

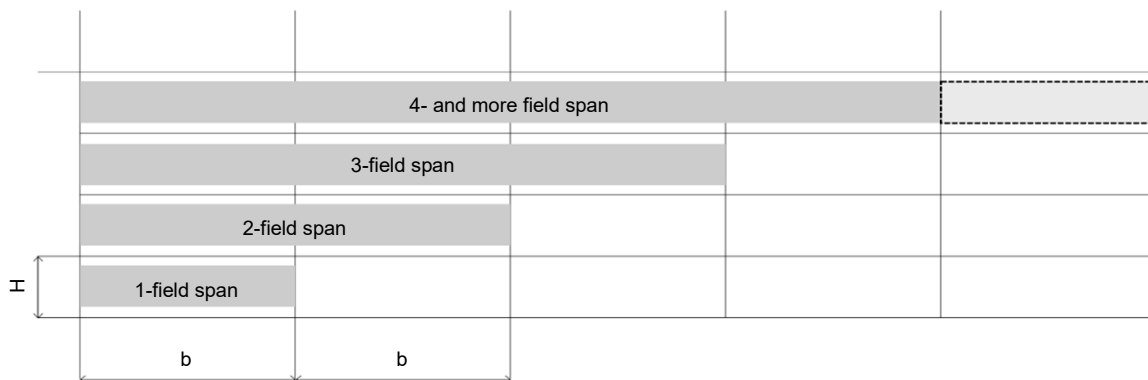
General performance

Rockpanel PlankClip System

The following table provides the ultimate performance values of the PlankClip System under wind load, expressed as the maximum allowable wind load based on varying subframe spacings and panel heights. The distances and corresponding capacities are determined in accordance with European Technical Assessment ETA-24/0911.

All wind load values shown are factored design loads, with the partial safety factor $\gamma_Q = 1.5$ according to Eurocode already included.

Span		1-field span	2-field span	3-field span	4- and more field span
600	100–115	–1.676 kN/m ²	–1.697 kN/m ²	–1.928 kN/m ²	–1.845 kN/m ²
	120–145	–1.343 kN/m ²	–1.360 kN/m ²	–1.545 kN/m ²	–1.478 kN/m ²
	150–300	–1.798 kN/m ²	–1.190 kN/m ²	–1.352 kN/m ²	–1.293 kN/m ²
500	100–145	–1.594 kN/m ²	–1.632 kN/m ²		
	150–300	–2.134 kN/m ²	–1.427 kN/m ²		
400	100–145	–1.959 kN/m ²	–2.040 kN/m ²		
	150–300	–2.623 kN/m ²	–1.784 kN/m ²		
↑ Spacing subframe b mm	↑ Panel-height H mm				



H: Panel height (mm)
b: Spacing subframe (mm)

Netherlands – Loadtable

Rockpanel PlankClip System

The following tables show the designed wind loads acting in the respective areas and the maximum possible spacing (b) for the PlankClip System.

Wind loads are calculated for rectangular buildings according to NEN EN 1991-1-4+A1+C2:2011. The values apply to the entire façade, with wind actions determined for corner zone “A”. All wind loads are factored. The partial safety factor $\gamma_Q = 1.5$ in accordance with Eurocode is already included.

OK	Combination possible
n/a	Location requires project specific check. Part of worst-case scenario does not comply
OK ^{x)}	Suitable, but with limitations (see comments at the end of the table)

The table is to be understood as a recommendation. If no combination is found in the following tables for the planned project, get in touch with your Rockpanel supplier.

→ The tables are valid if the cavity closure is considered. See Preconditions - Cavity closure

For building heights (z_e) ≤ 6 m

Windzone ¹⁾		Windgebie I		Windgebie II		Windgebie III	
Terrain category		Onbebouwd	Bebouwd	Onbebouwd	Bebouwd	Onbebouwd	Bebouwd
Designed wind-load kN/m ²		-1.77	-1.45	-1.48	-1.21	-1.22	-1.00
600	100–115	n/a	OK	OK	OK	OK	OK
	120–145	n/a	n/a	n/a	OK	OK	OK
	150–300	n/a	n/a	n/a	OK ²⁾	OK ²⁾	OK
500	100–145	n/a	OK	OK	OK	OK	OK
	150–300	n/a	n/a	n/a	OK	OK	OK
400	100–145	OK	OK	OK	OK	OK	OK
	150–300	OK	OK	OK	OK	OK	OK
↑ Spacing subframe b mm	↑ Panel- height H mm						

¹⁾ Annex to Netherlands Loadtable – Windzone map

²⁾ Only for 1-field and 4- or more-field spans

For building heights (z_e) $\leq$ 9 m

Windzone ¹⁾		Windgebied I		Windgebied II		Windgebied III	
Terrain category		Onbebouwd	Bebouwd	Onbebouwd	Bebouwd	Onbebouwd	Bebouwd
Designed wind-load kN/m ²		-2.06	-1.63	-1.73	-1.36	-1.42	-1.12
600	100–115	n/a	OK	n/a	OK	OK	OK
	120–145	n/a	n/a	n/a	OK ³⁾	n/a	OK
	150–300	n/a	n/a	n/a	n/a	n/a	OK
500	100–145	n/a	OK ³⁾	n/a	OK	OK	OK
	150–300	n/a	n/a	n/a	OK	OK	OK
400	100–145	n/a	OK	OK	OK	OK	OK
	150–300	n/a	OK	OK	OK	OK	OK
↑	↑						
Spacing subframe b mm	Panel- height H mm						

¹⁾ Annex to Netherlands Loadtable – Windzone map

³⁾ Only for 2-field and 4- or more-field spans

For building heights (z_e) $\leq$ 12 m

Windzone ¹⁾		Windgebied I		Windgebied II		Windgebied III	
Terrain category		Onbebouwd	Bebouwd	Onbebouwd	Bebouwd	Onbebouwd	Bebouwd
Designed wind-load kN/m ²		-2.27	-1.84	-1.91	-1.54	-1.57	-1.27
600	100–115	n/a	n/a	n/a	OK	OK	OK
	120–145	n/a	n/a	n/a	n/a	n/a	OK
	150–300	n/a	n/a	n/a	n/a	n/a	OK ²⁾
500	100–145	n/a	n/a	n/a	OK	OK	OK
	150–300	n/a	n/a	n/a	n/a	n/a	OK
400	100–145	n/a	OK	OK	OK	OK	OK
	150–300	n/a	n/a	n/a	OK	OK	OK
↑	↑						
Spacing subframe b mm	Panel- height H mm						

¹⁾ Annex to Netherlands Loadtable – Windzone map

²⁾ Only for 1-field and 4- or more-field spans

Annex

to Netherlands Loadtable

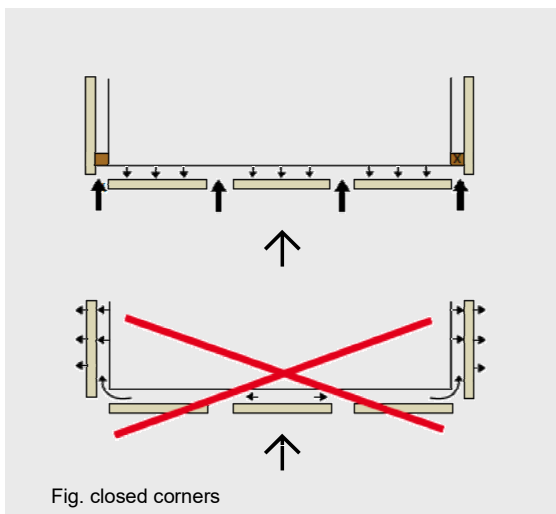
Windzone map



- Windgebied III
- Windgebied II
- Windgebied I

See NEN EN 1991-1-4+A1+C2:2011, Figuur NB.1 - Indeling van Nederland in windgebieden

Preconditions - Cavity closure



To apply the tables, the following preconditions must be satisfied:

- The internal pressure within the ventilated cavity must remain undisturbed by air movement between different sides of the building. To ensure this, a cavity closure should separate one building side in corner areas, see figure “closed corners”.

→ Further details are available in the national annex NEN EN 1991-1-4+A1+C2:2011