

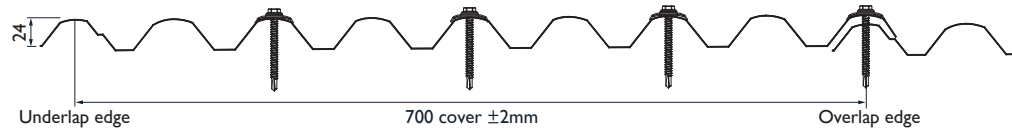
This product has been determined to satisfy NCC Performance Requirement H1P1 for structural resistance of materials and forms of construction in high wind areas

SMARTSPAN® ROOF CLADDING

Region C



Fixing screws to comply to AS3566. I-2002 Self-drilling screws for the building and construction industries - General requirements and mechanical properties.



Fastener Details		
Steel	Minimum 1.5mm (BMT)	Class 4 minimum 14g x 55mm self drilling screw with cyclonic washer assembly.
Timber	Hardwood F11/JD2 or stronger	Class 4 minimum 14g x 70mm self drilling screw with cyclonic washer assembly, embedded at least 35mm into timber.
	Softwood F7/JD4 or stronger	Class 4 minimum 14g x 70mm self drilling screw with cyclonic washer assembly, embedded at least 35mm into timber.

Note: For spans > 900mm side lap fixing midspan using an 8x15mm self drilling stitch screw with seal or 3.2mm sealed blind rivet is recommended (maximum 900mm centres). This provides a weather proof seal and secures the overlap.

Design Pressures - Strength Limit State Capacity (kPa)						
Span (mm)	0.42mm BMT			0.48mm BMT		
	Single	End	Internal	Single	End	Internal
400	10.76	10.76	11.77	12.00	12.00	13.12
1000	6.62	6.62	7.24	7.35	7.35	8.04
1300	5.05	5.05	5.53	5.61	5.61	6.13
1600	3.78	3.78	4.13	4.20	4.20	4.60
1900	2.79	2.79	3.05	3.13	3.13	3.42
2200	2.09	2.09	2.29	2.39	2.39	2.61
2500	1.68	1.68	1.84	1.99	1.99	2.17
2700	1.57	1.57	1.72	1.90	1.90	2.08

Maximum Allowable Spans (mm)																						
		3m Maximum Average Roof Height							5m Maximum Average Roof Height							10m Maximum Average Roof Height						
Terrain Category	KI	Pz (kPa)	0.42mm BMT			0.48mm BMT			Pz (kPa)	0.42mm BMT			0.48mm BMT			Pz (kPa)	0.42mm BMT			0.48mm BMT		
			Single	End	Internal	Single	End	Internal		Single	End	Internal	Single	End	Internal		Single	End	Internal	Single	End	Internal
1.0	1.0	3.90	1350	1560	1650	1670	1670	1760	4.23	1350	1480	1570	1590	1590	1680	4.84	1340	1340	1430	1450	1450	1540
	1.5	5.00	1310	1310	1400	1420	1420	1510	5.42	1220	1220	1320	1330	1330	1430	6.20	1070	1070	1170	1190	1190	1280
	2.0	6.10	1090	1090	1190	1200	1200	1300	6.61	1000	1000	1100	1120	1120	1210	7.56	860	860	940	970	970	1060
	3.0	8.30	750	750	820	870	870	960	8.99	650	650	710	780	780	860	10.28	460	460	510	620	620	670
2.0	1.0	3.44	1350	1690	1780	1800	1800	1890	3.44	1350	1690	1780	1800	1800	1890	4.15	1350	1500	1590	1610	1610	1700
	1.5	4.40	1350	1440	1530	1550	1550	1640	4.40	1350	1440	1530	1550	1550	1640	5.32	1240	1240	1340	1350	1350	1450
	2.0	5.37	1230	1230	1330	1340	1340	1440	5.37	1230	1230	1330	1340	1340	1440	6.48	1020	1020	1120	1140	1140	1240
	3.0	7.30	900	900	980	1000	1000	1100	7.30	900	900	980	1000	1000	1100	8.82	680	680	740	810	810	880
2.5	1.0	3.14	1350	1780	1870	1890	1890	1990	3.14	1350	1780	1870	1890	1890	1990	3.51	1350	1670	1760	1780	1780	1870
	1.5	4.02	1350	1530	1620	1640	1640	1730	4.02	1350	1530	1620	1640	1640	1730	4.50	1350	1420	1510	1530	1530	1620
	2.0	4.91	1330	1330	1420	1440	1440	1530	4.91	1330	1330	1420	1440	1440	1530	5.49	1210	1210	1300	1320	1320	1410
	3.0	6.67	990	990	1090	1100	1100	1200	6.67	990	990	1090	1100	1100	1200	7.46	870	870	950	980	980	1080
3.0	1.0	2.86	1350	1800	1960	1990	1990	2090	2.86	1350	1800	1960	1990	1990	2090	2.86	1350	1800	1960	1990	1990	2090
	1.5	3.66	1350	1630	1710	1730	1730	1830	3.66	1350	1630	1710	1730	1730	1830	3.66	1350	1630	1710	1730	1730	1830
	2.0	4.47	1350	1420	1520	1530	1530	1620	4.47	1350	1420	1520	1530	1530	1620	4.47	1350	1420	1520	1530	1530	1620
	3.0	6.07	1090	1090	1190	1210	1210	1310	6.07	1090	1090	1190	1210	1210	1310	6.07	1090	1090	1190	1210	1210	1310

Notes covering basis of DTC (Relevant test reports etc)

- Cyclonic Fatigue Testing in accordance with the NCC 2022 BCA Volume Two - Low-High-Low Pressure Testing.
- Design Criteria determined in accordance with AS/NZS 1170.2:2021 Wind Actions.
- Cyclonic Testing of Smartspan® Roof Sheeting, Report no. 71 revision A, 05/2014, Stratco Testing Facility, Gepps Cross, South Australia.

Checking Engineer

Name: Glenn Turner
Registration Number: NER 3823731
Date: 02/04/2026
Signature:

Must be an Australian registered structural engineer

Certifying Engineer

Name: Matthew Mammone
NT Registration Number: 243890 ES
Date: 02/04/2026
Signature:

Must be a registered structural engineer in the Northern Territory

Product Name

Smartspan® Roof Cladding

Product Description

Stratco Smartspan® Roof Cladding is manufactured from 0.42 or 0.48 BMT G550 steel. Cladding available in colour or zinc/al finish, minimum AM100 coating.

Manufacturer's Details

Stratco (Australia) Pty Ltd
780 Stuart Highway, Berrimah NT 0828. ABN 30 007 528 850

Design Criteria

The following criteria were used in the development of the tables:
Region C with an annual probability of exceedence of 500 years (strength), 25 years (serviceability).

- VR = 66m/s (limit state), with $M_c = 1.05$
- $M_s/M_e/M_d = 1.00$
- $K_{c,e} = K_{c,i} = 0.9$
- Importance Level 2

Height (m)	Terrain/Height Multiplier (Mz,cat)			
	1.0	2.0	2.5	3.0
≤3	0.97	0.91	0.87	0.83
≤5	1.01	0.91	0.87	0.83
≤10	1.08	1.00	0.92	0.83

Pressure Coefficients:

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

Design Criteria determined in accordance with AS/NZS 1170.2:2021 Wind Actions.

Limitations

- Design pressures and maximum allowable spans are based on crest fasteners to every second crest as per detail above.
- The maximum allowable spans have considered serviceability requirements.
- When fixing over insulation, screw length should be increased to ensure sufficient penetration of the fastener.
- When fixing to supports, roofing spans may be limited by the allowable support spacing. Refer to relevant engineering specifications.
- Maximum allowable overhang is 200mm for roof cladding.
- For pressure coefficients which vary from those specified in the design criteria, refer AS/NZS 1170.2:2021 Wind Actions for evaluation of pressure, P_z . Examples include elevated buildings and h/d ratios which exceed 0.5.
- Refer AS/NZS 1170.2:2021 Structural Design Actions Part 2: Wind Actions for definition of local pressure zones.
- Smartspan® roofing requires minimum 2° roof pitch.
- Walk flat footed over supports where possible keeping your weight evenly distributed over the soles of your shoes spread over as many ribs as possible.

Accepted for inclusion in Deemed to Comply Manual

DTCM drawing number: M/462/01-01

Chairperson Signature:

Chairperson Name: Elisha Harris

Date of Approval: 30/04/2026 Expiry Date: 30/04/2031