

Espan 340™ / 470™

COMMERCIAL ROOFING

DETAIL LIST

00 / 09	COVER SHEET
01 / 09	RIDGE FLASHING
02 / 09	SAWTOOTH RIDGE
03 / 09	INTERNAL GUTTER
04 / 09	FLUSH EAVE WITH EXTERNAL GUTTER BRACKET
05 / 09	FLUSH EAVE WITH PAN FIXED GUTTER
06 / 09	BARGE FLASHING WITH PROFILED CLADDING
07 / 09	PARAPET WITH TRANSVERSE APRON
08 / 09	TRANSVERSE APRON
09 / 09	PARALLEL APRON

PRE-FINISHED RIDGE CAP FLASHING
 STOPENDS TO ROOF CLADDING
 METALCRAFT ESPAN™ ROOFING
 PRE-FINISHED POP RIVET
 BEDDED IN SILICONE OR
 PRE-FINISHED 8g WAFER-
 TEK SCREW

5mm EXPANSION GAP AROUND

METALCRAFT MSS
 PURLIN BY ENGINEER

STRUCTURAL
 STEEL FRAMING BY
 ENGINEER

* ESPAN™
 MIN. ROOF PITCH = 3°
 3.00°
 H

SECONDARY
 FLASHING

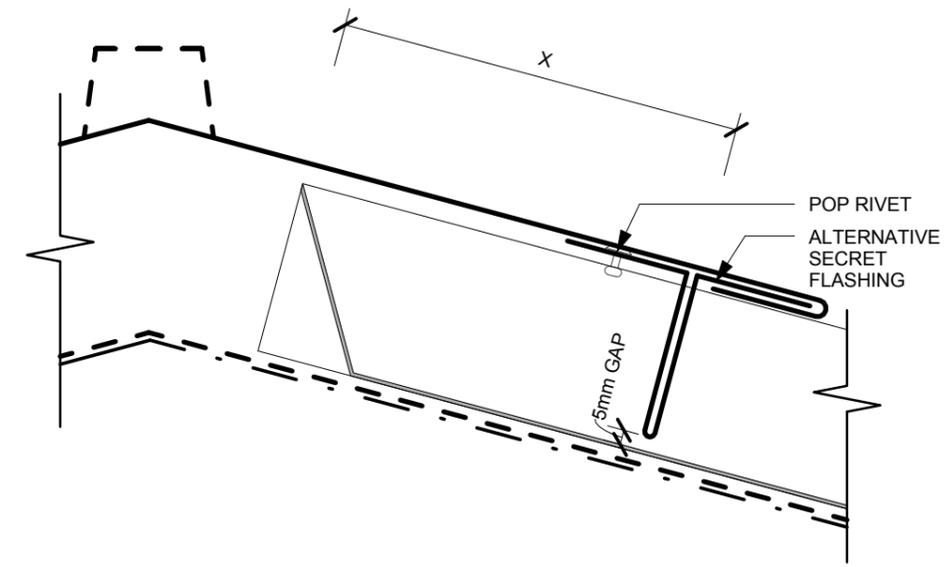
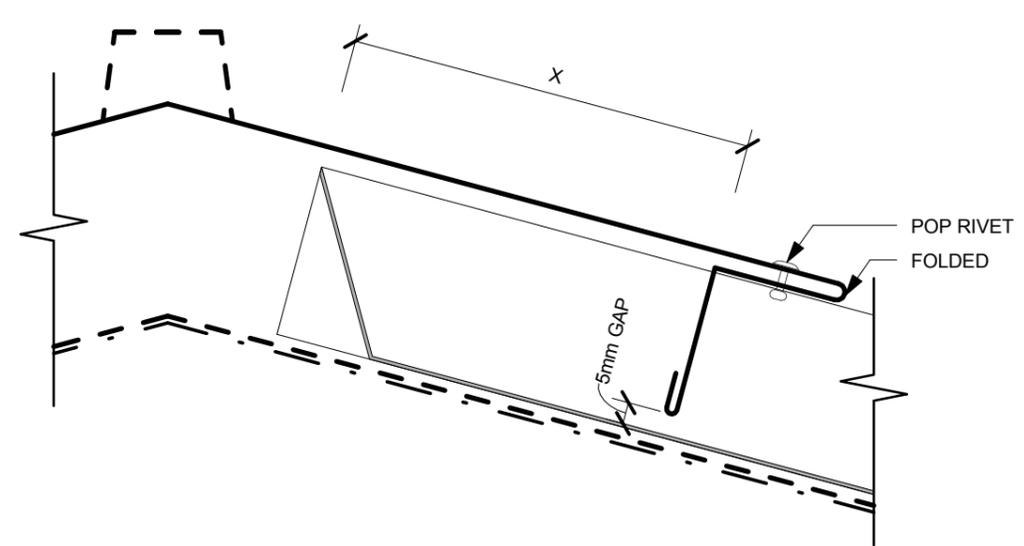
PERMEABLE UNDERLAY, SHOWN
 DASHED
 SAFETY MESH TO WORKSAFE
 NZ REQUIREMENTS
 METALCRAFT ESPAN™ CLIP SYSTEM
 WITH 12G x 16mm WAFERTEK

ACCEPTABLE SOLUTION AS PER E2/ASI		
SITUATION 1	SITUATION 2	SITUATION 3
1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH ≥ 10°	1. VERY HIGH WIND ZONE 2. LOW, MEDIUM & HIGH WIND ZONES WHERE ROOF PITCH ≤ 10°	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)

ALTERNATIVE SOLUTION AS PER MRM CODE OF PRACTICE	
CATEGORY A	CATEGORY B
1. NORMAL EXPOSURE 2. ROOF PITCH >10°	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH <10°
X MIN. 130mm	MIN. 200mm

ALTERNATIVE OPTION - A

ALTERNATIVE OPTION - B



**E2/ASI NO LONGER PREVENTS VENTILATION OF INSULATED SPACES. REFER TECHNICAL BULLETIN: VENTILATION OF ROOF SPACES

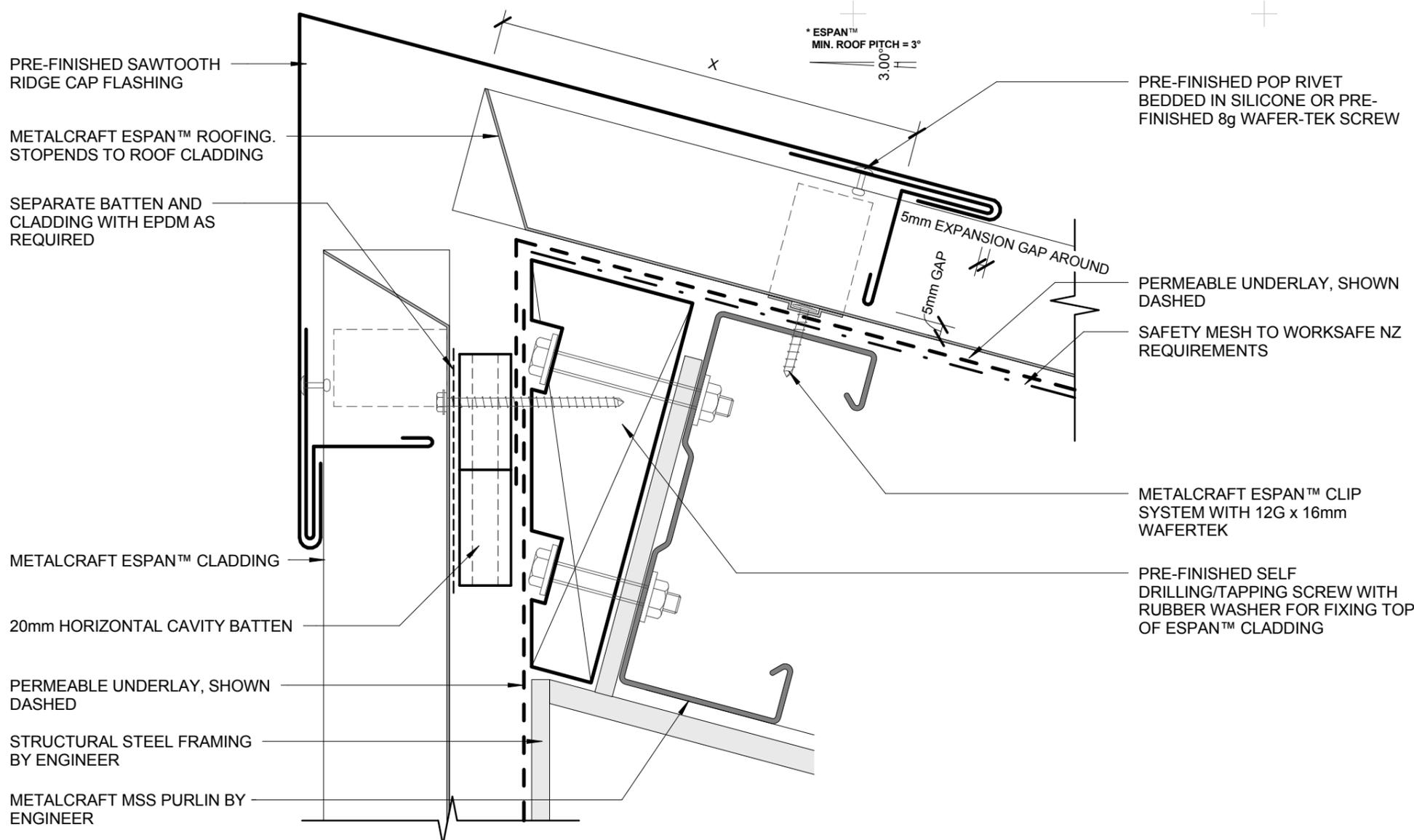
* - PLEASE REFER TO MRM CODE OF PRACTICE VERSION 2.2 /2012 AS MINIMUM PITCH WILL INCREASE DEPENDING ON SHEET LENGTH.

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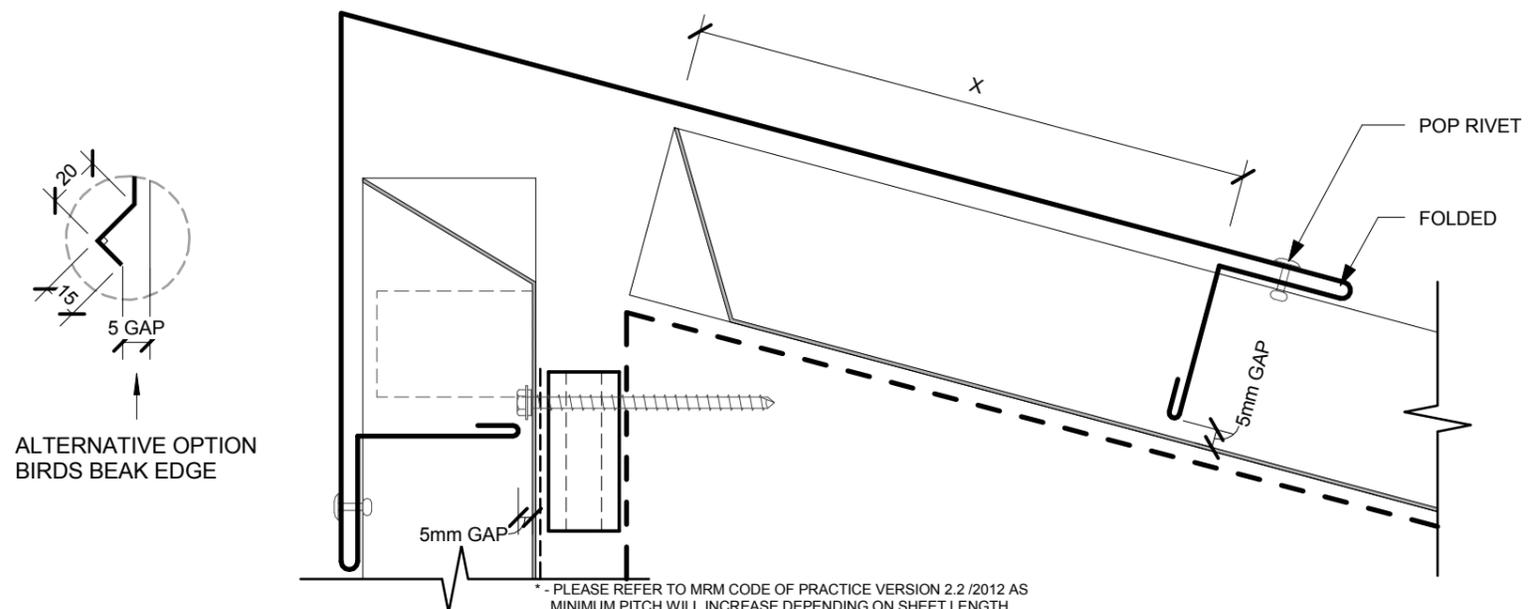


Espan 340™ / 470™

RIDGE FLASHING
 COMMERCIAL ROOFING



ALTERNATIVE OPTION - A



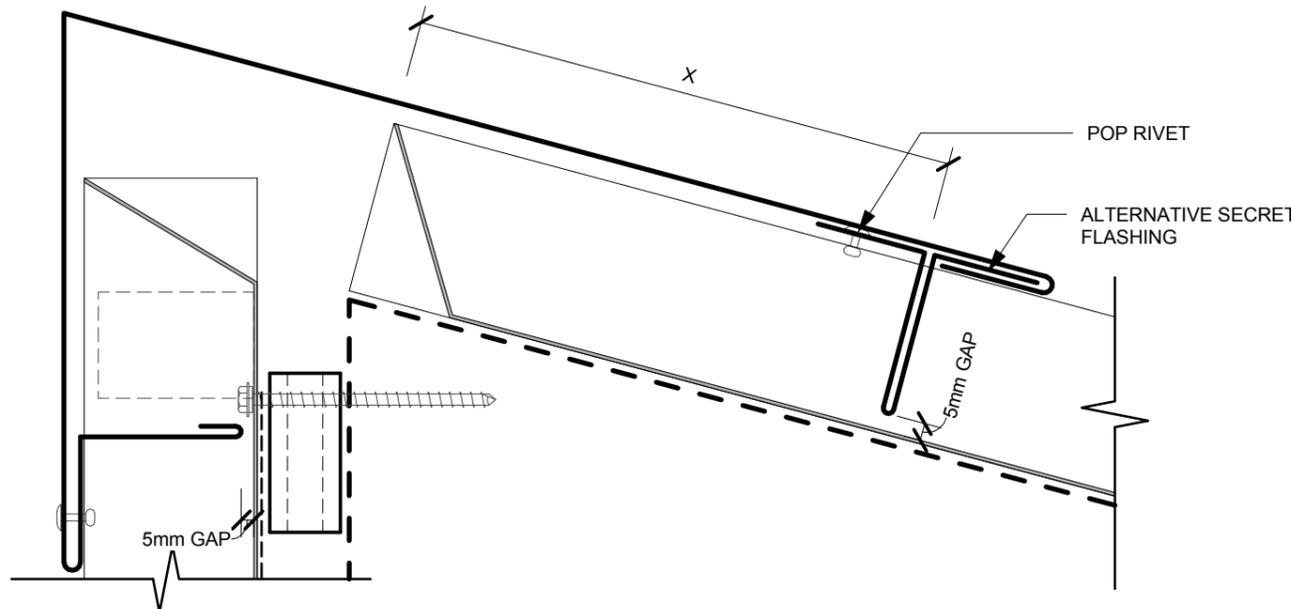
ALTERNATIVE OPTION BIRDS BEAK EDGE

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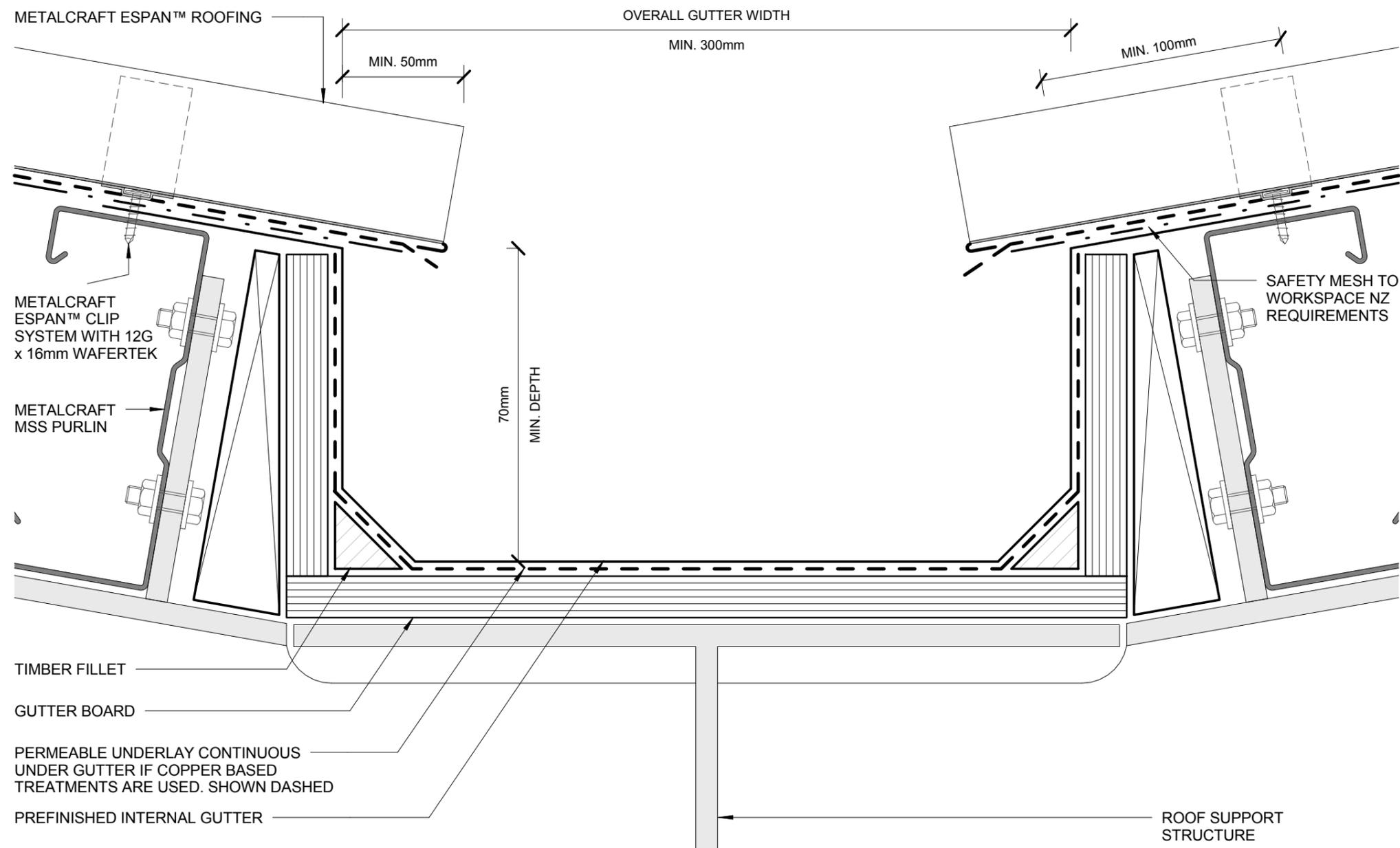
ACCEPTABLE SOLUTION AS PER E2/ASI		
SITUATION 1	SITUATION 2	SITUATION 3
1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH ≥ 10°	1. VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH ≤ 10°	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE
X MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN 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

ALTERNATIVE SOLUTION AS PER MRM CODE OF PRACTICE	
CATEGORY A	CATEGORY B
1. NORMAL EXPOSURE 2. ROOF PITCH >10°	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH <10°
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)

ALTERNATIVE OPTION - B

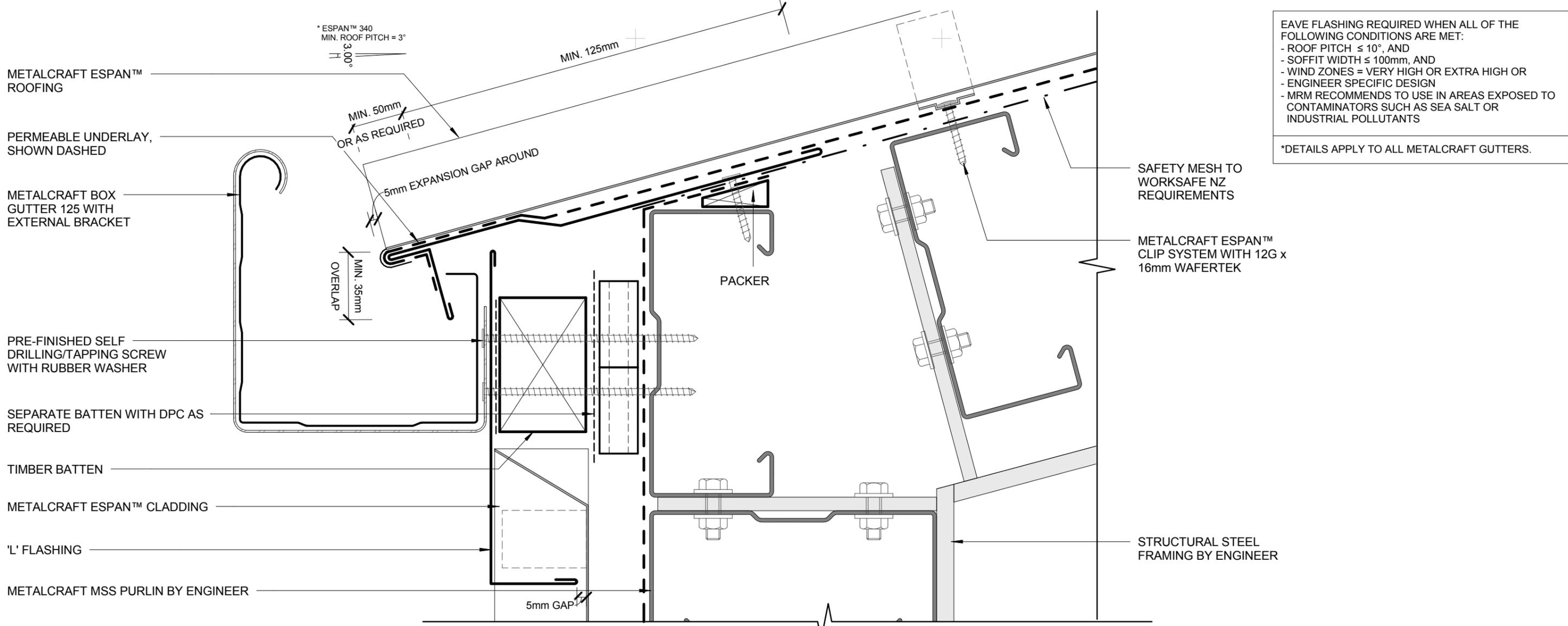


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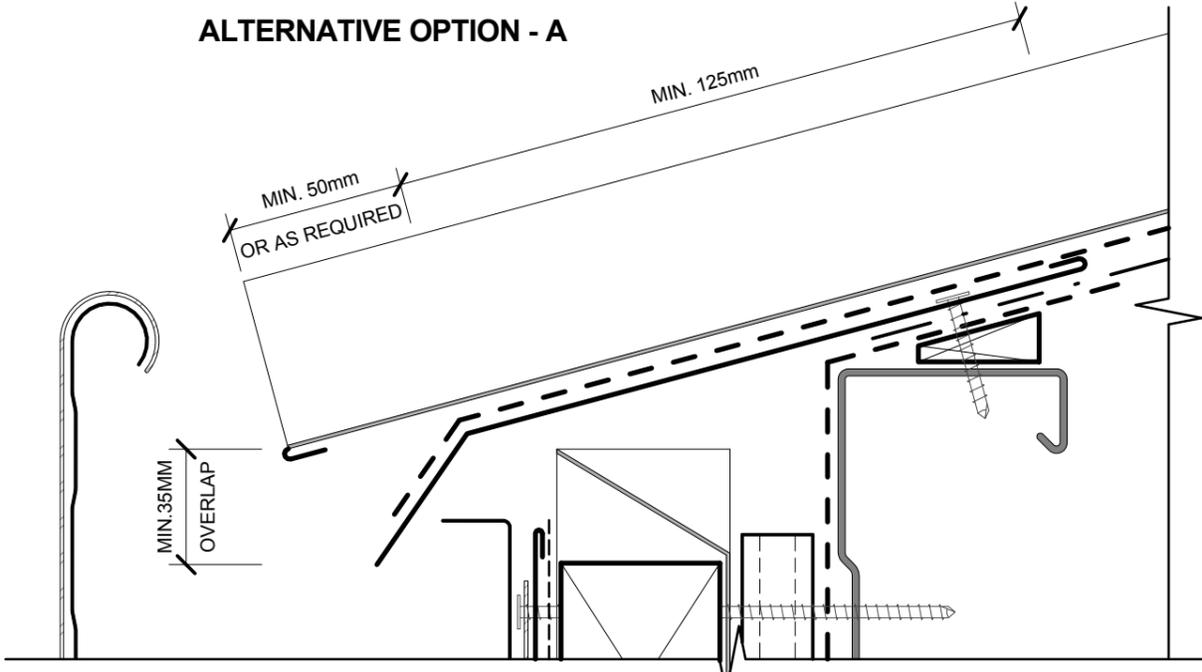


EAVE FLASHING REQUIRED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:

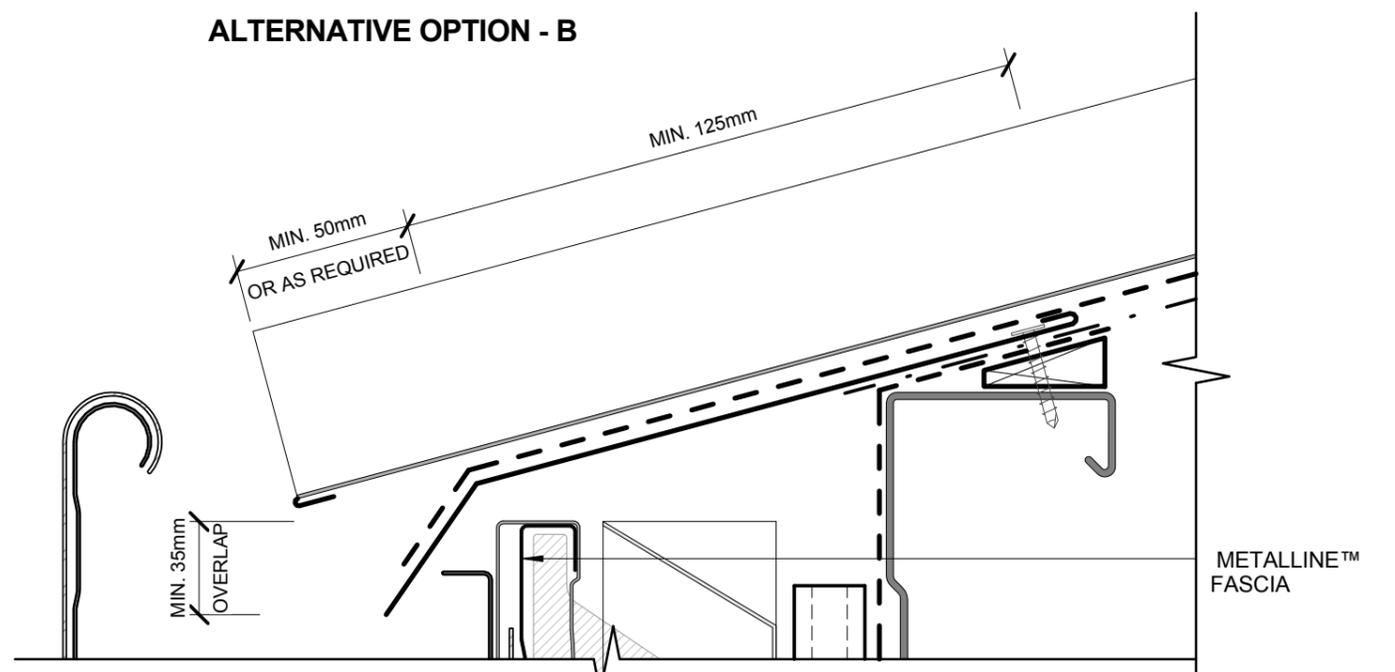
- ROOF PITCH $\leq 10^\circ$, AND
- SOFFIT WIDTH $\leq 100\text{mm}$, AND
- WIND ZONES = VERY HIGH OR EXTRA HIGH OR
- ENGINEER SPECIFIC DESIGN
- MRM RECOMMENDS TO USE IN AREAS EXPOSED TO CONTAMINATORS SUCH AS SEA SALT OR INDUSTRIAL POLLUTANTS

*DETAILS APPLY TO ALL METALCRAFT GUTTERS.

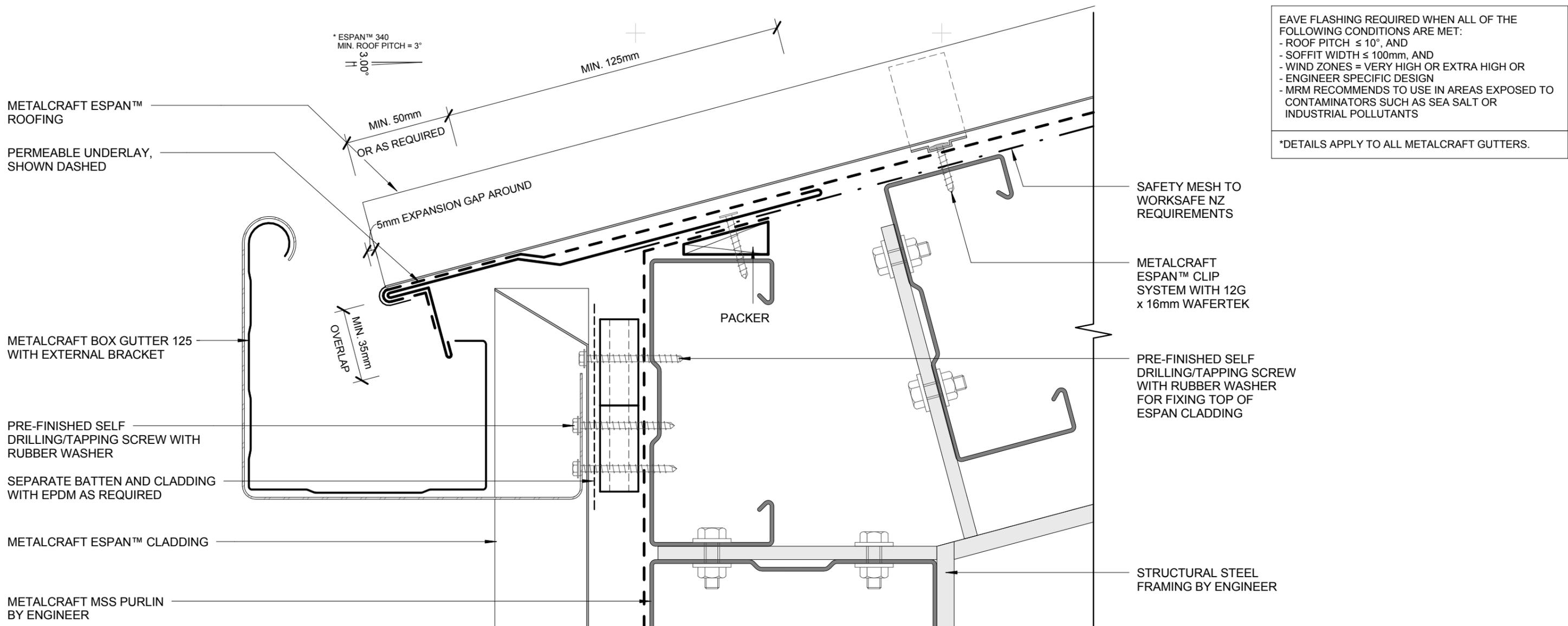
ALTERNATIVE OPTION - A



ALTERNATIVE OPTION - B



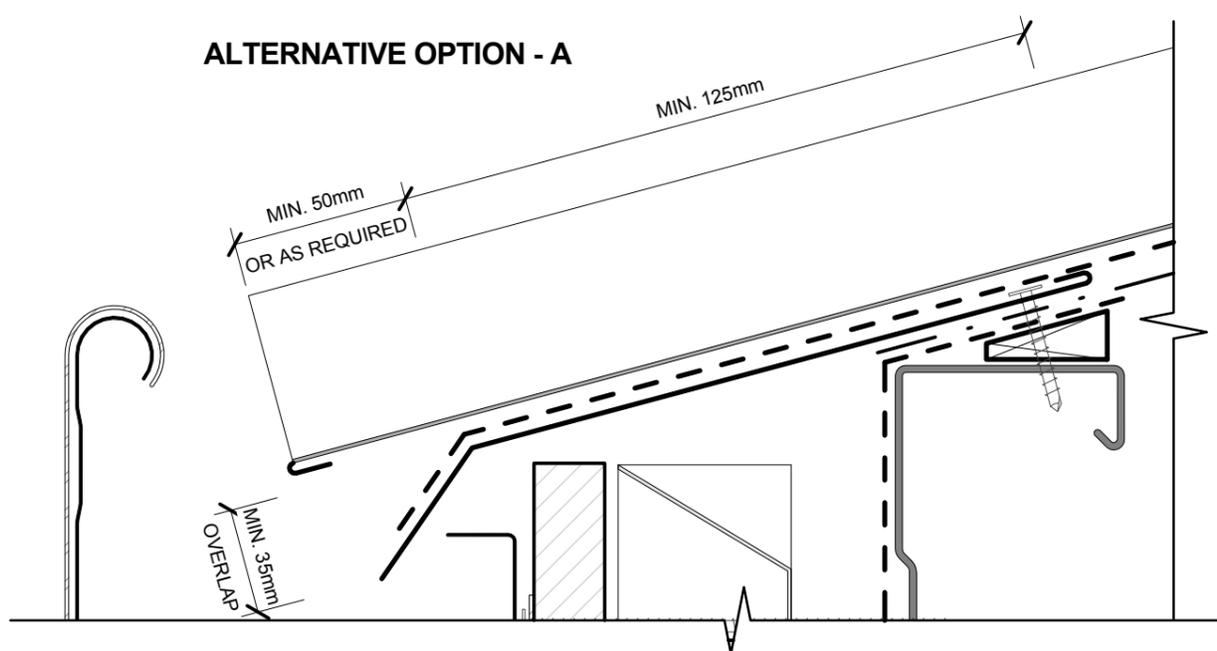
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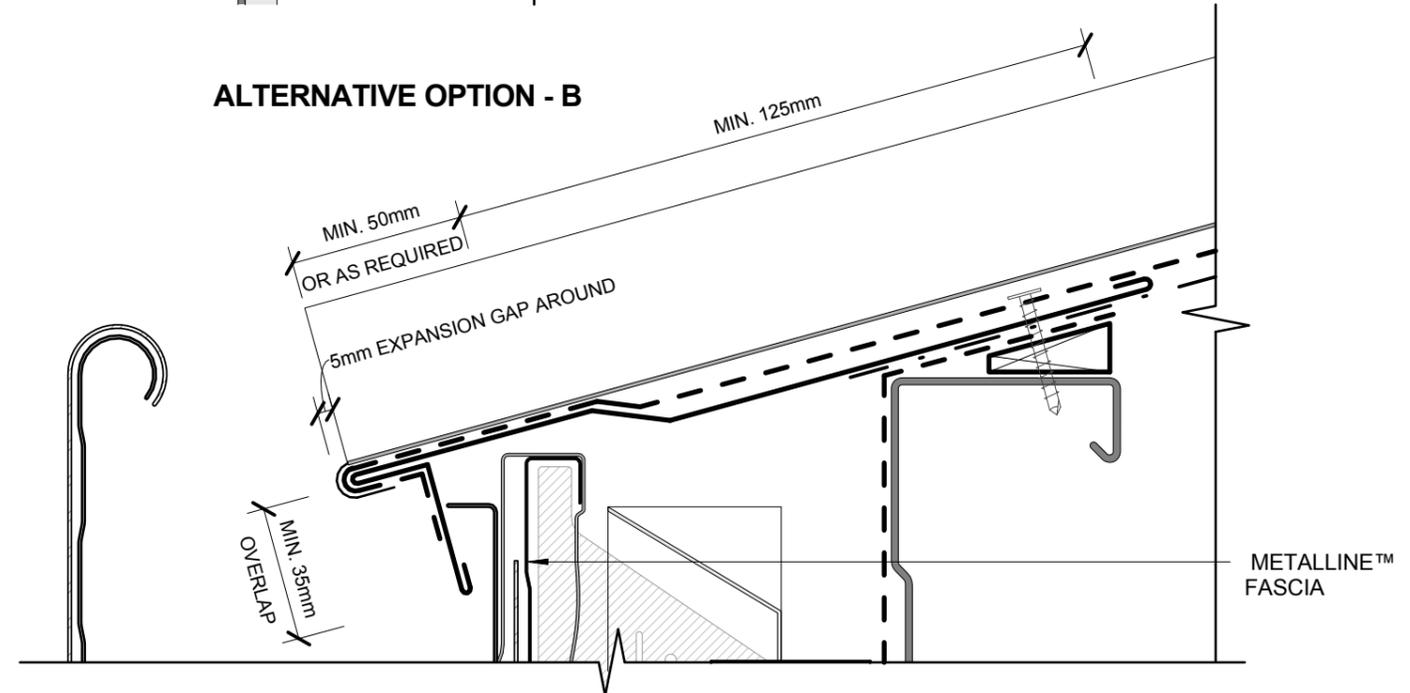
EAVE FLASHING REQUIRED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:
 - ROOF PITCH $\leq 10^\circ$, AND
 - SOFFIT WIDTH $\leq 100\text{mm}$, AND
 - WIND ZONES = VERY HIGH OR EXTRA HIGH OR
 - ENGINEER SPECIFIC DESIGN
 - MRM RECOMMENDS TO USE IN AREAS EXPOSED TO CONTAMINATORS SUCH AS SEA SALT OR INDUSTRIAL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

*DETAILS APPLY TO ALL METALCRAFT GUTTERS.

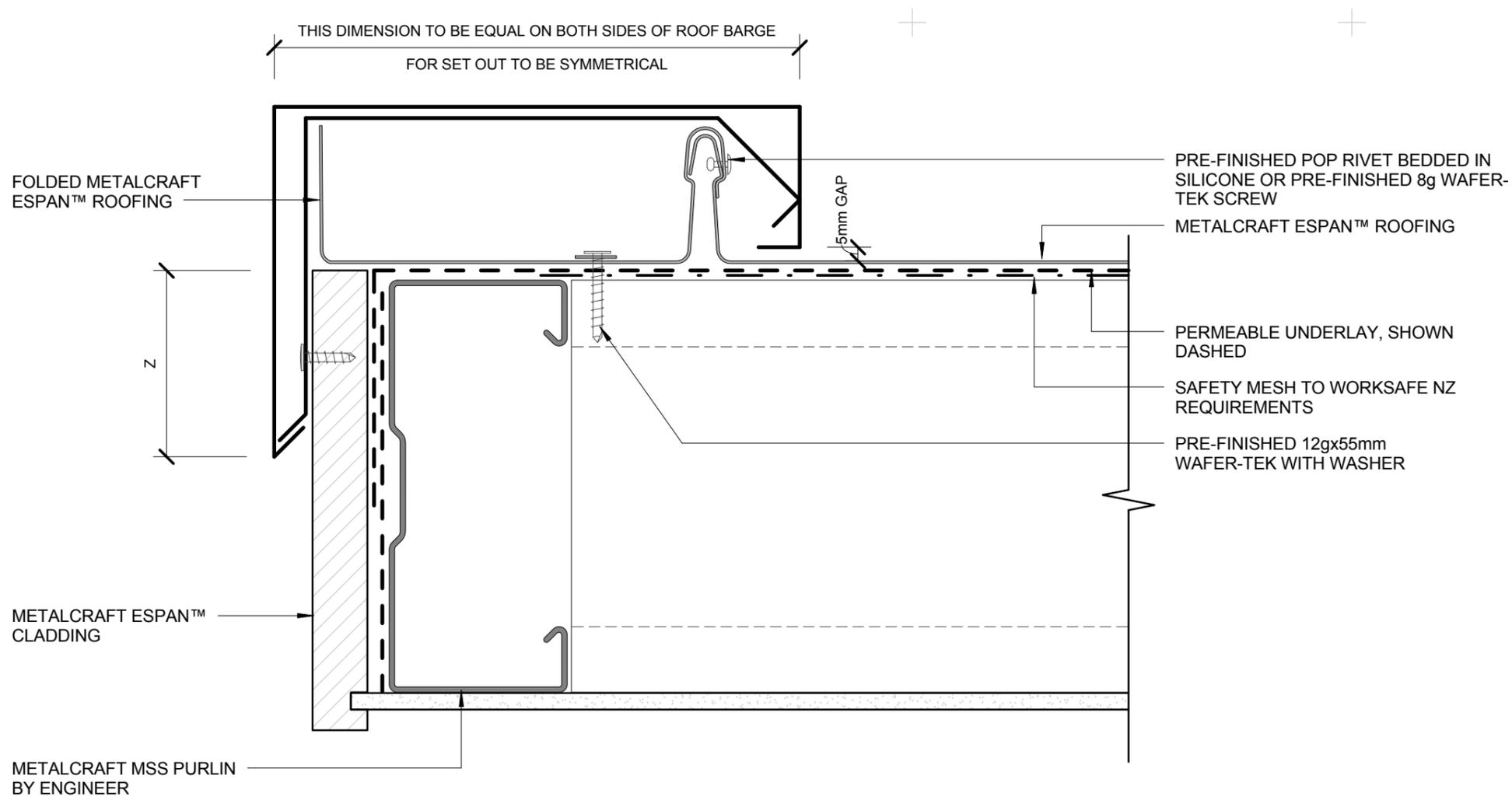
ALTERNATIVE OPTION - A



ALTERNATIVE OPTION - B



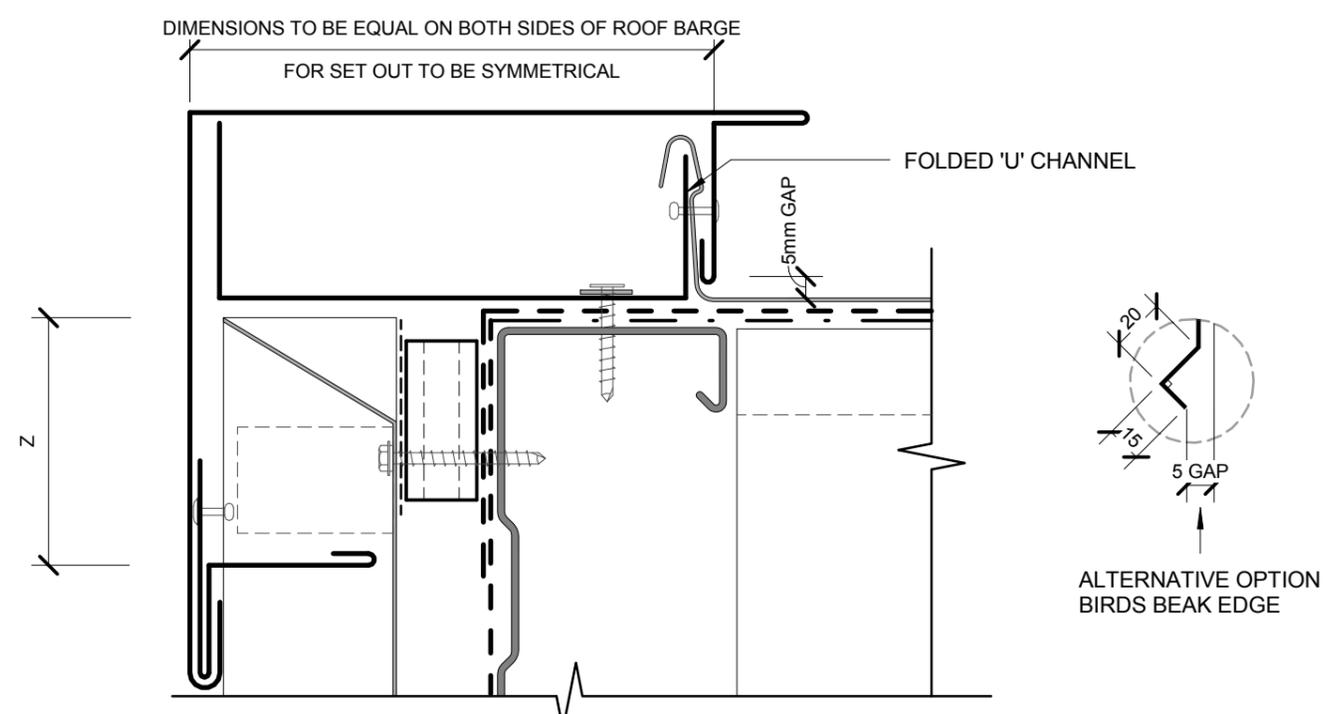
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ACCEPTABLE SOLUTION AS PER E2/AS1		
SITUATION 1	SITUATION 2	SITUATION 3
1. LOW, MEDIUM, HIGH WIND ZONES WHERE ROOF PITCH $\geq 10^\circ$	1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE.
Y AT LEAST TWO CRESTS	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS
Z MIN. 50mm	MIN. 70mm	MIN. 90mm

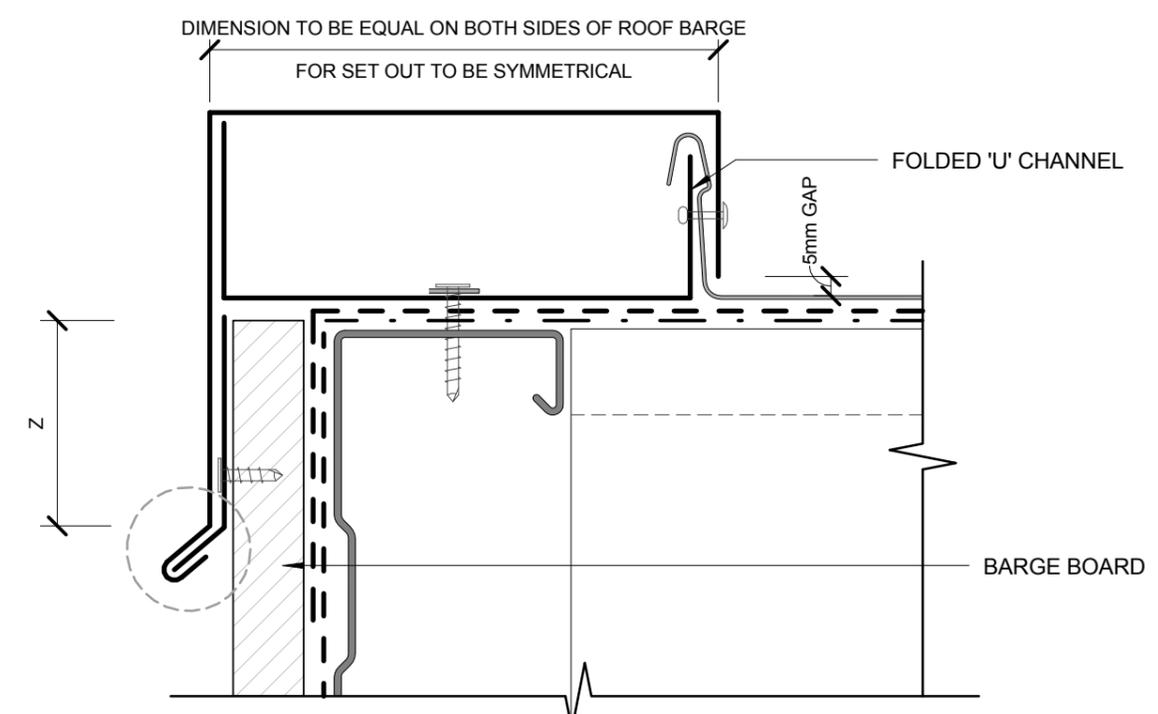
ALTERNATIVE SOLUTION AS PER MRM CODE OF PRACTICE	
CATEGORY A	CATEGORY B
1. NORMAL EXPOSURE 2. ROOF PITCH $> 10^\circ$	1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $< 10^\circ$
Y ONE RIB (TRAPEZOIDAL & TRAY) 2 CORRUGATIONS	ONE RIB, TWO RIBS ($< 20\text{mm}$) (TRAPEZOIDAL & TRAY) 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)

ALTERNATIVE OPTION - A



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ALTERNATIVE OPTION - B

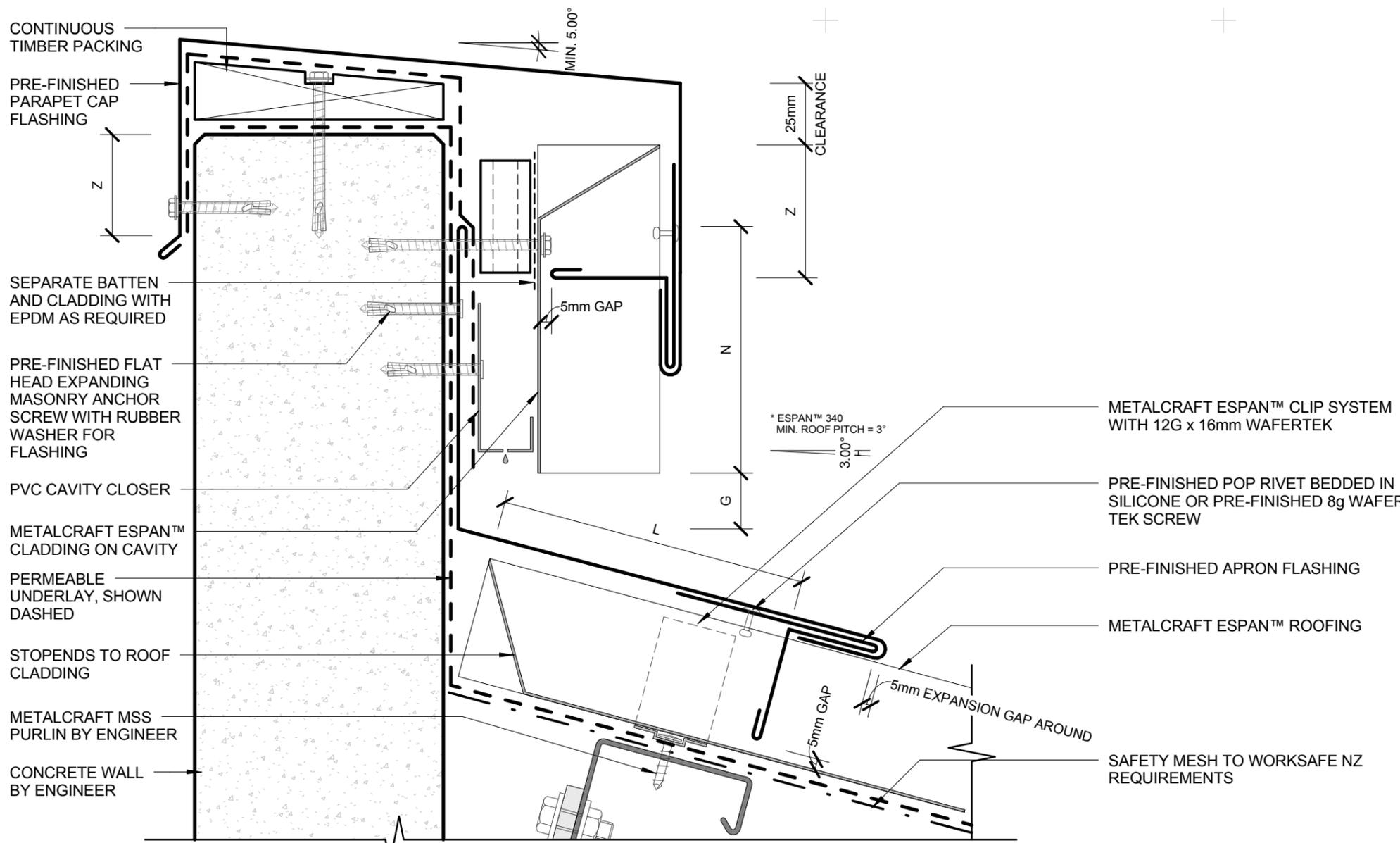


BARGE FLASHING WITH PROFILED CLADDING

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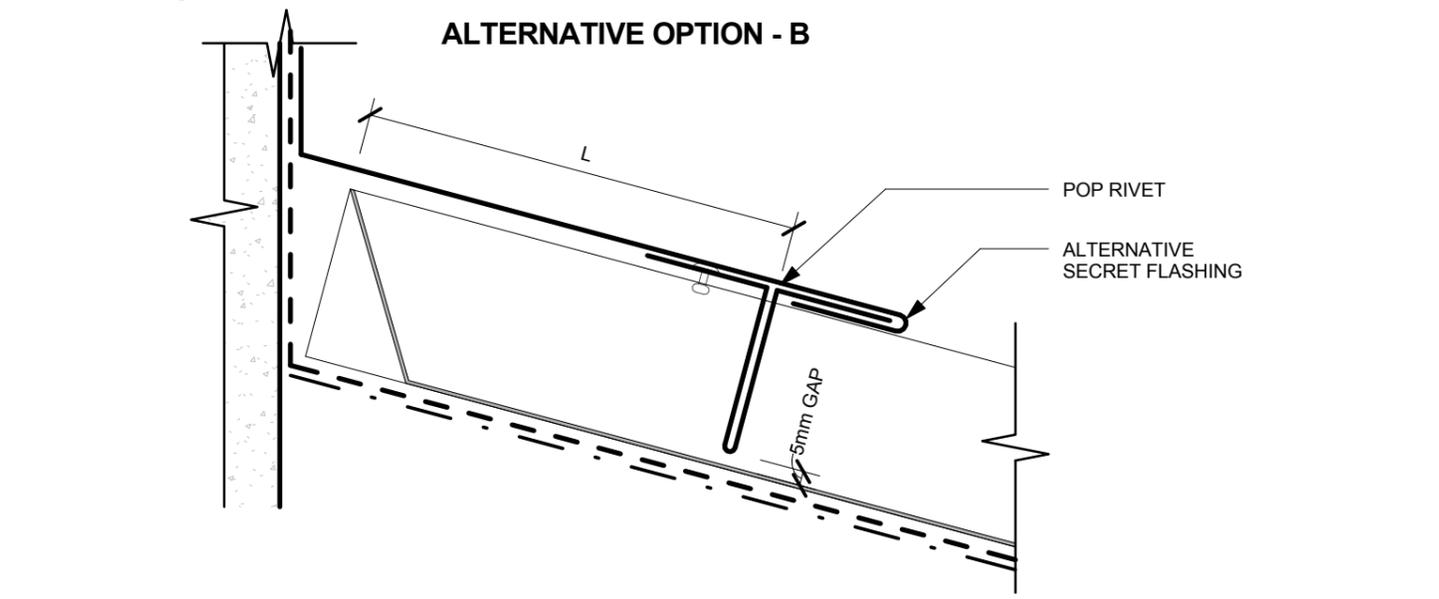
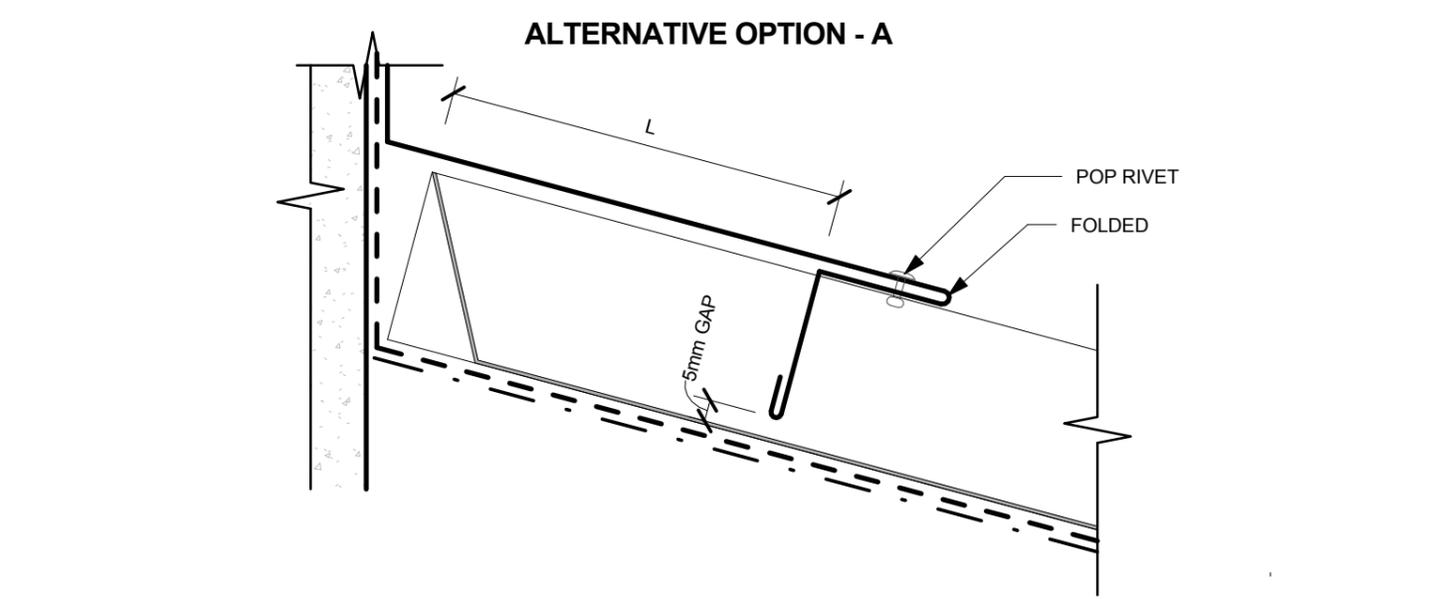


ACCEPTABLE SOLUTION AS PER E2/AS1

	SITUATION 1 1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	SITUATION 2 1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM, & HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	SITUATION 3 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

ALTERNATIVE SOLUTION AS PER MRM CODE OF PRACTICE

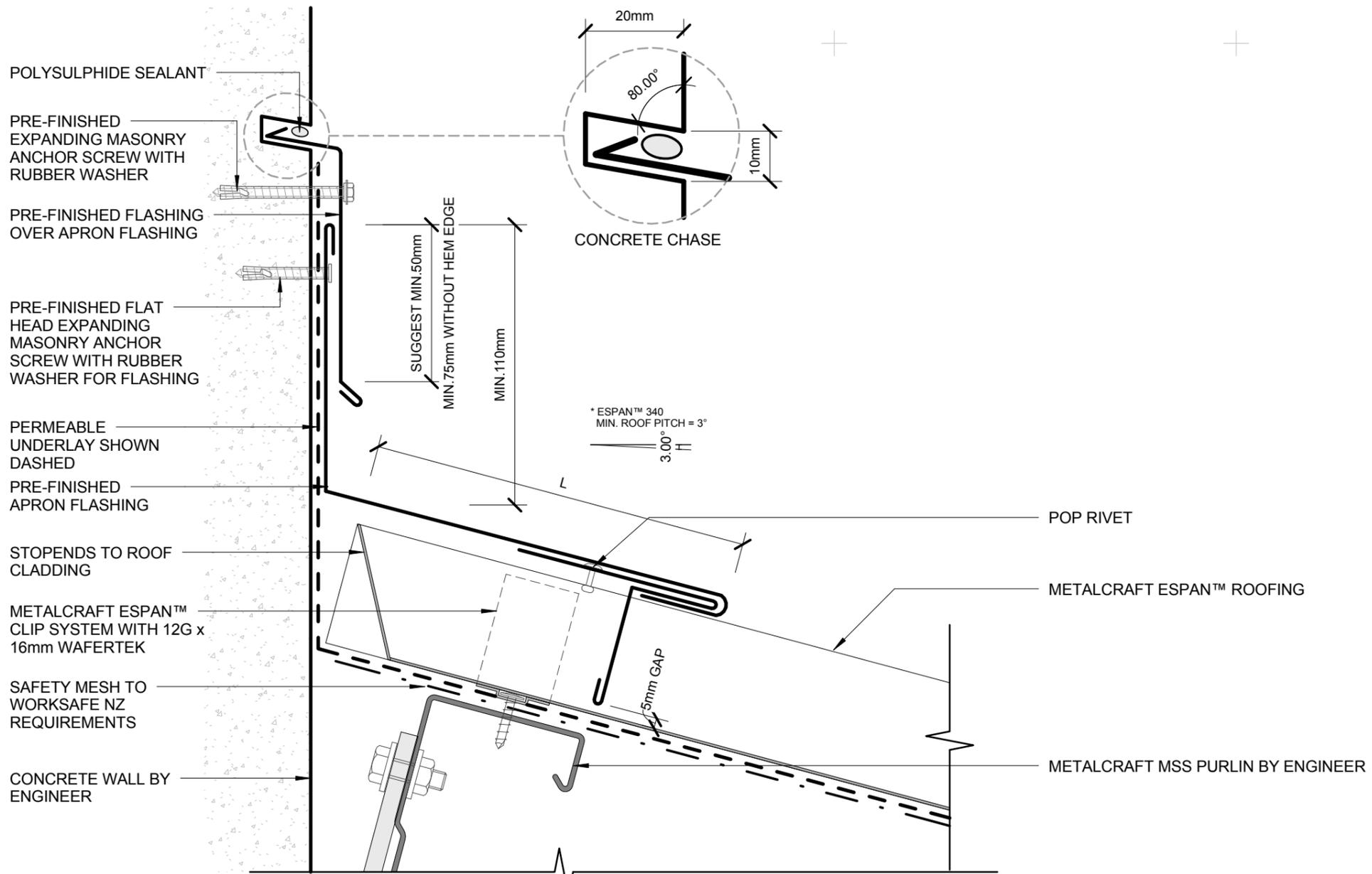
	CATEGORY A 1. NORMAL EXPOSURE 2. ROOF PITCH $>10^\circ$	CATEGORY B 1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH $<10^\circ$
G	25mm	25mm
N	MIN. 50mm + HEM OR 75mm (VERTICALLY UP FACE - SMOOTH) MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - PROFILED)	MIN. 75mm + HEM OR 100mm (VERTICALLY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



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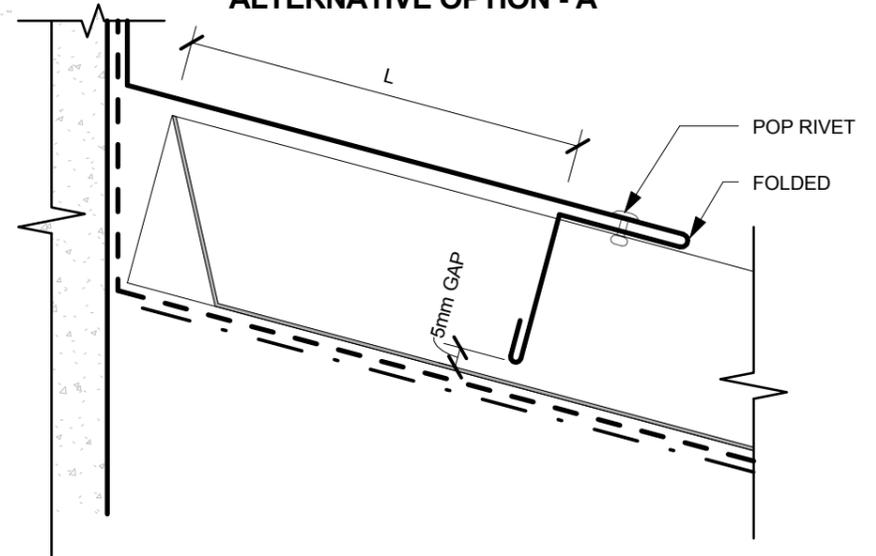
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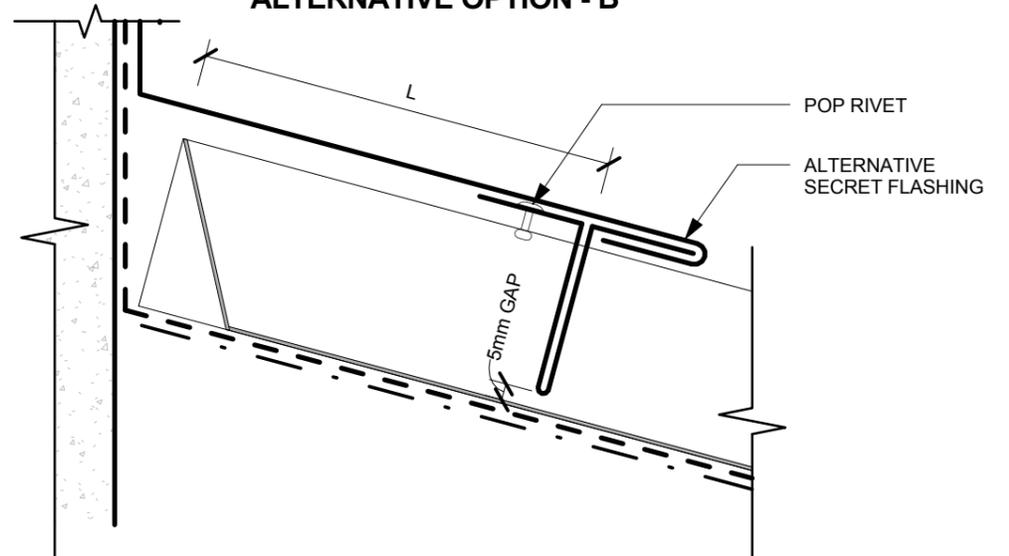
ACCEPTABLE SOLUTION AS PER E2/AS1		
SITUATION 1	SITUATION 2	SITUATION 3
1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH $\geq 10^\circ$	1. VERY HIGH WIND ZONE 2. LOW, MEDIUM, AND HIGH WIND ZONES WHERE ROOF PITCH $\leq 10^\circ$	1. ALL ROOF PITCHES EXTRA HIGH WIND ZONE
L MIN. 130mm (EXCLUDING ANY SOFT 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)

ALTERNATIVE SOLUTION 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 $<10^\circ$
L MIN. 150mm	MIN. 200mm

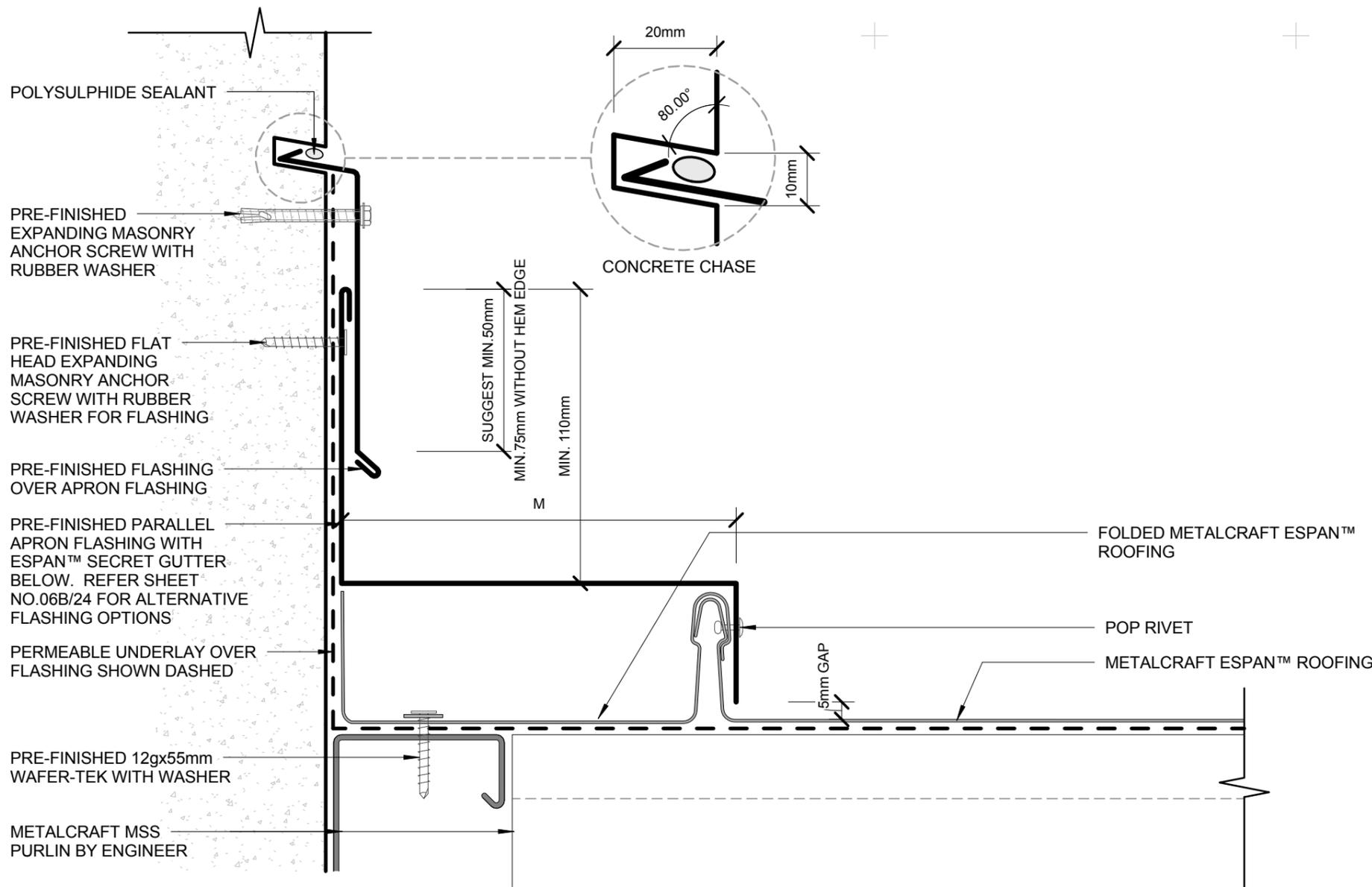
ALTERNATIVE OPTION - A



ALTERNATIVE OPTION - B



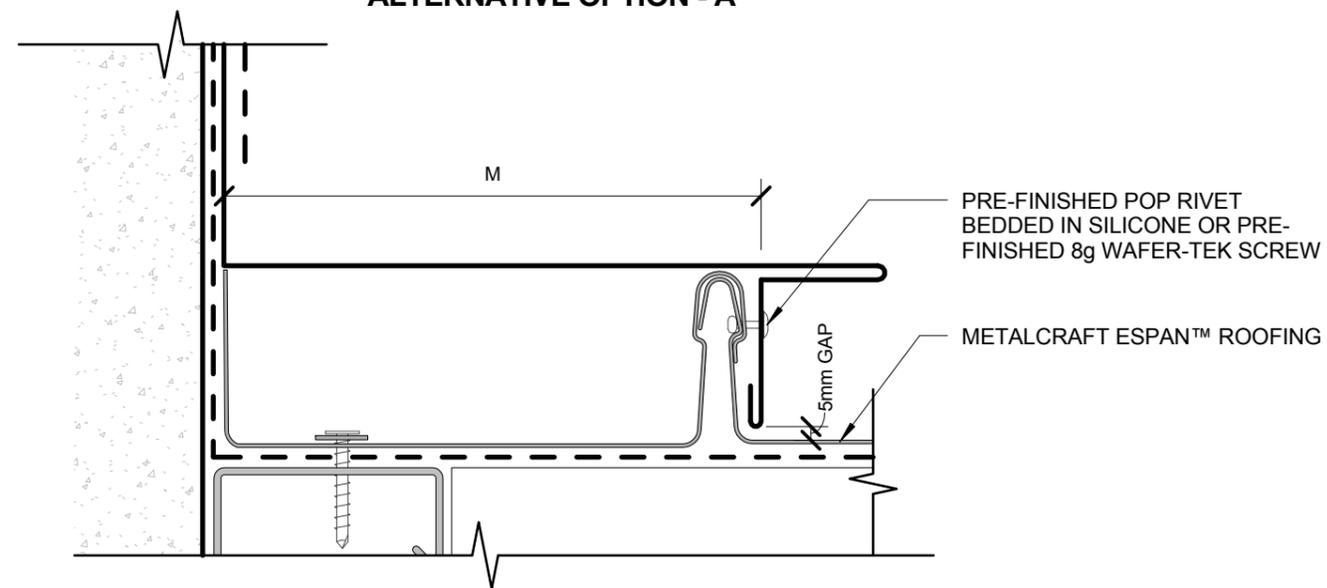
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ALTERNATIVE OPTION - A

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M AT LEAST TWO CRESTS	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS

ALTERNATIVE SOLUTION 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 $<10^\circ$
M ONE RIB (TRAPEZOIDAL & TRAY) 2 CORRUGATIONS (CORRUGATE)	TWO RIBS ($<20\text{mm}$) (TRAPEZOIDAL & TRAY) 3 CORRUGATIONS (CORRUGATE)



ALTERNATIVE OPTION - B

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