



BondorPanel/SmoothPanel EPS-FR SL Core 0.6mm Steel Skins Wall Span Table for Housing Application

Non-Cyclonic

Wind Class	ULS Design Wind Pressure (kPa)	Panel Thickness																	
		50 mm		75 mm		90 mm		100 mm		125 mm		140 mm		150 mm		200 mm		250 mm	
		Max Span (m)		Max Span (m)		Max Span (m)		Max Span (m)		Max Span (m)		Max Span (m)		Max Span (m)		Max Span (m)		Max Span (m)	
		Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span	Single Span	Multi-Span
N1	-0.73	4.2	4.5	5.7	5.7	6.0	6.0	6.6	6.6	7.2	7.2	7.8	7.8	8.1	8.1	9.3	9.3	9.9	9.9
N2	-1.00	3.9	3.9	4.8	4.8	5.1	5.1	5.4	5.4	6.3	6.3	6.6	6.6	6.9	6.9	7.8	7.8	8.7	8.7
N3	-1.58	2.4	2.4	3.9	3.6	4.2	4.2	4.2	4.2	4.8	4.8	5.1	5.1	5.4	5.4	6.3	6.3	6.9	6.9
N4	-2.34	1.5	1.5	3	2.4	3.3	3	3.6	3.3	3.9	3.9	4.2	4.2	4.5	4.5	5.1	5.1	5.7	5.7

Notes:

- Wind speeds and coefficients based on AS 4055 - Wind Loads for Housing.
- Wall pressure coefficients based on the following worst case assumptions:
 - External Pressure - Ratio of building height to least horizontal dimension on plan, $h/d < 0.5$. $C_{pe} = -0.65$
 - Internal Pressure - Non-Cyclonic - Building has no dominate openings & more than one permeable wall or is effectively sealed. $C_{pi} = +0.2$
 - Local Pressure - Least Horizontal Dimension on Plan $< 20m$ or Building Height $< 4m$ ($a = 4m$). $K_l = 1.5$
 - Combination Factor - $K_c = 0.9$
 - Non-cyclonic - $C_{fig} = -1.05$
- Serviceability deflection limit of span/150 has been allowed for.
- 4 x 14g Tek screw or 2 x Mushroom head bolt fixings at each line of support per panel are required.
- Span tables have been developed by Bligh Tanner Consulting Engineers by interpretation of physical testing conducted & reported by BRANZ.