

Kingspan Facades
UK & Ireland



QuadCore® Evolution Axis Wall Panel Product Data Sheet

Panelised Facade System



POWERED BY
QuadCore®
TECHNOLOGY


Kingspan®

Product Data

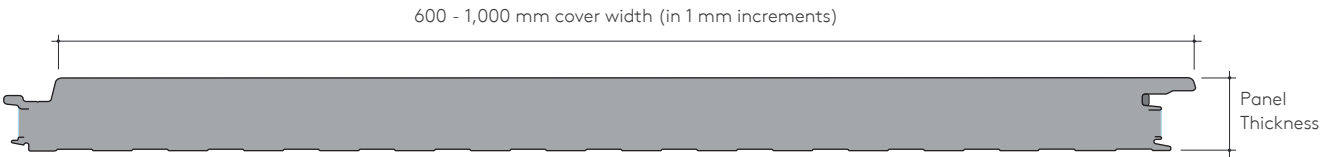
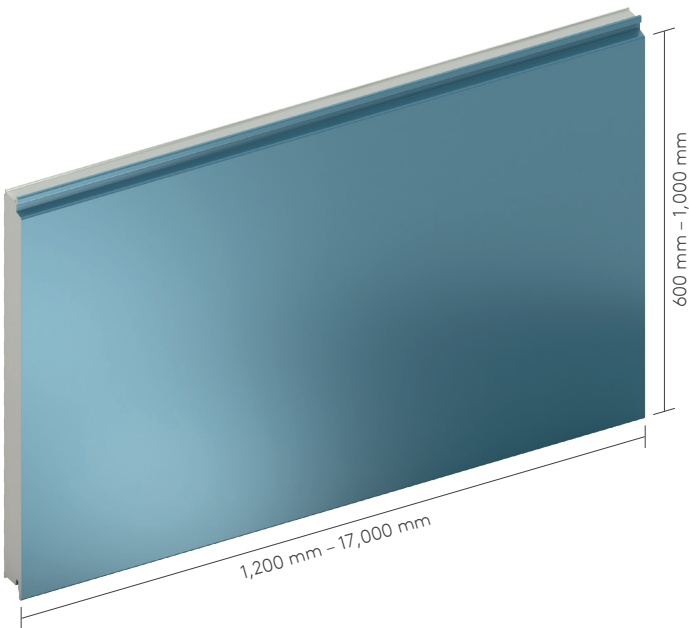
Applications

QuadCore® Evolution Axis Wall Panel is a secret-fix insulated wall panel delivering a clean, smooth, unprofiled and aesthetically appealing modern solution.

Available Lengths

Standard Lengths (m)	1.2 - 12.0
Longer Lengths (non-standard) (m)	12.0 - 17.0
Shorter Lengths (non-standard) (m)	Below 1.2
PPC Coated Standard Lengths (m)	2.0 - 12.0

Note: Additional costs and transport restrictions may apply for non-standard lengths. All lengths may change for export (outside of the UK).



Dimensions, Weight & Thermal Performance

Core Thickness (mm)	45*	54*	60*	70*	74*	80	90	100	120	140	150
U-Value (W/m²K)	0.46	0.35	0.32	0.27	0.25	0.23	0.20	0.19	0.15	0.13	0.12
Weight (kg/m²)	9.9	10.3	10.5	10.9	11.0	11.3	11.6	12.0	12.8	13.5	13.9

The QuadCore® insulation used in QuadCore® Evolution Axis Wall Panels has a Thermal Conductivity (λ) of 0.018 W/m.K
QuadCore® Evolution Axis Wall Panels have a Thermal Transmittance (U-Value), calculated using the method required by the Building Regulations Part L2 (England & Wales), Building Standards Section 6 (Scotland), Part L (Republic of Ireland) and Part F2 (Northern Ireland).
* The highlighted thicknesses are not available in Elementa PPC coating.

Insulation Core

QuadCore® Evolution Axis Wall Panels are manufactured with an HCFC, CFC and HFC free QuadCore® insulation core.



Product Data

Certification and Testing

Reaction to Fire

QuadCore® Evolution Axis Wall Panel is classified B-s1,d0, when tested on the internal face of the product, according to the European Reaction to Fire classification system (Euroclasses) EN 13501-1: 2018 under the certified name AWP Product Family when using the following internal liners:

- CLEANsafe 15, CLEANsafe 25, CLEANsafe 55, CLEANsafe 120 and AQUAsafe 55.

Please contact Kingspan Tech-eXchange for information relating to the external face.

Fire Resistance

Fire resistance classifications are subject to panel thickness, orientation, method of assembly, and steel coating. Please contact Kingspan Tech-eXchange for project specific details.

Insurer Approvals

QuadCore® Evolution Axis Wall Panel is tested to:

- LPS 1181 Part 1: Issue 1.2 Requirements and tests for built-up cladding and sandwich panel systems for use as the external envelope of buildings certified to:
 - LPS 1181-1 Grade EXT-B under the certified name Kingspan IPN QuadCore® Benchmark Evolution for thicknesses 45 – 150 mm.
- FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials for thicknesses:
 - 45 – 150 mm and panel widths of 900 mm and 1000 mm.
 - 74 – 150 mm and panel width of 600 mm.
- FM 4881 approval standard for class 1 exterior wall systems for thicknesses:
 - 45 – 150 mm and panel widths of 900 mm and 1000 mm.
 - 74 – 150 mm and panel width of 600 mm.
- FM 4882 approval standard for class 1 interior wall and ceiling materials or systems for smoke sensitive occupancies for thicknesses:
 - 45 – 150 mm and panel widths of 900 mm and 1000 mm.
 - 74 – 150 mm and panel width of 600 mm.

FM approvals are subject to the following certified names:

- For 1000 mm widths: KS1000 QuadCore® Evolution Axis.
- For 900 mm widths: KS900 QuadCore® Evolution Axis.
- For 600 mm widths: KS600 QuadCore® Evolution Axis.

Insurer approvals are large scale testing regimes that provide objective third-party testing, which is underpinned by quarterly, bi-annual and annual factory surveillance audits (depending on the region) to verify compliance. Insurer approvals are subject to panel thickness, cover width, orientation, method of assembly, steel coating and manufacturing facility. Please contact Kingspan Tech-eXchange for further information.



Environmental

Kingspan Insulated Panels produced in the UK and Ireland are certified to BES 6001 (Framework Standard for the Responsible Sourcing of Construction Products) 'Good'.

In addition, facilities located in Kingscourt, Holywell and Sherburn generate renewable energy onsite which contributes to that sites energy mix.

Recycled content calculations are available for all QuadCore® products via technical services. Kingspan insulated panels can directly contribute to BREEAM® / LEED® credits.

Air Leakage

An air leakage rate of 3 m³/hr/m² at 50Pa or less can be achieved when using Kingspan insulated roof and wall panels.

For information on detailing required to achieve lower air leakage rates please contact Kingspan Tech-eXchange.

Acoustic

Sound Reduction Index (SRI)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
SRI (dB)	20	15	17	23	18	25	40	46

QuadCore® Evolution Axis Wall Panels have a single figure weighted sound reduction $R_w = 24\text{dB}$. Results are based on panels of similar profile and core material.

Product Data

Materials

Substrate

Metallic protected steel to BS EN 10346: 2015.

Please contact Kingspan Tech-eXchange for information on other substrates.

Coatings – External Weather Sheet

- Kingspan Spectrum: Consists of a coated semi-gloss finish with slight granular effect.
- Kingspan Altaris: Technically advanced PVDF multi-layer (up to 4 layers of paint) coating featuring colour purity, strength, resistance and stability.
- Elementa PPC: Full range of Super Durable Class 2 polyester powder coated finishes as outlined in the Kingspan Insulated Panels Powder Coating Colour Book including finishes inspired by patina, oxidised, granite, stone and metallic materials. Only available in panel thicknesses ≥ 80 mm.

For Reaction to Fire performance of external weather sheets please contact Kingspan Tech-eXchange.

Coatings – Internal Liner Sheet

- Kingspan CLEANsafe 15: The coating has been developed for use as the internal lining of insulated panels. Standard colour is “bright white” with an easily cleaned surface.
- Kingspan CLEANsafe 120: The coating has been developed for use as the internal lining of insulated panels where a high level of cleanliness and hygiene is required, and the panels are to be cleaned down on a regular basis.
- Kingspan AQUAsafe 55: The coating has been developed for use as the internal lining of insulated panels to swimming pool internal environments.

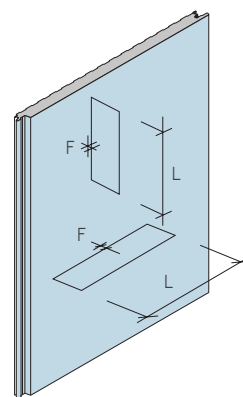
For Reaction to Fire performance of internal liners please see Certification and Testing section.

Product Tolerances

Cut to Length	± 5 mm
Cover Width	± 2 mm
Thickness (Core ≤ 100 mm)	± 2 mm
Thickness (Core > 100 mm)	$\pm 2\%$
End Squareness	± 3 mm

Flatness Tolerances

L (mm)	200	400	700
F (mm)	0.6	1.0	1.5



Seals

Factory applied side joint seals. All side joints have a factory applied seal fitted into the groove to automatically seal the joint between panels.

Quality & Durability

QuadCore® Evolution Axis Wall Panels are manufactured from the highest quality materials, using state of the art production equipment to rigorous quality control standards, complying with BS EN ISO 9001 standard, ensuring long term reliability and service life. The panels are also being manufactured under Environmental Management System Certification BS EN ISO 14001, Energy Management System Certification BS EN ISO 50001 and Occupational Health and Safety Certification BS EN ISO 45001 and Compliance Management Systems BS EN ISO 37301.

QuadCore® Evolution Axis Wall Panels are CE marked to BS EN 14509: 2013.



Product Data

Warranty

QuadCore® Assured Panel Warranty

- 25 years thermal performance
- 25 years fire performance
- 25 years structural performance
- 25 years environmental performance
- Up to 40 years coating performance

QuadCore® Assured System Warranty

- 25 years thermal performance
- 25 years fire performance
- 25 years structural performance
- 25 years environmental performance
- Up to 40 years coating performance
- 25 years warranty on system accessories*

*Please contact Kingspan Tech-eXchange or refer to the 'QuadCore® Assured' brochure for a list of accessories covered by Kingspan.

Sea Freight

Fully timber crated packs are available on projects requiring delivery by sea freight shipping, at additional costs. Alternatively, steel containers can be used. Special loading charges apply.

Delivery

All deliveries (unless indicated otherwise) are by road transport to project site. Off-loading is the responsibility of the client.

Site Installation Procedure

Site assembly instructions and construction details are available from Kingspan Tech-eXchange.

Packing

QuadCore® Evolution Axis Panels are stacked with weather sheet upward. The top and sides are protected by either cardboard or polystyrene and spiral wrap stretch polyfilm. The number of panels in a pack will vary depending on thickness/length of panel.

Core Thickness (mm)	45	54	60	70	74	80	90	100	120	140	150
No. of Panels per Pack	25	20	18	16	14	13	12	11	9	7	5

Note: Applies to UK pack sizes. Please contact Kingspan Customer Service for export information.

Product Data: Load / Span Tables

Load / span tables to be compared against calculated characteristic (i.e. unfactored) wind load values.

Single Span

Core Thickness (mm)	Load Type	Uniformly distributed imposed load (kN/m²)																																	
		Span (m)																																	
		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	
45	Pressure	7.89	5.92	4.73	3.94	3.38	2.96	2.63	2.37	2.15	1.97	1.72	1.47	1.26	1.09	0.95	0.83	0.73	0.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Suction	7.89	5.92	4.73	3.94	3.38	2.96	2.56	2.07	1.71	1.44	1.23	1.06	0.92	0.81	0.72	0.60	0.47	0.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
54	Pressure	9.50	7.13	5.70	4.75	4.07	3.56	3.17	2.85	2.59	2.38	2.19	1.93	1.68	1.48	1.29	1.13	1.00	0.88	0.79	0.70	0.63	0.56	-	-	-	-	-	-	-	-	-	-	-	
	Suction	9.50	7.13	5.70	4.75	4.07	3.56	3.08	2.50	2.06	1.73	1.48	1.27	1.11	0.98	0.86	0.77	0.69	0.62	0.57	0.49	0.40	0.32	-	-	-	-	-	-	-	-	-	-	-	
60	Pressure	10.57	7.93	6.34	5.29	4.53	3.97	3.52	3.17	2.88	2.64	2.44	2.15	1.87	1.65	1.46	1.30	1.17	1.05	0.94	0.84	0.76	0.68	0.62	0.56	-	-	-	-	-	-	-	-	-	
	Suction	10.57	7.93	6.34	5.29	4.53	3.97	3.43	2.78	2.30	1.93	1.64	1.42	1.24	1.09	0.96	0.86	0.77	0.69	0.63	0.57	0.53	0.48	0.41	0.34	-	-	-	-	-	-	-	-	-	
70	Pressure	12.37	9.27	7.42	6.18	5.30	4.64	4.12	3.71	3.37	3.09	2.85	2.51	2.19	1.92	1.70	1.52	1.36	1.23	1.12	1.02	0.93	0.86	0.79	0.73	0.67	0.61	0.56	0.51	-	-	-	-	-	
	Suction	12.37	9.27	7.42	6.18	5.30	4.64	4.01	3.25	2.69	2.26	1.92	1.66	1.44	1.27	1.12	1.00	0.90	0.81	0.74	0.67	0.61	0.56	0.52	0.48	0.45	0.41	0.38	0.32	-	-	-	-	-	
74	Pressure	13.08	9.81	7.85	6.54	5.61	4.91	4.36	3.92	3.57	3.27	3.02	2.66	2.32	2.04	1.80	1.61	1.44	1.30	1.18	1.08	0.98	0.90	0.83	0.77	0.71	0.66	0.62	0.56	0.52	-	-	-	-	
	Suction	13.08	9.81	7.85	6.54	5.61	4.91	4.24	3.44	2.84	2.39	2.03	1.75	1.53	1.34	1.19	1.06	0.95	0.86	0.78	0.71	0.65	0.60	0.55	0.51	0.47	0.44	0.41	0.38	0.35	-	-	-	-	
80	Pressure	14.16	10.62	8.49	7.08	6.07	5.31	4.72	4.25	3.86	3.54	3.27	2.88	2.51	2.20	1.95	1.74	1.56	1.41	1.28	1.16	1.07	0.98	0.90	0.83	0.77	0.72	0.67	0.63	0.59	0.55	0.51	0.47	-	
	Suction	14.16	10.62	8.49	7.08	6.07	5.31	4.59	3.72	3.07	2.58	2.20	1.90	1.65	1.45	1.29	1.15	1.03	0.93	0.84	0.77	0.70	0.65	0.60	0.55	0.51	0.47	0.44	0.41	0.39	0.36	0.34	0.30	-	
90	Pressure	15.95	11.96	9.57	7.97	6.83	5.98	5.32	4.78	4.35	3.99	3.68	3.24	2.82	2.48	2.20	1.96	1.76	1.59	1.44	1.31	1.20	1.10	1.02	0.94	0.87	0.81	0.76	0.71	0.66	0.62	0.58	0.55	0.52	
	Suction	15.95	11.96	9.57	7.97	6.83	5.98	5.17	4.19	3.46	2.91	2.48	2.14	1.86	1.64	1.45	1.29	1.16	1.05	0.95	0.87	0.79	0.73	0.67	0.62	0.57	0.53	0.50	0.47	0.44	0.41	0.38	0.36	0.34	
100	Pressure	16.90	12.67	10.14	8.45	7.24	6.34	5.63	5.07	4.61	4.22	3.90	3.60	3.14	2.76	2.44	2.18	1.96	1.77	1.60	1.46	1.34	1.23	1.13	1.05	0.97	0.90	0.84	0.79	0.74	0.69	0.65	0.61	0.58	
	Suction	16.90	12.67	10.14	8.45	7.24	6.34	5.63	4.66	3.85	3.24	2.76	2.38	2.07	1.82	1.61	1.44	1.29	1.17	1.06	0.96	0.88	0.81	0.75	0.69	0.64	0.59	0.55	0.52	0.49	0.46	0.43	0.40	0.38	
120	Pressure	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.63	3.39	3.18	2.94	2.62	2.35	2.12	1.93	1.75	1.61	1.47	1.36	1.26	1.16	1.08	1.01	0.94	0.88	0.83	0.78	0.73	0.69	
	Suction	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	3.89	3.32	2.86	2.49	2.19	1.94	1.73	1.55	1.40	1.27	1.16	1.06	0.97	0.90	0.83	0.77	0.71	0.67	0.62	0.58	0.55	0.51	0.48	0.46	
140	Pressure	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.63	3.39	3.18	2.99	2.82	2.68	2.48	2.25	2.05	1.87	1.72	1.59	1.47	1.36	1.27	1.18	1.10	1.03	0.97	0.91	0.86	0.81	
	Suction	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.87	3.34	2.91	2.56	2.26	2.02	1.81	1.64	1.48	1.35	1.24	1.14	1.05	0.97	0.90	0.83	0.78	0.73	0.68	0.64	0.60	0.57	0.53	
150	Pressure	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.63	3.39	3.18	2.99	2.82	2.68	2.54	2.41	2.20	2.01	1.85	1.70	1.57	1.46	1.36	1.26	1.18	1.11	1.04	0.98	0.92	0.87	
	Suction	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.58	3.12	2.74	2.43	2.17	1.94	1.75	1.59	1.45	1.33	1.22	1.12	1.04	0.96	0.89	0.83	0.78	0.73	0.69	0.64	0.61	0.57	

- Values have been calculated using the method described in BS EN 14509: 2013, for dark coloured panels.
- The following deflection limits have been used:
 - Short term pressure loading $L/100$.
 - Short term suction loading $L/100$.
- All panel thicknesses have been calculated with a minimum end support width of 50 mm and intermediate support width of 50 mm. Larger support widths are possible.

- The actual wind suction resisted by the panel is dependent upon the number of fasteners and the material of the supporting element.
- The fastener calculation should be carried out in accordance with the appropriate standards.
- For intermediate values linear interpolation may be used.
- The allowable steelwork tolerance between bearing planes of adjacent supports is ± 5 mm.

Product Data: Load / Span Tables

Load / span tables to be compared against calculated characteristic (i.e. unfactored) wind load values.

Double Span

Core Thickness (mm)	Load Type	Uniformly distributed imposed load (kN/m²)																																
		Span (m)																																
		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
45	Pressure	7.89	5.92	4.73	3.94	3.38	2.96	2.63	2.36	2.13	1.94	1.78	1.59	1.39	1.20	1.04	0.91	0.80	0.71	0.64	0.58	0.52	0.47	0.43	0.40	-	-	-	-	-	-	-	-	-
	Suction	7.89	5.92	4.73	3.94	3.38	2.96	2.56	2.07	1.71	1.44	1.23	1.06	0.92	0.81	0.72	0.64	0.57	0.52	0.47	0.43	0.39	0.36	0.33	0.31	-	-	-	-	-	-	-	-	-
54	Pressure	9.50	7.13	5.70	4.75	4.07	3.56	3.17	2.85	2.58	2.35	2.16	1.93	1.68	1.48	1.28	1.12	0.98	0.87	0.78	0.70	0.63	0.58	0.53	0.48	0.44	0.41	-	-	-	-	-	-	-
	Suction	9.50	7.13	5.70	4.75	4.07	3.56	3.08	2.50	2.06	1.73	1.48	1.27	1.11	0.98	0.86	0.77	0.69	0.62	0.57	0.52	0.47	0.43	0.40	0.37	0.34	0.32	-	-	-	-	-	-	-
60	Pressure	10.57	7.93	6.34	5.29	4.53	3.97	3.52	3.17	2.88	2.63	2.41	2.15	1.87	1.65	1.45	1.26	1.11	0.98	0.87	0.78	0.71	0.64	0.59	0.54	0.49	0.46	0.42	0.39	-	-	-	-	-
	Suction	10.57	7.93	6.34	5.29	4.53	3.97	3.43	2.78	2.30	1.93	1.64	1.42	1.24	1.09	0.96	0.86	0.77	0.69	0.63	0.57	0.53	0.48	0.44	0.41	0.38	0.35	0.33	0.31	-	-	-	-	-
70	Pressure	12.37	9.27	7.42	6.18	5.30	4.64	4.12	3.71	3.37	3.09	2.84	2.51	2.19	1.92	1.70	1.51	1.32	1.16	1.04	0.93	0.84	0.76	0.69	0.63	0.58	0.53	0.49	0.46	0.43	0.40	-	-	-
	Suction	12.37	9.27	7.42	6.18	5.30	4.64	4.01	3.25	2.69	2.26	1.92	1.66	1.44	1.27	1.12	1.00	0.90	0.81	0.74	0.67	0.61	0.56	0.52	0.48	0.45	0.41	0.39	0.36	0.34	0.32	-	-	-
74	Pressure	13.08	9.81	7.85	6.54	5.61	4.91	4.36	3.92	3.57	3.27	3.01	2.66	2.32	2.04	1.80	1.61	1.40	1.24	1.10	0.99	0.89	0.80	0.73	0.67	0.61	0.57	0.52	0.48	0.45	0.42	0.39	-	-
	Suction	13.08	9.81	7.85	6.54	5.61	4.91	4.24	3.44	2.84	2.39	2.03	1.75	1.53	1.34	1.19	1.06	0.95	0.86	0.78	0.71	0.65	0.60	0.55	0.51	0.47	0.44	0.41	0.38	0.36	0.34	0.32	-	-
80	Pressure	14.16	10.62	8.49	7.08	6.07	5.31	4.72	4.25	3.86	3.52	3.23	2.88	2.51	2.20	1.95	1.74	1.53	1.35	1.20	1.07	0.96	0.87	0.79	0.73	0.67	0.61	0.57	0.52	0.49	0.45	0.42	0.40	0.37
	Suction	14.16	10.62	8.49	7.08	6.07	5.26	4.59	3.72	3.07	2.58	2.20	1.90	1.65	1.45	1.29	1.15	1.03	0.93	0.84	0.77	0.70	0.65	0.60	0.55	0.51	0.47	0.44	0.41	0.39	0.36	0.34	0.32	0.30
90	Pressure	15.95	11.96	9.57	7.97	6.81	5.86	5.14	4.57	4.11	3.74	3.43	3.16	2.82	2.48	2.20	1.96	1.76	1.54	1.37	1.22	1.10	0.99	0.90	0.82	0.75	0.69	0.64	0.59	0.55	0.51	0.48	0.45	0.42
	Suction	15.95	11.96	9.53	7.75	6.51	5.59	4.90	4.19	3.46	2.91	2.48	2.14	1.86	1.64	1.45	1.29	1.16	1.05	0.95	0.87	0.79	0.73	0.67	0.62	0.57	0.53	0.50	0.47	0.44	0.41	0.38	0.36	0.34
100	Pressure	16.90	12.67	10.14	8.45	7.21	6.21	5.44	4.84	4.35	3.96	3.63	3.35	3.11	2.76	2.44	2.18	1.96	1.74	1.54	1.37	1.23	1.11	1.00	0.91	0.84	0.77	0.71	0.66	0.61	0.57	0.53	0.49	0.46
	Suction	16.90	12.67	10.10	8.22	6.90	5.93	5.19	4.62	3.85	3.24	2.76	2.38	2.07	1.82	1.61	1.44	1.29	1.17	1.06	0.96	0.88	0.81	0.75	0.69	0.64	0.59	0.55	0.52	0.49	0.46	0.43	0.40	0.38
120	Pressure	16.95	12.71	10.17	8.47	7.26	6.28	5.50	4.89	4.40	3.99	3.65	3.37	3.13	2.92	2.73	2.57	2.32	2.03	1.79	1.58	1.42	1.27	1.15	1.05	0.95	0.88	0.81	0.74	0.69	0.64	0.60	0.56	0.52
	Suction	16.95	12.71	10.17	8.29	6.96	5.98	5.23	4.64	4.17	3.79	3.32	2.86	2.49	2.19	1.94	1.73	1.55	1.40	1.27	1.16	1.06	0.97	0.90	0.83	0.77	0.71	0.67	0.62	0.58	0.55	0.51	0.48	0.46
140	Pressure	16.95	12.71	10.17	8.47	7.26	6.31	5.52	4.91	4.41	4.00	3.67	3.38	3.13	2.92	2.74	2.57	2.43	2.28	2.00	1.77	1.58	1.41	1.27	1.15	1.05	0.96	0.88	0.81	0.75	0.70	0.65	0.61	0.57
	Suction	16.95	12.71	10.17	8.32	6.97	5.99	5.23	4.64	4.17	3.78	3.46	3.20	2.91	2.56	2.26	2.02	1.81	1.64	1.48	1.35	1.24	1.14	1.05	0.97	0.90	0.83	0.78	0.73	0.68	0.64	0.60	0.57	0.53
150	Pressure	16.95	12.71	10.17	8.47	7.26	6.32	5.54	4.92	4.42	4.01	3.67	3.38	3.14	2.92	2.74	2.57	2.43	2.30	2.10	1.85	1.64	1.47	1.32	1.20	1.09	1.00	0.91	0.84	0.78	0.72	0.67	0.62	0.58
	Suction	16.95	12.71	10.17	8.33	6.98	5.99	5.24	4.64	4.17	3.78	3.46	3.19	2.96	2.74	2.43	2.17	1.94	1.75	1.59	1.45	1.33	1.22	1.12	1.04	0.96	0.89	0.83	0.78	0.73	0.69	0.64	0.61	0.57

- Values have been calculated using the method described in BS EN 14509: 2013, for dark coloured panels.
- The following deflection limits have been used:
 - Short term pressure loading $L/100$.
 - Short term suction loading $L/100$.
- All panel thicknesses have been calculated with a minimum end support width of 50 mm and intermediate support width of 50 mm. Larger support widths are possible.

- The actual wind suction resisted by the panel is dependent upon the number of fasteners and the material of the supporting element.
- The fastener calculation should be carried out in accordance with the appropriate standards.
- For intermediate values linear interpolation may be used.
- The allowable steelwork tolerance between bearing planes of adjacent supports is ± 5 mm.

Product Data: Load / Span Tables

Load / span tables to be compared against calculated characteristic (i.e. unfactored) wind load values.

Triple Span

Core Thickness (mm)	Load Type	Uniformly distributed imposed load (kN/m ²)																																
		Span (m)																																
		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
45	Pressure	7.89	5.92	4.73	3.94	3.38	2.96	2.63	2.37	2.15	1.97	1.82	1.59	1.39	1.22	1.08	0.96	0.87	0.78	0.71	0.65	0.59	0.54	0.50	0.46	-	-	-	-	-	-	-	-	-
	Suction	7.89	5.92	4.73	3.94	3.38	2.96	2.56	2.07	1.71	1.44	1.23	1.06	0.92	0.81	0.72	0.64	0.57	0.52	0.47	0.43	0.39	0.36	0.33	0.31	-	-	-	-	-	-	-	-	-
54	Pressure	9.50	7.13	5.70	4.75	4.07	3.56	3.17	2.85	2.59	2.38	2.19	1.93	1.68	1.48	1.31	1.17	1.05	0.95	0.86	0.78	0.72	0.66	0.61	0.56	0.52	0.48	-	-	-	-	-	-	-
	Suction	9.50	7.13	5.70	4.75	4.07	3.56	3.08	2.50	2.06	1.73	1.48	1.27	1.11	0.98	0.86	0.77	0.69	0.62	0.57	0.52	0.47	0.43	0.40	0.37	0.34	0.32	-	-	-	-	-	-	-
60	Pressure	10.57	7.93	6.34	5.29	4.53	3.97	3.52	3.17	2.88	2.64	2.44	2.15	1.87	1.65	1.46	1.30	1.17	1.05	0.96	0.87	0.80	0.73	0.67	0.62	0.58	0.54	0.50	0.47	-	-	-	-	-
	Suction	10.57	7.93	6.34	5.29	4.53	3.97	3.43	2.78	2.30	1.93	1.64	1.42	1.24	1.09	0.96	0.86	0.77	0.69	0.63	0.57	0.53	0.48	0.44	0.41	0.38	0.35	0.33	0.31	-	-	-	-	-
70	Pressure	12.37	9.27	7.42	6.18	5.30	4.64	4.12	3.71	3.37	3.09	2.85	2.51	2.19	1.92	1.70	1.52	1.36	1.23	1.12	1.02	0.93	0.86	0.79	0.73	0.68	0.63	0.59	0.55	0.51	0.48	-	-	-
	Suction	12.37	9.27	7.42	6.18	5.30	4.64	4.01	3.25	2.69	2.26	1.92	1.66	1.44	1.27	1.12	1.00	0.90	0.81	0.74	0.67	0.61	0.56	0.52	0.48	0.45	0.41	0.39	0.36	0.34	0.32	-	-	-
74	Pressure	13.08	9.81	7.85	6.54	5.61	4.91	4.36	3.92	3.57	3.27	3.02	2.66	2.32	2.04	1.80	1.61	1.44	1.30	1.18	1.08	0.98	0.90	0.83	0.77	0.71	0.66	0.62	0.58	0.54	0.51	0.48	-	-
	Suction	13.08	9.81	7.85	6.54	5.61	4.91	4.24	3.44	2.84	2.39	2.03	1.75	1.53	1.34	1.19	1.06	0.95	0.86	0.78	0.71	0.65	0.60	0.55	0.51	0.47	0.44	0.41	0.38	0.36	0.34	0.32	-	-
80	Pressure	14.16	10.62	8.49	7.08	6.07	5.31	4.72	4.25	3.86	3.54	3.27	2.88	2.51	2.20	1.95	1.74	1.56	1.41	1.28	1.16	1.07	0.98	0.90	0.83	0.77	0.72	0.67	0.63	0.59	0.55	0.52	0.49	0.46
	Suction	14.16	10.62	8.49	7.08	6.07	5.31	4.59	3.72	3.07	2.58	2.20	1.90	1.65	1.45	1.29	1.15	1.03	0.93	0.84	0.77	0.70	0.65	0.60	0.55	0.51	0.47	0.44	0.41	0.39	0.36	0.34	0.32	0.30
90	Pressure	15.95	11.96	9.57	7.97	6.83	5.98	5.32	4.78	4.35	3.99	3.68	3.24	2.82	2.48	2.20	1.96	1.76	1.59	1.44	1.31	1.20	1.10	1.02	0.94	0.87	0.81	0.76	0.71	0.66	0.62	0.58	0.55	0.52
	Suction	15.95	11.96	9.57	7.97	6.83	5.98	5.17	4.19	3.46	2.91	2.48	2.14	1.86	1.64	1.45	1.29	1.16	1.05	0.95	0.87	0.79	0.73	0.67	0.62	0.57	0.53	0.50	0.47	0.44	0.41	0.38	0.36	0.34
100	Pressure	16.90	12.67	10.14	8.45	7.24	6.34	5.63	5.07	4.61	4.22	3.90	3.60	3.14	2.76	2.44	2.18	1.96	1.77	1.60	1.46	1.34	1.23	1.13	1.05	0.97	0.90	0.84	0.79	0.74	0.69	0.65	0.61	0.58
	Suction	16.90	12.67	10.14	8.45	7.24	6.34	5.63	4.66	3.85	3.24	2.76	2.38	2.07	1.82	1.61	1.44	1.29	1.17	1.06	0.96	0.88	0.81	0.75	0.69	0.64	0.59	0.55	0.52	0.49	0.46	0.43	0.40	0.38
120	Pressure	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.63	3.39	3.18	2.94	2.62	2.35	2.12	1.93	1.75	1.61	1.47	1.36	1.25	1.15	1.06	0.98	0.92	0.85	0.80	0.75	0.70	0.66
	Suction	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.07	4.60	3.89	3.32	2.86	2.49	2.19	1.94	1.73	1.55	1.40	1.27	1.16	1.06	0.97	0.90	0.83	0.77	0.71	0.67	0.62	0.58	0.55	0.51	0.48	0.46
140	Pressure	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.63	3.39	3.18	2.99	2.82	2.68	2.45	2.19	1.97	1.78	1.62	1.48	1.35	1.25	1.15	1.07	0.99	0.92	0.86	0.81	0.76	0.71
	Suction	16.95	12.71	10.17	8.47	7.26	6.36	5.63	5.05	4.58	4.20	3.87	3.34	2.91	2.56	2.26	2.02	1.81	1.64	1.48	1.35	1.24	1.14	1.05	0.97	0.90	0.83	0.78	0.73	0.68	0.64	0.60	0.57	0.53
150	Pressure	16.95	12.71	10.17	8.47	7.26	6.36	5.65	5.08	4.62	4.24	3.91	3.63	3.39	3.18	2.99	2.82	2.68	2.54	2.27	2.03	1.84	1.67	1.52	1.39	1.28	1.18	1.10	1.02	0.95	0.88	0.83	0.78	0.73
	Suction	16.95	12.71	10.17	8.47	7.26	6.35	5.62	5.04	4.57	4.19	3.86	3.58	3.12	2.74	2.43	2.17	1.94	1.75	1.59	1.45	1.33	1.22	1.12	1.04	0.96	0.89	0.83	0.78	0.73	0.69	0.64	0.61	0.57

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- The fastener calculation should be carried out in accordance with the appropriate standards.
- For intermediate values linear interpolation may be used.
- The allowable steelwork tolerance between bearing planes of adjacent supports is ± 5 mm.

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