# Espan $340^{\text{R}}/470^{\text{R}}$

<u>DETAIL LIST</u>		<u>Revision</u>	<u>Date</u>
D 01	RIDGE WITH NON - PROFILED APEX	3.0	SEP 2024
D 02	SAWTOOTH RIDGE	3.0	SEP 2024
D 03	INTERNAL GUTTER	3.0	SEP 2024
D 04	FLUSH EAVE WITH EXTERNAL BRACKET	3.0	SEP 2024
D 05	BARGE WITH PROFILED CLADDING AND FASCIA	3.0	SEP 2024
D 06	PARAPET WITH TRANSVERSE APRON	3.0	SEP 2024
D 07	TRANSVERSE APRON	3.0	SEP 2024
D 08	PARALLEL APRON	3.0	SEP 2024
D 09	ALTERNATIVE FLASHING DESIGN	3.0	SEP 2024

F



# **COMMERCIAL ROOFING**

FOR ADDITIONAL DETAILS - REFER TO RESIDENTIAL ROOFING ESPAN



#### AS PER E2/ASI

MIN. 50mm

7

- SITUATION 1 1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH ≥ 10°
- MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

1. VERY HIG 2. LOW, MED ROOF PITCH MIN. 200mm (EXCLUDING ROOFING) MIN. 70mm

#### AS PER MRM CODE OF PRACTICE

				CATEGORY C
		LOW, MEDIUM OR HIGH WIND ZONES - ALL ROOF PITCHES	VERY HIGH WIND ZONES ROOF PITCH <8°	SED WIND ZONES UP TO 6 ALL ROOF PITCH
		VERY HIGH AND EXTRA HIGH WIND ZONES WHERE THE PITCH IS EQUAL TO OR GREATER THAN 10°	EXTRA HIGH WIND ZONES -ALL ROOF PITCHES	
	х	MIN. 130mm	MIN. 200mm	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)	MIN. 75mm (VERTICALLY D FACE - SMOOTH) MIN. 125mm (VERTICALLY FACE - PROFILED)
PRE-FINISHED RIDGE CAP FLASHING				
STOPENDS TO ROOF CLADDING		MIN. ROOF PITCH A PER MRM COP	5	
METALCRAFT ESPAN™ ROOFING	_	X		
PRE-FINISHED POP RIVET				RY FLASHING, ( THROUGH
BEDDED IN SILICONE OR PRE-FINISHED 8g WAFER-	<u> </u>		ESPAN BRA	
TEK SCREW				
			GAP	
5mm EXPANSION GAP AROUND PERMEABLE UNDERLAY, SHOWN			5mm EXPANSIO	No
5mm EXPANNE				N GAP AROUND
DASHED				
SAFETY MESH TO WORKSAFE NZ REQUIREMENTS		not h		
METALCRAFT ESPAN™ CLIP SYST	FM		7	
WITH 10G WAFERTEK				
				-
METALCRAFT MSS				
ENGINEER				
	1			
STRUCTURAL STEEL FRAMING BY				
ENGINEER				



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Espan 340<sup>®</sup> / 470<sup>®</sup>

Reference CREP

SITUATION 2 1. VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH < 10° MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING) MIN. 70mm		MIN. 200mn	F PITCHES IN EXTRA HIGH WIND ZONE	
<u>Y B</u>	CATEGORY C		CATEGORY D	
WIND ZONES ROOF PITCH	SED WIND ZONES UP TO 6	0 m/s	SED WIND ZONES UP TO 68 m/s	
H WIND ZONES -ALL ROOF	ALL ROOF PITCH		ALL ROOF PITCH	
n	MIN. 200mm		MIN. 200mm + BAFFLE (REFER NZ MRM COP)	
(VERTICALLY DOWN FACE - n (VERTICALLY DOWN DFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm (VERTICALLY DOWN FACE - PROFILED)		MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm (VERTICALLY DOWN FACE - PROFILED)	

**RIDGE WITH NON - PROFILED APEX** COMMERCIAL ROOFING

Rev. 3.0

Date SEP 2024

Scale 1:2

Sheet

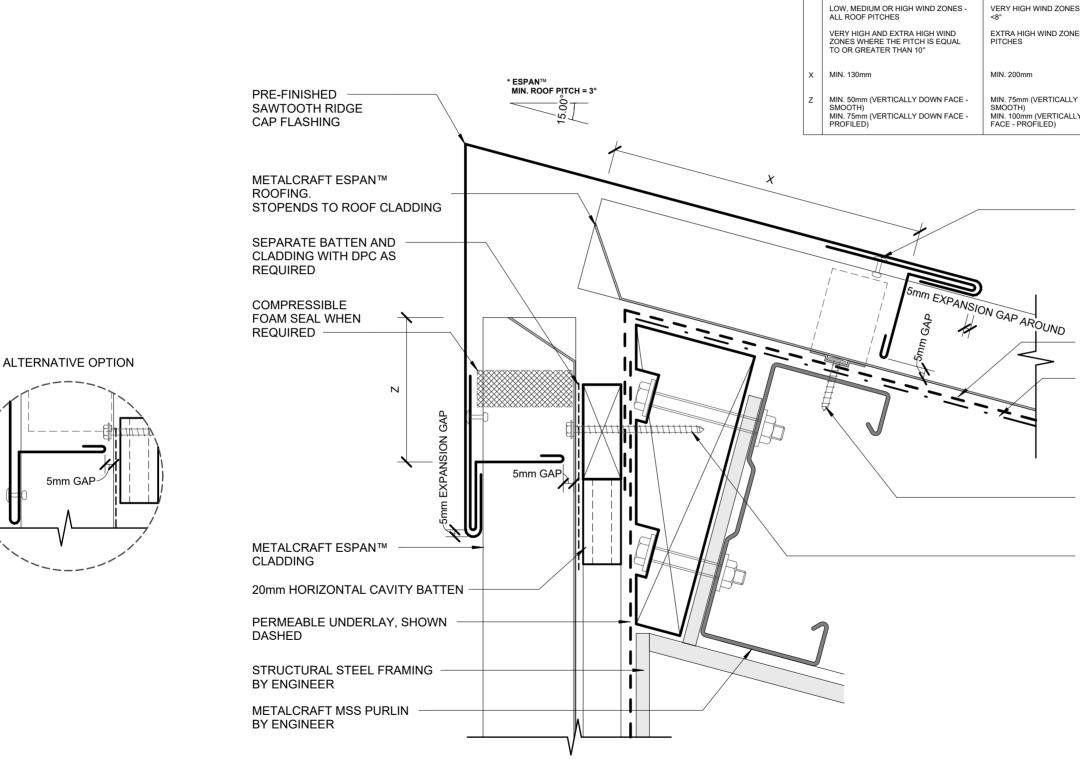
#### AS PER E2/ASI SITUATION 1

CATEGORY A

#### SITUATION 1. VERY HIG 2. LOW, MEI ROOF PITCH

- 1. LOW, MEDIUM, HIGH WIND ZONES, WHERE ROOF PITCH ≥ 10°
- MIN. 130mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING) MIN, 50mm

#### AS PER MRM CODE OF PRACTICE





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SITUATION 2 1. VERY HIGH WIND ZONE 2. LOW, MEDIUM AND HIGH WIND ZONES WHERE ROOF PITCH ≤ 10° MIN. 20mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING) MIN. 70mm		SITUATION 3 1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING) MIN. 90mm		
TICE				
CATEGORY	<u>( B</u>	CATEGORY C		CATEGORY D
VERY HIGH WIND ZONES ROOF PITCH <8°		SED WIND ZONES UP TO 60 m/s		SED WIND ZONES UP TO 68 m/s
EXTRA HIG PITCHES	H WIND ZONES -ALL ROOF	ALL ROOF PITCH		ALL ROOF PITCH
MIN. 200mn	n	MIN. 200mm		MIN. 200mm + BAFFLE

		(REFER NZ MRM COP)
Y DOWN FACE - LY DOWN	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 75mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm (VERTICALLY DOWN FACE - PROFILED)

#### PRE-FINISHED POP RIVET BEDDED IN SILICONE OR PRE-FINISHED 8g WAFER-TEK SCREW

#### PERMEABLE UNDERLAY, SHOWN DASHED

SAFETY MESH TO WORKSAFE NZ REQUIREMENTS

#### METALCRAFT ESPAN™ CLIP SYSTEM WITH 10G WAFERTEK

#### PRE-FINISHED SELF DRILLING/TAPPING SCREW WITH RUBBER WASHER FOR FIXING TOP OF ESPAN™ CLADDING

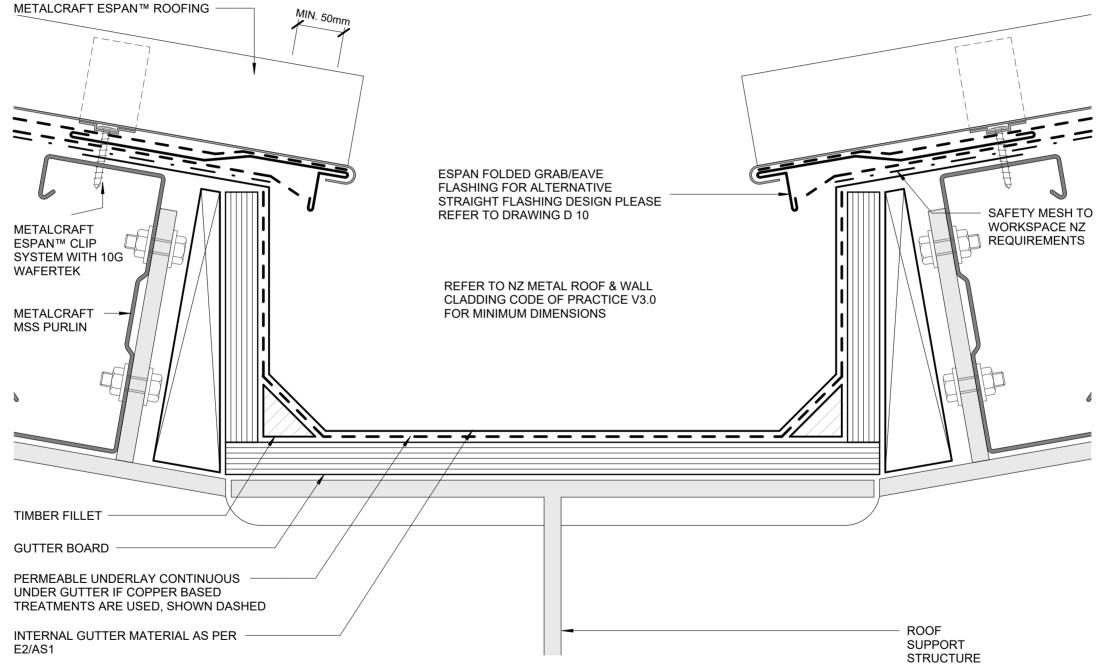
SAWTOOTH RIDGE COMMERCIAL ROOFING

Rev. 3.0

Date SEP 2024

Scale 1:2







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Espan 340<sup>®</sup> / 470<sup>®</sup>

Reference CREP

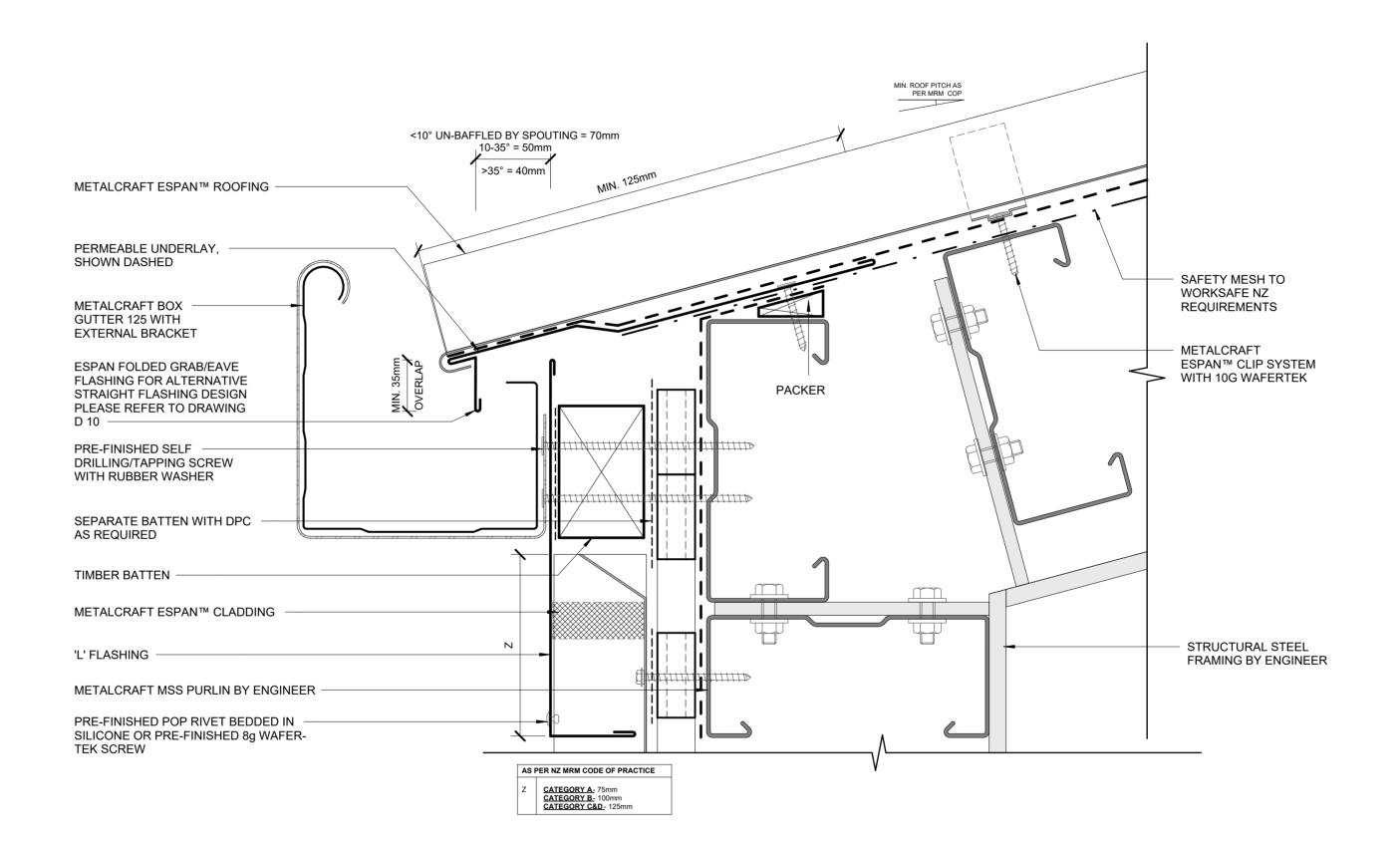
INTERNAL GUTTER COMMERCIAL ROOFING

Rev. 3.0

Date SEP 2024

Scale 1 : 2

D 03





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Espan 340<sup>®</sup> / 470<sup>®</sup>

Reference CREP

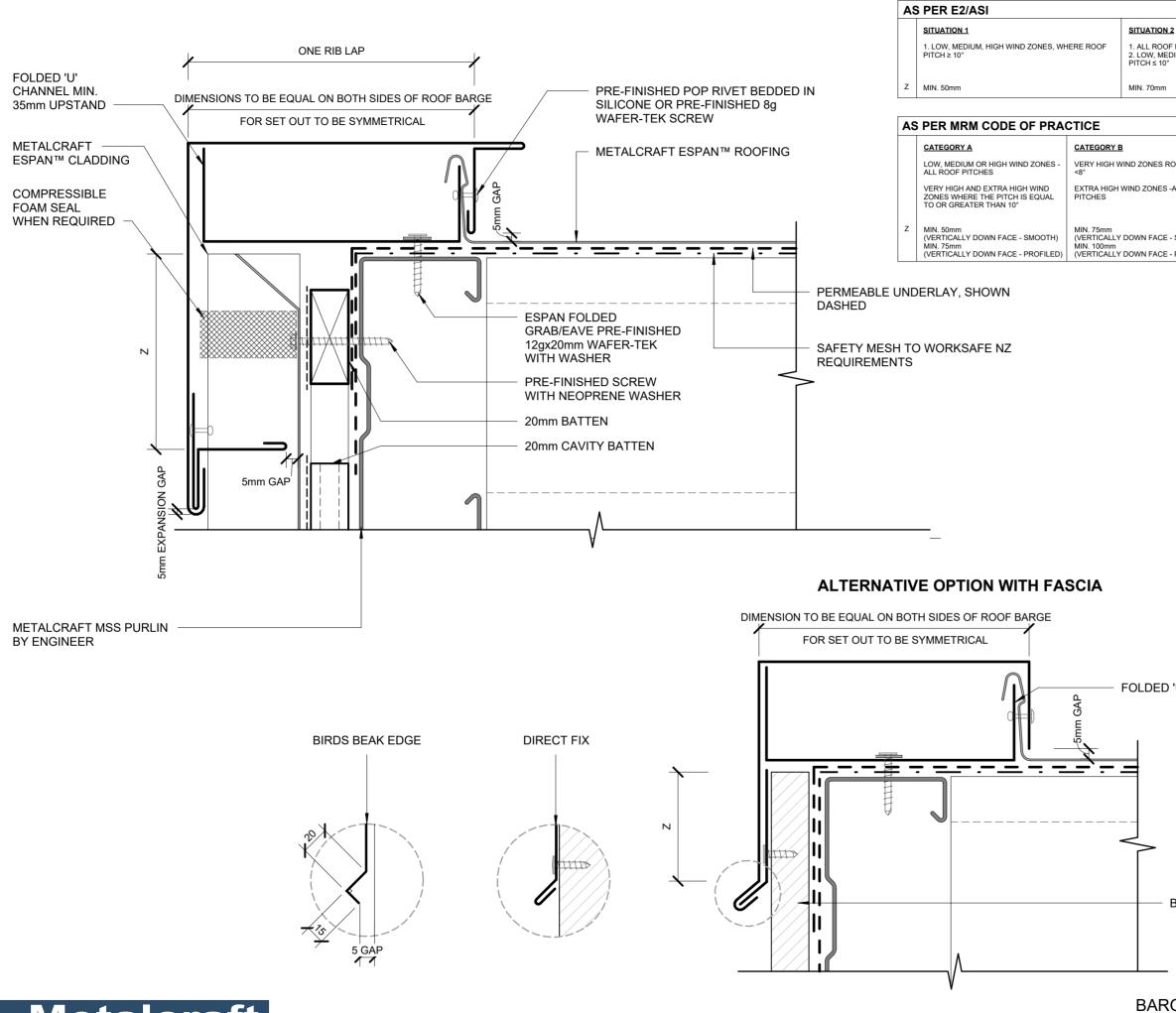
EAVE FLASHING IS ALWAYS REQUIRED

#### FLUSH EAVE WITH EXTERNAL BRACKET COMMERCIAL ROOFING Rev. 3.0

D 04

Date SEP 2024

Scale 1:2



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Reference CREP

1. ALL ROOF PITCHES IN VERY HIGH WIND ZONE 2. LOW, MEDIUM, HIGH WIND ZONES WHERE ROOF PITCH  $\leq$  10°

#### SITUATION 3

1. FOR ALL ROOF PITCHES IN EXTRA HIGH WIND ZONES

MIN. 90mm

	CATEGORY C	CATEGORY D
ROOF PITCH	SED WIND ZONES UP TO 60 m/s	SED WIND ZONES UP TO 68 m/s
S -ALL ROOF	ALL ROOF PITCH	ALL ROOF PITCH
E - SMOOTH) E - PROFILED)	MIN. 100mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm (VERTICALLY DOWN FACE - PROFILED)	MIN. 100mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm (VERTICALLY DOWN FACE - PROFILED)

#### FOLDED 'U' CHANNEL

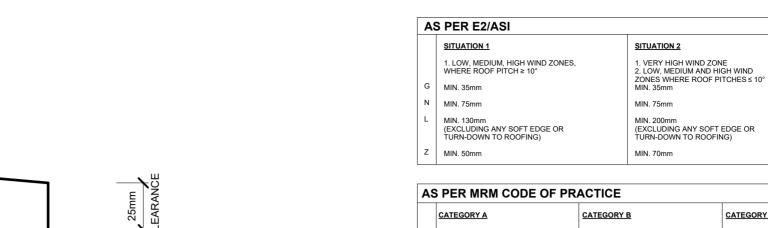
BARGE BOARD

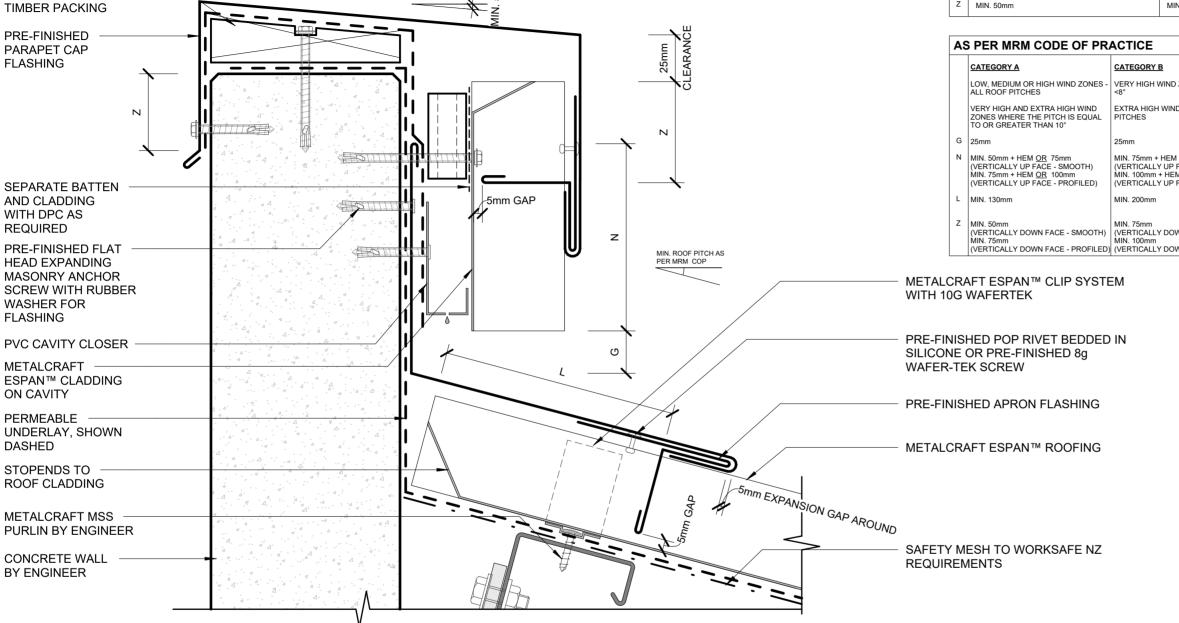
#### BARGE WITH PROFILED CLADDING AND FASCIA COMMERCIAL ROOFING Rev. 3.0

Date SEP 2024

Scale 1:2







5.00°



CONTINUOUS

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Reference CREP

(EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

#### SITUATION 3

1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE

MIN, 35mm

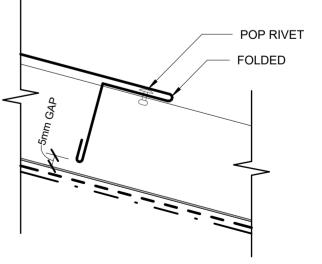
MIN. 75mm

MIN, 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

MIN. 90mm

	CATEGORY C	CATEGORY D
D ZONES ROOF PITCH	SED WIND ZONES UP TO 60 m/s	SED WIND ZONES UP TO 68 m/s
ND ZONES -ALL ROOF	ALL ROOF PITCH	ALL ROOF PITCH
	25mm	25mm
M <u>OR</u> 100mm PFACE - SMOOTH) EM <u>OR</u> 125mm PFACE - PROFILED)	MIN. 100mm + HEM <u>OR</u> 125mm (VERTICALLY UP FACE - SMOOTH) MIN. 125mm + HEM (VERTICALLY UP FACE - PROFILED)	MIN. 100mm + HEM <u>OR</u> 125mm (VERTICALLY UP FACE - SMOOTH) MIN. 125mm + HEM (VERTICALLY UP FACE - PROFILED)
	MIN. 200mm + BAFFLE (REFER NZ MRM COP)	MIN. 200mm + BAFFLE (REFER NZ MRM COP)
OWN FACE - SMOOTH)	MIN. 100mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm	MIN. 100mm (VERTICALLY DOWN FACE - SMOOTH) MIN. 125mm
OWN FACE - PROFILED)	(VERTICALLY DOWN FACE - PROFILED)	(VERTICALLY DOWN FACE - PROFILED)

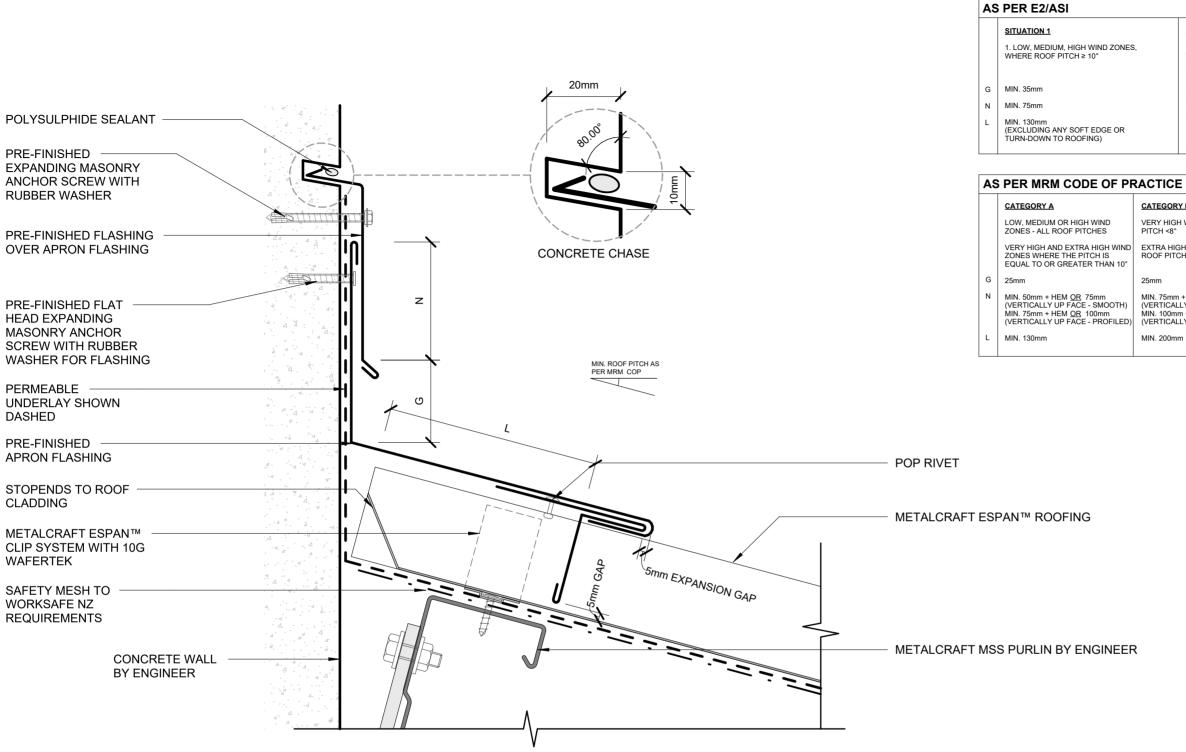
## **ALTERNATIVE OPTION**



PARAPET WITH TRANSVERSE APRON COMMERCIAL ROOFING Rev. 3.0

Scale 1:2

Sheet





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Reference CREP

SITUATION 2	SIT
1. ALL ROOF PITCHES IN VERY HIGH WIND ZONES 2. LOW, MEDIUM, AND HIGH WIND ZONES WHERE ROOF PITCH ≤ 10°	1. A Win
MIN. 35mm	MIN

MIN. 75mm

MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

#### TUATION 3

ALL ROOF PITCHES IN EXTRA HIGH IND ZONE

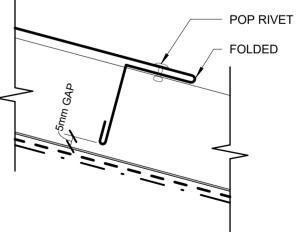
MIN. 35mm

MIN. 75mm

MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)

-		
DRY B	CATEGORY C	CATEGORY D
IGH WIND ZONES ROOF	SED WIND ZONES UP TO 60 m/s	SED WIND ZONES UP TO 68 m/s
HIGH WIND ZONES -ALL ITCHES	ALL ROOF PITCH	ALL ROOF PITCH
	25mm	25mm
nm + HEM <u>OR</u> 100mm CALLY UP FACE - SMOOTH) 0mm + HEM <u>OR</u> 125mm CALLY UP FACE - PROFILED)	MIN. 100mm + HEM <u>OR</u> 125mm (VERTICALLY UP FACE - SMOOTH) MIN. 125mm + HEM (VERTICALLY UP FACE - PROFILED)	MIN. 100mm + HEM <u>OR</u> 125mm (VERTICALLY UP FACE - SMOOTH) MIN. 125mm + HEM (VERTICALLY UP FACE - PROFILED)
)mm	MIN. 200mm + BAFFLE (REFER NZ MRM COP)	MIN. 200mm + BAFFLE (REFER NZ MRM COP)

### **ALTERNATIVE OPTION**

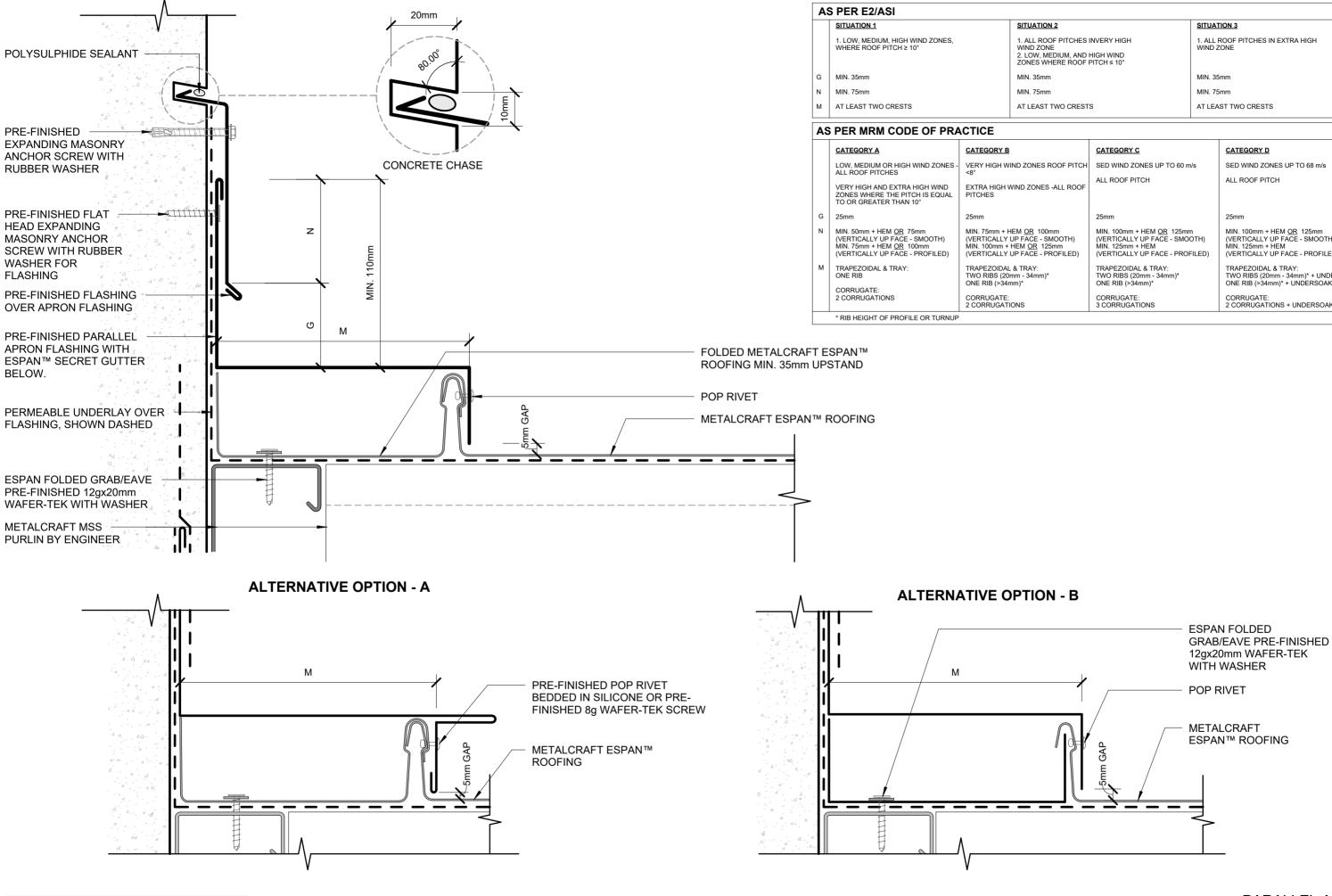


**TRANSVERSE APRON** COMMERCIAL ROOFING

Rev. 3.0

Scale 1:2

Sheet



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Reference CREP

12		SITUATION 3		
DF PITCHES INVERY HIGH IE EDIUM, AND HIGH WIND IERE ROOF PITCH ≤ 10°		1. ALL ROOF PITCHES IN EXTRA HIGH WIND ZONE		
ı		MIN. 35	imm	
ı		MIN. 75	imm	
TWO CREST	S	AT LEA	ST TWO CRESTS	
	CATEGORY C		CATEGORY D	
ROOF PITCH	SED WIND ZONES UP TO 60 m	/s	SED WIND ZONES UP TO 68 m/s	
-ALL ROOF	ALL ROOF PITCH		ALL ROOF PITCH	
	25mm		25mm	
mm MOOTH) 5mm ROFILED)	MIN. 100mm + HEM <u>OR</u> 125mn (VERTICALLY UP FACE - SMO( MIN. 125mm + HEM (VERTICALLY UP FACE - PROF	OTH)	MIN. 100mm + HEM <u>OR</u> 125mm (VERTICALLY UP FACE - SMOOTH) MIN. 125mm + HEM (VERTICALLY UP FACE - PROFILED)	
	TRAPEZOIDAL & TRAY: TWO RIBS (20mm - 34mm)* ONE RIB (>34mm)*		TRAPEZOIDAL & TRAY: TWO RIBS (20mm - 34mm)* + UNDERSOAKER ONE RIB (>34mm)* + UNDERSOAKER	
CORRUGATE: 3 CORRUGATIONS		CORRUGATE: 2 CORRUGATIONS + UNDERSOAKER		

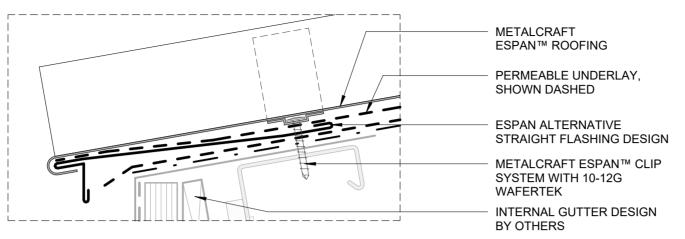
PARALLEL APRON COMMERCIAL ROOFING

D 08

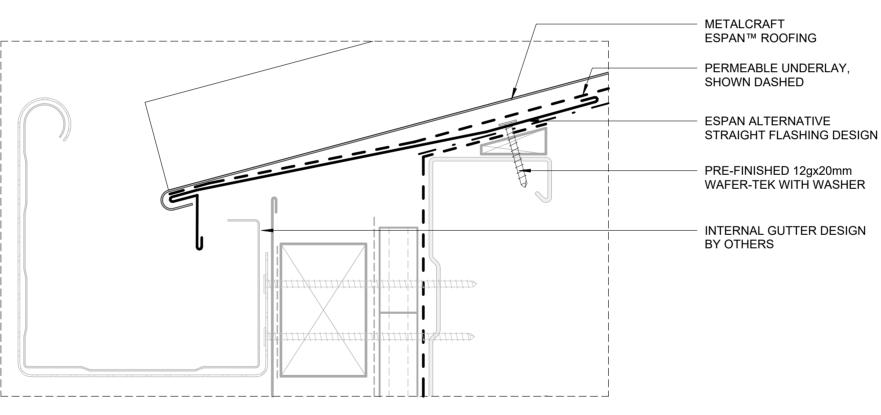
Rev. 3.0

Date SEP 2024

Scale 1:2



ALTERNATIVE STRAIGHT FLASHING DESIGN FOR INTERNAL GUTTER



ALTERNATIVE STRAIGHT FLASHING DESIGN FOR GUTTER EAVE



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# ALTERNATIVE FLASHING DESIGN

Rev. 3.0

COMMERCIAL ROOFING

Date SEP 2024

Scale 1 : 2

Sheet