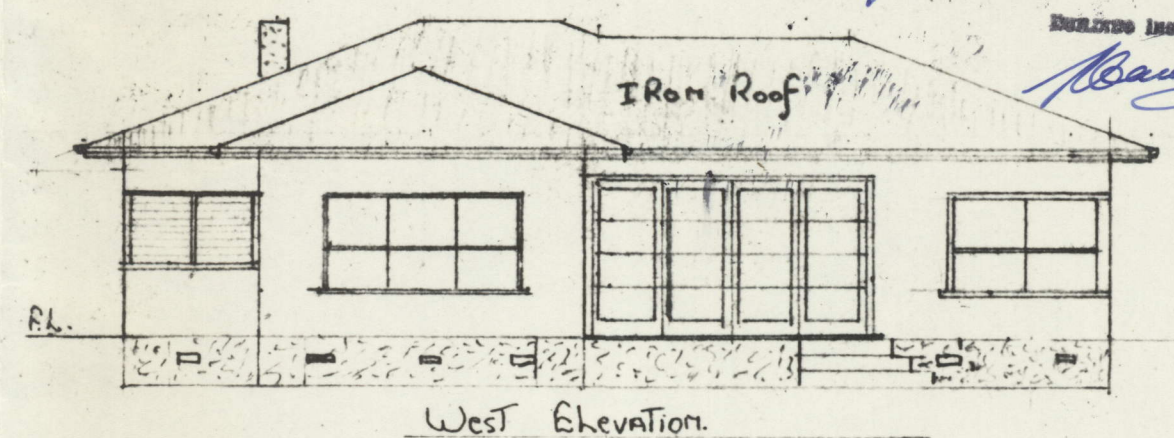
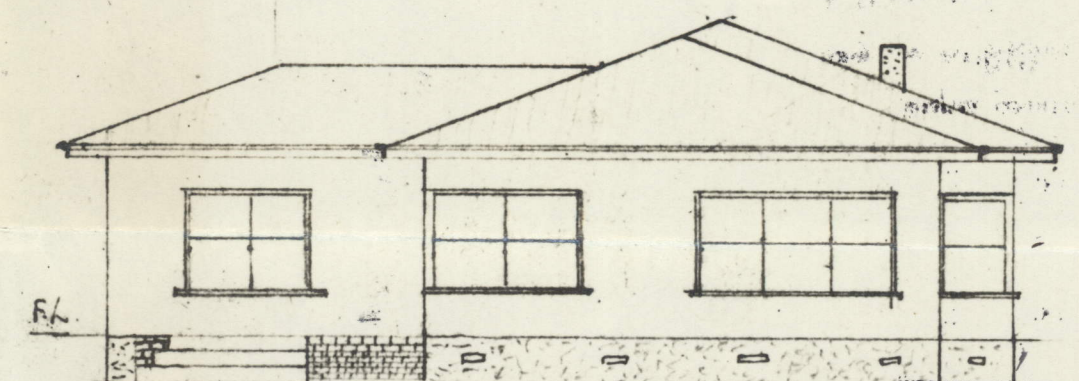
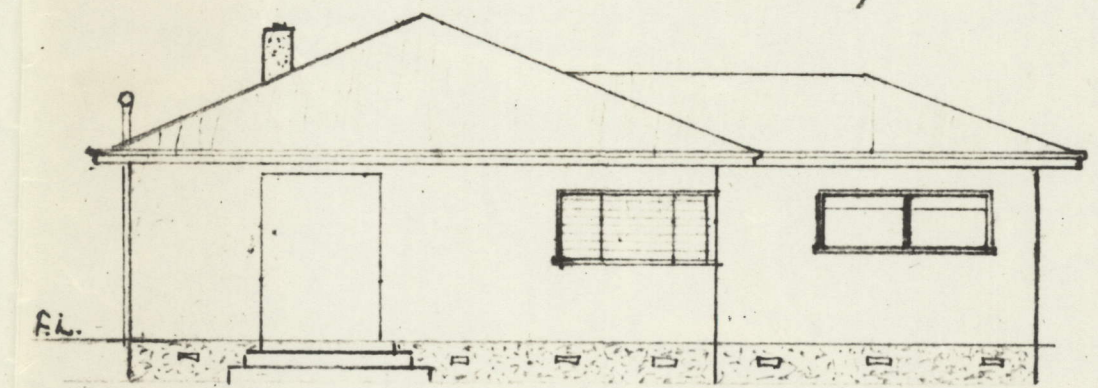
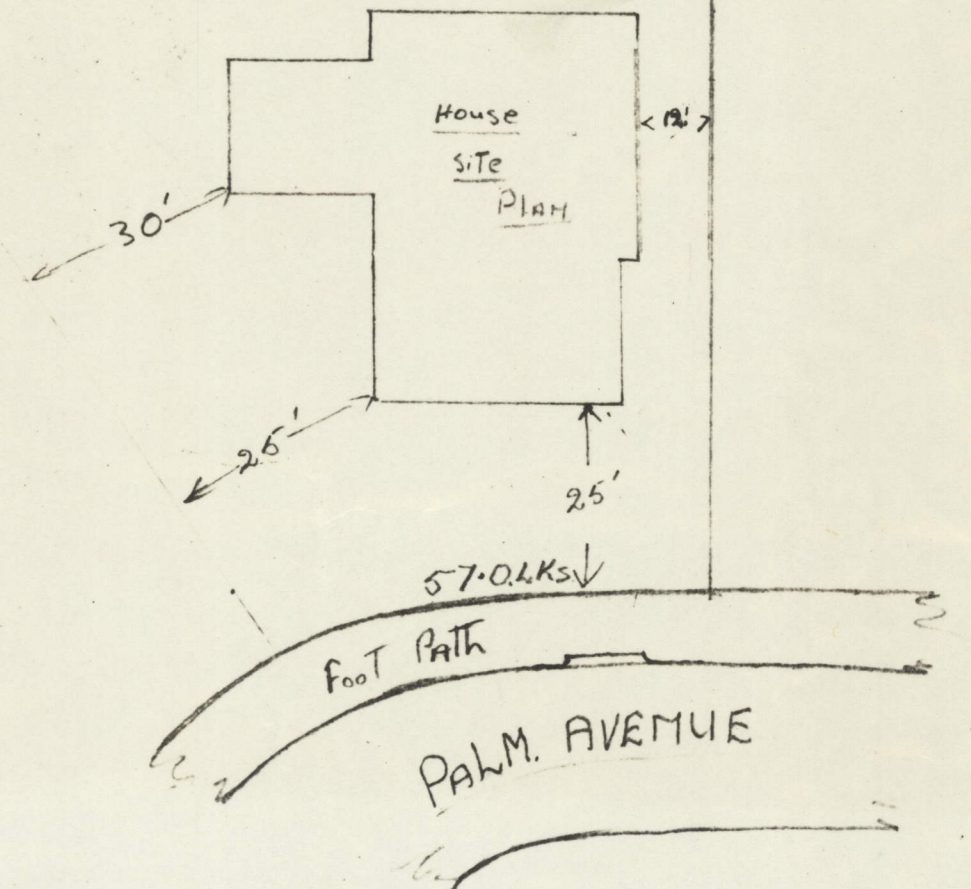
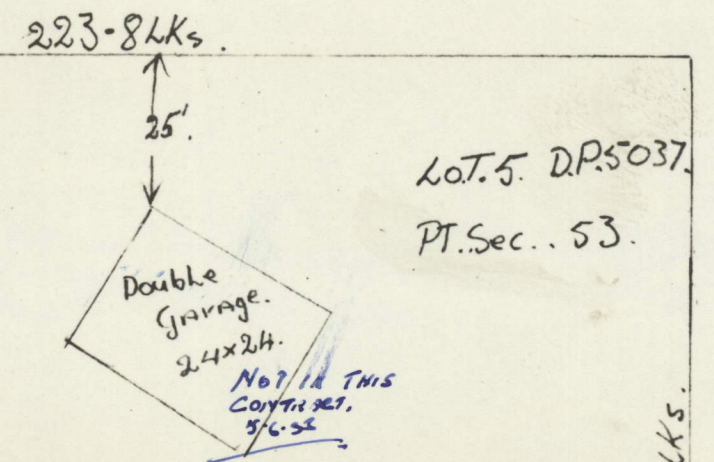
BUILDING INSPECTOR

Heaverson

New Residence To be Erected on Palm Avenue for Mr. R. M. Way.



Scale $\frac{1}{4}'' = 1$ Foot.
 Drawn By R.M. Way.



WAIMA COUNTY COUNCIL.

These and the Plans Specifications referred to

in Building Permit No. 2919.

Dated June 3rd 1935

Building Inspector

Beaman

PLAN 153

R.M. Way.

Palm Avenue

Lot 5

DP 5037