

Generation 2

NZ Timber Cladding Systems



VERSION 3 30/09/2020

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 hot-dipped 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.
- The Generation 2 product range have two quality factory applied Oil (alkyd) based primers.
- Approved for aluminium contact.

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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 General Information

1.1 Scope and General Information

The KLC Generation 2 H3.2 Vertical Shiplap 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 3602:2003 Timber Wood Based Products
- NZS 3617:1979 Profiles of weatherboards, fascia boards and flooring
- AS/5068 Finger Joints in Structural Products
- AS/5069 Finger Joints in Non-Structural Products
- NZS 1328.1:1998 Glued Laminated

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), Micronized Copper Azole (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 micronised copper carbonate (copper) and tebuconazole (azole). The 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.

1 General Information



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 19

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 General Information

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.

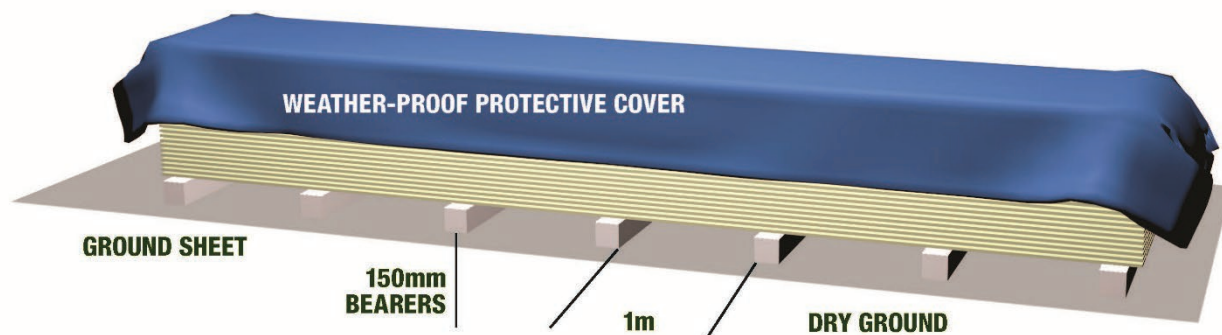
KLC Ltd and its Agent AIPdesignNZ Ltd DOES NOT:

- 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 General Information

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.

1 General Information

1.6 Cavity Batten

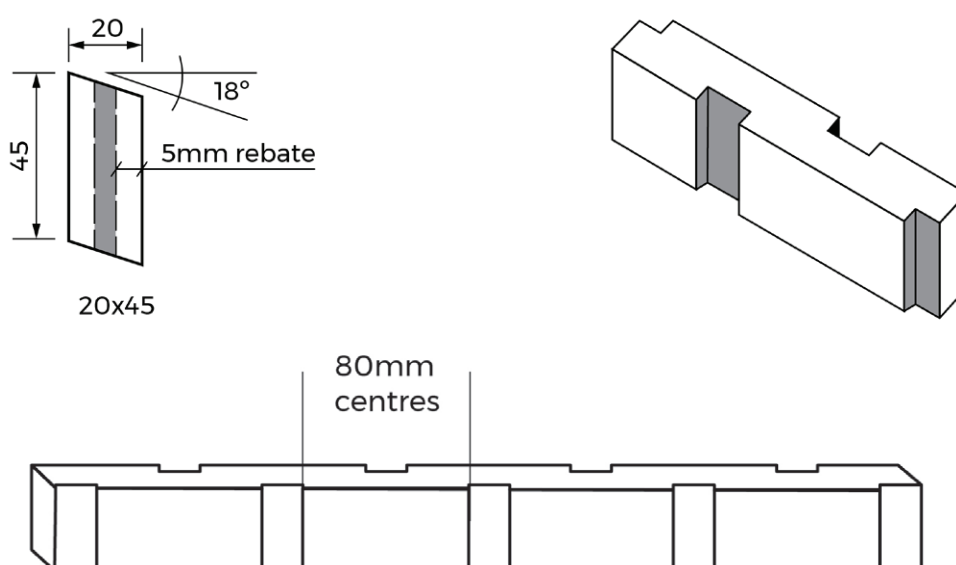
KLC Generation 2 H3.2 Vertical profiles have been designed for use in residential and small commercial building applications. The weatherboards are a thickness width of 18mm and are available in a range of face profiles.

The KLC Generation 2 H3.2 vertical profiles are an Acceptable Solution in E2/AS1 for direct fix only. However horizontal cavity battens can be used for cavity fix as an Alternative Solution.

Options are:

a. H3.2 Castellated cavity battens (Refer CF VS41, VS43, VS44 & VS45)

H3.2 Castellated cavity battens have gaps machined into them at approximately 80mm centres. They have a downward beveled slope on the top at an 18 degree angle to assist draining water. They are to be fixed onto every nog/dwang using 40x2.5 galvanised flat head nails or 50mm galvanized brad nails.



Note: Please refer to the detail drawings and the specified cavity batten. Reference the Architects plan and the manufacturers cavity batten instructions for installation.

b. Cavibat

Cavibat is an extruded polypropylene fluted cavity batten. Cavibat's are installed with 40.2.8mm galvanized flat head nails or brad gun nailed with galvanized bradsat 400 centres. Please refer to Cavibat's technical guide for full installation details.



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 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.

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.

3 Guidelines for Installation

3.1 General Information

KLC Generation 2 H3.2 Vertical Shiplap profiles can be used for buildings that fall within the scope of NZS3604 Timber Framed Buildings and Acceptable Solutions E2/AS1.

Although timber weatherboards can be used on buildings that have a maximum Weathertightness Risk Matrix Score of 6.

For situations where you wish to use vertical shiplap on a higher risk matrix score, you will have to apply to your local Council for an alternative solution.

This would require the vertical shiplap profiles to be installed on a 20mm cavity as per E2/AS1 9.1.8 drained cavities Pg 100.

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.

The KLC Generation 2 cladding products must be installed by a Licenced Building Practitioner (LBP).

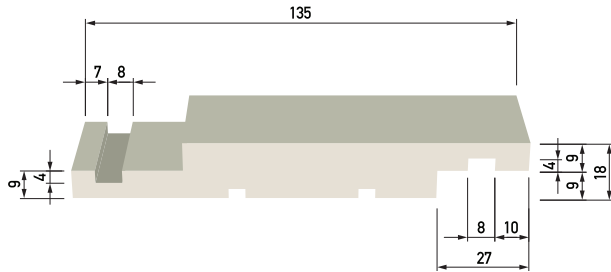
Vertical Shiplap Profile Sizes	Finish Grade	Lap	Cover	Length
KLC51 135X18 Bev Edge	Finger Jointed	25	110	6.3m
KLC52 180X18 Bev Edge	Finger Jointed	25	155	6.3m
KLC53 135X18 Bev Edge	Finger Jointed	25	110	6.3m
KLC54 180X18 Bev Edge	Finger Jointed	25	155	6.3m
KLC55 135X18 Sq Edge	Finger Jointed	25	110	6.3m
KLC56 180X18 Sq Edge	Finger Jointed	25	155	6.3m
KLC57 180X18 Bev Edge Dbl Groove	Finger Jointed	25	155	6.3m
KLC58 135x18 Sq Edge Single Groove	Finger Jointed	25	110	6.3m
KLC59 180X18 Sq Edge Single Groove	Finger Jointed	25	155	6.3m
KLC60 180X18 Sq Edge Dbl Groove	Finger Jointed	25	155	6.3m

3 Guidelines for Installation

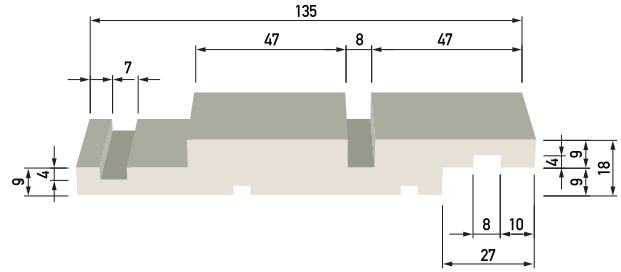
3.2 Vertical Shiplap Profiles

For fixing details Refer to drawings VS44

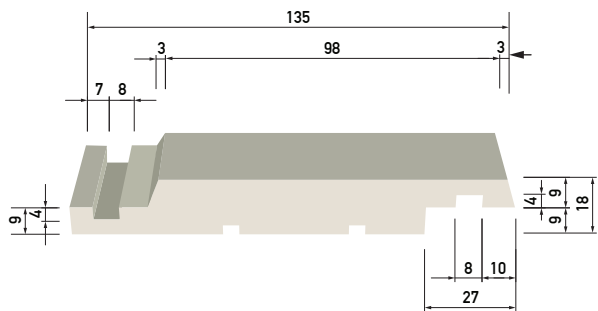
KLC55 V Shiplap



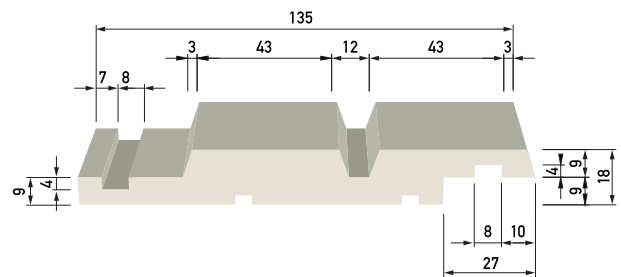
KLC58 V Shiplap Centre Groove



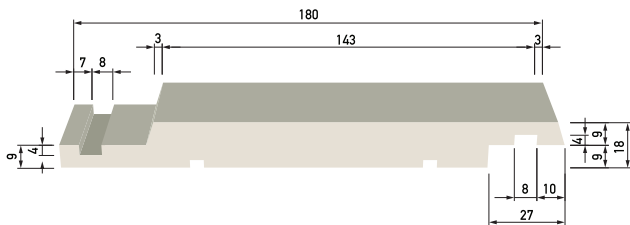
KLC51 Bevelled Edge V Shiplap



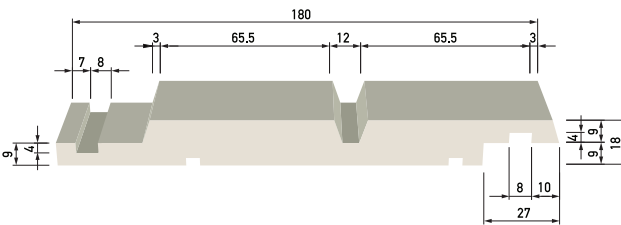
KLC53 Bevelled Edge V Shiplap Centre Groove



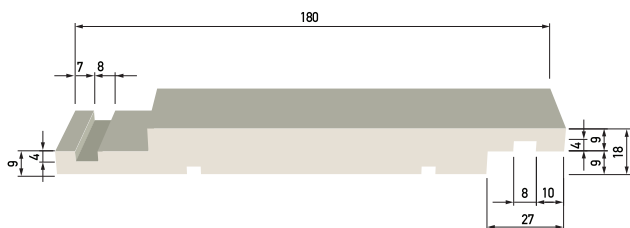
KLC52 Bevelled Edge V Shiplap



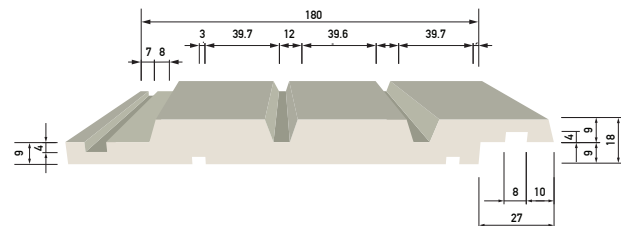
KLC54 Bevelled Edge V Shiplap Centre Groove



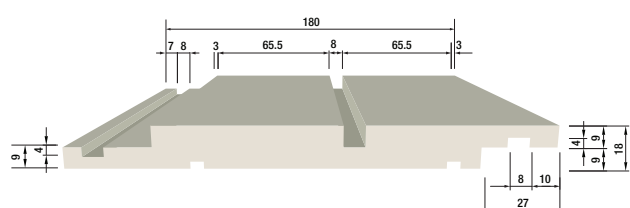
KLC56 V Shiplap



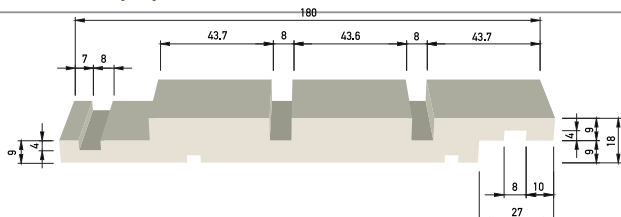
KLC57 Bevelled Edge V Shiplap Double Centre Groove



KLC59 V Shiplap Centre Groove



KLC60 V Shiplap Double Centre Groove



3 Guidelines for Installation

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.

3.3 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 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 designers responsibility to ensure all specified fastenings, fittings, and flashings comply with NZS 3604, Section 4 – Durability.

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.
- Do not install Generation 2 H3.2 weatherboards if their moisture content is over 15%.
- If building in “seaspray or geothermal zones”, it is the building designers responsibility to ensure all specified fastenings, fittings, and flashings comply with NZS 3604, Section 4 – Durability.
- Avoid joining KLC Generation 2 H3.2 vertical weatherboards use full length boards whenever possible, ensure a good pre-set out to use full lengths.
- Use full length boards.
- Re-prime all cut ends, mitres, notching's, borings with 2 coats of brush-applied alkyd primer.
- Stud centres are at 600mm max, Nog centres at 450mm max. Refer to the project plan for confirmation.
- Leave a 2mm minimum expansion gap in the lap of rebated Shiplap profiles, to allow for expansion and contraction.
- Boards must be fixed with a 2mm gap between each board to allow for seasonal movement, with a board overlap of 25mm for Shiplap profiles. Alignment of the weather grooves is essential.
- Hand nailing is recommended as nail guns can cause damage to the surface of the board. If a nail gun is used, a non-marking attachment should be used to avoid damage to the surface.
- Avoid joining vertical weatherboards use full length boards whenever possible, follow pre-set out to use full lengths.
- Pre-drill all boards to a minimum of 1mm diameter smaller than nail gauge.
- Single nail all weatherboard profiles, regardless of size. Nailing boards together will likely result in split boards.
- Location of nails is approximately 35mm to the side edge of the board. Do not nail through the underneath board. Align the weather grooves.
- Nails should be applied at an upward angle of 10 degrees 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.
- Re-prime all cut ends, mitres, notching's, borings with 2 coats of brush-applied alkyd (oil based) primer.

3 Guidelines for Installation

Timber weatherboards are designed to accommodate thermal, seismic and moisture related movement in the boards 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 which inhibits the natural and ongoing movement of the weatherboard.

3.5 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

3.6 Nail Selection

Refer to drawing VS44

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. If a nail gun is used, a non- marking attachment should be used to avoid damage to the surface.

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. Fixings are compliant with AS/NZS 4680 and to NZBC E2/AS1 Table 24.

Nailing Schedule

Weatherboard	Framing Set-Out	Nails (Direct Fixing)	Nails (On Cavity)	Nailing Requirements	Wind Zone	Wind Barrier*
Vertical Shiplap Weatherboards	Studs @ 600mm centres max. Refer to drawing VS44	75mm x 3.15mm Jolt Head (JH) Hot Dipped Galvanised Nails or Stainless Steel Nails 35mm penetration into the board	75mm x 3.15mm Jolt Head (JH) Hot Dipped Galvanised Nails or Stainless Steel Nails 35mm penetration into the board Refer to drawing VS44	Single nail on every nog 35mm from side edge of the board	Low, Medium, High & Very High	Lightweight Building Paper Heavyweight Building Paper
External & Internal Corners Box Corners	All weatherboards	50 x 2.5mm Jolt Head (JH) Hot Dipped Galvanised Nails 250mm centres	50 x 2.5mm Jolt Head (JH) Stainless Steel Nails 250mm centres	300mm centres maximum		

3 Guidelines for Installation

3.7 Fixing Details

Refer to drawing VS44

KLC Generation 2 H3.2 Vertical Weatherboards can be directly fixed to the framing but the use of this is limited by section 9.4 of E2/AS1. All types of weatherboards can be used where the risk score is between 0 and 6.

Where weatherboards are directly fixed to the framing a wall underlay complying with Table 23 of E2/AS1. Also refer to sections 9.1.5-9.1.7 prior to fixing weatherboards.

Refer to the full drawing suite for correct installation of Building Components.

3.8 Jointing Weatherboards

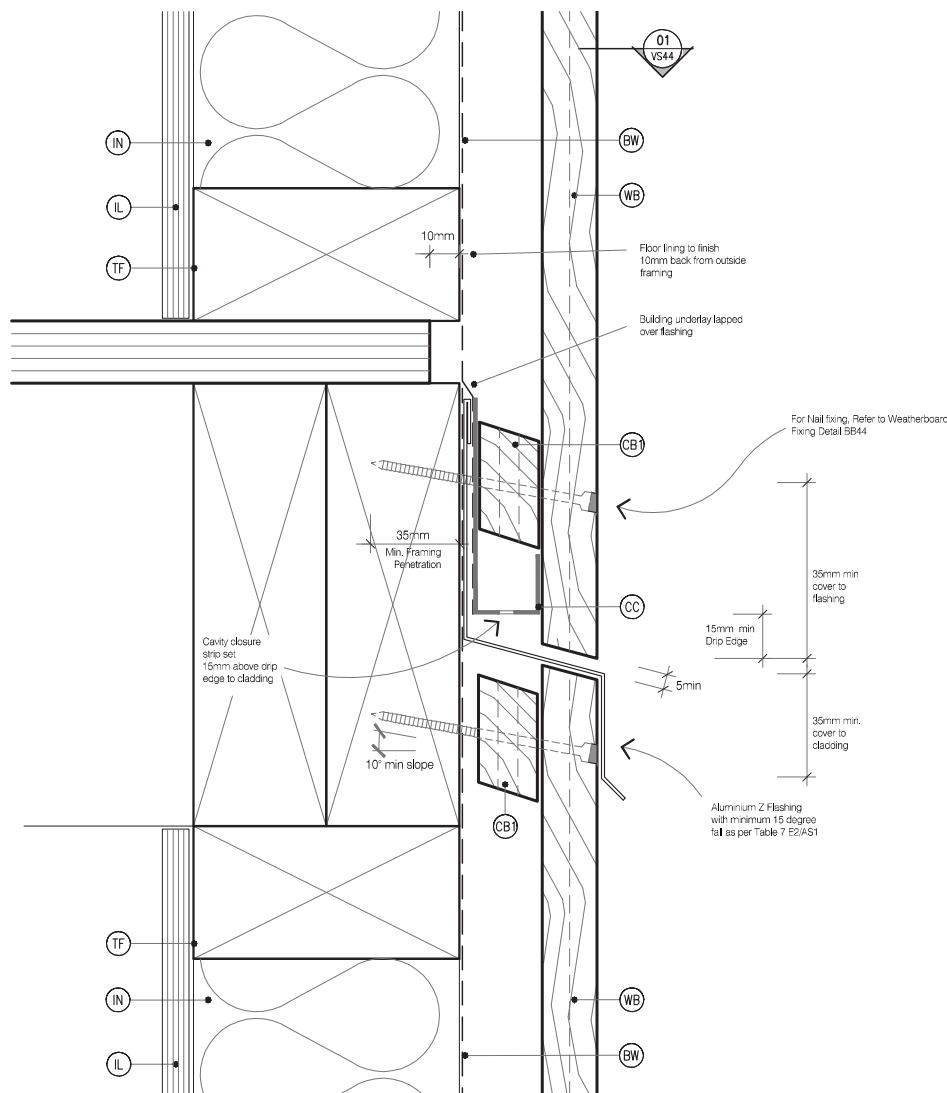
Refer to drawing VS45 Rev A

All cut ends, drill holes, rebates and notches must be resealed immediately with a suitably approved product. eg an Alkyd Primer

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

Refer to E2/AS1 Section 9.4.5, Vertical Weatherboards "Vertical Shiplap and Board & Batten weatherboards shall be in continuous lengths over the storey height". Therefore, no jointing is allowed.

For a 2 storey building refer to detail VS45 Rev A, below flashing as per Table 7 E2/AS1 Page 41



3 Guidelines for Installation

3.9 Bottom Of Cladding

Refer to drawings VS60 and VS61

There are differing requirements for the clearance between cladding, ground and pavers. Wall cladding and concrete slabs:

- Weatherboards must overlap the floor structure by no less than 50mm.
- 175mm from an uncovered ground surface. Ensure the end is completely sealed with a quality primer
- Overlap the concrete slab by a minimum of 50mm. Maintain a 15mm drip edge.
- Direct fix cladding must have a minimum horizontal off-set of 6mm to prevent moisture capillary action.
- With drained cavities there will be no direct connection between the sub floor spaces and the drained cavities.
Refer to drawing VS60

- Direct fix cladding must have a minimum horizontal offset of 6mm to prevent moisture capillary action.
- With drained cavity systems care must be taken to ensure air from the sub-floor space cannot enter the cavity.

3.10 Windows and Door Openings

Refer Drawings: WINDOWS VS10, VS11, VS12 & VS13

Refer Drawings: DOORS VS20, VS21, VS22 & VS23

Refer Drawings: METER BOX: VS30, VS31, VS32 & VS33

3.11 Flashings

Refer drawings VS13, VS23 & VS33

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

3.12 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.

3.13 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 Guidelines for Installation

3.14 External Corners

Refer drawings VS40 & VS41, VS50 & VS51

Fixing

Corners are to be screwed tight with a 45x10g 316 stainless steel wood screw, predrill counter sunk hole. Fix at 300mm centers, fill and prime.

Sealant to Corner Joint

Double prime cut ends and apply a continuous strip of a flexible adhesive sealant. Sealant must be used on the full face of both weatherboards. Push tightly together.

Corner Flashing Required

SEE NOTE: in the Drawing Legend CF Corner Flashing

Ensure all cut ends are sealed immediately.

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

3.15 Internal Corners

Refer to drawings VS42 & VS43

Internal corners must be made water tight by the use of corrosion-resistant flashings which shall be fitted behind the weatherboards on all internal corners.

Sealant To Corner Joint

Double prime cut ends and apply a continuous strip of a flexible adhesive sealant. Sealant must be used on the full face of both weatherboards. Push tightly together.

Corner Flashing Required

SEE NOTE: in the Drawing Legend CF Corner Flashing

General Inter-Storey Junctions

Refer to drawing VS45

Inter-storey junctions in cladding over drained cavity systems shall be formed for walls over 2 storeys

This is formed to allow for the management of moisture handled by the cavity to be directed to the outside of the building.

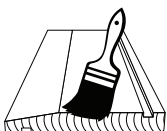
The Junction must have:

- A Minimum 15mm drip edge to upper weatherboard
- A minimum 5mm capillary gap between weatherboards and flashings
- A Minimum 15 degree slope to the flashing
- A minimum 35mm up stand to the flashing
- The flashing needs to lap a minimum of 35mm over the weatherboard

3.16 Pipe Penetration

Refer to drawings VS54 and VS55

Pipes to have a minimum 5° slope to the outside. A flexible flashing tape with a minimum of 100mm coverage around the outside. Install as per manufacturers instructions



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

3 Guidelines for Installation

3.17 Wall Underlay and Flashing Tapes

Refer to drawings VS13, VS23

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

3.18 Soakers And Flashings

Refer to drawings VS13, VS23 & VS33

Soakers and flashings can be Galvanised Steel, Aluminium, Stainless Steel (304) or Copper. All these materials are compatible with the KLC Generation 2 H3.2 profiles. These are safe to use with MicroPro treated products.

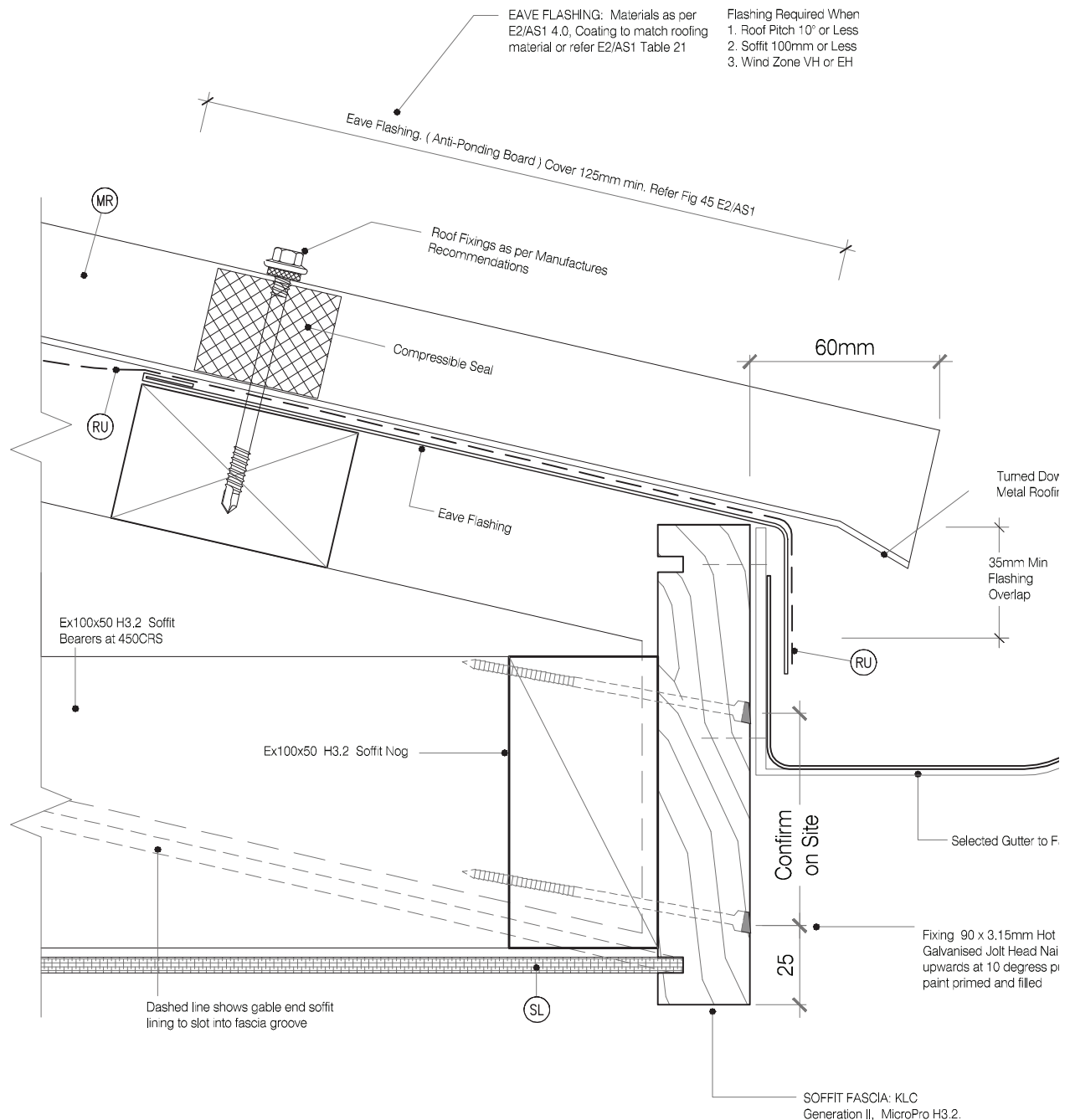
Soakers and flashings must be fixed in accordance with the NZS3604:2011 and Acceptable Solution E2/AS1.

NZS 3604:2011 section 4 and Table 6.12 outline durability for flashings. Section 9 of E2/AS1 outlines flashing design and fabrication details.

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 drawing VS63



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.
2. 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 sun's 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.



5.1 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.

5.2 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, this may be required more regularly eg. sea spray

Maintenance Checklist

1. Wash all exterior surfaces using a low-pressure wash system to remove dust, dirt and other contaminants.
 - Do not use 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 must be undertaken immediately.
 - If the paint surface has been damaged then:
 - Remove all damaged paint, sand back if required
 - Apply a quality primer on any bare timber
 - Once the primer has dried apply 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 good quality, delivering a good quality coating finish. In some cases repainting may be required earlier depending on condition and exposure to harsher elements.

6 Health and Safety

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.

7 Detailed Drawings

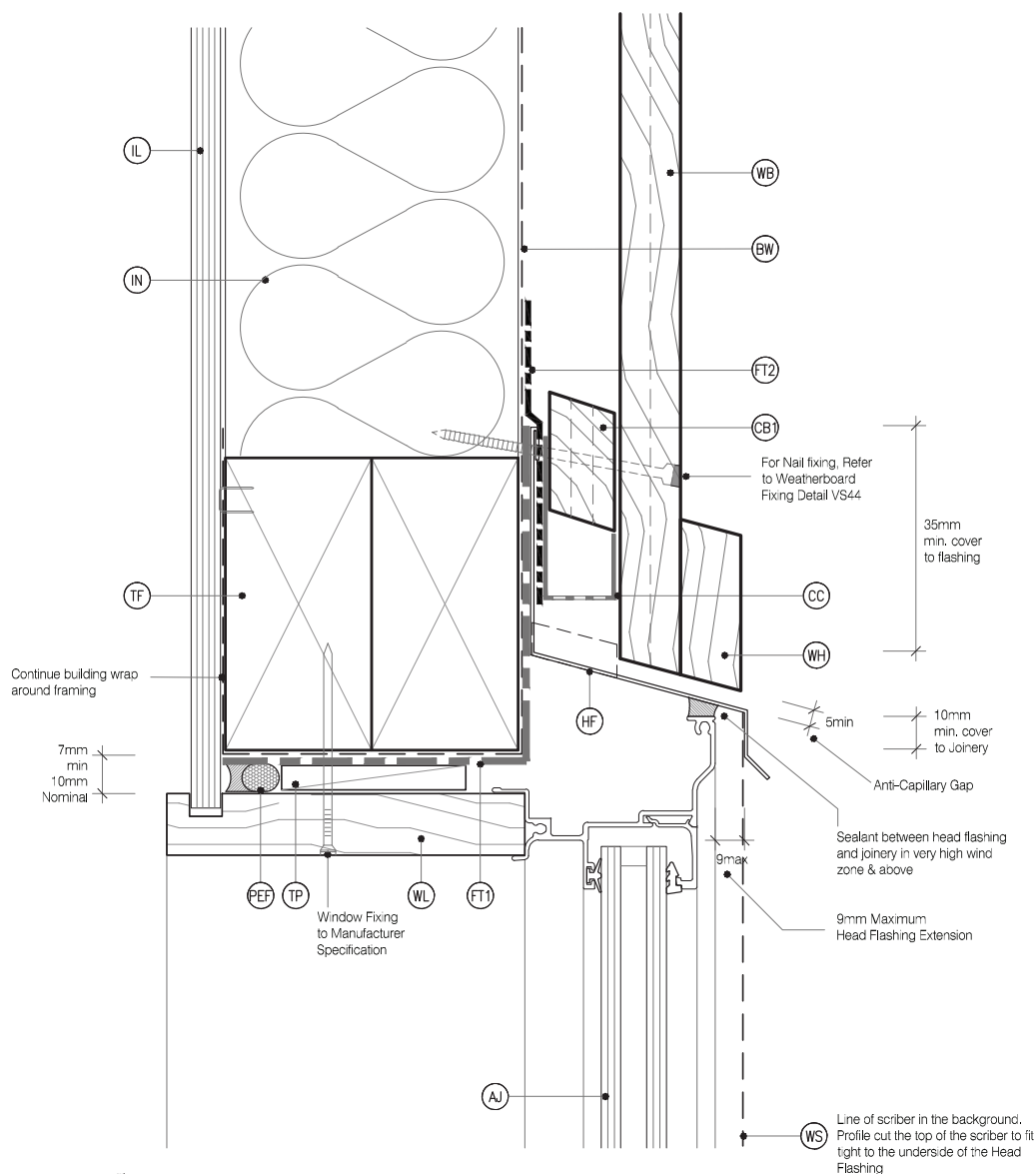
Cavity Fix

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8 Detailed Drawings

LEGEND:

PEF PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB2 CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity	WL WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
AJ ALUMINIUM JOINERY: Selected double glazed aluminium joinery	TF TIMBER FRAME: H1.2 min treated timber framing	WH WEATHERHEAD: (OPTIONAL) MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
IL INTERNAL LINING: Selected Internal Lining	FT1 FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	WZ WANZ SUPPORT: Provide window support as required by joinery manufacturer
BW BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1, 7.2 E2/AS1)	FT2 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to taped joint or top of frame	WS WINDOW SCRIBER: KLC Generation II, MicroPro H3.2, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole.
CC CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	IN INSULATION: Selected Insulation	WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
CB1 CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ. To form a 20mm cavity	HF HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1	
	TP TIMBER PACKER: MicroPro H3.2 Treated Packer	



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 NZS3640:2003 and AS1504:12012.
- MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
- Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
- 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 Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
- MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **Window Head Detail - Aluminium Joinery**



DRAWING SCALE
1:2 @ A4

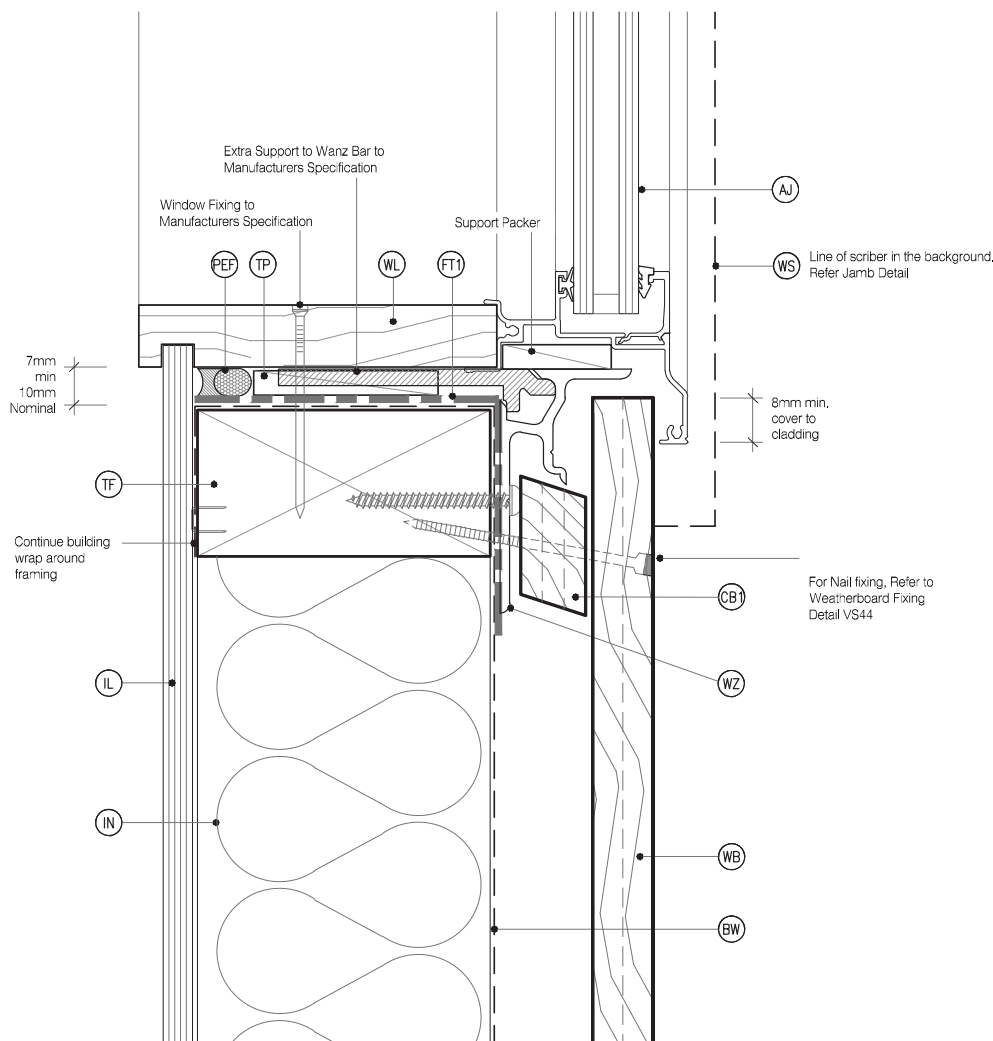
ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS10** REVISION

8 Detailed Drawings

LEGEND:

PEF	PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB2	CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity	WL	WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
AJ	ALUMINIUM JOINERY: Selected double glazed aluminium joinery	TF	TIMBER FRAME: H1.2 min treated timber framing	WH	WEATHERHEAD: (OPTIONAL) MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
IL	INTERNAL LINING: Selected Internal Lining	FT1	FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	WZ	WANZ SUPPORT: Provide window support as required by joinery manufacturer
BW	BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1, 7.2 E2/AS1)	FT2	FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to taped joint or top of frame	WS	WINDOW SCRIBER: KLC Generation II, MicroPro H3.2, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole.
CC	CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	IN	INSULATION: Selected Insulation	WB	WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
CB1	CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ. To form a 20mm cavity	HF	HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1		
		TP	TIMBER PACKER: MicroPro H3.2 Treated Packer		



MicoPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1504:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Cut End Treatment: All cut ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Window Sill Detail - Aluminium Joinery**



DRAWING SCALE
1:2 @ A4

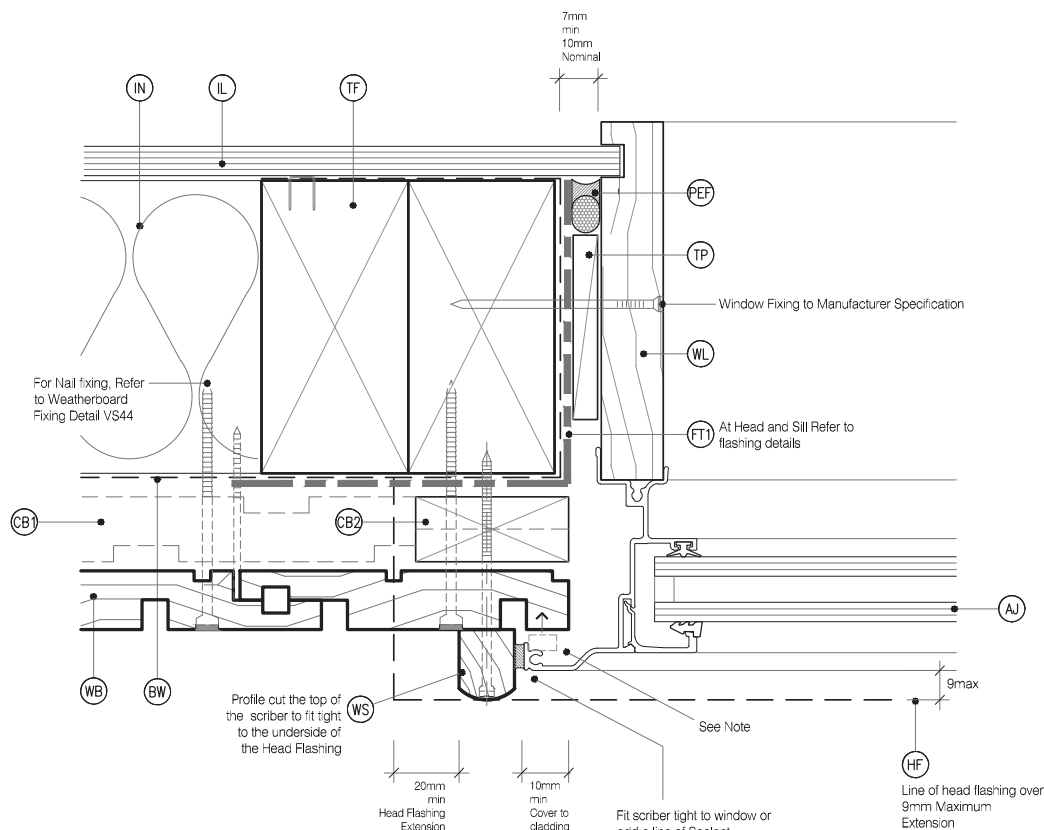
ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS11** REVISION

8 Detailed Drawings

LEGEND:

PEF	PEF ROD BACKING: Foam backing rod with sealant to cavity in Window perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB2	CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity	WL	WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
AJ	ALUMINIUM JOINERY: Selected double glazed aluminium joinery	TF	TIMBER FRAME: H1.2 min treated timber framing	WH	WEATHERHEAD: (OPTIONAL) MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scribe
IL	INTERNAL LINING: Selected Internal Lining	FT1	FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	WZ	WANSZ SUPPORT: Provide window support as required by joinery manufacturer
BW	BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1, 7.2 E2/AS1)	FT2	FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to taped joint or top of frame	WS	WINDOW SCRIBER: KLC Generation II, MicroPro H3.2, sealant to back of scribe and 75 x 3.15mm Galvanised nail in 3mm predrilled hole.
CC	CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	IN	INSULATION: Selected Insulation	WB	WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
CB1	CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ. To form a 20mm cavity	HF	HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1		
		TP	TIMBER PACKER: MicroPro H3.2 Treated Packer		



NOTE : No Scribe Option :
The Aluminium Joinery must sit hard against the back of the joinery flange and the timber weatherboards with a E.P.S Compressible bond breaker foam seal between

MicoPro® Wood Treatment Technology

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2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:2012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate® Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Window Jamb Detail - Aluminium Joinery**

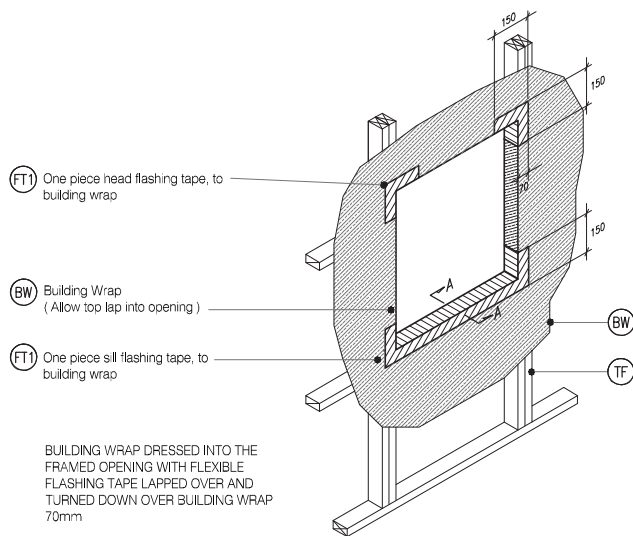


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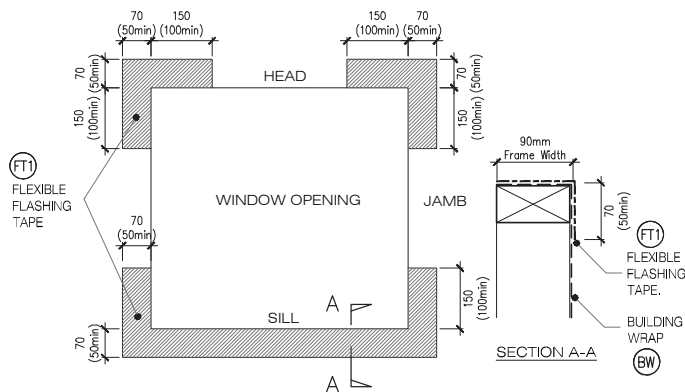
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DRAWING No **KLC CF20 VS12** REVISION

8 Detailed Drawings



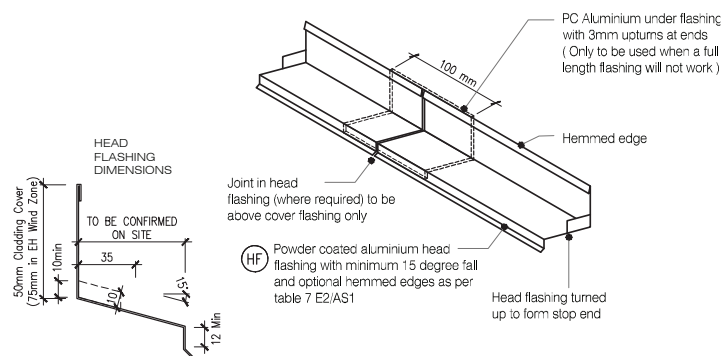
W4 TYPICAL WINDOW OPENING (FLASHING TAPE)
VS13 SCALE : N.T.S



W5 FLEXIBLE BUILDING WRAP AT OPENING
VS13 SCALE : 1 / 5 @ A1, 1 / 10 @ A3

MicroPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Cut End Treatment: All cut ends surfaces are to be double coated and sealed before fixing. With a **solvent (oil based) primer**.
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
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ONE PIECE PC ALUMINIUM HEAD FLASHING 15° SLOPE WITH 10mm min COVER TO JOINERY EXTEND 30mm min EITHER SIDE OF JOINERY WITH STOP ENDS

W6 TYPICAL HEAD & FLASHING JOINT
VS13 SCALE : 1 / 2 @ A1, 1 / 4 @ A3

CAD REF : KLC CF20 VS10-15 - WINDOW DETAILS.dwg
DATE : 26/10/2018



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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Window Flashing Details - Aluminium Joinery



DRAWING SCALE 1:4 @ A4	ISSUE DATE 26/10/2018
DRAWING No KLC CF20 VS13	REVISION

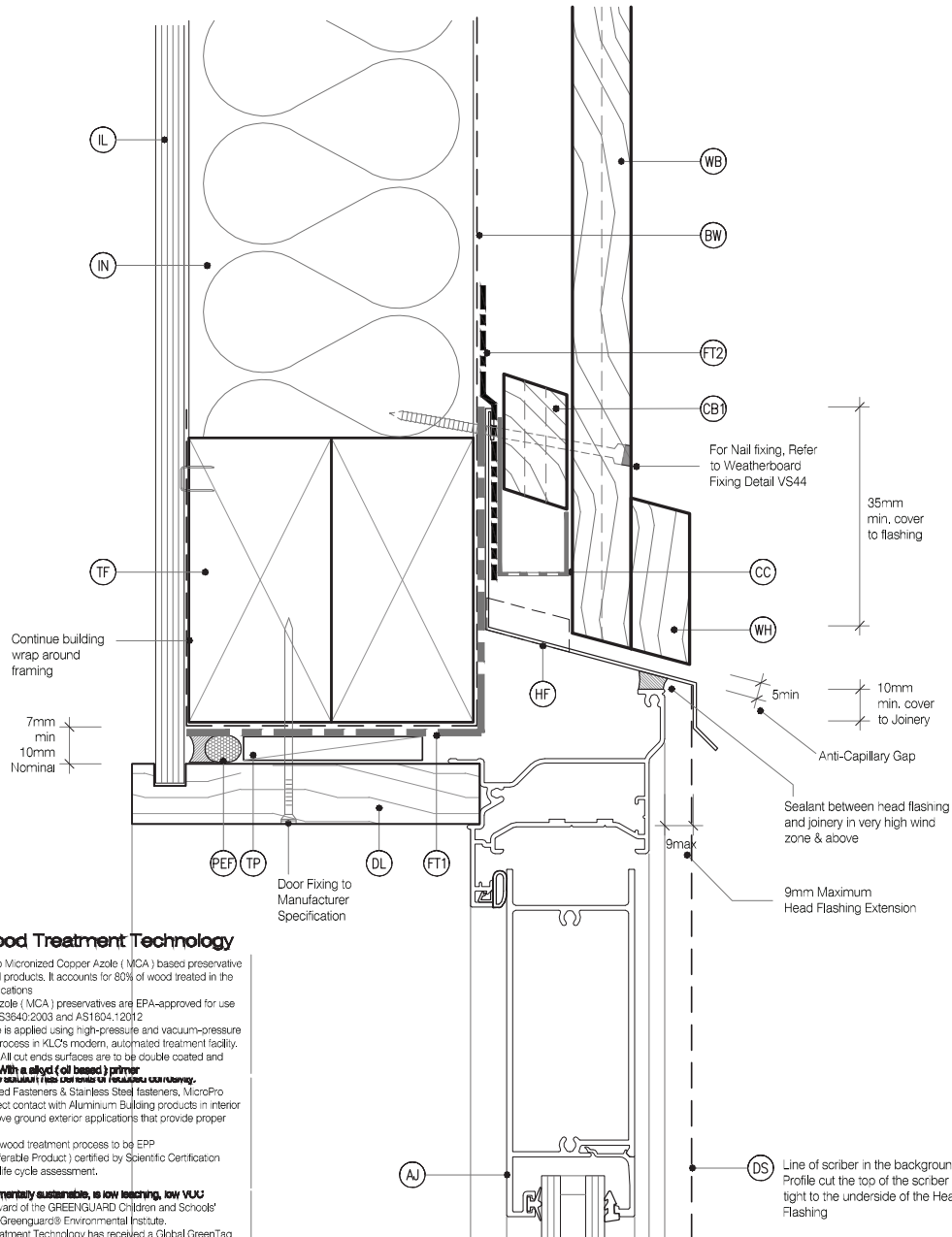
8 Detailed Drawings

LEGEND:

- (PEF) PEF ROD BACKING: Foam backing rod with sealant to cavity in door perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- (AJ) ALUMINIUM JOINERY: Selected double glazed aluminium joinery
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding
- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castelled with a 18 degree bevelled slope, MicroPro H3.2 FJ, To form a 20mm cavity

- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (FT1) FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1
- (FT2) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to taped joint or top of frame
- (IN) INSULATION: Selected Insulation
- (HF) HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1
- (TP) TIMBER PACKER: MicroPro H3.2 Treated Packer

- (DL) DOOR LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
- (WH) WEATHERHEAD: (OPTIONAL) MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
- (WZ) WANZ SUPPORT: Provide window support as required by joinery manufacturer
- (DS) DOOR SCRIBER: KLC Generation II, MicroPro H3.2 Sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole.
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617



MicroPro® Wood Treatment Technology

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2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:2012
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Cut End Treatment : All cut ends surfaces are to be double coated and sealed before fixing. With a solvent (oil based) primer.
5. *MicroPro preservative system is safe for use on all types of wood.*
Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. *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.*
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate® Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).

CAD REF : KLC CF20 VS20-25 - DOOR DETAILS.dwg
DATE : 26/10/2018



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TYPE

Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME

Door Head Detail - Aluminium Joinery



DRAWING SCALE

1:2 @ A4

ISSUE DATE

26/10/2018

DRAWING No

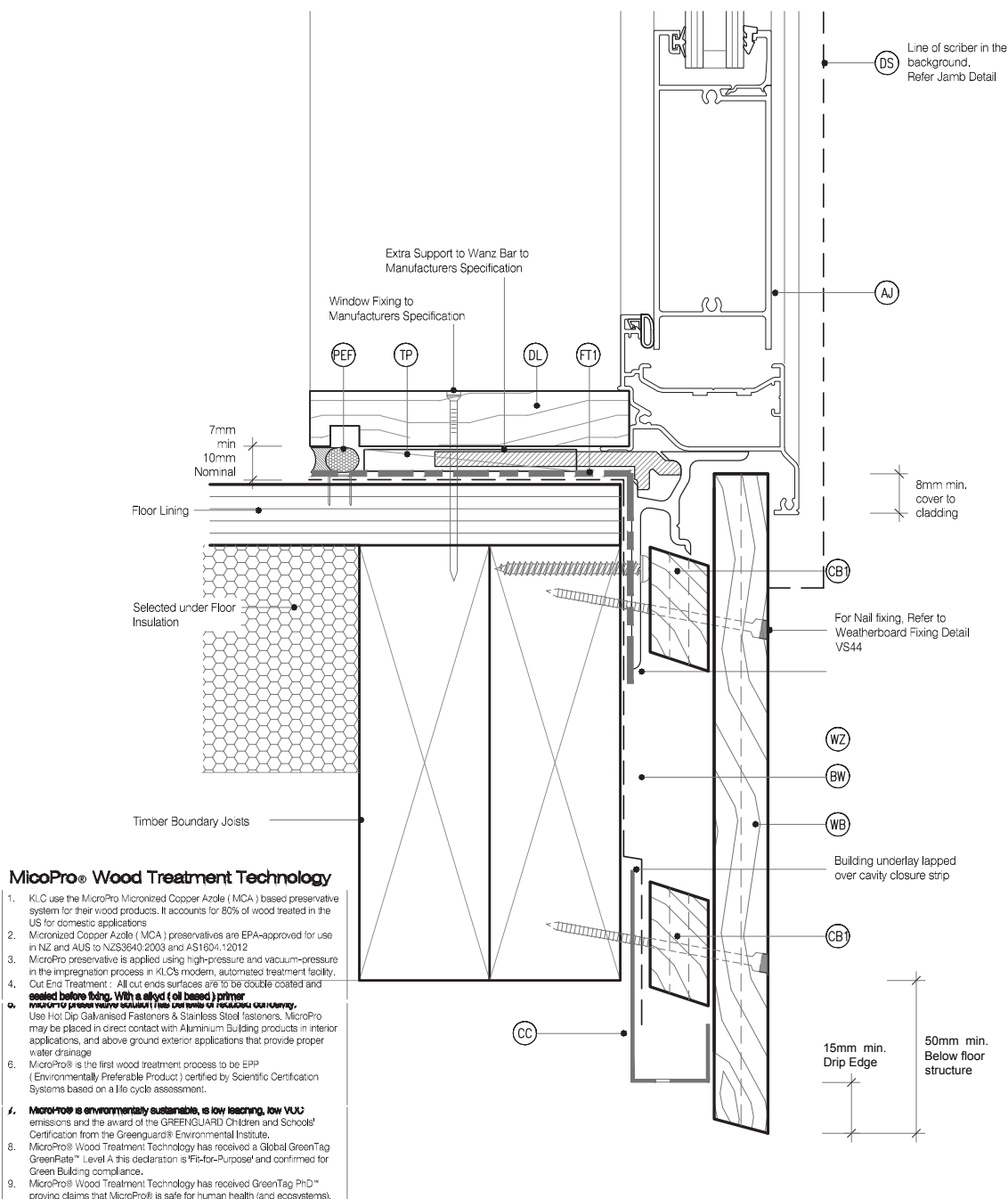
KLC CF20 VS20

REVISION

8 Detailed Drawings

LEGEND:

PEF	PEF ROD BACKING: Foam backing rod with sealant to cavity in door perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB2	CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity	DL	DOOR LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
AJ	ALUMINIUM JOINERY: Selected double glazed aluminium joinery	TF	TIMBER FRAME: H1.2 min treated timber framing	WH	WEATHERHEAD: (OPTIONAL) MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
IL	INTERNAL LINING: Selected Internal Lining	FT1	FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	WZ	WANZ SUPPORT: Provide window support as required by joinery manufacturer
BW	BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)	FT2	FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to taped joint or top of frame	DS	DOOR SCRIBER: KLC Generation II, MicroPro H3.2 Sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole.
CC	CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	IN	INSULATION: Selected Insulation	WB	WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
CB1	CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ. To form a 20mm cavity	HF	HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1		
		TP	TIMBER PACKER: MicroPro H3.2 Treated Packer		



MicroPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604.1:2012
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Cut End Treatment: All cut ends surfaces are to be double coated and sealed before being. With a oil or oil based primer.
5. ~~MicroPro preservative should not be used on treated wood.~~ Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. ~~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.~~
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE

Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME

Door Sill Detail - Aluminium Joinery



DRAWING SCALE

1:2 @ A4

ISSUE DATE

26/10/2018

DRAWING No

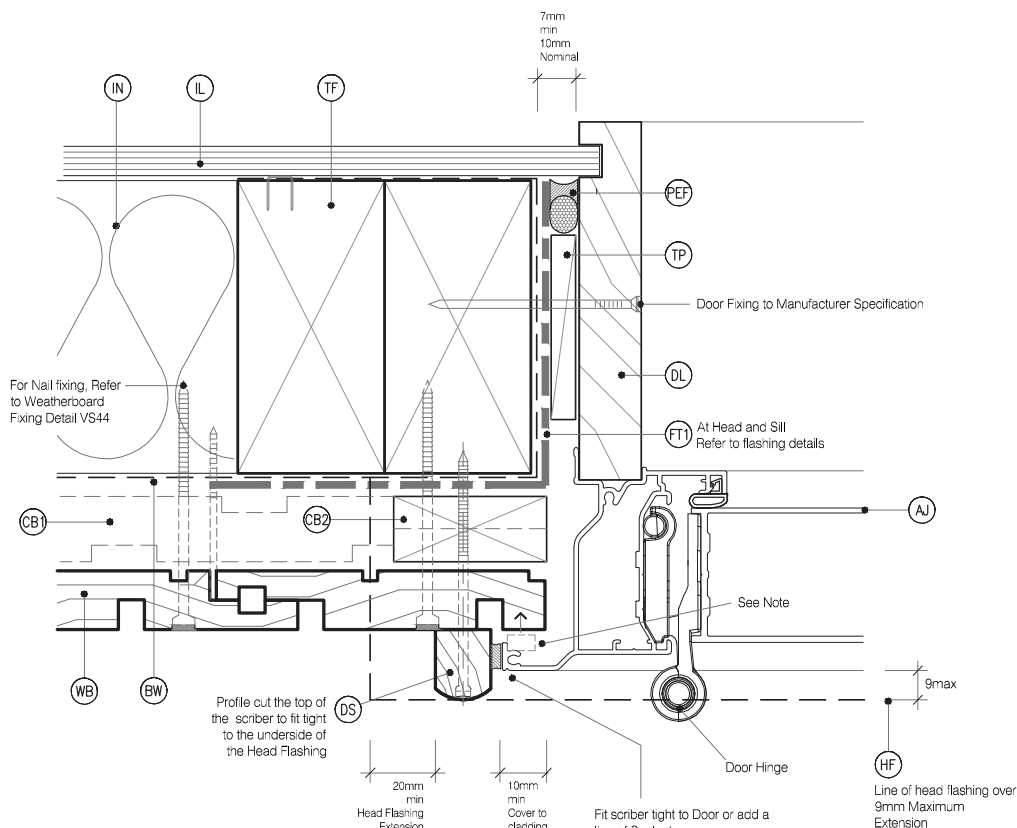
KLC CF20 VS21

REVISION

8 Detailed Drawings

LEGEND:

PEF PEF ROD BACKING: Foam backing rod with sealant to cavity in door perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB2 CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity	DL DOOR LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
AJ ALUMINIUM JOINERY: Selected double glazed aluminium joinery	TF TIMBER FRAME: H1.2 min treated timber framing	WH WEATHERHEAD: (OPTIONAL) MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
IL INTERNAL LINING: Selected Internal Lining	FT1 FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	WZ WANZ SUPPORT: Provide window support as required by joinery manufacturer
BW BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)	FT2 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to taped joint or top of frame	DS DOOR SCRIBER: KLC Generation II, MicroPro H3.2 Sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole.
CC CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	IN INSULATION: Selected Insulation	WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
CB1 CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ. To form a 20mm cavity	HF HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1	
	TP TIMBER PACKER: MicroPro H3.2 Treated Packer	



NOTE : No Scriber Option :
The Aluminium Joinery must sit hard against the back of the joinery flange and the timber weatherboards with a E.P.S Compressible bond breaker foam seal between

MicoPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Door Jamb Detail - Aluminium Joinery**

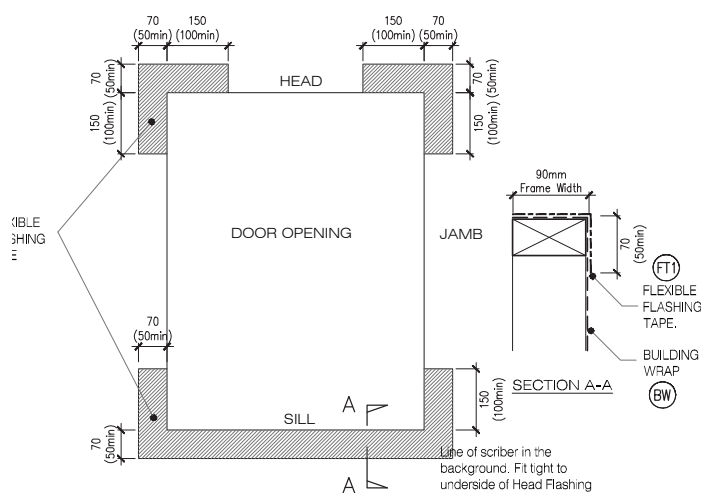
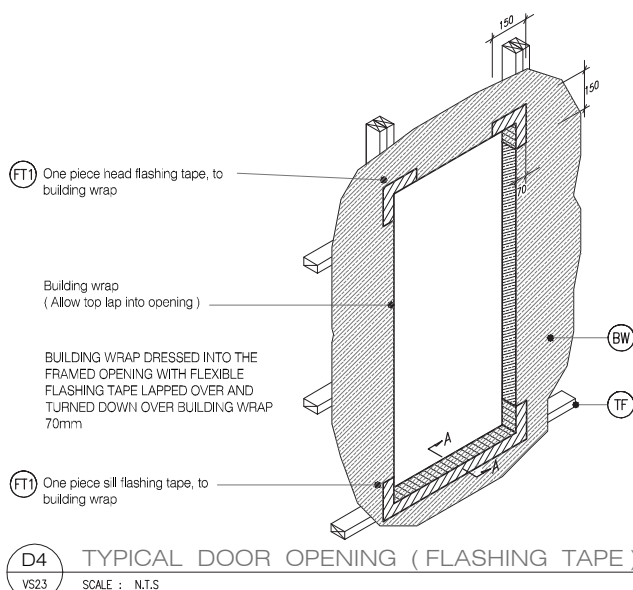


DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

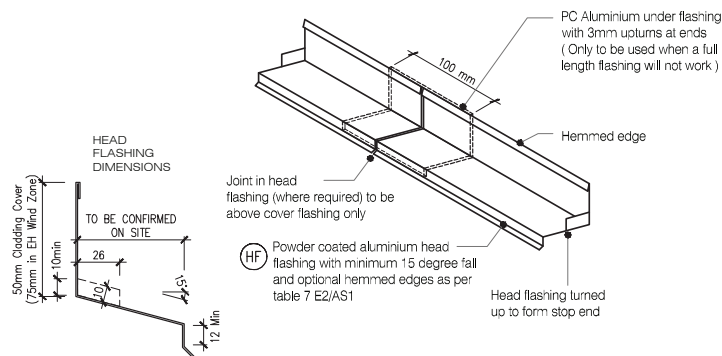
DRAWING No **KLC CF20 VS22** REVISION

8 Detailed Drawings



MicroPro® Wood Treatment Technology

1. 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
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:12012
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment: All out ends surfaces are to be double coated and sealed before fixing. With a silyd (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage
6. MicroPro is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. MicroPro® is environmentally sustainable, is low leaching, low VOC emissions and the award of the GREENGUARD Children and School® Certification from the Greenguard® Environmental Institute.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



CAD REF : KLC CF20 VS20-25 - DOOR DETAILS.dwg
DATE : 26/10/2018

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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Door Flashing Details - Aluminium Joinery

CODEMARK
AQ-020216-CMNZ

DRAWING SCALE
1:4 @ A4

ISSUE DATE
26/10/2018

DRAWING No KLC CF20 VS23
REVISION

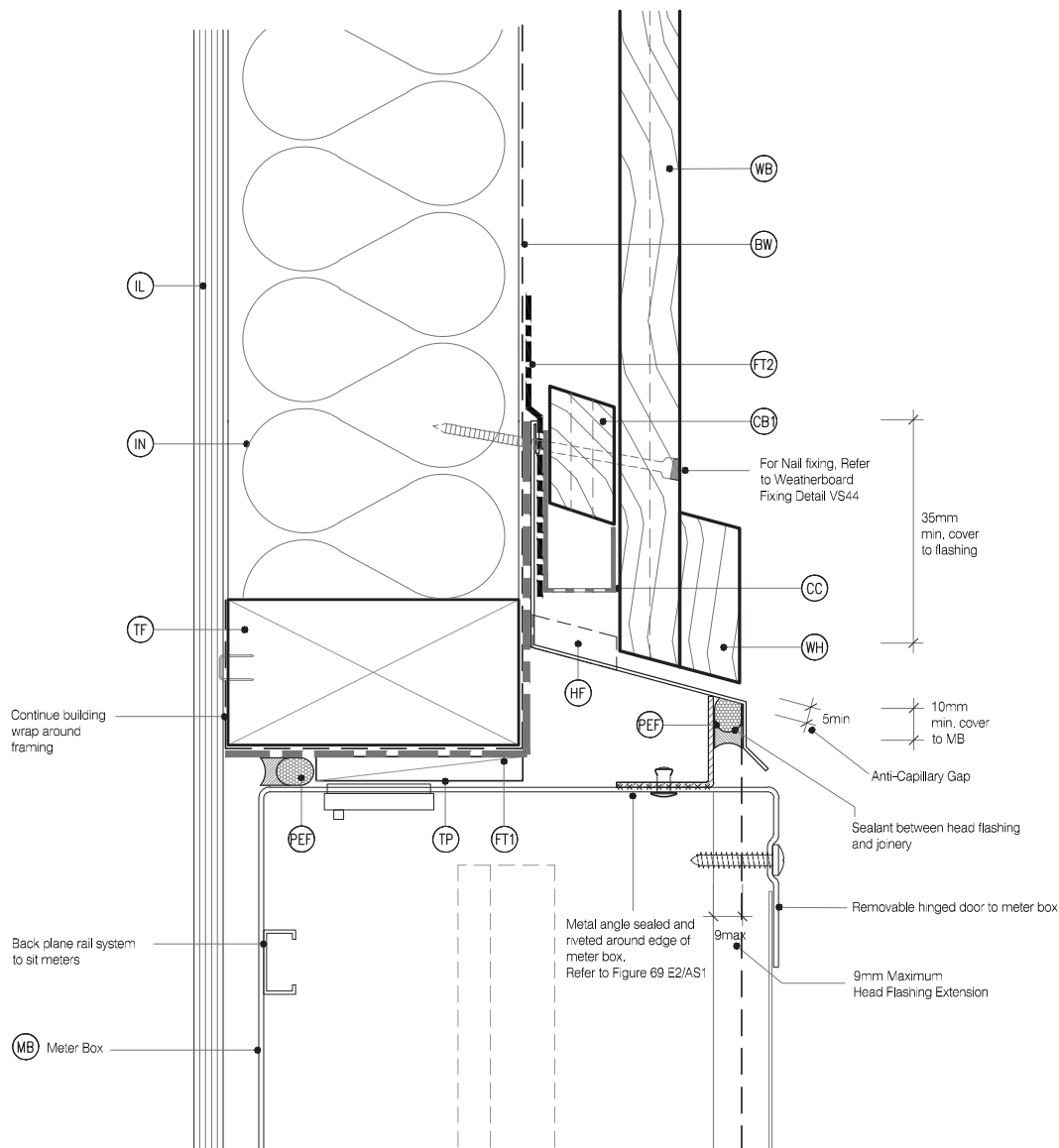
8 Detailed Drawings

LEGEND:

- (PEF) PEF ROD BACKING: Foam backing rod with sealant to cavity in meter box perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- (MB) METER BOX: Electrical meter box, with removable hinged door and polycarbonate viewing window
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1, 7.2 E2/AS1)
- (CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding
- (IN) INSULATION: Selected Insulation

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (FT1) FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1
- (FT2) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to lapped joint or top of frame

- (WH) WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber
- (MS) METER BOX SCRIBER: KLC Generation II, MicroPro H3.2, sealant to back of scriber and 75 x 3,15mm Galvanised nail in 2.5mm predrilled hole.
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617
- (HF) HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1
- (TP) TIMBER PACKER: MicroPro H3.2 Treated Packer



MicoPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1504:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Meter Box - Head Detail



DRAWING SCALE
1:2 @ A4

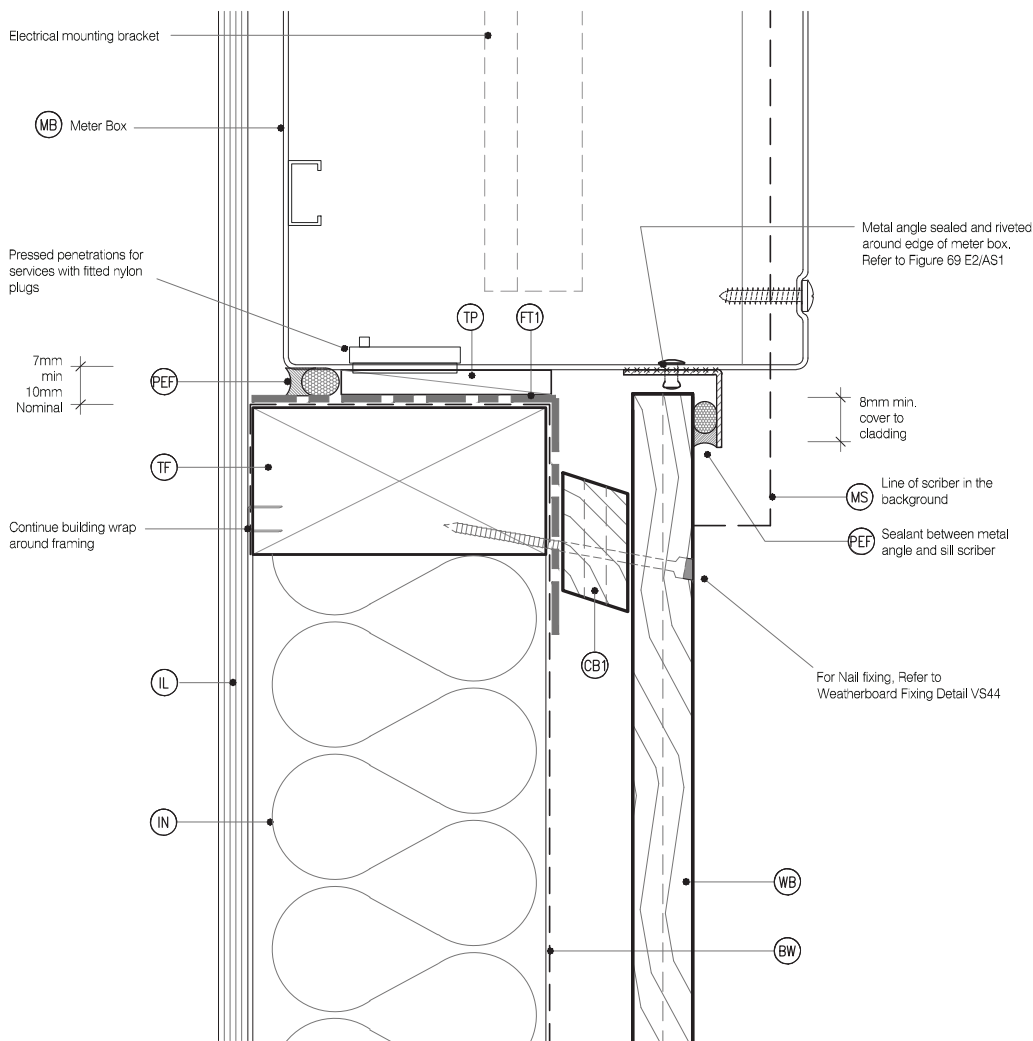
ISSUE DATE
26/10/2018

DRAWING No KLC CF20 VS30
REVISION

8 Detailed Drawings

LEGEND:

PEF	PEF ROD BACKING: Foam backing rod with sealant to cavity in meter box perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB1	CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 FJ. To form a 20mm cavity	WH	WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber
MB	METER BOX: Electrical meter box, with removable hinged door and polycarbonate viewing window	CB2	CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity	MS	METER BOX SCRIBER: KLC Generation II, MicroPro H3.2, sealant to back of scriber and 75 x 3,15mm Galvanised nail in 2.5mm predrilled hole.
IL	INTERNAL LINING: Selected Internal Lining	TF	TIMBER FRAME: H1.2 min treated timber framing	WB	WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617
BW	BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23. In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)	FT1	FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	HF	HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1
CC	CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	FT2	FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to lapped joint or top of frame	TP	TIMBER PACKER: MicroPro H3.2 Treated Packer
IN	INSULATION: Selected Insulation				



MicoPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1504:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Meter Box - Sill Detail**



DRAWING SCALE
1:2 @ A4

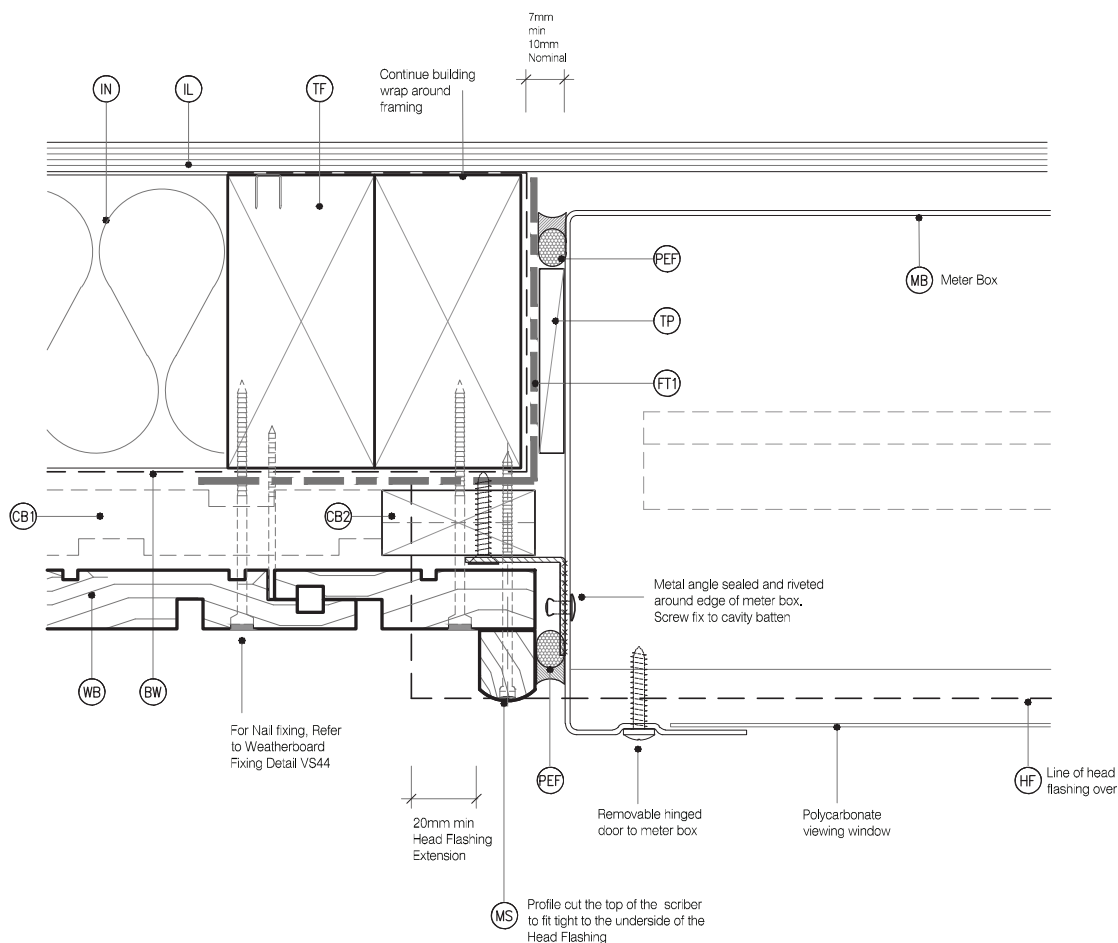
ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS31** REVISION

8 Detailed Drawings

LEGEND:

PEF	PEF ROD BACKING: Foam backing rod with sealant to cavity in meter box perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)	CB1	CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 F.J. To form a 20mm cavity	WH	WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber
MB	METER BOX: Electrical meter box, with removable hinged door and polycarbonate viewing window	CB2	CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity	MS	METER BOX SCRIBER: KLC Generation II, MicroPro H3.2, sealant to back of scriber and 75 x 3,15mm Galvanised nail in 2.5mm predrilled hole.
IL	INTERNAL LINING: Selected Internal Lining	TF	TIMBER FRAME: H1.2 min treated timber framing	WB	WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617
BW	BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23. In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)	FT1	FLASHING TAPE: Flashing tape over wrap 70mm (50 min) turn-down required in corners only. Refer to Fig. 72 of NZBC E2/AS1	HF	HEAD FLASHING: Aluminium head flashing with minimum 15 degree fall and optional hemmed edges as per table 7 E2/AS1
CC	CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding	FT2	FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped over aluminium head flashing or 2nd layer of Building Wrap to lapped joint or top of frame	TP	TIMBER PACKER: MicroPro H3.2 Treated Packer
IN	INSULATION: Selected Insulation				



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 NZS3640:2003 and AS1504:12012.
- MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
- Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
- 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 Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
- MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Meter Box - Jamb Detail**

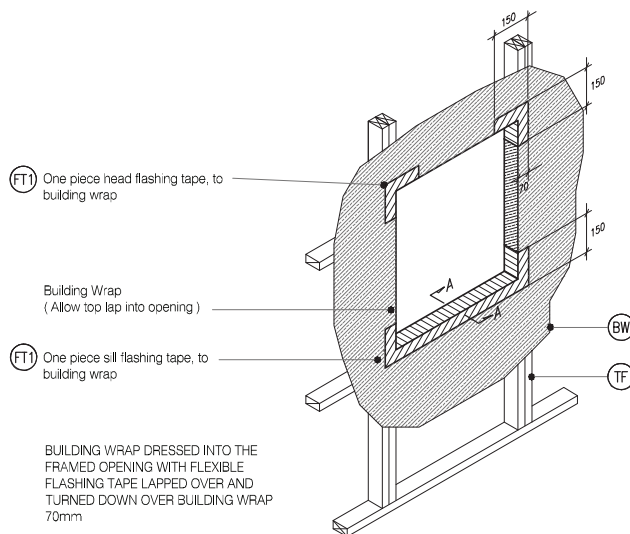


DRAWING SCALE
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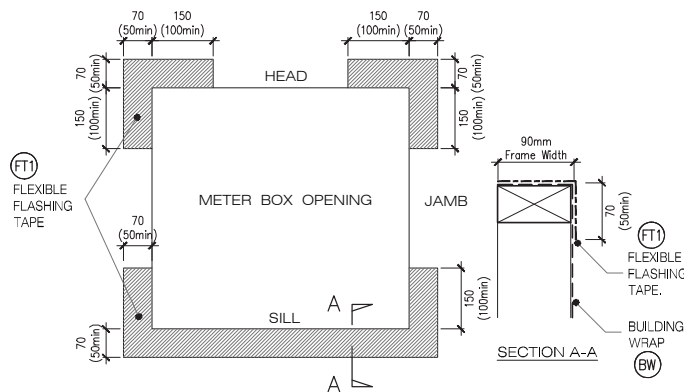
ISSUE DATE
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DRAWING No **KLC CF20 VS32** REVISION

8 Detailed Drawings



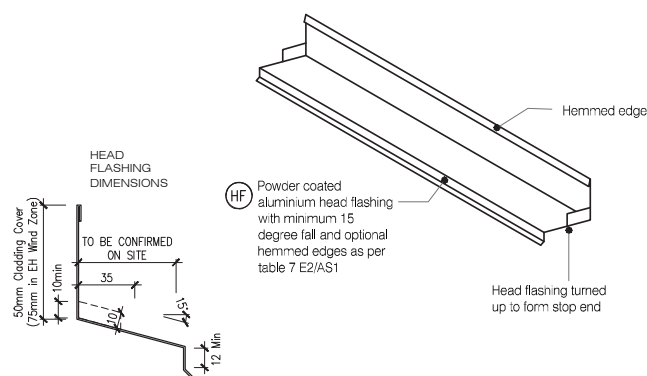
M4 TYPICAL METER BOX OPENING (FLASHING TAPE
VS33 SCALE : N.T.S



M5 FLEXIBLE BUILDING WRAP AT OPENING
VS33 SCALE : 1 / 5 @ A1, 1 / 10 @ A3

MicroPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment: All cut ends surfaces are to be double coated and sealed before fixing. With a **silkyd (oil based) primer**.
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
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M6 TYPICAL HEAD & FLASHING JOINT
VS33 SCALE : 1 / 2 @ A1, 1 / 4 @ A3

CAD REF : KLC CF20 VS30-35 - METER BOX.dwg
DATE : 26/10/2018



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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **Meter Box - Flashing Details**



DRAWING SCALE
1:4 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS33** REVISION

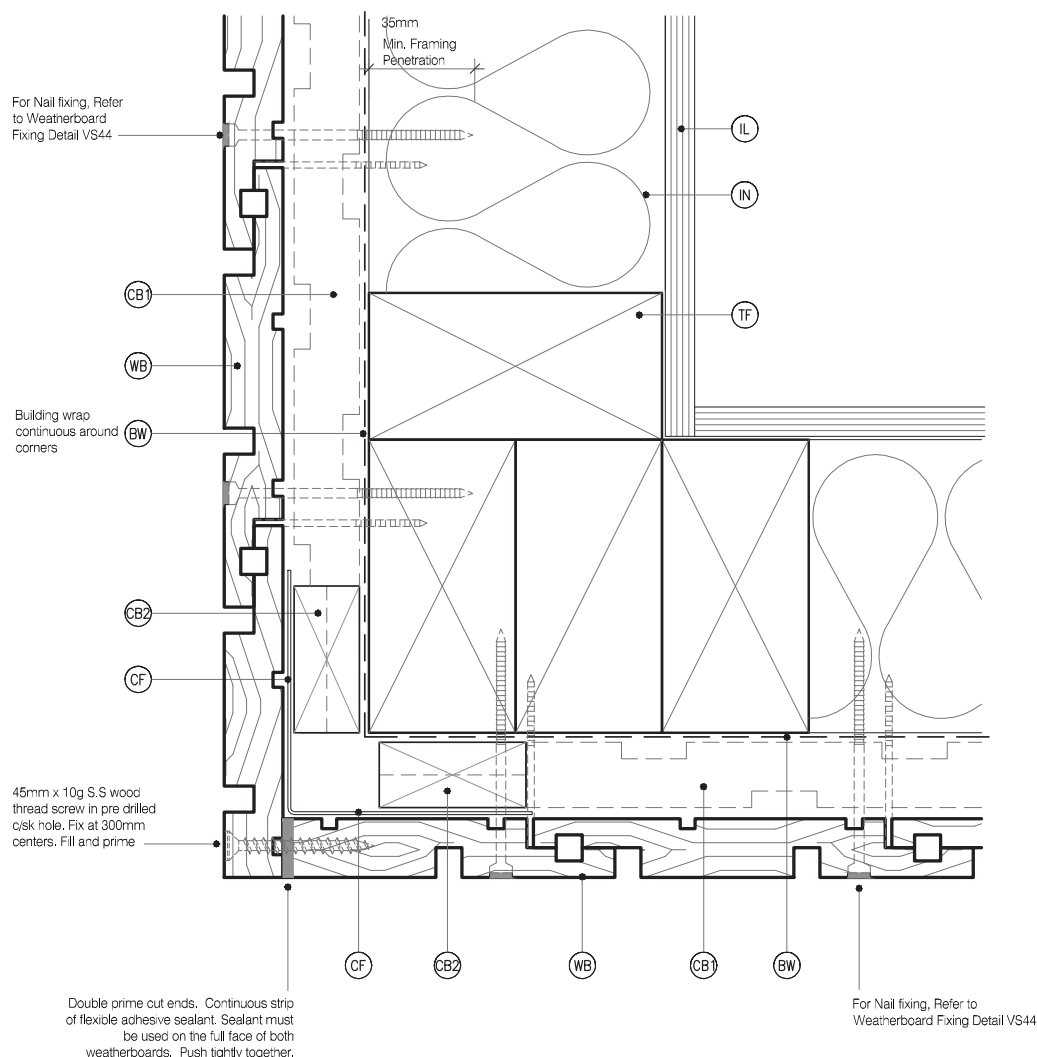
8 Detailed Drawings

LEGEND:

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner; Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 FJ. To form a 20mm cavity

- (CF) 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
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. 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 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 NZS3640:2003 and AS1504:12012.
- MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
- Out End Treatment: All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
- MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
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- MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **External Corner Soaker**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS40** REVISION

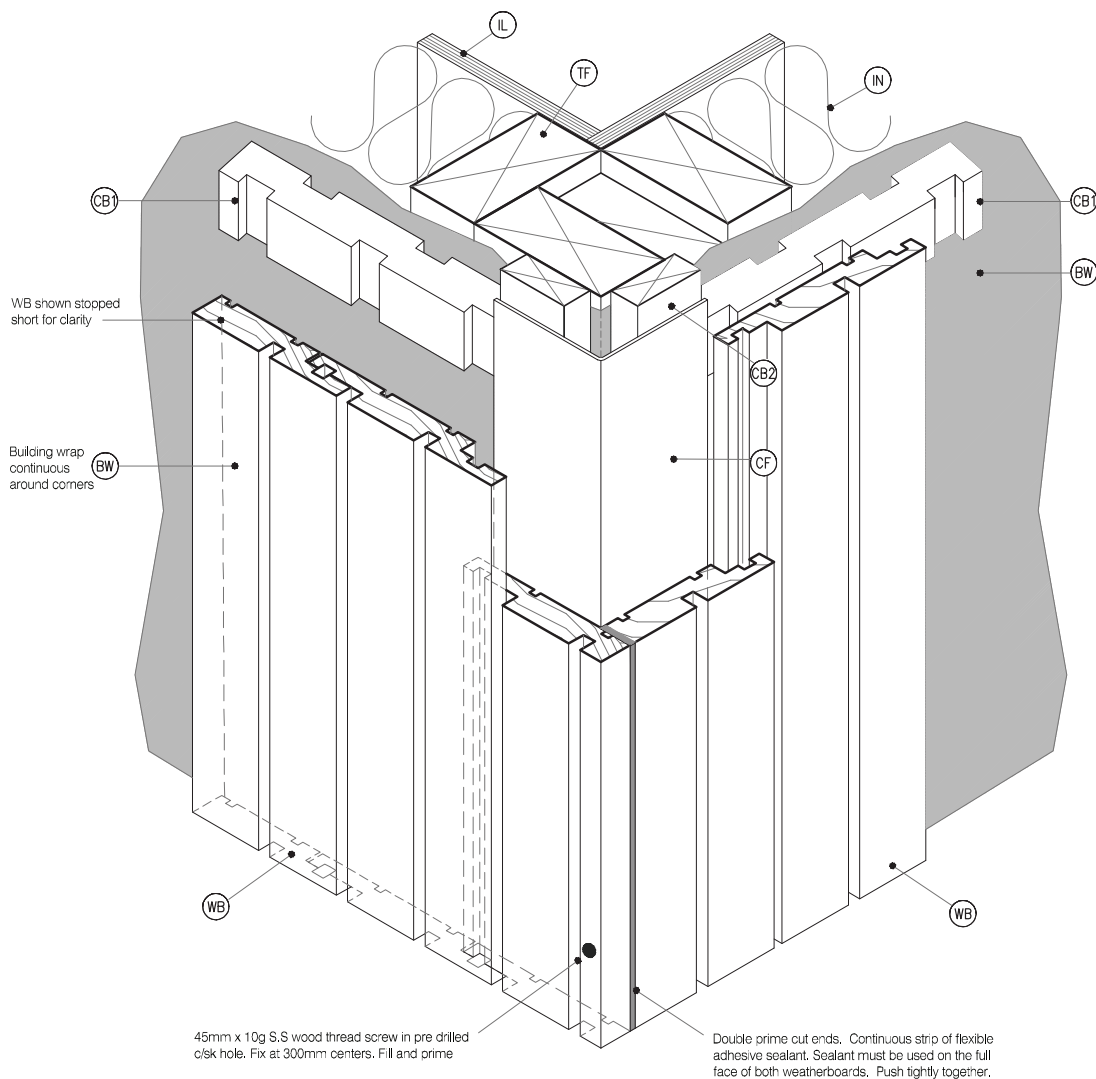
8 Detailed Drawings

LEGEND :

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity

- (CF) 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
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity



MicoPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **3D - External Corner Soaker**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS41** REVISION

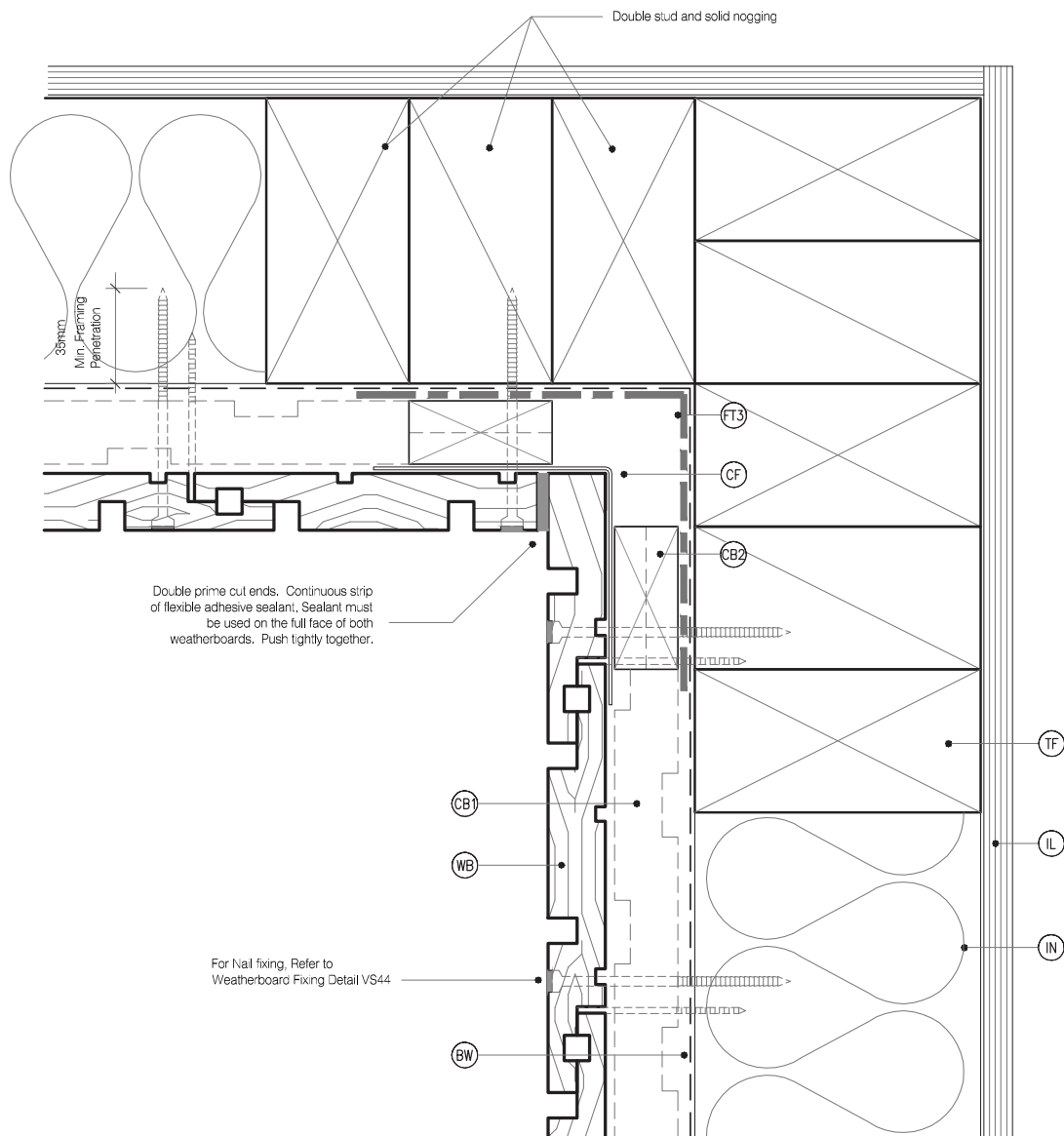
8 Detailed Drawings

LEGEND :

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner; Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 F.J. To form a 20mm cavity

- (CF) 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
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity



DETAIL NOTES :

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

MicroPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1504:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Cut End Treatment : All cut ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
6. MicroPro® is the first wood treatment process to be EPP (Environmentally Preferable Product) certified by Scientific Certification Systems based on a life cycle assessment.
7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Internal Corner**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS42** REVISION

CAD REF : KLC CF20 VS42-46 - GENERAL DETAILS 01.dwg
DATE : 25/10/2018

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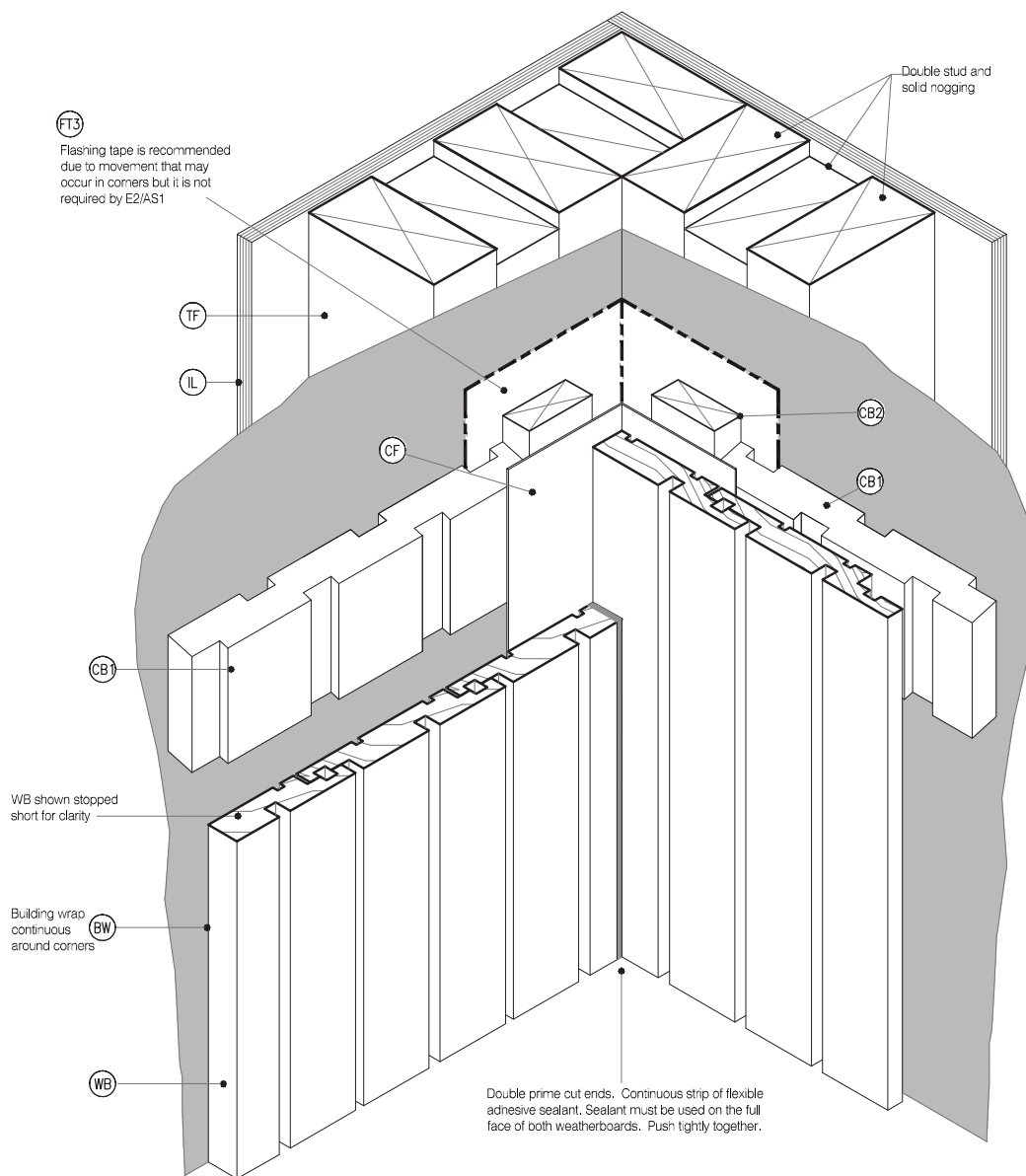
8 Detailed Drawings

LEGEND :

- WB** WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- IL** INTERNAL LINING: Selected Internal Lining
- BW** BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- IN** INSULATION: Selected Insulation

- FT3** FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner; Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- TF** TIMBER FRAME: H1.2 min treated timber framing
- CB1** CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 FJ. To form a 20mm cavity

- CF** 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
- CB2** CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. 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 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 NZS3640:2003 and AS1504:12012.
- MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
- Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
- 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 Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **3D - Internal Corner**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS43** REVISION

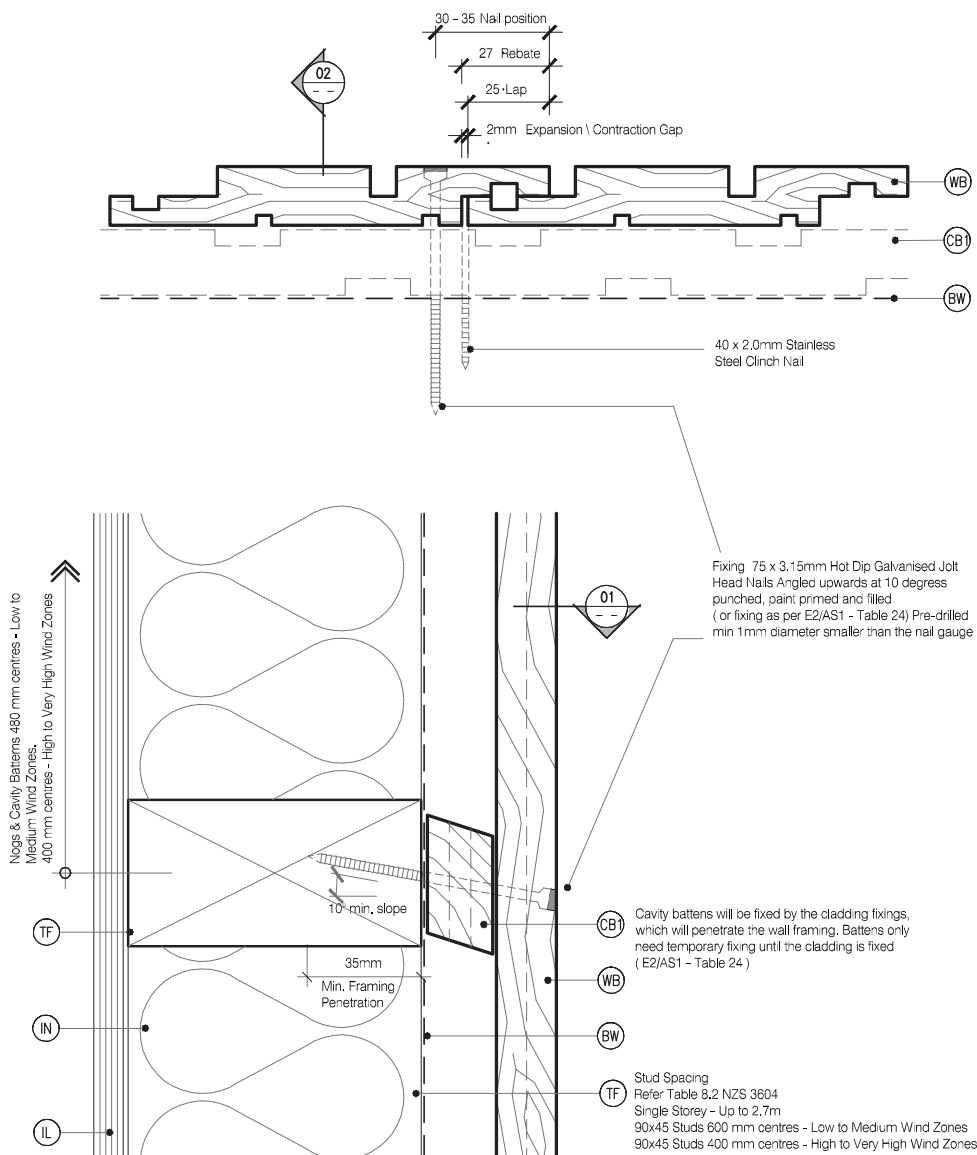
8 Detailed Drawings

LEGEND:

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner; Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 FJ. To form a 20mm cavity

- (CF) 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
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ. To form a 20mm cavity



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



TYPE **Generation II H3.2 Exterior Cladding Systems Vertical Shiplap WB - Cavity Fix**

NAME **Weatherboard Fixing**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS44** REVISION

CAD REF: KLC CF20 VS44-46 - GENERAL DETAILS 01.dwg
DATE: 25/10/2018

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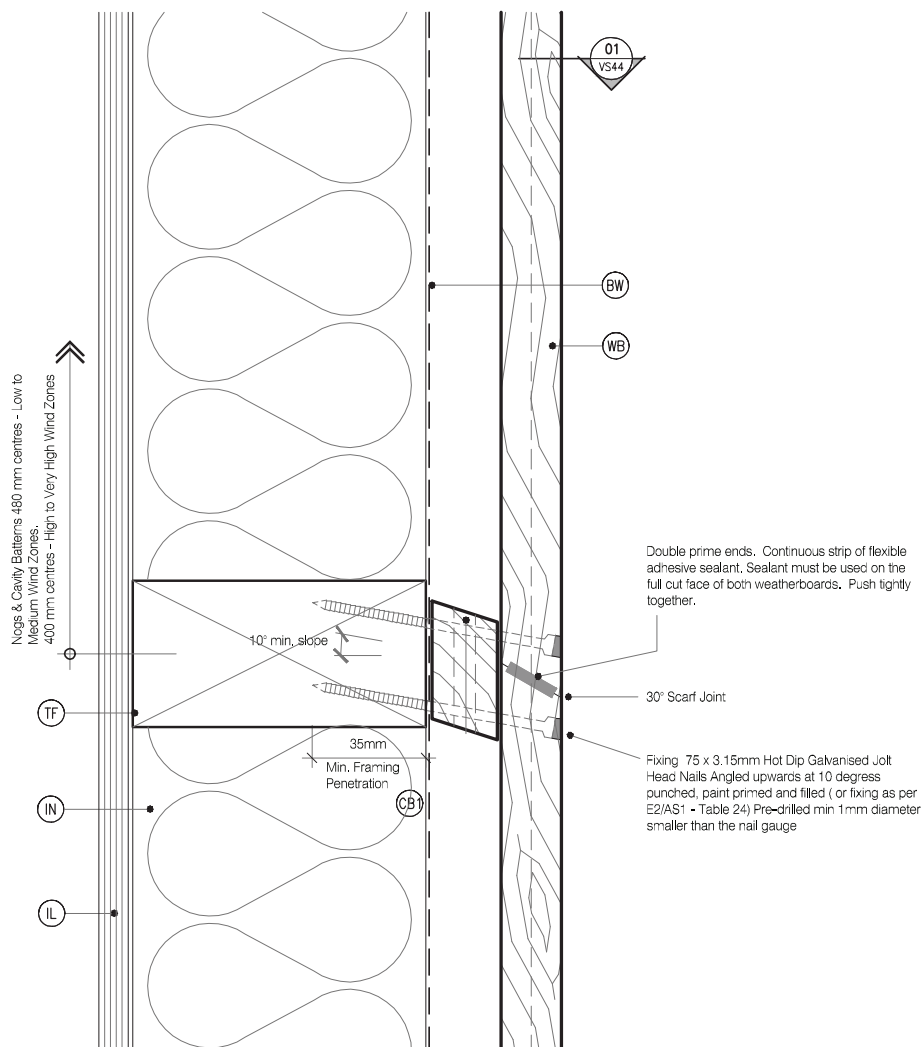
8 Detailed Drawings

LEGEND :

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner; Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope. MicroPro H3.2 F.J. To form a 20mm cavity

- (CF) 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
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity



MicoPro® Wood Treatment Technology

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8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Scarf Joint - Horizontal



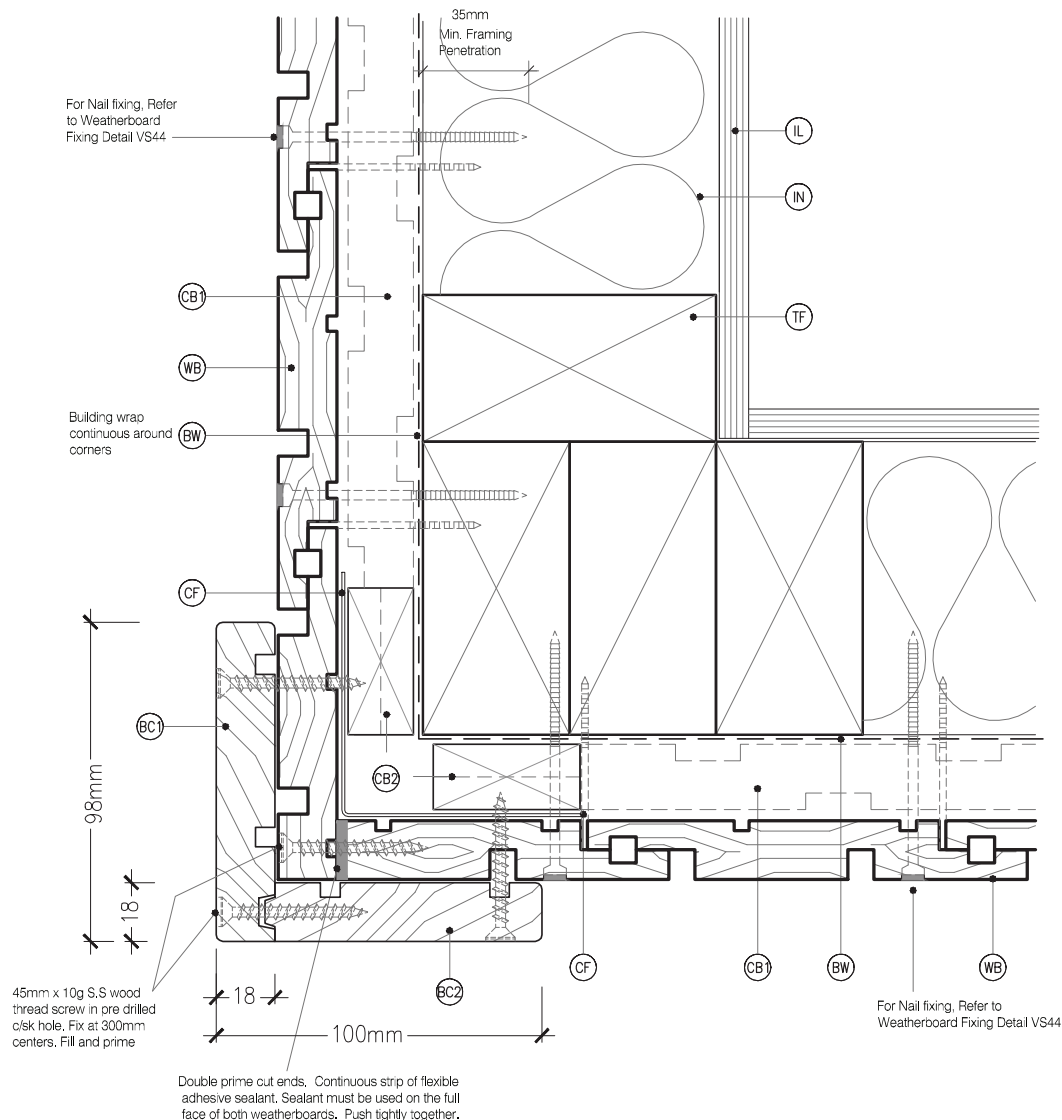
DRAWING SCALE 1:2 @ A4	ISSUE DATE 26/10/2018
DRAWING No KLC CF20 VS45	REVISION

CAD REF : KLC CF20 VS40-46 - GENERAL DETAILS 01.dwg
DATE : 25/10/2018

8 Detailed Drawings

LEGEND:

- | | | |
|--|--|--|
| <p>(PEF) PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)</p> <p>(IL) INTERNAL LINING: Selected Internal Lining</p> <p>(BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)</p> <p>(IN) INSULATION: Selected Insulation</p> <p>(TF) TIMBER FRAME: H1.2 min treated timber framing</p> <p>(WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617</p> | <p>(FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1</p> <p>(FT4) FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.1.1 & Figure 68</p> <p>(BC1) BOXED CORNER COVER : 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners</p> <p>(BC2) BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners</p> | <p>(CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castlatted with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity</p> <p>(CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity</p> <p>(CF) 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</p> |
|--|--|--|



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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **External Boxed Corner**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS50** REVISION

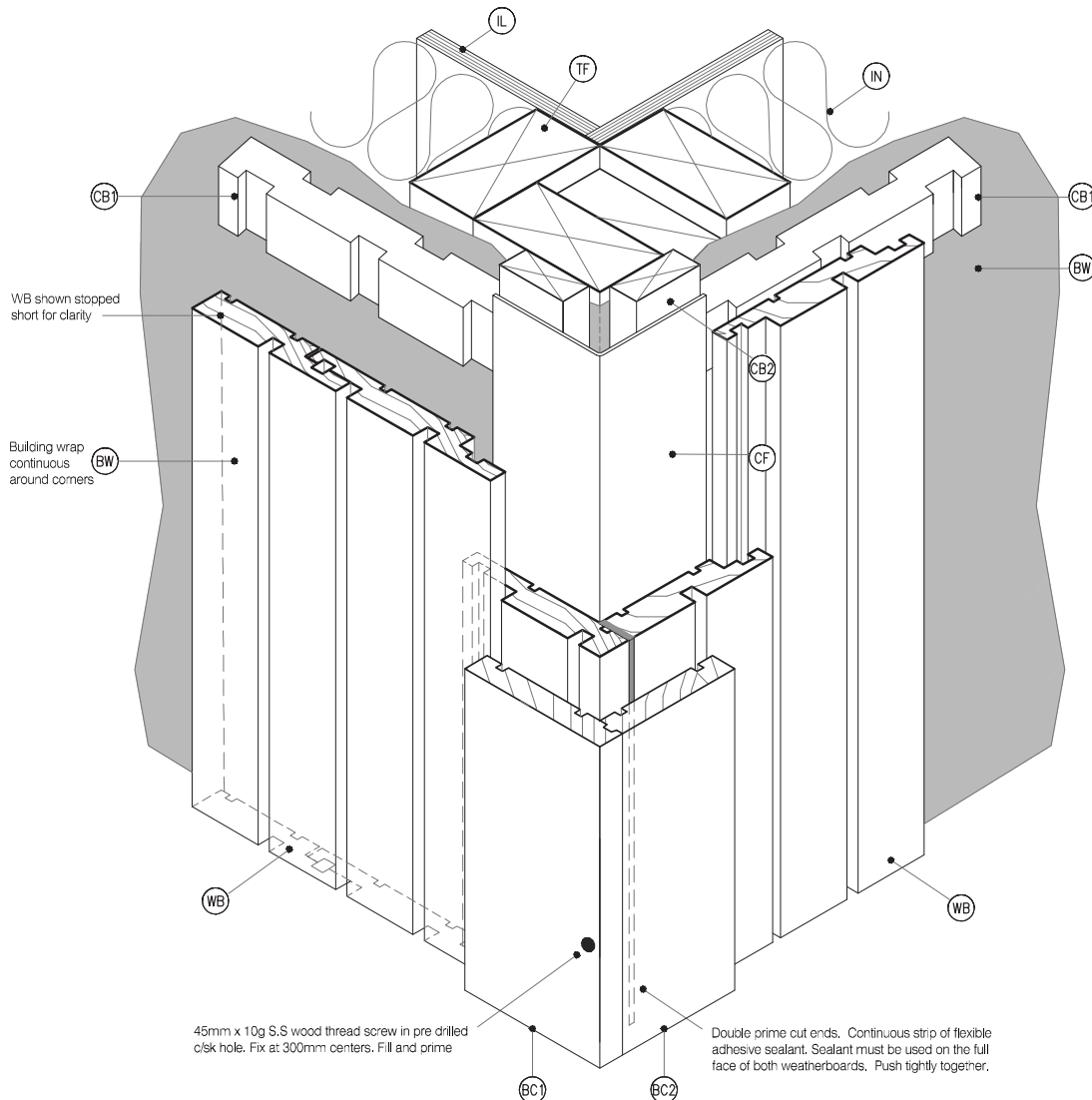
8 Detailed Drawings

LEGEND :

- (PEF) PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (FT4) FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.1.1 & Figure 68
- (BC1) BOXED CORNER COVER : 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- (BC2) BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castelled with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity
- (CF) 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



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

MicoPro® Wood Treatment Technology

1. 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.
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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **3D - External Boxed Corner**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS51** REVISION

CAD REF : KLC CF20 VS50-56 - GENERAL DETAILS 02.dwg
DATE : 26/10/2018

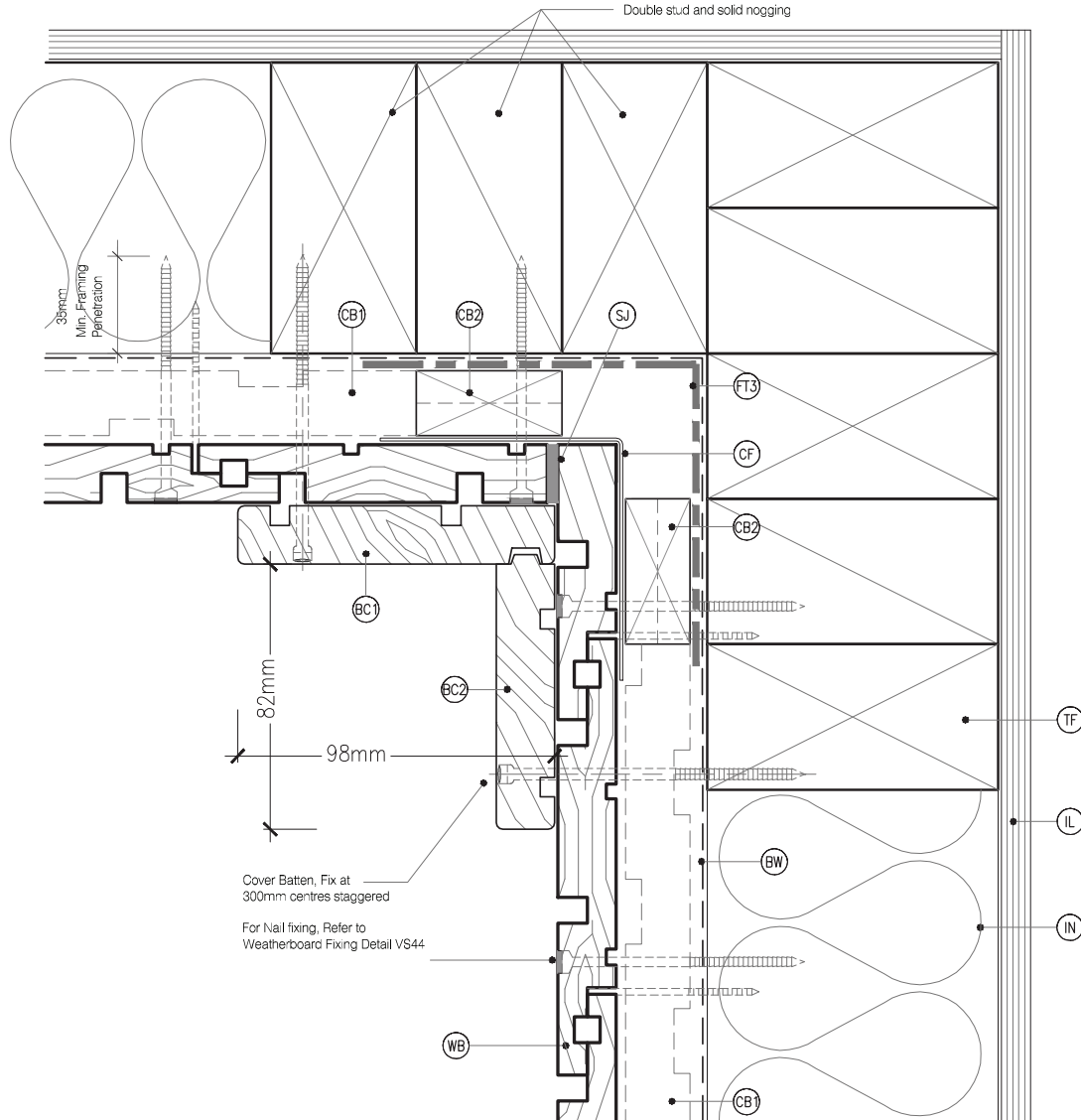
8 Detailed Drawings

LEGEND :

- (PEF) PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation
- (TF) TIMBER FRAME: H1.2 min treated timber framing
- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617

- (FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- (FT4) FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68
- (BC1) BOXED CORNER COVER : 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- (BC2) BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity
- (CF) 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



DETAIL NOTES :

1. Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1

2. Aluminium extrusion must not be continuous over solid floor joists.
MicroPro® Wood Treatment Technology

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2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1604:2012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer

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

7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).

CAD REF : KLC CF20 VS50-56 - GENERAL DETAILS 02.dwg
DATE : 26/10/2018



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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Internal Boxed Corner



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No KLC CF20 VS52
REVISION

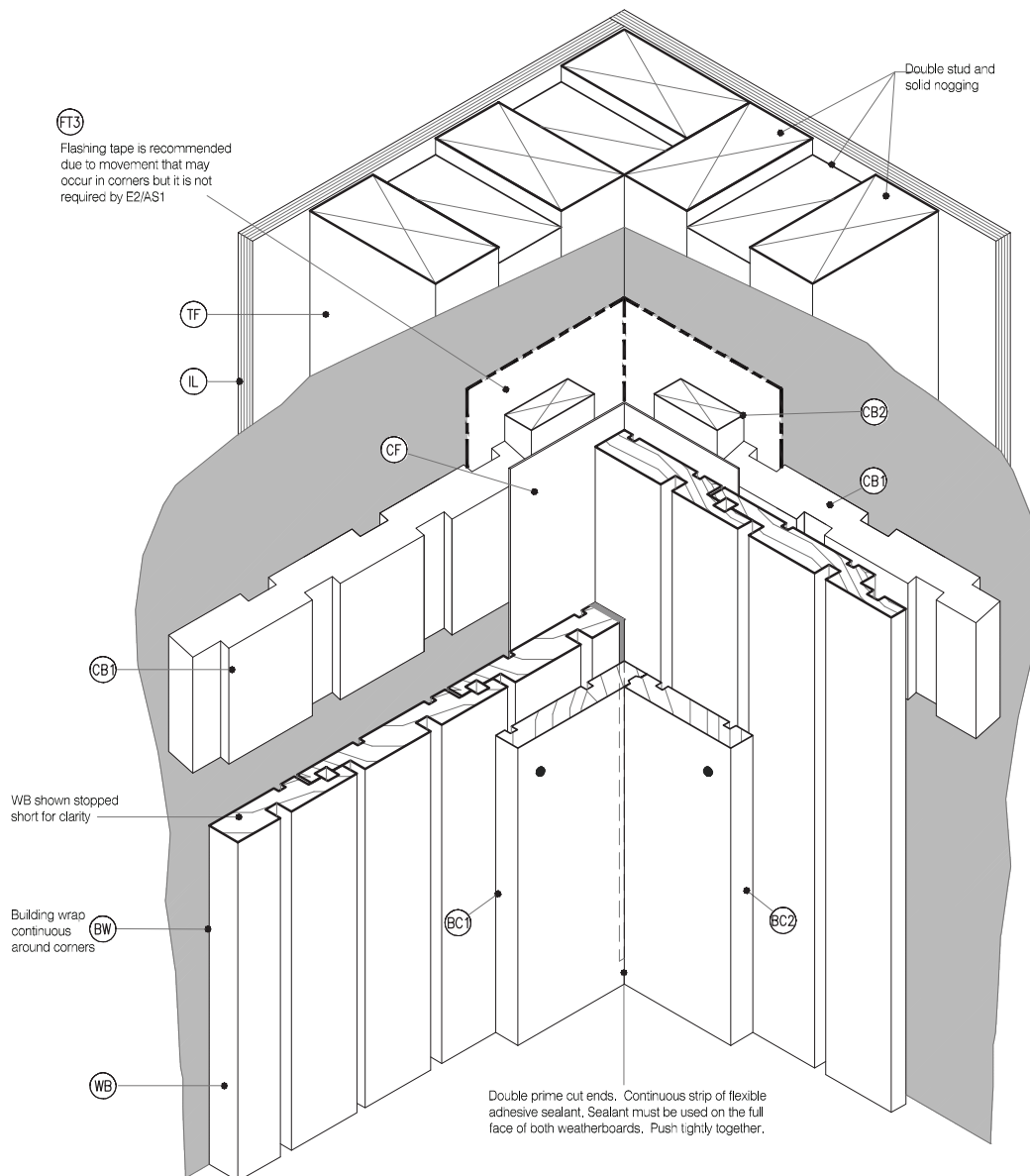
8 Detailed Drawings

LEGEND:

- PEF** PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)
- IL** INTERNAL LINING: Selected Internal Lining
- BW** BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- IN** INSULATION: Selected Insulation
- TF** TIMBER FRAME: H1.2 min treated timber framing
- WB** WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617

- FT3** FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1
- FT4** FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.1.1 & Figure 68
- BC1** BOXED CORNER COVER : 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners
- BC2** BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners

- CB1** CAVITY BATTEN, HORIZONTAL: 45x20 Castlatted with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity
- CB2** CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity
- CF** 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



MicoPro® Wood Treatment Technology

1. 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.
2. Micronized Copper Azole (MCA) preservatives are EPA-approved for use in NZ and AUS to NZS3640:2003 and AS1504:12012.
3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanized Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
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8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **3D - Internal Boxed Corner**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

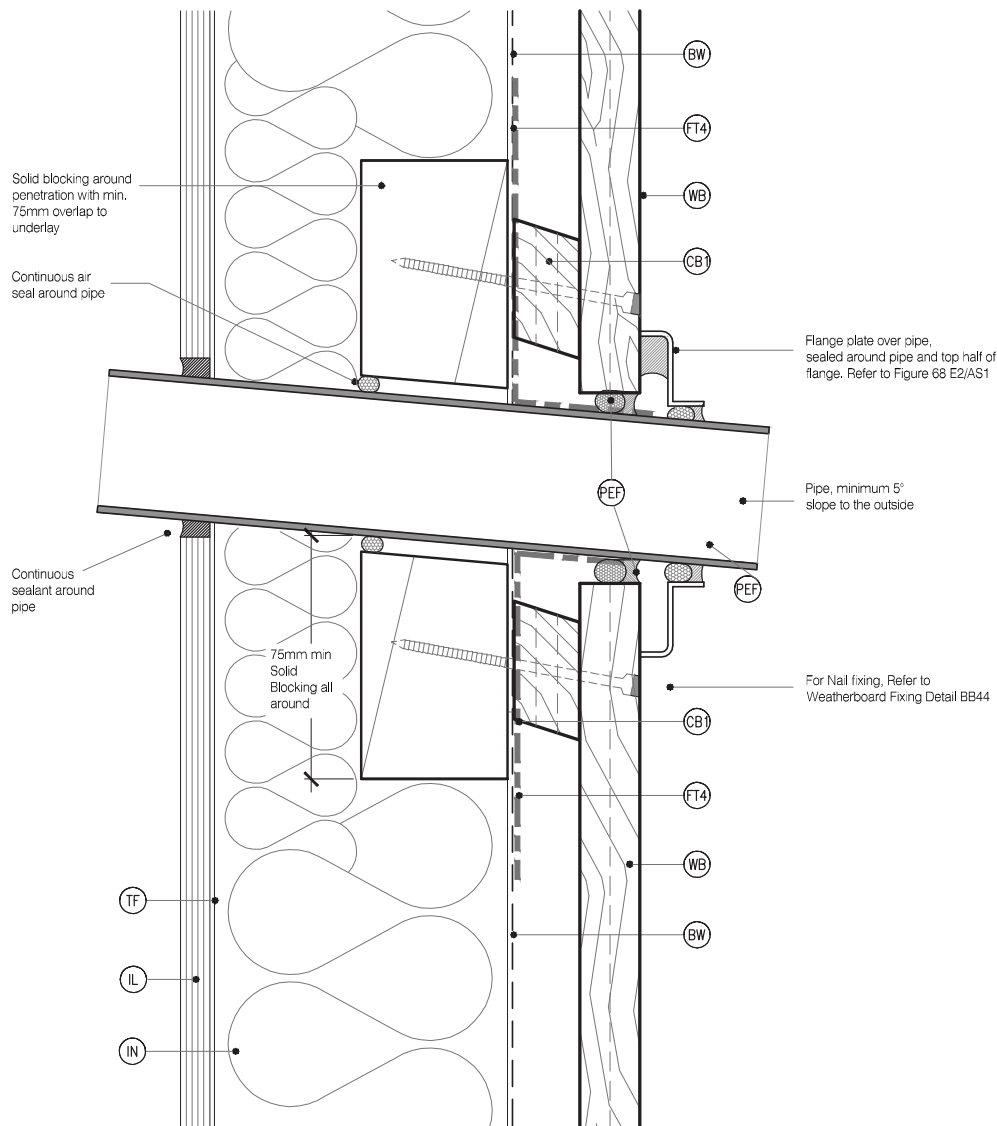
DRAWING No **KLC CF20 VS53** REVISION

CAD REF : KLC CF20 VS50-56 - GENERAL DETAILS 02.dwg
DATE : 26/10/2018

8 Detailed Drawings

LEGEND:

- | | | |
|--|--|--|
| <p>(PEF) PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)</p> <p>(IL) INTERNAL LINING: Selected Internal Lining</p> <p>(BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)</p> <p>(IN) INSULATION: Selected Insulation</p> <p>(TF) TIMBER FRAME: H1.2 min treated timber framing</p> <p>(WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617</p> | <p>(FT3) FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1</p> <p>(FT4) FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.1.1 & Figure 68</p> <p>(BC1) BOXED CORNER COVER : 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners</p> <p>(BC2) BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners</p> | <p>(CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castlatted with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity</p> <p>(CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity</p> <p>(CF) 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</p> |
|--|--|--|



MicoPro® Wood Treatment Technology

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7. 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.
8. MicroPro® Wood Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems**
Vertical Shiplap WB - Cavity Fix

NAME **Pipe Penetration**



DRAWING SCALE
1:2 @ A4

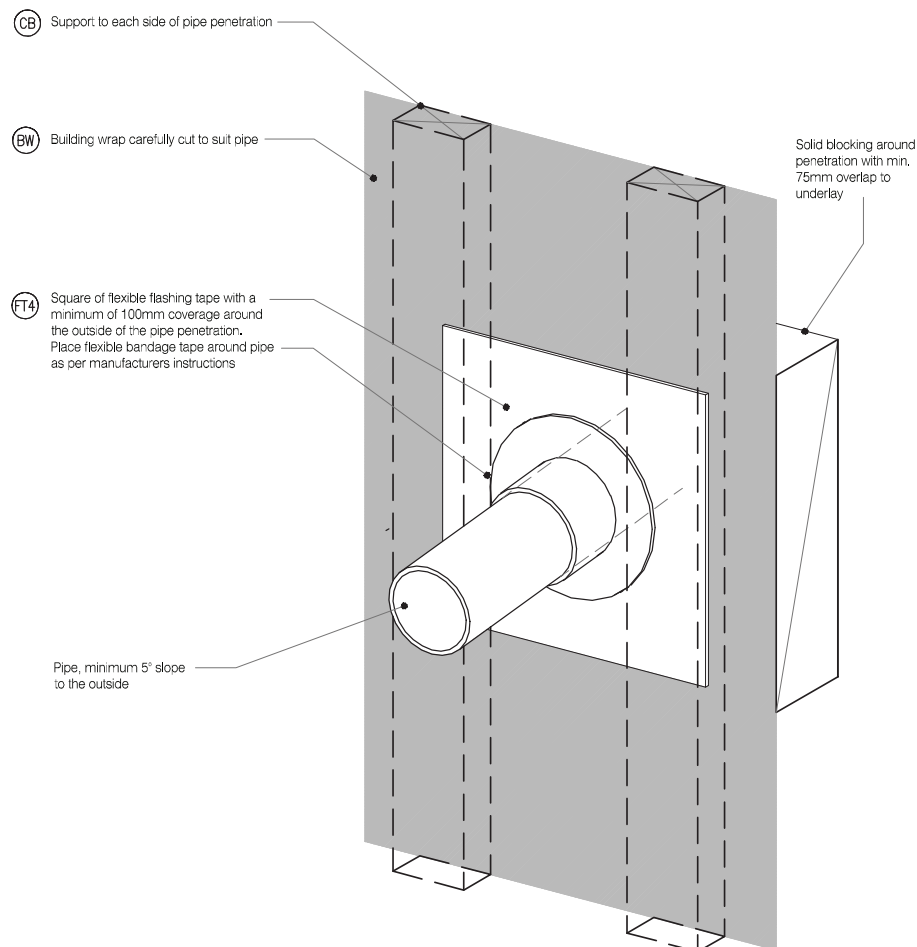
ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS54** REVISION

8 Detailed Drawings

LEGEND:

- | | | |
|--|--|---|
| <p>PEF PEF ROD BACKING: Foam backing rod with sealant to perimeter that forms a waterproof air-seal. (Sealant 2:1 Ratio)</p> <p>IL INTERNAL LINING: Selected Internal Lining</p> <p>BW BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)</p> <p>IN INSULATION: Selected Insulation</p> <p>TF TIMBER FRAME: H1.2 min treated timber framing</p> <p>WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB. Profile to NZS 3617</p> | <p>FT3 FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.1.1 Flashing tape is recommended due to movement that may occur in corners but it is not required by E2/AS1</p> <p>FT4 FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.1.1 & Figure 68</p> <p>BC1 BOXED CORNER COVER : 98x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners</p> <p>BC2 BOXED CORNER COVER: 85x18 KLC Generation II, MicroPro H3.2 Cover Batten to boxed corners</p> | <p>CB1 CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 F.J. To form a 20mm cavity</p> <p>CB2 CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 F.J. To form a 20mm cavity</p> <p>CF 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</p> |
|--|--|---|



MicoPro® Wood Treatment Technology

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- Out End Treatment : All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
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- 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 Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
- MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **3D - Pipe Penetration**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS55** REVISION

CAD REF : KLC CF20 VS55-56 - GENERAL DETAILS 02.dwg
DATE : 26/10/2018

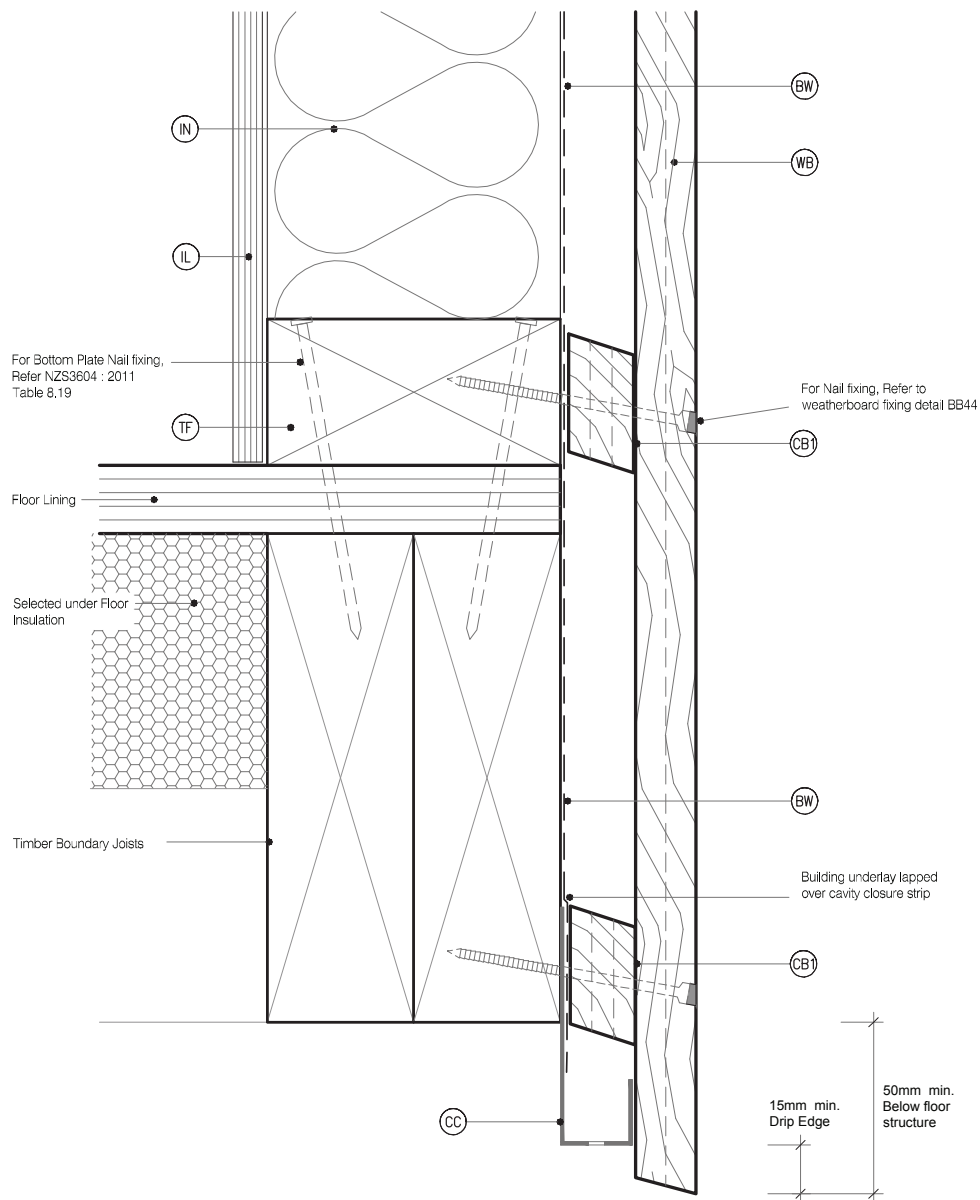
8 Detailed Drawings

LEGEND :

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
(IL) INTERNAL LINING: Selected Internal Lining
(BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
(IN) INSULATION: Selected Insulation
(TF) TIMBER FRAME: H1.2 min treated timber framing

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ, To form a 20mm cavity
(CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
(MR) METAL ROOFING : Selected Metal Roofing
(RU) ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
(TP) TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

- (HS) HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3,15mm Galvanised nail in 2,5mm predrilled hole
(AF) APRON FLASHING: 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 ≥ 10°) All others 200mm Refer Table 7 E2/AS1
(SL) SOFFIT LINING: As Selected (Typically 7,5mm Hardies Soffit Liner)
(CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding



MicoPro® Wood Treatment Technology

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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Base of Wall, Timber



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No KLC CF20 VS60
REVISION

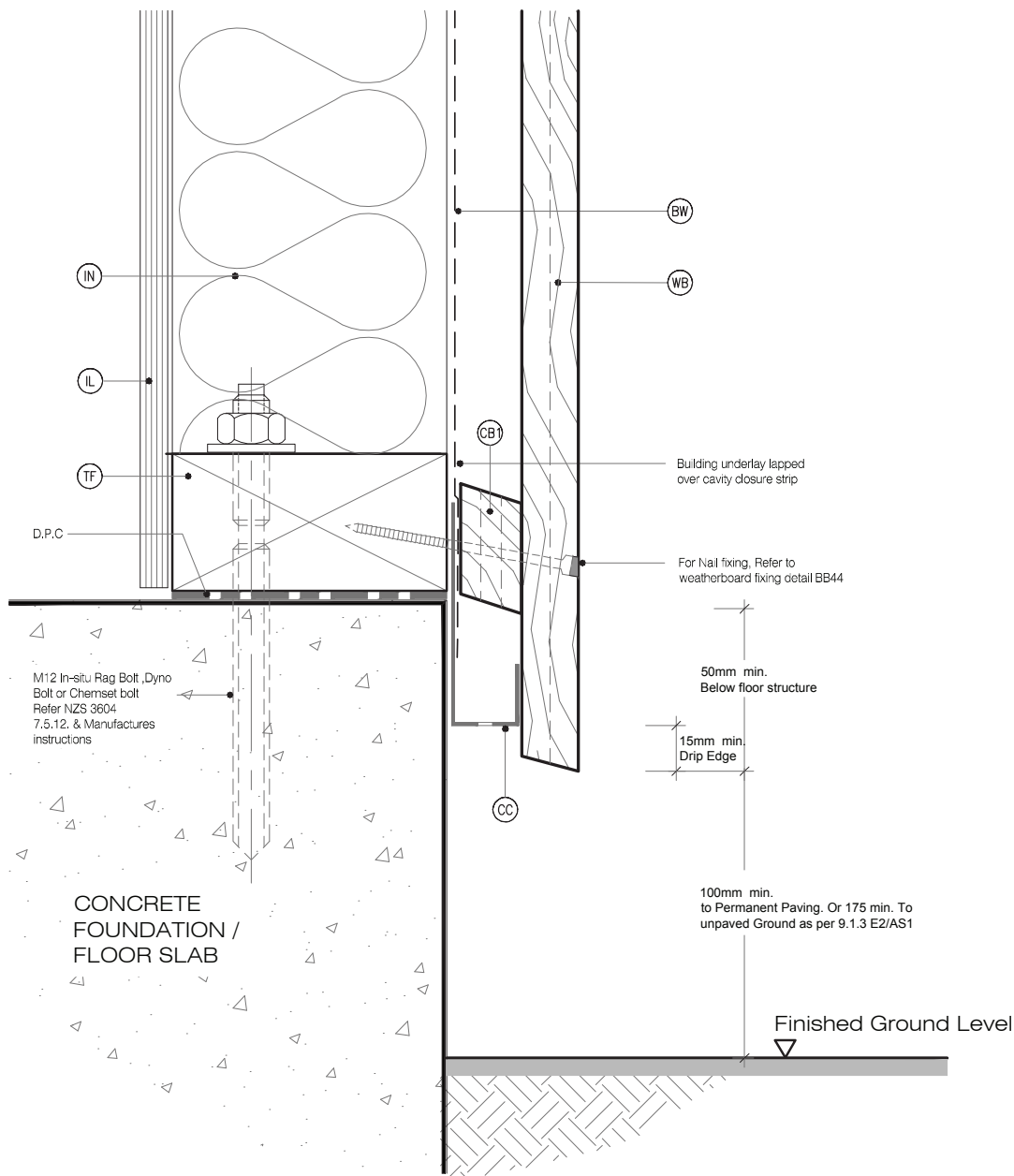
8 Detailed Drawings

LEGEND:

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation
- (TF) TIMBER FRAME: H1.2 min treated timber framing

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ, To form a 20mm cavity
- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
- (MR) METAL ROOFING: Selected Metal Roofing
- (RU) ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
- (TP) TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

- (HS) HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3,15mm Galvanised nail in 2,5mm predrilled hole
- (AF) APRON FLASHING: 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 ≥ 10°) All others 200mm Refer Table 7 E2/AS1
- (SL) SOFFIT LINING: As Selected (Typically 7,5mm Hardies Soffit Lining)
- (CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding



MicoPro® Wood Treatment Technology

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3. MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
4. Cut End Treatment: All cut ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
5. MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **Base of Wall, Concrete**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS61** REVISION

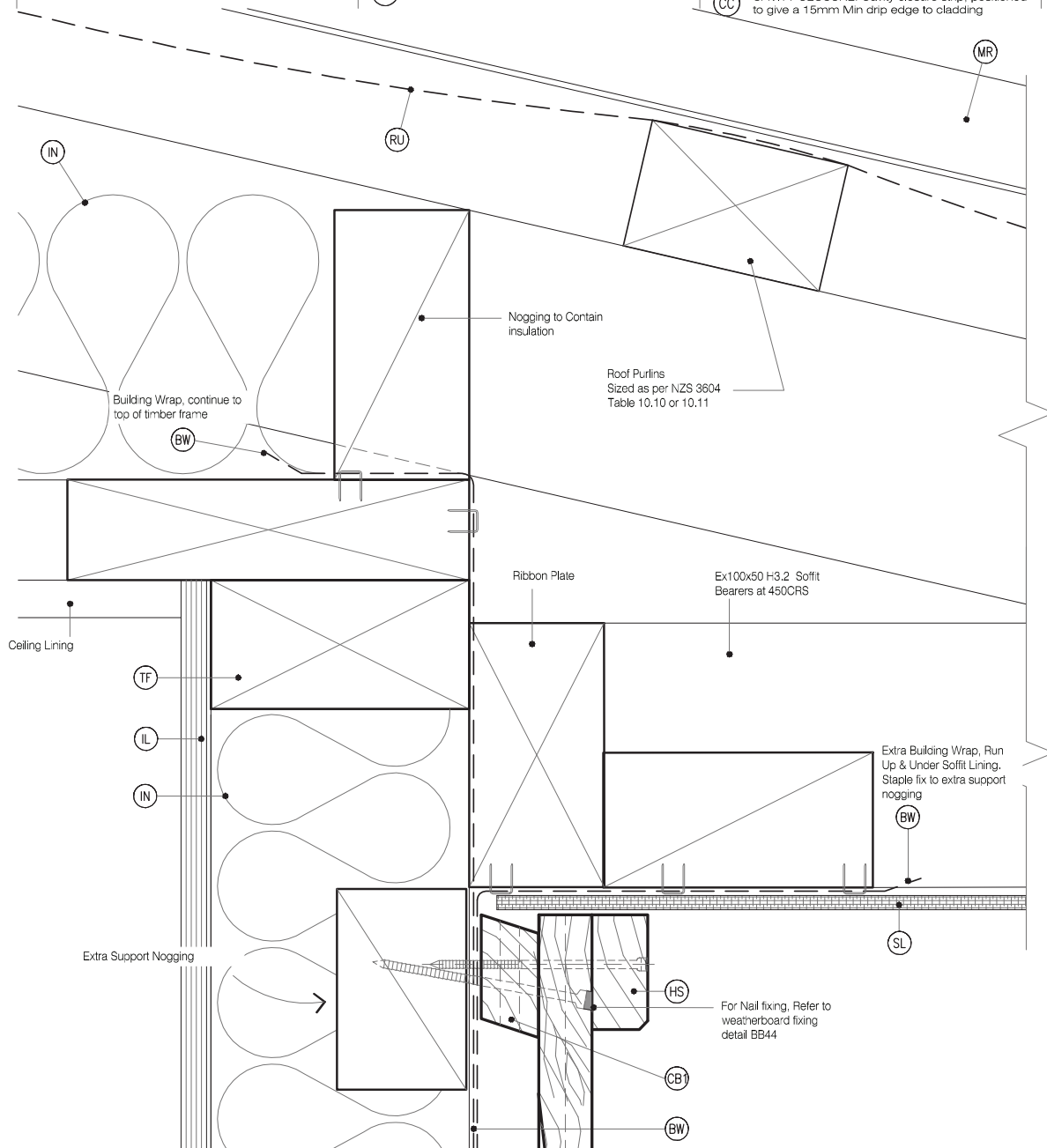
8 Detailed Drawings

LEGEND :

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
(IL) INTERNAL LINING: Selected Internal Lining
(BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
(IN) INSULATION: Selected Insulation
(TF) TIMBER FRAME: H1.2 min treated timber framing

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ, To form a 20mm cavity
(CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
(MR) METAL ROOFING : Selected Metal Roofing
(RU) ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
(TP) TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

- (HS) HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3,15mm Galvanised nail in 2,5mm predrilled hole
(AF) APRON FLASHING: 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 ≥ 10") All others 200mm Refer Table 7 E2/AS1
(SL) SOFFIT LINING: As Selected (Typically 7,5mm Hardies Soffit Liner)
(CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding



MicoPro® Wood Treatment Technology

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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Soffit Detail at Wall



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No KLC CF20 VS62
REVISION

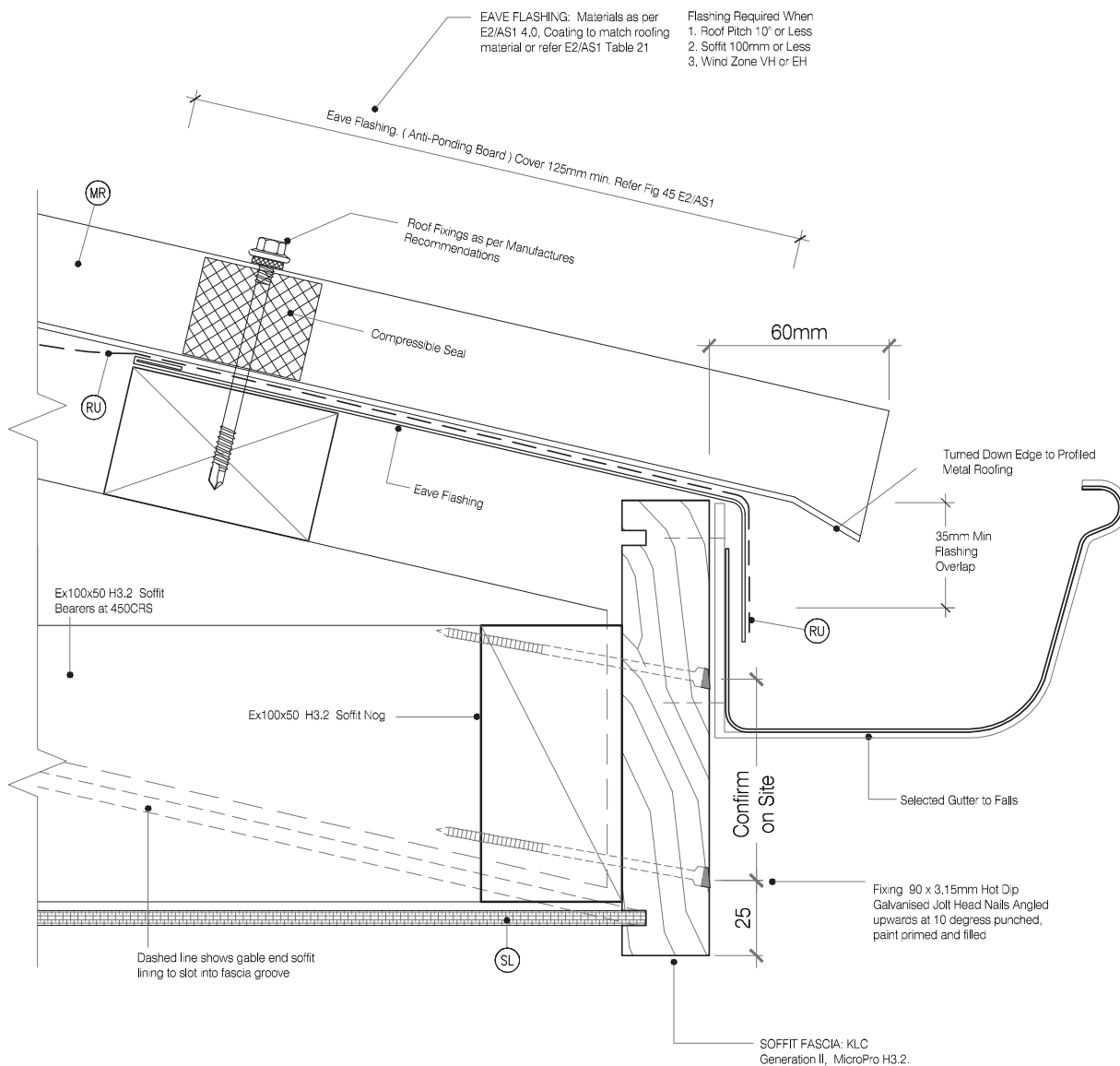
8 Detailed Drawings

LEGEND:

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
(IL) INTERNAL LINING: Selected Internal Lining
(BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
(IN) INSULATION: Selected Insulation
(TF) TIMBER FRAME: H1.2 min treated timber framing

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ, To form a 20mm cavity
(CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
(MR) METAL ROOFING: Selected Metal Roofing
(RU) ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
(TP) TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

- (HS) HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3.15mm Galvanised nail in 2.5mm predrilled hole
(AF) APRON FLASHING: 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 ≥ 10°) All others 200mm Refer Table 7 E2/AS1
(SL) SOFFIT LINING: As Selected (Typically 7.5mm Hardies Soffit Lining)
(CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding



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TYPE **Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix**

NAME **Soffit Detail at Fascia**



DRAWING SCALE
1:2 @ A4

ISSUE DATE
26/10/2018

DRAWING No **KLC CF20 VS63**

REVISION

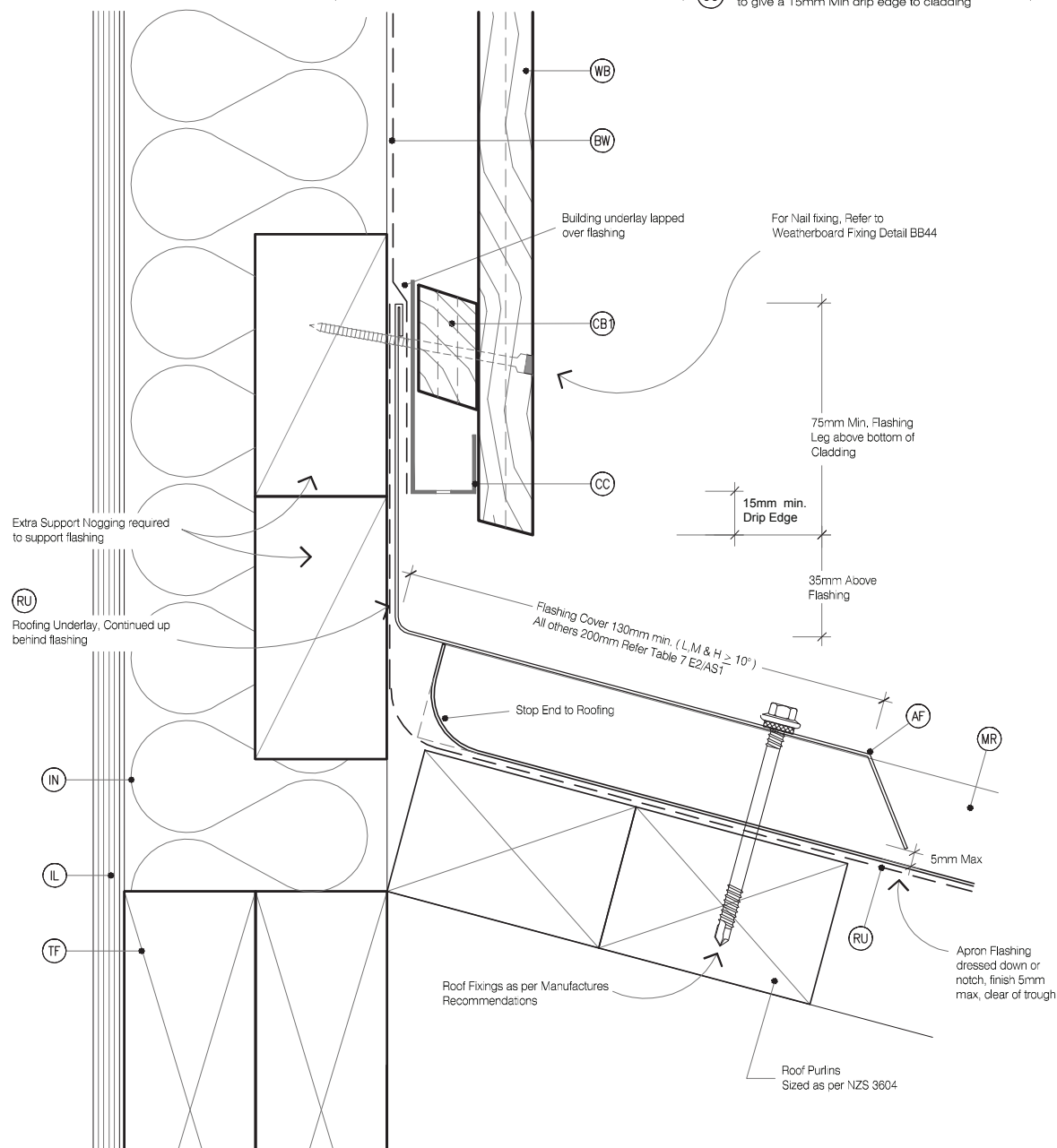
8 Detailed Drawings

LEGEND:

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
(IL) INTERNAL LINING: Selected Internal Lining
(BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
(IN) INSULATION: Selected Insulation
(TF) TIMBER FRAME: H1.2 min treated timber framing

- (CB1) CAVITY BATTEN, HORIZONTAL: 45x20 Castellated with a 18 degree bevelled slope, MicroPro H3.2 FJ, To form a 20mm cavity
(CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
(MR) METAL ROOFING: Selected Metal Roofing
(RU) ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
(TP) TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

- (HS) HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3,15mm Galvanised nail in 2,5mm predrilled hole
(AF) APRON FLASHING: 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 ≥ 10°) All others 200mm Refer Table 7 E2/AS1
(SL) SOFFIT LINING: As Selected (Typically 7,5mm Hardies Soffit Liner)
(CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding



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 NZS3604:2003 and AS1604:12012.
- MicroPro preservative is applied using high-pressure and vacuum-pressure in the impregnation process in KLC's modern, automated treatment facility.
- Out End Treatment: All out ends surfaces are to be double coated and sealed before fixing. With a alkyl (oil based) primer
- MicroPro preservative solution has benefits of reduced corrosivity. Use Hot Dip Galvanised Fasteners & Stainless Steel fasteners. MicroPro may be placed in direct contact with Aluminium Building products in interior applications, and above ground exterior applications that provide proper water drainage.
- 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 Treatment Technology has received a Global GreenTag GreenRate™ Level A this declaration is 'Fit-for-Purpose' and confirmed for Green Building compliance.
- MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).



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TYPE Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Apron Flashing - Roof to Wall Junction



DRAWING SCALE
1:2 @ A4

ISSUE DATE
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DRAWING No KLC CF20 VS64
REVISION

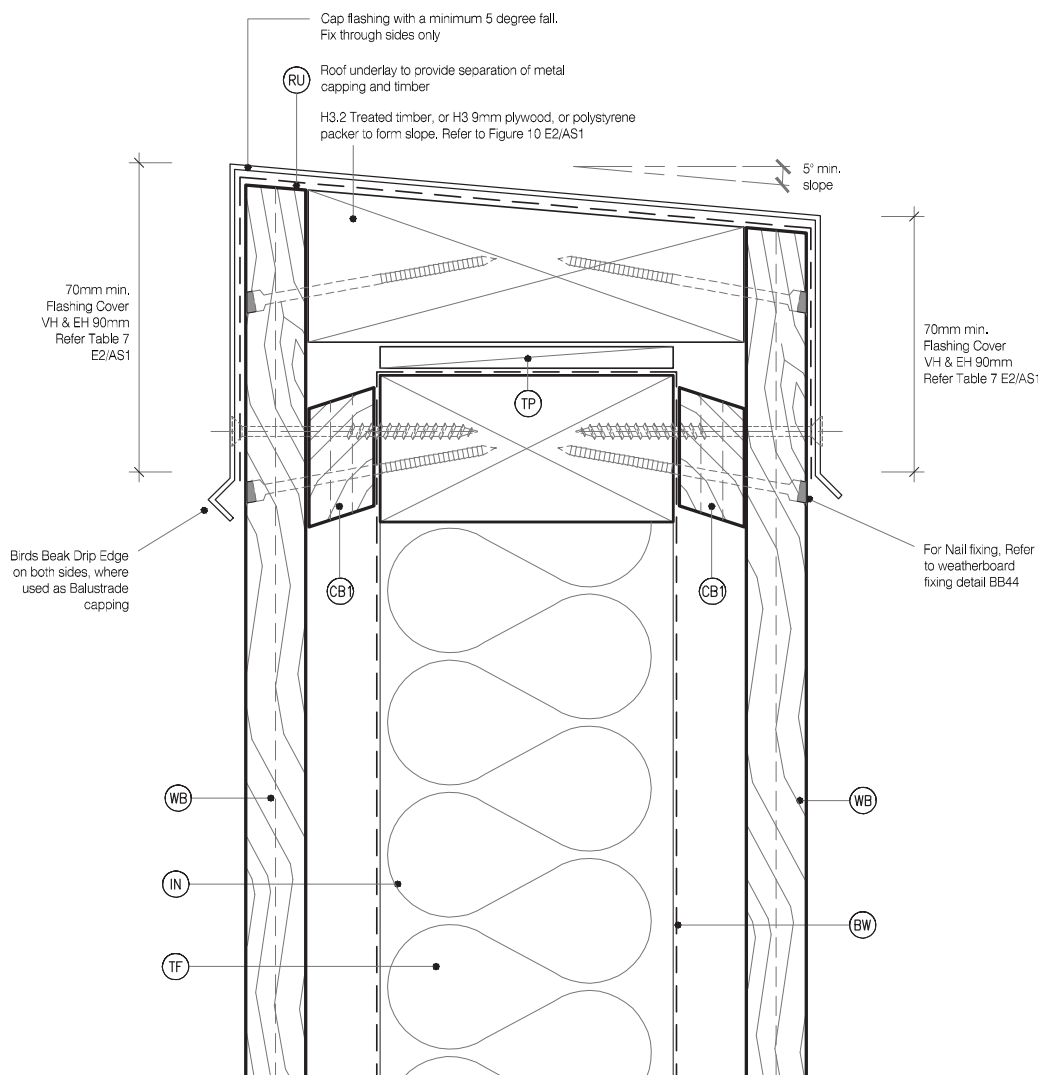
8 Detailed Drawings

LEGEND:

- (WB) WEATHER BOARD: KLC Generation II, MicroPro H3.2 Vertical Shiplap WB, Profile to NZS 3617
- (IL) INTERNAL LINING: Selected Internal Lining
- (BW) BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Rigid Underlay required (9.1.7.2 E2/AS1)
- (IN) INSULATION: Selected Insulation
- (TF) TIMBER FRAME: H1.2 min treated timber framing

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- (CB2) CAVITY BATTEN, VERTICAL: 45x20 KLC Generation II, MicroPro H3.2 FJ, To form a 20mm cavity
- (MR) METAL ROOFING: Selected Metal Roofing
- (RU) ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
- (TP) TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated

- (HS) HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2, Fix with 75 x 3,15mm Galvanised nail in 2,5mm predrilled hole
- (AF) APRON FLASHING: 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 ≥ 10°) All others 200mm Refer Table 7 E2/AS1
- (SL) SOFFIT LINING: As Selected (Typically 7,5mm Hardies Soffit Liner)
- (CC) CAVITY CLOSURE: Cavity closure strip, positioned to give a 15mm Min drip edge to cladding



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TYPE

Generation II H3.2 Exterior Cladding Systems
Vertical Shiplap WB - Cavity Fix

NAME Balustrade Capping or Parapet Detail



DRAWING SCALE

1:2 @ A4

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DRAWING No

KLC CF20 VS65

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