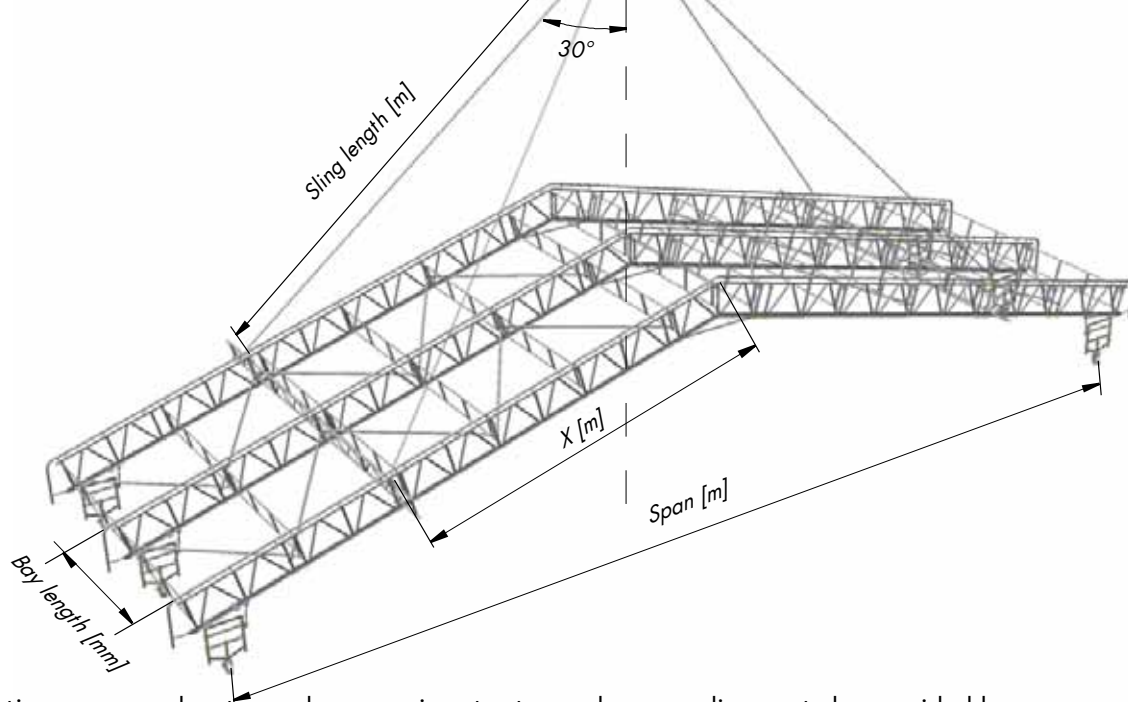


HAKITEC® Weather Protection Instructions for Lifting



Lifting roof sections are an advantage when covering structures where supplies are to be provided by crane or when working on similarly shaped structures for which the covering can be moved from stage to stage. Weather protection roofs with a slope of 15°- 22.5° can usually be lifted in sections of 1-4 bays in length depending on the span (see tables 1-4). Sling lengths have been calculated for an angle of 30°.

Roof sections

1 bay, length 3050 mm (table 1)

Span [m]	Weight [kg]	X [m]	Sling length S [m]
8.4	840	2.4	5.6
10.8	930	3.4	7.0
12.7	995	3.4	7.3
14.2	1010	4.3	9.0
16.6	1125	5.4	10.8
18.5	1165	5.4	10.8
20.4	1235	6.3	12.7
22.8	1320	7.4	14.7
24.8	1390	7.4	14.7
26.2	1405	7.7	15.1
28.6	1510	8.7	17.0
30.6	1570	9.6	18.9
32.5	1610	9.6	18.9
33.0	1645	9.6	18.9
34.9	1680	10.6	20.8

2 bays, length 6100 mm (table 2)

Span [m]	Weight [kg]	X [m]	Sling length S [m]
8.4	1355	2.4	7.7
10.8	1495	3.4	9.0
12.7	1610	3.4	9.0
14.2	1640	4.3	10.4
16.6	1830	5.4	12.1
18.5	1895	5.4	12.1
20.4	2010	6.3	13.7
22.8	2150	7.4	15.6
24.8	2265	7.4	15.6
26.2	2300	7.7	16.0
28.6	2465	8.7	17.8
30.6	2580	9.6	19.6
32.5	2600	9.6	19.6
33.0	2705	9.6	19.6
34.9	2725	10.6	21.5

3 bays, length 9150 mm (table 3)

Span [m]	Weight [kg]	X [m]	Sling length S [m]
8.4	1790	2.4	10.2
10.8	1970	3.4	11.2
12.7	2130	3.4	11.3
14.2	2160	4.3	12.4
16.6	2400	5.4	13.8
18.5	2490	5.4	13.8
20.4	2645	6.3	15.3

4 bays, length 12200 mm (table 4)

Span [m]	Weight [kg]	X [m]	Sling length S [m]
8.4	2280	2.4	13.1
10.8	2515	3.4	13.8
12.7	2715	3.4	13.9
14.2	2765	4.3	14.8
16.6	3080	5.4	16.0

The weights given include the lacing and bracing and the sheeting. For other roof slopes, please contact HAKI's technical department.

Lifting using mobile crane or fixed crane

Using the HAKITEC® Weather Protection system, whole roof sections can be completely assembled on the ground and then lifted into place by crane.

When a crane is to be used for lifting, the roof section must be fully assembled using guardrail frames GFL/GFLH in every bay, in both the roof and the supports/legs. The roof section must be braced diagonally in every other bay and always in the outer bays.

For reinforcement, lattice beams 450 are installed inside the roof sections using two right angle couplers at each 750 beam.

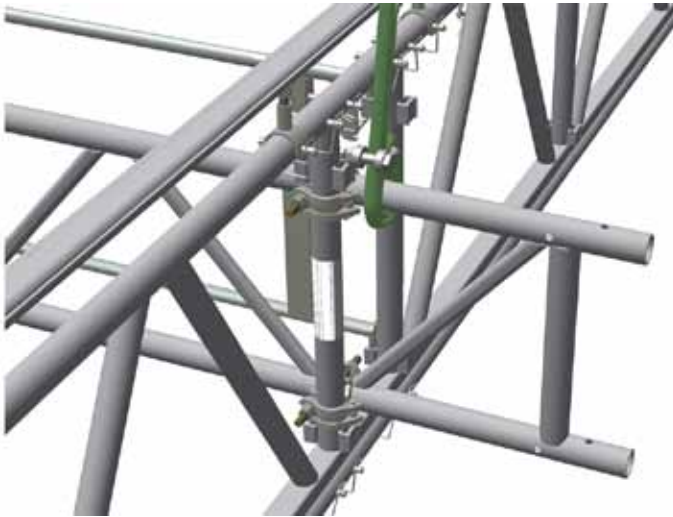


Figure 1

We recommend that slinging be done by looping a sling around the upper tube of one lattice beam 450.

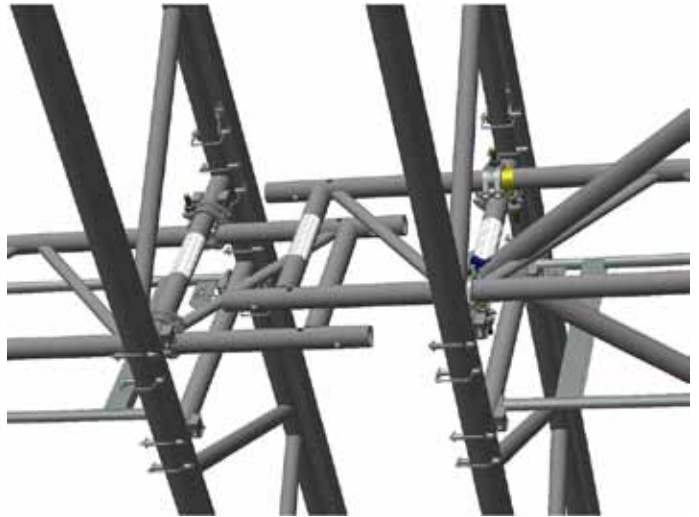


Figure 2

Where the distance between the roof sections is short, the lattice beams 450 should be fitted on each side of the standing tube in the lattice beams 750.

HAKITEC® Weather Protection - to check before lifting weather protection structures

- Diagonal bracing is complete and correctly installed
- Slinging has been done correctly
- Current safety regulations for lifting with a fixed or mobile crane are followed
- Maximum wind speed is approximately 5 m/s if sheeting has been installed

