

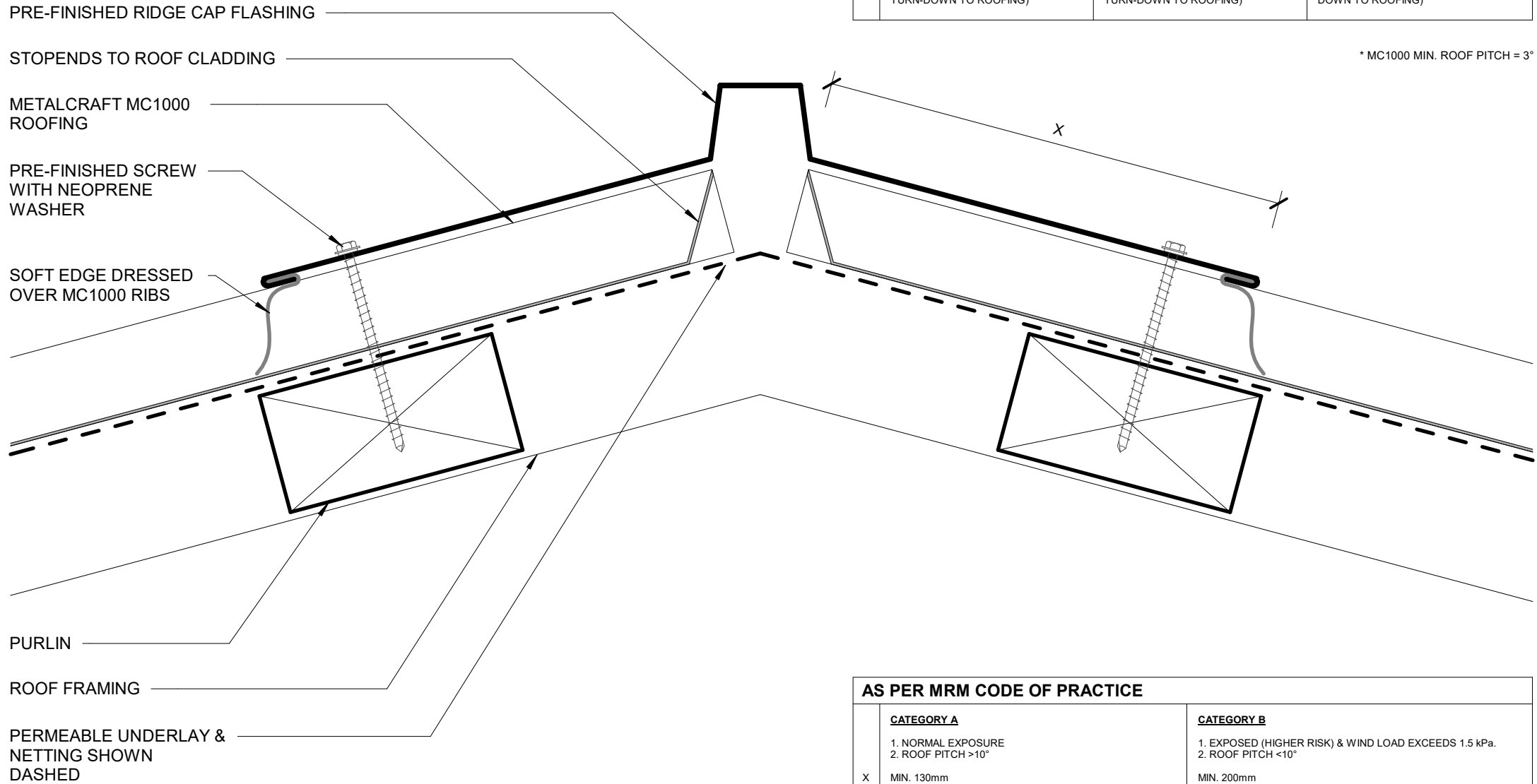
# MC 1000

## RESIDENTIAL ROOFING

<u>DETAIL LIST</u>	<u>Revision</u>	<u>Date</u>	<u>DETAIL LIST</u>	<u>Revision</u>	<u>Date</u>
A 00 / 29			A 15 / 29		
A 01 / 29			A 16 / 29		
A 02 / 29			A 17 / 29		
A 03 / 29			A 18 / 29		
A 04 / 29			A 19 / 29		
A 05 / 29			A 20 / 29		
A 06 / 29			A 21 / 29		
A 07 / 29			A 22 / 29		
A 08 / 29			A 23 / 29		
A 09 / 29			A 24 / 30		
A 10 / 29			A 25 / 29		
A 11 / 29			A 26 / 29		
A 12 / 29			A 27 / 29		
A 13 / 29			A 28 / 30		
A 14 / 29			A 29 / 29		
COVER SHEET			FLUSH EAVE WITH EXTERNAL GUTTER BRACKET	1.0	JAN 2023
ROOF RIDGE	1.0	JAN 2023	BARGE WITH PROFILED CLADDING	1.0	JAN 2023
ROOF RIDGE (ROUND)	1.0	JAN 2023	BARGE OVERHANG	1.0	JAN 2023
SAWTOOTH RIDGE	1.0	JAN 2023	PRARPET WITH TRANSVERSE APRON	1.0	JAN 2023
SAWTOOTH EAVE	1.0	JAN 2023	TRANSVERSE APRON	1.0	JAN 2023
ROOF VALLEY	1.0	JAN 2023	PARALLEL APRON	1.0	JAN 2023
ROOF VALLEY BAFFLE	1.0	JAN 2023	PIPE PENETRATION DIRECT FIXED BOOT FLASHING	1.0	JAN 2023
INTERNAL GUTTER	1.0	JAN 2023	PIPE PENETRATION BACK TRAY BOOT FLASHING	1.0	JAN 2023
PARALLEL HIDDEN GUTTER	1.0	JAN 2023	3D RIDGE TO BARGE JUNCTION	1.0	JAN 2023
PARALLEL HIDDEN GUTTER (2 PART FLASHING)	1.0	JAN 2023	3D DUTCH GABLE	1.0	JAN 2023
ROOF - CHANGE PITCH	1.0	JAN 2023	3D APRON	1.0	JAN 2023
MANSARD	1.0	JAN 2023	3D OVER 85mm DIAMETER PIPE PENETRATION	1.0	JAN 2023
EAVE WITH METALLINE FASCIA	1.0	JAN 2023	3D CHIMNEY PENETRATION	1.0	JAN 2023
EAVE WITH SNOW STRAP	1.0	JAN 2023	3D RIDGE/BARGE FLASHINGS	1.0	JAN 2023
FLUSH EAVE WITH INTERNAL GUTTER BRACKET	1.0	JAN 2023	3D DUTCH GABLE FLASHINGS	1.0	JAN 2023

AS PER E2/ASI			
	<b>SITUATION 1</b> 1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	<b>SITUATION 2</b> 1. VERY HIGH WIND ZONE 2. LOW, MEDIUM & HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	<b>SITUATION 3</b> 1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE.
X	MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

\* MC1000 MIN. ROOF PITCH = 3°



AS PER MRM CODE OF PRACTICE		
	<b>CATEGORY A</b> 1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	<b>CATEGORY B</b> 1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
X	MIN. 130mm	MIN. 200mm

PRE-FINISHED ROUND RIDGE CAP  
FLASHING

STOPENDS TO ROOF CLADDING

METALCRAFT MC1000  
ROOFING

PRE-FINISHED SCREW  
WITH NEOPRENE  
WASHER

SOFT EDGE DRESSED  
OVER MC1000 RIBS

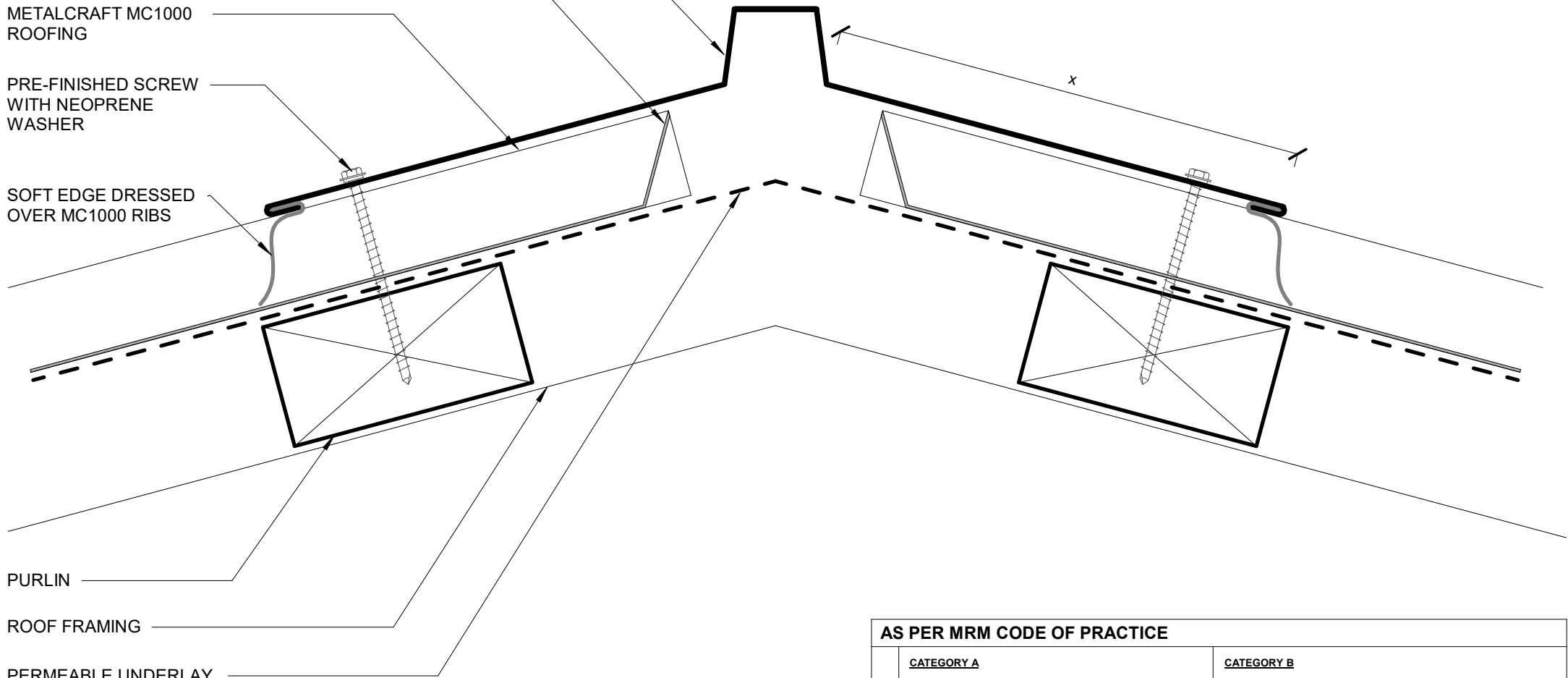
PURLIN

ROOF FRAMING

PERMEABLE UNDERLAY  
& NETTING SHOWN  
DASHED

AS PER E2/ASI			
	<p><b>SITUATION 1</b></p> <p>1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH <math>\geq 10^\circ</math></p>	<p><b>SITUATION 2</b></p> <p>1. VERY HIGH WIND ZONE 2. LOW, MEDIUM &amp; HIGH WIND ZONES WHERE ROOF PITCH <math>\leq 10^\circ</math></p>	<p><b>SITUATION 3</b></p> <p>1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE.</p>
X	<p>MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)</p>	<p>MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)</p>	<p>MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)</p>

\* MC1000 MIN. ROOF PITCH = 8°



AS PER MRM CODE OF PRACTICE		
	<p><b>CATEGORY A</b></p> <p>1. NORMAL EXPOSURE 2. ROOF PITCH <math>&gt;10^\circ</math></p>	<p><b>CATEGORY B</b></p> <p>1. EXPOSED (HIGHER RISK) &amp; WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH <math>&lt;10^\circ</math></p>
X	<p>MIN. 130mm</p>	<p>MIN. 200mm</p>

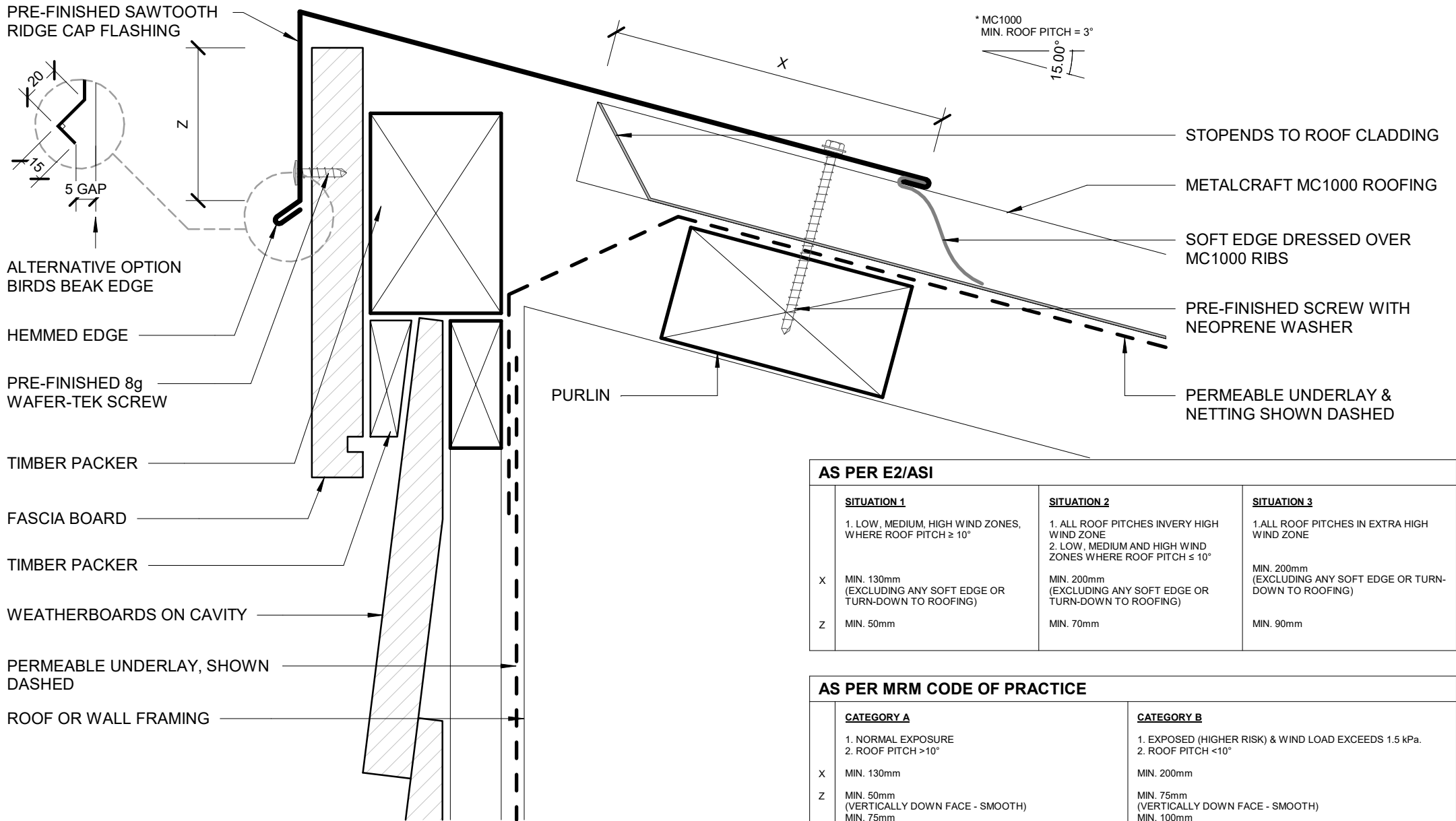
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Roofing  
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**DISCLAIMER:**  
All details are to be used for indicative purposes only and the designer should consult both the MRM code of practice version 3.0 / 2022, E2 and all other relevant building codes. Details of the supporting mechanisms are indicative only. Compliance of the supporting mechanisms is the responsibility of the designer. Construction detail can vary for wall cladding. The underlay is detailed as a single line for simplicity and is indicative only. Building paper type and method of installation should comply with underlay manufacturers recommendations and NZBC regulations.

**MC 1000** Rev. 1.0

**ROOF RIDGE (ROUND)**  
**RESIDENTIAL ROOFING**

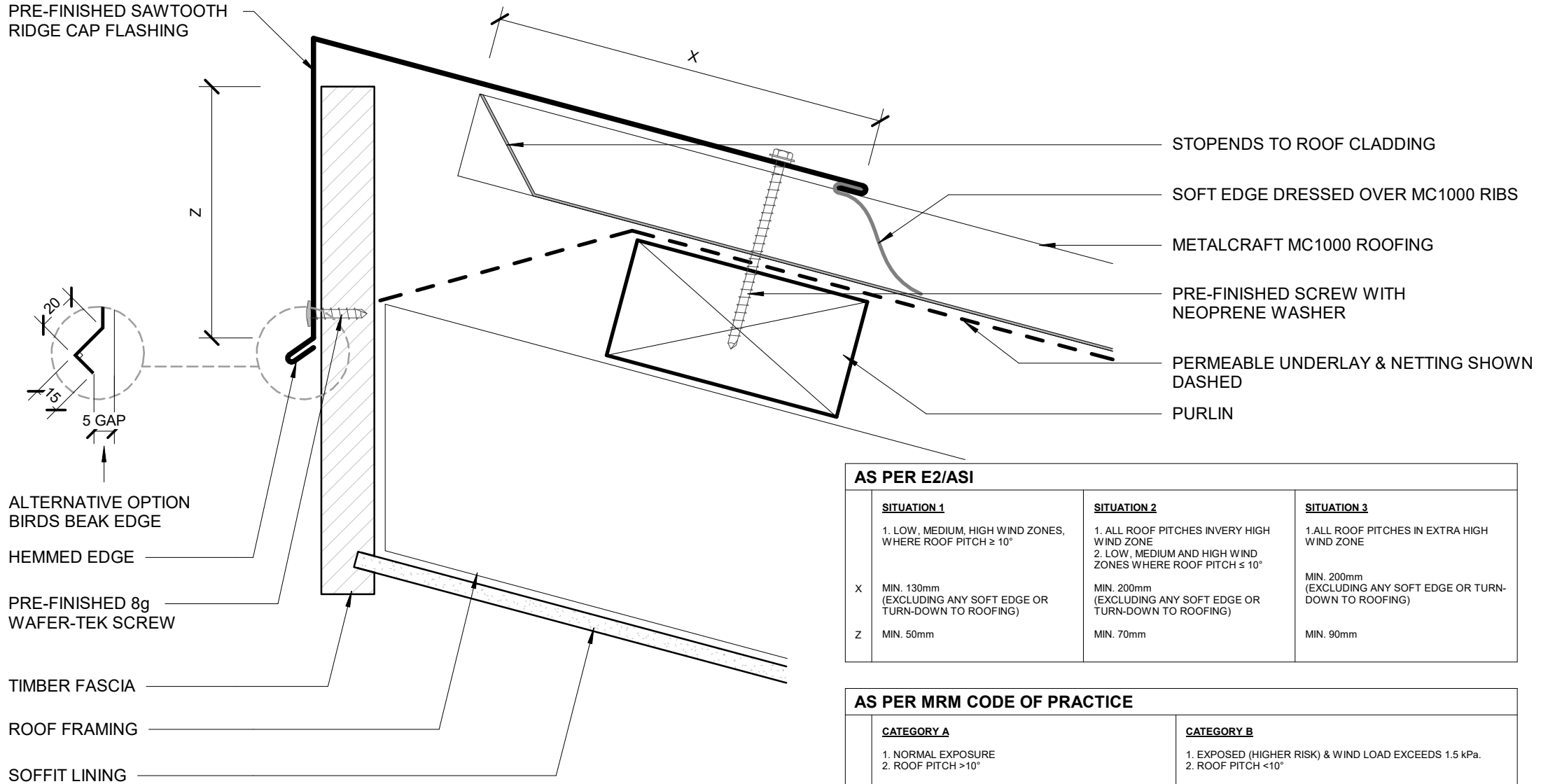
Reference RRM1000 Date JAN 2023 Scale 1 : 2 Sheet **A 02 / 29**



AS PER E2/ASI			
	SITUATION 1	SITUATION 2	SITUATION 3
	1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE
X	MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)
Z	MIN. 50mm	MIN. 70mm	MIN. 90mm

AS PER MRM CODE OF PRACTICE		
	CATEGORY A	CATEGORY B
	1. NORMAL EXPOSURE 2. ROOF PITCH $> 10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $< 10^\circ$
X	MIN. 130mm	MIN. 200mm
Z	MIN. 50mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 75mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 100mm (VERTICALLY DOWN FACE - PROFILED)

\* MC1000 ROOF PITCH = 3°



AS PER E2/ASI			
	SITUATION 1	SITUATION 2	SITUATION 3
	1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE
X	MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)
Z	MIN. 50mm	MIN. 70mm	MIN. 90mm

AS PER MRM CODE OF PRACTICE		
	CATEGORY A	CATEGORY B
	1. NORMAL EXPOSURE 2. ROOF PITCH $> 10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $< 10^\circ$
X	MIN. 130mm	MIN. 200mm
Z	MIN. 50mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 75mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 100mm (VERTICALLY DOWN FACE - PROFILED)

METALCRAFT MC1000  
ROOFING

PRE-FINISHED SELF  
DRILLING/TAPPING  
SCREW WITH NEOPRENE  
WASHER

REFER TO NZ METAL ROOF & WALL CLADDING  
CODE OF PRACTICE V3.0 FOR MINIMUM  
DIMENSIONS

ROOF  
FRAMING

PURLIN

VALLEY BOARD

PERMEABLE UNDERLAY CONTINUOUS  
UNDER GUTTER IF COPPER BASED  
TREATMENTS ARE USED, SHOWN  
DASHED

PREFINISHED VALLEY GUTTER

VALLEY RAFTER

\*ROOF PITCH FOR VALLEYS  
AS PER MRM CODE OF  
PRACTICE VERSION 3.0/2019

- FOR 8° DEGREES OR LOWER USE INTERNAL GUTTER DETAIL

METALCRAFT MC1000  
ROOFING

PRE-FINISHED SCREW  
WITH NEOPRENE  
WASHER

REFER TO NZ METAL ROOF & WALL CLADDING  
CODE OF PRACTICE V3.0 FOR MINIMUM  
DIMENSIONS

ROOF  
FRAMING

PURLIN

VALLEY BOARD

PERMEABLE UNDERLAY CONTINUOUS  
UNDER GUTTER IF COPPER BASED  
TREATMENTS ARE USED, SHOWN  
DASHED

PREFINISHED VALLEY GUTTER

Valley Rafter

\*ROOF PITCH FOR VALLEYS AS  
PER MRM CODE OF PRACTICE  
VERSION 3.0/2019

- FOR 8° DEGREES OR LOWER USE INTERNAL GUTTER DETAIL

METALCRAFT MC1000  
ROOFING

PRE-FINISHED SELF  
DRILLING/TAPPING  
SCREW WITH  
NEOPRENE WASHER

PURLIN

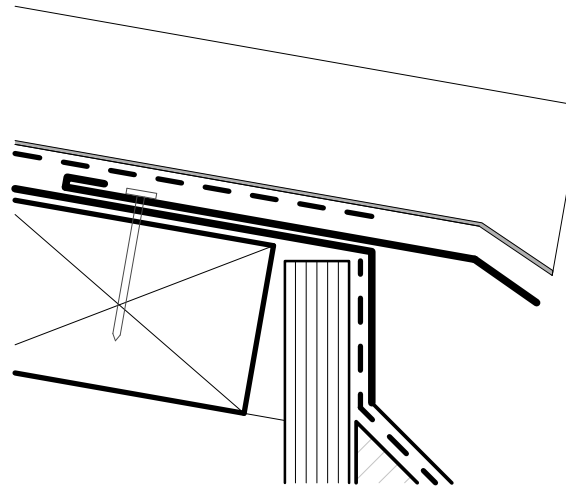
ROOF FRAMING

TIMBER FILLET

GUTTER BOARD

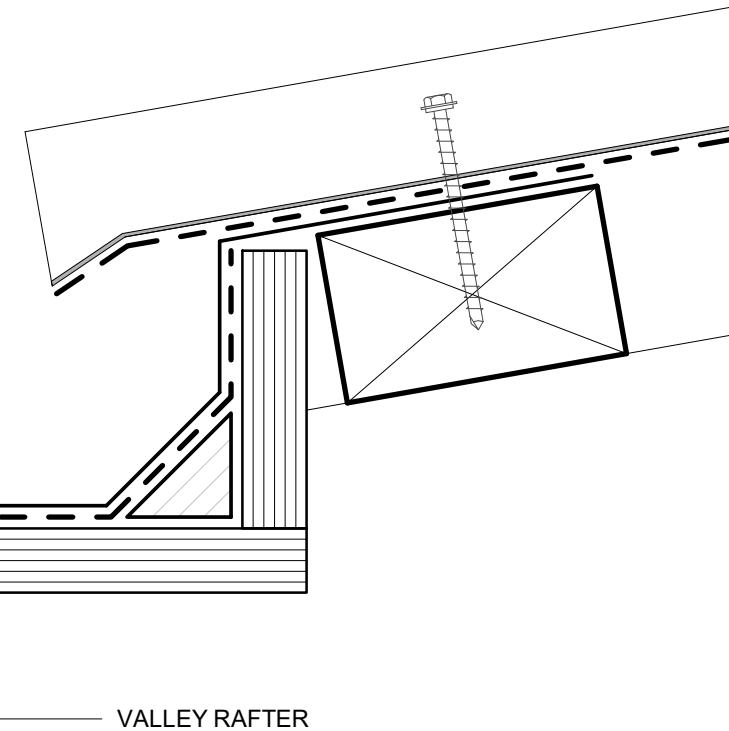
PERMEABLE UNDERLAY CONTINUOUS  
UNDER GUTTER IF COPPER BASED  
TREATMENTS ARE USED, SHOWN  
DASHED

PREFINISHED INTERNAL GUTTER



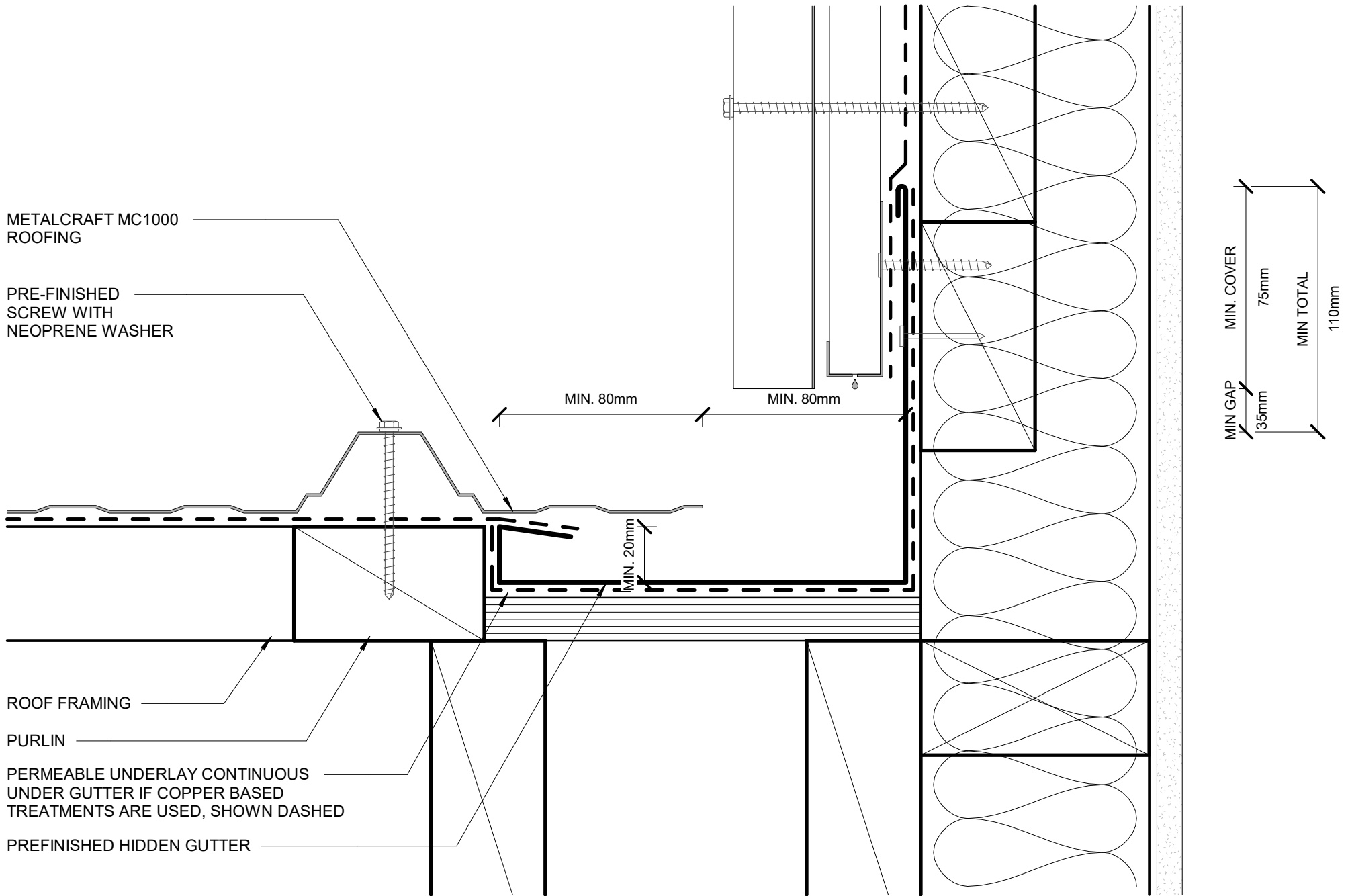
GUTTER EAVES FLASHING  
RECOMMENDED AS SEPERATION  
BETWEEN BUTYNOL

REFER TO NZ METAL ROOF &  
WALL CLADDING CODE OF  
PRACTICE V3.0 FOR MINIMUM  
DIMENSIONS



VALLEY RAFTER





METALCRAFT MC1000 ROOFING

PRE-FINISHED SCREW WITH NEOPRENE WASHER

MIN. 80mm

MIN. 80mm

MIN. 20mm

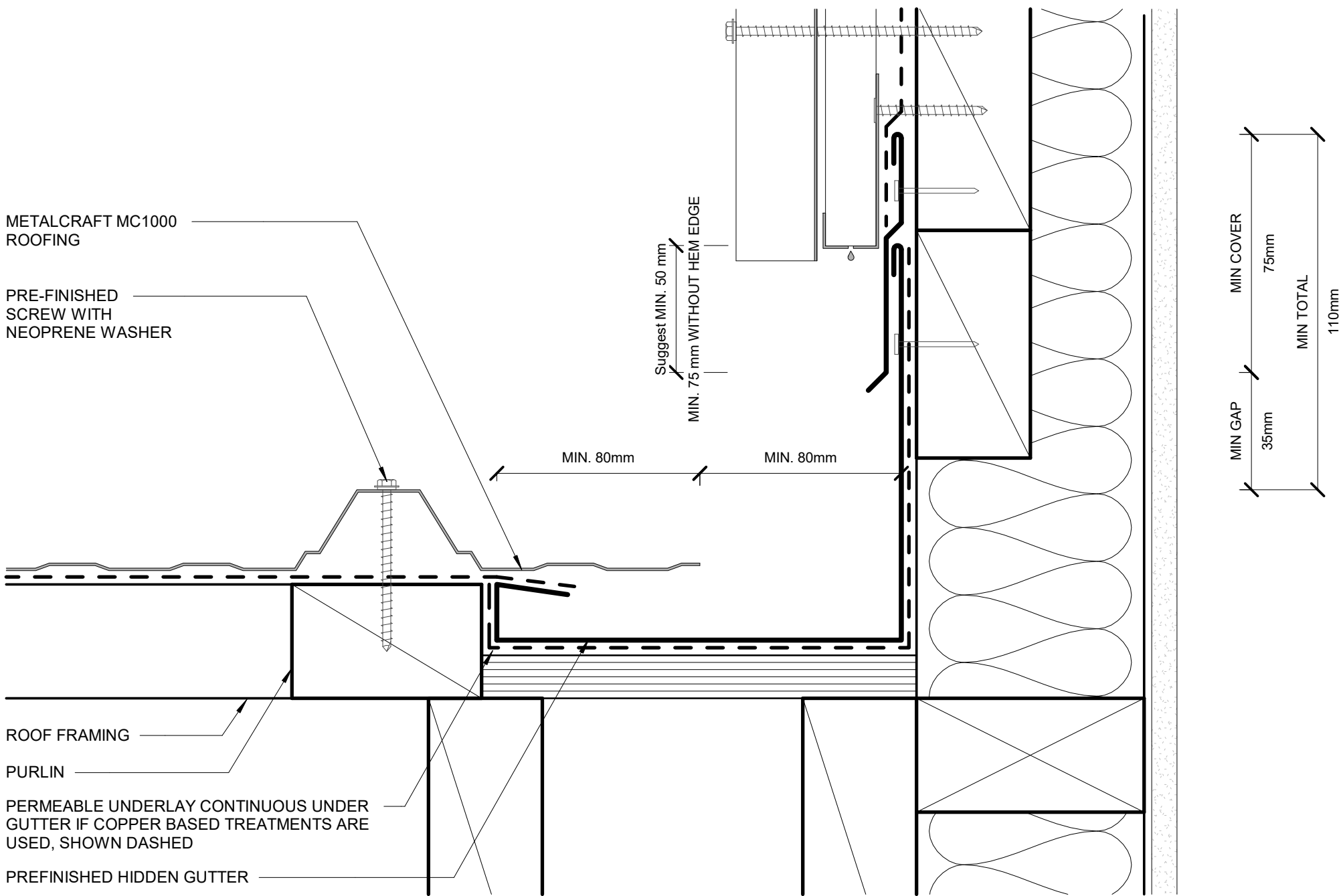
MIN GAP 35mm  
 MIN COVER 75mm  
 MIN TOTAL 110mm

ROOF FRAMING

PURLIN

PERMEABLE UNDERLAY CONTINUOUS UNDER GUTTER IF COPPER BASED TREATMENTS ARE USED, SHOWN DASHED

PREFINISHED HIDDEN GUTTER



METALCRAFT MC1000 ROOFING

PRE-FINISHED SCREW WITH NEOPRENE WASHER

Suggest MIN. 50 mm  
MIN. 75 mm WITHOUT HEM EDGE

MIN. 80mm

MIN. 80mm

MIN GAP 35mm  
MIN COVER 75mm  
MIN TOTAL 110mm

ROOF FRAMING

PURLIN

PERMEABLE UNDERLAY CONTINUOUS UNDER GUTTER IF COPPER BASED TREATMENTS ARE USED, SHOWN DASHED

PREFINISHED HIDDEN GUTTER

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**PARALLEL HIDDEN GUTTER (2 PART FLASHING)**

MC 1000

Rev. 1.0

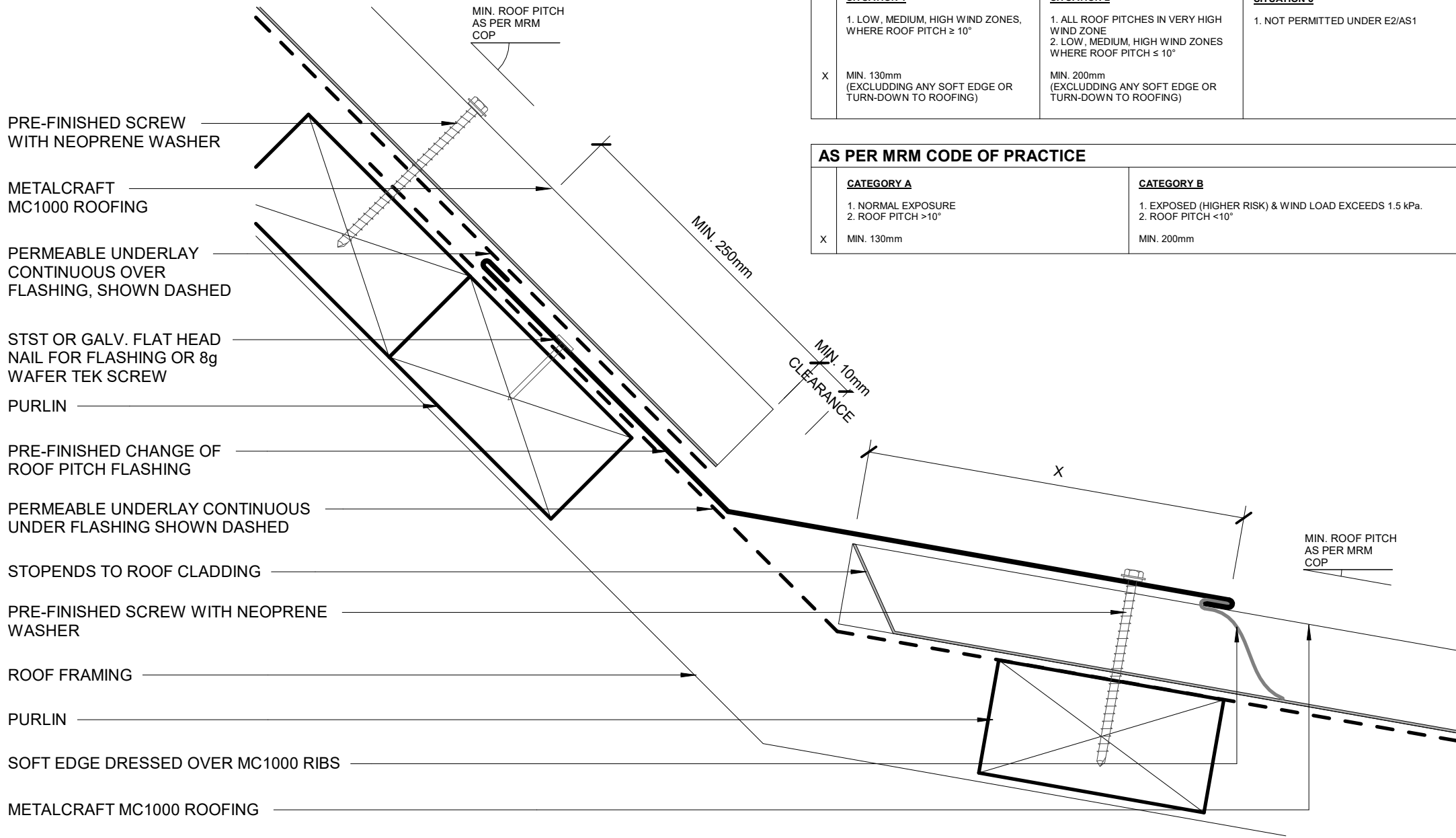
RESIDENTIAL ROOFING

Reference RRM1000

Date JAN 2023

Scale 1 : 2

Sheet **A 09 / 29**



AS PER E2/ASI			
	<b>SITUATION 1</b> 1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$  X MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	<b>SITUATION 2</b> 1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM, HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$  MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	<b>SITUATION 3</b> 1. NOT PERMITTED UNDER E2/ASI1

AS PER MRM CODE OF PRACTICE	
<b>CATEGORY A</b> 1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$  X MIN. 130mm	<b>CATEGORY B</b> 1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$  MIN. 200mm

METALCRAFT  
MC1000 ROOFING

STST OR GALV. FLAT HEAD  
NAIL FOR FLASHING

PRE-FINISHED SELF  
DRILLING/TAPPING SCREW  
WITH NEOPRENE WASHER

PERMEABLE UNDERLAY  
CONTINUOUS OVER,  
FLASHING SHOWN DASHED

PURLIN

PRE-FINISHED CHANGE OF  
ROOF PITCH FLASHING

PERMEABLE UNDERLAY  
CONTINUOUS UNDER FLASHING  
SHOWN DASHED

STOPENDS TO ROOF CLADDING

ROOF FRAMING

PRE-FINISHED SELF DRILLING/TAPPING  
SCREW WITH NEOPRENE WASHER

PURLIN

SOFT EDGE DRESSED OVER MC1000 RIBS

METALCRAFT MC1000 ROOFING

MIN. ROOF PITCH  
AS PER MRM  
COP

250mm MIN

25mm MIN  
50mm RECOMMENDED

MIN. ROOF PITCH  
AS PER MRM  
COP

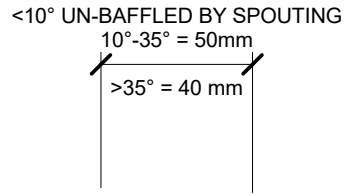
### AS PER E2/AS1

	SITUATION 1	SITUATION 2	SITUATION 3
	1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM, HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. NOT PERMITTED UNDER E2/AS1
X	MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	

### AS PER MRM CODE OF PRACTICE

	CATEGORY A	CATEGORY B
	1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
X	MIN. 130mm	MIN. 200mm

EAVE FLASHING REQUIRED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:  
 ROOF PITCH  $\leq 10^\circ$   
 SOFFIT WIDTH  $\leq 100\text{mm}$   
 WIND ZONES = VERY HIGH OR EXTRA HIGH  
 ENGINEER SPECIFIC DESIGN  
 MRM RECOMMENDS TO USE IN AREAS EXPOSED TO CONTAMINATORS SUCH AS SEA SALT OR INDUSTRIAL POLLUTANTS



MIN. ROOF PITCH AS PER MRM COP

FOAM CLOSURE USED AS REQUIRED

METALCRAFT MC1000 ROOFING

PERMEABLE UNDERLAY & NETTING SHOWN DASHED

METALLINE™ QUAD GUTTER

METALLINE™ QUAD GUTTER OVERSTRAP

SPRING CLIP

METALLINE™ FASCIA

FASCIA BRACKET

MIN. 125 mm

MIN. 35mm OVERLAP

PRE-FINISHED SCREW WITH NEOPRENE WASHER

PRE-FINISHED EAVE FLASHING

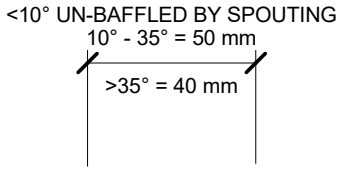
STST OR GALV. FLAT HEAD NAIL FOR FLASHING OR 8g WAFER TEK SCREW

TIMBER PURLIN

TIMBER ROOF FRAMING

SOFFIT LINING

EAVE FLASHING REQUIRED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:  
 ROOF PITCH  $\leq 10^\circ$   
 SOFFIT WIDTH  $\leq 100\text{mm}$   
 WIND ZONES = VERY HIGH OR EXTRA HIGH  
 ENGINEER SPECIFIC DESIGN  
 MRM RECOMMENDS TO USE IN AREAS EXPOSED TO CONTAMINATORS SUCH AS SEA SALT OR INDUSTRIAL POLLUTANTS



MIN. ROOF PITCH AS PER MRM COP

COMPRESSED FOAM WHEN REQUIRED

METALCRAFT MC1000 ROOFING

PRE-FINISHED SEALED POP RIVET OR PRE-FINISHED 8g WAFER-TEK SCREW

SNOW STRAP AS REQUIRED

METALLINE™ QUAD GUTTER

METALLINE™ QUAD GUTTER INTERNAL BRACKET

PRE-FINISHED 8g WAFER-TEK SCREW

TIMBER FASCIA

MIN. 125 mm

MIN. 35mm OVERLAP

PRE-FINISHED SCREW WITH NEOPRENE WASHER

PERMEABLE UNDERLAY & NETTING SHOWN DASHED

PRE-FINISHED EAVE FLASHING

STST OR GALV. FLAT HEAD NAIL FOR FLASHING OR 8g WAFER TEK SCREW

TIMBER PURLIN

TIMBER ROOF FRAMING

SOFFIT LINING

EAVE FLASHING REQUIRED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:  
 ROOF PITCH  $\leq 10^\circ$   
 SOFFIT WIDTH  $\leq 100\text{mm}$   
 WIND ZONES = VERY HIGH OR EXTRA HIGH  
 ENGINEER SPECIFIC DESIGN  
 MRM RECOMMENDS TO USE IN AREAS EXPOSED TO CONTAMINATORS SUCH AS SEA SALT OR INDUSTRIAL POLLUTANTS

$<10^\circ$  UN-BAFFLED BY SPOUTING  
 $10^\circ - 35^\circ = 50\text{ mm}$   
 $>35^\circ = 40\text{ mm}$

MIN. ROOF PITCH AS PER MRM COP

FOAM CLOSURE USED AS REQUIRED

METALCRAFT MC1000 ROOFING

PERMEABLE UNDERLAY & NETTING SHOWN DASHED

QUARTER ROUND GUTTER

QUARTER ROUND GUTTER INTERNAL BRACKET

PRE-FINISHED 8g WAFER-TEK SCREW

FASCIA BOARD

TIMBER PACKER

WEATHERBOARDS ON CAVITY

MIN. 125 mm

MIN. 35mm OVERLAP

PRE-FINISHED SCREW WITH NEOPRENE WASHER

PRE-FINISHED EAVE FLASHING

TIMBER PURLIN

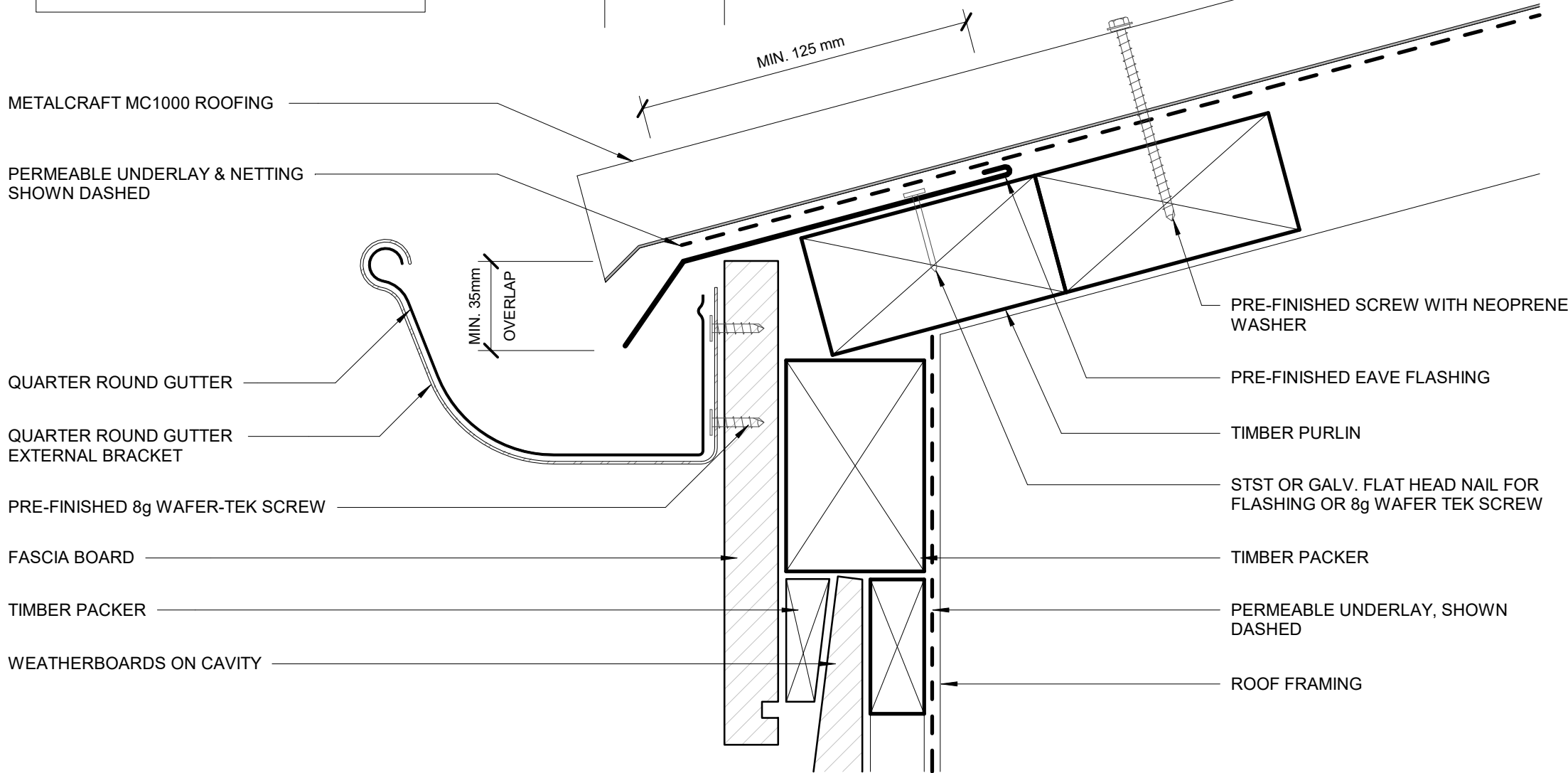
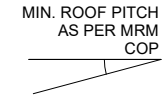
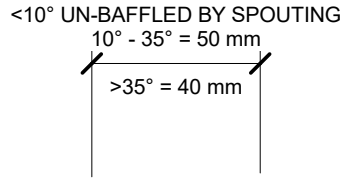
STST OR GALV. FLAT HEAD NAIL FOR FLASHING OR 8g WAFER TEK SCREW

TIMBER PACKER

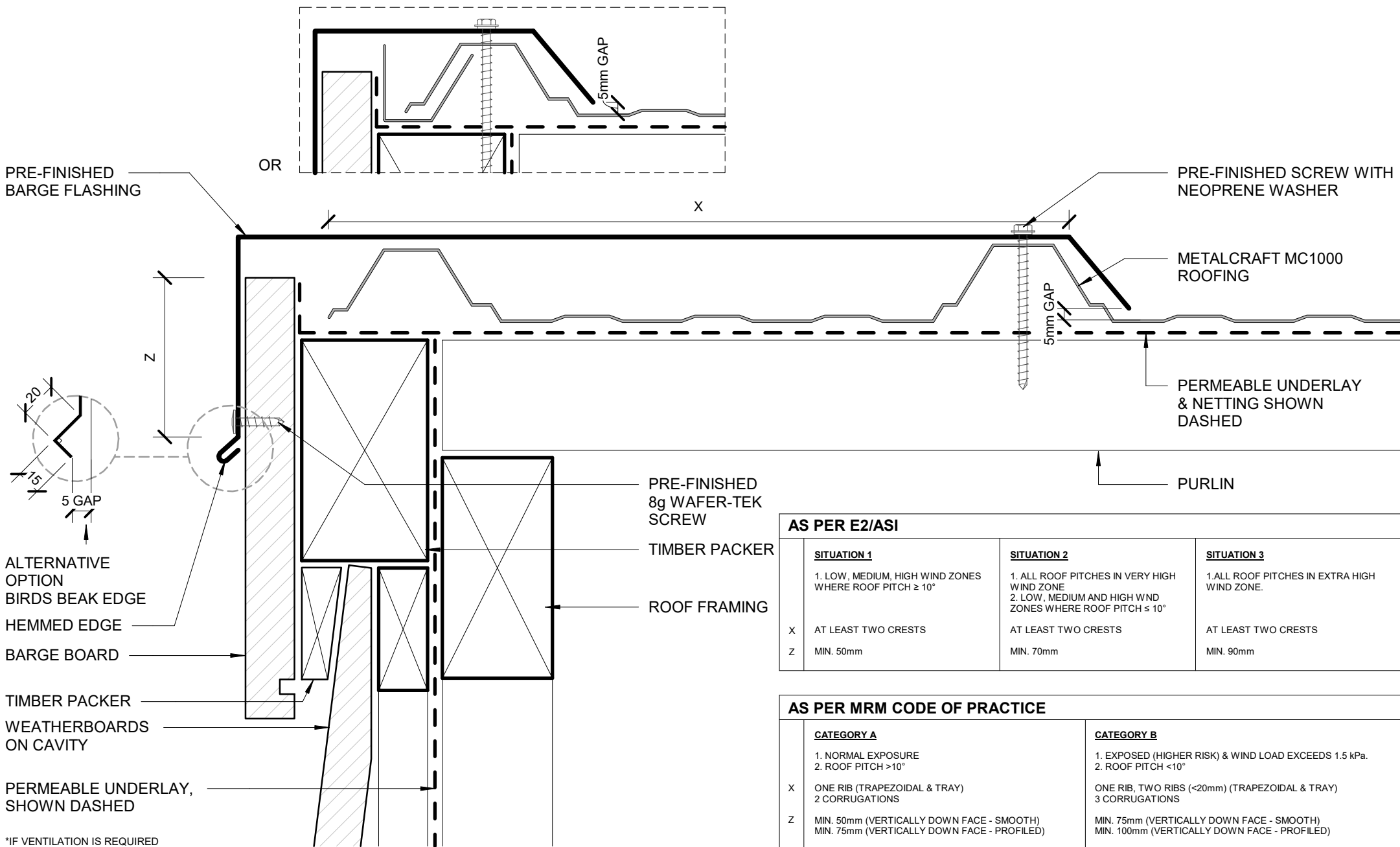
PERMEABLE UNDERLAY, SHOWN DASHED

ROOF FRAMING

EAVE FLASHING REQUIRED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:  
 ROOF PITCH  $\leq 10^\circ$   
 SOFFIT WIDTH  $\leq 100\text{mm}$   
 WIND ZONES = VERY HIGH OR EXTRA HIGH  
 ENGINEER SPECIFIC DESIGN  
 MRM RECOMMENDS TO USE IN AREAS EXPOSED TO CONTAMINATORS SUCH AS SEA SALT OR INDUSTRIAL POLLUTANTS

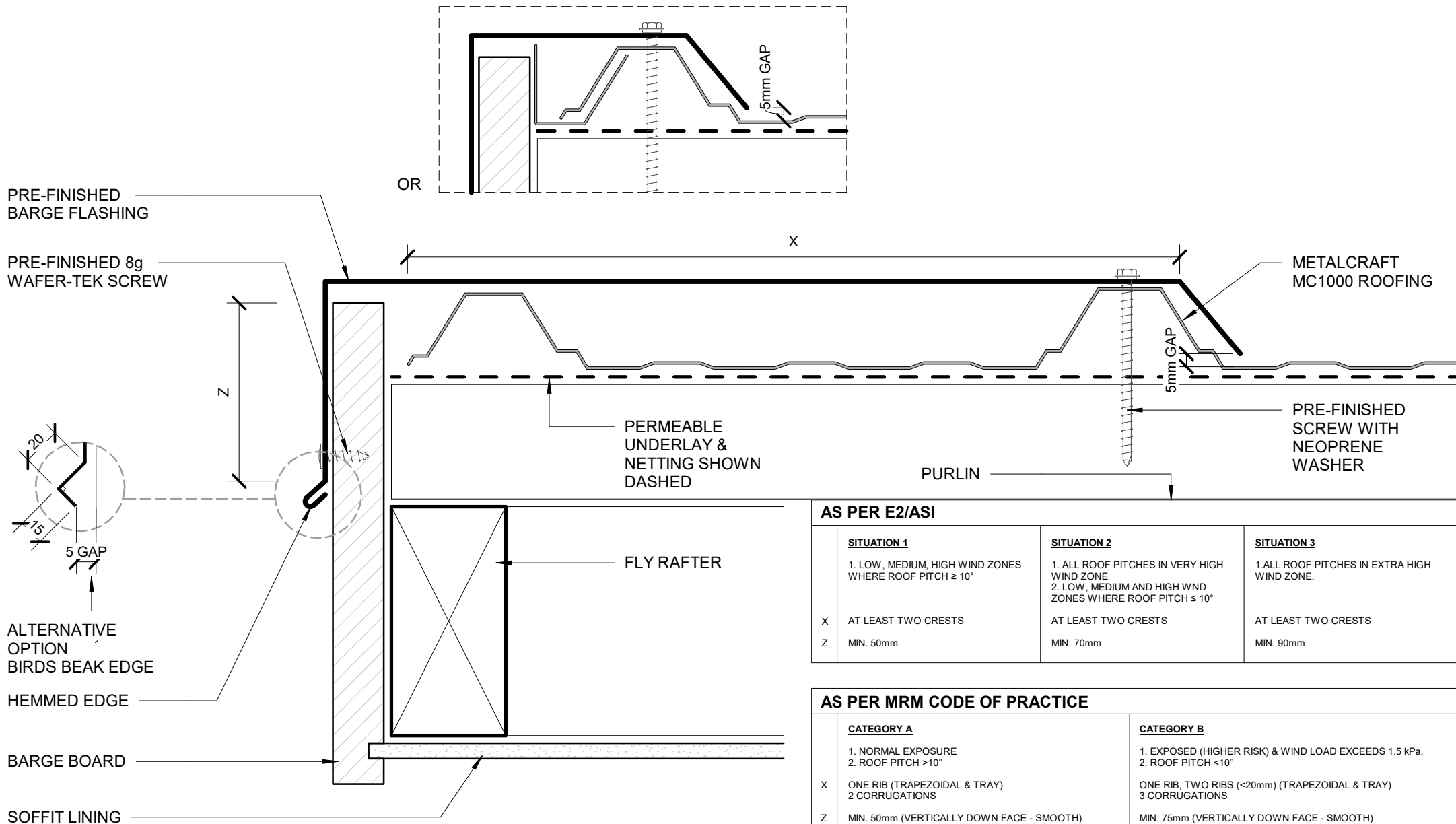






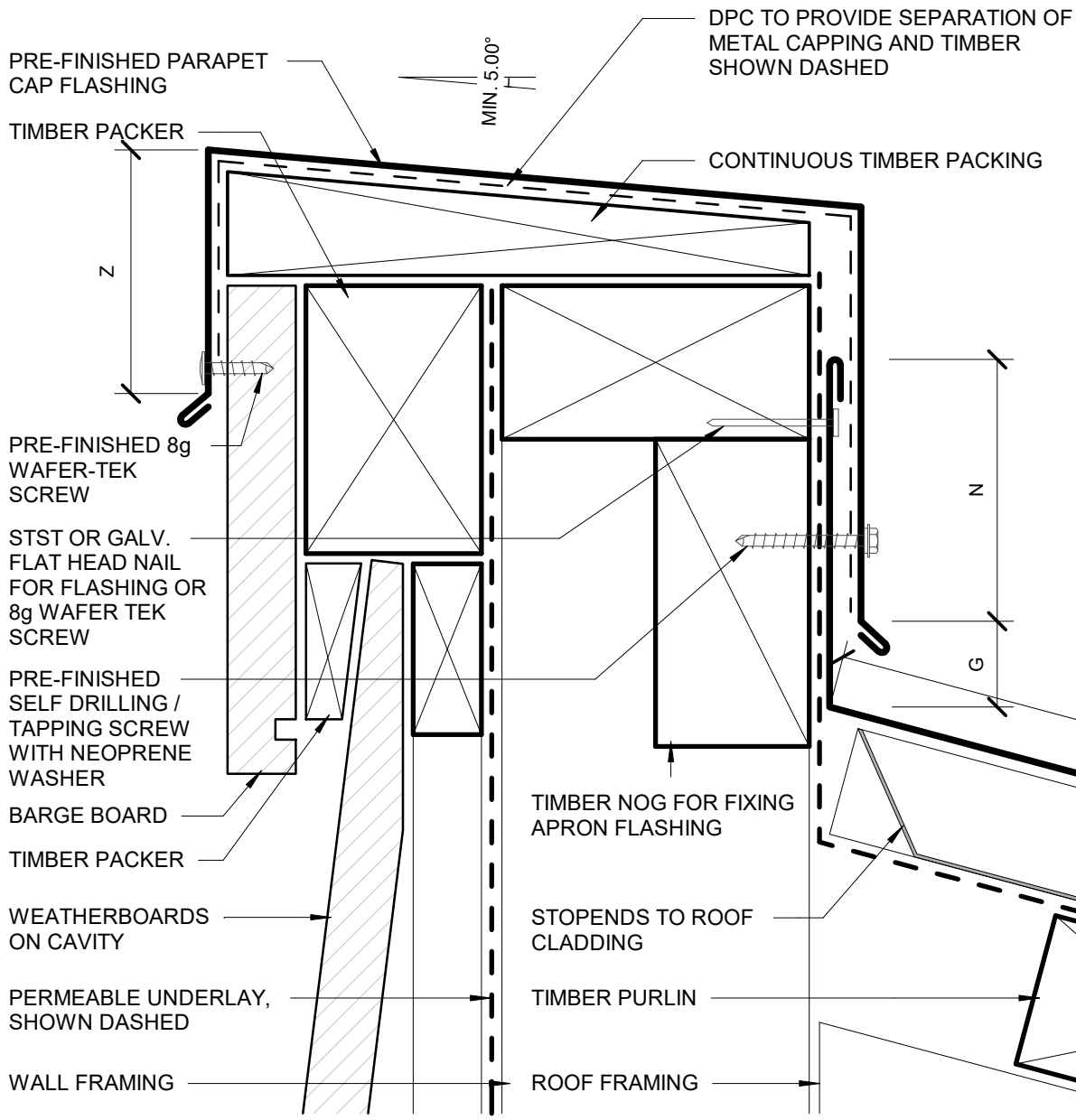
AS PER E2/ASI			
	SITUATION 1	SITUATION 2	SITUATION 3
	1. LOW, MEDIUM, HIGH WIND ZONES WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE.
X	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS
Z	MIN. 50mm	MIN. 70mm	MIN. 90mm

AS PER MRM CODE OF PRACTICE		
	CATEGORY A	CATEGORY B
	1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
X	ONE RIB (TRAPEZOIDAL & TRAY) 2 CORRUGATIONS	ONE RIB, TWO RIBS ( $<20\text{mm}$ ) (TRAPEZOIDAL & TRAY) 3 CORRUGATIONS
Z	MIN. 50mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 75mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 100mm (VERTICALLY DOWN FACE - PROFILED)



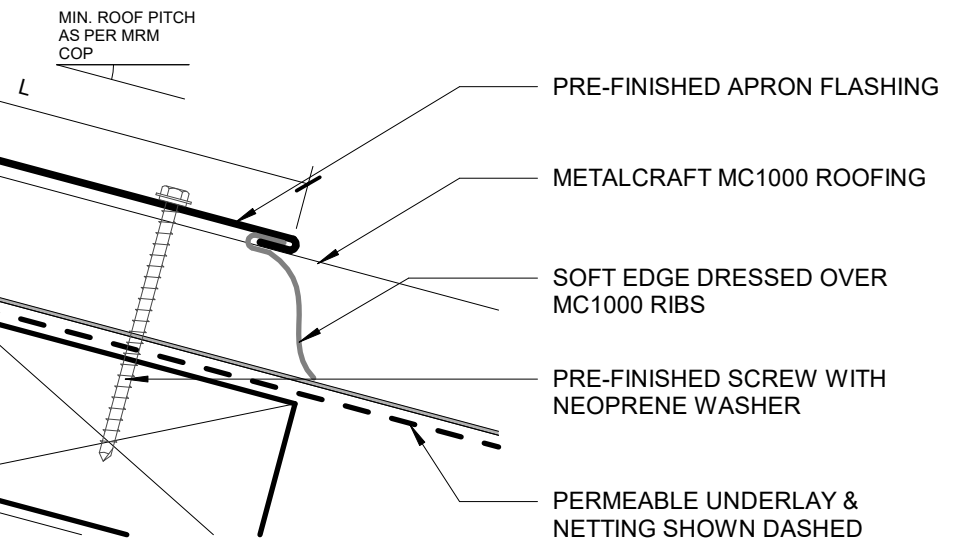
AS PER E2/ASI			
	<b>SITUATION 1</b> 1. LOW, MEDIUM, HIGH WIND ZONES WHERE ROOF PITCH $\geq 10^\circ$	<b>SITUATION 2</b> 1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	<b>SITUATION 3</b> 1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE.
X	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS
Z	MIN. 50mm	MIN. 70mm	MIN. 90mm

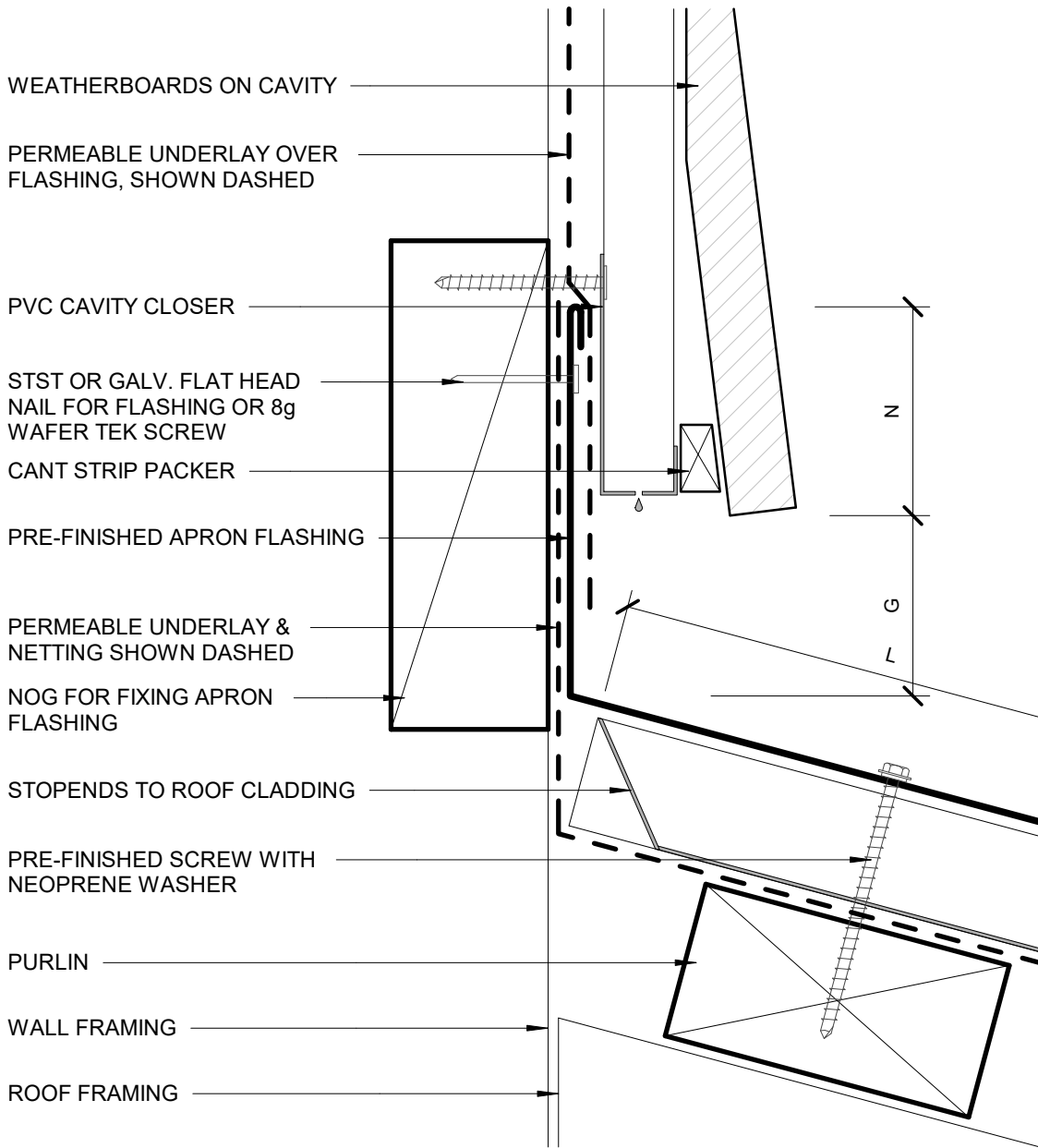
AS PER MRM CODE OF PRACTICE		
	<b>CATEGORY A</b> 1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	<b>CATEGORY B</b> 1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
X	ONE RIB (TRAPEZOIDAL & TRAY) 2 CORRUGATIONS	ONE RIB, TWO RIBS ( $<20\text{mm}$ ) (TRAPEZOIDAL & TRAY) 3 CORRUGATIONS
Z	MIN. 50mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 75mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 100mm (VERTICALLY DOWN FACE - PROFILED)



AS PER E2/ASI			
	SITUATION 1	SITUATION 2	SITUATION 3
	1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM, & HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE
G	MIN. 35mm	MIN. 35mm	MIN. 35mm
N	MIN. 75mm	MIN. 75mm	MIN. 75mm
L	MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)
Z	MIN. 50mm	MIN. 70mm	MIN. 90mm

AS PER MRM CODE OF PRACTICE		
	CATEGORY A	CATEGORY B
	1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
G	25mm	25mm
N	MIN. 50mm + HEM OR 75mm (VERTICALLY UP FACE - SMOOTH) MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - PROFILED)	MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - SMOOTH) MIN. 100mm + HEM OR 125mm (VERTICALLY UP FACE - PROFILED)
L	MIN. 150mm	MIN. 200mm
Z	MIN. 50mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 75mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 100mm (VERTICALLY DOWN FACE - PROFILED)





**AS PER E2/ASI**

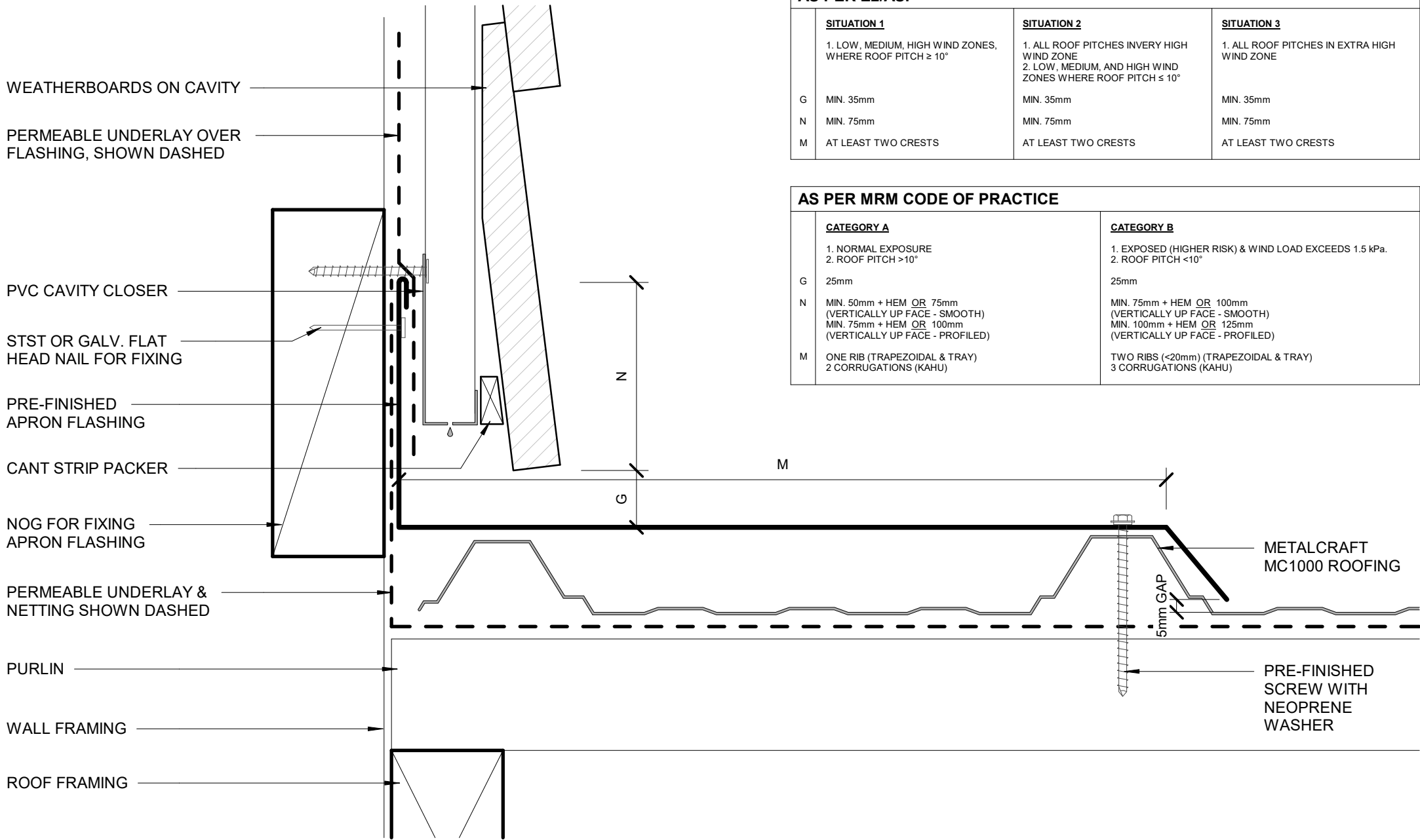
	<b>SITUATION 1</b>	<b>SITUATION 2</b>	<b>SITUATION 3</b>
	1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONES 2. LOW, MEDIUM, AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE
G	MIN. 35mm	MIN. 35mm	MIN. 35mm
N	MIN. 75mm	MIN. 75mm	
L	MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

**AS PER MRM CODE OF PRACTICE**

	<b>CATEGORY A</b>	<b>CATEGORY B</b>
	1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
	25mm	25mm
G	MIN. 50mm + HEM OR 75mm (VERTICALLY UP FACE - SMOOTH)	MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - SMOOTH)
N	MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - PROFILED)	MIN. 100mm + HEM OR 125mm (VERTICALLY UP FACE - PROFILED)
L	MIN. 150mm	MIN. 200mm

MIN. ROOF PITCH AS PER MRM COP



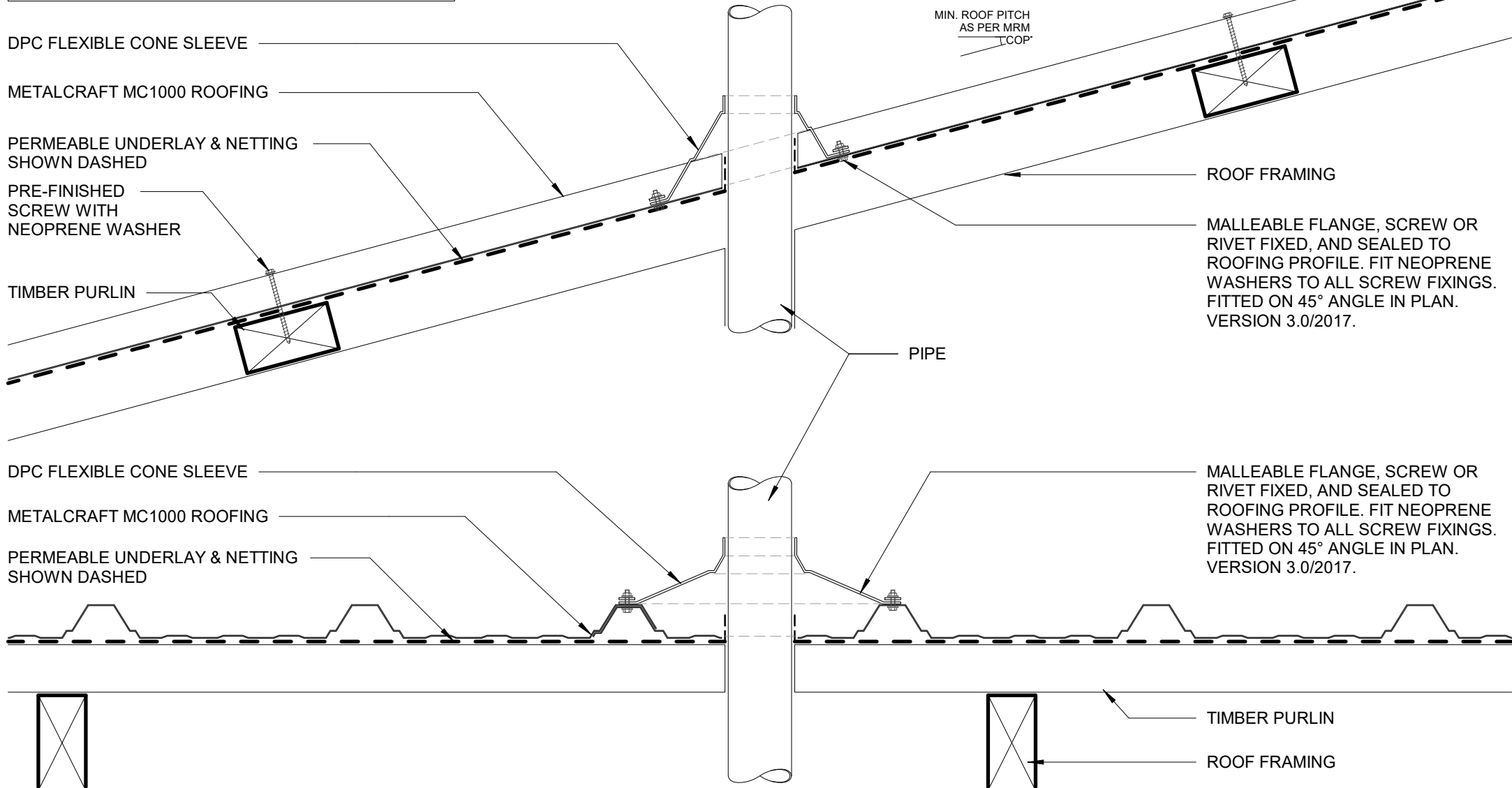


AS PER E2/ASI			
	SITUATION 1	SITUATION 2	SITUATION 3
	1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM, AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE
G	MIN. 35mm	MIN. 35mm	MIN. 35mm
N	MIN. 75mm	MIN. 75mm	MIN. 75mm
M	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS

AS PER MRM CODE OF PRACTICE			
	CATEGORY A	CATEGORY B	
	1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$	
G	25mm	25mm	
N	MIN. 50mm + HEM OR 75mm (VERTICALLY UP FACE - SMOOTH) MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - PROFILED)	MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - SMOOTH) MIN. 100mm + HEM OR 125mm (VERTICALLY UP FACE - PROFILED)	
M	ONE RIB (TRAPEZOIDAL & TRAY) 2 CORRUGATIONS (KAHU)	TWO RIBS ( $<20\text{mm}$ ) (TRAPEZOIDAL & TRAY) 3 CORRUGATIONS (KAHU)	

\* MIN. 10° FOR PIPE PENETRATION. DIRECT FIX BOOT FLASHING IS APPLICABLE FOR WHEN LESS THAN 50% BLOCKAGE OCCURS. WHEN EXCEEDING 50% BLOCKAGE, REFER TO BACK TRAY BOOT FLASHING

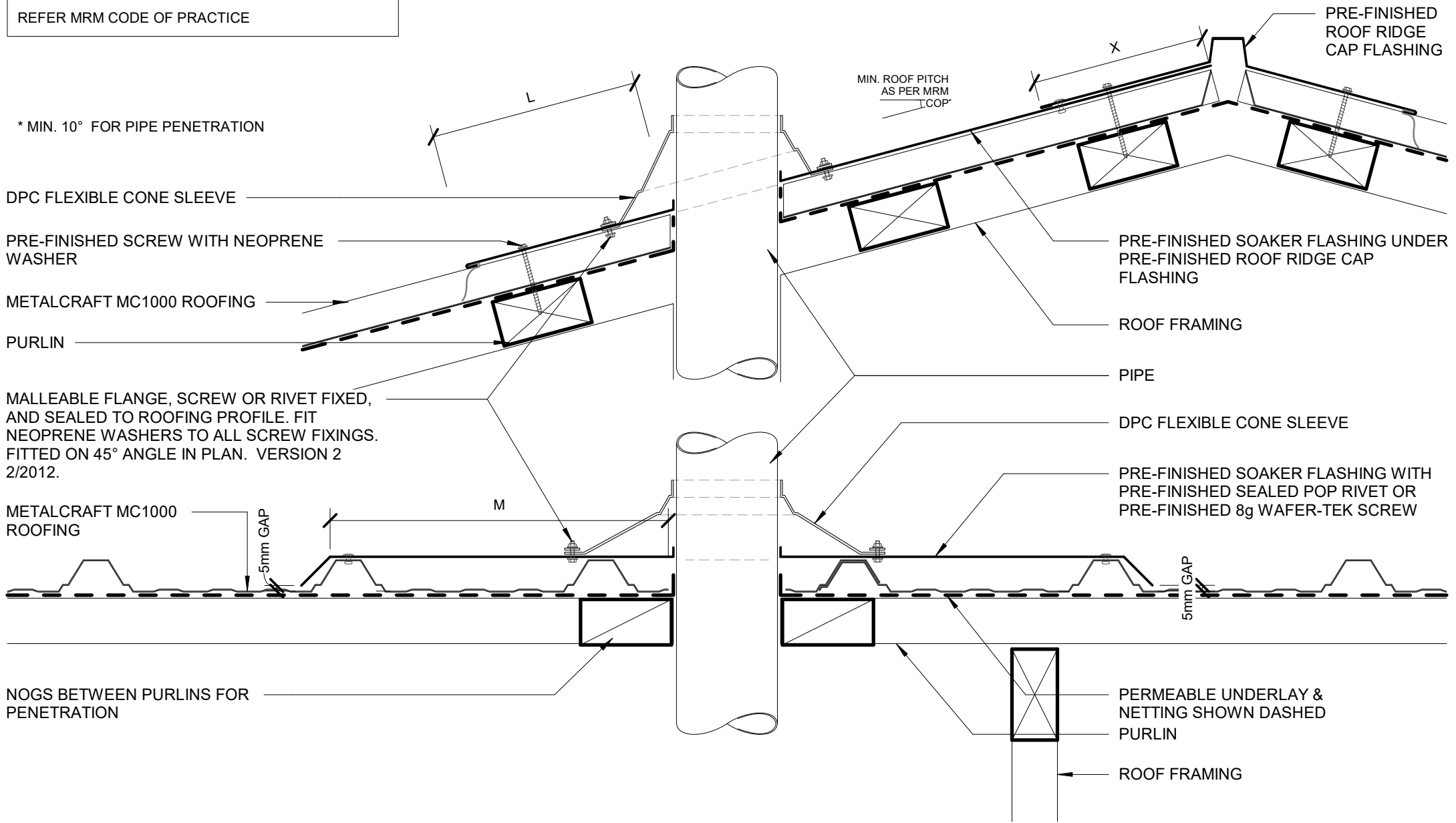
REFER MRM CODE OF PRACTICE



\* MIN. 3° FOR PIPE PENETRATION WITH A BOOT FLASHING

REFER MRM CODE OF PRACTICE

\* MIN. 10° FOR PIPE PENETRATION



**Metalcraft**  
Roofing

www.metalcraftgroup.co.nz

**DISCLAIMER:**

All details are to be used for indicative purposes only and the designer should consult both the MRM code of practice version 3.0 / 2022, E2 and all other relevant building codes. Details of the supporting mechanisms are indicative only. Compliance of the supporting mechanisms is the responsibility of the designer. Construction detail can vary for wall cladding. The underlay is detailed as a single line for simplicity and is indicative only. Building paper type and method of installation should comply with underlay manufacturers recommendations and NZBC regulations.

**PIPE PENETRATION BACK TRAY BOOT FLASHING**

MC 1000

Rev. 1.0

RESIDENTIAL ROOFING

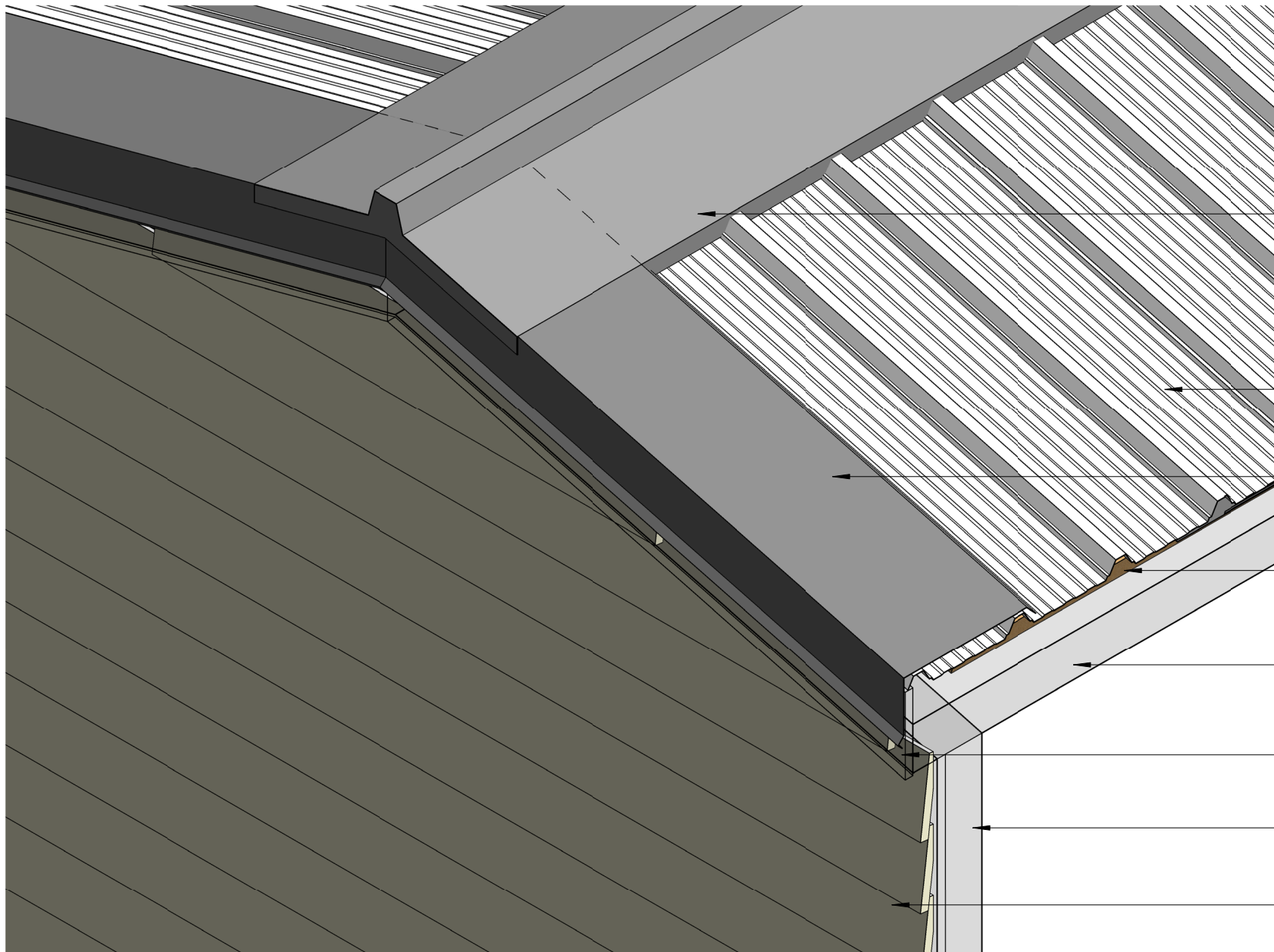
Reference RRM1000

Date JAN 2023

Scale 1 : 5

Sheet **A 22 / 29**





\* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHING FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

PRE-FINISHED RIDGE CAP FLASHING

METALCRAFT MC1000

PRE-FINISHED BARGE FLASHING

PURLIN

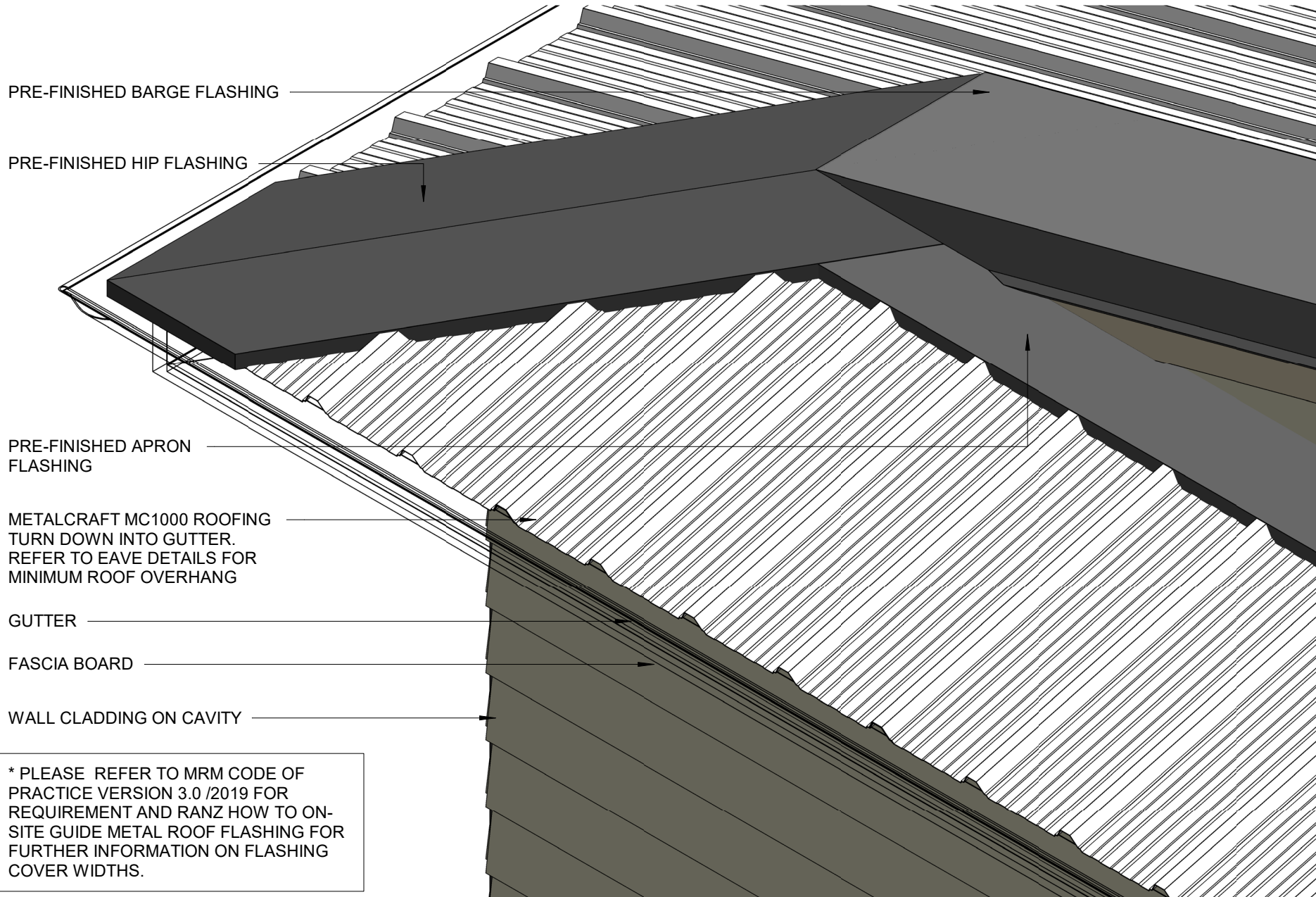
ROOF FRAMING

FASCIA BOARD

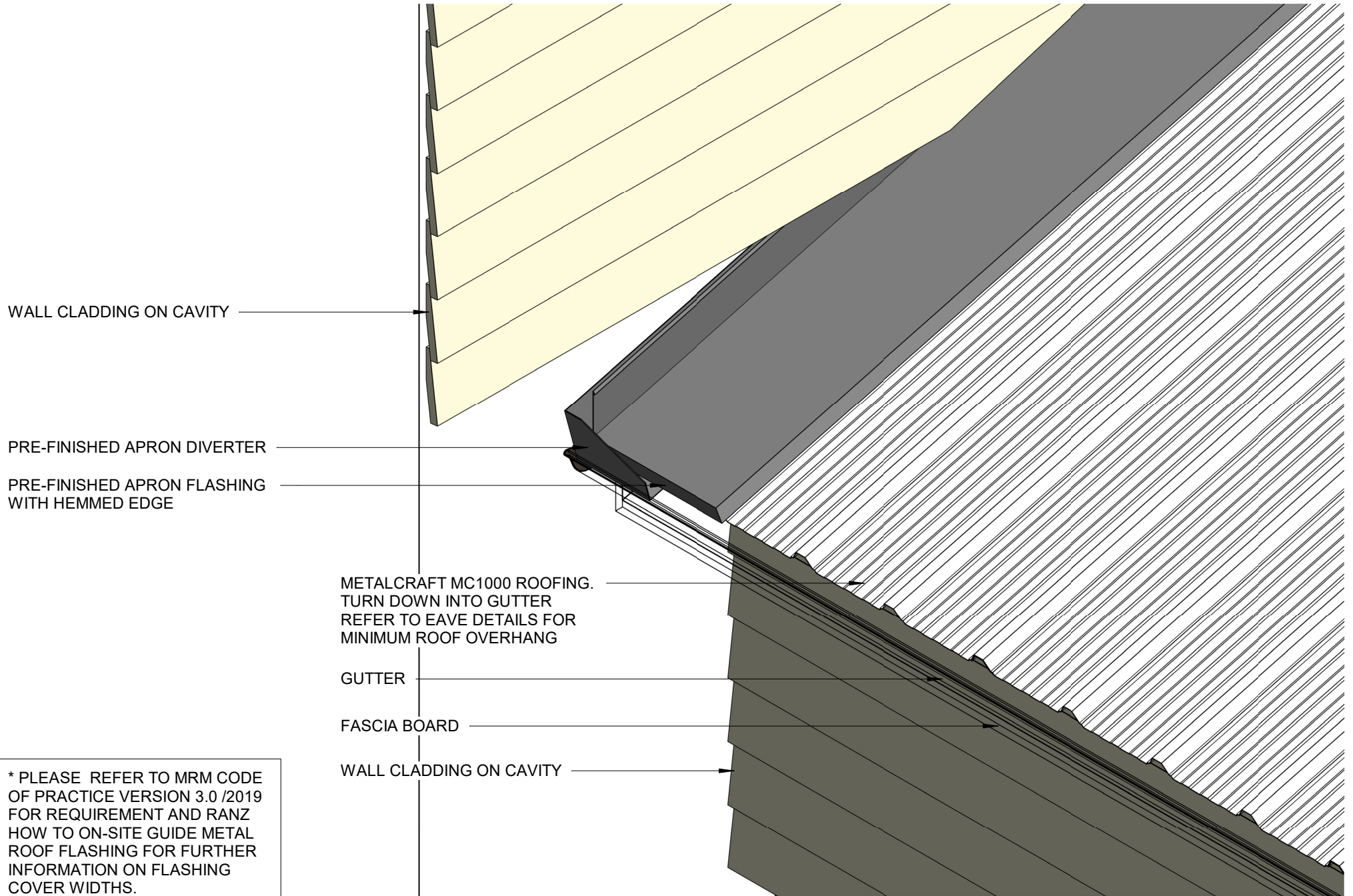
WALL FRAMING

WALL CLADDING ON CAVITY



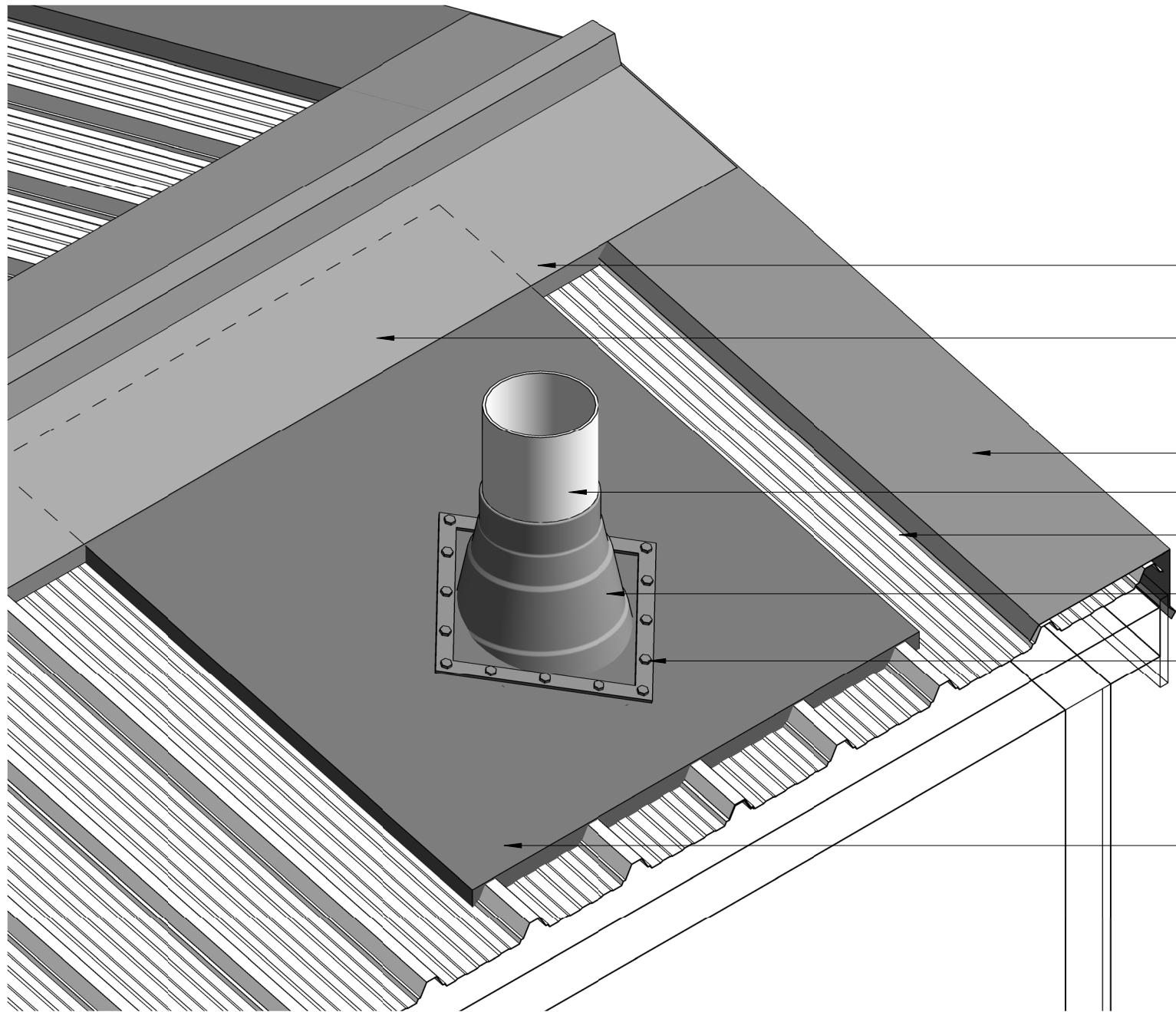


\* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHING FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.



\* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHING FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

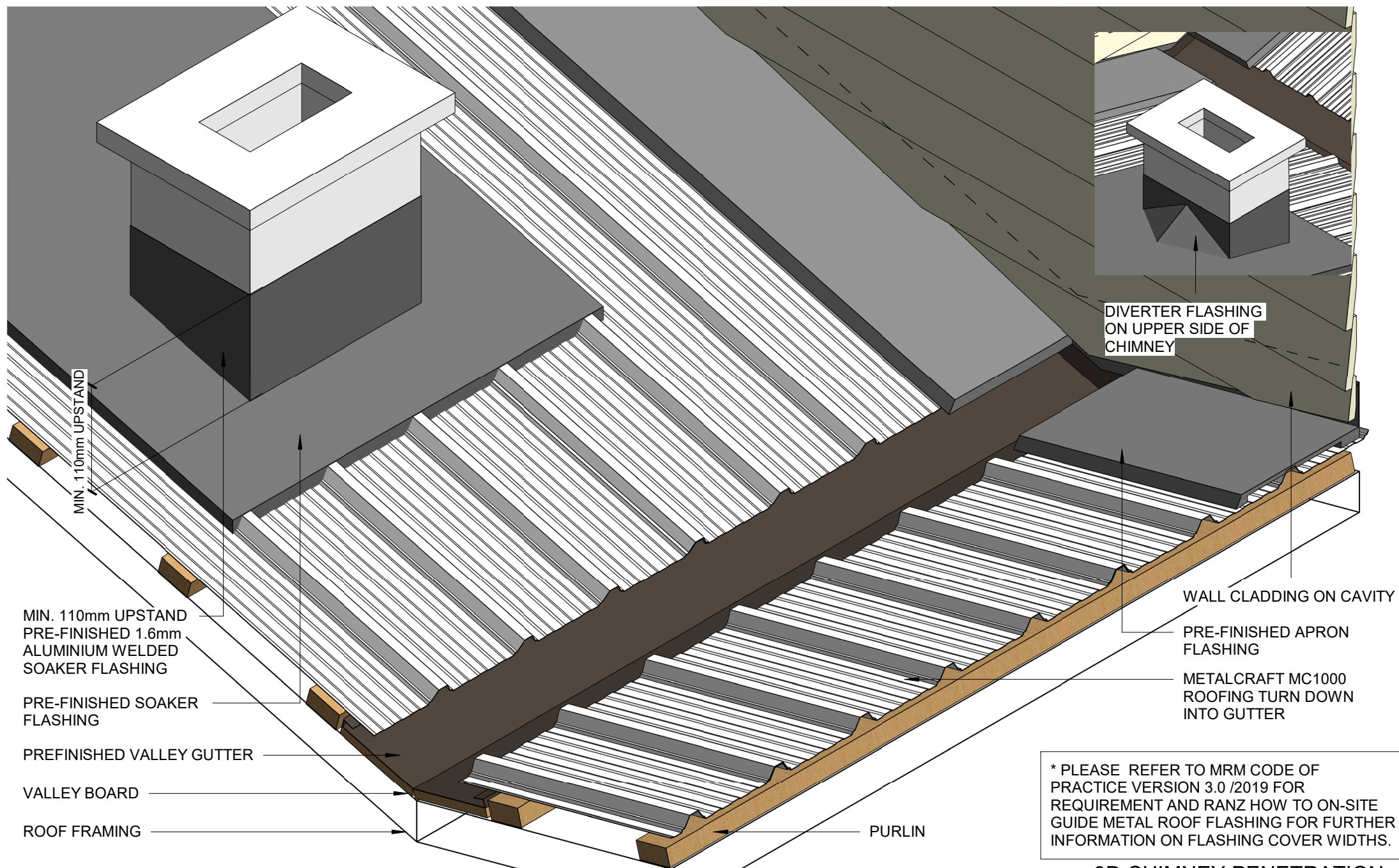
\* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHING FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.



- PRE-FINISHED ROOF RIDGE FLASHING
- PRE-FINISHED SOAKER FLASHING LINE UNDER PRE-FINISHED ROOFRIDGE FLASHING
- PRE-FINISHED ROOF BARGE FLASHING
- PIPE (DIAMETER OVER 85mm)
- METALCRAFT MC1000 ROOFING
- NEOPRENE FLEXIBLE CONE SLEEVE
- MALLEABLE FLANGE, SCREW OR RIVET FIXED, AND SEALED TO ROOFING PROFILE. FIT NEOPRENE WASHERS TO ALL SCREW FIXINGS. FITTED ON 45° ANGLE IN PLAN. VERSION 3.0/2017
- PRE-FINISHED SOAKER FLASHING

**3D OVER 85mm DIAMETER PIPE PENETRATION**





MIN. 110mm UPSTAND  
 PRE-FINISHED 1.6mm  
 ALUMINIUM WELDED  
 SOAKER FLASHING

PRE-FINISHED SOAKER  
 FLASHING

PREFINISHED VALLEY GUTTER

VALLEY BOARD

ROOF FRAMING

PURLIN

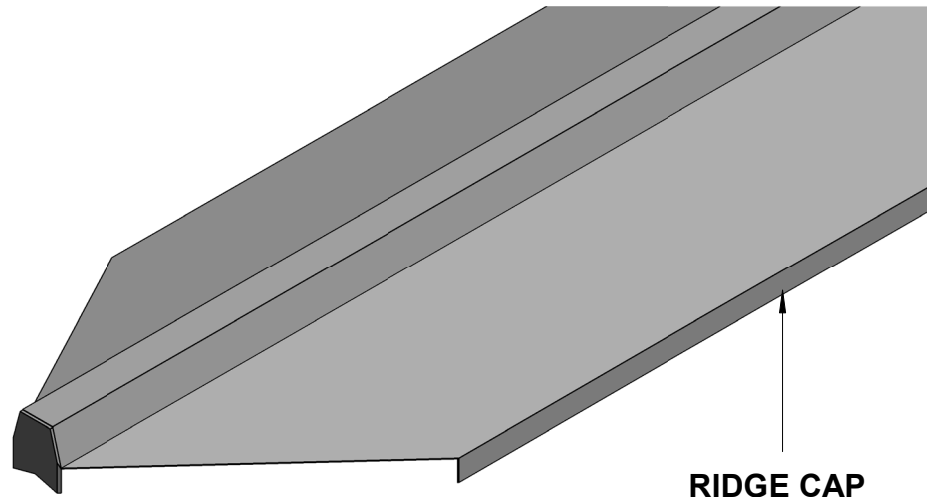
DIVERTER FLASHING  
 ON UPPER SIDE OF  
 CHIMNEY

WALL CLADDING ON CAVITY

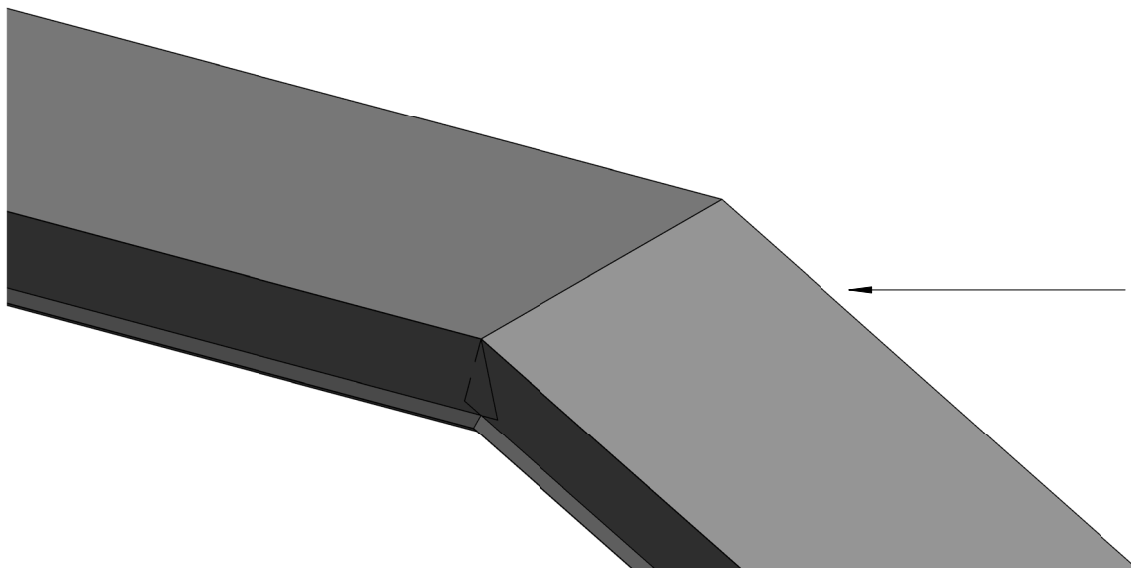
PRE-FINISHED APRON  
 FLASHING

METALCRAFT MC1000  
 ROOFING TURN DOWN  
 INTO GUTTER

\* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHING FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.



**RIDGE CAP FLASHING**

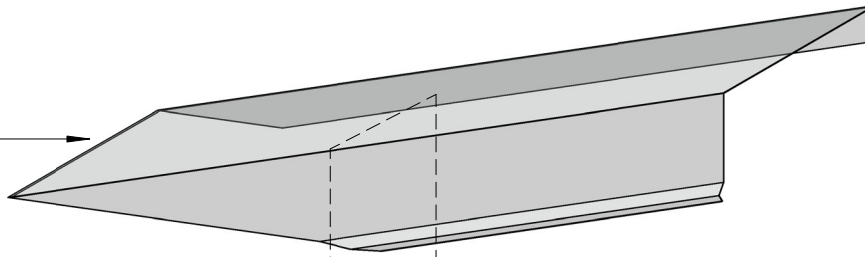


**BARGE FLASHING**

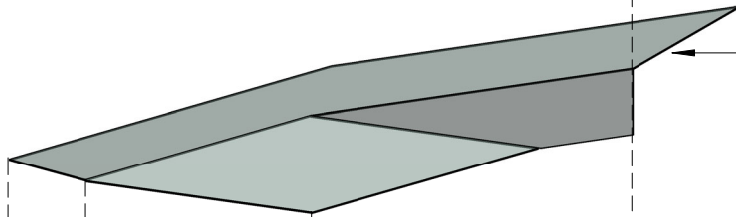
\*PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHINGS FOR FURTHER INFORMATION ON FLASHING COVER WIDTH

**3D RIDGE/BARGE FLASHINGS**  
RESIDENTIAL ROOFING

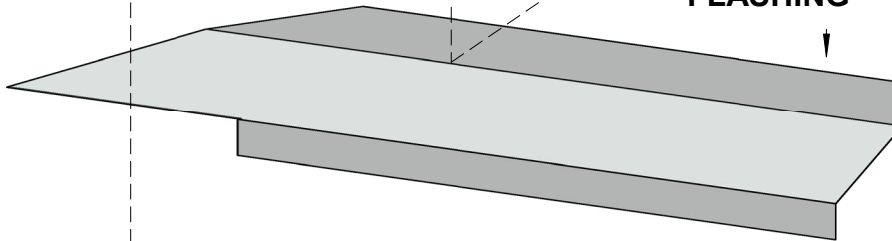
**(4) PRE-FINISHED BARGE FLASHING**



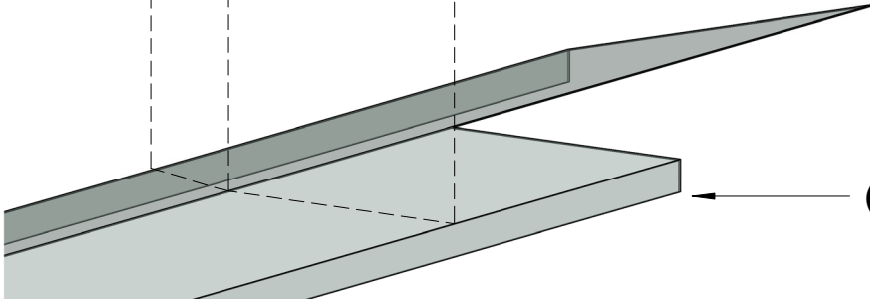
**(3) PRE-FINISHED 3D SADDLE FLASHING**



**(2) PRE-FINISHED APRON FLASHING**



**(1) PRE-FINISHED HIP FLASHING**



\* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 3.0 /2019 FOR REQUIREMENT AND RANZ HOW TO ON-SITE GUIDE METAL ROOF FLASHINGS FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

