ARCHITECTURAL DRAWINGS

ISSUE DATE : 20.11.2018

Generation II H3.2 Exterior Cladding Systems

Bevel Back Weatherboard - Direct Fix

A4 Site Details - INDEX

A3/A1 Architectural Details - INDEX

General Notes :

This documentation has been specifically designed to help Architects, Designers & Builders. They are grouped into Two Sections

A3 / A1 ARCHITECTURAL DRAWINGS :
The details are grouped together to make up completed A1 or A3 drawings.
eg WINDOW DETAILS (Head, Sill, Jamb & Flashing Details)

A4 SITE DRAWINGS :
The details in this section are full scale 1:2 at A4. You can easily read these drawings and are intended for the builder.

ARCHITECTS / DESIGNERS RESPONSIBILITY :
We have made the drawings as accurate as possible. We have even specified extra flashing's 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 particular projects and his client.
The Architect / Designer will need to determine the 'RISK MATRIX' that is project specific, that then determines the details required.
Builder that have questions about these details, will need to contact there project specific Architect or Designer

TECHNICAL INFORMATION :

1. The AutoCAD drawings have all the Xref,s embedded as blocks.
   Erase the title block and Xref in your own title block.
2. These drawings have been KEY NOTED
   This makes the details more readable, people then focus on the actual important notes on the drawing. This also allows for easer revisions. You only need to change one key note reference. You will need to personalize these notes to make them specific for your project.
3. The Drawings are coloured and have pen assignments to the colours. a PGP file will be supplied in the Zip File. All the drawing output sheets are default set to print a PDF drawing. It is recommended that you print these detail in PDF then print your paper copies from the PDF File.
4. The AutoCAD drawings, are made up of multiple details, The A1/A3 output drawings also link into the A4 Detail drawings, These A4 drawings have special scaled down notes and blocks.
   (Annotative Scale) But it is the exact same information
5. These drawings are Copyrighted to " KLC LIMITED" (ALL RIGHTS ASSERTED) and there Approved Clients. The Drawings have two methods of Electronic protect.
   You will receive your own personal password to open the drawings.

LEGAL INFORMATION :
KLC Ltd and its Agent AIPdesigNZ Ltd have no reason to believe the information in the details are inaccurate.
KLC Ltd and its Agent AIPdesigNZ 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.
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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 & AIPdesigNZ Details, including the accuracy or currency of the KLC & AIPdesigNZ Details. Any condition, warranty, right or liability which would otherwise be implied is excluded.

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

CAD REF : KLC DF BB00 COVER SHEET.dwg
DATE : 20/11/2018

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www.klc.co.nz

DETAILS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

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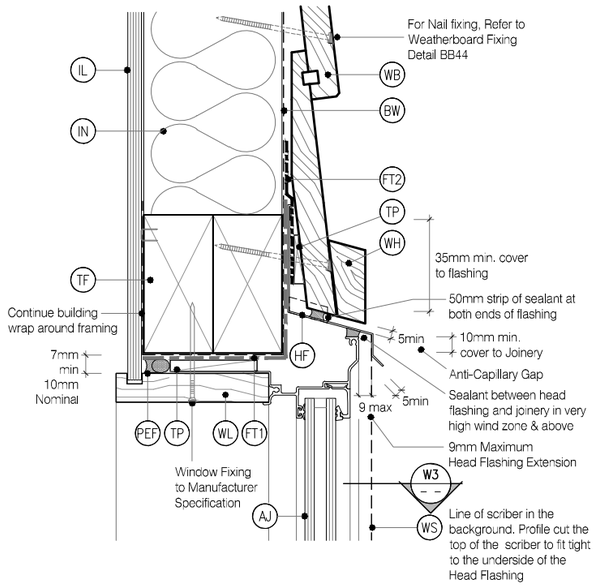
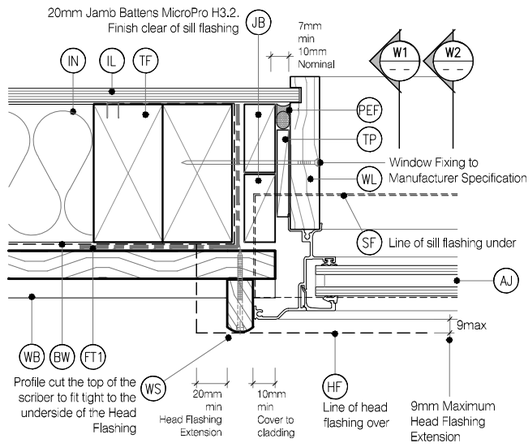
JOB # 18088



W1 BB10 WINDOW HEAD - Bevel Back WB

Direct Fix - Aluminium Joinery - Double Glazing

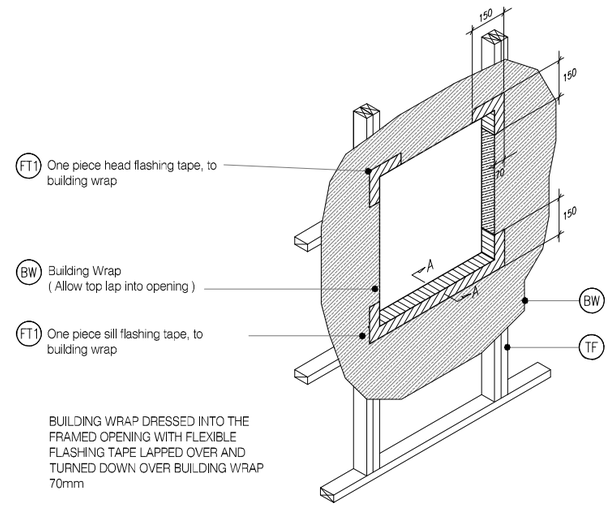
SCALE 1:2 @ A1, 1:4 @ A3



W3 BB12 WINDOW JAMB - Bevel Back WB

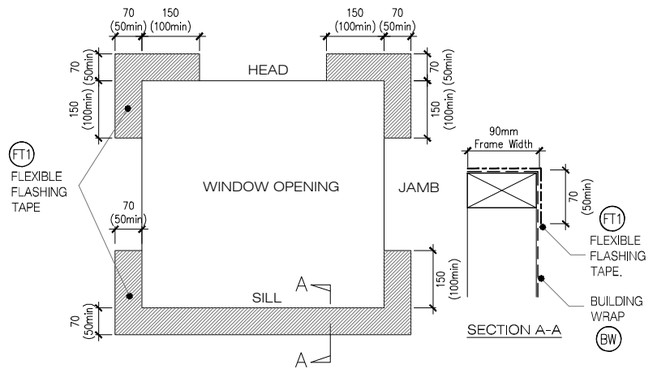
Direct Fix - Aluminium Joinery - Double Glazing

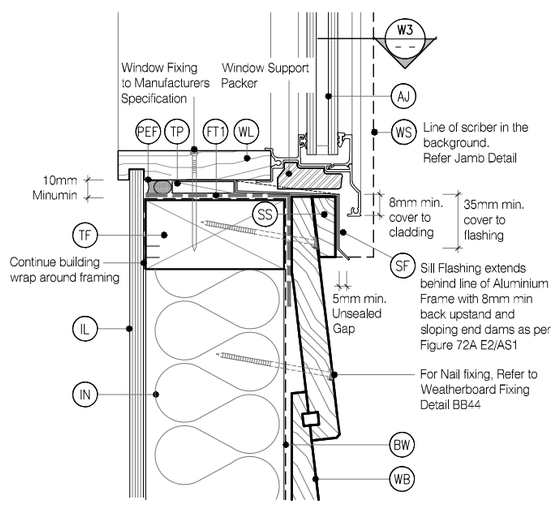
SCALE 1:2 @ A1, 1:4 @ A3



W4 BB13 TYPICAL WINDOW OPENING (FLASHING TAPE)

SCALE : N.T.S





W2 BB11 WINDOW SILL - Bevel Back WB

Direct Fix - Aluminium Joinery - Double Glazing

SCALE 1:2 @ A1, 1:4 @ A3

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)
- 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, Ridgid Underlay required (9.1.7.2 E2/AS1)
- SF — SILL FLASHING: Powder Coater Aluminium, extend behind line of Aluminium Frame with 8mm min back upstand and sloping end dams as per Figure 72A E2/AS1
- JB — JAMB BATTENS: 20mm MicroPro H3.2. Batten stops short of sill flashing, Sill flashing runs under
- 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
- TF — TIMBER FRAME: H1.2 min treated timber framing
- WB — WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- IN — INSULATION: Selected Insulation
- 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
- SS — SILL SCRIBER: MicroPro H3.2, Horizontal batten under window as necessary to suit profile, sealant to back of sill scriber
- WL — WINDOW LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
- WH — WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of head scriber
- WS — WINDOW SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole. 40x18 or 65x18 depending on weatherboard size

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 fixing. With a alkyd (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).

HOW TO DETERMINE THE TIMBER WEATHERBOARD STRUCTURE :

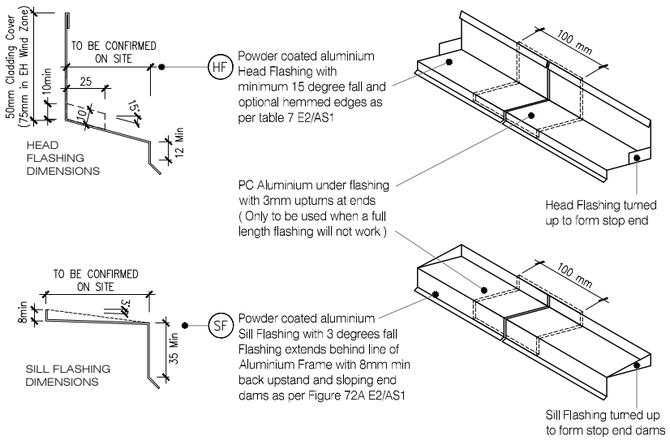
1. Establish the " RISK" (Section 3.1 & Figure 1 E2/AS1)
2. Definition of Risk Levels (Section 3.1.1 & Table 1 E2/AS1)
3. Building Envelope Risk Score (Section 3.1.2 & Table 2 E2/AS1)
   The RISK MATRIX defines the RISK SCORE
4. Suitable Wall Claddings (Table 3 E2/AS1)
5. The Architect / Designer are responsibility to confirm the RISK MATRIX, RISK SCORE & SUITABLE CLADDINGS

NOTES:
Claddings in Extra High Wind Zones require:
a. Rigid underlays to (Paragraph 9.1.7.2 E2/AS1)
b. Drained Cavities to (Paragraph 9.1.8 E2/AS1)
c. Hooks and Hems on flashing upstands and additional 25mm height to (Paragraph 4.6 E2/AS1)

6. FROM TABLE 3 E2/AS1

RISK SCORE	DIRECT FIX	20mm CAVITY FIX
0 - 6	Timber Weather Boards (All Types)	(Not Required)
7 - 12	Bevel Back Timber WB Vertical Timber Board & Batten	Rusticated WB
13 - 20	(Direct Fix NOT Allowed)	Rusticated WB B.B Timber WB
20 +	(Redesign or Specific Design)	

Table 3 E2/AS1 are the minimum requirements, For extra security, you can always upgrade to a higher specification.



W6 BB13 TYPICAL HEAD & SILL FLASHINGS

SCALE : 1 / 2 @ A1, 1 / 4 @ A3

W5 BB13 FLEXIBLE BUILDING WRAP AT OPENING

SCALE : 1 / 5 @ A1, 1 / 10 @ A3

CAD REF :KLC DF BB10-15 - WINDOW DETAILS.dwg
DATE : 20/11/2018

KLC Naturally Better

www.klc.co.nz

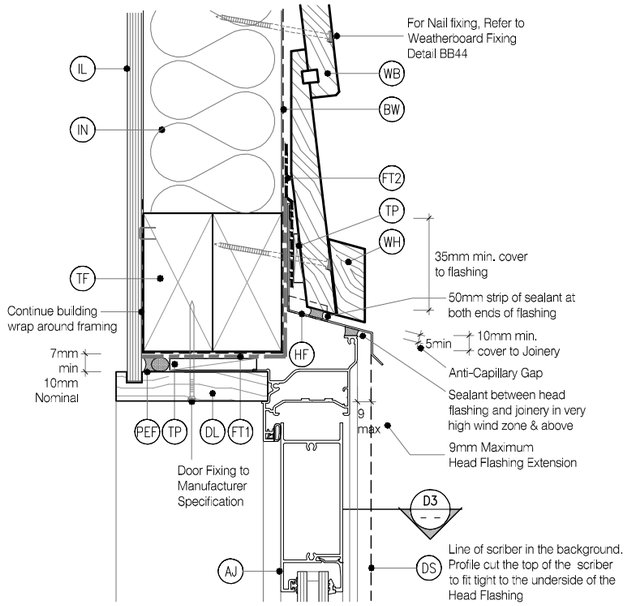
TYPE Generation II H3.2 Exterior Cladding Systems
Bevel Back Weatherboard - Direct Fix

NAME WINDOW DETAILS - Head, Sill & Jamb - Aluminium Joinery

CODEMARK AQ-020216-CMNZ

DRAWING SCALE	ISSUE DATE
1:2 @ A1 1:4 @ A3	20/11/2018

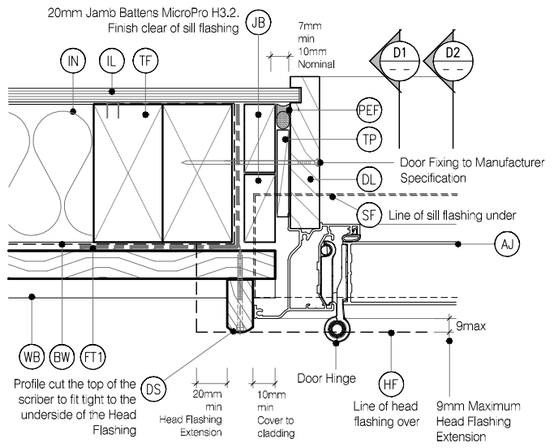
DRAWING No	REVISION
KLC DF BB15	0



D1 BB20 DOOR HEAD - Bevel Back WB

Direct Fix - Aluminium Joinery - Double Glazing

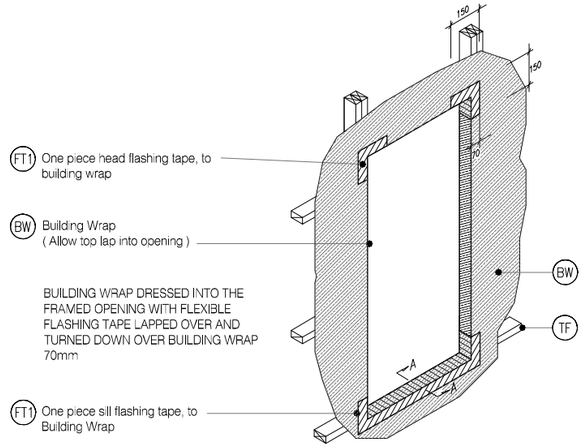
SCALE 1:2 @ A1, 1:4 @ A3



D3 BB22 DOOR JAMB - Bevel Back WB

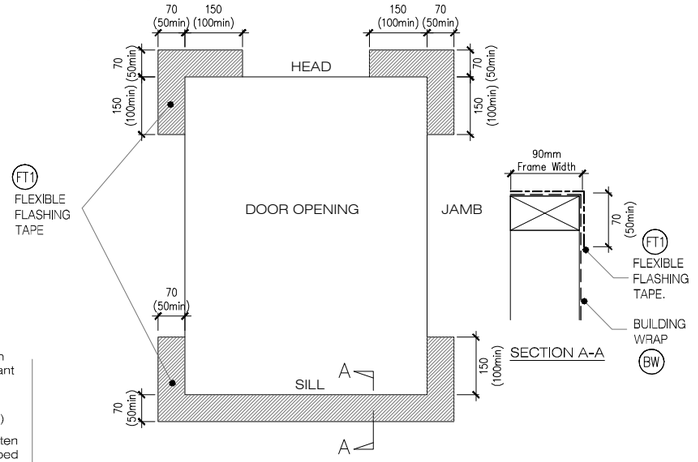
Direct Fix - Aluminium Joinery - Double Glazing

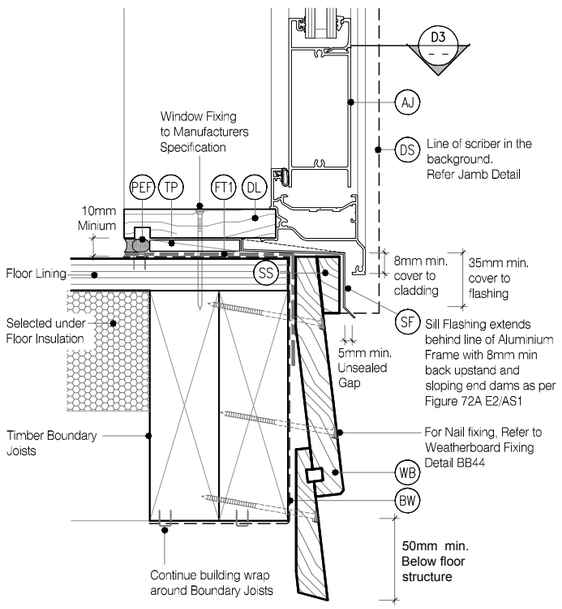
SCALE 1:2 @ A1, 1:4 @ A3



D4 BB23 TYPICAL DOOR OPENING (FLASHING TAPE)

SCALE : N.T.S





D2 BB21 DOOR SILL - Bevel Back WB

Direct Fix - Aluminium Joinery - Double Glazing

SCALE 1:2 @ A1, 1:4 @ A3

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)
- AJ: ALUMINIUM JOINERY: Selected double glazed aluminium joinery
- IL: INTERNAL LINING: Selected Internal Lining
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- 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
- TF: TIMBER FRAME: H1.2 min treated timber framing
- WB: WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- IN: INSULATION: Selected Insulation
- 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
- SS: SILL SCRIBER: MicroPro H3.2, Horizontal batten under window as necessary to suit profile, sealant to back of sill scriber
- DL: DOOR LINER: As Specified (We Recommend MicroPro H3.2 Liners & Sills)
- WH: WEATHERHEAD: MicroPro H3.2, Horizontal batten above window as necessary to suit profile, shaped to shed water, sealant to back of sill scriber
- TP: TIMBER PACKER: MicroPro H3.2 Treated Packer
- DS: DOOR SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole. 40x18 or 65x18 depending on weatherboard size

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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 fixing. With a alkyd (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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HOW TO DETERMINE THE TIMBER WEATHERBOARD STRUCTURE :

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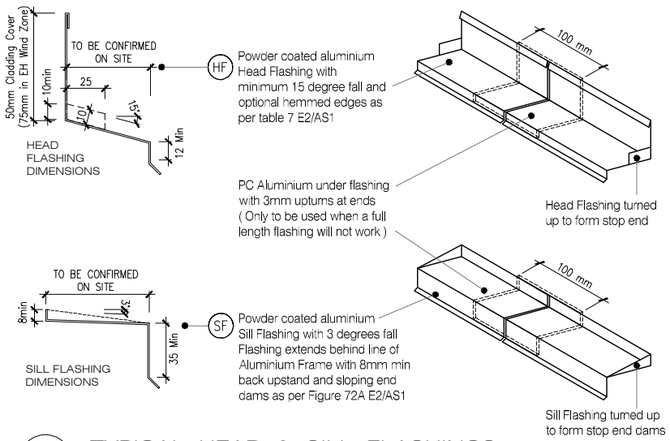
2. Definition of Risk Levels (Section 3.1.1 & Table 1 E2/AS1)
3. Building Envelope Risk Score (Section 3.1.2 & Table 2 E2/AS1)
   The RISK MATRIX defines the RISK SCORE
4. Suitable Wall Claddings (Table 3 E2/AS1)
5. The Architect / Designer are responsibility to confirm the RISK MATRIX, RISK SCORE & SUITABLE CLADDINGS

NOTES:
Claddings in Extra High Wind Zones require:
a. Rigid underlays to (Paragraph 9.1.7.2 E2/AS1)
b. Drained Cavities to (Paragraph 9.1.8 E2/AS1)
c. Hooks and Hems on flashing upstands and additional 25mm height to (Paragraph 4.6 E2/AS1)

6. FROM TABLE 3 E2/AS1

RISK SCORE	DIRECT FIX	20mm CAVITY FIX
0 - 6	Timber Weather Boards (All Types)	(Not Required)
7 - 12	Bevel Back Timber WB Vertical Timber Board & Batten	Rusticated WB
13 - 20	(Direct Fix NOT Allowed)	Rusticated WB B.B Timber WB
20 +	(Redesign or Specific Design)	

Table 3 E2/AS1 are the minimum requirements, For extra security, you can always upgrade to a higher specification.



D5 BB23 FLEXIBLE BUILDING WRAP AT OPENING

SCALE : 1 / 5 @ A1, 1 / 10 @ A3

D6 BB23 TYPICAL HEAD & SILL FLASHINGS

SCALE : 1 / 2 @ A1, 1 / 4 @ A3

CAD REF : KLC DF BB20-25 - DOOR DETAILS.dwg
DATE : 20/11/2018

KLC Naturally Better

www.klc.co.nz

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

NAME DOOR DETAILS - Head, Sill & Jamb - Aluminium Joinery

CODEMARK™ AQ-020216-CMNZ

DRAWING SCALE	ISSUE DATE
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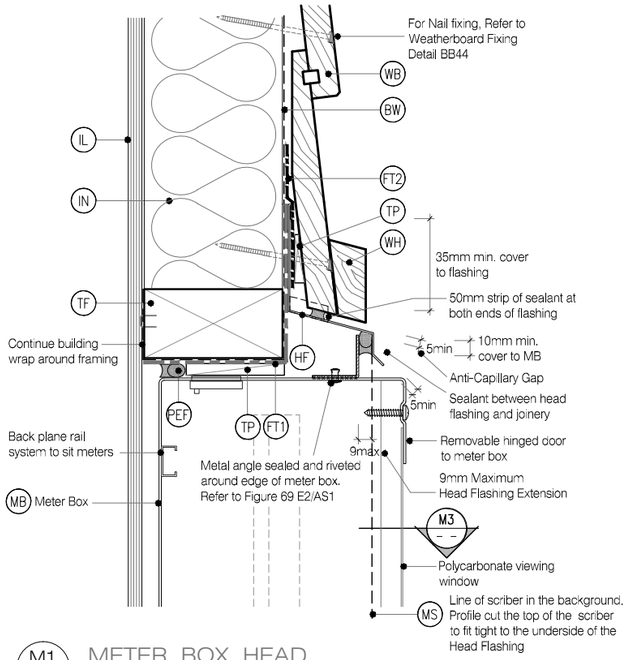
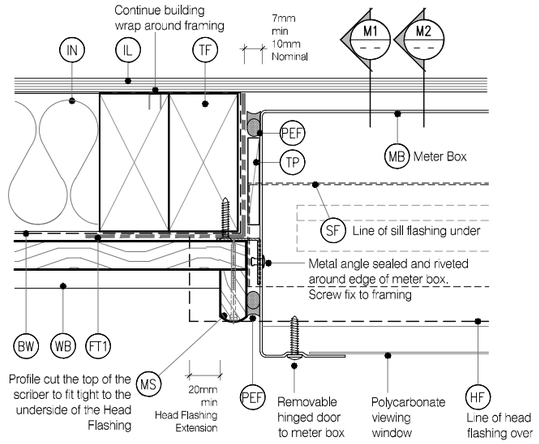
DRAWING No	REVISION
KLC DF BB25	0



M1 BB30 METER BOX HEAD

Direct Fix - Bevel Back Weather Boards

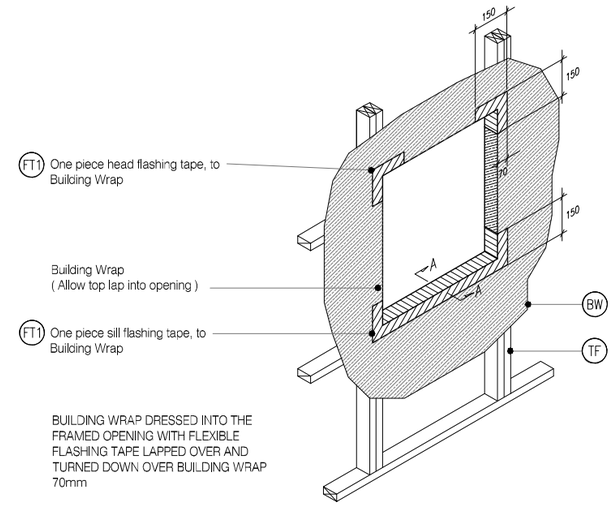
SCALE 1:2 @ A1, 1:4 @ A3



M3 BB32 METER BOX JAMB

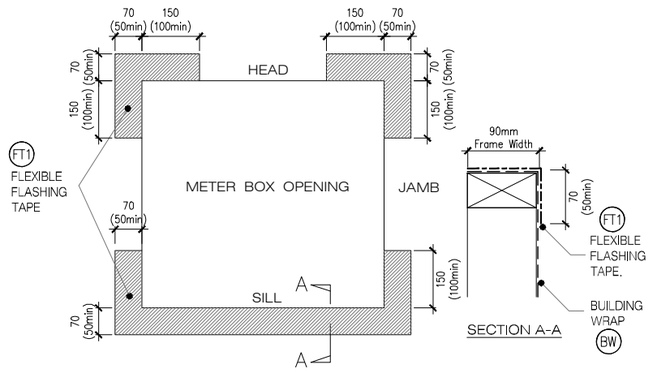
Direct Fix - Bevel Back Weather Boards

SCALE 1:2 @ A1, 1:4 @ A3



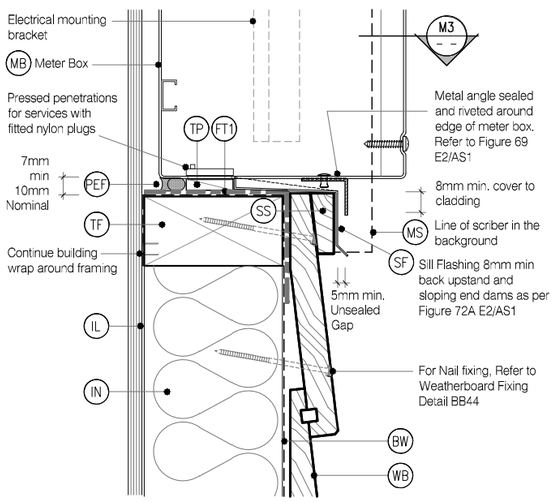
M4 BB33 TYPICAL METER BOX OPENING (FLASHING TAPE)

SCALE : N.T.S



M5 BB33 FLEXIBLE BUILDING WRAP AT OPENING

SCALE : 1 / 5 @ A1, 1 / 10 @ A3



M2 BB31 METER BOX SILL

Direct Fix - Bevel Back Weather Boards

SCALE 1:2 @ A1, 1:4 @ A3

LEGEND :

- 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, Ridgid Underlay required (9.1.7.2 E2/AS1)
- SF SILL FLASHING: Powder Coater Aluminium, with 8mm min back upstand and sloping end dams as per Figure 72A E2/AS1
- TP TIMBER PACKER: MicroPro H3.2 Treated Packer
- 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
- TF TIMBER FRAME: H1.2 min treated timber framing
- WB WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- IN INSULATION: Selected Insulation
- 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
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- SS SILL SCRIBER: MicroPro H3.2, Horizontal batten under meter box as necessary to suit profile
- MS METER BOX SCRIBER: KLC Generation II, MicroPro H3.2 profile cut to fit weatherboard, sealant to back of scriber, 40x18 or 65x18 depending on weatherboard size

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20 +	(Redesign or Specific Design)	

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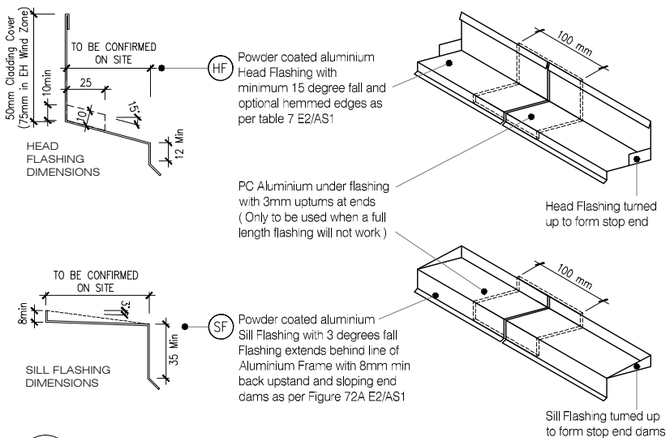


M6 BB33 TYPICAL HEAD & SILL FLASHINGS

SCALE : 1 / 2 @ A1, 1 / 4 @ A3

CAD REF :KLC DF BB30-35 - METER BOX.dwg
DATE : 20/11/2018

Naturally Better

www.klc.co.nz

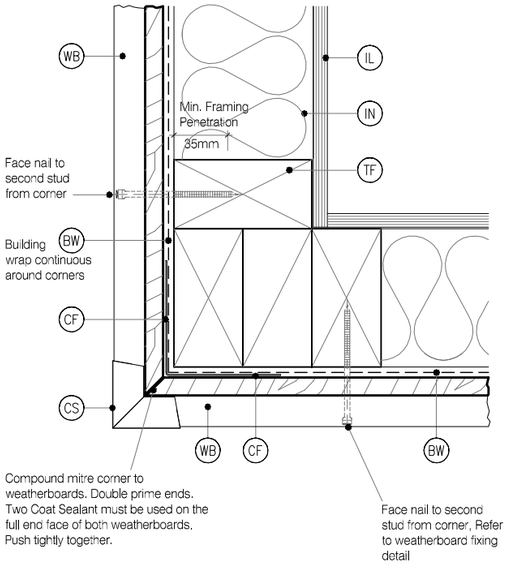
TYPE Generation II H3.2 Exterior Cladding Systems
Bevel Back Weatherboard - Direct Fix

NAME METER BOX DETAILS - Head, Sill & Jamb

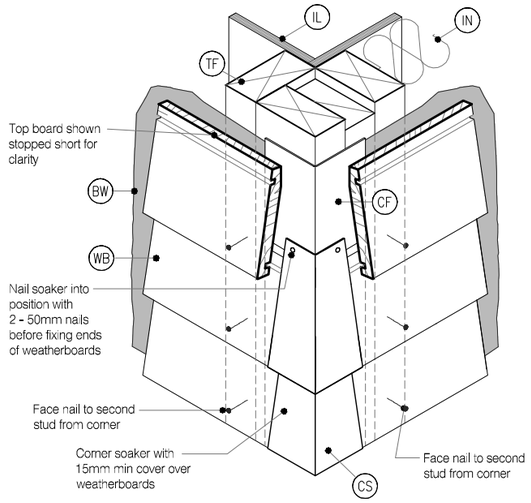
CODEMARK AQ-020216-CMNZ

DRAWING SCALE	ISSUE DATE
1:2 @ A1 1:4 @ A3	20/11/2018

DRAWING No	REVISION
KLC DF BB35	0

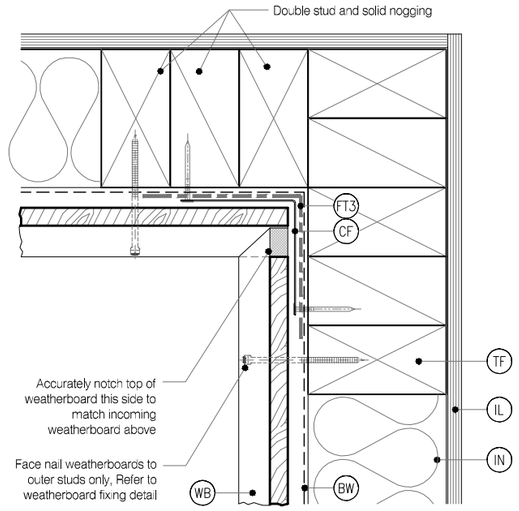


C1 BB40 EXTERNAL CORNER SOAKER
Direct Fix - Bevel Back WB
SCALE 1:2 @ A1, 1:4 @ A3



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

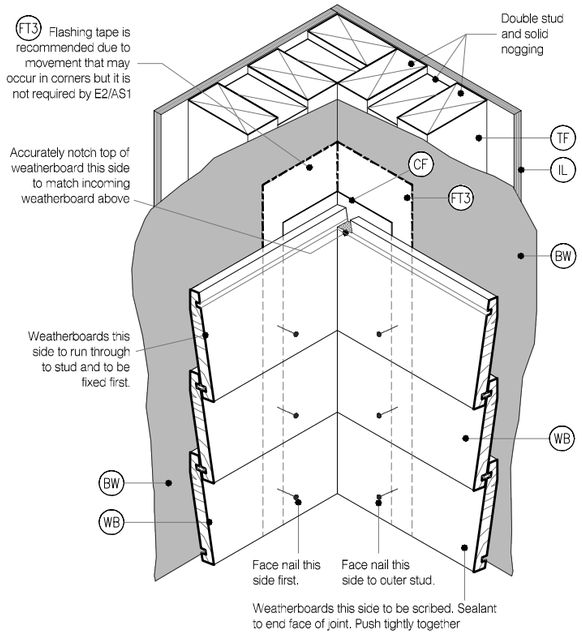
C2 BB41 3D EXTERNAL CORNER SOAKER
Direct Fix - Bevel Back WB
SCALE : N.T.S



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.

C3 BB42 INTERNAL CORNER
Direct Fix - Bevel Back WB
SCALE 1:2 @ A1, 1:4 @ A3



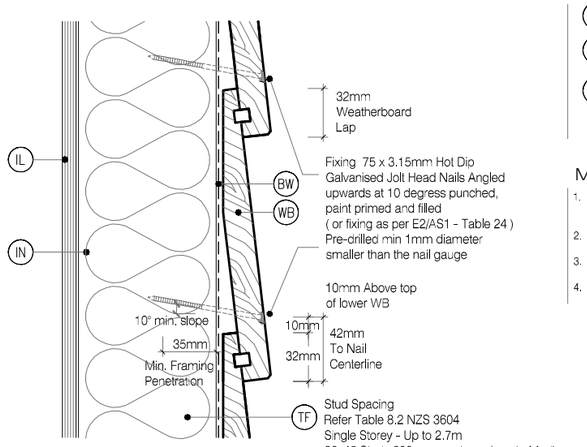
C4 BB43 3D INTERNAL CORNER
Direct Fix - Bevel Back WB
SCALE : N.T.S

LEGEND :

- IL — INTERNAL LINING: Selected Internal Lining
- BW — BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 - Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- CS — CORNER SOAKER: With 15mm Min cover over weatherboards
- FT3 — FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner
- TF — TIMBER FRAME: H1.2 min treated timber framing
- WB — WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- IN — INSULATION: Selected Insulation
- 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

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 fixing. With a alkyd (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).



C5 BB44 WEATHERBOARD FIXING
Direct Fix - Bevel Back WB
SCALE 1:2 @ A1, 1:4 @ A3

HOW TO DETERMINE THE TIMBER WEATHERBOARD STRUCTURE :

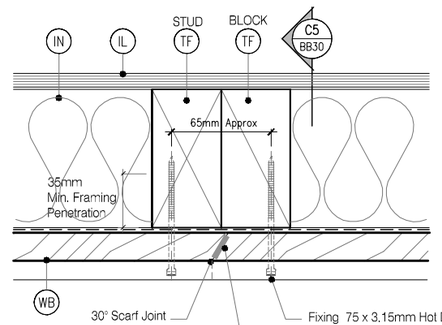
1. Establish the " RISK" (Section 3.1 & Figure 1 E2/AS1)
2. Definition of Risk Levels (Section 3.1.1 & Table 1 E2/AS1)
3. Building Envelope Risk Score (Section 3.1.2 & Table 2 E2/AS1)
   The RISK MATRIX defines the RISK SCORE
4. Suitable Wall Claddings (Table 3 E2/AS1)
5. The Architect / Designer are responsibility to confirm the RISK MATRIX, RISK SCORE & SUITABLE CLADDINGS

NOTES:
Claddings in Extra High Wind Zones require:
a. Rigid underlays to (Paragraph 9.1.7.2 E2/AS1)
b. Drained Cavities to (Paragraph 9.1.8 E2/AS1)
c. Hooks and Hems on flashing upstands and additional 25mm height to (Paragraph 4.6 E2/AS1)

6. FROM TABLE 3 E2/AS1

RISK SCORE	DIRECT FIX	20mm CAVITY FIX
0 - 6	Timber Weather Boards (All Types)	(Not Required)
7 - 12	Bevel Back Timber WB Vertical Timber Board & Batten	Rusticated WB
13 - 20	(Direct Fix NOT Allowed)	Rusticated WB B.B Timber WB
20 +	(Redesign or Specific Design)	

Table 3 E2/AS1 are the minimum requirements, For extra security, you can always upgrade to a higher specification.



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

C6 BB45 SCARF JOINT - HORIZONTAL
Direct Fix - Bevel Back WB
SCALE 1:2 @ A1, 1:4 @ A3

CAD REF : KLC DF BB40-46 - GENERAL DETAILS 01.dwg
DATE : 20/11/2018

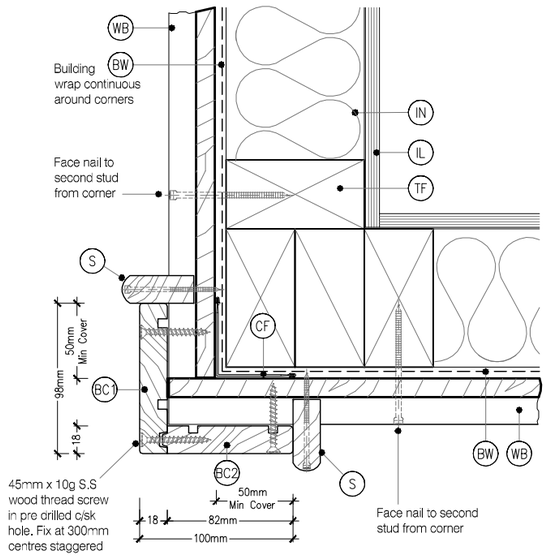
Naturally Better
www.klc.co.nz

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

NAME GENERAL DETAILS 01 - External & Internal Corner Details

CodeMark™ AQ-020216-CMNZ

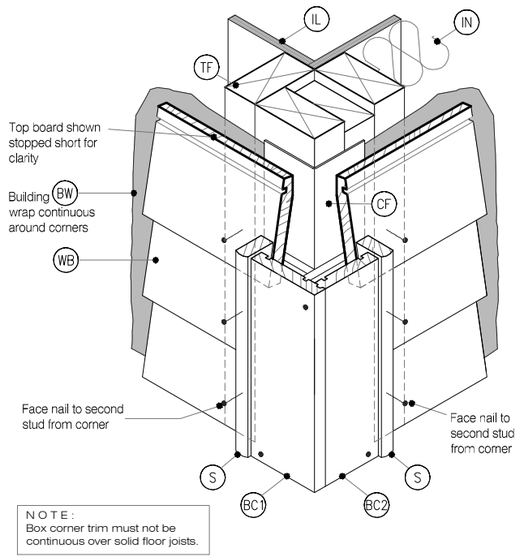
DRAWING SCALE 1:2 @ A1 1:4 @ A3
ISSUE DATE 20/11/2018
DRAWING No KLC DF BB46
REVISION 0



C10 BB50 EXTERNAL BOXED CORNER

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3

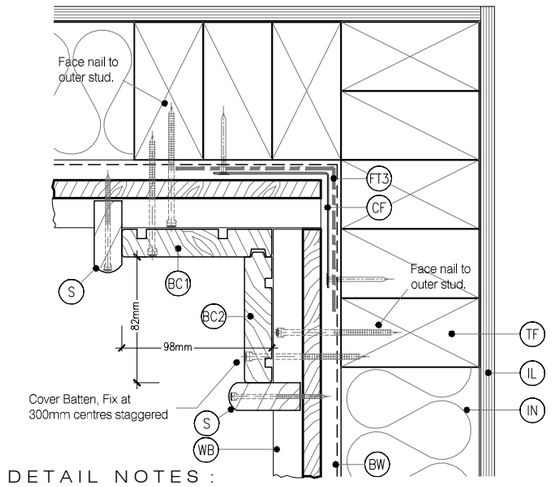


NOTE:
Box corner trim must not be continuous over solid floor joists.

C11 BB51 3D - EXTERNAL BOXED CORNER

Direct Fix - Bevel Back WB

SCALE : N.T.S



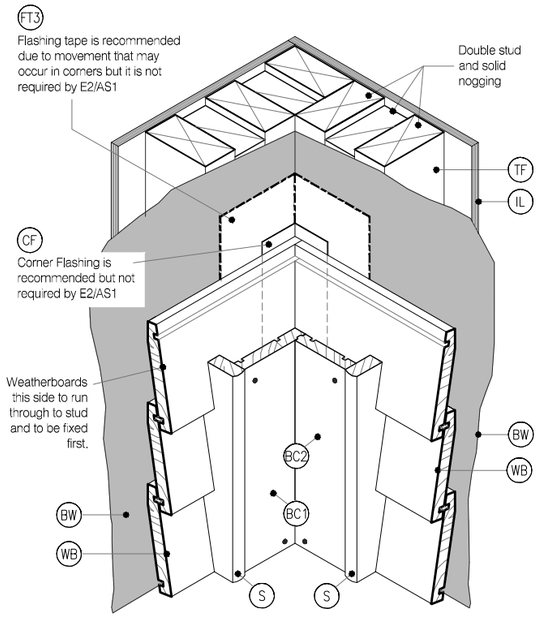
DETAIL NOTES :

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

C12 BB52 INTERNAL BOXED CORNER

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3



C13 BB53 3D - INTERNAL BOXED CORNER

Direct Fix - Bevel Back WB

SCALE : N.T.S

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, Ridgid Underlay required (9.1.7.2 E2/AS1)
- TF — TIMBER FRAME: H1.2 min treated timber framing
- WB — WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- FT3 — FLEXIBLE FLASHING TAPE: Flexible flashing tape lapped into corner, Refer NZBC E2/AS1 4.3.11
- FT4 — FLEXIBLE FLASHING TAPE: Flexible flashing tape wrapped around pipe and over building wrap, Refer NZBC E2/AS1 4.3.11 & Figure 68
- IN — INSULATION: Selected Insulation
- 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
- 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
- S — SCRIBER: KLC Generation II, MicroPro H3.2 (10mm wide min) profile cut to fit weatherboard, sealant to back of scriber and 75 x 3.15mm Galvanised nail in 3mm predrilled hole. 40x18 or 65x18 depending on weatherboard size

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 fixing. With a alkyd (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).

HOW TO DETERMINE THE TIMBER WEATHERBOARD STRUCTURE :

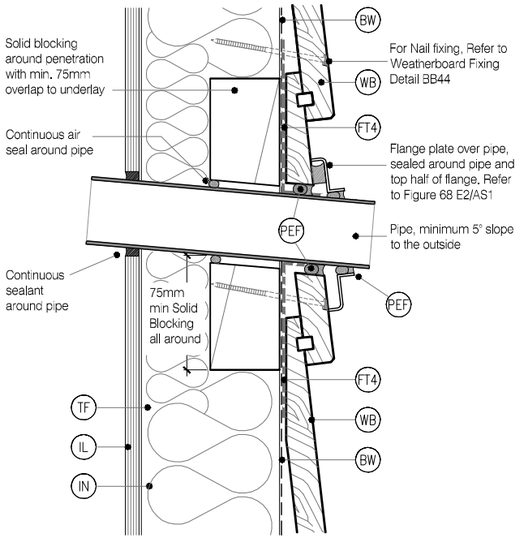
1. Establish the " RISK" (Section 3.1 & Figure 1 E2/AS1)
2. Definition of Risk Levels (Section 3.1.1 & Table 1 E2/AS1)
3. Building Envelope Risk Score (Section 3.1.2 & Table 2 E2/AS1) The RISK MATRIX defines the RISK SCORE
4. Suitable Wall Claddings (Table 3 E2/AS1)
5. The Architect / Designer are responsibility to confirm the RISK MATRIX, RISK SCORE & SUITABLE CLADDINGS

NOTES:
Claddings in Extra High Wind Zones require:
a. Rigid underlays to (Paragraph 9.1.7.2 E2/AS1)
b. Drained Cavities to (Paragraph 9.1.8 E2/AS1)
c. Hooks and Hems on flashing upstands and additional 25mm height to (Paragraph 4.6 E2/AS1)

6. FROM TABLE 3 E2/AS1

RISK SCORE	DIRECT FIX	20mm CAVITY FIX
0 - 6	Timber Weather Boards (All Types)	(Not Required)
7 - 12	Bevel Back Timber WB Vertical Timber Board & Batten	Rusticated WB
13 - 20	(Direct Fix NOT Allowed)	Rusticated WB B.B Timber WB
20 +	(Redesign or Specific Design)	

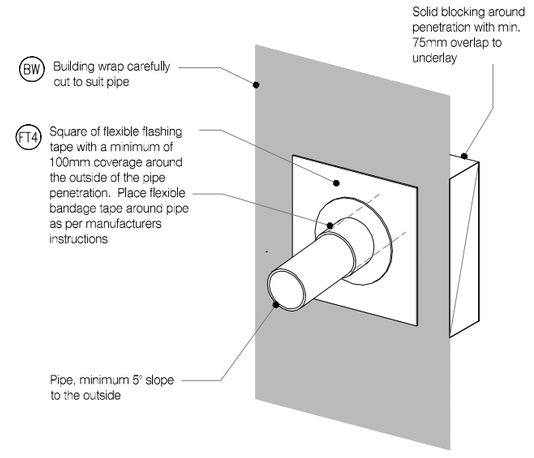
Table 3 E2/AS1 are the minimum requirements, For extra security, you can always upgrade to a higher specification.



C14 BB54 PIPE PENETRATION

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3



C15 BB55 3D PIPE PENETRATION

Direct Fix - Bevel Back WB

SCALE : N.T.S

CAD REF : KLC DF BB50-56 - GENERAL DETAILS 02.dwg
DATE : 20/11/2018

KLC Naturally Better

www.klc.co.nz

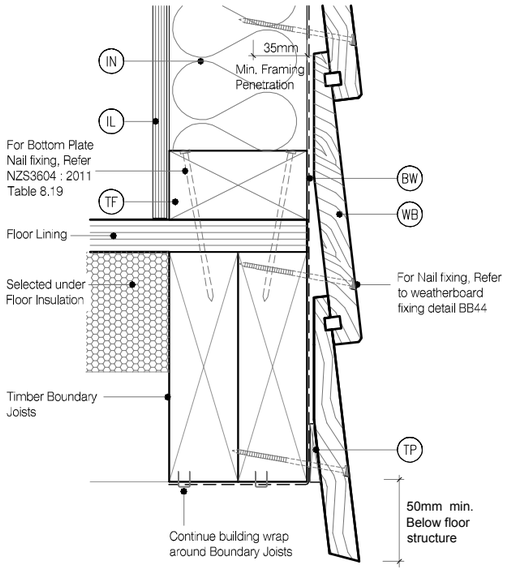
TYPE Generation II H3.2 Exterior Cladding Systems
Bevel Back Weatherboard - Direct Fix

NAME GENERAL DETAILS 02 - Boxed Corners & Pipe Penetrations

CodeMark™ AQ-020216-CMNZ

DRAWING SCALE	ISSUE DATE
1:2 @ A1 1:4 @ A3	20/11/2018

DRAWING No	REVISION
KLC DF BB56	0

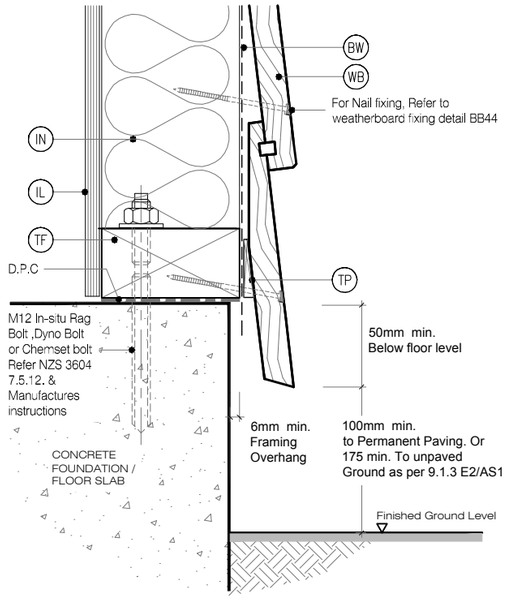


C16 BB60

BASE OF WALL, TIMBER

Direct Fix - Bevel Backed Weatherboards

SCALE 1:2 @ A1, 1:4 @ A3

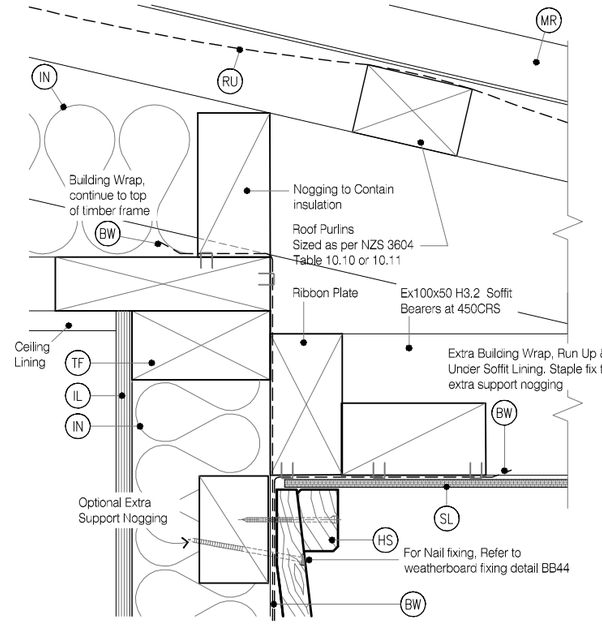


C17 BB61

BASE OF WALL, CONCRETE

Direct Fix - Bevel Backed Weatherboards

SCALE 1:2 @ A1, 1:4 @ A3

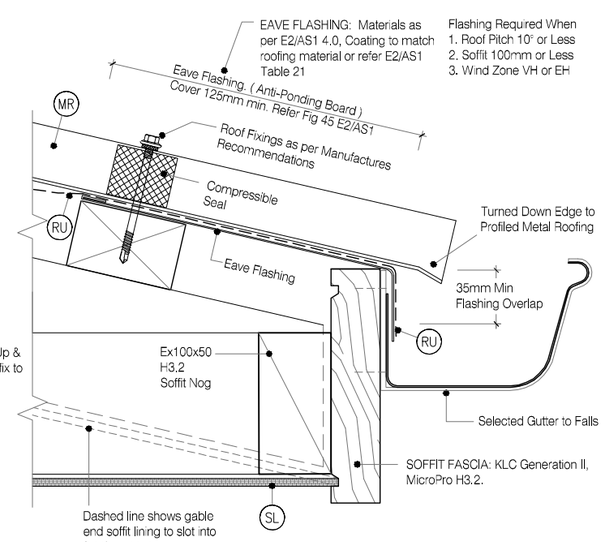


C18 BB62

WALL TO SOFFIT DETAIL

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3

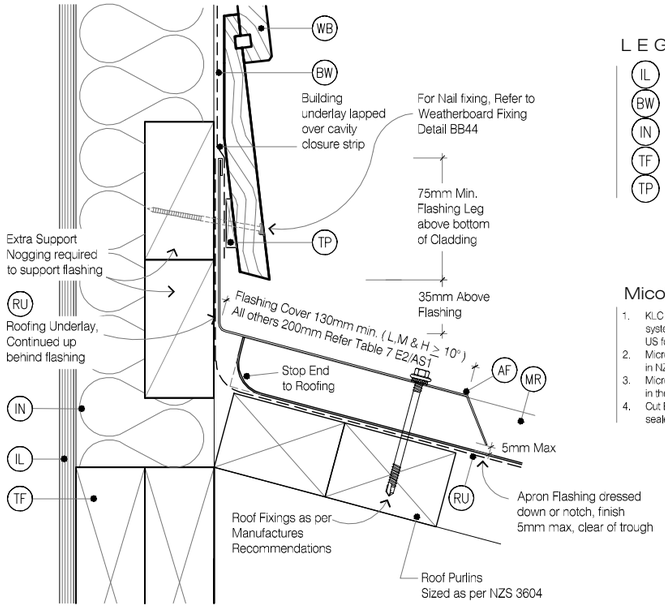


C19 BB63

SOFFIT DETAIL

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3



C20 BB64

APRON FLASHING ROOF TO WALL JUNCTION

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3

LEGEND :

- IL — INTERNAL LINING: Selected Internal Lining
- BW — BUILDING WRAP: Flexible Wall Underlay, As per NZBC E2/AS1 – Table 23, In extra high wind zones, Ridgid Underlay required (9.1.7.2 E2/AS1)
- IN — INSULATION: Selected Insulation
- TF — TIMBER FRAME: H1.2 min treated timber framing
- TP — TIMBER PACKER: Cant Strip, MicroPro H3.2 Treated
- WB — WEATHER BOARD: KLC Generation II, MicroPro H3.2 Bevel Back Weatherboard. Profile to NZS 3617
- MR — METAL ROOFING : Selected Metal Roofing
- RU — ROOFING UNDERLAY: Selected Roofing Underlay As Per AS/AZS4200 with Mesh or Self Supported
- SL — SOFFIT LINING: As Selected (Typicaly 7.5mm Hardies Soffit Liner)
- HS — HEAD SOFFIT SCRIBER: KLC Generation II, MicroPro H3.2. Fix with 75 x 3.15mm Galvanised nail in 3mm 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
- CB — CAVITY BATTEN: 45x20 KLC Generation II, MicroPro H3.2 FJ Cavity Batten 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 AS1604.1:2012
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9. MicroPro® Wood Treatment Technology has received GreenTag PhD™ proving claims that MicroPro® is safe for human health (and ecosystems).

HOW TO DETERMINE THE TIMBER WEATHERBOARD STRUCTURE :

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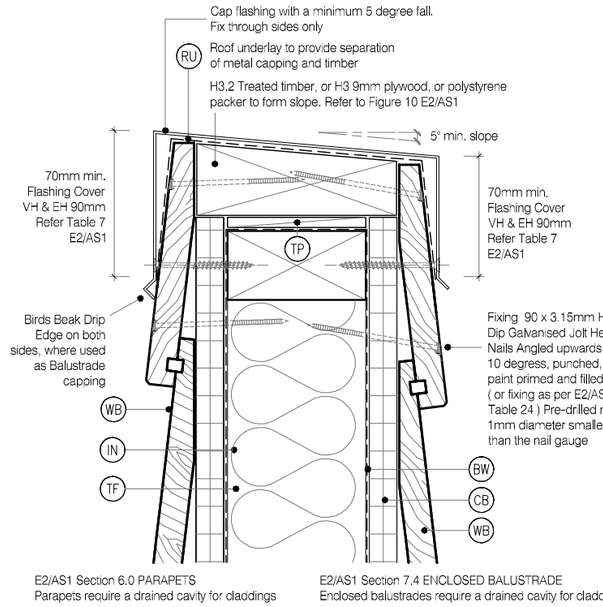
3. Building Envelope Risk Score (Section 3.1.2 & Table 2 E2/AS1) The RISK MATRIX defines the RISK SCORE
4. Suitable Wall Claddings (Table 3 E2/AS1)
5. The Architect / Designer are responsibility to confirm the RISK MATRIX, RISK SCORE & SUITABLE CLADDINGS

NOTES:
Claddings in Extra High Wind Zones require:
a. Rigid underlays to (Paragraph 9.1.7.2 E2/AS1)
b. Drained Cavities to (Paragraph 9.1.8 E2/AS1)
c. Hooks and Hems on flashing upstands and additional 25mm height to (Paragraph 4.6 E2/AS1)

6. FROM TABLE 3 E2/AS1

RISK SCORE	DIRECT FIX	20mm CAVITY FIX
0 - 6	Timber Weather Boards (All Types)	(Not Required)
7 - 12	Bevel Back Timber WB Vertical Timber Board & Batten	Rusticated WB
13 - 20	(Direct Fix NOT Allowed)	Rusticated WB B.B Timber WB
20 +	(Redesign or Specific Design)	

Table 3 E2/AS1 are the minimum requirements, For extra security, you can always upgrade to a higher specification.



E2/AS1 Section 6.0 PARAPETS
Parapets require a drained cavity for claddings

E2/AS1 Section 7.4 ENCLOSED BALUSTRADE
Enclosed balustrades require a drained cavity for claddings

C21 BB65

BALUSTARDE CAPPING OR PARAPET DETAIL

Direct Fix - Bevel Back WB

SCALE 1:2 @ A1, 1:4 @ A3

CAD REF : KLC DF BB60-66 - GENERAL DETAILS 03.dwg
DATE : 27/11/2018

KLC
Naturally Better

www.klc.co.nz

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

NAME GENERAL DETAILS 03 - Base and Roof to Wall & Soffit Details

CodeMark™ AQ-020216-CMNZ

DRAWING SCALE 1:2 @ A1 1:4 @ A3

ISSUE DATE 20/11/2018

DRAWING No KLC DF BB66

REVISION 0