

Scanning Quality Advice Note

Advice Note from: Power Business Services Scanning Team

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Wallace County Council

Inspector: M

File No.

Receipt No. 8406

Date Permit Issued 17/10/85

OWNER

Name D. J. Jenkins

Mailing Address 7 Horden St

TE ANAU

BUILDER

Name L M COOPER

Mailing Address 12 Pampolona St

TE ANAU

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No.

Street Name HENRY STREET

Town/District TE ANAU

Riding TE ANAU

LEGAL DESCRIPTION

Valuation Roll No. 3044/113/61

Lot D.P.

Section 846 Block 1

Survey District MANAPOURI

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

Erect New Dwelling.

FLOOR AREA

DWELLING UNITS

Whole
Sq. Metres

92.36 m

Number
Erected

ESTIMATED
VALUES
\$

Building
Plumbing
Drainage

42 750 00

3950 00

TOTAL

46 700 00

NATURE OF PERMIT (TICK BOX)

☐

NEW BUILDING
- exclude domestic garages and domestic outbuildings

☐

FOUNDATIONS ONLY

☐

ALTERED, REPAIRED, EXTENDED
- include conversions and resited buildings

☐

NEW CONSTRUCTION
OTHER THAN BUILDINGS - include demolitions

☒

DOMESTIC GARAGES
AND DOMESTIC OUTBUILDINGS

FEES APPLICABLE

Building Permit \$ 200 00
Street Damage Deposit \$
Building Research Levy .. \$ 47 00
Plumbing \$
Drainage \$
Sewer Connection \$

Water Connection \$ 60 00
Vehicle Crossing Levy ... \$
M.S. Plumbing \$
TOTAL: \$ 307 00

Receipt No. 8406
Date of Payment 8 / 10 / 85
Authorised Officer M. Lynch.

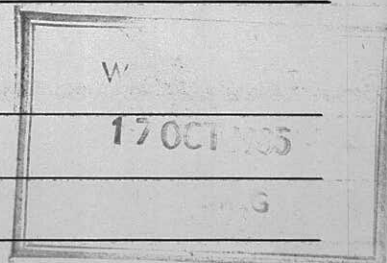
Special Conditions:

That the foundations and piles must comply fully with the requirements of N.Z.S. 3604 and the relevant parts of chapter 4.5 for anchor and braced piles and their connections to the piles. That the heating of the dwelling must comply with N.Z.S. 1900 chapter 4 and 4.5.2 and installation instructions must be provided before any unit is installed.

This permit is issued subject to the condition that Building Inspector's Office is notified one day prior to commencing foundations.

IT IS A CONDITION OF THIS PERMIT THAT ALL POWER AND TELEPHONE CONNECTIONS TO THE BUILDING ARE BY WAY OF UNDERGROUND CABLE

This Permit is issued subject to work complying in all respects to the requirements of Standard Code of Law 1900.



3044/113/61

61/5758

Te Anau.

APPLICATION NO: 85-490

PERMIT NO: D 4158

OWNER: Jenkins T.D.

BUILDER: L.M. Cooper

PLUMBER: James Plumbing P. & D. APP. NO: 85-250

WORK: En. Dwelling

SECTION AREA:

VALUE: \$42,750 + \$3,950 = \$ 46,700

DATE:

REMARKS: OK R&P 16/10/85 (P.D. O.K. 9.11.9. 16/10.85)

PERMIT ISSUED SUBJECT TO THE FOLLOWING REQUIREMENTS:

That the foundations and piles must comply fully with the requirements of N.Z.S. 3604 and the relevant parts of chapter 4.5. for anchor and braced piles and their connections to the piles.

That the Heating of the Dwelling must comply with N.Z.S 1900 ~~Chapter 4~~ Chapter 4 and 4.5.2. and Installation Instructions must be provided before any unit is installed.

- ps. {
- ① Foundation Notification.
 - ② Underground Power
 - ③ Standard Code Bylaws 1900.

OKed YUNCK
Heater + Pockets
Copy back
To the OWNER
7/2/86

WALLACE COUNTY COUNCIL

BUILDING PERMIT APPLICATION FORM

Building Inspector, NOTE: All Applications for Building Permits MUST be accompanied by appropriate applications and fees for any necessary Plumbing/Drainage work.

I, the Owner/Builder, hereby apply for permission to undertake the following work, according to detailed plans, elevations (site plan for township sections) and specifications of the building deposited herewith, in duplicate.

OWNER:

Name: T. J. JENKINS

Address: 7 HOLLAND ST TELHAR

BUILDER:

Name: L. M. COOPER

Address: 12 PEMBERTON ST TELHAR

THIS IS NOT A RECEIPT

Plumber: JAMES PLUMBING

Drainlayer: PETER MCGUIRE

NATURE		TYPE	
☒ New Building	☒ Dwelling	☐ Factory	
☐ Alterations/Additions	☐ Motel	☐ Shop	
☐ Conversions	☐ Haybarn	☐ Garage/Car Pt.	
☐ Demolition	☐ Implement Shed	☐ Flat	
	☐ Woolshed	☐ Other (Specify)	
Used By: Owner / Rented			
Estimated Date of Commencement: <u>21-10-85</u>		TYPE OF HEATING	
		Central Heating ☐	Coal Range ☐
Estimated Date of Completion: <u>DEC 85</u>		Free Standing Heater ☐	Open Fire ☒
Tick Appropriate Box			
Estimated Value of BUILDING WORK <u>\$ 42750-00</u>		Estimated Value of PLUMBING & DRAINAGE <u>\$ 3950-00</u> (Include Labour & Materials)	TOTAL COST <u>\$ 46700-00</u>
FEES DUE AS PER SEPARATE SCHEDULE			
BUILDING FEES:		SERVICE CHARGES:	
Permit Fee <u>\$ 200-00</u> ✓		Sewer Connection <u>\$ 70-00</u>	TOTAL
Research Levy <u>\$ 42-00</u> ✓		Stormwater Connection <u>\$ 00-00</u>	FEES
Inspection Fee <u>\$ 00-00</u>		Water Connection <u>\$ 60-00</u>	DUE
Mileage <u>\$ 00-00</u>		Vehicular Crossing <u>\$ 00-00</u>	
SUB-TOTAL <u>\$ 242-00</u> ✓		SUB-TOTAL <u>\$ 60-00</u>	<u>\$ 302</u>
FLOOR Dwelling <u>92.36² M</u>		APPLICANT'S SIGNATURE	
AREA Other _____		<u>[Signature]</u>	
		Date _____	

TO BE FILLED IN BY APPLICANT

Valuation Roll No.: 3044011361 Lot _____ D.P. _____
Section 846 Block 1
Survey District MANAPOURI Street HENRY STREET
Township TE ANAU Riding TE ANAU

FOR OFFICE USE

Permit No.

P. and D. Appl. No. 85-250

Date Issued: _____

Application No. 85-490

WALLACE COUNTY COUNCIL

BUILDING PERMIT APPLICATION FORM

NOTE: All Applications for Building Permits MUST be accompanied by appropriate applications and fees for any necessary Plumbing/Drainage work.

I, the Owner/Builder, hereby apply for permission to undertake the following work, according to detailed plans, elevations (site plan for township sections) and specifications of the building deposited herewith, in duplicate.

OWNER:	Name: _____
	Address: _____
BUILDER:	Name: _____
	Address: _____

THIS IS NOT A RECEIPT

NATURE		TYPE	
☒ New Building	☒ Dwelling	☐ Shop	☐ Factory
☐ Alterations/Additions	☐ Motel	☐ Garage/Car Pt	
☐ Conversions	☐ Hayrack	☐ Flat	
☐ Demolition	☐ Implement Shed	☐ Other (Specify)	
Used By: Owner / Rented			
Estimated Date of Completion: _____		TYPE OF HEATING	
Estimated Date of Commencement: _____		☐ Central Heating	
		☐ Coal Range	
		☒ Free Standing Heater	
		☐ Open Fire	
Tick Appropriate Box			
Estimated Value of BUILDING WORK: \$ 450.00		Estimated Value of PLUMBING & DRAINAGE: \$ 150.00	
		(Include Labour & Materials)	
SUB-TOTAL \$ 600.00		TOTAL COST \$ 600.00	
BUILDING FEES:		SERVICE CHARGES:	
Permit Fee \$ 50.00		Sewer Connection \$ 50.00	
Research Levy \$ 50.00		Stormwater Connection \$ 50.00	
Inspection Fee \$ 50.00		Water Connection \$ 50.00	
Miscellaneous \$ 50.00		Ventilator Crossing \$ 50.00	
SUB-TOTAL \$ 250.00		SUB-TOTAL \$ 250.00	
TOTAL \$ 850.00		TOTAL \$ 850.00	
FLOOR Dwelling		APPLICANT'S SIGNATURE	
AREA Other		Date	

TO BE FILLED IN BY APPLICANT

Valuation Roll No: _____	Section _____	Block _____
Township _____		
Survey District _____		
Riding _____		
WALLACE COUNTY		
8 OCT 1985		
WALLACE		
Permit No: _____	Application No: _____	Date Issued: _____
BUILDING PLUMBING & DRAINAGE		
- 8 OCT 1985		
WALLACE C.C.		

Private Bag,
OTAUA.

Phone 8069

Date ...20. August... '95.....

TO: Mr D. J. Jenkins
7 Horden St.
Te Anau.

Further to our discussion on Thursday 15th Aug re: the dwelling you propose to erect.

As various parts of the construction of the 'Initial Homes' vary from the 'lockwood' construction, a Design Certificate from a Registered Engineer, is hereby requested.

Also thermal calculations for the Building insulation materials must accompany your Building Permit application.

'Initial Homes' may supply these details on request.

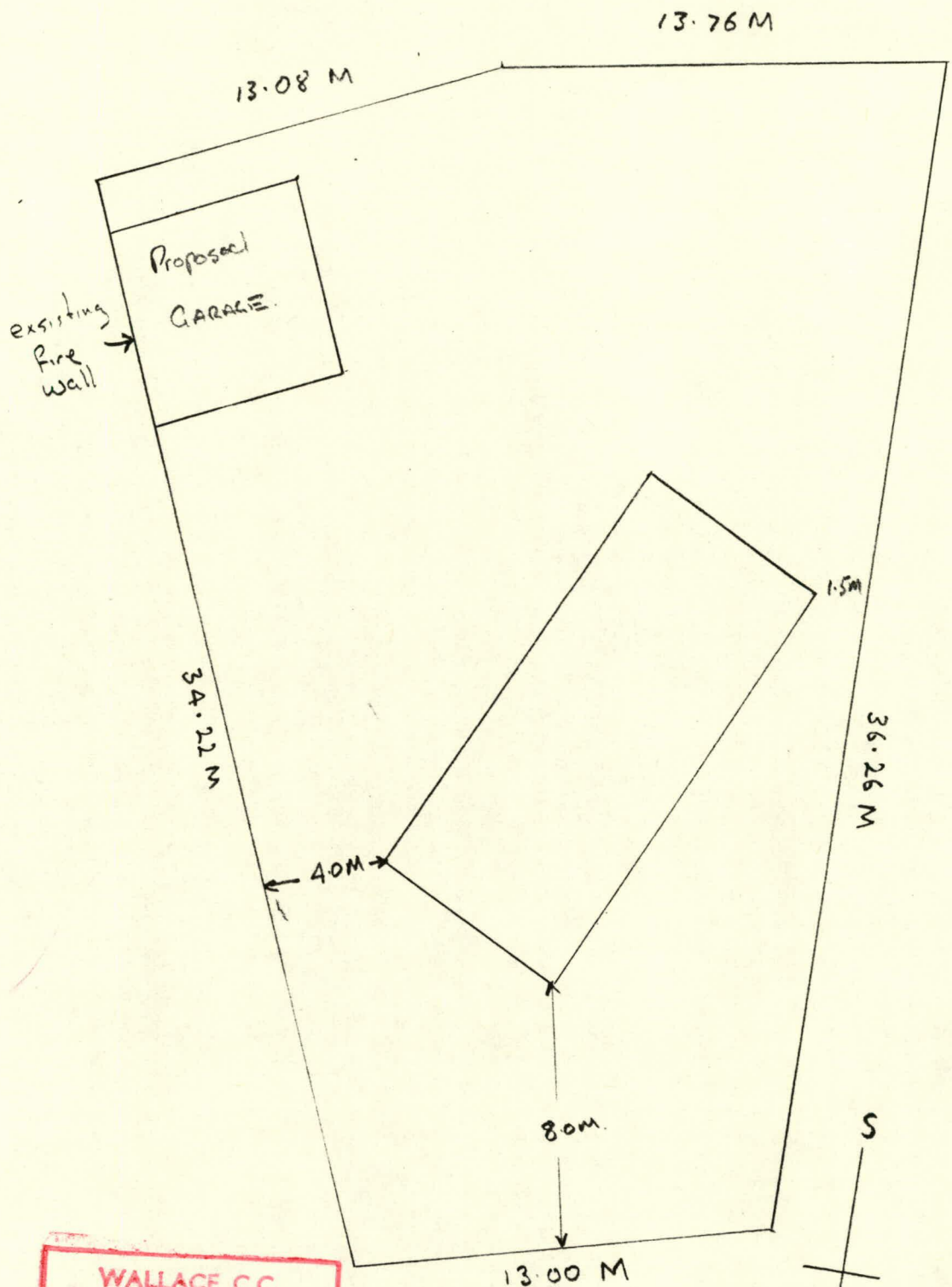
Signature K. J. Lloyd.....

Assistant Building Inspector

COMMENTS: _____

Held

Signature



Scale = 1cm = 2M

WALLACE C.C.
- 8 OCT 1985
BUILDING
PLUMBING & DRAINAGE

WALLACE COUNTY COUNCIL
R. S. Drake
Senior Building Inspector
Date *16/10/85*
Permit No. *04158*



SPECIFICATION INITIAL HOMES

Standard Specification for Initial Homes Components

(Specifications and Designs subject to alteration without notice)

1. BEARERS: Radiata Pine (No. 1 Framing Grade) double ex 150mm x 50mm gauged BORIC treated.
2. FLOOR JOISTS: Radiata Pine (No. 1 Framing Grade) ex 150mm x 50mm gauged BORIC treated.
3. FLOORING: 20mm thick, high density particle board, treated for weather resistance. Should particle board be unavailable other suitable material will be substituted.
4. NOGGINGS: Radiata Pine ex 100mm x 50mm and 150mm x 50mm gauged BORIC treated for floor noggings and roof truss noggings and bracing.
5. PERFORATED ALUMINIUM FOIL: Double sided, edge reinforced, underfloor foil insulation.
6. NAIL PLATES: For joining or connecting bearers, joists, noggings and battens where applicable.
7. INTERIOR AND EXTERIOR WALLS: Radiata Pine Initial Homes grade (43mm) ex 200 x 50mm BORIC treated kiln dried, fingerjointed where necessary, and shaped to a registered board design. This board is sealed in a water repellent solution.
8. CLEATS: 60mm long metal wall to floor fastening devices.
9. ALUMINIUM ALLOY INTERLOCKING EXTRUSIONS: (Refer to diagram).
10. TRUSS PLATE: Radiata Pine (No. 1 Framing Grade) ex 100 x 50mm gauged BORIC treated.
11. HEAD PACKER: Shaped packer for exterior joinery wall openings.
12. CAPPINGS: Radiata Pine Initial Homes grade ex 100mm x 50mm BORIC treated, kiln dried, fingerjointed where necessary to cap exposed ends of walls.
13. ALUMINIUM FOIL: Edge reinforced foil insulation for exterior wall application.
14. WALL AND CEILING BATTENS AND NOGGINGS: Radiata Pine (No. 2 Framing Grade) ex 50mm x 50mm or 50mm x 40mm gauged BORIC treated.
15. ROOF TRUSSES: Manufactured from Radiata Pine or Douglas Fir (No. 1 Framing Grade), gauged, BORIC treated. Engineer designed. Certificate available on application.
16. ROOF BATTENS: Radiata Pine (No. 1 Framing Grade) ex 75mm x 50mm gauged, BORIC treated.
17. "Z" NAILS: 4.9mm diameter nails to connect trusses to the truss plate.
18. TIERODS: 10mm diameter steel rods complete with washers and nuts, threaded one end.
19. NAILS: Various types and sizes, galvanised.
20. ROOF NETTING: (Galvanised).
21. BUILDING PAPER: For roof and exterior walls. A tar impregnated paper manufactured to prevent water ingress.
22. ROOF IRON: Roll formed iron 0.4mm galvanised roofing with edge lap and both ends primed complete with ridge caps and barge moulds.
23. BARGE AND SPOUTING BOARDS: Radiata Pine ex 200 x 25mm TANALITH treated kiln dried, fingerjointed, rebated, and primed.
24. EXTERIOR WALL SHEATHING: Smooth surface plank type wall cladding of composite material complete with fastening and sealing devices.
25. WINDOW HEAD FLASHING: Folded aluminium head flashing 0.5mm thick.
26. ANGLE PROFILE: 30mm x 30mm x 0.4mm folded galvanised steel profile.
27. ROOF OVERHANG LINING: Lining to conceal underside of roof overhangs complete with jointers.
28. EXTERIOR FINISHING SCOTIA: Radiata Pine (dressing grade) ex 50mm x 25mm gauged TANALITH treated kiln dried.
29. JOINERY: Aluminium joinery coated with a thermosetting polyester resin with added Olive pigmentation electrostatically applied, complete with timber liners Radiata Pine ex 150mm x 25mm BORIC treated kiln dried, fingerjointed or other suitable materials. All glass 4mm thick, door glass 5.5mm thick. Complete with exterior sealing compound. All hardware fitted (a,b, and c).
 - (a) Aluminium awning hung sashes (glass 4mm thick).
 - (b) Aluminium exterior sliding doors: either panel sliding (glass 5.5mm thick).
 - (c) Aluminium exterior outward swinging door (glass 5.5mm thick).
 - (d) Interior doors. Flush hollow core paint quality ready to hang doors in a Radiata Pine ex 100mm x 50mm BORIC treated, fingerjointed, timber frame. Hardware and furniture included.
30. SCRIBER: Radiata Pine ex 50mm x 10mm TANALITH treated kiln dried, fingerjointed, primed.

31. INTERIOR FINISHING MATERIALS

(a) Scotia, Skirting and Beading

(b) Shelving

(c) Shelf Battens

All (a), (b), and (c) Radiata Pine, kiln dried, fingerjointed.

(d) Wardrobe rails, 19mm diameter "powder coated" steel pipe complete with holders.

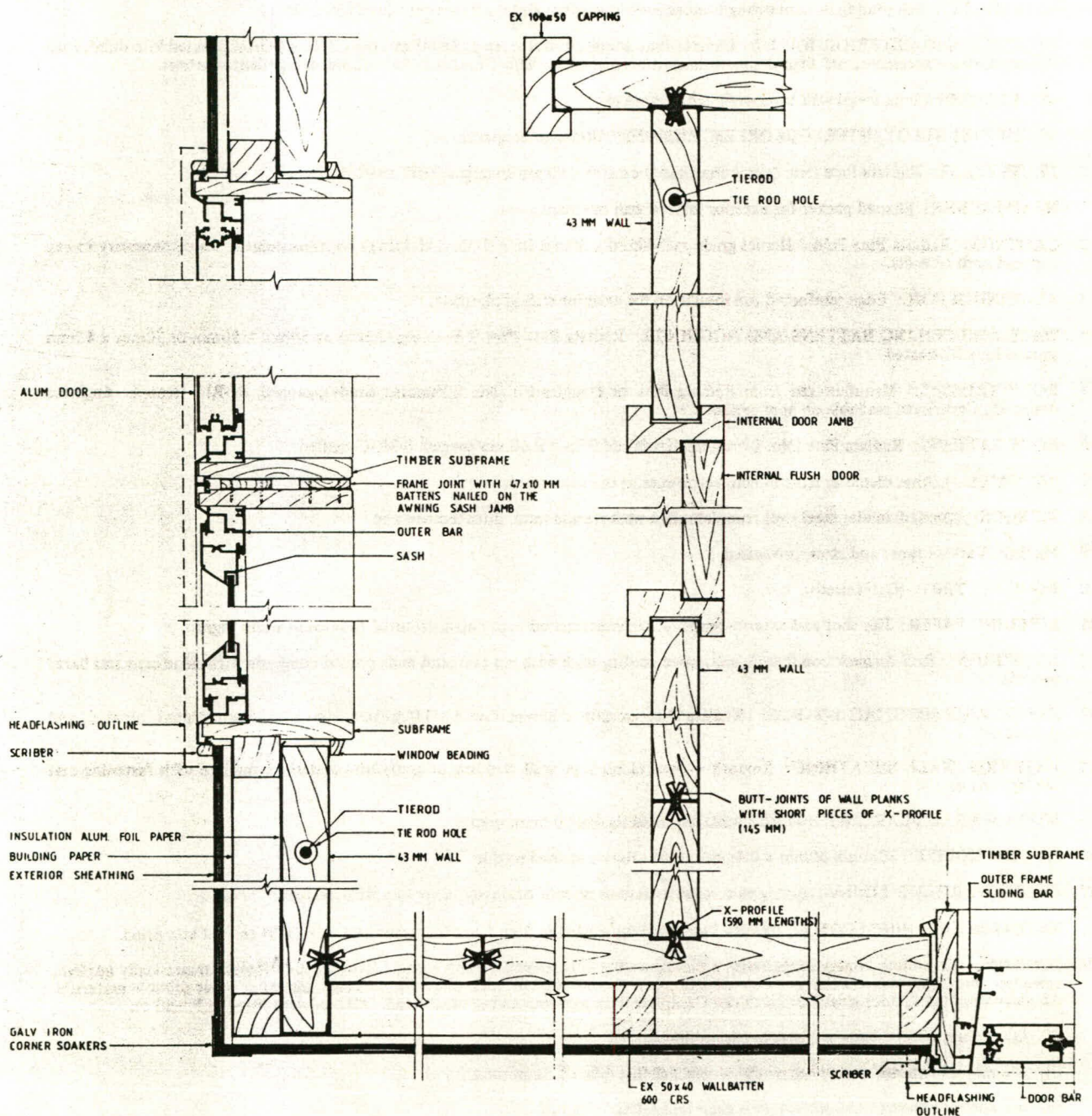
32. CEILING TILES: Rectangular preprimed wood fibre tiles.

33. BATH AND LAUNDRY TUB LININGS: Water resistant smooth surface wall boards complete with jointers, edge mouldings and adhesive.

34. INTERIOR FITTINGS: Bathroom vanity unit with top and bowl, laundry cupboard with stainless steel tub and kitchen sink bench with stainless steel top and kitchen fittings with prefinished tops. Carcasses are of paint quality with self closing hinges and timber knobs.

35. CEILING INSULATION: Glass wool fibre. Vapour barrier. Suitable materials will be substituted if glass wool fibre is unavailable.

HORIZONTAL CROSS SECTION OF 'INITIAL' COMPONENTS

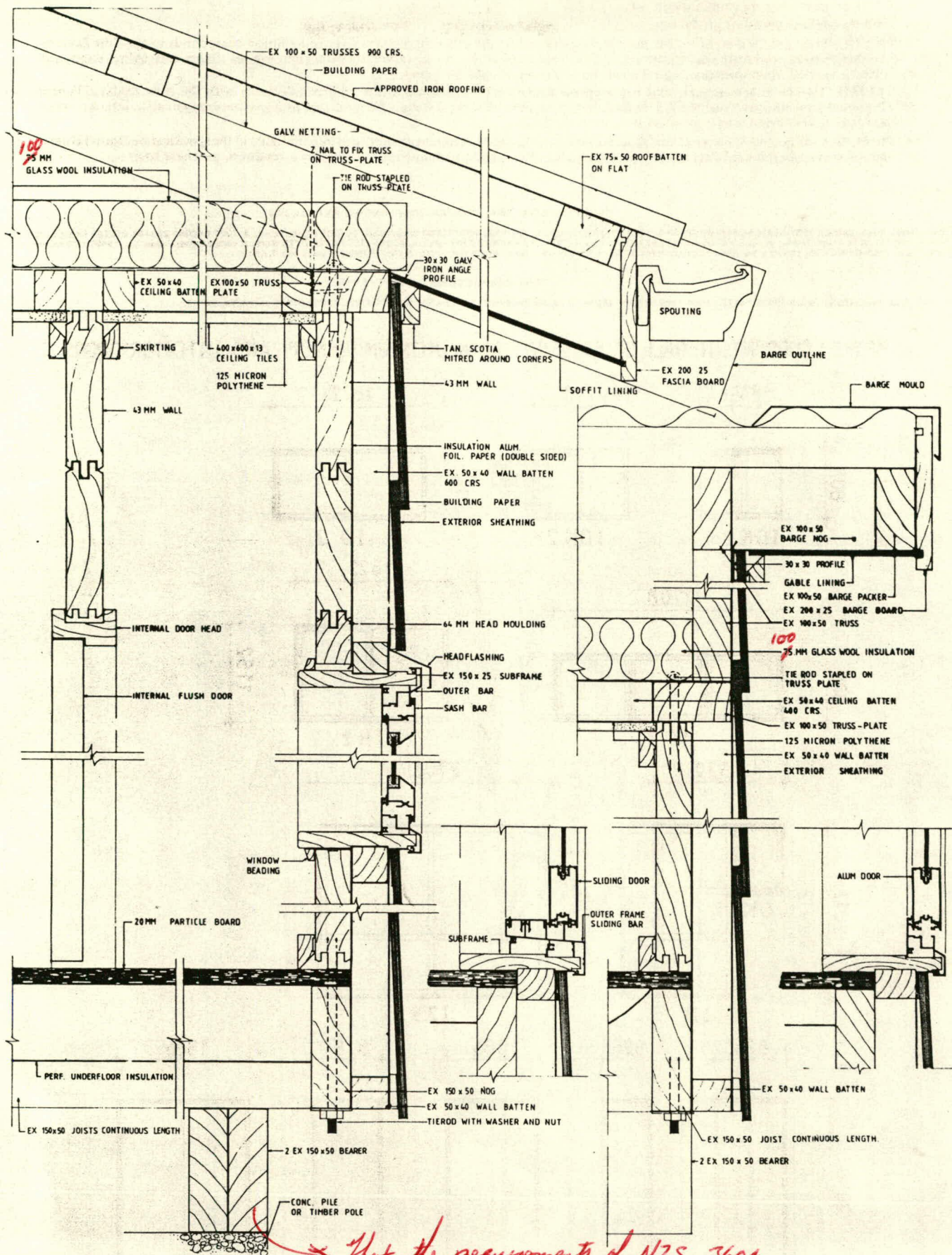


INTERLOCKING OF INITIAL COMPONENTS

27-6-83 HV
REV 15-7-83 HV 26-3-84 D.K.
1-8-83 HV

PATENTS & COPYRIGHTS RESERVED

VERTICAL CROSS SECTION OF 'INITIAL' COMPONENTS



INTERLOCKING OF INITIAL COMPONENTS

27-6-83 HV
REV: 15-7-83 HV
29-7-83 HV
28-2-86 R.C.

PATENTS & COPYRIGHTS RESERVED

The basic Initial system for the standard range of plans has been designed for wind speeds up to 50 metres per second as contained in NZS 3604 1981. Where Topography, elevation or degree of exposure result in higher wind speeds, special consideration must be allowed for in the design. These benefits are found in Initial Homes at no extra cost: . . .

1. Solid internal walls of natural timber (when finished with a synthetic varnish has an expected durability of a minimum of 25 years).
2. Reduced construction time.
3. Commercial grade aluminium joinery.
4. Factory quality controlled product.

BORIC: Treatment is a method of timber preservation applied by the diffusion process containing Boron compounds to the New Zealand Timber Preservation Authority Classification C8. This method of timber preservation is a protection against timber destroying fungus and insect attack in areas other than the tropical countries where white ants are found.

TANALITH: Treatment is multi-salt timber preservative applied under pressure to the timbers to comply with the New Zealand Timber Preservation Authority Specification C7. This method of treatment besides preventing fungal decay, protects timbers against the attack of white ants and timber destroying insects as found in tropical countries.

In general, the quality of material and standard finish for Initial Homes components will be within the limits of the specification. Initial Homes as a manufacturer, do not deal directly with the public, but distribute to appointed contractors on a vendor to purchase basis.

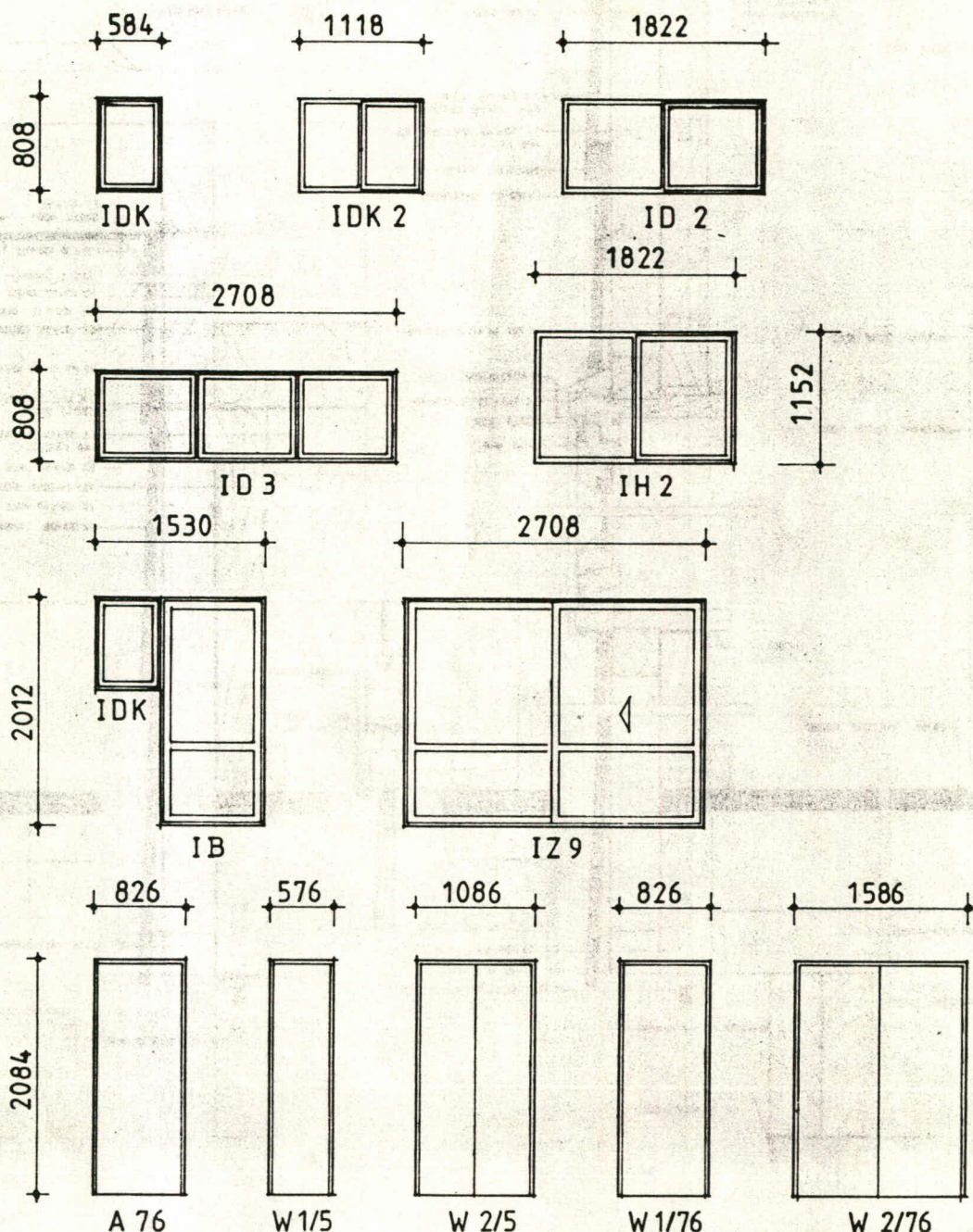
"PATENTED OR PATENT APPLICATIONS PENDING AS FOLLOWS"

New Zealand No. 14208-18331-164268-183758-168209-127724-184453-185995-187344-187345-183758 Sweden No. 7812657 Canada No. 317501-842461-963468-240763 Great Britain No. 48113/78-1113645 United States of America No. 967117-927333-3688460-3416275-3603063 Australia No. 42214-419774(32802/78 Vertical Partitioning) Japan No. 154578/78 Germany No. P28543604-G78372697 Norway No. 784209 Belgium No. 835998 France No. 36306 South Africa No. 66/3604 Malaya (see Great Britain)

"DESIGN REGISTRATION AS FOLLOWS"

New Zealand No. 10334-10335-10336-12499-11504-12504-18318-18348 Australia No. 47689-47688-47802-47801-47803-58607-53695 Japan No. 351179

KEY TO CURRENT OVERALL SIZES OF INITIAL ALUMINIUM JOINERY AND INTERIOR DOORS



DESIGN CERTIFICATE



To To Whom it May Concern

MEMBER OF
THE ASSOCIATION OF CONSULTING ENGINEERS
NEW ZEALAND

A Division of the New Zealand Institution of Engineers

I, John Kevin Spurr

being registered under the provisions of the Engineers Registration Act 1924 and currently holding an Annual Practising Certificate, hereby certify that I have supervised the design of, and the computations for Initial Homes Plans 101 to 105 inclusive.

House structures excluding foundations.

shown on the accompanying plan(s) prepared ^{by Initial Homes} ~~in my office~~, numbered Plan No 101 to 105 inclusive

dated 11/6/85 - 13/6/85 and Sheet 1 Rf 5287 - "Stiffener joining details"

dated Aug 83. and described in the accompanying specifications for a bearers, joists,

walls, tie rods, wall stiffeners and connections, roof truss connections
[TYPE OF STRUCTURE]

proposed to be erected for _____

on lot _____ Section _____ Deposited Plan No. _____

Located at _____

I further certify that the works defined above have been designed in accordance with sound and widely accepted engineering principles; that they have been designed to support the loads specified in _____

NZS 4203 as below. NZS 3604 for lateral stability

and further that I have ascertained to the best of my ability that the stresses and combinations of stresses in the various materials of construction under the above loads will not exceed the maxima to ensure the safety and stability of the structure if erected in accordance with these plans and specifications.

Various aspects of the design are in accord with the following relevant authorities _____

Earthquake A.

All floor joists 150x50 No 1 F continuous.

Maximum Basic Wind Speed 50m/s.

Maximum Design Wind Speed 33.5m/s $31 \times 52 = 0.67$.

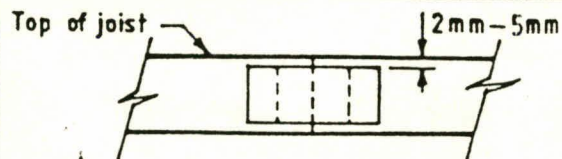
Signature: [Signature] Association Member Date 21/6/85.

Professional Qualifications BE MIPENZ MICE

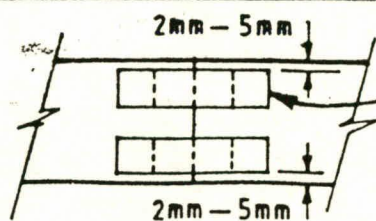
For and on behalf of Kelly Brown - Spurr

Address Box 23 Rotana.

This Design Certificate is valid only for a Building Permit application made within one year of the date of issue of this certificate.



TWO PLATES



FOUR PLATES
PER JOIST

All plates are Claw
plus Superclaw combination.

NOTES

- 1 All spans may be increased by 10% if joists are continuous over three or more supports
- 2 Joints must be square and firmly butted before applying nailplates
- 3 Splices must not be used where the timber cannot dry out to less than 18% moisture content during service
- 4 Do not use splice plates in timber treated with copper/chrome/arsenate preservatives
- 5 Minimum timber grade is No 1 Framing
- 6 A Technical report complying with the requirements of Appendix B of NZS 3604 is available on request.

JOIST SIZE mm.	MAXIMUM SIMPLY SUPPORTED SPAN		CLAW NAILPLATE SPLICE	MINIMUM DISTANCE BETWEEN SPLICES
	450mm centres	600mm centres		
100x50	1.75m	1.60m	2/10C3 $\frac{1}{2}$ +SC3	1.2m
125x50	2.20m	2.00m	4/10C2+SC2	1.5m
150x50	2.70m	2.40m	4/10C2+SC2	1.8m
200x50	3.60m	3.25m	4/10C2+SC2	2.4m
250x50	4.60m	4.15m	4/10C2 $\frac{1}{2}$ +SC2	3.1m
300x50	5.50m	5.00m	4/10C2 $\frac{1}{2}$ +SC2	3.7m

DESIGN LIVE LOAD = 1.5 kPa or 1.8 kN

pryda[®]

A.R. Turner & Co. (N.Z.) Ltd.

100 WILSON STREET, ONEKAWA 22-28 EILEEN ROAD, CLAYTON Sth
NEW ZEALAND • MELBOURNE 3169, AUSTRALIA
436 011 Telephone 5474574

CLAW FLOOR JOIST SPLICE CHART

SCALES	N.A.		DRG. No.
REVISION	2	APRIL 1981	
DESIGNED	G J COOPER [B.E., MNZIE, REG. ENG.]		SC-FJS/2
DRAWN	C N LEE		
CHECKED	<i>G.J. Cooper</i>		
DATE	9 APRIL 1981		

Specification of

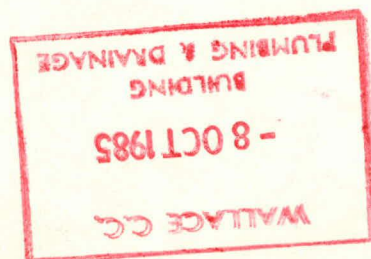
work to be done and materials to be used in the
erection and completion of a Lockwood house.

For Mr & Mrs D J JENKINS
on Lot Sec 846 D.P. MANAPOURI BL 1 Street No.
Address HENERY ST TE ANAU

The whole of the works to be carried out by:

L M COOPER.

Builders of fine homes using the world patented Lockwood system



Specification Index

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1 — Preliminary and General

The contractor shall provide all labour and materials, supply and maintain the required tools, plant, scaffolds, sheds, etc. All work shall be carried out in accordance with this specification together with all relevant plans and details and comply with the Local Body By-Laws. All work shall be in accordance with the NZS 3604 model building by-law except where overruled by Local Body By-Laws or special requirements by any lending institution which may be the mortgagee.

1. 1 *Plans and Specifications*

The working drawings with this specification and any special conditions attached shall form part of the contract. In the event of there being any difference between drawings and specifications the information in the specifications will take precedence.

Figured dimensions shall take precedence over scaled dimensions. Large scale drawings shall take precedence over small scale drawings.

1. 2 *Provide and Fix*

The words "provide" and "fix" where used separately shall be construed to mean "provide and fix", unless otherwise specified.

1. 3 *Insurance*

The contractor will insure the building for the full contract price against "Builders All Risk" in the names of the owner, the builder and the mortgagee (if any) for their respective rights and interests. This cover will be kept in force until the date of occupation.

1. 4 *Commencement of Work*

The commencement of work after signing of contract documents will be subject to the scheduled delivery of components from INITIAL Buildings Limited according to supply and demand as at that date.

1. 5 *Default and Bankruptcy*

The usual laws of bankruptcy and default apply to this contract.

1. 6 *Liens Act*

This contract is subject to the Wages Protection and Contractor's Liens Act 1939 and its amendments. Liens retention moneys shall be paid 31 days after the date of occupation irrespective of maintenance period.

1. 7 *Fluctuations in cost*

Should there be either a rise or fall in the price of labour and/or materials including the INITIAL components between the date of quotation and the date on which such labour is employed or such materials are procured for this contract then on the final settlement a compensating adjustment of the contract price shall be made and the Owner shall make additional payment on or receive such allowance from the contract price as such rise or fall shall cause.

1. 8 *Variations and extra work*

The contractor shall carry out variations or extra work requested by the employer providing,

- (a) that all such work is either authorised in writing by the owner or
- (b) if requested verbally by the owner, is confirmed immediately in writing by the contractor.
- (c) extras will be charged on a cost plus % basis unless quoted for.

1. 9 *Permits and Fees*

The contractor shall obtain all permits from, and pay all fees demanded by local authorities before commencement of work. This clause shall not apply for the arrangement and payment of the inspection and valuation by the lending institution (if any) in respect of progress payments. In the event of additional work being required by the local authority, this will be regarded as an extra to the contract and payments for these will be the responsibility of the owner.

1.10 *Vehicle Crossing*

Where a vehicle crossing is called for by the local authority, any fees arising shall be the responsibility of the owner and do not form part of the building contract.

1.12 *Material Specification*

Should any of the materials specified for this contract be unprocureable at the time of purchase, negotiations shall be made for the provision of substitutes. Any substitute must also be acceptable to the Local Authority. Any price variation will be credited or charged as an extra at the completion of the job. All materials placed on site by the contractor for the proposed building, remain the property of the contractor in the case of not being used. All waste material and boxing remain the property of the contractor.

1.13 *Maintenance*

The contractor shall maintain the work carried out for a period of 31 Days after completion of the contract. During that period the contractor shall make good all defects in any part of the trade to a workmanlike standard. Maintenance after stated period is entirely at the discretion of the contractor.

1.14 *P.C. Items*

The initials "PC" (Prime Cost) is the figure charged to the contractor. All items in the contract referred to as PC items are subject to a % markup for the handling and co-ordination of the same.

The PC Items allowed in this contract are as follows:—

- (1)
- (2)
- (3)
- (4)
- (5)
- (6)
- (7)
- (8)
- (9)
- (10)
- (11)
- (12)

1.15 *Clean up and make good*

The site is to be left clean at all times from accumulation of rubbish resulting from works, and provision is to be made for the regular removal of same from the site. Excavated soil is the responsibility of the Owner. The builder is responsible for leaving the house broom clean.

1.16 *Subcontractors*

All subcontractors shall be engaged and supervised by the building contractor except where prior arrangements are made in writing between contractor and employer. Every subcontractor jointly and separately shall collaborate, wait on, assist and render all necessary assistance to complementary trades. Additional work or adjustments must be made with the building contractor. Alterations made by the client with the subcontractor will not be the responsibility of the building contractor (refer to extra work).

The individual subcontracts as itemised in the specification are respectively the responsibility of the subcontractor under which they are listed.

Any subcontractor working on the contract without his own set of plans and specifications does so at his own risk, and errors must be rectified at his expense.

1.17 *Arbitration*

Any dispute arising between owner (employer) and contractor (builder) not soluble by the terms of his specification, shall be referred to arbitration within the meaning of the Arbitration Act of 1908. Occupation of the house cannot be taken until the dispute is settled. In the event of the owner taking occupation any claim to dispute is nullified.

1.18 *Exposed Sites*

The contractor will make every endeavour to ensure that the said structure is constructed in accordance with trade standards. Severely exposed sites shall receive special attention in respect to water and wind proofing, but shall not obligate the builder in extreme conditions. The owner indemnifies the contractor against any claims resulting from the effects of extreme weather conditions.

2 — Earthworks and Site Preparation

2. 1 *Setting Out*

The Owner shall be responsible for the locating and the clear flagging of all survey pegs before the setting out of the building on the site. The contractor will be responsible for the accurate setting out of all work to the dimensions shown on the drawings.

2. 2 *Levels*

Foundation heights shown on the plan are an approximation and should be checked on the site by the contractor. Any variation in the ground level requiring extra foundation will be charged as an extra.

2.3 *Ground conditions*

- (a) Foundations in this contract provide for solid bearing down to 300mm below ground surface level. Where soft, unsuitable or unusual strata or below ground conditions are encountered requiring additional depth of concrete and other foundation to provide a solid platform to build on and / or comply with Mortgagees and / or Local Authorities requirements, additional costs incurred shall be charged to the owner as an extra.
- (b) Where unusual ground conditions are found and special foundation works have to be carried out, they too shall be treated as an extra and have charged as above.

2. 4 *Temporary Services*

Water: a toby box should be on every section. In the event of water not being supplied any additional arrangements made by the contractor will be charged as an extra.

Electric Power: The contractor is responsible for the supply of temporary electric power to the building site.

2. 5 *Site preparation*

Must comply with NZS 3604 3.4 Excavation of the building site, if required, shall be arranged by the contractor and if the cost is not included in the contract, an extra charge will be made. The contractor is responsible for the supervision of the excavation and the progress of levels to establish the required platform.

For the purpose of this contract soil conditions are taken to solid ground approved by the Local Authority. It will be the client's responsibility to ensure that he or his representative is in attendance when excavations are carried out on the building site.

2. 6 *Clearing of site*

The owner shall arrange and pay charges for the clearing of the building site of vegetation, scrub, trees etc, which encroach on the building platform.

2. 7 *Site access*

All building sites should have access suitable for heavy vehicles. If this is not the case the responsibility of providing access rests with the owners and access should be supplied at their cost prior to commencement of building. However, if during the works it is necessary to provide hardfill for access, this will be handled by the contractor and charged to the owner accordingly. Where access is only available through an adjacent property, it shall be the responsibility of the owner to obtain prior approval from the owner of that property.

2. 8 *Footpath Damage*

The contractor will be responsible for any damage to Local Body footpaths and / or road crossings, resulting from any vehicle used by him or his sub-trades, or delivery vehicles of materials ordered by him, providing such crossings are constructed to an acceptable standard.

2. 9 *Registered Engineer*

If the lending authority or the Local Body Authority requests an Engineers report, instructions or calculations, then the costs for such services will be applied as an extra to the contract. Where the section has been filled, owner to supply engineers certificate of compaction.

2.10 *Earth fill*

The contractor shall not be liable for any damage or deterioration of any work to the building or to the site caused by or resulting from the inadequacy of earth fill or by the negligent application thereof, and the owner indemnifies the contractor against any claim against him by any person whatsoever for damages or expenses incurred by faulty earth fill aforesaid.

3 — Concretor — Slab Foundation

3. 1 *Concrete Slab Floors*

The concrete work consists of reinforced slab concrete floors to the house area, terraces, carport and associated ground beams and column pads as per plan.

3. 2 *Materials*

Aggregate shall be sharp, clean sand and crushed hard metal or river shingle. Materials and workmanship shall conform to all requirements of Appendix E NZS 3604.

3. 3 *Footings*

Mix aggregate thoroughly in a mechanical mixer for not less than two minutes, add sufficient water to give a stiff workable mixture. Concrete throughout shall be composed of 1 part cement to 4 parts of crushed metal and 2 parts of sand.

3. 4 *Concrete Slab*

Shall be 100mm thick reinforced with 665 H.R.C. mesh to middle of slab, lapped 200mm and secured at that height. Wire on mortar blocks or other approved means. All slab concrete shall be special grade air entrained concrete with 28 days crushing strength of 17.5 m.p.a. (as detailed in Appendix E NZS 3604) any concrete required to make good underground beams, due to excess excavation shall be as defined in Appendix E NZS 3604.

3. 5 *Reinforcing Steel*

Footings: Shall be shown on drawings, steel to conform to Appendix E NZS 3604 Hook rod-ends if detailed with U bends having internal radius of 4 bar diameters minimum and lapped 40 diameters minimum. Bend steel 600mm around all angles. All joints to be tied with 16 gauge black iron wire to secure and avoid displacement during the pouring of concrete.

3. 6 *Compaction*

Sand or clean white pumice shall be thoroughly watered and rolled to provide a substantial bed for the placing of the concrete slab.

3. 7 *Concrete Placing*

All the concrete shall be placed as close to its final position as possible, compacted and screeded level.

3. 8 *Damp-proof Course*

Shall be .010 black polythene or Moistop 737 concrete underlay laid on 30mm of compacted sand or clean white pumice on hardfill. The dampcourse will be properly lapped and all joints to be taped with black PVC adhesive tape. Care must be taken during pouring to prevent tears in the membrane. Any tears must be taped before the concrete is poured. Terrace and carport slabs do not require damp-course. The contractor shall notify the building inspector at the stage of placing concrete. The inspector will inspect, approve and authorise the pouring of the slab. All filling over 150mm in depth shall be charged as an extra to the contract.

3. 9 *Finishing*

All sizable slabs shall be screeded off level or to prescribed falls and then to be brought to a hard surface with approved power float or bull float equipment. Power floating shall be carefully timed to suit the setting rate of concrete and shall be such as to leave the surface perfectly dense and free from ridges, the surface to be accurate to 6mm in 3 metres.

3.10 *Building in*

Provide and build in all items and fixings necessary which may or may not be specified or shown on the drawings, but which are none the less necessary for the complete and proper execution of works.

Provision for trap for shower and / or bath

Box for the siting of the WC outlet

Box for all piping waste outlets

Recess footings for rebated sills

All plumbing to be laid in sand or clean white pumice prior to the laying of damp-proof course.

Service pipes to be laid in sand or clean white pumice for electrical wiring or telephone wire where required, prior to the laying of damp-proof course.

3A — Concretor — Pile Foundation

- 3A.1 *Materials*
Aggregate shall be sharp, clean sand crushed and hard metal or river shingle free from decomposable matter and of size to pass through a 25mm grid.
- 3A.2 *Mix*
Mix concrete thoroughly in a mechanical mixer for not less than two minutes; add sufficient water to give a stiff workable mixture. Concrete throughout shall be composed of 1 part cement to 4 parts of crushed metal and 2 parts of sand or builders mix.
- 3A.3 *Footings*
All pile footings shall not be less than 400mm x 400mm x 150mm of concrete, and must comply with the requirements of NZS 3604.4.
- 3A.4 *Piles*
All concrete piles to be 200mm x 200mm set not less than 300mm in the ground in concrete footings and must comply with the requirements of NZS 3604.4.
- 3A.4a All timber piles to be minimum 140 diameter and treated to T.P.A. C2, set in concrete footings to comply with NZS 3604.4.
- 3A.5 *Baseboards*
Baseboards will be Ex 100mm x 25mm tanalith treated pine dressed 4 sides. They will be fixed to piles with high-tensile nails and spacings of 20mm to allow for ventilation.
- 3A.6 *Trapdoor*
A trapdoor approximately 750mm wide will be provided in a convenient position to allow egress to the foundation. The door will be hung on two 100mm galvanised T hinges with galvanised screws. A 75mm galvanised padbolt will be the locking device.
- 3A.7 *Subfloor framing (if applicable)*
All jackstuds, braces, plates, stringers, bearers and associated fixings shall comply with NZS 3604.

3B — Concretor — Continuous Ring Foundation

- 3B.1 *Materials*
Aggregate shall be sharp, clean sand and crushed hard metal or river shingle, free from decomposable matter and of a size to pass through a 25mm grid.
- 3B.2 *Mix*
Mix concrete thoroughly in a mechanical mixer for not less than two minutes; add sufficient water to give a stiff workable mixture. Concrete throughout shall be composed of 1 part cement to 4 parts of crushed metal and 2 parts of sand, or builders mix.
- 3B.3 *Footings*
Must be built and reinforced in accordance with NZS 3604.
- 3B.4 *Base Walls*
Must be built and reinforced in accordance with NZS 3604.
- 3B.5 *Piles*
Interior piles to be 200mm x 200mm set not less than 300mm in the ground in concrete footings and must comply with the requirements of NZS 3604.
- 3B.6 *Trapdoor*
A trapdoor of approximately 750mm wide will be provided in a convenient position to allow egress to the foundation. The door will be hung on two 100mm galvanised T hinges with galvanised screws. A 75mm galvanised padbolt will be the locking device.
- 3B.7 *Subfloor Framing (if applicable)*
All jackstuds, braces, plates, stringers, bearers and associated fixings shall comply with NZS 3604: 1978 and subsequent amendments.

4 — Concrete Blocklaying

4. 1 *Materials and workmanship*

Sand shall be clean, sharp, washed in fresh water if necessary, free from all impurities and foreign substances such as shale, loam, or any organic matter. Exposed exterior blocks shall be approved sound vibrapac blocks to the shapes and sizes specified on the plan. All concrete blocks on exterior walls to be water-proof quality.

4. 2 *Mortar*

Mortar shall be composed of 1 part Portland cement and 4 parts of sand, with the addition of Onoda NN water-proofer or approved substitute in proportion of 6% of weight of cement. Mortar shall be mixed only in such quantities as can be used within half an hour after mixing. No batch shall be mixed with part of another batch and mortar which has obtained initial set shall not be retempered or reused. No joint on which a mortar bed is made shall be less than 38mm each way.

4. 3 *Blockwork*

All blockwork shall be made up in a first class manner and shall be properly co-ordinated with work of other trades. The work shall be maintained level around the building as far as is practical, but where it is necessary to run up part of the work in advance of the remainder, the courses shall be raked back. Toothing is not permitted. All angles at intersections shall be properly bonded not more than 10mm thick. Ensure that all blocks are cured before delivery. Stack all blocks on planks immediately after delivery to site and cover with approved water proof cover to keep blocks perfectly dry prior to use. DO NOT wet blocks before laying. Fill mortar joints tightly, weather struck on outside and struck slightly concave on inside. Build in timber grounds in all apertures, bolts, etc. as required by other trades.

4. 4 *Reinforcing*

Reinforcing to concrete blockwork to be as described in plan. Also to comply with NZSS 1900, and NZS 3604.

4. 5 *Joinery*

All apertures in blockwalls for joinery, or garage doors, are to be finished with rebate blocks to sides of aperture. Head to be fitted with slotted lintel blocks. Sills to have standard sill blocks.

4. 6 *Clean Blocks*

During the construction, and at completion, clean down all exposed block work and leave free from all stains and defects.

5 — Bricklayer

5. 1 *Materials*

Sand shall be clean, sharp, hard, fresh water or washed sand, free from all impurities and foreign substances, such as shale, loam, or organic matter. Cement plasticiser shall be Mortaflex Grade 1, used in accordance with manufacturer's instructions. Exposed exterior bricks shall be approved and sound throughout. Bricks and concrete stones to be as described in plan or as notified by Owner.

5. 2 *Mortar*

Mortar shall be composed of one part Portland cement and three parts of sand, with the addition of Mortaflex plasticiser. Mortar shall be mixed only in such quantities as can be used within one hour after mixing. No batch shall be mixed with part of another batch and mortar which has attained its initial set shall not be re-tempered or re-used. All joints shall be raked back at least 6mm whether or not they are to be pointed. All pointing shall be described fully on plans.

5. 3 *Brickwork*

All brickwork shall be made up in a first class manner and shall be properly co-ordinated with work of other trades. The work shall be maintained level around the building as far as is practical, but where it is necessary to run up part of the work in advance of the remainder the courses shall be raked back. Toothing will not be permitted. All angles at intersections shall be properly bonded not more than 10mm thick. All bricks to be well wetted and allowed partially to be dried out before using. All concrete stone to be kept dry away from damp ground prior to using.

5. 4 *Wall Tiles*

Brick veneer walls to be secured to wall framing with approved No. 8 galvanised wire tiles fixed to face of studs, without penetrating paper. They shall be built in at every fourth course and angles opening at end walls. Provide two ties to each alternate stud. Generally there will be a cavity of 40mm between brick walls and framing, giving a wall thickness over studs, cavity and brickwork of 230mm. Any additional width of brick is to cantilever over foundation.

5. 5 *Clean Bricks*

During the construction, and at completion, clean down all exposed brickwork with a weak muriatic acid solution, and leave free from stains and all defects.

5. 6 *Bricks Specification*

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Carpenter — INITIAL Method of Construction

6. 1 General

the contractor is qualified to construct and erect the particular techniques relevant to the INITIAL solid wall method of construction which are not normal in conventional building. In addition, normal, sound trade practice and workmanship must be applied as well as compliance with local by-laws for commencement and completion of the job in order to achieve the standard set by the manufacturers, INITIAL Buildings Limited. The method and detail of INITIAL erection must be in compliance with the INITIAL Assembly and Detail Manual.

6. 2 Materials

Refer to INITIAL specifications 1 - 16 for the list of materials as supplied ex factory, Rotorua.

6. 3 Breakages

Any breakages in transit or on site are the responsibility of the contractor. Structural components must be rectified or replaced before inserted in the INITIAL house.

6. 4 Technical Strength

Full engineering calculations are available on the INITIAL method of construction.

6. 5 Priming

Prime or stain all spouting boards, joints and abutting surfaces of exterior trim and joinery. Allow for priming all abutted and housed joints of all exterior timber works. Prime with white GP primer or suitable oilstain.

6. 6 Nails

All nails used in INITIAL construction must be galvanised.

6. 7 Floor sanding

The floors will be given one cut with an electric floor sander. Fine sanding and varnishing is not included in this contract.

6. 8 Making good and completion

Attend upon and make good in after all trades. On completion leave all in good condition.

6. 9 Decks

Construct timber decks as per plan using tanalised timber to standard INITIAL details.

6A — Insulation

Ceilings

6A.1 Standard INITIAL construction of ceilings:

Roofing material i.e. (iron, tiles, etc.) on building paper on ex 50 x 40 battens (on edge) on ex 40 x 75mm under purlins, on edge, on polythene, on building paper, on 43mm Lockwood sarking.

100mm glasswool blankets are to be laid between the top layer of building paper and the polythene vapour barrier.

For the purpose of compliance with NZS 4128P (type B wall construction), the calculated performance is $R = 3.0\text{m}^2 \text{C}^\circ/\text{W}$.

6A.2 Floors

Lay '422 Perforated Sisalation' over joists with a 100mm dish midspan between joists. Side laps of foil to be a minimum of 100mm.

Sisalation to be stapled to top of joists at 300mm maximum crs.

Fit foil tightly around floor nogs, service pipes etc. All damaged areas to be taped with 50mm wide polythene tape.

For the purposes of compliance with NZS 4218p, the calculated performance is $R = 1.5\text{m}^2 \text{C}^\circ/\text{W}$.

6B — Specification for INITIAL Plank Materials

6B. 1 General

For the most part NZS 2631: 1971 has been used as a basis for this specification but amended, where necessary, to suit availability, treatment processes, processing, supply length requirements, etc. of timber. It must always be understood that because of its solid nature *INITIAL* construction requires visual rather than strictly structural grade. For this reason a broad inclusion of natural defects (or features) is acceptable and, in fact, desirable.

6B. 2 Knots

- (a) Sound intergrown knots shall be permitted.
- (b) Sound tight partially intergrown knots shall be permitted, providing that the width of a knot does not exceed half the width of the piece.
- (c) Bark encased knots shall be permitted, providing they do not exceed 25mm in diameter, 1 of 25mm per metre or 2 of 12mm per metre.
- (d) Sound spike knots shall be permitted.
- (e) Sound intergrown knots in clusters shall be permitted.
- (f) Double spike knots shall be permitted.

6B. 3 Holes

Two cone stem holes or knot holes up to 12mm in diameter shall be permitted per metre. These could be at an angle to the surface of the piece. (Resulting in an oval hole).

6B. 4 Resin and Bark Pockets

Not greater than 5mm in width and not exceeding a combined length of 225mm per 3 metres.

6B. 5 Pith

1.500 metres of pith up to 20mm diameter shall be permitted. However, incidence of this defect is not to be excessive. Note: Any of the above could appear on the edge of any pieces.

6B. 6 Wane

Not permitted.

6B. 7 Stain

Medium stain, the difference in colour of which will be discernable if given a natural finish shall be permitted.

6B. 8 Crook

Shall not exceed 25mm in a piece 2.500 metres long. Shorter or longer pieces have the same curvature.

6B. 9 Bow

Shall not exceed 75mm in a piece 2.500m long. Shorter or longer pieces may have the same curvature.

6B.10 Checks

Surface checks: A large surface check with a perceptible opening not over 3 metres long shall be permitted.
Knot Checks: Not to exceed 10mm wide.

6B.11 Cup

A cup of 6mm across the piece shall be permitted.

6B.12 Sloping and Cross Grain

Not restricted.

6B.13 Aluminium sheathing to exterior 62mm laminated planks

Colour: A colour variation which is perceptible at a distance up to 23 metres shall be permitted. Unpainted Aluminium Sheathing shall not be permitted.

Blemishes: Blemishes apparent in the Aluminium Sheathing which are due to the surface of the timber to which the Aluminium is laminated shall be permitted.

Holes: Not permitted.

The latest edition of the Standard 1 - 16 specification supplied by Lockwood Buildings Ltd shall be read in conjunction with this section of the specification.

7 — Joinery

7. 1 *Workmanship*

Construct everything as detailed in a workmanlike manner. All skirtings, scotias, architraves, beads etc. are to be properly mitred together not butted. Nails, brads or screws shall be small as is consistent with practical requirements and shall be carefully punched or countersunk. Stop holes with approved stopping. No hammer bruises or other marks may show on finished work.

7. 2 *Exterior Joinery*

Exterior joinery will be generally first quality aluminium extrusion finished with a baked enamel paint surface. Powder coated (see *INITIAL* specifications). Any exterior timber hanging doors will be generally hung on two x 100 pin galvanised butts with 50mm solid rebated and throated frames and 75mm weather grooved sills. In the case of the door hanging inwards a special aluminium draught excluder shall be fitted.

All aluminium joinery will be fitted with rebated jamb liners to provide a housed finish obviating the use of architraves. Joinery to concrete blockwork shall be aluminium unless otherwise stated.

7. 3 *Interior Joinery*

Interior doors shall be stock flush hollow core veneer finished of an approved make, hung with 1½ pair of 100mm loose pins BS butts on ex 100 x 50 rebated solid jambs. The jambs will be rebated obviating the use of architraves. All door furniture will be fitted centrally on door 1 metre from the floor. Rebated liners will be used throughout the house in the case of sliding doors, linen cupboard doors, wardrobe doors and any other apertures.

7. 4 *Details Linings*

Bathrooms — Shower

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7. 5 *Hardware*

In general the hardware will be as supplied by *INITIAL* Buildings Ltd, unless a PC item has been stated. If a PC item has been stated the type of hardware is to be nominated by the client, and the cost of fitting same will be charged as an extra to the contract.

7. 6 *Hot Water Cupboard*

The storage area in the hot water cupboard is to be provided with 5 evenly spaced shelves using slats ex 100mm x 25mm with 12mm spacing.

7. 7 *Wardrobes, Coat Cupboards etc.*

Frame wardrobe, linen, coats etc shown with linings and doors as previously specified. Fix a 19mm pre-finished pipe at 1.500 metres from the floor. Install a 300mm x 25mm hat shelf at 1.700 metres from the floor.

7. 8 *Glazier*

All glass should be approved manufacture, and shall be cut with allowance for expansion, embedded, sprigged and back puttied (if applicable).

Sashes under .650 m² in 3mm glass.

Glaze all sashes above .650m² in 4mm glass except where specified as plate, and then 6mm drawn glass will be used. All service rooms such as bath and WC will be glazed in obscure glass, pattern as supplied by Lockwood Buildings Ltd.

7. 9 *Fittings*

Provide all fittings shown, true to level, plumb and square. Shelves shall be ex 150mm x 25mm with full cross support at intervals of not greater than 900mm.

Kitchen Units	Carcasses	Doors
	Drawer fronts	
	Drawer handles	
	Door Handles	
	Door Hinges	
Sink Bench	Door Catches	
	Type	Colour
Dresser Tops	Size	No. of Bowls
		Colour
Laundry Tub	No.	Type
Vanity Unit	Top	Colour
	Basin	Colour

Special Joinery Requirements

8A — Roofer — Decramastic Tiles

- 8A.1

Stone Chip Roofing Tiles

Roof construction to be as shown on the plans; all roofing materials to be supplied and fixed by approved roofing contractor.
Lay building paper over the whole of the roof area with a minimum laps of 150mm at all joints.
Make rod for tile module and fix 45mm x 2.mm Std galvanised flat head nails, position one at each end and one in the centre. Ridge board to be ex 25mm timber fixed 90mm above rafters to allow fixing for ridge caps. All tiles to be cut and folded into valleys to manufacturers specifications.
- 8A.2

Ridge Cap

Vertical upstand of tiles to be fixed to ridge board and capped with ridge cap. Straighten cap under line and nail at approximately 600mm centres.
- 8A.3

Barge Rolls

All tiles to be finished against barge boards per manufacturers requirements. Joins to have 300mm lap. Fixing to be approximately 600mm intervals. Fold edge of barge cap into contour of tiles.
- 8A.4

Cleaning up

The manufacturer supply tar and chips for the touching up of damaged tiles or dislodged chip during the course of erection.
- 8A.5

Tile Specification

As supplied by manufacturer.
- 8A.6

Tile Maker
- 8A.7

Tile Colour

8B — Roofer — Galvanised Deck Roofing

- 8B.1

Galvanised Deck Roofing

The roof decking shall be continuous galvanised roofing in one length. The decking shall be hot dipped galvanised and the gauge of iron will be governed by the span required on the plan. The underlisted calculations are applicable on a multispans roof:

Galvanised Steel.	(.8mm) span	2.100 metres
	(.6mm) span	1.750 metres
	(.5mm) span	1.400 metres
- 8B.2

General

Roofing will be supplied with the necessary fixing clips supplied by the manufacturer.
- 8B.3

Fixing

The fixing clip will be nailed directly to the roof battens and the trays interlock to manufacturers specification. This work will be done by the roofing contractor.
- 8B.4

Flashings

Flashings, spoutings, and downpipes for the whole of the roof are not the responsibility of the roofer, but are covered under the plumbing specification.
- 8B.5

Type

..... type shall be fixed in accordance with manufacturers recommendations.

9 — Plumbing

9. 1 *General*

Provide all materials, labour and plant necessary to complete the work set out in the plans and specifications in accordance with best trade practice and the requirements of local authorities.

The work shall be carried out by a competent tradesman possessing the qualifications as laid down in specification 15 and 16 of the NZSS 671 using materials consistent with sound trade practice, and in no case inferior to any requirements of the section 1 and sections 26 - 91 inclusive of NZSS 671.

The plumber shall give all necessary notices to the local authority and shall uplift the permit before starting work. Water pipes and tubes shall be set out in straight runs of even gradients, avoiding all places where airlocks are likely to occur. Use easy bends and unless avoidable, elbow fittings are not to be used. Copper tubing is to be secured in a position by copper straps. All piping where practical to be concealed. All work shall be left in a thoroughly sound and watertight condition or in a perfect working order as the case may be.

In the event of any piping above the floor being exposed to view, such piping is to be 12.7 dia. chrome plate on copper pipe with chrome fittings where visible.

9. 2 *Flashings*

Flash as necessary to render building watertight. All flashings shall be accurately fitted to work and shall be machine bent and cut in lengths as long as possible. All joints shall be well lapped and fixed with 19mm flat head galvanised nails at 450mm centres. Flashings shall be manufactured from materials that will not react adversely to adjacent materials.

9. 3 *Valleys*

Valleys shall be formed out of .6mm galvanised iron to form a 100mm x 50mm trough at intersection of angle roofs.

9. 4 *Spouting and Downpipes*

Fit spouting and downpipes to manufacturers specifications and or/in compliance with regulations set down by the local specifying authority. All spouting shall be fixed straight and with even falls and downpipes shall be positioned where marked on the plan.

9. 5 *Vents and soil stacks*

Soil stacks and back vents to wastes shall be approved rigid PVC. Terminal vents shall be rigid PVC or fibrolite of approved size and quality. Allow for all back vents as required and install soil pipes and vents in accordance with the appropriate Code of Practice and the Manufacturer's instructions. Where possible vent pipes and soil stacks shall be concealed.

9. 6 *Wastes*

Join WC pan to drain above level of the floor with a spun yarn ring sealed with mastic or other approved material with will provide a non rigid gas tight joint. Fix basin with 32mm chromium plated brass traps and waste pipes to floor level with an approved floor flange. Bath, shower and wash tub wastes shall be 38mm dia. Sink wastes shall not be less than 38mm diam. All waste pipes throughout the contract, other than exposed will be PVC piping or as approved by the local authority.

9. 7 *Hose Taps*

Supply and fit two brass hose cocks per dwelling in the position shown on the plan.

9. 8 *Cold Water Supply*

Use copper where in concrete slab floor. Lay cold water supply from supply point in 12.7mm diameter PVC pipe buried not less than 600mm. Where supply point exceeds 10m additional charge will apply. Take 12.7mm PVC branches to bath, basin, sink, vanity, each compartment of wash tubs, WC flushing cisterns and to exterior hose taps. Connect storage tank and to hot water cylinder with 12.7mm PVC pipe.

9. 9 *Hot Water Supply*

Supply and install above floor level a general purpose hot water cylinder. From cylinder connect in 12.7mm to laundry tub, shower, bath, basin and sink bench. Run pipes in copper as for cold water and completely cover with approved spirally wound "Plumbers Felt" tightly wrapped and secured in position with .75mm copper wire. Alternately use PVC piping.

9.10 *Pressure*

Except where a dual gas or electric system is to be installed or a supply tank is required, and where permitted by local authority, install an approved pressure reducing valve and/or pressure relief valve in accordance with the manufacturers instructions.

9.11 *Supply Tank*

Where a supply tank is to be installed provide an approved high density polythene tank 70 litre capacity complete with lid, tray and overflow pipe with birdstop outlet. Exhaust vent pipe from cylinders generally shall be carried through the roof, and shall not terminate in plastic supply tanks.

9.12 *Sanitary Fittings*

As shown on floor plan and schedule. Fixed cistern WC pan shall be white glazed earthenware fitted with a seat.

9.13 *Fixing*

The sinktop, tub, and all vanity units will be supplied by the joiner and the plumber is responsible for connecting only.

The following items are included in the contract:

Sink Taps	Type	
Hot water cylinder	Type	Capacity
Laundry Taps	Type	
Owners Washing Machine	Type	Taps & Waste
Bath	Type	Size
Handbasin	Type	
	Basin fitting	
Vanity Taps	Type	
Shower	Type	Size
Shower Mixer	Type	Rose
Spouting & Downpipes	Type	
Heating	Type	
Toilet	Cistern	Colour
Special plumbing requirements		
		
		
		
		
		

10 — Drainlayer

10. 1 Preliminary

The whole of the drainage work shall be carried out in accordance with the by-laws of the local authority, and to the satisfaction of the local authority inspector.

10. 2 General

Provide all fittings necessary to complete the work and lay all drains to an even and consistent fall not less than 1 in 40.

10. 3 Sanitary Fittings

Fit WC pan to sewer connections.
Connect up vent pipes fixed by the plumber.

10. 4 Sewer

Drains shall be laid in a straight line and to even gradients, properly cleaned out as the work proceeds. Fix 100mm GEW gulley traps to take wastes and 100mm bends to take soil pipe, terminal vent etc. Gulley traps shall have concrete curbs and CI gratings. All work to be done to the Local Authorities standard.

10. 5 Materials

Pipes shall be jointed to the local authority requirements. Bends and gulley traps to be haunched on a 100cm concrete pad. Provide minimum of 300mm of cover over highest point of drains, or alternatively provide 75mm concrete cover over top of drains.

10. 6 Septic Tank (if applicable)

Build a rectangular 2.724 litres septic tank in concrete to the requirements of the NZSS 758 of 1951. Alternatively an approved precast tank may be used.

10. 7 Effluent Drain (if applicable)

From the outlet of the septic tank lay field tile drain to an even grade. Lay drain on a 150mm bed of 75mm to 40mm clean shingle, discharging into a soakpit. Alternatively a 900mm diameter soakhole may be used.

10. 8 Stormwater

From all downpipes, take stormwater drains to 600mm diameter soak holes. Or to street channel or stormwater connection in compliance with Local Authority requirements.

10. 9 Sewerage and Stormwater

PC sum of allowed for this work.
(Refer also to PC Sums - Page 4)

11 — Electrical Work

11. 1 *General*

Provide all materials, labour and plant necessary to complete the work set out in the Plans and Specifications in accordance with best trade practice, the wiring regulations 1969, and to the satisfaction of the Local Authorities. Obtain the necessary permits from the supply authority prior to commencing work.

11. 2 *Mains*

Arrange with supply authority to make connection to house. Maximum distance allowed for overhead wiring of metres, or maximum for underground of metres. In the event of the mains exceeding the stated distance the extra charge will be made direct to the client by the supply authority.

11. 3 *Switchboard*

Provide and fix meterboard where indicated on drawings, complete with all necessary fittings, and enclose in galvanised iron case with glazed cover. Provide and fix internal fuseboard complete with cover where indicated on drawings.

11. 4 *Lights*

Provide light points complete with lamps and shades as indicated on the lighting plan. Provide 100 watt lamps in the living and dining rooms and 75 watt lamps at all other points. In the case of hanging lights the socket is to be 2200mm from the floor. (Or in general about that height for sloping ceilings.) In the case of wall lights the socket is to occur at 1550mm high. External wall lights are to be placed at 1800mm high.

11. 5 *Switches*

11 switches throughout the house are to be placed at 1 metre high from the floor.

11. 6 *Thermostats*

All thermostats are to be placed 1.650 metres high from the floor throughout the house.

11. 7 *Power Points*

Provide power points at positions shown. Allow for 10 amp 3 pin flush power sockets fixed 300mm above floor level.

11. 8 *Materials*

All switches and plugs shall be flush type, ring grip rocker type, black in colour. All cables shall be CMA brand or similar approved.

11. 9 *Aerial and Earth Points*

Television aerial connection with 3.600 metre of spare aerial flex to roof peak shall be provided if specially requested and allowed for in contract price.

11.10 *Electrical Specification*

The understated are included within this contract:

No. of Single Points	5	Type of Stove	
No. of Double Points	13	Under-sink HWC	
No. of Shaving Points	1	Dishwasher	
No. of Lights	12	Extraction Fan/Rangehood	
No. of Fluorescent Tubes	1	Waste Disposal Unit	
No. of Outside Lights — PDL Fittings	2	Electrical Heating	
No. of Two Way Switches	4	TV or Earth/Aerial Points	

Other Special Requirements

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11.11 *Electric Cooker*

The electric cooker is normally included as a PC item and is supplied, installed, maintained by the electrician under guarantee. In the event of the electrician not supplying the electric cooker, an additional charge of will be made for the installation of the same. (Split level cooker extra installation cost — i.e. total)

11.12 *Light Fittings*

Light fittings are not included in the contract price. The contract allows for a white plastic shade and bulb to all lamp holders. If the client wishes to have the electrician connect their fittings, negotiations must be made with the contractor at an early stage. Payment for the same will be made separate and not as part of the contract.

12 — Painting

12. 1 *Extent of Work*

The work as specified to be finished in the particular material or manner, and shall mean the provision of all preparatory work necessary to ensure proper finish, whether expressly mentioned or not. Leave everything clean at completion, with all debris and paint spots removed. Clean all glass.

12. 2 *Relation to other trades*

Inspect the work of other trades upon which material is to be applied and report any defect to the general contractor. Work shall not proceed until a satisfactory surface has been obtained. Failure to examine report will be construed as acceptance that the preparatory work is satisfactory.

12. 3 *Workmanship*

All work shall be done by a competent tradesman and finished to the contractors specification. All surfaces for the paint shall be suitably prepared. All permanently covered surfaces shall be primed before erection. All work shall be free from brush marks.

12. 4 *Materials*

No painting, enamelling, distempering or similar finishing shall be done on concrete, plaster or similar surfaces unless and until such surfaces are in a suitable condition to receive the finish. No painting on exterior work shall be done during wet or foggy weather.

Natural timber surfaces: All natural timber surfaces shall be thoroughly cleansed with a cleaning agent and steel wool or oxalic acid to render a surface perfectly clear and free from any dirt marks, boot marks, pencil lines etc. before the finish is applied.

12. 6 *Finishing*

All coats of paint to be thoroughly dry before subsequent coats are applied and rubbed down with fine wet and dry sandpaper where necessary.

12. 7 *The following finishes are required in this contract:*

Beams, decks, porches, screens, baseboards, and posts
.....
Spouting and Downpipes
Structural steelwork
Exterior paints/stains
.....
.....
.....
Interior paints/stains
.....
.....
.....

12. 8 *Items of special notice*

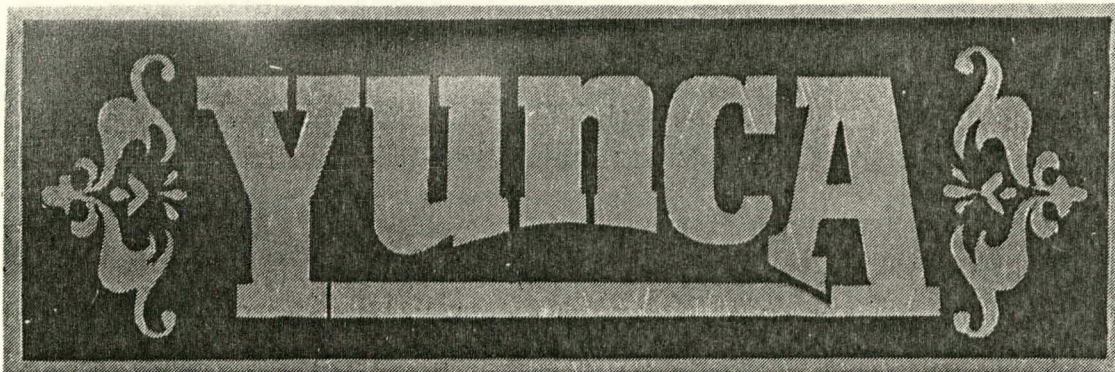
- (a) Timber Floors: The finish on timber floors is *not* included in this contract unless specified by the owner, and has not been quoted for.
- (b) Basements: Paint finishing to all levels below main floor level is *not* included in this contract.
- (c) Splitting — distorting — delamination of exposed exterior timbers through the application of dark coloured paints or stains will *not* be the responsibility of the contractor.
- (d) Painting of roof is not included in this contract.

12. 9 *Exterior Finishes*

The underside of the soffits to receive three good coats of Fungicidal Quality varnish, brushed into all grooves between the boards. This varnish is applied without thinning and 16 hours' drying time allowed between coats.

12.10 *Basic Materials*

Foundations:
Floor:
Walls:
Roofing:



INSTALLATION INSTRUCTIONS MULTI FUEL FREESTANDING

- A. Manufacturer recommends all installation be carried out by competent trades persons e.g. (Space Heater Installer) to obtain maximum performance and maintenance free heating.
- B. A permit is normally required and we suggest you check with your local building inspectors as by-laws can vary from place to place. Also notify your Insurance Company that a space heater has been installed.
- C. Hearth —
1. Must extend at least 300mm in front of heater.
 2. Must extend at least 150mm on each side of heater.
 3. Must be constructed of non combustible materials giving heat resistance equal to concrete or brick at least 50mm thick.
- D. Heater Clearances —
- | | |
|--|--------------------------|
| 1. Combustible wall e.g. timber | Rear 300mm
Side 300mm |
| 2. Noncombustible wall e.g. any material deemed satisfactory by approved authorities | Rear 25mm
Side 25mm |
- E. Flue Kit —
1. Combined Burner in New Zealand consists of 3.6m 150mm stainless steel flue.
 2. 1 x Weather cap and cowl.
 3. 1 x Ceiling tile.
 4. 2 x spider brackets
 5. 2 x 900mm lengths of 250mm galvanised liners.
- F. NOTE: 1. All joints must be sealed with flue sealing compound and screwed together.
2. Weather cowl must be screwed to liner.

WALLACE COUNTY COUNCIL

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Senior Building Inspector

Date

Permit No.

D J JENKINS

19 HENRY ST

TE ANAU.

3044/113/61

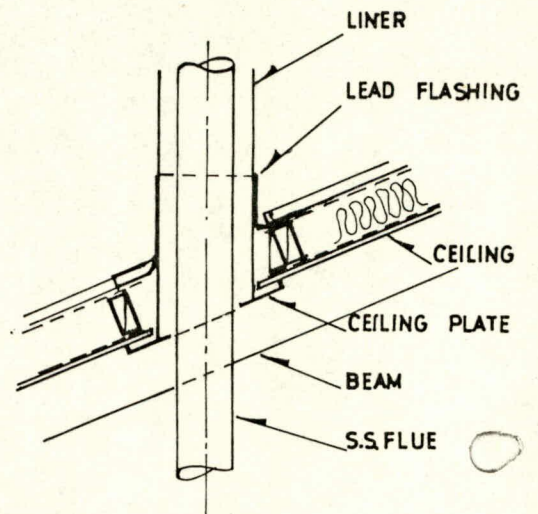
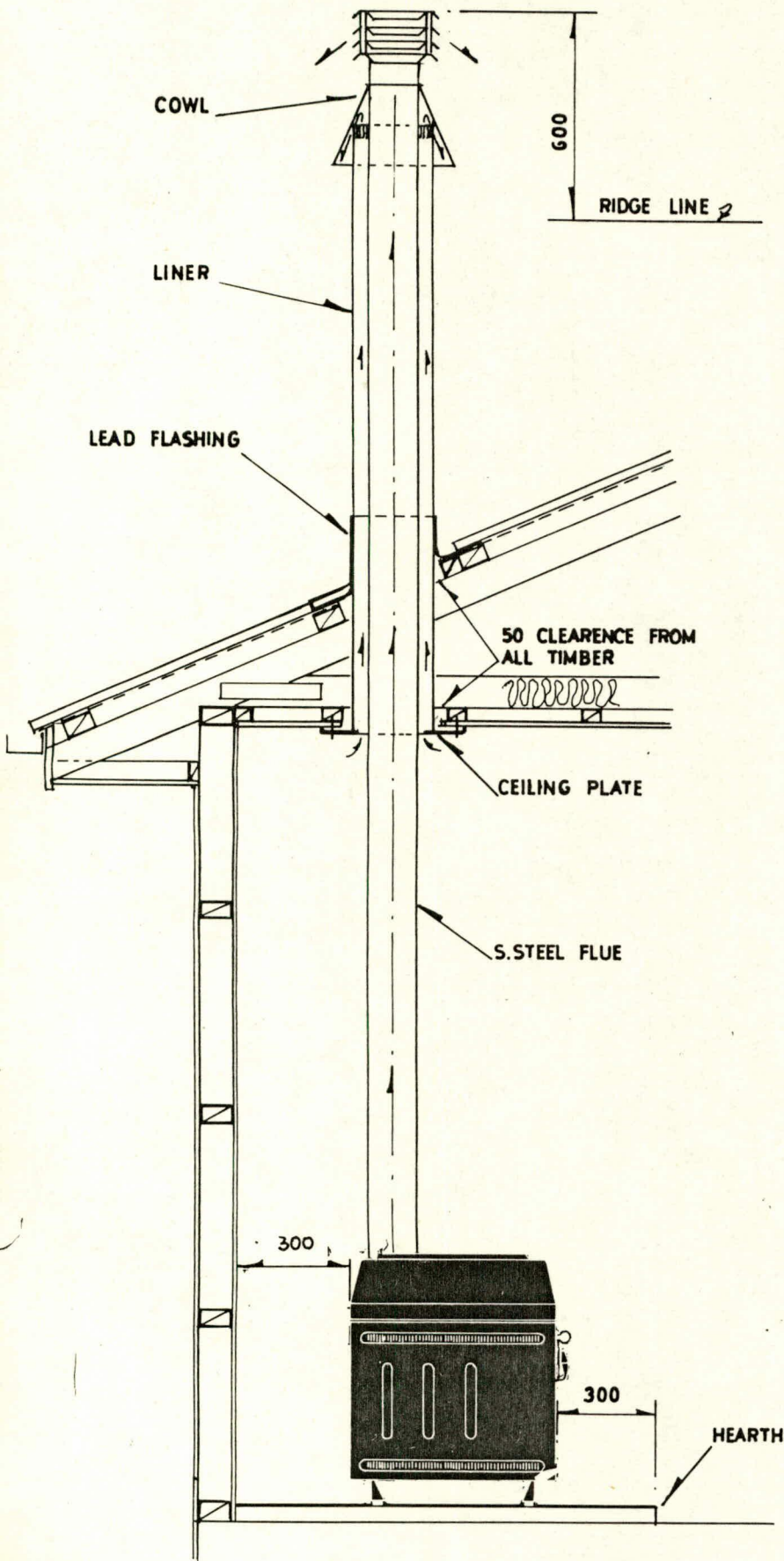
WALLACE COUNTY COUNCIL

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Senior Building Inspector

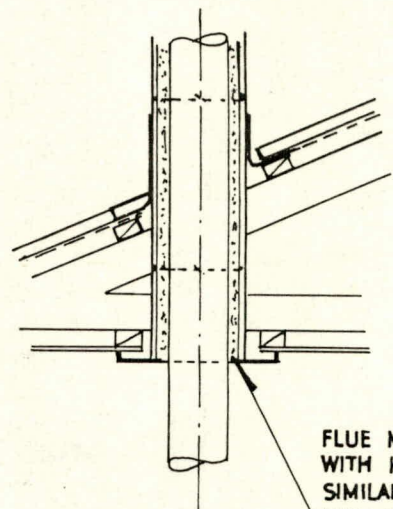
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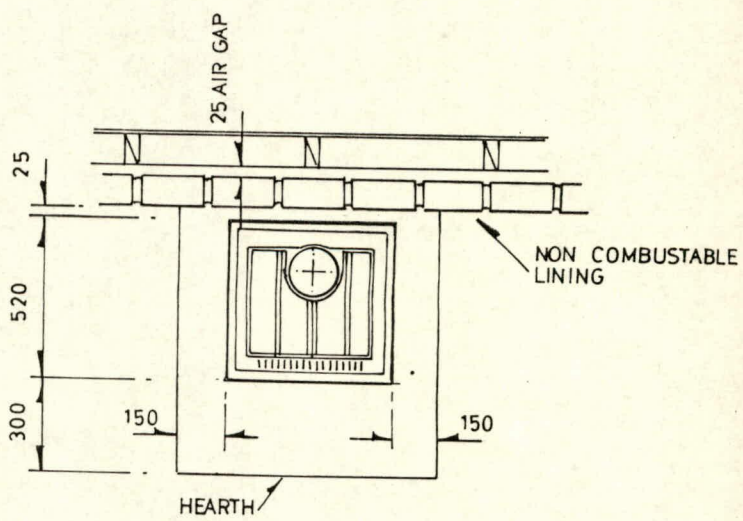
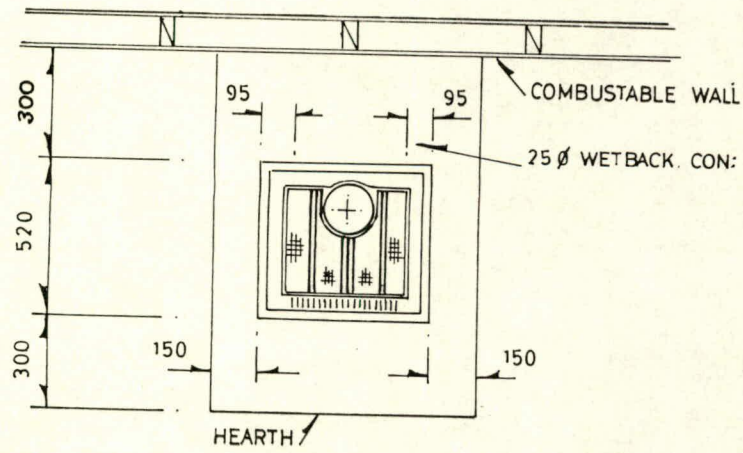
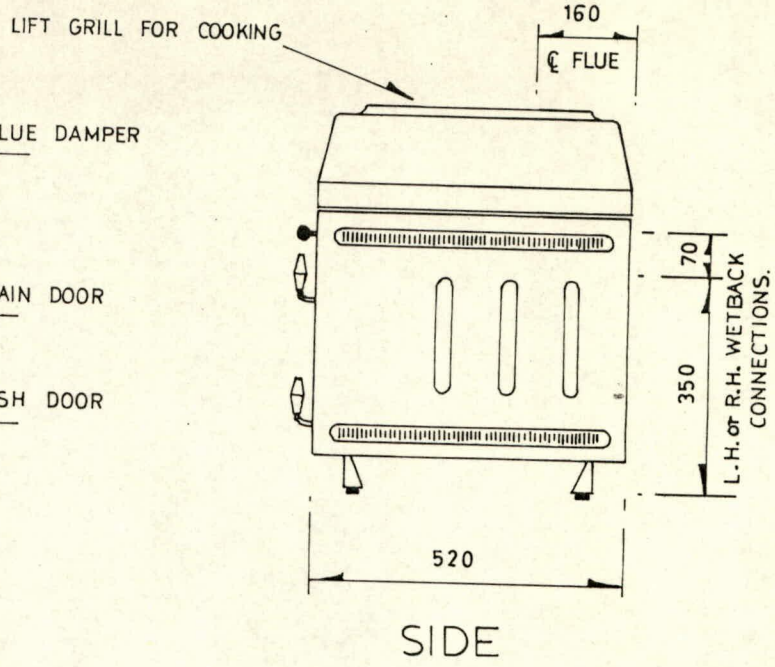
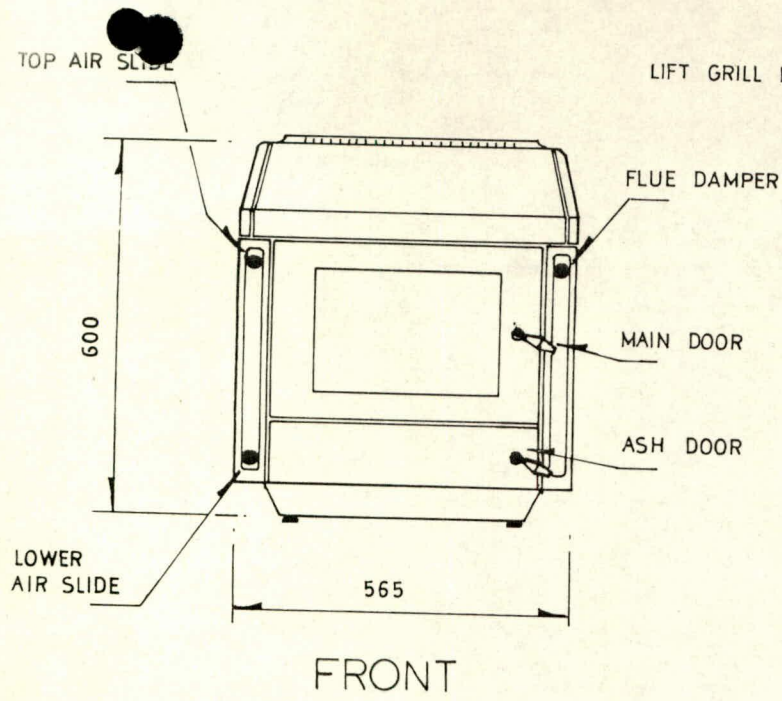
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TYPICAL FLUE INSTALLATION



BEAM CEILING





HEATER POSITION

