Generation 2NZ Timber Cladding Systems







NATURAL. DURABLE. CLASSIC.



Generation 2 bevelback weatherboards are proudly 100% New Zealand made.

We pride ourselves on delivering a premium weatherboard to work with and know you are well protected.

- Treatment warranty of 50 years protection.
- Treated with Koppers MicroPro® Wood Treatment Technology.
- Reduced corrosivity allowing the use of corrosion-resistant fasteners including hotdipped galvanised, stainless steel or other approved fasteners to meet building code requirements
- New Zealand Radiata Pine sourced from renewable plantation forestry. KLC is a Chain of Custody, FSC® Certified Company.
- Eco-friendly with four environmental credentials.
- Weatherboards up to 6.3 metres in length.
- Formaldehyde-free and low volatile organic compounds used in the treating and gluing manufacturing process.
- No odour.
- A two coat, superior alkyd (oil based) priming system.
- Approved for aluminium contact.

Table of Contents

DISC	LAIME	R	3
1	GENE	ERAL INFORMATION	
	1.1	Scope and General Information	4
	1.2	Product Information	4
	1.3	Architects/Designers Responsibility	6
	1.4	Legal Information	6
	1.5	On-Site Storage and Handling - KEEP IT DRY	7
2	LIFE	SERVICEABILITY	
	2.1	Warranty	8
3	GUID	ELINES FOR INSTALLATION	
	3.1	Pre-Installation Checks	0
	3.2	Framing 1	0
	3.3	Nail Selection	
	3.4	Installation	
	3.5	Joins and Pipe Penetration	
	3.6	Wall Underlay and Flashing Tapes	
	3.7	Windows and Door Openings	
	3.8	Flashings	
	3.9	Sealants	
	3.10	Air Seals	
	3.11	Wall Cladding Cavities 1	
	3.12	External and Internal Corner Details	
	3.13	External and Internal Box Corner Details	
	3.14	Windows and Doors (Aluminium) 1	
		Window and Door Sills	
		Window and Door Heads 1	
4	FASC	CIA INSTALLATION 1	7
5	PAIN		
	Top (Coat Light Reflectance Values1	8
		ne Cool Colour Technology 1	
6		ITENANCE 1	
7	HEALTH AND SAFETY		
8	DETA	AILED DRAWINGS2	11

DISCLAIMER

The recommendations contained in this document are based on good building practice, but are not an exhaustive statement of all relevant information. The successful performance of the system relies on many factors outside the control of KLC Limited, such as the quality of workmanship and design. KLC Limited will not be responsible for the installation of the products outside of the control of KLC Limited. It is the responsibility of the building designer of the intended project to ensure that the details and recommendations provided are suitable and that the design is executed appropriately.

1.1 Scope and General Information

The KLC Generation 2 H3.2 range of Bevelback weatherboards, fascia, cavity battens, scriber and finishing boards (D4S) have been designed as a complete system.

Generation 2 H3.2 Bevelback weatherboards can be used for buildings that fall within the scope of NZS 3604/2012 Timber Framed Buildings and Acceptable Solutions E2/AS1. Buildings that have a weathertightness risk score of more than 6 as assessed in E2/AS1 section 3 will require a drained and ventilated cavity.

Including:

- NZS 3617: Profiles of Weatherboards, Fascia Boards and Flooring
- NZS 3602:2003 Timber Wood Based Products
- AS/5068 Finger Joints in Structural Products
- AS/5069 Finger Joints in Non-Structural Products
- NZS 1328.1:1998 Glued Laminated Structural Timber

Meets and Exceeds

NZS 3640:2003 Preservation of timber and wood-based products

The information contained within this guide are based on good building practice and are not a complete statement of all relevant building practices.

The drawings are as accurate as possible. KLC have specified extra flashing's in some areas that are over and above the requirements of NZBC E2/AS1 External Moisture.

1.2 Product Information

KLC Generation 2 H3.2 products are manufactured from short lengths of clear high grade radiata pine that are finger-jointed together using a structural glue to produce an untreated length of 6.3metres (substrate).

The substrate is then treated to H3.2, using the revolutionary wood treatment technology called MicroPro® (MCA). MicroPro® (MCA), MicroPro® (MCA), MicroPro® (MCA), MicroPro® (MCA), MicroPro® (MCA) preservative system protects wood products from insects, termites and fungal decay and is manufactured by Koppers Performance Chemicals. The preservative contains a mixture of microPro® treatment system is a water-borne, copper-based biocide preservative system with four Environmental Certifications.











These environmental certifications have been awarded to Kopper MicroPro® Wood Treatment Technology



Scientific Certification Systems

MicroPro® is the first treated wood process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment. As the leader in green building product certification since 1990, SCS was the first company to offer manufacturers a program for verifying the accuracy of environmental claims on products.



Greenguard® Environmental Institute

MicroPro® is environmentally sustainable, this is demonstrated in low leaching of treatment preservatives from the timber, low volatile organic compound (VOCs) emissions and the award of the GREENGUARD Children and Schools' Certification from the Greenguard® Environmental



Global GreenTag International - GreenRate™

MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate[™] Level A award under Version 4.0 of the Global GreenTag International Product Certification Standard. It is the highest-level achievement for a product under Global GreenTag's GreenRate[™] product rating system – declared by the certification body as 'Fit-for-Purpose' and confirmed for Green Building compliance.



Global GreenTag International - Health Declaration

The GreenTag[™] Product Health Declaration proves that Koppers MicroPro® Wood Treatment Technology is safe for human health (and ecosystems) and can be used with absolute peace of mind in workplace and residential building projects. Reducing risks for Building, Design and Procurement Professionals whilst supporting the user and occupant's health and wellbeing compared to products that don't.

The blanks are then kiln dried (KD) to a pre-determined moisture content. The KD H3.2 substrate is then profiled to various Weatherboards, Fascia, Finishing Boards (D4S), box corners and other profiles.

To complement these appearance grade products, a dual coat oil based (alkyd) priming system is applied.

Note: Pre-priming does not waterproof the product and care must be taken to ensure dryness of product before final painting.

When using pre primed weatherboards and fascia ensure top coat painting occurs soon as possible after installation. Refer 4.0 Painting page 18

KLC will not "Warranty" any Generation 2 H3.2 product that have not been stored correctly and installed by a professional Licenced Building Practitioner and as per the NZ Building Code NZS 3604 and painted in accordance with AS/NZS 2311 2017.

KLC Generation 2 exterior cladding systems have been designed for use in residential and small commercial building applications.

KLC Generation 2 H3.2 exterior cladding systems shall be either direct fixed to framing over a wall underlay or fixed to a Generation 2 H3.2 cavity batten, this method is described in the Acceptable Solution E2/AS1 paragraph 9.1.8.

Timber weatherboards are included in the Acceptable Solution E2/AS1, section 3.0.

All types of weatherboard profiles may be used in low risk buildings. Only bevel back, rusticated and vertical shiplap weatherboards should be used in high risk buildings. For information on requirements for rained ventilated cavities refer to the Acceptable Solution E2/ AS1, paragraph 9.1.8.

KLC Generation 2 H3.2 weatherboards are limited to use in buildings with a risk matrix score of 20 or below as outlined in E2/AS1 paragraphs 3.4.1 to 3.4.3 (Weather Tightness Matrix)

Weatherboard cladding systems are an acceptable solution under the terms of the New Zealand Building Code E2/AS1. NZBC E2/AS1 section 1.5 specifies that the design, installation and alteration of cladding is classed as restricted building work.

1.3 Architects/Designers Responsibility

We have made the drawings as accurate as possible. We have even specified extra flashings in some areas that are over and above the NZ Building Code E2/AS1 External Moisture.

But it is the Architects/Designers responsibility to confirm the suitability of these details for his/her particular project and the client.

The Architect/Designer will need to determine the RISK MATRIX that is project specific, that then determines the details required.

Builders that have questions about these details will need to contact the project specific Architect or Designer.

1.4 Legal Information

KLC Ltd and its Agent AIPdesignNZ Ltd have no reason to believe the information in the details are inaccurate.

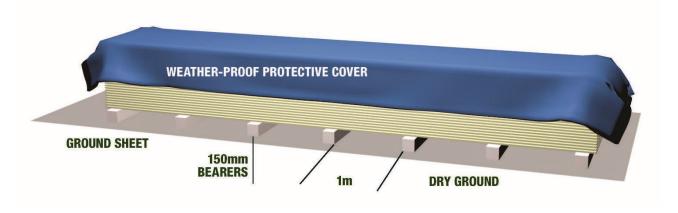
KLC Ltd and its Agent AIPdesignNZ Ltd does not warrant the accuracy, adequacy or completeness of such information and we do not undertake to keep the information in the details updated.

KLC Ltd and its Agent AlPdesignNZ Ltd DOES NOT:

- a. Give any assurances that the details and information will be suitable for your purposes and you agree that you will not rely on the information and you will make your own independent assessments (with the aid of qualified independent advise).
- b. Accept responsibility for any loss, damage (including indirect, special or consequential loss or damage), however caused (including through negligence) that you may directly or indirectly suffer in connection with your use of or reliance on the KLC Ltd and AIPdesignNZ Ltd Details. Any condition, warranty, right or liability which would otherwise be implied is excluded.

1.5 On-Site Storage and Handling – KEEP IT DRY

Correct on-site storage of Generation 2 H3.2 products prior to installation is critical.



Ensure the product is stored on site correctly. Inside, under cover or as per the diagram above if stored outside.

- . MUST remain dry at all times prior to installation.
- MUST be stored indoors on a flat surface off the ground, on bearers 150mm above ground, supported every one
 metre.
- If stored outside, there MUST be a moisture barrier (ground sheet) under the stack and a secondary waterproof cover. Allow for a good air circulation.
- Keep out of direct sunlight and protected from both rain and ground moisture uptake.
- Ensure that the framing and cavity battens are dry prior to installation. The underside of the weatherboard is vulnerable to water ingress. The moisture content must not exceed 15% at time of installation.

Note: Generation 2 H3.2 products are made from kiln dried timber. Timber will absorb moisture in a damp environment and release it in a dry environment. If Generation 2 H3.2 products do absorb moisture prior to installation, dimensional swelling may occur, this will disappear when the timber returns to its original moisture content. If the boards have become wet, check the dimensions of the profile. If the dimensions are larger than the specification leave the boards to dry and regain correct profile specifications before installation.

Handling

Care should be taken when unloading KLC Generation 2 product. The profiles should be unloaded by hand or with a Hiab forklift, ensure that there is a minimum of 2 well-spaced load points to avoid excessive bending or flexing during unloading.

- Do not tip these products from a truck.
- · Avoid scratching the face of the board.
- · Always carry profiles products on their edge to avoid excessive bending.
- · Avoid leaning against any vertical surface to avoid any bending.

2 Life Serviceability

2.1 Warranty

KLC Generation 2 weatherboards have a durability warranty based on the Treatment Manufacturer's 50-year limited guarantee.

Under the New Zealand Standards NZS 3602:2003 Timber Wood Based Products, weatherboards and cladding products must have a minimum durability of 15 years.

The life service is subject to correct installation, paint coating of the product, maintenance and care.

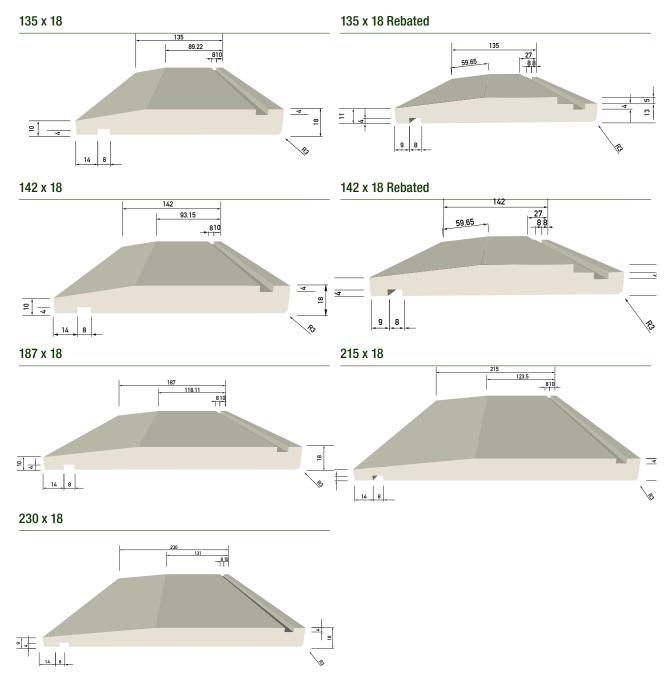
When KLC Generation 2 weatherboards are installed according to the instructions contained in this manual and by a Licenced Building Practitioner (LBP) or suitably qualified person, the service life can be expected to be considerably longer.

Full details covering all the aspects of pre-installation care, installation, painting and maintenance are contained within this manual.

Bevelback Weatherboard Measurement Table

Bevel Back Profile Sizes	Finish Grade	Lap	Cover	Length	Lm/m2
135x18	Finger Jointed	32mm	103mm	6.3m	9.71
135x18 Rebated	Finger Jointed	32mm	103mm	6.3m	9.71
142x18	Finger Jointed	32mm	110mm	6.3m	9.09
142x18 Rebated	Finger Jointed	32mm	110mm	6.3m	9.09
187x18	Finger Jointed	32mm	155mm	6.3m	6.45
215x18	Finger Jointed	32mm	183mm	6.3m	5.46
230x18	Finger Jointed	32mm	198mm	6.3m	5.05

Full details covering all the aspects of pre-installation care, installation, painting and maintenance are contained within this manual. Bevelback Weatherboard Measurement Table.



The products should be installed by a competent qualified person in accordance with the provisions of the Building Code E2/AS1 (sec 9.4) and NZS 3604 (2011). For further information visit BRANZ Good Practice Guide, Timber Cladding.

3.1 Pre-Installation Checks

There are many simple checks that should be carried out prior to installation which can avoid issues during installation.

- Where any KLC Generation 2 profile has been exposed to moisture prior to installation, the moisture content should be checked. If the moisture content is above 15% then the product should not be installed until it returns to 15% or less.
- When excessive moisture or swelling is found the profile should be put aside and allowed to dry to its original
 profiled dimensions. This is best done by placing the product in fillet and stored as outlined above. Filleting allows
 air movement through the boards for drying.
- · Check for any defects or damage caused during delivery or storage.
- · Remove any dirt, dust or stones which may be on the product.
- If there are any areas where a primer coat has been removed or damaged, the affected area should be sanded smooth and a primer coat applied.
- This product is primed with a factory applied alkyd (oil based) architectural coating, a similar oil-based undercoat
 or primer must be used for touch-up work
- If building in "sea spray or geothermal zones", it is the building designer's responsibility to ensure all specified fastenings, fittings, and flashings comply with NZS 3604, Section 4 Durability.

3.2 Framing

- The timber framing must comply with NZS3604 Timber Famed Buildings with maximum of 600mm centres.
- The moisture content of the framing must not exceed 20% at the time of fixing the weatherboard. Excessive
 moisture content in the timber framing may cause movement in the framing structure thus altering the
 weatherboard positioning.
- · Additional framing may be required at soffit, corners, windows and door opening

3.3 Nail Selection

KLC Generation 2 H3.2 weatherboards are treated using the revolutionary water based micronised copper timber treatment technology called "MicroPro".

- In most applications both stainless steel and hot dip galvanised steel fixings and fasteners are safe to use with MicroPro® treated exterior products. Compliant to AS/NZS 4680 and to NZBC E2/AS1 Table 24.
- Note In sea-spray and Geothermal zones nails must be Stainless Steel.
- · Hand nailing is recommended as the use of nail guns can cause fibre damage to the face and back of the board.

Based on MicroPro® ISANTA fastener corrosion test results, MicroPro® treatment is considered similar to CCA treatment with regard to the effects on fastener material. Therefore, in most applications both stainless steel and hot dip galvanised steel fixings and fasteners are safe to use with MicroPro® treated exterior products. Compliant to AS/NZS 4680 and to NZBC E2/AS1 Table 24.

Nail Option A	Nail Option B
One Nail to Framing (refer E2/AS1 - Table 24)	Structurally Fixed Cavity Batten (Refer BRANZ Bulletin No 582 & Test Report ST0589)
Weatherboard & Cavity Batten Fixing 90 x 3.55mm Jolt Head, Hot Dip Galvanised Nails OR 75 x 3.15mm CSK Annular Grooved, HD Galvanised Nail 75 x 3.15mm CSK Annular Grooved, SS Nail	BATTEN FIXING OPTION 60 x 2.8mm Jolt Head, Hot Dip Galvanised Nail 65 x 2.87mm Power Driver, Hot Dip Galvanised Nail 65 x 2.87mm Power Driver, Annular Grooved SS Nail

Bevelback Nail Selection Table

Timber size (mm)	Generation 2 profile	Recommended minimum nail size
135 x 18, 142 x 18, 180 x 18, 187 x 18, 215 x 18 and 230 x 18	Bevelback direct fixed weatherboards	75 x 3.15
135 x 18, 142 x 18, 180 x 18, 187 x 18, 215 x 18 and 230 x 18	Bevelback cavity fixed weatherboard	75 x 3.15
85 x 18 & 100 x 18, 100 x 100 cover	External and Internal Box Corners	50 x 2.50
All sizes D4S	Finishing Boards	50 x 2.00
40 x 18	Scriber	50 x 2.00
45 x20	Cavity Batten	60 x 2.80

3.4 Installation

- Installation must be by a Licensed Building Practitioner (LBP), or supervised by an LBP. Please refer to BRANZ Bulletin Number 468, Fixing of Timber Weatherboards or refer to detail drawings contained in this document or online.
- Using a TP (timber packer), position and fix the bottom weatherboard. Ensure there is a minimum of 50mm overlap below the bottom plate or bearer. The purpose of a TP is to provide the accurate layback angle for the bottom board.
- Use 75 x 3.15 JH hot-dipped galvanised or annular grooved stainless steel nails for fixing either directly into the framing or structural batten.
- Leave a 2mm expansion gap in the lap of rebated profiles, ie Rusticated & Bevelback to allow for expansion and contraction.
- Boards must be single nail fixed to allow for seasonal movement, with an overlap of 32mm.
- Single nail all weatherboard profiles, regardless of size. Nailing boards together will likely result in split boards.
- Hand nailing is recommended as nail guns can cause damage to the surface of the board. If a nail gun is used, a nonmarking attachment should be used to avoid damage to the surface.
- Nails must have a minimum penetration of 35mm into the wall framing or structural batten. Refer drawing CF20 BB44,
 CF20 BB44+ and DF BB44.
- · Pre-drill all boards 50mm from the end to avoid end splitting.
- Nail holes should be pre-drilled especially in areas around joins and the end of boards. This is to avoid splitting the product.
- Location of the nails is to be a maximum overall distance of 42mm from the bottom edge of the board. 32mm minimum overlap and 10mm to the nail fixing point. Aligning the weather grooves.
- Nails should be applied at an upward angle of 10degrees to avoid water entering through the fixing point.
- · All nails should be punched to a depth of no less than 2mm.
- As soon as nails are punched below the surface of the weatherboard, they must be filled with an exterior grade filler immediately to prevent moisture uptake in the weatherboards.
- · The top board may need to be cut to suit the soffit.

IMPORTANT NOTE: Timber weatherboards are designed to accommodate thermal, seismic and moisture related movement in the board laps. Each weatherboard is single nailed so that the weatherboards can expand, contract and move independently of each other. KLC does not recommend the use of any sealant/glue being used by the painters under the lap of each board, this inhibits the natural and ongoing movement of the weatherboard.

3.5 Joins and Pipe Penetrations

It is an industry recommendation that all forms of timber treated products, when cut, have a cut-end treatment applied (e.g. a zinc naphthenate-based product like Reseal Clear or Protim) which restores the treated envelope. This refers to MCA, CCA and LOSP treated products.

KLC's manufacturing and tested treating process and the inclusion of the two coat oil based priming system being applied to all of the Generation 2 profiles, KLC recommends that all during the installation process, cut ends, drill holes, rebates and notches must be re- sealed/primed immediately with a suitably approved product.

KLC recommends following best building practices and industry recommendations which includes the use and application of end seal treatment product or alternatively 2 coats of an oil based primer being brush applied.

KLC recommends the use of Koppers "Protim Reseal".

End sealing can be achieved by the application of 2 coats of brush-applied, quality Alkyd (oil based) primer allowed to dry between coats.

Joining Weatherboards

Refer CF& DF BB45 & BB45

Avoid joining Generation 2 H3.2 weatherboards whenever possible, but if unavoidable use a 45-degree scarf joint directly over studs or Generation 2 H3.2 FJ Cavity Batten. Care must be taken to angle mitre joints away from the prevailing weather, and or use Flat Soakers. Alternatively, a butt join is acceptable using flat soakers.

Face the overlapping board away from the prevailing weather direction using one fixing through the overlapping board (predrill the hole to avoid splitting). Re-prime the cut ends.

Nails should be driven and punched below the surface to allow for filling.

Prime then fill with an exterior grade wood filler immediately after nailing.



Apply two coats of an Alkyd (oil based) primer or end sealer.

Pipe Penetrations

Refer to drawings CF & DF BB54 & BB55

Pipes to have a 5° Slope to the outside.

A flexible flashing tape with a minimum Of 10mm coverage around the outside.

Install as per the manufacturer's instructions



 \square Apply two coats of an Alkyd (oil based) primer or end sealer.

3.6 Wall Underlay and Flashing Tapes

Refer Drawings CF & DF BB13, BB23

Use only underlays that meet the requirements of E2/AS1 Table 23

3.7 Windows and Door Openings

Refer Drawings: WINDOWS – CF & DF, BB10, BB11, BB12 & BB13
Refer Drawings: DOORS – CF & DF, BB20, BB21, BB22 & BB23
Refer Drawings: METER BOX – CF & DF, BB30, BB31, BB32 & BB33

3.8 Flashings

Refer drawings CF & DF BB13, BB23 & BB33

Refer to NZS3604 section 4 and E2/AS1 Table 20 for durability requirements and E2/AS1 section 9 for flashing design and fabrication details.

3.9 Sealants

All sealants must be suitable for exterior use and while they will assist with providing weathertightness at laps and joins they must not be relied on to provide total protection.

3.10 Air Seals

Air seals are a barrier that prevent air flowing into the building. Air seals are required where a hole or penetration through the external cladding occurs – windows, doors, pipes, meter boxes etc. See E2AS1 for complete building air seal requirements.

A foam backing rod of a suitable diameter must be installed in the gap, a sealant to the perimeter that forms a waterproof air seal prior to applying the sealant.

Backing rods and sealants must be used in accordance with the manufacturer's instructions

3.11 Wall Cladding Cavities

Refer Drawings CF & DF BB44

If the weathertightness risk score is higher than 6 a drained and ventilated cavity will be required between the underlay and Generation 2 weatherboards.

If a cavity is required, structurally fix Generation 2 treated cavity battens to the framing in accordance with BRANZ Bulletin 582. Cavity construction, Including flashing and vermin proofing, must be in accordance with the requirements as set out in E2/AS1 and NZS4229.

Structurally Fixed Cavity Batten (Refer BRANZ Bulletin No 582 & Test Report ST0589)

3.12 External and Internal Corner Details

Refer to drawings CF & DF BB40, BB41+, BB42 and BB43

Using 50x2.5mm JH hot dipped galvanised or annular grooved stainless-steel nails, fix the Generation 2 Box Corner two-piece box corner profiles over the Generation 2 weatherboards. Use two nails at each fixing point. There must be a minimum 50mm cover on both faces of the corner.

Fixings must be located 35-40mm above the lower edge of the overlapping board on every fourth board for every 142mm wide weatherboard, every third for the 215 and 187x18 weatherboard and every second for the 230x18 wide weatherboards. For nails near the ends of the corner boards pre-drill the nail holes.

Install a Generation 2 scriber over the weatherboards against the corner boards. Pre-drill holes and using 60x2.8mm (40x18 scriber) or 50x205mm (40x10 scriber) JH hot dipped galvanised or annular grooved stainless-steel nails, fix the scriber firmly against the box corner. Nail at 450mm centres.



 $\mathbb{R}^{(0)}$ Re-prime the cut ends with two coats of and alkyd (oil based) primer, allowing to dry between coats.

Nails must be hand driven and punched below the surface to allow for filling. Prime then fill with an exterior grade wood filler immediately after nailing.

3.13 External and Internal Box Corner details

Refer to drawings CF & DF BB50, BB51 AND BB53

Internal corners, direct or cavity fix, must have a flashing behind the cladding that provides a minimum 50mm cover to both faces of the corner. Refer to E2/AS1 for full details. Using 50x2.5mm JH hot-dipped galvanised or annular grooved stainless-steel nails, fix the Generation 2 two piece prefabricated internal box corner over the Generation 2 weatherboards. Use two nails at each fixing point. The Generation 2 internal box corner provides 100mm cover on both faces of the corner.

Fixings must be located 35-40mm above the lower edge of the overlapping board on every fourth board for every 142mm wide weatherboard, every third for the 215 and 187x18 weatherboard and every second for the 230x18 wide weatherboards. For nails near the ends of the corner boards pre-drill the nail holes.

Fit a pre-cut Generation 2 scriber over the weatherboards against the corner boards. Pre-drill holes and using 60x2.8mm (40x18 scriber) or 50x205mm (40x10 scriber) JH hot dipped galvanised or annular grooved stainless-steel nails, fix the scriber firmly against the box corner. Nail at 450mm centres.



 $^{ imes}$ Re-prime the cut ends with two coats of and alkyd (oil based) primer, allowing to dry between coats.

3.14 Windows and Doors (Aluminium)

Refer to drawings CF & DF BB10, BB11, BB12 and BB13

Window and door openings are a high weathertightness risk area an require particular attention to ensure weathertightness is achieved. All window and door openings must be constructed and trimmed in accordance with E2/AS1. All flashings, air seals, underlay and flexible flashing tapes must be in place. For flashing details refer to NZS3604 section 4 and E2/AS1 table 20 for durability requirements and E2/AS1 for flashing design and fabrication details.

As recommended in E2/AS1, window and door suppliers are responsible for head flashings.

All windows must comply with NZS4211 including consideration of building location.

3.15 Window and Door Sills

Refer to drawings CF & DF BB11, BB21, BB22, BB23

The Generation 2 weatherboard system requires a full width sill tray for direct fixed windows and doors, which meets the requirements of E2/AS1.

In a cavity fix application, all doors and windows with a trim opening wider than 600mm require an appropriate sill support bar conforming to EMS, paragraph 9.1.10.5

3.16 Window and Door Heads

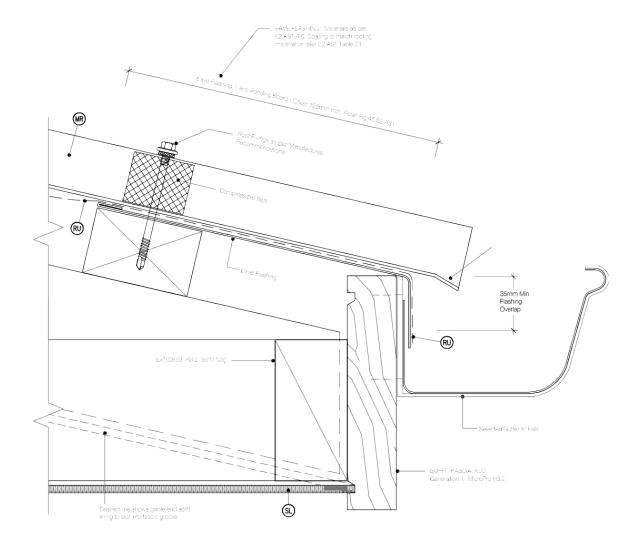
Refer to drawings CF & DF BB10 and BB20

Direct and cavity fixed aluminium windows and doors require a flashing that meets the requirements of E2/AS1. The flashing must be fitted behind the cladding with a 5mm gap between the bottom edge of the cladding and the horizontal surface of the flashing.

4 Fascia Installation

As an alternative to nail fixing, fascia can be screwed onto rafter ends as wide as is practical with wide head (10mm) Stainless steel screws, slightly countersunk. Screws should be a min. 75mm long.

Refer to drawing CF & DF BB63



5 Painting

KLC Generation 2 H3.2 products have a premium factory applied alkyd primer and undercoat applied in two separate coats.

All painting must be carried out in a good tradesman-like manner and in accordance with AS/NZS 2311 2017. Please also refer to "BRANZ Good Practice Guide to Exterior Coating".

If boards have been exposed for longer than 4 weeks, some dimensional swelling or distortion of the board may have occurred during unprotected exposure to the elements. Also, some sanding and re-priming may be required.

- 1. The moisture content of the boards before painting. Equilibrium Moisture Content (EMC) should be at 15% or less. Use a correctly calibrated moisture meter to check.
- Once installed, remove any dirt and surface contamination by sanding and dusting down. Spot-prime any exposed timber with two coats of oil primer. Spot-prime the filled nail holes. Any sealants used should be of a flexible exterior grade and suitable for over coating with acrylic paint
- 3. Once undercoated, simply apply two coats of 100% premium acrylic low gloss house paint to the manufacturer's specification, at a rate of 12-14m2/L.
- 4. Once applied, the two topcoats should have a combined thickness of no less than 50 microns. The Painter must adhere to the topcoat paint manufacturer's spread rate.
- 5. The onus is on the painter to ensure that the primed surface remains well adhered to the timber substrate and is a suitable base for the subsequent topcoats. This is particularly important where the boards have been exposed for longer than 4 weeks before top coating. Painters should refer to the AS/NZ 2311:2017 guide to painting buildings.
 NOTE: The KLC warranty will be void if dark colours with a Light Reflectance Value (LRV) less than 45 are used.
- 6. Darker colours will absorb heat from the sun and may cause excessive movement, distortion, splitting and possible resin bleed. Light colours reflect the suns heat. Therefore, only light colours with a light reflective value (LRV) of greater than or equal to 45% may be used. Refer paint colour charts for details.

Top Coat Light Reflectance Values as recommended by KLC



The significance of Light Reflectance Values is now being recognized by the building industry. When paint is exposed to sunlight it absorbs and reflects radiant heat (as well as UV light).

It's not only radiant heat warming up the paint film that is the problem. Damage is caused by temperature changes (i.e. from hot sun, cold to cloudy sky) causing the paint film to go through a process of heating up then cooling down again resulting in changes in dimensional stability of the timber substrate. Increases

in the core temperature of the timber substrate can also cause resins to mobilise and leach through the paint film. This is known as resin bleed.

Light paint colours with a high light reflectance (and therefore a high LRV over 45) allow less free radicals to be released, which means the paint film and substrate will last longer. Correspondingly dark colours with a lower light reflectance allow more heat to be absorbed, therefore causing more damage to the surface and resulting in reduced life for the paint film.

Resene Cool Colour Technology

- Resene Cool Colour technology reduces the amount of Infra-red heat absorption only into the substrate (it does not have an effect on Visible light nor Ultra Violet which equates to 49% of Sunlight energy)
- · Resene Cool Colour technology works best for Darker colours where Black tinter is used in the colour
- When using Resene Cool Colour the surface will still remain warm/hot to touch however less heat is being absorbed thru
 into substrate
- LRV's are only a measure of visible colour, not heat absorption which is better measured by TSR (Total Solar Reflectance)
 therefore LRV's are not altered when using Resene Cool Colours as the colour is the same (albeit that a Resene Cool
 Colour will perform like a colour with a higher LRV)
- Resene advise customers that the use of Resene Cool Colour technology does not alter the LRV of the colour therefore Suppliers/Manufacturers of substrates own guidelines on colour choice should always be followed unless that Supplier/ Manufacturer advises otherwise.

6 Maintenance

It is the responsibility of the home owner to ensure that annual maintenance is carried out.

Maintenance should be carried out every 12 months. In some cases, where a home is coastal this may be required more regularly eg. 6 monthly.

Maintenance Checklist

- 1. Wash all exterior surfaces using a low pressure wash system to remove dust, dirt and other contaminants.
 - · Do not uses a high pressure washing system eg water blaster.
 - If the washing does not remove stubborn areas of mold or dirt use a soft brush or broom and an appropriate
 cleaning agent to remove these deposits. Check with the paint manufacturer and read the directions on the product
 to apply the cleaning agent.
- 2. Once the building is clean and the surfaces have been inspected for damage, wear and tear and paint coating degrade then repairs and must be undertaken immediately.
 - If the paint surface has been damaged, then:
 - a. Remove all damaged paint, sand back if required
 - b. Apply a quality primer on any bare timber
 - c. Once the primer has dried apply a base coat and then 2 top coats of a quality top coat paint.
- 3. It is a general rule that timber weatherboard homes should be repainted every 10 years if the initial coating product used was of

7 Health and Safety

Health and safety precautions should be adhered to when working with all wood products.

Machine tools should be fitted with dust extractors and work areas should be kept clean.

If dust levels exceed Work Safe New Zealand Standards, the wearing of a dust mask (AS/NZS 1715 & AS/NZS 1716) and protective eyewear (AS/NZS1336 & AS/NZS 1337) is recommended.

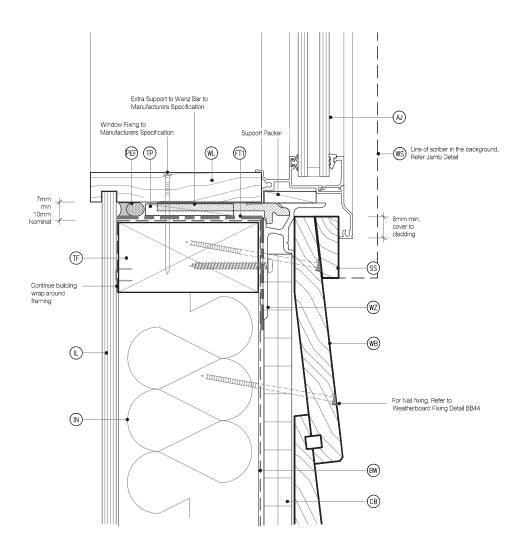
Storage and work areas should be adequately ventilated.

Direct Fix		
DF BB10	Window Details	22
DF BB11	Window Details	23
DF BB12	Window Details	24
DF BB13	Window Details	25
DF BB20	Door Details	26
DF BB21	Door Details	27
DF BB22	Door Details	28
DF BB23	Door Details	29
DF BB30	Meter Box	30
DF BB31	Meter Box	31
DF BB32	Meter Box	32
DF BB33	Meter Box	33
DF BB40	External Corner Soaker	34
DF BB41	3d External Corner Soaker	35
DF BB42	Internal Corner	36
DF BB43	3d Internal Corner	37
DF BB44	Weatherboard Fixing	38
DF BB45	Scarf Joint - Horizontal	39
DF BB50	External Boxed Corner	40
DF BB52	Internal Boxed Corner	41
DF BB53	3d Internal Boxed Corner	42
DF BB54	Pipe Penetration	43
DF BB55	3d Pipe Penetration	44
DF BB60	Base of Wall - Timber	45
DF BB61	Base of Wall - Concrete	46
DF BB62	Soffit Detail at Wall	47
DF BB63	Soffit Detail at Fascia	48
DF BB64	Apron Flashing	49
DF BB65	Balustrade Capping	50

KLC CF20 BB11 WINDOW DETAILS

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) ALUMINIUM, JOINERY: Selected double glazed aluminium joinery. (PEF)
- (AJ)
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) (BW)
- CC CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding
- CB CAVITY BATTEN: 45x20 KLC Generation II, MicroPro
- (FT)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 7c of NZBC E2/AS1
 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over alluminum head flashing or 2nd layer of Building Wrap to taped joint or top of frame
 TIMBER FRAME: H1.2 min treated timber framing (TF)
- WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB) (N)INSULATION: Selected Insulation
- HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1 TIMBER PACKER: MicroPro H3.2 Treated Packer (HF)(TP)
- SILL SCRIBER: MicroPro H3.2, Horizontal batten under window as necessary to suit profile, sealant to back of sill scriber
- (WL) WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
 - WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
- WANZ SUPPORT: Provide window support as required by joinery manufacturer
- WINDOW SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to bac of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole, 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KCU use the MicroPro Microrized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications Microrized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZ59840;2003 and AS1604,12012 MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLOs modern, automated treatment facility. Out Ero Tireatment: All out ends surfaces are to be double coated and sealed before fixing. With a alkyd (oil based) primer

- applications, and above ground controlled whether draining MigroProß is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the sward of the GREENGUARD Children and Schools' Certification from the Greenguard's Environmental Installe, MicroPro® Wood Treatment Technology has recoved a Global GreenTaig CreenTaigs! Level A this dederation is "FH-for-Purpose" and confirmed for GreenTaigs. enhaie" Level A this declaration is "Hi-for-Purpose" and confirmed sen Bullding compliance.
 rroPro® Wood Treatment Technology has received CreenTag PhD"
 ving claims that MicroPro® is safe for human health (and ecosyster



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Cavity Fix

NAME Window Sill Detail - Aluminium Joinery



DRAWING SCALE 18/10/2018 1:2 @ A4 DRAWING No REVISION KLC CF20 BB11

MODNIM

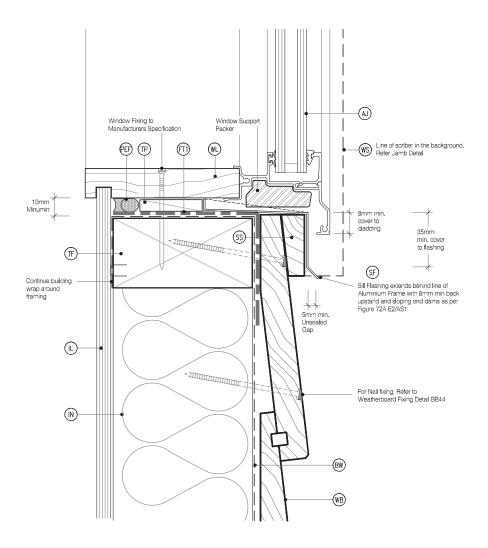
REF

DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

KLC DF BB11 Window Details

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- (AJ)
- (BW)
- waterproof air-seal. (Sealant 2:1 Fatio)
 ALUMINUM JOINERY: Selected double glazed
 aluminium joinery
 INTERNAL LINING. Selected Internal Lining
 BUILDING WRAP: Flexible Wall Underlay, As per
 NZBC 52/AS1 Table 23, In extra high wind zones,
 Ridgid Underlay required (9.1.7.2 EZ/AS1)
 SILL FLASHING: Powder Coater Aluminium, extend
 behind line of Aluminium Frame with 8mm min
 back upstand and sloping end dams as per Figure
 72A EZ/AS1
 JAMB BATTENS: 20mm MicroPro H3.2. Batten
 stops short of sill flashing, Sill flashing runs under (SF)
- (JB)
- (FT)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1 FLEXIBLE FLASHING TAPE: Floxible flashing tape lapped over aluminum head flashing or 2nd layer of Building Wrap to taped joint or top of frame (TF) TIMBER FRAME: H1.2 min treated timber framing
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (IN) INSULATION: Selected Insulation
- HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1 (HF) (TP)
 - TIMBER PACKER: MicroPro H3.2 Treated Packer
- SILL SCRIBER: MicroPro H3.2, Horizontal batten under window as necessary to suit profile, sealant to back of sill scriber WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills) (SS)
- (WL)
 - WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
- WINDOW SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predfilled hole, 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and seaded before long. With a allay of these of prime.

- MicroPro preservative solution has benefits of reduced corrosivity.
 Use hot Do Calvanised Fasteners & Stainless Stael fasteners. NicroPro
 may be placed in direct contact with Auminium Bullding products in interor
 applications, and above ground exterior applications that provide proper
 water dramage
 MicroPro® is the first wood treatment process to be EPP
 (Envoronmentally Preferable Product) certified by Scientific Certification
 Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and Schools' Certification from the Greenquards Environmental Institute, MicroPro® Wood Treatment Technology has received a Global GreenTag GreenBale* Level A flus declaration is Fill-for-Pupped and confirmed for
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD"
 proving claims that MicroPro® is safe for human health (and ecosyster)



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

0

DRAWING No. REVISION KLC DF BB11

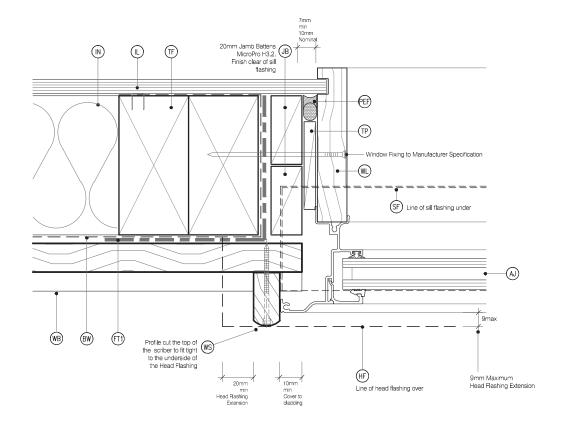
KLC DF 8810-15 REF CAD

NAME Window Sill Detail - Aluminium Joinery DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

KLC DF BB12 Window Details

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- (AJ)
- (BW)
- waterproof air-seal. (Sealant 2:1 Fatio)
 ALUMINUM JOINERY: Selected double glazed
 aluminium joinery
 INTERNAL LINING. Selected Internal Lining
 BUILDING WRAP: Flexible Wall Underlay, As per
 NZBC 52/AS1 Table 23, In extra high wind zones,
 Ridgid Underlay required (9.1.7.2 EZ/AS1)
 SILL FLASHING: Powder Coater Aluminium, extend
 behind line of Aluminium Frame with 8mm min
 back upstand and sloping end dams as per Figure
 72A EZ/AS1
 JAMB BATTENS: 20mm MicroPro H3.2. Batten
 stops short of sill flashing, Sill flashing runs under (SF)
- (JB)
- (FT)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1 FLEXIBLE FLASHING TAPE: Floxible flashing tape lapped over aluminum head flashing or 2nd layer of Building Wrap to taped joint or top of frame (TF) TIMBER FRAME: H1.2 min treated timber framing
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (IN) INSULATION: Selected Insulation
- HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1 (HF) (TP)
 - TIMBER PACKER: MicroPro H3.2 Treated Packer
- SILL SCRIBER: MicroPro H3.2, Horizontal batten under window as necessary to suit profile, sealant to back of sill scriber WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills) (SS)
- (WL)
 - WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
- WINDOW SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predfilled hole, 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and seaded before long. With a allay of these of prime.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Calvanised Fasteners & Stainless Sized fasteners. MicroPro may be placed in direct contact with Auminium Building products in interior applications, and above ground exterior applications that provide proper water dramage. MicroProB is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- McroProë is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENSUARD Chitren and Stoods' Conflictation from the Greenquard's Funormental Institute. McroPros Wood Treament Tochnology has recoved a Global GreenTag GreenFalle* Level A this declaration is Fi-flor* Purposed and confirmed for GreenFalle* Level A this declaration is Fi-flor* Purposed and confirmed for
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD"
 proving claims that MicroPro® is safe for human health (and ecosyster)



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No. REVISION KLC DF BB12 0

KLC DF 8810-15 REF CAD

NAME Window Jamb Detail - Aluminium Joinery

8 Detailed Drawings / Direct Fix

KLC DF BB13 Window Details

:KLC DF 8810-15 -

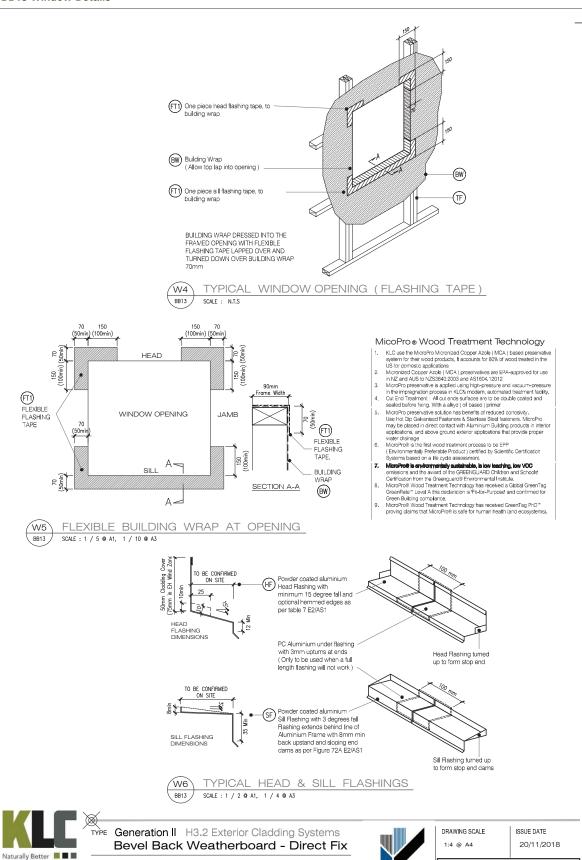
뗥

CAD

www.klc.co.nz

NAME Window Flashing Details -

Aluminium Joinery



REVISION

0

CODEMARK

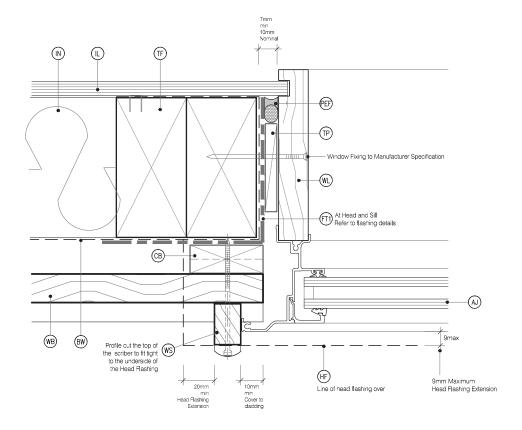
DRAWING No.

KLC DF BB13

KLC CF20 BB12 Window Details

- PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- ALUMINIUM JOINERY: Selected double glazed aluminium joinery (AJ)
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- CC CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding
- CB CAVITY BATTEN: 45x20 KLC Generation II, MicroPro
- (FT1)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC 52/AS1
 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over alumnium head flashing or 2nd layer of Building Wrap to taped joint or top of frame (TF) TIMBER FRAME: H1.2 min treated timber framing
- WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB) (N)INSULATION: Selected Insulation
- HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as por table 7 E2/AS1 TIMBER PACKER: MicroPro H3.2 Treated Packer (HF) (TP)
- SILL SCRIBER: MicroPro H3 2. Horizontal batte (SS) under window as necessary to suit profile, sealant to back of sill scriber

 - to back of sill scriber WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills) WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
- WANZ SUPPORT: Provide window support as required by joinery manufacturer
 WINDOW SCRIBER: KLC Generation II, MicroPro
 H3.2 profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in
 3mm predifiled hole, 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- System for the invoice ploudus, in adoption to look of vividuo release in the US for domestic applications. Who consider the properties of the Micronized Copper Azale (Micronized Copper Azale (M
- MicroPro preservative solution has benefits of reduced corrosvity. Use Hot Dip Calvanised Fasteners & Stainless Steel fasteners. MicroPro may be pisced in direct contact with Auminium Building products in interior spokedisons, and above ground exterior applications that provide proper water dramage. MicroProR is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and Schools' Cenficiation from the Greenquard's Fortnormental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenBallet* Level 4 this declaration is FH-Ior-Purpose' and confirmed for Green Bulding completions. MicroPro® Wood Treatment Technology has received GreenTag PhD* proving claims that MicroPro® Wood Teament Technology has received GreenTag PhD* proving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Cavity Fix

NAME Window Jamb Detail - Aluminium Joinery



DRAWING SCALE 1:2 @ A4

18/10/2018

REVISION KLC CF20 BB12

KLC CF20 8

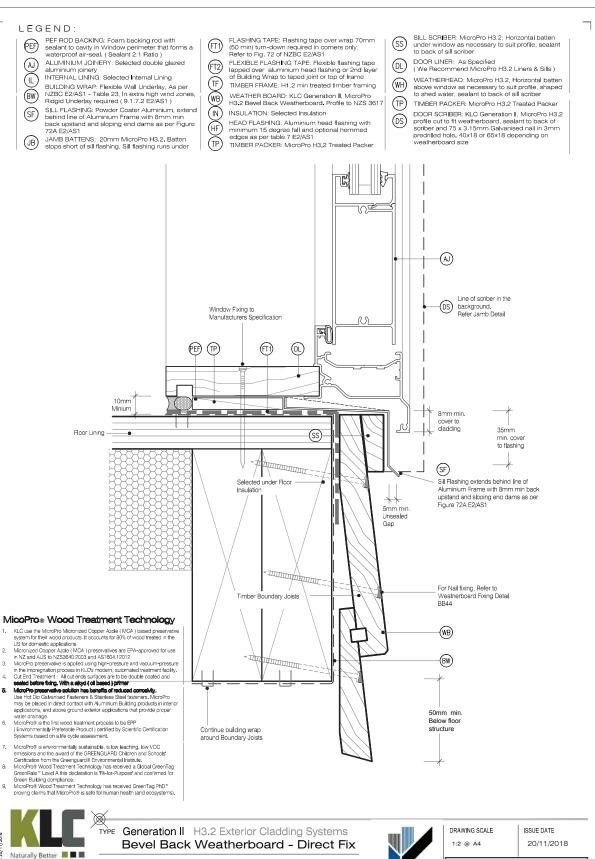
KLC DF BB21 Door Details

D00R

REF

CAD

www.klc.co.nz DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



NAME Door Sill Detail - Aluminium Joinery

REVISION

0

CODEMARK

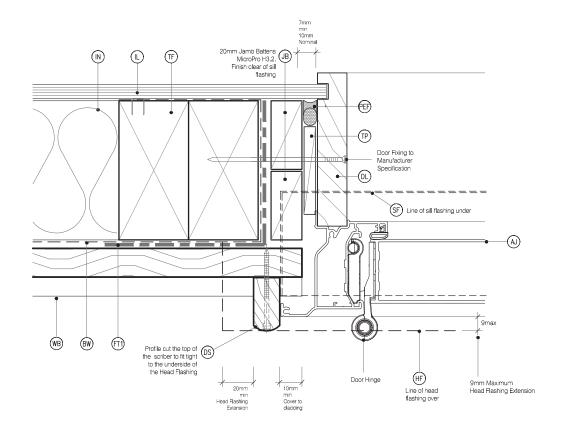
DRAWING No.

KLC DF BB21

KLC DF BB22 Door Details

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- (AJ)
- (BW)
- waterproof air-seal. (Sealant 2:1 Fatio)
 ALUMINUM JOINERY: Selected double glazed
 aluminium joinery
 INTERNAL LINING. Selected Internal Lining
 BUILDING WRAP: Flexible Wall Underlay, As per
 NZBC 52/AS1 Table 23, In extra high wind zones,
 Ridgid Underlay required (9.1.7.2 EZ/AS1)
 SILL FLASHING: Powder Coater Aluminium, extend
 behind line of Aluminium Frame with 8mm min
 back upstand and sloping end dams as per Figure
 72A EZ/AS1
 JAMB BATTENS: 20mm MicroPro H3.2. Batten
 stops short of sill flashing, Sill flashing runs under (SF)
- (JB)
- (FT)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1 FLEXIBLE FLASHING TAPE: Floxible flashing tape lapped over aluminum head flashing or 2nd layer of Building Wrap to taped joint or top of frame (TF) TIMBER FRAME: H1.2 min treated timber framing
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- (IN) INSULATION: Selected Insulation HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1 (HF)
- (TP) TIMBER PACKER: MicroPro H3.2 Treated Packer
- SILL SCRIBER: MicroPro H3.2, Horizontal batten under window as necessary to suit profile, sealant to back of sill scriber
- DOOR LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
- WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber
 - TIMBER PACKER: MicroPro H3.2 Treated Packer
- DOOR SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole. 40x18 or 65x18 depending on weatherboard size (DS)



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and seaded before long. With a allay of these of prime.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Calvanised Fasteners & Stainless Sized fasteners. MicroPro may be placed in direct contact with Auminium Building products in interior applications, and above ground exterior applications that provide proper water dramage. MicroProB is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and Schools' Certification from the Greenguard® Environmental Institute. MicroPro® Wood Teament Technology has received a Global GreenTag GreenRale" Level A this declaration is Fit-for-Purpose* and confirmed for
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD"
 proving claims that MicroPro® is safe for human health (and ecosyster)



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Door Jamb Detail - Aluminium Joinery DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No. REVISION KLC DF BB22 0

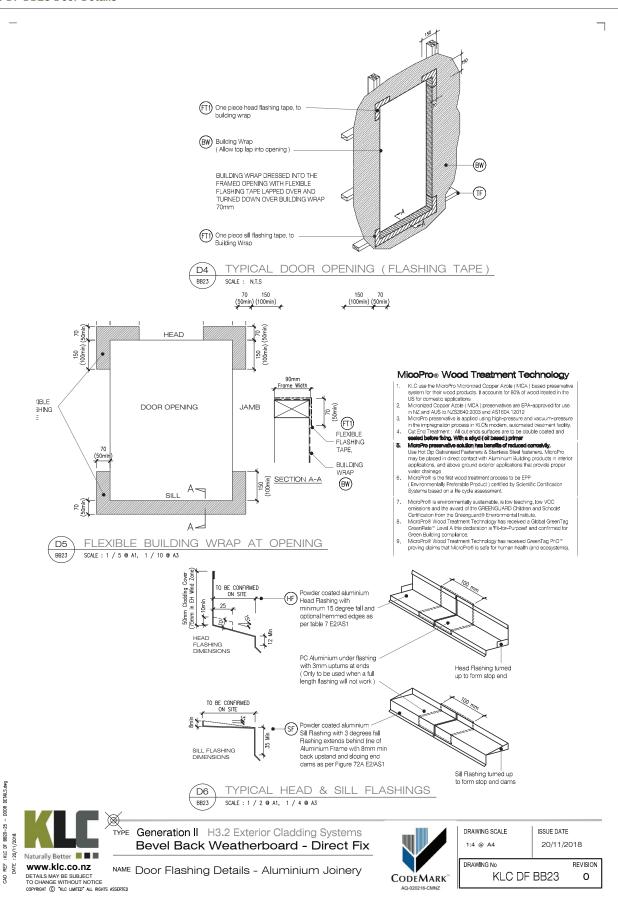
D00R REF CAD

Detailed Drawings / Direct Fix

KLC DF BB23 Door Details

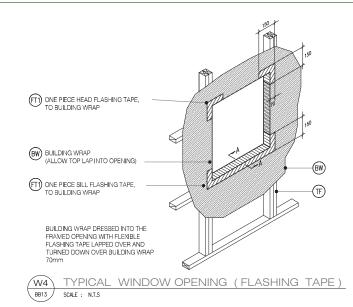
D00R

CAD



Detailed Drawings / Direct Fix

KLC CF20 BB13 Window Details



HEAD FT1 FLEXIBLE FLASHING TAPE WINDOW OPENING JAMB (FTI) FLEXIBLE FLASHING TAPE. BUILDING SECTION A-A (BW)

MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA.) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA.) preservatives are EPA-approved for use in NZ and AUS to NZ59840/2003 and AS1604.12012.

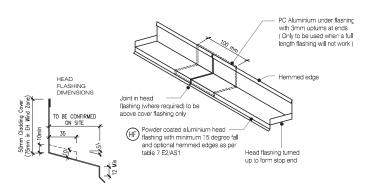
- Microrized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to X25840/2008 and AS1604. 1202 MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLCS modem, automated treatment facility. Out End Treatment: All out ends surfaces are to be double costed and seased before from, With a alley (of lossed) primer MicroPro preservative solution has benefits of reduced corrosivity. Use HOLD poll Asimised Fasteriers & Starlares Stellar Steariners, MicroPro may be alloced in cirect contact with Alumnium Building products in interior applications, and above ground exterior applications that provide proper water drainage MicroProis is the lirst wood treatment process to be EPP (Emirormentally Preferable Product) certified by Scientific Certification Systems based on all 6 cyclo assessment.

 MicroProis Wood Treatment Technology has received a Global GreenTag GreenFalath* Level A this enderation is \$Fil-for-Purposer and confirmed for Green Building compliance.

 MicroProis Wood Treatment Technology has received a Global GreenTag Pro?*

 proving daims that MicroProis is safe for human health (and ecceystems).

FLEXIBLE BUILDING WRAP AT OPENING W5 SCALE: 1 / 5 @ A1, 1 / 10 @ A3



ONE PIECE PC ALUMINIUM HEAD FLASHING 15° SLOPE WITH 10mm min COVER TO JOINERY EXTEND 30mm min EITHER SIDE OF JOINERY WITH STOP ENDS



:KLC CF20 BB10-15 Naturally Better www.klc.co.nz DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT (© "KLC LIMITED" ALL RIGHTS ASSERTED

Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Cavity Fix

NAME Window Flashing Details - Aluminium



DRAWING SCALE

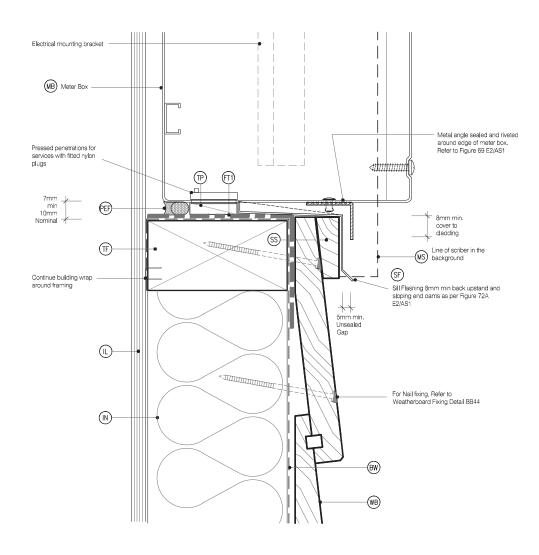
18/10/2018

KLC CF20 BB13

KLC DF BB31 Meter Box

LEGEND:

- (PEF) PEF ROD BACKING: Foam backing rod with sealant to carried in packing not with sealant to carried by perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- a waterproof air-seal. (Sealani 2.1 natio)
 METER BOX: Electrical meter box, with removable hinged door and polycarbonate viewing window
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) (BW)
- SFL FLASHING: Powder Coater Aluminium, with 8mm min back upstand and sloping end dams as per Figure 72A E2/AS1
- (TP) TIMBER PACKER: MicroPro H3.2 Treated Packet
- (FT)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1 FLEXIBLE FLASHING TAPE: Floxible flashing tape lapped over aluminum head flashing or 2nd layer of Building Wrap to taped joint or top of frame
- (TF) TIMBER FRAME: H1.2 min treated timber framing WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB)
- INSULATION: Selected Insulation
- HEAD FLASHING: Aluminium head flashing with \mathbb{H} minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1
- TIMBER PACKER: MicroPro H3.2 Treated Packer
- WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber \mathbb{W}
- SILL SCRIBER: MicroPro H3,2, Horizontal batten under meter box as necessary to suit profile
- METER BOX SCRIBER: KLC Generation II, MicroPro (MS) H3.2 profile cut to fit weatherboard, sealant to back of scriber. 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservative are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and sealed before long. With a allay of these of princip.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and Stroods' Certification from the Geneguard's invoromental Institute. MicroPro® Wood Treatment Technology has recovered a Global Greenfage Creenfage Tuesde A this declaration is Fisher-Purpos and confirmed for Greenfage Tuesde. A this declaration is Fisher-Purpos and confirmed for
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD"
 proving claims that MicroPro® is safe for human health (and ecosyster)



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No. REVISION KLC DF BB31 0

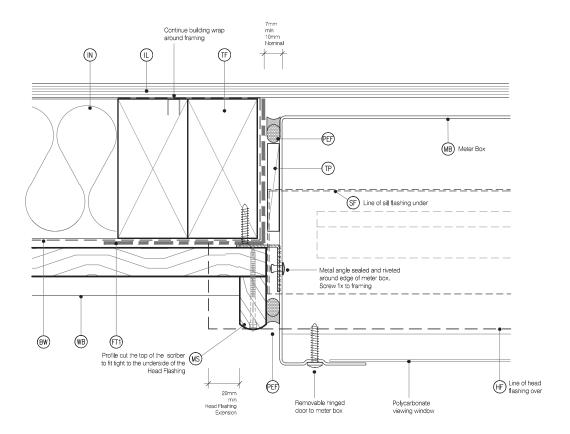
METER BB30-35 -REF CAD

NAME Meter Box - Sill Detail

KLC DF BB32 Meter Box

LEGEND:

- PEF ROD BACKING: Foam backing rod with (PEF) sealant to cavity in meter box perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio.)
- a waterproof air-seal. (Sealani 2.1 natio)
 METER BOX: Electrical meter box, with removable hinged door and polycarbonate viewing window
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) (BW)
- SFL FLASHING: Powder Coater Aluminium, with 8mm min back upstand and sloping end dams as per Figure 72A E2/AS1
- (TP) TIMBER PACKER: MicroPro H3,2 Treated Packer
- (FT)
- FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminum head flashing or 2nd layer of Building Wrap to taped joint or top of frame
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB)
- INSULATION: Selected Insulation
- HEAD FLASHING: Aluminium head flashing with \mathbb{H} minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1
- TIMBER PACKER: MicroPro H3.2 Treated Packer
- WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber \mathbb{W}
- SILL SCRIBER: MicroPro H3,2, Horizontal batten under meter box as necessary to suit profile
- METER BOX SCRIBER: KLC Generation II, MicroPro (MS) H3.2 profile cut to fit weatherboard, sealant to back of scriber. 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservative are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and sealed before long. With a allay of these of princip.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and Schools' Certification from the Greenguard® Environmental Institute. MicroPro® Wood Teament Technology has received a Global GreenTag GreenRale" Level A this declaration is Fit-for-Purpose* and confirmed for
- Green Bulding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD' proving claims that MicroPro® is safe for human health (and ecosystem).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Meter Box - Jamb Detail



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No. REVISION KLC DF BB32 0

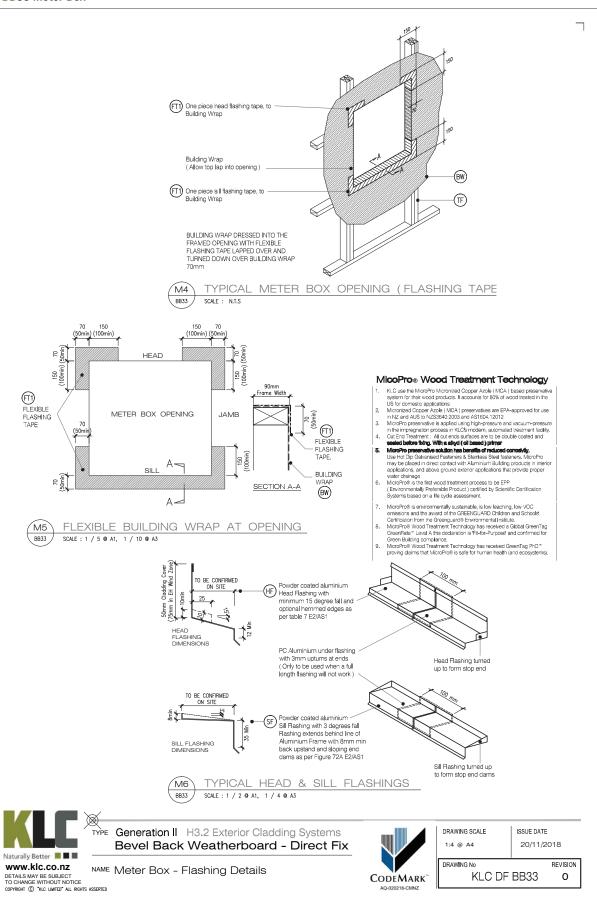
8 Detailed Drawings / Direct Fix

KLC DF BB33 Meter Box

METER

REF

CAD



KLC DF BB41 External Corner Soaker

LEGEND:

(IL) INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) BW

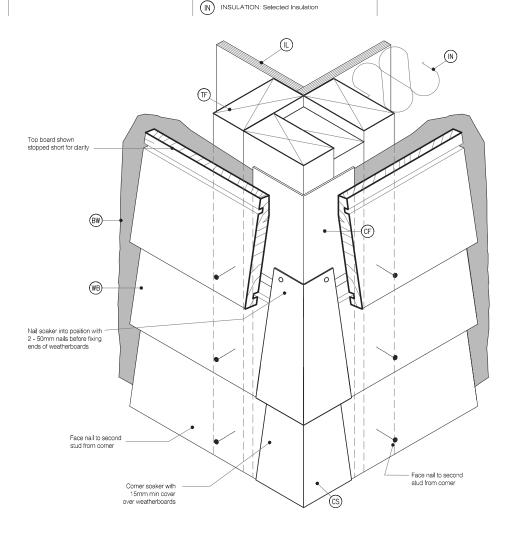
CS CORNER SOAKER: With 15mm Min cover over weatherboards

FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner

(TF) TIMBER FRAME: H1.2 min treated timber framing

WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB)

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE (CF) 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1



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

MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products, it accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS640:2003 and AS1604, 12012.

 MicroPro preservative is applied using high-pressure and vacuum-pressure in the improgressfor process in ACC modern, automated treatment facility. Out Ero Treatment: All out erick surfaced see to be double coated and seaded before fang. With a alloy of to based primm.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Stroods' Certification from the Geneguard's Environmental Institute, Generitaet (MicroPro® Wood Treatment Technology has received a Global GreenTag Generitaet *Level A his declaration is Fildor-Purpose' and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PrD-" proving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No REVISION KLC DF BB41 0

REF CAD

NAME 3D - External Corner Soaker

KLC DF BB42 Internal Corner

LEGEND:

(IL) INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBO E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) BW

CS CORNER SOAKER: With 15mm Min cover over weatherboards

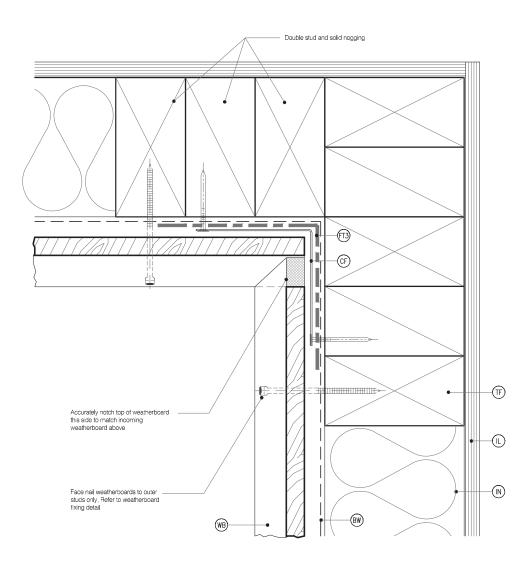
FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner

(TF) TIMBER FRAME: H1,2 min treated timber framing

WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB)

INSULATION: Selected Insulation

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WINID ZONE (CF) 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1



DETAIL NOTES :

- 1. Flashing tape is recommended due to movement that may occur in comers but it is not required by E2/AS1
- 2. Aluminium extrusion must not be continuous over solid floor joists.

MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use Micronized Copper Azole (MCA) preservatives are EPA-approved for use Micronized Copper Azole (MCA) preservatives are applied using high-pressure and vacuum-pressure in the impregnation process in CLCs modern, automated freatment facility. Our Ero Treatment: All out one's surfaces see to be double costed and sealed before long. With a alloy of to based) primer.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Stroods' Certification from the Geneguard's Environmental Institute, Generitaet (MicroPro® Wood Treatment Technology has received a Global GreenTag Generitaet *Level A his declaration is Fildor-Purpose' and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PrD-" proving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Internal Corner



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No REVISION KLC DF BB42 0

REF CAD

KLC DF BB43 Internal Corner

LEGEND:

(IL) INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) BW

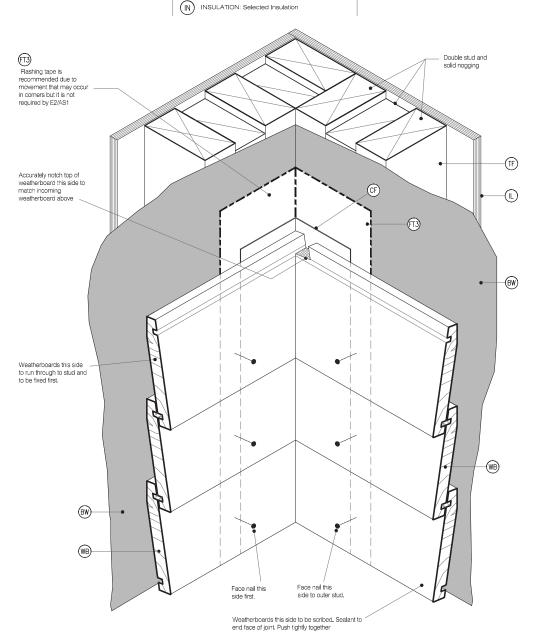
CORNER SOAKER: With 15mm Min cover over

FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner

(TF) TIMBER FRAME: H1.2 min treated timber framing

WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB)

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE (CF) 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products, it accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS640:2003 and AS1604, 12012.

 MicroPro preservative is applied using high-pressure and vacuum-pressure in the improgressfor process in ACC modern, automated treatment facility. Out Ero Treatment: All out erick surfaced see to be double coated and seaded before fang. With a alloy of to based primm.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Schools Certification from the Greenquard® inforrommental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRale® 1-Lead A this declaration is FI-Hor-Purpose and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PhDrovoring claims that MicroPro® is safet for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME 3D - Internal Corner



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

0

DRAWING No REVISION KLC DF BB43

www.klc.co.nz DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT (*) "KLC LIMITED" ALL RIGHTS ASSERTED

REF

CAD

KLC DF BB44 Weatherboard Fixing

LEGEND:

(IL) INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) BW

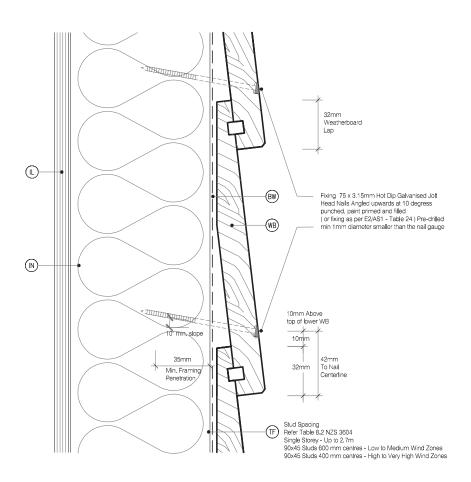
CORNER SOAKER: With 15mm Min cover over weatherboards

FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner

(TF) TIMBER FRAME: H1.2 min treated timber framing

WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB) INSULATION: Selected Insulation

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WINID ZONE (CF) 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for Micronized Copper Azole (MCA) preservatives are EPA-approved for In NZ and ALS to NZSS964:2003 and AS1604.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in CLCs modern, automated realiment facility. Our Ero Treatment: All out oncis surfaces see to be double costed and sealed before large, With a alloy of to based) primer.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Stroods' Certification from the Geneguard's Environmental Institute, Generitaet (MicroPro® Wood Treatment Technology has received a Global GreenTag Generitaet II-used A Inite declaration is Fil-dor-Purpose and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PriDriproving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Weatherboard Fixing



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No

REVISION KLC DF BB44 0

Detailed Drawings / Direct Fix

KLC DF BB45 Scarf Joint

LEGEND:

IL INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) BW

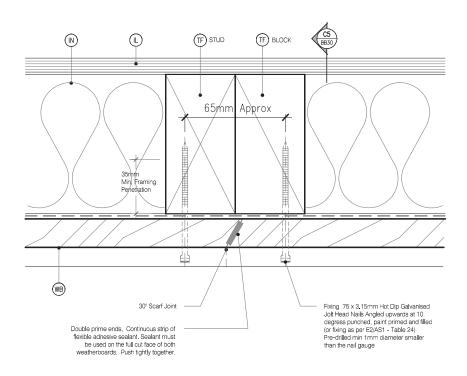
CORNER SOAKER: With 15mm Min cover over weatherboards

FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner

(TF) TIMBER FRAME: H1,2 min treated timber framing

WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (WB) INSULATION: Selected Insulation

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WINID ZONE (CF) 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1



When joining weatherboards a 30 ° Scart joint is to be used. This joint must face away from the prevailing weather. Alternatively a corrosion resistant soaker can be used, refer to E2/AS1 - 9.4.4.2 & Soakers materials to 4.32 to Paragraph 4.3.8

MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved in NZ and ALS to NZSS964:2003 and AS1604.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in CLCs modern, automated realiment facility. Our Ero Treatment: All out oncis surfaces see to be double costed and sealed before large, With a alloy of the see! primer of the see asked before large, With a alloy of the see! primer of the see asked before large, With a alloy of the see! primer and the see asked before large. With a alloy of the see! primer and the see asked before large, With a alloy of the see! primer and the see asked before large. With a alloy of the see! primer and the see asked before large. With a alloy of the see! primer and the see asked before large. With a slow of the see!

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Stroods' Certification from the Geneguard's Environmental Institute, Generitaet (MicroPro® Wood Treatment Technology has received a Global GreenTag Generitaet *Level A his declaration is Fildor-Purpose' and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PrD-" proving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Scarf Joint - Horizontal



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

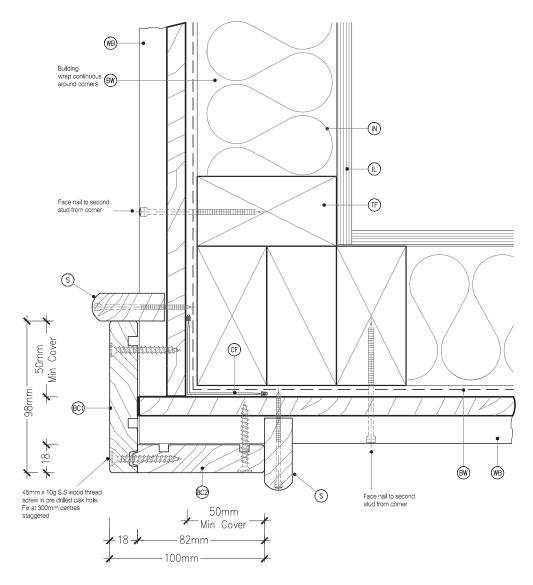
DRAWING No REVISION KLC DF BB45 0

KLC DF BB50 External Boxed Corner

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11 (FT3)
- FLEXIBLE FLASHING TAPE: Flexible flashing tape **FT4** wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68
- (IN) INSULATION: Selected Insulation
- BOXED CORNER COVER: 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners €C2
- CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1
- SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nall in 3mm prodrilled hole.

 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for Micronized Copper Azole (MCA) preservatives are EPA-approved for In NZ and ALS to NZSS964:2003 and AS1604.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in CLCs modern, automated realiment facility. Our Ero Treatment: All out oncis surfaces see to be double costed and sealed before large, With a alloy of to based) primer.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® s environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGLAFD Children and Schools' Certification from the Greenquards Environmental Institute, MicroPro® Wood Treatment T
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD" proving claims that MicroPro® is safe for human health (and ecosyster)



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No. REVISION KLC DF BB50 0

REF CAD

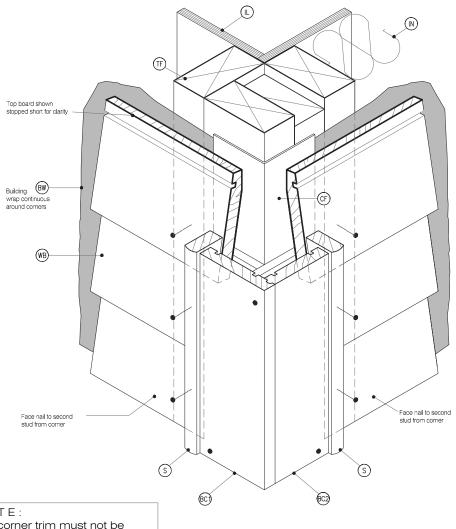
NAME External Boxed Corner DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

KLC DF BB51 External Boxed Corner

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11 (FT3)
- FLEXIBLE FLASHING TAPE: Flexible flashing tape **FT4** wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68
- (IN) INSULATION: Selected Insulation
- BOXED CORNER COVER: 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners €C2
- CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1
- SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nall in 3mm prodrilled hole.

 40x18 or 65x18 depending on weatherboard size



NOTE:

Box corner trim must not be continuous over solid floor joists.

MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840;2003 and AS 1604, 12012.

 MicroPro preservative is applied using high-pressure and vacuum-pressure in the improgression process in ACC modern, automated treatment facility. Our Erol Treatment: Allout ericle surfaces ere to be double coaled and sealed before fung. With a alloy of lotace of primary.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitrien and Schools Certification from the Geneguard's Environmental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRage Tuesde A his declaration is Fil-for-Purpose and confirmed for Green Balding compliance. When the Compression of the Compression of Compliance of Compliance of Compliance of Compression of Compression of Compliance of Compression of Compliance of Compression of Co



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No REVISION KLC DF BB51 0

REF CAD

NAME 3D - External Boxed Corner

KLC DF BB52 Internal Boxed Corner

LEGEND:

PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)

INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)

(TF) TIMBER FRAME: H1.2 min treated timber framing

WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617

FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11

FLEXIBLE FLASHING TAPE: Flexible flashing tape **FT4** wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68

(IN) INSULATION: Selected Insulation

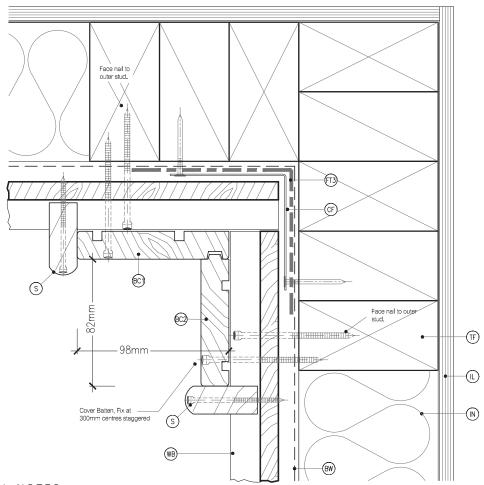
BOXED CORNER COVER: 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners

BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1

SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nall in 3mm prodrilled hole.

40x18 or 65x18 depending on weatherboard size



DETAIL NOTES :

- 1. Aluminium extrusion must not be continuous over solid floor joists.
- 2. Corner Flashing is recommended but not required by E2/AS1
- 3. Flashing tape is recommended due to movement that may occur in corners but it is not required by ${\sf E2/AS1}$

MicoPro® Wood Treatment Technology

- KLC use the MicroPro Microraced Copper Azole (nMC4) based preservative system for their wood products, it accounts for 60% of wood treated in the US for domestic applications. Microraced Copper Azole (nMC4) preservatives are PPA-approved for use in NZ and AUS to NZSS849/2003 and AS1604, 912012
 MicroPro preservative is applied using high-pressure and vacuum-pressure in the imprograms nAC for modern, automated treatment lacitly. Our Erol Treatment: Allout erols surfaces are to be double coated and sealed before hang. With a alloy of tabsed primer.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® s environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGLAFD Children and Schools' Certification from the Greenquards Environmental Institute, MicroPro® Wood Treatment T
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD" proving claims that MicroPro® is safe for human health (and ecosystem).



www.klc.co.nz NAME Internal Boxed Corner DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No REVISION KLC DF BB52 0

KLC DF BB53 Internal Boxed Corner

LEGEND:

PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)

INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)

(TF) TIMBER FRAME: H1.2 min treated timber framing

WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 361

FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11 (FT3)

FLEXIBLE FLASHING TAPE: Flexible flashing tape **FT4** wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68

(IN) INSULATION: Selected Insulation

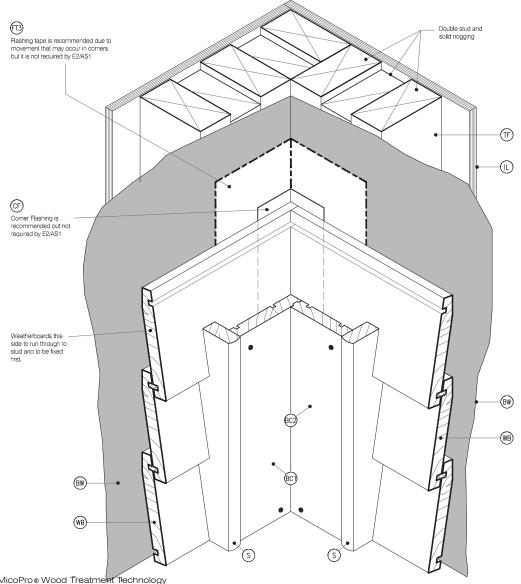
BOXED CORNER COVER: 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners

BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners (6C2)

CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1

SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nall in 3mm prodrilled hole.

40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and seaded before long. With a allay of these of prime.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Schools Certification from the Greenquard® inforrommental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRale® 1-Lead A this declaration is FI-Hor-Purpose and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PhDrovoring claims that MicroPro® is safet for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME 3D - Internal Boxed Corner



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

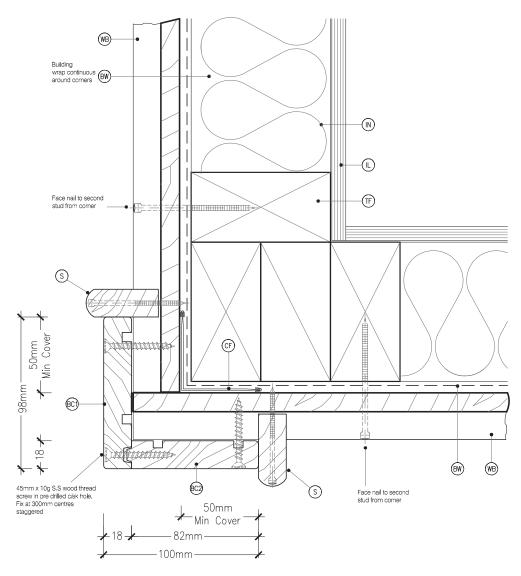
DRAWING No. REVISION KLC DF BB53 0

KLC DF BB54 External Boxed Corner

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11 (FT3)
- FLEXIBLE FLASHING TAPE: Flexible flashing tape **FT4** wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68
- (IN) INSULATION: Selected Insulation
- BOXED CORNER COVER: 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners €C2
- CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1
- SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nall in 3mm prodrilled hole.

 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for Micronized Copper Azole (MCA) preservatives are EPA-approved for In NZ and ALS to NZSS964:2003 and AS1604.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in CLCs modern, automated realiment facility. Our Ero Treatment: All out oncis surfaces see to be double costed and sealed before large, With a alloy of to based) primer.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® s environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGLAFD Children and Schools' Certification from the Greenquards Environmental Institute, MicroPro® Wood Treatment T
- Green Bullding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD" proving claims that MicroPro® is safe for human health (and ecosyster)



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME External Boxed Corner DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

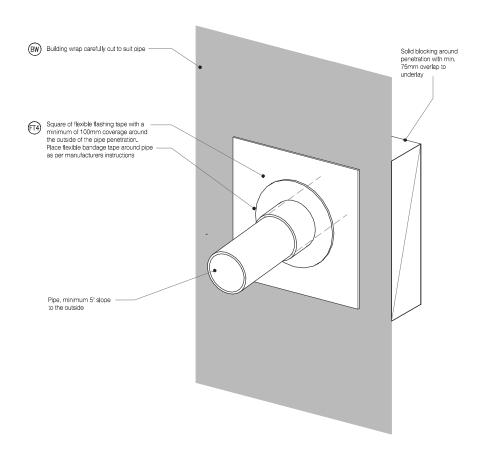
DRAWING No. REVISION KLC DF BB50 0

KLC DF BB55 Pipe Penetration

LEGEND:

- PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio) (PEF)
- INTERNAL LINING: Selected Internal Lining
- BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11 (FT3)
- FLEXIBLE FLASHING TAPE: Flexible flashing tape **FT4** wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68
- (IN) INSULATION: Selected Insulation
- BOXED CORNER COVER: 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
 - BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- CORNER FLASHING: Aluminium, PVC or Stainless Steel corner flashing. Refer NZBC E2/AS1 4.3 50x50 Hem or Hook to Flashing Edges 75x75 NO, Hem or Hook Required EXTRA HIGH WIND ZONE 100x100 Hem or Hook to Flashing Edges, Refer NZBC E2/AS1 4.5.1
- SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nall in 3mm prodrilled hole.

 40x18 or 65x18 depending on weatherboard size



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved in NZ and ALS to NZSS964:2003 and AS1604.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in CLCs modern, automated realiment facility. Our Ero Treatment: All out oncis surfaces see to be double costed and sealed before large, With a alloy of the see! primer of the see asked before large, With a alloy of the see! primer of the see asked before large, With a alloy of the see! primer and the see asked before large. With a alloy of the see! primer and the see asked before large, With a alloy of the see! primer and the see asked before large. With a alloy of the see! primer and the see asked before large. With a alloy of the see! primer and the see asked before large. With a slow of the see!

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® s environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGLAFD Children and Schools' Certification from the Greenquards Environmental Institute, MicroPro® Wood Treatment Technology has received a Global GreenTaig GreenTaigs Level A this declaration is Felicie-Purposed and confirmed for
- Green Bulding compliance.

 MicroPro® Wood Treatment Technology has received GreenTag PhD' proving claims that MicroPro® is safe for human health (and ecosystem).



REF

CAD

TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

REVISION

0

DRAWING No. KLC DF BB55

NAME 3D - Pipe Penetration DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

KLC DF BB60 Base of Wall Timber

LEGEND:

INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) (BW) INSULATION: Selected Insulation (F)

TIMBER FRAME: H1.2 min treated timber framing

TIMBER PACKER: Cant Strip, MicroPro H3.2 Treate

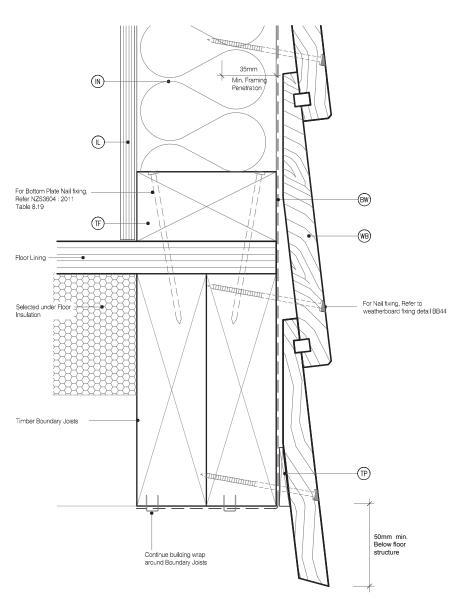
WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (MR) METAL ROOFING : Selected Metal Roofing

ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported (RU)

SOFFIT LINING: As Selected (Typicaly 7,5mm Hardies Soffit Liner) (SL)

(HS)

HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2. Fix with 75 x 3.15mm Galvanised nail in 3mm predriled hole APRON FLASHINO: Materials as per E2/AS1 4.0, Coating to match roofing material or refer E2/AS1 Table 21. Flashing Cover 130mm min. (L,M & H \geq 10°) All others 200mm Refer Table 7 E2/AS1



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and seaded before long. With a allay of these of prime.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and Schools' Certification from the Greenguard's invoronmental Institute, MicroPro® Wood Treatment Technology has received a Global GreenTag GreenBaller Level A this declaration is FIHJor-Purpose and confirmed for Green Bullating compliance. MicroPro® Wood Treatment Technology has received GreenTag PriDropoving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Base of Wall, Timber



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

0

DRAWING No REVISION KLC DF BB60

DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

REF

CAD

KLC DF BB61 Base of Wall Concrete

LEGEND:

INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) (BW) INSULATION: Selected Insulation

TIMBER FRAME: H1.2 min treated timber framing

TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

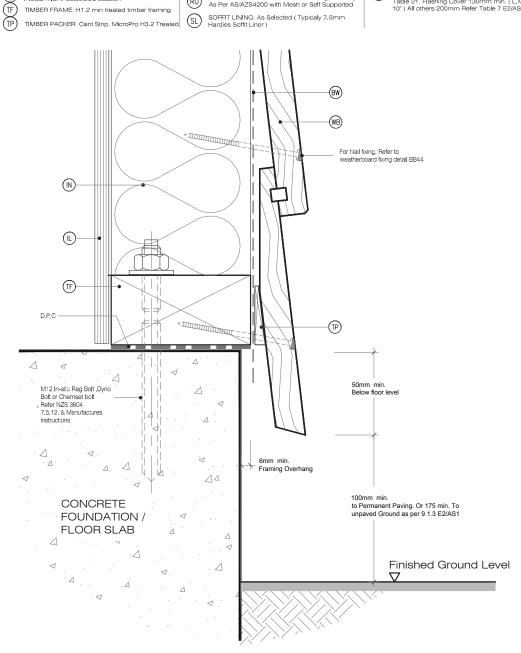
WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (MR) METAL ROOFING : Selected Metal Roofing

ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported (RU)

SOFFIT LINING: As Selected (Typicaly 7,5mm Hardies Soffit Liner) (SL)

(HS)

HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2. Fix with 75 x 3.15mm Galvanised nail in 3mm predriled hole APRON FLASHINO: Materials as per E2/AS1 4.0, Coating to match roofing material or refer E2/AS1 Table 21. Flashing Cover 130mm min. (L,M & H \geq 10°) All others 200mm Refer Table 7 E2/AS1



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840;2003 and AS 1604, 12012.

 MicroPro preservative is applied using high-pressure and vacuum-pressure in the improgression process in ACC modern, automated treatment facility. Our Erol Treatment: Allout ericle surfaces ere to be double coaled and sealed before fung. With a alloy of lotace of primary.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Calvanised Fasteners & Stainless Sized fasteners. MicroPro may be placed in direct contact with Auminium Building products in interior applications, and above ground exterior applications that provide proper water dramage. MicroProB is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitrien and Schools Certification from the Geneguard's Environmental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRage Tuesde A his declaration is Fil-for-Purpose and confirmed for Green Balding compliance. When the Compression of the Compression of Compliance of Compliance of Compliance of Compression of Compression of Compliance of Compression of Compliance of Compression of Co



REF

CAD

TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Base of Wall, Concrete



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

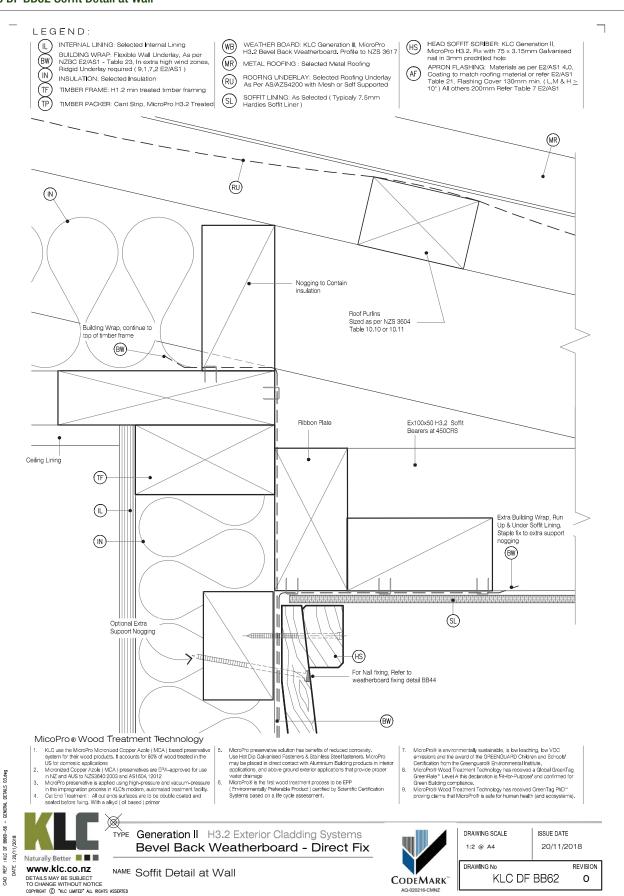
0

DRAWING No REVISION KLC DF BB61

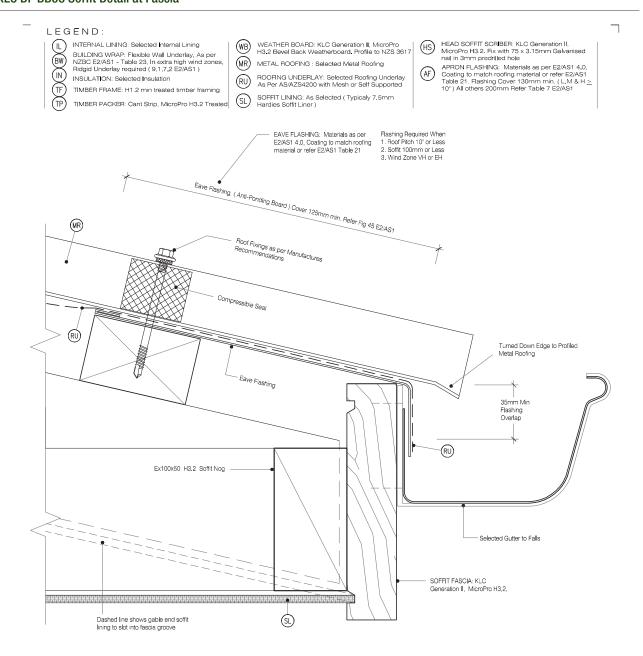
www.klc.co.nz DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

KLC DF BB62 Soffit Detail at Wall

CAD



KLC DF BB63 Soffit Detail at Fascia





- KLC use the MicroPro Micronized Copper Azole (MOA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840:2003 and AS1804.12012. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in EUS modern, automated readment facility. Our Ero Treatment: All our ero's surfaces see to be double coaled and seaded before long. With a allay of these of prime.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.

- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitrien and Schools Certification from the Geneguard's Environmental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRage Tuesde A his declaration is Fil-for-Purpose and confirmed for Green Balding compliance. When the Compression of the Compression of Compliance of Compliance of Compliance of Compression of Compression of Compliance of Compression of Compliance of Compression of Co



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Soffit Detail at Fascia DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

REVISION

DRAWING No

KLC DF BB63 0

KLC DF BB64 Apron Flashing



(IL) INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zone Ridgid Underlay required (9.1.7.2 E2/AS1) (BW)

INSULATION: Selected Insulation

TIMBER FRAME: H1.2 min treated timber framing

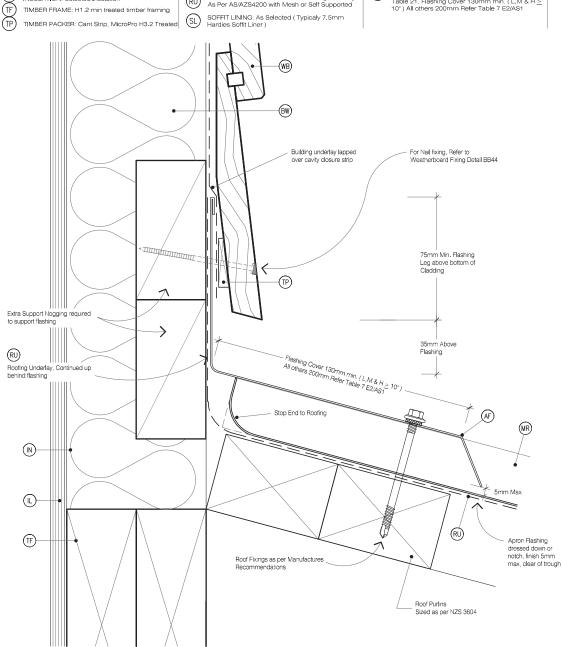
WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (MR) METAL ROOFING : Selected Metal Roofing

ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported (RU)

SOFFIT LINING: As Selected (Typicaly 7,5mm Hardies Soffit Liner) (SL)

(HS)

HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2. Fix with 75 x 3.15mm Galvanised nail in 3mm predriled hole APRON FLASHINO: Materials as per E2/AS1 4.0, Coating to match roofing material or refer E2/AS1 Table 21. Flashing Cover 130mm min. (L,M & H \geq 10°) All others 200mm Refer Table 7 E2/AS1



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 80% of wood freated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840-2003 and AS1604. 2012 MicroPro preservative is applied using high-pressure and vacuum-pressure in the imprographs process or NZC both modern, automated treatment facility. Our Ero Treatment All our eros surfecce are to be double coefed and sealed before facing. With a alloy (of based) primer.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitrien and Schools Certification from the Geneguard's Environmental Institute. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRage Tuesde A his declaration is Fil-for-Purpose and confirmed for Green Balding compliance. When the Compression of the Compression of Compliance of Compliance of Compliance of Compression of Compression of Compliance of Compression of Compliance of Compression of Co



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No REVISION KLC DF BB64 0

REF CAD

www.klc.co.nz NAME Apron Flashing - Roof to Wall Junction DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED

KLC DF BB65 Balustrade Capping

LEGEND:

INTERNAL LINING: Selected Internal Lining

BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1) (BW) INSULATION: Selected Insulation

TIMBER FRAME: H1.2 min treated timber framing

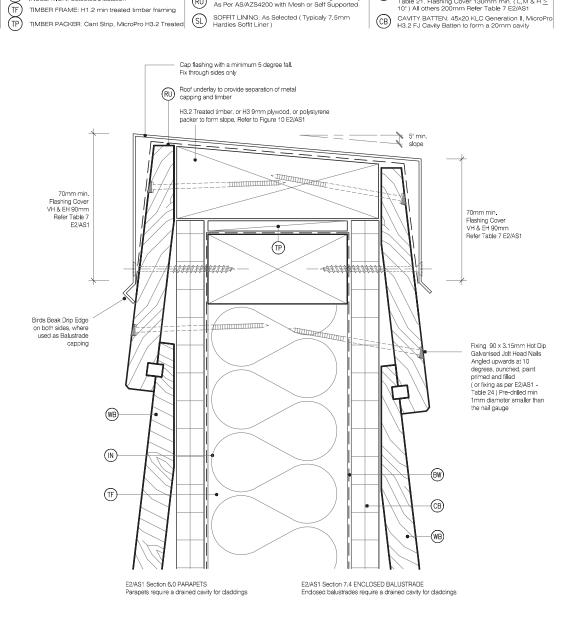
TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617 (MR) METAL ROOFING : Selected Metal Roofing

ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported (RU)

SOFFIT LINING: As Selected (Typicaly 7,5mm Hardies Soffit Liner) (SL)

HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3.15mm Galvanised nail in 3mm predrilled hole
APRON FLASHING: Materials as per E2/AS1 4.0, Coating to match roofing material or refer E2/AS1 Table 21. Filashing Cover 130mm min. (L, M & H ≥ 10°) All others 200mm Refer Table 7 E2/AS1
CBI CAVITY BATTEN. 45x20 KLC Generation II, MicroPro H3.2 FJ Cavity Battlen to form a 20mm cavity



MicoPro® Wood Treatment Technology

- KLC use the MicroPro Micronized Copper Azole (MCA) based preservative system for their wood products. It accounts for 60% of wood treated in the US for domestic applications. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZSS840;2003 and AS 1604, 12012.

 MicroPro preservative is applied using high-pressure and vacuum-pressure in the improgression process in ACC modern, automated treatment facility. Our Erol Treatment: Allout ericle surfaces ere to be double coaled and sealed before fung. With a alloy of lotace of primary.

- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dp Galvanised Fasteners & Stainless Street fasteners. MicroPro may be placed in direct contact with Authnium Building products in interior applications, and above ground exterior applications that provide proper water dranage. MicroPro? is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
- MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Orbitren and Stroods' Certification from the Geneguard's Environmental Institute, Generitaet (MicroPro® Wood Treatment Technology has received a Global GreenTag Generitaet II-used A Inite declaration is Fil-dor-Purpose and confirmed for Green Building compliance. MicroPro® Wood Treatment Technology has received GreenTag PriDriproving claims that MicroPro® is safe for human health (and ecosystems).



TYPE Generation II H3.2 Exterior Cladding Systems Bevel Back Weatherboard - Direct Fix

NAME Balustrade Capping or Parapet Detail DETAILS MAY BE SUBJECT
TO CHANGE WITHOUT NOTICE
COPYRIGHT © "KLC LIMITED" ALL RIGHTS ASSERTED



DRAWING SCALE 1:2 @ A4

ISSUE DATE 20/11/2018

DRAWING No

REVISION KLC DF BB65 0

99-0988 REF CAD