

Special structures in trade fair construction

Special structures in trade fair construction are stand constructions for which at least one of the following characteristics applies:

- Structures in the outdoor area.
- Multi-storey exhibition stands (double-decker).
- Platforms that are not fully supported.
- Fall protection (ballustrades).
- Free-standing walls and free wall ends (individual case consideration).
- Column-type structures (steles, lighting poles, flagpoles).
- Overhead structures (ceiling elements / portal frames / cantilevered structures).
- Cabin structures with a height/depth (H/T) ratio of:

$H / T > 1/1$ for cabins with a wall weight of less than 7,6 kg/m² wall element.

$H / T > 2/1$ for cabins with a wall weight of less than 15,2 kg/m² wall element.

$H / T > 3/1$ for cabins with a wall weight of less than 22,8 kg/m² wall element.

$H / T > 4/1$ for cabins with a wall weight of less than 30,4 kg/m² wall element.

H = height of cabin, T = depth of cabin (not width (B) of cabin, $B > T$).

- Truss structures at risk of overturning or covered truss structures (banners / wooden panelling). The manufacturer's approvals must be observed.
- Structures that are not stable on their own without being ballasted or anchored/connected to steel or wooden plates. The horizontal load to be applied can be found in the Technical Guidelines of Messe Essen.

It is not mandatory to provide a structural stability calculation for every special construction. We can check the need for a structural analysis in advance. A registration of the exhibition stand as a special construction via Messe Essen is required.

For special constructions that require a structural stability calculation, this report must be available on site with the corresponding construction drawings. On request, we can check the documents in advance.

The exhibition stands are randomly checked by us during the set-up phase.