Plans Located in: ☐ Blue Folder ☑ Codafile ☐ Plan Drawer Nº:

Project File Cover Sheet

Building Category(R1-3) (C1-3)	Building Officer Responsible	FOH Received Date	Restricted Building Work
R1	RES	20/4/15	Trade LBP classes required: N/a ☐ Carpentry ☑ External Plastering ☐ Bricklaying ☐ Blocklaying ☐ Foundation ☐ Roofing ☑

NZFS DRU Input Required? Y / N

PLANNING/SUBDVN	Name: Argyll	Date: 24/04/15	Completed: (Y) N	
Planning Ok			PK LS	
CLAIMS MANAGEMENT			In Progress:	Trade LBP classes provided: N/a ☐ Carpentry ☐ External Plastering ☐ Bricklaying ☐ Blocklaying ☐ Foundation ☐ Roofing ☐
Does this consent require a:				
Section 72	YES / NO		Completed:	
Section 75	YES / NO			
Memorandum of Encumberance	YES / NO			
SITE VISIT:	Name:	Date:	Completed: Y N	
BUILDING PIM:	Name:	Date:	Completed: Y N	
BUILDING BC:	Name: G Cockery	Date: 2.6	Completed: (Y) N	
G 4/11 28-4				
suspended by owner 13.05.15				
RESTART 21/5/15.				
Sort & stamp kyn 3.6				
Existing ☐ New ☐ Amended ☐			CS #:	
Added:			CS Admin: Y N	
P&D WASTEWATER	Name:	Date:	Completed: Y N	
CITY NETWORKS	Name:	Date:	Completed: Y N	
STRUCTURAL	Name:	Date:	Completed: Y N	
HEALTH/HSNO	Name:	Date:	Completed: Y N	

Address for Inspection Checklists to be sent to: N/a ☐

Name:

Address:

Email:

PROJECT DESCRIPTION

A003 - ALTS

Site Folder: Cityview Map ☐ Site Plan ☐ Drainage Plan ☐ Copy of PIM ☐ Copy of B/C ☐

Project Number	PIM Number	VC number
40660		

PROJECT ADDRESS

10 WILLIS CR

Provisional Due Date

19/5/15

ABH.

4/12/15

10660

Application for Code Compliance Certificate

Building Services

Section 92, Building Act 2004

Please submit to Council only when all inspections have been completed (as identified on the Building Consent)

The Building Consent:

Building Consent number: BC 40660

Issued by:
[Name of building consent authority that granted building consent, TICK ONE]

☐ Manawatu District Council ☑ Palmerston North City Council

Address of work: 10 WILLIS CRES
ASHHURST

The Owner: [It is not necessary to complete this section if details have not changed from the Building Consent]

Name of owner:
[include preferred form of address, eg, Mr, Mrs, Miss, Dr if an individual]

Ronald Craig Stevens

Contact person:
[insert n/a if the owner is an individual]

N/A

Mailing address:
[if different from address of work above]

Street address/registered office: 10 Wills Crescent Ashhurst

Phone numbers

Landline: (06) 3268 089

Mobile: 027 268 ~~58~~ 6409

Daytime: (06) 3268 089

After hours:

Facsimile number: —

Email address: lyhandcraigstevens@clear.net.nz

Evidence of ownership is attached to this application: [showing full name of legal owner(s) of the building]

[required only if ownership has changed since the application was made]

☑ Certificate of Title ☐ Agreement for Sale and Purchase

☐ Lease ☐ Other document

The Agent: [Only required if application is being made on behalf of the owner.]

Name of agent:
[eg, Mr, Mrs, Miss, Dr if an individual]

Contact person:
[insert n/a if the agent is an individual]

Mailing address:

Street address/registered office:

Phone numbers **Landline:**

Mobile:

Daytime:

After hours:

Facsimile number:

Email address:

Relationship to owner:

[State details of the authorisation from the owner to make the application on the owner's behalf]

First point of contact for communications with the council/building consent authority:
[Contact details must be in New Zealand]

Full name:

Mailing address:

Phone numbers:
[Landline] [Mobile]

Facsimile number:

Email address

Application:

All building work to be carried out under the above building consent was completed on:
[insert date]

✗ 1/12/15

The Licensed Building Practitioners (LBP) who carried out or supervised the restricted building work is/are as follows:

Name	Licensing Class	LBP number (or registration # if treated as being licensed under s291 of Building Act 2004)	Particular work carried out or supervised
✗ J C Greenlees	Carpentry S1	102584	Alterations

The personnel who carried out building work other than restricted building work are as follows:
[List names, addresses, telephone numbers, and (where relevant and if not provided above) LBP numbers or Plumbers, Gasfitters and Drainlayers Board registration numbers]
Note: Continue on another page if necessary
The personnel who carried out the building work are as follows:

Designer/Architect:

Business/name:
Address:
Daytime: Mobile:
After hours: Facsimile:
Registration/qualification:

Structural Engineer:

Business/name:
Address:
Daytime: Mobile:
After hours: Facsimile:
Registration/qualification:

Engineer (identify practice college):

Business/name:
Address:
Daytime: Mobile:
After hours: Facsimile:
Registration/qualification:

Plumber:

Business/name:
Address:
Daytime: Mobile:
After hours: Facsimile:
Registration/qualification:

Builder:

✗ Business/name: Mr J C Greenlees
Address: 52 Royal Oak Dr Palm Nth
Daytime: 06) 3540645 Mobile: 027 482 5600
After hours: Facsimile:
Registration/qualification: 102584

Drainlayer:

Business/name:
Address:
Daytime: Mobile:
After hours: Facsimile:
Registration/qualification:

10660

Head Contractor / Site Manager:	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Facsimile:
Registration/qualification:	

Bricklayer:	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Facsimile:
Registration/qualification:	

Plasterer:	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Facsimile:
Registration/qualification:	

Other:	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Facsimile:
Registration/qualification:	

The following specified systems are contained on the compliance schedule for the building and, in the opinion of the personnel who installed them, are capable of performing to the performance standards set out in the building consent [list specified systems]

I request that you issue a code compliance certificate for this work under section 95 of the Building Act 2004.

The code compliance certificate should be sent to: 10 Wills Crescent Ashhurst

[state which address, and whether owner or agent]

Signature of the owner / agent on behalf of and with the authority of the owner: R.C Stevens

Name of person signing: R.C. Stevens

Date: 3/12/15

Attachments:

The following documents are attached to this application:
[Tick as applicable]

- ○ Memoranda (Records of Building Work) from LBP(s) stating the restricted building work they carried out or supervised
- ○ Other documents from the personnel who carried out the work
- ○ Certificates that relate to the energy work
- ○ Evidence that specified systems are capable of performing to the performance standards set out in the building consent

W pncc.govt.nz | E info@pncc.govt.nz | P +64 6 356 8199 | Private Bag 11034, The Square, Palmerston North, New Zealand

PALMERSTON NORTH CITY COUNCIL

Code Compliance Certificate

Section 95, Building Act 2004

The Building

Street address of building:	10 WILLS CRESCENT ASHHURST
Legal description of land where building is located:	FLAT 1 DP 57064
Current, lawfully established, use:	RESIDENTIAL DWELLING
Year first constructed:	1984

The Owner

Name of owner:	STEVENS, RONALD CRAIG
Mailing address:	10 WILLS CRESCENT ASHHURST 4810
Phone number	Landline: 06 3268089 Mobile: 027 2684409
Email address:	lynandcraigstevens@clear.net.nz

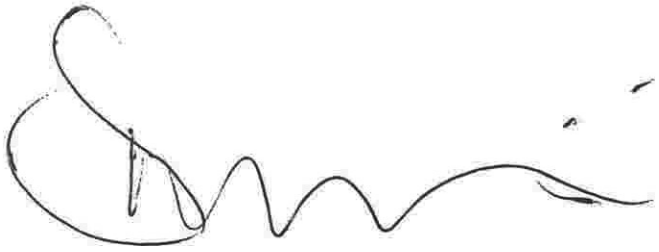
Building Work

Building Consent Number	40660
Project Description:	NEW FREESTANDING FIRE METRO WEE RAD; REMOVE EXISTING WINDOW & RELOCATE TO ANOTHER WALL; NEW BAY WINDOW; REMOVE EXISTING FRONT DOOR & FILL IN WALL
Issued by:	PALMERSTON NORTH CITY COUNCIL

Code Compliance

The building consent authority named below is satisfied, on reasonable grounds, that —

(a) the building work complies with the building consent

Signature: 

Name: Leigh Sage

Position: Head of Building Services

On behalf of: **PALMERSTON NORTH CITY COUNCIL**

Date: - 6 JAN 2016

40660

APPLICATION FOR BUILDING CONSENT

and/or project information memorandum

Building Services

Building Act 2004, section 33 or section 45
Send or deliver your application to: Palmerston North City Council, Private Bag 11034, Manawatu Mail Centre, Palmerston North, 4442
For enquiries, phone 06 356 8199

Council use only:
Application #: 40660
Receipt #: 2015/301772

Please provide two copies of all attachments, unless otherwise specified in checklist

PART 1 – APPLICATION (SELECT TYPE APPROPRIATELY) (If you have an existing application number relating to this building please note the number beside the application type)

For the building work described in this application I request that you issue a:
☒ Building consent
☐ Project information memorandum (PIM)
☐ PIM and building consent
☐ Staged consent
☐ National multi-use approval *(If yes provide copies of MultiProof certificate, plans and specifications)*

Please tick appropriately:		
Will the building work include any restricted building work?	☒ Yes	☐ No
Is this a re-clad application?	☐ Yes	☒ No
Is this application subject to a claim, including the Financial Assistance Package scheme?	☐ Yes	☒ No
If yes quote claim number		

THE BUILDING (Project location)

Building name *(if applicable)*		
Building street address **10 Wills Crescent, Ashhurst**		
Location of building within the site *(include nearest street access)*		
Legal description of land where the building is located. If a subdivision of the land is proposed provide the lot numbers and consent number		
Lot(s) **20**		Subdivision lot No:
DP(s) **46535**		Subdivision consent No:
Number of levels *(include below ground, ground and above ground)* **One**		
Level/unit number *(if applicable)*		
Area (in square metres)		
Existing floor area: **81.7m2**	Proposed new floor area: **0.46m2**	Resulting total floor area: **82.16m2**
Current, lawfully established use of all parts of the building *(include number of occupants per level and per use if more than one level)* **Residential dwelling**		
Year first constructed *(insert year, an approximate date is acceptable such as 1920's or 1960-1970)*		1984
Does the building or site have any cultural or heritage significance, or is it a marae?	☐ Yes	☒ No
Is the site subject to natural or created hazards such as erosion, subsidence, flooding, slips, cut and fill or contamination?	☐ Yes	☒ No

OWNER (must be completed for all applications and all details must be the owner's)

Name of owner: (*include preferred form of address, e.g. Mr, Miss, Dr if an individual*)
If the owner is a company or other organisation provide the company or organisation name and a contact person's name

Ronald Craig Stevens

Owner's mailing address: **10 Wills Crescent, Ashhurst, 4810**

Street address/registered office:

Owner's contact details:

Phone number(Landline):		Mobile:
Daytime: **027- 268 6409**	After hours:	Facsimile number:
Email address: **lynandcraigstevens@clear.net.nz**	Website:	

The following evidence of ownership is attached to this application: (*copy of certificate of title, lease, agreement for sale and purchase, or other document showing full name of legal owner(s) of the building*)

☒ Copy of the land title (*Computer register, Certificate of Title, CT or property title*) – no more than three months old	☐ Agreement for sale and purchase
☐ Lease	☐ Other (please specify):

AGENT (only required if application is being made on behalf of the owner)

Name of agent: (*If application is for a company, trust or other organisation provide a contact person's name*)
Agneesh Brahmbhatt

Agent's mailing address **PO BOX 850, PN**

Street address/registered office **Level 2, Silvester Clark Building**

Phone number(Landline): **06 355 5599**		Mobile:**021 0272 7021**
Daytime:	After hours:	Facsimile number; **06 355 5596**
Email address: **agneesh@shadboltarchitects.co.nz**	Website: **www.architypestudio.co.nz**	

Relationship to owner (state details of the authorisation from the owner to make the application on the owner's behalf)

Architect

FIRST POINT OF CONTACT FOR COMMUNICATIONS WITH THE COUNCIL/BUILDING CONSENT AUTHORITY: (*state full name, mailing address, phone number(s), facsimile number(s) and email address(es)* [Contact details must be in New Zealand]

Further information	☒ Agent	☐ Owner
Correspondence	☒ Agent	☐ Owner
Invoicing	☐ Agent	☒ Owner

RESTRICTED BUILDING WORK

If the building work includes any restricted building work, provide details of all licensed building practitioners (LBP) who will be involved in carrying out or supervising the restricted building work. [*If these details are unknown at the time of the application, they must be supplied before the building work begins* by completing the *Trade LBP Notification Form]*

CONTACTS / LBP NOTIFICATION Provide *LBP # or registration # if treated as being licensed under section 291 of Act*

Designer or Architect: Agneesh Brahmbhatt		**Head Contractor / Site Manager: TBA**	
Business/name: **Shadbolt Architects**		Business/name:	
Address: **Po Box 850, PN**		Address:	
Landline: **06 355 5599**	Mobile: **021 0272 7021**	Landline:	Mobile:
Email: **agneesh@shadboltarchitects.co.nz**		Email:	
Registration/qualification/LBP #: **3576**		Registration/qualification/LBP #:	
If LBP state licensing class: **Registered Architect**		If LBP state licensing class:	
Fire safety designer: N/A		**Structural Engineer: N/A**	
Business/name:		Business/name:	
Address:		Address:	
Landline:	Mobile:	Landline:	Mobile:
Email:		Email:	
Registration/qualification/:		Registration/qualification/:	
Drainlayer: TBA		**Plumber: N/A**	
Business/name:		Business/name:	
Address:		Address:	
Landline:	Mobile:	Landline:	Mobile:
Email:		Email:	
Registration/qualification:		Registration/qualification:	
Builder: TBA		**Other: N/A**	
Business/name:		Business/name:	
Address:		Address:	
Landline:	Mobile:	Landline:	Mobile:
Email:		Email:	
Registration/qualification/LBP #:		Registration/qualification/LBP #:	
If LBP state licensing class:		If LBP state licensing class:	
Other:		**Other: *(Attach additional page if required)***	
Business/name:		Business/name:	
Address:		Address:	
Landline:		Landline:	
Email:		Email:	
Registration/qualification/LBP #:		Registration/qualification/LBP #:	
If LBP state licensing class:		If LBP state licensing class:	

SIGNATURE

Signed by the owner	OR	Signed by the agent *(on behalf of, or with the authority from, the owner)*
Signature		Signature 
Name		Name **Agneesh Brahmbhatt**
Date		Date 09/04/16

PRIVACY INFORMATION

The information you have provided on this form is required so that your building consent application can be processed under the Building Act 2004. The Council collates statistics relating to issued building consents and has a statutory obligation to forward these regularly to Statistics New Zealand. The Council stores the information on a public register, which must be supplied (as previously determined by the Ombudsman) to whoever requests the information.
Under the Privacy Act 1993 you have the right to see and correct personal information the Council holds about you.

PART 2 – PROJECT

Description of the building work *(provide sufficient description to enable full understanding of the scope of the work).*

- New fire place
- Removing existing window & relocating to another wall
- New bay window
- Removing existing front door & filling in wall

Will the building work result in a change of use of the building? *(If yes, provide details of the new use)*

☐ Yes ☒ No

Intended life of the building if less than 50 years: ..... years

List building consents previously issued for this project *(if any).*

–

Estimated value of the building work on which the building levy will be calculated *(including goods and services tax) [state estimated value as defined in section 7 of the Building Act 2004].*

$ 15,000

PART 3 – SITE ISSUES AND PROJECT INFORMATION

Site issues	Applicant to complete	Reference on drawings, specifications and/or comments	Council use only
Are the finished floor, finished ground, street and associated datum levels shown on plans?	**Yes**		☑ Verified
Are the distances to boundaries shown on plans?	**Yes**		
Does the proposed work cover two or more allotments?	**No**		
What is the wind zone?	**Medium**		
What is the exposure zone?	**B**		
Are there public drains on the site?	**No**		
Is the site subject to natural or created hazards such as erosion, subsidence, flooding, slips, cut and fill or contamination? If yes, provide details.	**No**		
Are the ground conditions specified?	**N/A**		

PROJECT INFORMATION MEMORANDUM (The following matters are involved in the project)

Select box if the matter is part of the project		Comments
Subdivision	☐	
Alterations to land contours	☐	
New or altered connections to public utilities	☐	
New or altered locations and/or external dimensions of building(s)	☒	Filling in porch area
New or altered access for vehicles	☐	
Building work over or adjacent to any road or public place	☐	
Disposal of stormwater and wastewater	☐	
Building work over any existing drains or sewers or in close proximity to wells or water mains	☐	
Other matters known to the applicant that may require authorisations from the appropriate territorial authority *[specify]*	☐	

PART 4 – COMPLIANCE

Do not fill in this section if this application is only for a project information memorandum

THE FOLLOWING DOCUMENTS ARE ATTACHED TO THIS APPLICATION:

☒ Plans and specifications (please list):
A0.01 - A1.01 – A1.06, Fire Specs, Arch. Specs

☑ Memoranda from Licensed Building Practitioner(s) (LBP) who carried out or supervised any design work that is restricted building work

☐ Statutory declaration as to owner-builder status form (2B)	☐ Project information memorandum
☐ Development Contribution Notice	☐ MultiProof certificate
☐ Certificate attached to project information memorandum	☐ Specified Systems Form

THE BUILDING WORK WILL COMPLY WITH THE BUILDING CODE AS FOLLOWS:

Please ensure that any details of the listed compliance elements/clauses are shown on drawings and/or specifications

Clause (list relevant clause numbers of building code)	Means of compliance (refer to relevant compliance document(s) or detail of alternative solution in the plans and specifications)	For Council use only
B1: Structure	☐ N/A VM1 ☐ VM4 ☐ AS1 ☒ AS3 ☐ ☐ Other (specify):	☑ Checked
B2: Durability	☐ N/A VM1 ☐ AS1 ☒ ☐ Other (specify):	☑ Checked
C1-C6: Protection from fire	N/A C/VM1 ☐ C/VM2 ☐ C/AS1 ☒ C/AS2 ☐ ☐ C/AS3 C/AS4 ☐ C/AS5 ☐ C/AS6 ☐ C/AS7 ☐ ☐ Other (specify):	☑ Checked
D1: Access routes	☒ N/A VM1 ☐ AS1 ☐ ☐ Other (specify):	☐ Checked
D2: Mechanical installations for access	☒ N/A AS1 ☐ AS2 ☐ AS3 ☐ ☐ Other (specify):	☑ Checked
E1: Surface water	☒ N/A VM1 ☐ AS1 ☐ ☐ Other (specify):	☑ Checked
E2: External moisture	☐ N/A VM1 ☐ AS1 ☒ AS2 ☐ AS3 ☐ ☐ Other (specify):	☑ Checked
E3: Internal moisture	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
F1: Hazardous agents onsite	☒ N/A VM1 ☐ Other ☐ (specify):	☑ Checked
F2: Hazardous building materials	☐ N/A AS1 ☒ Other ☐ (specify):	☑ Checked
F3: Hazardous substances and processes	☒ N/A VM1 ☐ Other ☐ (specify);	☑ Checked
F4: Safety from falling	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
F5: Site safety	☐ N/A AS1 ☒ Other ☐ (specify):	☑ Checked
F6: Visibility in escape routes	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
F7: Warning systems	N/A AS1 ☒ Other ☐ (specify):	☑ Checked

THE BUILDING WORK WILL COMPLY WITH THE BUILDING CODE AS FOLLOWS:

Please ensure that any details of the listed compliance elements/clauses are shown on drawings and/or specifications

Clause (list relevant clause numbers of building code)	Means of compliance (refer to relevant compliance document(s) or detail of alternative solution in the plans and specifications)	For Council use only
F8: Signs	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
G1: Personal hygiene	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
G2: Laundering	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
G3: Food & preparation & prevention of contamination	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
G4: Ventilation	☐ N/A VM1 ☐ AS1 ☒ ☐ Other (specify):	☑ Checked
G5: Interior environment	☐ N/A AS1 ☒ Other ☐ (specify):	☑ Checked
G6: Airborne and impact sound	☒ N/A VM1 ☐ AS1 ☐ ☐ Other (specify):	☑ Checked
G7: Natural light	☐ N/A VM1 ☐ AS1 ☒ ☐ Other (specify):	☑ Checked
G8: Artificial lighting details	☒ N/A VM1 ☐ AS1 ☐ ☐ Other (specify):	☑ Checked
G9: Electricity	☐ N/A VM1 ☐ AS1 ☒ ☐ Other (specify):	☑ Checked
G10: Piped services	☒ N/A VM1 ☐ AS1 ☐ ☐ Other (specify):	☑ Checked
G11: Gas as an energy source	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
G12: Water supply	☒ N/A VM1 ☐ AS1 ☐ AS2 ☐ ☐ Other (specify):	☑ Checked
G13: Foul water	☒ N/A VM1 ☐ VM4 ☐ AS1 ☐ AS2 ☐ AS3 ☐ ☐ Other (specify):	☑ Checked
G14: Industrial liquid waste	☒ N/A VM1 ☐ AS1 ☐ ☐ Other (specify);	☑ Checked
G15: Solid waste	☒ N/A AS1 ☐ Other ☐ (specify):	☑ Checked
H1: Energy efficiency	☐ N/A VM1 ☐ AS1 ☒ Other ☐ (specify):	☑ Checked
SH: Simple house	☒ N/A SHAS1 ☐	☑ Checked
Back country huts	☒ N/A BCH/AS1 ☐	☑ Checked

WAIVER / MODIFICATION REQUIRED (STATE NATURE OF WAIVER OR MODIFICATION OF BUILDING CODE REQUIRED)
Specify parts of the code; supporting documentation must be attached. If not applicable, state n/a
N/A

PART 5 – COMPLIANCE SCHEDULE (COMPLETE THIS SECTION ONLY FOR COMMERCIAL BUILDINGS AND RESIDENTIAL BUILDINGS WITH CABLE CAR)		
Do not fill in this section if this application is only for a project information memorandum		**For Council use only**
☒ There **are no** specified systems in the building? ☐ There **are** specified systems in the building? ☐ Specified systems **are** being altered, added to or removed in the course of the building work ***(If there are specified systems in the building, complete and attach the 'Specified Systems Form')***		☑ Checked
If existing building containing Specified Systems, please state the Compliance Schedule No:		☑ Checked
Risk Group	Total occupancy numbers	
Fire alarm type		

W pncc.govt.nz | E info@pncc.govt.nz | P +64 6 356 8199 | Private Bag 11034, The Square, Palmerston North, New Zealand

PALMERSTON NORTH CITY COUNCIL

40660

Building Consent No: 40660
Section 51, Building Act 2004

609 1079/11

The Building

Street Address of building:	9-10 WILLS CRESCENT ASHHURST
Legal Description of land where building is located:	LOT 20 DP 46535
Building Name:	N/A
Location of Building within site/block number:	N/A
Level/unit number	1

The Owner

Name of owner:	STEVENS, RONALD CRAIG
Mailing Address:	10 WILLS CRESCENT ASHHURST 4810
First point of contact for communications with the building consent authority:	SHADBOLT ARCHITECTS LTD AGNEESH BRAHMBHATT
Mailing Address:	T/A ARCHITYPE PO BOX 850 PALMERSTON NORTH CENTRAL PALMERSTON NORTH 4440
Phone number:	day 0064 06 3555599
Facsimile number:	Fax 0064 06 3555596
Email address:	darren@shadboltarchitects.co.nz

Building Work

The following building work is authorised by this building consent:

Project:	NEW FREESTANDING FIRE METRO WEE RAD; REMOVE EXISTING WINDOW & RELOCATE TO ANOTHER WALL; NEW BAY WINDOW; REMOVE EXISTING FRONT DOOR & FILL IN WALL
Intended Use:	RESIDENTIAL DWELLING

40660

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;

BUILDING ACT 2004, SECTION 90:

Inspections by Building Consent Authorities

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.

Signature:

Name: **GEOFF COCKERY**

Position: **SENIOR BUILDING OFFICER**

On behalf of: **PALMERSTON NORTH CITY COUNCIL**

Date: **2 JUNE 2015**

ENDORSEMENTS – The following items will need to be addressed prior to the issue of the code compliance certificate;

EASEMENTS/BUILDING LINE RESTRICTIONS (LGA Sect. 327a / Sect 243. Resource Management Act):

This property is subject to a rights of way and water, sanitary sewer, gas, telephone and stormwater easement at the front of the property. The proposed works are clear of the easement. Please check your certificate of title for further information.

RESTRICTED BUILDING WORK:

Building Act 2004, Section 87 and 88
Before Restricted Building Work commences under a building consent, it is the owners' responsibility to provide written notice on the appropriate form, of the name of every Licensed Building Practitioner who is engaged to carry out or supervise the Restricted Building Work.

The following licence classes have been identified as requiring Licensed Building Practitioners to undertake the work under this building consent:

Carpentry
Foundation

Each Licensed Building Practitioner who carries out (other than as an owner-builder) or supervises restricted building work under a building consent must, on completion of the restricted building work, provide the owner and the territorial authority for the district in which the restricted building work is situated with a record of work, in the prescribed form, stating what restricted building work the licensed building practitioner carried out or supervised.

THE FOLLOWING INSPECTIONS ARE MANDATORY, FAILURE TO NOTIFY THE PALMERSTON NORTH CITY COUNCIL BUILDING SERVICES SECTION OF ANY OF THE REQUIRED INSPECTIONS WILL RESULT IN A NOTICE TO FIX BEING ISSUED.

Code	Detail	Date	Name/ Signature	Pass/ Fail
✓T30O	1 x WEATHERTIGHTNESS			
✓T30P	1 x PRELINE - SINGLE/LOWER STOREY			
N/A ✗T30S	1 x POSTLINE			
✓T30U	1 x FINAL - BUILDING			

NOTE: FURTHER INSPECTIONS MAY INCUR ADDITIONAL COST AT TIME OF CODE COMPLIANCE CERTIFICATE ISSUE.

COMPOSITE COMPUTER REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**WN25D/674**
Land Registration District	**Wellington**
Date Issued	27 September 1984

ior References
WN17D/575

Estate	Fee Simple - 1/2 share
Area	963 square metres more or less
Legal Description	Lot 20 Deposited Plan 46535

Proprietors
Ronald Craig Stevens

Estate	Leasehold	**Instrument**	L 647523.3
		Term	999 years commencing on 1.9.1984
Legal Description	Flat 1 Deposited Plan 57064		

Proprietors
Ronald Craig Stevens

Interests

478386 Notice imposing Building Line Restriction (Affects Fee Simple)

493935 Notice imposing Building Line Restriction (Affects Fee Simple)

purtenant hereto are rights of way and water, sanitary sewer, gas, power, telephone and stormwater rights specified in Easement Certificate 228986.6 (Affects Fee Simple)

Subject to a right of way and to water, sanitary sewer, gas, power, telephone and stormwater rights over part marked E on DP 46535 specified in Easement Certificate 228986.6 (Affects Fee Simple)

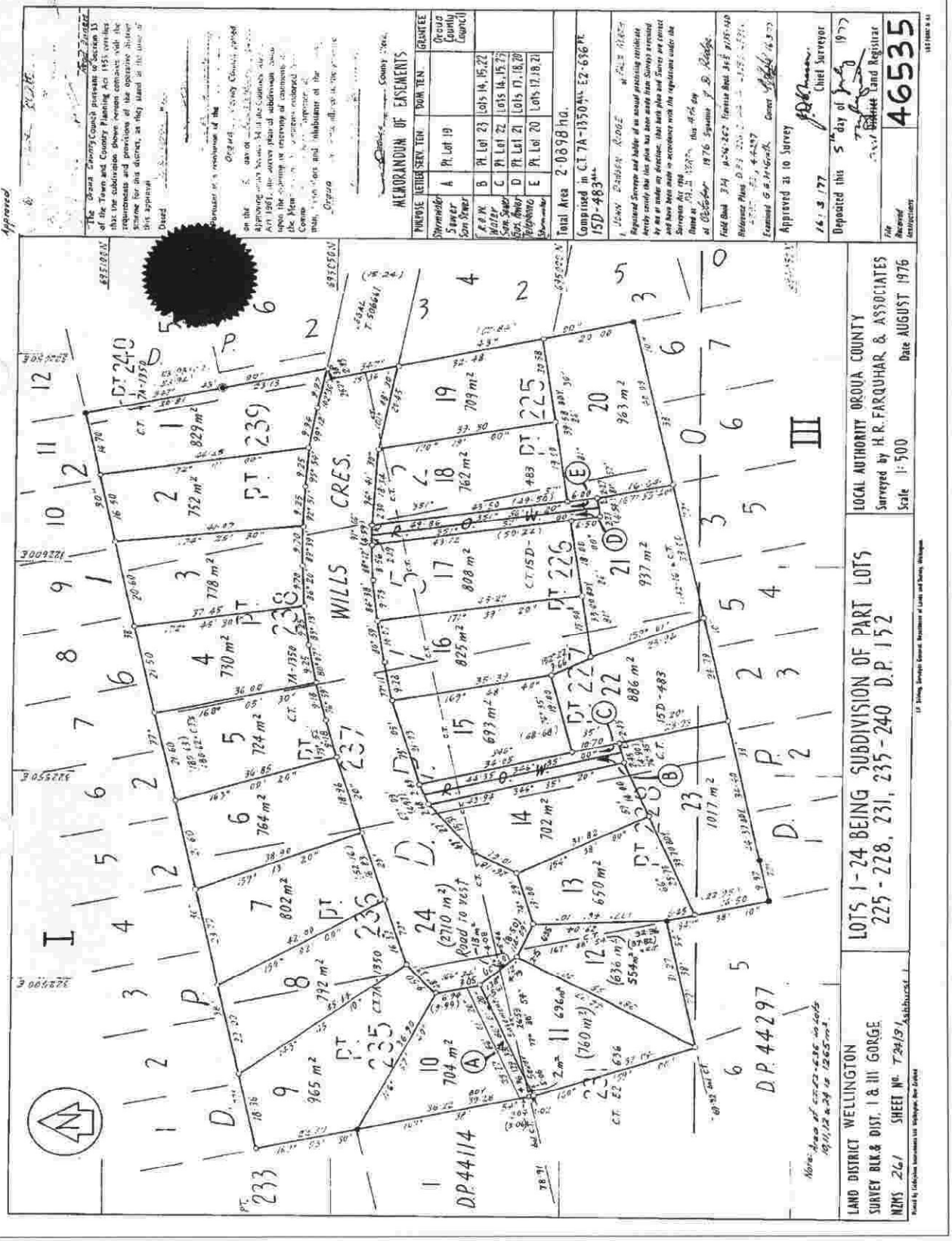
The easements specified in Easement Certificate 228986.6 are subject to Section 309 (1) (a) Local Government Act 1974

647523.3 Lease of Flat 1 DP 57064 Term 999 years commencing on 1.9.1984 Composite CT WN25D/674 issued - 27.9.1984 at 9.22 am (Affects Fee Simple)

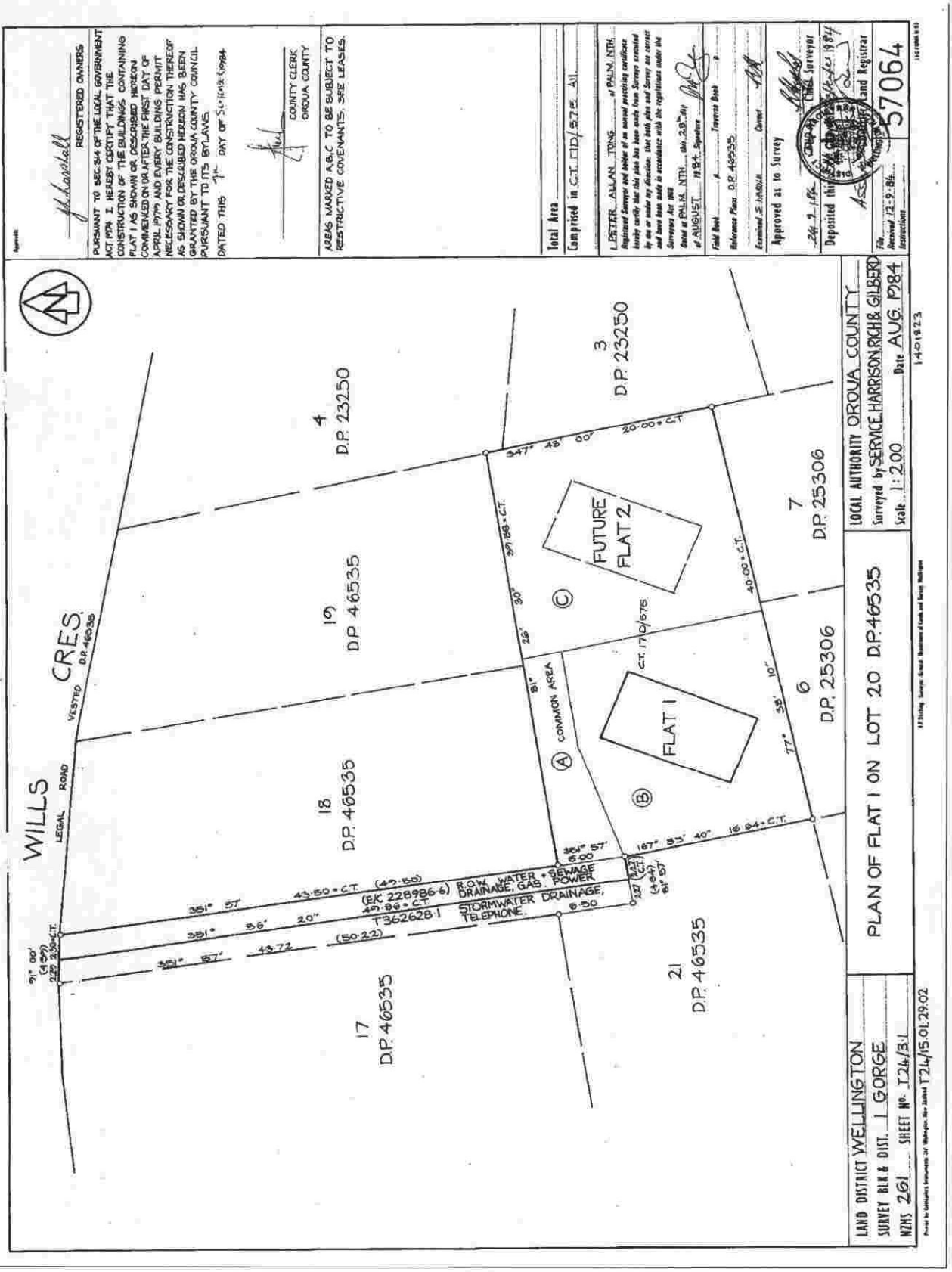
696192.1 Lease of Flat 2 Plan 58044 Term 999 years commencing on 1.4.1985 CT WN27A/568 issued - 17.6.1985 at 2.54 pm (Affects Fee Simple)

B820137.2 Mortgage to (now) Westpac New Zealand Limited - 31.1.2001 at 11.16 am

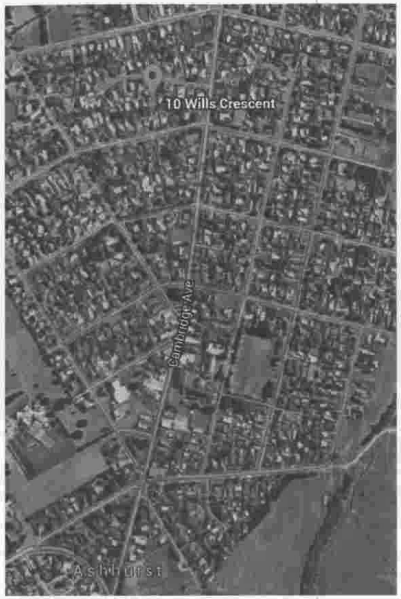
Identifier **WN25D/674**



Identifier **WN25D/674**



10660



LOCATION PLAN
NTS



PHOTO 1
NORTH ELEVATION



PHOTO 2
PART WEST ELEVATION



SITE PLAN
NTS

PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

FOR CONSENT & CONSTRUCTION

architype
shadbolt architects ltd
D 06 355 5599
F 06 355 5598
po box 850
level 2, 99 rangitikei st,
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general
- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in millimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

note
- Wind Zone: Medium
- Earthquake zone: 3
- Exposure zone: B
- District plan zone: Residential zone
- Lot 20 DP 46535
- 10 Wills cres cross leased with 9 Wills Cres
- 9 & 10 Wills total site area: 963m²
  Site area minus ROW: 850m²

NO CHANGE TO SITE COVERAGE

project
ALTERATION AT
10 WILLS CRES
ASHURST

sheet title
Location & Site Plan

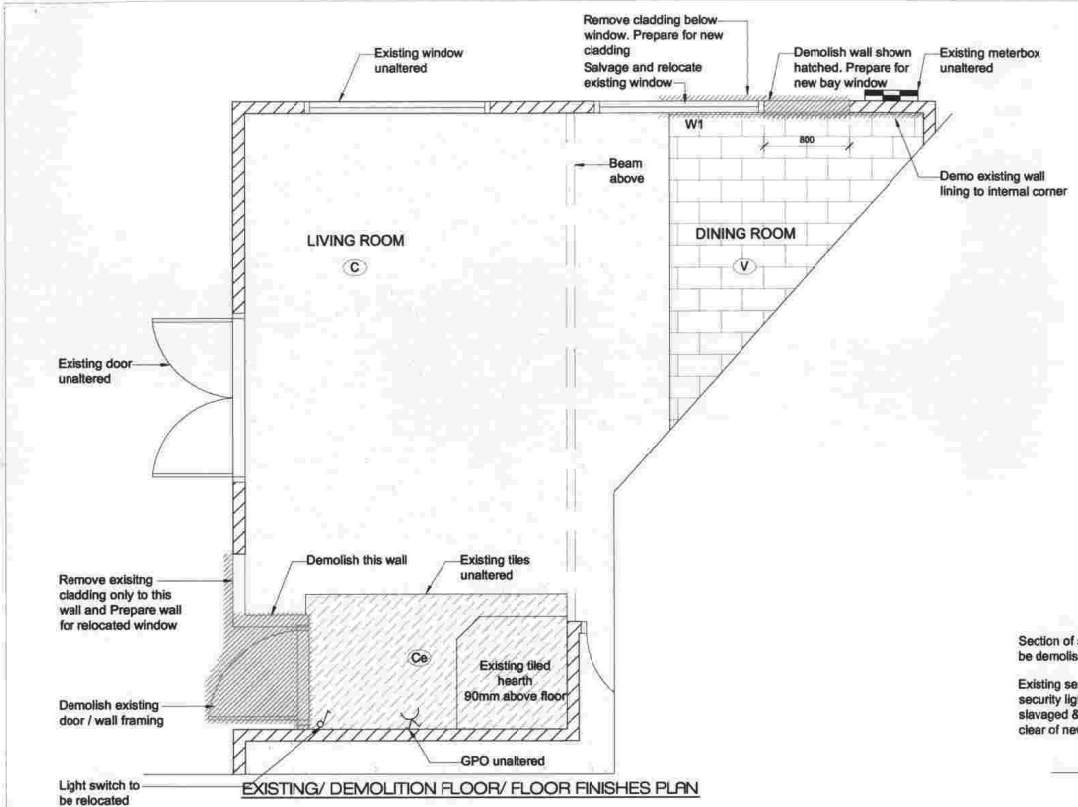
sheet	sheet scale	secondary scale
A1	• 1:200 • 1cm = 2.0m	• - • -
sheet	sheet scale	secondary scale
A3	• 1:400 • 1cm = 4.0m	• - • -

sheet ruler in meters
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

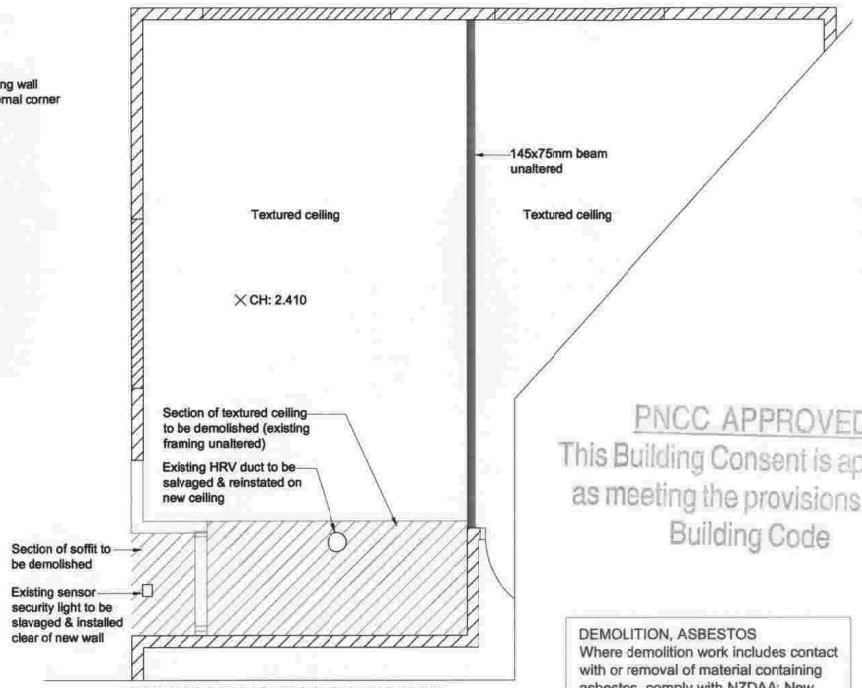
project no.	stage
15005	DT
sheet no.	rev.
A0.01	A

rev.	date	details	drw by	chk by
A	08/04/15	• issue: For Review	EB	AB

10660



EXISTING/ DEMOLITION FLOOR/ FLOOR FINISHES PLAN

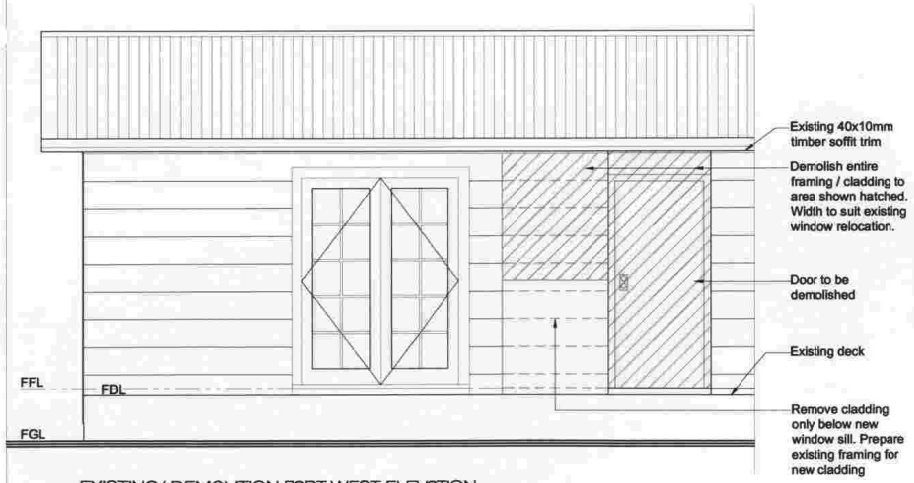


EXISTING/ DEMOLITION CEILING PLAN

NOTE: Builder to check asbestos content to existing ceiling

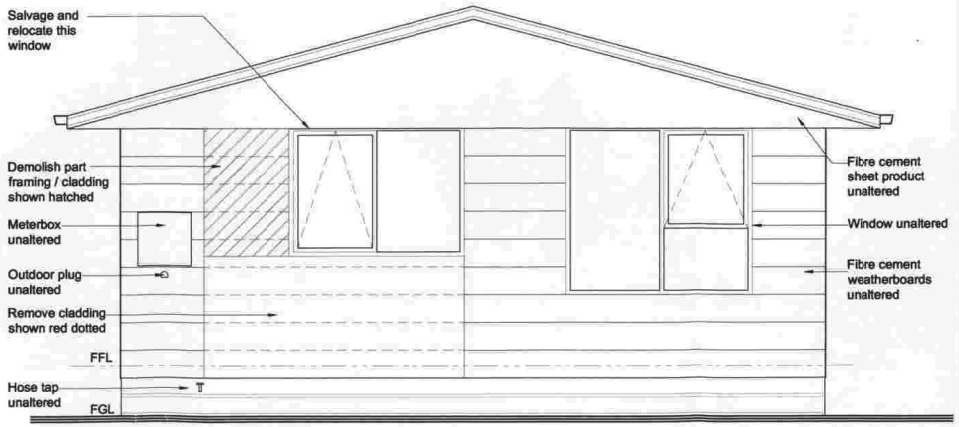
PNCC APPROVED
This Building Consent is app
as meeting the provisions o
Building Code

DEMOLITION, ASBESTOS
Where demolition work includes contact with or removal of material containing asbestos, comply with NZDAA: New Zealand guidelines for the management and removal of asbestos.



EXISTING/ DEMOLITION PART WEST ELEVATION

Existing porch omitted for clarity



EXISTING/ DEMOLITION NORTH ELEVATION

Existing porch omitted for clarity

FOR CONSENT & CONSTRUCTION

architype
shadbolt architects ltd
D 06 355 5599
F 06 355 5598
po box 850
level 2, 99 rangitikei st,
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general

- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in milimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

legend- existing/ demo plan
- Existing wall
- Demolished item

legend- electrical
- GPO
- Light switch

legend- flooring
- C Carpet
- V Vinyl
- Ce Cementitious surface

legend- elevations
- FFL: Finished Floor Level
- FDL: Finished Floor Level
- FGL: Finished Floor Level

project
ALTERATION AT
10 WILLS CRES
ASHURST

sheet title
Existing/ demolition elevations, floor & ceiling plan

sheet	sheet scale	secondary scale
A1	• 1:25 • 1cm = 0.25m	•- •-
sheet	sheet scale	secondary scale
A3	• 1:50 • 1cm = 0.5m	•- •-

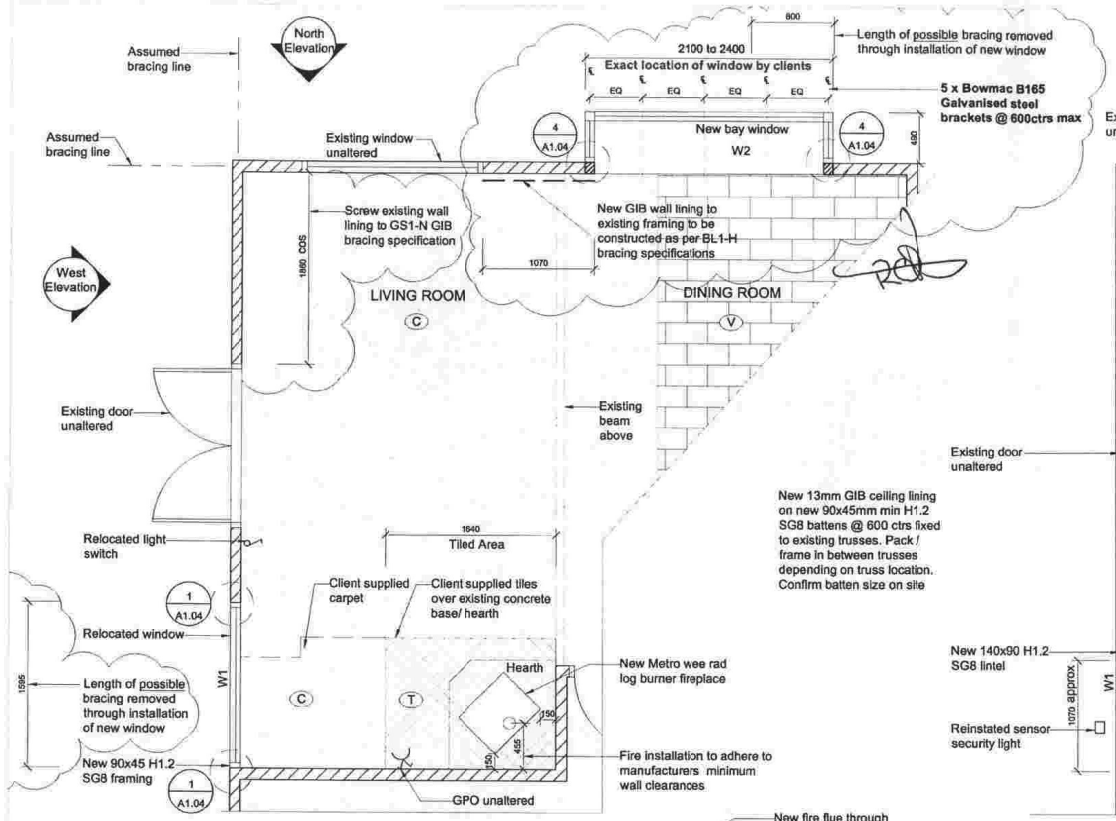
sheet ruler in meters
0 0.5 1

rev.	date	details	drw by	chk by
A	20/03/15	• Issue: For Review	EB	-

project no. 15005
stage DT
sheet no. A1.01
rev. A

040660

RECEIVED
21 MAY 2015
BY

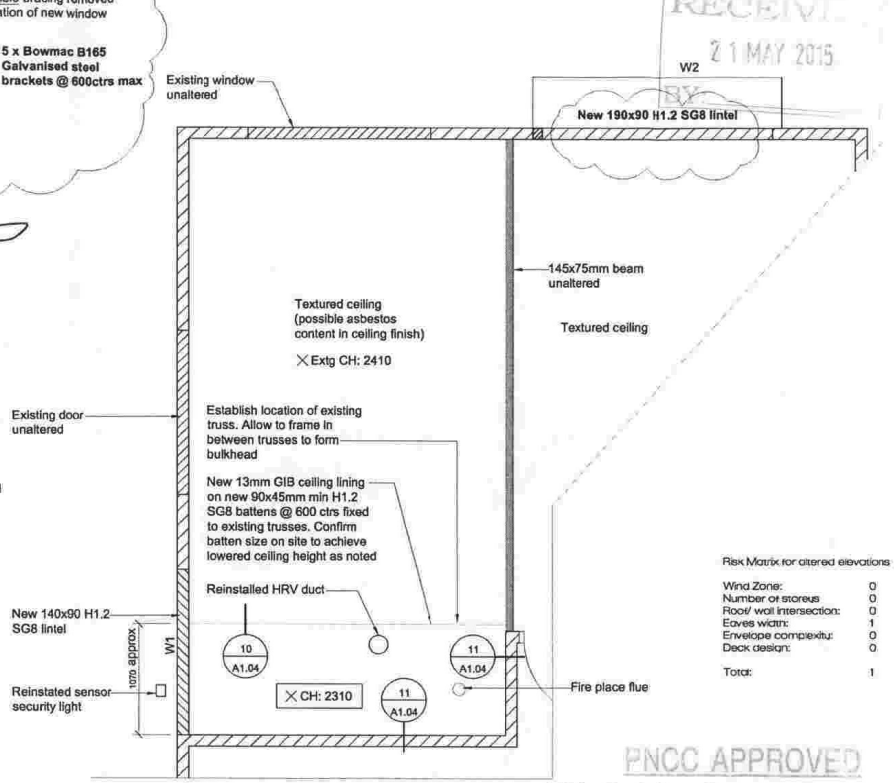


ALTERED FLOOR/ FLOOR FINISHES PLAN



ALTERED PART WEST ELEVATION

Existing porch omitted for clarity



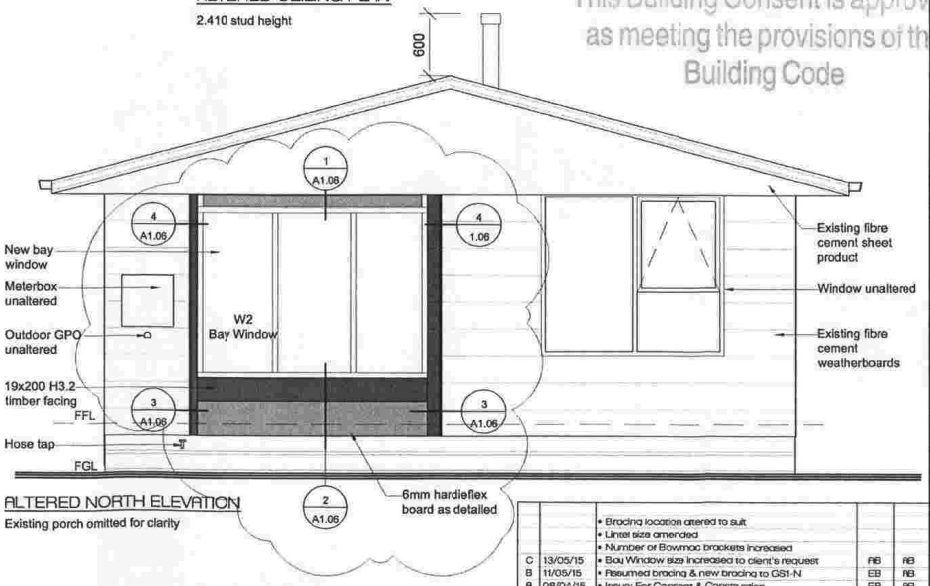
ALTERED CEILING PLAN

2.410 stud height

Risk Matrix for altered elevations

Wind Zone:	0
Number of storeys	0
Roof/ wall intersection:	0
Eaves width:	1
Envelope complexity:	0
Deck design:	0
Total:	1

PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code



ALTERED NORTH ELEVATION

Existing porch omitted for clarity

FOR CONSENT & CONSTRUCTION

rev.	date	details	drw by	chk by
		• Bracing location altered to suit • Lintel size amended • Number of Bowmac brackets increased		
C	13/05/15	• Bay Window size increased to client's request	AB	AB
B	11/05/15	• Assumed bracing & new bracing to GS1-N	EB	AB
A	08/04/15	• Issue: For Consent & Construction	EB	AB

architype
shadbolt architects ltd
D 09 355 5599
F 09 355 5596
po box 8150
level 2, 99 rangitikei st,
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general

- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in millimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

note

- Architraves: 60x10mm to match existing
- Skirting: 45x10mm to match existing
- Scotia: 40x10mm to match existing
- Contractor to ensure operational smoke alarm within 3m of every bedroom door

legend- existing/ demo plan

- Existing wall
- New 90x45 H1.2 SG8 framed wall. Studs @400. Dwangs @600.

legend- electrical

- GPO
- Light switch

legend- flooring

- C Carpet
- V Vinyl
- T Tiles

legend- elevations

- FFL: Finished Floor Level
- FDL: Finished Floor Level
- FGL: Finished Floor Level

project

ALTERATION AT
10 WILLS CRES
ASHURST

sheet title

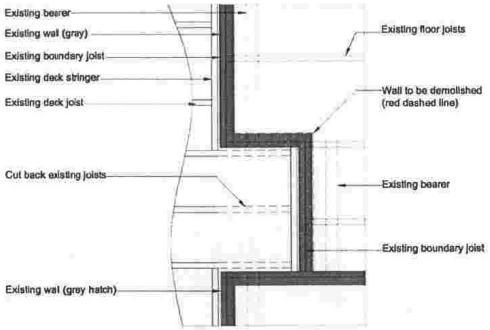
Altered elevations, floor & ceiling plan

sheet	sheet scale	secondary scale
A1	• 1:25 • 1cm = 0.25m	• - • -
sheet	sheet scale	secondary scale
A3	• 1:50 • 1cm = 0.5m	• - • -

sheet ruler in meters

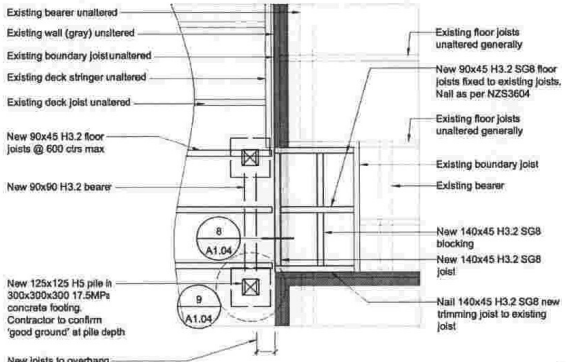
0 0.5 1

project no.	stage
15005	DT
sheet no.	rev.
A1.02	C



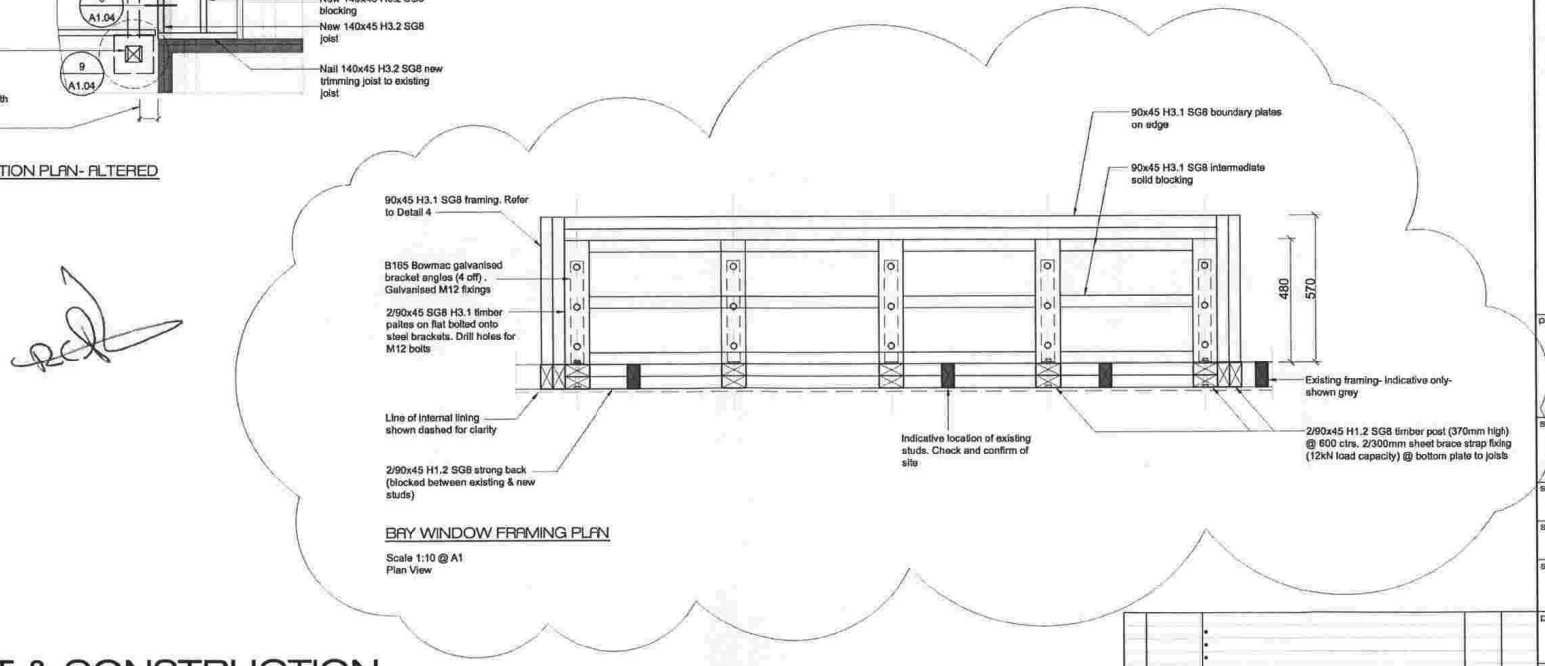
PART FOUNDATION PLAN- EXISTING

Scale 1:20 @ A1
Plan view



PART FOUNDATION PLAN- ALTERED

Scale 1:20 @ A1
Plan view



BAY WINDOW FRAMING PLAN

Scale 1:10 @ A1
Plan View

FOR CONSENT & CONSTRUCTION

RECEIVED
21 MAY 2015
BY: 040660

PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

architype
shadbolt architects ltd
D 06 355 5599
F 06 355 5598
po box 650
level 2, 99 rangitikei st.
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general

- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in millimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

Fixing schedule:

Joist to bearer:
2/100x3.75 skew nails

Boundary joist to joist:
2/100x3.75 end nailed

Bearer to pile:
2/49mm wire dogs with 2/100x3.75 skew nails

Joist to trimmer:
3/100x3.75 end nailed

project
ALTERATION AT
10 WILLS CRES
ASHURST

sheet title
Existing/ altered part floor joist plan & section

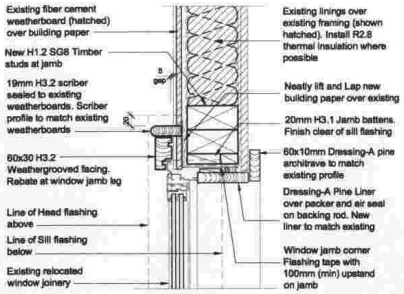
sheet	sheet scale	secondary scale
A1	• 1:10 • 1cm = 10cm	• 1:20 • 1cm = 20cm
sheet	sheet scale	secondary scale
A3	• 1:20 • 1cm = 20cm	• 1:40 • 1cm = 40cm

sheet ruler in meters
0 0.5 1

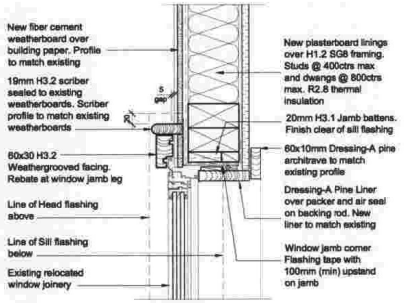
rev.	date	details	drw by	chk by
B	13/05/15	• Bay window size increased	EB	AB
A	08/04/15	• Issue: For Consent & Construction	EB	AB

project no. 15005
stage DT
sheet no. A1.03
rev. B

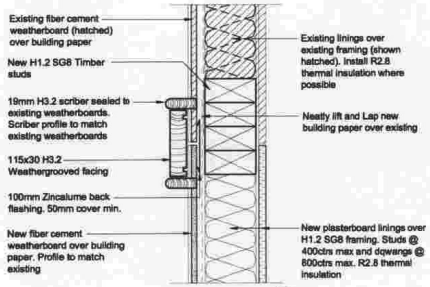
10660



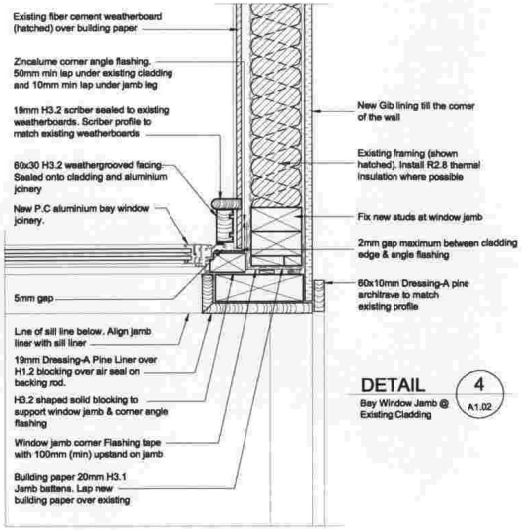
DETAIL 1 Typical Window Jamb @ Existing Cladding — A1.02



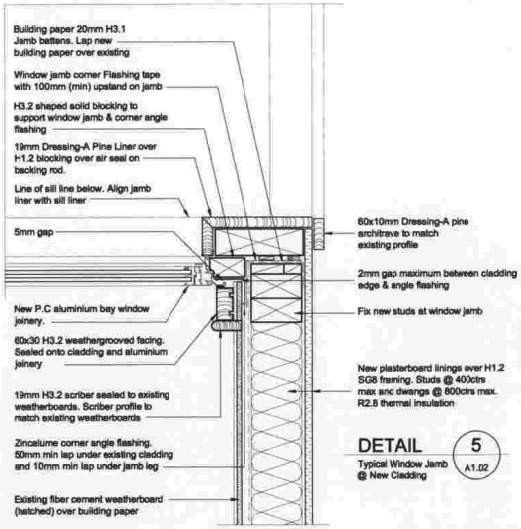
DETAIL 2 Typical Window Jamb @ New Cladding — A1.02



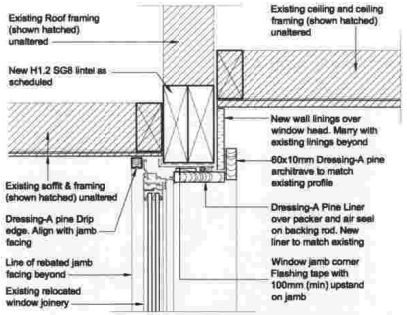
DETAIL 3 Vertical Joint Existing + New Cladding — A1.02



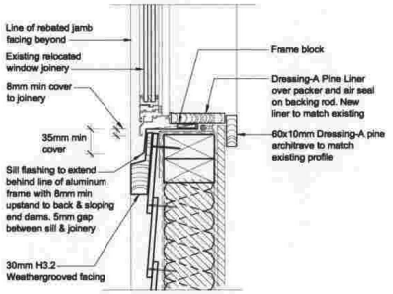
DETAIL 4 Bay Window Jamb @ Existing Cladding — A1.02



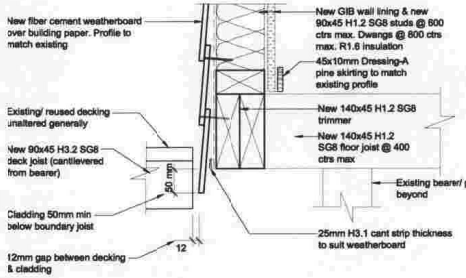
DETAIL 5 Typical Window Jamb @ New Cladding — A1.02



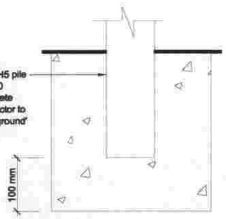
DETAIL 6 Typical Window Head — A1.02



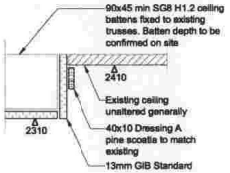
DETAIL 7 Window sill detail — A1.02



DETAIL 8 Weatherboard detail — A1.02



DETAIL 9 Pile footing detail — A1.02



DETAIL 10 Ceiling bulkhead detail — A1.02



DETAIL 11 Lowered ceiling detail — A1.02

PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

FOR CONSENT & CONSTRUCTION

rev.	date	details	drw by	chk by
A	08/04/15	• Issue: For Consent & Construction	EB	RB

architype
shadbolt architects ltd
D 06 365 5599
F 06 365 5596
po box 850
level 2, 99 rangitikei st,
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general

- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in millimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

project
ALTERATION AT
10 WILLS CRES
ASHURST

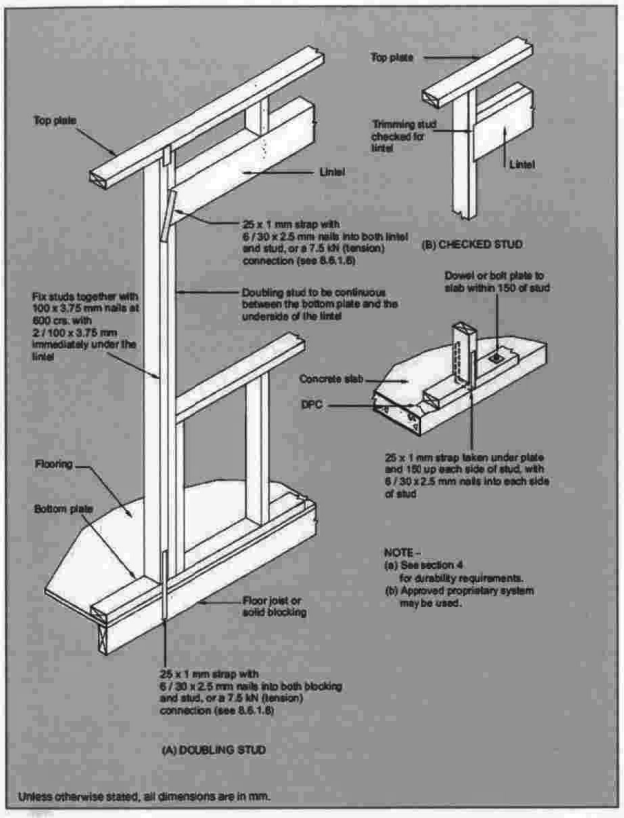
sheet title
Construction Details One

sheet	sheet scale	secondary scale
A1	• 1:5 • 1cm = 5cm	• - • -
sheet	sheet scale	secondary scale
A3	• 1:10 • 1cm = 10cm	• - • -

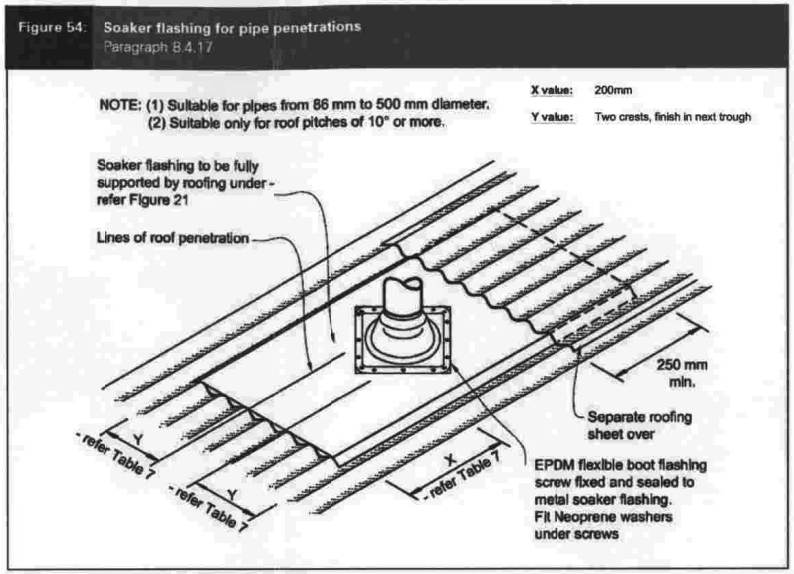
sheet ruler in meters
0 0.5 1

project no.	stage
15005	DT
sheet no.	rev.
A1.04	A

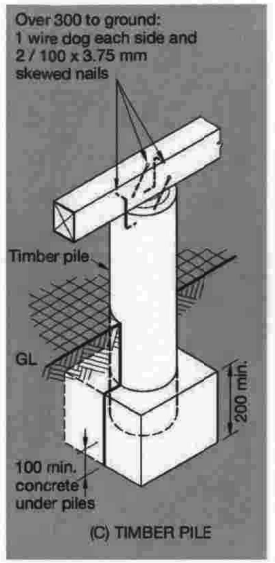
10666



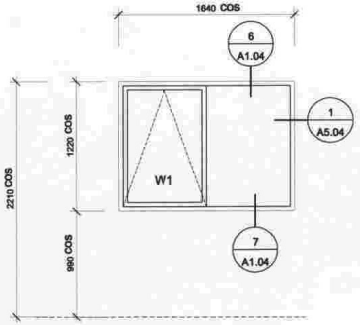
Detail 1
Lintel fixing



Detail 2
Chimney roof flashing penetration

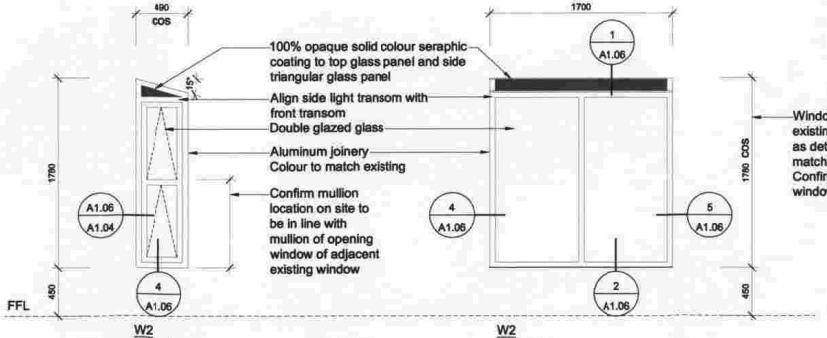


Detail 3
Pile to bearer fixing detail



W1
Existing window reused

Glazing:	Existing. Single glazed
Aluminum joinery:	Existing



W2
Side view

W2
Front view

Nulook weathertight series green house window

Aluminum panels:	Colour TBC by client
Glazing:	Double glazed. Tint TBC by client
Aluminum joinery:	Colour to match existing

Contact: Rob Newport
027 203 2803
06 368 3523

ENCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

FOR CONSENT & CONSTRUCTION

rev.	date	details	drw by	chk by
A	08/04/15	• Issue: For Consent & Construction	EB	AB

architype
shadbolt architects ltd
D 06 355 5599
F 06 355 5598
po box 850
level 2, 99 rangitikei st,
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general
- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in millimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

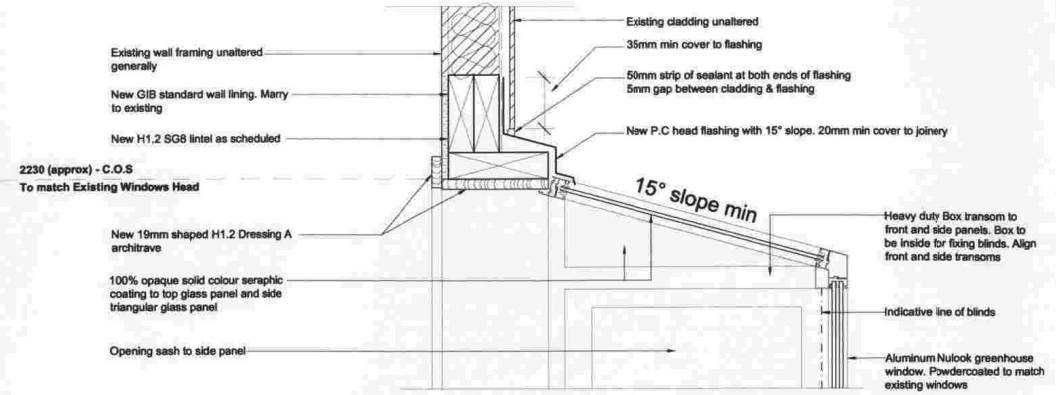
project
ALTERATION AT
10 WILLS CRES
ASHURST

sheet title
Details 2 & Window Schedule

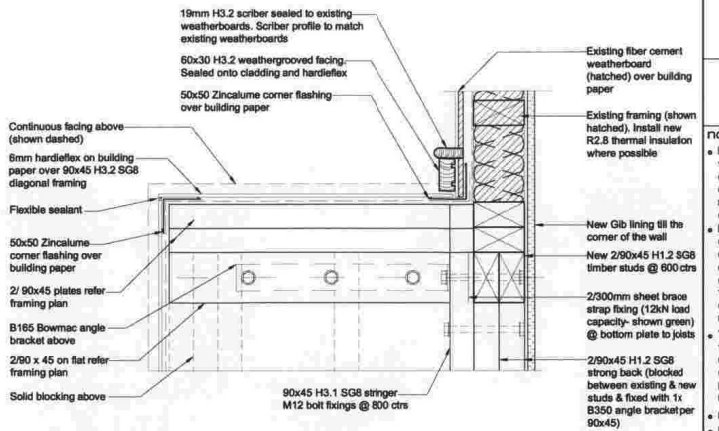
sheet	sheet scale	secondary scale
A1	• 1:25 • 1cm = 25cm	•- •-
sheet	sheet scale	secondary scale
A3	• 1:50 • 1cm = 50cm	•- •-

sheet ruler in meters
0 0.5 1

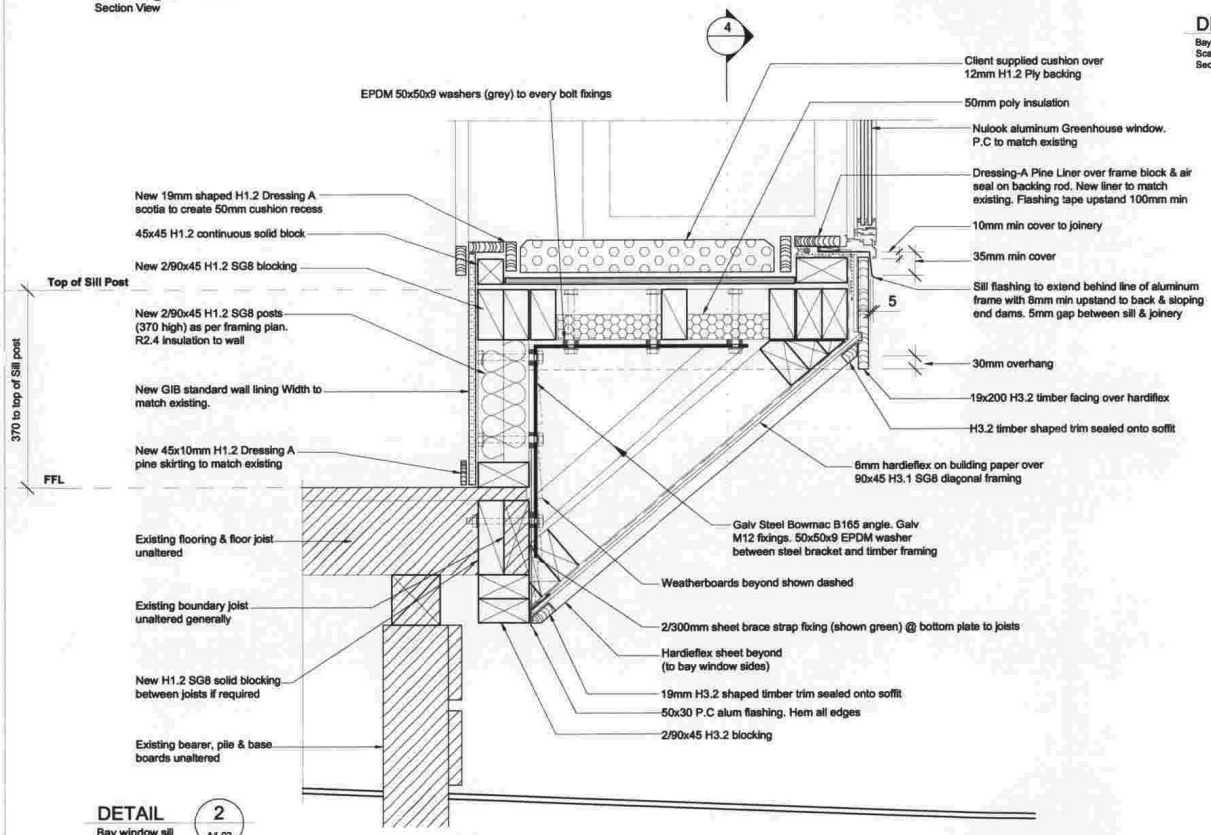
project no.	stage
15005	DT
sheet no.	rev.
A1.05	A



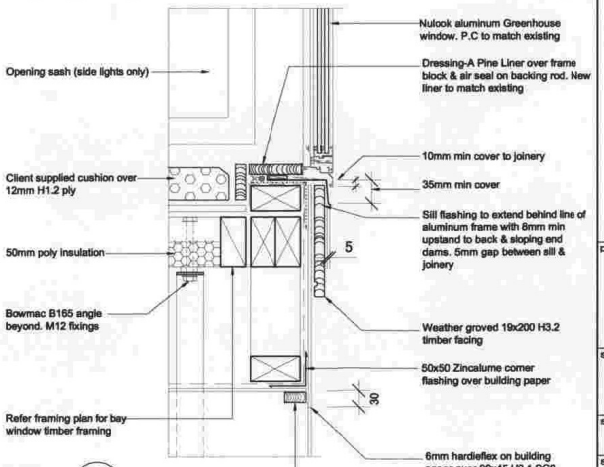
DETAIL 1 A1.02
Bay window head
Scale 1:10 @ A1
Section View



DETAIL 3 A1.02
Bay window sill
Scale 1:5 @ A1
Section View



DETAIL 2 A1.02
Bay window sill
Scale 1:10 @ A1
Section View



DETAIL 4 A1.02
Bay window sill
Scale 1:5 @ A1
Section View

FOR CONSENT & CONSTRUCTION

PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

10660

architype
shadbolt architects ltd
D 06 355 5599
F 06 355 5598
po box 860
level 2, 99 rondalkei st.
palmerston north 4410
NZIA Practice

client
LYN & CRAIG STEVENS

notes - general
- Read the drawings in conjunction with other relevant project documents, specification & with other such written instructions as may be issued during the entire course of the project
- Notify the architect immediately of any omissions and/or discrepancies in drawings and/or deviation from any onsite conditions. Failure to notify in timely manner shall result in contractor taking any and all remedial measures required
- The information contained on these drawing is subject to Copyright and may not be copied or reproduced without written permission of Architype - Shadbolt Architects ltd
- All dimensions are in millimeter
- Do not scale the drawings. If in doubt ask
- All dimensions shall be verified on site before construction and/or fabrication
- Workmanship, materials and fixings shall be in accordance with relevant codes and statutory requirements

project
ALTERATION AT
10 WILLS CRES
ASHURST

sheet title
Bay window details

sheet	sheet scale	secondary scale
A1	• 1:5 • 1cm = 5cm	• - • -
sheet	sheet scale	secondary scale
A3	• 1:10 • 1cm = 10cm	• - • -

sheet ruler in meters

project no.	stage
15005	DT
sheet no.	rev.
A1.06	A

rev.	date	details	drw by	chk by
A	08/04/15	• Issue: For Consent & Construction	EB	AB

Memorandum from licensed building practitioner: Record of building work

Section 88, Building Act 2004

THE BUILDING

Street address: 10 WILLS CRES.	
Suburb:	
Town/City: ASHHURST	Postcode: 40660

THE PROJECT

Building consent number: BC 40660	

THE OWNER(S)

Name(s): L + C STEVENS	
Mailing address: 10 WILLS CRES	
Suburb:	PO Box/Private Bag:
Town/City: ASHHURST	Postcode:
Phone number: 063268089	Email address:

RECORD OF WORK THAT IS RESTRICTED BUILDING WORK

PRIMARY STRUCTURE

Work that is restricted building work	Description of restricted building work	Carried out or supervised
Tick ✓	If necessary, describe the restricted building work.	Tick ✓ whether you carried out the work or supervised someone else.
Foundations and subfloor framing ○		○ Carried out ○ Supervised
Walls ✓	FRAMED OUT OLD FRONT DOOR AREA. REFITTED EXISTING WINDOW. FRAMED UNDER BAY WINDOW	✓ Carried out ○ Supervised

PRIMARY STRUCTURE CONT'S		
Roof ◯	40660	◯ Carried out ◯ Supervised
Columns and beams ◯		◯ Carried out ◯ Supervised
Bracing ◯		◯ Carried out ◯ Supervised
Other ◯		◯ Carried out ◯ Supervised

RECORD OF WORK THAT IS RESTRICTED BUILDING WORK

EXTERNAL MOISTURE MANAGEMENT SYSTEMS		
Damp proofing ◯		◯ Carried out ◯ Supervised
Roof cladding or roof cladding system ◯		◯ Carried out ◯ Supervised
Ventilation system (for example, subfloor or cavity) ◯		◯ Carried out ◯ Supervised

EXTERNAL MOISTURE MANAGEMENT SYSTEMS CONT'D

Wall cladding or wall cladding system	☒	FIXED HARDIE PLANK UNDER BOTH WINDOWS 40660	☒ Carried out ○ Supervised
Waterproofing	○		○ Carried out ○ Supervised
Other	○		○ Carried out ○ Supervised

ISSUED BY

Name and contact details of the licensed building practitioner who is licensed to carry out or supervise restricted building work.

Name: JC GREENLEES	LBP number: 102584
Class(es) licensed in: CARPENTRY S1.	
Plumbers, Gasfitters and Drainlayers registration number (if applicable):	
Mailing address (if different from below):	
Street address/Registered office: 52 ROYAL OAK DR	
Suburb: KELVIN GROVE	Town/City: PALMERSTON NORTH
PO Box/Private Bag:	Postcode: 4414
Phone number: 063540645	Mobile: 0274825600
After hours: 0274825600	Fax:
Email address:	Website:

DECLARATION

I J GREENLEES carried out or supervised the restricted building work recorded on this form.

Signature: J Greenlees Date: 1/12/15

10660

Building Services

Trade LBP Notification Form

Please complete this form to notify Council of the trade Licensed Building Practitioner(s) (LBP) you intend to undertake your building work. This form should also be used to advise of any changes to LBP details previously notified to Council.

Trade LBP's are holders of one or more of the following licences: carpentry, roofing, external plastering, foundations, brick and blocklaying. Licensed plumbers and gasfitters are automatically treated as LBP's and their details must also be provided if undertaking Restricted Building Work

Section 87 of the Building Act 2004 states that before any Restricted Building Work commences a building owner must give the Building Consent Authority written notice of every LBP who is engaged to carry out or supervise work under the Building Consent.

1. The building project and key contact

Building Consent Number:	BC 40660
Street Address of Building:	10 WILLS CRES ASHHURST
Contact Person:	J GREENLEES
Contact Address:	52 ROYAL OAK DR PALMERSTON NORTH
Contact Phone Number:	0274825600
Contact Email:	rgreenleesextra.co.nz

2. LBP details (complete for all relevant LBP's)

Name:	JOHN GREENLEES			
Please tick relevant Licensing Class(es) being carried out by LBP:				
☐ Foundation	☑ Carpentry	☐ Roofing	☐ External Plastering	☐ Brick/Blocklaying
Address	52 ROYAL OAK DR PALMERSTON NORTH			
Email:	rgreenleesextra.co.nz		**Registration #:**	BP 102584
Mobile No:	0274825600		**Landline:**	06 3540645

Name:				
Please tick relevant Licensing Class(es) being carried out by LBP:				
☐ Foundation	☐ Carpentry	☐ Roofing	☐ External Plastering	☐ Brick/Blocklaying
Address				
Email:			**Registration #:**	
Mobile No:			**Landline:**	

Name:				
Please tick relevant Licensing Class(es) being carried out by LBP:				
☐ Foundation	☐ Carpentry	☐ Roofing	☐ External Plastering	☐ Brick/Blocklaying
Address				
Email:			**Registration #:**	
Mobile No:			**Landline:**	

10660

Building Services

Trade LBP Notification Form

Name:					
Please tick relevant Licensing Class(es) being carried out by LBP:					
☐ Foundation	☐ Carpentry	☐ Roofing	☐ External Plastering	☐ Brick/Blocklaying	
Address					
Email:			**Registration #:**		
Mobile No:			**Landline:**		

Name:					
Please tick relevant Licensing Class(es) being carried out by LBP:					
☐ Foundation	☐ Carpentry	☐ Roofing	☐ External Plastering	☐ Brick/Blocklaying	
Address					
Email:			**Registration #:**		
Mobile No:			**Landline:**		

Name:					
Please tick relevant Licensing Class(es) being carried out by LBP:					
☐ Foundation	☐ Carpentry	☐ Roofing	☐ External Plastering	☐ Brick/Blocklaying	
Address					
Email:			**Registration #:**		
Mobile No:			**Landline:**		

3. Signature of the owner / agent on behalf of and with the authority of owner:

Name:	Craig Stevens		
Signed:		**Date:**	6/7/15

COUNCIL USE ONLY		
Item	**Decision**	**Comments**
All LBP's registered	YES / NO	
Owner / Agent notified of decision	YES / NO	
System updated with LBP details	YES / NO	
LBP inspection flag updated	YES / NO	
Approved form placed in site file	YES / NO	
Notes:		
All items completed?	YES / NO	Name: S. Todd Date: 24-12-15 Signature:

Dave Brown interview

16487

Form 2A

40660

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: **10 Wills Crescent**	
Suburb: **Ashhurst**	
Town/City: **Ashhurst**	Postcode: 4810

THE OWNER

Name(s): Ronald Craig Stevens	
Mailing address: **As above**	
Suburb:	PO Box/Private Bag:
Town/City:	Postcode:
Phone number: **027- 268 6409**	Email address: **lynandcraigstevens@clear.net.nz**

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
(X)	**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 Agneesh Brahmbhatt 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
Tick(•) if included *Cross (X) if excluded*	*[If appropriate, provide details of the restricted building work]*	*[Specify whether you carried out this design work or supervised someone else carrying out this design work]*	*[If appropriate, specify references]*

Primary structure

All RBW Design work relating to B1	(√)	***New lintels & wall sections***	(**X**) Carried out (**X**) Supervised	**A1.02**
Foundations and subfloor framing	(√)	***New pile & framing***	(**X**) Carried out (**X**) Supervised	**A1.03**
Walls	(√)	***New sections of wall***	(**X**) Carried out (**X**) Supervised	**A1.02**
Roof	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Columns and beams	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Bracing	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Other	(**X**)	***N/A***	( ) Carried out ( ) Supervised	

EXTERNAL MOISTURE MANAGEMENT SYSTEMS: E2

All RBW design work relating to E2	(√)	***New direct fix fibre cement weatherboard to match existing***	(**X**) Carried out (**X**) Supervised	**A1.03 & A1.04**
Damp proofing	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Roof cladding or roof cladding system	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Ventilation system (for example, subfloor or cavity)	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Wall cladding or wall cladding system	(√)	***New direct fix fibre cement weatherboard to match existing***	(**X**) Carried out (**X**) Supervised	**A1.03 & A1.04**
Waterproofing	(**X**)	***N/A***	( ) Carried out ( ) Supervised	
Other	(**X**)	***N/A***	( ) Carried out ( ) Supervised	

FIRE SAFETY SYSTEMS: C1 – C6

Emergency warning systems, evacuation and fire service operation systems, suppression or control systems, or other	(√)	**Smoke alarm**	(**X**) Carried out (**X**) Supervised	**A1.02**

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 (X) No

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

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

Note: continue on another page if necessary.

ISSUED BY

Name: **Agneesh Brahmbhatt**	LBP or Registration number: **3576**
The practitioner is a: ( ) Design LBP (X) Registered architect ( ) Chartered professional engineer	
Design Entity or Company (optional): **Shadbolt Architects T/A Architype**	
Mailing address (if different from below): **Po Box 850, Palmerston North**	
Street address / Registered office: **Level 2, 99 Rangitikei Street**	
Suburb: **Palmerston North**	Town/City: **Palmerston North**
PO Box/Private Bag: **Po Box 850**	Postcode: **4410**
Phone number: **06 355 5599**	Mobile: **021 0272 7021**
After Hours:	Fax:
Email address: **agneesh@shadboltarchitects.co.nz**	Website: **www.architypestudios.co.nz**

DECLARATION

I **Agneesh Brahmbhatt** [*name of practitioner*], **Registered Architect**

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: 09/04/15

SUSPENSION

☐ PIM	☑ BC		#:40660
Property Address:	10 Willis Cres		
Date Suspended:	10/5/15	**Suspended By:** Geoff	
Person notified:	Agneesh		**Date:** 10/5/15
Notified by:	☐ Letter	☑ Email	☐ Fax
Statutory clock stopped: (on computer system)	☑ Yes	**Date reply document received:** 11/5/15.	
Date suspension lifted:	2/6/15	**By:** JON	
Additional notes if required:			

Dear Daryl,

Suspended Building Consent Application

40660

Building Consent Number: 40639
Project Description: New deck and pool fencing – Internal alterations
Building project at : 31-56 Kingsdale Park

We have reviewed your building consent application against the requirements under the Building Act 2004 and the New Zealand Building Code.

Unfortunately it has been necessary to suspend further processing of your application under Section 48(2) of The Building Act 2004 pending receipt of the following additional information:

1. Please confirm existing patio barrier is compliant with NZBC B1 and F4.
2. Reassess the pool barrier design in accordance with NZS3604:2011 as a safety barrier.

Please compile together all the requested information and supply to doc.register@pncc.govt.nz (note; information supplied in parts adds to the administration time and cost to you). Please also note that additional information may be required on receipt of this information.

Although suspended, your consent will continue to be processed against requirements; this could result in you being requested by them to provide further information. Please ensure you reply to the appropriate department requesting those further details.

Please would you supply this within the next thirty (30) days. If we have not heard from you within this time your application may be cancelled.

Regards,

REFER ATTACHED E-MAIL DATED 10 MAY

GEOFF COCKERY | Contract Building Officer
Palmerston North City Council | Private Bag 11034 | Palmerston North
ithin this time your application may be cancelled.

Kim Stevens

From: Geoff Cockery
Sent: Sunday, 10 May 2015 2:43 p.m.
To: agneesh@shadboltarchitects.co.nz
Cc: Doc Register
Subject: Request for further information BC40660 - 10 Willis Cres

Follow Up Flag: Follow up
Flag Status: Completed

Dear Agneesh,

Suspended Building Consent Application

Building Consent Number: 40660
Project Description: Internal alterations
Building project at : 10 Willis Cres

40660

We have reviewed your building consent application against the requirements under the Building Act 2004 and the New Zealand Building Code.

Unfortunately it has been necessary to suspend further processing of your application under Section 48(2) of The Building Act 2004 pending receipt of the following additional information:

1. Please assess the front exterior wall for compliance with NZBC B1 for wall bracing to ensure no reducing to BU's as a result of the alterations.
2. Provide design verification for NZBC B1 of the bay window supports.

Please compile together all the requested information and supply to doc.register@pncc.govt.nz (note; information supplied in parts adds to the administration time and cost to you). Please also note that additional information may be required on receipt of this information.

Although suspended, your consent will continue to be processed against requirements; this could result in you being requested by them to provide further information. Please ensure you reply to the appropriate department requesting those further details.

Please would you supply this within the next thirty (30) days. If we have not heard from you within this time your application may be cancelled.

Regards,

GEOFF COCKERY | **Contract Building Officer**
Palmerston North City Council | Private Bag 11034 | Palmerston North
| www.pncc.govt.nz

Kim Stevens

RECEIVED
11 MAY 2015
BY: 040660

From: Agneesh Brahmbhatt <Agneesh@shadboltarchitects.co.nz>
Sent: Monday, 11 May 2015 1:20 p.m.
To: Geoff Cockery
Cc: Doc Register
Subject: RE: Request for further information BC40660 - 10 Willis Cres
Attachments: A1.02 Rev B Altered plans and elevations Model (1).pdf; GIB bracing spec_ GS1-N.pdf; GIB bracing spec_BL1.pdf; Page 94 of MiTek Onsite guide for Bowmac Bracket specs.pdf; Glazing Weight.pdf

architype
shadbolt architects ltd

Hello Geoff,

Response in Red below,

40660

Please feel free to contact us should you have any query.

Regards,

NZ REGISTERED ARCHITECT
GREEN STAR NZ ACCREDITED PROFESSIONAL

agneesh brahmbhatt

D 06 355 5599
M 021 0272 7021
po box 850, level 2,
silvester clark building
rangitikei & walding st
palmerston north

www.architypestudio.co.nz

From: Geoff Cockery [mailto:geoff.cockery@pncc.govt.nz]
Sent: Sunday, 10 May 2015 2:43 p.m.
To: Agneesh Brahmbhatt
Cc: Doc Register
Subject: Request for further information BC40660 - 10 Willis Cres

Dear Agneesh,

Suspended Building Consent Application

Building Consent Number: 40660
Project Description: Internal alterations
Building project at : 10 Willis Cres

We have reviewed your building consent application against the requirements under the Building Act 2004 and the New Zealand Building Code.

Unfortunately it has been necessary to suspend further processing of your application under Section 48(2) of The Building Act 2004 pending receipt of the following additional information:

1. Please assess the front exterior wall for compliance with NZBC B1 for wall bracing to ensure no reducing to BU's as a result of the alterations.

We have obtained the original construction drawings for the house. Unfortunately the bracing has not been indicated. We have assumed 2 affected bracing lines on A1.02 rev B (attached). We have identified the possible bracing removed as a result of the alterations & we have compensated for this by either screwing off existing GIB lining to GS1-N specifications or installing new to BL1-H bracing specifications (also attached).

2. Provide design verification for NZBC B1 of the bay window supports.

We have used Bowmac seat brackets, which is essentially the purpose of bay window – seating. Apart from human load, all we are adding is glazing load.

Bowmac seat brackets with M12 bolt fixings has a loading capacity of approx. 3Kpa or 305kg/Sqm live load if fixed at 2000mm centres. We have used 4 brackets at 600crts, as a result we have more than doubled loading capacity.

Double gazed units weigh approx. 30 kg/SQM (please find attached glazing weights schedule) + 120KG / Sqm to 150KG/Sqm (weight of a rather large person) = total 150KG / Sqm to 180KG/Sqm.

As a result Bay window brackets are way over designed than its actual requirements.

Please compile together all the requested information and supply to doc.register@pncc.govt.nz (note; information supplied in parts adds to the administration time and cost to you). Please also note that additional information may be required on receipt of this information.

Although suspended, your consent will continue to be processed against requirements; this could result in you being requested by them to provide further information. Please ensure you reply to the appropriate department requesting those further details.

Please would you supply this within the next thirty (30) days. If we have not heard from you within this time your application may be cancelled.

Regards,

GEOFF COCKERY | **Contract Building Officer**
Palmerston North City Council | Private Bag 11034 | Palmerston North
| www.pncc.govt.nz

Caution: The content of this email is confidential and may be legally privileged. If it is not intended for you, please email the sender immediately and destroy the original message. You may not copy, disclose or use the contents in any way. Thank You.

13 May 2015

BC 40660
10 Wills Cres

Please suspend processing of this consent as some design work needs to be changed

40660

Craig Stevens

242 am
architects ltd

D 06 356 1800
M 021 0272 7023
E monika@242am.co.nz
Lvl - 1 / Queen Street
Palmerston north – 4412

18.05.2015

09906

Att : Palmerston North City Council

RE: Alterations to 10 Wills Crescent, Ashhurst

We have reviewed and are satisfied with the building consent drawings.

We are now happy for the suspension to be lifted and the building consent process to be continued as required.

Signed by the Client as confirmation

.....Date 18.05.2015

Lyn & Ronald Graig Stevens

Monika Puri

NZ REGISTERED
ARCHITECT

40660

BCA T-04b
Ver: 40
Date: 01/12/14

PNCC – Building Services Project Sheet

Project Address: 10 Willis Cres, Ashhurst

Project Description: Remove existing window & relocate. Install new bay window. Remove existing front door & fill in wall. Install metro weerad F/S fire

Building Category (circle): R1 R2 R3 C1 C2 C3 **(circle)** Residential Commercial Industrial

Project Number: 40660

Restricted Building Work? ☑ Yes ☐ No

Date accepted: 20 April 2015

Project Value ($): 15,000 **Person Making Payment:** Shadbolt Arch # 2794

MultiProof certificate? ☐ Yes ☑ No **EQ Prone Strengthening Work** ☐ Yes ☑ No

TYPE	Code	V/G NO (PNCC)	Code	AMOUNT
		Lodgement BC	BA	$
BUILDING CONSENT	P2	Lodgement BC	BA	$ 335.
BUILDING RESEARCH LEVY - $1.00 / $1,000,00 (set fees)		Lodgement BC	BA	$
BUILDING LEVY - $2.01 / $1,000,00 (set fees)		Lodgement BC	BA	$
BUILDING CONSENT AMENDMENT		SI NONE	BA	$
CERTIFICATE FOR PUBLIC USE		SI NONE	BA	$
EXEMPT/ UNAUTHORISED BUILDING WORK / THIRD PARTY REPORT / EXTENSION OF TIME	UBW		BA	$
CERTIFICATE OF ACCEPTANCE		Lodgement BC	BA	$
DEVELOPMENT CONTRIBUTION		SI NONE		$
INSTANT RESOURCE CONSENT		RCON INST		$
RELOCATION BOND	RBND			$
CERTIFICATE OF TITLE (CT)	CT ✓	To Invoice by Kaspirit		$ 21.
VEHICLE CROSSING (VEHX)		Lodgement BC		$
COUNCIL ASSET BOND (No GST)	FBND			$
SERVICE CONNECTIONS STORMWATER	SCSW			$
SERVICE CONNECTIONS WASTEWATER	SCWR			$
SERVICE CONNECTIONS WATER	SCWW			$
			TOTAL	$

Comments:

Risk score: 1

Please Invoice $21 for CT

Please tick technical inputs for processing as required:					
	Land Information Officer		Environmental Health		NZ Fire Service DRU
✓	Planning	✓	Building		City Networks
	Plumbing & Drainage		Structural		Claims Management
Please tick appropriate processing checklist:					
	T-08a Planning processing PIM		T-19g Commercial – New Building		T-19p Farm Buildings
	T-08b Building processing PIM		T-19h Commercial Addition & Alteration		T-19q Demolitions
	T-08c PIM/Building Consent Site Visit		T-19i Commercial Minor Alteration		T-19r Multiproof Consent
✓	T-19a Planning Processing BC		T-19j EH Food Premises		T-19s Shade sails/Small Sheds/Open Sited Buildings
	T-19b New Dwelling		T-19k EH Hair Premises		T-19t Continuous Flow Hot Water
✓	T-19c Small Addition		T19l EH Hazardous Substances		T-21b Amendment to Building Consent
	T-19d Minor Alteration.		T19m Swimming Pool		T-36a Certificate of Acceptance C/list
	T-19e Garage/Carport/Pergola/Sleepout		T19n Relocation		T-47a Certificate for Public Use C/list
	T-19f Conservatory	✓	T19o Fires		

Palmerston North
City Council

<<COPY ONLY>>

TAX INVOICE No: 2015/301772
GST Reg No : 11-213-081

Received From
SHADBOLT ARCHITECTS LIMITED

Date :20 Apr 2015, Time: 12:05pm
Till :FOH11
Received :$ 335.00 CHEQUE
==========

Applicat'n:$ 335.00 BCON-40660
SHADBOLT ARCHITECTS LTD

Total Rec :$ 335.00
==========

Incl GST :$ 43.70

Palmerston North
City Council

<<COPY ONLY>>
40660

CASH RECEIPT No: 2015/359038

Received From
E - 5047 STEVENS, RONALD CRAIG

Date :08 Jun 2015, Time: 10:22am
Till :FOH2
Received :$ 1372.87 EFTPOS
==========

Sundry Inv:$ 1372.87 609
STEVENS, RONALD CRAIG
BCON 648118

Total Rec :$ 1372.87
==========

40660

CHARGE SHEET

OTHER FEES			TIME	
FOH vetting B Officer Name: Lyn		Chargeable Time	15	
FOH vetting Planner Name: Steve		Chargeable Time	15	
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
Consultant Name:		Chargeable Time		
nning	A3	$3.75 ea		$
	A4	$2.25 ea 79		$
Legal Fee	Sect 75	$749.00		$
	Sect 72	$337.00		$
Licensed Building Practitioner (LBP) Registration		$125.00		$
Producer Statement PS3 and PS4 Only		$72.00ea		$
Compliance Schedule		$153.00		$
Compliance Schedule (amendment only)		$99.00		$
NZ Fire Service DRU				$
Levies on Amendment – Building Levy		Invoiced Y or N		
Levies on Amendment – Building Research Levy		Invoiced Y or N		
				$
DEVELOPMENT CONTRIBUTIONS – GST INCL		City Wide Reserves		$
		Roading		$
		Water		$
		Wastewater		$
		Local Reserves/Parks & Reserves		$
		Stormwater		$

TOTAL COST	$
TOTAL FEE TO BE WAIVED (See Below)	$
TOTAL TO BE INVOICED/PAID	$

Date Fees Entered into Computer System: 5/6/15 Signed off by BSO:

Description of Fees To Be Waived:

Type of fee	Reason for waiving	Amount
	Total	$

Waived Fees Approved By (Manager): _____ Date: _____

RECEIVED
- 2 JUN 2015
BY:

INSPECTIONS REQUIRED

		Tick if Applicable	No. of Inspections
291 / T28A	Building WOF		
292 / T30A	Foundations		
293 / T30AA	Reinspection		
294 / T30AB	Inbuilt Fireplace Pre-Install Check		
295 / T30AC	Final - Fireplace		
297 / T30AE	COMM - Foundation/Pads/Ground Beams		
296 / T30AD	Structural Concrete & Masonry		
298 / T30AF	COMM - Concrete Slab		
299 / T30AG	COMM - Framing		
300 / T30AH	COMM - Preline		
301 / T30AI	COMM - Postline		
302 / T30AJ	COMM - Final		
343 / T30VA	COMM - Final - Plumbing		
303 / T30AK	Swimming & Spa Pool		
304 / T30AL	CPU Inspection		
305 / T30B	Foundations Slab Single Pour		
306 / T30C	Retaining Wall/Split Level Foundation		
307 / T30D	Ring and Pile Foundation		
342 / T30DA	Farm Building Foundation		
308 / T30E	Subfloor Framing		
309 / T30F	Underfloor/Preslab Soil/Drain/Waste		
310 / T30G	Concrete Slab		
311 / T30GH	Blockfill		
312 / T30H	Framing		
314 / T30J	Cavity		
313 / T30I	Preclad/Plaster System Flashings		
315 / T30K	Monolithic Backing		
316 / T30L	Paper Netting		
317 / T30M	Scratch Coat		
318 / T30N	Half High Brick	✓	
319 / T30O	Weathertightness		1
320 / T30P	Preline - Single/Lower Storey	✓	1
321 / T30Q	Preline - Upper Level		
322 / T30R	Preline - Plumbing		
395 / T30RA	Minor Preline - Plumbing & Building		
336 / T30P/R	Preline - Building & Plumbing		
323 / T30S	Postline	✓	1
324 / T30T	Drainage		
325 / T30U	Final - Building	✓	1
326 / T30V	Final - Plumbing		
344 / T30WA	Final - Relocation		
328 / T30X	Final - Garage, Carport, Pergola		
337 / T30XA	Final - Farm Buildings		
329 / T30Y	Final - Minor Internal Alteration		
330 / T30Z	Final - Demolition		
331 / T30ZZ	Engineer Observation		
	Total Number of Inspections Charged		4

40660

40666

architype

D 06 355 5599
F 06 355 5596
po box 850,
level 2, 99 rangitikei st,
palmerston north 4410
admin@shadboltarchitects.co.nz

REVISION	**V1**
FOR	**CONSENT**
ISSUE DATE	**25/03/15**
PRN	**15005**

CLIENT **Lyn and Craig Stevens**

PROJECT **10 Wills Crescent**

LOCATION **Ashhurst**

TITLE **SPECIFICATION ARCHITECTURAL**

PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

DOCUMENT CONTROL

Rev No.	Date	Revision Details	Complier	Author	Verified	Approved
01	25/03/15	V1	EB	EB	AB	AB

1012 TABLE OF CONTENTS

1012	TABLE OF CONTENTS	2
1220	PROJECT	3
1232	INTERPRETATION & DEFINITIONS	5
1233	REFERENCED DOCUMENTS	7
1234	DOCUMENTATION	8
1237	WARRANTIES	12
1237WA	WARRANTY AGREEMENT	14
1240	ESTABLISHMENT	17
1270	CONSTRUCTION	18
2110	DEMOLITION WORKS	22
2123	ASBESTOS REMOVAL	25
3820	CARPENTRY	27
4161T	THERMAKRAFT UNDERLAYS, FOILS AND DPC	30
4231HW	JAMES HARDIE WEATHERBOARD CLADDING	33
4521	ALUMINIUM WINDOWS AND DOORS	37
5113G	GIB® PLASTERBOARD LININGS	44
6700R	RESENE PAINTING GENERAL	48
6711R	RESENE PAINTING EXTERIOR	54
6721R	RESENE PAINTING INTERIOR	56
7701	ELECTRICAL BASIC	58

40660

1220 PROJECT

1. GENERAL

This general section describes the project including:
- A description of the work
- Site description, features and restrictions
- Design parameters for design by contractor

1.1 READ ALL SECTIONS TOGETHER
Read all general sections together with all other sections.

Description of the work

1.2 SCOPE OF THE WORK



Figure 1: 10 Wills Cres- Existing hearth

- Install new fire place to existing hearth



Figure 2: 10 Wills Cres- North elevation

- Remove window (left window on photo above) to be relocated to west elevation
- New bay window to North elevation



Figure 3: 10 Wills Cres- West Elevation
- Window from North elevation to be relocated to West elevation
- Existing entry door & porch to be demolished for new framing/ cladding

1.3 RESTRICTED BUILDING WORK
This project includes Restricted Building Work.

Site

1.4 SITE
The site consists of: Cross leased site with 9 Wills Cres

as shown on drawing no. A0.01

1.5 LEGAL DESCRIPTION
The site of the works, the street address and the legal description are shown on the drawings.

1.6 EXISTING BUILDINGS
Existing buildings consist of: Existing dwelling
Refer to drawing(s) no(s): A0.01

1.7 EXISTING SERVICES
The following are the network utility services:
Electrical, Telecommunication, Water, Stormwater, Foul water

Site environment - Wind

1.9 WIND DESIGN PARAMETERS - NON SPECIFIC DESIGN
The design wind pressures are to NZS 3604, Table 5.4 Determination of wind zone, up to and including Extra High Wind Zone.
Building wind zone medium (refer to NZS 3604, table 5.4)

Site environment - Durability

1.10 EXPOSURE ZONE
The exposure zone is to NZS 3604, Section 4 Durability, 4.2 Exposure zones and NZBC E2/AS1.
The site zone is: B

Site environment - Seismic

1.11 EARTHQUAKE ZONE - NON SPECIFIC DESIGN
The zone is to NZS 3604, Section 5 Bracing design, 5.3 Earthquake bracing demand.
The earthquake zone is: 3

END OF SECTION

1232 INTERPRETATION & DEFINITIONS

40660

1. GENERAL

This general section relates to interpretation and definitions that are used in this specification.

1.1 DEFINITIONS

Required:	Required by the documents, the New Zealand Building Code or by a statutory authority.
Proprietary:	Identifiable by naming the manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.
Provide and fix:	"Provide" or "fix" or "supply" or "fix" if used separately mean provide and fix unless explicitly stated otherwise.
Review:	Review by the contract administrator is for general compliance only. Review does not remove the need for the contractor to comply with the stated requirements, details and specifications of the manufacturers and suppliers of individual components, materials and finishes. Neither can the review be construed as authorising departures from the contract documents.
Working Day:	Working Day means a calendar day other than any Saturday, Sunday, public holiday or any day falling within the period from 24 December to 5 January, both days inclusive, irrespective of the days on which work is actually carried out.

1.2 PERSONNEL

Owner:	The person defined as "owner" in the New Zealand Building Code.
Principal:	The person defined as "principal" in the conditions of contract.
Contractor:	The person contracted by the principal to carry out the contract.
Contract Administrator:	The person appointed by the principal to administer the contract on the principal's behalf. Where no person has been appointed by the Principal, it means the Principal or the Principal's representative.

1.3 ABBREVIATIONS

The following abbreviations are used throughout the specification:

AAMA	American Architectural Manufacturers Association
AS	Australian Standard
AS/NZS	Joint Australian/New Zealand Standard
ASTM	American Society for Testing and Materials
AWCINZ	Association of Wall and Ceiling Industries of New Zealand Inc
BCA	Building Consent Authority
BRANZ	Building Research Association of New Zealand
BS	British Standard
CSIRO	Commonwealth Scientific and Industrial Research Organisation
HERA	Heavy Engineering Research Association
LBP	Licensed Building Practitioner
MBIE	Ministry of Business, Innovation and Employment (includes the old DBH)
MPNZA	Master Painters New Zealand Association Inc
NZBC	New Zealand Building Code
NZS	New Zealand Standard
NZS/AS	Joint New Zealand/Australian Standard
NZTA	New Zealand Transport Agency (previously TNZ)
NUO	Network Utility Operator
PS1	Producer Statement – Design
PS2	Producer Statement – Design Review
PS3	Producer Statement - Construction
PS4	Producer Statement – Construction Review
RBW	Restricted Building Work
SARNZ	Scaffolding and Rigging Association New Zealand Inc
SED	Specific Engineering Design

TA	Territorial Authority
TNZ	Transit New Zealand (Transit New Zealand is now New Zealand Transport Agency NZTA, some specifications are still prefixed TNZ)

1.4 DEFINED WORDS

Words defined in the conditions of contract, New Zealand Standards, or other reference documents, to have the same interpretation and meaning when used in their lower case, title case or upper case form in the specification text.

1.5 WORDS IMPORTING PLURAL AND SINGULAR

Where the context requires, words importing singular only, also include plural and vice versa.

END OF SECTION

1233 REFERENCED DOCUMENTS

40660

1. GENERAL

1.1 REFERENCED DOCUMENTS

Throughout this specification, reference is made to various New Zealand Building Code Compliance Documents (NZBC __), acceptable solutions (__ AS_) and verification methods (__ VM_) for criteria and/or methods used to establish compliance with the New Zealand Building Code.

Reference is also made to various standards produced by Standards New Zealand (NZS, AS/NZS, NZS/AS), overseas standards and to listed Acts, Regulations and various industry codes of practice and practice guides. The latest edition (including amendments and provisional editions) at the date of this specification applies unless stated otherwise.

It is the responsibility of the contractor to be familiar with the materials and expert in the techniques quoted in these publications.

Documents cited both directly and within other cited publications are deemed to form part of this specification. However, this specification takes precedence in the event of it being at variance with the cited documents.

1.2 DOCUMENTS

Documents referred to in the GENERAL sections are:

NZBC F4/AS1	Safety from falling
NZBC F5/AS1	Construction and demolition hazards
AS/NZS 1170.2	Structural design actions - Wind loads
AS/NZS 3012	Electrical installations - Construction and demolition sites
NZS 3109	Concrete construction
NZS 3114	Specification for concrete surface finishes
NZS 3404:1997	Steel structures standard
NZS 3602	Timber and wood-based products for use in building
NZS 3604	Timber-framed buildings
	NZS 6803 Acoustics - Construction Noise

Building Act 2004
Building Regulations 1992
Health and Safety in Employment Act 1992
Health and Safety in Employment Regulations 1995
New Zealand Building Code
Heritage New ZealandPouhere Taonga Act 2014
Resource Management Act 1991
Smoke-free Environments Act 1990

WorkSafe NZ	Guidelines for the provision of facilities and general safety in the construction industry
SARNZ	Best practice guideline for scaffolding in New Zealand

END OF SECTION

1234 DOCUMENTATION

1. GENERAL

This general section relates to documentation required by the Territorial Authority/Building Consent Authority for compliance with the New Zealand Building Code. It also includes documentation relating to:
- Substitutions
- Manufacturers documents

Building Consent Authority documentation

1.1 BUILDING CONSENT
Obtain the original or copies of the building consent forms and documents from the owner and keep them on site. Liaise with the BCA for all notices to be given and all inspections required during construction to ensure compliance. Return the consent form and documents to the owner on completion.

1.2 BUILDING CONSENT COMPLIANCE
It is an offence under the Building Act 2004
- to carry out any work not in accordance with the building consent.
- to carry out Restricted Building Work by anyone other than a Licensed Building Practitioner licensed for that type of work.

The resolution of matters concerning building code compliance to be referred to the contract administrator for a direction in writing and then to the BCA for consent.

Where any alteration is requested by the territorial authority or any other authority, do not undertake such alteration until the matter has been referred to the Contract administrator for direction.

1.3 PROJECT PERSONNEL
Provide names and contact detail of the contractor's key personnel and tradespersons who are involved with the project. Provide the names in the form required in the general section of the specification. Review the list once a month and reissue it if changes have been made.

Licensed Building Practitioner documentation

1.4 LICENSED BUILDING PRACTITIONERS
On behalf of the Owner, provide details of LBP's to carry out or supervise Restricted Building Work. Provide names, LBP numbers, areas of practice and other required information. Provide this to the BCA and the Contract Administrator before commencing work on the Restricted Building Work. Provide the information in the form required in the general section 1222L PROJECT PERSONNEL LBP'S. Review the list once a month and reissue it if changes have been made.

Include the following which are considered applicable to this project:
- Site LBP
- Carpenter

Also provide names and contact details of the following

- Registered electrician

1.5 NOTIFICATION OF BREACHES OF BUILDING CONSENT
Provide to the Contract Administrator and the Contractor a copy of any advice given to the BCA under s.89 of the Building Act. Provide this advice no later than the time the advice is given to the BCA.

1.6 RECORD OF BUILDING WORK
Where Restricted Building Work is carried out by a LBP, on completion of the RBW provide a Record of Building Work for inclusion with the documentation required for Code Compliance. Provide copies to both the BCA and the Contract Administrator.

Compliance information

1.7 DOCUMENTATION REQUIRED FOR CODE COMPLIANCE
Information may be required either as a condition of the contract documents or as a condition of the building consent may include the following: -
- Applicators approval certificate from the manufacturer / importer / distributor
- Manufacturer's, importer's or distributors warranty
- Installer / applicator's warranty
- LBP Record of Work
- Producer Statement - Construction from the applicator / installer

Producer Statement - Construction review from an acceptable suitably qualified person

Refer to the general sections for the requirements for compliance information to be provided by the contractor.

Refer to the building consent for the requirements for compliance information to be provided by the contractor.

Obtain required documents from the relevant parties for delivery to the contract administrator after the final inspection has been carried out by the Building Consent Authority.

Substitutions

1.8 ACCEPTABLE PRODUCT/MATERIAL SUPPLIERS
Where a product or material supplier is named in SELECTIONS, the product/material must be provided by the named supplier. Where more than one named supplier, any one of the named suppliers will be acceptable.

1.9 NO SUBSTITUTIONS
Where specifically stated in a section, substitutions are not permitted to any of the specified systems, components and associated products listed in that section.

1.10 PROPOSED SUBSTITUTIONS
A substitution may be proposed where specified products are not reasonably available. A substitution may also be proposed by the Contractor where the Contractor considers a proposed substitution to be an alternative to the specified product. Except where a specified product is not available, the Contract administrator is not bound to accept any substitutions. Where branded work sections are included in this specification, substitution of those products or systems will not be allowed.

1.11 NOTIFICATION OF SUBSTITUTIONS
Notify proposed substitution of specified products. Notification to include but not be limited to:
- Product identification
- Manufacturer's name, address, telephone and facsimile numbers, website and email address
- Detailed comparison between the properties and characteristics of the specified product and the proposed substitution
- Statement of NZBC compliance including durability
- Details of manufacturer warranties

plus an assessment of
- Any changes required to the programme including any extension of time required
- Any consequential effects of the proposed substitution
- Allowance for time and cost for re-design and documentation (if applicable)
- Allowance for time and cost for obtaining an amendment to the Building Consent (if applicable)

© CIL Masterspec 2015

- Any change in cost associated with the proposed substitution

and if requested
- All current manufacturer's literature on the product
- Accreditations and appraisals available
- Reference standards
- Product limitations
- Samples
- List of existing installations in the vicinity of the project

1.12 ACCEPTANCE OF SUBSTITUTIONS
The Contract administrator must advise of acceptance of substitutions in writing.

Amendment to issued Building Consent

1.13 CONTRACTOR AMENDMENTS TO BUILDING CONSENT
Where the contactor has sought acceptance of a substitution or a variation which is for the contractor's own convenience and the substitution or variation requires an amendment to the Building Consent, the contractor must apply for and obtain the required amendment.

The contractor must:
- Obtain approval for substitutions from the Contract administrator.
- Prepare and provide to the BCA all documentation required for the amendment.
- Pay all fees and other costs associated with this amendment.
- Where the amendment affects other approved plans, also amend those plans.

1.14 PRINCIPALS AMENDMENTS TO BUILDING CONSENT
Where the principal is proposing a substitution or a variation which requires an amendment to the Building Consent, the contractor must provide to the principal information that the contractor has that is required for the amendment.

The principal will:
- Prepare and provide to the BCA all documentation required for the amendment.
- Pay all fees and other costs associated with this amendment.
- Where the amendment affects other approved plans, also amend those plans.

Manufacturer's documents

1.15 BRANDED WORK SECTIONS
Branded sections may be included in this specification relating to specific products and systems to be installed as part of the contract works. Where branded sections are included, substitutions to the branded products and systems will not be allowed.

1.16 CROSS REFERENCED WORK SECTIONS
If any related work is cross referenced to a generic work section, but only the equivalent branded section is included in the specification, use that branded section. Confirm with the Contract administrator if there is any doubt.

1.17 MANUFACTURER'S AND SUPPLIER'S REQUIREMENTS
Manufacturers and supplier's requirements, instructions, specifications or details mean those issued by them for their particular material, product or component and are the latest edition.

1.18 MANUFACTURER'S AND SUPPLIER'S DOCUMENTS
Refer to individual sections for a detailed list of manufacturer's and supplier's documents relating to work on this project. Retain current copies of the documents listed, and all other relevant manufacturer's technical literature, on site. Make this information available to all personnel and ensure they are familiar with requirements for handling, storing, preparing for, fixing and finishing all products before commencing work. Provide a copy of all listed manufacturer's literature to the Contract administrator.

© CIL Masterspec 2015

1.19 ONGOING MAINTENANCE REQUIREMENTS
Refer to individual sections for details of manufacturer's and supplier's requirements for ongoing maintenance necessary to ensure continuing compliance with the durability requirements of the NZBC. Provide a copy of literature detailing ongoing maintenance and inspection requirements to the Contract administrator.

As built drawings

1.20 PROVIDE AS BUILT DRAWINGS
Provide as built drawings where specified in the work sections and as required by the BCA.

Operation and maintenance

1.21 PROVIDE OPERATION AND MAINTENANCE INFORMATION
Unless addressed elsewhere in this specification provide operation and maintenance documentation necessary for the principal to operate and maintain the works. Provide documentation no later then the date of practical completion or the date on which the principal takes occupation of the works. This documentation is to include: -
- A complete list of subcontractors' names, addresses and telephone numbers noting which portions of the contract each provided
- A complete list of equipment and appliances including serial numbers, manufacturer's names and sources of supply
- Copies of all manufacturer's product literature containing maintenance requirements/instructions
- Final As-Built drawings (as required by the work sections)
- Originals of all warranties and guarantees properly executed.

Submit in final form in a hard cover, "clear view" loose-leaf binder, with contents index, contractor's name, date of practical completion and titled on the binding edge "Operation and maintenance information for (project name)".

END OF SECTION

© CIL Masterspec 2015

1237 WARRANTIES

1. GENERAL

This general section refers to the requirements for warranties as listed, either in this work section and/or in specific work sections. It includes: -
- Warranties for parts of the work required by the Principal in a required form
- Installer/applicator warranties for parts of the work in the installer/applicator's standard form
- Manufacturer/supplier warranties provided with products, appliances and the like in the suppliers standard form
- Guarantees/Warranties provided by contractors in the contractor's standard form

Warranties

1.1 PROVIDE WARRANTIES
Provide executed warranties in favour of the principal in respect of, but not limited to, materials, components, service, application, installation and finishing called for in that specified section of work. The terms and conditions of the warranty in no case negate the minimum remedies available under common law as if no warranty had been offered. Failure to provide the warranty does not reduce liability under the terms of the warranty called for in that specified section of work.

- Conform to the 1237WA WARRANTY AGREEMENT form included in the specification/conditions of contract.
- Commence warranties from the date of practical completion of the contract works (unless otherwise stated).
- Maintain their effectiveness for the times stated.
- Provide executed warranties prior to practical completion.

1.2 WEATHERTIGHTNESS AND WATERTIGHTNESS WARRANTY
A warranty is required from the contractor for a minimum period of 2 years, covering the weathertightness of the complete building envelope and the watertightness of all liquid supply and disposal systems and fittings. This general warranty is in addition to any specific warranties required.

Provide this warranty in favour of the principal. The terms and conditions of this warranty in no case negate the minimum remedies available under common law as if no warranty had been offered. Failure to provide the warranty does not reduce liability for execution and materials for that part of the work.

- Conform to the standard form1237WA WARRANTY AGREEMENT included in the contract documents.
- Commence the warranty from the date of Practical Completion.
- Maintain its effectiveness for the time stated.

1.3 WARRANTIES - INSTALLER/APPLICATOR
Where installer/applicator warranties are offered covering execution and materials of proprietary products or complete installations, provide such warranties to the contract administrator. These warranties may be provided in lieu of the warranties that are otherwise required provided that these warranties are subject to similar conditions and periods.

Provide warranties in favour of the principal. The terms and conditions of such warranties in no case negate the minimum remedies available under common law as if no warranty had been offered. Failure to provide the warranty does not reduce liability for execution and materials for that part of the work.

- Conform to the installer/applicator standard form. Where the installer/applicator does not have a standard form, use the 1237WA WARRANTY AGREEMENT included in the contract documents.
- Commence the warranties from the date normally applicable for the work.

© CIL Masterspec 2015

- Maintain their effectiveness for the times stated.

1.4 WARRANTIES - MANUFACTURER/SUPPLIER
Where warranties are offered covering materials, equipment, appliances or proprietary products, provide all such warranties to the contract administrator.

Provide warranties in favour of the principal. The terms and conditions of such warranties in no case negate the minimum remedies available under common law as if no warranty had been offered. Failure to provide the warranty does not reduce liability for execution and materials for that part of the work.

- Conform to the manufacturer/suppliers standard form.
- Commence the warranties from the date normally applicable.
- Maintain their effectiveness for the times stated.

Submissions

1.5 REVIEW BY CONTRACTOR
Obtain the warranties from the installers and suppliers at the earliest possible date and review to ensure that they are correctly filled out and executed. Where warranties are executed as a deed, ensure that a duplicate copy is provided for execution by the Principal/Owner. Keep safe and secure until required for submission.

1.6 WARRANTIES - REQUIRED BY BUILDING CONSENT AUTHORITY
Obtain copies of warranties required for submission to the BCA as a condition of the Building Consent. Keep safe and secure until required at the time of the BCA final inspection and Code Compliance Certificate. Provide to the BCA in the form they require.

1.7 WARRANTIES - REQUIRED BY CONTRACT
Obtain copies of warranties listed in the contract documents for submission to the Contract Administrator/Owner. Provide all warranties at the same time. Present the warranties to the Contract Administrator in a "clear view" document book suitably labelled with the project name and details. If the project has an operations and maintenance documentation provision, present the warranties with the operations and maintenance information.

1.8 TIME FOR SUBMISSION
Submit all warranties/ compliance documents to client after completion

Warranties schedule

1.9 SCHEDULE OF WARRANTIES
Provide the Warranties and Guarantees listed in each individual section and AS1/B2

Warranties required for each section. Refer to each trade section for specific requirement.

Use prescribed form 1237WA

1.10 OTHER WARRANTIES / GUARANTEES
In addition to the warranties/guarantees listed above, there may also be other warranty/guarantee requirements in seperate volumes of the project specification and in documents prepared by others. Review ducumentation for such requirements.

END OF SECTION

1237WA WARRANTY AGREEMENT

1. WARRANTY AGREEMENT

Contract for: 10 Wills Crescent, Ashhurst
(the contract works)

Contractor:
(the contractor)

Principal:
(the principal)

Warrantor:
(name of contractor, subcontractor or materials supplier)

Warranted works:
(the warranted works)

Warranted materials:
(the warranted materials)

Warranty period: years from the date of practical completion of the contract works.

The principal has entered into a contract (the contract) with the contractor for carrying out the contract works. The warranted works / materials are part of the contract works.

The contractor has agreed to arrange for the provision of a warranty in respect of the warranted works / materials for the warranty period on the terms set out in this warranty.

The warrantor has agreed to provide a warranty in respect of the warranted works / materials for the warranty period on the terms set out in this warranty.

2. IT IS HEREBY AGREED

The warrantor warrants to the principal that the warranted work performed /materials supplied shall be as required in the contract. If not specified the work shall be of good trade practice with materials and fittings of merchantable quality.

This warranty shall be in addition to and shall not derogate from any manufacturer's warranty or any warranty implied by law, attaching to any part of the warranted works.

2.1 WARRANTOR'S OBLIGATIONS
The warrantor agrees that if the warrantor is advised by the principal in writing of any defect in the warranted works / materials within the warranty period for which the warrantor is liable under the terms of this warranty, the warrantor will promptly take steps to remedy the defect / replace defective materials.

2.2 REMEDIAL WORK / REPLACEMENT OF DEFECTIVE MATERIALS
Any remedial work / replacement of defective materials which the warrantor is liable to undertake / provide under this warranty shall be carried out:
- to the standard required by the contract; and
- in a prompt and timely manner; and
- without unnecessary inconvenience to any occupants; and
- at the warrantor's cost; and
- subject to reasonable access being provided to the warrantor for the purpose of carrying out the remedial work.

2.3 REPAIR, REPLACEMENT AND/OR COMPENSATION
Where the cost of replacement of work and/or materials is out of all proportion to the consequences of the defect, or where the defect may not be reasonably capable of

40660

rectification without substantial expense which is out of all proportion to the cost of the contract works, the warrantor may:
- where the defect or defective material is reasonably rectified by repair rather than by replacement, the warrantor's obligation under this warranty shall be only to repair or otherwise make good the defect or
- propose reasonable monetary compensation in lieu of remedying the defect or
- propose a combination of both repair and compensation.

The principal must consider the warrantor's reasonable proposals and the parties must endeavour in good faith to reach agreement. Where agreement cannot be reached the dispute shall be resolved in accordance with the disputes clause in this warranty.

2.4 FAILURE BY WARRANTOR TO PERFORM REMEDIAL WORK

If the warrantor fails to promptly, adequately and satisfactorily carry out the remedial work or to propose acceptable repair/compensation, the principal may then arrange for the remedial work to be carried out by others.

If the warrantor fails to promptly, adequately and satisfactorily provide replacement materials or to propose acceptable repair/compensation, the principal may then arrange for the replacement materials to be supplied by others.

The principal must first give the warrantor 10 working days notice to carry out and complete the remedial work / supply replacement materials. If the warrantor does not complete this work / supply replacement materials within the time, the principal must then advise the warrantor in writing that the work will be carried out / materials will be supplied by others.

In such event the warrantor is not released from obligations under this warranty, which continues in full force and effect, except in respect of the defect remedied / materials supplied by the principal or by another person contracted by the principal. The reasonable cost of the remedial work carried out / materials supplied by such other persons including all reasonable costs of the principal is to be paid to the principal by the warrantor on demand.

2.5 EXCLUSIONS

The principal agrees that the warrantor is not liable for any defect or damage caused by:
- wilful act or negligence of the principal or any person other than the warrantor; or
- fire, explosion, earthquake, war, subsidence, slips, faulty materials or workmanship other than caused by the defect in the warranted work; or
- any force of nature which the warrantor could not reasonably foresee; or
- any neglect or unnecessary delay by the principal in giving notice to the warrantor of a defect in the warranted works becoming apparent; or
- design faults, errors or discrepancies, unless the warrantor undertook the design of the part of the warranted works the subject of the defect; or
- unintended use of the warranted works by the principal or any occupant thereof; or
- failure by the principal or any occupant thereof to maintain the warranted works in accordance with good practice and any manufacturer's stated or recommended instructions or requirements.

2.6 ASSIGNMENT

The principal may assign the benefit of this warranty to any person.

2.7 DISPUTES

Any dispute or difference between the principal and the warrantor arising out of or in connection with this warranty, or the subject matter of this warranty, including any question about its existence or validity, will be referred to arbitration by a sole arbitrator to be agreed upon by the parties. If the parties are unable to agree upon the identity of an arbitrator within 10 working days from the date upon which notice of the dispute is given, then the arbitrator will be appointed by the Registrar of the Building Disputes Tribunal (NZ) Ltd upon the application of either party.

© CIL Masterspec 2015

2.8 NOTICES

Notices given to the warrantor are deemed to have been effectively served on the warrantor if given in accordance with the contract.

3. EXECUTED BY

Signed by the warrantor: .....

on this: .....day of .....20.....
(day) (month) (year)

(And where required to be executed as a deed) signed in the presence of:

Witness signature .....

Name: .....
(print)

Address: .....
(print)

Occupation: .....
(print)

Signed by the principal: .....

on this: .....day of .....20.....
(day) (month) (year)

(And where required to be executed as a deed) signed in the presence of:

Witness signature .....

Name: .....
(print)

Address: .....
(print)

Occupation: .....
(print)

NOTE - Where the warrantor is not the contractor the warranty agreement must be executed by the warrantor and the principal in the manner required for execution of a deed.

Any of these parties which are a company must execute the warranty by having it signed, under the name of the company, by two or more directors. If there is only one director, it is sufficient if the warranty agreement is signed under the name of the company by that director, but the signature must be witnessed by another person. The witness must not only sign but must also add his or her occupation and address. Alternatively, companies may execute under power of attorney. Any party which is a body corporate (other than a company) must execute by affixing its seal, which must be attested in the manner provided for in the rules of, or applicable to, the body corporate.

In the case of a party who is an individual, the party must sign and the signature must be witnessed by another person. The witness must not only sign but must also add his or her occupation and address.

END OF SECTION

10660

1240 ESTABLISHMENT

1. GENERAL

This general section relates to site establishment including:
- Notices and approvals
- Inspections
- Site preparation

Notices and approvals

1.1 STATUTORY OBLIGATIONS
Comply with all statutory obligations and regulations of regulatory bodies controlling the execution of the works.

1.2 BUILDING CONSENT AUTHORITY AND NETWORK UTILITY APPROVALS
Attend on Building Consent Authority officers, statutory and network utility inspectors, as necessary to obtain approvals (in addition to building consent approval) for and the satisfactory completion of, the works.

1.3 NOTIFY NETWORK UTILITY OPERATORS
Notify all network utility operators of proposed works before commencing site operations. Ascertain location of services or confirm that none exist in the vicinity of the works. Take all necessary precautions to avoid damage to existing services.

Site preparation

1.4 SITE ACCESS
Access to the site is limited to: Right of way to 10 Wills Crescent

1.5 WORKING AREA
Limited to the following designated working areas on the site: 10 Wills Crescent

Existing buildings

1.7 ALTERATIONS
Control access and working areas within existing buildings. Liaise with building owner to establish site limitations.

1.8 TEMPORARY ACCESS
Liaise with the building owner to arrange access to areas of the existing building

END OF SECTION

© CIL Masterspec 2015

1270 CONSTRUCTION

1. GENERAL

This GENERAL section relates to common requirements for construction issues including: -

- Quality assurance
- Noise and nuisance
- Set out
- Common execution requirements
- Common materials requirements

- Final presentation and cleaning
- Commissioning

Quality control and assurance

1.1 QUALITY ASSURANCE

Carry out and record regular checks of material quality and accuracy, including:

- Levels of all floors relative to the site datum.
- Framing timber moisture content.

Where any material, quality or dimension falls outside specified or required tolerances, obtain written direction from the contract administrator. Where building consent approval is affected, confirm remedial action with the Building Consent Authority.

Provide all materials, plant, attendances, supervision, inspections and programming to ensure the required quality standards are met by all project personnel.

Noise and nuisance

1.2 LIMIT CONSTRUCTION NOISE

Minimise the effects of noise generation by including in the planning of the work such factors as placing of plant, programming the sequence of operations and other management functions. Limit construction noise to comply with the requirements of NZS 6803, the requirements of the Resource Management Act sections 326, 327 and 328 and the Health and Safety in Employment Regulations clause 11.

1.3 ACCEPTABLE NOISE LEVELS

Refer to NZS 6803 Tables 2 and NZS 6803, tables 3 for the upper limits of construction work noise in residential and industrial areas over the various time periods, particularly 0730 to 1800 hours. Note also the allowed adjustments and exemptions in NZS 6803, 6. Do not exceed these limits.

1.4 PROVIDE INFORMATION TO NEIGHBOURS

Provide information to neighbours of any noise generation from the site liable to constitute a problem. Explain to them the means being used to minimise excessive noise and establish with them the timings most suitable for the noise generating work to be carried on.

Discuss with any complainant the measures being used to minimise noise. Where possible modify these measures to accommodate particular circumstances. Finally, determine the sound level at the location under discussion using methods and observation reporting as laid down in NZS 6803. If the noise level is above the upper limits of NZS 6803, tables 2 and NZS 6803, tables 3, cease the noise generating operation and remedy the problem.

1.6 INCONVENIENCE TO OTHERS

When the works are to be carried out in or around occupied premises, ascertain the nature and times of occupation and use. Carry out the works in a manner to minimise inconvenience, nuisance and danger to occupants and users.

1.7 DIRT AND DROPPINGS
Remove dirt and droppings deposited on public or private thoroughfares from vehicles servicing the site to the satisfaction of the appropriate authorities and the contract administrator.

1.8 DAMAGE AND NUISANCE
Take all precautions to prevent damage and nuisance from water, fire, smoke, dust, rubbish and all other causes resulting from the construction works.

Set-out and tolerances

1.9 USE OF SET-OUT INSTRUMENTS
Permit without charge, the use of instruments already on site for checking, setting out and levels.

1.10 CHECK DIMENSIONS
Check all dimensions both on drawings and site, particularly the correlation between components and work in place. Take all dimensions on drawings to be between structural elements before linings or finishes, unless clearly stated otherwise.

1.11 TOLERANCES
All work to be level, plumb, and true to line and face. Unless otherwise specified in specific work sections of this specification, tolerances for structural work shall comply with the following:

Structural steelwork:	To NZS 3404:1997 Steel structures standard Section 14.4 Tolerances (after fabrication) Section 15.3 Tolerances (erection)
Timber framing:	To NZS 3604 Timber-framed buildings Clause 2.2 Tolerances Table 2.1 Timber framing tolerances

Refer to work sections for tolerance requirements for finishes.

Execution

1.12 EXAMINE PREVIOUS WORK
Before commencing any part of the work carefully examine the previous work on which it may depend. Report in writing to the contract administrator defects that may affect the quality of the proposed work and obtain instructions. Commencing work on any part means that previous work is accepted as being satisfactory for work of the required standard.

1.13 WORKER QUALIFICATIONS
All work to be level, plumb, and true to line and face. Employ only experienced workers familiar with the materials and techniques specified.

Materials

1.14 NEW PRODUCTS AND MATERIALS
Materials and products to be new unless stated otherwise, of the specified, and complying with all cited documents.

1.15 COMPATIBILITY OF MATERIALS AND FINISHES
Ensure all parts of a construction or finish are compatible and their individual use approved by the manufacturers and suppliers of other parts of the system. Source all parts of a system from a single manufacturer or supplier.

1.16 STORING PRODUCTS AND MATERIALS
Take delivery of and store products, materials and components in accordance with codes of practice and the product manufacturer's or supplier's stated requirements. Maintain

the proper condition of any protective packaging, wrappings or supports during delivery, unloading and storage.

1.17 HANDLING PRODUCTS AND MATERIALS
Handle products, materials and components in accordance with codes of practice and the manufacturer's or supplier's stated guidelines. Avoid distortion and any contact with potentially damaging surfaces or conditions.

1.18 SUBSTRATE CONDITIONS
Ensure substrate conditions are within the manufacturer's or supplier's stated guidelines both before and during the installation of any material, product or system. Obtain written instructions on the necessary action to rectify unsatisfactory conditions.

1.19 INSTALLING PRODUCTS AND MATERIALS
Install in accordance with the manufacturer's or supplier's technical literature. Ensure that all installers are familiar with the required substrate conditions and the manufacturer's or supplier's specified preparation, fixing and finishing techniques.

1.20 COMPLY WITH STANDARDS
Comply with the relevant and/or cited Standard for any material or component. Obtain certificates of compliance when requested by the contract administrator.

1.21 CONDITION OF MATERIALS AND COMPONENTS
To be in perfect condition when incorporated into the work.

1.22 INCOMPATIBLE MATERIALS AND METALS
Separate incompatible materials and metals with separation layers, sleeves or gaskets of plastic film, bituminous felt or mastic or paint coatings, installed so that none are visible on exposed surfaces.

Final presentation and cleaning

1.26 REMOVE TEMPORARY PROTECTION
Remove all temporary markings, coverings, labels and protective wrappings unless instructed otherwise.

1.27 REPLACE DAMAGED MATERIALS
Replace all materials or component damaged during the works to the standard of and integral with the original.

1.28 COMPLETE ALL SERVICES
Ensure all services are complete and operational, with all temporary labelling removed, required labelling fixed and service instructions provided.

1.29 CLEANING BY CONTRACTOR
Clear the contract works of all construction materials, waste, dirt and debris. Clean the contract works including:
- Wipe all surfaces to remove construction dust
- Clean out service ducts and accessible concealed spaces
- Clean out all gutters and rainwater heads
- Wipe dust from both sides of glass. Take particular care when removing paint or cementitious materials to not damage the glass.
- Remove adhesive residue left by labels and other temporary protection/markings
- Clean out the interior of all cabinetry
- Wash down external concrete including driveways and concrete masonry. Take care when waterblasting to not cause damage to the surface or allow water to enter the building.
- Remove rubbish and building material from the area immediately adjacent to the contract works

1.30 CLEANING BY COMMERCIAL CLEANER
Use a commercial cleaning firm to clean the whole of the interior of the building, including all appliances, equipment, fittings, surfaces and finishes to leave it without any blemish. Cleaning to include:

- Clean and wash down all external surfaces to remove dirt, debris and marking.
- Clean all interior surfaces including cabinetwork, joinery, sanitary and hardware items.
- Vacuum or polish all floor finishes.
- Clean and polish all glass, both sides.

Commissioning

1.31 MOVING PARTS
Adjust, ease and lubricate all doors, windows, drawers, hardware, appliances, controls and all moving parts to give easy and efficient operation.

1.33 SECURITY AT COMPLETION
Remove any temporary lock cylinders and complete final keying prior to handing over keys to the principal on completion of the works. Leave the works secure with all accesses locked. Account for all keys/cards/codes and hand to the principal along with an itemised schedule, retaining a duplicate schedule signed by the principal as a receipt.

END OF SECTION

© CIL Masterspec 2015

2110 DEMOLITION WORKS

1. GENERAL

This section relates to the demolition of existing buildings and structures in whole or in part, to the extent necessary to carry out the new work.

1.2 DOCUMENTS

Documents referred to in this section are:

NZBC F5/AS1	Construction and demolition hazards
NZS 6803	Acoustics - Construction noise
NZDAA	Best practice guidelines for demolition in New Zealand
NZDAA	New Zealand guidelines for the management and removal of asbestos

Health and Safety in Employment Act 1992

1.3 QUALIFICATION

Carry out demolition only under the supervision of a suitably experienced person and using only experienced operators and drivers. Use only experienced, certified, construction blasters for explosives demolition.

1.4 NOISE

Refer to NZS 6803, tables 2 and 3 for the allowable upper limits of construction work noise in residential, commercial and industrial areas over the various time periods. Use silenced and noise insulated plant to ensure compliance with these requirements.

1.5 NUISANCE

Take all precautions necessary to minimise nuisance caused by dust, dirt, rubbish and water.

1.6 HEALTH AND SAFETY

Comply with the Health and Safety in Employment Act in general, NZBC F5/AS1 and NZDAA Best practice guidelines for demolition in New Zealand, section 5 Demolition Safety.

1.7 BUILDING CONSENT REQUIREMENTS

Demolition work to be carried out to building consent requirements

1.8 INSPECTIONS

Inspection of the demolition work to take place at each of the stages as scheduled in the building consent. Confirm a written programme to facilitate these inspections, including notification when each stage of the work is ready for inspection. Allow 48 hours advanced notice for the inspections.

Obtain and pay for any required inspections which are additional to the building consent.

1.9 SURVEY

Before commencing work, carry out a thorough survey and examination of all buildings or structures to be demolished in order to ensure the extent, sequence, technique and method of demolition proposed can be safely and efficiently carried out.

Take photographs of the works, adjacent buildings and sites, before commencing work. Provide a set of these photographs as a record of existing condition.

1.10 SERVICES

Before commencing demolition, arrange with all utility network operators to disconnect services and remove fittings and equipment. Pay all fees and charges for this work.

1.11 MATERIAL

Material from the demolition becomes the property of the contractor except where expressly provided otherwise. Remove redundant materials from the site as work proceeds.

1.12 SALVAGE

Designated items remain the property of the owner.

© CIL Masterspec 2015

1.13 BURNING OF MATERIALS
Burning of materials is not permitted on site.

2. PRODUCTS

2.1 ELEMENTS FOR SALVAGE OR RE-USE
Carefully dismantle, remove and store on site where directed. Protect from damage and weather until required.

3. EXECUTION

3.1 DEMOLITION GENERALLY
Comply with the requirements of NZDAA Best practice guidelines for demolition in New Zealand. Submit a written demolition plan to the requirements of section 4.7, Demolition plan (method statement).

3.2 PROTECT
Protect retained parts of existing buildings, the site and site structures, trees and shrubs. Take care in the cutting away and stripping out to reduce the amount of making good.

3.3 SUPPORT
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.

3.4 TEMPORARY SCREENS
Erect approved screens wherever penetration of weather, dust and dirt needs to be prevented. Adjust screens as work proceeds.

3.5 SITE SAFETY
Prevent access by unauthorised persons. Illuminate and protect all holes, unsafe buildings and other hazards. Leave site and buildings safe at the close of each day's work.

3.6 FLAMMABLE OR EXPLOSIVE CONDITIONS
Prevent fire or explosion and arrange to alert the appropriate authority where any danger exists.

3.7 DEMOLISH
Demolish buildings and structures down to the existing finished ground level. Do not remove support to adjacent properties or buildings.

3.8 DEMOLITION, ASBESTOS
Where demolition work includes contact with or removal of material containing asbestos, comply with NZDAA: New Zealand guidelines for the management and removal of asbestos.

3.10 SALVAGE
Carefully dismantle and store safely all salvage items where directed; for removal, use on the site, or until completion of the works.

3.11 REINSTATE AND MAKE GOOD
Reinstate and make good demolition damage to adjoining properties, existing work, services, or property.

3.12 TAKE AWAY
Take away from the site all plant and equipment, temporary access works and demolished materials and elements. Leave the site completely clean and tidy.

4. SELECTIONS

4.2 ELEMENTS FOR SALVAGE AND DISPOSAL BY CONTRACTOR

Salvage the following elements.

Element/component		
Refer architectural plan A1.01		

4.3 ELEMENTS FOR RE-USE

Element/component	Location	Location for re-use
Window on North elevation	North elevation	West elevation
Exterior sensor security light	On soffit adjacent to existing entry door	To soffit clear of new wall

END OF SECTION

40660

2123 ASBESTOS REMOVAL

1. GENERAL

This section relates to the removal of asbestos prior to other demolition work, to the extent necessary to carry out the contract works.

1.1 RELATED WORK
Refer to 2110 for Demolition.

1.2 ABBREVIATIONS
The following abbreviations are used throughout this part of the specification:
NZDAA New Zealand Demolition and Asbestos Association

Documents

1.3 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:
NZBC F5/AS1 Construction and demolition hazards
NZS 6803 Acoustics - Construction noise
NZDAA New Zealand guidelines for the management and removal of asbestos
Health and Safety in Employment Act 1992
Health and Safety in Employment Regulations 1995

Requirements

1.4 QUALIFICATIONS
Carry out asbestos removal only under the supervision of a suitably experienced person, using only workers trained for this work

1.5 NOTIFIABLE WORK
Notify the appropriate WorkSafe NZ office of work that is notifiable under the Health and Safety in Employment Regulations 1995, 24 hours before starting the work.

1.6 HEALTH AND SAFETY
Comply with the Health and Safety in Employment Act in general, NZBC F5/AS1 and NZDAA New Zealand guidelines for the management and removal of asbestos.

2. PRODUCTS

2.1 EQUIPMENT
Protective clothing, respirators, vacuum cleaners, decontamination facilities, isolation facilities, etc as appropriate and as required by the NZDAA. Equipment shall be cleaned or disposed of as directed by the NZDAA New Zealand guidelines for the management and removal of asbestos.

2.2 ELEMENTS FOR RE-USE
Building elements that need to be temporarily removed to allow the removal of asbestos, dismantle carefully, remove, clean and store on site where directed. Protect from damage and weather until required.

3. EXECUTION

Conditions

3.1 SAFETY DURING ASBESTOS REMOVAL
Refer to NZBC F5/AS1 and the NZDAA New Zealand guidelines for the management and removal of asbestos and carry out the requirements laid down in section 7: Safe Removal of Friable Asbestos in respect of:
- instability
- supervision

- plant, tools and equipment
- personal protective equipment
- protection of the public
- unauthorised access to site.

Application

3.2 CARRY OUT ASBESTOS REMOVAL
Carry out asbestos removal to the requirements of the NZDAA New Zealand guidelines for the management and removal of asbestos.

Completion

3.3 MAKE GOOD
Make good damage caused by asbestos removal work.

3.4 REINSTATE
Reinstate where any damage is caused by this asbestos removal to those parts of the existing building, other buildings and the remainder of the site being retained.

3.5 LEAVE
Leave work to the standard required by following procedures.

3.6 DISPOSAL OF ASBESTOS
Store, label and dispose of asbestos to the requirements of NZDAA New Zealand guidelines for the management and removal of asbestos, Section 11: Storage, labelling and Disposal of Asbestos.

3.7 TAKE AWAY
Take away from the site all plant, tools and equipment, temporary access works, and demolished materials and elements, to leave the site completely clean and tidy.

4. SELECTIONS

4.1 DECORATIVE COATINGS CONTAINING ASBESTOS FOR REMOVAL
Location: Refer demolition plan A1.01

END OF SECTION

10660

3820 CARPENTRY

1. GENERAL

This section relates to the supply and erection of light timber framing, floors, flooring underlays and decking.

1.1 RELATED WORK
Refer to 4161 UNDERLAYS, FOIL AND DPC for underlays, foils and DPC.

1.2 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC B2/AS1	Durability
AS/NZS 2269.0	Plywood - Structural - Specification
AS/NZS 2904	Damp-proof courses and flashings
AS/NZS 2918	Domestic solid fuel burning appliances - Installation
NZS 3602	Timber and wood-based products for use in building
NZS 3603	Timber structures standard
NZS 3604	Timber-framed buildings
NZS 3622	Verification of timber properties
NZS 3640	Chemical preservation of round and sawn timber
FTMA CoP	Frame and Truss Manufacturers Association Code of Practice

***A copy of** NZS 3604 **Timber-framed buildings, must be held on site.**

1.5 DIMENSIONS
All timber sizes except for battens are actual minimum dried sizes.

2. PRODUCTS

2.1 TIMBER FRAMING, TREATED
Species, grade and in service moisture content to NZS 3602, NZBC B2/AS1 and treatment to NZS 3640, NZBC B2/AS1. Structural grade (SG) to NZS 3604, NZS 3622 with properties to NZS 3603.

2.2 PLYWOOD
Structural plywood to AS/NZS 2269.0 for floors.

2.3 NAILS
Type to NZS 3604, section 4, **Durability**, and of the size and number for each particular types of joint as laid down in the nailing schedules of NZS 3604, sections 6-10.

2.4 BOLTS AND SCREWS
Bolts and screws of engineering and/or coach type complete with washers, to the requirements of NZS 3604, section 4, **Durability**, and of the number and form required for each particular junction to NZS 3604, sections 6-10.

2.5 NAIL PLATES
Comply with the requirements of NZS 3604, section 4, **Durability**, and of the number and form required for each particular junction to NZS 3604, sections 6-10. Plates to the plate manufacturer's design for the particular locations as shown on the drawings.

2.6 CONNECTORS
Comply with the requirements of NZS 3604, section 4, **Durability**, and of the number and form required for each particular junction to NZS 3604, sections 6-10. Connectors and structural brackets to the connector manufacturer's design for particular locations shown on drawings.

2.7 CORROSION RISKS
For exterior timber, timber in damp areas and timber subject to occasional wetting, use only stainless steel (or equivalent) fixings and connectors, when the timber is treated with;

Copper Azole (CuAz, Preservative code 58), Alkaline Copper Quaternary (ACQ, Preservative code 90), Micronise Copper Azole (code 88) or Micronised Copper Quaternary (code 89).

2.8 DPC
Refer to 4161 UNDERLAYS, FOIL AND DPC section

3. EXECUTION

3.1 EXECUTION GENERALLY
To NZS 3603 and NZS 3604 except as varied in this specification. Execution 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).

3.2 SEPARATION
Separate all timber framing timbers from concrete, masonry and brick by: -
- a full length bituminous damp-proof membrane overlapping timber by at least 6mm; or
- a 12mm minimum free draining air space

3.3 ATTENDANCE
Provide and fix blocks, nogs, openings and other items as required by other trades.

3.4 MOISTURE CONTENT
Maximum allowable equilibrium moisture content (EMC) for non air-conditioned or centrally heated buildings for framing to which linings are attached.

Framing at erection:	24% maximum
Framing at enclosure:	20% maximum
Framing at lining:	16% maximum

3.5 SET-OUT
Set out framing in accordance with the requirements of NZS 3604 and as required to support sheet linings and claddings.

3.7 FRAMING FLOORS
Framed and fastened to NZS 3604, section 7, **Floors**.

3.8 FRAMING WALLS
Frame to required loading and bracing complete with lintels, sills and nogs, all fabricated and fastened to NZS 3604, section 8, **Walls**.

3.9 INSTALLING WALL UNDERLAYS
Refer to 4161 UNDERLAYS, FOIL AND DPC section

3.10 FIT JAMB BATTENS
For walls with direct fix cladding, fit 20mm (nominal) jamb battens over the wall underlay, to the jambs of window and door rough openings, to NZBC E2/AS1, fig 72A. Cut around sill flashings. Fix with 60 x 2.8 flat head galvanized nails at 300mm centres.

3.11 LAYING PLYWOOD FLOORING
Lay, countersink screw and adhesive fix to the plywood manufacturer's requirements and to NZS 3604, section 7.2.3, **Wood-based sheet flooring**.

3.13 DPC TO TIMBER
Refer to 4161 UNDERLAYS, FOIL AND DPC section.

3.14 INSTALL PROPRIETARY FIREPLACE
Prepare for the installation as detailed and as required by the manufacturer. Install strictly in accordance with AS/NZS 2918 and the manufacturer's stated and detailed requirements.

10660

4. SELECTIONS

4.2 FLOOR FRAMING

Member	Species	Grade	Treatment
Bay window 'floor' structure	Radiata pine	SG8	H1.2
Bearers/ joists/ piles	Radiata pine	SG8	H3.2

4.3 EXTERIOR WALL FRAMING

Member	Species	Grade	Treatment
Exterior walls:	Radiata pine	SG8	H1.2
Jamb battens:	Radiata Pine	Merch	H3.1

4.5 EXTERIOR FINISHING TIMBERS

Member	Species	Grade	Treatment
cover boards:	Radiata pine	Dressing	H3.2
Exterior trim:	Radiata pine	Dressing	H3.2

4.6 PLYWOOD

Member	Brand/type	Treatment
Plywood flooring:	CD	H1.2

4.7 INTERIOR FINISHING TIMBERS

Member	Species	Grade	Size
Architraves:	Radiata pine	Dressing	60x10mm to match existing
Skirtings:	Radiata pine	Dressing	45x10mm to match existing
Scotias:	Radiata pine	Dressing	40x10mm to match existing

4.8 DPC

Refer to 4161 UNDERLAYS, FOIL AND DPC section.

4.9 NAILS

Location	Type	Material	Finish
All	To suit	Steel	Galvanised/ Stainless steel

4.10 BOLTS AND SCREWS

Location	Type	Material	Finish
All	To suit	Steel	Galvanised/ Stainless steel

4.11 NAIL PLATES

Location	Type	Material	Finish
All	To suit	Steel	Galvanised/ Stainless steel

4.12 CONNECTORS

Location	Type	Material	Finish
All	To suit	Steel	Galvanised/ Stainless steel

4.13 PROPRIETARY INSTALLATIONS

Type: Bowmac 165 (4 Nos)
Finish: Galvanized

4.13 PROPRIETARY INSTALLATIONS

Type: Bowmac B50
Finish: Galvanized

END OF SECTION

4161T THERMAKRAFT UNDERLAYS, FOILS AND DPC

1. GENERAL

This section relates to the application of **Thermakraft Industries (NZ) Ltd**, DPC, DPM, underfloor foil insulation, wall underlays and roofing underlays.

1.2 ABBREVIATIONS AND DEFINITIONS
Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.

The following abbreviations apply specifically to this section:

NZMRM	New Zealand Metal Roofing Manufacturers Inc.

The following definitions apply specifically to this section:

Wall underlay	the same meaning as defined in NZBC E2/AS1, covering kraft based and synthetic wall underlays, sometimes called, wall wraps, building wraps or building papers.

Documents

1.3 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC C/AS1-AS7	Protection from fire
NZBC E2/AS1	External moisture
AS 1530.2	Methods for fire tests on building materials, components and structures - Test for flammability of materials
NZS 2295	Pliable, permeable building underlays
AS/NZS 2904	Damp-proof courses and flashings
NZS 3604	Timber-framed buildings
AS/NZS 4200.1	Pliable building membranes and underlays - Materials
NZS 4214	Methods of determining the total thermal resistance of parts of buildings
AS/NZS 4389	Safety mesh
AS/NZS 4534	Zinc and zinc/aluminium-alloy coatings on steel wire
NZMRM CoP	NZ metal roof and wall cladding Code of Practice

1.4 MANUFACTURER/SUPPLIER DOCUMENTS
Thermakraft documents relating to work in this section are:
Thermakraft product manual and technical data sheets.
BRANZ Appraisal 695 - Watergate-Plus Fire Retardant Wall Underlay

BRANZ Appraisal 878 - Thermakraft Aluband Window Flashing Tape

Manufacturer/supplier contact details

Company:	Thermakraft Industries (NZ) Ltd
Web:	www.thermakraft.co.nz
Email:	info@thermakraft.co.nz
Telephone:	0800 806 595

Warranties

1.5 MANUFACTURER'S WARRANTY
Warrant this work under normal environmental and use conditions against failure of materials and execution. Thermakraft Industries Ltd warrant performance of products if design and installation complies with relevant technical literature, NZBC, and recognised industry Codes of Practice. Copy of Thermakraft Product Warranty available on request.

Requirements

1.6 NO SUBSTITUTIONS
Substitutions are not permitted to any specified materials, or associated products, components or accessories.

1.7 INSTALLATION SKILL LEVELS
Installers to be experienced in the installation of Thermakraft products and familiar with Thermakraft Industries technical literature and the related documents listed in this design i.e. NZMRM CoP NZ metal roof and wall cladding Code of Practice.

2. PRODUCTS

Materials
Wall underlays

2.2 SYNTHETIC BREATHER TYPE FILM COATED WALL UNDERLAY
Watergate-Plus™, absorbent breathable spun bonded non-woven polyolefin type building membrane, coated with a water resistant vapour permeable film. A fire retardant membrane, with Flammability Index of ≤ 5, when tested to AS 1530.2. The product has a BRANZ Appraisal 695.

Accessories

2.3 WINDOW AND DOOR SEALING TAPE
Thermakraft Aluband™ Window Sealing Tape system consists of synthetic faced reinforced bituminous window sealing tape, Thermakraft Aluband™ Corner Moulding™ piece, used in conjunction with the Thermakraft Aluband™ Hand Tool to ensure good adhesion and a tight fit into corners. See Thermakraft Data Sheet 312 for installation details and BRANZ Appraisal 878.

2.4 WINDOW AND DOOR SEALING TAPE
Thermakraft Bulldog™ Window Sealing Tape system consists of synthetic faced bituminous window sealing tape, Thermakraft Aluband™ Corner Moulding™ piece, used in conjunction with the Thermakraft Aluband™ Hand Tool to ensure good adhesion and a tight fit into corners. See Thermakraft Data Sheet 312 for installation details and BRANZ Appraisal 803.

2.5 TAPE
Thermakraft tapes to compliment the underlay. Pressure sensitive aluminium foil tapes for joining foil insulation and vapour barriers. These include:
- Thermakraft White General Purpose Underlay Tape
- Thermakraft Window Sealing Tapes, used to repair damaged bituminous underlays

3. EXECUTION

Conditions

3.1 GENERAL REQUIREMENTS
Design application and installation of Thermakraft Building products to NZBC E2/AS1, BRANZ Appraisals, Thermakraft Technical Literature and Industry Codes of Practice.

3.2 STORAGE
Store building underlays and accessory materials, under conditions that ensure no deterioration or damage. Store rolls in an upright position on a smooth floor and protected from sunlight, UV radiation and moisture.

3.3 INSPECTION
Before starting work, check that the building construction phase will allow work of the required standard. Carry out remedial work identified before laying underlay.

Application - wall underlay

3.7 WALL UNDERLAY

Fix horizontally to outside face of framing in true alignment, with succeeding sheets overlapping 150mm to NZBC E2/AS1, 9.1.7, Wall underlay and refer to Thermakraft Industries for requirement for fastenings. Fix to Thermakraft Industries Technical Data specifications. Scribe neatly around penetrations and openings to leave no gaps. Tape all penetrations. Keep clean, undamaged and without visible weather deterioration until closed in.

Completion

3.9 CLEAN UP

Clean up as the work proceeds.

3.10 LEAVE

Leave work to the standard required by following procedures.

3.11 REMOVE

Remove debris, unused materials and elements from the site.

4. SELECTIONS

For further details on selections go to www.thermakraft.co.nz.
Substitutions are not permitted to the following, unless stated otherwise.

Wall Underlays

4.2 THERMAKRAFT WATERGATE-PLUS™

Location: To new walls
Type: Thermakraft Watergate-Plus™

Window / Door Sealing System

4.3 THERMAKRAFT - ALUBAND™

Location: To windows as detailed
Type: Thermakraft window sill tape 75mm Aluband™ END OF SECTION

4231HW JAMES HARDIE WEATHERBOARD CLADDING

1. GENERAL

This section relates to the supply and fixing of the following fibre cement products:
- James Hardie Weatherboard cladding

1.1 RELATED WORK
Refer to painting section/s for the protective coating required to meet the NZBC durability requirements.

Documents

1.2 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC E2/AS1	External moisture
NZBC E2/VM1	Weathertightness
AS/NZS 1170.2	Structural design actions - Wind actions
AS/NZS 2908.2	Cellulose-cement products - Flat sheet
NZS 3602	Timber and wood-based products for use in building
NZS 3604	Timber-framed buildings

1.3 MANUFACTURER/SUPPLIER DOCUMENTS
James Hardie documents relating to this part of the work:
James Hardie Weatherboards technical specification

Manufacturer/supplier contact details

Company:	James Hardie New Zealand
Web:	www.jameshardie.co.nz
Email:	info@jameshardie.co.nz
Telephone:	Ask James Hardie™ on 0800 808 868

The BRANZ appraisal is available at www.branz.co.nz.

Warranties

1.4 WARRANTY - MANUFACTURER/SUPPLIER
Provide a material manufacturer/supplier warranty:

15 years:	For James Hardie™ . (refer to James Hardie™ product warranty)
15 year:	For accessories supplied by James Hardie (refer to James Hardie™ product warranty)
From:	Date of purchase

- Provide this warranty on the manufacturer's standard form.

Refer to the general section 1237 WARRANTIES for additional requirements.

Requirements

1.5 NO SUBSTITUTIONS
Substitutions are not permitted to any specified system, or associated components and products.

1.6 MAINTENANCE REQUIREMENTS
Provide relevant James Hardie maintenance requirements at completion of the work.

Performance

1.7 PERFORMANCE, WIND
The design wind pressures are to NZS 3604, up to and including Extra High Wind Zone. James Hardie Technical Specifications are suitable for these conditions.

2. PRODUCTS

Materials

2.1 WALL UNDERLAY
For flexible wall underlays and rigid wall underlays, refer to the appropriate separate section(s).

2.2 JAMES HARDIE WEATHERBOARDS
James Hardie Weatherboards, 7.5mm thick, pre-primed, manufactured from treated cellulose fibre, Portland cement, sand and water and cured by high pressure autoclaving, manufactured to AS/NZS 2908.2 and complying with NZBC E2/AS1.

Components

2.3 FASTENER TYPE
Fasteners to minimum durability requirements of the NZBC. Refer to NZS 3604, section 4, **Durability**, for requirements for fixing's material to be used in relation to the exposure conditions.

Refer to NZBC E2/AS1, Table 20, Material selection, and NZBC E2/AS1, Table 21, Compatibility of materials in contact, for selection of suitable fixing materials and their compatibility with other materials.

Zone	Fixings Material
Zone B	Hot-dipped galvanized

2.4 SCREWS
30mm x 7 gauge stainless steel HardieDrive screws

2.5 GALVANIZED NAILS
60mm x 3.15mm diameter jolt head
75mm x 3.15mm diameter jolt head
90mm x 4.0mm diameter jolt head
HardieFlex™ Nail 40mm x 2.8mm diameter
HardieFlex™ Nail 50mm x 2.8mm diameter
HardieFlex™ Nail 60mm x 3.15mm diameter
HardieFlex™ Nail 75mm x 3.15mm diameter

Accessories

2.7 SEALANT
Silaflex AT-Facade sealant or similar. Refer to James Hardie technical specifications for application requirements.

3. EXECUTION

Conditions

3.1 STORAGE
Take delivery of products dry and undamaged on pallets, and keep on pallet. Protect edges and corners from damage and covered to keep dry until fixed.

3.2 HANDLING
Avoid distortion and contact with potentially damaging surfaces. Carry weatherboards in vertical position. Do not drag weatherboards across each other, or across other materials. Protect edges, corner and surface finish from damage.

3.3 SUBSTRATE
Do not commence work until the substrate is of the standard required by James Hardie for the specified finish; plumb, level and in true alignment. Moisture content of timber framing must not exceed the requirements specified by NZS 3602 to minimise shrinkage and movement after sheets are fixed.

Application - generally

3.4 PENETRATIONS AND FLASHINGS
Confirm that exterior wall openings have been prepared ready for the installation of all window and door frames and other penetrations through the cladding. Required preparatory work includes the following:
- Wall underlay appropriately incorporated with penetration and junction flashings.
- Materials lapped in a way that water tracks down to the exterior face of the wall underlay.
- Wall underlay to openings finished and dressed off ready for the installation of window and door frames and other penetrations
- Claddings neatly finished off to all sides of openings
- Installation of flashings (those required to be installed prior to installation of penetrating elements).

3.5 INSTALL FLASHINGS
Install flashings at all wall openings, penetrations, junctions, connections, window sills, heads and jambs to NZBC E2/AS1.

3.6 INSTALL JAMES HARDIE WEATHERBOARDS
Cut weatherboards to required lengths and fit joints off-stud using concealed soaker. Fit internal corners and fix weatherboards as per James Hardie Weatherboard technical specifications. Fit and fix external corners and joint soakers as required. It metal internal corner flashings in accordance with E2/AS1,9.5.3.4 **Internal corners** Fig 89.

Completion

3.7 REPLACE
Replace all damaged or marked elements.

3.8 LEAVE
Leave work to the standard required for following procedures.

3.9 REMOVE
Remove debris, unused materials and elements from the site.

4. SELECTIONS

James Hardie Weatherboards

4.1 JAMES HARDIE WEATHERBOARDS

Location:	Refer architectural drawings
Brand/type:	James Hardie
Thickness:	7.5mm
Width:	To match existing as close as practicable
Construction:	Timber
Nail pattern:	Face nail
Nail finish:	Galv
Nails:	As per manufacturers specification co

Finishing

4.3 PAINTING
Refer to painting section/s for details.

END OF SECTION

10660

4521 ALUMINIUM WINDOWS AND DOORS

1. GENERAL

This section relates to the manufacture, supply, and installation of :-
- aluminium windows
- aluminium doors and frames
- hardware and furniture
- overhead glazing
- flashings

1.1 RELATED WORK
Refer to glazing sections for glass types

1.2 ABBREVIATIONS AND TERMS

SLS	Serviceability limit state
ULS	Ultimate limit state
WANZ	Windows Association of Zealand
PQAS	Powder Coating Quality Assurance System

Documents

1.3 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC E2/AS1	External moisture
NZBC F4/AS1	Safety from falling
NZBC H1/VM1	Energy efficiency
NZBC H1/AS1	Energy efficiency
AS/NZS 1580.108.1	Methods of test for paints and related materials - Determination of dry film thickness on metallic substrates - Non destructive methods
AS/NZS 1170.2	Structural design actions - Wind loads
NZS 1170.5	Structural design actions - Earthquake actions - New Zealand
AS/NZS 1734	Aluminium and aluminium alloys - flat sheets, coiled sheet and plate
AS/NZS 1866	Aluminium and aluminium alloys - Extruded rod, bar, solid and hollow shapes
NZS 3604	Timber-framed buildings
AS 3715	Metal finishing - Thermoset powder coatings for architectural applications
BS 3900	Methods of tests for paints, Part C5: Determination of film thickness
NZS 4211	Specification for performance of windows
NZS 4223.3	Glazing in buildings - Human impact safety requirements
AS/NZS 4680	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles
WANZ Installation Guide:	The WANZ Guide to Window Installation as described in E2/AS1 Amendment 5.
WANZ PQAS	Powder Coating Quality Assurance System
WANZ SFA 3503-03	Anodic Oxide coatings on wrought aluminium for external architectural application (2005).
BRANZ BU 337	Protecting Window Glass from Surface Damage
AAMA 2604	Voluntary specification, performance requirements and test procedures for high performance organic coatings on aluminium extrusions and panels.
AAMA 2605	Voluntary specification, performance requirements and test procedures for superior performing organic coatings on aluminium extrusions and panels.

US Federal Specification

TT-S-001543A	Sealing compound, silicone rubber base (for caulking, sealing and glazing in buildings and other structures)
TT-S-00230C	Sealing compound, elastomeric type, single component (for caulking, sealing and glazing in buildings and other structures)

© CIL Masterspec 2015

1.4 MANUFACTURER'S DOCUMENTS
Manufacturer's and supplier's documents relating to work in this section are:
Nulook weathertight booklet

Copies of the above literature are available from
Web: www.nulook.co.nz
Contact: Rob Newport
Email: robnewport@outlook.com
Telephone: 06 368 3523
027 203 2803

Warranties

1.5 WARRANTY - MANUFACTURER/SUPPLIER
Provide a material manufacturer/supplier warranty:
5 years: For fabrication
Refer to the general section for the required form of 1237WA WARRANTY AGREEMENT and details of when completed warranty must be submitted.

1.6 WARRANTY - INSTALLER
Provide an installer/applicator warranty:
2 years: For installation

- Provide this warranty in the installer/applicator standard form.

Refer to the general section 1237 WARRANTIES for additional requirements.

Requirements

1.8 QUALIFICATIONS
Work to be carried out by tradesmen experienced, competent and familiar with the materials and techniques specified.

1.9 COMPLIANCE
Windows and doors to be manufactured and installed to NZBC E2/AS1.

1.11 CERTIFICATION
Provide evidence of a certificate by a laboratory accredited by International Accreditation of New Zealand that the windows and doors offered comply with the requirements of NZS 4211.

Performance

1.12 PERFORMANCE - WINDOWS AND DOORS
To NZS 4211, including:
- deflection, opening sashes, air infiltration, water penetration, ultimate strength, torsional strength of sashes, marking.

Refer to SELECTIONS.

1.13 PERFORMANCE - STRUCTURAL/WEATHER-TIGHTNESS
The structural and weather-tight performance of the completed joinery, the glazing and infill panels is the responsibility of the window manufacturer.

Performance - Wind (design by contractor)

1.14 WIND - NON SPECIFIC DESIGN
Design the installation to the wind zone parameters of NZS 3604, table 5.4.
Refer to SELECTIONS for wind zone.

Finishes

10660

1.15 CERTIFY COATINGS - POWDER COATING
Certify on request, compliance with this specification and support with control and sampling records. Test for film thickness to BS 3900, part C5, method No. 4, using method (b) or to AS/NZ 1580.108.1 for certifying thickness and method (a) where any dispute arises as to the thickness provided.
The coating should be applied by an applicator who can certify that the coating has been applied in accordance with the specification.

2. PRODUCTS

Materials

2.1 WINDOWS
Refer to SELECTIONS for type and finish.

2.3 ALUMINIUM EXTRUSIONS
Alloy designation to comply with AS/NZS 1866. Branded and extruded for anodising or powder coating.

2.4 ALUMINIUM SHEET AND STRIP
Complying with AS/NZS 1734 of suitable thickness. Rolled for anodising or powder coating.
Alloy designation: 5251 - H16 or 5005 - H16

2.5 STAINLESS STEEL SHEET AND STRIP
Type: 316 austenitic steel
Finish grade: 2B (satin lustre)

2.6 GLASS
Refer to the glazing section for glass types and installation.

2.7 REVEALS - TIMBER PAINTED
Timber reveals for paint finish with all sides primed grooved for wall linings or flush finished for architraves.

2.8 FLASHINGS GENERALLY
To NZBC E2/AS1, 9.1.10 **Windows and Doors**. Material, grade and colour of head flashings to match the window frames. Ensure that materials used for head, jamb and sill flashings are compatible with the window frame materials and fixings and cladding materials.

Components - for direct fix systems

2.9 SILL PAN FLASHING
To NZBC E2/AS1, 9.1.10.5 Window and Door Sills. Flashing for direct fix claddings to collect and drain water that may penetrate through the window or door unit. Size to extend from the inner most point of the aluminium frame out over the external face of the cladding.

2.10 WANZ SUPPORT ANGLE
Support angle, for use below the sill pan, for deeper claddings to transfer the weight of the window back to the frame. Size to suit cladding thickness.

Components

2.11 GLAZING GASKETS
Thermoplastic rubber. Do not stretch glazing gaskets during installation. Measure and cut gaskets 5-10% over length before installation.

2.12 HARDWARE AND FURNITURE
Hinges, stays, catches, fasteners, latches, locks and furniture as offered by the window and door manufacturer. Refer to SELECTIONS for type and finish. Key alike all lockable window hardware able to be keyed alike.

© CIL Masterspec 2015

2.13 SAFETY STAYS
Stainless steel non releasable restrictors to limit window opening to NZBC F4/AS1, Table 2, Acceptable opening sizes for barriers.

Sealants

2.15 WEATHERING/INSTALLATION SEALANT
Building sealant used in accordance with manufacturer's instructions for weather sealing aluminium frames to the cladding, complying with US Federal Specification TT S 0011534A, or a one-part polyurethane moisture curing, elastic joint sealant of medium modulus (± 25% movement) to US Federal Specification TT S 00230C.

2.16 FOAM TAPE
Foam tape to NZBC E2/AS1, 9.1.10.7 **Closed cell foam tape**.

Finishes

2.17 POWDER COATED ALUMINIUM - EXTRA DURABLE
Polyester powder organic coating in accordance with WANZ PQAS and AS 3715.

3. EXECUTION

Conditions - generally

3.1 DO NOT DELIVER
Do not deliver to site any elements which cannot be unloaded immediately into suitable conditions of storage.

3.2 UNLOAD WINDOW JOINERY
Unload, handle and store elements in accordance with the window manufacturer's requirements.

3.3 AVOID DISTORTION
Avoid distortion of elements during transit, storage and handling.

3.4 PREVENT DAMAGE
Prevent prefinished surfaces rubbing together, and contact with mud, plaster and cement. Keep paper and cardboard wrappings dry.

3.5 PROPRIETARY ELEMENTS
Fix in accordance with the window manufacturer's requirements.

3.6 PROTECTIVE COVERINGS
Retain protective coverings and coatings to BRANZ BU 337 and keep in place during the fixing process. Provide protective coverings and coatings where required to prevent marking of surfaces visible in the completed work and to protect aluminium joinery from following trades. Remove protection on completion.

3.7 ADDITIONAL PROTECTION
Supply and fix additional protection as necessary to prevent marking of surfaces which will be visible on completed work.

Conditions - fixings and fastenings

3.8 SUPPLY OF FIXINGS
Use only fixings and fastenings recommended by the manufacturer of the component being fixed and to comply with the ULS wind pressure stated in SELECTIONS. Ensure fixings and fastenings exposed to the weather are of aluminium, or Type 316 stainless steel or if not exposed to the weather may they be hot-dip galvanized steel with a coating weight of 610 g/m² complying with AS/NZS 4680.

10660

3.9 INSTALLATION FIXING
To NZBC E2/AS1, 9.1.10.8, **Attachments for windows and doors**. Fix windows/doors through reveal to frame with a pair of 75 x 3.15mm minimum galvanised jolt head nails or a pair of 8 gauge x 65mm minimum stainless steel screws. Fix at a maximum of 450 centres along all reveals and a maximum of 150mm from reveal ends. Ensure fixings do not penetrate metal flashings.
Install packers between reveals and framing at fixing points, except at the head.

Assembly

3.10 FABRICATION
Fabricate frames as detailed on shop drawings. Install glazing, hinges, stays and running gear as scheduled. Provide temporary bracing and protection. Temporarily secure all opening elements for transportation.

3.11 TIMBER REVEALS
Before fixing to aluminium frames, ensure that timber reveals which are being painted have been primed on all surfaces.

3.12 HARDWARE GENERALLY
Factory fit all required and scheduled hardware

3.13 SAFETY STAYS
Factory fit safety stays to all windows scheduled for safety stays and to all windows where safety stays are required to comply with NZBC F4/AS1 4.0, Opening windows.

Installation - windows and doors

3.14 CORROSION PROTECTION
Before fixing, apply suitable barriers of bituminous coatings, stops or underlays between dissimilar metals in contact, or between aluminium in contact with concrete.

3.15 CONFIRM PREPARATION OF EXTERIOR WALL OPENINGS
Confirm that exterior wall openings have been prepared ready for the installation of all window and door frames. Do not proceed with the window and door installation until required preparatory work has been completed.

Required preparatory work includes the following:
- wall underlay/building wrap to openings finished and dressed off ready for the installation of window and door frames to NZBC E2/AS1:9.1.5 **Wall underlays to wall openings**.
- Full height 20mm jamb battens to NZBC E2/AS1 figure 72A (direct fix only)
- claddings neatly finished off to all sides of openings
- installation of flashings (those which are required to be installed prior to frames).

3.16 INSTALLATION
Fix to comply with the reviewed shop drawings and installation details including flashings and bedding compounds, pointing sealants and weathering sealants.

3.17 INSTALLATION DIRECT FIX
Install to window manufacturers details and drawings including sill pans to window and door units.

3.18 INSTALL FLASHINGS
Install flashings to heads, jambs and sills of frames as supplied and required by the window manufacturer and as detailed on the drawings. Finish head flashings to match window finish.

Place all flashings so that the head flashing weathers the jamb flashings, which in turn weathers over the upstand of the sill flashing. Ensure that sill flashings drain to the outside air.

Except where window/door frames are recessed, ensure that head flashings over-sail unit by 20mm minimum plus any jamb scriber width at each end.

© CIL Masterspec 2015

3.19 COMPLETE AIR SEAL
To NZBC E2/AS1:9.1.6 Air seals. Form an air-tight seal by means of a proprietary expanding foam or sealants used with backing rods, applied between the window / door reveal and structural framing to a depth of 10 - 20mm, to provide a continuous air tight seal to the perimeter of the window or door.

3.20 FIX HARDWARE
Fix all sash and door hardware and furniture as scheduled.

Application - jointing and sealing

3.21 SEAL FRAMES ON SITE
Seal frames to each other and to adjoining structure and finishes, all as required by the window manufacturer and to make the installation weathertight. In very high and extra high or greater wind zones, seal between the window head and the head flashing. Do not seal the junction between the sill member and the cladding or sill flashing which must remain open.

3.22 PREPARE JOINTS
Ensure joints are dry. Remove loose material, dust and grease. Prepare joints in accordance with the sealant manufacturer's requirements, using required solvents and primers where necessary. Mask adjoining surfaces which would be difficult to clean if smeared with sealant.

3.23 BACK UP
When using back-up materials do not reduce depth of joint for sealant to less than the minimum required by the manufacturer of the sealant. Insert polyethylene rod or tape back-up behind joints being pointed with sealant.

3.24 SEALANT FINISH
Tool sealant to form a smooth fillet with a profile and dimensions required by the sealant manufacturer. Remove excess sealant from adjoining surfaces, using the cleaning materials nominated by the sealant manufacturer and leave clean.

Completion - cleaning

3.25 REMOVE TRADE DEBRIS
Remove trade debris by appropriate means on a floor by floor basis as each floor is completed and again before any work is covered up by others. Arrange for general removal.

3.26 TRADE CLEAN
Trade clean window frames, operable windows and doors, glass and other related surfaces inside and out at the time of installation to remove marks, dust and dirt, to enable a visual inspection of all surfaces.

Completion

3.27 PROTECTIVE COVERINGS
Retain protective coverings and coatings and keep in place during the fixing process. Provide protective coverings and coatings where required to prevent marking of surfaces visible in the completed work and to protect aluminium joinery from following trades.

3.28 SAFETY
Indicate the presence of transparent glasses for the remainder of the contract period, with whiting, tape or signs compatible with the glass type. Indicators other than whiting must not be applied to the glass surface. Masking tape must not be used for this purpose.

3.29 IN SITU TOUCH-UP TO POWDER COATED ALUMINIUM
In situ touch-up of polyester or fluoropolymer coated aluminium is only permitted only to minor surface scratching. Otherwise replace all damaged material.

© CIL Masterspec 2015

10660

3.30 REMOVE
At the appropriate stage of the project, remove safety indicators and protective coverings and wipe down all joinery thoroughly.

3.31 REPLACE
Replace damaged, cracked or marked elements.

3.32 MANIFESTATIONS
Apply manifestations to comply with NZS 4223.3, 303.1 Manifestations.

4. SELECTIONS

Performance

4.1 THERMAL PERFORMANCE
R-value: 0.26 (as determined from NZBC H1/VM1 or H1/AS1)

Performance - Wind (design by contractor)

4.3 WIND - NON SPECIFIC DESIGN
Building wind zone Medium (refer to NZS 3604, table 5.4)

Window and door system

4.4 WINDOWS AND DOORS TYPE
Manufacturer: Nulook
Type/location: Weathertight series green house windows

4.5 VENTILATORS
Brand/type:

4.6 WINDOW AND DOOR REVEALS - TIMBER
Timber species: Radiata Pine
Grade/treatment: H1.2
Thickness: 19mm
Finish: Dressing A

Finishes

4.7 ORGANIC POWDER COATING FINISH
Type: Polyester organic powder coating
System integrity: To suit
Thickness: Average of 80 microns with a minimum of 50 microns
Colour: To match existing windows

4.8 FLASHINGS
Material/type: PC aluminium
Pattern: Formed to suit details provided

4.10 WEATHERING SEALANT
Brand/type: 1-part polyurethane moisture curing, elastic joint sealant
Colour: To match

4.17 HARDWARE

	Brand/style	Material/finish
Sash fasteners:	Interlock Aria venting	Powdercoat to match joinery
Sash Stays	Interlock safety stays	Stainless Steel

END OF SECTION

5113G GIB® PLASTERBOARD LININGS

1. GENERAL

This section relates to the supply, fixing and jointing of GIB® plasterboard linings and accessories to timber and steel framed walls and ceilings to form:
- standard systems

1.2 ABBREVIATIONS
The following abbreviations are used throughout this part of the specification:

AWCINZ	Association of Wall and Ceiling Industries New Zealand

Documents

1.3 DOCUMENTS REFERRED TO
Documents referred to in this section are:

NZBC E2/AS1	External moisture
AS/NZS 2588	Gypsum plasterboard
AS/NZS 2589	Gypsum linings - Application and finishing
NZS 3604	Timber-framed buildings
BRANZ Technical Paper P21	BRANZ Technical Paper P21: A wall bracing test and evaluation procedure (2010)
NASH	Residential and Low-Rise Steel Framing Part 1 2010 Design Criteria

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document.

1.4 MANUFACTURER'S DOCUMENTS
Manufacturer's and supplier's documents which refer to work in this section are:
- GIB® Site Guide (Jan 2010)

Copies of the above literature are available at

Web:	www.gib.co.nz
Telephone:	0800 100 442

Requirements

1.5 NO SUBSTITUTIONS
Substitutions are not permitted to any specified GIB® systems, GIB® system components, GIB® plasterboard, associated GIB® products or GIB® accessories.

1.6 INSTALLER WORK SKILLS AND QUALIFICATIONS
GIB® plasterboard fixers and plasterers to be experienced competent workers, familiar with GIB® plasterboard lining systems installation and finishing techniques. Submit evidence of experience on request. For example:
- National Certificate of Interior Systems; or
- Certified Business member of AWCINZ.

Performance

1.7 INSPECTIONS AND ACCEPTANCE
Allow for inspection of the finished plasterboard surface:
- before applying sealer and
- before applying finish coatings or decorative papers,

so that after assessment of the type and/or angle of illumination and its effect on the completed decorative treatment, group approval and acceptance of the surface can be given.

2. PRODUCTS

Materials

2.1 GIB® PLASTERBOARD
Gypsum plaster core encased in a face and backing paper formed for standard and water resistance use to AS/NZS 2588. Refer to SELECTIONS for location, type, thickness and finish.
GIB® Standard plasterboard

Components

2.2 CEILING BATTENS
GIB ceiling to be fixed to existing timber battens (installed @ 400 ctrs)

2.3 SCREWS
GIB® Grabber® drywall screws.

2.4 NAILS
GIB® Nails (gold passivated).
Size: 30mm, 40mm

2.5 TAPE ON TRIMS AND EDGES
GIB® Goldline® tape-on trims
GIB® UltraFlex high impact corner mould

2.6 METAL ANGLE TRIMS
GIB® galvanized steel slim angle trims.

Accessories

2.8 ADHESIVE
Timber frame and/or steel frame:
GIBFix® One ultra low VOC water based wallboard adhesive
GIBFix® All-Bond solvent based wallboard adhesive

2.9 JOINTING COMPOUND

Bedding compound:	GIB Tradeset®, GIB Lite Blue®, GIB MaxSet®, GIB ProMix® All Purpose, GIB Plus 4®
Finishing compound:	GIB ProMix® All Purpose, GIB® Trade Finish®, GIB® Trade Finish® Lite, GIB ProMix® Lite, GIB® U-Mix, GIB Plus 4®
Cove:	GIB-Cove® Bond

2.10 JOINTING TAPE
GIB® paper jointing tape.

2.11 GAP FILLER
GIB® Gap Filler ultra low VOC multi-purpose acrylic flexible filler

3. EXECUTION

Conditions

3.1 STORAGE
Store GIB® plasterboard sheets and accessories in dry conditions stored indoors out of direct sunlight in neat flat stacks on either an impervious plastic sheet or clear of the floor with no sagging and avoiding damage to ends, edges and surfaces. Reject damaged material. Refer to GIB® Site Guide (Jan 2010).

3.2 LEVELS OF PLASTERBOARD FINISH
Provide the selected plasterboard surfaces to the pre decorative levels of finish specified in AS/NZS 2589.

3.3 CONFIRM LEVELS OF PLASTERBOARD FINISH ACCEPTANCE
Before commencing work, agree in writing upon the surface finish assessment procedure towards ensuring that the quality of finish expectations are reasonable and are subsequently obtained and acceptable.

Do not apply decorative treatment until it is agreed in writing by the contractor, subcontractors and decorator that the specified plasterboard Level of Finish has been achieved.

"Levels of plasterboard finish" is a tool for specifying the required quality of finish when installing and flush stopping GIB® plasterboard **prior** to the application of a range of decorative finishes under various lighting conditions. Refer to **AS/NZS** 2589.

3.4 SUBSTRATE
Do not commence work until the substrate is plumb, level and to the standard required by the sheet manufacturer's requirements. Refer to GIB® Site Guide (Jan 2010).

3.5 TIMBER FRAME MOISTURE CONTENT
Maximum allowable moisture content to AS/NZS 2589 for timber framing at lining: 18% or less for plasterboard linings. Refer to NZBC E2/AS1 and GIB® Site Guide (Jan 2010).

3.7 PROTECTION
Protect surfaces; cabinetwork, fittings, equipment and finishes already in place from the possibility of water staining and stopping damage. Refer to GIB® Site Guide.

Application

3.9 LINING WALLS AND CEILINGS GENERALLY
Form to GIB® Site Guide (Jan 2010). Ensure bulk insulation thickness shall not exceed that of the wall framing.

3.10 BOARD ORIENTATION
Minimise joints by careful sheet layout using the largest sheet sizes possible, and generally fixing horizontally. Where part sheets are required for various stud heights they should be positioned so the cut sheet is as low as possible to keep joints below eye level.

3.13 INSTALL TAPE-ON TRIMS
Install to GIB® Goldline® Tape-on trims literature and/or GIB® Ultraflex high impact corner mould literature.

Finishing

3.14 FINISHING GENERALLY
To GIB® Site Guide (Jan 2010) and AS/NZS 2589.

Completion

3.15 REPLACE
Replace damaged sheets or elements.

3.16 CLEAN DOWN
Clean down completed surfaces to remove irregularities and finally sand down with fine paper to the sheet manufacturer's requirements, to leave completely smooth and clean.

3.17 REMOVE
Remove debris, unused materials and elements from the site.

3.18 LEAVE
Leave work to the standard required by following procedures.

4. SELECTIONS

Plasterboard

4.1 GIB® STANDARD SYSTEMS WALLS

Location	Plasterboard type / Lining requirements	Thickness	Finish Level
To new walls – thickness to match & marry to existing	GIB® Standard plasterboard	10mm	4
	GIB® Standard plasterboard	13mm	

4.2 GIB® STANDARD SYSTEMS CEILINGS

Location	Plasterboard type / Lining requirements	Thickness	Finish Level
As per architectural drawings	GIB® Standard plasterboard	13mm	

Accessories

4.5 GIB® TAPE ON EDGE OR CORNER TRIMS
Brand/type:

4.6 SCOTIA
Brand/type: H1.2 Dressing A Trim 40x10mm to match existing

END OF SECTION

6700R RESENE PAINTING GENERAL

1. GENERAL

This section relates to the general matters related to **Resene** painting work.

1.1 RELATED WORK
Refer to 6721R RESENE PAINTING INTERIOR
Refer to 6711R RESENE PAINTING EXTERIOR

1.2 ABBREVIATIONS AND DEFINITIONS
Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.

The following abbreviations apply specifically to this section:
MPNZA Master Painters New Zealand Association Inc.

Documents

1.3 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:
Health and Safety in Employment Act 1992
MPNZA Specification manual

1.4 MANUFACTURER/SUPPLIER DOCUMENTS
Manufacturer's and supplier's documents related to this section are:

Resene One-Line specifications and product data manual (hard copy or at www.resene.co.nz)
Resene Putting your safety first

Copies of the above literature are available from **Resene**
Telephone: 0800 **RESENE** (0800 737 363)

Warranties

1.5 WARRANTY - MANUFACTURER/SUPPLIER
Warrant this work under normal conditions of use against failure referring to the **Resene** Promise of Quality in the **Resene** One-Line specifications and product data manual.

Requirements
This painting specification is written based on information available at the time of writing.

1.6 NO SUBSTITUTIONS
Substitutions are not permitted to any specified **Resene** coating system, or associated components and products. Do not combine paints from different manufacturers in a paint system.

If in the applicator's own expertise and judgement an amendment to this specification is required, or where a substrate preparation, or required painting system is not covered in this specification, this shall be brought to the attention of the contract administrator and any amendment agreed before work proceeds any further.

1.7 QUALIFICATIONS
Painters to be experienced competent workers, familiar with the materials and the techniques specified and with the **Resene** coating systems and be members of the Master Painters New Zealand Association Inc.

The applicator is to have the necessary skill, experience and equipment to undertake the work. The applicator remains responsible for ensuring proper completion of the work.

40660

Painters to be selected from the **Resene** Eco.Decorator programme. The **Resene** Eco.Decorator programme is designed to recognise a nationwide network of environmentally responsible, quality focussed painting contractors.
Refer to www.resene.co.nz/ecodecorator.htm for a list of Eco.Decorators in your area.

1.8 HEALTH AND SAFETY
Refer to and comply with the requirements of the Health and Safety in Employment Act 1992 including the obligation to:

- Eliminate hazards and if hazards cannot be eliminated or isolated, then minimise the hazards in this work by using the proper equipment and techniques as required by the MPNZA Painters hazard handbook and **Resene** Putting your safety first handbook.
- Supply protective clothing and equipment.
- Inform the contractor as well as the employees and others on site of those hazards and put in place procedures for dealing with emergencies.

1.9 SAFETY DATA SHEETS
Obtain from **Resene** (phone 0800 **RESENE**, or www.resene.co.nz) the safety data sheet for each product used and comply with the required safety procedures. Keep sheets on site.

Performance

1.10 RESENE INSPECTION
Permit representatives of **Resene** to inspect the work in progress and to take samples of their products from site if requested. **Resene** will take care when inspecting the work, but does not accept any responsibility for the proper completion of the work before or after such inspection.

1.11 INSPECTION OF THE WORK
Inspection of the whole of the work at each of the stages set out in SELECTIONS may be made. Agree on a programme that will facilitate such inspection, including notification when each part and stage of the work is ready for inspection.

2. PRODUCTS

Materials

2.1 MATERIALS GENERALLY
Do not combine paints from different manufacturer's in a paint system.

Use only Resene products (which are guaranteed for consistency and performance under AS/NZS ISO 9001 and APAS) prepared, mixed and applied as directed in the Resene One-Line Specifications and Product Data Manual. This specification has been written using where practical and available both low/no VOC and Environmental Choice approved products.

2.2 EXPOSED DARK COLOURS
Darker colours in areas of high sun exposure place significant stress on the coating and substrate. **Resene** 'CoolColour' technology reduces heat absorption of a wide range of colours. Contact your local Resene Representative or visit www.resene.co.nz for more information or visit www.resene.co.nz/coolcolour. View a list of Resene colours that can be made using Resene CoolColour technology at www.resene.co.nz/colourlibrary.

2.3 THINNERS/ADDITIVES
Use only if and when expressly directed by Resene for their particular product in a particular application. Always wear gloves when handling any solvents including turpentine as harmful chemicals may be absorbed into the body through the skin.

Accessories

2.4 ACCESSORIES
Contact your local **Resene ColorShop** for a full range of accessories and usage advice.

3. EXECUTION

Conditions

3.1 EXECUTION
To conform to required trade practice, which shall be deemed to include those methods, practices and techniques contained in the Master Painters New Zealand Association Inc. Specification manual.

3.2 TREATED SURFACES
Where surfaces have been treated with preservatives or fire retardants, check with the treatment manufacturer that coating materials are compatible with the treatment and do not inhibit its performance. If they are not compatible, obtain instructions before proceeding.

3.3 ANCILLARY SURFACES
The descriptions of areas in schedules and elsewhere are of necessity simplified. Coat ancillary exposed surfaces to match similar or adjacent materials or areas, except where a fair-faced natural finish is required or items are completely prefinished. In cases of doubt obtain written instructions before proceeding.

3.4 HARDWARE
Do not paint hinges or hardware that cannot be removed. Before commencing work carefully remove hardware, fixtures and fittings, set aside where they cannot be damaged or misplaced and replace on completion. Refer to SELECTIONS for hardware, fixtures and fittings for removal.

3.5 PROTECTION
Supply, lay and fix dropsheets, coverings and masking necessary to protect adjoining, fixtures, fittings and spaces from paint drops, spots, spray and damage.

Application - preparatory work

3.6 SURFACE PREPARATION
Refer to the **Resene** One-Line specifications and product data manual for surface preparation sheets (or obtain them by phoning 0800 **RESENE**, or at www.resene.co.nz) listed in the materials systems schedule clauses. Carry out the preparatory work required by them for each of the substrates.

3.7 SHARP EDGES, CRACKS AND HOLES
Remove and/or repair sharp edges, cracks and holes if present, as outlined in the preamble of the **Resene** One-Line specifications and product data manual.

Elastomeric sealants, if used, should not be painted. The paint film will not match the flexibility of the sealant and may severely limit its effectiveness.

3.8 REMEDIAL WORK
If any substrate or surface, that even with the preparation work called for in this section, cannot be brought up to a standard that will allow painting or clear finishing of the required standard then do not proceed until remedial work is carried out.

3.9 GAP FILLING
Make good cracks, holes, indented and damaged surfaces. Use suitable gap fillers to match the surface being prepared. Any special priming requirements of the fillers must be satisfied. Allow to dry or set before sanding back level with the surface. Prime or seal timber before using putty.

Exterior and wet areas: Use only Portland cement base or water-insoluble organic base gap fillers.

3.10 OFF-SITE WORK
Carry out this work under cover in a suitable environment with suitable lighting. Store items, both before and after coating, in a clean, dry area protected from the weather and mechanical damage, properly stacked and spaced to allow air circulation and to prevent sticking.

3.11 PRIMING JOINERY
Pre-treat any cut surfaces of preservative treated timber before priming. Ensure L.O.S.P. treated joinery has dried sufficiently to lose solvent odour. Pre-treat bare timber with **Resene** TimberLock (see Data Sheet D48) to improve the durability of subsequent coats.

Liberally coat end grain, allow to soak in and then recoat.

3.12 CONCEALED JOINERY SURFACES
Where off-site coatings are specified they must be applied to surfaces including those concealed when incorporated into the building.

3.13 CONCEALED METAL SURFACES
Apply primer to suit the coating system to surfaces which will be concealed when incorporated into the building.

3.16 PUTTY FRONTING
According to the putty manufacturer's instructions allow putty to set, then prime with **Resene** Wood Primer (see Data Sheet D40). Fully protect the putty by completing the **Resene** coating system as soon as it is sufficiently firm.

Application - generally

3.17 PAINTING GENERALLY
Comply with the **Resene** One-Line specifications and product data manual data sheets and the additional requirements of this work section.
Ensure large wall areas that require more than one container of paint per coat, have enough paint boxed (mixed) together to complete the final coat. This will not apply if a single factory batch of paint, rather than shop tinted paint, is applied.

3.18 MIXING
Although generally supplied ready-mixed, thoroughly mix paints. Lift any settled pigment and ensure the paint is homogenous.

3.19 ENVIRONMENT
Defer painting of exterior surfaces until weather conditions are favourable - warm dry days without frost or heavy dews. Avoid painting in direct sunlight any surfaces that absorb heat excessively. As far as possible apply paint in the temperature range 15°C to 25°C. If temperatures fall outside the range of 10°C and 35°C do not paint unless paints with the necessary temperature tolerance have been specified. Do not apply solvent borne paint if moisture is present on the surface.

3.20 SEQUENCE OF OPERATIONS
Painting work to generally follow the following sequences:
- Complete surface preparation before commencing painting.
- Apply primers, sealers, stains, undercoats, paints and clear coatings in the sequences laid down by **Resene**.
- Allow the full drying time between coats laid down by **Resene**.
- Do not expose primers, undercoats and intermediate coats beyond **Resene's** recommendations before applying the next coat.
- Finish broad areas before painting trim.
- Ensure batch numbers of tins are matched for whole areas.
- Internally, paint ceilings before walls and walls before joinery, trim and other items.

3.21 APPLICATION
Select brush, roller, or pad and apply coatings to the requirements of **Resene** to obtain a smooth, even coating of the specified thickness, uniform gloss and colour.

3.22 LIGHTLY SAND
Lightly sand primers, sealers, undercoats and intermediate coats to remove dust pick-up, protruding fibres and coarse particles. Complete by removing dust immediately before applying the next coat.

3.23 DEFECTIVE WORK
Correct defective work immediately and recoat as required, following precisely the **Resene** system being applied.

3.24 EACH COAT
Each coat of paint and the completed paint system to have the following qualities and properties:
- Uniform finish, colour, texture, sheen and hiding power and the proper number of coats applied.
- No blemishes such as runs, sags, crinkling, fat edges, entrained paint skins, hairs, dust, bare or starved patches, cracks, brush marks, ladder marks and blistering.
- Proper covering of corners, crannies, thin edges, cracks, end grain and other difficult places of application.

Completion

3.25 CLEAN
Clean adjoining surfaces, glass and fittings of any paint contamination. Clean off glass indicators at the completion of the building works. Clean glass inside and out to a shining finish. Use the Resene Washwise on site 'paint equipment clean-up water' reclamation system to minimise the environmental impact of cleaning paint application tools.

3.26 LEAVE
Leave the whole of this work uniform in gloss and colour, of correct thickness, free from painting defects, clean and unmarked and to the standard required by following procedures.

3.27 REMOVE
Remove dropsheets, coverings and masking to leave surrounding surfaces and areas clean, tidy and undamaged. Remove debris, unused materials and elements from the site.

3.28 REPLACE
Replace hardware without damage to it or the adjoining surface and leave hardware properly fitted and in working order.

3.29 DISPOSAL OF PAINTS AND THINNERS
Note: The use and disposal of paint and thinners represents a significant environmental hazard.
Ensure all paint and thinners are disposed of in the following manner:
- When requested hand over part used paint containers to client for maintenance touch ups.
- Recycle leftover paint at a Resene ColorShop as part of the Resene "Paintwise programme". Contact your local Resene ColorShop for details or view information online at www.resene.co.nz/paintwise.htm.
- Donate left over paint to local community groups.
- Solvent based paints, paint thinners, turpentine, mineral spirits and solvents require special disposal procedures. Do not pour down sewer or storm water drains, sinks or into the ground. If they cannot be recycled they must be disposed of in a refuse dump licensed to take toxic waste.

3.30 MAINTENANCE
Good maintenance of coating systems involves a routine of regular cleaning as well as regular inspections. Regular inspections of the coating systems are recommended to identify breakdown, accidental damage to or undesirable deterioration of the paint. Refer the Resene Caring for your paint finish brochure and the Resene website, www.resene.co.nz/comn/services/maintenance.htm.

4. SELECTIONS

4.1 SELECTIONS
Refer to 6711R RESENE PAINTING EXTERIOR and 6721R RESENE PAINTING INTERIOR for selections.

END OF SECTION

6711R RESENE PAINTING EXTERIOR

1. GENERAL

This section relates to the surface preparation, painting and clear finishing of new and existing exterior substrates using **Resene** architectural and decorative coating systems.

1.1 RELATED WORK
Refer to 6700R RESENE PAINTING GENERAL for general matters related to painting work.
Refer to 6721R RESENE PAINTING INTERIOR for interior paint systems.

2. PRODUCTS

Materials

2.1 PAINT TYPES GENERALLY/ THINNERS AND ADDITIVES
Refer to 6700R RESENE PAINTING GENERAL for product clauses.

3. EXECUTION

Conditions

3.1 EXECUTION
Refer to 6700R RESENE PAINTING GENERAL for execution clauses.

4. SELECTIONS

Substitutions are not permitted to the following, unless stated otherwise.

Paint system schedules

4.5 EXTERIOR FINISHES

Substrate	**Resene** Spec number	Colour
Weatherboards		To match existing
Timber facing/trims		To match existing

Resene exterior paint systems

4.6 EXTERIOR CEMENTITIOUS SURFACES

Description:	**Exterior cementitious surfaces, waterborne semi-gloss**
System:	**Resene** One-Line Spec. No. 1e 1.2 (EC)
Surface prep:	D83 For thin plaster - **Resene** Limelock D809, waterborne cure/seal
1st coat:	For sound cementitious surfaces - **Resene** Concrete Primer D405, waterborne primer; or For powdery surfaces - **Resene** Sureseal D42NEC, solventborne sealer Self priming - **Resene** Sonyx 101 D30, waterborne semi-gloss
2nd coat:	**Resene** Sonyx 101 D30, waterborne semi-gloss
3rd coat:	**Resene** Sonyx 101 D30, waterborne semi-gloss
4th coat:	**Resene** Multishield+ D54a, waterborne glaze (optional)

4.7 EXTERIOR TIMBERS

Description:	**Exterior timbers, waterborne semi-gloss**
System:	**Resene** One-Line Spec. No. 2e 1.2 (EC)
Surface prep:	D82; and **Resene** TimberLock D48 NEC, solventborne preserver/conditioner

© CIL Masterspec 2015

1st coat:	For normal recommended system - **Resene** Quick Dry D45, waterborne primer/undercoat; or For timber that stains - **Resene** Wood Primer D40NEC, solventborne primer; or For hardboard only - **Resene** Sureseal D42NEC, solventborne sealer
2nd coat:	**Resene** Sonyx 101 D30, waterborne semi-gloss
3rd coat:	**Resene** Sonyx 101 D30, waterborne semi-gloss
Description:	**Exterior timbers, waterborne satin**
System:	**Resene** One-Line Spec. No. 2e 1.3 (EC)
Surface prep:	D82; and **Resene** TimberLock D48NEC, solventborne preserver/conditioner
1st coat:	For normal recommended system - **Resene** Quick Dry D45, waterborne primer/undercoat; or For timber that stains - **Resene** Wood Primer D40NEC, solventborne primer; or For hardboard only - **Resene** Sureseal D42NEC, solventborne sealer Self priming - **Resene** Lumbersider D34, waterborne satin
2nd coat:	**Resene** Lumbersider D34, waterborne satin
3rd coat:	**Resene** Lumbersider D34, waterborne satin

END OF SECTION

© CIL Masterspec 2015

6721R RESENE PAINTING INTERIOR

1. GENERAL

This section relates to the surface preparation, painting and clear finishing of new and existing interior substrates using **Resene** architectural and decorative coating systems.

1.1 RELATED WORK
Refer to 6700R RESENE PAINTING GENERAL for general matters related to painting work.
Refer to 6711R RESENE PAINTING EXTERIOR for exterior paint systems.

2. PRODUCTS

Materials

2.1 PAINT TYPES GENERALLY/ THINNERS AND ADDITIVES
Refer to 6700R RESENE PAINTING GENERAL for product clauses.

3. EXECUTION

Conditions

3.1 EXECUTION
Refer to 6700R RESENE PAINTING GENERAL for execution clauses.

4. SELECTIONS

Substitutions are not permitted to the following, unless stated otherwise.
Resene interior paint systems

4.5 INTERIOR TIMBER

Description:	**Interior timber, waterborne semi-gloss**
System:	**Resene** One-Line Spec. No. 2i 1.2 (EC)
Surface prep:	D82; and **Resene** TimberLock D48NEC, solventborne preserver/conditioner
1st coat:	For normal recommended system - **Resene** Quick Dry D45, waterborne primer/undercoat; or For timber that stains - **Resene** Wood Primer D40NEC, solventborne primer; or For hardboard only - **Resene** Sureseal D42NEC, solventborne sealer; or For painting over varnish - **Resene** Waterborne Smooth Surface Sealer D47a, waterborne sealer
2nd coat:	**Resene** Lustacryl D310, waterborne semi-gloss enamel
3rd coat:	**Resene** Lustacryl D310, waterborne semi-gloss enamel

4.8 INTERIOR PAPER FACED PLASTER/SOLID PLASTER/FIBROUS PLASTER

For Level 4 system - **Resene** One-Line Spec No. 15i 1.4 ZS L 4 (EC)
Remove Resene Broadwall Surface Prep & Seal from Surface prep and add 1st coat:
Resene Broadwall Waterborne Wallboard Sealer D403, waterborne sealer

Description:	**Interior paperfaced plaster/solid plaster/fibrous plaster, waterborne low sheen**
System:	**Resene** One-Line Spec. No. 15i 1.4 SC Level 5 (EC)
Surface prep:	D84; D85; D87; **Resene** Broadwall Surface Prep & Seal D807, waterborne prep
1st coat (if reqd):	For wet area, stained, porous or powdery areas - **Resene** Sureseal D42NEC, solventborne sealer
2nd coat:	**Resene** SpaceCote Low Sheen D311, waterborne low sheen enamel
3rd coat:	**Resene** SpaceCote Low Sheen D311, waterborne low sheen enamel

© CIL Masterspec 2015

For Level 4 system - **Resene** One-Line Spec No. 15i 1.4 SC L 4 (EC)
Remove Resene Broadwall Surface Prep & Seal from Surface prep and add 1st coat:
Resene Broadwall Waterborne Wallboard Sealer D403, waterborne sealer

END OF SECTION

© CIL Masterspec 2015

7701 ELECTRICAL BASIC

1. GENERAL

This section relates to the wiring for domestic installations, including:
- power
- lighting

- electrically-powered fittings

1.2 ABBREVIATIONS AND DEFINITIONS
Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.
The following abbreviations apply specifically to this section:

CFL	compact fluorescent lamp
ELV	extra low voltage
GLS	general lighting service
IP	international (ingress) protection classification
LCD	liquid crystal display
LED	light emitting diode
MCB	miniature circuit breaker
NUO	Network Utility Operator
PCB	printed circuit board
PIR	passive infrared
RCBO	residual current-operated circuit breaker with over current protection
RCCB	residual current-operated circuit breakers
RCD	residual current device
SIA	security integration architecture
TPS	tough plastic sheathed
TCF	Telecommunications Carriers' Forum

Documents

1.3 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC E2/AS1	External moisture
NZBC G4/AS1	Ventilation
NZBC G9/AS1	Electricity
AS/NZS 1125	Conductors in insulated electric cables and flexible cord
AS/NZS 1768	Lightning protection
AS/NZS 3000	Electrical installations (known as the Australian/New Zealand Wiring Rules)
AS/NZS 3008.1.2	Electrical installations - Selection of cables - Cables for alternating voltages up to and including 0.6/1 kV - Typical New Zealand installation conditions
AS/NZS 3100	Approval and test specification-general requirements for electrical equipment
AS/NZS 3112	Approval and test specification - Plugs and socket-outlets
AS/NZS 3350.1	Safety of household and similar electrical appliances - General requirements
AS 3786	Smoke alarms
AS/NZS 5000.2	Electric cables - Polymeric insulated - for working voltages up to and including 450/750v

TCF Premises Wiring Code of Practice 2011
Warranties

10660

1.5 WARRANTY

Warrant the complete electrical installation under normal environmental and use conditions against failure of materials and execution.

1 year: Warranty period

Refer to the general section for the required form of 1237WA WARRANTY AGREEMENT and details of when completed warranty must be submitted.

Requirements

1.6 COMPLY

Comply with the Electricity (Safety) Regulations 2010, AS/NZS 3000, AS/NZS 3008.1.2 and TCF Premises Wiring Code of Practice for listed and prescribed work and with the utility network operator's requirements. Apply for the service connection. Arrange for the required inspections of listed work. Pay all fees.

1.7 QUALIFICATIONS

Carry out work under the supervision of an electrical licensed supervisor.

1.10 ELECTRICAL CERTIFICATE OF COMPLIANCE

Supply a certificate of compliance (CoC) to the owner, and if required the NUO, as required by the Electricity (Safety) Regulations (2010), prior to connection.

- Arrange for the NUO to inspect before the meter installation, listed work inspection, polarity check and supply becoming live.
- Arrange for an inspector to inspect as required by regulation 70.

1.11 ELECTRICAL SAFETY CERTIFICATE

Provide an Electrical Safety Certificate (ESC), as required by the Electricity (Safety) Regulations 2010, to the owner and when required the BCA. To be provided at completion of the work, prior to Practical Completion.

2. PRODUCTS

2.1 CABLES

Tough plastic sheathed copper conductors to AS/NZS 5000.2, stranded above 1.0mm², and to AS/NZS 3008.1.2. Minimum sizes as below. Increase sizes if the method of installation, thermal insulation, cable length or load will reduce the cable rating below that of the MCB rating, or produce an excessive voltage drop.

Lighting circuits: Domestic: 1.5mm² on 10 amp MCBs

Power circuits: 2.5mm² on 16 amp MCBs for domestic and unenclosed or unfilled cavity construction
2.5mm² on 16 amp MCBs for domestic insulated construction, or filled cavity

Heat resistant cable for final connections to all heated appliances, and high temperature cable in ambient conditions that may be above 35°C.

2.3 SWITCH UNITS

Single pole switches to be 16 amp minimum rated, double pole or intermediate to be 16 amp minimum rated. All switches to be 230 volt a.c. polycarbonate flushplate units. Refer to drawings/schedules for number of switches per unit, dimmer units, neon (indicator or toggle) units and 2 way units.

2.4 SWITCHED SOCKET UNITS

10 amp, 230 volt flat 3 pin socket outlets fitted with safety shutters and manufactured to AS/NZS 3100, AS/NZS 3112 and AS/NZS 3113, single or multi gang as detailed.

© CIL Masterspec 2015

2.8 RESIDENTIAL RECESSED LIGHT FITTINGS
Residential recessed luminaires to AS/NZS 60598.2.2, types IC-F, IC, CA-80 or CA-135 only.

2.9 OUTDOOR SWITCHES & SOCKETS
Using materials with superior UV protection, impact strength, and addition chemical resistance when compared with interior polycarbonate fittings. Weather protected, switches to IP56 minimum, and sockets to IP53 minimum. Sockets fitted with safety shutters behind socket pins, and all products able to be padlocked off or on.

3. EXECUTION

3.1 EARTH BONDS
Bond together and to earth all plumbing fittings not adequately isolated, to AS/NZS 3000, the Electricity (Safety) Regulations 2010 and the fitting manufacturer's requirements.

3.2 MAIN EARTH
Provide a plastic toby box to contain and protect the earth electrode. Fix the connecting earth wiring closely and securely against wall surfaces.

3.4 SET-OUT
The position of outlets and equipment shown on drawings is indicative of requirements. Confirm documents and site conditions are not in conflict with other services or features. Resolve conflicts and discrepancies before proceeding with work affected. Confirm on site the exact location, disposition and mounting heights of all outlets, fittings, equipment, penetrations, and use of exposed wiring. Fix outlet items level, plumb and in line.

3.5 CABLING
Install wiring systems to AS/NZS 3000. All cabling run 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 cable in conduits where required to pass through concrete or underground. In walls run cabling horizontally and vertically in straight lines. In ceilings either run cabling along ceiling framing or attached to catenary wires. Clip cabling to ceiling framing/catenary wires.

3.6 CABLING CIRCUITS
Install all circuits with the appropriately rated cable and circuit protection. Install with a maximum of 8 light switch units or 4 double or single switched socket units on any circuit. Minimum 2 lighting circuits per floor. Separate circuits for all electric heating appliances. Kitchen sockets to be on at least two different circuits.

3.7 WALL BOXES
Mount flush in cavity construction size to fit products selected. Fix vertically mounted wall boxes to studs. Screw fix horizontally mounted switched socket outlet wall boxes to solid blocking or nogs. Fix switch panel wall boxes to solid blocking.

3.8 SWITCH AND SOCKET UNITS
Fit all single and double switch units, all sockets to the following heights (to the centre of the unit) unless shown otherwise on the drawings.
Switch Units: 1000mm

Mount light switches and switch socket outlets vertically and socket units horizontally. Label all switch units that control electrical equipment or special lighting circuits by colour filled engraving on the switch. Use proprietary engraved switch mechanisms where applicable.

3.10 LIGHT FITTINGS
Install light fittings in locations and at heights specified and confirmed by the owner, in accordance with the fitting manufacturer's requirements.

© CIL Masterspec 2015

3.13 ELECTRIC POWERED FITTINGS AND EQUIPMENT
Install and wire fittings and equipment to individual fittings and equipment manufacturer's requirements. Refer to the drawings for required layouts and locations for equipment. Refer to SELECTIONS for schedules of fittings.

3.14 OUTDOOR/EXTERIOR SERVICES
Install all wiring systems in accordance with AS/NZS 3000 and in accordance with the manufacturer's recommendations:
Provide circuits and connections for exterior installations, including ELV 12/24 Volt path lighting and electronic irrigation systems. Refer to drawings for connection points. Where underground, ensure appropriate protection, such as thickness of sheathing, conduit, depth of cabling, and proximity to other services.
Use the appropriate rated fittings for power control and power supply. Weather protected switches to IP56, and sockets to IP53 as a minimum. Install to manufacturer's specifications using recommended fittings and sealants to maintain the products integrity. Earth leakage protection to be provided for in areas where there is increased risk to human safety in the form of either RCDs at the distribution board, or socket outlet. RCDs are recommended for visible awareness of protection.

3.15 LABELLING
Include label under each controller, switch and circuit breaker on distribution boards. Include a warning notice if light dimmers are used in the installation. List the rating of each circuit.

Completion

3.16 COMPLETION
Leave installation operating correctly, with equipment clean and operational.

4. SELECTIONS

Materials

4.1 SELECTIONS - FITTINGS AND HARDWARE
Confirm selections of all outlet fittings and hardware with the owner in writing before ordering.

Outlets & fittings

4.2 INTERIOR OUTLETS

Scope of works: Relocate existing light switch as per architectural drawings

4.5 EXTERNAL LIGHT FITTINGS

Scope of works: Relocate existing sensor soffit light clear of new wall

END OF SECTION

© CIL Masterspec 2015

RECEIVED
11 MAY 2015
BY: 040660

GIB EzyBrace® System Specification – GS1-N

JUNE 2011

Specification Code	Minimum Length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard Plasterboard to one side only

WALL FRAMING

Wall framing to comply with;

- NZBC B1 - Structure; AS1 Clause 3 Timber (NZS 3604:2011)
- NZBC B2 - Durability AS1 Clause 3.2 Timber (NZS 3602)

Framing dimensions and height as determined by NZS 3604 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING

Timber Floor

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or

Three power driven 90 x 3.15 nails at 600mm centres.

Concrete floor

INTERNAL WALL BRACING LINES

In accordance with the requirements of NZS 3604:2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 150mm and 300mm from end studs and 600mm centres thereafter.

EXTERNAL WALL BRACING LINES

In accordance with the requirements of NZS 3604 for external plate fixing.

WALL LINING

Any 10mm or 13mm GIB® Plasterboard lining.
Sheets can be fixed vertically or horizontally.
Sheet joints shall be touch fitted.
Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING

Fasteners

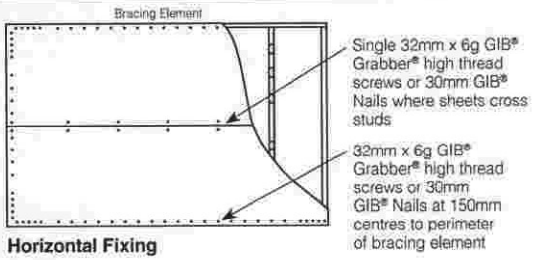
32mm x 6g GIB® Grabber® high thread screws; or
30mm GIB® Nails.

Fastener centres

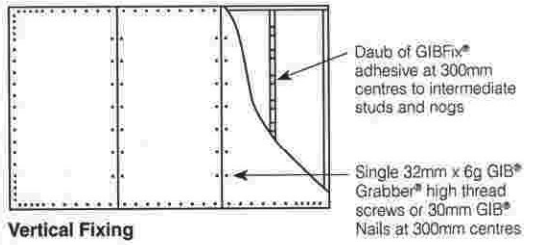
50,100,150, 225, 300mm from each corner and 150mm thereafter around the perimeter of the bracing element.
For vertically fixed sheets place fasteners at 300mm centres to intermediate sheet joints.
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.
Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs.
Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING

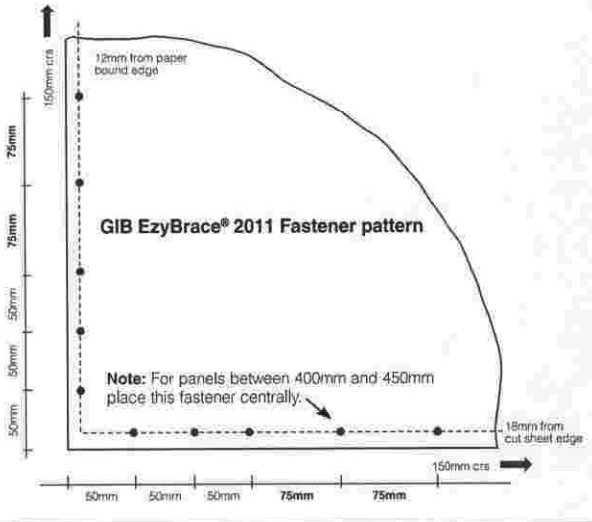
All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.



Horizontal Fixing



Vertical Fixing



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This Specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems 2011 and has been appraised in accordance with the BRANZ Appraisal No. 294 (2011).

BRANZ Appraised
Appraisal No.294 [2011]

RECEIVED
11 MAY 2015
BY: 040660

Bracing System Specification – BL1 (10 or 13)

APRIL 2009

Specification Number	Length (m) minimum	Lining requirements	Other requirements
BL1	0.4	10 or 13mm GIB Braceline® one side	Hold-downs

WALL FRAMING

Wall framing to comply with,

- NZBC B1 – Structure: AS1 Clause 3 – Timber (NZS3604)
- NZBC B2 – Durability: AS1 Clause 3.2 – Timber (NZS3602)

Framing dimensions and height as determined by NZS3604 stud and top plate tables for load-bearing and non load-bearing walls. The use of kiln dried machine stress graded timber is recommended.

BOTTOM PLATE FIXING

Timber floor

Use panel hold-down connections at each end of the bracing element. The GIB Handibrac® is recommended. Details are specified separately. In addition use pairs of 100 x 3.75mm hand driven nails or three 90 x 3.15mm power driven nails at 600mm centres along the length of the bracing element.

Concrete floor

Use panel hold-down connections at each end of the bracing element. The GIB Handibrac® is recommended. Details are specified separately. Within the length of the bracing element bottom plates are fixed in accordance with the requirements of NZS 3604:1999.

WALL LINING

One layer of 10 or 13mm GIB Braceline®. Vertical or horizontal fixing permitted. Sheet joints shall be touch fitted. Use full length sheets where possible.

PERMITTED SUBSTITUTION

The Bracing Unit ratings for system BL1 apply to 10mm GIB Braceline® (fixed with GIB Braceline® Screws or GIB Braceline® Nails) or 13mm GIB Braceline® (fixed with GIB Braceline® Screws only). For other permitted GIB® Plasterboard substitutions refer to page 23 in GIB® EzyBrace™ Systems, 2009.

FASTENING THE LINING

Fasteners

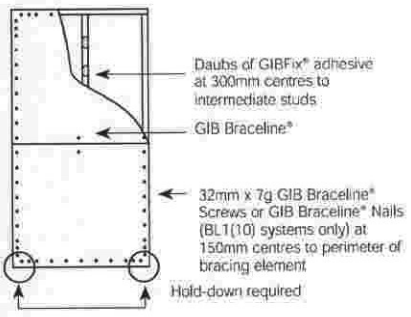
32mm x 7g GIB Braceline® Screws or
35mm GIB Braceline® Nails (BL1(10) systems only).

Fastener Centres

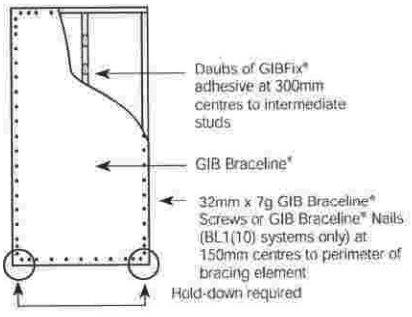
50, 100 and 150mm from each corner and 150mm thereafter around the perimeter of the bracing element. For vertical fixing place fasteners at 300mm centres at sheet joints in the tapered sheet edge. For horizontal fixing place single fasteners in the tapered edge where sheets cross studs. Use daubs of GIBFix® Adhesive at 300mm centres to intermediate studs. Place fasteners 12mm from tapered paper bound sheet edges and 18mm from sheet end or cut sheet edges.

JOINTING

All fastener heads stopped and all sheet joints paper-tape reinforced and stopped in accordance with the "GIB® Site Guide".

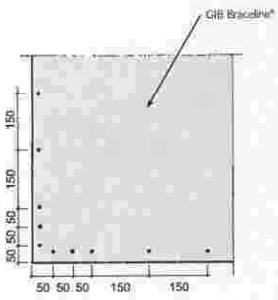


Horizontal Fixing



Vertical Fixing

For hold-down fixings refer to pages 20 and 21 in GIB® EzyBrace™ Systems, 2009.



Fasteners are placed at 150mm centres around the bracing element perimeter starting at 50, 100, and 150mm from the bracing element corner. Fasteners are placed no closer than 12mm to a paper bound machine edge of the sheet and no closer than 18mm to a sheet end or cut edge.

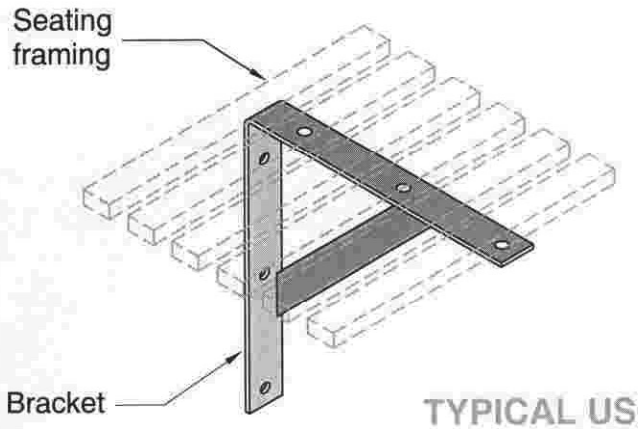
In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This Specification sheet is issued in conjunction with the publication GIB® EzyBrace™ Systems, 2009 and has been appraised in accordance with the BRANZ Appraisal No. 294 (2009).

BRANZ Appraised
Appraisal No.294 (2009)

RECEIVED
11 MAY 2015
BY:

ANGLE BRACKETS WITH GUSSET

040660



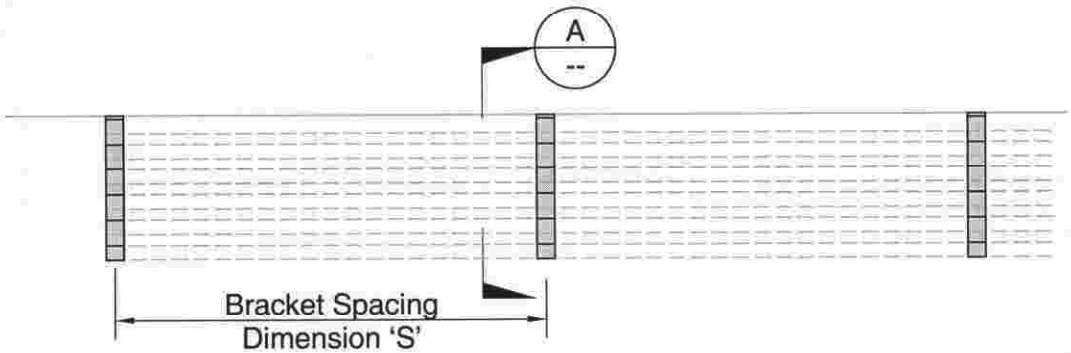
BRACKET RANGE

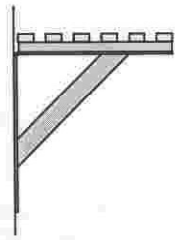
- B163 and B165

FIXING NOTE

- All bolt holes accommodate M12 Bolt unless noted.

TYPICAL USE





SECTION A --

SCALE: NTS

SEATING LOAD

- Bracket designed to carry live load of 3.0 kPa.

BRACKET SPACING TABLE

Bracket	Max. Spacing 'S'
B163	2.0m
B165	2.0m

LOAD NOTE:

- Bracket selection for B163 & B165 is dependant on seating width only. The same unit load applies to both brackets.

MiTek New Zealand Limited
AUCKLAND
PO Box 58-214, Botany 2163
Phone: 09-274 7100
Fax: 09-274 7100
CHRISTCHURCH
PO Box 8067, Riccarton 8440
Phone: 03-348 8891
Fax: 03-348 0314
www.mitekinz.co.nz
GANG-NAIL® LUMBERLOK® BOWMAC®

BOWMAC® STRUCTURAL BRACKETS DESIGN DETAILS

Job No:	CH1000
Date:	09/2011
Sheet No:	Sheet 5

© Copyright 2011 MiTek Holdings, Inc.
All rights reserved.

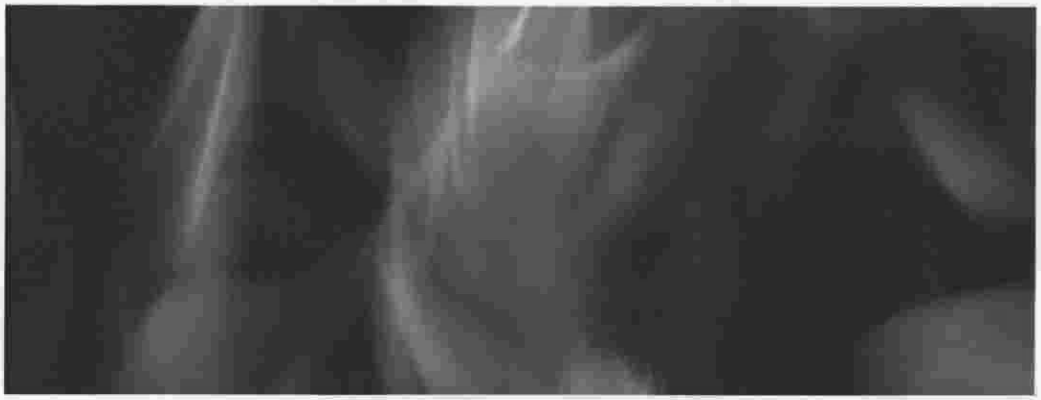
RECEIVED
11 MAY 2015
540660

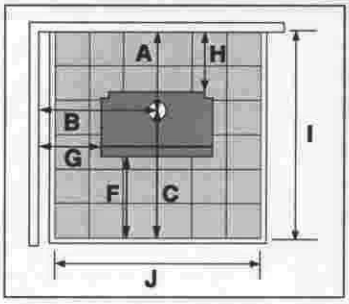
Viridian Thermotech™ insulating glass units

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U Value		SHGC	Shading Co.	Weight m^2
		Trans.	Refl. Out	Refl. In	Trans.	Refl.		Air	Argon			
Viridian VFloat™												
Clear	3+12+3	81	15	15	69	13	53	2.7	2.6	0.75	0.87	15
	4+12+4	80	15	15	69	13	51	2.7	2.6	0.75	0.86	20
	5+12+5	79	15	15	63	12	47	2.7	2.5	0.72	0.83	25
	6+12+6	78	15	15	62	12	44	2.7	2.5	0.71	0.82	30
	8+12+6	77	14	14	57	11	42	2.7	2.5	0.66	0.76	35
	10+12+6	76	14	14	54	10	39	2.7	2.5	0.64	0.73	40
	12+12+6	75	14	14	51	10	37	2.6	2.5	0.61	0.71	45
Grey	4+12+4	50	8	13	46	8	24	2.7	2.6	0.55	0.64	20
	5+12+5	42	7	12	38	7	19	2.7	2.5	0.49	0.57	25
	6+12+6	37	7	12	33	7	15	2.7	2.5	0.45	0.52	30
	10+12+6	24	5	12	24	5	9	2.7	2.5	0.38	0.44	40
	12+12+6	19	5	12	20	5	7	2.6	2.5	0.34	0.40	45
Green	4+12+4	73	13	14	49	9	30	2.7	2.5	0.57	0.66	20
	5+12+5	70	13	14	42	9	25	2.7	2.5	0.52	0.60	25
	6+12+6	68	12	13	39	8	21	2.7	2.5	0.50	0.57	30
	10+12+6	56	9	13	24	6	9	2.6	2.5	0.37	0.43	40
Bronze	4+12+4	55	10	13	50	9	23	2.7	2.5	0.59	0.68	20
	5+12+5	48	8	13	41	7	18	2.7	2.5	0.52	0.61	25
	6+12+6	43	8	12	38	7	15	2.7	2.5	0.50	0.57	30
	10+12+6	30	6	12	28	6	7	2.6	2.5	0.41	0.48	40
Viridian VLam™												
Clear	6.38+12+6	78	15	15	58	12	<1	2.7	2.5	0.67	0.77	30.4
Grey	6.38+12+6	37	7	12	37	7	<1	2.7	2.5	0.49	0.56	30.4
Bronze	6.38+12+6	46	8	13	40	8	<1	2.7	2.5	0.52	0.60	30.4
Green	6.38+12+6	63	11	14	50	9	<1	2.7	2.5	0.60	0.70	30.4
Cool Blue	6.38+12+6	64	11	14	50	9	<1	2.7	2.5	0.60	0.69	30.4
Translucent	6.38+12+6	58	10	13	44	8	<1	2.7	2.5	0.55	0.64	30.4
Soft White	6.38+12+6	70	13	14	50	10	<1	2.7	2.5	0.61	0.70	30.4
SuperGreen	6.38+12+6	57	10	13	26	7	<1	2.7	2.5	0.38	0.44	30.4
Viridian High Performance Tones												
SuperGreen	4+12+4	65	11	14	36	7	18	2.7	2.6	0.46	0.54	20
	5+12+5	63	11	13	32	7	15	2.7	2.5	0.43	0.50	25
	6+12+6	59	10	13	28	6	10	2.7	2.5	0.39	0.46	30
VFloat Supergrey	6+12+6	8	4	11	6	4	1	2.7	2.5	0.21	0.25	30
SuperBlue	6+12+6	47	8	13	27	6	17	2.7	2.5	0.39	0.46	30
	10+12+6	36	7	12	17	5	10	2.6	2.5	0.31	0.36	40
Viridian EVantage™												
Grey (#2)	6+12+6	29	10	30	24	9	8	2.0	1.7	0.33	0.39	30
Bronze (#2)	6+12+6	34	13	29	28	11	9	2.0	1.7	0.36	0.44	30
BlueGreen (#2)	6+12+6	51	21	30	29	12	13	2.0	1.7	0.38	0.44	30
Clear (#2)	6+12+6	61	27	29	47	20	23	2.0	1.7	0.56	0.64	30
SuperGreen (#2)	6+12+6	44	18	30	21	9	7	2.0	1.7	0.30	0.34	30
SuperBlue (#2)	6+12+6	35	13	30	19	9	8	1.9	1.7	0.29	0.33	30
Viridian EnergyTech™												
EnergyTech Clear (#2)	4+12+4	75	17	18	57	15	41	1.9	1.6	0.64	0.74	20
	6+12+6	73	16	17	52	14	36	1.9	1.6	0.61	0.71	30
	10+12+6	71	16	17	48	12	32	1.9	1.6	0.58	0.66	40
EnergyTech Green (#2)	4+12+4	68	15	17	41	10	25	1.9	1.7	0.49	0.56	20
	6+12+6	63	13	16	33	9	19	1.9	1.6	0.41	0.48	30
EnergyTech SuperGreen (#2)	6+12+6	54	11	16	24	7	10	1.9	1.6	0.32	0.37	30
EnergyTech Grey (#2)	4+12+4	45	9	15	38	9	18	1.9	1.6	0.46	0.53	20
	6+12+6	35	8	16	29	8	13	1.9	1.7	0.39	0.45	30
Viridian SolTech™												
SolTech Neutral (#2)	4+12+4	55	12	16	38	10	34	1.9	1.6	0.46	0.53	20
	6+12+6	56	12	16	36	10	30	1.9	1.6	0.45	0.52	30
SolTech Grey (#2)	6+12+6	27	6	12	19	6	10	1.9	1.6	0.28	0.33	30

40660

Wood Fire Installation & Owner's Operation Manual









PNCC APPROVED
This Building Consent is approved as meeting the provisions of the Building Code

metrofires

Clean Air Freestanding Models

- ECO Tiny Ped
- ECO Tiny Rad
- R1
- R2
- Classic Rad
- Wee Rad
- Wee Rad Base
- Wee Ped
- Xtreme Rad
- Xtreme Rad Base
- Xtreme Ped
- ECO Euro Rad
- ECO Euro Ped
- Mega Rad

Installation important information 2
Assembling your Metro.....2-3
Direct vent option 4
Floor protector installation 5
Clearances and specifications.....6
Wetback and flue installation 7
Operation important information 8
Where to install a Metro in your home....9
Optional wetbacks 9
Getting to know your Metro 10
Operating your Metro.....10
Cleaning and maintenance 11
Troubleshooting 12
Metro warranty.....13
Pioneer wood fire accessories 14

NZHHA
New Zealand Home Heating Association Inc.

NEW ZEALAND MADE

PIONEER
MANUFACTURING LIMITED

PO Box 11, Inglewood 4347, New Zealand
Ph (06) 756 6520 • Fax (06) 756 6540
info@metrofires.co.nz • www.metrofires.co.nz

M11120 02/15 © PIONEER MANUFACTURING LTD

⚠ WARNING! Important Information

- **WE HIGHLY RECOMMEND YOU READ THIS ENTIRE MANUAL AS INCORRECT OPERATION, MISUSE AND/OR LACK OF MAINTENANCE WILL VOID THE WARRANTY**
- The appliance and flue-system shall be installed in accordance with AS/NZS2918 and the appropriate requirements of the relevant building code or codes
- Any modification of the appliance that has not been approved in writing by the testing authority is considered to be in breach of the approval granted for compliance with AS/NZS4013 and will void the warranty
- The appliance must be installed correctly. We recommend a competent and suitably qualified NZHHA installer

⚠ CAUTION! Important Information

- **Mixing of appliance or flue-system components from different sources or modifying the dimensional specification or components may result in hazardous conditions. Where such action is considered, the manufacturer should be consulted in the first instance**
- **Do not install a Metro fire if there is any sign of visible damage to the product**
- **This appliance must be regularly maintained.**
- **Use authorised Metro replacement parts only. The use of unauthorised parts may void the warranty**
- **This manual must be left with the home owner**

This Metro wood fire has been tested to and complies with AS/NZS2918:2001 when installed in accordance with this manual. Please ensure you are fully conversant with this relevant standard and the contents of this manual. Correct installation is critical to the safe operation and performance of this wood fire.

Please take particular note of the following:

- It is recommended that Metro's be installed with a Metro ECO flue system which has been developed to enhance the performance of Metro wood fires. Any alternative flue system must have a minimum flue pipe length of 4.2 metres of 150mm diameter flue pipe & have been tested to AS/NZS2918:2001.
- The 150mm active flue pipe must be fully encased from the ceiling to the underside of the flashing cone at the top of the flue system, (i.e. there must not be any 150mm flue pipe exposed).
- All flue pipe joints must be sealed and riveted. The bottom of the flue pipe in particular MUST be fully sealed into the flue outlet of the Metro wood fire.
- In New Zealand, the Metro must be bolted through the floor protector into the floor to comply with the seismic restraint provisions of AS/NZS2918:2001
- All Metro's are extremely heavy, varying in weight from 85kgs up to 150kgs. During the installation process do not lift the appliance by yourself, and take care not to damage the panel coating.
- Please take care when lifting the Metro into place onto the hearth or floor protector as point loading may break tiles and/or scratch surfaces.

Assembling your Metro wood fire

All Metro wood fires are packed in a single heavy-duty carton, and tek screwed to a wooden pallet. Having removed the packaging and located this manual, familiarise yourself with the illustrations on pages 2 & 3, and proceed as detailed below.

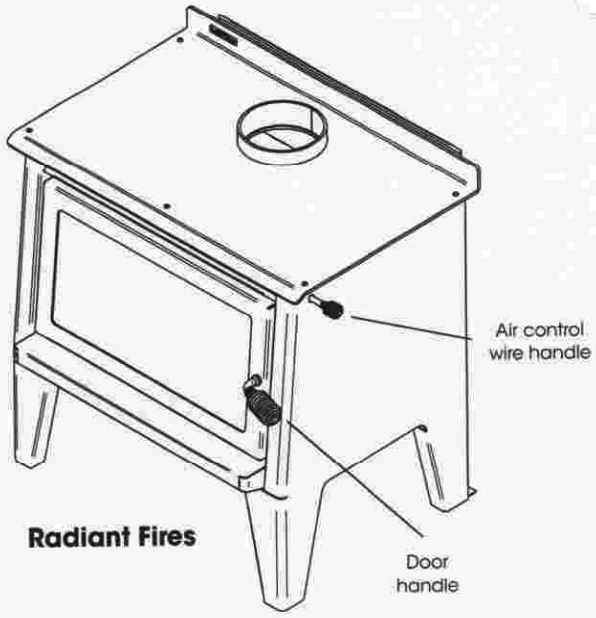
Please note: you should only assemble this wood fire if you are suitably experienced in wood fire assembly and installation.

Note: The Metro carton shows the model Metro you are about to install, enabling you to select the appropriate model's assembly instructions.

Metro Radiant Fires

These Metro's are supplied virtually fully assembled. Packed inside the firebox you will find bricks in a cardboard wrapper, a wire door handle and the air control wire handle.

- Remove the two tek screws located at the base of each rear leg which secure the Metro to the wooden pallet, and carefully "walk" the Metro off the pallet.
- Open the door fully and fit the side bricks to each side of the firebox. Location lugs are fitted to the base and rear of the firebox to retain the side bricks in position. Refer to Diagram 2.
- Attach the door handle to the door latch assembly by screwing it on clockwise.
- Attach the air control wire handle by screwing it on clockwise.



Radiant Fires

Assembling your Metro wood fire

10660

Metro Pedestal Fires

To minimise freight damage, the pedestal base has been packaged inside the firebox. Please note: you should only assemble this wood fire if you are suitably experienced in wood fire assembly and installation.

To safely assemble your Metro, please proceed as follows: -

- Safely remove straps by cutting straps with scissors.
- Lift off carton, turn upside down (use to hold all discarded packaging).
- Lift off the top grill and place somewhere safe. Be careful not to chip the enamel coating.
- Open the door 90 degrees and lift the door off the hinge and place somewhere safe. Be careful not to chip the enamel coating.

  Remove the pedestal packed in a cardboard wrap
- Remove the pedestal mount plate
- Remove pedestal heat shield
  Note: For some models this may be taped to rear heat shield and the ECO Tiny Ped is already assembled.
- Remove the side bricks, door handle and the bolt bag
- Remove the 2 tek screws at the base of the inside of the firebox that fix the wood fire to the pallet.
- It is recommended that 2 people work together with this step. Grab the underneath top of the firebox door opening with one hand, holding the flue spigot with the other, slowly lift the front of the wood fire all the way back and rest the wood fire on its rear heat shield on the floor. Remove the packaging pallet.
- Fit the pedestal heat shield over the 4 bolts as shown in Diagram 1, with the open edge facing the front of the Metro (up)
- Position the pedestal with its front facing over the 4 bolts and fit the washers and nuts supplied, check to ensure the pedestal is correctly aligned and securely tighten the nuts
- It is recommended that 2 people work together with this step. Grab the flue spigot with one hand and the other hand underneath the top of the firebox door opening, lift upwards standing the wood fire onto its pedestal.
- Re-fit the door and top grill
- Open the door fully and fit the side bricks to each side of the fire box. Location lugs are fitted to the base and rear of the firebox to retain the side bricks in position. Refer to Diagram 2.

Note: The ECO Tiny Ped model utilises a slightly different pedestal to that detailed in Diagram 1. The rear panel on the pedestal must be turned around with the return fold facing back the opposite way. This creates the mounting plate.

All Metro Models

Check to ensure the top baffle is in its correct position in the top chamber of the firebox. It should be resting on four support lugs (two on each side of the firebox). The baffle must be hard back against the rear of the firebox with the "promet extension" (white board) or return front steel edge of the baffle facing forward as illustrated in Diagram 2.

Diagram 1

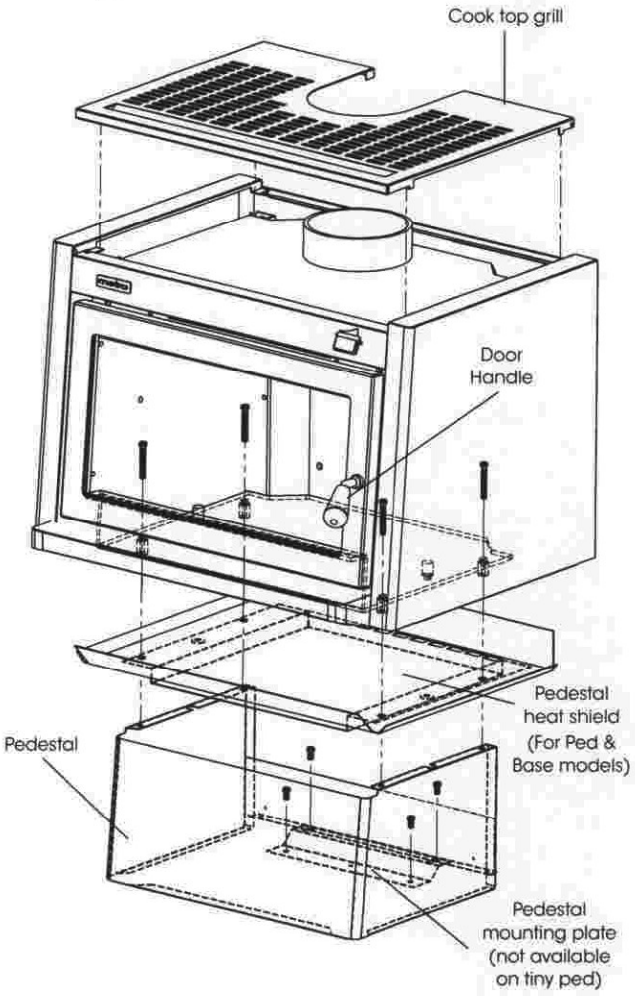
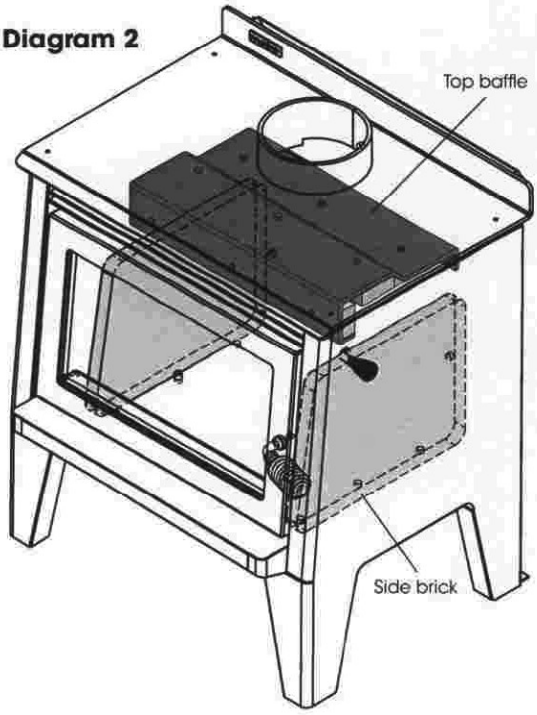


Diagram 2



Direct vent option

The ECO Euro Ped and ECO Euro Rad models have the option to be installed as "Direct Vent" appliances, thereby drawing all primary and secondary combustion air from outside the home. Once connected, this direct venting option ensures the air that is heated within the home, stays in the home improving efficiency and reducing fuel usage.

Note: Connection of the Metro's direct vent inlet to outside the home is optional. If not connected these Direct Vent models still offer greatly improved performance and lower emissions due to the unique pre-heated air path for all primary and secondary combustion air that these models consume.

Direct Vent Options

Three "Direct Vent kits" are available to connect the ECO DV Metro to an air supply from outside the living environment of the home. The kits available include;

- DV WALL KIT – For installations when the Metro is installed against an outside wall.
- DV FLOOR KIT– For installations onto a floor which has a free air supply below it.
- DV CEILING KIT– For installations when the Metro is installed against an internal wall and on a concrete floor

(DV Ceiling kit goes into the wall cavity, up inside the wall into the ceiling cavity, where the air supply is drawn from)

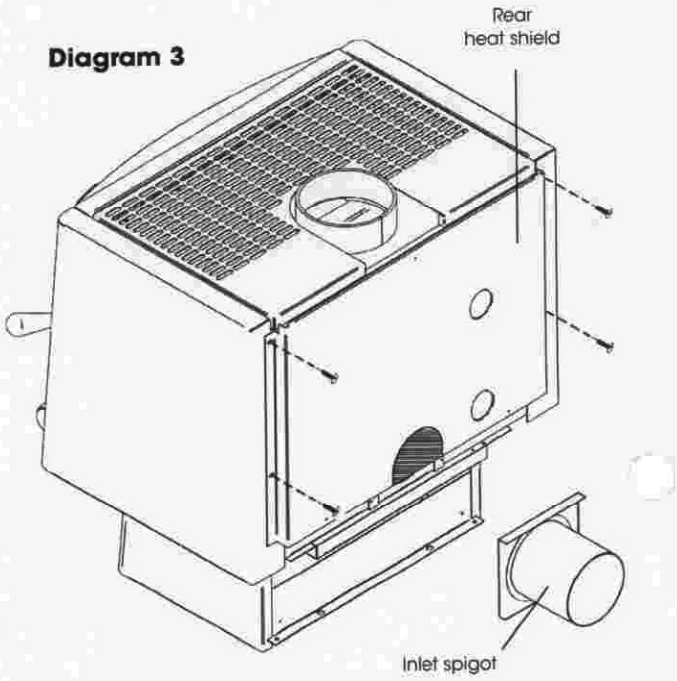
Installing the Direct Vent Option

Remove the rear heatshield from the Metro wood fire by unscrewing the four self-tapping screws illustrated in Diagram 3 and proceed as follows;

1. Remove the section of panel illustrated with a "hatch", from the mid/bottom section of the rear heatshield. This section to be removed has been pre-punched and only requires a few small tabs to be cut.
2. Take the "inlet spigot" supplied in the "Direct Vent kit" and slide it fully down into position into the brackets provided on the rear of the firebox.
3. Replace the Metro's rear heatshield with the four screws previously removed.

The Metro wood fire is now ready for installation once you have pre-fitted the Direct Vent kit into the wall or floor. Full instruction for this procedure are supplied with the Direct Vent kits.

Diagram 3



Floor protector size, construction and fitting

Pioneer manufacture an extensive range of what Pioneer term "Ash Floor Protectors" which comply with the minimum floor protector requirement of AS/NZS2918:2001, and can be installed with any freestanding Metro wood fire.

Metro freestanding wood fires do not require an insulated floor protector as they comply with the minimum floor protector requirements of AS/NZS2918:2001. These minimum floor protector requirements are;

- They must be of adequate size to give appropriate wall, rear and front clearances/projections as detailed below and in the chart illustrated on page 6.

Note;

- The floor protector must extend 200mm horizontally to the rear and each side directly below the door opening, and 300mm forward of the door opening.

  The upper surface of the floor protector must be made of non-combustible material.

- A suitable floor protector for a Metro freestanding wood fire is therefore any non-combustible material which could include;

- Ceramic tiles with grouted joints fixed directly to timber flooring.
- A sheet of toughened glass, panel steel etc. laid directly onto a wooden or other combustible floor.

Note: If being installed onto a concrete or non-combustible floor a floor protector is not required.

Metro Radiant Fires

Lift the Metro onto the floor protector and using a tape measure ensure that the minimum wall clearances and front floor protector projections as detailed in the chart on page 6 are met or exceeded. Once the Metro's location on the floor protector is established and if the installation is in New Zealand, seismic restraint is required.

Using masonry anchors if the floor protector is on a concrete floor or coach bolts if a wooden floor, secure through the holes provided at the base, behind both rear legs.

Note: The anchors must pass through the floor protector and securely anchor the Metro to the floor.

Metro Pedestal Fires

These models (excluding the ECO Tiny Ped) are supplied with a "pedestal mounting plate". Refer to Diagram 1 on page 3. Place the mounting plate on the floor protector with the two slots at the rear. A flue centre hole is marked on this plate and the chart on page 6 enables you to locate the position of the Metro without placing the Metro onto the floor protector. Once the location of this mounting plate is established, secure it through the floor protector into the floor using both of the two holes provided.

Use masonry anchors if the floor protector is on a concrete floor or coach bolts if a wooden floor.

Note: The anchors must pass through the floor protector and securely anchor the Metro to the floor.

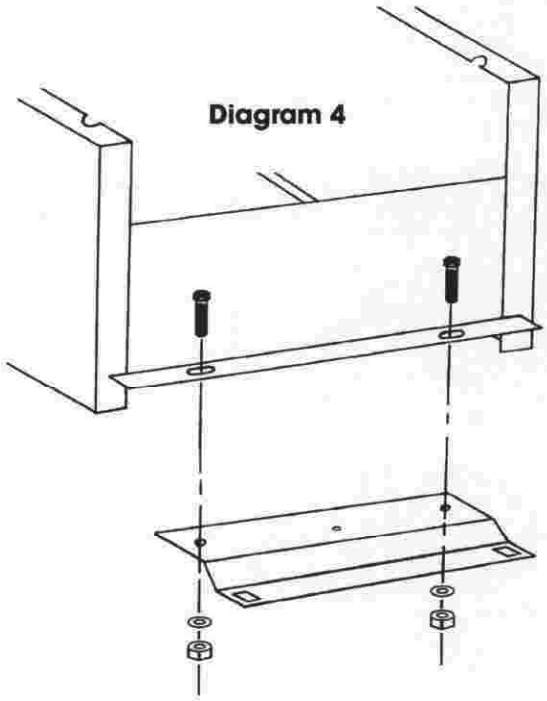
Alternative Metro Mount Plate Installation 40660

For installations when it is desirable to position the assembled Metro prior to bolting down, it is possible to "invert" the mounting plate and use it as a means of bolting the Metro directly to the floor, through the floor protector. Refer to Diagram 4 and note;

1. Rotate the mount plate 180 degrees.
2. Remove the two "slide nuts" from the rear face of the mount plate.
3. Secure the mount plate to the pedestal with 6mm bolts through holes provided as illustrated.

You can then bolt down the Metro through the two rectangular slots in the rear edge of the mount plate. These slots are more accessible than bolting direct through the pedestal, and it also eliminates the need for spacers.

Diagram 4



Clearance chart

Minimum clearances

All Metro wood fires comply with AS/NZS2918:2001. Minimum clearances shown below are detailed in millimetres, with a Pioneer double flue shield fitted to the appliance. Measurements are taken from the following reference points as illustrated:

- From the nearest combustible wall or surface (A, B, D, E, G, H)
- From the Metro's flue centre (A, B, C, D)
- From the Metro's cabinet/heatshield outermost point (E, F, G, H)
- To the edge of the ash floor protectors non-combustible surface (C, F, I, J, K, L, M)

AS/NZS2918:2001 allows for a reduction in minimum clearances as detailed in Section 3, tables 3.1 and 3.2 of the standard.

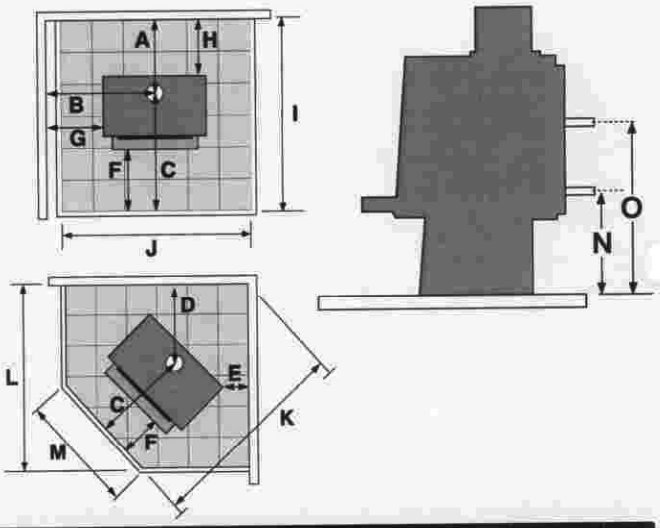
Some Metro models have undergone additional testing which allows for reduced clearances. Please see the footnotes below the tables for applicable models.

Specifications were correct at the time of printing, but may alter and those detailed within should be used only as a guide. If in doubt, please consult your Metro retailer.

Wetback connections

Connections below are taken facing the Metro/wall.

- Tiny Series models are 92mm left of the flue centre.
- Wee Series models are 226mm left of the flue centre.
- The Classic Rad is 183mm left of the flue centre.
- Xtreme Series models are 275mm left of the flue centre.
- All other models are 140mm left of the flue centre.



Metro clearances and specifications (Minimum clearances shown are in mm, with a Pioneer double flue shield fitted)

	Minimum installation clearances with a Pioneer double flueshield fitted (mm)													Wetback		Dimensions		
Clean Air Models	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**Width**	**Depth**	**Height**
ECO Tiny Ped	210	430	580	290	25	200	185	60	790	650	990	875	250	280	470	490	530	665
ECO Tiny Rad	225	552	580	420	150	200	300	75	805	650	1165	925	250	280	470	505	530	665
R1	243	774	586	554	280	244	530	100	829	825	1370	1118	425	N/A	N/A	488	485	668
R2	246	858	626	582	275	235	570	100	872	905	1449	1203	505	N/A	N/A	575	537	690
Wee Rad [1]	251	568	577	455	150	230	260	100	828	825	1224	1015	425	295	485	615	498	688
Wee Rad Base	271	678	577	489	180	230	370	120	848	825	1270	1049	425	295	485	615	498	688
Wee Ped [2]	263	651	580	490	170	230	350	110	843	825	1274	1050	425	295	485	602	503	665
Classic Rad [3]	257	695	780	500	220	229	430	100	1037	728	1487	1253	570	393	583	530	707	680
Xtreme Ped	251	624	630	441	110	227	280	100	881	907	1254	1065	507	349	539	688	554	721
Xtreme Rad	251	650	630	458	100	227	280	100	881	907	1277	1077	507	349	539	740	554	743
Xtreme Rad Base	251	650	630	458	100	227	280	100	881	907	1277	1077	507	349	539	740	554	743
ECO Euro Rad DV	250	625	625	435	80	200	250	100	875	905	1240	1065	505	338	528	750	575	745
ECO Euro Ped DV [4]	230	585	625	495	170	200	250	80	855	905	1325	1120	505	325	515	670	575	715
Mega Rad	285	720	728	497	100	224	300	130	1013	1006	1431	1227	606	300	490	840	657	749

1 Wee Rad corner clearance (E) can be reduced to 120mm with the Wee Rad corner wing shields fitted. This in turn also reduces clearances (D) to 425mm, (K) to 1180mm and (L) to 985mm. When fitting the corner wing shields the Wee Rad itself must be installed to a corner clearance (E) of 120mm. The corner wing shields are then fitted which gives a wall to shield corner clearance of 100mm.

2 Wee Ped corner clearance (E) can be reduced to 115mm if installed with a Pioneer double flue shield with the side extensions fitted. This in turn also reduces clearances (D) to 436mm, (K) to 1197mm and (L) to 996mm.

3 Classic Rad corner clearance (E) can be reduced to 180mm if installed with a Pioneer double flue shield with the side extensions fitted. This in turn also reduces clearances (D) to 460mm, (K) to 1430mm and (L) to 1213mm.

4 ECO Euro Ped corner clearance (E) can be reduced to 110mm if installed with a Pioneer double flue shield with the side extensions fitted. This in turn also reduces clearances (D) to 435mm, (K) to 1240mm and (L) to 1060mm.

Wetbacks

⚠ WARNING! Important Information

- Do not connect to an unvented hot water system.
- Install in accordance with AS 3500.4.1 or NZS 4603 and the appropriate requirements of the relevant building code or codes.

If the home is in a classified "clean air zone", and dependent on requirements/restrictions which may be imposed by your local council, you may or may not be able to install a water heating device. If in doubt consult your local Metro retailer. Only Pioneer's cast jacket wetback system should be fitted to a Metro; alternative wetbacks will void the Metro's emission approvals and may seriously affect the performance of the appliance and void the owner's warranty.

Note: Wetback systems are not suitable for use in locations where the water supply has lime content, lime build up inside the coil will eventually block the coil causing the wetback to fail.

The wetback is fitted to the inside rear of the firebox, unless as detailed in the points below. The connection pipe heights are illustrated and detailed on the previous page 6. Please note:

- Wetback connections are as follows:
  - Tiny Series models are 92mm left of the flue centre.
  - Wee Series models are 226mm left of the flue centre.
  - The Classic Rad is 183mm left of the flue centre.
  - Xtreme Series models are 275mm left of the flue centre.
  - All other models are 140mm left of the flue centre.
- The Wee models, Classic Rad and Xtreme models wetback position is to the outside left hand firebox wall. See specific instruction in the 'Side Wetback' box for these appliances.
- It is recommended the return pipe has a minimum rise of 1 in 12; performance will reduce as the distance to the storage cylinder increases.

To fit the wetback proceed as follows: (For Wee Series, Xtreme Series and Classic Rad models, please follow instructions included in the side wetback box)

1. Remove the rear panel of the Metro by removing the four pozi drive screws. Remove the two pre-punched knockouts from this panel.
2. Two further knockouts will be visible on the inner rear heatshield; remove these also. Once these are removed 6mm nuts will be visible through the knockout holes.
3. Open the Metro's door and locate two bolts securing the pressed washers which are visible on the left hand side of the firebox for both inlet and outlet connection points.
4. A further three bolt heads will also be visible on the inside rear wall of the firebox: these are threaded into the 6mm thick firebox. Remove all three.
5. Using the tube of sealant supplied with the wetback, apply a liberal bead of sealant around both the two connection pipes and also the outer circumference of the wetback which will face and press against the inside rear wall of the firebox. This will completely seal the wetback to the inside rear wall of the fire on installation.
6. Fit the wetback into the firebox and carefully pass the connection pipes through the holes in the rear of the firebox. Securely attach the wetback using the three bolts previously removed from the rear face of the firebox, fitting them through the slots provided in the wetback's jacket.
7. The wetback is now ready for connection to the storage cylinder by a registered plumber.

Flue installation

It is recommended that all Metro freestanding wood fires be installed with the energy efficient Metro ECO flue system which comes complete with a detailed installation manual. This installation manual must be presented with your application to gain consent with your local council.

A copy of the installation manual can be downloaded from www.metrofires.co.nz, or a copy can be obtained from your Metro retailer. Any alternative flue system must comply with and be installed as detailed in AS/NZS2918:2001, and a copy of the installation manual must also be presented with your application to gain consent with your local council.

All Metro's require a 150mm diameter flue. Please note:

- All joints in the flue pipe must be sealed with Pioneer fire cement (or similar) and riveted.
- The base of the flue pipe must be sealed into the outlet of the Metro's flue outlet. This is critical for optimum operation.
- Refer "Important Information" on page 2.
- The flue systems 150mm diameter flue pipe must terminate a minimum of 4.6 metres above the top surface of the floor protector.

Pioneer Double Flue Shield

All Metro's have been tested with a Pioneer double flue mounted shield. For the Metro to be installed with minimal clearances as the clearance chart states, only the Pioneer double mounted flue shield can be used. All other flue shields will invalidate the installation.



The Metro can be installed without a flue shield, if this is the case it needs to be installed as AS/NZS2918:2001 stipulates.

⚠ WARNING! Important Information

- **WE HIGHLY RECOMMEND YOU READ THIS ENTIRE MANUAL AS INCORRECT OPERATION, MISUSE AND/OR LACK OF MAINTENANCE WILL VOID THE WARRANTY**
- Any modification of the appliance that has not been approved in writing by the testing authority is considered as breaching AS/NZS 4013 and will void the warranty
- Do not use flammable liquids or aerosols in the vicinity of this appliance when it is operating
- Never operate your Metro with the top grill removed
- Do not dry clothes on or near this appliance
- Do not use flammable liquids or aerosols to start or rekindle the fire OR store fuel within the Metro's specified installation clearances
- Never operate your Metro with the door ajar, except on initial start up
- Open the air control fully before opening the Metro's door

⚠ CAUTION! Important Information

- **This appliance should be maintained & operated at all times in accordance with this instruction manual**
- **This appliance should not be operated with cracked door glass, over worn, faulty or missing door seals**
- **Do not use driftwood, treated or unseasoned (wet) fuel, the use of most types of preservative treated wood as fuel can be hazardous and will damage your appliance**
- **Burning unseasoned (wet) fuel or incorrect operation on extended low burn cycles will cause excessive creosote to form. Creosote is very corrosive and excessive buildups will result in the flue pipe, flue spigot and upper burn chamber failing. Failure of the applicance and/ or flue system due to creosote damage is not covered under warranty. The formation of such is not an appliance issue it is a fuel and operational issue**
- **This appliance must be regularly maintained and replacement parts must be authorised Metro parts only**
- **Do not empty ash into a combustible container**

Congratulations on the purchase of your Metro wood fire

This low-emission, slow combustion appliance is designed to give you many years of warmth and service, subject to the following key factors. These key factors, if not adhered to are the major causes of unsafe installation, poor performance and flue blockages and potential product failure.

1. Your Metro wood fire must be installed correctly. Metro recommend a competent and suitably qualified NZHHA installer.
2. The only fuel to be used in this appliance shall be wood that meets the following criteria.
   - Less than 25% moisture content
   - Has not been treated with preservatives or impregnated with chemicals or glue,
   - Is not chipboard, particle board, or laminated board,
   - Is not painted, stained or oiled
   - Is not driftwood or other salt impregnated wood
3. The appliance shall be operated at all times in accordance with the "Installation and Operating Instructions" supplied with each appliance.
4. It is preferable that Metro wood fires should be installed with a Metro ECO Flue System.
5. Coal must not be used as a fuel.

Please also note the following important points:

- In New Zealand a building consent is required from your local building authority. The homeowner is responsible for obtaining this consent.
- As correct installation is critical to the performance and safe operation of your Metro, it is recommended your Metro be installed by a NZHHA registered installer or a person suitably qualified in the installation of wood fires. Your Metro retailer will be able to arrange professional installation for you.
- During the very first fire your Metro will give off an odour and fumes as the firebox paint cures. Do not be alarmed; open all windows and externally opening doors in that room and close any internally opening doors. This curing process will last for approximately one hour and is likely to happen this one time.
- Properly seasoned (dry) timber is necessary for the Metro to operate efficiently; firewood that contains a high moisture content will result in flue pipe blockages, reduce heat output and create other issues.

Note: Once split, Softwood usually takes 12 months to season - Hardwood can take up to 24 months to season - Wood must be stored in a location that enables air circulation. Unseasoned wood stored in a closed woodshed without air circulation will still be unseasoned 12 months later.

- It is critical that the fire not be operated with over worn, faulty or missing door seals. Door seals will harden over time and become over-worn (3-4 year's) this will cause ai to leak into the fire, causing the appliance to 'over fire'.
- It is critical that the fire not be operated with over worn, faulty or missing bricks, baffle plate, baffle extension (white board on the baffle plate)
- It is critical that the fire not be operated with cracked, or broken door glass.

Please note, the above 3 points require regular inspection/ maintenance (every time the ash bed is cleaned out, generally 3-5 times a season) and if not maintained will void the firebox warranty. A glowing firebox or lower fluepipe is just one sign you are over firing your appliance. Please ensure you keep your proof of purchase/receipt on any parts you purchase.

- For optimum performance fuel must be loaded so the logs lay "front to rear" in preference to laying across the width of the firebox. Spaces should be left between the logs to enable oxygen to get to as much of the surface of the fuel as possible.
- A small hot fire loaded frequently is more efficient than a large fire burning on a low setting.
- Your Metro is covered by a full unconditional 12 month warranty on replacement parts, and a 10 year firebox warranty.

Where to install a Metro wood fire in your home

Wood fires are usually installed in the main living area, which is the section of the home that is usually kept the warmest, being the area in the home most frequently occupied. However, before deciding on the best location for your Metro wood fire you may wish to consider:

- Water heating. If you are intending to have a wetback it is important that the wood fire is as close as practically possible to the water storage cylinder.
- Split level homes are best heated when the wood fire is installed on the lower level, as the heated air will rise to the higher levels.
- Building construction is another consideration. Specified clearances from walls, curtains etc must be maintained and you need to ensure no structural beams or internal gutters etc are directly above your preferred site. If you have a two storey dwelling you need to consider the second storey to ensure you don't have the flue directly outside a second storey window.

Generally, you can install your Metro in your home anywhere that suits you; Pioneer offer various fan systems to transfer heat to other sections of the home that are not heated sufficiently. It is necessary if using a fan system that the Metro you have purchased has sufficient output to heat the total area you wish to heat. Your Metro retailer or installer will be able to advise if you are uncertain.

Optional wetbacks

If your home is in a classified "clean air zone", and dependent on requirements/restrictions which may be imposed by your local territorial authority (council) you may or may not be able to install a water heating device. If in doubt consult your local Metro retailer.

Water heating is another key feature of your Metro wood fire, and on offer are a number of options depending on the model you have purchased. Metro offer a 2kW wetback suitable for the ECO Tiny Rad and ECO Tiny Ped. The Ambie One cannot be fitted with a wetback in a clean air zone, but can be fitted with a wetback if installed on a 2HA+ rural property. All other 'ECO' Metro's can be fitted with the ECO wetback.

The Side wetback is suitable for the Wee Series models, Classic Rad and Xtreme Series models. Both R1 and R2 models cannot be fitted with a wetback at all.

Note: Wetbacks are not suitable for use in locations where the water supply has lime content. Lime build up inside the coil will eventually block the coil causing the wetback to fail.

Other considerations are:

- Distance from your Metro to the storage cylinder will affect the amount of hot water produced.
- Your climate & the manner in which you will 'fire' your Metro will determine the amount of hot water produced.

Cost Savings

Wetbacks can enable substantial power savings, dependent on the climate in the area in which you live. If you live in a cold climate you are likely to use your Metro for many months of the year, in which case a Pioneer wetback will reduce or even eliminate your water heating costs over those months. If however you live in a warmer climate and use your Metro for only a few hours a day over the colder months, electricity savings will be considerably less.

Water Pressure

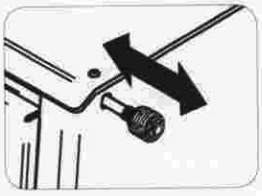
A common misconception is that you must have a low-pressure system to have a wetback; this is not true. You must have a "vented" system and high-pressure cylinders are usually not vented. However you can install an "indirect" cylinder which contains a secondary coil inside the storage cylinder, enabling you to have a wetback while retaining a high-pressure system.

Getting to know your Metro wood fire

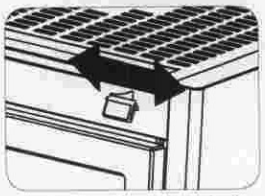
Operating your Metro wood fire is simple and you will quickly learn how to get the best from it. First take a minute to familiarise yourself with your new Metro.

- Raise the door handle anti-clockwise until the latch releases, and then slowly pull the door open. You will note that if you let the door go before it is at 90° to the appliance, it will fall closed. This is a safety feature that ensures the door cannot fall open if it is not latched securely. For the door to remain open, you must open it fully.
- There is a single air control making your Metro easy to adjust. This control moves from left to right, which is "low to high".

The Metro Radiant fires have a wire air control handle located at the upper right hand side of the appliance. Simply pull out to increase burn rate or push in to reduce burn rate.



Radiant fires air control



All other fires air control

All other model Metro's have an air control knob located on the upper front of the appliance.

Slide this control knob gently from right to left until you reach a stop. This is a pre-set "low" position. Your Metro must not be operated at a lower burn rate than this pre-set low allows.

Operating your Metro wood fire

If your Metro has only been installed within the past few days, the fire cement seal at the base of the flue will not be fully cured. To ensure the cement sets without blistering it is recommended you burn 2-3 sheets of loosely crumpled newspaper at a time, approximately once every hour over a 6-8 hour period.

During the very first fire your Metro will give off an odour and fumes as the firebox paint cures. Do not be alarmed. Open all windows and externally opening doors in that room and close any internally opening doors. This curing process will last for approximately one hour and is likely to happen this one time.

Start up

Place a quantity of loosely crumpled newspaper on the base of the firebox until it is approximately 50% full of paper, or place firelighters on the base of the firebox. Add dry kindling and move the air control knob fully to the right, being the "full open" position.

Light the paper at two or three locations across the front of the door opening and leave the door slightly ajar resting on the latch pin if necessary for a few minutes while the fire establishes. Once the kindling is burning well, open the door and add 2-3 small logs at a time until you have a well-established fire. Usually this will take approximately 30 minutes, during which time the air control should be set on "high" and the door should be closed, except for the initial few minutes and when fuel is being added.

Normal operation

Once the fire is well established, regulate the air control to achieve the desired burn rate and heat output. As you move the air control to the right, burn rate, firebox temperature and heat output will increase, if you move the control to the left they will decrease.

Please note:

- Always open the air control fully prior to opening the door, then open the door slowly.
- When loading logs, place them end-on, "front to back"; air spaces should be left between the logs to enable oxygen to get to as much of the surface of the fuel as possible.
- Every time you refuel, leave the air control on "high" for a minimum of 20-25 minutes.
- Never use the door to force wood into the firebox, as this is likely to break the glass.

Cooking

All Metro's are designed to enable cooking of soups, stews and casseroles etc, and your Metro will easily boil a flat bottom stainless steel kettle. The Radiant Series have a dedicated cooking top enabling large pots to be placed on the cook top, while all other models have a lift-off grill.

Note: Metro's supplied with a lift-off top grill have this feature to enable the grill to be removed for cleaning if you have a spill. The lift-off top grill must be left on when cooking, because if removed the wall temperatures next to the appliance may become excessive and the top of the firebox is generally too hot to cook on directly. Please note: Although very durable, Metro's in a satin stainless look are not recommended to be used to cook on.

Cleaning and maintenance for your Metro wood fire

The Metro radiant fires are painted wood fires and coated with "Pioneer Metallic Black" high temperature paint and will require periodic repainting to keep them looking their best.

All other Metro's are coated with either vitreous enamel or a high temperature silver coating;

- Vitreous enamel is extremely durable and designed to last the life of the appliance. As vitreous enamel is glass, a solid or heavy object dropped or banged against a panel could chip the enamel surface.
- Silver coated Metro's are offered in a stainless steel look. Although very durable it is not recommended that Metro's with this finish be used to cook on.

All model Metro's can be cleaned with a cloth when the appliance is not operating.

This appliance must be regularly maintained and replacement parts must be authorised Metro parts only.

Door glass

Providing your fuel is properly seasoned, under normal operating conditions the air-wash design of the Metro's firebox will keep the door glass clear. If the glass requires cleaning you may use either a razor blade scraper or an oven cleaner.

If your door glass breaks it must be replaced with 5mm thick ceramic glass which is available from your local Metro retailer.

Door seals

Over time, usually 3-4 years, the door and glass seals will become hard and cause air to leak into the firebox, causing the appliance to 'over fire'. Your Metro retailer stocks replacement woven fibreglass door and glass seals, which need replacing when they become hard and over worn.

The door of your Metro is easily removed. Hold it in both hands and lift the hinge end of the door up and over the top hinge pin, then lower the door from the bottom hinge pin.

Side bricks

Hair-line cracks are not uncommon and are a result of the intense heat within the Metro's firebox, coupled with mechanical damage caused by accidental impact when fuel is being loaded. However if the side bricks become cracked to the extent that they start to break up, they must be replaced.

Door adjustment

Provision is available on both sides of the door for adjustment.

To adjust the hinge end of the door, open the door fully, loosen the top hinge nut and slightly lift the latch end of the door; you will see the hinge assembly move back 1-2mm which will usually be sufficient. Retighten, then repeat by loosening the lower hinge nut, this time applying a slight downwards pressure onto the door to move the lower hinge assembly back a similar distance, then retighten.

The door latch is also adjustable, as the latch pin on the right side of the firebox is fitted through a slot which enables the latch pin to be loosened, moved back and re-tightened.

Ash removal

Over a period of time ash will build up in the base of the Metro's firebox and require removal. The time this build-up takes depends on the density and cleanliness of your fuel.

To remove the excess ash your Metro should not be operating.

- Open the door, and using a hearth shovel or similar, empty the excess ash directly into a steel or non-combustible container.
- If the ash is not disposed of immediately, be careful where you store it, as the ash can retain heat for many days and become a fire hazard.
- You must leave a bed of ash in the base of the firebox approximately 10mm deep; this insulates the base of the firebox and improves combustion.

Top baffle

This is a 'sacrificial' wear part of the firebox and should be checked monthly. Usually only the "Promet" (white board) front/underneath section needs to be replaced when it starts to disintegrate.

Note: Cracks in the promet are not uncommon and have no adverse effect on the operation of your Metro. These cracks are the result of intense heat coupled with expansion and contraction. Burning wood which is not properly seasoned, i.e. 25% moisture content or more, will over time cause the promet to disintegrate and require replacement.

Flue systems

Should be checked annually, particularly the bottom end of the lower flue section at its rear lock formed joint. If deterioration is noticed contact your Metro retailer or installer.

The flue pipe should also be swept a minimum of once a year, or as required during the winter season. If smoke enters the room when you open the Metro's door this usually indicates the flue pipe is becoming restricted and needs cleaning. The frequency of flue pipe cleans depends on many factors, with the main variables being:

- The seasoning of the wood. If not properly seasoned you will require frequent flue pipe cleans.
- The density of the wood. Softwoods generally result in more deposits building up in the flue pipe.

To clean the flue pipe of your Metro, proceed as follows:-

- Open the Metro's door fully, reach inside with the palm of your hand face-up and extended, lift the top baffle approximately 20mm, then lift it forward out through the door opening, placing it on a sheet of newspaper you have placed on the front of the floor protector.

  Note: Some appliances have a two piece top baffle.
- Close the door and slide the air control to the left.
- Once on the roof, remove the cowl from the top of flue system and sweep the flue pipe using a 150mm-diameter flue pipe brush as detailed in the instructions provided with the fluebrush.
- Once the flue pipe is clear, clean and refit the cowl. Remove the excess soot which has fallen into the firebox, leaving a layer of ash 10mm deep on the base of the firebox, then refit the top baffle.

Note: The baffle must be fitted so its rear is touching the back of the firebox; if uncertain refer to page 3 in the installation section at the front of this manual, which shows illustrations of the baffle location.

Troubleshooting your Metro wood fire

If your Metro is installed correctly, your fuel is dry and you operate your fire correctly, you will find it to be a pleasure to use. Metro's many years of experience within the wood heating industry has shown that dissatisfaction is mainly due to:

- unseasoned fuel
- faulty installation
- operational error
- or a combination of the above 3 points.

The following may be of assistance if you are experiencing any of these problems.

SMOKE ENTERS THE ROOM WHEN THE METRO'S DOOR IS AJAR (Possible reasons and solutions)

Check flue pipe joins:

If the flue pipe joins are not sealed correctly, the flue pipe will not draw as well as it should. The flue pipe join connecting into the flue spigot on top of the Metro is most critical, if this is not sealed correctly, smoke will enter the room when the door is ajar. To check this join is sealed correctly, run a match or lighter flame around the join. If the flame is sucked into the spigot then it is not sealed correctly. This check needs to be done when the fire is not going. Ensure you check the rear of the flue pipe/spigot join, as due to the seam in the flue pipe, this is the most common area for not being sealed correctly.

Ensure the fuel you are using is correctly seasoned:

If you are burning unseasoned fuel (wet), the fire will cause nothing but problems. The Metro won't deliver much heat, it will be lazy, smoke will enter the room when the door is ajar, and the door glass will run black. Unseasoned fuel is the main contributor to excessive creosote deposits which can be corrosive to your appliance and flue system.

Flue pipe length is too short:

Add more flue pipe as the longer the flue system, the better the draw of the flue pipe. Please note, if you did not purchase the Metro ECO Flue System, you will not have the ECO Cowl which increases draw. We highly recommend the Metro ECO Cowl is fitted as this will increase the draw. If you already have an ECO Cowl and smoke is still entering the room, please add another 600mm length of flue pipe.

Downdraft:

If you have checked all of the above and the fire is still smoking into the room, it's possible there may be a down draft issue. Down draft is environmental and can be caused by many variables, and it is purely trial and error to ascertain the cause. Solutions may be:

- 'H' Cowl, designed purely for downdraft issues, but if you have an ECO Cowl fitted as standard, you will also need to add another 600mm of flue pipe to compensate as the H Cowl is shorter in length.
- Directional Cowl, designed for high wind areas.

Air control setting:

Ensure the air control setting is on high before opening the door to reload, as this increases the draw up the flue pipe. Open the door slowly.

If your Metro did not smoke, but its starting too and is getting worse:

The flue pipe is in need of a clean. It is recommended that the flue pipe be cleaned every season, however if you are burning the fire on low a lot, or are using unseasoned fuel, flue pipe cleans will be required more frequently.

Correct operation:

Modern day wood fires need to be operated hard and fast, more so than low and lazy to ensure the firebox and flue pipe runs hot and efficiently. If the fire and flue pipe is up to temperature it will perform extremely well, the smoke will draw up the flue pipe with ease, and the fire will produce good amounts of heat.

If the fire is operated on low a lot of the time, the door glass will run black, the flue pipe will tend to block up more frequently and the fire will end up smoking into the room when reloading. It's better to have a small fire running hard and fast, rather than a big fire running low and lazy.

OTHER ISSUES YOU MAY EXPERIENCE

I can smell smoke in the room after a low burn cycle:

The smell is creosote that will be seeping through the flue pipe join or out of the flue spigot onto an external surface, thus creating the smell in your room. The cause will be either unseasoned fuel, fuel mass too large, incorrect operation on low burn cycles or a combination. Creosote is very corrosive and excessive buildups will result in the flue pipe and potentially the flue spigot and upper burn chamber failing. The formation of excessive creosote is not an appliance issue, it is a fuel and operational issue. Failure of flue pipe or firebox due to creosote build up is not covered under warranty as excessive creosote build up is only possible from either unseasoned fuel or incorrect operation.

The Metro is noisy as it heats up and cools down:

There will always be some expansion and contraction noise as the Metro heats and cools. This can usually be reduced by loosening three nuts at the rear of the appliance. To remedy, locate the 25mm deep cavity at the rear of your Metro between the 'rear panel' and the 'inner rear heat shield'. You will see a 6mm nut and two 6mm bolt heads in this cavity. Using a 10mm ring or open ended spanner, loosen all three so they are finger tight only.

On all non-DV model Metro's the air channel that allows the combustion air to enter the fire is fitted to the top underneath of the door opening. It is fitted with two M6 bolts. Slightly loosen both of these bolts. Note: This does not apply to the ECO DV models.

The Metro won't turn down as much as it did

The door itself may need readjusting, the hinge and latch is slotted and allows for movement. Loosening the hinge and moving it back a few mm will make the door seal tighter and stop air leaking into the fire. The door and glass seals may be in need of replacing, which is generally required every 3-4 years.

Familiarise yourself with the instructions on page 11 before proceeding with this maintenance.

Warranty details for your Metro wood fire

Metro wood fires are manufactured in New Zealand, using the highest quality of materials, workmanship and the latest manufacturing techniques, which is why we offer a full 10 year firebox warranty and 1 year parts warranty for peace of mind.

METRO WARRANTY
(NZ Consumer laws apply to this warranty)

Pioneer Manufacturing Limited (Pioneer) warrants the steel firebox against defective materials and workmanship which would render it unfit for normal domestic use, from the date of purchase by the original consumer, for a period of 10 years.

Components including panel coating, door retainers, door seals, glass, trim, baffle & bricks are warranted for a period of 1 year from the date of original purchase for normal domestic use against defective materials and workmanship.

All associated accessories including, but not limited to, fans, flue systems, flue shields, wetbacks, tool sets, ash pots etc, are covered by a 1 year warranty against defective materials and workmanship.

It is recommended, but not a condition of this warranty, that a full service/inspection of the Metro wood fire be carried out at the end of each winter season.

Warranty Conditions:

- The Metro wood fire must be installed, operated and maintained strictly in accordance with the building code and this installation and operation manual.
- The Metro wood fire must be installed and used in a domestic application.
- This warranty covers appliance like for like replacement or repair at the manufacturer's discretion but excludes freight, travel, installation, labour and/or any other associated costs.
- Pioneer or their agents are not liable for any loss or expense direct or indirect arising from the failure of any part or operation of the appliance.
- Operation of this appliance in violation of the warnings in this operation and installation manual will void this warranty.
- Your Metro wood fire must be regularly maintained and we recommended it is also serviced annually. Proof of servicing may be required. If a wood fire is not regularly maintained and serviced, the life span will be reduced. If your Metro wood fire has been neglected, by not being regularly maintained and serviced, warranty may be declined.
- It is critical that the fire not be operated with over worn, faulty or missing door seals. Door seals will harden over time and become over-worn (3-4 year's) this will cause air to leak into the fire, causing the appliance to 'over fire'.
- It is critical that the fire not be operated with over worn, faulty or missing bricks, baffle plate or baffle extension (white board on or under the baffle plate)
- It is critical that the fire not be operated with cracked, or broken door glass.

⚠ IMPORTANT INFORMATION

Note: The above 3 points require regular inspection/ maintenance (every time the ash bed is cleaned out, generally 3-5 times a season) and if not maintained will void the firebox warranty. Please ensure you keep your proof of purchase/receipt on any parts you buy.

- A claim under this warranty should be directed to the retailer who supplied the Metro wood fire. If this is not possible write directly to the manufacturer stating details of fault, model and serial number of your Metro, date and proof of purchase and name of retailer where the Metro was purchased.

Warranty Exclusions:
This manufacturer's warranty does not cover:

- Service calls which are not related to any defect in the product (i.e. operational, installation or fuel issues). The cost of a service call will be charged if the problem is not found to be a product fault.
- Defects caused by factors other than normal domestic use or use in accordance with the product's operation manual.
- Defects caused through the product being operated in an "over-fired" manner resulting in sections of the firebox operating excessively hot to the point that sections glow red. (Note - This will result in distortion of the firebox)
- Defects to the product caused by accident, neglect, misuse or act of God.
- The cost of repairs carried out by non-authorised repairers or the cost of correcting such unauthorised repairs.
- Required maintenance as set out in this manual.

Service under this manufacturer's warranty must be provided by a repairer authorised by Pioneer Manufacturing Ltd. Such service shall be provided during normal business hours.

⚠ WARNING! Complete and retain these details at time of purchase:

Purchase Date	
Serial Number	
Model	
Colour	
Retailer	

Metro - Visit us online today www.metrofires.co.nz

Metro Wood Fire Specifications

Metro have a Specifications Brochure available which details relevant compliance data for every model. This brochure is updated annually and details the minimum clearances and specifications for all models, which is generally required when applying for a building consent. See your Metro retailer to obtain a copy, or visit www.metrofires.co.nz

metrofires.co.nz

Visit the Metro website: www.metrofires.co.nz to view Metro's 'video demos' showing the latest in wood fire technology energy saving options. You can view the entire Metro product range, find out where your nearest Metro retailer is located or simply check out the latest specifications, installation requirements and emission and efficiency data for the Metro of your choice.



Pioneer heating accessories

Metro Accessories

Metro offer a range of heating accessories designed to compliment your Metro wood fire. See below for some of the products within our heating accessory range.

This range of accessories includes floor protectors, heat transfer systems, child guards, baffles, bricks and more. For further details ask your Metro retailer for a copy of the Metro heating accessories brochure, or visit www.metrofires.co.nz



ECO Flue Systems



Flashrites and Versatiles



Wetbacks



High Temperature Paint



Child Guards



Heat Transfer Systems



Universal Door Seal Kits



Fire Cement And Silicone



Corner and Wall Floor Protectors



Glass Tape



Door Seal Rope



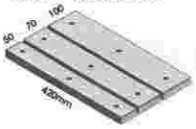
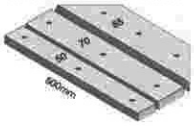
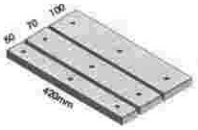
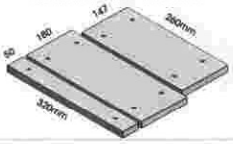
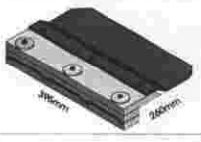
Chubb Smoke Detectors

Parts guide for your Metro – Baffle, promet and wetback

Listed below are the parts and product codes for your Metro wood fire. The promet/baffle should be regularly checked and must always be in place during the operation of your fire.

Note: Cracks in the promet are not uncommon and have no adverse effect on the operation of your Metro. These cracks are the result of intense heat coupled with expansion and contraction and is normal wear & tear.

Your Metro wood fire must be regularly maintained and we recommended it is also serviced annually. If a wood fire is not regularly maintained and serviced, the life span will be reduced. If your Metro wood fire has been neglected, by not being regularly maintained and serviced, with authorised Metro parts replaced as required, your warranty may be declined.

Clean air models	Type of promet required / Type of steel baffle(s) required			Water heating options
• **ECO Tiny Ped** • **ECO Tiny Rad**		ECO Tiny 500-1550 	ECO Tiny Complete 500-2050 	ECO 2kW Booster 450-0050 
• **R1**		Wee/R1 Set 500-2005 	Wee/R1 Complete 500-2505 	No wetback can be fitted
• **R2**	Xtreme/R2 Set 500-2010 	Xtreme/R2 Front 500-2510 	Xtreme/R2 Rear 500-2515 	No wetback can be fitted
• **Wee Rad** [LEGS] • **Wee Rad** [BASE] • **Wee Ped**		Wee/R1 Set 500-2005 	Wee/R1 Complete 500-2505 	Side Wetback 450-0275 
• **Classic Rad**	Classic Rad Set 500-2015 	Classic Rad Front 500-2520 	Classic Rad Rear 500-2525 	Side Wetback 450-0275 
• **Xtreme Rad** [LEGS] • **Xtreme Rad** [BASE] • **Xtreme Ped**	Xtreme/R2 Set 500-2010 	Xtreme/R2 Front 500-2510 	Xtreme/R2 Rear 500-2515 	Side Wetback 450-0275 
• **ECO Euro Rad DV**		ECO DV 500-1750 	ECO DV Complete 500-2200 	No wetback if this fire is installed in a clean air zone. The LTD wetback can be fitted in a non-clean air zone. LTD 3kW Wetback 450-0100 or LTD 4kW Wetback 450-0150
• **ECO Euro Ped DV**		ECO DV 500-1750 	ECO DV Complete 500-2200 	ECO Wetback 450-0450 
• **Mega Rad**	Mega Rad Promet Set 500-2020 	Mega Rad Front 500-2530 	Mega Rad Rear 500-2535 	LTD 3kW Wetback 450-0100 

10660

Wee Rad



CLEAN AIR Model | LTD RURAL 2HA+ Model | 150m2 | 15kW | Wetback

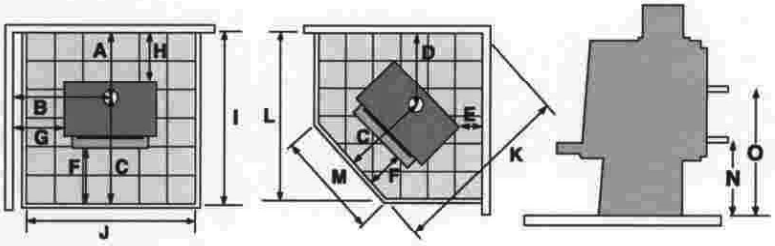
Wee Series

NZ's hot favourite every winter. The Wee Rad has been heating kiwi homes for almost 15 years. Recently updated, the Wee Rad is now bigger, hotter and cleaner burning with a larger door glass for enhanced flame view. A popular model with timeless traditional styling that will easily heat a standard 3 bedroom home for many winters to come.

Available in:

● *metallic black paint*

NEW ZEALAND MADE



Model Dimensions (mm)	Width	Depth	Height	Firebox
	615	498	688	41 litres

Model Clearances (mm)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
251	568	577	455	150	230	260	100	828	825	1224	1015	425	295	485
251	568	577	425	120	230	240	100	828	825	1180	985	425	295	485

CLEAN AIR **Clean Air Model** - Suitable for any size property. Can be installed into Clean Air Zones.

LTD RURAL 2HA+ **LTD Model** - Suitable for properties with land area of two hectares or greater. Overnight burn capabilities.

Kilowatt Output - Peak output with a Metro ECO Flue System fitted. (A Metro ECO Flue System will increase the overall heat efficiency in your home)

m2 - The floor area the Metro wood fire is capable of heating. (Estimated on 2.4m stud height in an average NZ climate/insulation)

Wetback - Can be fitted with an energy saving wetback to assist or fulfil your water heating needs.

* Wee Rad corner clearance (E) can be reduced to 120mm with the Wee Rad corner wing shields fitted. This in turn also reduces clearances (D) to 425mm, (K) to 1180mm and (L) to 985mm. When fitting the corner wing shields the Wee Rad itself must be installed to a corner clearance (E) of 120mm. The corner wing shields are then fitted which gives a wall to shield corner clearance of 100mm.

FIRE ONLY

$1699

Add a Metro ECO Flue System and flueshield for $813

Prices are recommended retail and include GST

metrofires

Trusted reliable heat

www.metrofires.co.nz | info@metrofires.co.nz

Building Services

PIM/Building Consent Application Checklist

Project Address: 10 Wills Cres, Ashhurst

Interviewing Officer/s: [signature] **Date:** 20 April 2015

Building Officer

Application Documentation	Yes	N/a	No
Application type: ☐ **PIM** ☒ **BC** ☐ **Combination PIM & BC**			
Does this application rely on a MultiProof certificate? If yes, ensure certificate is provided.			✓
Does application relate to Restricted Building Work (RBW) If yes complete RBW section below	✓		
Residential: **Two** sets of plans and specifications provided	✓		
Commercial:**Two** sets of plans and specifications provided, plus 1 electronic copy if NZFS review required		✓	
Confirmed street address on system? Consult and confirm with Land Admin for new buildings (residential & commercial) and relocates	✓		
Legal Description Completed	✓		
Proof of ownership matches applicant details	✓		
Application form signed and dated	✓		
Description of work accurate	✓		
NES Notification form completed and attached (MDC only)			
Value of work checked	✓		
Compliance detail completed on application form	✓		
Trades peoples' details filled out (back page)			✓
Application form completed & correct	✓		
Applicant advised of DBH and BRANZ Levies, Structural processing fees, bonds, Vehicle Crossing and inspection and legal fees		✓	
Is application part of Financial Assistance Package (FAP) – Notify Team Leader if yes			✓
Section 75			
Any buildings over boundaries shown (Section 75)? If yes, indicate 'Claims Management' technical input.			✓
Restricted Building Work (RBW)	✓		
Is this an owner-builder exemption application? If yes, ensure Statutory declaration (Form 2B) attached			✓
Certificate(s) of work provided on prescribed form, fully completed and signed	✓		
Register checked and license current for Licensed Building Practitioner (LBP) identified on Certificates of work	✓		
Applicant advised to provide Trade LBP's information prior to commencing work (If not provided)	✓		
EQ Prone Building (n/a if residential unless multi unit / level building)			✓
Record of building on EQP database (if no, update database) **Please record EQP assessment ID # here:** _____		✓	
Building meets EQP criteria		✓	
Building work relates to EQ prone strengthening		✓	
City Networks	**Yes**		**No**
Any roading / footpath encroachments			✓
Staged consent			✓
Stage____ of _____ Description:		✓	
Construction programme provided		✓	
Commercial	**Yes**	**N/a**	**No**
Demolition work – copy of Building Consent application to Information Services		✓	
Building being used or intended to be used by the public prior to CCC being issued (if 'Yes' Application for Certificate of Public Use & Project Management Plan required)		✓	
Work likely to impact on road reserves (If yes, provide City Network handout)		✓	
Fire analysis report for new buildings & alterations to existing buildings provided		✓	
NZ Fire Service Design Review Unit, review required? **If required, obtain electronic copy of all documentation from customer as requested by NZFS Design Review Unit.**		✓	
To City Networks for Service Connections, Backflow and Trade Waste (grease traps/oil interceptors etc)		✓	
Accessibility for new buildings & alterations to existing buildings addressed & checked on plans		✓	
Inspection, maintenance and reporting details for specified systems provided		✓	

Hazardous substances	Yes	N/a	No
Storage of >100kg LPG on site?			✓
Location on site plan identified?			✓
Test certifier location certificate provided for existing LPG storage?		✓	
Preliminary test certifier letter of approval provided for proposed storage?		✓	
Plans	**Yes**	**N/a**	**No**
Plans to standard i.e. to scale, no graph paper, no pencil drawings, no single line drawings	✓		
Site plans show distance to a minimum of two boundaries (for all buildings) *		✓	
Site plans show location of septic systems & distances to boundaries		✓	
Slab & foundation detail shown on plans A1.03 2 new piles	✓		
Compliant residential driveway gradient		✓	
Datum shown		✓	
Engineer detail shown on plans		✓	
Drainage detail shown on plans		✓	
Rooms Identified Partial only **	✓	.	
Fire walls shown on plans and details provided		✓	
Smoke alarms shown on plans Notation on plan A1.02		✓	
Windows shown on plans Partial only – New & relocated window	✓		
Ventilation (mechanical detail where no windows) opening windows		✓	
Dimensions shown on plans windows only	✓		
Cross Section	**Yes**	**N/a**	**No**
Full cross section – min. 1 for garages refer A1.06 details	✓		
Full cross section – min. 2 for dwellings		✓	
Finished floor levels shown on plans		✓	
Stair, barrier, handrail detail & dimensions shown on plans		✓	
Weather Tightness	**Yes**	**N/a**	**No**
Flashing of windows, doors, junction, balcony, parapet, int/ext corner details shown on plans	✓		
Specifications	**Yes**	**N/a**	**No**
Bracing schedule for walls/subfloor provided 2 new piles for deck only	✓		
Truss design certificate & layout details provided		✓	
Timber grade & treatment schedule provided	✓		
Lintel schedule provided A1.02	✓		
Exterior cladding system information provided (including E2 risk matrix)	✓		
Effluent disposal system (rural only) provided		✓	
Relevant & comprehensive specifications provided	✓		
Specific Design	**Yes**	**N/a**	**No**
Engineer calculations & details provided		✓	
Producer statement design review - PS2 (if yes application may not need structural input)		✓	
Existing Vehicle Crossing	**Yes**	**N/a**	**No**
Existing vehicle crossing shown on plans	✓		
New Vehicle Crossing required?	**Yes**	**N/a**	**No**
Vehicle Crossing application form completed			✓
If no: Provide applicant with Vehicle Crossing application form			
Location of vehicle crossing distance to boundary shown on plans		✓	
Width of vehicle crossing shown on plans		✓	
Service Connections	**Yes**	**N/a**	**No**
Application for service connections		✓	

Notes:

* Distance to boundaries not decreasing

** Emg to email regarding DEOP - rec'd 20/4

Planning Officer (PNCC) / Building Officer (MDC as applicable)	Planning Information	Yes	N/a	No
	North direction point & all boundaries shown	✓	✓	
	Show distances to two boundaries min	✓	✓	
	Show existing ground & finished floor levels	✓		
	Street frontage identified	✓		
	Existing & proposed buildings shown	✓	✓	
	Six metre living court shown		✓	
	Any buildings over boundaries (Section 75) shown			✓
	Instant resource consent required for separation distances			✓
	Neighbour's consent form & plan provided & signed by all property owners		✓	
	Site area & coverage details provided		✓	
	Height recession zones shown on plans		✓	
	Lot & DP number shown on plans	✓		
	Proximity to stop banks shown		✓	
	Demonstrated compliance to air noise schedules or acoustics report provided		✓	
	Applicant advised that Development Contribution costs apply to the development		✓	
	Notes			
	Just slight alteration to existing.			

Building Officer	*For Office Use Only: Administration Information*	Yes	N/a	No
	Site Visit Booked		✓	
	Letter of confirmation to applicant		✓	
	Fees calculated (including Building and Building Research Levies)	✓		
	GeoCity plan attached (PNCC) / Mapper plan attached (MDC)	✓		
	Receipt number & fee code entered on application form	✓		
	Risk assessment number entered on fees sheet	✓		
	Building Officers time entered on fees sheet	✓		
	Fees sheet completed	✓		

Copies of inspection checklists requested:	☐ Yes	☑ No
Please select one option only:	☐ Please email copies to (email address):	
	Please mail copies to: ☐ Owner	☐ Agent
Full Name:		
Mailing Address:		

Project Number:	40660	**Application Accepted by:**	Name: Lyn Best Signature:	**Date Accepted:**	20 April 2015

40660

Lyn Best

From: Emma Zee <Emma@shadboltarchitects.co.nz>
Sent: Monday, 20 April 2015 12:26 p.m.
To: Lyn Best
Subject: RE: partial plan of city

Thanks for that Lyn

Just confirming that the DEOP for 10 Wills Cres, Ashhurst is less than 25m and the total open path is less than 60m which complies with C/AS1

Kind regards

Emma

www.architypestudio.co.nz

-----Original Message-----
From: Lyn Best [mailto:lyn.best@pncc.govt.nz]
Sent: Monday, 20 April 2015 11:45 a.m.
To: Emma Zee
Subject: partial plan of city

Emma

For you :-)

Lyn

Caution: The content of this email is confidential and may be legally privileged. If it is not intended for you, please email the sender immediately and destroy the original message. You may not copy, disclose or use the contents in any way.

The sender's email address in this message may constitute a designation of an information system for the purposes of section 11(a) of the Electronic Transactions Act 2002 (New Zealand). You agree that, in sending an email message to that address, the time of receipt will be when the message actually comes to the attention of the addressee, not the time the message enters the designated information system. Thank You.

40660

BCA T-19a
Version: 7
Date:16/01/2013

Planning Processing - Building Consent

Applicant Name: Ronald Stevens **PIM No:** / **BC No:** 40660

Site Address: 10 Mills Crescent. **Date:** 24/04/15

Planning OK

Item to be checked for compliance: with the PNCC District Plan & NZ Building Act 2004 Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Yes	N/A	No	Details of Processing & Comments: Comments **must** be made for **Non-complying** items
Application checklist completed & attached?	Yes/No			
Certificate of title attached?	Yes/No			
Site Identification				
Identify site on City View	Yes/No			If no, attach copy of #Subdivision Scheme Plan from RM file, & identify Lot
Site plan matches property boundaries	✓			
Subdivision/ Property Issues Information				
Subdivision conditions / restrictions / property issues / undevelopable land / consent notices / geotech reports[1]		✓		Attach copies:
Requirement for 'Survey Certificate' placed as a note on the Building Consent		✓		
Water services compliant in accordance with Water Supply Bylaw?		✓		
Street number allocated		✓		
EIR				
Site on EIR database	Yes/No			Details: Clause:
Flood Maps/Stop Banks				
Site within flood hazard areas[2]	Yes/No			Details: Clause:
Site adjacent to Manawatu River/ Mangaone Stream	Yes/No			Details: Clause:
Section 72 – Land subject to natural Hazards[3]				
What level of liquefaction risk is the property subject to?				Moderate to High / Moderate to Very High ☐ Low or Negligible ☐ **Add appropriate endorsement from Ozone to BC**
Is land likely to be subject to natural hazard/s?	Yes/No			Type of hazard/s:
Has adequate provision been made to protect land, building work or other property **or** restore damage to land or other property as a result of building work?				☐ **Yes: Consent can be issued.** ☐ **No: Move to next question.**

40660

BCA T-19a
Version: 7
Date:16/01/2013

Planning Processing - Building Consent

Will the building work accelerate, worsen or result in a natural hazard on the land or any other property?	*N/A if Yes to question above*	☐ **Yes: Refuse application. Inform applicant in writing.** ☐ **No: Liaise with Senior Building Officer for Building Code waiver/modification. Add condition to BC & make notification under Building Act 2004, section 73.** (Ref form: PL BA Sect 73)
Section 75 – Building over 2 or more allotments		
Building constructed over boundaries[4]	Yes/No	Details: Clause:
Has 'Subdivision' application been made?	Yes/No	
Inform Building Officer Section 75 required	Yes/No	
Cert. of Title/Easements/X Lease		
Any easements/building line restrictions	Yes/No	Details: Clause:
Easements still relevant[5]	Yes/No	Details: Clause:
Building over private easements[6]	Yes/No	Details: Clause:
Cross lease property	Yes/No	Details: Clause:
PNCC Drainage engineer approved building over PNCC Easement?	Yes/No	
Applicant been advised of 'Private Easement'?	Yes/No	
Is the BC for an additional dwelling that could lead to an increase in rates?	Yes/No	☐1 additional dwelling ☐ Multiple additional dwellings **Add appropriate endorsement from Ozone to BC**
District Plan		
Zoning	✓	
Stream Site in ponding areas/ min. floor level areas	Yes/No	Details: Clause:
Minimum floor level (Subdivision)	Yes/No	Details: Clause **Add appropriate endorsement from Ozone to BC**
Site in air noise zone	✓	Details: Clause:
Notable trees on/near site	Yes/No	Details: Clause:
Building/site registered heritage building	Yes/No	Details: Clause:
Site registered archaeological/Waahi Tapu site	Yes/No	Details: Clause:
Activity / development complies with DP[7]	✓	Details:
Land Use Consent		
Resource Consent required for the project?	Yes/No	
Resource Consent been 'Granted'?	✓	
Is the non-compliance for separation distance in residential zone	Yes/No	If yes, Instant Resource Consent required Clause:
Applicant advised & BCR applied?	✓	
If it (what) does not comply is there an existing, valid (<5yrs) Land Use consent[8]	✓	Details:
Is proposal compliant with landuse consent plans and information	✓	Details of BCR advice:
Landuse consent granted for relocated dwelling	✓	Details: Clause:
Roading		
Vehicle crossing complies with DP[9]	✓	
Vehicle crossing free of street trees (as identified from City View)	✓	Details: Clause:
Development Contributions		
Development contribution payable	Yes/No	Details: Clause:
Development Contribution payment	Yes/No	

Planning Processing - Building Consent

condition of Building Consent?		
Development Contribution been paid at 224 subdivision stage?	Yes/No	
Conditions entered on consent ?	Yes/No	**Officer:** Aveyll Edgar **Date:** 24/04/15
Application approved?[10]	Yes/No	**Signed:**

[1] Liaise with Subdivision Engr / Snr Subdivision Planner, see land instability process – Tonkin & Taylor Policy
[2] Horizons.mw flood maps
[3] Natural hazard means: erosion(including coastal erosion, bank erosion and sheet erosion); falling debris (including soil, rock, snow and ice); subsidence; inundation (including flooding, overland flow, storm surge, tidal effects and ponding); slippage. *The answer to this question is based on the best knowledge and systems available to Council officers at the time of processing the application.*
[4] Section 75 required
[5] Check with City Networks, refer to current Certificate of Title
[6] Advise applicant to obtain written approval from all parties' with an interest in the easement
[7] If proposed subdivision, check against existing & proposed boundaries
[8] Check RM Module/ Property file/ Subdivision file
[9] If proposed subdivision, check against existing & proposed boundaries
[10] If the decision is made to refuse to approve this application, document reasons in notes section

32 The Square
Palmerston North 4410
Private Bag 11034
New Zealand

Telephone 00 64 6 356 8199
Fax 00 64 6 351 4471
Email info@pncc.govt.nz
Website www.pncc.govt.nz

PALMERSTON NORTH CITY COUNCIL

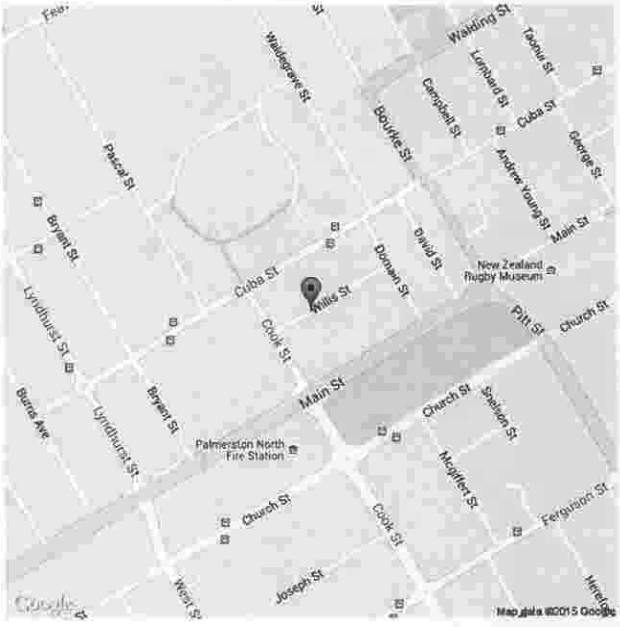
40660

Inspection - Preline Single Level

Form Name / Version:	Inspection - Preline - Single-Lower Storey (BCA T-30p) - v8
Reference Number:	REF150700444
Completed On:	06/07/2015 16:56
Completed By:	barry.cardiff@pncc.govt.nz
Consent Number:	40660
Site Address:	9-10 WILLS CRESCENT
Contact:	STEVENS, RONALD CRAIG
Contact Phone:	
Contact Email:	

Passed?	Yes





Inspection checklist

Builder:	Rawyne
Builder phone:	0274825600

Item to be inspected for compliance: with the Building Act 2004, NZBC and Approved Documents. Complies with approved plans and specifications. Note: N/A = this item is not applicable to this application and has not been assessed

Details of Inspection &Comments: Comments must be made for: 1.Non-complying Items 2.Items/work deviating from approved documents 3. Detail alternative solution &how compliance achieved

Pass = Compliance with approved plans &documentation, N/A = Not applicable to this project, Fail = Non-compliance with approved plans &documentation.

Staged / Partial Inspection:	No
Conditions of consent / site instructions read?	Yes
Comments	

4066

Approved stamped site plan, foundation plan, cross section drawings, truss layout and fixing detail, specifications, engineer detail, floor plan, drainage plan, effluent disposal site plan and detail

Approved plans &specifications sighted?	Yes
Comments	
Approved plans include specific design detail?	No
Comments	
Approved plans include air / noise detail?	No
Comments	
Framing inspection passed?	Pass
Comment:	minor work
Cavity inspection passed	N/A

Where Plumbing Preline inspection has not been passed, site instruction to be issued detailing areas able to be lined and any other necessary actions

Plumbing pre-line inspection passed?	N/A
Subfloor inspection passed?	N/A
Reg No: / LBPs licensed and Council notified?	Pass
Name:	john greenlees
Number	102584
Comments	
Special PPE required for this site?	Yes
Specify:	• safety footwear • high visibility jacket

Exterior

Exterior cladding in place &weathertight	Yes
Comments	
Exterior protected? (where cladding is not in place)	Pass
Comments	window being replaced

Roof

District Plan (h) Air Noise Control "Schedule P", "Schedule Q", "Schedule R"

Does the roof cladding thickness meet the requirements for air noise control	N/A

40660

Roof is weatherproofed i.e minimum of ridge caps, barge rolls, barge flashings, apron flashings in place

Roof cladding &flashings	N/A

NZS 3604:1999 Section 13.3.1 &NZS 3604:2011 Section 13.3.1 location to allow unobstructed access to roof space, min. 600mm headspace

Access to roof space	N/A

Bracing

Plan checked &wind zone confirmed	N/A
Brace bottom plate fixings	N/A
Unit length as per plan	N/A

Check bracing limitations in appropriate bracing manual (e.g. Limitations Page 8 GIB Bracing Systems)

Bracing limitations	N/A
Bracing as per approved plans	N/A
Bracing plan amended &approved	N/A

Framing

Bottom plate fixings?	Pass
Type:	handi bracs and gun nails
Comments	
Floor as per approved plans	Pass
Comments	

Reference E2 / AS1, 11.2. Forest Research Institute recommends testing 10 studs, 6 ceiling battens &6 lintels, 9 out of the 10 studs must be within the limits.

Moisture content	Pass
MC Range	14
Comments	
Lintels &beams as per approved plans?	Pass
Comments	
Lintels / beam support &fixings	Pass
Comments	

Lintels, studs, wind straps, bottom &top plates.

Fixings for high wind	Pass
Comments	

NZS 3604:2011 Table 8.18

Top plate fixings	Pass
Comments	
Spacing (suitable for linings)	Pass
Comments	
Engineer detail as per approved plans	N/A
Engineer design steel connections checked	N/A

40660

Fire Wall

Fixings &straps	N/A

All penetrations shall be fire rated to ensure the integrity of the fire separation is not compromised

Penetrations &electrical fittings	N/A

Insulation

Air gap backing rod and foam installed correctly?	Pass
Comments	
Insulation walls?	Pass
Type:	pink batts
Grade: R	2.6
Comments	
Insulation ceilings	N/A
Blown insulation thickness	N/A
Insulation in skillion roof	N/A
Ply (roof &decks) thickness as per plans	N/A

Safety Glazing

Exterior windows	N/A
Window restrictors fitted	N/A
Doors	N/A
Stairs	N/A
Wet areas	N/A

Wet Area

Flooring substrate as per plans?	N/A

Waterproofing systems checked?	N/A	40663

Inspection signoff

Note any additional information, such as: cast in fixings, timber, etc.

Notes	fire on consent installed correctly by david brown plumber to manufactures specifications. ok to use,
Amended plans required?	No
Amended specification required?	No
Reinspection required?	No
Site instruction issued?	No
Pre-line Single / Lower storey inspection passed?	Yes
Email a copy of this inspection checklist?	No
Inspector name:	barry cardiff.
Signature	

RECEIVED
- 2 JUN 2015
BY:

40660

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Applicant Name: Stevens **PIM No:** ✓ **BC No:** 40660

Site Address: 10 Willis Crel **Date:** 10/5/15

Notes[1]:
New fireplace, remove existing window and relocation, new bay window and remove existing front door + infill wall
Restricted building works.

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	**Plans/Specs Checked** Complies	N/A	Non-Complying	**Details of Processing & Comments:** Comments must be made for: 1. **Non-complying** items 2. Alternative solutions & how compliance with NZBC achieved
Act				
S.72 Hazards – stability / flooding	Yes / No / N/a			
S.75 Building on 2 or more allotments	Yes / No / N/a			
S.112 Alterations to existing buildings	Yes / No / N/a			means of escape from fire
S.113 Specified intended life	Yes / No / N/a			If 'Yes', add endorsement to BC
S.115 Change of use	Yes / No / N/a			
S.116A Subdivision	Yes / No / N/a			
Section 75 – Building over 2 or more allotments				
Building constructed over boundaries[2]	Yes / No			
Does proposed building contain a 'Party Wall'?	Yes / No			
City View plan marked demonstrating lots affected?	Yes / No			Number of lots affected: 1 2 3 4 5 6 7 (circle number applicable)
Condition placed on Building Consent	Yes / No			
Building Consent suspended	Yes / No			

RECEIVED
- 2 JUN 2015
BY:

40660

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments must be made for: 1. Non-complying items 2. Alternative solutions & how compliance with NZBC achieved
PIM / Building Consent				
Application checklist completed & attached?	Yes / No			
Plans				
Site plans for building location	Yes / No			A0-01
Letter of encumbrance required	Yes / No			
Issues				
Minimum floor levels for flood	Yes / No			Details:
Soft ground	Yes / No			Details:
Earthquake prone building	Yes / No			Details:
Overhead utilities (power/phone lines, etc)	Yes / No			Details:
Site Visit				
Conducted	Yes / No			If no, comment:
Building – site visit checklist completed & attached	Yes / No / N/a			
Planning – site visit checklist completed & attached	Yes / No / N/a			
Are network utility connections required				
City Networks (Engr. Approved)	Yes / No / N/a			
Water	Yes / No			Details:
Stormwater	Yes / No			Details:
Sewer	Yes / No			Details:
Other				
	Yes / No / N/a			
	Yes / No / N/a			
	Yes / No / N/a			
LPG				
Storage of LPG >100kg on site?[3]	Yes / No			
Location on site plan identified?	Yes / No			
Preliminary test certificate letter of approval provided for proposed work (ERMA)*?	Yes / No			
Plumbing				
Sufficient information to process	Yes / No			Details:
Plumbing Act noted on PIM/BC	Yes / No			Details:
Effluent disposal report & description required	Yes / No			Details:
Site Services				
Is site serviced?	Yes / No			Details:
Age of existing laterals (pre 1960)	Yes / No / N/a			Details:
Proposed site service plan	Yes / No / N/a			Provided / required / N/a
Existing site service plan checked on building file, copy provided	Yes / No			
Water Supply				
Water supply tank issues (from site visit)	Yes / No / N/a			Details:
Water mains pressure for sprinklers	Yes / No / N/a			Details:
Other				
	Yes / No			
	Yes / No			

No issues identified.

Not required

No plumbing works.

RECEIVED
- 2 JUN 2015
BY:

40666

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies / N/A / Non-Complying	Details of Processing & Comments: Comments **must** be made for: 1. **Non-complying** items 2. Alternative solutions & how compliance with NZBC achieved
	Yes / No	
Is the previously issued PIM attached relevant to this building work?	Yes / N/a / No	
If 'No' advised applicant new PIM application required & suspended BC?	Yes / N/a	
Any outstanding Building Consents relating to property	Yes / No	Record Building Consent Number/s:
Planning PIM detail		
Planning checklist completed & attached?	Yes / No	Nargill Planning ok.
Planning requirements noted on consent/PIM?	Yes / No	
Is proposed addition over a 'Private Easement'	Yes / No	
Survey certificates required[4]?	Yes / No	
Is this a sloping site[5]	Yes / No	
Spot levels & floor heights & datum shown on plans	✓	
Min. floor heights for areas subject to flood shown on plans	✓	
Building PIM detail	NZBC - B1 & B2	
Wind zone identified	Yes / No	Low / medium / high / very high/ extra high / specific design (SED)
Snow zone identified	Yes / N/a / No	Up to 1.0kPa / Greater: specify
Exposure zone identified	Yes / N/a / No	B / C / D (seaspray)
Building PIM checklist completed & attached?	Yes / N/a / No	
Building requirements from PIM noted?	Yes / N/a / No	
Waiver and Modification		
Application for a waiver or modification?	Yes / No	Agreed UBP 3576.
Restricted Building Work	Yes / No	
Certificates of work collectively cover all design RBW[6]	Yes / No	
Check designers license class covers building category	Yes / No	
Trade LBP classes **required** (Circle)		Carpentry / External Plastering / Brick/Blocklaying Foundation / Roofing
Trade LBP classes **provided** (Circle)		Carpentry / External Plastering / Brick/Blocklaying Foundation / Roofing
Trade LBP's registered	Yes / No / Na	TBA
Trade LBP endorsement added to Building Consent	Yes / No / Na	Added.
Building consent detail	Building Act - Sec 45	
Siting measurements from min. 2 boundaries shown	Yes / No	
Sloping site accurately shown on plan	✓	
Compliant residential driveway gradient	✓	
Vehicle crossing required?	Yes / No	un-changed.

RECEIVED
- 2 JUN 2015
BY:
40660

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments **must** be made for: 1. **Non-complying** items 2. Alternative solutions & how compliance with NZBC achieved
Vehicle crossing application submitted[7]		✓		
Foundations	NZBC – B1 & B2			
Engineer detail peer reviewed **(by 2nd engineer/PS1/2 provided)**		✓		**(Eng. to initial items checked)**
Engineer detail correctly shown on plans		✓		
Concrete strength specified	✓			Specified mPa:
Footing dimensions		✓		
Reinforcing size, type & cover shown		✓		
Foundation walls	NZBC – B1 & B2			
Heights & dimensions of foundation walls shown		✓		
Reinforcing size, type & cover shown		✓		
Foundation height in respect of subfloor access, pile heights etc.[8]	✓	✓		
Ventilator set out[9]	✓			Bare boards
Subfloor access door[10]		✓		NZS3604:2011
Ordinary piles[11]:	NZBC – B1 & B2			
Footing dimensions	✓			
Pile dimensions shown on plans	✓			
Set out, spacing & treatment	✓			
Ordinary pile connections shown	✓			
Anchor piles[12]:	NZBC – B1 & B2			
Footing dimensions		✓		
Pile dimensions shown on plans		✓		
Set out, spacing & treatment		✓		
Anchor pile connections shown (min. 12Kn)		✓		
Braced piles[13]:	NZBC – B1 & B2			
Footing dimensions		✓		
Pile dimensions shown on plans		✓		
Set out, spacing & treatment		✓		
Braced pile connections shown (min. 12Kn)		✓		
Brace type		✓		
Column/post footings[14]:	NZBC – B1 & B2			
Footing dimensions		✓		
Post dimensions shown on plans		✓		
Slab on Ground	NZBC – B1, B2 & E2			
Concrete strength specified		✓		Specified mPa:
Floor heights shown on plans		✓		
Hardfill detail		✓		
Damp proof membrane		✓		
Connection to existing foundations shown on plans		✓		

RECEIVED
- 2 JUN 2015
BY:

40666

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments **must** be made for: 1. **Non-complying** items 2. Alternative solutions & how compliance with NZBC achieved
Reinforcing: size, type, placement on plans		✓		
Supplementary reinforcing detailed on plans		✓		
Shrinkage control joints detailed on plans		✓		
Timber Treatment	NZBC – B1 & B2			
Timber grade & treatment schedule (for **all** timber)	✓			B2/AS1
Framing	NZBC – B1, B2 & E2			
Wind zone identified (so fixings can be checked)	✓			Med
Exposure zones identified (so fixings can be checked)	✓			
Bearer size & spans	✓			⊕: Provide design
Bearer fixing details to foundation walls shown on plans	✓			verification by
Joist size & spans	✓			window suppliers (B1)
Support for walls parallel with floor joists	✓			
Flooring material specified	✓			(A) Provided
Bottom plate fixing (walls) shown on plans	✓			
Top plate fixings detailed	✓			
Stud height & spacing	✓			
Verandah post, beam & fixing detail shown on plans		✓		
Lintel sizes & specifications shown on plans[15]	✓			
Lintel fixing detail attached (Place copy in site file)	✓			
Cantilever beams, corner window etc.[16]		✓		
Engineer details, incl. connections shown on plans[17]		✓		
Ceiling batten size, grade, spacing, span	✓			
Wall & ceiling linings shown on plans	✓			
Framing set out suitable for linings	✓			
Truss manufacturer's design certificate		✓		
Truss manufacturer's set out detail[18]		✓		
Truss manufacturer's fixing detail[19]		✓		
Rafter size, spacing & span		✓		
Rafter fixing shown on plans		✓		
Underpurlin size shown on plans		✓		
Strutting beams size shown on plans		✓		
Struts loading on strutting beam or load bearing walls		✓		
Purlin/batten size, spacing & span		✓		
Purlin/batten fixing detail specified		✓		

RECEIVED
- 2 JUN 2015
BY:

40660

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments must be made for: 1. Non-complying items 2. Alternative solutions & how compliance with NZBC achieved
Skillion roof detail[20]			✓	
Building paper/wrap specified - walls	✓			
Building paper/wrap specified - roof	✓			
Roof cladding specified	✓			glazing
Roof cladding suitable for min. roof pitches (length of sheet may effect min. pitch)	✓			
Internal gutters construction detail shown on plans		✓		
Internal gutter overflow detail shown on plans		✓		
Pergola/porch framing detail shown on plans		✓		
Pergola/porch fixing detail shown on plans		✓		
Deck joists size, spacing & span		✓		
Saddle flashings fitted to deck joists		✓		
Deck stringer spaced off cladding min. 12mm		✓		
Fixing of deck barrier detail		✓		
Bracing	NZBC – B1 & B2			
Calculations incl. subfloor, decks	✓		✓	
Fixing details for framing and sheet material provided[21] (One copy for site folder)	✓			Record information (type, version, month and year) placed in site folder
Elements equally distributed throughout building		✓		Q: Where front wall wall bracing, to ensure no reduction to BU as a result of the proposed works.
Double sided bracing of exterior walls checked[22]		✓		
Interior walls: bracing limitations e.g. bathrooms[23]		✓		
Roof bracing shown on plans		✓		
Decks > 2m width bracing calculation provided		✓		
Interior	NZBC B2, E3 & H1			
Insulation				
Non Solid Construction	✓			(A) No reduction ok
Solid Timber Construction		✓		
Solid Construction		✓		4/1/151 No reduction to R values as a result of alteration.
Heated ceiling / wall / floor		✓		
Air noise: design, construction detail shown on plans		✓		
Air noise: producer statement – design received		✓		
Lighting & Ventilation	NZBC G4 & G7			G7/151
Light & visual awareness (incl. attic windows & skylights)	✓			
Ventilation (incl. all habitable spaces)[24]	✓			G4/151

RECEIVED
- 2 JUN 2015
BY:

40666

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments must be made for: 1. Non-complying items 2. Alternative solutions & how compliance with NZBC achieved
Wet Areas	NZBC B2 & E3			
Type of shower specified?		✓		Fully tiled floor & walls / tiled walls only / Acrylic cubicle
Flooring linings specified?		✓		Concrete / sealed timber / vinyl / Tiled
Wall linings specified		✓		Fibre cement / Plasterboard / Wet wall linings
Waterproofing membrane specification provided for interior situation?		✓		
Membrane junction details provided?		✓		
Waterproofing detail decks / balconies		✓		
Waterproofing membrane specification provided for exterior situation?		✓		
Glazing	NZBC F2			
Safety glazing specifications & details provided for: stairs balustrade, landing barriers, window seats, wet area screens & windows, balcony barriers etc.	✓			E2/AS1
Fire / smoke alarms	NZBC B1, C clauses			
Fireplace / solid fuel heater shown on plans[25]	✓			Manufacturers spec's provided. Wee Rad.
Manufacturers' specifications provided	✓			
Flue location shown on elevations[26]	✓			
Smoke alarms specified & shown on plans	✓			
Food preparation & prevention of contamination	NZBC B2 & E3			
Sink & preparation surfaces		✓		
Cooking facilities (Oven &/or hobs)		✓		
Food storage (Refrigerator)		✓		
Wall linings		✓		
Exterior	NZBC B1, B2 & E3			
E2 risk matrix assessment checked	✓			Minor infill of redundant door.
Exterior cladding(s) specified	✓			
System specification provided	✓			
Cavity system details (batten size, fixing & treatment)		✓		Fibre cement weatherboards.
Control joints shown on plans (solid plaster)		✓		
Vermin proofing	✓			
Internal & external corner details	✓			
Junction details of dissimilar materials	✓			
Bottom edge clearances to ground levels and/or decks	✓			E2/AS1
Brick veneer cavity, fixing & waterproofing detail		✓		
Double studs or blocking to openings for brick veneer ties		✓		
Brick veneer lintel bars		✓		
Brick veneer shelf angles		✓		

RECEIVED
- 2 JUN 2015
BY:

10660

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments **must** be made for: 1. **Non-complying** items 2. Alternative solutions & how compliance with NZBC achieved
Brick veneer panel widths				
Flashings	NZBC B2 & E3			
Windows & doors[27]				
Sill threshold flashing detail				
Soffitt/wall junction flashing detail				
Penetrations @ fixing points, pergolas, decks				
Penetrations of electrical cables				
Parapets - caps, walls, intersections, etc.				
Intersections, roof walls, dissimilar claddings				
Stairs & Barriers	NZBC B1, B2, D1, F2 & F4			
All stair construction detail shown on plans				
All balcony, stair & landing barrier detail shown on plans				
Stair min. tread max. rise specified				
Slip resistant surface (main entry decks & stairs)				
Conditions/Endorsements & Inspections entered onto computer system?	Yes/No			
Plumbing	NZBC G12,G13			**Plumbing Processing Officer:**
Schematic layout provided – waste/drain	Yes/No			
Discharge length of pipes / sizes				
Discharge pipes venting / AAV				
Soil stack layout provided				
Soil stack layout in relation to floor joist				
Soil stack venting				
Water supply	NZBC G2, G12 & H1			
Type of material				
Type of hot water supply				Open vented / valve vented / solar , existing
Hot water – distance to furthest fixture				H1
Tempered hot water				
Pipe Insulation				
Drainage	NZBC E1, E2 & G13			
Stormwater layout shown on plans				
Gutter & outfall sizes in relation to roof size				
Internal gutter / overflow				
Site stormwater/surface water collection & disposal detail (Erosion of sloping sites)				
Sewer layout				
Gulley traps/ overflow relief gullies (ORGs)				
Sewer venting				

No plumbing proposed

RECEIVED
- 2 JUN 2015
BY:

40666

BCA T-19c
Version:21
Date: 26/06/14

Processing Checklist – Small Addition

Item to be checked for compliance: with the Building Act 2004, NZBC and Approved Documents. Note: N/A = this item is not applicable to this application and has not been assessed	Plans/Specs Checked: Complies	N/A	Non-Complying	Details of Processing & Comments: Comments **must** be made for: 1. **Non-complying** items 2. Alternative solutions & how compliance with NZBC achieved
Effluent disposal	NZBC G13			
Septic tank & effluent disposal design		✓		Designer:
Effluent disposal site plan		✓		Type:
Proximity to water course(s) & buildings		✓		
Stormwater cut off drain above effluent bed shown on plans (Sloping sites)		✓		
Conditions/Endorsements & Inspections entered onto computer system?	Yes/No			
Structural – Application approved: [28]	Yes/No			**Officer:** **Date:** **Signed:**
Plumbing & Drainage - Application approved: [29]	Yes/No			**Officer:** **Date:** **Signed:**
Building Officer - Application approved for Granting: [30]	Yes/No			**Officer:** Geoff Richey **Date:** 2/6/15 **Signed:**

[1] General notes and observations
[2] Section 75 required
[3] >100kg LPG on site requires Location Test Certificate from an Environmental Risk Management Authority (ERMA) approved HSNO Test Certifier. Forward ontoEnvironmental Health – Dangerous Goods for review.
[4] Refer to Policy BLG-001p siting of proposed buildings & Policy BLG-002p when to require surveyor's certificates as a condition of a resource consent
[5] Sloping sites > 11°, refer to Tonkin Taylor report
[6] Ensure Design License Class is aplicable to building category (1, 2 or 3)
[7] If vehicle crossing application is required and has not yet been submitted, this results in a "non-compliance"
[8] Check that minimum pile heights and subfloor access will be satisfied, particle board floor required to be > 550mm above ground level
[9] Maximum 750mm from corners and ends. Spaced at 1.8m centres maximum
[10] Openings in foundations walls exceeding 300mm any direction require one D12 trimming bar each side
[11] The minimum treatment for all timber in contact with ground is H5.
[12] The minimum treatment for all timber in contact with ground is H5.
[13] The minimum treatment for all timber in contact with ground is H5.
[14] The minimum treatment for all timber in contact with ground is H5.
[15] Where proprietary lintels are specified, manufacturer's detail/specification tables copied & included on file.
[16] Construction detail of corner window showing cantilever beams required
[17] Check load path from beam supports for slab thickening, piles and enlarged pile footings
[18] Check set out detail for girder trusses, etc., loadings requiring slab thickenings or pads/piles & pile footings
[19] Copy placed in "green" folder for on site checking
[20] Check for air gap over ceiling insulation
[21] Details to be provided for framing fixing requirements and fixing of the sheet material on all types of bracing systems proposed, i.e. Gib, Ply, Strandboard, MDF, Hardibacker etc
[22] Double sided bracing e.g. GS2 & BLG braces not appropriate for exterior walls. Recessing of sheet bracing into wall framing on approved cavity systems.
[23] Check bracing limitations in appropriate bracing manual e.g. GIB bracing systems. GIB Winstone Bracing limitations prohibit the use of bracing elements behind showers & baths.
[24] Where opening windows do not provide adequate ventilation, detail of the alternative solution specified on plans
[25] Copy of manufacturer's specifications showing clearances, etc. Copy placed in "green" folder for on site checking
[26] Flue to be min of 1000mm above roof or when situated within 3m of ridge, height to be min of 600mm above ridge
[27] Head, jamb & sill flashing details
[28] If the decision is made by the Structural Engineer to refuse to approve the application, document the reasons for refusal in the notes section of this checklist
[29] If the decision is made by the Plumbing and Drainage Officer to refuse to approve the application, document the reasons for refusal in the notes section of this checklist
[30] If the decision is made by the Building Officer to refuse to approve the application for granting, document the reasons for refusal in the notes section of this checklist

32 The Square
Palmerston North 4410
Private Bag 11034
New Zealand

Telephone 00 64 6 356 8199
Fax 00 64 6 351 4471
Email info@pncc.govt.nz
Website www.pncc.govt.nz

PALMERSTON NORTH CITY COUNCIL

40660

Inspection - Weather Tightness

Form Name / Version:	Inspection - Weather Tightness (BCA T-30o) - v7
Reference Number:	REF150712847
Completed On:	04/08/2015 14:29
Completed By:	Ian.Culver@pncc.govt.nz
Consent Number:	40660
Site Address:	9-10 WILLS CRESCENT
Contact:	STEVENS, RONALD CRAIG
Contact Phone:	
Contact Email:	

Passed?	Yes





Inspection checklist

Builder:	Raewyn
Builder phone:	0274825600

Item to be inspected for compliance: with the Building Act 2004, NZBC and Approved Documents. Complies with approved plans and specifications. Note: N/A = this item is not applicable to this application and has not been assessed

Staged / Partial Inspection:	No

Details of Inspection &Comments: Comments must be made for: 1.Non-complying Items 2.Items/work deviates from approved documents 3. Detail alternative solution &how compliance achieved

Pass = Compliance with approved plans &documentation, N/A = Not applicable to this project, Fail = Non-compliance with approved plans &documentation.

Conditions of consent / site instructions read?	Yes
Comments	40660

Approved stamped site plan, foundation plan, cross section drawings, truss layout and fixing detail, specifications, engineer detail, floor plan, drainage plan, effluent disposal site plan and detail

Approved plans &specifications sighted?	Yes
Comments	
Approved plans include specific design detail?	Yes
Framing inspection passed?	N/A
Reg No: / LBP's licensed and Council notified?	Pass
Name:	John Greenlees
Number:	102584
Comments	
Site hazard board read	N/A
Special PPE required for this site?	Yes
Specify:	• safety footwear • high visibility jacket
Comments	

Cladding

Roof cladding in place	N/A
Roof flashings in place	N/A
Roof cladding temporary alternative solution	N/A

Lower storey

Building wrap / paper	N/A
Wall cladding type shown on plans	N/A
Wall cladding temporary alternative solution	N/A
Windows fitted	N/A
Flashings in place	Pass
Comments	
Flashings temporary alternative solution	N/A

Upper storeys

40660

Wall cladding type shown on plans	N/A
Wall cladding temporary alternative solution	N/A
Windows fitted	N/A
Flashings in place	Pass
Comments	
Flashing temporary alternative solution	N/A

Inspection signoff

Notes	John Greenlee on site, brackets fitted for new bay window
Amended plans required?	No
Amended specifications required?	No
Reinspection required?	No
Site instruction issued?	No
Weather Tightness inspection passed?	Yes
Email a copy of this inspection checklist?	No
Inspector name:	Ian Culver

Signature

32 The Square
Palmerston North 4410
Private Bag 11034
New Zealand

Telephone 00 64 6 356 8199
Fax 00 64 6 351 4471
Email info@pncc.govt.nz
Website www.pncc.govt.nz

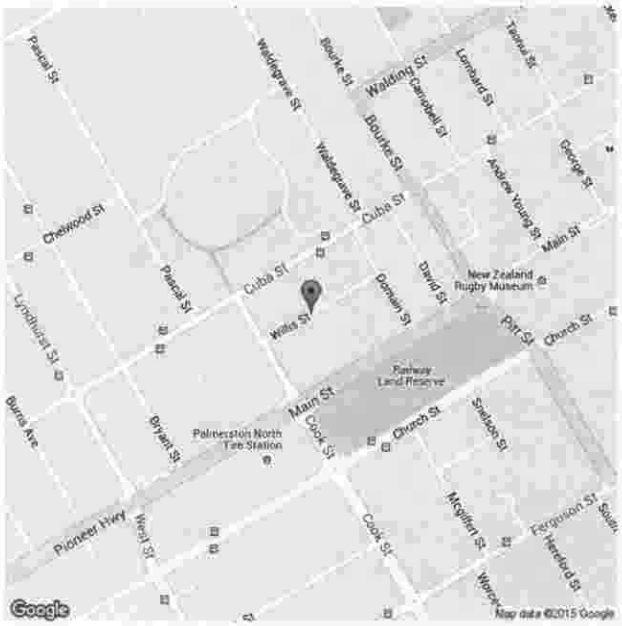
PALMERSTON NORTH CITY COUNCIL

Inspection - Building Final

40660

Form Name / Version:	Final - Inspection - Building (BCA T-30u) - v11
Reference Number:	REF151200223
Completed On:	04/12/2015 17:25
Completed By:	warren.kitchen@pncc.govt.nz
Consent Number:	40660
Site Address:	9-10 WILLS CRESCENT
Contact:	STEVENS, RONALD CRAIG
Contact Phone:	
Contact Email:	

Passed?	Yes



Inspection checklist

Builder:	John
Builder Phone:	0274 825 600
Staged / Partial Inspection:	No
Stamped approved plans and specification on site?	Yes
Comments	On site, Install new window and replace second window

Application for Code Compliance Certificate received	Yes
Comments	Received
Conditions of consent / site instructions read?	No
Comments	
Conditions of consent actioned?	Pass
Comments	
Plumbing Final inspection passed?	N/A
Reg No: / LBP's licensed and Council notified	Pass
Name:	John Greenlees
Number	102584
Comments	
Records of work received from all LBPs?	Pass
Comments	Builder only received
All required inspections passed	Pass
Comments	
Special PPE required for this site?	Yes
Specify:	• safety footwear • high visibility jacket
Comments	
Electrical certificate of compliance provided	N/A
Gas certificate of compliance provided	N/A
HSNO Certificate provided for storage of greater than 100kg LPG on site?	N/A
Producer Statements as specified on building consent conditions provided	N/A

40660

Exterior

Photos taken (all sides of the building, e.g. where ground levels are questionable or may be built up when landscaping is done)	Yes
Comments	Cladding scribers painting
Landscaping	N/A
Floor heights (in relation to ground levels)	Pass
Comments	Existing
Chimney / flue height in relation to surrounding ridges &roof	Pass
Comments	Checked at preline inspection
Vents in chimney (Jetmaster fires)	N/A

Wall cladding

Cladding painted &sealed	Pass
Comments	Painted walls
Gaps &cracks properly filled &sealed	Pass

Comments	
Facings &scribers fitted &sealed	Pass
Comments	Scribes in place
Warranty &guarantee certificates provided	N/A
Weep holes in brick clear	N/A
Vent gaps at top of brickwork	N/A
Lintel bars fitted	N/A

40660

Venting

Bathroom venting ducts exiting envelope	N/A
Ensuite venting ducts exiting envelope	N/A
Laundry venting ducts exiting envelope	N/A
Kitchen venting ducts exiting envelope	N/A

Subfloor

Base boards &vent grills subfloor area	N/A
Access subfloor area (with door)	N/A
Subfloor ground levels (subfloor ground level must not be lower than exterior ground levels &spoil in the subfloor must be raked out evenly)	N/A
Subfloor insulation	N/A
Ground vapour barrier laid in subfloor area:	N/A

Verandahs/Pergolas/Upper Level Decks

Post / beam fixings as per plans	N/A
Rafter / floor joist fixings as per plans	N/A
Rafter / joist / ribbon board connections to building envelope as per plans	N/A

Decks

Handrails to all stairs	N/A
Overflows to enclosed decks	N/A
Glass barriers	N/A
Barrier stability	N/A
Slip resistant surface (main entry decks)	N/A

Overhead Glazing

Branded safety glazing identified	N/A

40660

Retaining Walls/Excavations

Retaining walls site works completed	N/A
Barriers to retaining walls / site works	N/A
Retaining wall drains cleanout access (house)	N/A

Interior

Paint &sealing of interior completed	Yes
Comments	Painted walls
Safety glazing window seats, hinged doors, low level glass	Pass
Comments	In place confirmed
Windows (general glazing checked)	N/A
Camera Image (95238 bytes)	
Camera Image (153104 bytes)	

Fire – Solid fuel heater / open fireplace

Inspection checklist BCA T-30ac completed	No
Comments	Fire installed part of the consented checked by Barry Cardiff at preline inspection

Window Opening Restrictors (windows lower than 760mm from floor)

Ground floor windows	N/A
Upper level windows	N/A

40669

Kitchen

Painting &sealing of kitchen complete	N/A
Seal around bench complete	N/A
Splash protection around sink completed	N/A
Range hood vents to the exterior of the building	N/A

Smoke Alarms

Operational	Pass
Comments	1 x Alarm
Hush facility	Pass
Comments	
Manufactured to an approved standard	Pass
Comments	
Located as per plans	Pass
Comments	In hall

Stairs

Handrail fitted	N/A
Balustrade barrier	N/A
Head room (2m min)	N/A
Branded safety glazing identified	N/A
Min. tread, max. rise	N/A

Interior Balconies

Barrier stability	N/A

Bathroom

Wall paint &sealing complete	N/A
Impervious floor seal complete	N/A
Flexible seal to floor wall junctions (tiles)	N/A

Branded safety glazing identified	N/A
Seal around vanity, bath &shower	N/A
Splash protection complete	N/A
Ventilation	N/A

40660

Toilet

Wall paint &sealing complete	N/A
Impervious floor seal complete	N/A
Flexible seal to floor wall junctions (tiles)	N/A
Pan secured to floor	N/A
Seal around toilet	N/A
Seal around handbasin complete	N/A
Splash protection complete	N/A
Ventilation	N/A

Ensuite

Wall paint &sealing complete	N/A
Impervious floor seal complete	N/A
Flexible seal to floor wall junctions (tiles)	N/A
Branded safety glazing identified	N/A
Pan secured to floor	N/A
Seal around vanity, bath, shower &toilet	N/A
Splash protection complete	N/A
Ventilation	N/A

Ceiling Space

Access to space provided min 600 x 500mm	N/A
Insulation installed as per manufacturer's specifications	N/A
Insulation away from downlights &flues	N/A
Fan vent ducts connected	N/A

Laundry

Wall paint &sealing complete	N/A
Impervious floor sealed &complete	N/A
Flexible seal to floor wall junctions (tiles)	N/A
Seal around tub	N/A

Splash protection complete	N/A
Ventilation	N/A

40660

Vehicle Crossing

Crossing completed	N/A

Swimming Pool/Spa Pool

Pool inspection completed	N/A

Inspection signoff

Notes	Owners, John, Raewyn Greenlees on site This inspection is for removal of window, replace with bay window all as per plan, safety glass in place for window seat. Exterior cladding painted and scibers in place
Modification to consent required?	No
Agreement in writing obtained from owner / agent to modify consent?	N/A
Product warnings &bans	No
Amended specifications required?	No
Reinspection required?	No
Site instruction / NTF issued?	No
Building Final inspection passed?	Yes
Email a copy of this inspection checklist?	No

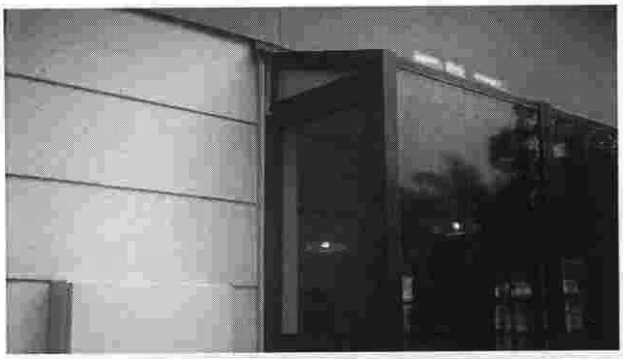
Camera Image (133358 bytes)



Camera Image (107154 bytes)



Camera Image (97221 bytes)



Camera Image (90713 bytes)



Inspector name:

Warren Ktchen

40660

Signature

WA Ktchen

Project File Sign Off Checklist

BCA T-33a
Ver: 15
Date: 01/12/14

Address: 10 Willis Cres. Building Consent No.: 40660.

Item to be checked for completion:	Yes	N/A	No	Comments:
Plumbing & Drainage Officer				
'As laid' Drainage plans received?		✓		
P&D conditions / endorsements signed off?		✓		
Total number of pans in the Building[1]				Number:
Plumbing & Drainage items signed off?	Officer: Signed:			Date:
Building Officer				
All conditions/endorsement of the consent signed off?	✓			
All mandatory inspections completed and SIN/NTF complied with?	✓			Postline N/A. Discussed with Ian Culver.
All LBP records of work provided cover full scope, on prescribed form and signed by registered LBP's **(Register checked)**	✓			
CS and CSS required?		✓		
Amendment to existing Compliance Schedule required?		✓		
Section 72, 75 or Memo of Encumbrance Certificates registered?		✓		
Waiver and modification process completed?		✓		
Property Issues forms been completed and registered?		✓		
Roads Assets Officer advised if new vehicle crossing is applicable and copy of project file sign off checklist forwarded?		✓		
WHRS claim applicable to BC and copy of Project File Sign Off Checklist forwarded to Claims Officer?		✓		
Planning Officer advised if work is a relocate and copy of project file sign off checklist forwarded?		✓		
Earthquake Prone Building Register – Provide confirmation of New Building Standard (NBS) % and summary of earthquake strengthening report to Information Services Officer		✓		
Swimming pool administration officer been advised and copy of inspection checklist forwarded?		✓		
All relevant information placed on the project file:				
• Building Consent Application	✓			
• PIM / CT / Consent Notices	✓			
• Certificates of work	✓			
• Processing Checklist	✓			Building + Planning.
• Plans & Specifications	✓			
• Engineer Design / Calculations		✓		
• Geotechnical Report		✓		
• Effluent System Design		✓		
• Truss Layout / Design Certificate		✓		
• Fire Design / Analysis		✓		
• NZFSDRU Summary		✓		
• Producer Statements (PS1/PS2)		✓		
• Producer Statement Acceptance Checklist completed?		✓		
• Further Information Requests / Correspondence	✓			
• Building Consent / ~~Amended BC~~'s	✓			
• Building and Planning Services Project sheet	✓			
• Section 77 Certificate		✓		
• Amendments (application/checklist)		✓		
• Inspection checklists as per BC			✓	4 on BC - 3 done (Postline N/A)
• NTF / SIN		✓		
• Energy Certificates		✓		
• Memoranda (Record of Building Work)	✓			
• As Laid Drainage Plans		✓		
• Manufacturers Certificates		✓		
• Producer Statements (PS3/PS4)		✓		

Project File Sign Off Checklist

BCA T-33a
Ver: 15
Date: 01/12/14

Item to be checked for completion:	Yes	N/A	No	Comments:
• Producer Statement Acceptance Checklist completed?		✓		
• Installer Declaration Acceptance Checklist completed?		✓		
• CPU application/checklist/certificate		✓		
• Waiver or modification documents		✓		
• Application for CCC	✓			
• Certification of specified systems from approved certifiers		✓		40669
• OTHER / Notes:		✓		
– Rotline Inspection not required Confirmed with Ian Culver.	✓			
– Fire inspected by Barry Cardiff	✓			
Building Officer – CCC application approved for issue?	✓			Officer: Ross Marshall Signed: R. Marshall Date: 22/12/15.
Team Leader				
Do mandatory inspections match number of inspections carried out?	✓			
4 paid 3 carried out Do additional inspection charges or refunds apply?	✓			**If yes:** Number of additional inspections to be charged: ___ @ $ ___ **If No:** Enter reason if no charge applies: Number of inspections for refund: 1
Development Contribution paid? N/A				**If no:** suspend CCC until payment received. **Date to suspend from:** ___
Team Leader Approved for issue?	✓			Officer: Leigh Sage Head of Building Services Signed: Date: 6 JAN 2016
Administration Officer				
Any changes to the street address? (check on City View)			✓	Holding parcel flat 1
File been amended if street address has changed?	✓	✓		
All inspections invoiced?	✓	✓		
All bonds or inspections refunded if applicable?		✓		
Development Contribution paid?	✓	✓		
All fees paid?	✓			
BC number stamped on ALL pages within file?	✓			
Copy plan showing means of escape, fire and smoke separations and exits from fire report for attachment to CS		✓		Voucher: 26/11/15
Create reminder notice for EQ re-assessment record and update of the NBS		✓		CR/note: 6/1/1645
Compliance Schedule (CS) and Compliance Schedule Statement (CSS) prepared?		✓		
CCC issued? Copy of signed CCC, CS & CSS (if applicable) and project file sign off checklist placed in project file.	✓			06/01/16.
Administration items signed off? J K Swadel	Officer: Signed: J. K. Swadel			Date: 04/01/16

[1] Urinals are treated as one pan.