Ph: 1300 155 155
www.stratco.com.au

CYCLONIC STEEL ROOF BATTEN (REGION C)

JULY 2014

Product Description

0.75mm BMT AS1397/G550 AZ150

Design Criteria

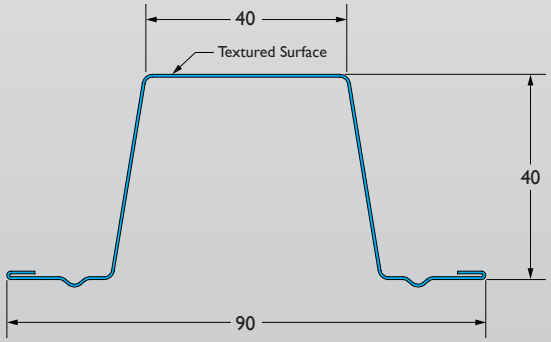
The following criteria were used in development of the tables:

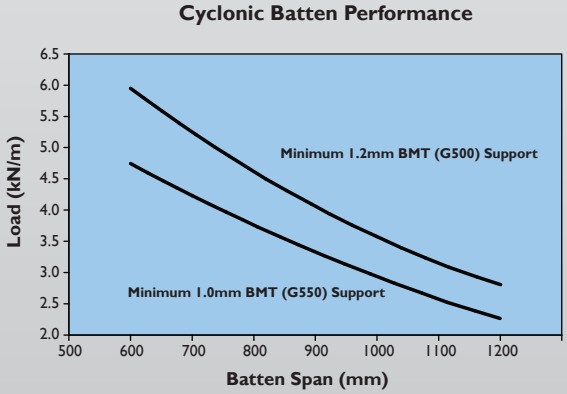
1. Region C with a design return period of 500 years
2. $V_R = F_C 66m/s$ (strength limit state), with $F_C = 1.05$
3. Ms/Mt/Md = 1.0
4. Local pressure factors: General areas, Kl = 1.0
   Roof edges, Kl = 2.0

	Terrain/height Multiplier (Mz,cat)			
Height (m)	**1.0**	**2.0**	**2.5**	**3.0**
5.0	1.05	0.91	0.87	0.83

Note: 5.0m is based on average roof height.

Pressure Coefficients:
Internal Cp,i = +0.7
External Cp,e = -0.9
Kc = 0.9





Limitations

1. Design loads and spacing are based on roof battens being continuous over minimum two spans. Cyclonic Roof Batten detail sheet is based on use with Stratco CGI and Superdek crest fixed profiles.
2. Similar crest fixed roof cladding profiles may be used on Stratco Cyclonic Batten, provided these profiles and their fixing screws have demonstrated performance to Low-High-Low cyclic testing requirements when fixed to 0.75mm BMT G550 steel supports.
3. Roof batten spacing may be limited by the maximum allowable roof sheeting spans. Refer to the relevant roof cladding sheet for spans and appropriate fixing requirements.
4. Batten spacing has been determined for domestic application, for alternative applications (or conditions outside of the design criteria or limitations below), utilise the Design Loads table to calculate relevant batten spacing.
5. House limitations:
   Maximum Batten Spacing table based on the following limitations:
   a) average roof height shall not exceed 5m with maximum 8.5m to the highest roof point.
   b) maximum width shall not exceed 16m (excluding eaves) and length shall not exceed five times the width.
   c) maximum roof pitch shall not exceed 35 degrees.
6. For roof slopes <10°, a local pressure factor of 3.0 applies within 1200mm of eaves corners. Utilise the Design Loads table to determine if batten spacing needs to reduce in these areas.

Notes:

1. Testing in accordance with the Building Code of Australia (BCA) - Low-High-Low Pressure Testing.
2. Design Criteria determined in accordance with AS/NZS1170.2 2011 & AS4055 2012.
3. Cyclonic Batten Testing, Report No. 146, 11/2011

Fastener Details

Steel	Min 1.0mm BMT	14-10 x 25mm hex head self drilling screws
Timber	Hardwood (F11)	Minimum 12 gauge timber fix screws embedded at least 35mm into timber
	Softwood (F5)	Minimum 12 gauge timber fix screws embedded at least 35mm into timber

Note: Roof Battens are secured with two screws per rafter or truss.

Design Loads

Span	600	700	800	900	1000	1100	1200
Load, 1.0mm BMT Support (kN/m)	4.74	4.23	3.76	3.33	2.93	2.58	2.26
Load, 1.2mm BMT Support (kN/m)	5.95	5.25	4.62	4.06	3.57	3.15	2.81

Maximum Batten Spacing into 1.0mm Support (mm)

Terrain Category	General Areas				Roof Edges*			
	Pz (kPa)	Rafter/Truss Spacing (mm)			Pz (kPa)	Rafter/Truss Spacing (mm)		
		600	900	1200		600	900	1200
1.0	4.57	1020	720	490	7.15	660	460	310
2.0	3.44	1380	960	650	5.37	880	610	420
2.5	3.14	1490	1040	710	4.91	950	670	450
3.0	2.86	1650	1160	790	4.47	1060	740	500

* Spacing is appropriate for areas within 1200mm of roof edge.

Maximum Batten Spacing into 1.2mm Support (mm)

Terrain Category	General Areas				Roof Edges*			
	Pz (kPa)	Rafter/Truss Spacing (mm)			Pz (kPa)	Rafter/Truss Spacing (mm)		
		600	900	1200		600	900	1200
1.0	4.57	1300	880	610	7.15	830	560	390
2.0	3.44	1730	1180	810	5.37	1100	750	520
2.5	3.14	1870	1270	880	4.91	1190	810	560
3.0	2.86	2080	1410	980	4.47	1330	900	620

* Spacing is appropriate for areas within 1200mm of roof edge.

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CYCLONIC STEEL ROOF BATTEN (REGION D)

JULY 2014

Product Description

0.75mm BMT AS1397/G550 AZ150

Design Criteria

The following criteria were used in development of the tables:

1. Region C with a design return period of 500 years
2. $V_R = F_D 80$m/s (strength limit state), with $F_D = 1.10$
3. Ms/Mt/Md = 1.0
4. Local pressure factors: General areas, Kl = 1.0
   Roof edges, Kl = 2.0

	Terrain/height Multiplier (Mz,cat)			
Height (m)	**1.0**	**2.0**	**2.5**	**3.0**
5.0	1.05	0.91	0.87	0.83

Note: 5.0m is based on average roof height.

Pressure Coefficients:
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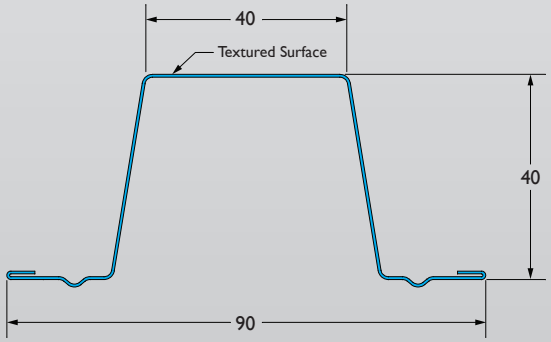

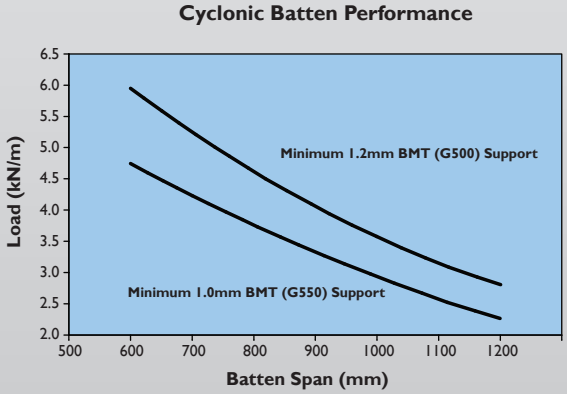

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Maximum Batten Spacing into 1.0mm Support (mm)

Terrain Category	General Areas				Roof Edges*			
	Pz (kPa)	Rafter/Truss Spacing (mm)			Pz (kPa)	Rafter/Truss Spacing (mm)		
		600	900	1200		600	900	1200
1.0	7.38	640	450	300	11.53	410	280	190
2.0	5.54	850	600	400	8.66	540	380	260
2.5	5.06	920	640	440	7.91	590	410	280
3.0	4.61	1020	720	490	7.20	650	460	310

* Spacing is appropriate for areas within 1200mm of roof edge.

Maximum Batten Spacing into 1.2mm Support (mm)

Terrain Category	General Areas				Roof Edges*			
	Pz (kPa)	Rafter/Truss Spacing (mm)			Pz (kPa)	Rafter/Truss Spacing (mm)		
		600	900	1200		600	900	1200
1.0	7.38	800	550	380	11.53	510	350	240
2.0	5.54	1070	730	500	8.66	680	460	320
2.5	5.06	1170	800	550	7.91	750	510	350
3.0	4.61	1290	880	600	7.20	820	560	380

* Spacing is appropriate for areas within 1200mm of roof edge.