

Sharalyn Fraser *Agency*

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Code Compliance Certificate

Section 95, Building Act 2004

Application

Mr Graeme Cromie	No.	040111
Box 30 238	Issue date	11/08/06
Lower Hutt	Application date	2/02/04

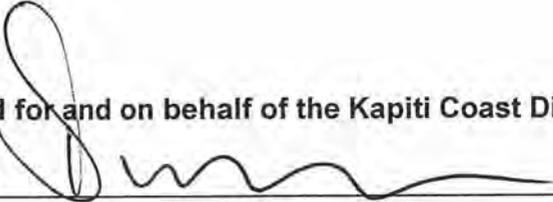
Project

Description	Dwellings - Alterations & additions Being Stage 1 of an intended 1 Stages Dwelling adds & alts.
Intended Life	Indefinite, but not less than 50 years
Intended Use	Residential.
Estimated Value	\$80,000
Location	93 FIELD WAY, WAIKANAE BEACH
Legal Description	LOT 11 DP 24476
Valuation No.	1491039800

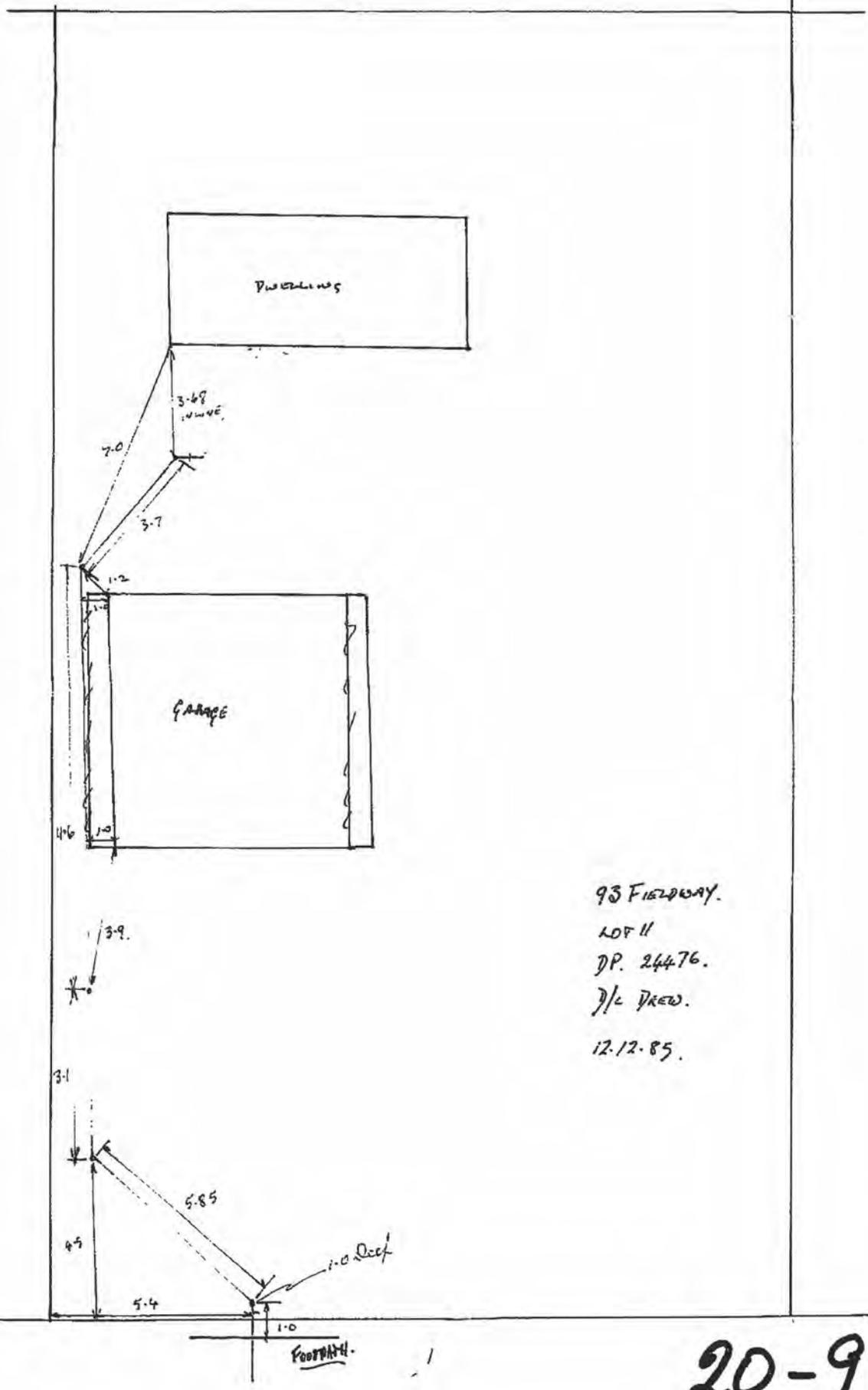
This is a final Code Compliance Certificate issued in respect of all the building work under the above building consent.

The property owner must follow and carry out the manufacturers prescribed maintenance procedures.

Signed for and on behalf of the Kapiti Coast District Council:

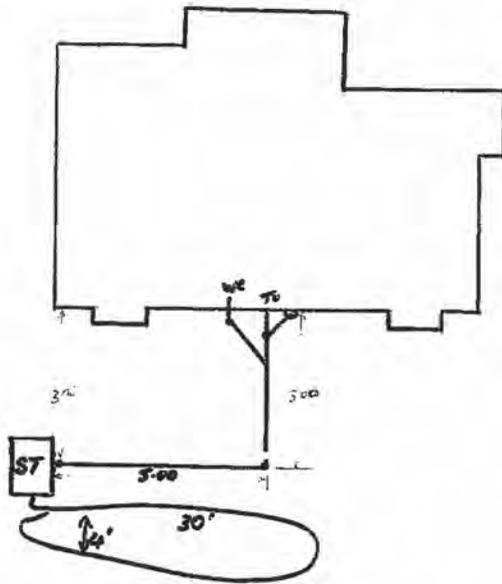
Name: 

Date: 21 AUG 2006



93 FIELDWAY.
 LOT 11
 DP. 24476.
 3/4 DREW.
 12.12.85.

20-93

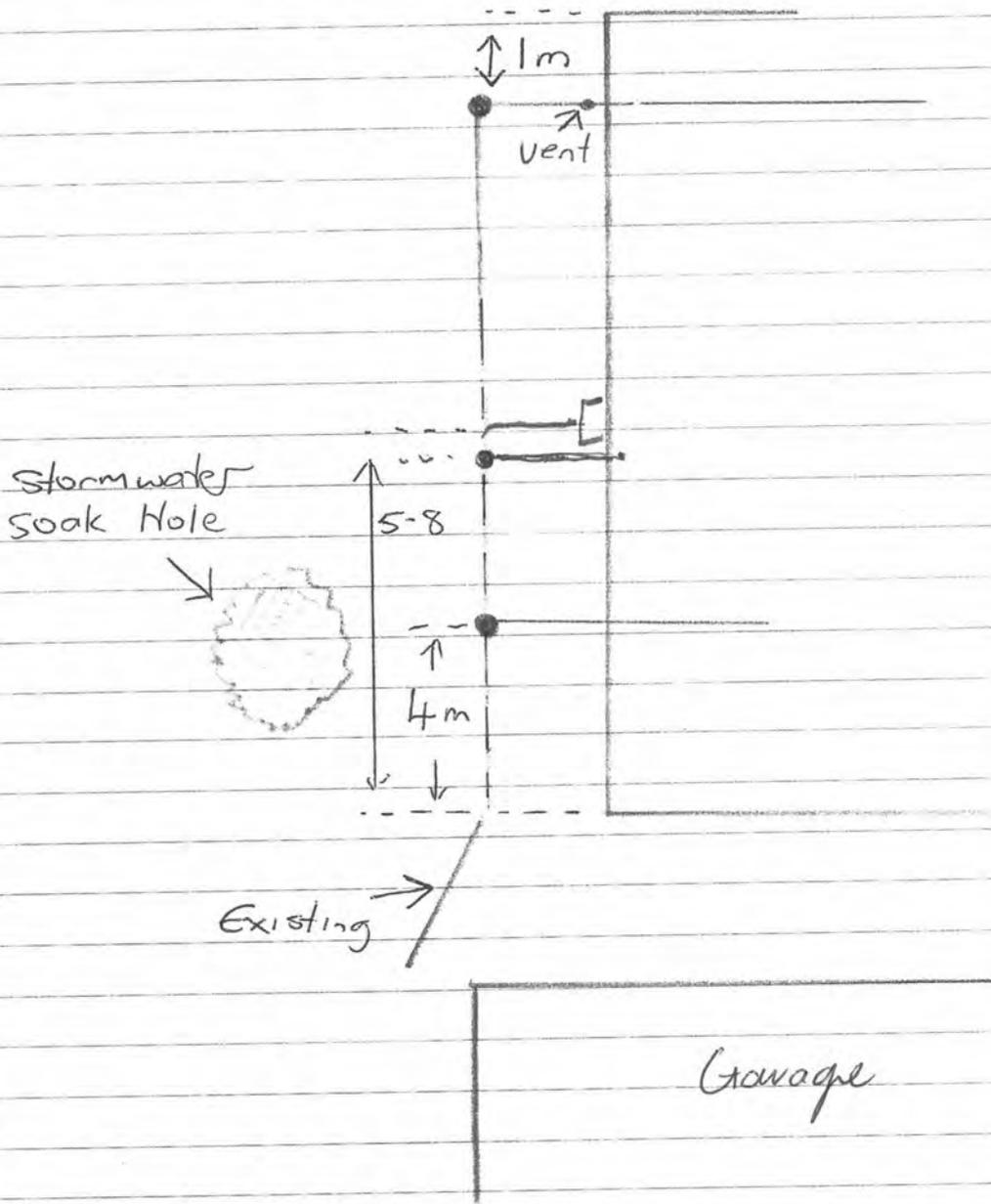
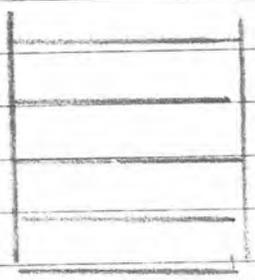


FIELD WAY
 BUILDER... D. COOMLEN
 DRAINLAYER... RAWLIEGH
 B. No ... 10481
 OWNER ... D.L FRANCIS.
 DATE ... 3-1-78

20-93



Chromie 93 Fieldway Waukane beach



Garage
Road

Council owns most of the manholes, pipes, connections etc shown on this plan including where they cross private property. It is illegal to interfere with any of Council services.

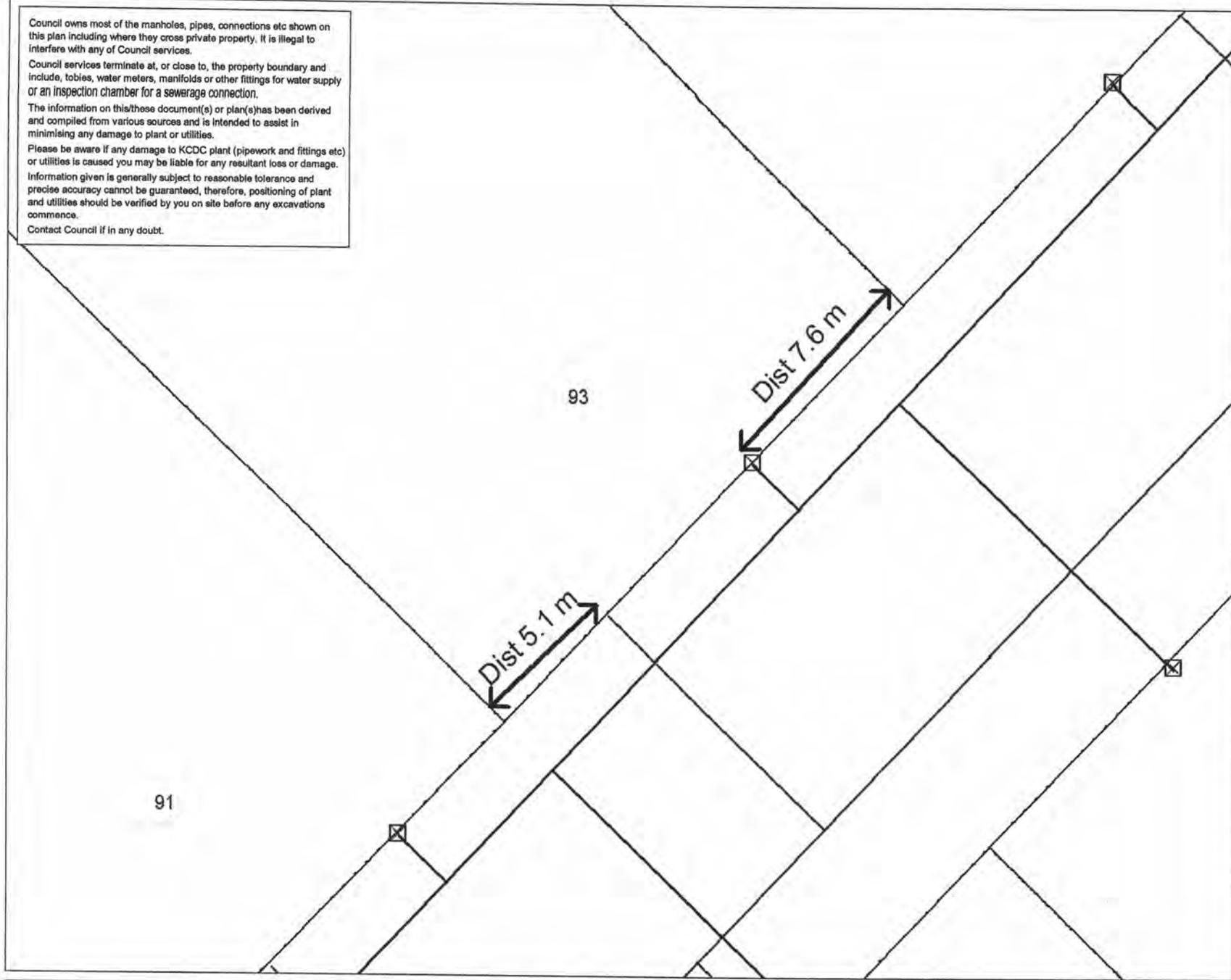
Council services terminate at, or close to, the property boundary and include, tobes, water meters, manifolds or other fittings for water supply or an inspection chamber for a sewerage connection.

The information on this/these document(s) or plan(s) has been derived and compiled from various sources and is intended to assist in minimising any damage to plant or utilities.

Please be aware if any damage to KCDC plant (pipework and fittings etc) or utilities is caused you may be liable for any resultant loss or damage.

Information given is generally subject to reasonable tolerance and precise accuracy cannot be guaranteed, therefore, positioning of plant and utilities should be verified by you on site before any excavations commence.

Contact Council if in any doubt.



LEGEND



- Sewer Pump
- ⊙ Sewer Manhole
- ★ Stormwater Soak Hole
- Stormwater Pump
- ⊙ Stormwater Manhole
- ▒ Stormwater Sump
- ◆ Stormwater Outlet
- ▲ Stormwater Inlet
- Water Hydrant
- ⊕ Water Valve
- ⊠ Water Toby
- Sewer Rising Main
- Sewer Pipe
- Stormwater Pipe
- Stormwater Rising Main
- Water Pipe

Map Drawn Date: 13/02/2004 By PC96

Scale: A4 1:190

Date of Aerial Photography:

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SERVICE NETWORK



13 JAN 2008

Producer Statement

Stormwater Drains

Construction Review

PETER JACKSON PLUMBING

Box 542 Paraparaumu

Phone (04) 904 6429

Issued by... Mobile 0274 789 880..... Registration Number 11499.....

To Kapiti Coast District Council

In respect to the following

Stormwater Drains installed in accordance with E1 AS1 as shown on the approved plans or as per the attached amended plan

Installed at 93 Featherway Waikanae Beach

Building Consent No 040111

As a registered drainlayer, currently holding an annual practicing license, certify that I, or personnel under my control, have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code.

Signed [Signature] Date 5-12-05

Note: Fully dimensioned as built drain plan to be supplied. (scale 1:100)

Producer Statement
Piped Services
&
Sanitary Plumbing Stacks

Construction Review

Issued by Peter Jackson Plumbing Ltd Registration Number 11499

To Kapiti Coast District Council

In respect to the following

Piped Services installed in accordance with G12/AS1 as shown on the approved plans or as per the attached amended plan and Sanitary Plumbing Stacks installed in accordance with G13/AS1 or AS/NZS 3500.2.2

Installed at 93 Fieldway Waikanae Beach

Building Consent No. 040111

As a Craftsman plumber, currently holding an annual practicing license, certify that I, or personnel under my control, have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code. Both hot and cold systems have been pressure tested for a period of 15 minutes at a pressure of 1500 kPa.

Signed  Date 5-12-05

Producer Statement

Private Sewer Drains

Construction Review

Issued by Peter Jackson Plumbing Ltd Registration Number 11499
To Kapiti Coast District Council

In respect to the following

Private Sewer Drains installed in accordance with G13 AS2 or AS/NZS 3500 .2.2 as shown on the approved plans or as per the attached amended plan

Installed at 93 Feildway Waikanae Beach

Building Consent No. 040 111

As a registered drainlayer, currently holding an annual practicing license, certify that I, or personnel under my control, have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code.

Signed  Date 5.12.05

Note: Fully dimensioned as built drain plan to be supplied. (scale 1:100)

Drains may be laid and backfilled without inspection provided that the drain is left under test with a min of 1.0 m head and the inspection at the lateral left exposed.



90 - 104 Falton Mathew Ave,
P.O. Box 18 071, Glen Innes,
Auckland, New Zealand
Freephone: 0800 104 868
Freefax: 0800 766 324
Email: info@gerardroofs.co.nz
Web: www.gerardroofs.co.nz

Name of Purchaser **Andrew Cromie**
Address Warranted **93 Feildway**
Waikanae Beach, Wellington
Type of Warranty **Addition**
Installation Contractor **Horowhenua Tile Co Ltd-Paraparaumu**
Date of Warranty **October 2005**
Brand **Colortile Textured Teak**

Warranty number

81362AZ

Purchase order No.

AHI Roofing is proud to provide you with the attached **Gerard Roofs ® Warranty**.

Our tiles are made from Zinalume coated steel, which is pressed prior to the application of an acrylic topcoat. This manufacturing system provides long term protection in the harshest of climates, including marine environments. This is why we are able to offer you fully backed 50-year pro rata **weatherproof** and 15-year pro rata **surface coating warranties**.

Most building materials require some servicing and maintenance during their product life and roofs are no exception. It is therefore important that you take the time to **read the attached warranty and maintenance guide** for your Gerard Roof.

In addition, please undertake the following actions to **validate your Gerard Roofs Warranty**:

- Please **complete the attached warranty card** and post back to Gerard Roofs.
- Please **input your name and address details** (in the space provided) in the upper left-hand corner, of the first page of your warranty.
- Please **file your warranty** in a safe place.

For more information about Gerard Roofs, suggested maintenance programs or your warranty please visit www.gerardroofs.co.nz.

Or alternatively you can call the Gerard Roofs Helpline on **0800 104 868** during office hours.

You can also contact us by fax, e-mail or via the internet.

Yours sincerely



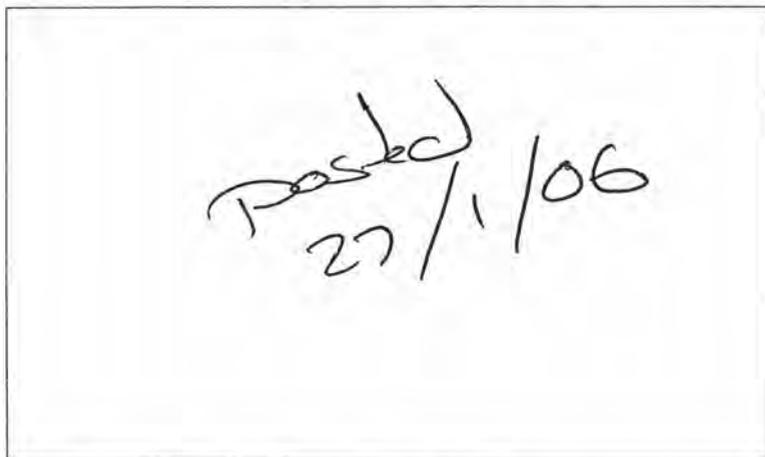
Max Goode
Customer Service Manager



**WARRANTY AND
MAINTENANCE GUIDE
FOR YOUR GERARD ROOF**

METAL TILE WARRANTY FOR NEW ZEALAND

(This warranty excludes installation in Rotorua)



IMPORTANT
TO VALIDATE THIS
WARRANTY YOU
MUST COMPLETE
THE DETAILS ON
THE WARRANTY
CARD AND POST
BACK TO
GERARD ROOFS

- (a) **Weather Security Warranty by AHI Roofing Limited (hereinafter called the Company).**
If any *Zincalume® steel roofing tile (a "tile") manufactured by the Company before the date of this warranty comprised in the roof fitted to the Purchaser's property described above (the "property") does not remain weatherproof for a period of 50 years from the date of this warranty then the Company will, at its option, either repair or replace the tile. The Company's obligation under this weather security warranty is limited to the full cost of repair or replacement in respect of claims made during the first 25 years following the date of this warranty and thereafter is limited to its share (calculated in accordance with Schedule A overleaf) of the cost of repair or replacement.
- (b) **Surface Coating Warranty by AHI Roofing Limited**
If, during the period of 15 years from the date of this warranty, the surface coating of a tile deteriorates to the extent that, in the Company's reasonable opinion, the appearance of the roof is substantially affected, then the Company will at its option either replace the tile, apply the Company's surface coating to the affected tile or provide other reasonable compensation to the Purchaser. The Company's obligation under this surface coating warranty is limited to the full cost of remedial work in respect of claims made during the first five years following the date of this warranty and thereafter is limited to its share (calculated in accordance with Schedule B overleaf) of the cost of remedial work.
- (c) **Installation Warranty by the Installation Contractor**
In the installation contract between the Purchaser and the installation contractor, the Company requires the installation contractor to warrant that defects in the Purchaser's roof arising within three years of the date of this warranty which are caused by faulty or defective workmanship in installation of tiles shall be made good by the installation contractor at no cost to the Purchaser.

Terms and Conditions of the Weather Security Warranty and Surface Coating Warranty (together the "warranties"):

- i. The warranties shall only apply if the Purchaser has made full payment for the supply and fitting of all tiles and thereafter will extend to subsequent owners of the property.
- ii. The warranties shall only apply in respect of claims arising as a direct result of a manufacturing defect in a tile (for example, and not in limitation, claims arising as a consequence of faulty workmanship in the fitting of tiles and damage caused by walking on tiles (whether by the owner or any other person such as a plumber, TV repairman, electrician, painter etc) or from defects in the structure on which the tiles are fitted, are not covered by the warranties).
- iii. The Company shall not be liable under these warranties, or any implied warranties arising under local laws which are not excluded pursuant to paragraph (xii) below, for any consequential, indirect or special damage or loss of any kind whatsoever, or loss of profits or anticipated savings, including any such losses arising due to any delay by the Company in complying with its obligations under the warranties.
- iv. As colour variations may exist in tiles manufactured at different times, the Company reserves the right to repair or replace a tile in a colour similar to the original tiles.
- v. The warranties shall not apply if any work, except temporary emergency work, is done to tiles other than work carried out under the supervision, or subject to the prior inspection and prior written approval, of the Company.
- vi. The Company gives no warranties if, during installation of the tiles, skillsaws, abrasive disks or hacksaws are used to cut tiles except as directed in fixing instructions issued by the Company.
- vii. The surface coating warranty shall not apply where the growth of organic matter such as moss or lichen occurs on tiles. Organic matter, if left unchecked, may damage the surface of tiles or cladding products.
- viii. Any remedial work carried out under the warranties shall not extend the term of the warranties.
- ix. The chip used in the manufacture of tiles is crushed rock from different quarries throughout New Zealand. The colour is natural and from time to time variations in colour or texture, and the presence of other minerals, will occur. These natural occurrences are not covered by the surface coating warranty.
- x. All surface coating systems will fade and chalk over time, particularly on roofing surfaces where they are subjected to the extremes of continuous ultra violet radiation. Gradual fading and chalking over the period of the surface coating warranty is expected, and is not covered by the surface coating warranty.
- xi. These terms and conditions shall not in any way limit the rights of the Purchaser, or the obligations of the Company, under applicable local laws except to the extent permitted by such laws.
- xii. All warranties implied by local laws are negated to the fullest extent permitted by such laws.
- xiii. Each of the above limitations is a separate limitation applying even though one or more of the other limitations may be held not to apply in the circumstances.

Special Note:

If rainwater is collected from the roof for drinking, the water connection system should be disconnected from the tank for three good rainfalls, or hosed down, after installation of tiles and before reconnection.

*Zincalume® is a registered trade mark held within the BHP Group of Companies.

**SCHEDULE A
WEATHER SECURITY WARRANTY PRO RATA**

Year	Company Contribution	%	Purchaser Contribution (Owner)	%
1-25	"	100%	"	Nil
26	"	50%	"	50%
27	"	48%	"	52%
28	"	46%	"	54%
29	"	44%	"	56%
30	"	42%	"	58%
31	"	40%	"	60%
32	"	38%	"	62%
33	"	36%	"	64%
34	"	34%	"	66%
35	"	32%	"	68%
36	"	30%	"	70%
37	"	28%	"	72%
38	"	26%	"	74%
39	"	24%	"	76%
40	"	22%	"	78%
41	"	20%	"	80%
42	"	18%	"	82%
43	"	16%	"	84%
44	"	14%	"	86%
45	"	12%	"	88%
46	"	10%	"	90%
47	"	8%	"	92%
48	"	6%	"	94%
49	"	4%	"	96%
50	"	2%	"	98%
51	"	0%	"	100%

**SCHEDULE B
SURFACE COATING WARRANTY PRO RATA**

Year	Company Contribution	%	Purchaser Contribution (Owner)	%
1 to 5	"	100%	"	Nil
6	"	67%	"	33 %
7	"	60%	"	40%
8	"	54%	"	46 %
9	"	47%	"	53 %
10	"	40%	"	60%
11	"	34%	"	66 %
12	"	27%	"	73%
13	"	20%	"	80%
14	"	14%	"	86 %
15	"	7 %	"	93 %
16 and thereafter	"	0%	"	100%

How to care for your roof

1. You should not walk on your roof unless absolutely necessary. To avoid denting, cracking or other damage to your roof, you should, if you have occasion to walk on it, firstly wear soft soled shoes and secondly place your feet on the lowest point of the tile at the front edge.
2. In certain locations due to humidity or the proximity of trees and shrubs, lichen and moss may grow on your roof. If left unchecked this may damage the surface coating. The manufacturers RECOMMEND this growth be removed by spraying. Consult your local distributor to ascertain the suitability of any cleaning material you wish to apply to your roof.

Roof Care and Maintenance Instructions

Introduction

This information sheet is intended to give you the relevant details about how to care for your roof and maintenance that should be carried out.

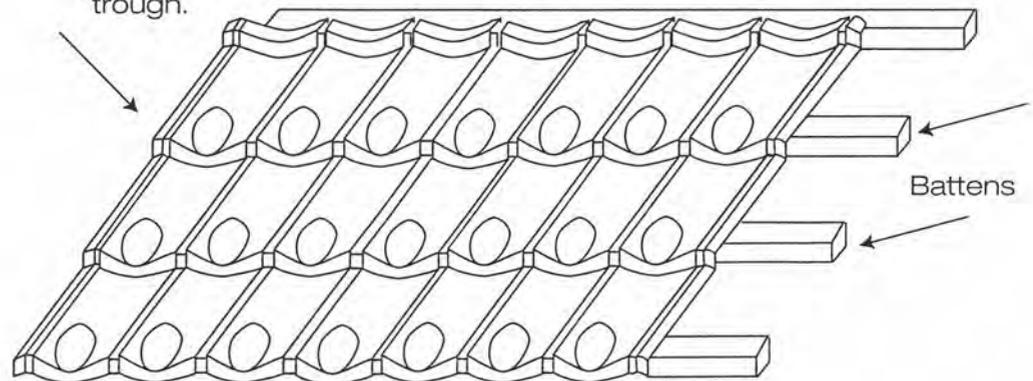
It is a condition of the material and product warranty issued by AHI Roofing Limited for Gerard Roofs' products that the following maintenance procedures are carried out. Maintenance is essential to prolong the good looks of the product and ensure that it performs as you would expect it should. Failure to carry out a regular maintenance program may result in a significantly reduced lifespan of the product and nullify any warranty.

How To Walk on Your Roof

You should not walk on your roof unless it is absolutely necessary. To avoid denting, cracking or other damage to your roof, you should, if you have occasion to walk on it, wear soft-soled shoes, such as tennis shoes or runners. Place your weight over the battens. Take your time, care is required on steep pitch roofs and you should avoid walking on the roof when it is wet. When working at height take appropriate precautions to prevent falls.

If service/trade persons need to access the roof, inform them that the roof is a steel tile roof and if need be inform them of where they should be walking on the roof. Most good trades people know how to walk over roofs, however they should be informed as to what precautions are required.

Where to stand, a 100x100mm area at the nose of the tiles, on the lowest section of the trough.



Organic Growth

In the event that organic growth occurs it should be removed to prevent damage to the roof's protective coating, using a roof cleaning material that is suitable for your type of roof. You can do this yourself or contact a commercial contractor, such as Decragard Roof Coating Systems Licensed Applicators, who specialise in this work and can do it for you very cost effectively.

The time and extent that the growth appears is very dependent on local conditions; this can be as localised as different sections on the same roof. The pitch, direction the roof is facing and locality of trees or any object positioned over the roof can all contribute to conditions that accelerate or inhibit organic growth.

Atmospheric pollutants such as dirt from building sites, fertilisers from nearby farms and pollen from trees also contaminate roofs. These are often mistaken for organic growth on new roofs. They may wash off in heavy rain - if they don't they should be washed off or they may remain and contribute nutrients for organic growth to accumulate on.

There are two commonly available materials that will clean algae and lichen from roofs. These are hypochlorite or sanitising washes. Listed below are recommendations as to which may be used on which types of roofs.

Roof Type	Satin finish - all aged roofs	
Treatment	Sanitising wash, known variously as: Alkyl Benzyl Ammonium Chloride or Quaternary Ammonium compounds	
Roof Type	Textured finish - under 5 years	Textured finish - over 5 years
Treatment	Sanitising wash, known variously as: Alkyl Benzyl Ammonium Chloride or Quaternary Ammonium compounds	Hypochlorite, bleach or Sanitising wash, known variously as: Alkyl Benzyl Ammonium Chloride or Quaternary Ammonium compounds
<p>In all circumstances the manufacturer's recommendations on application rates, strengths and compatibility should be followed.</p> <p>The manufacturer's instructions should also be followed in situations where rainwater is collected from the roof for drinking. It is likely the manufacturer will require that the water connection system is disconnected during and for a period after treatment, such as for three good rainfalls, or may require hosing down prior to reconnection.</p>		

Hypochlorite should not be used on Textured roofs under 5 years old as it can affect the clear overglaze that is applied to the tiles during their manufacture. If you are unsure of the age of the roof then the solution should be applied to a small test area that is unseen from the ground. If the general surface of the roof turns white then you should not use this type of roof wash.

Some organic growths will be killed immediately, and will disappear after a few rainfalls. Other types of growths, such as black algae and lichen, may take many rainfalls and as long as 6 months to be removed from the surface. You will know if the treatment is working if the organic growth changes colour. This may take from a few days to a few weeks.

Preventive Maintenance

It is best to chemically clean the roof before growths are seen as a preventive maintenance measure. Spores may be present on the roof for up to two years before any visible organic growths are noticed. Treating the roof will not only kill the organic growths, but also the spores that lead to them. We suggest treating the roof every three to five years, however if you see growth occurring treat the roof more frequently.

Long Term Durability – Re-Coating

Maximum durability will only be achieved if re-coating is carried out while the original coating is still sound and protecting the substrate, as this provides a better surface for re-coating and is more economical than waiting until corrosion shows. Re-coating will revitalise the appearance of the roof and ensure the substrate is fully covered with a coating.

Generally re-coating will be most economical if carried out 15-20 years after installation, depending on environmental exposure.

Re-coating should be carried out by trained personnel from a Decragard Roof Coating Systems Licensed Applicator.

Material Compatibility with Modern Roofing Materials

If alterations are made to your home after installation of your roof, such as fitting of chimneys, extensions, installation of skylights etc, it is important to ensure that the materials that are used are compatible with your roofing material. Gerard Roofs' steel tiles are manufactured from *Zincalume® steel and then post coated with a protective and decorative coating system.

Dissimilar Metal Corrosion

When two different metals are in contact and moisture is present, one metal is relatively protected while the other suffers accelerated corrosion. A similar effect commonly occurs with water flowing over dissimilar metals. This form of corrosion is commonly found: where water is discharged from copper or brass systems over a galvanised or Zincalume® steel roof, where unpainted lead flashings are applied directly to Zincalume® steel products or where fasteners are incompatible with the roofing material. Any electrical contact between dissimilar metals should be avoided, e.g. wet leaves making contact between copper gutters and Zincalume® steel roof tiles.

More Active Metals —————> More Noble Metals

Zinc ▶ Zincalume® Steel ▶ Aluminium ▶ Steel ▶ Lead ▶ Copper ▶ Stainless Steel

This chart lists commonly used metals in a "Galvanic series". If any two of these metals are in damp contact or a run-off situation, the metal further to the left will sacrifice itself to protect the metal further to the right. Therefore the simple rule to remember is that you can run water from left to right, but not from right to left. For example zinc to copper is alright but copper to zinc is not.

Specific advice should be sought from AHI Roofing Limited regarding use of dissimilar metals.

*Zincalume® is a registered trade mark held within the BHP Group of Companies.

This leaflet is produced in the interest of customer education and good customer relations. AHI Roofing Limited has endeavoured to provide the most technically correct and up to date advice possible but, subject to any claims a person may have under the Consumer Guarantees Act 1993, assumes no responsibility in relation to such information or advice. Alteration in the specification or instructions may occur from time to time. Please contact AHI Roofing Limited on 0800 104 868 for the most up to date technical advice available prior to using this information.

Technological, two-component elastic waterproofing system suitable for the containment of water, under positive and negative thrust, in monolithic structures in concrete. Ideal for waterproofing non-absorbent substrates such as old flooring. Certified as suitable for the containment of drinking water.



IDROBUILD®

ELASTIC MINERAL WATERPROOFING PRODUCT – The IDROBUILD® technology ensures impermeability and protection for all hydraulic engineering works designed to resist anaerobic and acid aggression of the terrain, continuous abrasion caused by flowing water, for permanent immersion and the containment of drinking water. The elasticity, the occlusive interstitial crystallisation and the compactness of the micro-components used in IDROBUILD® ensure a superior degree of impermeability to water also in the presence of high, positive-negative pressure.

INNOVATIVE TECHNOLOGY FOR SUBSTRATES – The IDROBUILD® technology ensures impermeability in balconies, terraces, swimming pools and shower cabinets before direct laying of ceramic tiles with SAS (Shock Absorbing System) Technology adhesives. IDROBUILD® ensures rapid, secure waterproofing of old terraces, avoiding any requirement for onerous demolition work.

GUARANTEED LONG LIFE – The durability of the waterproofing process in IDROBUILD® is ensured by the high levels of resistance to ageing and by its inorganic, mineral nature. A mix of silicate microparticles, flexibilizing co-polymers and mineral reactive agents with a low water soluble salt content complete the chemical structure of IDROBUILD®, ensuring effective elasticity and resistance to chemical/environmental aggression of the waterproofing system.

Developed by the Research and Development Division and guaranteed by the Training Center.
Compliant with the CARE Project for the Protection of Health and the Environment:
Substrates Division (Method M1 – Action FE207).

AREAS OF USE

Waterproofing of:

- balconies, terraces, swimming pools and shower cabinets before the laying of the ceramic covering
- foundations, hoistway pits, basements and exterior foundation walls even with a negative hydrostatic thrust
- tanks for containment of drinking water
- impermeable protection of concrete surfaces

Use

Monolithic screeds; old flooring featuring dimensional stability and anchored to ceramic substrates, marble floor tiles and natural stone; beams and pillars in prefabricated concrete or fresh concrete casting; cement plasters and mortars.

Do not use

On gypsum walls or ready-to-use gypsum-based plaster, on metallic or wooden supports, on bituminous coverings or for waterproofing flat surfaces which are left visible.

PREPARATION OF SUBSTRATES

The substrate must be perfectly aged, free from hygrometric shrinkage, solid (i.e. free from any loose, flaky or easily removable parts) and free from oil, grease and paint.

Check that the concrete contains no traces of parting compound. When working on weakened or missing parts, and also in the case of gravel beds, the substrate has to be restored with appropriate restoration mortars.

On ceramic substrates any materials used to treat the surface such as wax or greasy substances must be completely removed. The most suitable cleaning methods are sanding, shot-blasting or washing with detergents and pressurised water. Before application, the absorbent substrates must be wet well but must not include any stagnant water.

To waterproof monolithic liquid containers and swimming pools, fill the spacer holes with the technological epoxide system KERABUILD® EPOADESIVO, create rigid connection shells in vertical and horizontal corners and any required finishing and levelling coatings with KERABUILD® FINITURA mortar.

On terraces, create dimensionally stable areas of surface smaller than ten square metres by means of mechanical cutting of the flooring and substrate. To produce horizontal joints and peripheral overlapping use the PVC strip IDROBUILD® GIUNTOFLEX 160, applied with KERABUILD® EPOADESIVO.

ABSTRACT

Concrete protection: on constructions that must be protected from weathering and from the action of antifreeze salts, waterproofing must be carried out with a technological, two-component, elastic waterproofing system such as IDROBUILD® manufactured by Kerakoll, applied in two coats for an overall coverage of $\approx 4 \text{ kg/m}^2$.

Swimming Pools - Tanks - Basements: the waterproofing of swimming pools, tanks and basements should be carried out with a technological, two-component, elastic waterproofing system such as IDROBUILD® manufactured by Kerakoll. The horizontal and vertical angles should be linked up with a shell using a structural mortar such as KERABUILD® FINITURA manufactured by Kerakoll. Then the waterproofing product should be applied in two coats with an interposed reinforcing mesh made of anti-alkaline glass fibre for a coverage of $\approx 4.5 \text{ kg/m}^2$.

Terraces: the waterproofing of terraces should be carried out with a technological, two-component, elastic waterproofing system such as IDROBUILD® manufactured by Kerakoll. The expansion joints, fractionizing joints and angular couplings should be waterproofed with a PVC strip such as IDROBUILD® GIUNTOFLEX 160 manufactured by Kerakoll, stuck to the support with an epoxide system such as KERABUILD® EPOADESIVO manufactured by Kerakoll and welded onto the overlaps. Then the waterproofing product should be applied in two coats with an interposed reinforcing mesh made of anti-alkaline glass fibre for a coverage of $\approx 4.5 \text{ kg/m}^2$.

INSTRUCTIONS FOR USE

Preparation

IDROBUILD® is prepared by mixing component A with component B (preset ratio 3 : 1 in the bags). The two components should be mixed with a low-rev, drill-type mixing device for approximately 2 minutes until a mixture with a fluid and homogenous consistency is obtained. Pour the latex into a clean container and gradually add the powder during the mixing operation. Leave the mixture to rest for approximately 2 minutes to allow the co-polymer to become completely dispersed and mix again for approximately 20 seconds before use.

Application

IDROBUILD® is applied with a smooth spreader or hard fibre brush to the surface prepared in advance. When waterproofing, apply a first coating and immediately insert the reinforcement mesh in anti-alkali glass fibre suitable for finishing coatings, with a weight equal to approximately 100 g/m² and mesh pattern size of approximately 4x5 mm. When the product has hardened, and in any case within not more than 24 hours, apply the second coat in a criss-cross direction as compared with the first coat. The different layers of IDROBUILD® must be applied with great care in order to assure the total covering of the substrate and maximum level of adhesion. Installation of a reinforcement mesh is not required when protecting concrete and in waterproofing operations in foundations and basements. Subsequent laying of ceramic coverings must be performed 24 hours after application of the final coating with SAS (Shock Absorbing System) Technology adhesive of the H40® line. A rough coating with KERABUILD® BETON mortar, which is required on application of the thermal plaster ISOBUILD®, must be performed after the product has set and in any case within 24 hours following application of the final coating.

Cleaning

Residual traces of IDROBUILD® can be removed from tools with plain water before the product has hardened.

SPECIAL NOTES

Terraces: expansion joints, fractionizing joints and angular couplings. In the realisation of joints and bindings it is necessary to link up the opposite surfaces with the PVC strip IDROBUILD® GIUNTOFLEX 160, stuck to the support with the technological, epoxide system KERABUILD® EPOADESIVO and welded onto the overlays before treating with IDROBUILD®.

Swimming pools, tanks, basements: angular couplings. The linking up of the horizontal and vertical angles should be carried out with a shell of mortar KERABUILD® FINITURA before treating with IDROBUILD®.

Walls waterproofed with IDROBUILD®: application of plaster. In order to favour the adequate bonding of the plaster to the waterproofing layer, carry out a "wide" first coat with technological mortar KERABUILD® BETON.

TECHNICAL CHARACTERISTICS

Appearance	Part A light-coloured clear ready-mixed – Part B white latex	
Apparent volumetric mass	Part A ≈ 1.28 kg/dm ³ – Part B ≈ 1.01 kg/dm ³	UEAtc
Mineralogical nature of inert material	Silicate-crystalline carbonate (part A)	
Chemical nature	Co-polymers in water solution (part B)	
CARE	Method M1 – Action FE207	
Storage	≈ 12 months in original packaging in dry environment	
Warning (part B)	Protect from frost, avoid direct exposure to sunlight and sources of heat	
Packaging	Part A 24 kg bag / Part B 8 kg can	

TECHNICAL DATA compliant with Kerakoll Quality Standard

Mixing ratio	Part A : Part B = 3 : 1	
Mixture spread	≈ 85%	UNI 7044
Viscosity	≈ 150000 mPa · s, rotor 96 RPM 5	Brookfield method
Specific weight of the mixture	≈ 1,65 kg/dm ³	UNI 7121
pH of the mixture	≥ 12	
Pot life	≥ 1 h	
Temperature range for application	from +5 °C to +35 °C	
Min. thickness	≥ 2 mm	
Max thickness obtainable by coat	≈ 3 mm	
Max thickness obtainable	≤ 6 mm	
Waiting time between 1st and 2nd coat	≤ 24 h	
Waiting time before laying covering	≈ 24 h	
Coverage	≈ 1.6 kg/m ² per mm of thickness	

At +23 °C and 50% R.H. and no ventilation.

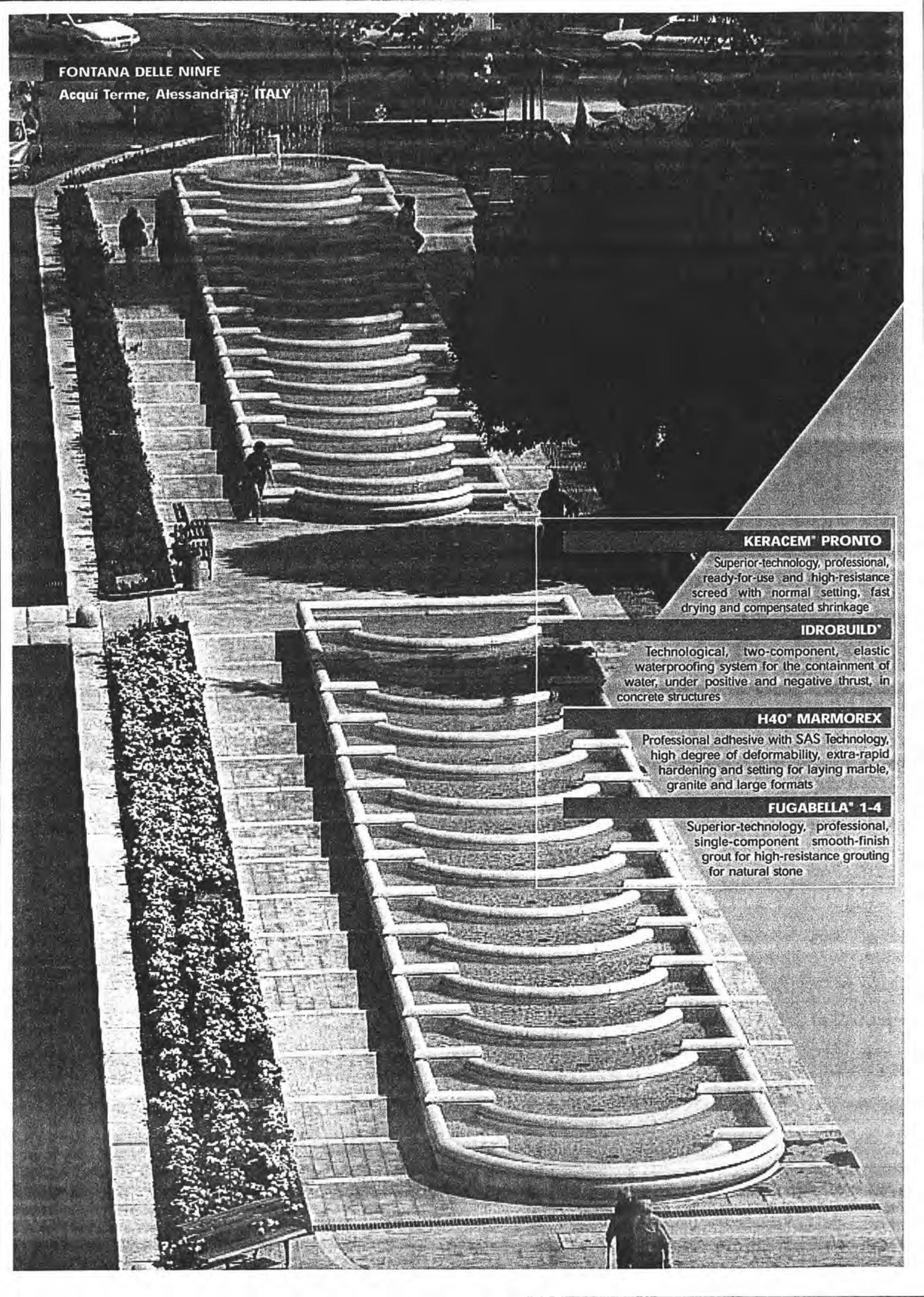
FINAL CHARACTERISTICS

Resistance to the positive thrust of water:	≥ 7 bar (thickness: 2 – 6 mm)	DIN 1048
Drinking water containing	Suitable	6520/00 ARPA* Cert.
Adhesion to concrete after 28 days	≥ 1 MPa	UNI-EN 1542
Resistance to abrasion after 28 days	≤ 2 g, grinding-wheel H-22, weight 500 g, revs 200	ASTM D 4060
Resistance to sulphates (penetration)	0 mm	
Resistance to chloride (penetration)	0 mm	UNI 7928

Values taken at +23 °C and 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.
*ARPA = Italian Regional Environment Protection Agency

WARNING

- **Product for professional use**
- use at temperatures between +5 °C and +35 °C
- make sure the substrate is not frozen
- protect treated surfaces from direct sunlight and wind
- any condensation on the first coat must be dried before applying the second coat
- the elastic joints must be adequately waterproofed with the PVC strip IDROBUILD* GIUNTOFLEX 160
- do not add any water, binders or additives to the mortar mixture
- do not position on gypsum, metal or wood
- do not apply to dirty, loose or flaky surfaces
- do not apply in thickness exceeding 2 mm per separate coat
- if necessary, ask for the safety data sheet
- for further information please consult the **Kerakoll Worldwide Global Service +39-0536.811.516**



FONTANA DELLE NINFE

Acqui Terme, Alessandria - ITALY

KERACEM® PRONTO

Superior-technology, professional, ready-for-use and high-resistance screed with normal setting, fast drying and compensated shrinkage

IDROBUILD®

Technological, two-component, elastic waterproofing system for the containment of water, under positive and negative thrust, in concrete structures

H40® MARMOREX

Professional adhesive with SAS Technology, high degree of deformability, extra-rapid hardening and setting for laying marble, granite and large formats

FUGABELLA® 1-4

Superior-technology, professional, single-component smooth-finish grout for high-resistance grouting for natural stone



THE KERAKOLL GLOBAL SERVICE

Wherever you are, and whatever your project needs are, you can always rely on the Kerakoll Service: highly-efficient, global customer support matching the high quality of our products.

Technical Service +39-0536.811.516 - Technical assistance in real time

Training Service - Professional training to support our quality

Guarantee Service - A long-lasting warranty

Kerakoll.com - The channel of choice for your projects



KERAKOLL QUALITY STANDARD

In all units of the Kerakoll Group, before being considered suitable for production, products undergo stringent testing in accordance with the very high requirements set by the Kerakoll Quality Standard: a process supported by the Centre for Applied Technology which assists the work of researchers with its sophisticated resources and laboratories. At the Kerakoll laboratories the various elements of formulations are carefully analysed to identify and eliminate any factors of weakness by means of simulation of real working conditions in building sites. After the testing cycles, the new products are submitted to the extreme fatigue of the Safety-Test process.



SAFETY, HEALTH AND THE ENVIRONMENT

For an industrial system such as Kerakoll it is vitally important to ensure that human health and the environment are protected. The Kerakoll company policy is to ensure that every possible safeguard be taken to make sure that these factors are always considered, and regulations and specific methods have been developed over the years for this purpose at all levels of the organisation. The CARE Project is the result of the Group's concern for human health and the environment, and ensures that the Group's products are perfectly safe for use and that the building materials supplied to builders ensure a very high level of safety before, during and after their use.

The information given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind our Company in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.

© Kerakoll is a trademark owned by Kerakoll International Rotterdam - The Netherlands

Code F115/2004-I

Kerakoll
Quality
System

ISO 9001
CERTIFIED
ICMQ N. 421

KERAKOLL
SUPERIOR BUILDING TECHNOLOGY

T +39-0536.816.511

F +39-0536.816.581

E info@kerakoll.com

W www.kerakoll.com



equus

WATERTIGHT TECHNOLOGY

REF:WW1631 BJB:sm

10 February 2006

**B M Scott Ltd
PO Box 1046
LEVIN**



Dear Sirs

**CROMIE RESIDENCE
93 FIELD WAY, WAIKANAE
CHEVALINE TROWELTEXX FINO COATING TO EXTERNAL
CONCRETE MASONRY AND JOINTED HARDITEX WALLS
(Standard Specification 2071mod)**

Further to our discussions regarding a materials warranty covering coating materials supplied for the above contract, we would confirm the Terms and Conditions of the Warranty as set out in this letter as follows:

1. **Limitations of Cover:** The terms and conditions of Warranty as set out in this letter refer specifically to materials supplied by Equus Industries Ltd., to your Company as our Approved Contractor for this contract.
2. **Warranty Cover:** The Warranty covers quality and suitability for use of materials supplied for exterior application and relates to film integrity of the applied coating.
3. **Warranty Period:** The maximum period for which such materials are covered by a materials warranty is ten (10) years from such date stipulated in any form of warranty entered into by **B M Scott Ltd.**
4. **General Terms and Conditions:**
 - (a) This warranty is applicable only to materials manufactured by Equus Industries Ltd., and applied by **B M Scott Ltd** on the above contract.
 - (b) This warranty is supplied to **B M Scott Ltd** as the purchaser of the materials. It is not an Application or Process Performance Warranty and may not replace or supplant any warranty required of **B M Scott Ltd** for application/process performance.
 - (c) The Warranty is valid only for the satisfactory performance of materials which are applied to this contract strictly in accordance with specifications supplied for this contract, information contained in relevant Know Hows, and any other specific written instructions supplied by Equus Industries Ltd., or amendments thereto.



Page 2

Ref: WW1631

5. Limitation of Liability:

No responsibility is taken by Equus Industries Ltd., for any failure of the applicator to apply materials in the correct manner to correctly nominated, prepared and designed surfaces. No responsibility is taken by Equus Industries Ltd., for any alteration to performance of the materials caused by work carried out on the coated surfaces without prior written approval of Equus, or any change in use of the coated structure from that pertaining at the time coating work was completed.

There shall be no liability for Equus in respect of damage to or deterioration in performance of the coatings caused by Act of God, exceptional weather conditions, fire or riot civil commotion, vandalism, nuclear explosions or fall out, damage caused by objects dropped from above, bursting or other forms of destruction or failure of gas or fluid carrying pipes or other vessels, electrical faults, negligence or wilful damage by the main contractor, owner and/or occupier of the building and/or any visitors to the building on which the coatings are applied, or any criminal act, or any consequential damage, or any physical damage from mechanical causes, spillage of any substance or disruption of the surface to which the coatings are applied by any natural disturbance of the structure.

6. Indemnity:

If it is established that faulty materials have been supplied to **B M Scott Ltd.**, for this contract and the Terms and Conditions set out above have been satisfied, Equus Industries Ltd., will thereby indemnify **B M Scott Ltd.**, against the costs of rectification or upgrading of any coated surfaces where such materials have been used, so that the original warranty period and performance are met.

7. Payment for Materials

This warranty shall not be binding on Equus until payment in full is received by Equus Industries Ltd for materials supplied to **B M Scott Ltd** for the contract described above

8. Disputes:

Should there be any dispute in regard to any provisions of this warranty or the manner in which it is exercised or interpreted, the decision of an independently appointed arbitor will be accepted as final and binding.

Yours faithfully,
EQUUS INDUSTRIES LTD

Brian J Greenall
Director



PRODUCER STATEMENT – PS4 – CONSTRUCTION REVIEW

ISSUED BY: P M F Yong – Clendon Burns & Park Ltd.....

TO: Graeme Cromie.....

TO BE SUPPLIED TO: Kapiti District Council.....

IN RESPECT OF: Alterations.....

AT: 93 Fieldway.....
Waikanae.....

DP 24476 SO

Clendon Burns & Park Ltd has been engaged by owner to provide inspection services of structural elements in respect of clause B1 of the Building Regulations 1992 for the building work described by the structural calculations drawings and accompanying sketches:

Prepared by: Clendon Burns & Park Ltd
 Titled: 93 Fieldway, Waikanae
 Numbered: Structural Sketches SK1-SK7 with SK7 (revised 15 Nov 2004)
 Authorised variations as shown on SK7 have been issued during the course of the works, attached herewith.
 I have sighted Building Consent No. 040111 and the attached conditions of the building consent.

As an independent design professional covered by a current policy of Professional Indemnity Insurance to a minimum value of \$200,000, I or personnel under my control have carried out periodic reviews of the work appropriate to the engagement and based upon these reviews and information supplied by the contractor during the course of the works

I BELIEVE ON REASONABLE GROUNDS that All Part only as specified in the attached particulars of the building work under the above Building Consent with respect to Clause(s) B1 of the Building Regulations 1992 has been completed to the extent required by that Building Consent.

BE(Hons) ME, MIPENZ, CPENG, IntPE

Date: 28 June 2005

Reg No: 109515

Member ACENZ

IPENZ

Clendon Burns & Park Ltd
P O Box 10 348
WELLINGTON

Job No: 203 029

GUIDANCE ON USE OF PRODUCER STATEMENTS

This producer statement has been prepared by a combined task committee consisting of members of the New Zealand Institute of Architects, Institution of Professional Engineers New Zealand, Association of Consulting Engineers New Zealand and the Building Officials Institute of New Zealand.

Four producer statements are available and brief details on the purpose of each are as follows:

- Design:** Intended for use by the person responsible for the design in circumstances where the Territorial Authority will rely on the producer statement to issue a Building Consent.
- Design Review:** Intended for use by a suitably qualified independent design professional where the Territorial Authority does not undertake an internal review and relies on the independent design professional's review to issue the Building Consent.
- Construction:** Intended for the use by the contractor of the building works where the Territorial Authority requires a producer statement at the completion of construction.
- Construction Review:** Intended for use by the person required by the Building Consent to undertake construction monitoring of the building works in circumstances where the Territorial Authority will rely on the producer statement to issue a Code Compliance Certificate.

The producer statements system is intended to provide Territorial Authorities with reasonable grounds for the issuing of a Building Consent or Code Compliance Certificate without having to duplicate design or construction checking by others.

The following criteria are recommended to Territorial Authorities with respect to the use of the producer statements.

Definition of Suitably Qualified Design Professional

A suitably qualified design professional should have recognised qualifications and experience for the work undertaken and should be either:

- (i) an active member of the Association of Consulting Engineers New Zealand (ACENZ) or;
- (ii) a member of the Institution of Professional Engineers New Zealand (IPENZ) having a current policy of Professional Indemnity Insurance for a sum not less than \$200,000 or;
- (iii) a member of the New Zealand Institute of Architects (NZIA) having a current policy of Professional Indemnity Insurance for a sum of not less than \$200,000.

Design Build Contracts

If the design professional is engaged by the contractor, the territorial authority should satisfy itself that it is appropriate for the territorial authority to rely upon a producer statement from the design professional.

Consulting Services during Construction Phase

There are several levels of service which a design professional may provide during the construction phase of a project. The territorial authority is encouraged to require that the service to be provided by the design professional is appropriate for the project concerned.

Requirement to provide Producer Statement

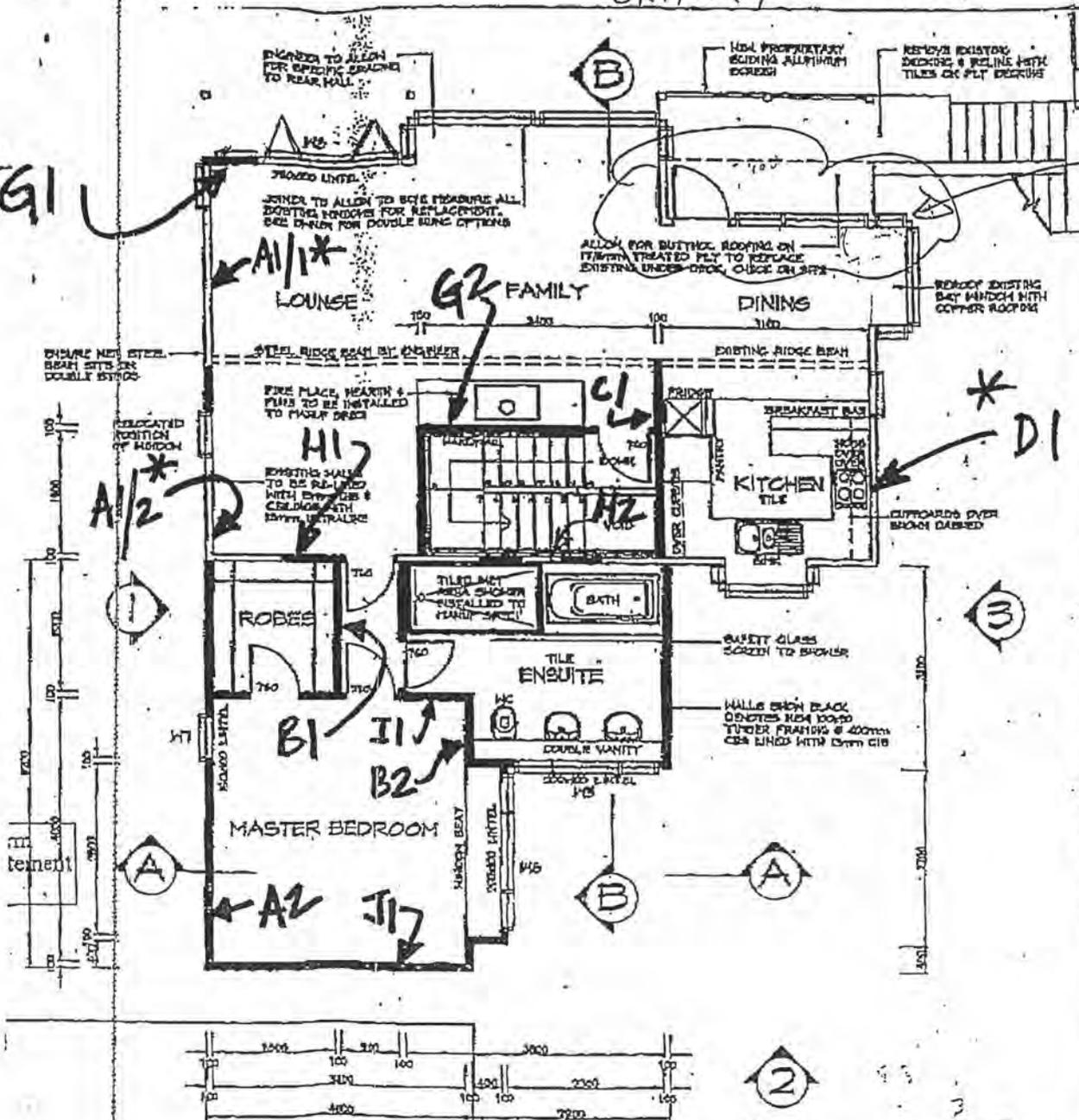
Territorial Authorities should ensure that the applicant is aware of any circumstances in which there may be a requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the design professional's engagement.

Attached Particulars

Attached particulars referred to in this producer statement refer to supplementary information appended to the producer statement.

- ST, 3.0m ✓
- AZ: G1B1, 1.6m ✓
- B1: BR6, 2m ✓
- B2: BR4, 1.0m ✓
- C1: G1B2, 3m ✓
- * D1: G1B1, 2m ✓
- G1: DAY ✓
- G2: BR6, 2.4m ✓
- H1: G1B2, 2m ✓
- H2: G1B2, 3.8m ✓
- I1: BR4, 1.1m ✓
- J1: G1B1, 3.7m ✓

* = EXISTING ELEMENTS : E.O.S.



7.5mm ply top & bottom of window with 6 x 2w straps on posts

PROPOSED FIRST FLOOR SCALE 1:50

NOTE: BRACING BY ENGINEER

ensure upstairs soil and wastepipes can run to the exterior with out damaging any structural members.

BRACING LAYOUT PLAN 15/11/04

COPY

Base Consulting Engineers Limited

Job No: 44161

Report No: 1

SITE REPORT / INSTRUCTION

Date: 29-7-04

Project: Cromie Extension to Dwelling

Location: 93 Fieldway Waukanai

On site 0845, as requested to check ground conditions for East extension to dwelling.

Construction to be 2 story - lower block. Area grassed is believed to have had septic tank removed & backfilled with metal.

2 probes undertaken.

P1 in grass shows ground conditions not satisfactory.

P3 abandoned adjacent garage hit solid, @ was excavated to reveal DPM

Recommendation

Excavate to 800 mm, identify any services / tanks to be removed.

Backfill & compact in 150 layers (C.G. 150). Extent of excavation to be determined by Engineer on site - may not extend into sealed area (P2 ok).

T.b.a. when excavating

Distribution:

Client

KCDC / HDC



Site Engineer

(datum: -----)

SCALA PROBES

(9 kg. hammer falling 1/2 a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.)

JOB NO: 44161 DATE 29/7/04

LOCATION: 93 Flewney Walkanne

CLIENT: Cromie

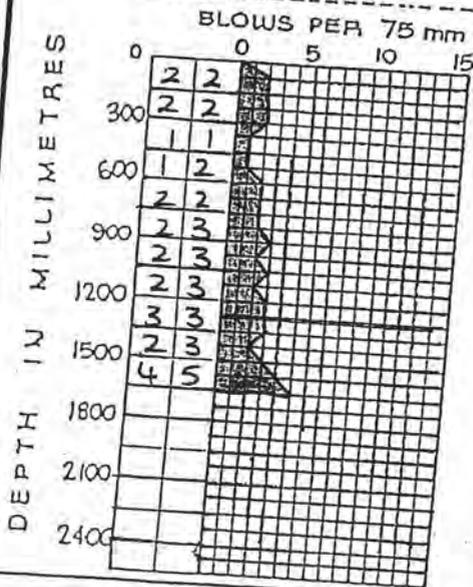
SIGNED: P. Bolton

Refer Plate 1

PROBING NO P4

Elevation: -----

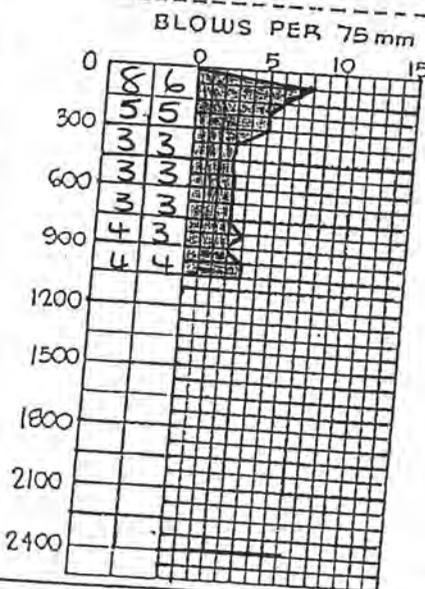
Remarks: -----



PROBING NO P5

Elevation: -----

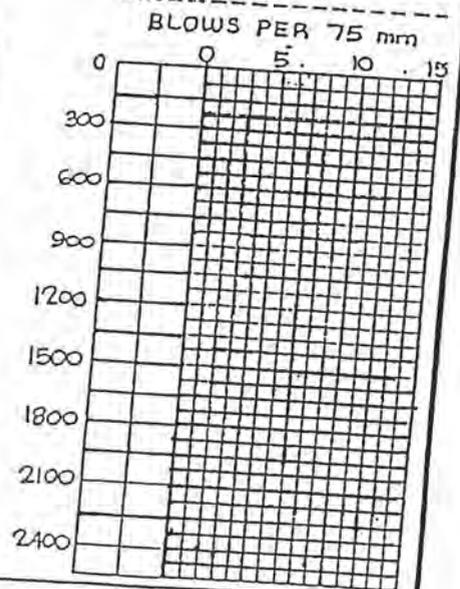
Remarks: -----



PROBING NO

Elevation: -----

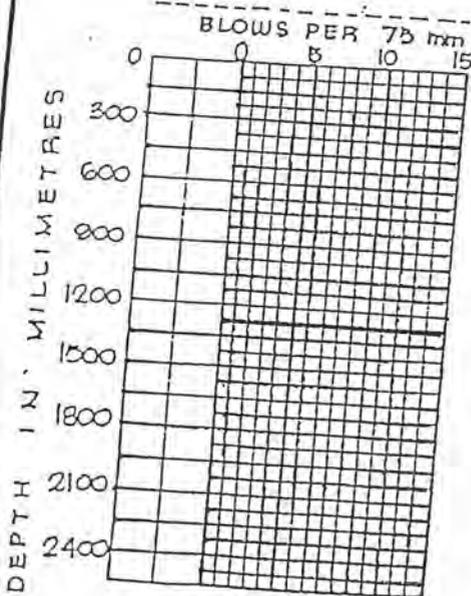
Remarks: -----



PROBING NO

Elevation: -----

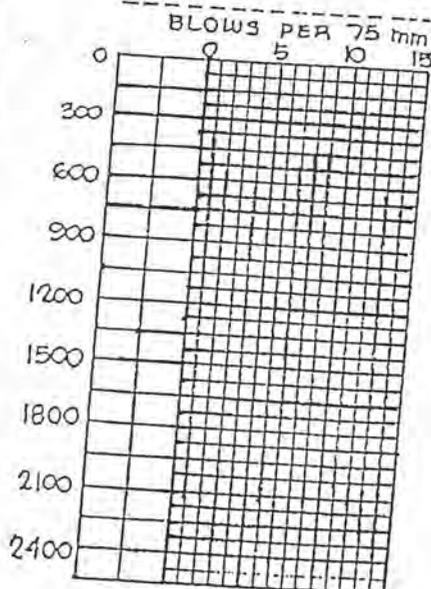
Remarks: -----



PROBING NO

Elevation: -----

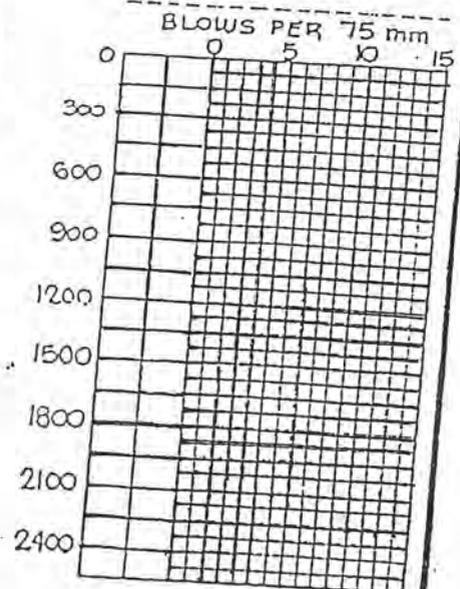
Remarks: -----



PROBING NO

Elevation: -----

Remarks: -----



ed

CHECKED

COPY

Base Consulting Engineers Limited

Job No: 44161

Report No: 2

Date: 3-8-04

SITE REPORT / INSTRUCTION

Project: CHROME EXTENSIONS TO DWELLING

Location: 93 FIELDWAY
WAIKANAE

Revisit site

Earthworks completed, sand used as backfill

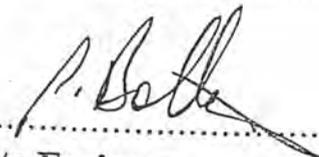
2 further probes undertaken

Results acceptable

OK to continue using conventional foundations
as per drawings

Distribution:

Client
KCDC / HDC


Site Engineer

LOCATION

(datum: -----)

SCALA PROBES

(9 kg. hammer falling 1/2 a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.)

JOB NO: 44161 DATE 3/8/04

LOCATION: 93 Fieldway
WAIKANAÉ

CLIENT: Crowie

SIGNED: P Bolton

EXISTING GARAGE

6200

4000

PROPOSED EXTENSION

2900

EXISTING DRIVE

DRIVE DOWN
TO FIELDWAY

⊗ P1
⊗ P4

⊗ P3
⊗ P5

3100

CHECKED

BY

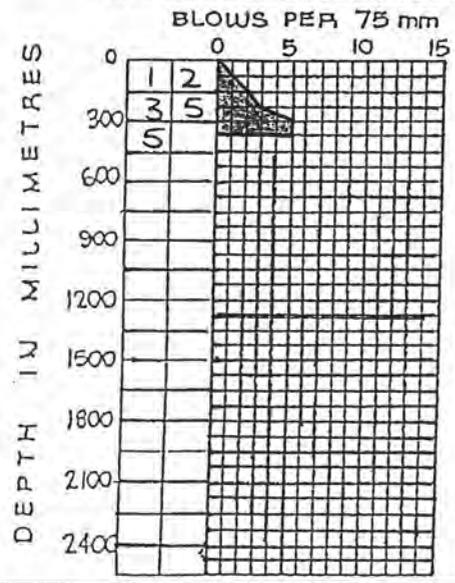
LOCATION

CLIENT

PROBING NO P1

Elevation: -----

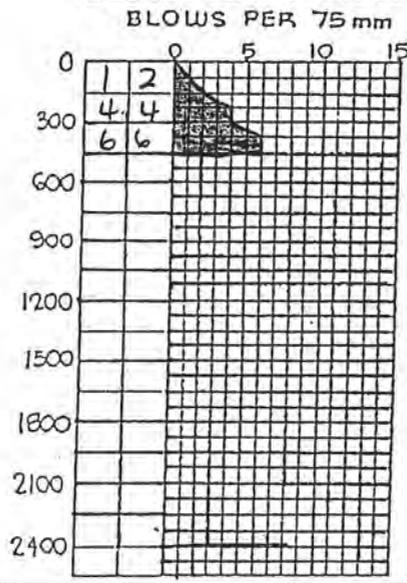
Remarks: -----



PROBING NO P2

Elevation: -----

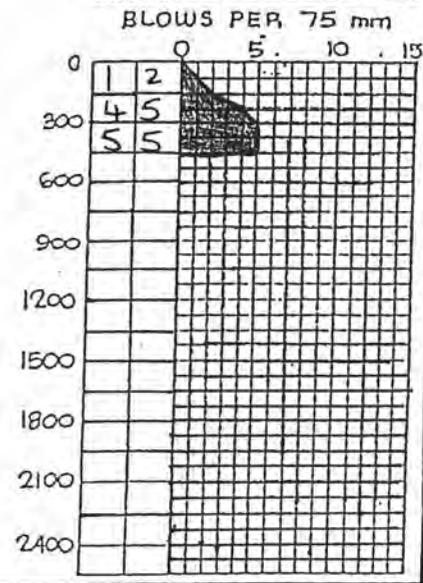
Remarks: -----



PROBING NO P3

Elevation: -----

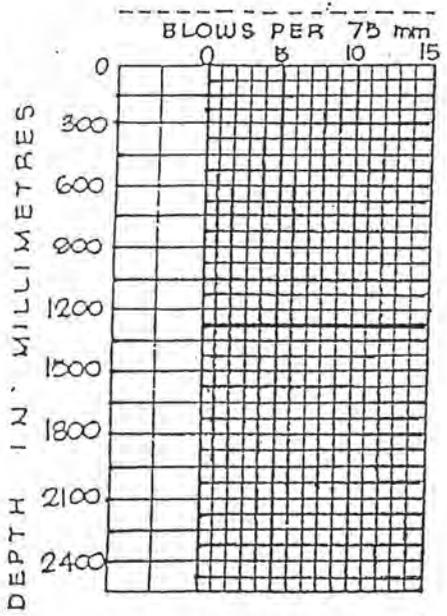
Remarks: -----



PROBING NO

Elevation: -----

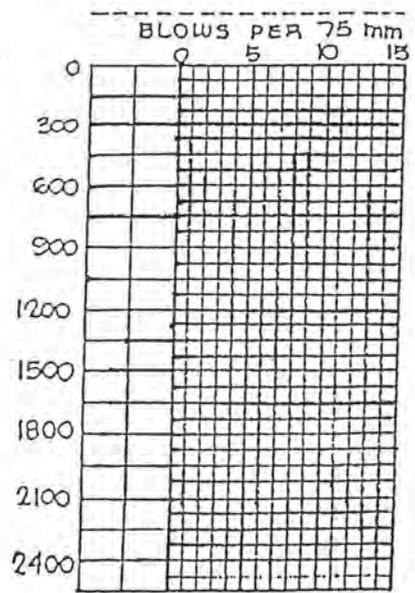
Remarks: -----



PROBING NO

Elevation: -----

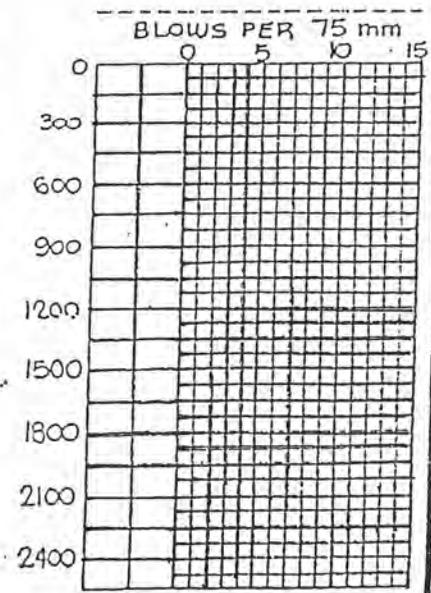
Remarks: -----



PROBING NO

Elevation: -----

Remarks: -----



Electrical Certificate of Compliance

No. **1794959**

for prescribed electrical work that is carried out on electrical installations and involves the placing or positioning or the replacing or repositioning of conductors (including fittings attached to those conductors).
To be completed whether or not an inspection is required.

No. of attachments

CUSTOMER INFORMATION - PLEASE PRINT CLEARLY

Name of customer **Glenn Cronin** Phone: **021 420033**Address of installation **93 FRODOX, WARRING BEACH**Postal address of customer (if not as above)

WORK DETAILS

78 No. of lighting outlets No. of ranges
37 No. of socket outlets No. of water heaters

Was any installation work carried out by the homeowner? Yes No

Please tick (✓) as appropriate where work includes:

Mains Main earthing system
 Switchboard Electric lines

Description **HOME REPAIRS UNIT, LIGHTS**
x POWER PROTECTION BY TWO RCDs x
MCBs ON EACH CIRCUIT. UNDER TREE
HEATING TO CASSETTE x BATH TOILET.
UNDER BEACH HOT WATER FOR KITCHEN
x MAINS CIRC FOR REST. 24/7
CIRCUIT FOR SOME LIGHTS x ONE
POWER OUTLET.

It is recommended that test results be recorded here:

Visual Examination Earth Continuity Bonding Polarity Insulation Resistance MohmOther **COPY****OTHER WORK TO MAINS REFER (X) NO. 1700152**

If necessary attach any pages with sketches of work done

CERTIFICATION OF WORK

I certify that the above electrical work has been carried out in accordance with the requirements of the Electricity Act 1992 and Electricity Regulations 1997.

ELECTRICAL WORKER DETAILS

Name **RICHARD BOND**
Registration no. **E15407**
Company **BREEM ELECTRICAL**
Signature **[Signature]**
Date **30.5.05**
Contact Ph No. **2987053**

CERTIFICATION OF ELECTRIC LINES

(to be completed where a separate electrical worker has installed the electric line portion of the mains)

Name
Registration no.
Company
Signature
Date
Contact Ph No.

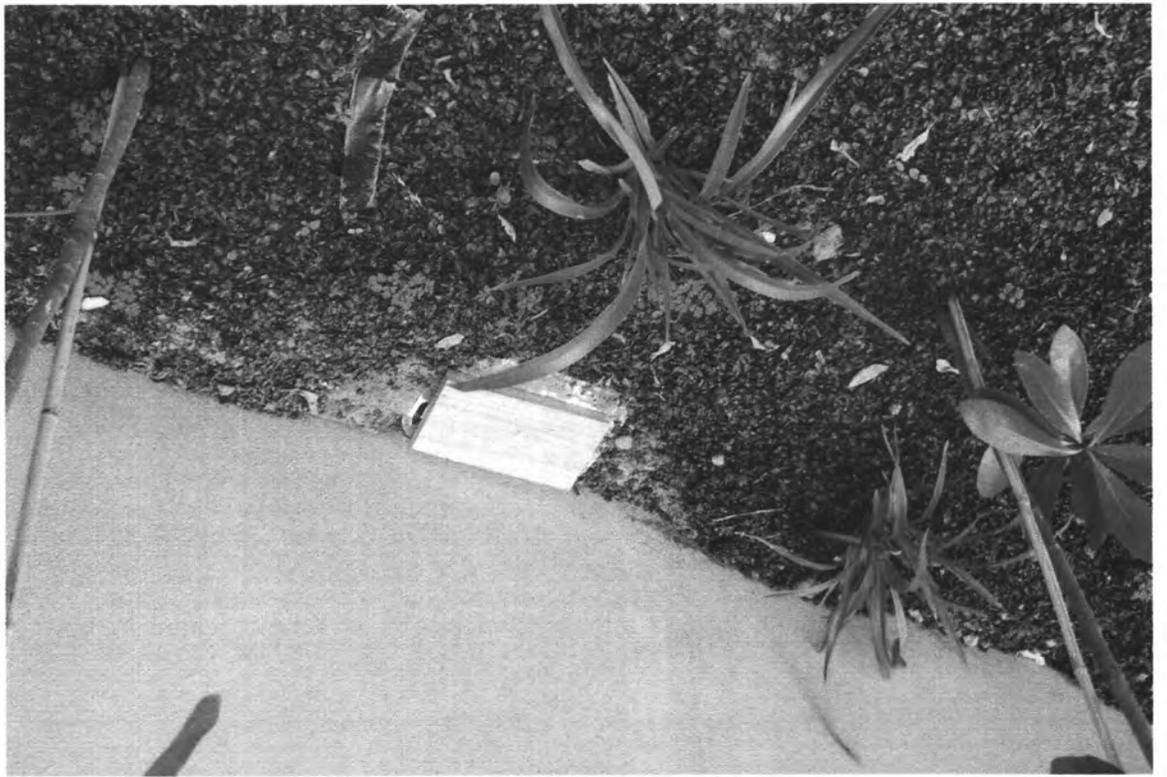
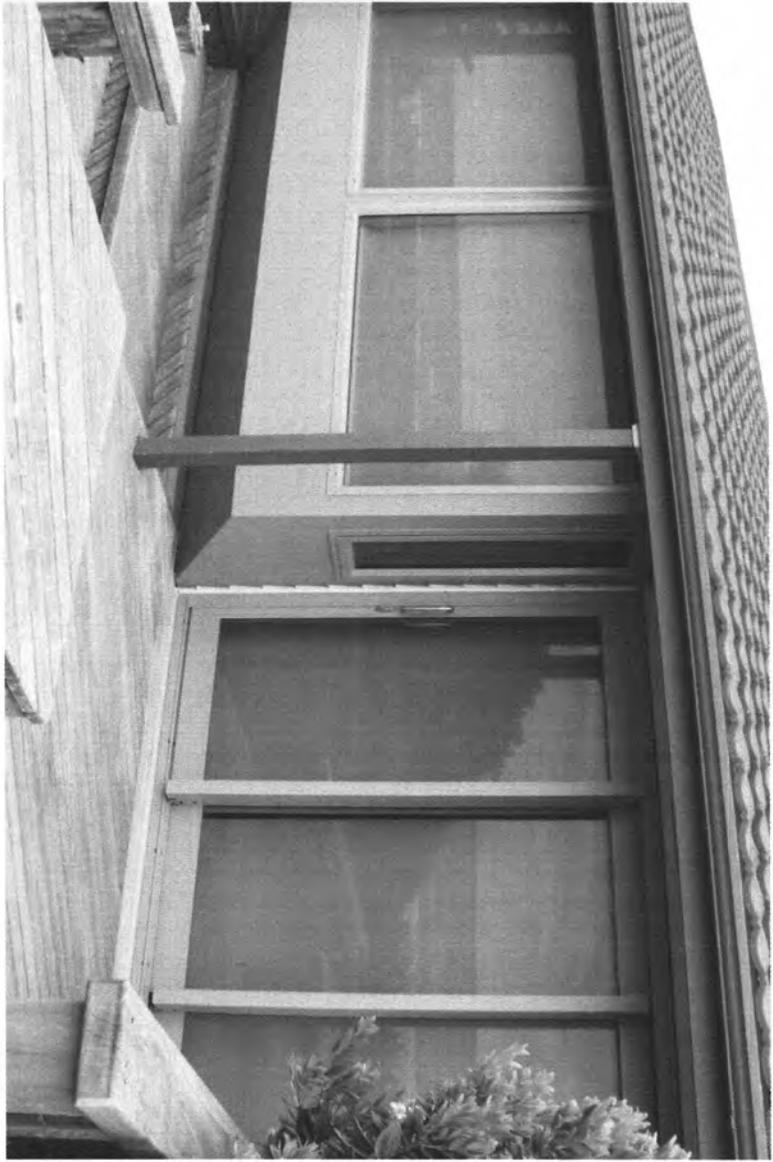
INSPECTION DETAILS Electrical work requiring inspection by a registered electrical inspector

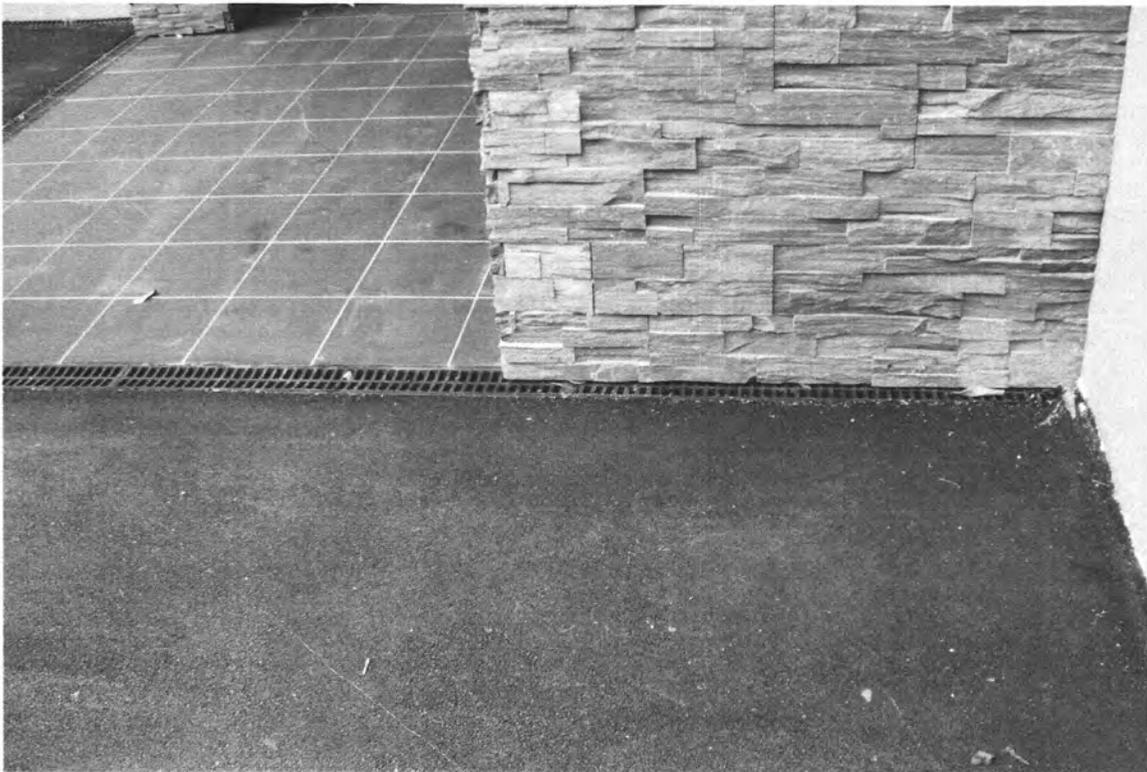
New mains Switchboard Earthing system Installation work in hazardous areas

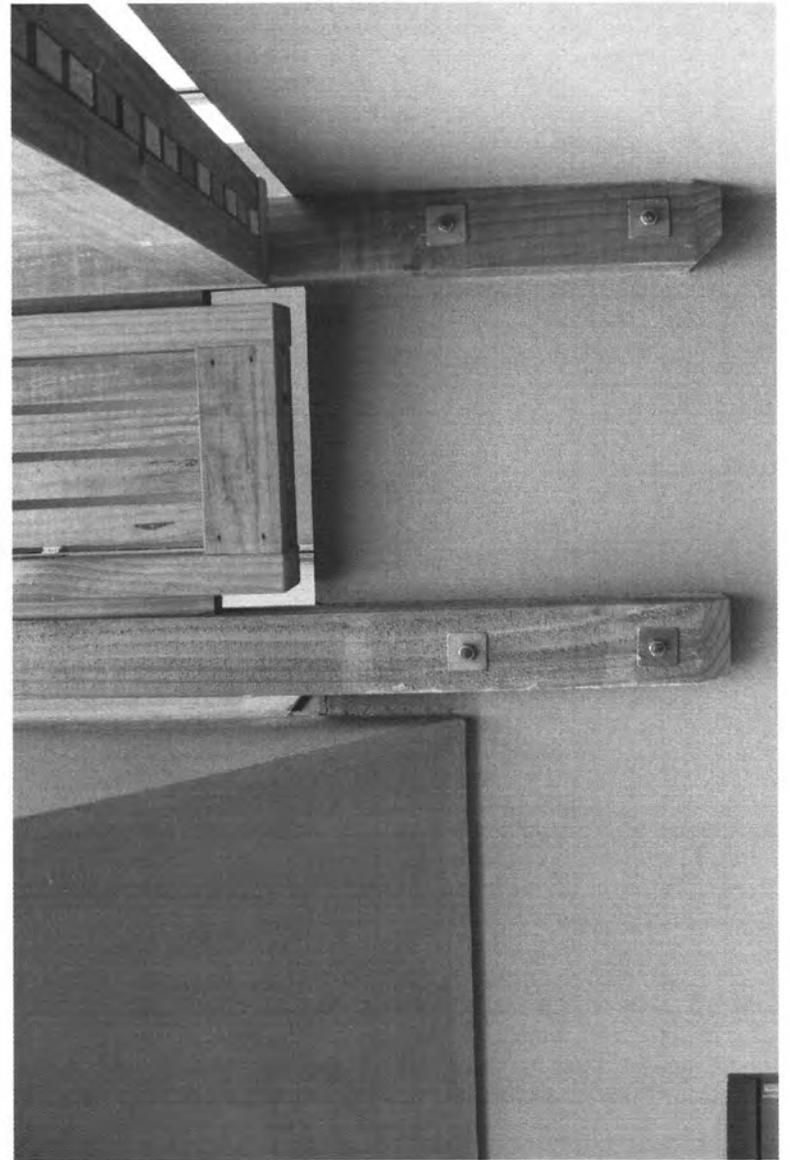
I certify that the inspection has been carried out in accordance with the requirements of regulation 41 of the Electricity Regulations 1997.

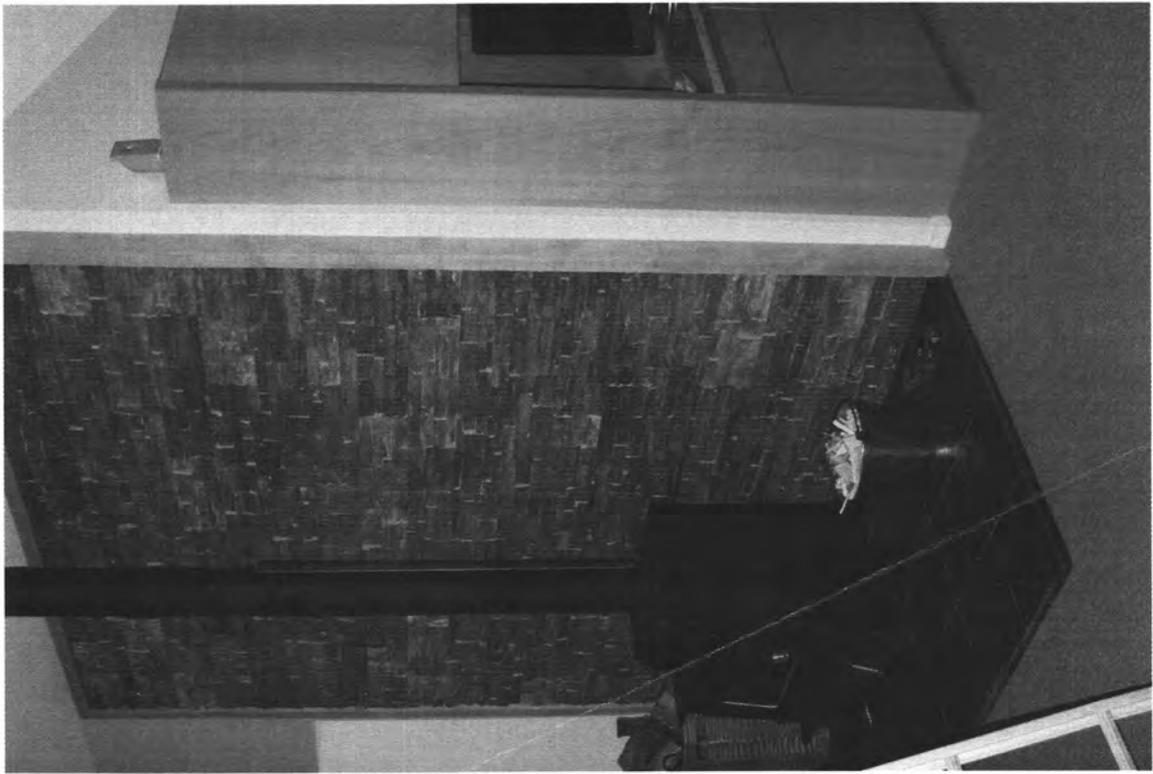
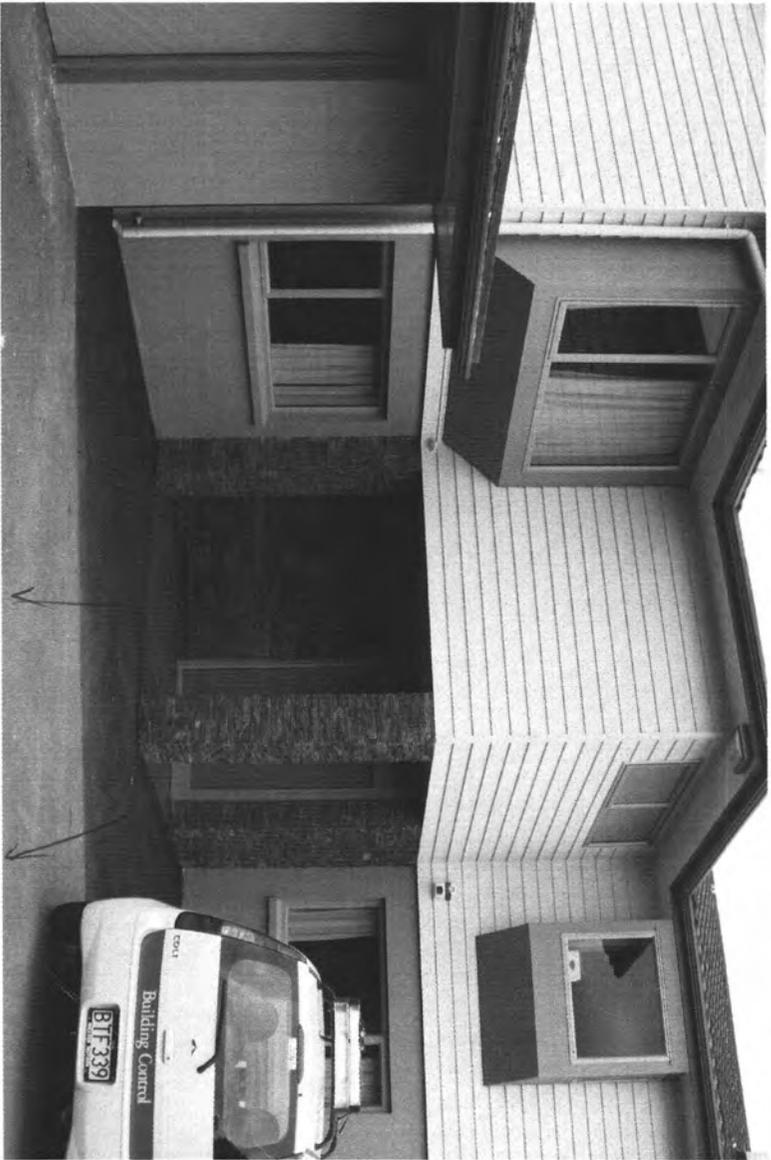
Name Registration no.
Signature Date
Contact Ph No.

TO BE RETAINED BY THE WORKER RESPONSIBLE FOR CERTIFYING THE WORK











SITE INSPECTIONS - BC 040111

Application Details

Applicant Name :	Mr Graeme Cromie
Contact Address :	Box 30 238 Lower Hutt
Location :	93 FIELD WAY, WAIKANAE BEACH
Legal Description :	LOT 11 DP 24476 Status history Lodged 2/02/04 F
Proposal :	Dwelling adds & alts.

INITIAL INSPECTION

COMMENTS

WORK CANNOT PROCEED PAST EACH STEP UNTIL THAT STEP HAS BEEN INSPECTED, APPROVED AND THIS FORM SIGNED BY THE RELEVANT INSPECTOR

FOUNDATIONS

Date: Officer: Builder/Contractor/Owner:

Approved building consent documents on site: YES / NO

SITING:

Front yard	<input checked="" type="checkbox"/>	Left hand side yard	<input checked="" type="checkbox"/>	Conforms with approved plan	YES / NO
Rear yard	<input checked="" type="checkbox"/>	Right hand side yard	<input type="checkbox"/>	If no, has new site plan been requested	YES / NO
Minimum floor level	<input type="checkbox"/>	Footing size	<input type="checkbox"/>	Foundation wall reinforcing	YES/NO
Pile hole size	<input type="checkbox"/>	Footing reinforcing	<input type="checkbox"/>	Foundation wall size	
Anchor pile size	<input type="checkbox"/>	Subfloor vents	<input type="checkbox"/>	Specific design	YES/NO
Pile hole spacing	<input type="checkbox"/>	Steps/stairs	<input type="checkbox"/>	If yes, has Engineer inspected	YES/NO

Has a **Site Instruction** been issued? Yes/No Instruction No:

Is a reinspection required? Yes/No Proposed date of follow up inspection

Labels in place? Yes/No Producer Statement Yes/No/NA

COMMENTS

BAM
4/8/09
 SINGLE POUR: FOUNDATION BY ENGINEER, STEEL TO RECHECK
 DISCUSSED ON SITE WITH BUILDER, DRAINAGE CHANNEL TO BE
 USED FOR DWELLING OLDS & FRONT ENTRY

Be 040111
Branie

PRE-BLOCKFILL

COMMENTS

DM
30/8/04

BLOCKS IN PLACE AS PER DESIGN, STEEL IN PLACE
AS REQUIRED, CLEAR TO FILL

PRE-SLAB

BUILDING

Date: 2/8/09 Officer: [Signature] Builder Contractor/Owner: CMS

Minimum floor level

DPC

Joints taped

Penetrations

Specific design

If yes, has Engineer inspected Yes / No

<input checked="" type="checkbox"/>

Yes / No

?

Mesh

Mesh chairs

~~Slab thickening~~

~~Bottom plate fixings~~

<input checked="" type="checkbox"/>

Has a **Site Instruction** been issued? ~~Yes~~ No

Instruction No:

Is a reinspection required? ~~Yes~~ No

Proposed date of follow up inspection

Labels in place? Yes/No

Producer Statement

Yes/No/NA

COMMENTS

OK TO CONTINUE

EXTERIOR CLADDING

Solid Plaster/Textured Finish

Date: Officer: Builder/Contractor/Owner:

Rigid backing	<input type="checkbox"/>
Non rigid backing	<input type="checkbox"/>
Building paper	<input type="checkbox"/>
Battens (non rigid)	<input type="checkbox"/>
Cavity (non rigid)	<input type="checkbox"/>
Sheet set out (Hardies)	<input type="checkbox"/>

Reinforcement	<input type="checkbox"/>
Spacers	<input type="checkbox"/>
Nailing (Hardies)	<input type="checkbox"/>
Flashings	<input type="checkbox"/>
Control joints	<input type="checkbox"/>

Has a **Site Instruction** been issued? Yes/No Instruction No:

Is a reinspection required? Yes/No Proposed date of follow up inspection

Producer Statement Yes/No/NA

COMMENTS

Amended plans to - Linen w/hd .. Re inspect for head flashing *J 2/10*
Cavity battens in place & O.K.

PRELINE

PLUMBING AND DRAINAGE: Plumber:

Date: Officer: Builder/Contractor/Owner:

Pressure test
 Visual leak check
 Pipe support/clips
 Pipe size
 Pipe material

Joint strain
 Pipe insulation
 Stacks
 Wastes
 Supply tank

Has a **Site Instruction** been issued? Yes/No Instruction No:

Is a reinspection required? Yes/No Proposed date of follow up inspection

Preline Labels in place? Yes/No Producer Statement Yes/No/NA

COMMENTS

BUILDING

Date: *22/11/04* Officer: *Leon Smith* Builder/Contractor/Owner: *Chris*

Timber treatment
 Ceiling diaphragm
 Dragon ties
 Studs - size/spacing
 Wall insulation *outside*
 Posts - size/fixing
 Lintels/bms - size/fixings *Refer plan*
 Ext joinery - labels
 Ceiling runners
 Wall bracing
 Mech ventilation
 Moisture Content Walls *10-15* %

Bracing straps
 Timber grade
 Wall dwangs
 Trimming studs
 Truss/rafter - fix/space *As per truss plan*
 Ceiling joists
 Plate fixings
 Ventilation
 Ceiling battens
 Check exterior claddings *90% done*
 Ceiling *10-12* %

Has a **Site Instruction** been issued? Yes/No Instruction No:

Is a reinspection required? Yes/No Proposed date of follow up inspection

Preline Labels in place? Yes/No Producer Statement Yes/No/NA

COMMENTS

*(Engineer, upstairs)
 included plus required as upstairs layout different than on the plans as well as the bracing team around window.*

POSTLINE

Date: *20/10/14* Officer: *Kevin S. H.* Builder/Contractor/Owner: *C. Harris*

Sheets nailed as per your schedule Insulation to walls

Has a **Site Instruction** been issued? Yes/No Instruction No:

Is a reinspection required? Yes/No Proposed date of follow up inspection

Postline Label in place? Yes/No

COMMENTS

An approval CRs

= 021 - 420030

= GRAHAM

FINAL INSPECTION

Building Exterior	CHECK PLANS	
Subfloor - ventilation	Flashings - roof penet	Gulley dish
Decks - structure	hips	Wastes to gullies
Balustrades - design	valleys	Terminals vents
height	gables	Spouting - Downpipes
Steps/Stairs - design	flues	Landscaping & ground levels
handrail	* Cladding (ground clearance)	Texture Coating Warranty
Flashings - windows	Roofing & Fixings (roofing warranty)	

All Appliances ok from ground level

Building Interior	CHECK FITTINGS	
Service area floors & walls	Food storage	- Water temperature
Stair design	Nat. ventilation	Solid fuel heater
Handrails	Mech. Ventilation	Supply tank
Barriers	Insulation	Trap seals & AA Valves
Lightings	Hot water cylinder flues	Cistern flushing
Laundering	Hot water cylinder valves	WC pan connection
Cooking facilities	Hot water cylinder rest	Septic Tank (engineers inspc report)
	Tempering valve	Windows - labels
		Safety glass

Water testing
First v/h level 2
Full length doors
Lower bathroom doors
Ensite

Footpath crossing installed	Yes/No	Berm damaged	Yes/No
Refund crossing deposit	Yes/No	Engineering site reports required	Yes/No
Stormwater & site drainage appear satisfactory		Yes/No	Engineering site reports received
		Yes/No	

Has a Site Instruction been issued? Yes/No NTR Instruction No.

Producer Statement Yes/No/NA

OK to issue final code compliance certificate. Yes/No

If an interim certificate is issued please list proposed conditions on the reverse of this form.

Is a reinspection required? Yes/No Proposed date of follow up inspection

Comments:

- Gully trap to close to the ground level
- Flashed producer statements / Drainage & Stormwater As Built Drainage Plan.
- Tiled area (water proofing?) Reflected on plans
- Pergolas not built will require a letter deleting from Building Consent
- * Shist stone at entrance & ground levels.
- Roofing warranties
- Texture warranties by access supervision reports

Tick (✓) approved inspections Cross (x) inspections not approved Strike out inspections not applicable

Hot water cylinder not turned on.

- Bay window - not etched required safety
- or been approved safety film fitted
- Regulator Restrictor stays required to windows 700,
and that open under than 10cm & to a fall greater
to than or than one meter.
- Smoke detector required to be a maximum of
3 meters away from Bedroom door.
- ~~Windows not label.. (require letter manufacturer)~~
- Fire Place installers installation forms.
- (See Photos.
- 2) Only one strap on cylinder requires 3 mm mini
per screw & tension straps as 250 Ltr.



BC Number: 040111

NOTE: Please have this form completed by the installer and ready for our Building Inspector to collect when doing the final inspection

FIREWORX

INSTALLER'S NAME: (Please print) AC & RM Zammit Partnership TA Fireworx

64a Mangaroa Valley Rd, R.D., Upper Hutt

Address: Phone: 5289391 Fax: 5289392 **Plus**

CST No: 75-470-320

FREE STANDING FIRE OR INBUILT FIRE INSTALLED AT:

Address: 93 Fieldway Whakarua

For: Graeme J Cromie

The following requirements under ~~AS 7421:1996~~ or AS/NZ 2918:2001 have been met and the solid fuel burning domestic appliance type and model Fisher Denniston FIS has been installed in accordance with the manufacturer's installation instructions.

Please tick (where applicable) the following:

- The chimney has been cleaned
- The chimney is in a sound condition
- The chimney is of pumice and of correct dimensions to comply with BRANZ zero clearance certificates
- The chimney is ventilated to manufacturer's requirements
- The appliance is restrained against seismic activity (free standing and fireplace heaters).
- The inbuilt hearing appliance has been approved by BRANZ as complying with their zero clearance certificate.
- The hearth is an approved type according to manufacturer's requirements.
- The hearth is restrained against seismic activity
- The fire surround at its connection to the fire place is fully insulated with approved material [see BRANZ Building Information Bulletin 248 (1986)].
- The ash hearth is of correct dimensions according to installation instructions.

Signature:

[Handwritten Signature]

Date: 5.12.05

27. Apr. 2006 10:29

KAPITI COAST D C 64 4 9045810

No. 2459 P. 2

12

Attn: Building Dept.

Attn: Andrew Cromie
(I have already faxed to KDC too)



BC Number: _____

NOTE: Please have this form completed by the Installer and ready for our Building Inspector to collect when doing the final inspection

INSTALLER'S NAME: (Please print)

Andrew Zammit / Fireworx

Address: 1048 Fergusson Drive
Upper Hutt

Ph: 04 526 2001

FREE STANDING FIRE OR INBUILT FIRE INSTALLED AT:

Address: 93 Field Way

For: Andrew Cromie / Maxam Group

The following requirements under NZS 7421:1990 or AS/NZ 2918:2001 have been met and the solid fuel burning domestic appliance type and model Fisher Denniston has been installed in accordance with the manufacturer's installation instructions.

Please tick (where applicable) the following:

- The chimney has been cleaned
- The chimney is in a sound condition
- The chimney is of pumice and of correct dimensions to comply with BRANZ zero clearance certificates
- The chimney is ventilated to manufacturer's requirements
- The appliance is restrained against seismic activity (free standing and fireplace heaters).
- The inbuilt heating appliance has been approved by BRANZ as complying with their zero clearance certificate.
- The hearth is an approved type according to manufacturer's requirements.
- The hearth is restrained against seismic activity
- The fire-surround at its connection to the fire place is fully insulated with approved material [see BRANZ Building Information Bulletin 248 (1986)].
- The ash hearth is of correct dimensions according to installation instructions.

Signature:

Bobbe Cat

Date:

27/4/06

Costing Sheet Residential Additions & Alterations

Application No: 040111	Admin = \$45 per hour	Engineering Technical
Date: 2.2.04	Plan Vetting = \$70 per hour	Assessment/Peer Review
Site Address: 93 Fieldway	Inspections = \$65	Cost + 10%

No.	Classification	Plan Vetting				Consultants			Inspections				Set Fee Portion of Consent Fee	PIM Portion Of Consent Fee	(A) Total Fee Excluding BRANZ, BIA Levies & Refundable Damage Deposits	Total (A) Plus
		Plumbing	Drainage	Building	E health	District plan	Fire	Engineering	Site	Plumbing	Drainage	Building				
16	Internal Alterations												\$135	\$165	\$598	
17	Internal Alterations with Plumbing /Drainage												\$135	\$165	\$698	
18	Single Story Brick Veneer												\$135	\$165	\$763	
19	Single Story Brick Veneer with Plumbing / Drainage												\$135	\$165	\$863	
20	Single Story Weatherboard												\$135	\$165	\$903	
21	Single Story Weatherboard with Plumbing / Drainage												\$135	\$165	\$1038	
22	Single Story Stucco/Texture Coating/Ply/Steel/Block												\$135	\$165	\$1033	
23	Single Story Stucco/Texture Coating/Ply/Steel/Block with Plumbing/Drainage												\$135	\$165	\$1168	
24	Multi Story Brick Veneer												\$281	\$165	\$968	
25	Multi Story Brick Veneer with Plumbing / Drainage												\$281	\$165	\$1103	
26	Multi Story Weatherboard												\$281	\$165	\$1133	
27	Multi Story Weatherboard with Plumbing / Drainage												\$281	\$165	\$1298	
28	Multi Story Stucco/Texture Coating/Ply/Steel/Block												\$281	\$165	\$1203	
30	Multi Story Stucco/Texture Coating/Ply/Steel/Block with Plumbing/Drainage												\$281	\$165	\$1368	
30	Relocated Dwellings												\$281	\$165	\$1368	

Note. If Relocation Includes Alterations/Additions add Alteration & Addition rate above

*Note. All Residential Additions with Multiple Cladding Types charged at
Stucco/Texture Coating/Ply/Steel/Block rate*

-28-50 117450

CONSENT DATA INPUT REQUIREMENTS

REQUIRED INSPECTIONS		STANDARD ADDENDA			
14	✓	32	✓	21	✓
1	✓	2	✓	22	
17		3		23	
7	✓	4	✓	23A	
16	✓	5		24	
2	✓	6		24A	✓
3		7	✓	25	
22	✓	8	✓	26	
20		8A	✓	27	✓
18		8B	✓	28	
19		9	✓	29	
4	✓	10		30	
8	✓	11		31	✓
5	✓	12		33	
15	✓	13		34	
		14		38	✓
		15		39	
		16		40	
		17		41	
		18		42	
		19		43	
		20		44	✓

STANDARD CONSENT CONDITIONS
35
36
37

NON STANDARD ADDENDA



Ground bearing must be reconfirmed on site following excavation but prior to placing of concrete and reinforcing. Soft ground may be encountered requiring Engineers Specific Design.

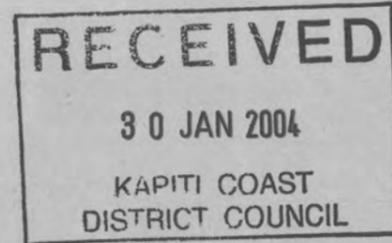
FOR COUNCIL USE:

DEPARTMENT	TICK FOR REFERRAL	COMMENTS	APPROVING OFFICER/ DATE
Resource Consents	/	Agreed that 80 sep. to garage OK - Block wall basement no other Dist Plan Issues	10/2/04
Plumbing and Drainage	/		13/2/04
Building	/		1/3/04
Fire Design			
Compliance Schedule			
Structural			
Hazardous Substances			
Environmental Health			
Site- Footpath & Entrance Conditions		Ground	
LEVEL BUILDING SITE		SOFT SAND	9/2/04
VEHICLE CROSSING EXISTING & IN REASONABLE CONDITION		FURTHER INVESTIGATION REQUIRED	
FOOTPATH HAS OLD DAMAGE		NOTES:	NOTED ON ADDENDA 1/3/04

Check Septic tank removal see notes on plan



175 Rimu Road
Private Bag 601
Paraparaumu
Phone: [04] 9045700
Fax: [04] 9045830



5 Hagley Street
P O Box 50218
Porirua City
Phone: [04] 237 5089
Fax: [04] 237 1439

APPLICATION FOR BUILDING CONSENT
Section 33, Building Act 1991

To: Kapiti Coast District Council/Porirua City Council (delete one)
[Tick each applicable box and attach relevant documents]

App. No. 040111

ANTICIPATED COMMENCEMENT DATE: _____ FINISH DATE: _____

PART A : GENERAL

[Complete Part A in all Cases - Refer over for Part B, C and D, sign and date]

APPLICANT	PROJECT
Owner Name: MR GRAEME CROMIE	New or Relocated Building <input type="checkbox"/>
Mailing Address: PO BOX 30 238 LOWER HUTT	Alterations or Additions <input checked="" type="checkbox"/>
Contact Name: DESIGN NETWORK	Accessory Building or Fire <input type="checkbox"/>
Phone: Wk: 04 902 5505 Hm _____	Building demolition or Removal <input type="checkbox"/>
Cellphone No: _____	Intended use, e.g Dwelling, Carport, Garage etc
Fax: 04 902 5504	Being stage 1 of an intended 1 stages.
*Under section 33 of the Building Act 1991, the applicant must be the owner of the land on which building work is contemplated or a person who or which has agreed in writing, whether conditionally or unconditionally, to purchase the land or any leasehold estate or interest in the land, or to take a lease of the land, while the agreement remains in force.	Estimated value (inclusive of GST) \$ 80 000
	Intended life: (of building) Indefinite but not less than 50 years Specified as _____ years
FOR COUNCIL USE	PROJECT LOCATION
Received: _____	93 73 Street Address (if any) FIELDWAY WAIKANAHE SH.
Application Fee: \$ _____	Legal description (as shown on certificate of title rates notice, if any)
Receipt No: _____	Lot 11 DP _____
Balance of Fees: \$ _____	Valuation No. 1491058800
Receipt No: _____	
Date: _____	
NOTE: Balance of fees are payable on consent approval	
This application is for:	
<input type="checkbox"/> Building Consent only, in accordance with Project Information Memorandum	
<input type="checkbox"/> Both Building Consent and a project Information Memorandum	

SCANNED

PART B : BUILDING DETAILS

(Complete Part B in all cases)

This application is accompanied by (tick each applicable box, attach relevant documents in duplicate):

- The drawings, specifications and other documents according to which the building is proposed to be constructed to comply with the provisions of the building code, with supporting documents, if any, including:
 - Building certificates
 - Producer statements
 - References to accreditation certificates issued by the Building Industry Authority
 - References to determinations issued by the Building Industry Authority
- Proposed procedures, if any, for inspection during construction

PART C : PROJECT DETAILS

(Complete Part C only if you have not applied separately for a project information memorandum)

- Location, in relation to legal boundaries, and external dimensions of new, relocated, or altered buildings
- New provisions to be made for vehicular access, including parking
- Provisions to be made in building over or adjacent to any road or public place
- New provisions to be made for disposing of stormwater and wastewater
- Precautions to be taken where building work is to take place over existing drains or sewers or in close proximity to wells or watermains
- New connections to public utilities
- Provisions to be made in any demolition work for the protection of the public, suppression of dust, disposal of debris, disconnection from public utilities and suppression of noise
- Any cultural heritage significance of the building or building site, including whether it is on a marae

PART D : KEY PERSONNEL

Designer(s): DESIGN NETWORK

Building Certifier(s): K.C.D.C.

Builder/s: TO BE NOTIFIED

Registered Drainlayer: " REG NO: "

Craftsman Plumber: " REG NO: "

Other: _____

PLEASE NOTE

The information provided in support of this application is public and as such is freely available on request. However under Section 27(3) of the Building Act 1991 you may for security and/or copyright reasons request the plans and specifications pertaining to this application be marked as confidential by completing the following section.

CONFIDENTIALITY	SIZE OF BUILDING
Plans and Specifications	Floor area m ² <u>63m²</u>
I/We require that my/our:	No of stories <u>2</u>
1. <input type="checkbox"/> plans	No of Units <u>1</u>
2. <input type="checkbox"/> specifications	
be treated as confidential in order to protect either:	
3. <input type="checkbox"/> the security of the building; and/or	
4. <input type="checkbox"/> the copyright	
Signed: _____	

Signed for and on behalf of the Applicant:

Name: [Signature]

Position: DRAWING MAN Date: 30/01/04

FOR OFFICE USE ONLY

FEE	AMOUNT	APPLICATION DEPOSIT	\$.....
Building	\$11,741.50	RECEIPT NO	DATE.....
Sewer Connection	\$.....	90610	5-3-04
Water Connection	\$.....	RECEIPT NO	DATE.....
Vehicle Crossing	\$.....	55657	5-4-04
Damage Deposit	\$400	FEES PAID BY:	
Structural Checking	\$.....		
Building Research Levy	\$80.00	BUILDING CONSENT	DATE ISSUED
Development Levy	\$.....	NUMBER	
BIA Levy	\$52.00	AUTHORISATION FOR REFUND OF DEPOSIT	
Compliance Schedule	\$.....	Deposit held =	\$.....
Digital Storage Fee	\$28.50	Cost to Repair Damage Caused During	
Certificate of Title Charge	\$.....	Construction =	\$.....
Photocopying	\$.....	Total Balance to be Refunded	
SUBTOTAL	\$1,735.00	Authority Number:	
Less Deposit Paid	\$.....	Authorised:	DATE:
TOTAL	\$1,735.00		
GST INCLUDED	\$.....		

Received with thanks by 46/01
KAPITI COAST DISTRICT COUNCIL

5-04-04 16:26 Receipt no. 55657

COPY *COPY* *COPY*
DR BC040111
CROMIE GRAEME 1,735.00-
Mr Graeme Cromie::Box 30 238:Lower Hutt
CQ B
G CROMIE 1,735.00



Building Consent

Section 35, Building Act 1991

Application

Mr Graeme Cromie	No.	040111
Box 30 238	Issue date	5/04/04
Lower Hutt	Application date	2/02/04

Project

Description	Alterations, Repairs or Extensions Being Stage 1 of an intended 1 Stages Dwelling adds & alts.
Intended Life	Indefinite, but not less than 50 years
Intended Use	Residential.
Estimated Value	\$80,000
Location	93 FIELD WAY, WAIKANAE BEACH
Legal Description	LOT 11 DP 24476
Valuation No.	1491039800

Charges

The Council's charges paid on uplifting this Building Consent, in accordance with the attached details are:

	\$	1,603.00
Building Research Levy	\$	80.00
Building Industry Authority Levy	\$	52.00
Total	\$	1,735.00

This building consent is a consent under the Building Act 1991 to undertake building work in accordance with the attached plans and specifications so as to comply with the provisions of the building code. It is not a consent under the Resource Management Act and does not affect any duty or responsibility under any other Act nor permit any breach of any other Act.

Signed for and on behalf of the Council:

Name: Robyne Cranlow
Kapiti Coast District Council

Date: 5/4/04

Phone (04) 904 5700, Fax (04) 904 5830 175 Rimu Road, Private Bag 601, Paraparaumu. Website www.kcdc.govt.nz

Addenda to Application

Application

Mr Graeme Cromie Box 30 238 Lower Hutt	No.	040111
--	-----	--------

Project

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Estimated Value	\$80,000
Location	93 FIELD WAY, WAIKANAE BEACH
Legal Description	LOT 11 DP 24476
Valuation No.	1491039800

General Requirements

- a) The District Inspector is to be given 24 hours' notice before carrying out the following inspections:
1. INITIAL INSPECTION - PREVIOUSLY COMPLETED
 2. FOUNDATION INSPECTION
 3. PRE-CONCRETE SLAB INSPECTION OF PLUMBING
 4. PRE-BLOCK-FILL INSPECTION
 5. PRE-SLAB INSPECTION, CONCRETE FLOOR
 6. EXTERIOR CLADDING INSPECTION
 7. PRELINING INSPECTION, MOISTURE TEST, CHECK BRACING
 8. POST-LINING INSPECTION, LININGS, FIXED AS PER BRACE DESIGN
 9. COMPLETION INSPECTION
- b) To arrange for any of the above required inspections by the District Inspector, please contact the building inspectorate on (04) 902 2845 between the hours of 8.00am and 4.30pm.

1. LAPSE AND CANCELLATION OF BUILDING CONSENT. A building consent shall lapse and be of no effect if the building work concerned has not been commenced within 6 calendar months after the date of issue. Or within such further period as the territorial authority allows.
2. The inspection of all specific design components of the building is the responsibility of the Design Engineer who is also required to supply a written report to Council.
3. NZS3604 is an Acceptable Solution in terms of the New Zealand Building Code and is a recommended reference document for timber framed buildings.
4. Fit head, jamb, sill flashings and proprietary sill tray to external joinery. Fit airseals to the inside edges of the window reveals.
5. As this building is located within the Very High Wind Zone all Exterior load bearing walls require 100 x 50 studs at 480mm centres maximum, and light roofs require 16 kN cyclone ties to rafters and trusses. Purlins to light roofs require 1 - 'Z' nail additional securement, top and bottom edge
6. As this building is located within the Very High Wind Zone, light roofs require 16 kN cyclone ties to rafters and trusses. Purlins require 1 - 'Z' nail additional securement, top and bottom edge.
7. All glazing, construction system and components to comply with Very High Wind Area (50 m/s) and 500 m Coastal Corrosion Zone if applicable.
8. Note and comply with endorsements on approved plans.
9. Minimum heights of finished concrete slab-on-ground floors above adjoining finished ground level to comply with the current NZS3604.
10. Section F7 of the New Zealand Building Code requires the installation of an approved smoke alarm system for detection and warning of fire. Alarms are to be of a type which include a reset and test buttons.
11. Provide from your Contractor a roof warranty covering the product and its installation.
12. As this site is located in the Severe Coastal Corrosion Zone, all exposed fixings and cladding fixings need to be stainless steel.
13. Window sashes on upper levels less than 760 mm above floor, to have restrictor stays installed for 100 mm maximum opening.
14. Exterior cladding system to be previously completed and inspected by Council's Inspector prior to any subsequent prelining inspection/approval being granted for the fixing of internal linings.
15. Ground bearing must be reconfirmed on site following excavation but prior to placing of concrete and reinforcing. Soft ground may be encountered requiring Engineers Specific Design.
- 16.

I have read the foregoing requirements, and the Owner/Builder/Authorised Person hereby agrees to comply with them.

**OWNER/BUILDER/
AUTHORISED PERSON**

Date:

27 October 2004

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Attention Mr Andrew Wood

Dear Sir,

Re: Building Consent 040111 for 93 Fieldway, Waikanae.

We have applied to change the cladding from Monotek to Linea with a cavity system, all as per James Hardies standard details. The application has not yet been approved.

We have been unable to satisfactorily apply the Linea to the 45 degree slope to the soffit of the protruding windows. We are however, able to achieve these details in Monotek. The Monotek will be fully plastered.

Trust this is satisfactory and that this can be applied to our current application for an alteration.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andrew Cromie', with a stylized flourish at the end.

Andrew Cromie

Phone 04 570 3312 or 021 420 033
Fax 04 570 3317

PO Box 30 238
Lower Hutt.

Attached full set of drawings with alterations highlighted

Risk Factor	Risk Severity North Elevation								
	Low	Score	Medium	Score	High	Score	Very High	Score	Sub totals for each risk factor
Wind zone (per NZS 3604)	0		0		1		2		
Number of storeys	0		1		2		4		
Roof/wall intersection design	0		1		3		5		
Eaves width	0		1		2		5		
Envelope complexity	0		1		3		6		
Deck design	0		2		4		6		
Total risk score									4

Risk Factor	Risk Severity South Elevation <i>SECRET</i>								
	Low	Score	Medium	Score	High	Score	Very High	Score	Sub totals for each risk factor
Wind zone (per NZS 3604)	0		0		1		2		
Number of storeys	0		1		2		4		
Roof/wall intersection design	0		1		3		5		
Eaves width	0		1		2		5		
Envelope complexity	0		1		3		6		
Deck design	0		2		4		6		
Total risk score									5

Risk Factor	Risk Severity East Elevation								
	Low	Score	Medium	Score	High	Score	Very High	Score	Sub totals for each risk factor
Wind zone (per NZS 3604)	0		0		1		2		
Number of storeys	0		1		2		4		
Roof/wall intersection design	0		1		3		5		
Eaves width	0		1		2		5		
Envelope complexity	0		1		3		6		
Deck design	0		2		4		6		
Total risk score									5

Risk Factor	Risk Severity West Elevation								
	Low	Score	Medium	Score	High	Score	Very High	Score	Sub totals for each risk factor
Wind zone (per NZS 3604)	0		0		1		2		
Number of storeys	0		1		2		4		
Roof/wall intersection design	0		1		3		5		
Eaves width	0		1		2		5		
Envelope complexity	0		1		3		6		
Deck design	0		2		4		6		
Total risk score									5

Addendum to Building Consent Application

E2 Claddings

Commencing 1 July 2004 Kapiti Coast District Council Building Control introduced additional documentation requirements primarily to cover the exterior envelope of buildings to ensure compliance with Clause E2 of the Building Code.

Note that a completed risk assessment will be required from 1 August.

These additional items must be identified and where indicated (*) specific products and installers of those products shall be named.

Feature	Product	Direct fixed	Cavity system	Installer
Wall Claddings				
*EIFS				*
*Flush finished fibre cement sheet				*
Fibre cement sheet	Mondlek		✓	Chris Longstaff
*Solid plaster (stucco) (Note 1)				*
Plywood				
*Profiled metal (Note 1)				*
Timber weatherboards				
Fibre cement weatherboards	linea		✓	Chris Longstaff
*Masonry veneer				*
Flashings				
Building Wrap				
Flexible sealing tape				
Sealants including air seals				
Colour (Note 2)				
Roof Claddings				
*Masonry tiles				*
*Pressed metal tiles				*
*Profiled metal				*
*Membrane roofing				*
Flashings				
Underlay				

Note 1: Stucco and horizontal metal profile to be installed on cavity

Note 2: Finished colour required for flush finished fibre cement and EIFS claddings

KAPITI COAST DISTRICT COUNCIL
AMENDED / REVISED PLANS

Date Received

Date Approved

Approving Officer

PROPOSED ADDITION FOR MR & MRS CROMIE

LOT 2 FIELDWAY, WAIKANAE BEACH

INDEX

- 1 EXISTING & PROPOSED LOWER FLOOR PLANS
- 2 EXISTING & PROPOSED UPPER FLOOR PLANS
- 3 SITE PLAN, ELEVATIONS & JOINERY SCHEDULE
- 4 FOUNDATION PLAN, ROOF PLAN, JOIST PLAN
- 5 SECTIONS AA & BB & DETAILS

REVISED PLANS 27/07/04

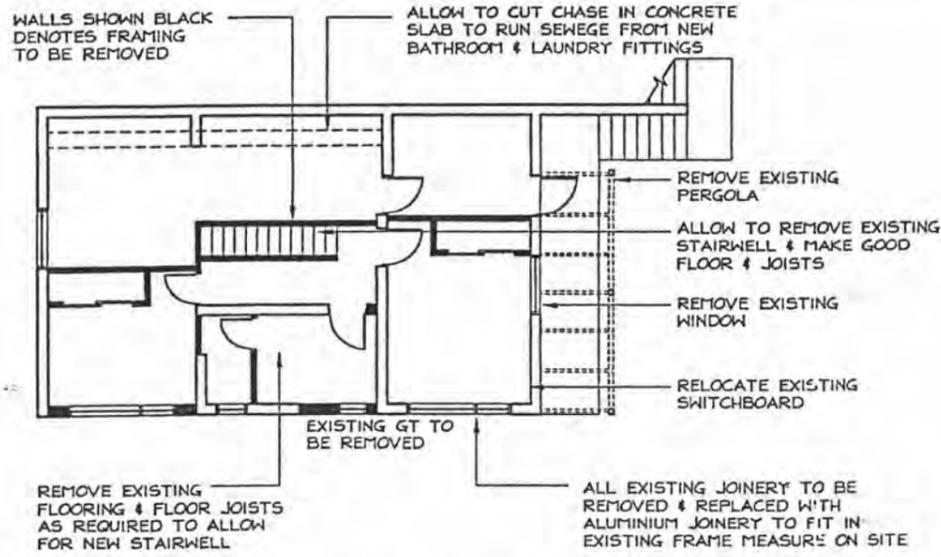
2311

Design Network Kapiti

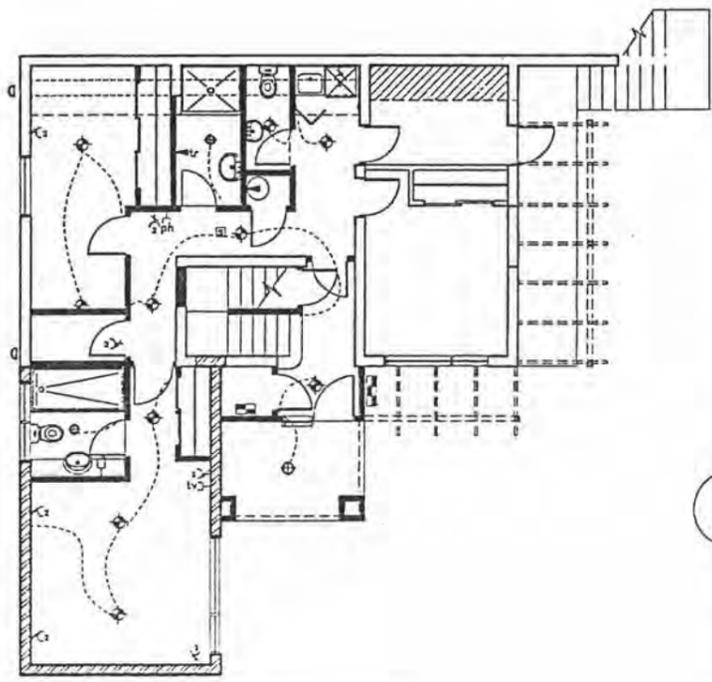
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Email: kapiti@desnet.co.nz

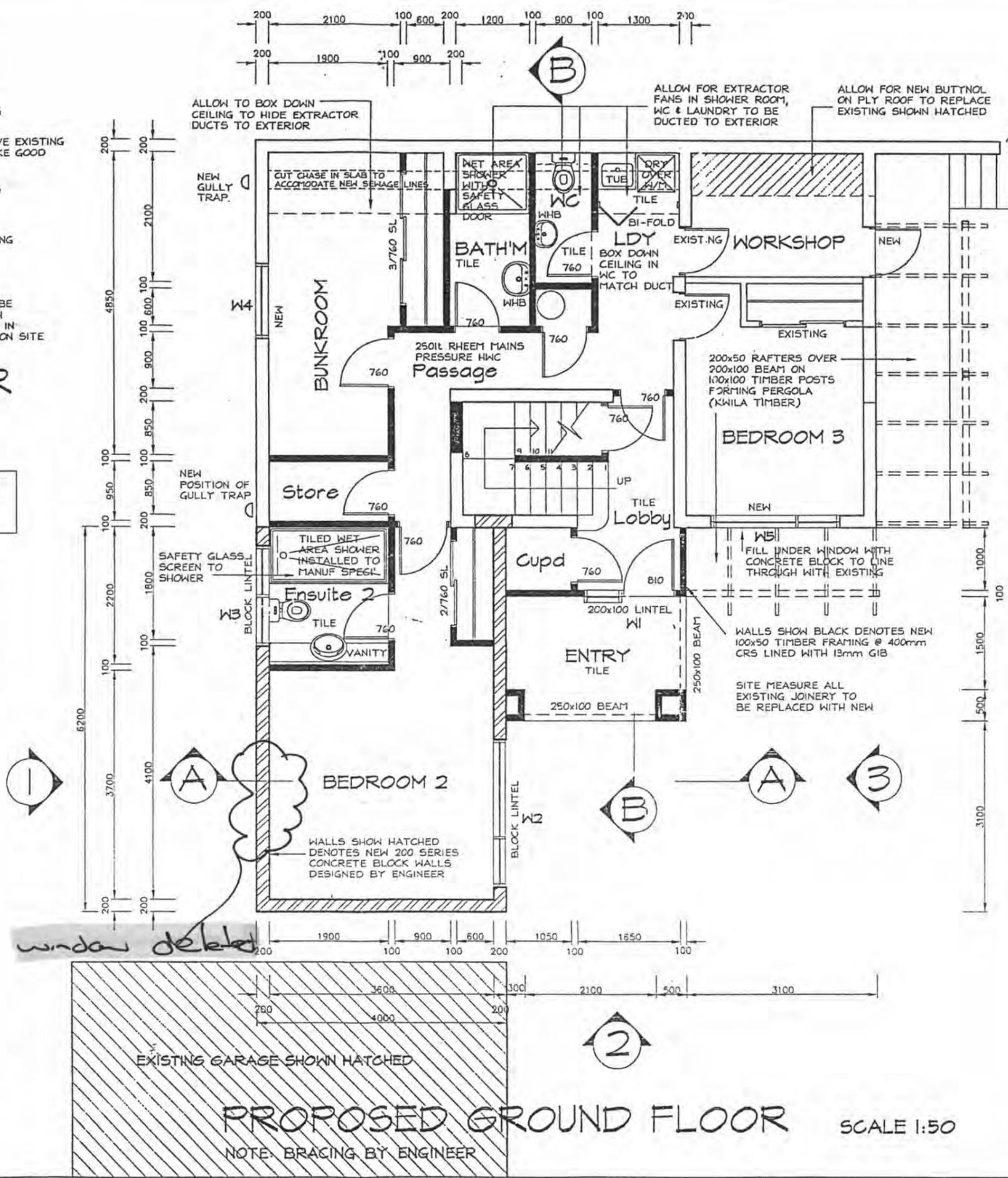


EXISTING GROUND FLOOR
SCALE 1:100



ELECTRICAL LEGEND			
⊙	Exterior Lighting Point	⊙	Permanent Point
⊙	Recessed Downlight	⊙	Television Point
⊙	Wall Mounted Lighting Point	⊙	Telephone Point
⊙	Ceiling Light / Extract Fan	⊙	Shaving Point
⊙	Power Point (2 denotes double)	⊙	Heated Towel Rail
⊙	Switch Board	⊙	Smoke detector
⊙	Meter Board		

ELECTRICAL PLAN
SCALE 1:100



PROPOSED GROUND FLOOR
SCALE 1:50

PROJECT: ADDITION FOR MR & MRS G CROMIE
LOT 2 FIELD WAY WAIKANA E BEACH

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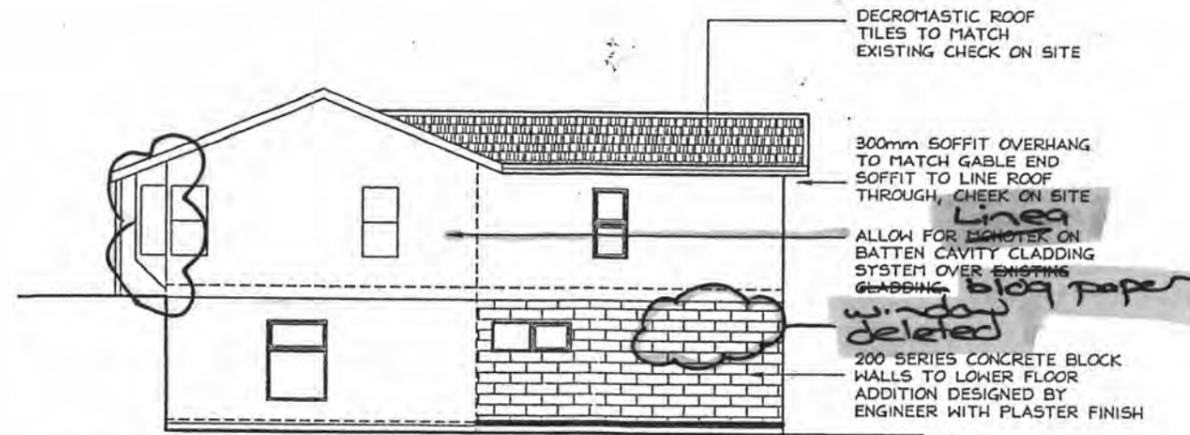
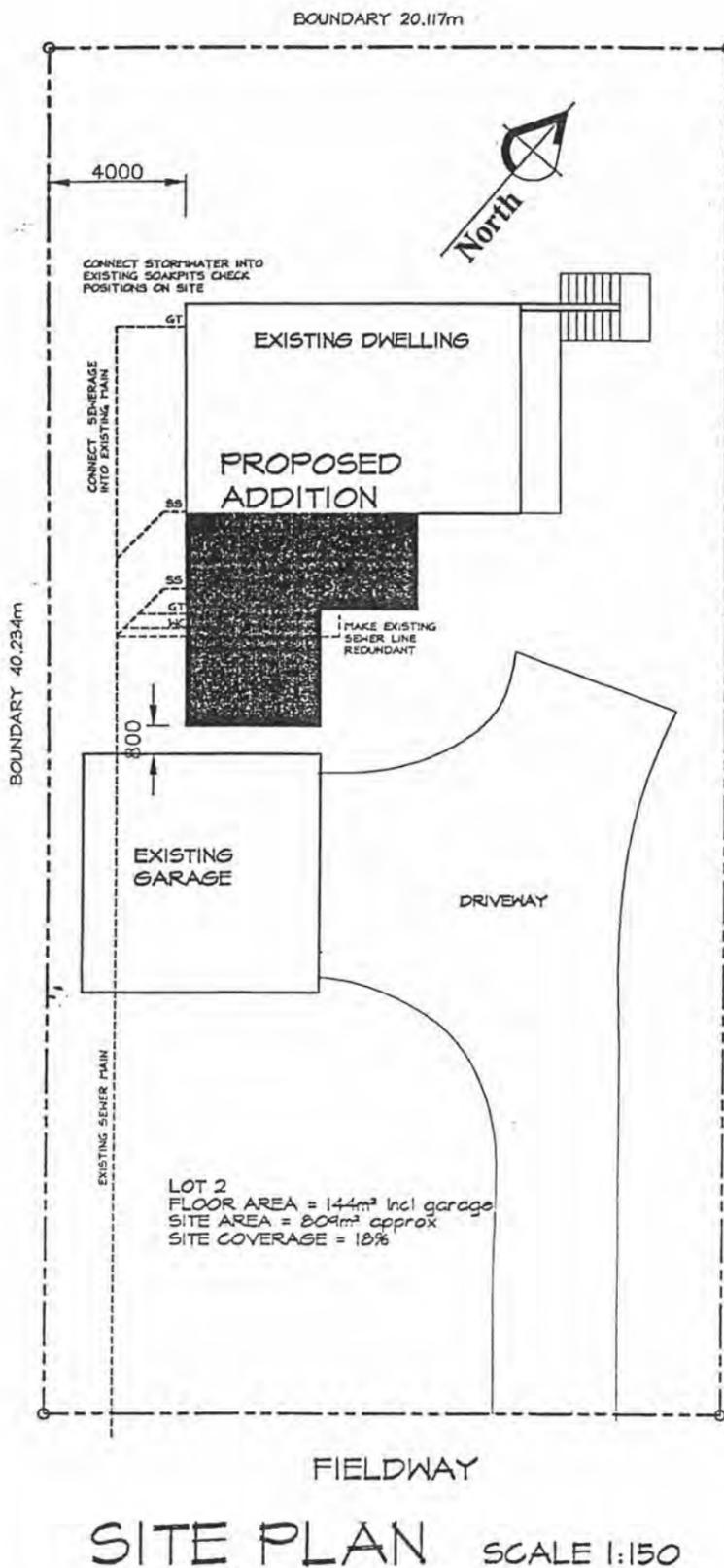
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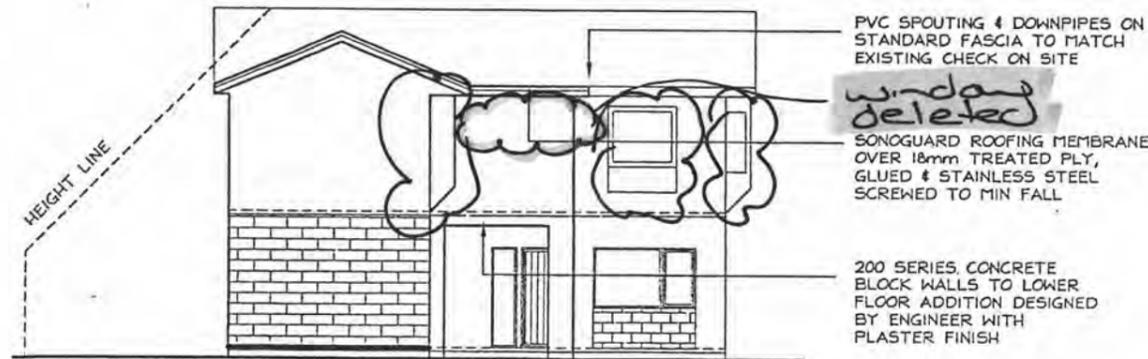
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C 27/07/04 WINDOW CHANGES

PLANS

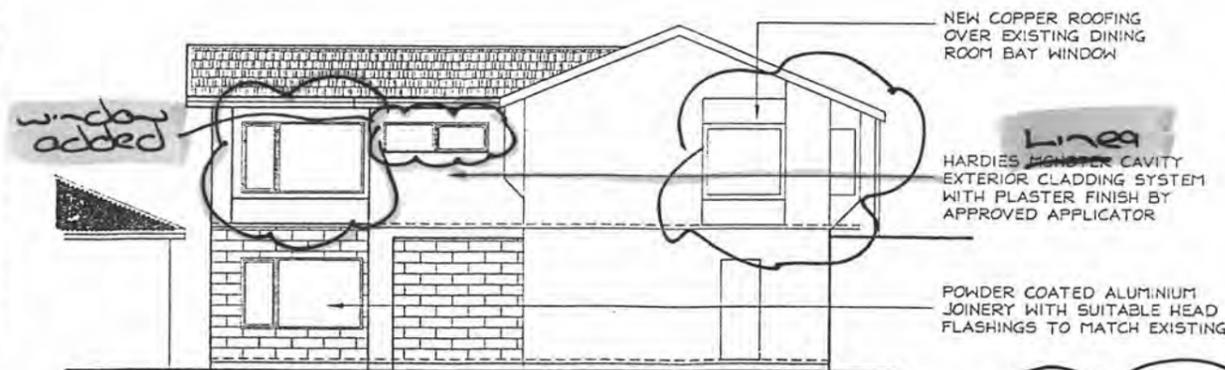
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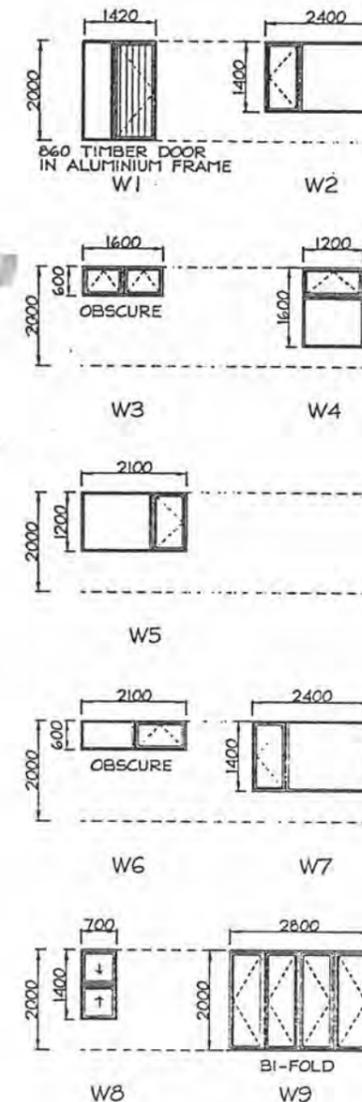
SIDE ELEVATION
SCALE 1:100



FRONT ELEVATION
SCALE 1:100



SIDE ELEVATION
SCALE 1:100



JOINERY SCHEDULE

Scale 1:100

NOTE:
JOINER TO ALLOW FOR SITE MEASURE OF ALL EXISTING UNITS TO FIT NEW ALUMINIUM JOINERY

NOTE:
EXTERIOR JOINERY TO COMPLY WITH NZS 4211, 100 Pa MIN DESIGN WIND PRESSURE AND SUITABLE FLASHINGS TO BE FITTED TO ALL UNITS

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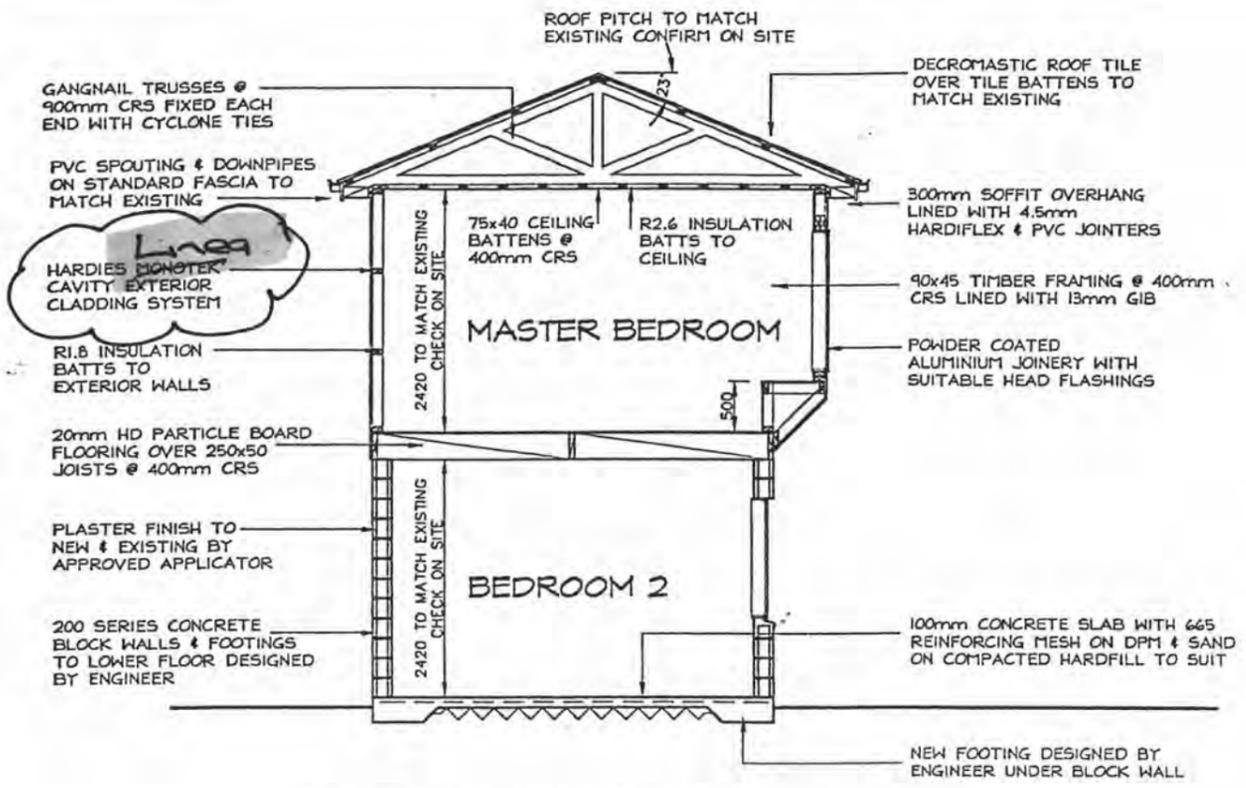
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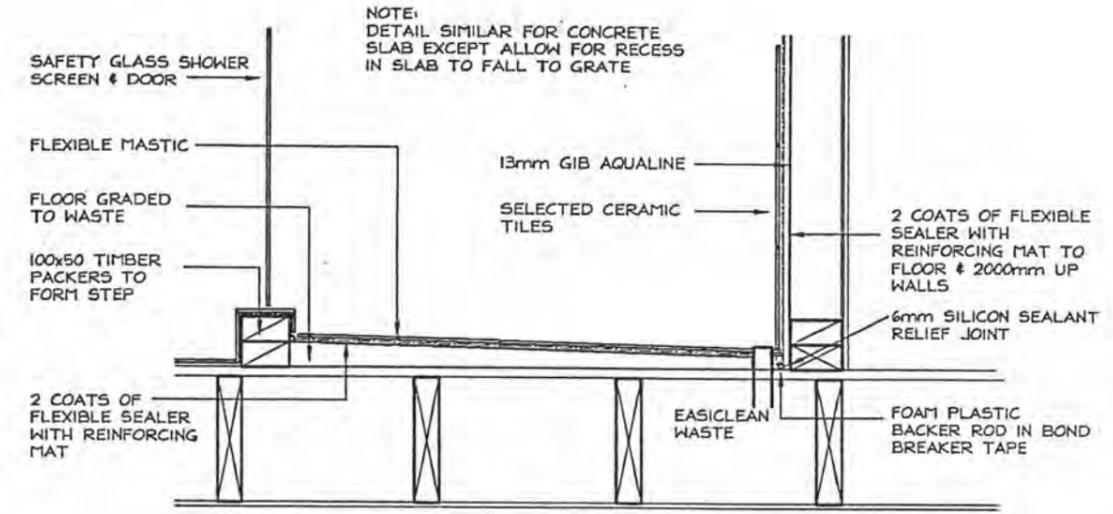
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C 27/07/04 FLAT ROOF & WINDOW CHANGES

PLANS

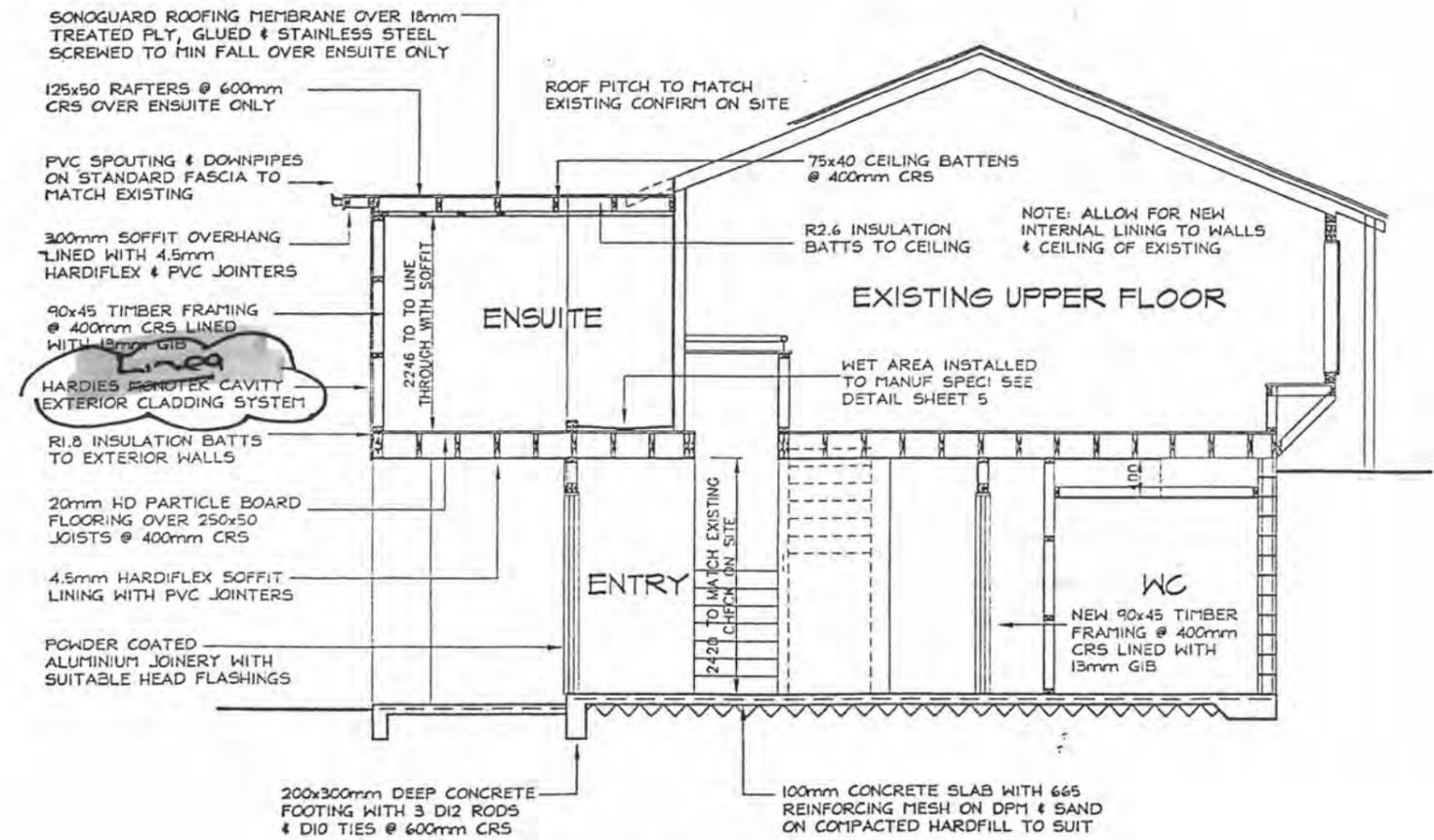
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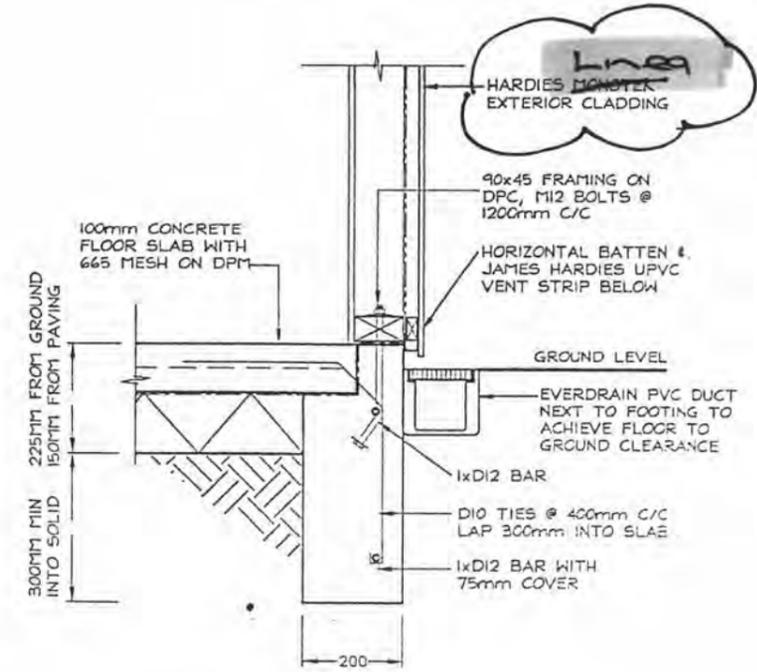
SECTION AA SCALE 1:50



WET AREA SHOWER DETAIL SCALE 1:10



SECTION BB SCALE 1:50



TWO STOREY FOOTING SCALE 1:10 TO ENGINEERS DESIGN & SPECIFICATION

PROJECT: ADDITION FOR MR & MRS G CROMIE
LOT 2 FIELD WAY WAIKANAEBEACH

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C 27/07/04 FLAT ROOF

PLANS

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2311 / 5	C
(A1 original) OF 5	

COUNCIL COPY



Building Control Services

Thank you for choosing KCDC Building Control Services to process and inspect your building project. It is our aim to provide you with timely and professional building control services. We welcome any suggestions for improvements to the services we provide.

Ken Smith
Building Control Manager
Ph (04) 904 5855
Cell 027 4501509

Building Consent Number : 040111

Applicant Name : Mr Graeme Cromie

COUNCIL COPY

Proposal : Dwelling adds & alts.

Location : 93 FIELD WAY, WAIKANAEBEACH

Legal Description : LOT 11 DP 24476 Status history

Please note the list below which identifies the inspections required for this project. Whenever possible allow sufficient time to notify KCDC Building Control Services to enable those inspections to be carried out. You will notice some additional inspections which are extra to those commonly required. These are to ensure Compliance with the NZ Building Code and have benefits for you. They will be provided at no additional cost to you or your contractor.

Inspection	Required	Sign off	Date
Initial (previously completed)	Yes		
Foundation <i>SINGLE POOL @ 4/8/09</i>	Yes	<i>[Signature]</i>	<i>6/8/09</i>
Sub floor pre b-boards (reloc)	No		
Pre slab plumbing	No <i>YES</i>	<i>[Signature]</i>	<i>6/8/09</i>
Pre block fill	Yes	<i>[Signature]</i>	<i>30/8/09</i>
Pre slab <i>SINGLE POUR 4/8/09 AS ABOVE</i>	Yes		
Sub floor	No		
Exterior cladding (general)	Yes		
Pre texture coating	No		
Pre stucco	No		
Brick veneer	No		
Pre lining	Yes	<i>[Signature]</i>	
Post lining <i>for floor only</i>	Yes	<i>[Signature]</i>	<i>20/12/09</i>
Drain test	No		
Completion	Yes		

APPROVED
BY BUILDING
MARK FITZPATRICK
Officer

CAUTION
Plans have been digitally
reproduced and may not
be to scale.

All references to standards
and codes etc shall be taken
as reference to latest version
including amendments.

PROPOSED ADDITION FOR MR & MRS CROMIE

LOT 2 FIELDWAY, WAIKANAE BEACH

VERY HIGH WIND ZONE
Refer section 10 of NZS 3604 (1999) for roof
framing and fixing requirements.
[purlins - 10.2.1.16], [rafters - 10.2.1.3],
[trusses - 10.2.2]
Max stud spacing 480mm - refer
NZS 3604 stud tables.

All Face Sealed (monolithic) wall cladding systems
must incorporate a minimum 20mm drainage cavity
system with weep holes. H3 battens are required.
Wall framing must be H1.2 , decay resistant treatment.
Alternative methods are not approved by the
Kapiti Coast District Council.

Section F7 of the New Zealand Building Code
requires the installation of an approved smoke
alarm system for detection and warning of fire.

INDEX

- 1 EXISTING & PROPOSED LOWER FLOOR PLANS
- 2 EXISTING & PROPOSED UPPER FLOOR PLANS
- 3 SITE PLAN, ELEVATIONS & JOINERY SCHEDULE
- 4 FOUNDATION PLAN, ROOF PLAN, JOIST PLAN
- 5 SECTIONS AA & BB & DETAILS

REVISED PLANS 27/01/04

Amendments to E2 of the Building Code
require a drainage cavity system behind
all cladding of a High risk category.
(min 20mm H3 cavity battens)

SEVERE COASTAL ZONE
All propriety or bolted
fixings exposed to air plus
cladding fixings to be
stainless steel.

Note area is coastal corrosion
area, and components must
meet 50yr durability requirements
of NZ Bldg Code

2311

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MARK FITZPATRICK

APPROVED
BY P & D

SIMON COPP
Officer

13/2/04

PROJECT: ADDITION FOR MR & MRS G CROMIE
LOT 2 FIELD WAY WAIKANAEBEACH

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DRAWN: BF

CAD REF:

SCALE: AS SHOWN

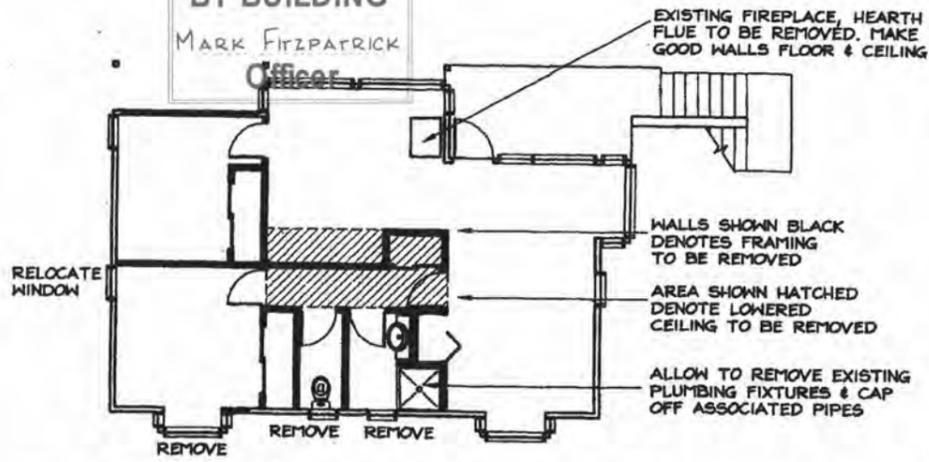
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PLANS

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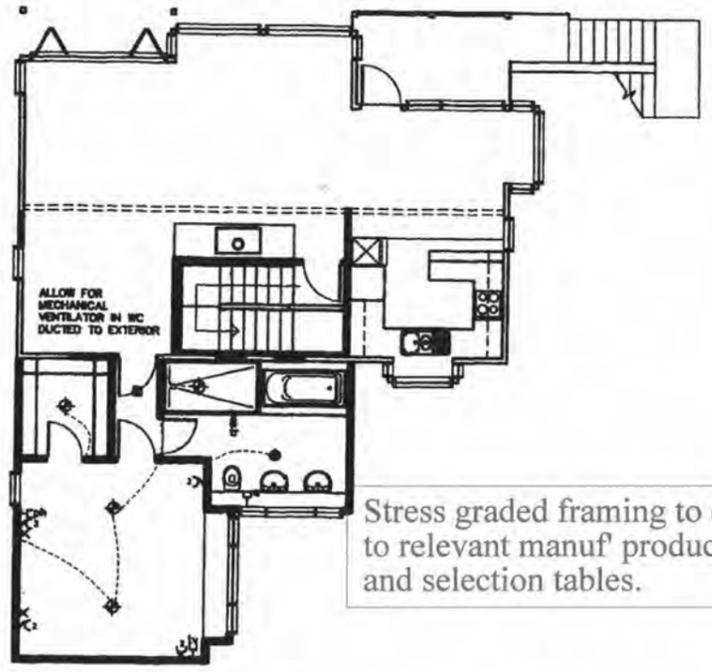
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EXISTING FIRST FLOOR
SCALE 1:100

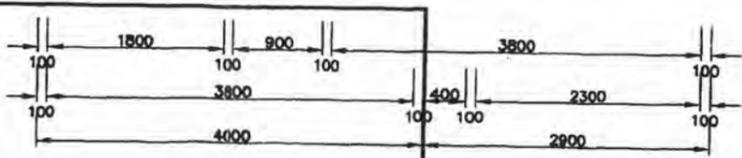
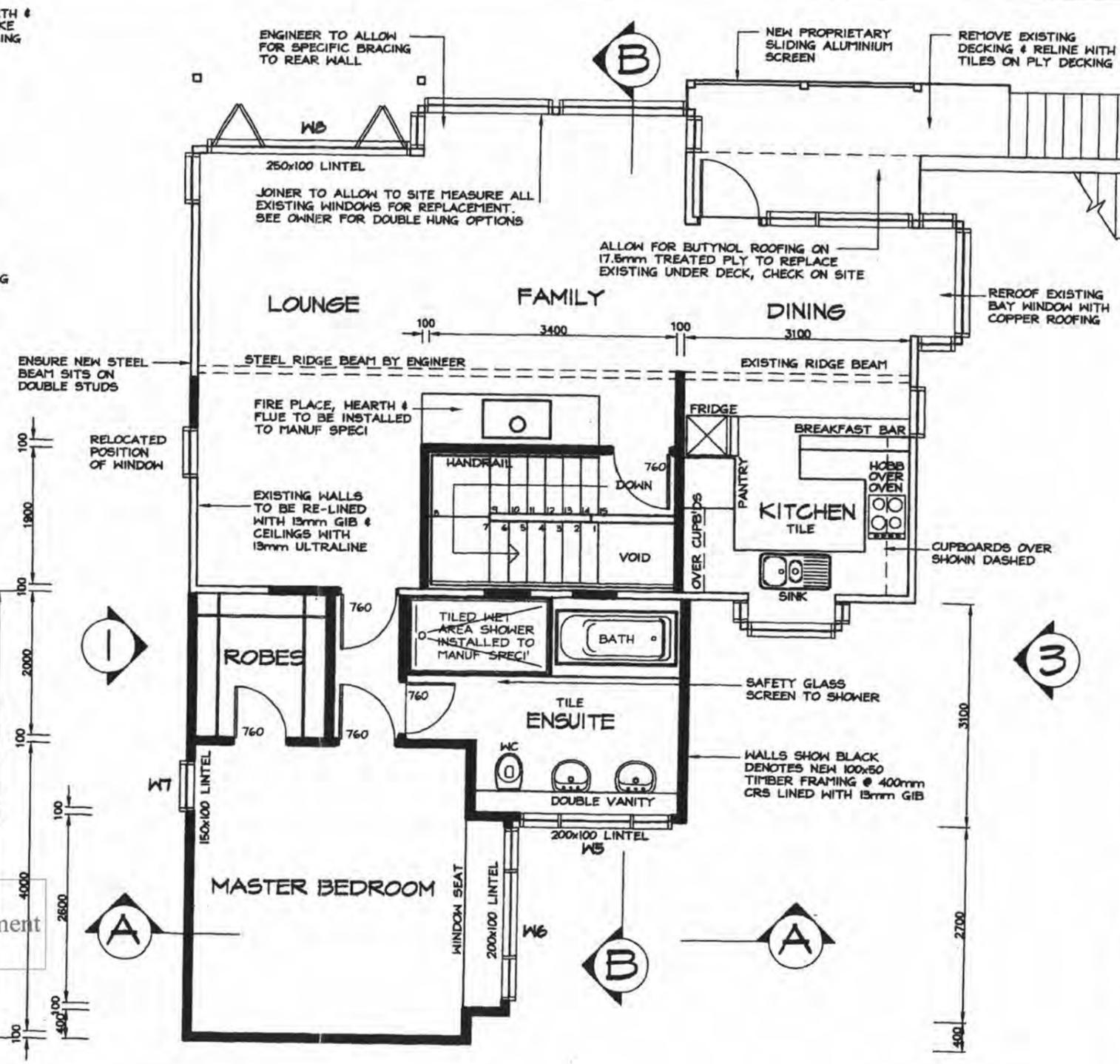
Lintels where specified other than to tables of NZS 3604:1999 and all proprietary beams & trusses must be confirmed by the Supplying Licensed Preailer or Registered Engineer.



ELECTRICAL LEGEND

⊕	Ceiling Mounted Lighting Point	⊕	Permanent Point
⊙	Recessed Downlight	TV	Television Point
X	Wall Mounted Lighting Point	ph	Telephone Point
⊙	Ceiling Light / Extract Fan	SP	Shaving Point
⊕	Power Point	HT	Heated Towel Rail
(2 denotes double)		SD	Smoke detector

ELECTRICAL PLAN
SCALE 1:100



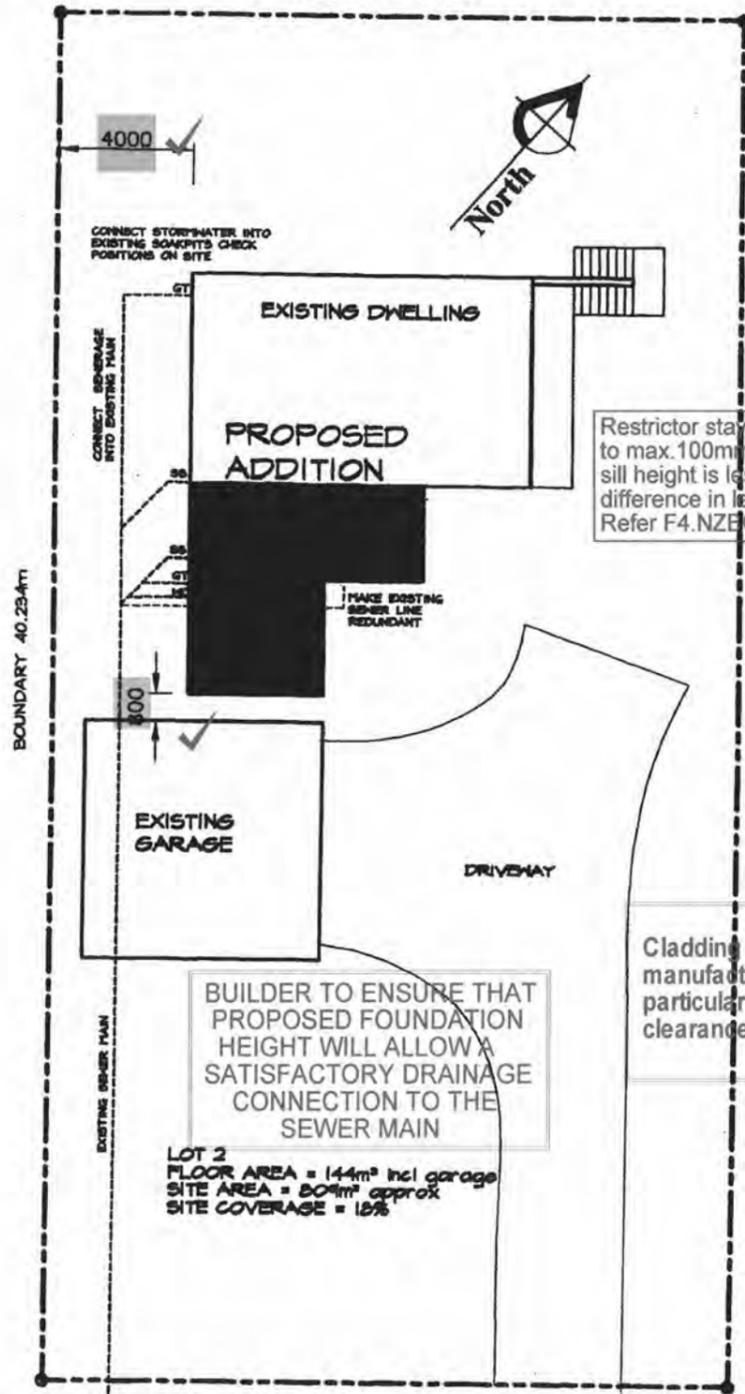
PROPOSED FIRST FLOOR
SCALE 1:50

NOTE: BRACING BY ENGINEER

ensure upstairs soil and wastepipes can run to the exterior with out damaging any

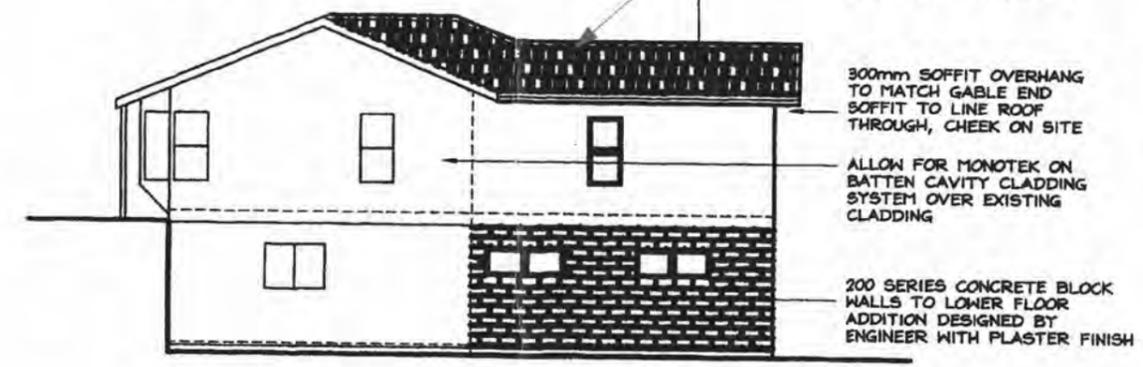
SEPTIC TANK IN THE VICINITY OF THE PROPOSED REMOVE AND RECOMPACT SAND UNDER THE SUPERVISION OF AN ENGINEER.

BOUNDARY 20.117m



SITE PLAN SCALE 1:150

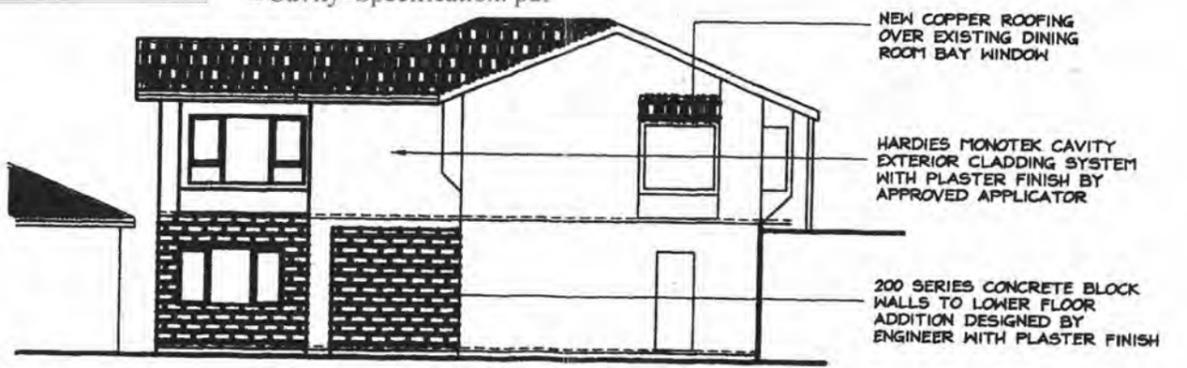
APPROVED BY PLANNING
ARNOLD HAWKINS
Officer
10/02/2004



SIDE ELEVATION SCALE 1:100

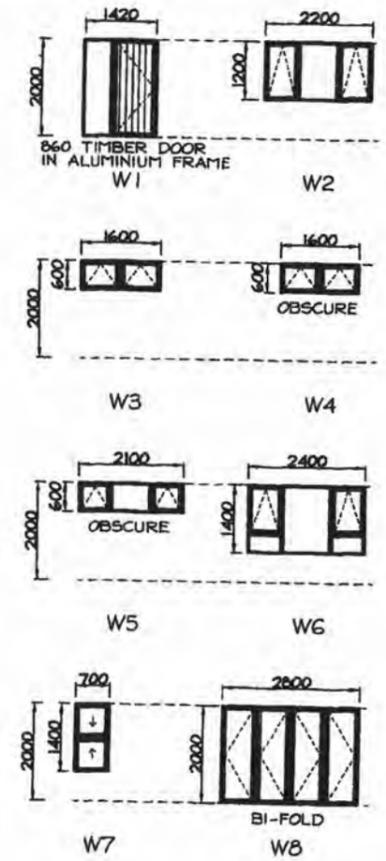


FRONT ELEVATION SCALE 1:100



SIDE ELEVATION SCALE 1:100

GLAZING CONFORM NZS 4223 PARTS 1, 2, 3.
FIT SUITABLE FLASHINGS ETC. JOINERY
VERY HIGH WIND 1550pa DWP



JOINERY SCHEDULE Scale 1:100

NOTE: JOINER TO ALLOW FOR SITE MEASURE OF ALL EXISTING UNITS TO FIT NEW ALUMINIUM JOINERY

NOTE: EXTERIOR JOINERY TO COMPLY WITH NZS 4211, 100 Pa MIN DESIGN WIND PRESSURE AND SUITABLE FLASHINGS TO BE FITTED TO ALL UNITS

APPROVED BY P & D
SIMON COPP
Officer
13/2/04

PROJECT: ADDITION FOR MR & MRS G CROMIE
LOT 2 FIELD WAY WAIKANA E BEACH

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B 27/01/04

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CHECK P.I.M INFORMATION FOR SERVICE CONNECTIONS PROVIDED IN THE PLUMBING @ DRAINAGE PACK.

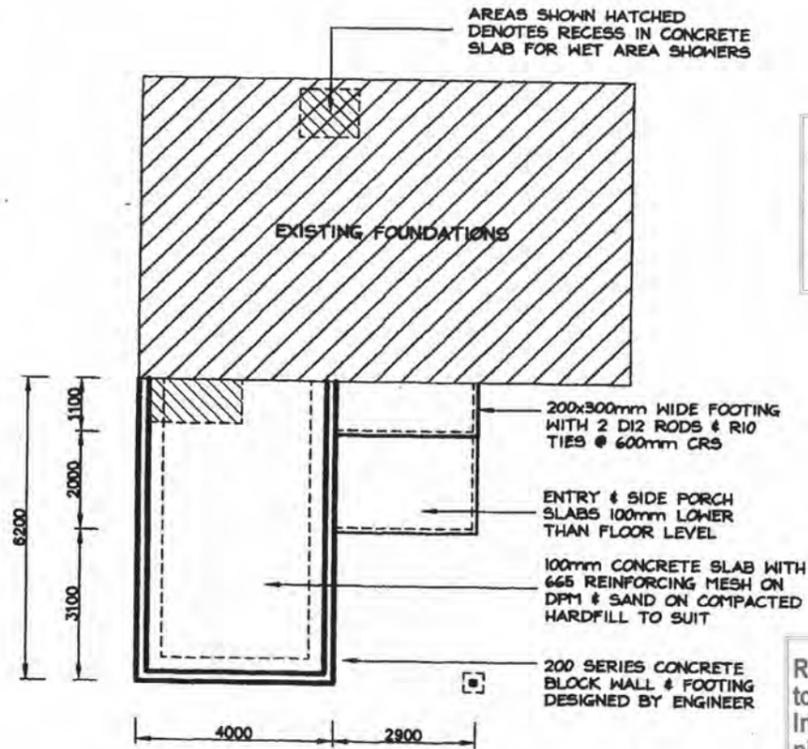
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MARK FIRZPATRICK
Officer

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BY P & D

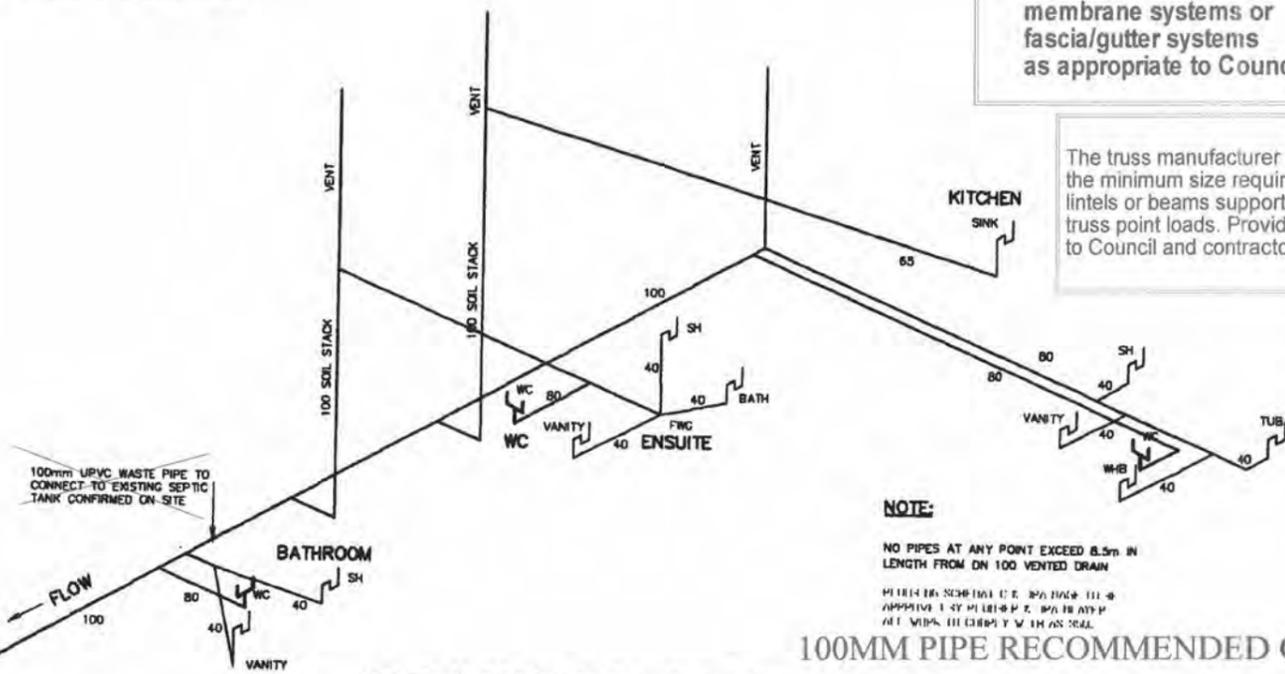
Simon Copp
Officer

13/2/04



FOUNDATION PLAN SCALE 1:100

2X45 DEG BENDS REQUIRED AT THE
BASE OF THE SOILPIPES



DRAINAGE SCHEMATIC NOT TO SCALE

ALL WASTES TO CONNECT INTO A DRAIN
THAT CONNECTS INTO THE COUNCIL SEWER

Both sides of bolted
connections to be fitted with
50x50x3mm square or 55mm
dia round washers

Roofing material to be installed
to manufacturers requirements.
In particular, fixing and minimum
pitch (reference also Table 1 of
E2 NZ Building Code.)

Supply copy of relevant
warranties for roofing,
membrane systems or
fascia/gutter systems
as appropriate to Council

The truss manufacturer must confirm
the minimum size requirement of all
lintels or beams supporting girder
truss point loads. Provide in writing
to Council and contractor.

NOTE:

NO PIPES AT ANY POINT EXCEED 8.5m IN
LENGTH FROM DN 100 VENTED DRAIN

100MM PIPE RECOMMENDED ON W.C PIPE

ALLOW TO CUT BACK & REMOVE
ROOFING & SOFFIT AS
REQUIRED FOR ADDITION

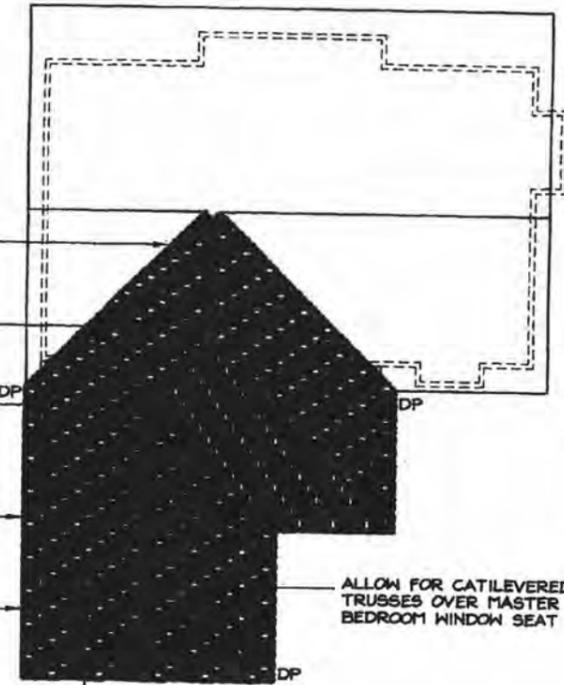
DECROMASTIC ROOF TILE
OVER TILE BATTENS TO
MATCH EXISTING

GANGNAIL TRUSSES @
900mm CRS FIXED EACH
END WITH CYCLONE TIES

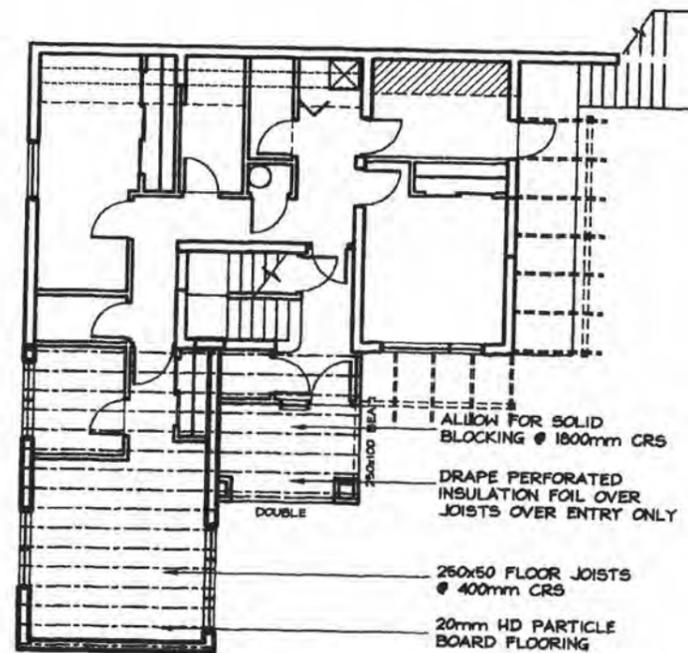
300mm SOFFIT OVERHANG
TO MATCH GABLE END
SOFFIT TO LINE ROOF
THROUGH, CHECK ON SITE

PVC SPOUTING & DOWNPIPES
ON STANDARD FASCIA TO
MATCH EXISTING CHECK ON
SITE

ALLOW FOR ROOF PLANE
BRACING TO NZS 3604 1999



ROOF PLAN SCALE 1:100



JOIST PLAN SCALE 1:100

PROJECT: ADDITION FOR MR & MRS G CROMIE
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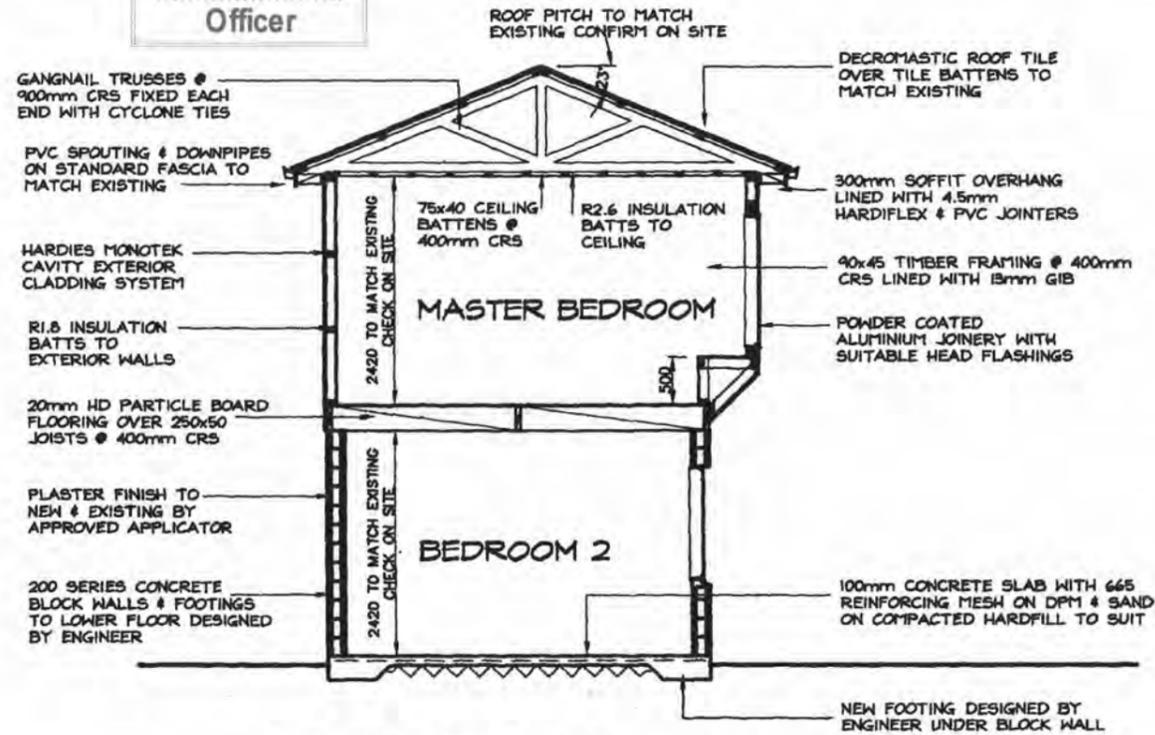
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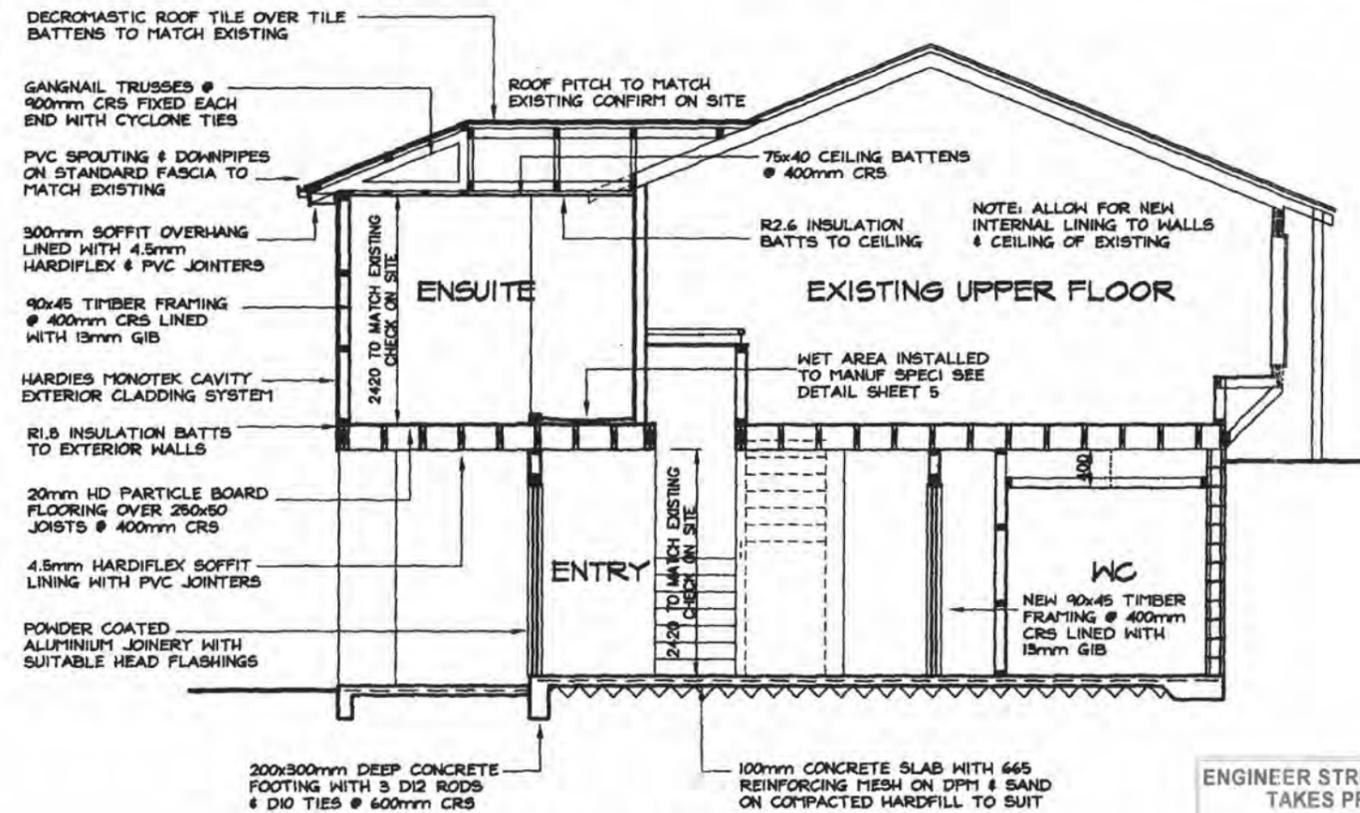
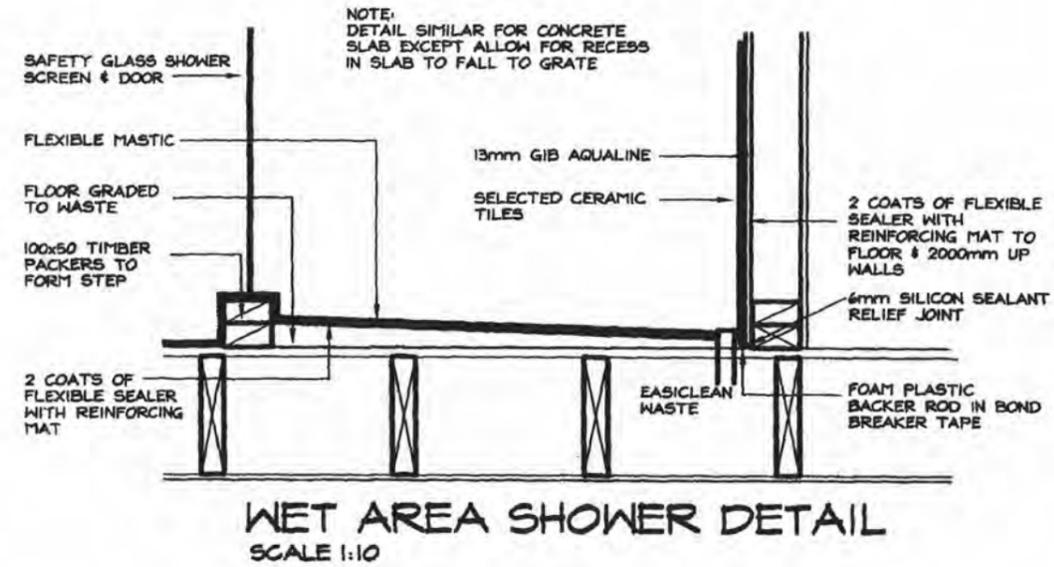
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Officer



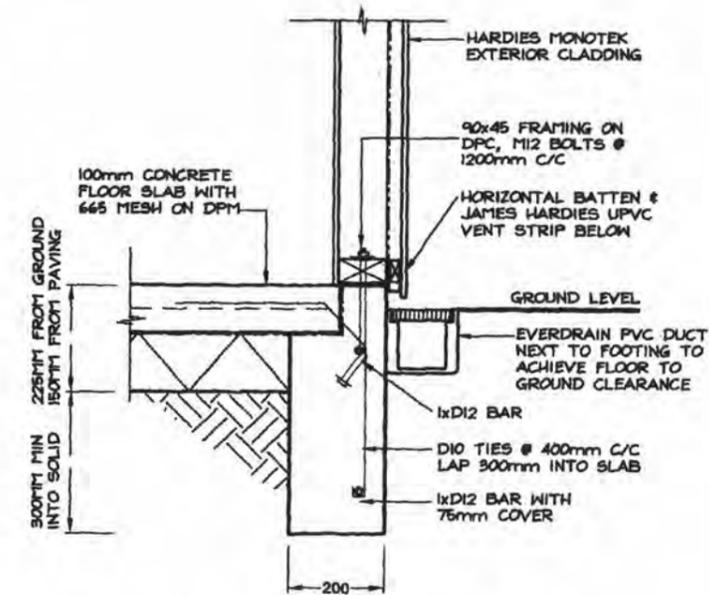
SECTION AA SCALE 1:50

Insulation to (NZS 4218) 1996



SECTION BB SCALE 1:50

ENGINEER STRUCTURAL DESIGN
TAKES PRECEDENCE



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10.2 Systems to resist vertical loads**10.2.1 Framed roofs****10.2.1.1 Scope**

The scope of this clause is as follows:

- (a) Clause 10.2.1 is written specifically for *couple-close roofs* (see figures 10.1 and 10.3), but the requirements for individual roof framing members apply equally to framed roofs of other types; for example, mono-pitch skillion and exposed *rafter* roofs.
- (b) This clause does not include "cathedral ceiling" type roofs (see figure 10.3);
- (c) The *rafter spacing* shall not exceed 1200 mm for *light roofs*, and 900 mm for *heavy roofs*.

Table 10.1 – Summary of roof bracing systems (see 10.1.4)

Roof type	Roof plane diagonal braces unless sarked (see 10.4)		Roof space diagonal braces*	Hip or valley rafters		Hip and top plate
Light hip	–	–	–	Minimum 3 per ridge	–	–
Heavy hip	One per 35 m ² roof plane plan area	Plus	–	Minimum 3 per ridge	Plus	Top plate connected at 2.5 m maximum centres to wall bracing elements (see figure 10.22)
Light gable	One per 50 m ² roof plane plan area	Or	At each end of ridge and maximum 7.5 m centres between	–	–	–
Heavy gable	One per 25 m ² roof plane plan area, minimum 2 per plane	Plus	One per 12 m ² roof plane plan area, parallel to ridge but not less than 2 m from a parallel external wall	–	–	–

* Sometimes known as ridge braces or gable braces.

NOTE –

- (1) Roofs with hip and valley rafters shall have at least 3 hips or valleys connected to the ridge and top plates (refer to 10.3).
- (2) Additional hip and valley rafters shall be counted as roof plane braces.

If you are having trouble viewing this newsletter, please go to the following uri: <http://www.bia.govt.nz/update/>

BIA Update

December 23 2003 No 20

Changes to Acceptable Solution B2/AS1 – Timber Durability

The Building Industry Authority has announced final changes to Acceptable Solution B2/AS1, concerning timber treatment levels.

Chairman Barry Brown said the changes are less conservative than the original proposals issued in June, but do require increased treatment levels in some framing situations more at risk from water damage, particularly caused by leaking.

"The changes are risk informed and require appropriate levels of protection needed to manage the risk of moisture contact in differing building elements or components," Mr Brown said.

"They will require additional treatment levels in some situations, but we are not introducing a requirement that all framing timber is treated as was proposed earlier this year.

"Our focus has been on putting in place a regime that will provide homeowners and users with appropriate protection if a building leaks. We have also taken into account feedback from the timber and building industries during our extensive consultation on this matter."

"This approach is about putting additional protection in place where it is needed. It also means that certain timber products - like untreated kiln dried radiata pine and untreated Douglas fir - can still be extensively used in buildings built to the Acceptable Solution."

The changes will take effect from 1 April 2004, subject to feedback from the industry over implementation timing.

The changes will apply to all buildings, not just residential constructions as originally proposed.

They include new requirements for colour coding and identification marking of timber so that treatment level and treatment type will be more easily identified.

Summary of changes

Changes to Hazard Classes

- H1 Hazard Class will be split into H1.1 and H1.2 to differentiate between insect only protection (H1.1) and insect protection plus a degree of protection against fungal decay (H1.2)
- The H3 Hazard Class will be split into H3.1 and H3.2 to resolve concerns about the durability of LOSP

- H3.1 will contain H3 LOSP
- H3.2 will contain H3 CCA, ACQ, copper naphthenate and copper azole
- H3.1 treated timber will cease to be acceptable in the construction of the structure of timber decks and balconies.

Changes to Minimum Treatment Requirements

Building Element*	Current Minimum Treatment Requirements	New** Minimum Treatment Requirements
<ul style="list-style-type: none"> • Roof framing, trusses and ceiling joists • Interior wall framing, including bottom plates • Exterior wall framing in low risk, single storey masonry veneer buildings 	<ul style="list-style-type: none"> • Untreated kiln dried radiata pine • Untreated Douglas fir • H1 treated, planer gauged radiata pine[^] 	No practical change
<ul style="list-style-type: none"> • Exterior wall framing and parapets in all but low risk, single storey masonry veneer buildings • Enclosed framing within skillion roofs^{^^} 	<ul style="list-style-type: none"> • Untreated kiln dried radiata pine • Untreated Douglas fir • H1 treated, planer gauged radiata pine[^] 	<ul style="list-style-type: none"> • H1.2
<ul style="list-style-type: none"> • Subfloor framing 	<ul style="list-style-type: none"> • Untreated Douglas fir • H1 treated, planer gauged radiata pine 	<ul style="list-style-type: none"> • H1.2
<ul style="list-style-type: none"> • Enclosed framing within flat roofs • Framing for enclosed decks and balconies • Framing within enclosed balustrades 	<p>Standard unclear, but in practice the following have been typically used:</p> <ul style="list-style-type: none"> • Untreated kiln dried radiata pine • Untreated Douglas fir • H1 treated radiata pine[^] 	<ul style="list-style-type: none"> • H3.1
<ul style="list-style-type: none"> • Piles and other structural in ground material 	<ul style="list-style-type: none"> • H5 	No change

* Summary of major elements only

** Takes effect from 1 April 2004, subject to final industry feedback

[^] A range of other minor timbers are permitted

^{^^} A pitched roof where the ceiling lining is parallel and close to the roof cladding

Changes to Identification Requirements

In order to help ensure the right timber is used in the right situation, the Acceptable Solution will introduce changes to the way treated timber will be identified. These are:

- In addition to the existing requirement that the treatment level of timber is branded on its end, there must be a unique numbering system that identifies the treatment type.
- A requirement that framing timber is coloured at the time of treatment to identify

treatment levels.

Detail of Amendments

A BIA paper detailing amendments to B2/AS1 is available by [clicking here](#).

A PDF version of the amended B2/AS1 is available from Victoria Books in the normal manner by [clicking here](#). Printed and CD Rom versions will be available in January.

To view further background information on the changes to B2/AS1 please [click here](#).

B2/AS1 amendment calls up New Zealand Standard 3602 (**NZS 3602:2003: Timber and Wood-based Products for use in Building**), which in turn calls up New Zealand Standard 3640 (**NZS 3640:2003 Chemical Preservation of Round and Sawn Timber**).

NZS 3602 describes what level of timber treatment is required to meet the durability requirements set out in B2/AS1 (i.e., what timber is needed where). This is available for purchase from Standards New Zealand by [clicking here](#).

NZS 3640 is intended for use by treatment plants and sets out the preservative treatment and identification of timber to provide protection from decay and insect attack. The requirements are based on six hazard classes that are described in this Standard. This is available for purchase from Standards New Zealand by [clicking here](#).

Impact on Consenting and Code Compliance Certificates

Changes to Acceptable Solutions are not retrospective. If a council has granted a building consent or code compliance certificate before 1 April 2004, the consent or certificate will remain valid.

We have introduced the 1 April 2004 date for two reasons. It provides industry with an opportunity to address supply chain issues. Secondly, it provides a reasonable opportunity for existing construction jobs to be completed and signed off prior to the changes taking effect.

However, from 1 April 2004, if a building consent has been granted but no code compliance certificate has been issued, councils **may** apply the new Acceptable Solution when considering whether to grant certification. Councils must have reasonable grounds that a building complies with the Building Code in order to issue a code compliance certificate.

This means builders and designers should take the changes to the Acceptable Solution into account in regards to current building projects.

Our strong advice to councils is that they clearly inform customers applying for building consents of the changes to the Acceptable Solution and the implications for their building project. The BIA will formally provide additional information to councils on that matter as soon as possible in 2004, to facilitate the provision of useful consumer advice.

If a building does not comply with the Acceptable Solution, it may still comply with the with the Building Code as an Alternative Solution. The building is just not automatically deemed to comply. Councils must consider these buildings on their individual merits and determine whether they will meet the performance requirements of the Building Code. Councils must be have reasonable grounds that a building complies with the Building Code in order to issue a code compliance certificate.

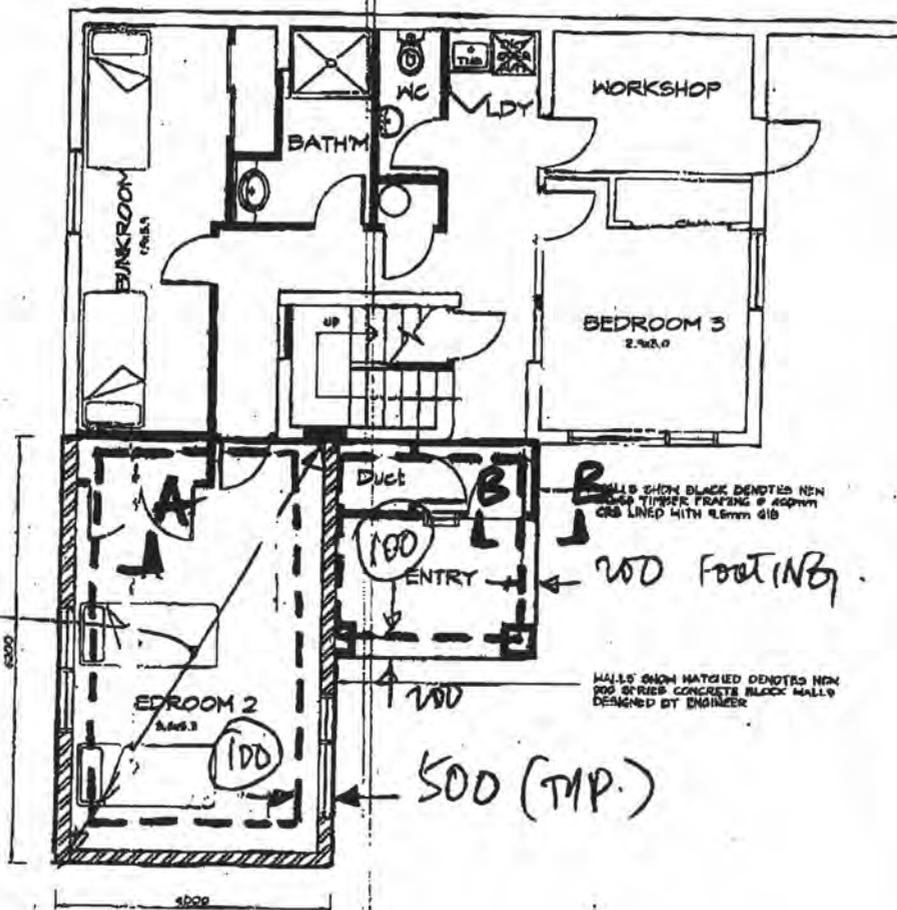
It should also be noted that there are three months before the changes come into effect. This change has been widely anticipated since at least the publication of the Hunn report more than 12 months ago. The BIA clearly signaled a need for increased timber treatment requirements when it published proposed changes to B2/AS1 in June 2003.

NOTES :

* REFER NZS 4229 FOR TIMBER FLOOR
DIAPHRAGM CONNECTIONS

(100) 100 THICK SLAB ON GRADE

All work carried out under
jurisdiction of producer
statement to meet the engineer
requirements fully.



TIMBER
FLOOR
DIAPHRAGM
TO NZS4229
AT FIRST
FLOOR *

PROPOSED GROUND FLOOR

SCALE 1:50

203029

SKI

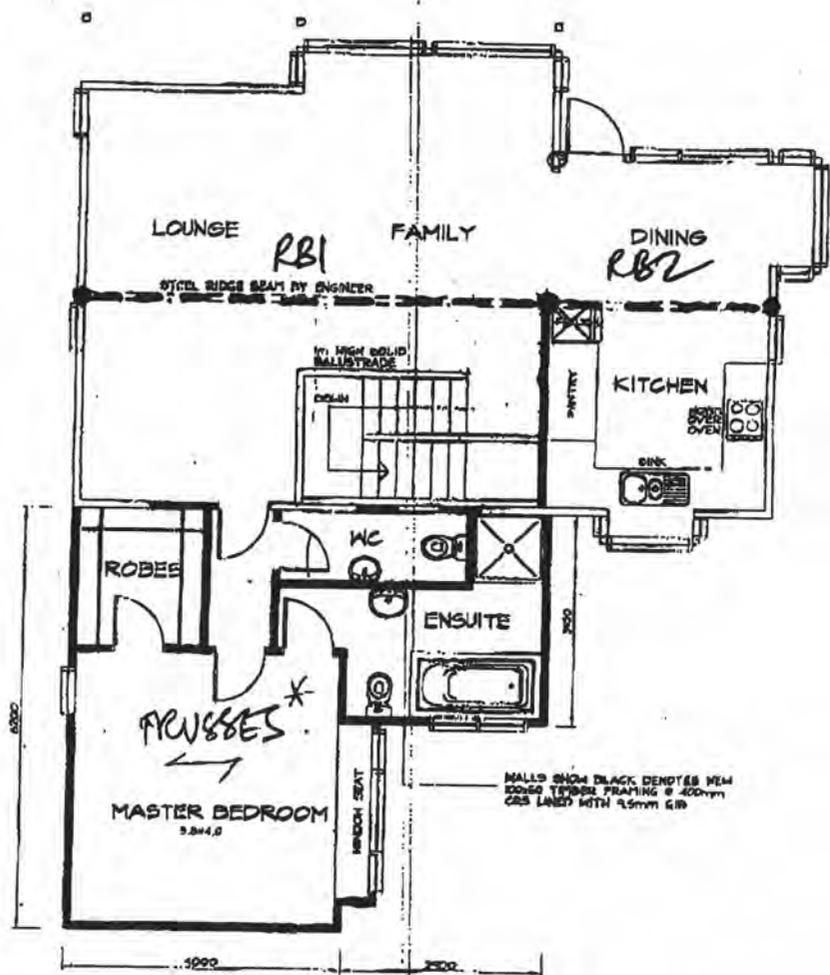
20/2/03

REVISIONS
NO. | DATE | BY | DESCRIPTION

NOTES:

RB1: 250UB80
RB2: 150UB14 or 150K100 - EXISTING ASSUME OK
* PROPRIETY TRUSSES

All work carried out under jurisdiction of producer statement to meet the engineer requirements fully.



PROPOSED FIRST FLOOR SCALE 1:50

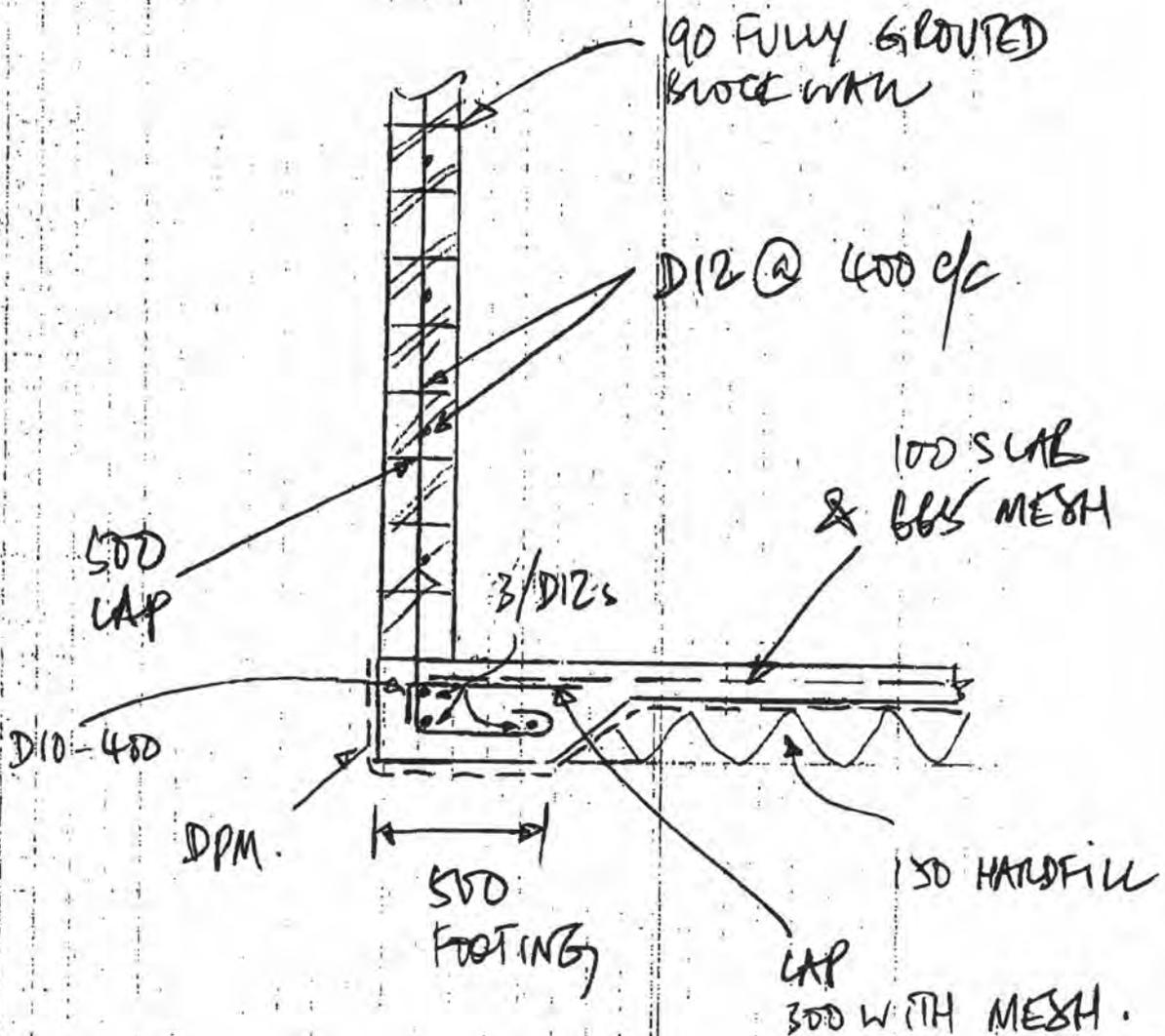
PROJECT: PROPOSED ADDITION FOR MR & MRS G CROMIE
REV:

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203	1
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203029

SK2
20/2/03

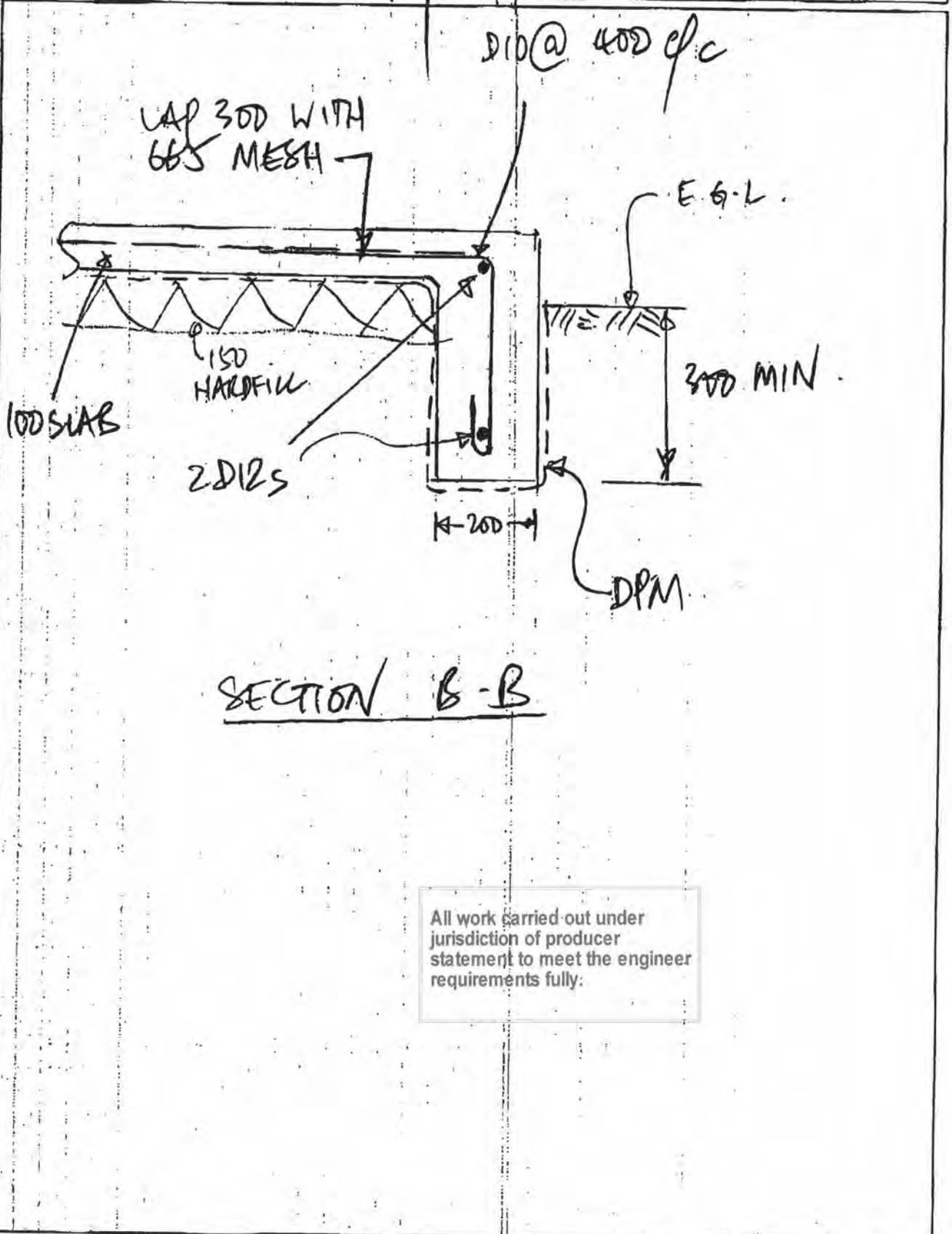
 Clendon Burns & Park Ltd Consulting Civil & Structural Engineers	Project LT2, Fieldway		Job Ref. 20302				
	Section		Sheet no./rev SK3				
16a Evelyn Terrace ph 04 472 1412 email cbp@cbp.co.nz Wellington New Zealand	P O Box 10 348 fax 04 472 1417	Drawn by PM	Date 20/2/03	Chck'd by	Date	App'd by	Date



SECTION A-A

All work carried out under
jurisdiction of producer
statement to meet the engineer
requirements fully.

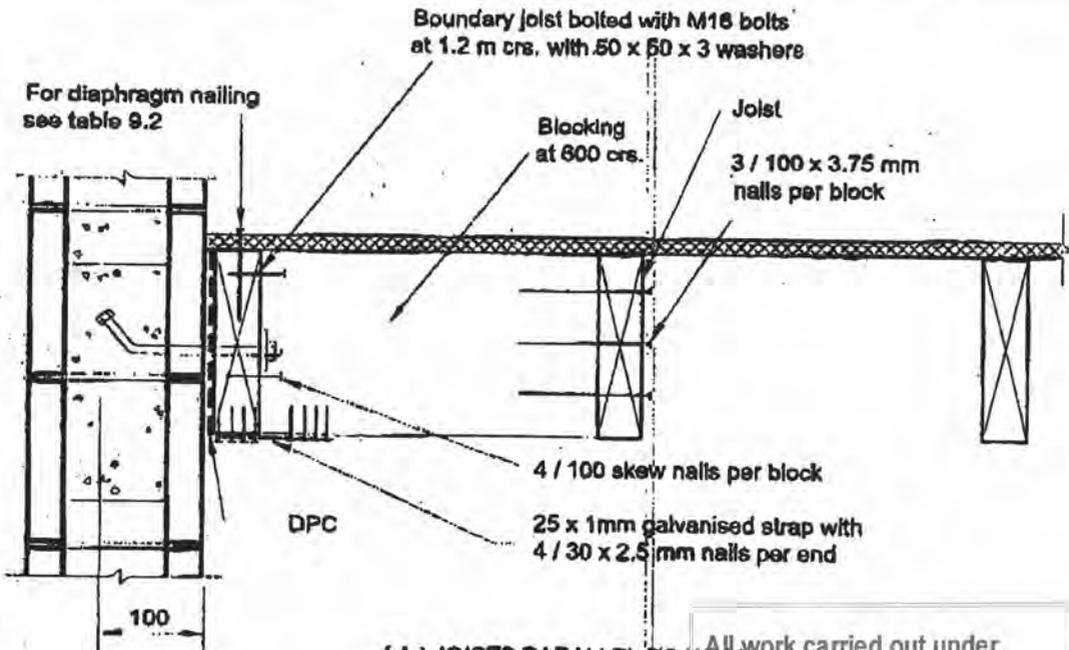
 Clendon Burns & Park Ltd Consulting Civil & Structural Engineers 16a Euston Terrace Ph 04 472 1412 email cbp@clp.co.nz Wellington New Zealand P O Box 10 348 fax 04 472 1417	Project	A2, Fieldway		Job Ref.	203029	
	Section			Sheet no./rev	SK4	
Calc by	M	Date	20/03	Chk'd by		Date
App'd by		Date				



All work carried out under jurisdiction of producer statement to meet the engineer requirements fully.

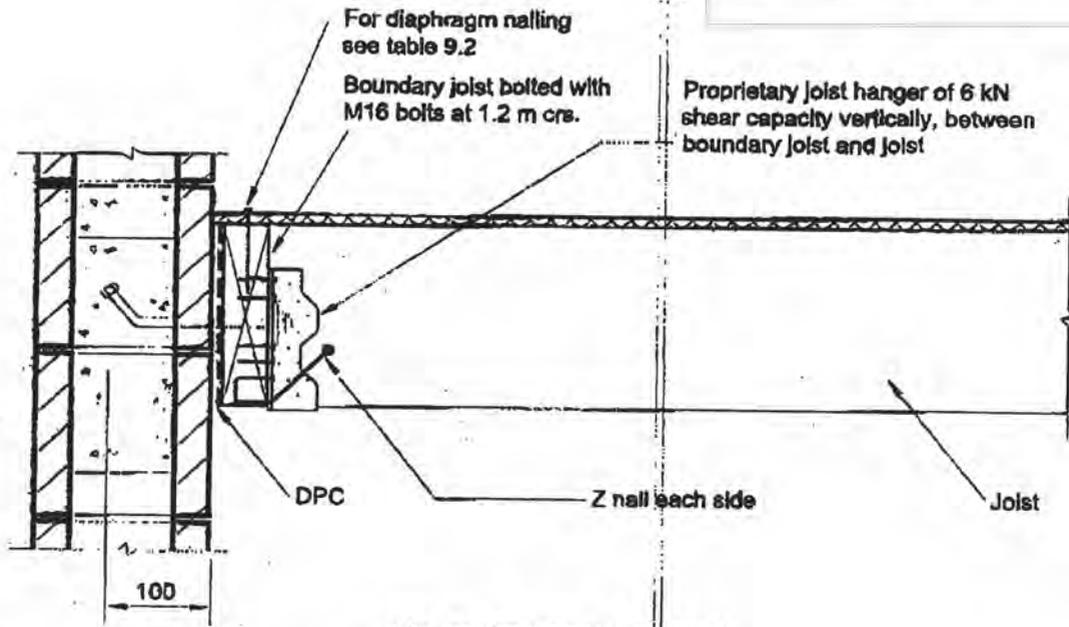
20302

NZS 4229:1999



(A) JOISTS PARALLEL TO WALL

All work carried out under jurisdiction of producer statement to meet the engineer requirements fully.



(B) JOISTS NORMAL TO WALL

NOTE -

- (1) Minimum embedment length of all M12 bolts shall be 75 mm.
- (2) The length of the bolt is determined by the thickness of the members to be attached.
- (3) Use mild steel galvanized washers, 50 x 50 x 3 mm between bolt head and timber member.

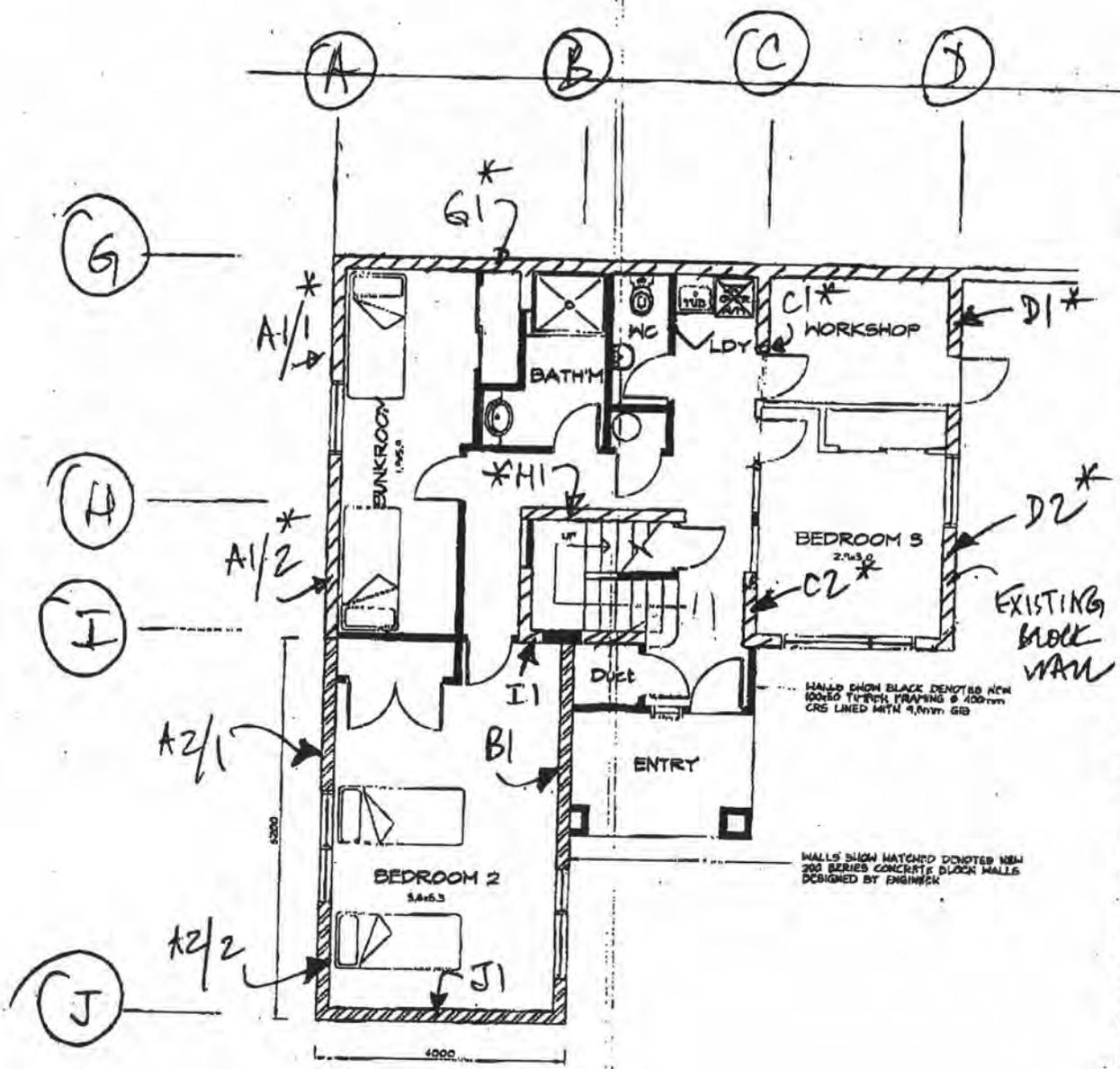
Figure 9.5 - Timber floor diaphragms connections (see 9.3.4.2)

SKS 111 20/1/03

203 029

* EXISTING MASONRY WALLS

All work carried out under jurisdiction of producer statement to meet the engineer requirements fully.



PROPOSED GROUND FLOOR BRACING LAYOUT PLAN

SCALE 1:50

SK 7
 20/2/03

PROJECT: PROPOSED ADDITION FOR MR & MRS G CROMIE
 REV: [blank]
 DATE: [blank]
 DRAWN: [blank]
 CHECKED: [blank]
 SCALE: [blank]
 JOB: [blank]
 (A1) 0



SPECIFY WITH CONFIDENCE

BRANZ Appraisals

Technical Assessments of products for building and construction

BRANZ APPRAISAL CERTIFICATE No. 457 (2005)

VENTCLAD VENTILATED CAVITY SYSTEM

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1.1 The VentClad Ventilated Cavity System is a cavity-based, flush-finished, monolithic plaster wall cladding. It is designed to be used as an external wall cladding system for residential and light commercial type buildings where domestic construction techniques are used.

1.2 The VentClad Ventilated Cavity System consists of Eterpan fibre cement sheet fixed over timber battens to form a cavity. The cladding is finished with a jointing and trowel applied plaster finish system.

1.3 The system incorporates a primary and secondary means of weather resistance (first and second line of defence) against water penetration by separating the cladding from the external wall framing with a nominal 20 mm cavity. The cavity allows for any occasional ingress of water that may get past the external skin to drain to the exterior of the building, and any remaining moisture to dry by evaporation.



2.1 The VentClad Ventilated Cavity System has been appraised as an external wall cladding for buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 1.1; and,
- with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Table 2; and,
- on buildings situated in NZS 3604 Building Wind Zones up to, and including, 'Very High'; and,
- detached and located 1 metre or more from the relevant boundary.

2.2 The VentClad Ventilated Cavity System is appraised for use with jointing and trowel applied plaster finish systems that have been tested to BRANZ Evaluation Method No. 4 (BRANZ EM4) on Eterpan 7.5 mm fibre cement sheet. Refer to Paragraph 4.3.

2.3 The VentClad Ventilated Cavity System must only be installed on vertical surfaces (except for tops of sills and balustrades, which must have a minimum 10° slope and be waterproofed in accordance with the Technical Literature).

2.4 The system is appraised for use with aluminium window and door joinery that is installed with horizontal heads and sills and vertical jambs, in the plane of the wall. (Note: The Appraisal of the VentClad Ventilated Cavity System relies on the joinery meeting the requirements of NZS 4211 for the relevant Building Wind Zone.)

2.5 The cladding system must be installed in accordance with the details set out in the VentClad Ventilated Cavity System Technical Literature, refer to Paragraph 6.1.

2.6 Installation of components and accessories supplied by the jointing and trowel applied plaster finish system manufacturer must be carried out only by the jointing and trowel applied plaster finish system manufacturer's approved applicators.

(Note: The VentClad Ventilated Cavity System can be used to provide structural bracing and fire resistance rated construction, but these aspects have not been assessed by this Certificate and are therefore outside its scope.)

New Zealand Building Code (NZBC)

3.1 In the opinion of BRANZ, the VentClad Ventilated Cavity System, if designed, used, installed and maintained in accordance with the statements and conditions of this Certificate, will meet or contribute to meeting the following provisions of the NZBC:

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2, and B1.3.4. The VentClad Ventilated Cavity System meets the requirements for loads arising from self-weight, earthquake, wind and impact [i.e. B1.3.3 (a), (f), (h) and (j)]. See Paragraphs 11.1 – 11.3.

Clause B2 DURABILITY: Performance B2.3.1 (b), not less than 15 years. The VentClad Ventilated Cavity System meets this requirement. See Paragraph 12.1.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. The VentClad Ventilated Cavity System meets this requirement. See Paragraphs 16.1 – 16.5.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. The VentClad Ventilated Cavity System meets this requirement and will not present a health hazard to people.

3.2 This Certificate appraises an Alternative Solution in terms of New Zealand Building Code Compliance.

4.1 System components and accessories for the VentClad Ventilated Cavity System supplied by PBS Distributors Ltd are:

Eterpan Sheet

- Eterpan sheet is 7.5 mm thick, 1200 mm wide and either 2400 mm, 2700 mm or 3000 mm long, and is manufactured from a cellulose cement formulation. The boards are formed, cut to length and then cured by high-pressure autoclaving. They are produced in flat, smooth surfaced sheet material form. After autoclaving tapered edges are created along both long edges of the sheet. The sheets are manufactured to conform to the requirements of AS/NZS 2908.2.

Accessories

- VentClad vented battens - 50 mm wide x 20 mm thick or 70 mm wide x 20 mm thick timber, with 20 mm wide x 5 mm deep machined grooves at 100 mm centres on both faces, treated to Hazard Class H3.1.
- Horizontal flashing – uPVC, available in 3000 mm lengths.
- Vertical control joint – 6 mm flexible control joint, uPVC, available in 3000 mm lengths.
- Window and door joinery head flashings – uPVC, available in 5000 mm lengths.
- Vermin flashing/cavity vent strip – uPVC, available in 5000 mm lengths.
- Head flashing – extruded uPVC, available in 5000 mm lengths.
- Inter-floor movement joint flashing – 0.9 mm thick aluminium.

4.2 Accessories used with VentClad Ventilated Cavity System that are supplied by the cladding installer are:

- Building wrap – wrap complying with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Table 23, or breather-type membranes covered by a valid BRANZ Appraisal Certificate for use as wall wraps.
- Building wrap support – polypropylene strap, 75 mm galvanised mesh, galvanised wire, or additional vertical battens for securing the building wrap in place and

preventing bulging of the bulk insulation into the drainage cavity. (Note: mesh and wire galvanising must comply with AS/NZS 4534.)

- Window and door trim cavity air seal – air seals complying with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 9.1.6, or self expanding, moisture cure polyurethane foam air seals covered by a valid BRANZ Appraisal Certificate suitable for use around window, door and other wall penetration openings.
- Flexible sill, head and jamb flashing tape – flexible flashing tapes complying with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 4.3.11, or flexible flashing tapes covered by a valid BRANZ Appraisal Certificate for use around window and door joinery openings.
- Flexible sealant – sealant complying with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, or sealant covered by a valid BRANZ Appraisal Certificate for use as a weather sealing sealant for exterior use.
- Eterpan sheet fixings – there are three different types for use in different situations. These are:
 - 60 x 2.8 mm grade 316 stainless steel ring-shanked, flat head nails.
 - 60 mm 10 gauge countersunk stainless steel screws.
 - 25 mm 8 gauge countersunk head stainless steel screws.
- Cavity batten fixings - 40 mm panel pins.
- Batten strap - galvanised mild steel fixing strap 25 mm wide.
- Waterproof membrane tapes – tapes covered by a valid BRANZ Appraisal Certificate for use as waterproofing membranes over tops of plastered balustrades, fixing blocks and the like.

Trowel Applied Plaster Finish System

4.3 The Uniplast flush finished jointing and trowel applied plaster finish plaster system has been tested to BRANZ EM4 for use with the VentClad Ventilated Cavity System.

4.4 System components and accessories supplied by Uniplast Ltd for the Uniplast flush finished jointing and trowel applied plaster finish plaster system are:

Primer

- Uniplast UV Primer Sealer is a milky white, water based latex primer. It is used to seal the face of the Eterpan fibre cement sheets and sheet joints prior to plastering. Uniplast UV Primer Sealer is supplied in 20 litre pails.

Plasters

- Uniplast Jointing Compound is a pre-mixed acrylic modified cement plaster. It is trowel applied to the joints of Eterpan sheets and is used as the bedding compound for the joint reinforcing mesh. Uniplast Jointing Compound is supplied in 25 kg bags.
- Uniplast Mesh Coat is a Portland cement-based plaster comprising sand, hydrated lime and mineral additives. It is trowel applied to the entire sheet surface to approximately 1.5 mm thick. Uniplast Mesh Coat is supplied in 25 kg bags.
- Uniplast Sponge Finishing Compound is a Portland cement-based plaster comprising sand, hydrated lime and mineral additives. It is trowel applied to the entire sheet surface to approximately 1.0 mm thick. Uniplast Sponge Finishing Compound is supplied in 20 kg bags.

Accessories

- Reinforcing mesh - alkali resistant fibreglass mesh with a nominal mesh size of 4 mm x 4 mm and an approximate weight of 160 g/m². The mesh is supplied in rolls 65 mm and 200 mm wide
- External corners - PVC slim line angles, available in 2400 mm lengths.

Paint System Specification

4.5 Dulux Acraprime water-based acrylic primer is used as a sealer coat on the VentClad Ventilated Cavity System. Dulux Acrashield is used as a finishing coat. The paint colour selected must have a light reflectance value (LRV) of 40% minimum regardless of gloss value.

Handling and Storage

5.1 Handling and storage of all materials supplied by PBS Distributors Ltd or the building contractor, whether on site or off site, is under the control of the building contractor. Eterpan sheets must be stacked flat, off the ground and supported on a level platform. They must be kept dry at all times either by storing under cover or by providing waterproof covers to the stack. Care must be taken to avoid damage to edges, ends and surfaces. The sheets must always be carried on edge. uPVC flashings and profiles must be protected from direct sunlight and physical damage, and should be stored flat and under cover.

5.2 Cavity battens and other accessories must be stored so they are kept clean, dry and undamaged. All accessories must be used within the maximum storage period recommended by the manufacturer.

5.3 Handling and storage of all materials supplied by the jointing and textured finish system manufacturer or the approved applicator, whether on site or off site, is under the control of the approved applicator. Dry storage must be provided on site for the fibreglass mesh and bags of plaster mix. Bags of plaster must be used within the designated shelf life from the date of manufacture.

6.1 Refer to the Appraisals listing on the BRANZ Website for details of the current Technical Literature for the VentClad Ventilated Cavity System. The Technical Literature must be read in conjunction with this Certificate. All aspects of design, use, installation and maintenance contained within the Technical Literature and within the scope of this Certificate must be followed.

Cavity Battens

7.1 The VentClad Ventilated Cavity System incorporates full-width horizontal battens. This system has been specifically tested to ensure compliance with the ventilation, drainage and drying requirements of NZBC Clause E2.

Framing

Timber Treatment

8.1 Timber wall framing behind the VentClad Ventilated Cavity System must be treated as required by NZS 3602.

Timber Framing

8.2 Studs must be provided at maximum 600 mm centres. Nogs must be fitted flush between the studs at 800 mm or 1200 mm centres.

8.3 Timber wall framing behind cavity battens where sheets are joined must be nominal 50 mm thickness (i.e. 45 mm minimum finished thickness).

8.4 Timber framing must comply with NZS 3604 or be to a specific design using NZS 3603 and NZS 4203. Where specific design is required, the framing must be of at least equivalent stiffness to the framing provisions of NZS 3604.

8.5 Timber wall framing and cavity battens must have a maximum moisture content of 24% at the time of the cladding

application. (Note: If Eterpan sheets are fixed to framing with a moisture content of greater than 24% problems can occur at a later date due to excessive timber shrinkage.)

Eterpan Sheet Set Out

8.6 Eterpan sheets must be installed vertically. All vertical Eterpan sheet edges must be supported and fixed through the cavity battens to the wall framing. Horizontal sheet edges must be supported by horizontal VentClad battens as described in the Technical Literature. At the base of the wall, the sheets must hang 50 mm below the supporting framing.

8.7 Additional framing may be required at soffits, internal and external corners and window and door openings for the support and fixing of sheet edges.

General

9.1 Punchings in the cavity vermin flashing provide a ventilation opening area of at least 1000 mm² per lineal metre of wall in accordance with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 9.1.8.3(b).

9.2 At ground level the bottom edge of Eterpan fibre cement sheets must be kept clear of paved surfaces, such as footpaths, by a minimum of 100 mm and unpaved surfaces by 175 mm in accordance with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Table 18. The ground clearances to finished floor levels as set out in NZS 3604 must be adhered to.

9.3 At balcony, deck or low pitched roof/wall junctions, the bottom edge of the VentClad Ventilated Cavity System must be kept clear of any adjacent surface, or above the top surface of any adjacent roof flashing by a minimum of 35 mm in accordance with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 9.1.3.6.

9.4 Unlined gables and walls must incorporate a rigid sheathing or air barrier that meets the requirements of NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Table 23. Where rigid sheathings are used, fixing length must be increased by a minimum of the thickness of the sheathing.

9.5 Where the VentClad Ventilated Cavity System abuts other cladding systems, the designer must detail the junction to meet their own requirements and the performance requirements of the NZBC. These details are outside the scope of this Certificate.

Control Joints

10.1 Control joints must be constructed in accordance with the Technical Literature, and be provided as follows:

- Vertical control joints – at maximum 5.4 m centres; aligned with any control joint in the structural framing; where the system abuts different cladding types, or where the system covers different structural materials.
- Horizontal control joints – at inter-storey floor levels and at maximum 5.4 m centres.

(Note: Horizontal and vertical control joints must be located over structural supports. The design of vertical control joints where the system abuts different cladding types is outside the scope of this Certificate and is the responsibility of the designer – see Paragraph 9.5.)

10.2 Inter-storey junctions must be constructed in accordance with the Technical Literature. Inter-storey drained joints must be provided for walls over 2 storeys in height in accordance with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 9.1.9.4(b).

Structure

Mass

11.1 The mass of the VentClad Ventilated Cavity System is approximately 13 kg/m² at equilibrium moisture content, therefore it is considered a light wall cladding in terms of NZS 3604.

Impact Resistance

11.2 The VentClad Ventilated Cavity System has good resistance to hard body impacts likely to be encountered in normal residential use. The likelihood of impact damage to the system when used in light commercial situations should be considered at the design stage, and appropriate protection such as the installation of bollards and barriers should be considered for vulnerable areas.

Wind Zones

11.3 The VentClad Ventilated Cavity System is suitable for use in all Building Wind Zones of NZS 3604 up to, and including, Very High. (For the scope limitations of buildings covered by this Certificate, refer to Paragraph 2.1.)

Durability

Serviceable Life

12.1 VentClad Ventilated Cavity System installations are expected to have a serviceable life of at least 50 years provided that the jointing and trowel applied plaster finish system is maintained in accordance with this Certificate to ensure the Eterpan fibre cement sheets remain dry in service. For the VentClad Ventilated Cavity System to meet the durability requirements of the NZBC, it must be finished within three months of installation of the Eterpan Sheets.

Maintenance

13.1 Regular maintenance is essential for VentClad Ventilated Cavity System installations to continue to meet the NZBC durability performance provision and to maximise their serviceable life.

13.2 Annual inspections must be made to ensure that all aspects of the cladding system, including the jointing and trowel applied plaster finish system, flashings and any sealed joints remain in a weatherproof condition. Any cracks, damaged areas or areas showing signs of deterioration which would allow water ingress, must be repaired immediately. Sealant, paint coatings, trowel applied plaster finish system, flashings or the fibre cement sheets must be repaired in accordance with the relevant manufacturer's instructions.

13.3 Regular cleaning (at least annually) of the paint coating is recommended to remove grime, dirt and organic growth, to maximise the life and appearance of the coating.

13.4 Recoating of the paint system will be necessary throughout the life of the cladding system. The interval between recoats depends on the colour, orientation, coating formulation and the quality of the application, and will be at approximately 5-10 yearly intervals in accordance with the paint manufacturer's instructions.

13.5 Minimum ground clearances as set out in this Certificate and the Technical Literature must be maintained at all times during the life of the cladding. (Note: Failure to adhere to the minimum ground clearances given in this certificate and the Technical Literature will adversely affect the long term durability of the VentClad Ventilated Cavity System.)

Control of External Fire Spread

14.1 The VentClad Ventilated Cavity System, when finished with the Uniplast jointing and trowel applied plaster finish system is considered to meet the performance requirements of NZBC Clause C3.3.5 for use as an external wall cladding when restricted to:

- Single storey buildings 1 m or more from the relevant boundary for all purpose groups; or,
- Buildings with a building height less than 7 metres, 1 m or more from the relevant boundary, for all purpose groups other than SC and SD; or,
- Buildings containing purpose group SH, with a building height less than 10 m and located more than 1 m or more from the relevant boundary.
- Fully sprinklered buildings with a building height of less than 25 m, 1 m or more from the relevant boundary for all purpose groups other than SC, SD, SA and SR.

(Note: The building heights referenced in Paragraph 14.1 above are as defined in the Definitions Section of the Fire Safety Clauses of the NZBC. The scope of this Certificate limits building heights to 10 m from ground to eaves in accordance with the limitations of NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 1.1(a).)

Outbreak of Fire

15.1 The VentClad Ventilated Cavity System must be separated from chimneys and flues in accordance with the requirements of NZBC Acceptable Solution C/AS1 Part 9 for the protection of combustible materials.

External Moisture

16.1 The VentClad Ventilated Cavity System, when installed and maintained in accordance with this Certificate and the Technical Literature on buildings with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Table 2, prevents the penetration of moisture that could cause undue dampness or damage to building elements.

16.2 The cavity must be sealed off from the roof and sub-floor spaces to meet compliance with NZBC Clause E2.3.5.

16.3 The VentClad Ventilated Cavity System allows excess moisture present at the completion of construction to be dissipated without permanent damage to building elements to meet compliance with NZBC Clause E2.3.6.

16.4 The details given in the Technical Literature for weather sealing are based on the design principle of having a first and second line of defence against moisture entry for all joints, penetrations and junctions. The ingress of moisture must be excluded by detailing joinery and wall interfaces as shown in the Technical Literature. Weathertightness details that are developed by the designer are outside the scope of this Certificate and are the responsibility of the designer for compliance with the NZBC.

16.5 The use of the VentClad Ventilated Cavity System where there is a designed cavity drainage path for moisture that penetrates the cladding, does not reduce the requirement for joints, penetrations and junctions to remain weather resistant.

Internal Moisture

17.1 NZBC Acceptable Solution E3/AS1 Paragraph 1.1.1(a) requires a minimum wall R-value of 1.5 for framed cavity wall construction, and therefore, the wall frame

cavity must be insulated.

Water Vapour

17.2 The VentClad Ventilated Cavity System is not a barrier to the passage of water vapour, and when installed in accordance with this Certificate will not create or increase the risk of moisture damage resulting from condensation.

Installation Skill Level Requirements

18.1 Installation of Eterpan sheets and accessories supplied by PBS Distributors Ltd and the building contractor must be completed by tradespersons with an understanding of cavity construction and fibre cement sheet installation, in accordance with instructions given within the VentClad Ventilated Cavity System Technical Literature and this Certificate.

18.2 Installation of components and accessories supplied by the trowel applied plaster finish system manufacturer must be completed by applicators approved by the trowel applied plaster finish system manufacturer.

System Installation

Building Wrap and Flexible Sill and Jamb Tape

19.1 The selected building wrap and flexible sill and jamb tape systems must be installed by the building contractor in accordance with the wrap and tape manufacturers' instructions prior to the installation of the cavity battens. Particular attention must be paid to the installation of the building wrap and sill and jamb tapes around window and door openings to ensure a continuous seal is achieved and all exposed timber wall framing in the opening is protected.

Cavity Battens

19.2 VentClad ventilated cavity battens must be installed vertically over the building wrap to the wall studs at maximum 600 mm centres, and horizontally over dwangs at 800 mm or 1200 mm centres. The battens are fixed in place with 40 mm panel pins.

Aluminium Joinery Installation

19.3 Aluminium joinery and associated head flashings must be installed by the building contractor in accordance with the Technical Literature. A nominal 10 mm gap must be left between the joinery reveal and the wall framing so a PEF rod and air seal can be installed after the joinery has been secured in place.

Eterpan Fibre Cement Sheet Installation

19.4 Eterpan fibre cement sheets may be cut by scoring and snapping, hand guillotine, hand or power saw. Site edge recessing of cut sheets may be carried out using a tool specifically designed for that use, or by running an angle grinder down the edge of the sheet at an acute angle to the face. A minimum sheet edge thickness of 5 mm must be maintained. Holes and cut-outs may be formed by drilling a number of holes around the perimeter of the opening required and tapping out the centre with a hammer, or by using a hole saw. When power tools are used for cutting, grinding or forming holes, safety measures as set out in the Technical Literature must be undertaken because of the amount of dust generated.

19.5 Sheets must be dry prior to installation. It is not necessary for sheet edges to be pre-painted with a seal coat prior to fixing, as required by NZBC Acceptable Solution E2/AS1 Third Edition June 2004, Paragraph 9.7.3.

19.6 Prior to fixing sheets, a check must be made to

ensure all sheet joints will be supported by framing. Sheets must be fixed through the cavity battens to the timber framing with 60 x 2.8 mm flat head, stainless steel ring shank nails.

19.7 Sheet edges at flush finished vertical and horizontal joints must be close butted together. Vertical control joints must be fixed so that an 8 mm gap is left between the sheets to allow for the fitting of a uPVC vertical control joint extrusion.

19.8 Sheets must not be fixed to inter-storey joists or blocking, and must have a 9 mm gap between sheet edges at this point to allow for shrinkage of the framing. This gap must be flashed with an inter-floor movement joint flashing to prevent moisture entry, and be covered with an architectural shape fixed to the upper sheet only.

19.9 Horizontal or vertical sheet joints, with the exception of vertical control joints, must not occur at window and door openings. Vertical sheet joints adjacent to openings must be a minimum of 200 mm from the jamb line of the opening.

Eterpan Sheet Fixings

19.10 Eterpan sheets must be fixed through the cavity battens to the wall framing at maximum 150 mm centres along sheet edges and in the body of the sheet along studs. The fixings are at 200 mm centres along dwangs. The fixings must be positioned a minimum of 12 mm from all sheet edges, and a minimum of 100 mm vertically and 50 mm horizontally from sheet corners. The fastener heads must not break the sheet surface.

Jointing and Trowel Applied Plaster Finish System

19.11 Uniplast components and accessories must be installed by Uniplast Ltd's approved applicators. Application of the jointing and trowel applied plaster finish system must be carried out at an ambient temperature of between 10°C and 30°C.

Finishing

19.12 The paint coating manufacturer's instructions must be followed at all times for application of the paint finish. The plaster must be completely dry before commencing painting.

Inspection

19.13 The Technical Literature must be referred to during the inspection of VentClad Ventilated Cavity System installations by building consent authorities and territorial authorities.

Health and Safety

20.1 Safe use and handling procedures for the components that make up the VentClad Ventilated Cavity System are provided in the relevant manufacturer's Technical Literature.

20.2 Cutting of Eterpan sheets must be carried out in well ventilated areas, and a dust mask and eye protection must be worn. When power tools are used for cutting, grinding or forming holes, safety measures as set out in the Technical Literature must be undertaken because of the amount of dust generated.

The following is a summary of the technical investigations carried out:

Tests

21.1 The following testing has been completed by BRANZ:

- The Uniplast jointing and trowel applied plaster finish system has been tested to BRANZ EM4 over 7.5 mm Eterpan sheet.
- Testing was carried out to determine the face load pressure resistance of Eterpan sheet.
- Testing was carried out to determine the performance of Eterpan fibre cement sheet under hard body impact.

21.2 Testing has been carried out by Window Engineering Consultants to BRANZ Draft E2/VMI testing protocol. The testing was observed by a BRANZ technical expert. The results have been reviewed by BRANZ and found to be satisfactory. In addition to the weathertightness test, the details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the system will meet the performance levels of Acceptable Solution E2/AS1 Third Edition June 2004 for drained cavity claddings.

Other Investigations

22.1 Structural, durability and weathertightness opinions have been given by BRANZ technical experts.

22.2 Site inspections have been carried out by BRANZ to assess the practicability of installation, and to examine completed installations.

22.3 The manufacturer's Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

23.1 The manufacture of Eterpan fibre cement sheet by Eternit Guangzhou Co. Ltd has been assessed by BRANZ, including the methods for quality control. Details regarding the quality and composition of the materials used were obtained and found to be satisfactory.

23.2 The quality of materials, components and accessories supplied by PBS Distributors Ltd are the responsibility of PBS Distributors Ltd. The quality control system of PBS Distributors Ltd has been assessed by BRANZ and found to be satisfactory.

23.3 The manufacture of the Uniplast jointing and trowel applied plaster coating system by Uniplast Ltd has been assessed by BRANZ, including the methods for quality control. Details regarding the quality and composition of the materials used were obtained and found to be satisfactory.

23.4 Quality of installation on site of components and accessories supplied by PBS Distributors Ltd and the building contractor is the responsibility of the installer.

23.5 Quality of installation on site of the Uniplast jointing and trowel applied plaster finish system is the responsibility of the Uniplast Ltd approved applicator.

23.6 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of framing systems and joinery, building wraps, flashing tapes, airseals, joinery head flashings, cavity battens and Eterpan fibre cement sheets in accordance with the instructions of PBS Distributors Ltd.

23.7 Building owners are responsible for the maintenance of the VentClad Ventilated Cavity System in accordance with the instructions of PBS Distributors Ltd.

Sources of Information

- AS 3566 – 2002 Self-drilling screws for the building and construction industries.
- AS/NZS 2908.2: 2000 Cellulose-cement products - flat sheet.
- AS/NZS 4534:1998 Zinc and zinc/aluminium-alloy coatings on steel wire.
- NZS 3602:2003 Timber and wood-based products for use in building.
- NZS 3603:1993 Timber structures standard.
- NZS 3604:1999 Timber framed buildings.
- NZS 4211:1985 Specification for performance of windows.
- BRANZ Evaluation Method No. 4 (2004) Test procedure for coating and jointing systems for flush finished fibre cement sheet cladding, 7 March 2005.
- New Zealand Building Code Handbook and Approved Documents, Building Industry Authority, 1992.
- Approved Document for New Zealand Building Code External Moisture Clause E2, Building Industry Authority, Third Edition June 2004.
- The Building Regulations 1992, up to, and including October 2004 Amendment.



In the opinion of BRANZ, the VentClad Ventilated Cavity System is fit for purpose and will comply with the Building Code to the extent specified in this Certificate provided it is used, designed, installed and maintained as set out in this Certificate.

The Appraisal Certificate is issued only to the Certificate Holder, PBS Investments Ltd, and is valid until further notice, subject to the Conditions of Certification.

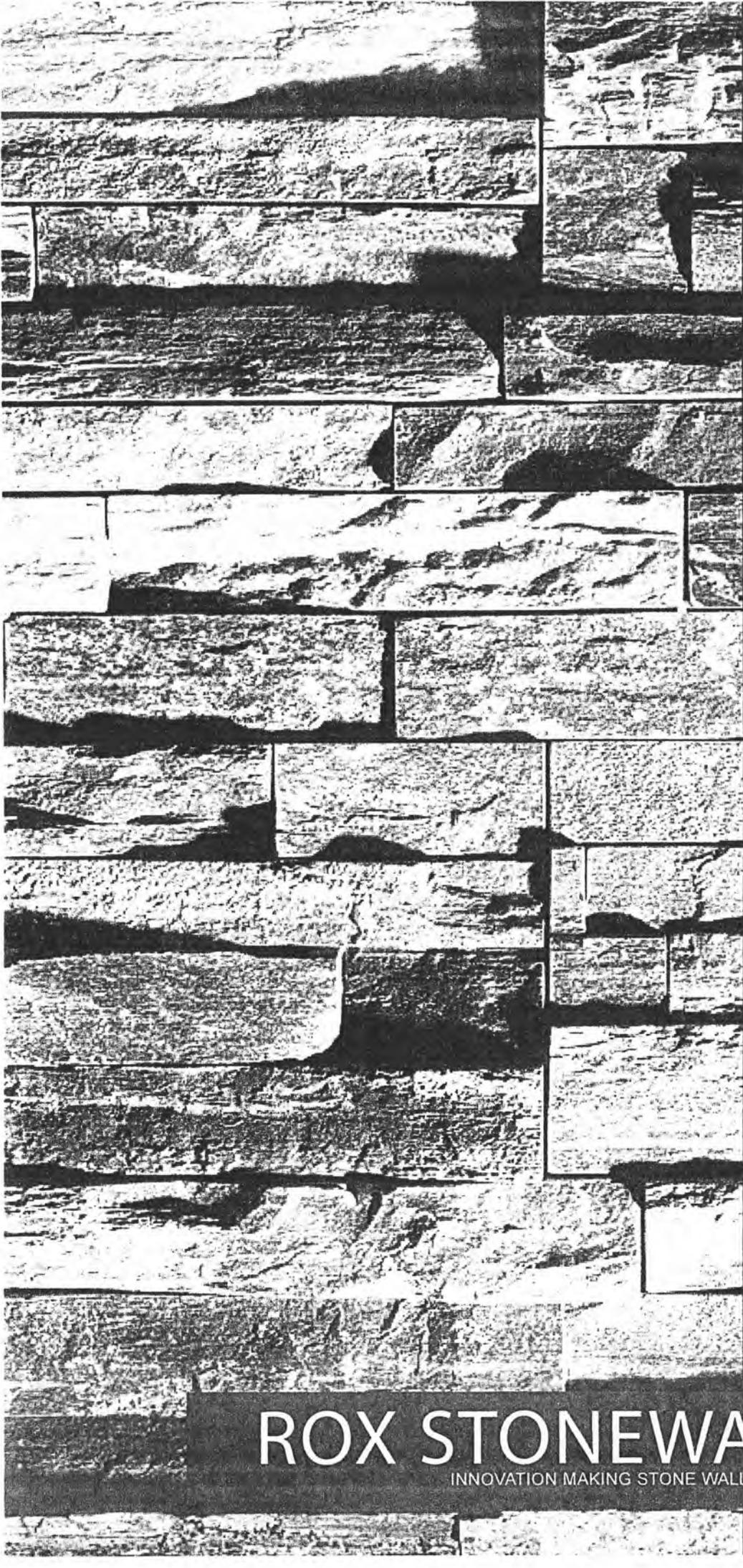
Conditions of Certification

1. This Certificate:
 - a) relates only to the product as described herein;
 - b) must be read, considered and used in full together with the technical literature;
 - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
 - d) is copyright of BRANZ.
2. The Certificate Holder:
 - a) continues to have the product reviewed by BRANZ;
 - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
 - c) abides by the BRANZ Appraisals Services Terms and Conditions.
3. The product and the manufacture are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ.
4. BRANZ makes no representation as to:
 - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and workmanship;
 - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
 - c) any guarantee or warranty offered by the Certificate Holder.
5. Any reference in this Certificate to any other publication shall be read as a reference to the version of the publication specified in this Certificate.

For BRANZ

P Robertson
Chief Executive

Date of issue: 1 April 2005



OS
original stone

ROX™ STONEWALLING

TUSCAN® SANDSTONE

SLATE ROOFING

BASALT

EFESUS TRAVERTINE

LIMESTONE

SLATE FLOORING

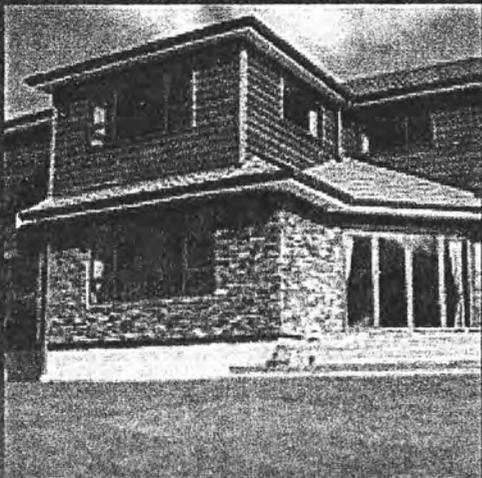
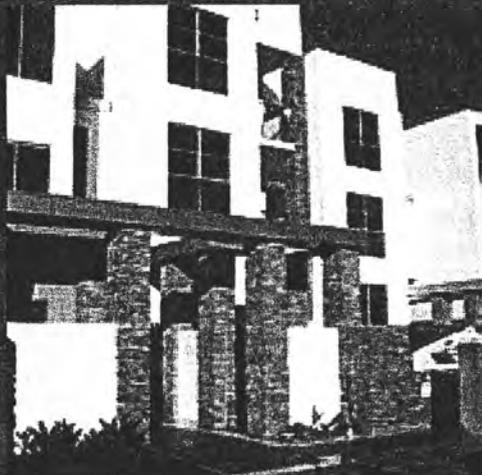
BENCHTOPS

ROX STONEWALLING

INNOVATION MAKING STONE WALL AFFORDABLE

Stonewalls make handy property lines, retaining walls and places to sit, hide behind, plant against and swing elaborate gates from. They improve greatly with age, dreaming away the centuries. Almost everyone I know wants a stone wall someday, for reasons probably as real as the primordial rock caves deep down in our minds.

ROX STONE WALLING LOOKS LIKE NATURAL STONE BECAUSE IT IS!



This exciting product is in essence modular stonewalling. Comprised of two separate ranges, the *Veneer Series* and the *Facade Series*, each suited to different applications having its own distinct appeal. One of the greatest advantages of Rox Stonewalling is the ability to substantially reduce construction time resulting in significant overall cost savings.

The *Veneer Panel Series* has proven popular with commercial developers as cladding for apartments, retirement homes, retail shops, bars and even schools.

The *Facade Block Series* is ideal for projects requiring the natural appeal of Schist. Although used commercially, it is also used to effect on many New Zealand homes.

Both walling series incorporate Column Blox, and Modular Cappings. Matching letter boxes to columns and walling heightens street appeal, while finishing your project with a homogenous flow.

With its versatility and wide selection of colours, Rox is quickly becoming a New Zealand favourite for stonewalling. Natural Stone, the world's oldest building material, was employed by "The Grand Architect". See what it can do for you.

LIGHTWEIGHT CONTEMPORARY STONEWALLING VENEER SERIES

Suitable for Interior/external, this series provides a solution to the common weight and thickness problems of traditional stonewalling. Panels are installed like wall tiles but without the need for jointing.

PANELS

Primary product, easily installed over concrete block, timber framework, pre-cast concrete Eterpain and Hebel. Sold per m²

610x152x30-60mm

FINGER JOINT CORNERS

Modular solution to external corners. Quantities are easily ascertained by calculating the total lineal meterage required. Purchased long and short.

610x152x30-60mm - 305x152x30-60mm

NATURAL ENDS

Excellent when your stone stops and your wall keeps going. Fireplace surrounds often require this detail, but also useful for door & window details.

610x152x30-60mm - 305x152x30-60mm

COLUMN BLOCKS

Require concrete footings with steel starters. Column blocks are then stacked one on top of other, the core filled with cement with no need to joint between the blocks. Finished columns are load bearing and entirely replace the need for steel posts. In fact this product cannot be used where steel posts are already in place.

450x450x300mm - 600x450x300mm

600x600x300mm - 800x800x300mm

LETTER BLOX

These modules are used in combination with the Column Blox to create a featuresome letter box. Fitted to the interior of each letter block is a specialized stainless steel compartment which has a spring loaded panel in the front to receive mail and an access panel at the back.

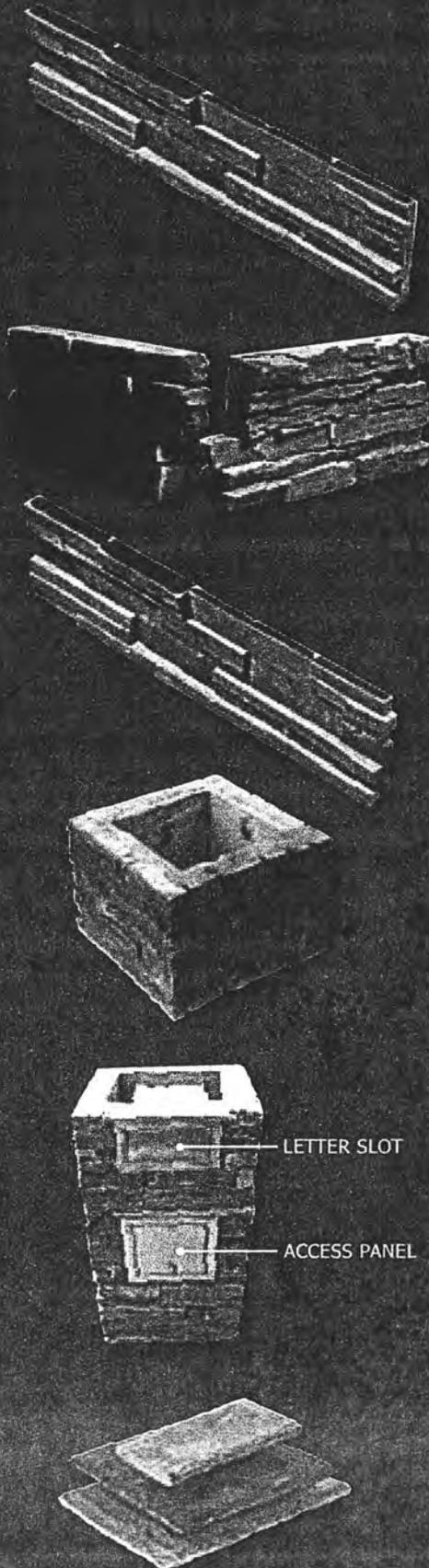
450x450x300mm

CAPPINGS

Used for sills, wall cappings, column cappings and as a finishing for letter boxes. Leading edges are chipped to create a natural finish.

400x200x40-50mm • 400x250x40-50mm • 550x550x40-50mm

700x550x40-50mm • 900x900x40-50mm



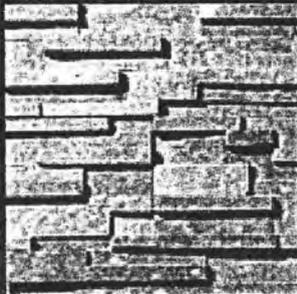
VERSATILE / AFFORDABLE STONEWALLING
ROX™ VENEER SERIES



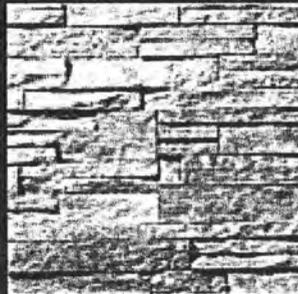
ROX BOROUGH ASHLAR



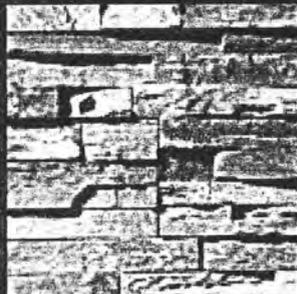
ROX BOROUGH SCHIST



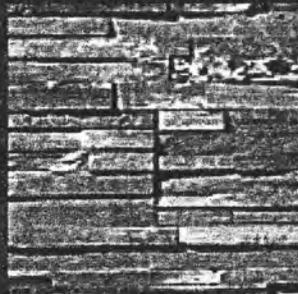
LAUDER ASHER



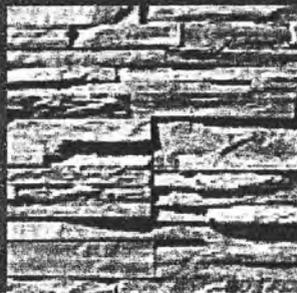
LAUDER SCHIST



MOSGIEL SCHIST



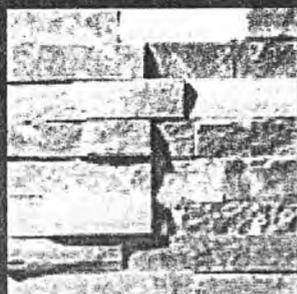
POOL BURN SCHIST



BASALT SCHIST



ST BATHANS



NAMIBIA SCHIST



TARRAS SCHIST

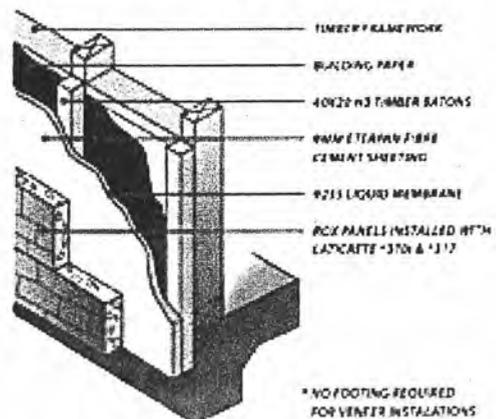
Using the Rox™ Veneer Series you can achieve the texture and detail of expensive, hand laid, dry stack stonewalling but with the simplicity of a panel. The absence of open jointing between the stones creates the contemporary look favoured by designers.

The versatility of this product is immediately apparent. In the Rox™ Veneer Series natural rock is harnessed and processed into walling panels, column blocks and cappings. The panels in the series are distinguished by their slim profile and lack of weight. This makes them very easy to handle and install.

With panels the installation format is essentially independent of the installer. The alignment of the stones are predetermined therefore there is little risk of poor aesthetic finish.

The colours of loose quarried stone are often ill expressed, but not so with the Rox™ Veneer Series. Panels can be seen and laid out prior to installation. This enables designers and clients to successfully choose and match their colours to suit their environment.

**ROX™ PANEL VENEER
 OVER TIMBER FRAME
 054.1**



EXCITING NEW INTERIOR/EXTERIOR STONEWALLING FACADE SERIES

This series delivers the age old look of stacked stonewalling where each stone is separated by a mortar joint, more commonly known as a "Raked Out" look the stones are also larger than those of the Veneer Series.

Z BLOX

This system weight loads to a concrete footing, free standing stonewalls use Z Blox as you would normal stone. House facades are installed to the brick specification, a cavity system named as one of the most successful cladding methods in the February 04 BIA watertightness survey, particularly as a sole cladding.

550x200x80mm

Z BLOX FINGER JOINT

A modular approach to external corners. Quantities required are easily ascertained by calculating the total lineal meterage required. Purchased long and short.

550x200x80mm • 275x200x80mm

Z BLOX NATURAL ENDS

Useful when your stone stops and your wall keeps going. Successfully employed on most fire surrounds and window frames.

550x200x30-60mm • 275x200x30-60mm

RAKED OUT COLUMN BLOCKS

Require concrete footings with steel starters. Column blocks are then stacked one on top of the other, the core filled with cement and there is no need to joint between the blocks. Finished columns are load bearing and entirely replace the need for steel posts. In fact this product cannot be used where steel posts are already in place.

450x450x300mm

LETTER BLOX

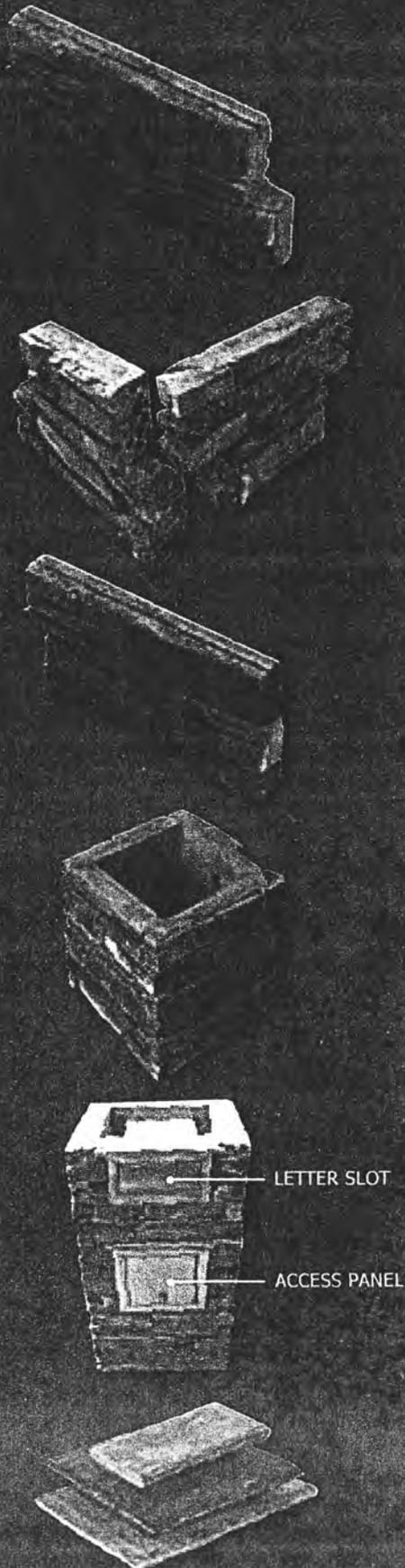
These modules are used in combination with the column Blox to create a featuresome letter box. Fitted to the interior of each letter block is a specialized stainless steel compartment which has a spring loaded panel in the front to receive mail and an access panel at the back. Very impressive.

450x450x300mm

CAPPINGS

Used for sills, wall cappings, column cappings and as a finishing for letter boxes. Leading edges are chipped to create a natural finish.

400x200x40-50mm • 400x250x40-50mm • 550x550x40-50mm
700x550x40-50mm • 900x900x40-50mm



AN EXCITING RANGE OF PRODUCTS

ROX™ FACADE SERIES



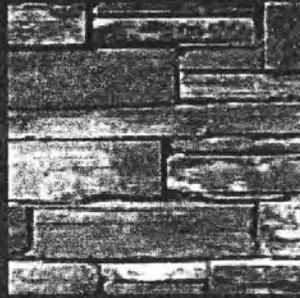
ROX BOROUGH



LAUDER SCHIST



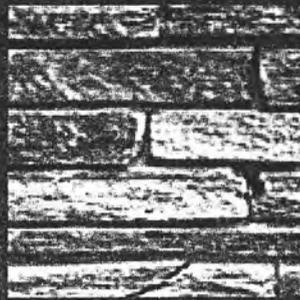
MOSGIEL SCHIST



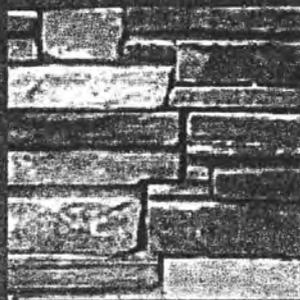
POOL BURN SCHIST



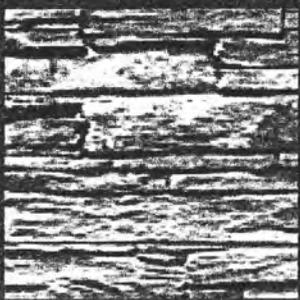
BASALT SCHIST



ST BATHANS SCHIST



NAMIBIA SCHIST



GLEN IDA SCHIST

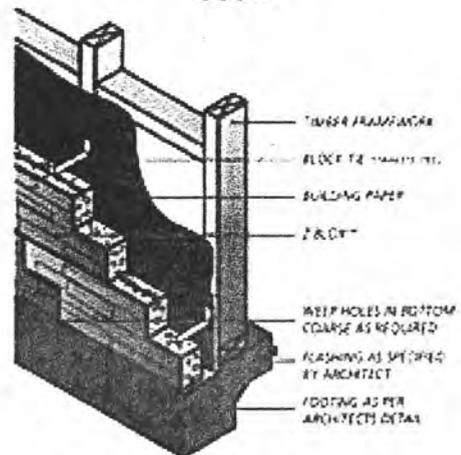
With Rox™ Facade Series free standing stonewalls can be created by employing traditional construction techniques. Walls are tastefully finished with modular cappings selected from the range available. The Rox Facade Series is an intelligent stone walling system with classic appeal, capturing the essence of traditional masonry craftsmanship.

An exciting product that incorporates interlocking concrete blocks with schist style walling. This product differs from the Veneer Series. Facade Z Blox place their primary weight load on the footing and are tied back to a structural wall. Therefore Facade Z Blox are easily installed to brick specifications.

For timber framework installations the Facade Series is less expensive than both the Veneer Series and traditional stonewalling. No additional wall linings are required pre-installation. (Please refer to completed wall cost comparisons sheet.)

According to the recent BIA water tightness survey of February 2004, masonry facades installed in accordance with appropriate cavity specifications are among the most successful at ensuring your building is watertight, especially when used as sole cladding.

Z BLOX™ FACADE OVER TIMBER FRAME OS3.1





www.originalstone.co.nz
Telephone : 0800 157 340

Auckland Showroom

177 Marua Rd, Ellerslie, Auckland
Telephone : Ph: 09 579 3326

Wellington Showroom

Home Ideas Centre, Cnr Esplanade & Hutt Roads,
Petone, Wellington,
Telephone : 04 939 6985



SCANNED

BC 040111

2 February 2004

Mr G Cromie
PO Box 30238
LOWER HUTT

Dear Sir

PROPOSED DWELLING ADD & ALTERATIONS - 93 FIELD WAY WAIKANAЕ

Thank you for your recent building consent application which is currently being processed.

A preliminary check of the documents supporting your application has revealed that the proposal does not comply with the Building Act 1991 Acceptable Solutions.

- Please provide without delay the engineering information as mentioned on the plans.

We look forward to completing your consent and would appreciate your prompt attention to these details so as to avoid any unnecessary delays in the processing system.

For further information or clarification of these items please contact Arnold Hawkins on (04) 9045879.

Yours sincerely

Arnold Hawkins
BUILDING CONTROL OFFICER

PLEASE MAKE IF ATTACHED
IS SUBJECT.

THANKS

5/2

Graeme Cromie

Governing Director

maxam

Maxam Corporation Limited
46-50 Bloomfield Terrace
PO Box 30-238
Lower Hutt New Zealand
E-mail gcromie@ihug.co.nz
Facsimile +64-4-570 3317
Mobile +64-21-420 030
Telephone +64-4-570 3310
Direct Line +64-4-570 3311

Kapiti Coast District Council

Clendon Burns & Park Ltd

Consulting Civil & Structural Engineers

16a Evelyn Tce, P O Box 10 348 Wellington NZ
Telephone 04 472 1412 Facsimile 04 472 1417
Email cbp@cbp.co.nz

FACSIMILE TRANSMISSION ADVICE

TO:	GRAEME BROMIE	JOB NO:	20302
ATTENTION:	5703317		
FACSIMILE NO:	PHILIP YONG	NO OF PAGES:	17
SENDER:		(Including this sheet)	
SUBJECT:			
DATE:	20/2/02		

Please advise immediately if the number of pages received is less than the number of pages stated.

CONFIDENTIALITY:
This facsimile message and accompanying data may contain information that is confidential and subject to legal privilege. If you are not the intended recipient, you are notified that any use, dissemination, distribution or copying of this message or data is prohibited. If you have received this facsimile in error, please notify us immediately and return the original to us. Thank you.

Re: Lot 2, Fieldway

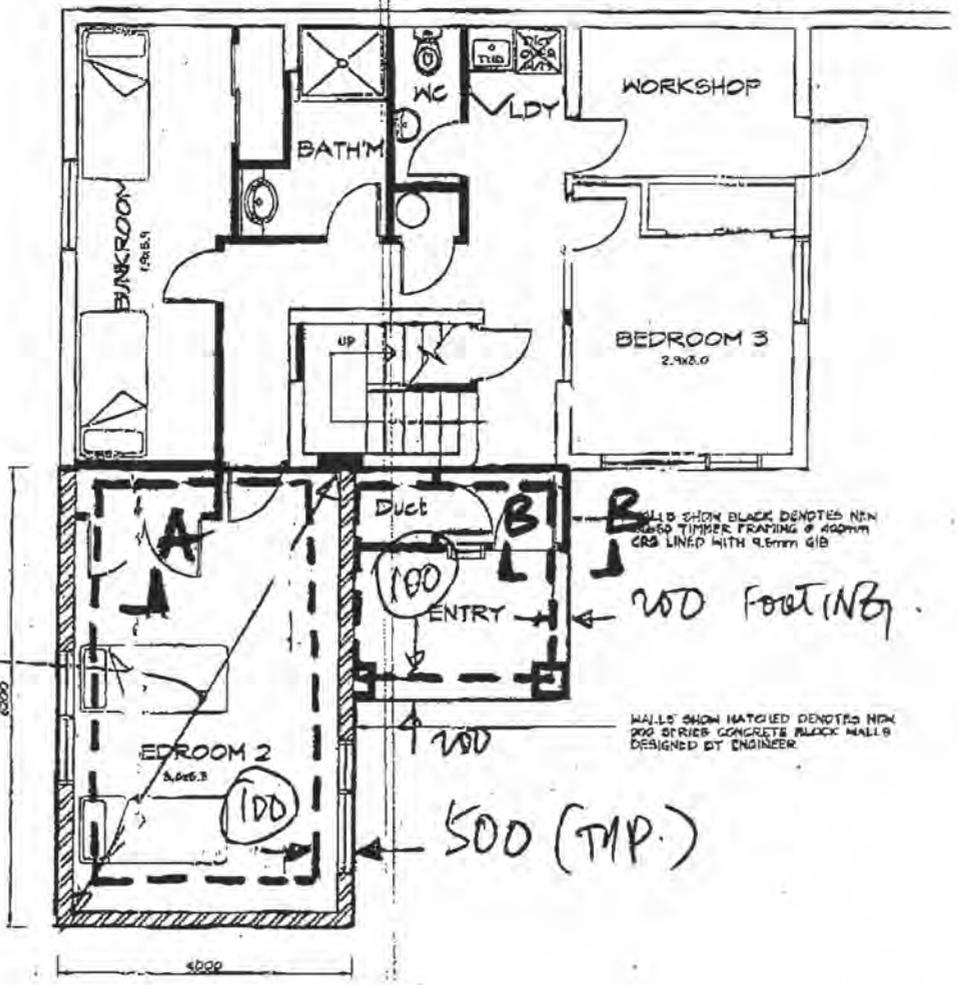
Structural info. attached.

Regards
M.Y.

NOTES:

* REFER NZS 4229 FOR TIMBER FLOOR
DIAPHRAGM CONNECTIONS

(100) 100 THICK SLAB ON GRADE



TIMBER
FLOOR
DIAPHRAGM
TO NZS 4229
AT FIRST
FLOOR *

PROPOSED GROUND FLOOR SCALE 1:50

203029

SK1

20/2/03

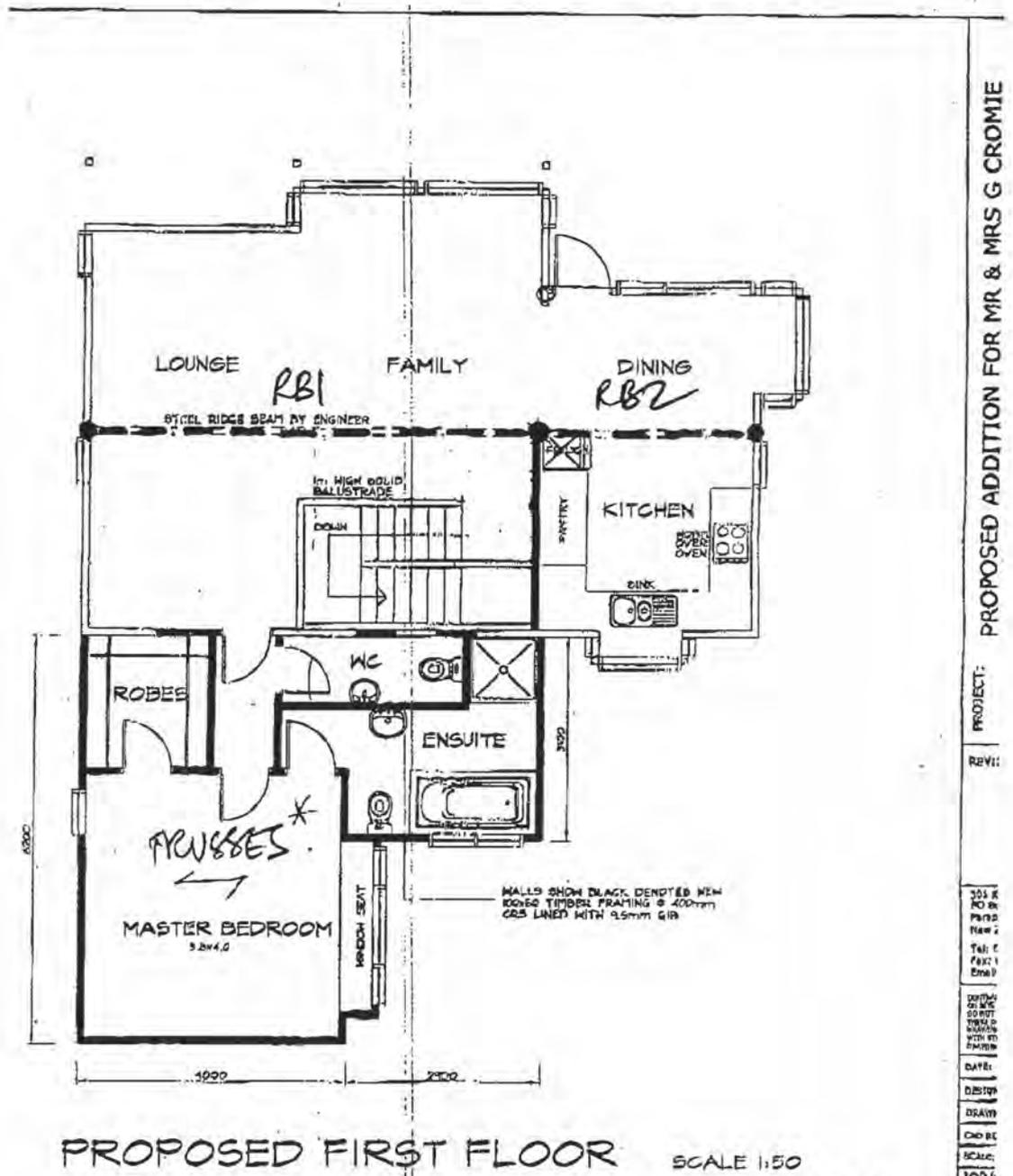
PROJECT: REVISIONS: 1. DATE: 20/2/03

NOTES :

RB1: 250UB80

RB2: 150UB14 or 250X100 - EXISTING ASSUME OK.

* PROPRIETARY TRUSSES



PROJECT: PROPOSED ADDITION FOR MR & MRS G CROMIE
REVI:
JOB/:

203029

SK2
20/2/03

JOB NO	203029
DATE	15/02/03
SCALE	1:50
DRAWN	SK2
CHECKED	
DATE	
SCALE	
JOB/	

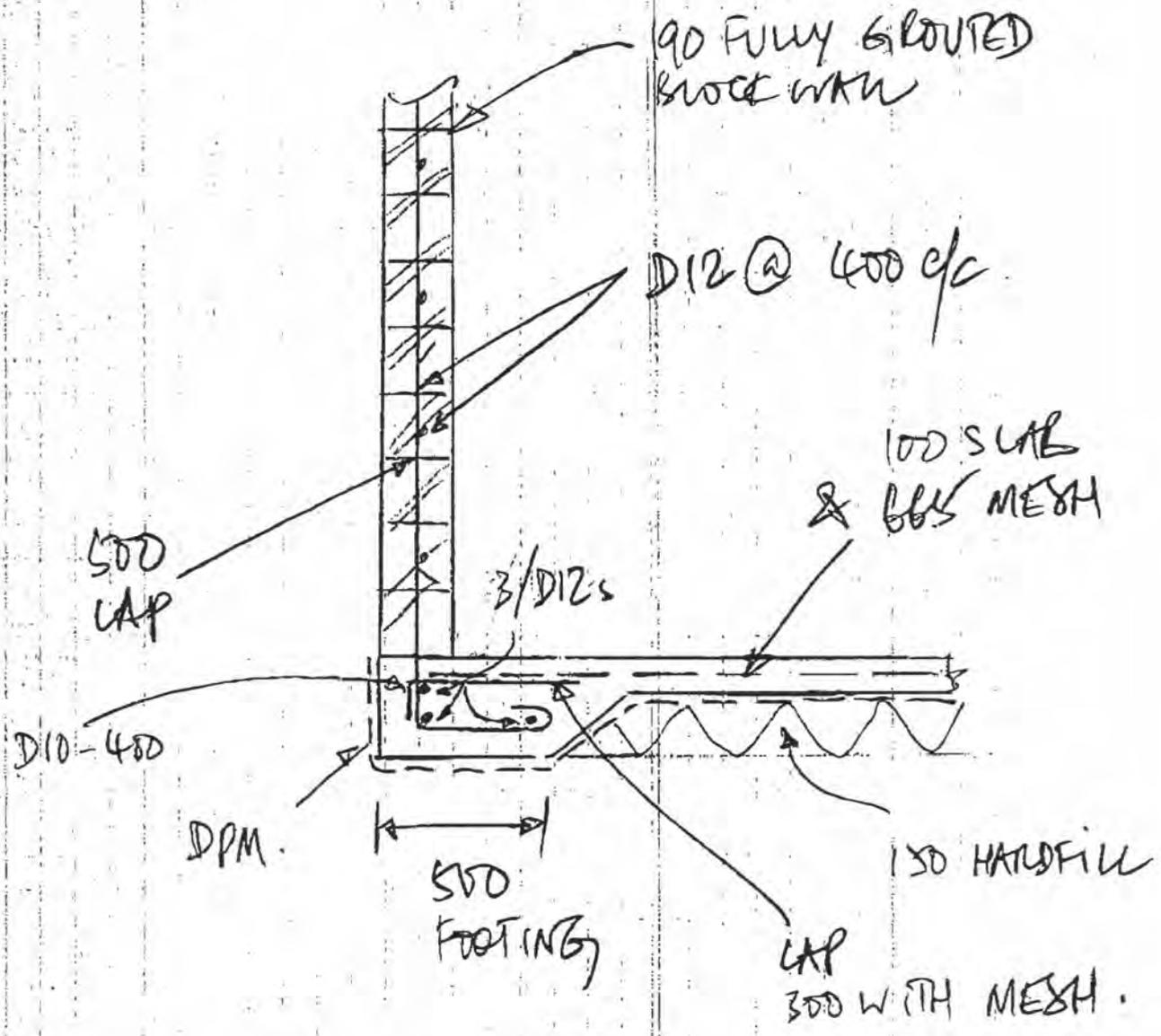


Clendon Burns & Park Ltd
Consulting Civil & Structural Engineers

15a Everson Terrace
ph 04 472 1412
email cbp@cbp.co.nz
Wellington New Zealand

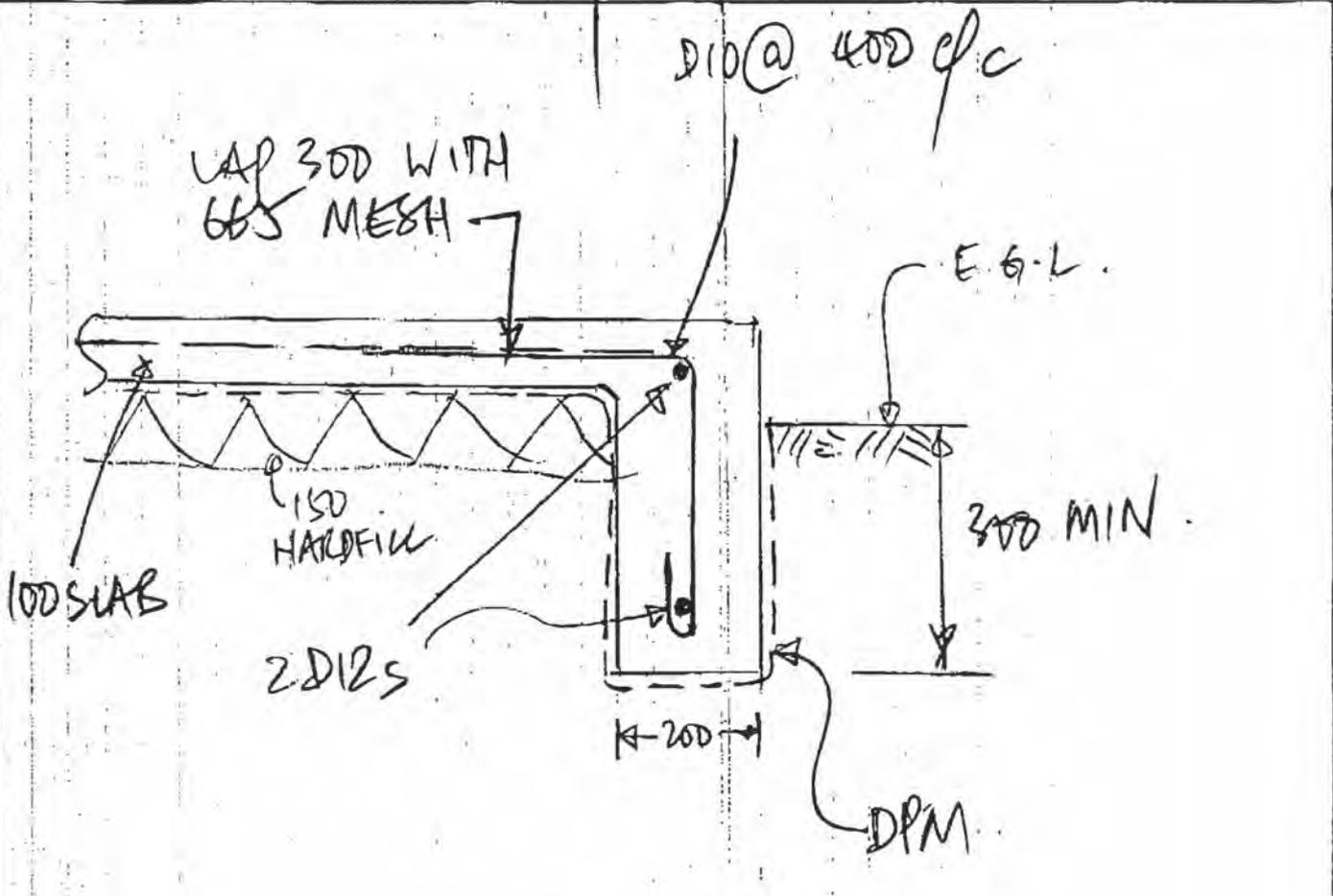
P O Box 10 348
fax 04 472 1417

Project ST2, Fieldway		Job Ref. 20302	
Section		Sheet no./rev 563	
Drawn by [Signature]	Date 20/2/03	Checked by	Date
		App'd by	Date



SECTION A - A

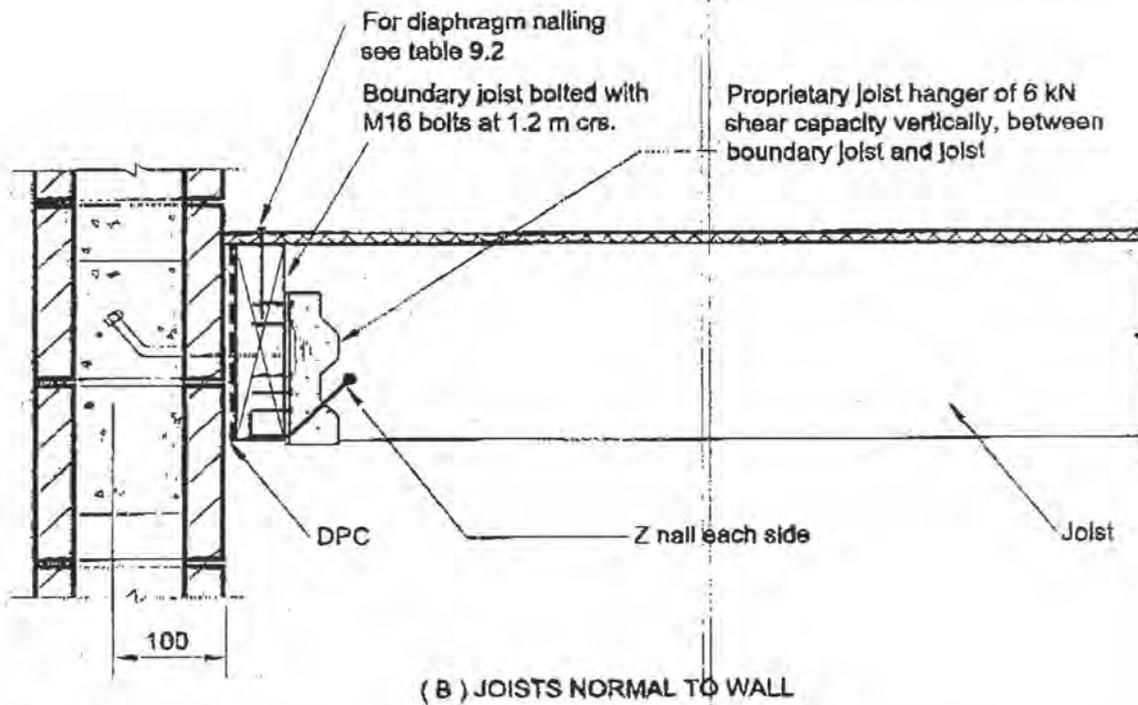
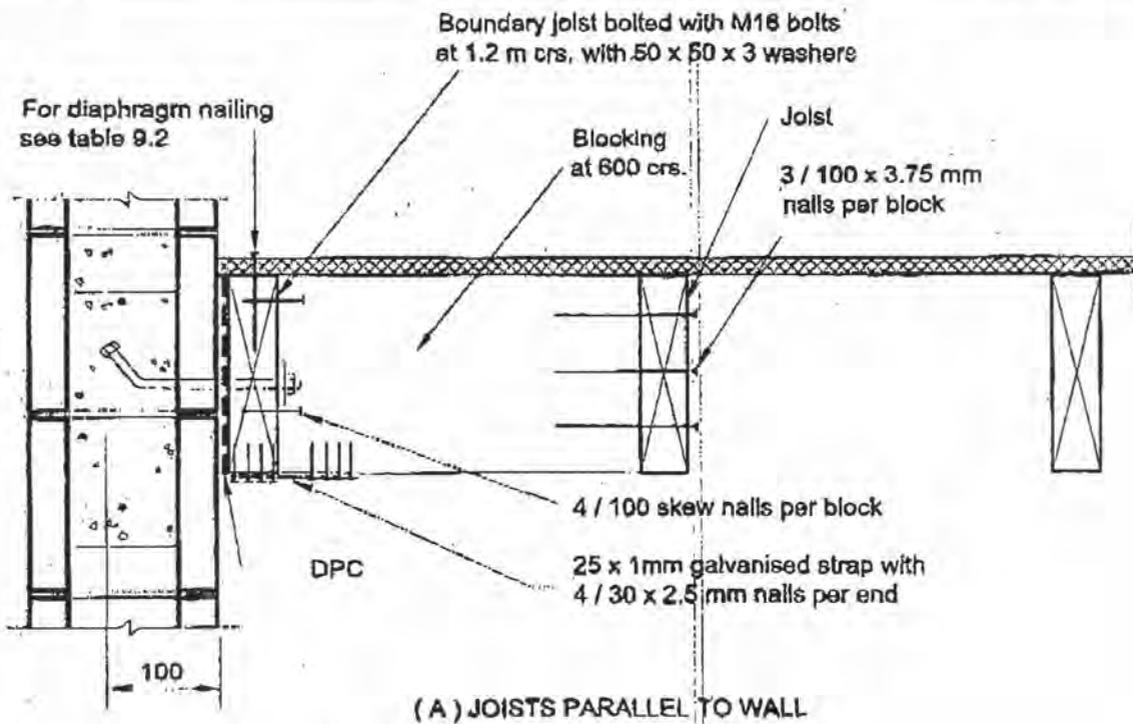
 Clendon Burns & Park Ltd Consulting Civil & Structural Engineers 16a Everton Terrace ph 04 472 1412 email cbp@cbp.co.nz Wellington New Zealand	Project Lot 2, Fieldway		Job Ref. 203029		
	Section		Sheet no./rev SKP		
Calc'd by M	Date 20/03	Chck'd by	Date	App'd by	Date



SECTION B-B

20302

NZS 4229:1999



NOTE -

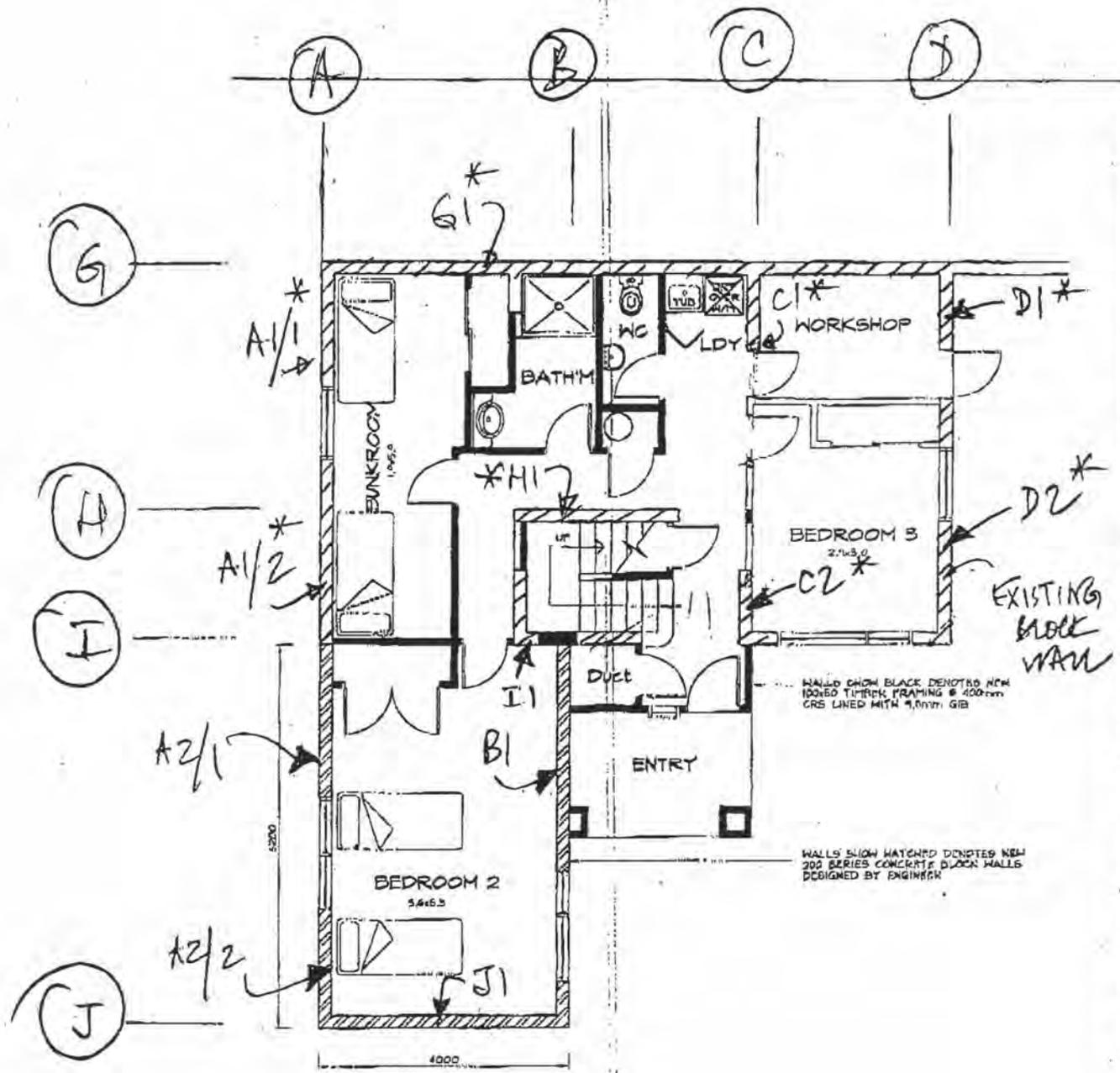
- (1) Minimum embedment length of all M12 bolts shall be 75 mm.
- (2) The length of the bolt is determined by the thickness of the members to be attached.
- (3) Use mild steel galvanized washers, 50 x 50 x 3 mm between bolt head and timber member.

Figure 9.5 - Timber floor diaphragms connections (see 9.3.4.2)

SKS
20/1/03

203 029

* EXISTING MASONRY WALLS



PROPOSED GROUND FLOOR
BRACING LAYOUT PLAN

SCALE 1:50

SK 7
20/2/03

PROPOSED ADDITION FOR MR & MRS G CROMIE
PROJECT:
REV:
30/1
P.D.
P.A.
Rev
Tel:
Fax:
E-mail:
DATE:
DESIGN:
DRAW:
C.A.P.
SCALE:
JOB:
(A.L.C.)

2 February 2004

Mr G Cromie
PO Box 30238
LOWER HUTT

Dear Sir

PROPOSED DWELLING ADD & ALTERATIONS – 93 FIELD WAY WAIKANAE

Thank you for your recent building consent application which is currently being processed.

A preliminary check of the documents supporting your application has revealed that the proposal does not comply with the Building Act 1991 Acceptable Solutions.

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For further information or clarification of these items please contact Arnold Hawkins on (04) 9045879.

Yours sincerely



Arnold Hawkins
BUILDING CONTROL OFFICER

*check for soil
refrost when this info comes*

A.

22 March 2005

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Fax 04 904 5830 (3 pages)

Attention **Mr Andrew Wood**

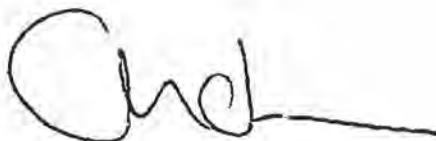
Dear Sir,

Re: Building Consent 040111 for 93 Fieldway, Waikanae.

Please find attached details of the Fisher Denniston fire place that we are intending to install in the above mentioned project.

Please confirm that this now completes the information you require for the fire place.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andrew Cromie', with a long horizontal stroke extending to the right.

Andrew Cromie

Phone 04 570 3312 or 021 420 033
Fax 04 570 3317

PO Box 30 238
Lower Hutt.

original



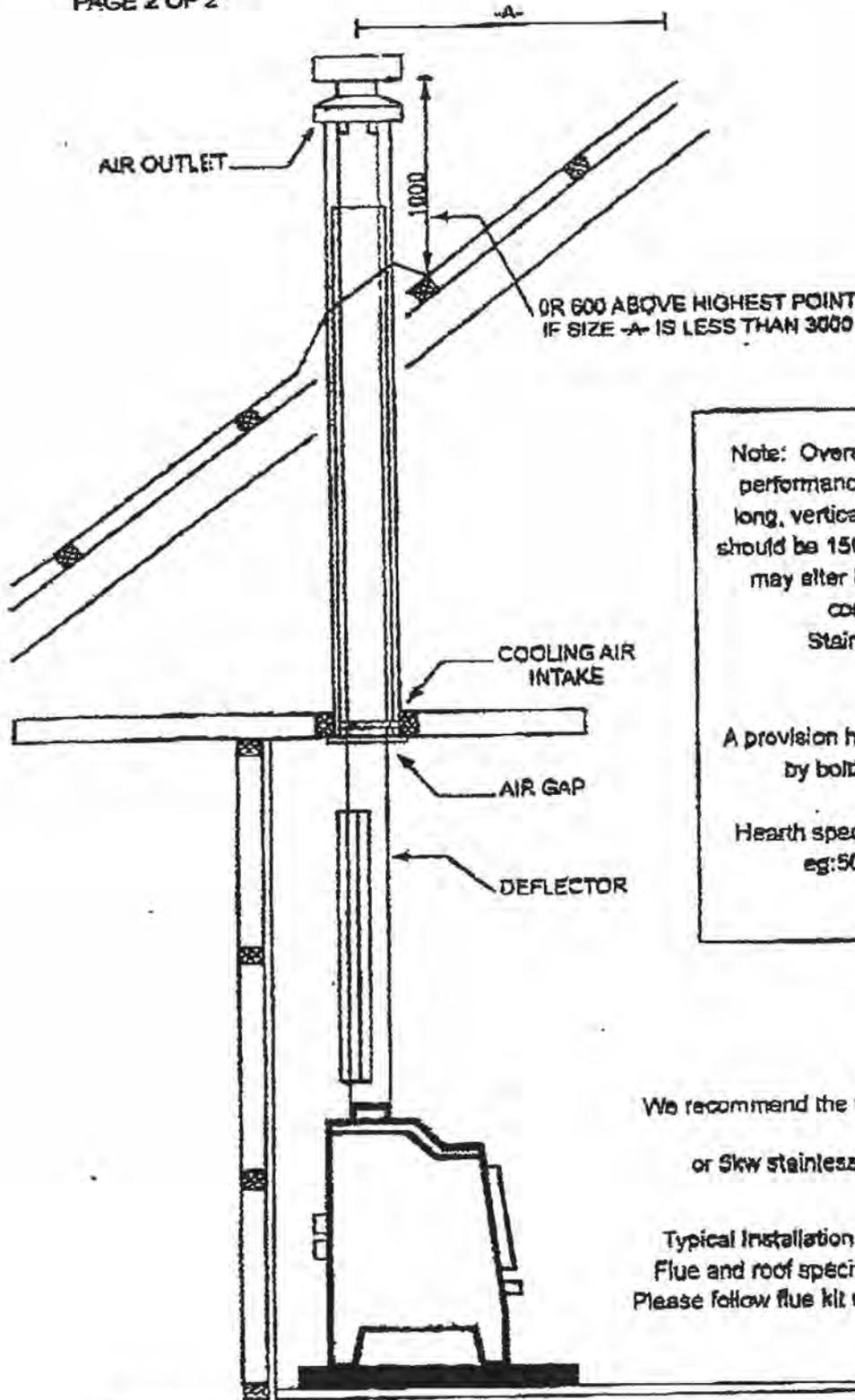
ATTN: Rochelle

FREE STANDING SPECIFICATIONS

DENNISTON

Effective December 2003

PAGE 2 OF 2



Note: Overall flue system length for optimum performance should be between 4200-4800 long, vertical and have no bends. Flue pipes should be 150mm Diameter. Deviation from this may alter heaters performance, if in doubt contact your Fisher supplier.
Stainless Steel deflector tested on this unit.

A provision has been made for seismic restraint by bolting through holes in rear legs

Hearth specs (New Zealand) Insulated Hearn eg: 50mm concrete or equivalent thermal protection.

Water Booster
We recommend the use of the "Superior" 2.6 Kw Booster P/N 127526
or Skw stainless steel wetback P/N SUP-RE001

Typical installation shown complies with AS/NZS2918
Flue and roof specifications are recommendations only.
Please follow flue kit manufacturers installation instructions.

IF INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS THE HEATER COMPLIES WITH AS/NZS 2918:2001

RETAIL LINKS LTD RESERVE THE RIGHT TO CHANGE SPECIFICATIONS OR DESIGNS WITHOUT PRIOR NOTICE

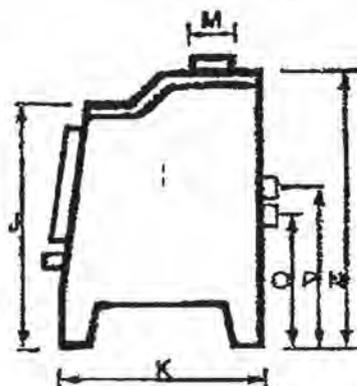
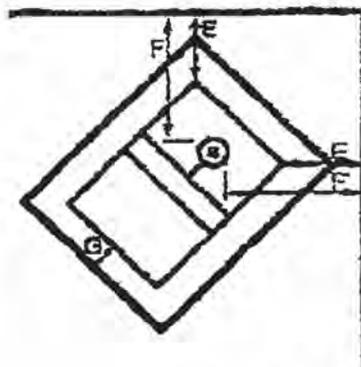
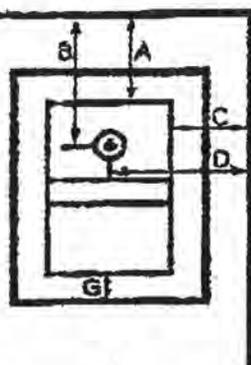


FREE STANDING SPECIFICATIONS

Effective December 2009

DENNISTON

PAGE 1 OF 2



Denniston Specifications

	A	B	C	D	E	F	G
New Zealand with S/S Flue Screen 1200	450	600	750	1045	600	925	300
New Zealand without flue screen	725	875	775	1070	600	925	300
Fisher Heatshield and S/S Screen	200	350	360	655	250	575	300

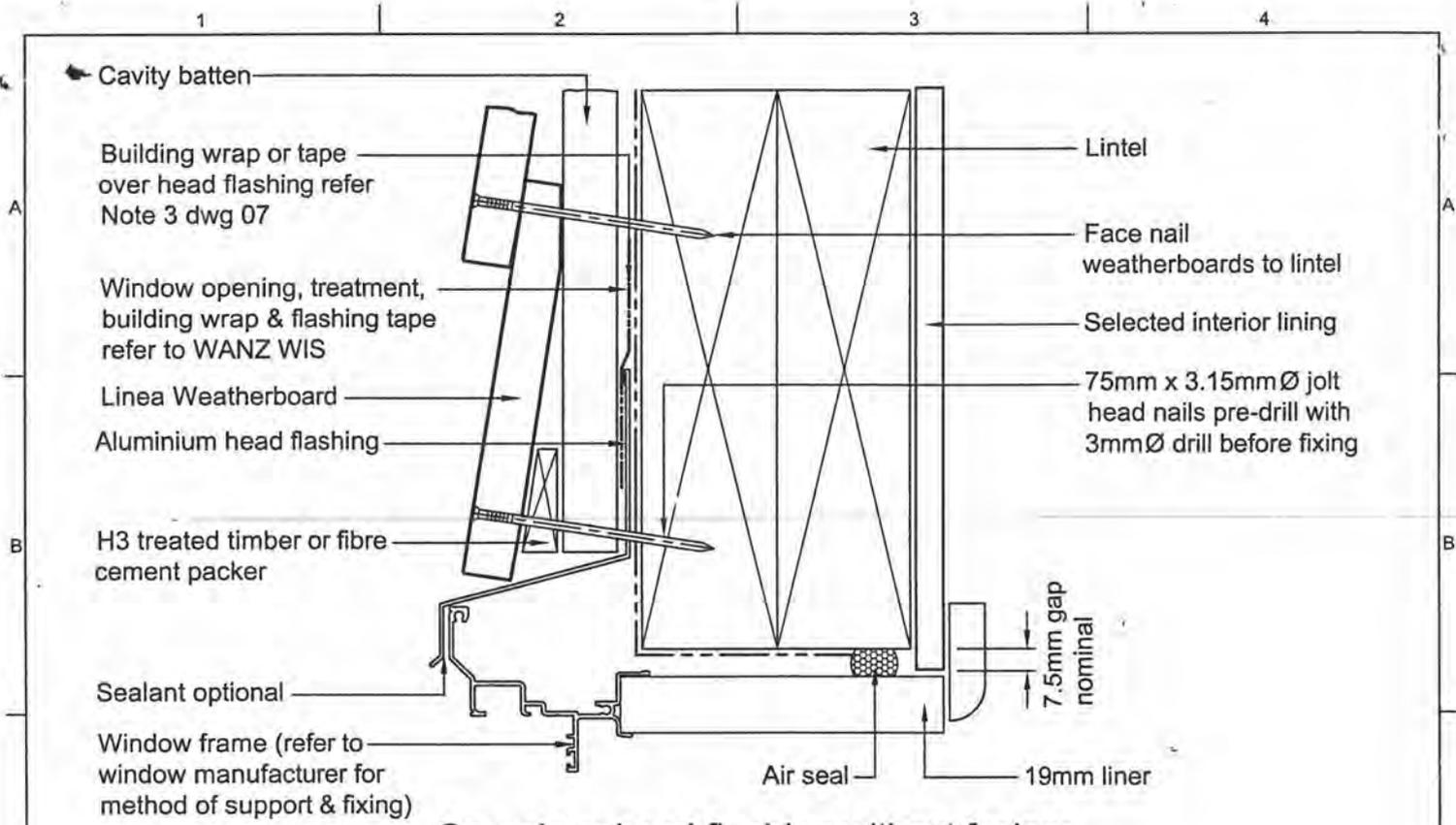
	H	I	J	K	L	M	N	O	P
Measurements	585	540	650	555	150	150	755	495	520

	DEPTH	WIDTH
Minimum Hearth Size	1020	1200

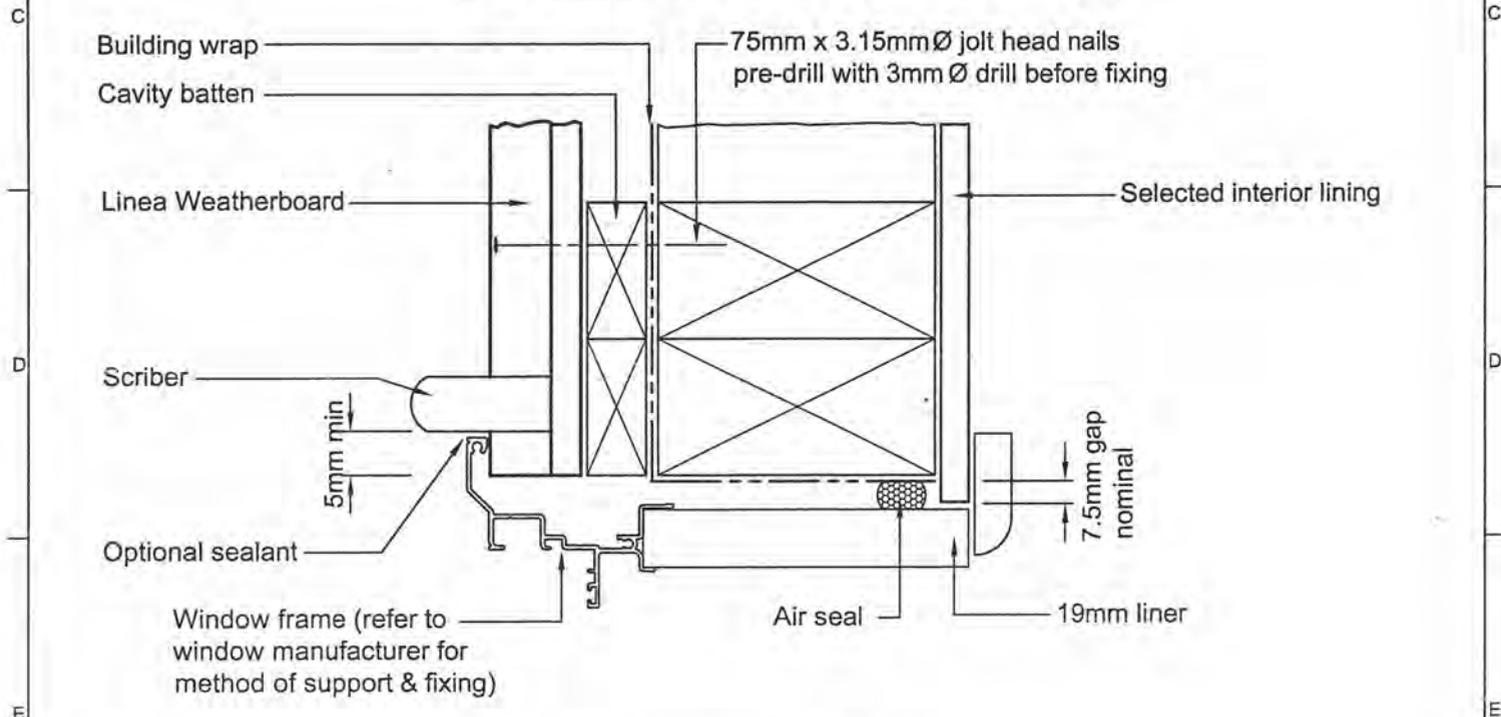
Estimated Peak Output (KW)	Max Log Length	Water Heating Option	Overnight Burning	Insulated Hearth
24	460	YES	YES	YES

IF INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS THE HEATER COMPLIES WITH AS/NZS 2918:2001

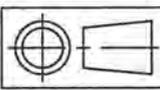
RETAIL LINKS LTD RESERVE THE RIGHT TO CHANGE SPECIFICATIONS OR DESIGNS WITHOUT PRIOR NOTICE



One piece head flashing without facings



Jamb flashing without facings

Material	 James Hardie Building Products	Drawn SK	Date 26.11.2003
		Checked	Date
 <p>Drawn to AS 1100 Dimensions in Millimetres Do Not Scale</p>	<p>Copyright in this information belongs to James Hardie and the reproduction of this material is only authorised for purposes connected with the specification or use of James Hardie's products. This information is intended to be informative and used as a guideline in conjunction with the relevant James Hardie literature. Due to the many variables affecting different projects it can not replace the judgement or advice of an architect, engineer or other relevant technical expert and such experts must be consulted to determine the suitability or otherwise of the details or the necessity for further design/detailing.</p> <p>TECHNICAL PRODUCT DEVELOPMENT NEW ZEALAND BUILDING PRODUCTS RESIDENTIAL LINEA WEATHERBOARD GENERAL SPECIFICATION CAVITY WINDOW DETAILS WITHOUT FACINGS</p>	Approved	Date
		Sheet Size A4	Scale NTS
		Reference No N_ZR-L_W-GSP	Detail 21
		Sht of Shts	Revision A

KAPITI COAST DISTRICT COUNCIL
AMENDED/REVISED PLANS

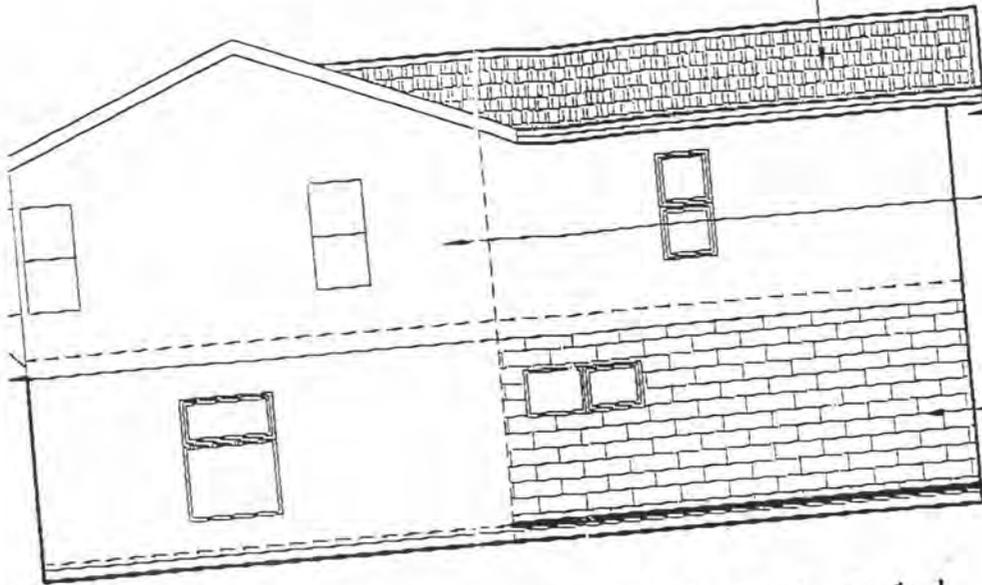
Date Received
Date Approved
Approving Officer

DECROMASTIC ROOF
TILES TO MATCH
EXISTING CHECK ON SITE

300mm SOFFIT OVERHANG
TO MATCH GABLE END
SOFFIT TO LINE ROOF
THROUGH, CHECK ON SITE

ALLOW FOR MONOTEK ON
BATTEN CAVITY CLADDING
SYSTEM OVER EXISTING
CLADDING

200 SERIES CONCRETE BLOCK
WALLS TO LOWER FLOOR
ADDITION DESIGNED BY
ENGINEER WITH PLASTER FINISH



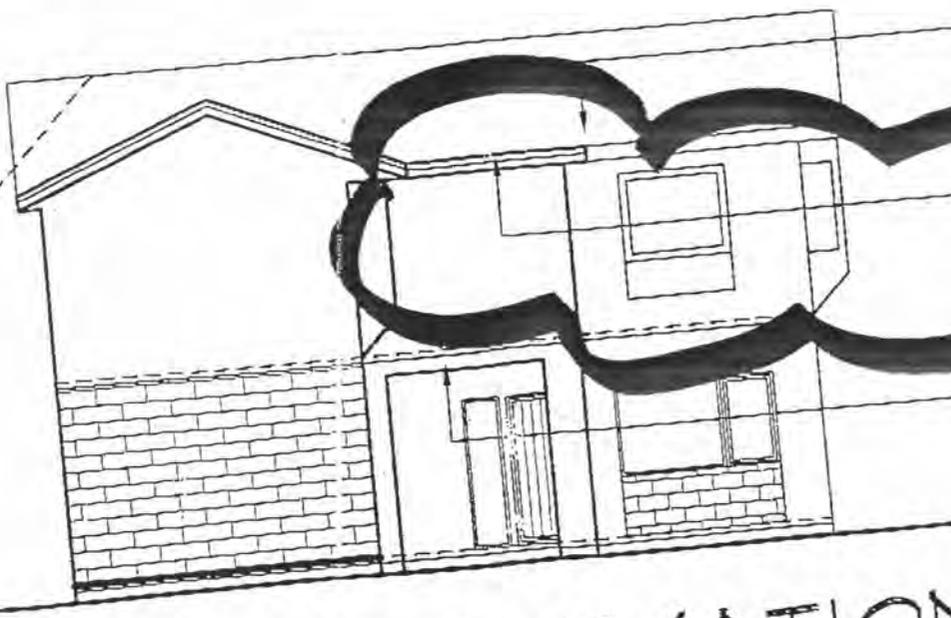
SIDE ELEVATION
SCALE 1:100

Part Drawg
2311/3

PVC SPOUTING & DOWNPIPES OF
STANDARD FASCIA TO MATCH
EXISTING CHECK ON SITE

Bitumat
SONOSAND ROOFING MEMBRANE
OVER 18mm TREATED PLY,
GLUED & STAINLESS STEEL
SCREWED TO MIN FALL

200 SERIES CONCRETE
BLOCK WALLS TO LOWER
FLOOR ADDITION DESIGNED
BY ENGINEER WITH
PLASTER FINISH



FRONT ELEVATION
SCALE 1:100

NOTE:

KAPITI COAST DISTRICT COUNCIL
AMENDED/REVISED PLANS

Date Received
 Date Approved
 Approving Officer

TO CUT BACK &
 ROOFING & SOFFIT
 WANTED FOR ADDITION

ASTIC ROOF TILE
 LE BATTENS TO
 EXISTING

L TRUSSES @
 CRS FIXED EACH
 4 CYCLONE TIES

SOFFIT OVERHANG
 2H GABLE END
 TO LINE ROOF
 4, CHECK ON SITE

UTING & DOWNPIPES
 DARD FASCIA TO
 XISTING CHECK ON

OR ROOF PLANE
 TO NZS 3604 1999

ENSUITE CEILING
 DETERMINED
 BY SOFFIT HEIGHT

125x50 RAFTERS @
 600mm CRS OVER
 ENSUITE ONLY

Bilomat
~~SCISSOR~~ BOARD ROOFING
 MEMBRANE OVER 18mm
 TREATED PLY, GLUED
 & STAINLESS STEEL
 SCREWED TO MIN FALL
 OVER ENSUITE ONLY

ALLOW FOR CATILEVERED
 TRUSSES OVER MASTER
 BEDROOM WINDOW SEAT

PITCH TO MIN
 EXISTING ON SITE

PROJECT: **ADDITION FOR MR & MRS G CROMIE**
LOT 2 FIELD WAY WAIKANAEBEACH

301 Kapiti Road
 PO Box 1616
 Paraparaumu Beach
 New Zealand

Tel: 04 902 5505
 Fax: 04 902 5504
 Email: kapiti@des

CONTRACTOR TO VERIFY -
 ON SITE PRIOR TO COMMENCEMENT
 DO NOT SCALE DRAWINGS
 THESE DRAWINGS ARE CONTRACTOR'S
 DRAWINGS TO BE READ IN CONJUNCTION
 WITH STRUCTURAL ENGINEER'S
 DRAWINGS.

DATE:	06 J
DESIGNED:	MS
DRAWN:	BF
CAD REF:	
SCALE:	AS S

REVISIONS:

ROOF PLAN SCALE 1:100

*Part Dwg
 2311/4*

OVER 18mm CD PLY
 TO MANUF SPECI
 TO FORM MIN FALL

18mm
 PLY

WARD ON
 BLOCK

CK

NG

003

MAXAM CORPORATION LTD

01/09 2004 14:41 FAX 64 4 5703317

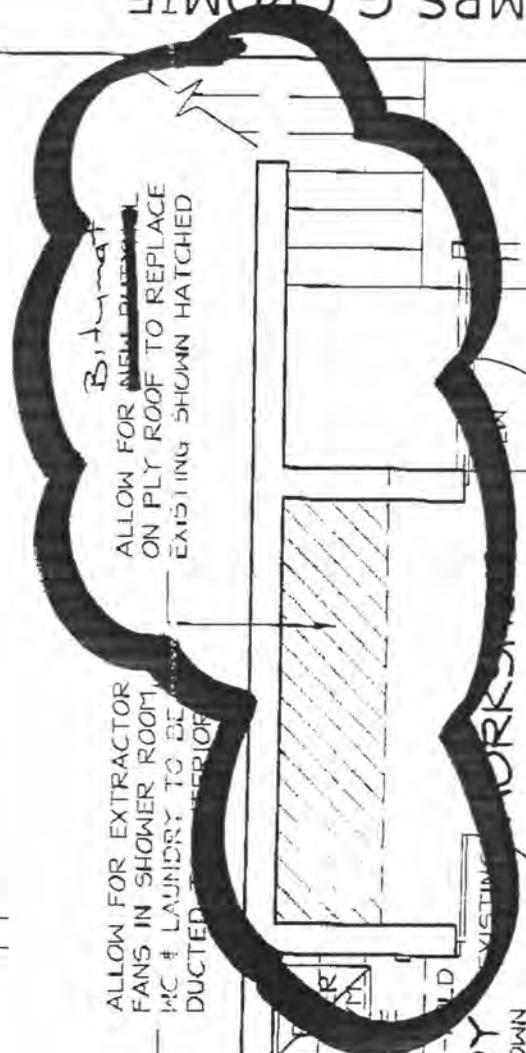
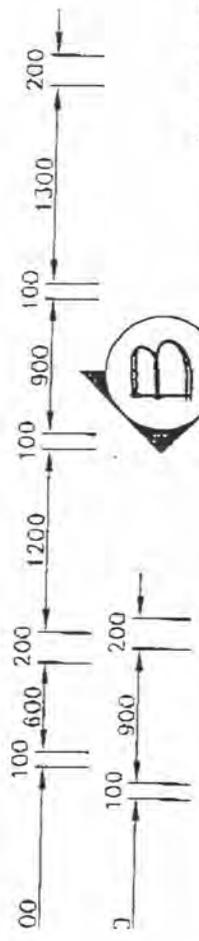
Design Network Kapiti

PROJECT: ADDITION FOR MR & MRS G CROMIE
 LOT 2 FIELD WAY WAIKANAE BEACH

Part Drawg 2311/1

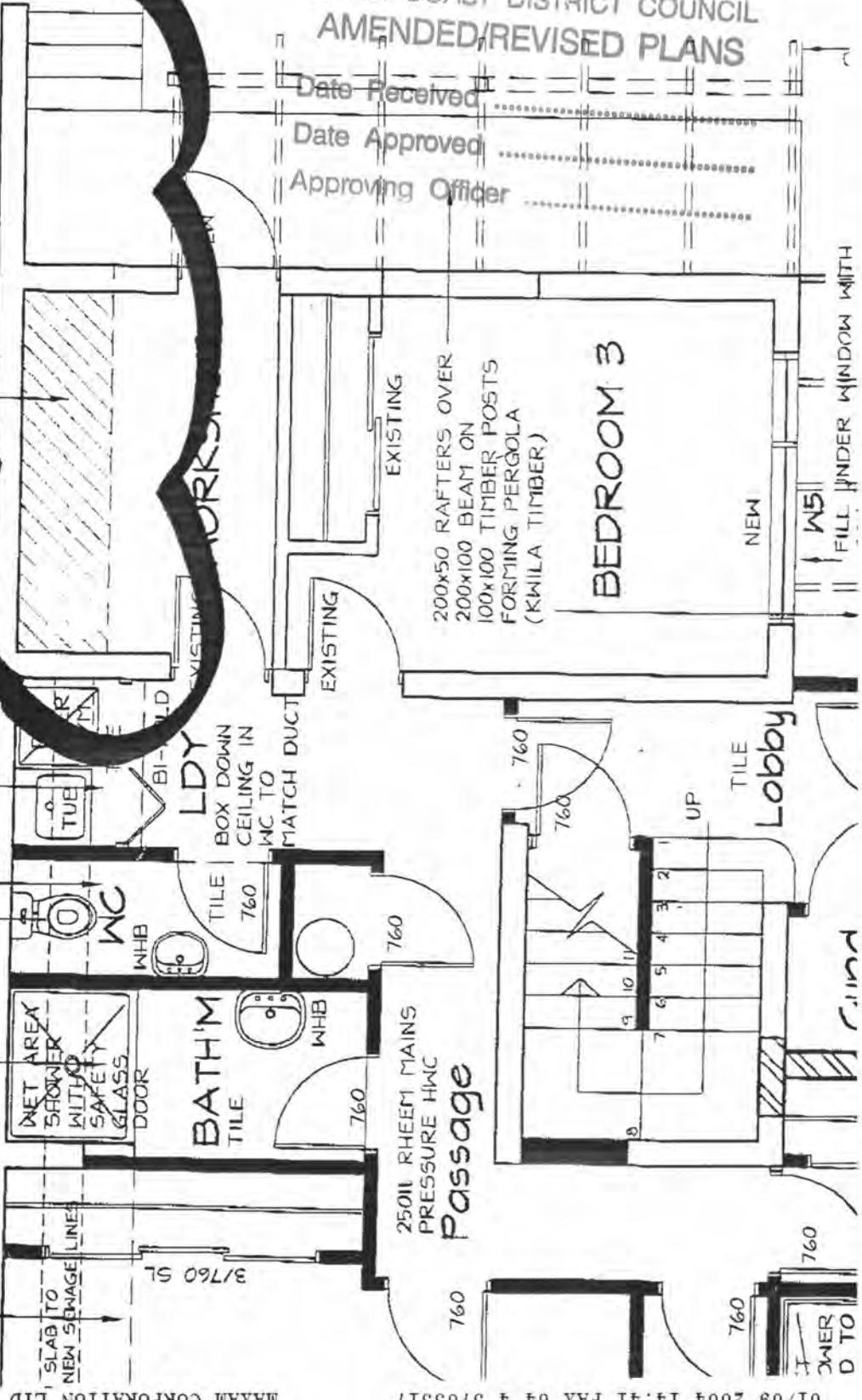
KAPITI COAST DISTRICT COUNCIL
 AMENDED/REVISED PLANS

Date Received
 Date Approved
 Approving Officer



Bridgmat
 ALLOW FOR NEW PLY ROOF TO REPLACE ON PLY ROOF TO REPLACE EXISTING SHOWN HATCHED

ALLOW FOR EXTRACTOR FANS IN SHOWER ROOM W/ MC # LAUNDRY TO BE DUCTED TO EXTERIOR



SCANNED

1 September 2004

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Fax: 04 9045 830 (4 Pages)

Attention Mr Ken Smith

KAPITI COAST DISTRICT COUNCIL
AMENDED/REVISED PLANS

Date Received

Date Approved

Approving Officer

Dear Sir,

Re: Building Consent 040111 for 93 Fieldway, Waikanae.

Please find attached 3 revised part drawings, with the changes clouded, relating to the above mentioned building consent.

The roof at the front door is altered to a flat roof and the torch down roofing membrane we intend to use is 4mm Bitumat Polyflame.

This project has commenced and we are perhaps 2 weeks away from proceeding with the above mentioned work. Please advise if this is to your satisfaction.

Yours sincerely



Andrew Cromie

Phone 04 570 3312 or 021 420 033

Fax 04 570 3317

PO Box 30 238
Lower Hutt.



James Hardie
Building Products

December 2003



LINEA[®]
WEATHERBOARD
GENERAL
SPECIFICATION

The Specifier or other responsible party for the project is responsible to ensure that the information and details in this specification are appropriate for the intended application and specific design and detailing is undertaken for areas which falls outside this published scope and specification. All relevant information must be provided to the local TA for Permit application.



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This specification must be read in conjunction with drawings numbered 1 – 21.

For more detailed information about Linea installation, refer to the *Linea Weatherboard Installation Guidelines*.



1.0 Application & Scope

1.1 Application

Linea Weatherboards are 16mm thick, pre-primed fibre cement planks for use in lightweight construction of timber-framed external walls. Linea is available in 135mm and 180mm widths.

James Hardie Trim is a 16mm thick, pre-primed fibre cement product available in a variety of widths for use as decorative external trim around openings and at corners.

1.2 Scope

This specification covers the use of Linea Weatherboard for buildings that fall within the scope of NZS 3604:1999, "Timber Framed Buildings." The specification includes the use of Linea in both direct to stud and cavity construction method and must be read in conjunction with current BRANZ Appraisal for Linea.

1.3 Code Compliance

Linea Weatherboard has been Appraised by BRANZ. Refer to Appraisal Certificate number 446 (2003) and 447 (2003).

Note: the scope of the Appraisal Certificate takes precedence over the scope of this Specification.

2.0 Design

2.1 Responsibility

The Specifier for the project must ensure that the details in this specification are suitable for the intended application and that additional detailing is provided for specific design or any areas that fall outside the scope and specifications of this literature.

For applications which are outside the scope of this literature and details which are not in this literature the specifier must ensure that the design meets the relevant performance requirements of the NZBC.

James Hardie recommend that professional design advice is sought in these circumstances.

2.2 Site & Foundations

The site on which the building is situated must comply with the Acceptable Solution E1/AS1 of the Approved Document for the NZBC (New Zealand Building Code) Clause E1 "Surface Water".

Any foundation design that complies with the NZBC will be satisfactory for Linea Weatherboard.

2.3 Ground Clearances

The floor must have a minimum clearance to paved or unprotected ground as required by NZS 3604:1999.

Linea Weatherboards must overhang the bottom plate on a concrete slab by a minimum of 50mm as required by NZS 3604:1999.

The bottom edge of the Linea Weatherboards and James Hardie Trim must be a minimum of 100mm above paved surfaces or 175mm above unprotected ground.

2.4 Moisture Management

It is the responsibility of the specifier to identify moisture related risks associated with any particular building design.

Wall construction design must effectively manage moisture, accounting for both the interior and exterior environments of the building, particularly in buildings that have a higher risk of wind driven rain penetration or that are artificially heated or cooled.

Walls shall include those provisions as required by Acceptable Solution E2/AS1 of the Approved Documents for the NZBC Clause E2 "External Moisture". All wall openings, penetrations, junctions, connections, window sills, heads and jambs must incorporate appropriate flashings and waterproofing. The specification and installation of materials and components that are used to manage moisture in framed wall construction must, at a minimum, comply with the requirements of relevant standards and the NZBC.

For information in relation to designing for weathertightness, refer to the Building Research Association of New Zealand (BRANZ) and the Building Industry Authority (BIA) Updates on the following websites, respectively:

www.branz.co.nz and www.bia.govt.nz

2.5 Structure

Timber-framed buildings must be designed in accordance with NZS 3604:1999. Requirements for timber member size and spacing are however specified.



2.6 Wind Loading

Linea Weatherboards are suitable for use in wind zones up to and including VH as defined by NZS 3604:1999.

2.7 Structural Bracing

Fixing specifications and bracing capacities are given in the *James Hardie Bracing Manual*. The following range of bracing ratings can be achieved;

- Wind: 68-120 BU's
- Earthquake: 60-105 BU's

2.8 Fire Resistance Rated Walls

Linea Weatherboards can be used in fire rated assemblies as specified in the *James Hardie Fire & Acoustic Manual*. The following FRR ratings can be achieved;

- 30 min FRR
- 60 min FRR

2.9 Energy Efficiency

The R-Value of Linea Weatherboard walls constructed in accordance with this manual, will comply with the "Schedule Method" of NZS 4218:1996 (*Energy Efficiency – Housing and Small Building Envelope*) as shown in Table 1. Calculation is based on a framing member size of 90 x 45mm and internal linings of either James Hardie Villaboard, plasterboard or timber.

Climate Zone*	Cavity Insulation Infill Requirement
1 & 2	R1.8 Fibreglass batts.
3	R2.2 Fibreglass batts.

Table 1: *Insulation Requirements*
(*as defined in NZS4218:1996)

3.0 Framing

3.1 Dimensions

A 35mm minimum stud width is required unless noted otherwise in this section.

3.2 Structural Grade

Minimum timber grade requirements are No.1 framing grade in accordance with NZS 3631:1978 "New Zealand Timber Grading Rules" or equivalent.

3.3 Durability

Refer to Acceptable Solution B2/AS1 of the Approved Documents for NZBC Clause B2 "Durability".

Note: this document is now being extensively revised and is due for publication during 2004. Refer to this draft document for latest information.

Timber framing must be treated (H1.2) to provide resistance to fungal attack. For further timber treatment information refer to the draft code NZS 3602:2003 (*Timber and Wood-Based Products for Use in Buildings*) and NZS 3640:2003 (*Chemical Preservation of Round and Sawn Timber*) for minimum timber treatment requirements.

For further timber selection guidance refer to framing manufacturers literature.

3.4 Frame Construction

Use of timber framing must be in accordance with framing manufacturers' specifications.

All timber framing sizes and set-out must comply with NZS 3604:1999, and with stud and nog centres and timber widths required by this specification:

- Studs must be provided at a 600mm centres maximum.
- Nogs must be provided at 1200mm centres maximum.
- Refer to NZS 3602:1995 for moisture content requirements. Framing must be kept as dry as possible at all times.

3.5 Special Framing Requirements

The following are special framing requirements:

- For cavity construction method when studs are at 600mm centers the nogs must be provided at 800mm centers max. and when the studs are at 400mm centers the nogs may be at 1200mm centers max.
- Double studs at internal corners ;
- Extra packers may be required at external corners;
- Extra studs for aluminium internal corner sections.
- Double studs are required for scarfed or butted joints with soakers.



3.6 Tolerances

In order to achieve an acceptable wall finish, it is imperative that framing is straight and true. Framing tolerances must comply with the requirements of NZS 3604:1999.

4.0 Preparation

4.1 Building Wrap

Building wrap must be provided in accordance with Acceptable Solution E2/AS1 of the Approved Document for NZBC clause E2 "External Moisture" and NZS 3604:1999, or be a BRANZ Appraised breather-type membrane. Note that in VH wind zones, the standard requires the installation of a wind barrier. The building wrap must be fixed in accordance with the manufacturer's recommendations and the requirements of NZS 3604:1999.

Walls which are not lined on the inside face e.g. garage walls or gable ends must include a rigid sheathing behind the cladding when constructed in wind zones H or VH as defined by NZS 3604:1999.

4.2 Cavity Battens

Some applications require the use of a battened cavity behind the Linea Weatherboards. It is recommended that the specifier refers to publications related with exposure to 'risk' by both BRANZ and the BIA for the details of these applications. In all circumstances check with your Local Territorial Authority.

Where cavity battens are required fix nominal 20mm thick x 45mm wide (minimum) H3.1 treated vertical battens as mentioned below:

Battens at 300mm centres where studs are at 600mm centres. OR

Battens at studs only where studs are at 400mm centres.

Battens must be fixed with 40mm x 2.8mm galvanised nails at top & bottom plates and at nogs.

4.3 Corners

The requirements of Acceptable Solution E2/AS1 (for Timber Weatherboards) must be followed.

Do not run trim or aluminium extrusions continuously across solid floor joists. Anticipated joist shrinkage must be allowed for in the design.

There are a number of options to select from when detailing **external corners**:

- 90° and 135° corner soaker in aluminium, copper or stainless steel. Refer to Detail 04 and detail 15.
- Box corners using James Hardie Trim. Refer to drawings Detail 02, Detail 11 and detail 13.
- Mitered corners to weatherboards. Refer to Detail 03 and Detail 14.
- Aluminium boxed corners. Refer to Detail 03 and Detail 14

There are a number of options to select from when detailing **internal corners**:

- Scribed corner. Refer to Detail 04 and Detail 15.
- 90° or 135° Aluminium W-mould. Refer to Detail 05 and Detail 16.

4.4 Junctions & Penetrations

Refer to Clause 2.4 of this specification for moisture management requirements.

All windows and doors must be detailed as per the requirements of Acceptable Solution E2/AS1. Refer also to NZS 3604:1999 and your joinery provider.

The Window Association of New Zealand (WANZ) has specifications and details available for the treatment of window penetrations. Refer to www.wanz.co.nz.

James Hardie has details for window flashings for Weatherboards which include those requirements of Acceptable Solution E2/AS1. Refer to Details 7 to 10 and Details 18 to 21.

5.0 Fixing Linea Weatherboard & James Hardie Trim

5.1 General

Linea Weatherboards must be kept dry and under cover whilst in storage prior to and during fixing.

Cut ends which are exposed or where sealant is applied to the boards must be primed prior to installation. Dust and loose material must be removed before priming.

An H3 treated timber cant strip must be provided to support the bottom board on the wall. Refer to Detail 06.



5.2 Fixing Durability

NZS 3604:1999 specifies requirements for fixing material relating to the exposure conditions as summarised in Table 2.

Nail Material			
Sea Zones *	Spray	Zone 1 outside sea spray zone and Zones 2 – 4 & Geothermal hot spots	Bracing – All zones
Grade Stainless	316	Hot-dipped galvanised or 316 stainless	Grade 316 Stainless

Table 2: Exposure Conditions & Nail Selection prescribed by NZS 3604:1999

*(Zone 1 areas where local knowledge dictates that increased durability is required, appropriate selection shall be made.)

5.3 Nail Sizes and Fixing Method

Linea Weatherboards and James Hardie Trim must be fixed to timber with the types of nails specified in Tables 3 and 4, in accordance with the following:

- All concealed nails must be driven flush with the board surface.
- Linea Weatherboards must be fixed using concealed fixings behind the lap of the boards, except at all corners and vertical edges of openings face nailing must be provided.
- Gun-nailing must not be used to fix Linea Weatherboards in bracing applications.
- Nails must be 25mm from the end of the board when hand nailing
- Nails must be 50 mm from the end of the board when using gun nailing – double studs will be required.

Direct to stud Fixing

Concealed Nailing

40 x 2.8φ mm Hardiflex nails	Finish flush with the board surface.
------------------------------	--------------------------------------

Face Nailing

60 x 3.15φ mm jolt head nails	Hot-dipped galvanised may be driven through both thicknesses at board lap without pre-drilling.
	Stainless steel jolt heads will require pre-drilling*

Cavity Fixing

Concealed Nailing

60 x 3.15φ mm Hardiflex nails	Finish flush with the board surface. *
-------------------------------	--

Face Nailing

75 x 3.15φ mm jolt head nails	Hot-dipped galvanised may be driven through both thicknesses at board lap without pre-drilling.
	Stainless steel jolt heads will require pre-drilling*

Table 3: Nail Requirements for Linea Weatherboards

*Use a 3.0mm drill bit.

Single Thickness

60mm jolt head nails.
If fixing over Linea Weatherboard use predrilled* 75 x 3.15mm jolt head nails.

Double Thickness

60mm jolt head nails.

Single plus packer

If fixing over Linea Weatherboard use 75 x 3.15mm jolt head nails through a pre-drilled* hole. When fixing to timber support use 60mm jolt head nails.

Table 4: Nail Requirements for Trim

*Use a 3.0mm drill bit.

For fixing requirements for bracing and fire resistance rated walls refer to the *Linea Bracing Systems Technical Information and Fire Systems Brochure*.



6.0 Jointing

The ends of Linea Weatherboards are jointed off-stud by means of the tongue-and-groove. T&G joints may be located centrally between studs but no closer than 100mm from the edge of a stud. Sealant must be provided in the T&G joint.

Alternatively the joints can be constructed in accordance with Acceptable Solution E2/AS1 (for timber weatherboards), but must be fitted with corrosion resistant soakers and be made over double studs, with either scarfed or tight-butted and sealant filled before pushing boards together.

7.0 Finishing

Note: Protective coating of Linea Weatherboards and James Hardie Trim is required in order to meet the durability requirements of the New Zealand Building Code.

7.1 Preparation & Priming

The Linea Weatherboards and Trim must be dry before painting.

Punch and fill all exposed nails a maximum of 2mm below the surface. Fill the hole with an Exterior Grade Builders Fill, allow to cure and sand smooth ready for priming. Prime in accordance with paint manufacturer's specifications.

7.2 Sealants

All sealants must demonstrate to meet the relevant requirements of the NZBC and hold a current and valid BRANZ Appraisal Certificate. Application and use of sealants must comply with manufacturers instructions. Sealants, if coated, must be compatible with the paint system.

7.3 Painting

All Linea Weatherboards are pre-primed on their face and bottom edge with a factory-applied acrylic base coat.

Linea Weatherboards must be painted within 3 months of being fixed.

James Hardie recommends the application of two coats minimum of a quality acrylic paint over the pre-primed boards in accordance with the paint manufacturer's specifications.

Dark coloured paints and stains can be used on Linea Weatherboards and James Hardie Trim.

Some environments require special coatings. Painting selection and specifications are dependant on the paint chosen. Refer to the paint manufacturer.

8.0 Maintenance

It is the responsibility of the specifier to determine normal maintenance requirements as per the requirements of Acceptable Solution B2/AS1.

The extent and nature of maintenance will depend on the geographical location and exposure of the building.

As a guide, it is recommended that basic normal maintenance tasks shall include but not be limited to:

- Washing down exterior surfaces every 6-12 months*,
- Re-applying exterior protective finishes*,
- Maintaining the exterior envelope and connections including joints, penetrations, flashings and sealants that may provide a means of moisture entry beyond the exterior cladding to comply with the requirements of NZBC clause E2.
- Cleaning out gutters, blocked pipes and overflows as required,
- Pruning back vegetation which is close to or touching the building.

*Refer to your paint manufacturer for washing down and recoating requirements related to paint performance.



9.0 Product Information

9.1 Manufacturing & Classification

James Hardie New Zealand is an ISO 9001(2000) Telarc certified manufacturer. Linea Weatherboard and Trim is manufactured to meet the requirements of AS/NZS 2908.2: 2000 'Cellulose-Cement Products',

Linea Weatherboard is a reduced density cellulose cement formulation incorporating James Hardie patented CLD™ (Ceramic Low Density) technology.

Linea Weatherboards are bevel backed and have a tongue-and-groove (T&G) joint at the ends.

Linea Weatherboards are supplied pre-primed on their face and bottom edge with an acrylic primer.

Linea Weatherboards are identified by the printing at regular intervals of the name LINEA on the back face.

9.2 James Hardie Trim

The Trim, used for box corners, around windows and doors as well as special architectural features, is also made with the CLD™ technology and is supplied pre-primed with an acrylic primer.

9.3 Linea Weatherboards & James Hardie Trim Sizes

Available sizes of Linea Weatherboards and Trim are given in Table 5.

9.4 Physical Properties

Physical properties of Linea Weatherboards and Trim are provided in Table 5.

Linea Weatherboard is thus classified as a Light Wall Cladding by NZS 3604:1999.

TABLE 5: LINEA WEATHERBOARD & TRIM SIZES

Product	Length (mm)	Width (mm)	Thickness (mm)	End Details	Coverage Information				Pallet Weight (60 kg / pack)
					Effective Cover (mm)	No. of planks / metre height (approx)	Mass kg / lin m (approx at EMC)	Mass kg / m ² (approx at EMC)	
135 Classic Linea Weatherboard	4200*	135	16	T & G	105	9.5	2.5	23.8	740
180 Classic Linea Weatherboard	4200*	180	16	T & G	150	6.7	3.4	22.7	980
84mm Linea Trim	2600	84	16	Square	N/A	N/A	1.6	N/A	N/A
100mm Linea Trim	2600	100	16	Square	N/A	N/A	1.9	N/A	N/A
135mm Linea Trim	4200	135	16	Square	N/A	N/A	2.6	N/A	N/A
180mm Linea Trim	4200	180	16	Square	N/A	N/A	3.4	N/A	N/A

Table 5: Linea Weatherboard Sizes

*Length is 4200mm plus 5mm for the tongue and groove (T & G) making the length 4205mm overall.

*The horizontal effective thickness on the finished wall of the lapped cladding is approximately 33 to 35mm.

10.0 Safe Working Practice

If you are unfamiliar with working safely with fibre-cement products and their accessories, please refer to the Safe Working Instructions literature that accompanies every pack of fibre-cement from James Hardie.



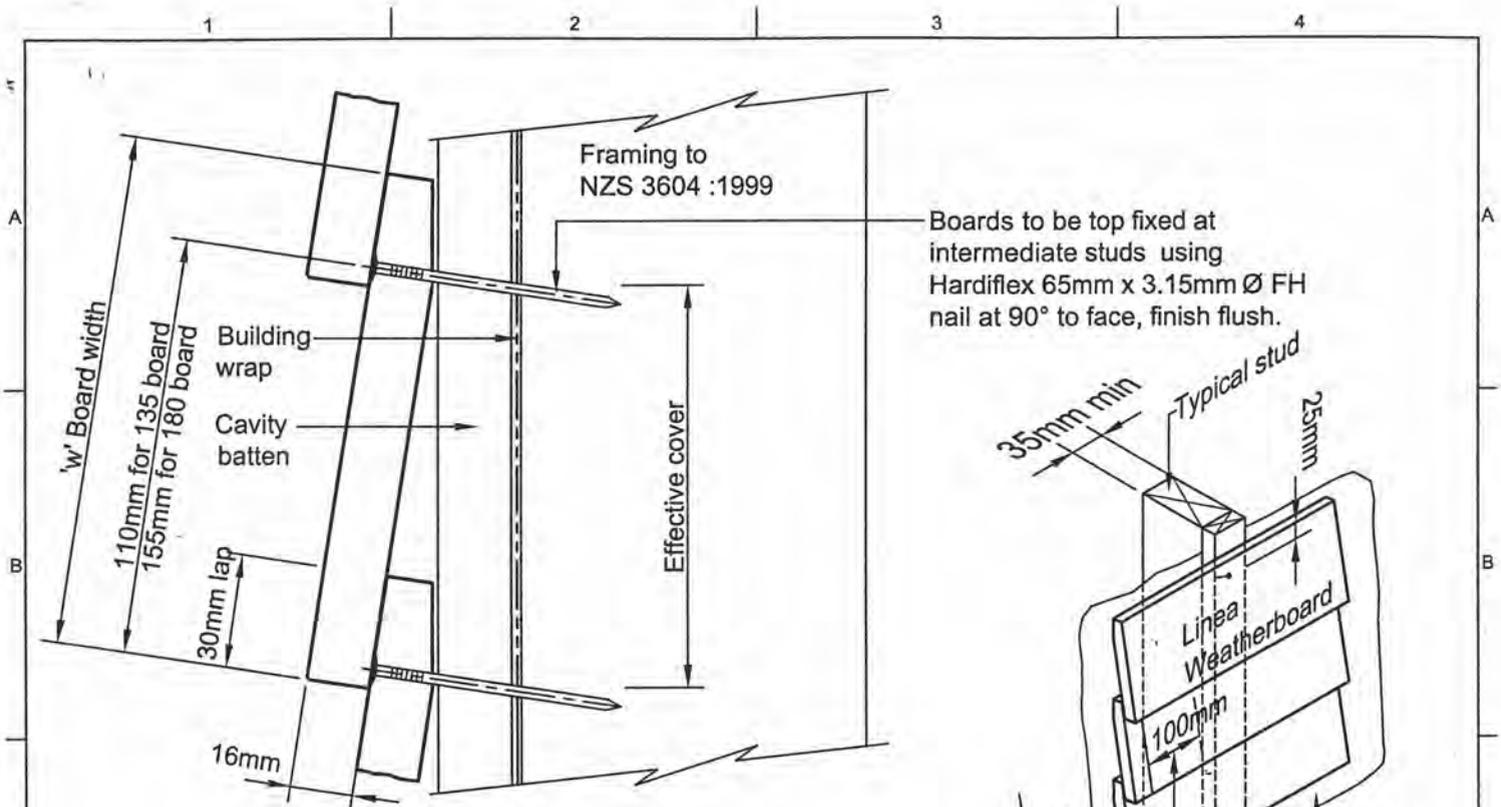
11. Warranty

James Hardie NZ Limited ("James Hardie") warrants for a period of 25 years from the date of purchase that the Linea Weatherboard and CLD Trim (the "Board"), will be free from defects due to defective factory workmanship or materials and the Board when properly installed and maintained in accordance with James Hardie's current published literature will not crack, rot or burn. The recommendations in this brochure are formulated along the lines of good building practice but are not intended to be an exhaustive statement of all relevant data. Further, as the successful installation of these systems depends on numerous factors outside the control of James Hardie (e.g. quality of workmanship, particular design requirements, etc) James Hardie accepts no responsibility for or in connection with the quality of the recommendations or their suitability for any purpose when installed.

Conditions of Warranty:

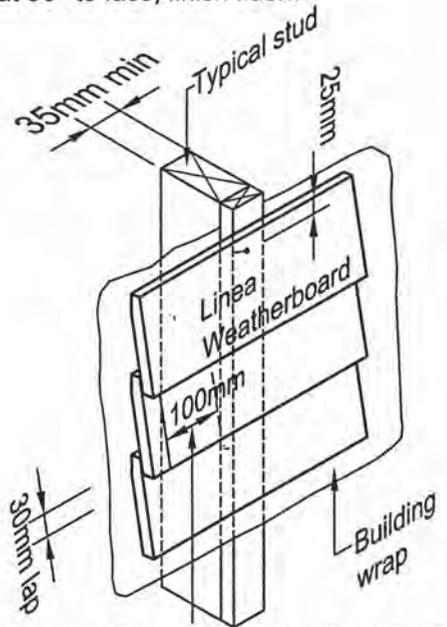
The warranty is strictly subject to the following conditions:

- (a) The claimant must provide proof of purchase and make a claim within 30 days after the defect would have become reasonably apparent;
- (b) The Board must be installed strictly in accordance with James Hardie's published literature current at the time of installation;
- (c) This warranty is not transferable;
- (d) If James Hardie is reasonably satisfied a claim may be made under the warranties it will either (at its option) supply replacement products, rectify or pay for the cost of the replacement products or rectification of the affected product. This will be the sole exclusive remedy of the claimant.
- (e) Under no circumstances will James Hardie be liable for claims, damages or defects arising from or in any way attributable to poor workmanship, settlement or structural movement and/or movement to materials to which the Board is attached, incorrect design of the structure, acts of God including but not limited to earthquakes, cyclones floods or other severe weather conditions or unusual climatic conditions, efflorescence or performance of paint/coatings applied to the Board, growth of mould, mildew, fungi, bacteria, or any organism on any Board surface or Board (whether on the exposed or unexposed surfaces), or any other losses or damages (whether direct or indirect) including property damage or personal injury, consequential loss, economic loss or loss of profits arising in contract or negligence or howsoever arising. All warranties, conditions, liabilities and obligations other than those specified are excluded. Nothing in this warranty is to be construed as excluding or modifying any rights of the customer, which cannot be excluded or modified at law;
- (f) If meeting a claim under this warranty involves re-coating of Boards, there may be slight colour differences between the original and replacement Boards due to
The effects of weathering and variations in materials over time.
- (g) Maintenance must be undertaken in accordance with the New Zealand Building Code and James Hardie's published literature current at the time of installation.

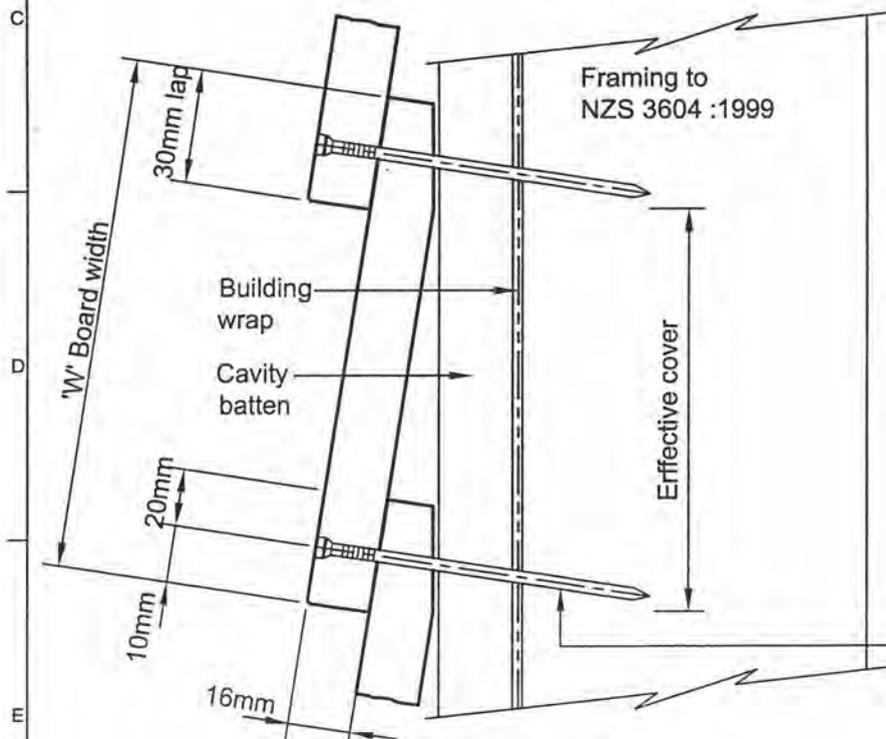


Concealed Nailing

Boards to be top fixed at intermediate studs using Hardiflex 65mm x 3.15mm Ø FH nail at 90° to face, finish flush.



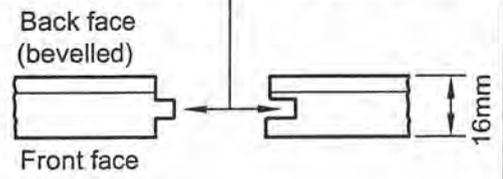
Tongue & groove joint in weatherboard to be 100mm minimum from side of stud.



Exposed Nailing

Fixing at Stud

Before pushing end joint together apply a skim coat of adhesive sealant to mating surfaces.



Boards to be face fixed at corners & down window & door openings using 75mm x 3.15mm Ø jolt head nails at 90° to face, punch 2mm below surface & fill.

Material

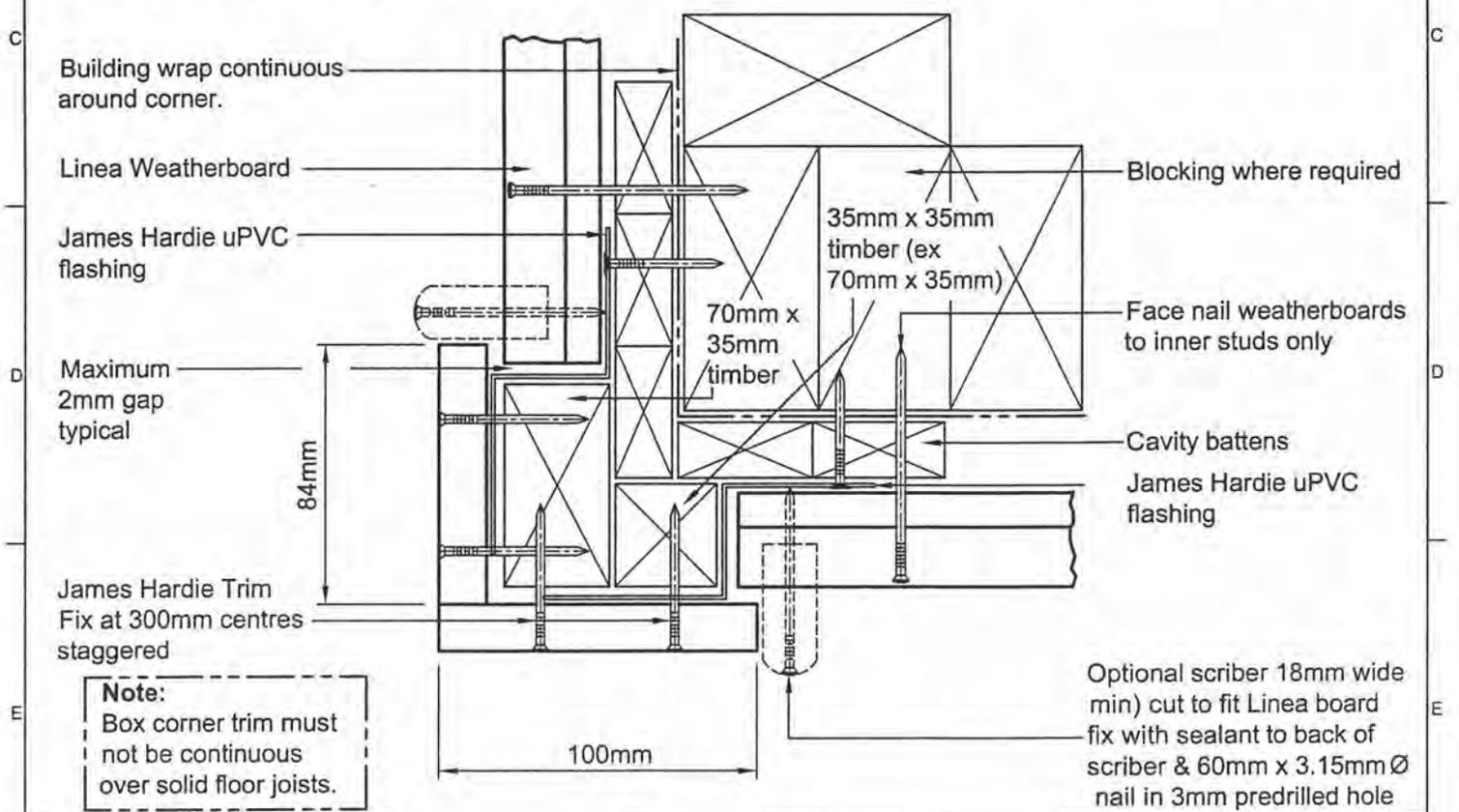
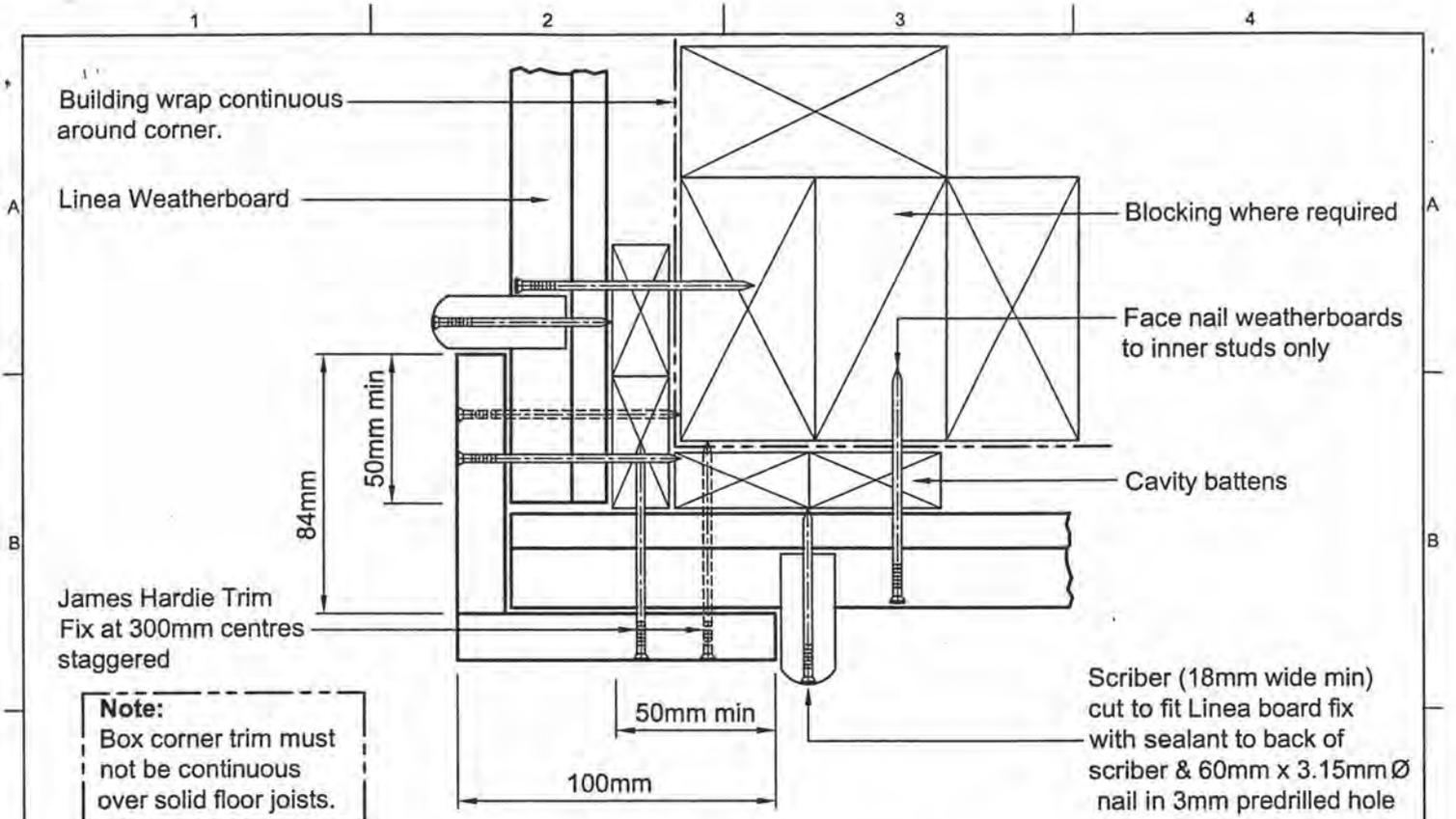
Drawn to AS 1100
Dimensions in Millimetres
Do Not Scale

James Hardie Building Products

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**TECHNICAL PRODUCT DEVELOPMENT
NEW ZEALAND BUILDING PRODUCTS
RESIDENTIAL
LINEA WEATHERBOARD
GENERAL SPECIFICATION
CAVITY WEATHERBOARD FIXING**

Drawn SK	Date 26.11.2003
Checked	Date
Approved	Date
Sheet Size A4	Scale NTS
Reference No N_ZR-L_W-GSP	Detail 12
Sht of Shts	Revision A



Material

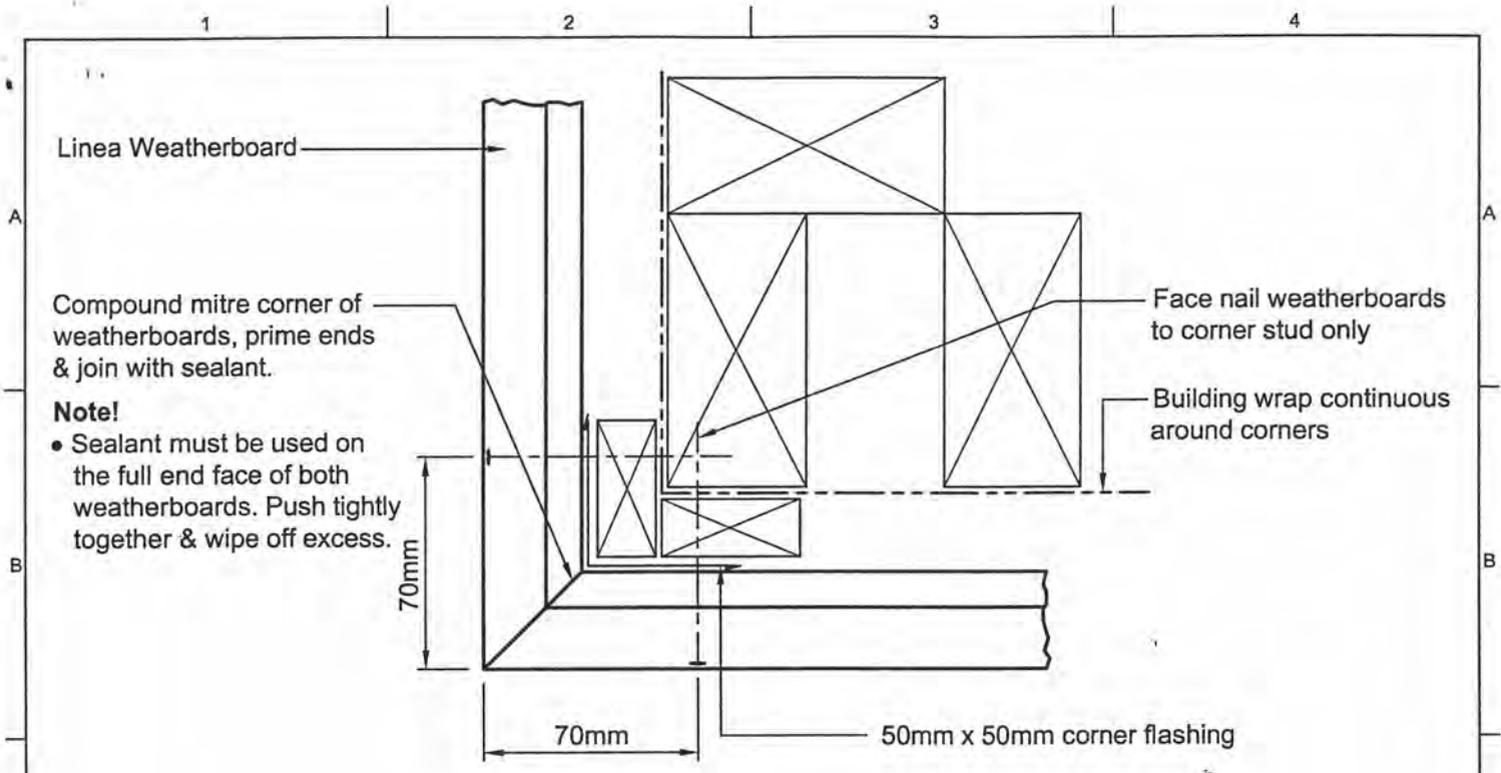
Drawn to AS 1100
Dimensions in Millimetres
Do Not Scale

James Hardie Building Products

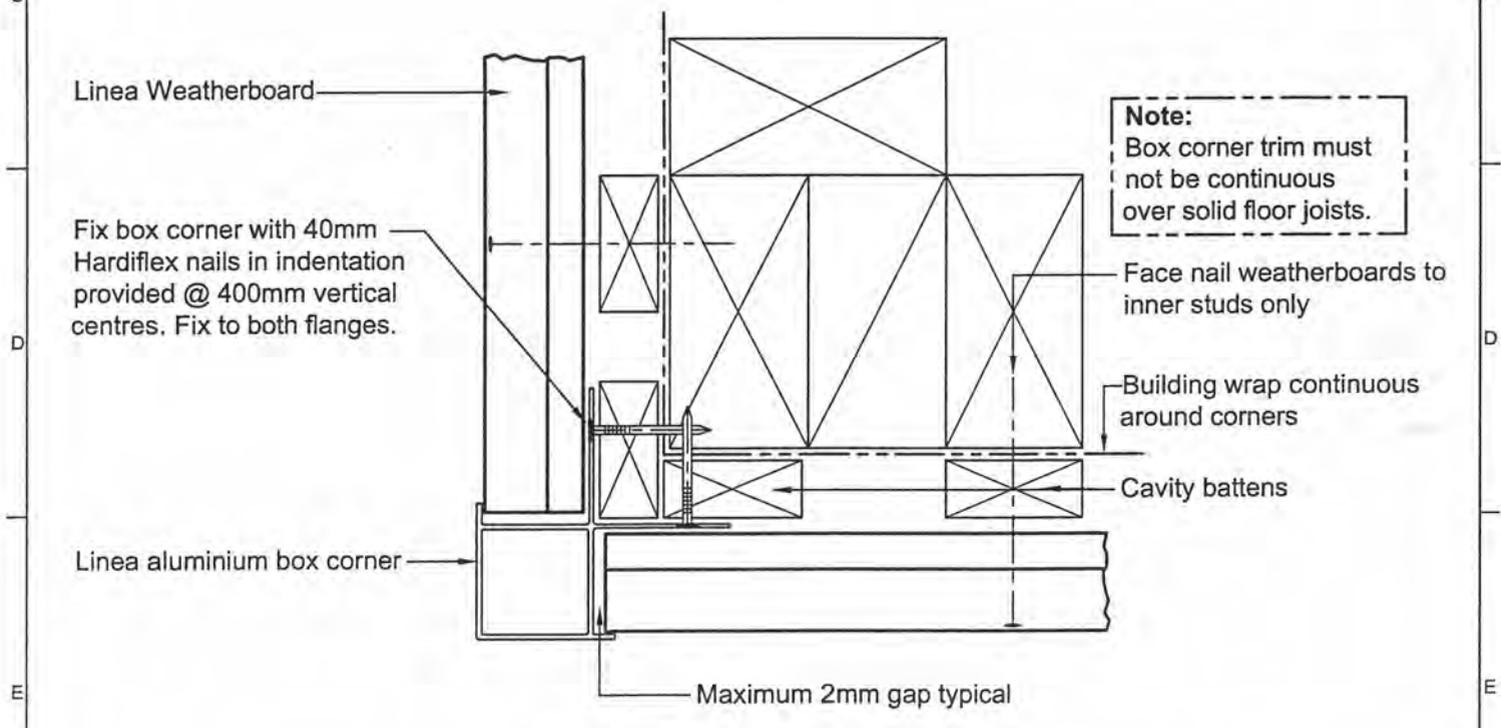
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**TECHNICAL PRODUCT DEVELOPMENT
NEW ZEALAND BUILDING PRODUCTS
RESIDENTIAL
LINEA WEATHERBOARD
GENERAL SPECIFICATION
CAVITY BOXED CORNERS**

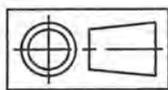
Drawn	SK	Date	26.11.2003
Checked		Date	
Approved		Date	
Sheet Size	A4	Scale	NTS
Reference No	N_ZR-L_W-GSP	Detail	13
Sht of Shts		Revision	A

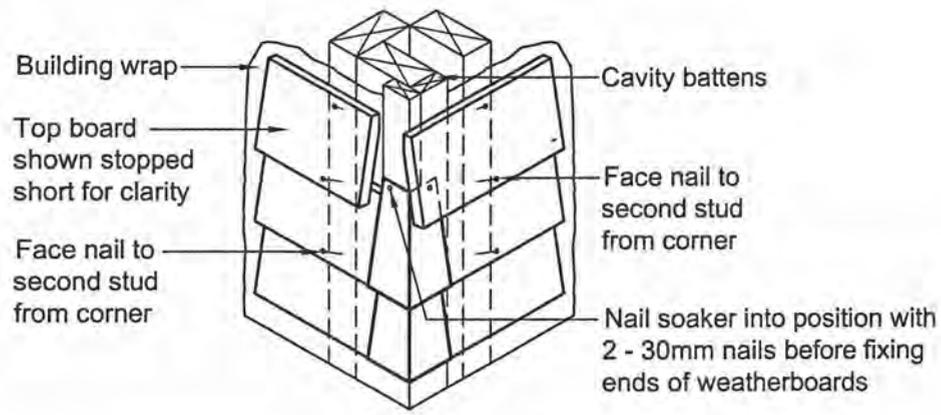


Mitre Corner



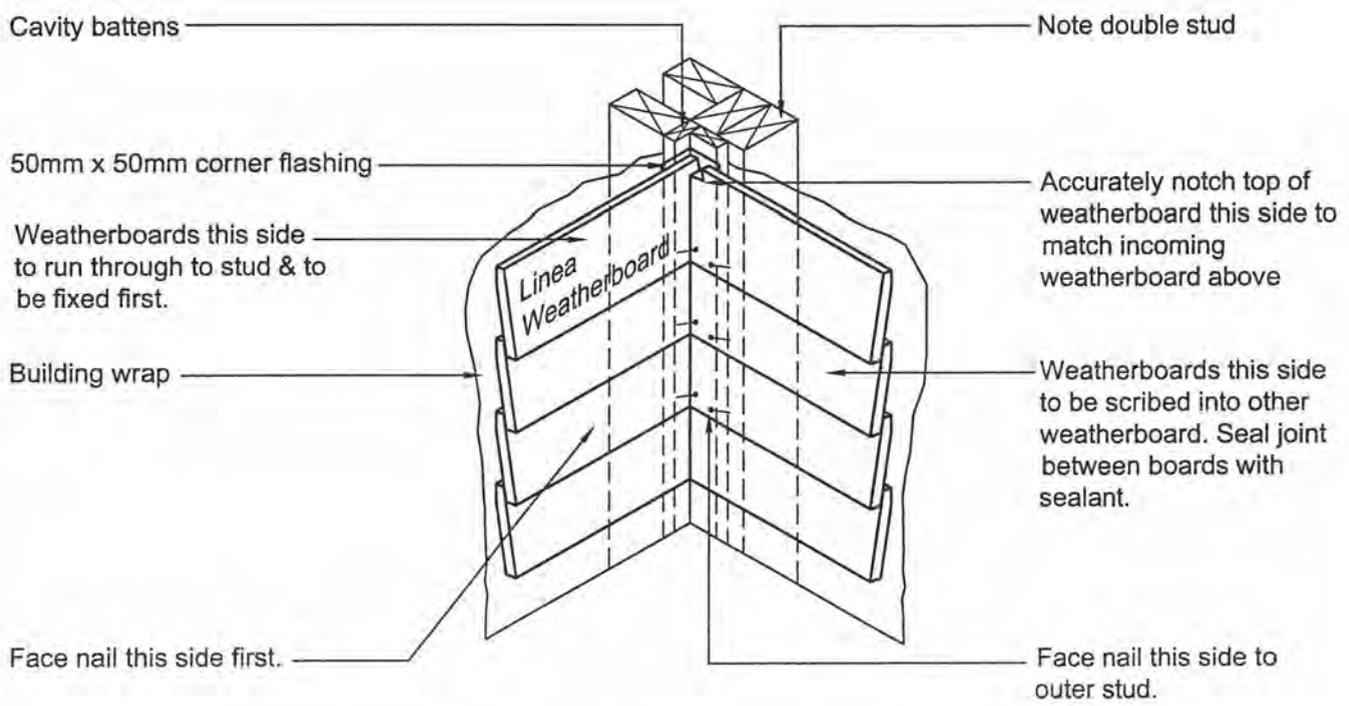
Aluminium Box Corner

Material	 James Hardie Building Products <small>Copyright in this information belongs to James Hardie and the reproduction of this material is only authorised for purposes connected with the specification or use of James Hardie's products. This information is intended to be informative and used as a guideline in conjunction with the relevant James Hardie literature. Due to the many variables affecting different projects it can not replace the judgement or advice of an architect, engineer or other relevant technical expert and such experts must be consulted to determine the suitability or otherwise of the details or the necessity for further design/detailing.</small>	Drawn SK	Date 26.11.2003
		Checked	Date
 Drawn to AS 1100 Dimensions in Millimetres Do Not Scale	TECHNICAL PRODUCT DEVELOPMENT NEW ZEALAND BUILDING PRODUCTS RESIDENTIAL LINEA WEATHERBOARD GENERAL SPECIFICATION CAVITY MITRE & ALUMINIUM BOXED CORNERS	Approved	Date
		Sheet Size A4	Scale NTS
		Reference No N_ZR-L_W-GSP	Detail 14
		Sht of Shts	Revision A



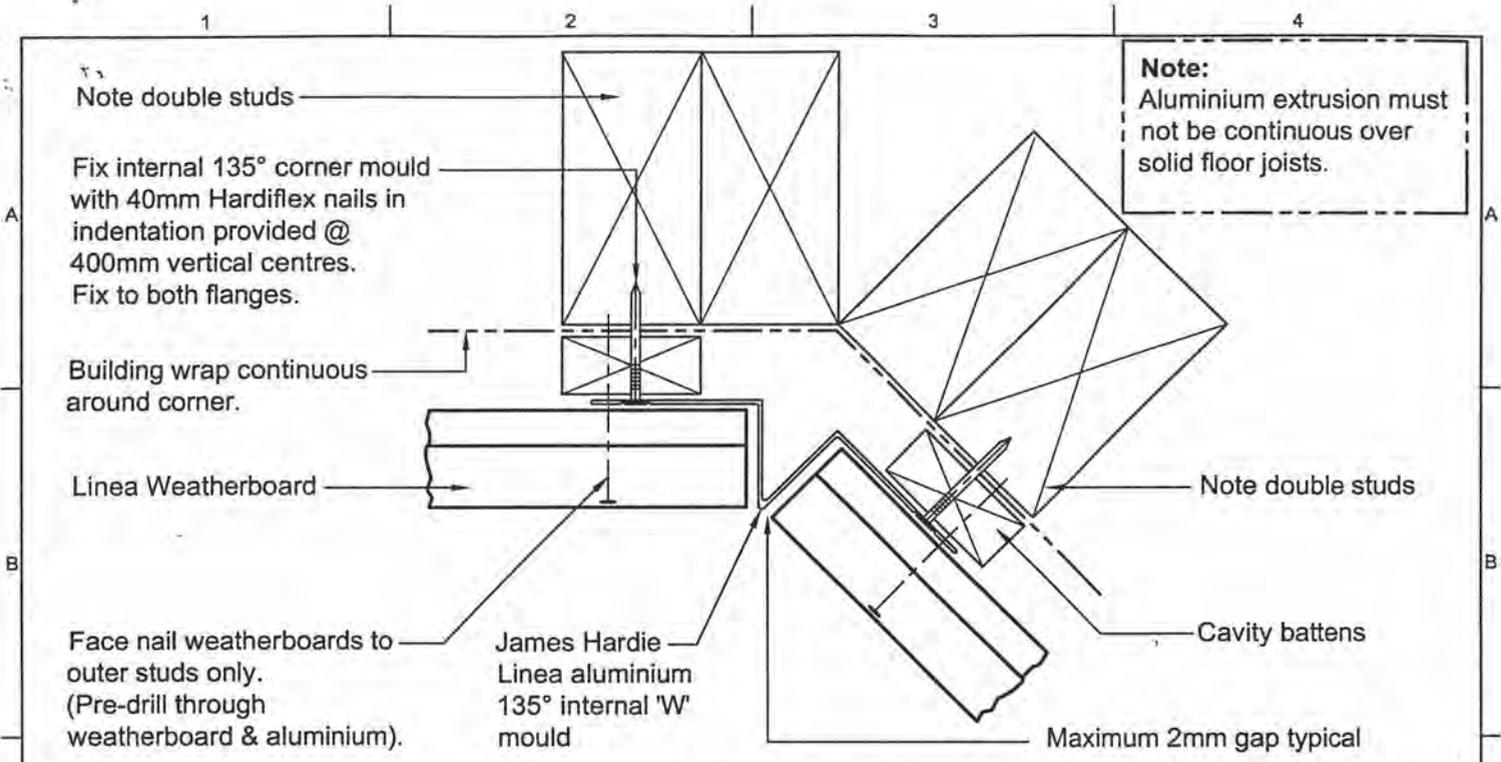
Soaker material	Nail material
Copper	Copper or phosphor bronze
Aluminium	Hot dip galvanised
Stainless steel	Stainless steel

Corner Soaker

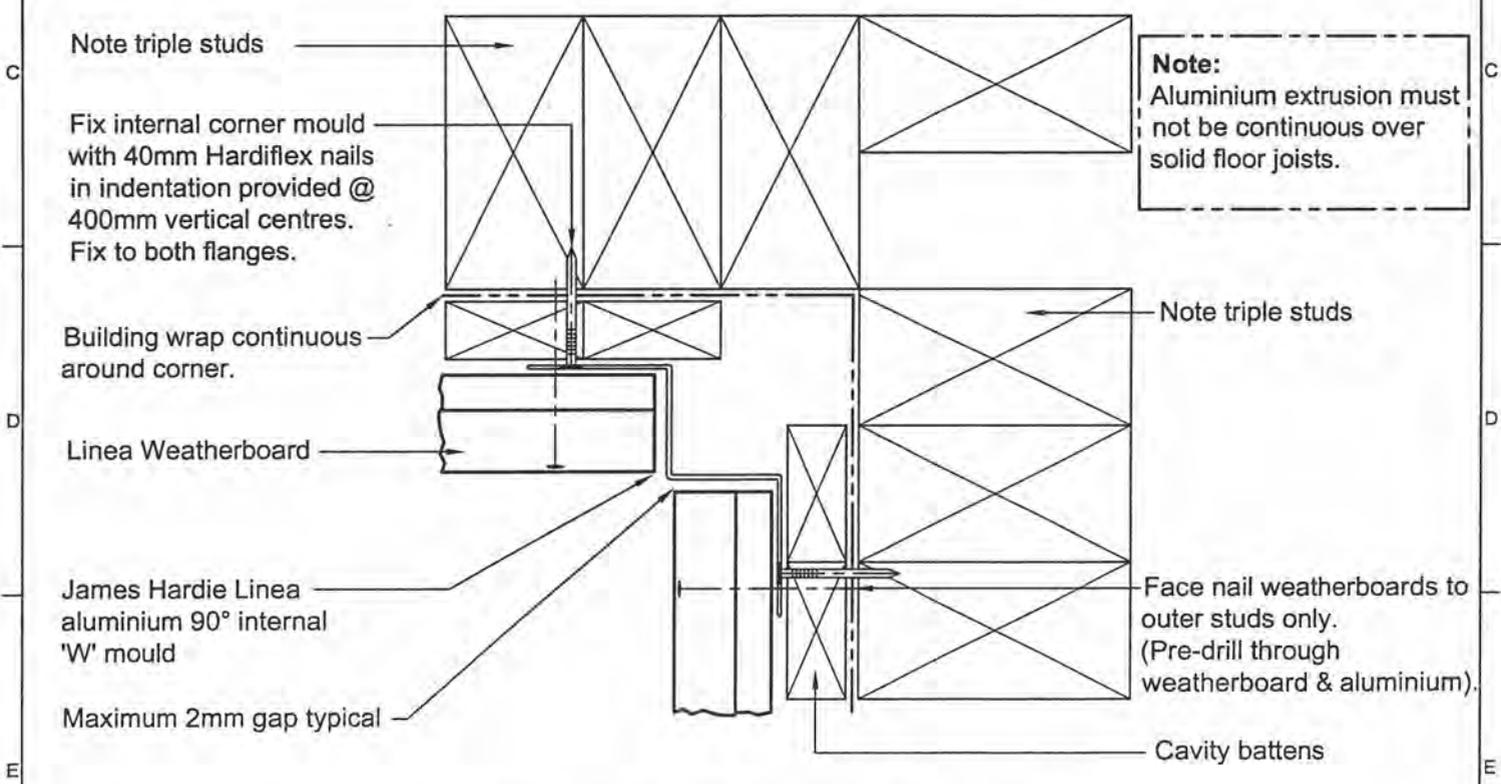


Internal Scribed Corner

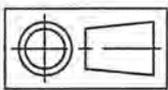
<p>Material</p>	<p>James Hardie Building Products</p> <p><small>Copyright in this information belongs to James Hardie and the reproduction of this material is only authorised for purposes connected with the specification or use of James Hardie's products. This information is intended to be informative and used as a guideline in conjunction with the relevant James Hardie literature. Due to the many variables affecting different projects it can not replace the judgement or advice of an architect, engineer or other relevant technical expert and such experts must be consulted to determine the suitability or otherwise of the details or the necessity for further design/detailing.</small></p>	<p>Drawn SK</p>	<p>Date 26.11.2003</p>	
<p>Drawn to AS 1100 Dimensions in Millimetres Do Not Scale</p>	<p>TECHNICAL PRODUCT DEVELOPMENT NEW ZEALAND BUILDING PRODUCTS</p>	<p>Checked</p>	<p>Date</p>	
	<p>RESIDENTIAL</p>	<p>Approved</p>	<p>Date</p>	
	<p>LINEA WEATHERBOARD</p>	<p>Sheet Size A4</p>	<p>Scale NTS</p>	
	<p>GENERAL SPECIFICATION</p>	<p>Reference No N_ZR-L_W-GSP</p>		<p>Detail 15</p>
	<p>CAVITY EXTERNAL & INTERNAL CORNERS</p>	<p>Sht of Shts</p>	<p>Revision A</p>	

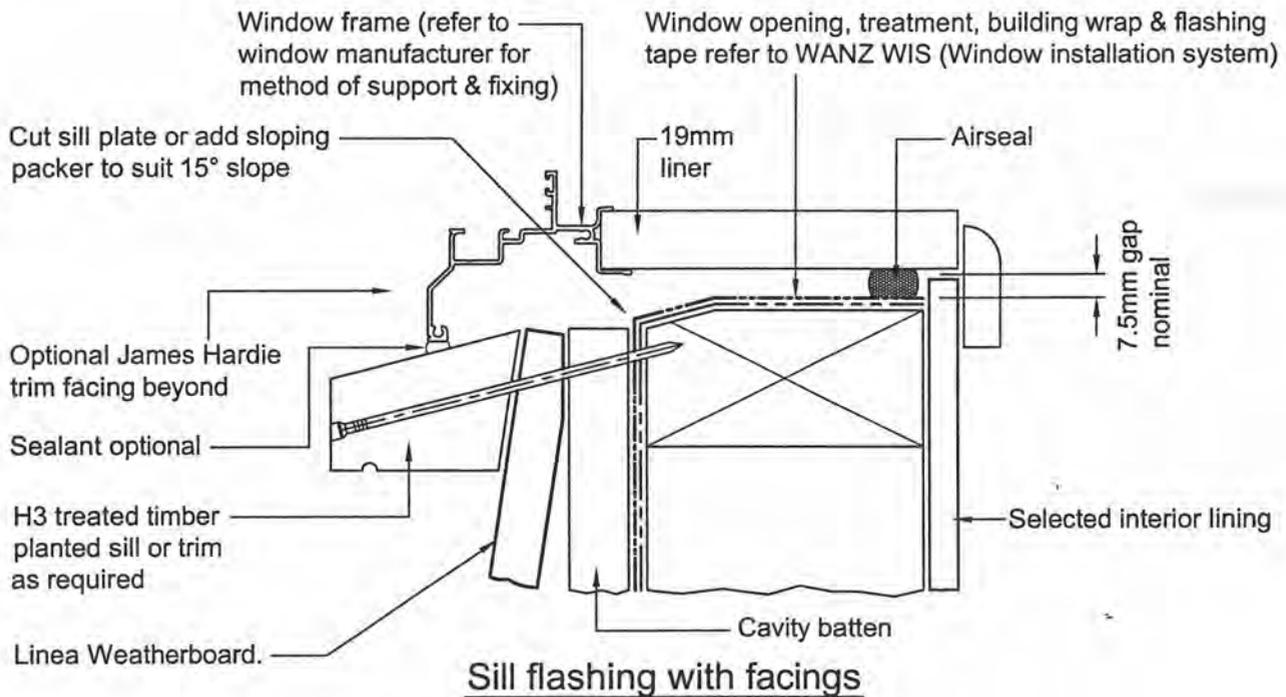


Internal 135° Aluminium 'W' mould



Internal 90° Aluminium 'W' mould

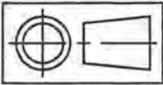
Material	 James Hardie Building Products	Drawn SK	Date 26.11.2003
		Checked	Date
	Approved	Date	Sheet Size A4
 <p>Drawn to AS 1100 Dimensions in Millimetres Do Not Scale</p>	<p>Copyright in this information belongs to James Hardie and the reproduction of this material is only authorised for purposes connected with the specification or use of James Hardie's products. This information is intended to be informative and used as a guideline in conjunction with the relevant James Hardie literature. Due to the many variables affecting different projects it can not replace the judgement or advice of an architect, engineer or other relevant technical expert and such experts must be consulted to determine the suitability or otherwise of the details or the necessity for further design/detailing.</p> <p>TECHNICAL PRODUCT DEVELOPMENT NEW ZEALAND BUILDING PRODUCTS RESIDENTIAL LINEA WEATHERBOARD GENERAL SPECIFICATION CAVITY INTERNAL CORNERS</p>	Scale NTS	Detail 16
		Reference No N_ZR-L_W-GSP	Revision A
		Sht of Shts	

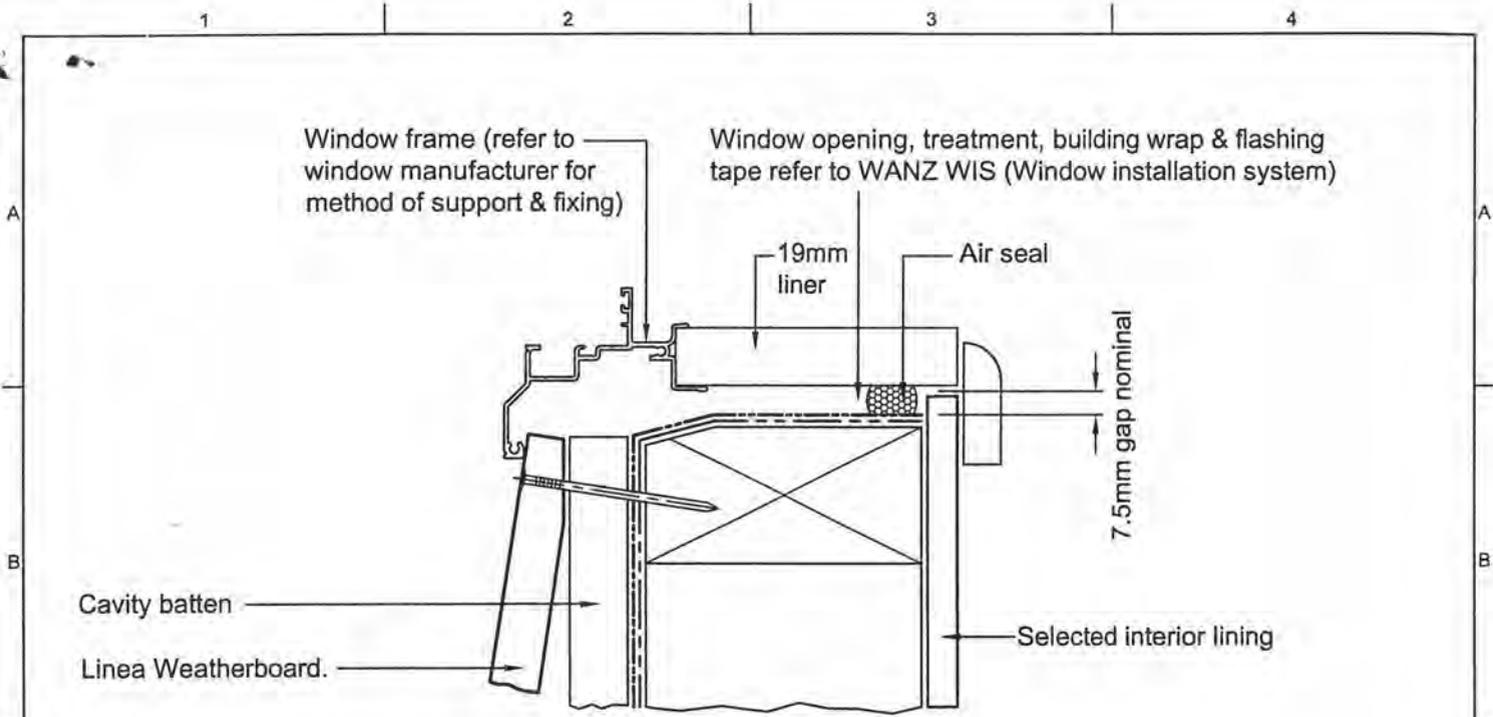


General notes for materials selection

1. Flashing materials must be selected based on environmental exposure, refer to NZS 3604: 1999.
2. Building wrap must comply with acceptable solution E2/AS1 & NZS 3604:1999.
3. Use only 'BRANZ Appraised' flashing tapes demonstrated to meet relevant NZBC requirements.
4. Use only 'BRANZ Appraised' products suitable for use as an airseal.

Refer to the manufacturer or supplier for technical information for these materials .

Material	 James Hardie Building Products	Drawn SK	Date 26.11.2003
		Checked	Date
 <p>Drawn to AS 1100 Dimensions in Millimetres Do Not Scale</p>	<p>Copyright in this information belongs to James Hardie and the reproduction of this material is only authorised for purposes connected with the specification or use of James Hardie's products. This information is intended to be informative and used as a guideline in conjunction with the relevant James Hardie literature. Due to the many variables affecting different projects it can not replace the judgement or advice of an architect, engineer or other relevant technical expert and such experts must be consulted to determine the suitability or otherwise of the details or the necessity for further design/detailing.</p> <p>TECHNICAL PRODUCT DEVELOPMENT NEW ZEALAND BUILDING PRODUCTS RESIDENTIAL LINEA WEATHERBOARD GENERAL SPECIFICATION CAVITY WINDOW DETAIL</p>	Approved	Date
		Sheet Size A4	Scale NTS
		Reference No N_ZR-L_W-GSP	Detail 18
		Sht of Shts	Revision A



Sill flashing without facings

General notes for materials selection

1. Flashing materials must be selected based on environmental exposure, refer to NZS 3604: 1999.
2. Building wrap must comply with acceptable solution E2/AS1 & NZS 3604:1999.
3. Use only 'BRANZ Appraised' flashing tapes demonstrated to meet relevant NZBC requirements.
4. Use only 'BRANZ Appraised' products suitable for use as an airseal.

Refer to the manufacturer or supplier for technical information for these materials .

Material	 James Hardie Building Products <small>Copyright in this information belongs to James Hardie and the reproduction of this material is only authorised for purposes connected with the specification or use of James Hardie's products. This information is intended to be informative and used as a guideline in conjunction with the relevant James Hardie literature. Due to the many variables affecting different projects it can not replace the judgement or advice of an architect, engineer or other relevant technical expert and such experts must be consulted to determine the suitability or otherwise of the details or the necessity for further design/detailing.</small>	Drawn SK	Date 26.11.2003
		Checked	Date
	Approved	Date	
 Drawn to AS 1100 Dimensions in Millimetres Do Not Scale	TECHNICAL PRODUCT DEVELOPMENT NEW ZEALAND BUILDING PRODUCTS RESIDENTIAL LINEA WEATHERBOARD GENERAL SPECIFICATION CAVITY WINDOW DETAIL WITHOUT FACINGS	Sheet Size A4	Scale NTS
		Reference No N_ZR-L_W-GSP	Detail 20
		Sht of Shts	Revision A

25 November 2004

Kapiti Coast District Council
Private Bag 601
Paraparaumu

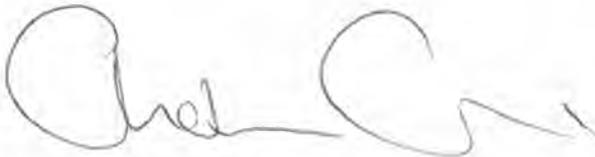
Attention Mr Andrew Wood

Dear Sir,

Re: Building Consent 040111 for 93 Fieldway, Waikanae.

Please find attached a copy of the revised bracing schedule for the above mentioned project.

Yours sincerely



Andrew Cromie

Phone 04 570 3312 or 021 420 033

Fax 04 570 3317

PO Box 30 238

Lower Hutt.

SCANNED

KAPITI COAST DISTRICT COUNCIL
AMENDED / REVISED PLANS

Date Received 29-11-04

Date Approved

Approving Officer

22 March 2005

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Fax 04 904 5830 (3 pages)

Attention Mr Andrew Wood

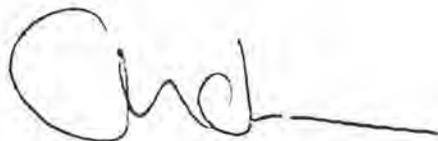
Dear Sir,

Re: Building Consent 040111 for 93 Fieldway, Waikanae.

Please find attached details of the Fisher Denniston fire place that we are intending to install in the above mentioned project.

Please confirm that this now completes the information you require for the fire place.

Yours sincerely



Andrew Cromie

Phone 04 570 3312 or 021 420 033
Fax 04 570 3317

PO Box 30 238
Lower Hutt.

Original



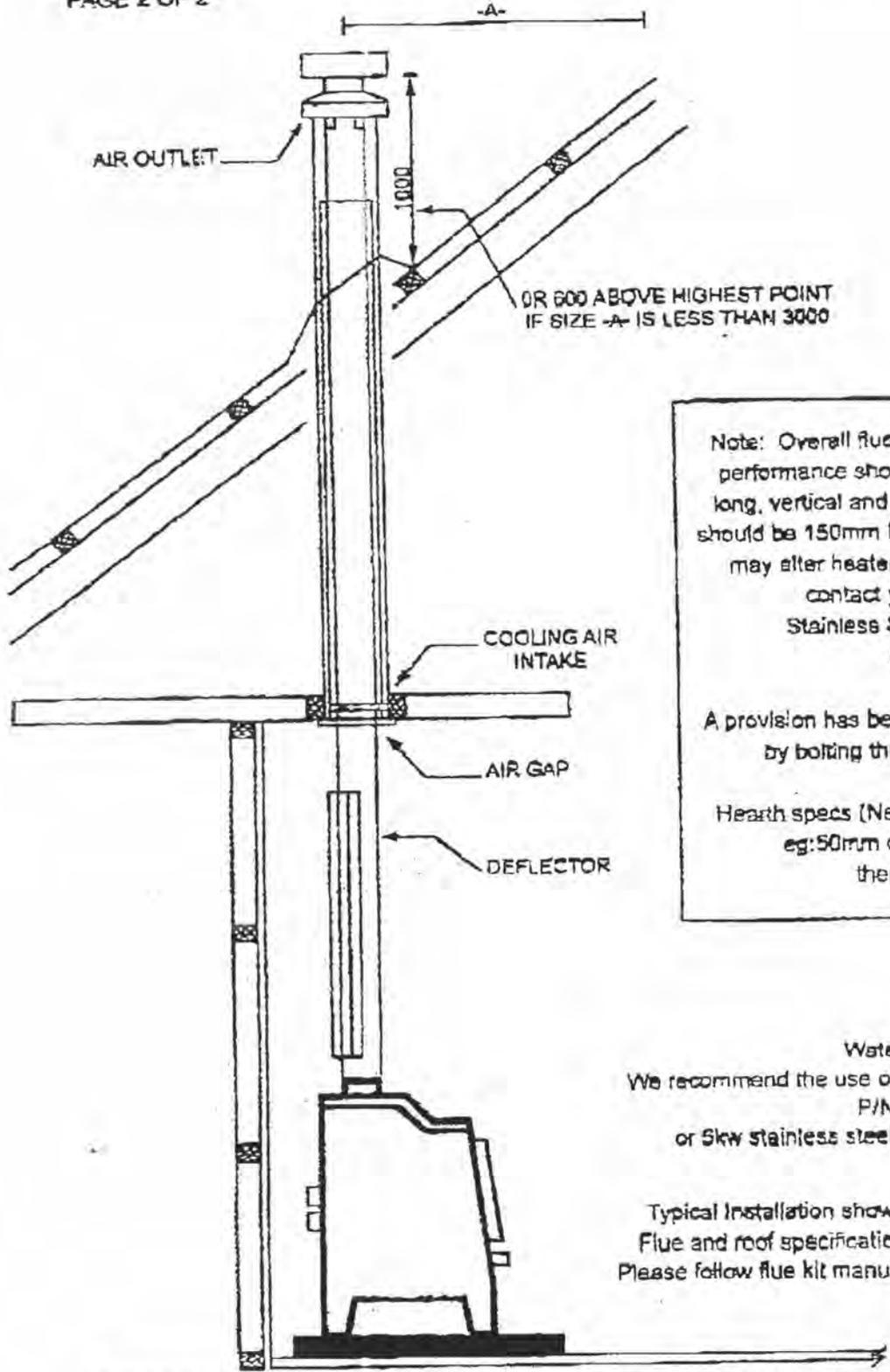
ATTN: Rochelle

FREE STANDING SPECIFICATIONS

DENNISTON

Effective December 2003

PAGE 2 OF 2



Note: Overall flue system length for optimum performance should be between 4200-4800 long, vertical and have no bends. Flue pipes should be 150mm Diameter. Deviation from this may alter heaters performance. If in doubt contact your Fisher supplier.
Stainless Steel deflector tested on this unit.

A provision has been made for seismic restraint by bolting through holes in rear legs.

Hearth specs (New Zealand) Insulated Hearth eg: 50mm concrete or equivalent thermal protection.

Water Booster
We recommend the use of the "Superior" 2.6 Kw Booster P/N 127526
or 5kw stainless steel wetback P/N SUP-RE001

Typical installation shown complies with AS/NZS2918
Flue and roof specifications are recommendations only.
Please follow flue kit manufacturers installation instructions.

IF INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS THE HEATER COMPLIES WITH AS/NZS 2918:2001

RETAIL LINKS LTD RESERVE THE RIGHT TO CHANGE SPECIFICATIONS OR DESIGNS WITHOUT PRIOR NOTICE

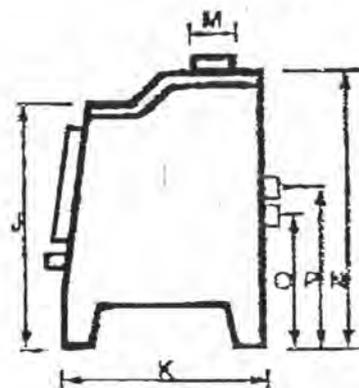
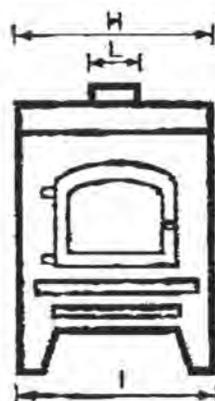
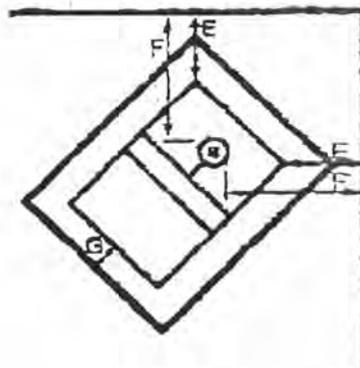
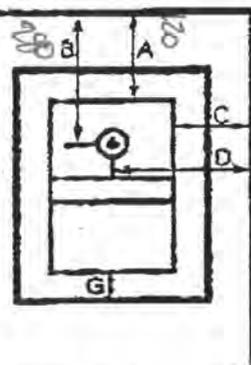


FREE STANDING SPECIFICATIONS

DENNISTON

Effective December 2003

PAGE 1 OF 2



Denniston Specifications

	A	B	C	D	E	F	G
New Zealand with S/S Flue Screen 1200	450	600	750	1045	600	925	300
New Zealand without flue screen	725	875	775	1070	600	925	300
Fisher Heatshield and S/S Screen	200	350	360	655	250	575	300

	H	I	J	K	L	M	N	O	P
Measurements	585	540	650	555	150	150	755	495	520

	DEPTH	WIDTH
Minimum Hearth Size	1020	1200

Estimated Peak Output (KW)	Max Log Length	Water Heating Option	Overnight Burning	Insulated Hearth
24	460	YES	YES	YES

IF INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS THE HEATER COMPLIES WITH AS/NZS 2918:2001

RETAIL LINKS LTD RESERVE THE RIGHT TO CHANGE SPECIFICATIONS OR DESIGNS WITHOUT PRIOR NOTICE

29 November 2005

Mr G Cromie
PO Box 30-238
LOWER HUTT

Dear Mr Cromie

BUILDING CONSENT 040111 – 93 FIELDWAY, WAIKANAE

The following items require completion or change to comply with the above building consent documents:

1. Please provide a copy of the following to Council:
 - (a) roofing warranties
 - (b) plumbers producer statement, pipes and services
 - (c) drainlayers producer statement, sewage and stormwater
 - (d) as built drainage plan
 - (e) engineers supervision report
 - (f) texture warranties for product and installation
2. Tiled area on site, we will require details and manufacturers specifications on the membrane used under the tiles (Butynol shown on plans).
- ✓ 3. The pergolas on the approved plans haven't been constructed and we will require a signed letter from the owner deleting these from the consent.
- ✓ 4. Hot water cylinder is required to be turned on and the water to full temperature so this can be checked.
- ✓ 5. Bay windows, the glass isn't etched and is required to be safety glass or have an approved safety film fitted.
- ✓ 6. Restrictor stays are required to be installed to the windows that open to a fall greater than 1.0metre where the sills are lower then 760mm from the floor. They are to open no wider than 100mm.
- ✓ 7. Smoke detectors are required to be installed as per the attached details.
- ✓ 8. The hot water cylinder is required to be secured with 3 straps with (tex screws) not screws. See the attached details.
9. Attached is a fire place installation form for the installer to fill in and return to Council.
10. The levels at the entrance, we will require information on the cladding and its backing board as it shows the entrance area famed up with timber on the approved plans. We will also require to know overflow levels are.
11. The gully trap is too close to the ground level. It has to be 25mm above permanently paved or 100mm above ground level.
- ✓ 12. The fire place installed inside, we will need to have a detail of the product used behind it and the type of backing board used as it is closer to this wall than the manufactures specifications.

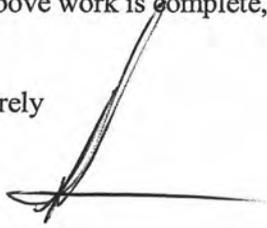
Speak to Leigh Sage
*= Drivway Runs away down to ROAD
on Drainage Grill & connects to stormwater.*

Kapiti Coast District Council

Phone (04) 904 5700, Fax (04) 904 5830 | 75 Rimu Road, Private Bag 601, Paraparaumu. Website www.kapiticoast.govt.nz

When the above work is complete, please arrange for re-inspection.

Yours sincerely

A handwritten signature in black ink, consisting of a large, stylized 'L' shape with a horizontal stroke extending to the right.

Leon Smith
BUILDING CONTROL OFFICER

17 March 2005

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Fax 04 904 5830 (1 page)

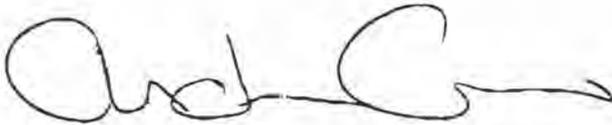
Attention Mr Andrew Wood

Dear Sir,

Re: Building Consent 040111 for 93 Fieldway, Waikanae.

The above mentioned consent drawings include for the installation of a fire place (Fisher Log Burner) Are we correct in assuming we don't require any further documentation to be completed prior to installation?

Yours sincerely



Andrew Cromie

Phone 04 570 3312 or 021 420 033

Fax 04 570 3317

PO Box 30 238

Lower Hutt.

8 May 2006

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Attention: Mr Leon Smith

Dear Sir,

Building Consent 040111 – 93 Fieldway, Waikanae.

The following outstanding items for Code Compliance have been attended to as requested.

- ✓ 1) Attached copy of the roofing warranty. (7 pages)
- 2) Attached copy of the Plumbers Producer Statements for Plumbing and Drainage and an As Built plan. (4 pages)
- 3) Attached copy of Clendon Burns & Park Ltd Producer Statement and Base Consulting Engineers Ltd Site Reports (7 pages)
- 4) Texture Coating Warranties (2 pages)
- ✓ 5) Attached copy of the under tile membrane details (7 pages)
- ✓ 6) We confirm that the pergolas as detailed on the consented plans were deleted.
- ✓ 7) The HWC have been turned on and are up to full temperature.
- ✓ 8) Attached letter from First Window and Doors dated 7 May 2006 confirming all glass meets the required code (3 pages)
- ✓ 9) Restrictor stays have been installed to all affected windows.
- ✓ 10) Smoke detectors have been installed.
- ✓ 11) HWC has had the 3 straps attached.
- ✓ 12) Attached copy of the completed fire place installers form (1 page)
- ✓ 13) Attached copy of the Ventclad Ventilated Cavity System and Rox Stonewalling details which were used to clad the entry way (14 pages)
- ✓ 14) The gully trap has been corrected.
- ✓ 15) The fire place surround uses the Rox Stonewalling as per item 13 above. The Fire place installer has approved the installation as per item 12 above

The property is ready for a re inspection.

Yours sincerely



Andrew Cromie
(phone 021 420 033)



GRW CONSULTANTS LTD TRADING AS

FIRST WINDOWS & DOORS WELLINGTON

5 Mohula Crescent, Porirua
PO Box 56087, Tawa
Tel: 0-4-237 5780, Fax: 0-4-237 4457



Sunday, May 07, 2006

Kapiti Coast District Council

Attention: - Leon Smith

Re:-93 Fieldway Waikanae

Leon,

I have included the 2 pages from the glass code that cover window seat glazing. 307.2.1 states that glass within 500mm of a seat requires annealed glass not less than 5mm thickness in accordance with column 2 of table 3.2.

All glass in this contract meets the required code.

Please call me on 0274-862-713 if you need any further clarification.

Regards

Alex Laplanche
Director

Bringing a whole new perspective to joinery design



NZS 4223:Part 3:1999

(e) The glass panel is marked by means of an opaque band or other decorative treatment to the requirements of 303.1;

(f) The glazing comprises shop front glazing;

NOTE – See definition for shop front glazing in 302.

(g) The glazing protects a difference in level of 1000 mm or more.

NOTE – A drop of 1000 mm or more is considered a visual barrier.

If the glazing complies with either (a), (b), (c) or (d), annealed glass in accordance with column 3 of table 3.2 shall be used.

If the glazing complies with (e), annealed glass in accordance with column 2 of table 3.2 shall be used and the glass shall be marked and comply with 303.1.

If the glazing complies with (f), it shall meet the requirements of 309.

If the glazing complies with (g), it shall meet the requirements of 310.

306.2

Any glazed panel that is deemed capable of being mistaken for an open doorway or an unimpeded path of travel shall be glazed as follows:

(a) For framed panels – Grade A safety glazing material which complies with the requirements of table 3.1 and 303.1;

(b) For unframed panels – Grade A safety glazing material which complies with the requirements of table 3.4 or 3.5 and 303.1.

307 LOW LEVEL AND WINDOW SEAT GLAZING

307.1 Low level glazing

307.1.1

Any annealed glass within 500 mm of the floor level shall be not less than 5 mm thickness in accordance with column 2 of table 3.2.

307.1.2

Where the glazing has a clear height of more than 1000 mm and exceeds 500 mm in width, it could be mistaken for a unimpeded path of travel and therefore shall meet the requirements of 306 with 5 mm minimum thickness.

307.1.3

Where the glazing material protects a difference in level below the window sill of 1000 mm or more, the glazing shall meet the requirements of 310 with 5 mm minimum thickness.

307.2 Window seat glazing

307.2.1

Where the glazing forms a backrest to a window seat, or similar seating arrangement with the glazing extending down to within 500 mm of the seat level, annealed glass of not less than 5 mm thickness in accordance with column 2 of table 3.2 shall be used. A horizontal ledge wider than 200 mm from the glass face and within 1000 mm of the floor level shall be considered as a window seat.

NZS 4223:Part 3:1999

Table 3.2 – Maximum areas of annealed glass for high, medium and low risk areas

Nominal thickness (mm)	Column 1 High Risk (m ²)	Column 2 Medium Risk (m ²)	Column 3 Low Risk (m ²)
3	0.05	0.1	0.3
4	0.2	0.3	1.1
5	0.5	1.2	2.2
6	0.9	2.1	3.3
8	1.8	3.2	4.5
10	2.7	4.4	6.0
12	4.5	6.3	8.0
15	6.3	8.2	10.0
19	8.5	10.3	12.0
25	12.0	13.5	15.0

Table 3.3 – Maximum areas of annealed glass for fully framed glazing

Nominal thickness (mm)	Fully framed maximum area (m ²)
3	0.5
4	2.0
5	3.3
6	4.6
8	7.0
10	9.5
12	12.0
15	16.0
19	16.0
25	16.0

NOTE – Maximum areas based on a ULS design face load of 1.3 kPa. Maximum areas are generally based on 1.3 kPa face loading which is considered to provide a minimum level of protection against impact. In situations where the ULS design wind pressure exceeds 1.3 kPa the glazing must be selected to carry the appropriate windloading.

A COMPANY OF THE GROUP
KERAKOLL INTERNATIONAL B.V.
ROTTERDAM, THE NETHERLANDS

5

(201309)

JACOBSEN CREATIVE SURFACES LIMITED
228 Orakei Rd, Rumuera P.O.Box 28-042
AUCKLAND - NEW ZELAND

LC/yt

Sassuolo, 05th February 2003

FOR THE KIND ATTENTION OF MR. KEVIN WEST

Subject: IDROBUILD

Dear Mr. West,

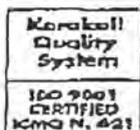
By the present we are very pleased to confirm you the suitability of the two components KERAKOLL's product called IDROBUILD that, if used in accordance with the instructions shown in the relative technical data sheet, it can be used as waterproofing in the wet areas where situations of water run-off or ponding are present, and that it has a durability of 15 years on condition that there are not in this time substitutions of the coating which is covering it.

Remaining at your full disposal for any further information you might need, in the meantime we offer you our best regards.

KERAKOLL S.p.A.
Ludovico Casati
Main Customers Manager



OK MB



Encl 10-11-05
4PM

MAXAM CORPORATION LIMITED
46-50 Bloomfield Terrace Lower Hutt
PO Box 30-238, Lower Hutt, New Zealand
Email maxcromie@xtra.co.nz
Telephone 64-4-570 3310
Facsimile 64-4-570 3317

maxam

attn Leigh Sage

FACSIMILE TO:

Kapiti Coast Council

ATTENTION:

Building Control Department

FACSIMILE NUMBER:

04 904-5830

FACSIMILE FROM:

Andrew Cromie

NUMBER OF PAGES:

1+7

DATE:

4-10-05 resent 28-10-05

SUBJECT:

93 Featherston, Wairarapa

MAXED

Attached Application for Code
Compliance Certificate along
with Electrical Certificate and
Certificate of Title.

Any problems please call me.

Regards

AW



Project Information Memorandum

Section 31, Building Act 1991

Application

Mr Graeme Cromie	No.	040111
Box 30 238	Issue date	5/03/04
Lower Hutt	Application date	2/02/04

Project

Description	Alterations, Repairs or Extensions Being Stage 1 of an intended 1 Stages Dwelling adds & alts.
Intended Life	Indefinite, but not less than 50 years
Intended Use	Residential.
Estimated Value	\$80,000
Location	93 FIELD WAY, WAIKANAE BEACH
Legal Description	LOT 11 DP 24476
Valuation No.	1491039800

This project information memorandum is confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 1991, and any requirements of the building consent.

This project information memorandum includes:

- Information identifying relevant special features of the land concerned
- Details of relevant utility systems
- Details of authorisations which have been granted

Signed for and on behalf of the Council:

Name:

Kapiti Coast District Council

Date:

5-3-04

Phone (04) 904 5700, Fax (04) 904 5830 175 Rimu Road, Private Bag 601, Paraparaumu. Website www.kcdc.govt.nz



PROJECT INFORMATION MEMORANDUM - BC 040111

Application Details

Applicant Name :	Mr Graeme Cromie
Contact Address :	Box 30 238 Lower Hutt
Location :	93 FIELD WAY, WAIKANAE BEACH
Legal Description :	LOT 11 DP 24476 Status history Lodged 2/02/04 F
Proposal :	Dwelling adds & alts.

Application Details

Use Permitted :	Permitted activity
Resource consent granted :	Yes - RM030187
Designations on property :	None listed
Easements :	None listed
Site subject to inundation :	Not known to be
Relocatable zone :	Proposed approx 25 metres from sea bndy
Coastal building line restriction :	Existing approx 7.5 metres " " "
Minimum floor level (50 year event) :	N/A
Floor level (100 year event) :	N/A
Yard and height requirements :	Comply
Tree/building preservation :	None listed

Comments

Consent notices, covenants and like listings registered on the title are the responsibility of the applicant. Search this property title for any impediments to this proposal.

Note: Minimum floor levels must use Mean Sea Level Wellington Datum 1953. Certification that the floor level complies with the minimum floor level will be required from a registered surveyor prior to foundation inspection.



COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952



Search Copy

R. W. Muir
Registrar-General
of Land

Identifier **WNB1/307**
Land Registration District **Wellington**
Date Issued **03 April 1963**

Prior References

WNB1/10

Estate Fee Simple
Area 809 square metres more or less
Legal Description Lot 11 Deposited Plan 24476
Proprietors
Graeme Cromie and Jonathan Harcourt James Crawford

Interests

Transaction Id 4469791
Client Reference Maxam

Search Copy Dated 26/06/03 2:26 pm, Page 1 of 1
Register Only

MAXAM CORPORATION LIMITED
46-50 Bloomfield Terrace Lower Hutt
PO Box 30-238, Lower Hutt, New Zealand
Email maxcromie@xtra.co.nz
Telephone 64-4-570 3310
Facsimile 64-4-570 3317

maxam

FACSIMILE TO:

Kapiti Coast Council
Building Control Department

ATTENTION:

FACSIMILE NUMBER:

04 904 - 5830

FACSIMILE FROM:

Andrew Cromie

NUMBER OF PAGES:

1+7

DATE:

4-10-05

SUBJECT:

93 Feilding, Wairarapa

Attached Application for Code
Compliance Certificate along
with Electrical Certificate and
Certificate of Title.

Any problems please call me.

Regards

Andrew Cromie

Tasman Sea

Esplanade Res

100.0

200.0

||

32.0P

200.0

100.0

Field Way

Compliance Schedule

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 standards set on in the building consent:

There are no specified systems in the building

Cable Car (including to individual dwelling)

Automatic systems for fire suppression (for example, sprinkler systems)

Electromagnetic or automatic doors or windows (for example, ones that close on fire alarm activation)

Automatic or manual emergency warning systems for fire or other dangers

Emergency lighting systems

Escape route pressurisation systems

Riser mains for Fire Service use

Any automatic back-flow preventer connected to a potable water supply

Lifts, escalators, travelators or other systems for moving people or goods within buildings

Mechanical ventilation or air-conditioning systems

Means of escape from fire

Building maintenance units for providing access to the exterior and interior walls of buildings

Emergency power systems for, or signs relating to, a system or feature specified

Safety barriers

Means of access and facilities for use by persons with disabilities which meet the requirements of section 118

Hand-held hose reels for fire fighting

Such signs as are required by the Building Code or by section 120

Laboratory fume cupboards

Audio loops or other assistive listening systems

Smoke control systems

Blackburn County Council No. 1041

Inspector: M File No.

Receipt No. 2365

Date Permit Issued 11/12/85

OWNER

Name G Cromie

Mailing Address 34 Drummond Street
Lower Hill.

BUILDER

Name A. Cunniff

Mailing Address _____

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No. 45

Street Name Field Way

Town/District Warrance

Riding Warrance DC.

LEGAL DESCRIPTION

Valuation Roll No. 1493/31

Lot 11 D.P. 24416

Section _____ Block _____

Survey District _____

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

Private Garage.

FLOOR AREA Whole Sq. Metres 19

DWELLING UNITS Number Erected _____

ESTIMATED VALUES

Building	<u>1500</u>
Plumbing	<u>100</u>
Drainage	<u>400</u>
TOTAL	<u>1900</u>

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	\$ <u>400</u>	Water Connection	\$ _____	Receipt No.	<u>2365</u>
Street Damage Deposit	\$ _____	Vehicle Crossing Levy	\$ _____	Date of Payment	<u>11/12/85</u>
Building Research Levy	\$ _____	M.S. Plumbing	\$ _____	Authorised Officer	_____
Plumbing	\$ <u>200</u>				
Drainage	\$ _____				
Sewer Connection	\$ _____				
TOTAL:	\$ <u>1000</u>				

Special Conditions: See drawings ✓

Date Inspected	REMARKS (e.g. stage reached with work)
<u>Nov 85</u>	<u>Foundation inspection carried out prior to permit being issued steel sig & placement OK Polythene repair barrier used</u>

20-93

Horowhenua County Council

PERMIT No. W3041

LOCALITY Waikanae

DATE RECEIVED : : .

DATE ISSUED 19:9:77

APPLICATION FOR PLUMBING AND DRAINAGE PERMIT

OWNER'S NAME Don R. Francis

FOR OFFICE USE ONLY

REMARKS:

See diagram with approved plans for details of pipe runs to wet beach installation.
Upper of waste pipes to be back vented as required.

APPROVED
<i>B. J. [Signature]</i>
COUNTY ENGINEER.
DATE <u>13-9-77</u>

10481

NOTE.—In all cases where septic tanks are installed the site and position must be first approved by the County Health Inspector.

20-93

[Handwritten initials]

Valuation Book No. 1493/39.

Date _____, 19____

Application For Plumbing and Drainage Permit

TO THE COUNTY HEALTH INSPECTOR,
Horowhenua County Council,
Bath Street,
Levin.

Postal Address:
Horowhenua County Council,
P.O. Box 17,
Levin.

I, the undersigned, do hereby apply for a permit to carry out DRAINAGE and PLUMBING work in accordance with the undermentioned particulars.

Description of Drainage and Plumbing Work Plumbing & drainage on new dwelling

Allotment. Lot: 11 D.P.: 24676 Section: _____ Area: _____

Block: _____ S.D.: _____ Locality: _____

Previous Owner { If Section has been recently transferred }

Frontage (Length) _____ (Name of Street or Road) 93 Field Way

Water Supply (Description) Town

Estimated Value of Plumbing Work \$ 2000.

Estimated Value of Septic Tank included \$ _____

Estimated Value of Drainage Work \$ 625.

Total \$ 2000-00

All work will be carried out in accordance with Horowhenua County Council's By-laws and the Drainage and Plumbing Regulations 1959 and Amendments.

Permit Fees \$ 24.00 W. Comm. \$ 24. ⁴⁹³⁵ Receipt No.: 4933
(For Scale of Fees see Back Page.)

Full Name and Address of Owner: Ed Francis
71 Warwick Street Wilton Wairarapa

NOTE.—The following MUST accompany this Application:—

- (a) Ground Plan of Building showing all drains, vents, sumps, septic tanks and sanitary fittings to be plotted on opposite page.
- (b) Detailed drawings of septic tank — 1/4 in to one foot.
- (c) Specifications of work and materials to be used.

Plan showing drains should be drawn to scale of 1/4 in to foot for large premises — in DUPLICATE

Stormwater drains should be shown (if any) in dotted lines.

Signature of Applicant: [Signature]

Address: 105 Lemster Ave Dammate St

Plumber's Name, Address, and Registered No. { If not the applicant. } Reg no. 05535

BUILDING INSPECTOR'S FIELD SHEET

AUTHORITY

Stats. No. B 068739
No. 15144

Montgomery County Council

Inspector: M

File No.

Date Permit Issued 13/4/84

Receipt No. 2112

OWNER

Name Gerome

Mailing Address 39 Wilson Street
Leeds Hill

BUILDER

Name Self

Mailing Address _____

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No. 93

Street Name Trinity Way

Town/District Waltham

Riding Waltham DC

LEGAL DESCRIPTION

Valuation Roll No. 1493/39

Lot 2 D.P. 24416

Section _____ Block _____

Survey District _____

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

Internal Alterations to Dwelling

FLOOR AREA Whole Sq. Metres N/A

DWELLING UNITS Number Erected _____

ESTIMATED VALUES \$	Building	58000.00
	Plumbing	
	Drainage	
	TOTAL	58000.00

NATURE OF PERMIT (TICK BOX)

NEW BUILDING - include dwelling added, exclude domestic garages

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	\$ 40.00	Water Connection	\$	Receipt No.	2112
Street Damage Deposit	\$	Vehicle Crossing Levy	\$	Date of Payment	11/4/84
Building Research Levy	\$	M.S. Plumbing	\$	Authorised Officer	
Plumbing	\$		\$		
Drainage	\$		\$		
Sewer Connection	\$		\$		
		TOTAL:	\$ 40.00		

Special Conditions:

Date Inspected 21/3/84

REMARKS (e.g. stage reached with work) Completed O.k. *WA*

20-93

Horowhenua County Council

PERMIT No. 15144
8068439

LOCALITY Waikanae

DATE RECEIVED 21 : 2 : 84 DATE ISSUED 13 : 4 : 84

APPLICATION FOR BUILDING PERMIT

OWNER'S NAME GERENE CROMIE

FOR OFFICE USE ONLY

REMARKS:

APPROVED
<i>B. Yodd</i>
COUNTY ENGINEER
DATE <u>21-3-84</u>

owner to confirm insulation to block walls.

NOTE.—

1 All Plans and Specifications must be In Ink.

20-93

APPLICATION FOR BUILDING PERMIT

TO THE BUILDING INSPECTOR,
Horowhenua County Council,
Bath Street,
Levin.

Postal Address: Horowhenua County Council,
P.O. Box 258,
Levin.

I, the undersigned, do hereby apply for PERMISSION to erect BUILDINGS in accordance with the under-mentioned particulars in Waikanae RIDING.

1. Type of Building: INTERIOR ARTISTS
Dwellings, etc.; additions or alterations.

Particulars of Building: Foundations: CONC Walls: TIMBER Roof: GLASS
Total floor area: 121 sq. metres.

2. Purpose for which every part of Building is to be used or occupied. (Describing separately each part intended for use or occupation for a separate purpose) DWELLING

3. Allotment: Lot: II D.P.: 24170 Section: CT B1 307
Area: 809 m² Block: S.D. Locality: 93 BILDWAY
WAIKANAe

4. Owner's Full Name: CAROLINE COCHRAN
Address: 39 MANKON ST, LAVERGNIET

5. Previous Owner If Section has been recently transferred MR. FRANCIS

6. Frontage (Length): 20.17 m Name of Street or Road 93 BILDWAY

7. Estimated Value of Building— \$ 5800 :
Plumbing and Drainage— \$ — : Total \$ 5800 :

8. Fees \$ 40 : No. of Receipt 212
See Scales of Fees on Back Page.

Building Research Levy \$ — : Footpath Damage Deposit \$ — :
All work will be carried out in accordance with Horowhenua County Council's By-laws.

NOTE:—The following MUST accompany this Application:— (3 SETS DRAWING REINFORCED)

Plans and Specifications in Duplicate to be provided.

Together with every application there shall be submitted to the Engineer, in duplicate, detailed plans, elevations, cross sections, and specifications, which shall together furnish complete details of design and qualities and descriptions of all materials of construction and workmanship, and which shall be of sufficient clarity to show to the satisfaction of the Engineer the exact nature and character of the proposed undertaking and the provision made for full compliance with the requirements of the By-laws including:

- (a) A Floor plan of each floor level;
- (b) An elevation of each external wall;
- (c) The type and location of each foundation element (for example; reinforced masonry foundation wall. Anchored pile, cantilevered pile, etc.);
- (d) Adequate information on all subfloor, floor, wall and roof framing, including the type and location of each subfloor brace, diagonal brace, and wall bracing element and the number of bracing units assigned to each wall bracing element;
- (e) The type and location of cladding, sheathing and lining.
- (f) Where a building requires Plumbing and Drainage Work, a separate application form must be filled in and Permit obtained before commencing any such work.

Signature of Applicant [Signature] as BUILDER or OWNER.

Address 39 MANKON ST, LAVERGNIET

Builder's Name and Address if not the applicant APPLICANT