

## Stramit® Cladding Solutions for Region C Using Stramit® Cyclonic Roof Battens

This update covers possible cladding solutions for Region C wind pressures, using Stramit® Cyclonic Battens. Wind pressure capacities are based on the latest LHL testing data for roofs, and on the AS4040.3 testing regime for walls. Ongoing research and development ensures that Stramit® products are tested or witnessed by independent organisations such as the Cyclone Testing Station at James Cook University and the University of Adelaide.

**Note: Data subject to change because of ongoing testing. See the Stramit website for latest information.**

### Assumptions

Region C, Importance Level 2, No shielding, Flat topography  
 Roof height 5m or 10m, Roof height/building length  $\leq 0.5$   
 Roof slope  $\leq 10$  degrees  
 Enclosed building, Dominant opening on one wall

Strength:  $V_R = 69$  m/s

Serviceability:  $V_R = 47$  m/s

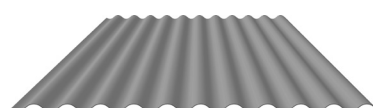
$M_d = M_t = M_s = C_{dyn} = 1.0$

$C_{p,i} = +0.2$  (service),  $+0.7$  (strength)

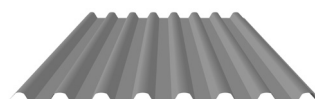
$C_{p,e} = -0.9$  (roof),  $-0.65$  or  $+0.7$  (wall)

Combination factors  $K_{c,e} = K_{c,i} = 0.9$

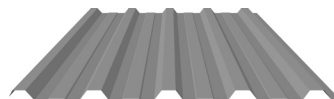
$K_a = K_p = 1.0$



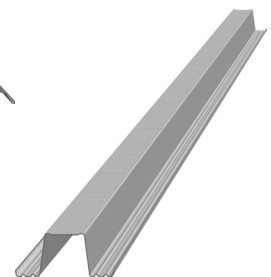
Stramit® Corrugated



Stramit Longspan®



Stramit Monoclad®



Stramit® Cyclonic Roof Batten

### Fixing

STRAMIT® SHEETING	FASTENER DETAILS		
	No per sheet per support	Roofing screws** – crest fixed with Buildex cyclone caps or equivalent	Walling screws* – pan/valley fixed
		0.75mm BMT Stramit® cyclonic batten supports	
Monoclad®	4	Buildex® 15-15x55mm Batten Tek® or M6-11x50mm Roof Zips®	Buildex® 15-15x25mm Batten Tek® or M6-11x25mm Roof Zips®
Longspan®	5		
Corrugated	5		

\* All walling spans should have No 8-15x15mm sidelap fasteners at midspan

\*\* Roof sheeting spans over 900mm should have No 8-15x15mm sidelap fasteners at midspan

All screws should be hex-head self drilling & threading screws.

All other information as given in Cyclonic Areas Roof & Wall Cladding design supplement on the Stramit website.

# Stramit® Cladding Solutions for Region C with Stramit® Cyclonic Battens

STRAMIT® ROOFING SOLUTIONS FOR REGION C - DESIGN PRESSURES AS PER AS/NZS 1170.2:2011																					
Roof Height	Terrain Category	Local press factor LPF K <sub>i</sub>	Roof Pressure (kPa)		Max Batten spacings (mm) for Batten span (mm) & fixing 2 No 14 screws into 1.5 G450				Solutions for Stramit® Roofing												
									Monoclad® with cyclone caps				Longspan® with cyclone caps				Corrugated with cyclone caps				
									0.42mm BMT		0.48mm BMT		0.42mm BMT		0.48mm BMT		0.42mm BMT		0.48mm BMT		
Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal										
<=5	1&2	1	1.45	3.71	1940	1460	970	730	900	850	900	850	1250	1150	1150	900	1150	1050			
		1.5	2.04	4.76	1520	1140	760	570	750	650	750	650	1000	900	1000	900	900	800	900	800	
		2	2.63	5.80	1240	930	620	460	550	550	550	550	800	750	800	750	750	700	750	700	
	2.5	3	3.81	7.89	910	680	450	340	-	-	-	450	550	550	550	550	550	550	500	550	500
		1	0.99	3.15	2290	1720	1140	860	1100	1000	1100	1000	1450	1350	1450	1350	1200	900	1350	1200	
		1.5	1.40	4.04	1790	1340	890	670	850	800	850	800	1150	1050	1150	1050	1050	900	1050	950	
	3	2	1.81	4.92	1460	1100	730	550	700	650	700	650	950	850	950	850	850	800	850	800	
		3	2.62	6.69	1080	810	540	400	500	450	500	450	700	650	700	650	650	550	650	550	
		1	0.90	2.63	2740	2060	1370	1030	1300	1150	1300	1150	1750	1600	1750	1600	1200	900	1600	1200	
<=10	1&2	1.5	1.27	3.37	2140	1600	1070	800	1050	900	1050	900	1400	1250	1400	1250	1200	900	1300	1150	
		2	1.64	4.11	1750	1310	870	650	850	750	850	750	1150	1050	1150	1050	1050	900	1050	950	
		3	2.38	5.59	1290	960	640	480	600	550	600	550	850	750	850	750	800	700	800	700	
	2.5	1	1.65	4.11	1750	1310	870	650	850	750	850	750	1150	1050	1150	1050	1050	900	1050	950	
		1.5	2.32	5.27	1370	1020	680	510	650	550	650	550	850	800	850	800	800	750	800	750	
		2	2.99	6.43	1120	840	560	420	500	450	500	450	750	650	750	650	650	600	650	600	
	3	3	4.34	8.74	820	620	410	310	-	-	-	-	500	450	500	450	500	450	500	450	
		1	1.10	3.67	1960	1470	980	730	950	850	950	850	1300	1150	1300	1150	1150	900	1150	1050	
		1.5	1.55	4.71	1530	1150	760	570	750	650	750	650	1000	900	1000	900	900	850	900	850	
3	2	2.00	5.74	1260	940	630	470	600	550	600	550	800	750	800	750	750	700	750	700		
	3	2.90	7.81	920	690	460	340	-	-	-	-	600	550	600	550	550	500	550	500		
	1	0.90	3.26	2210	1660	1100	830	1050	950	1050	950	1450	1300	1450	1300	1200	900	1300	1200		
3	1.5	1.27	4.17	1730	1290	860	640	850	750	850	750	1100	1050	1100	1050	1050	900	1050	950		
	2	1.64	5.09	1420	1060	710	530	700	600	700	600	900	850	900	850	850	800	850	800		
	3	2.38	6.92	1040	780	520	390	500	450	500	450	700	600	700	600	600	550	600	550		

STRAMIT® WALLING SOLUTIONS FOR REGION C - DESIGN PRESSURES AS PER AS/NZS 1170.2:2011																				
Wall Height	Terrain Category	Local press factor LPF K <sub>i</sub>	Wall Pressure (kPa)		Max Batten spacings (mm) for Batten span (mm) & fixing 2 No 14 screws into 1.5 G450				Solutions for Stramit® Roofing											
									Monoclad®				Longspan®				Corrugated			
									0.42mm BMT		0.48mm BMT		0.42mm BMT		0.48mm BMT		0.42mm BMT		0.48mm BMT	
Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal									
<=5	1&2	1	1.55	3.54	2040	1530	1020	760	950	850	950	850	1350	1200	1350	1200	1200	1100	1200	1100
		1.5	1.97	4.64	1550	1160	770	580	750	700	750	700	1000	900	1000	900	900	850	900	850
		2	1.06	3.00	2400	1800	1200	900	1150	1050	1150	1050	1550	1400	1550	1400	1450	1300	1450	1300
	2.5	1.5	1.06	3.30	2190	1640	1090	820	1050	950	1050	950	1400	1300	1400	1300	1300	1150	1300	1150
		2	1.35	3.94	1830	1370	910	680	850	800	850	800	1150	1100	1150	1100	1100	1000	1100	1000
		1	0.97	2.51	2880	2160	1440	1080	1350	1250	1350	1250	1850	1700	1850	1700	1700	1500	1500	1500
	3	1.5	0.97	2.76	2620	1960	1310	980	1250	1150	1250	1150	1700	1550	1700	1550	1550	1400	1500	1400
		2	1.23	3.29	2190	1640	1090	820	1050	950	1050	950	1400	1300	1400	1300	1300	1150	1300	1150
		1	1.76	3.92	1840	1380	920	690	850	800	850	800	1200	1100	1200	1100	1100	1000	1100	1000
<=10	1&2	1.5	1.76	4.31	1670	1250	830	620	800	750	800	750	1100	1000	1100	1000	1000	900	1000	900
		2	2.24	5.14	1400	1050	700	520	650	600	650	600	900	850	900	850	850	750	850	750
		1	1.17	3.50	2060	1540	1030	770	1000	850	1000	850	1350	1200	1350	1200	1200	1100	1200	1100
	2.5	1.5	1.17	3.85	1880	1410	940	700	850	800	850	800	1200	1100	1200	1100	1100	1000	1100	1000
		2	1.50	4.59	1570	1180	780	590	750	700	750	700	1000	900	1000	900	950	850	950	850
		1	0.97	3.11	2320	1740	1160	870	1100	1000	1100	1000	1500	1350	1500	1350	1400	1250	1400	1250
	3	1.5	0.97	3.41	2120	1590	1060	790	1000	900	1000	900	1350	1250	1350	1250	1250	1150	1250	1150
		2	1.23	4.07	1770	1330	880	660	850	800	850	800	1150	1050	1150	1050	1050	950	1050	950

■ May be limited by sheeting spans

■ May be limited by batten spacings

### Span Configurations

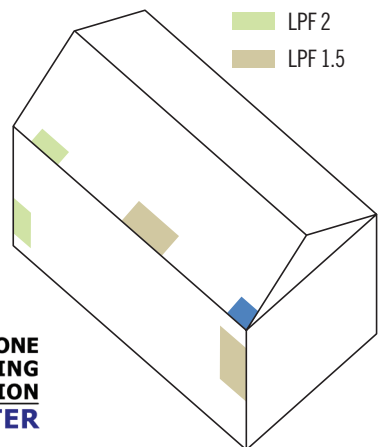
Internal = Internal spans with end spans at least 20% shorter

Equal = All spans equal, with minimum of 3 spans

### Local Pressure Factors

Corner and edge areas may experience higher pressures and require reduced spans or increased fixing.

- LPF 3
- LPF 2
- LPF 1.5



For further information call (08) 9493 8800 Or visit [www.stramit.com.au](http://www.stramit.com.au)