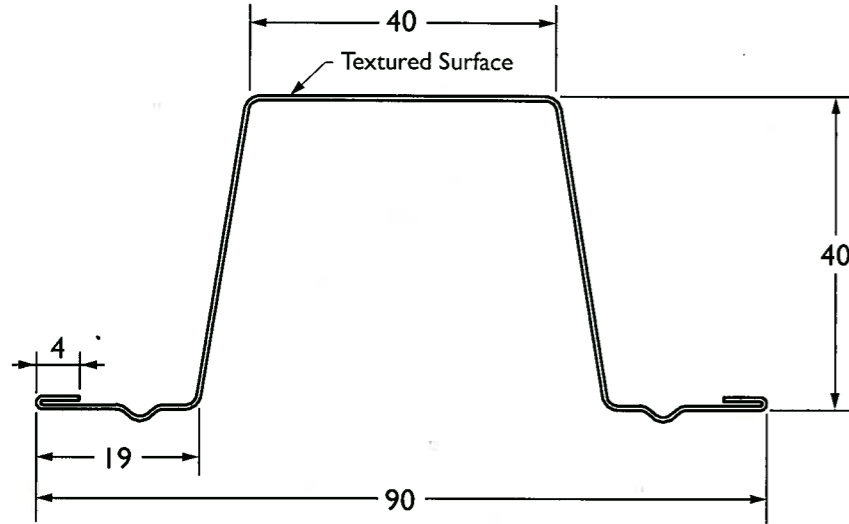


IN ACCORDANCE WITH NCC VOLUME 2 AMENDMENT 1 (SECTION P3.0), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



CYCLONIC STEEL ROOF BATTEN (REGION C)



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	4.23	1120	780	530	6.61	710	500	340
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

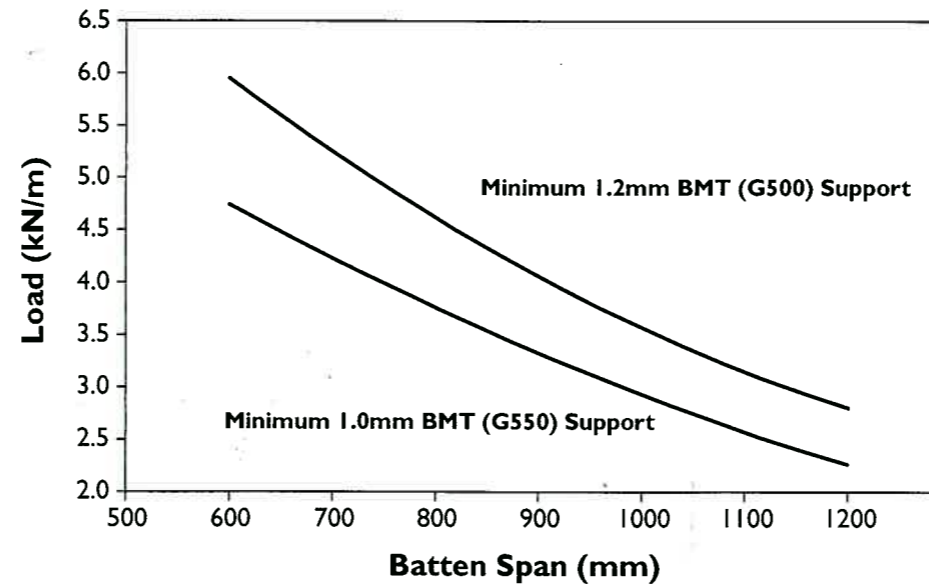
* Spacing is appropriate for areas within 1200mm of roof edge.

Maximum Batten Spacing into Timber or 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	4.23	1400	950	660	6.61	890	610	420
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.

Cyclonic Batten Performance



Fastener Details

Material	Support Requirement	Fastener Specification
Steel	Min 1.0mm BMT	14-10 x 25mm hex head self drilling screws
Timber	Minimum JD4	Minimum 12 gauge timber fix screws, thread embedded at least 35mm into timber

Note: Roof Battens are secured with two screws per rafter or truss. All screws minimum class 4 finish.

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, Timber or 1.2mm BMT Support (kN/m)	5.95	5.25	4.62	4.06	3.57	3.15	2.81

Product Name

CYCLONIC STEEL ROOF BATTEN

Product Description

0.75mm BMT ASI397/G550 AZI50

Manufacturer's Name

Stratco Pty Ltd

780 Stuart Highway, Berrimah NT 0828. ABN 30 007 528 850

Design Criteria

The following criteria were used in development of the tables:

- Region C with a design return period of 500 years
- $V_s = 66\text{m/s}$ (strength limit state).
- $M_s/M_t/M_d = 1.0$, $M_c = 1.05$
- Local pressure factors: General areas, $K_l = 1.0$
Roof edges, $K_l = 2.0$
Extreme corners, $K_l = 3.0$ (roof slopes $< 10^\circ$)
Ridge corners, $K_l = 3.0$ (roof slopes $\geq 10^\circ$)

Height (m)	Terrain/height Multiplier ($M_{z,cat}$)			
	1.0	2.0	2.5	3.0
5.0	1.01	0.91	0.87	0.83

Note: 5.0m is based on average roof height.

Pressure Coefficients:

Internal $C_{p,i} = +0.7$
External $C_{p,e} = -0.9$
 $K_{c,e} = K_{c,i} = 0.9$

Limitations

- Design loads and spacing are based on roof battens being continuous over minimum three spans.
- 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.
- 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.
- 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.
- For roof slopes $< 10^\circ$, a local pressure factor of 3.0 applies within 1200mm of eaves corners. For roof slopes $\geq 10^\circ$, a local pressure factor of 3.0 applies within 1200mm of ridge corners. Utilise the Design Loads table to determine if batten spacing needs to reduce in these areas.
- In accordance with AS/NZS1170.2 2021, for $h/d > 0.5$ when $C_{p,e}$ exceeds 0.9 in magnitude, utilise the Design Loads table to calculate relevant batten spacing.

Accepted for Inclusion

DTCM ref: **22-2535-01**

Chairman's Signature:

Chairman's Name: **Paul Nowland**

Date of Approval: **28/11/2022** Expiry Date: **28/11/2027**

Notes covering basis of DTC (Relevant test reports etc)

- Testing in accordance with the NCC Building Code of Australia 2019 Amendment 1- Volume Two, Low-High-Low Pressure Testing.
- Design Criteria determined in accordance with AS/NZS1170.2 2021 & AS4055 2021.
- Cyclonic Batten Testing, Report No. 146, 24/11/2011, Stratco Testing Facility, Gepps Cross, South Australia.

*Checking Engineers Certification

Name: **Glenn Turner**
Registration Number: **NER 3823731**
Date: **5/08/2022**
Signature:

*registered as a structural engineer in Australia

*Certifying Engineers Certification

Name: **MATTHEW MAMMONE**
NT Registration Number: **243890ES**
Date: **6/9/2022**
Signature:

*registered as a structural engineer in the Northern Territory