MAXIMUS 22

MODERN | CONTEMPORARY | ARCHITECTURAL

MAXIMUS 22

MAXIMUS CORRUGATED STEEL HAS A TIMELESS APPEAL COMBINED WITH STRENGTH AND VERSATILITY

MAXIMUS 22

STRATCO MAXIMUS 22

Stratco Maximus 22 Corrugated roofing - where a timeless classic meets and compliments modern, contemporary and traditional design, to create an aesthetically pleasing Australian steel roof. With the stronger Maximus profile, Stratco offers not only market leading technology and product quality, but now has an extended corrugated roofing product range.

MAXIMUS 22

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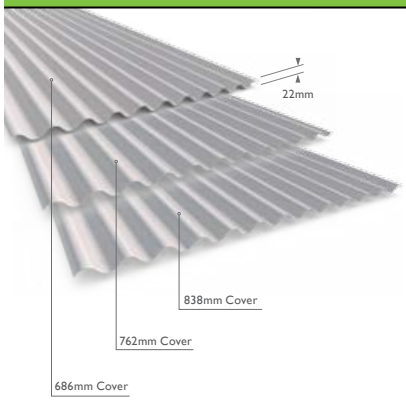


762mm Cover 0.40mm BMT
Tolerance L ±5mm W ±2mm
Minimum Pitch 3°

PRODUCT	DESCRIPTION			AVAILABILITY	UNIT OF MEASURE	CODE
	MAXIMUS 22 686mm Cover 762mm Cover 838mm Cover			 QLD NSW VIC SA WA NT		## = Colour
	ROOFING AND WALLING					
	686mm Cover					
	0.42 BMT Zinc/Al	●	●	● ●	m²	M2268642AZ
	0.42 BMT Colour	●	●	● ●	m²	M2268642##
	0.42 BMT Ultra Colour	●	●	●	m²	M22686ULT42##
	0.42 BMT High Gloss D/Sided Colour	●	●	●	m²	M2268642HG##
	0.42 BMT Metalic Colour	●	●	●	m²	M22686MET42##
	0.48 BMT Zinc/Al	●	●	● ●	m²	M2268648AZ
	0.48 BMT Colour	●	●	● ●	m²	M2268648##
	0.48 BMT Ultra Colour	●	●	●	m²	M22686ULT48##
	0.48 BMT Metalic Colour	●	●	●	m²	M22686MET48##
	762mm Cover					
	0.40 BMT Colour	●	●	●	m²	M2276240##
	838mm Cover					
	0.45 BMT Colour	●	●	● ●	m²	M2283845##

MATERIAL SPECIFICATIONS

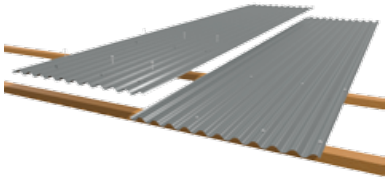
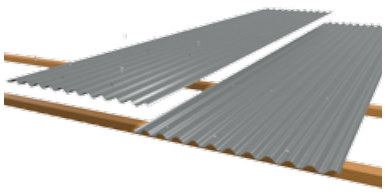
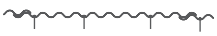
Material Properties	0.40mm BMT		0.42mm BMT		0.45mm BMT		0.48mm BMT	
	Zinc/Al	Colour	Zinc/Al	Colour	Zinc/Al	Colour	Zinc/Al	Colour
Min. 'AZ' Coating Mass (g/m²)	150	150	150	150	150	150	150	150
Mass (kg/linear metre)	3.31	3.37	3.47	3.53	4.20	4.27	3.70	3.76
Mass (kg/square metre)	4.34	4.42	5.05	5.14	5.01	5.10	5.40	5.48
Yield (square metre/tonne)	230	226	198	194	199	196	185	183
Tensile Strength (MPa)	550	550	550	550	550	550	550	550
Width Coverage (mm)	762	762	686	686	838	838	686	686

FIXING AND LAYING DIRECTIONS - NON-CYCLONIC AREAS

INSTALLATION

NOTE: The following recommendations apply to non-cyclonic areas.

- Maximus sheets should be fixed within the recommended support spacings. Avoid 'stretching' the width of the sheet when installing, as this could allow wind and rain to enter.
- Side lap fixing is recommended to maintain a weather proof seal and to secure the overlap especially when the roof is walked on occasionally.
- This is best done with either 8 x 12mm self drilling stitching screws or a 3.2mm blind rivet (rivets should be sealed to prevent water penetration). It is recommended side lap fasteners are secured at maximum 900mm centres for roofing and 1200mm centres for walling.
- On roofing, at the high end of the sheets, the valleys of each corrugation should be turned up at crest using a turn up tool.

	FIXING TO STEEL	FIXING TO TIMBER	❯❯ PREVAILING WIND LAYING DIRECTION ❮❮
ROOFING CREST FIXING	 **M6 x 50mm** TS self drilling screw	 **M6 x 50mm** TS self drilling screw	
	Laying Procedure 0.40mm BMT  Single, End & Internal Spans 3 screws/sheet/support  Double Spans 5 screws/sheet/support	Laying Procedure 0.42, 0.48mm BMT  Single, End & Internal Spans 3 screws/sheet/support  Double Spans 5 screws/sheet/support	Laying Procedure 0.45mm BMT  Single, End & Internal Spans 4 screws/sheet/support  Double Spans 6 screws/sheet/support
WALLING PAN FIXING	 M6 x 25mm TS self drilling screw	 M6 x 25mm TS self drilling screw	❯❯ PREVAILING WIND LAYING DIRECTION ❮❮ 
	Laying Procedure 0.40mm BMT  Single, End & Internal Spans 3 screws/sheet/support  Double Spans 5 screws/sheet/support	Laying Procedure 0.42, 0.48mm BMT  Single, End & Internal Spans 3 screws/sheet/support  Double Spans 5 screws/sheet/support	

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WATER CARRYING CAPACITY

Maximum roof run for drainage (m)

Roof Slope	150 mm/HR	200 mm/HR	250 mm/HR	300 mm/HR	350 mm/HR	400 mm/HR
2°	23	17	13	11	9	8
3°	28	21	17	14	12	10
5°	36	27	22	18	15	13
10°	52	39	31	26	22	19
15°	64	48	38	32	27	24
20°	74	56	44	37	32	28
22°	78	59	47	39	33	29

WIND CAPACITIES (kPa)

BMT	Span Type	Limit State	Span (mm)							
			600	900	1200	1500	1800	2100	2400	2700
0.40mm Roofing & Walling	Single	Serviceability	2.60	1.92	1.36	0.93	0.63	0.45	-	-
		Strength	8.40	7.00	5.70	4.50	3.40	2.39	-	-
	Double (5 Screws)	Serviceability	4.20	3.29	2.51	1.85	1.32	0.91	0.63	0.48
		Strength	8.50	7.14	5.94	4.91	4.05	3.35	2.82	2.45
	End / Internal	Serviceability	2.45	1.99	1.59	1.27	1.01	0.82	0.70	0.65
		Strength	6.40	5.20	4.18	3.35	2.70	2.24	1.96	1.86
0.42mm Roofing & Walling	Single	Serviceability	3.35	2.44	1.71	1.14	0.74	0.51	-	-
		Strength	9.00	7.57	6.24	5.00	3.85	2.80	-	-
	Double (5 Screws)	Serviceability	4.50	3.52	2.67	1.97	1.40	0.97	0.68	0.53
		Strength	10.60	8.77	7.17	5.79	4.65	3.73	3.05	2.59
	End / Internal	Serviceability	2.46	2.12	1.81	1.54	1.30	1.10	0.93	0.80
		Strength	7.80	6.32	5.06	4.01	3.18	2.56	2.16	1.98
0.45mm Roofing	Single	Serviceability	-	2.85	2.00	1.33	0.84	0.53	0.41	-
		Strength	-	9.50	7.75	6.30	5.16	4.33	3.80	-
	Double (6 Screws)	Serviceability	-	3.60	2.77	2.07	1.50	1.06	0.74	0.56
		Strength	-	9.42	7.98	6.73	5.65	4.75	4.04	3.50
	End / Internal	Serviceability	-	2.50	2.07	1.71	1.40	1.16	0.97	0.85
		Strength	-	7.90	6.28	4.94	3.90	3.14	2.68	2.50
0.48mm Roofing	Single	Serviceability	-	2.90	2.12	1.48	0.98	0.62	0.41	0.34
		Strength	-	10.37	8.61	7.12	5.90	4.95	4.26	3.85
	Double (5 Screws)	Serviceability	-	-	2.88	2.16	1.56	1.10	0.77	0.57
		Strength	-	-	9.40	8.09	6.99	6.10	5.41	4.93
	End / Internal	Serviceability	-	-	2.11	1.85	1.66	1.35	1.11	0.88
		Strength	-	-	7.00	5.63	4.51	3.62	2.97	2.57

MAXIMUM RECOMMENDED SPANS (mm)

Determined by wind speeds for non-cyclonic areas

Span Type	Roofing (BMT)				Walling (BMT)	
	0.40mm	0.42mm	0.45mm	0.48mm	0.40mm	0.42mm
Single Span	800	900	1000	1100	1800	1900
End or Double Span	1200	1350	1500	1650	2400	2500
Internal Span	1400	1500	1800	2000	2600	2700
Un-stiffened Overhang	250	250	250	250	300	300
Stiffened Overhang	400	400	400	450	300	300

Roofing: Spans are limited, based on foot traffic incidental to maintenance.

Walling: Spans are based on N1 (W28) wind loading, refer to Span tables below for additional wind allocations.

DOMESTIC PATIO SPANS (mm)

Determined by wind speeds for non-cyclonic areas

Wind Classification	0.40 BMT	0.42 BMT	0.45 BMT	0.48 BMT
N1 (W28)	1900	2000	2050	2200
N2 (W33)	1900	2000	2050	2200
N3 (W41)	1500	1700	1800	1900
N4 (W50)	1200	1400	1500	1600

For carport and verandah applications, utilise crawl boards or ladders over roofing to avoid damage during installation and maintenance. Always ensure boards or ladders are stable and will not slide.

SPANS (mm)

Determined by wind speeds for non-cyclonic areas

BMT	Application	Span Type	N1 (W28)	N2 (W33)	N3 (W41)	N4 (W50)
0.40mm	Roofing	Single	800	800	800	800
		Double	1200	1200	1200	1200
		End	1200	1200	1150	1000
		Internal	1400	1400	1150	1000
	Walling	Single	1800	1450	1250	1150
		Double	2400	2050	1850	1750
		End	2400	1900	1500	1350
		Internal	2600	1900	1500	1350
0.42mm	Roofing	Single	900	900	900	900
		Double	1350	1350	1350	1350
		End	1350	1350	1350	1150
		Internal	1500	1500	1350	1150
	Walling	Single	1900	1600	1400	1350
		Double	2500	2100	1900	1800
		End	2500	2100	1900	1650
		Internal	2700	2400	1900	1650
0.45mm	Roofing	Single	1000	1000	1000	1000
		Double	1500	1500	1500	1500
		End	1500	1500	1500	1350
		Internal	1800	1800	1550	1350
0.48mm	Roofing	Single	1100	1100	1100	1100
		Double	1650	1650	1650	1650
		End	1650	1650	1650	1500
		Internal	2000	2000	1700	1500

0.40 & 0.42mm BMT Maximus roofing values are applicable for use with steel supports of minimum 0.55mm thickness, G550.
0.40 & 0.42mm BMT Maximus walling values and 0.45mm BMT Maximus roofing values are applicable for use with steel supports of minimum 0.75mm thickness, G550.
NOTE: If fixing 0.45mm BMT Maximus roofing to 0.55mm supports, 0.42mm BMT Maximus roofing spans must be used.

MAXIMUS 22

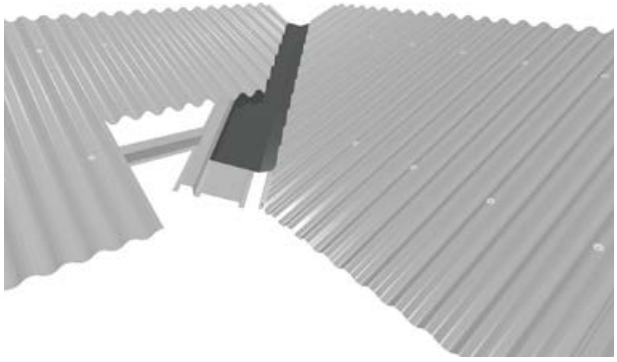
DESIGN CONSIDERATIONS

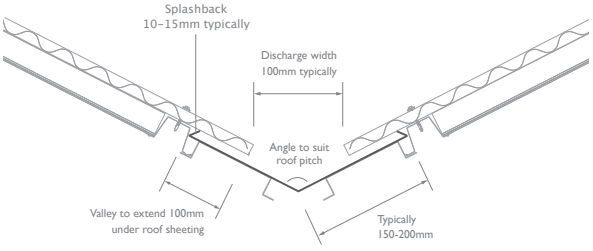
Maximus 22 has a 762mm cover in 0.40mm BMT material, 838mm cover in 0.45mm BMT material and 686mm cover in both 0.42mm and 0.48mm BMT material.

The minimum recommended roof pitch is 3°. Maximus roofing is subject to thermal expansion. The maximum length before an expansion joint is needed is 24 metres for light colours and 16 metres for dark colours.

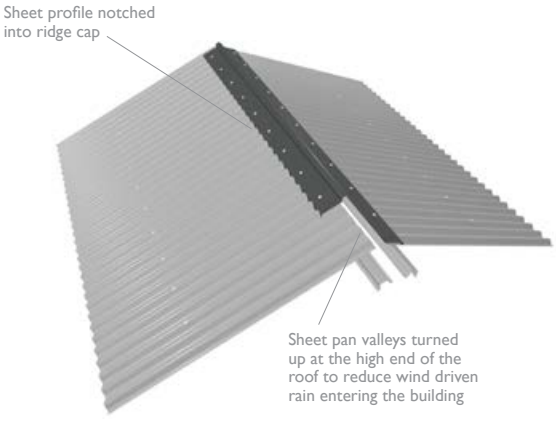
DESIGN APPLICATIONS

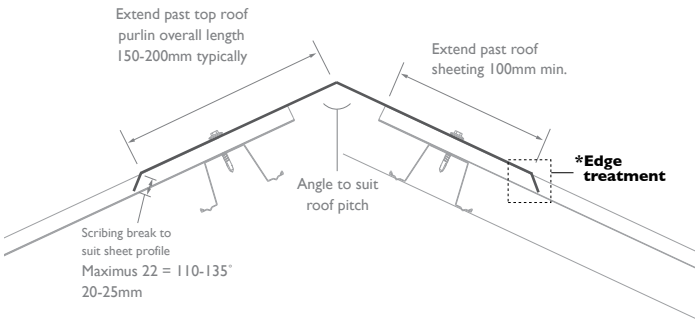
VALLEY GUTTER





RIDGE FLASHING





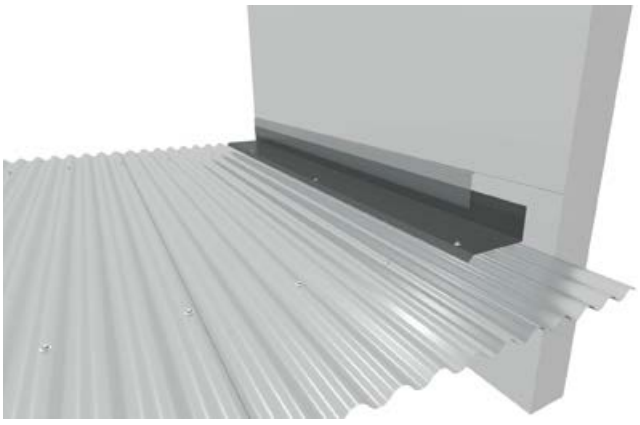
***Edge treatments for Maximus 22 Ridge Flashing:**

Scribing Break
Allows profile of roof sheet to be notched into capping

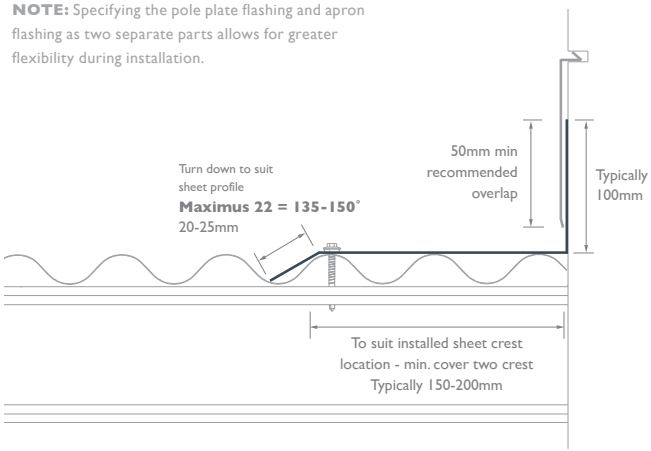
Slight Break
Stiffens edge and reduces oil canning

MAXIMUS 22

APRON FLASHING

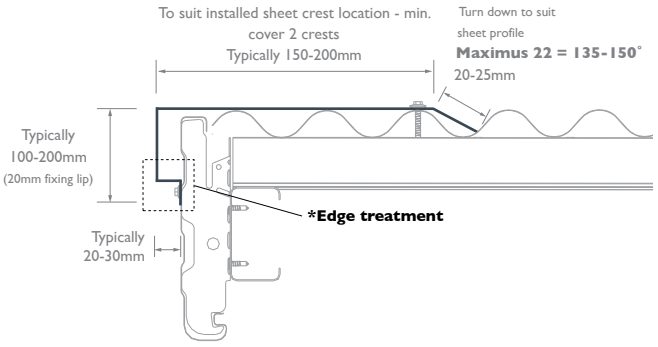


NOTE: Specifying the pole plate flashing and apron flashing as two separate parts allows for greater flexibility during installation.



MAXIMUS 22

BARGE CAPPING



***Edge treatments for Maximus 22 Barge Capping:**

Square end
Neat finish

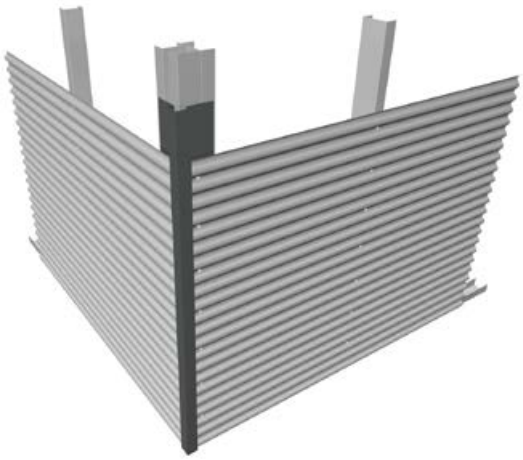
Fixing lip
Provides practical fixing point for flashing

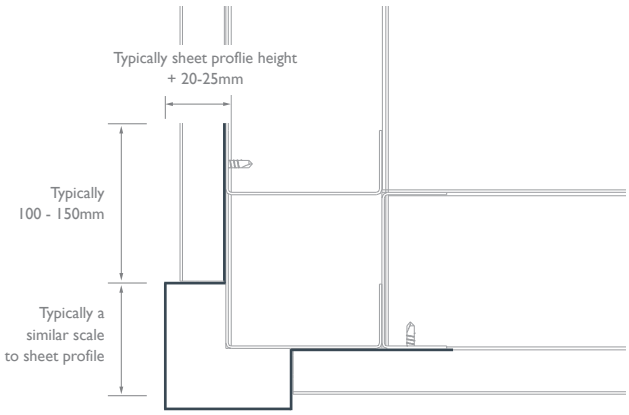
Drip edge
Discharges water away from wall reducing staining

Slight break
Stiffens edge and reduces oil canning

Birds beak
Stiffens edge and reduces oil canning

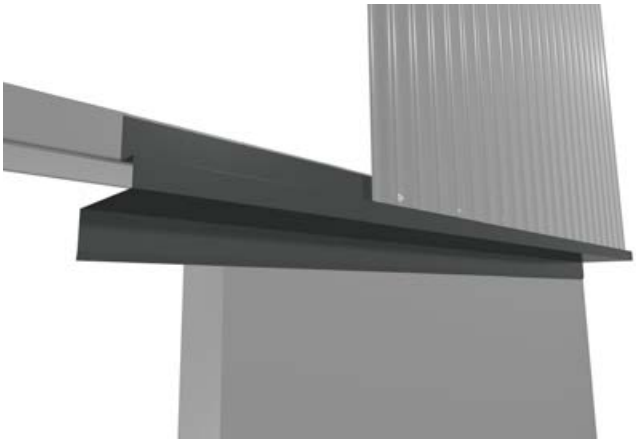
CORNER FLASHING

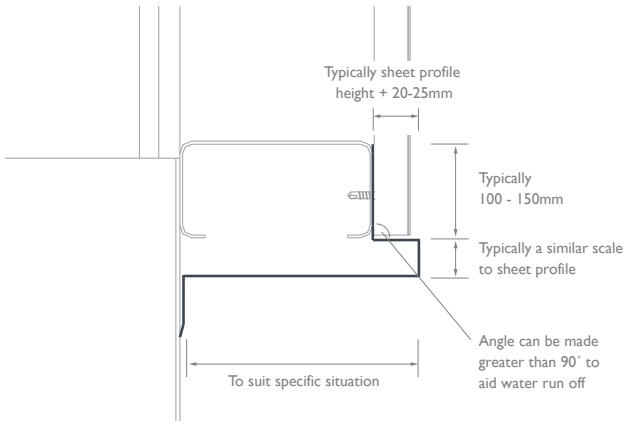




MAXIMUS 22

FOOTMOULD





STRATCO

MAXIMUS 33

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MAXIMUS 33

MAXIMUS CORRUGATED STEEL HAS A TIMELESS APPEAL COMBINED WITH STRENGTH AND VERSATILITY

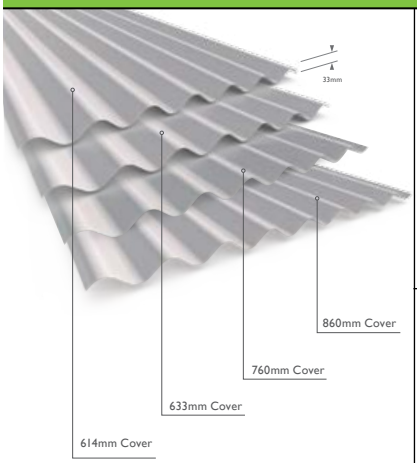
MAXIMUS 33

STRATCO MAXIMUS 33

Stratco Maximus 33 Corrugated roofing - adding more choice and additional features, this deeper, rounder, well-formed Maximus corrugated profile now provides the ultimate solution and adaptability to all steel walling and roofing applications.

MAXIMUS 33

MAXIMUS 33



760mm Cover 0.40mm BMT
Tolerance L ±5mm W ±2mm
Minimum Pitch 2°

PRODUCT	DESCRIPTION			AVAILABILITY	UNIT OF MEASURE	CODE
	MAXIMUS 33					
	ROOFING					
	614mm Cover					
	860mm Cover					
	WALLING					
	633mm Cover					
	760mm Cover			QLD NSW VIC SA WA NT		## = Colour
	ROOFING					
	614mm Cover					
	0.48 BMT Zinc/Al	●	●	● ●	m²	M3361448AZ
	0.48 BMT Colour	●	●	● ●	m²	M3361448##
	0.48 BMT Ultra Colour	●	●	●	m²	M33614ULT48##
	0.48 BMT Metalic Colour	●	●	●	m²	M33614MET48##
	860mm Cover					
	0.45 BMT Colour	●	●	● ●	m²	M3386045##
	WALLING					
	633mm Cover					
	0.42 BMT Zinc/Al	●	●	●	m²	M3363342AZ
	0.42 BMT Colour	●	●	●	m²	M3363342##
	760mm Cover					
	0.40 BMT Colour	●	●	●	m²	M3376040##

MATERIAL SPECIFICATIONS

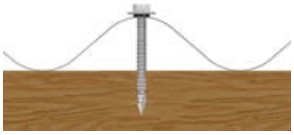
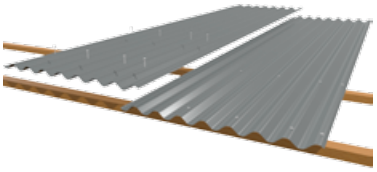
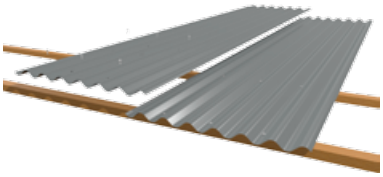
Material Properties	0.40mm BMT		0.42mm BMT		0.45mm BMT		0.48mm BMT	
	Zinc/Al	Colour	Zinc/Al	Colour	Zinc/Al	Colour	Zinc/Al	Colour
Min. 'AZ' Coating Mass (g/m²)	150	150	150	150	150	150	150	150
Mass (kg/linear metre)	3.31	3.37	3.47	3.53	4.20	4.27	3.70	3.76
Mass (kg/square metre)	4.36	4.43	5.48	5.57	4.89	4.97	6.03	6.12
Yield (square metre/tonne)	230	226	183	179	205	201	166	163
Tensile Strength (MPa)	550	550	550	550	550	550	550	550
Width Coverage (mm)	760	760	633	633	860	860	614	614

FIXING AND LAYING DIRECTIONS - NON-CYCLONIC AREAS

INSTALLATION

NOTE: The following recommendations apply to non-cyclonic areas.

- Maximus sheets should be laid into the prevailing wind and sit neatly on the preceding roof sheet with a side lap as shown in the fastener positions detail below. They should be fixed within the recommended support spacings.
- Avoid 'stretching' the width of the sheet when installing, as this could allow wind and rain to enter.
- Side lap fixing is recommended to maintain a weather proof seal and to secure the overlap especially when the roof is walked on occasionally. This is best done with either 8 x 12mm self drilling stitching screws or a 3.2mm blind rivet (rivets should be sealed to prevent water penetration).
- It is recommended side lap fasteners are secured at maximum 900mm centres for roofing and 1200mm centres for walling.
- On roofing, at the high end of the sheets, the valleys of each corrugation should be turned up at crest using a turn up tool.

	FIXING TO STEEL	FIXING TO TIMBER	PREVAILING WIND LAYING DIRECTION
ROOFING CREST FIXING	 **M6 x 50mm** TS self drilling screw	 **M6 x 65mm** TS self drilling screw	
	Laying Procedure 0.45mm BMT Single, End & Internal Spans 4 screws/sheet/support Double Span Supports 7 screws/sheet/support	Laying Procedure 0.48mm BMT Single, End & Internal Spans 3 screws/sheet/support Double Span Supports 6 screws/sheet/support	
WALLING PAN FIXING	 **M6 x 25mm** TS self drilling screw	 **M6 x 25mm** TS self drilling screw	PREVAILING WIND LAYING DIRECTION 
	Laying Procedure 0.40mm BMT Single, End & Internal Spans 3 screws/sheet/support Double Spans 5 screws/sheet/support	Laying Procedure 0.42 BMT Single, End & Internal Spans 3 screws/sheet/support Double Spans 4 screws/sheet/support	

MAXIMUS 33

WATER CARRYING CAPACITY

Maximum roof run for drainage (m)

Roof Slope	150 mm/HR	200 mm/HR	250 mm/HR	300 mm/HR	350 mm/HR	400 mm/HR
2°	79	59	47	39	34	29
3°	97	73	58	48	41	36
5°	126	94	75	63	54	47
7.5°	154	115	92	77	66	57
10°	178	134	107	89	76	67
15°	220	165	132	110	94	82

WIND CAPACITIES (kPa)

BMT	Span Type	Limit State	Span (mm) 900	1200	1500	1800	2100	2400	2700
0.40mm Walling	Single	Serviceability	2.35	1.82	1.40	1.08	0.86	0.74	-
		Strength	7.30	6.14	5.08	4.12	3.27	2.52	-
	Double (5 Screws)	Serviceability	4.50	3.52	2.69	2.00	1.46	1.06	0.80
		Strength	8.80	7.21	5.86	4.75	3.89	3.27	2.90
	End / Internal	Serviceability	1.80	1.56	1.35	1.18	1.04	0.93	0.86
		Strength	6.68	5.31	4.17	3.26	2.58	2.12	1.89
0.42mm Walling	Single	Serviceability	2.80	2.27	1.80	1.40	1.06	0.78	-
		Strength	8.53	6.96	5.58	4.40	3.41	2.62	-
	Double (4 Screws)	Serviceability	5.17	4.03	3.06	2.26	1.63	1.18	0.90
		Strength	9.70	7.88	6.37	5.17	4.27	3.68	3.40
	End / Internal	Serviceability	2.30	2.04	1.81	1.59	1.39	1.21	1.05
		Strength	7.35	5.55	4.44	3.42	2.69	2.25	2.10
0.45/0.48mm Roofing	Single	Serviceability	-	2.39	1.97	1.59	1.24	0.93	0.65
		Strength	-	9.50	7.67	6.23	5.17	4.49	4.20
	Double	Serviceability	-	4.51	3.41	2.51	1.80	1.28	0.95
		Strength	-	9.85	8.39	7.18	6.23	5.55	5.12
	End / Internal	Serviceability	-	2.35	1.97	1.66	1.41	1.22	1.10
		Strength	-	7.82	6.35	5.16	4.27	3.67	3.36

MAXIMUM RECOMMENDED SPANS (mm)

Determined by wind speeds for non-cyclonic areas

Span Type	Walling (BMT)		Roofing (BMT)	
	0.40mm	0.42mm	0.45mm	0.48mm
Single Span	2100	2400	1200	1300
End Span	2400	2700	1400	1600
Internal Span	2400	2700	1900	2500
Un-stiffened Overhang	400	400	250	250
Stiffened Overhang	400	400	400	450

Roofing: Spans are limited, based on foot traffic incidental to maintenance.

Walling: Spans are based on N1 (W28) wind loading, refer to Span tables below for additional wind allocations.

DOMESTIC PATIO SPANS (mm)

Determined by wind speeds for non-cyclonic areas

Wind Classification	0.40 BMT	0.42 BMT	0.45 BMT	0.48 BMT
N1 (W28)	1900	2000	2050	2200
N2 (W33)	1900	2000	2050	2200
N3 (W41)	1500	1700	1800	1900
N4 (W50)	1200	1400	1500	1600

For carport and verandah applications, utilise crawl boards or ladders over roofing to avoid damage during installation and maintenance. Always ensure boards or ladders are stable and will not slide.

SPANS (mm)

Determined by wind speeds for non-cyclonic areas

BMT	Application	Span Type	WIND CLASSIFICATION			
			N1 (W28)	N2 (W33)	N3 (W41)	N4 (W50)
0.40mm	Walling	Single	2100	1950	1600	1500
		Double	2400	2400	2250	2150
		End	2400	2400	1700	1450
		Internal	2400	2400	1700	1450
0.42mm	Walling	Single	2400	2200	1900	1800
		Double	2700	2650	2350	2250
		End	2700	2650	2350	1800
		Internal	2700	2650	2350	1800
0.45mm	Roofing	Single	1200	1200	1200	1200
		Double	1400	1400	1400	1400
		End	1400	1400	1400	1400
		Internal	1900	1900	1800	1600
0.48mm	Roofing	Single	1300	1300	1300	1300
		Double	1600	1600	1600	1600
		End	1600	1600	1600	1600
		Internal	2500	2350	1800	1600

NOTE: 0.40 & 0.42mm BMT Maximus walling values are applicable for use with steel supports of minimum 0.75mm thickness, G550. 0.45mm & 0.48mm BMT Maximus roofing values are applicable for use with steel supports of minimum 1.0mm thickness, G550. End and Internal spans are applicable for cladding spanning over three or more continuous spans.

MAXIMUS 33

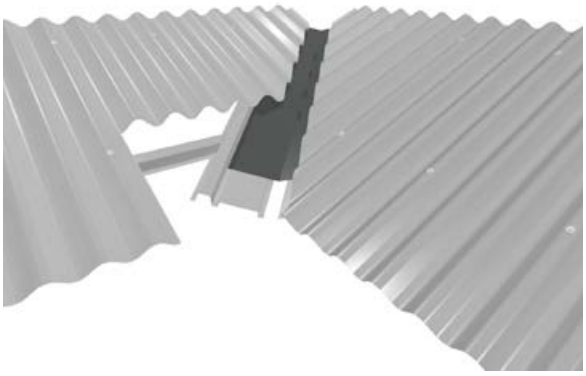
DESIGN CONSIDERATIONS

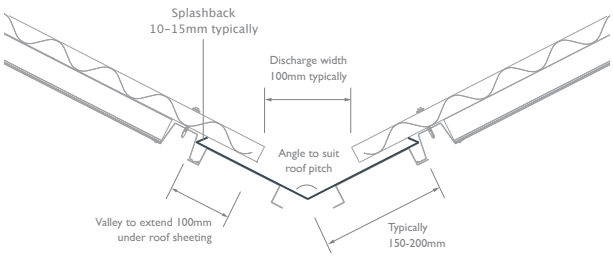
Maximus 33 has a 760mm cover in 0.40mm BMT and 633mm cover in 0.42mm BMT walling material, 860mm cover in 0.45mm BMT and 614mm cover in 0.48mm BMT roofing material.

The minimum recommended roof pitch is 2°. Maximus roofing is subject to thermal expansion. The maximum length before an expansion joint is needed is 24 metres for light colours and 16 metres for dark colours

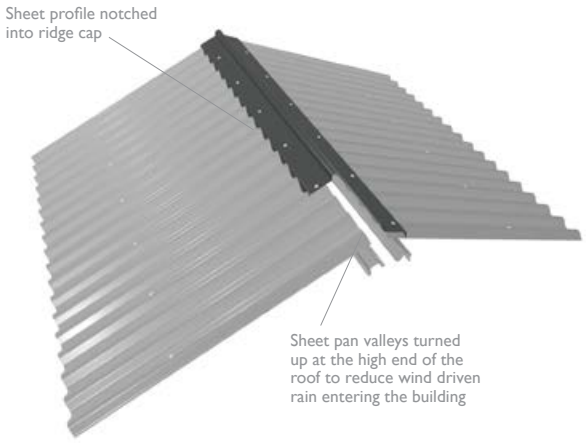
DESIGN APPLICATIONS

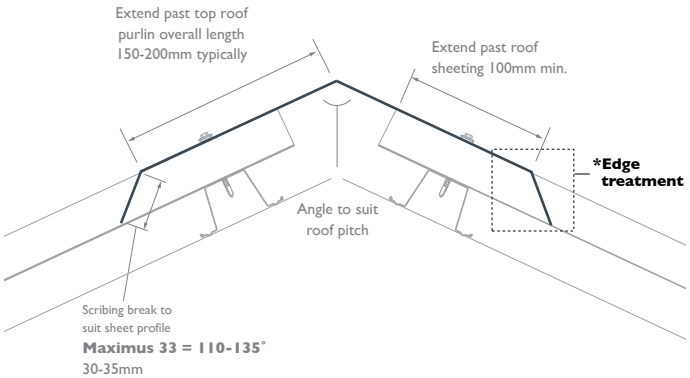
VALLEY GUTTER





RIDGE FLASHING





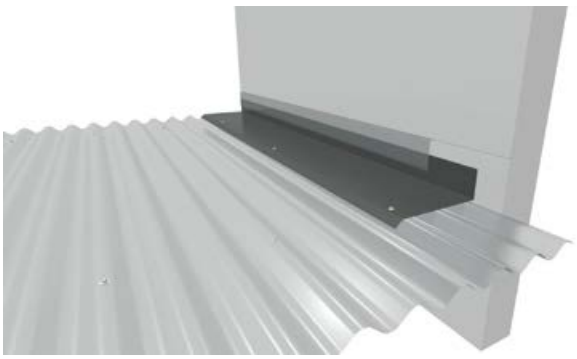
***Edge treatments for Maximus 33 Ridge Flashing:**

Scribing Break
Allows profile of roof sheet to be notched into capping

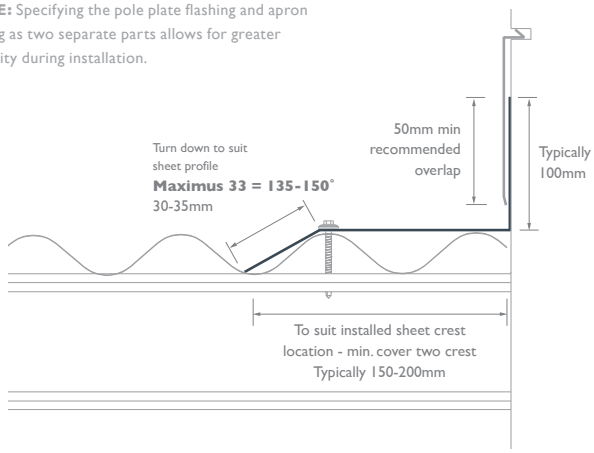
Slight Break
Stiffens edge and reduces oil canning

MAXIMUS 33

APRON FLASHING

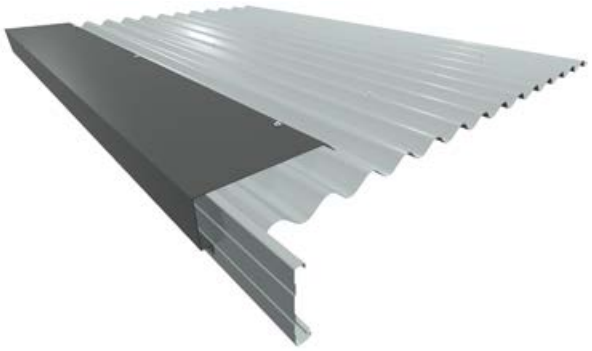


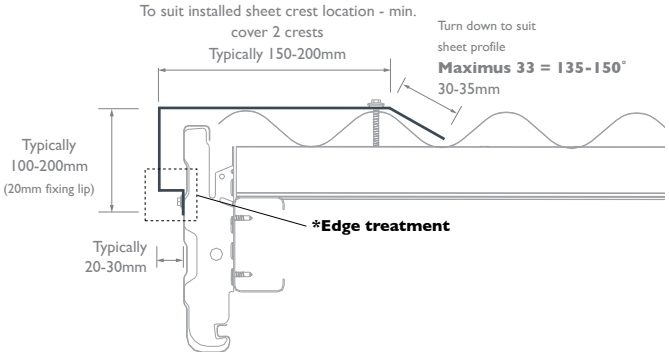
NOTE: Specifying the pole plate flashing and apron flashing as two separate parts allows for greater flexibility during installation.



MAXIMUS 33

BARGE CAPPING





***Edge treatments for Maximus 33 Barge Capping:**

Square end
Neat finish

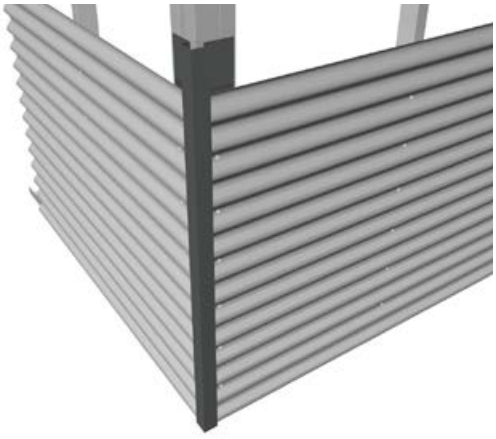
Fixing lip
Provides practical fixing point for flashing

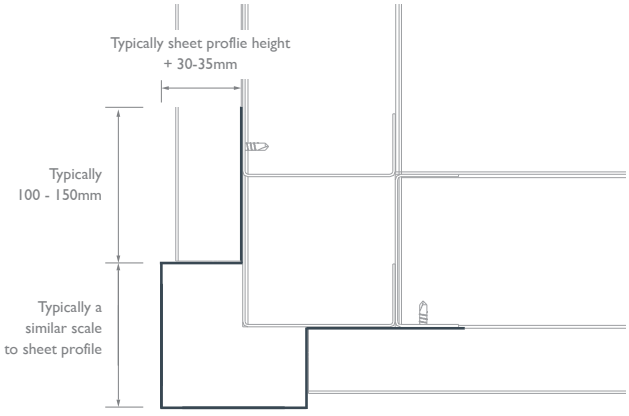
Drip edge
Discharges water away from wall reducing staining

Slight break
Stiffens edge and reduces oil canning

Birds beak
Stiffens edge and reduces oil canning

CORNER FLASHING





MAXIMUS 33

FOOTMOULD