

Stramit® Cladding Solutions for Region C

This update covers cladding solutions for Region C wind pressures. 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 ≤ 0.5
 Roof slope ≤ 10 degrees
 Enclosed building, Dominant opening on one wall

Strength: $V_R = 69$ m/s

Serviceability: $V_R = 47$ m/s

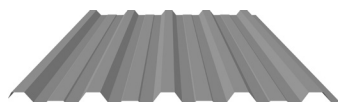
$M_d = M_t = M_s = C_{dyn} = 1.0$

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

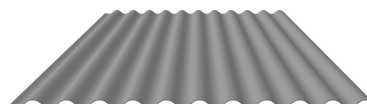
$C_{p,e} = -0.9$ (roof), -0.65 or $+0.7$ (wall)

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

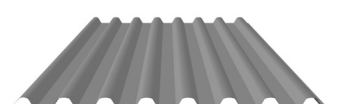
$K_a = K_p = 1.0$



Stramit Monoclad®



Stramit® Corrugated



Stramit Longspan®

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	
		Steel supports #	Timber supports	Steel supports #	Timber supports
Monoclad®	4	No 14-10x50	No 14-10x65 Type 17	No 14-10x20	No 14-10x25 Type 17
Corrugated	5	No 14-10x42	No 14-10x65 Type 17		
Longspan®	4	No 14-10x50	No 14-10x65 Type 17		

* 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 steel supports should be minimum 1.5mm thick

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

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

Stramit® Cladding Solutions for Region C

STRAMIT® ROOFING SOLUTIONS FOR REGION C - DESIGN PRESSURES AS PER AS/NZS 1170.2:2011																
Roof Height	Terrain Category	Local press factor LPF K_f	Roof Pressure (kPa)		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	
serv	strength	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	
<=5	1&2	1	1.45	3.71	1600	1350	2000	1700	1600	1500	2050	1850	1200	900	1600	1200
		1.5	2.04	4.76	1350	1250	1700	1600	1350	1300	1650	1500	1200	900	1500	1200
		2	2.63	5.80	1150	1100	1500	1400	1200	1150	1400	1300	1150	900	1350	1200
	2.5	1	0.99	3.15	1700	1350	2100	1700	1750	1650	2100	2100	1200	900	1600	1200
		1.5	1.40	4.04	1450	1350	1900	1700	1500	1400	1850	1700	1200	900	1600	1200
		2	1.81	4.92	1300	1200	1650	1550	1350	1250	1600	1450	1200	900	1550	1200
	3	1	0.90	2.63	1700	1350	2100	1700	2100	1750	2100	2100	1200	900	1600	1200
		1.5	1.27	3.37	1700	1350	2100	1700	1700	1600	2100	2050	1200	900	1600	1200
		2	1.64	4.11	1450	1350	1850	1700	1450	1400	1850	1700	1200	900	1600	1200
<=10	1&2	1	1.65	4.11	1450	1350	1850	1700	1450	1400	1850	1700	1200	900	1600	1200
		1.5	2.32	5.27	1250	1150	1600	1500	1300	1200	1500	1400	1200	900	1400	1200
		2	2.99	6.43	1100	1000	1400	1250	1150	1050	1300	1200	1100	900	1300	1200
	2.5	1	1.10	3.67	1650	1350	2000	1700	1600	1500	2050	1850	1200	900	1600	1200
		1.5	1.55	4.71	1350	1250	1700	1600	1400	1300	1650	1500	1200	900	1600	1200
		2	2.00	5.74	1150	1100	1500	1400	1200	1150	1400	1300	1150	900	1450	1200
	3	1	0.90	3.26	1700	1350	2100	1700	1700	1600	2100	2100	1200	900	1600	1200
		1.5	1.27	4.17	1450	1350	1850	1700	1450	1400	1800	1700	1200	900	1600	1200
		2	1.64	5.09	1250	1200	1650	1550	1300	1250	1550	1450	1200	900	1600	1200
	3	2.38	6.92	1050	950	1300	1150	1050	1000	1200	1100	1050	900	1250	1150	

STRAMIT® WALLING SOLUTIONS FOR REGION C - DESIGN PRESSURES AS PER AS/NZS 1170.2:2011																
Wall Height	Terrain Category	Local press factor LPF K_f	Wall Pressure (kPa)		Solutions for Stramit® Walling											
					Monoclad®				Longspan®				Corrugated			
					0.42mm BMT		0.48mm BMT		0.42mm BMT		0.48mm BMT		0.42mm BMT		0.48mm BMT	
serv	strength	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	Internal	Equal	
<=5	1&2	1	1.55	3.54	1300	1200	1350	1250	1350	1200	1500	1400	1550	1450	1500	1500
		1.5	1.55	3.89	1200	1150	1250	1150	1200	1100	1400	1300	1450	1300	1500	1450
		2	1.97	4.64	1100	1000	1100	1050	1000	900	1250	1150	1400	1150	1400	1300
	2.5	1	1.06	3.00	1400	1350	1500	1400	1600	1450	1750	1600	1750	1550	1500	1500
		1.5	1.06	3.30	1350	1250	1400	1300	1450	1300	1600	1450	1650	1500	1500	1500
		2	1.35	3.94	1200	1100	1250	1150	1200	1100	1400	1300	1400	1300	1500	1450
	3	1	0.97	2.51	1800	1500	1800	1700	1900	1700	2100	2100	1800	1650	1500	1500
		1.5	0.97	2.76	1500	1400	1700	1450	1700	1550	2100	1750	1800	1600	1500	1500
		2	1.23	3.29	1350	1250	1400	1300	1450	1300	1600	1450	1650	1500	1500	1500
<=10	1&2	1	1.76	3.92	1200	1150	1250	1150	1200	1100	1400	1300	1400	1300	1500	1450
		1.5	1.76	4.31	1150	1050	1150	1100	1100	1000	1300	1250	1300	1150	1450	1400
		2	2.24	5.14	1000	950	1050	950	900	850	1150	1050	1100	1050	1300	1200
	2.5	1	1.17	3.50	1300	1200	1350	1250	1350	1200	1550	1400	1550	1450	1500	1500
		1.5	1.17	3.85	1200	1150	1250	1150	1200	1100	1400	1300	1450	1350	1500	1450
		2	1.50	4.59	1100	1000	1100	1050	1050	950	1250	1150	1200	1150	1400	1300
	3	1	0.97	3.11	1400	1300	1450	1350	1500	1400	1700	1550	1700	1500	1500	1500
		1.5	0.97	3.41	1300	1250	1350	1300	1400	1250	1550	1450	1600	1450	1500	1500
		2	1.23	4.07	1150	1100	1200	1150	1150	1050	1350	1250	1400	1250	1500	1450

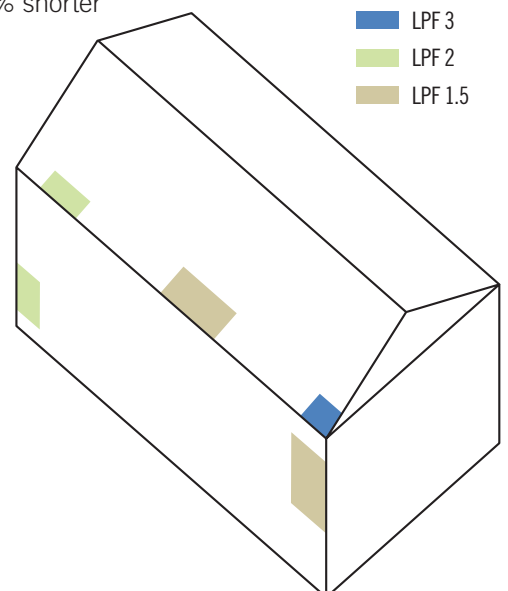
Span Configurations

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

Equal = All spans equal, with minimum of 3 spans

Local Pressure Factors

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



For further information call (08) 9493 8800

Or visit www.stramit.com.au