

SPECIFICATION

of work to be done and materials to be used in carrying out the works shown on the accompanying drawings

Waikanae Country Lodge – Roofing Remedial Works

(project name)

394 Te Moana Road, Waikanae

(project address)

Arvida Group Limited

(owners name)

Job Number: 1622

Date: 04/02/2016

1012 TABLE OF CONTENTS

1012 TABLE OF CONTENTS2
1210 PROJECT3
1211 DOCUMENTATION5
1212 COMPLIANCE6
1213 SELECTIONS7
1220 GENERAL REQUIREMENTS..... 10
1233 DOCUMENTS REFERENCED 14
2100 DEMOLITION WORK..... 16
3800 TIMBER FRAMING 18
4220 WALL CLADDING 20
4310 ROOFING 22
4520 ALUMINIUM WINDOWS AND DOORS..... 24
4610 GLAZING 30
5110 INTERIOR LININGS AND TRIM 31
6700 PAINTING 33
7410 RAINWATER SPOUTING SYSTEM..... 35
7430 DRAINAGE SYSTEMS 36

1210 PROJECT.

1. GENERAL

1.1 PROJECT

Street address:	394 Te Moana Road Waikanae
Legal description:	DP 87411 Lots 1-3 DP 76423 , C.T. ~
Site area:	Apprx. 12,635 m2
Project type:	Roofing Alteration
Intended use:	Multiple residential building
Intended life:	Indefinite but not less than 50 years

1.2 PROJECT DESCRIPTION

- Modifications to existing roofs to remove areas prone to leaking.

Four main zones of modifications:

Zone 1 - remove area of flat roof by extending western gable roof along to meet with existing southern gable roof.

Zone 2 - Remove area of flat roof by connecting two western gable roofs to continue the full length of the building

Zone 3 - Remove area of flat roof and internal gutter by instating a new gable roof covering the full width of middle building. Also lowering the pitch of the lean-to section to match height of main ridge line

Zone 4 - Remove area of flat roof by introducing a new lean-to section above eastern section of building, also extending northern gable roof along to cover north-easterb section of building.

- Replace existing skylights with new complying skylights

1.3 CATEGORY AND LBP REQUIREMENT

Category 1:

- Single household dwellings with low- or medium-risk envelope design

Category 2

- Single household dwellings with high-risk envelope design, or other buildings with a building height of 10m or less.

Category 3

- Building 10m or greater in building height, except single household dwellings.

Any site license LBP's shall have a minimum:

Site license in area of practice 1

Bricklaying and Blocklaying 1 : Brick / masonry veneer

Bricklaying and Blocklaying 2: Structural masonry

Carpentry

External Plastering 1: Solid plastering

External Plastering 2: Proprietary Plaster Cladding Systems

Foundations 1: Concrete foundation walls and concrete slab-on-ground

Foundations 2: Concrete or timber pile foundations

Roofing 1: Concrete or clay tile roof

Roofing 2: Profiled metal roof and/or wall cladding

Roofing 3: Metal tile roof

Roofing 4: Roof membrane

Roofing 5: Torch on roof membrane

Roofing 6: Liquid membrane roof

Roofing 7: Shingle or slate roof

1.4 OWNER

Name:	Arvida Group Limited (rep. by: Jonathan Ash)
Mailing address:	P Box 90217, Victoria Street, West Auckland
Telephone:	09 972 1186
Email:	Jonathan.ash@arvida.co.nz

1.5 DESIGNER

Name:	John Tocker
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Mailing address:	PO Box 24496, Wellington, 6011
Telephone:	04 473 9803
Email:	john@jtbarhitects.co.nz

1.6

ENGINEER

Name:	~
Mailing address:	~
Telephone:	~
Email:	~

1.7

CONTRACTOR

Name:	~
Mailing address:	~
Telephone:	~
Email:	~

1211 DOCUMENTATION

1. GENERAL

1.1 DRAWINGS

Number	Revision	Title
0.01 – 3.10	1	Waikanae Country Lodge Roofing Modifications

1.2 ENGINEERS DOCUMENTS Truss design documents

1.3 OTHER DOCUMENTS ~

1.4 PRODUCER STATEMENTS Truss design documents

1.5 PRODUCT CERTIFICATION ~

1.6 MANUFACTURERS LITERATURE James Hardie: Monotek Technical Spec James Hardie: Linea Weatherboard Technical Spec James Hardie: Villaboard Soffit Lining Technical Spec Metrotile: Installation Manual Monier Roofing Installation Guide Velux Fixed-Skylight Installation Instructions

1212 COMPLIANCE

1. GENERAL

1.1 SITE DATA

Soil type:	NA (to NZS 3604 , 3.2 Soil types)
Exposure zone:	Zone C (to NZS 3604 , 4.2 Exposure zones or E2/AS1 Zone E severe marine)
Wind zone:	Medium (to NZS 3604 , table 5.4 Determination of Wind Zone)
Earthquake zone:	Zone 3 (to NZS 3604 , figure 5.4 Earthquake zones)

1.2 BUILDING DATA

Building classification:	~ Importance Level (to NZS 3604 , table 1.1 Classification of buildings)
Floor live load:	~ KPa (to NZS 3604 , table 1.2 Imposed floor live load reference values)
Overall height:	7.4 metres (in accordance with NZS 3604 , Fig 1.2 Buildings covered by this Standard)
Risk assessment:	~ Total Risk Score (to NZBC E2/AS1 , 3.1 Establishing the risk)

1.3 PRODUCER STATEMENTS

Provide Producer Statements for the following

- Truss design
- Aluminium joinery
- Glazing

Provide Producer Statements in the required form. Where no form is specified provide in the industry/trade standard form. Provide all Producer Statements before the Building Consent Authority carries out the final inspection.

1.4 RECORDS OF WORK

Provide Records of Work for Restricted Building Work:

- Brick/masonry veneer
- Structural masonry
- Carpentry
- Solid plastering
- Proprietary Plaster Cladding Systems
- Roofing
- Membrane roof
- Foundations

Refer to the Building Consent for specific requirements. Provide Records of Work in the required form. Provide all Records of Work before the Building Consent Authority carries out the final inspection.

1213 SELECTIONS

1. GENERAL

The following selections are to be read in conjunction with the related work sections, where they are available, and the general sections.

2. SITE

<< 2100 DEMOLITION WORK >>

2.1 DEMOLITION ITEMS FOR REUSE

Identify where required

2.2 DEMOLITION ITEMS FOR RETURN TO THE OWNER

Identify with Owner

3. STRUCTURE

<< 3800 TIMBER FRAMING >>

3.1 EXTERIOR WALL TIMBER FRAMING

Type/treatment: Radiata pine, Grade SG8, Treated H1.2
Cavity battens: Radiata pine, Treated H3.1 (non-structural)
Jamb battens: Radiata pine, Treated H3.1

3.2 ROOF TIMBER FRAMING

Type/treatment: Radiata pine, Grade SG8, Treated H1.2

3.3 ROOF TRUSSES

Type/treatment: Radiata pine, Grade SG8, Treated H1.2
Truss supplier: Placemakers

3.4 INTERIOR WALL TIMBER FRAMING

Type/treatment: Radiata pine, Grade SG8, Treated H1.2

3.5 EXTERIOR EXPOSED TIMBER

Cladding & trim: Radiata pine, Dressing, Treated H3.1
Structure: Radiata pine, Grade SG8, Treated H3.2 CCA (preservative code 01 or 02)

4. ENCLOSURE

<< 4160 DAMP-PROOFING, UNDERLAYS AND RIGID AIR BARRIERS >>

There is no work section specification relating to the following selections

4.1 DAMP-PROOF COURSE

Brand/Type: ~

4.2 WALL UNDERLAY/ROOF UNDERLAY

Brand/Type: Dupont/Tyvek Homewrap
Brand/Type: Dupont/Tyvek 'metal' synthetic roof underlay

<< 4220 WALL CLADDING >>

4.3 CLADDING

Brand/Type: James Hardie, Bevel back timber weatherboards (or to match existing)
Fixings: direct fix in accordance with manufacturer's requirements
Jointers: in accordance with manufacturer's requirements
Finish: to match existing

Brand/Type: James Hardie, Monotek with plaster finish to match existing
Fixings: fixed over battens in accordance with manufacturer's requirements

Jointers: in accordance with manufacturer's requirements
Finish: plaster finish to match existing

<< 4239 SOFFIT LINING >>

4.4 SOFFIT
Brand/Type/thickness: James Hardie /Villaboard soffit lining/6 mm
Fixings: 30 x 6g screws
Jointers: 6mm Hardiejointer
Finish: paint finish to match existing

<< 4310 ROOFING >>

4.5 ROOFING
Brand/Type: Monier, hacienda, concrete roof tiles. Installed in accordance with manufacturer's specifications
Flashings: Monier, hacienda, concrete roof tiles with lead flashings in accordance with manufacturer's specifications
Colour: antique olive colour finish

Brand/Type: Monier, mysteel metal roof tiles classic or roman; satin or textured (confirm with client,
Flashings: Monier, mysteel metal roof tile flashings in accordance with manufacturer's specifications
Colour: River gum or as near to existing colour finish

4.6 ROOF SKYLIGHTS
(See 4554VS)

<< 4520 ALUMINIUM WINDOWS AND DOORS >>

4.14 ALUMINIUM WINDOWS AND DOORS
NOTE: If the existing wall cladding (plaster finish only) below a proposed wall extension is not on cavity battens, allow to remove this, and reclad entire wall with James Hardie Monotek on cavity battens. For these areas, allow to reinstall windows and doors within existing wall to fit within new depth of wall. This includes: the removal of existing window and door joinery; new reveals to suit new wall depth; and reinstallation of existing windows and door joinery including installation of WANZ bars as per manufacturer's specification
Brand/Type: Existing
Finish/colour: Existing
Jamb liners: 18mm Radiata pine, Dressing, Treated H3.1, paint finish to match existing
Flashings: 1.2mm PC aluminium head flashing
0.7mm PC aluminium jamb
0.7mm PC aluminium sill flashing
Hardware: Existing

<< 4820 FLASHINGS >>

There is no work section specification relating to the following selections

4.7 FLASHINGS - ROOFING
Type: 0.55mm Colorsteel powdercoated flashings – colour to match roof cladding
Type: 1.8mm lead sheet flashing

4.8 FLASHINGS – SKYLIGHT
Type: EDW flashing as per manufacturer's requirements and specifications

5. INTERIOR

<< 5110 INTERIOR LININGS AND TRIM >>

5.2 WALL LININGS

Location:	All interior walls unless otherwise specified
Brand/Type/thickness:	Gib / standard plasterboard / 10mm
Finish:	Paint finish
Location:	All bathroom linings
Brand/Type/thickness:	Gib / Aqualine plasterboard / 10mm
Finish:	Paint finish

5.3 CEILING LININGS

Location:	All interior ceilings unless otherwise specified
Brand/Type/thickness:	Gib / standard ceiling plasterboard / 13mm
Finish:	Paint

5.4 INTERIOR TRIM

Skirtings:	to match existing
Architraves:	to match existing
Scotia:	to match existing

6. FINISH

<< 6700 PAINTING >>

6.1 EXTERIOR PAINTING

Walls	Resene – 1e 1.2 - Semi-gloss
Facias, barges,	Resene – 2e 1.2 – Semi-gloss
Soffit	Resene – 1e 1.2 – semi-gloss

6.2 INTERIOR PAINTING

Walls	Resene – 15i 1.4ZS – low sheen
Ceiling:	Resene – 15i 1.4SC - flat
Doors	Resene – 3i 1.2 NRS - semi gloss
Cabinetry:	to be selected
Trim:	Resene – 3i NRS – semi gloss

7. SERVICES

<< 7410 RAINWATER SPOUTING SYSTEM >>

7.1 SPOUTING

Brand/type/size:	Marley, Classic, cross sectional area: 6,700mm ²
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7.2 DOWNPIPES

Brand/type/size:	Marley, RP80, 80mmØ downpipe system
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8. EXTERNAL

1220 GENERAL REQUIREMENTS

1. GENERAL

1.1 THE WORKS

The works are as described in this specification and shown on the drawings.

1.2 PERSONNEL

Owner: The person defined as "owner" in the New Zealand Building Code.

Contractor: The person contracted by the owner to carry out the contract.

1.3 THE SITE

The site of the works, the site address and the legal description are listed under the sections 1210 PROJECT. Confine access and work to the area of site indicated on the drawings.

1.4 SPECIFICATION SECTIONS

Sections are for reference and convenience only and do not constitute individual trade sections or work elements. Read all sections together and read this section with all other sections.

1.5 INTERPRETATIONS

Required: Required by the documents, or by a statutory authority.

Proprietary: Identifiable by naming the manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.

Approval: Approval in writing.

Direction: Direction in writing.

Notified: Notified in writing.

1.6 ABBREVIATIONS

The following abbreviations are commonly used throughout the specification:

AS	Australian Standard
AS/NZS	Joint Australian/New Zealand Standard
BCA	Building Consent Authority
BRANZ	Building Research Association of New Zealand
LBP	Licensed Building Practitioner
NZBC	New Zealand Building Code
NZS	New Zealand Standard
NZS/AS	Joint New Zealand/Australian Standard
NUO	Network Utility Operator
OSH	Occupational Safety and Health
RBW	Restricted Building Work
TA	Territorial Authority

1.7 INCONSISTENCIES

If there are any inconsistencies, errors or omissions in or between documents, the contractor must seek direction in resolving it. Figured dimensions take precedence over scaled dimensions; drawings to a larger scale take precedence over drawings to a smaller scale and drawings take precedence over specification.

1.8 SUBSTITUTIONS

A substitution may be proposed where specified products are not available, or if substitute products are brought to the attention of and are considered by the owner as equivalent or superior to those specified. Except where a specified product is not available, the owner is not bound to accept any substitutions.

Notify proposed substitution of specified products. Include sufficient information to allow the owner to confirm that the substitution is equivalent or superior to that specified. Advise the owner whether an amendment will or may be required to the Building Consent and the expected costs of such amendment.

- 1.9 THE WORDS "PROVIDE" OR "FIX"
The words "provide" (or "supply") or "fix" if used separately mean "provide and fix" unless explicitly stated otherwise.
- 1.10 MANUFACTURERS AND SUPPLIERS
Manufacturers and suppliers requirements, instructions, specifications or details are those issued by them for their particular material, product or component and are the latest edition.
- 1.11 REFERENCED DOCUMENTS
Reference is made to various New Zealand Building Code (NZBC) acceptable solutions (AS) and verification methods (VM) for criteria and/or methods used to establish compliance with the Building Act 2004. Reference is also made to various Standards produced by Standards New Zealand (NZS, AS/NZS) and to listed Acts, Regulations and various industry codes of practice and practice guides. The latest edition (including amendments and provisional editions) at the date of this specification applies unless stated otherwise. Documents cited both directly and within other cited publications are part of this specification.
- 1.12 PRECEDENCE OF REFERENCED DOCUMENTS
This specification takes precedence in the event of it being at variance with and requiring a higher standard than, the cited documents. Resolution of any variance must be confirmed in writing and where Building Consent is affected, the change notified to the BCA for advice as to whether an amendment is required to the Building Consent Authority.
- 1.13 BUILDING CONSENT COMPLIANCE
It is an offence under the Building Act 2004 to carry out any work not in accordance with the Building Consent. Refer the resolution of matters concerning compliance to the owner for a direction. Where Building Consent is affected refer any change to the BCA for advice as to whether an amendment is required to the Building Consent.
- 1.14 STATUTORY OBLIGATIONS
Comply with all statutory obligations and regulations of regulatory bodies controlling execution of the works.
- 1.15 BUILDING CONSENT
Obtain the original or copies of the Building Consent form and documents from the owner and keep on site. Liaise with the BCA and/or the building certifier for all required notices and all inspections required during construction to ensure compliance. Return the consent form and documents to the owner on completion.
- 1.16 INSPECTIONS
Do not proceed with work noted on the Building Consent for inspection until it has been inspected and passed by the BCA inspector.
- 1.17 KEY PERSONNEL
Provide names and contact detail of LBP's/ key personnel. Prior to Restricted Building Work being carried out, provide names, registrations numbers (where appropriate) and contact detail of LBP's that are required for RBW by the Building Consent Authority as part of the Building Consent.
- Include the following as applicable:
- Person with the appropriate site license
 - Carpenter
 - Registered drainlayer
 - Registered plumber
 - Registered gasfitter
 - Registered electrician
 - Roofer
 - Block layer
 - Bricklayer
 - External plasterer
 - External window manufacturer
 - Waterproof membrane applicator

- 1.18 **PRODUCER STATEMENTS AND LBP DOCUMENTATION**
When Records of Work or producer statements verifying construction are required, for the application for the Code Compliance Certificate, provide copies to both the BCA and the owner. Provide LBP documents and producer statements in the form required by the BCA.
- 1.19 **CERTIFICATE OF COMPLIANCE**
Provide Certificates of Compliance for electrical and gas work carried out.
- 1.20 **CODE COMPLIANCE CERTIFICATE**
Provide documentation that the Owner requires in order to obtain a Code Compliance Certificate for the consented work.
- 1.21 **TRADE GUARANTEES AND WARRANTIES**
Where specific trade guarantees/warranties are offered covering materials and/or execution of proprietary products or complete installations, or are required as a condition of Building Consent, provide guarantees/warranties to the owner.
- 1.22 **SITE ACCOMMODATION**
Provide, erect and maintain scaffolding, sheds, toilets, water, power and hoardings. Allow for cartage, craneage, plant hire and storage. Arrange for temporary works and services necessary for the completion of the works.
- 1.23 **HEALTH AND SAFETY**
Make the works safe and provide and maintain a safe working environment. Ensure that all those working on or visiting the site are aware of the rules governing site safety, are properly supervised and are not unnecessarily exposed to hazards.
- 1.24 **PROTECT THE WORKS**
Protect parts of the work liable to damage until completion of the works. Take all precautions necessary to protect the works from damage by unauthorised entry or inclement weather. Brace and support all parts of the works against damage during construction.
- 1.25 **STORAGE AND PROTECTION**
Provide temporary storage areas and protective covers and screens. Fillet stack and protect all framing and structural members from moisture and contamination. Completely protect finishing materials from the weather and damage and store in accordance with the manufacturer's requirements. Protect fabricated elements from the weather and damage, and store in accordance with suppliers requirements.
- 1.26 **ANTIQUITIES AND ITEMS OF VALUE AND INTEREST**
Report immediately the finding of any fossils, antiquities, pre-1900 items, or objects of value. Ensure they remain undisturbed until approval is given for their removal.
- 1.27 **MEANS OF COMMUNICATION**
All directions and approvals in writing.
- 1.28 **PROGRAMME**
Provide a programme for the contract works, including the work of separate contractors being carried out concurrently with this contract. Form of programme: A dated bar chart, identifying the contract work's critical path and all key dates for the provision of labour, materials and elements. Supply a copy of the programme, and any updates to the owner.
- 1.29 **WORKING HOURS**
Work on site is restricted to between 0800 to 1800, Monday to Friday, excluding statutory holidays. Work outside these hours may be permitted, with prior approval in writing by the owner.
- 1.30 **RESTRICTIONS**
Do not:
- smoke on site
- light rubbish fires on the site
- bring dogs on to or near the site

- bring radios/audio players on to the site.

- 1.31 **QUALITY ASSURANCE**
Carry out and record regular checks of material quality and accuracy. Provide all necessary materials, equipment, plant, attendances, supervision, inspections and programming to ensure required standards are met.
- 1.32 **DAMAGE AND NUISANCE**
Prevent damage and nuisance from water, fire, smoke, vehicles, dust, rubbish, noise and other causes resulting from the contract works. Comply with the requirements of the TA and relevant Acts and Standards.
- 1.33 **SET-OUT AND DATUM**
Set out the works to conform with the drawings. Establish a permanent site datum to confirm the existing ground floor level and its relationship to other existing and new building levels.
- 1.34 **EXECUTION OF THE WORK**
Conform to the requirements of this specification. Ensure work is level, plumb, and true to line and face. Employ only experienced workers familiar with the materials and techniques specified.
- 1.35 **MATERIALS AND PRODUCTS**
Use only new materials and products, unless stated otherwise, of the specified quality and complying with cited documents.
- 1.36 **COMPATIBILITY**
Ensure all parts of a construction or finish are compatible and their individual use approved by the manufacturers and suppliers of other parts of the system. Source all parts of a system from a single manufacturer or supplier.
- 1.37 **COMPLETE ALL SERVICES**
Ensure completed building services are operational, with temporary labelling removed, required labelling fixed and service instructions provided.
- 1.38 **CLEAR AWAY**
Regularly clear away trade debris, unused materials and elements from the site. On completion of the work leave the building clean and ready for occupancy, with all services operating and mechanical parts in good working order. Remove temporary markings, coverings and protective wrappings.
- 1.39 **CLEAN**
Clean and wash down external surfaces to remove dirt, debris and marking. Clean interior surfaces including floors, glass, cabinetwork, joinery, sanitary and hardware items.

1233 DOCUMENTS REFERENCED

1. GENERAL

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

1.1 ACTS AND REGULATIONS

[Building Act 2004](#)

Gas (Safety and Measurement) Regulations 2010

[Health and Safety in Employment Act 1992](#)

Electricity (Safety) Regulations 2010

[Plumbers, Gasfitters and Drainlayers Act 2006](#)

1.2 NEW ZEALAND BUILDING CODE VERIFICATION METHODS

[NZBC E2/VM1](#) External moisture

[NZBC G12/VM1](#) Water supplies

1.3 NEW ZEALAND BUILDING CODE ACCEPTABLE SOLUTIONS

[NZBC B1/AS1](#) Structure - general

[NZBC B2/AS1](#) Durability

[NZBC C/AS1-AS7](#) Protection from fire

[NZBC D1/AS1](#) Access routes

[NZBC E1/AS1](#) Surface water

[NZBC E2/AS1](#) External moisture

[NZBC E2/AS3](#) External moisture

[NZBC F2/AS1](#) Hazardous building materials

[NZBC F7/AS1](#) Domestic smoke alarms

[NZBC G1/AS1](#) Personal hygiene

[NZBC G10/AS1](#) Piped services - Gas

[NZBC G11/AS1](#) Gas as an energy source

[NZBC G12/AS1](#) Water supplies

[NZBC G13/AS2](#) Foul water - Drainage

1.4 NEW ZEALAND STANDARDS

[AS/NZS 1604.3](#) Specification for preservative treatment - Plywood

[NZS/AS 1884](#) Floor coverings - Resilient sheet and tiles - Installation practices

[AS/NZS 2269.0](#) Plywood - Structural - Specifications

[AS/NZS 2455.1](#) Textile floor coverings - Installation practice - General

[AS/NZS 2455.2](#) Textile floor coverings - installation practice - Carpet tiles

[AS/NZS 2589](#) Gypsum linings - Application and finishing

[AS/NZS 2642.2](#) Polybutylene pipe systems - Polybutylene pipe for hot and cold water applications

[AS/NZS 2699.1](#) Built-in components for masonry construction Wall ties

[AS/NZS 3000](#) Electrical installations (known as the Australian/NZ Wiring Rules)

[NZS 3101.1](#) Concrete structures standard

[NZS 3103](#) Sands for mortars and plasters

[NZS 3104](#) Specification for concrete production

[NZS 3109](#) Concrete construction

[NZS 3114](#) Concrete surface finishes

[AS/NZS 3500.2:2003](#) Plumbing and drainage - Sanitary plumbing and drainage

[NZS 3501](#) Specification for copper tubes for water, gas and sanitation

[NZS 3602](#) Timber and wood-based products for use in building

[NZS 3603](#) Timber structures standard

[NZS 3604](#) Timber-framed buildings

[NZS 3622](#) Verification of timber properties

[NZS 3631](#) New Zealand national timber grading rules

[AS/NZS 4130](#) Polyethylene (PE) pipes for pressure applications

[NZS 4210](#) Masonry construction materials and workmanship

[NZS 4211](#) Specification for the performance of windows

[NZS 4218 2004](#) Energy efficiency - Housing and small building envelope

[NZS 4223.1](#) Glazing in buildings - Glass selection and glazing

NZS 4223.3	Glazing in buildings - Human impact safety requirements
NZS 4223.4	Glazing in buildings - Wind, dead, snow and live actions
NZS 4229	Concrete masonry buildings not requiring specific engineering design
NZS 4251.1	Solid plastering - Cement plasters for walls, ceilings and soffits
AS/NZS 4666	Insulating glass units
AS/NZS 4671	Steel reinforcing materials
AS/NZS 4858	Wet area membranes
AS/NZS 5601.1: 2010	Gas installations - general installations
NZS 6803	Acoustics - Construction noise

1.5 BUILDING RESEARCH ASSOCIATION OF NEW ZEALAND (BRANZ)

Weathertight Solutions Vol. 2: Stucco

Good practice guide: Tiling

Good practice guide: Membrane roofing

Bulletin 441 - Sealed joints in external claddings - 2. Sealants

Bulletin 519 - Fasteners selection

1.6 OTHER DOCUMENTS

Cement & Concrete Association of New Zealand

- [CCANZ CP 01](#): Code of practice for weathertight concrete and concrete masonry construction

WorkSafe New Zealand (OSH)

- [Approved code of practice for safety in excavation and shafts for foundations](#)

- [Repainting lead based paints](#)

Waterproofing Membrane Association Inc.

- [WMAI CoPTM](#): Code of practice for torch-on membrane systems for roofs and decks

New Zealand Demolition and Asbestos Association (NZDAA)

- [Best Practice Guideline for Demolition in New Zealand.](#)

- [New Zealand Guidelines for the Management and Removal of Asbestos](#)

New Zealand Metal Roofing Manufacturers Inc

- [NZMRM COP](#): NZ Metal roof and wall cladding: Code of practice

Window Association of New Zealand Incorporated (WANZ)

- [WANZ PQAS](#): Powder Coating Quality Assurance System

- [WANZ Installation Guide](#): The WANZ Guide to Window Installation as described in E2/A S1 Amendment 5.

2100 DEMOLITION WORK.

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Carry out work using persons competent and experienced in the trade.

1.2 SURVEY EXISTING BUILDING

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

1.3 HEALTH AND SAFETY

Conform with the Health and Safety in Employment Act 1992 and the NZDAA Best practice guidelines for demolition in New Zealand.

1.4 NUISANCE

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

1.5 NOISE

Refer to [NZS 6803](#), table 2, **Recommended upper limits for construction noise...** for the allowable upper limits of construction work noise in residential areas over the various time periods. Use silenced and noise insulated plant to ensure compliance.

2. PRODUCTS

2.1 MATERIAL FROM DEMOLITION

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

3. EXECUTION

3.1 DISCONNECT SERVICES

Before commencing demolition, disconnect services and remove associated fittings and equipment.

3.2 PROTECTION

Protect retained parts of existing buildings, site and site structures, trees and shrubs.

3.3 SUPPORT

Support and brace the existing structure during the cutting of new openings or the replacement of structural parts. Prevent debris from overloading any part of the structure. Do not remove supports until the new work is strong enough to support the existing structure. Ensure all work remains structurally stable and sound.

3.4 TEMPORARY SCREENS

Erect screens to maintain security and to prevent penetration of weather, dust and dirt.

3.5 SITE SAFETY

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

3.6 ASBESTOS

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

3.7

SALVAGE ITEMS

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

3800 TIMBER FRAMING

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

Use experienced competent carpenter familiar with the materials and techniques specified. Work to be carried out by or supervised by the appropriate LBP.

2. PRODUCTS

2.1 TIMBER FRAMING GENERALLY

Species, grade and level of treatment to [NZBC B2/AS1](#), [NZS 3602](#), tables 1 to 3 **Requirements for wood-based building components**..., and moisture content to [NZS 3602](#), table 4 **Allowable moisture content**..... Structural Grade (SG) to [NZS 3604](#), [NZS 3622](#) with properties to [NZS 3603](#).

2.2 TIMBER TRUSSES

To FTMA Code of Practice. Moisture content 16% at supply.

2.3 ACCESSORIES

Damp-proof course:	High impact embossed polyethylene
Stud straps	Polypropylene tape run horizontal at 300mm centres over flexible wall underlay, for drained cavities with stud spacings greater than 450mm.
Nails, bolts and screws:	Steel, stainless steel, galvanized steel of pattern to suit the location and to BRANZ BU 519: Fasteners selection. To NZS 3604 , 4 Durability and NZBC E2/AS1 .
Nail plates connectors:	Stainless steel and/or galvanized steel toothed or nailed plates to the plate manufacturer's design for the particular locations as shown on the drawings and to NZS 3604 , 4 Durability . Galvanized steel and stainless steel connectors and brackets to the connector manufacturer's design for locations shown on drawings and to NZS 3604 , 4 Durability and NZBC E2/AS1
Corrosion risk	For exterior timber, timber in damp areas and timber subject to occasional wetting, use only stainless steel (or equivalent) fixings and connectors, when the timber is treated with; Copper Azole (CuAz, Preservative code 58), Alkaline Copper Quaternary (ACQ, Preservative code 90), Micronise Copper Azole (code 88) or Micronised Copper Quaternary (code 89). For interior timber, treated with copper-based timber preservatives (H3.2 or higher), use a minimum of hot-dipped galvanized steel fixings and fasteners.

3. EXECUTION

3.1 ATTENDANCE

Provide and fix blocks, nogs, openings and other items as required by others.

3.2 MOISTURE CONTENT

Maximum allowable moisture content to [NZS 3602](#), table 4 **Allowable moisture content** ..., for framing supporting interior linings:

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

3.3 EXECUTION GENERALLY

To [NZS 3604](#) except as varied in this specification. To include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs). Set out framing in

accordance with the requirements of [NZS 3604](#) and as required to support sheet linings and claddings.

3.4 **INSTALL FLOOR, WALL AND ROOF FRAMING**

Floors and bottom plates framed and fastened to [NZS 3604](#), 7 **Floors**. Frame walls to required loading and bracing complete with lintels, sills and nogs, all fabricated and fastened to [NZS 3604](#), 8 **Walls**. Frame roof to required loading and bracing complete with valley boards, ridge boards and purlins to [NZS 3604](#), 10 **Roof framing**. Design and fit roof trusses complete with anchorage. All fabricated and fastened to [NZS 3604](#), 9 **Posts**, and [NZS 3604](#), 10 **Roof framing**.

3.5 **BATTENS**

For drained cavity construction nominal 20mm H3.1 cavity battens (non-structural) to [NZBC E2/AS1](#), 9.1.8.4 **Cavity battens**. For direct fix cladding window and door openings nominal 20mm H3.1 jamb battens to [NZBC E2/AS1](#), Fig. 72A.

4220 WALL CLADDING

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Carry out work using persons competent and experienced in the trade.

2. PRODUCTS

2.1 FIBRE CEMENT BACKING

Treated cellulose fibre in a matrix of cement and sand autoclaved sheet, 4.5mm thick, tinted.

2.2 TIMBER WEATHERBOARD

As selected, or radiata pine to [NZS 3631](#) for grading and to [NZS 3602](#), table 2 **Requirements for wood-based building components...**, for selection and treatment.

2.3 FIBRE CEMENT SOFFIT LINING

Cellulose cement autoclaved sheets.

2.4 TIMBER FASCIAS AND BARGE BOARDS

As selected, or radiata pine to [NZS 3631](#) for grading and to [NZS 3602](#), table 2 **Requirements for wood-based building components...**, for selection and treatment.

2.5 ACCESSORIES

Wall underlay:	Breather type, waterproof.
Rigid Air Barriers:	Proprietary rigid sheet pre-cladding systems.
Jointers:	To suit cladding type and thickness.
Nails, screws, fastenings:	Metal, size and pattern, to cladding manufacturer's requirements and complying with the relevant aspects of NZS 3604 , section 4: Durability and E2/AS1.

3. EXECUTION

3.1 MOISTURE CONTENT

Maximum allowable moisture content to [NZS 3602](#), table 4 **Allowable moisture content**

3.2 EXECUTION GENERALLY

To [NZBC E2/AS1](#) except as varied in this specification. Execution to include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs).

3.3 INSTALL WALL UNDERLAY/RIGID AIR BARRIER

Fix to the manufacturer's requirements. Refer to 1213 SELECTIONS for type

3.4 CAVITY BATTENS OR JAMB BATTENS

As specified in the section 3800 TIMBER FRAMING, to suit the selected wall cladding and construction type.

3.5 INSTALL FIBRE CEMENT PLASTER BACKING

Install drained cavity to the sub-sheathing manufacturer's requirements, including expansion joints and control joints as required.

3.6 PRIME OR SEAL TIMBER WEATHERBOARDS

Prime (for opaque finish) or seal (for clear finish) front and back faces, edges and end grain (minimum 2 coats) before fixing weatherboards and exterior trim.

3.7 INSTALL TIMBER WEATHERBOARDS

Install level, true to line and face, to [NZBC E2/AS1](#), 9.4 **Timber weatherboards**.

- 3.8 **INSTALL FIBRE CEMENT SOFFITS**
Cut sheets dry and scribe fit to fully support all edges and joints. Nail and drill for and insert fasteners to the sheet manufacturer's requirements. Fit complete with jointers and capping moulds. Refer to the cladding manufacturer's literature for fixing details and fixings durability requirements to [NZS 3604](#), section 4 **Durability**.
- 3.9 **INSTALL EXTERIOR TIMBER FINISHINGS**
Install timber fascias, barge boards, facings, beads, trim and enclosures level, true to line and face, with all end grain sealed and joints mitred.
- 3.10 **INSTALL FLASHINGS**
Install flashings, covers and soakers as detailed on the drawings and to [NZBC E2/AS1](#), 4.0 **Flashings**.
- 3.11 **USE OF SEALANTS**
Selection and use of sealants to follow BRANZ BU 441: Sealed joints in external claddings - 2. Sealants.
- 3.12 **COMPLETE**
Complete all flashings, finishings and trim so the cladding system is completely weathertight.

4310 ROOFING

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Use experienced competent roofers familiar with the materials and techniques specified. Work to be carried out by or supervised by the appropriate LBP.

1.2 WIND AND EARTHQUAKE LOADINGS

Use fixings and methods capable of sustaining the loads appropriate to the area as set out in [NZS 3604](#), section 5 **Bracing design**, and confirmed under 1212 COMPLIANCE.

2. PRODUCTS

2.1 METAL TILES

Profile, metal and finish as selected. Accessories, cappings, flashings, and fixings to match and to the roofing manufacturer's requirements.

2.2 CONCRETE TILES

Type and finish as selected. Accessories, capping, flashings, fixings and mortar pointing to match and to the roofing manufacturer's requirements.

2.3 ACCESSORIES

Tile battens:	Douglas fir or radiata pine, SG6, treated H1.2, size, spacing and fixing to NZS 3604 , table 10.12, Tile battens for all wind zones .
Roof underlays:	As selected.
Nails, screws, fastenings:	Metal, size and pattern, to roofing manufacturer's requirements and complying with the relevant aspects of NZS 3604 , section 4 Durability and NZBC E2/AS1 .
Flashings:	As required.

3. EXECUTION

3.1 STORAGE

Stack roofing and accessories on clean, level areas of the site. Cover and protect from damage and from weather until ready to fix in place.

3.2 SET-OUT

Set out the planned layout before fixing commences, to ensure true lines and the correct relationship to module, grid and roof features. Overlaps to face away from prevailing wind direction.

3.3 LAY ROOF UNDERLAY

Lay and fix to [NZBC E2/AS1](#), 8.1.5 **Roof Underlays**.

3.4 TAKE CARE

Take care to avoid damaging pre-finished roofing both during and after fixing. Mark only with chalk or spirit-based pen. Wear only soft-soled shoes on the finished surface. Remove metal filings daily.

3.5 INSTALL TILE BATTENS

Install to the roofing manufacturer's requirements, with joints fully supported and staggered.

3.6 INSTALL METAL TILES

Cut with tools specified by the roofing manufacturer. Fold ends and seal cut edges of tiles and accessories without damaging their integrity or finish, all to the roofing manufacturer's requirements. Lap metal tiles and fix complete with matching accessories, flashed to roof features and penetrations; all to the roofing manufacturer's requirements.

- 3.7 **INSTALL CONCRETE TILES**
Install and fix with metal ties, every second tile in a row and all perimeter tiles. Incorporate matching accessories, flash to roof features and penetrations, with anti-ponding boards and under-cloaks where required, to the roofing manufacturer's requirements.
- 3.8 **INSTALL ROOF WINDOWS/ROOFLIGHTS/SKYLIGHTS**
Check that the trimmed openings are formed and constructed to suit. Install and fix roof windows/lights/skylights in accordance with the manufacturer's installation instructions. Install flashings and overflashings as detailed and as required to make the installation completely weatherproof. Install selected accessories and hardware. Install and complete operating systems.
- 3.9 **FIXINGS AND SEALANTS**
Refer to the roofing manufacturer's literature for fixing details and to [NZS 3604](#) for fixings durability requirements. Select and use sealants only as recommended by the roofing manufacturer.
- 3.10 **INSTALL COVERS AND FLASHINGS**
Provide apron, verge and ridge flashings. Install and fix as detailed and to the roofing manufacturer's details and to comply with [NZBC E2/AS1, 4.0 Flashings](#), [NZBC E2/AS1: 5.0 Roof/wall junctions](#), and [NZBC E2/AS1: 6.0 Parapets](#).
- 3.11 **PENETRATIONS**
Flash and overflash penetrations through the roof. Fit proprietary boots to pipework penetrations.
- 3.12 **COMPLETE**
Ensure the work is complete with flashings, undercloaks, valleys, ridges and hips properly installed so the finished roof is completely weathertight.
- 3.13 **CLEAR**
Clear trade debris and unused materials from the roof and surrounds regularly during the work and at completion. Sweep down the completed roof and flush out spoutings, gutters and rainwater pipes.

4520 ALUMINIUM WINDOWS AND DOORS

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Fabricators/Installers to be experienced, competent trades people familiar with the materials and techniques specified.

1.2 CERTIFICATION

Provide documentation that the windows and doors comply with [NZS 4211](#) and safety glass complies with [NZS 4223.3](#) as modified by [NZBC F2/AS1](#) and [NZBC B1/AS1](#).

1.3 WIND LOADINGS

Refer to section 1212 COMPLIANCE for wind zone.

2. PRODUCTS

2.1 WINDOW AND DOOR REVEALS

As selected, manufactured to comply with [NZS 4211](#). Timber jamb liners to [NZS 3602](#).

2.2 FLASHINGS

To [NZBC E2/AS1](#), 9.1.10 **Windows and Doors** and as required.

2.3 POWDER COATING FINISH

To WANZPQAS: Powder Coating Quality Assurance System. All finished surfaces to show uniformity of gloss and colour (to match sample) free of all coating defects.

2.4 SEALANT, GLAZING TAPE AND GASKETS

To the window manufacturer's requirements.

2.5 FIXINGS

Ensure fixings and bracketing are compatible with aluminium. Do not use electroplated zinc fasteners or brass fastenings.

3. EXECUTION

3.1 OPENING PREPARATION

Confirm framing openings (including jamb battens for direct fix cladding) on site for dimension, plumb and straightness prior to fabrication or ordering of aluminium joinery. Prepare and trim to WANZ Window Installation Guide requirements. For openings over 600mm wide on cavity construction provide sill support bars.

3.2 EXECUTION GENERALLY

To [NZBC E2/VM1](#) and [NZBC E2/AS1](#). Install to WANZ Window installation Guide requirements.

3.3 HANDLING

Avoid distortion of elements during transit, handling and storage. Prevent pre-finished surfaces from rubbing together. Prevent contact with mud, plaster and cement. Do not deliver to site any elements which cannot be immediately unloaded into suitable conditions of storage.

3.4 CORROSION PROTECTION

Seal or suitably coat cut ends and holes drilled in aluminium before the frames are installed. Before fixing, apply bituminous coatings, slips or underlays between dissimilar metals in contact, or aluminium in contact with concrete.

- 3.5 **FIX FRAMES**
Fix frames rigidly in place without distortion, to the window manufacturer's requirements and to [NZBC E2/AS1](#), 9.1.10.8, **Attachments for windows and doors**, plumb, true to line and face, weathertight and with all openings operating freely.
- 3.6 **DRAINAGE**
Anti-condensation channels to sills. All sills to sashes and fixed lights to incorporate positive drainage to the exterior.
- 3.7 **GLAZING INSTALLATION**
All glass held in aluminium beads and black PVC gaskets.
- 3.8 **SAFETY GLASS INSTALLATION**
Use in doors, sidelight panels, low level windows and all other locations to comply with [NZS 4223.3](#), as modified by [NZBC F2/AS1](#), 1.0 **Glazing** and [NZBC B1/AS1](#), 7.0 **Glazing**.
- 3.9 **INSTALL FLASHINGS**
Install flashings to heads, jambs and sills of frames as supplied and required by the window manufacturer and as detailed on the drawings. Finish on head flashings to match window finish.
- 3.10 **SEAL FRAMES ON SITE**
Seal frames to each other and to adjoining structure and finishes, all as required by the window manufacturer and to make the installation weathertight. Provide a continuous internal air seal between reveals and framing, using sealant over a backing rod.
- 3.11 **SAFETY**
Indicate the presence of transparent glasses for the remainder of the contract period, with whiting, tape or signs compatible with the glass type. Indicators other than whiting must not be applied to the glass surface. Permanent manifestations to comply with [NZS 4223.3](#), 303.1 **Manifestations** (making glass visible).
- 3.12 **CLEAN GLASS AND FRAMES**
Clean off or remove glass indicators at completion of the building. Clean glass inside and out to a shining finish. Clean down both sides of window and door frames using the methods required by the window and door manufacturer.

4554VS VELUX OPENING AND FIXED SKYLIGHTS

1. GENERAL

This section relates to the manufacture, supply, and installation of VELUX opening and fixed skylights and roof windows:

It includes;

- operating systems
- accessories
- proprietary flashings

1.1 RELATED WORK

Refer to ~ for ~

Documents

1.2 DOCUMENTS

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

NZBC E2/AS1	External moisture
AS/NZS 2208	Safety glazing materials in buildings
NZS 3604	Timber-framed buildings
NZS 4223.3	Code of practice for glazing in buildings - Human impact safety requirements
NZS 4223.4	Code of practice for glazing in buildings - Wind, dead, snow and live actions

1.3 MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer's and supplier's documents relating to this part of the work:

Sales Brochure April 2014

Installation instructions for GGU/GGL Roof Window and Flashing

Installation instructions for VS/E Skylight

Installation instructions for FS Skylight

Installation instructions for VCM/E curb mounted Skylight

Installation instructions for FCM curb mounted Skylight

Installation instructions for EDW flashing

Installation instructions for EDL flashing

Manufacturer/supplier contact details

Company: VELUX New Zealand Limited

Web: www.velux.co.nz

Email: info@velux.co.nz

Telephone: 0800 650 445

Warranties

1.4 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

10 years: For VELUX Skylights

- Provide this warranty on the manufacturer/supplier standard form.
- Commence the warranty from the date of practical completion of the contract works.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.5 WARRANTY - INSTALLER/APPLICATOR

Provide an installer/applicator warranty:

2 years: For installation of VELUX Skylights

- Provide this warranty on the installer/applicator standard form.
- Commence the warranty from the date of installation.

Refer to the general section 1237 WARRANTIES for additional requirements.

Requirements

- 1.6 **QUALIFICATIONS**
Installers to be to be experienced, competent trades people familiar with the materials and techniques specified.
- 1.7 **NO SUBSTITUTIONS**
Substitutions are not permitted to any of the specified VELUX systems, components and associated products listed in this section.

Performance

- 1.8 **PERFORMANCE, WIND, DEAD, SNOW, AND LIVE ACTIONS**
The design wind pressures and snow loads to [NZS 3604](#). Live loads and glazing design, for glass or equivalent plastics, to [NZS 4223.4](#).

2. PRODUCTS

- 2.1 **SKYLIGHTS**
VELUX Skylights, either top hinged with INTEGRA (electric) or manual opening, or fixed skylight, for roof pitches between 15° to 90°. Manufactured from high quality treated timber, prefinished frame and sash in white, semi-gloss paint. External cappings in umber grey manufactured from polyester coated aluminium. Refer to SELECTIONS for type, finish and accessories.

Components

- 2.2 **FIXINGS**
VELUX proprietary fixings and brackets compatible with the skylight/roof window.
- 2.3 **GLAZING - FIXED SKYLIGHTS**
VELUX proprietary toughened double glazing with Argon gas fill and low E³ coating.
- 2.4 **HARDWARE**
Fasteners, stays, locks, vents and other hardware as supplied with the unit.
- 2.5 **FLASHINGS**
VELUX proprietary flashing solutions to VELUX instructions. Refer to SELECTIONS for type.

Accessories

- 2.6 **MANUAL OPENING DEVICES**
Proprietary rod for manual opening.
- 2.7 **MOTORISED OPENING DEVICES**
Motorised control unit including remote, electric motor, keypad and transformer.
Rain sensor for automatic control of opening.
- 2.8 **INSTALLATION ACCESSORIES**
VELUX installation accessories as supplied with the unit. Refer to SELECTIONS for type.

Finishes

- 2.9 **FINISH**
VELUX proprietary finishes.

3. EXECUTION

Conditions

- 3.1 **DELIVERY, STORAGE AND HANDLING**
Avoid distortion of elements during transit, handling and storage. Deliver in original containers, dry, undamaged with seals and labels intact. Prevent pre-finished surfaces from rubbing together. Prevent contact with mud, plaster and cement. Do not deliver to site any elements which cannot be immediately unloaded into suitable conditions of storage.
- 3.2 **PRE-INSTALLATION REQUIREMENTS**
Confirm framed openings on site for dimensions, to suit the VELUX proprietary Skylight / Roof Window. Unit dimensions are overall finished frame dimensions. For framing purposes refer to supplied installation instructions.
- 3.3 **EXECUTION GENERALLY**
Check that the preparation of the opening is to [NZBC E2/AS1, 8.4.17](#), Roof penetrations.
- 3.4 **HARDWARE GENERALLY**
Factory fit all required and scheduled hardware.
- 3.5 **RETAIN PROTECTIVE COVERINGS**
Retain protective coverings and coatings in place during fixing wherever possible. Provide additional protection to prevent marking of surfaces visible in the completed work. Remove protection on completion.

Installation

- 3.6 **GENERALLY**
Check that the trimmed openings are formed and constructed to suit the required units. Do not proceed until roof and structural openings are properly formed.
- 3.7 **INSTALL UNITS**
Install and fix the units strictly in accordance with manufacturer's requirements and installation instructions. Repack any thermal insulation around rough openings where disturbed by the installation to maintain continuity of thermal barriers. Install proprietary flashings (EDW, EDL) as detailed by VELUX to make the installation completely weatherproof.
- 3.8 **ACCESSORIES AND OPERATING SYSTEMS**
Install selected VELUX accessories and hardware and complete all operating systems.

Completion

- 3.9 **CLEAN FRAMES AND GLAZING**
On completion clean down both sides of unit frames, using the methods required by the manufacturer. Remove any manufacturer's stickers and clean glass. Ensure all installed units are adequately protected from damage and adverse weather during construction.
- 3.10 **CONFIRM**
Confirm the proper operation of hardware and operating systems on completion of the installation and again at completion of the contract works.

4. SELECTIONS

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

Skylights

- 4.1 **VELUX - FS - FIXED SKYLIGHT**
- | | |
|------------------|---|
| Location: | ~ |
| Brand: | VELUX |
| Model: | FS Fixed |
| Type/size: | ~, ~ |
| Glazing: | Pre installed. VELUX proprietary toughened double glazing with Argon gas fill and low E ³ coating. |
| Colour: | White, semi gloss finish |
| Roof type/pitch: | ~, ~ |

Components

4.2 VELUX FLASHING SYSTEM
Brand: VELUX
Roofing type: ~
Roof pitch: ~
Flashing type: ~, to match unit/roof type
Colour: Greyfriars

Accessories

4610 GLAZING

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Glaziers to be experienced, competent trades people familiar with the materials and techniques specified.

1.2 CERTIFICATION

If not supplied with windows, provide documentation that the safety glass complies with [NZS 4223.3](#) as modified by [NZBC F2/AS1](#) and [NZBC B1/AS1](#).

2. PRODUCTS

2.1 GLAZING TAPE

Pressure sensitive, self-adhesive vinyl foam tapes, selected to suit the glazing detail.

2.2 GLASS THICKNESS

As selected and to [NZS 4223.1](#), [NZS 4223.3](#), [NZS 4223.4](#) and [NZBC B1/AS1](#), 7.0 **Glazing**.

2.3 FLOAT GLASS

Clear ordinary annealed glass for general window glazing. Thickness as required by [NZS 4223.1](#).

2.4 INSULATED GLASS UNITS

As selected and to [AS/NZS 4666](#).

2.5 SETTING BLOCKS

Neoprene, 80-90 Shore A hardness, set at quarter points or to detail, at the base of glass panes.

3. EXECUTION

3.1 EXECUTION GENERALLY

To [NZS 4223.1](#), and for human impact safety glazing to [NZS 4223.3](#), both modified by [NZBC B1/AS1](#), 7.0 **Glazing**. Insulating glass units to [AS/NZS4666](#).

3.2 INSTALL GLASS TO ALUMINIUM FRAMES

Install glass to [NZS4223.1](#).

- Bead glaze to Section 4 Glazing.

- Channel glaze to Section 4 Glazing, and Section 5 for Framed, Unframed, Partly Framed Glass Assemblies.

3.3 SAFETY

Indicate the presence of transparent glasses, with whiting, tape or signs compatible with the glass type. Do not apply indicators other than whiting to the glass surface. Permanent manifestations to comply with [NZS 4223.3](#), 303.1 **Manifestation** (making glass visible).

3.4 CLEAN

Clean off or remove indicators at completion of the building. Clean glass inside and out to a shining finish.

5110 INTERIOR LININGS AND TRIM

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 FRAMING MOISTURE CONTENT

Maximum allowable moisture content to [NZS 3602](#), table 4 **Allowable moisture content**

1.2 PROTECT

Protect joinery, fittings and finishes already in place from water staining or damage from lining installation. Ensure building is weatherproof before lining work commences.

2. PRODUCTS

2.1 PLASTERBOARD

Gypsum plaster core encased in a durable face and backing paper formed for standard use, bracing use, fire rated use and water resistance use.

2.2 PLASTERBOARD ACCESSORIES

External angles:	Slim type 0.5mm galvanized steel.
Casing bead:	Slim type 0.5mm galvanized steel or PVC.
Cornice:	Plasterboard scotia type.
Nails:	Galvanized clouts 40mm x 2.5mm.
Screws:	40mm x 6 gauge zinc electro-plated bugle head gypsum drywall screws
Jointing compound & paper tape:	To the board manufacturer's requirements.
Adhesive:	Multi-purpose water based wallboard adhesive.

2.3 NAILS

Zinc-plated steel, stainless steel and galvanized steel of pattern to suit location and to BR ANZ BU 519: **Fasteners selection**.

2.4 INTERIOR FINISHING TRIM

Timber selection to [NZS 3602](#), table 3 **Requirements for wood-based building components**.... Profile as selected or to match existing. Jointer profiles to suit location.

3. EXECUTION

3.1 SUBSTRATE

To [NZS 3604](#), section 8 **Walls**, section 10 **Roof framing**, section 12 **Interior linings**, section 13 **Ceilings**, and the standard required by the lining manufacturer's requirements. Ensure moisture content of timber framing is at or below specified levels.

3.2 CONFIRM LEVELS OF PLASTERBOARD FINISH

Before commencing work, confirm the surface finish assessment procedures necessary to ensure the specified levels of finish will be obtained. Provide levels of finish as laid down in [AS/NZS 2589](#).

3.3 LINE PLASTERBOARD CEILINGS AND WALLS

Line walls and ceilings with plasterboard sheets, fastened to the plasterboard manufacturer's requirements.

3.4 FIX PLASTERBOARD EXTERNAL ANGLES

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

3.5 PLASTERBOARD JOINTING AND STOPPING

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

und followed by a coat of finishing compound. Allow to dry and lightly sand off. All to the plasterboard manufacturer's requirements.

3.6

LEVELS OF FINISH

Provide levels of finish to standards laid down by [AS/NZS 2589](#) as follows:

Level 4: For thin coating finishes (paint) and surfaces receiving light texture or wall covering finishes

Level 5: Where specifically detailed for surfaces receiving thin coating finishes (paint).

3.7

INSTALL TRIM

Scribe and fit reveal linings to exterior timber joinery, architraves to interior joinery, skirting to walls and timber beads to wall/ceiling junctions, and other trim as detailed.

6700 PAINTING

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Carry out work using competent and experienced painters.

1.2 HEALTH AND SAFETY

Refer to the requirements of the [Health and Safety in Employment Act 1992](#) and if elimination or isolation is not possible, then minimise the hazards in this work. Refer to WorkSafe NZ publication, [Repainting lead based paints](#), for the required procedures and precautions when treating or removing lead based paint, burning or sanding off paint, or using solvent based paint removers.

1.3 SELECTIONS

Confirm all selections, colours and finishes with the owner.

2. PRODUCTS

2.1 PAINT

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

2.2 GAP FILLERS

Linseed oil, putty, plastic wood, wood filler or plastic filler, to suit and to match the surface being prepared.

3. EXECUTION

3.1 INSPECT SURFACES

Inspect surfaces being painted and report to the owner any that will not, after the preparatory work laid down by the paint manufacturer, allow work of the required standard. Confirm that all areas have adequate lighting and are sufficiently free of other construction activities to enable painting work to proceed.

3.2 EXISTING FINISHED SURFACES

Ensure that all surfaces are sound, remove any, blistered, drummy, chalky, powdery, loose, soft or corroded material and make good. Remove or treat any surface contaminants or moss and mould to manufacturer's requirements.

3.3 PROTECT

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

3.4 REMOVE HARDWARE

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

3.5 PRIMING AND SEALING

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

3.6 ENVIRONMENTAL CONDITIONS

Carry out work within acceptable temperature and humidity limits, with timber dry, all to the requirements of the paint manufacturer.

3.7 SHARP EDGES, CRACKS AND HOLES

Repair as required by the paint manufacturer.

- 3.8 **PREPARE SURFACES**
Prepare surfaces as required by the paint manufacturer. Make good all damage and defects.
- 3.9 **PAINT APPLICATION**
Apply paint by brush and/or roller to suit the location of the coating and to the paint manufacturer's requirements. Do not spray on site without express permission.
- 3.10 **MANUFACTURER'S MANUALS**
Refer to the paint manufacturers' manuals and follow their preparation, sequence and application requirements applying to each system. Ensure all paint coats in any system are supplied by the same manufacturer.
- 3.11 **SCUFF BETWEEN COATS**
Scuff between all coats to remove any dust pick-up, protruding fibres and coarse particles.
- 3.12 **FINISHED PAINT SURFACES**
Finished paint surfaces to show uniformity of gloss and colour, with the correct thickness for each coat, and freedom from painting defects. Ensure finished work is clean and free of any disfigurement.
- 3.13 **CLEAN**
Clean adjoining surfaces, glass and fittings of any paint contamination.
- 3.14 **REFIT HARDWARE**
Refit hardware without damage to the hardware or the adjoining surfaces.

7410 RAINWATER SPOUTING SYSTEM

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 LIAISON

Ensure liaison with associated installations to ensure material selections are compatible and required flashing work is completed.

1.2 ELECTROLYTIC ACTION

Avoid electrolytic action by eliminating contact or continuity of water between dissimilar metals.

2. PRODUCTS

2.1 PVC-U SPOUTING

Profile, jointing, brackets and fittings brand matched and complete to the spouting manufacturer's specifications.

2.2 PVC-U DOWNPIPES

Tubes, stand-off brackets and fittings brand matched and complete to the manufacturer's specifications.

3. EXECUTION

3.1 INSTALL PVC-U SPOUTING AND DOWNPIPES

Fit and screw fix brackets, set to falls to outlets. Ensure solvent welded or rubber ring jointed spouting sections are complete with all fittings to the spouting manufacturer's requirements. Screw fix stand-off brackets, set pipes plumb and clear of the wall, solvent welded. Discharge into stormwater bends.

3.2 ENSURE

Ensure rainwater services are operational, flashings complete and the building weathertight.

7430 DRAINAGE SYSTEMS

1. GENERAL

Refer to 1213 SELECTIONS/drawings for specific product, material, accessories and finish selections.

1.1 QUALIFICATIONS

Carry out work by or under the direct supervision of a person registered under the [Plumbers, Gasfitters and Drainlayers Act 2006](#).

1.2 AS BUILT DOCUMENTS

Supply a 1:100 as-built drawing to the BCA and the owner on completion.

2. PRODUCTS

2.1 MATERIALS

Concrete:	17.5 MPa prescribed grade.
Reinforcement:	Grade 300 deformed bars.
PVC-U pipes:	PVC-U pipes bends, junctions, fittings and joints.
Field drains:	Plastic pipes for field drains perforated and coiled with filter fabric cover.
Drainage/filling materials	
Granular fill:	Clean gravel or crushed stone or a blend of these. Particle size from minimum 7mm to maximum 20mm.
Selected fill:	Fine grain soil or granular material suitable for bedding, excluding topsoil.
Ordinary fill:	Top soil or other excavated materials.

2.2 FITTINGS

Gully traps:	To NZBC G13/AS2 , 3.3 Gully traps , complete with grating.
Strip drain channel:	Proprietary, modular, variable invert, PVC-U or precast concrete drainage channel sections and drainage sump, embedded in site concrete and fitted with selected metal gratings.

3. EXECUTION

3.1 EXCAVATE

Excavate for drains to a firm even base with correct gradients set in straight runs.

3.2 MANUFACTURER'S REQUIREMENTS

All drainage installations to the pipe and fitting manufacturer's requirements.

3.3 EXECUTION GENERALLY

Carry out drainage work as applicable to:

- [NZBC G13/AS2](#) and [NZBC E1/AS1](#).

3.4 LAY STORMWATER DRAINS

Confirm the required location of downpipes and finished ground levels before commencing pipework. Set downpipe bends in concrete brought up to protect the top of the bend from damage. Lay drains in straight runs to correct gradients to discharge into the NUO's stormwater system.

3.5 FIELD TEST

Field test drains for watertightness to the satisfaction of the BCA inspector.

3.6 BACKFILL

Backfill drain lines in 150mm layers, well tamped but without disturbing the drains. Finish off garden areas with 150mm of topsoil, slightly mounded above the finished ground line. Public roads and footpaths to be made good to the controlling authority requirements.

