# **DOOR GIANTS**

### Special doors with extreme dimensions

Hangar, truck port, sawmill or warehouse: there are astonishingly many special constructions that require oversized doors. For entrances with a width of more than 15 metres or a height of more than 15 metres, specialists are responsible who know how to reliably close such openings - with suitable special solutions. Four practical examples.



# The Task

Door dimensions beyond the normal dimensions are required regularly - but there is no such thing as "too large". The focus is rather on customer-oriented solutions, such as those designed by Teckentrup for special applications.

In the following we will present four examples of solution-oriented XXL doors – a logistic hall with access in XXL format, a roller door turned inside out, a huge door with a height of 12.5 metres and a folding door with twelve elements for a hangar.



By default roller doors can be produced in 11.5 x 12 metres. Door widths up to 18 metres can be realised on request.



With a height of 12.5 metres, this roller door is one of the largest that Teckentrup has yet built. It closes an agricultural warehouse where grain transporters can unload their freight into silos.

#### Up high: Roller door for a silo hall

Teckentrup has recently delivered a true goal giant to Sweden: The ThermoTeck roller door measures 6,80 metres by 12,50 metres - a total of 85 square metres with a weight of 1,150 kilograms. This oversize dimension was required to enable grain transporters to be emptied completely. These are tilted almost vertically upwards to allow the grain to trickle down into the collecting silos.



#### XXL-access for XXL-trucks

Truckport Knüllwald, logistics hall of the "European Load Association of International Freight Forwarders" (ELVIS), directly on the A7 motorway. A trans-shipment point where trucks of all sizes are continuously approaching and where goods need to be loaded and unloaded quickly and easily. Therefore, the access roads are planned in XXL format: 15 metres wide, 5 metres high. The solution: two roller doors next to each other, connected by a central post. The trick: the 50 centimetre wide galvanised steel post is coupled to the guide rail at the top; over which it can be pushed to the side. If required, the entire width of the driveway is thus available for passage. The ingenious system ensures safety: To be able to move the post, it must first be unlocked which is only possible when both doors are raised. Conversely, a door can only be lowered if the centre post is locked. The glazing at eye level provides a clear view - to the outside and inside.



In order to be able to pass the door exit without much manoeuvring, both doors are opened and the centre post is moved to the side.



**Roller door variant: Turned inside out** In the 'Hochsauerland' region, "Dickel Holz" operates a sawmill for lumber and solid structural timber. In the course of the construction of a new biomass storage facility, a production hall with modified delivery routes was also built. The long timbers are loaded horizontally from the hall via a transfer station to the outside directly onto forklift trucks. The Teckentrup roller shutters therefore have an unusual size: Only 1,50 meters high, but up to 11,45 meters wide. The special feature, however, is the assembly solution as an "outside roller"



Height: XXS, width: XXL: The special working conditions of the sawmill resulted in unusual door dimensions of 1,50 metres high and up to 11,43 metres wide. The interior of the hall was limited in size and had to be completely accessible as a sawing and working area. With this variant, the customer's wish was fully met.



#### TECKENTRUP I CASE STUDY

#### Special case "hangar": Folded beats rolled

Special means of transport require special storage facilities, such as the "heliport" in Odessa, Ukraine. The hangar is home to several historic aircraft and helicopters - with impressive wingspans. This is where the door reaches extreme dimensions in both width and height. The solution is a folding door with twelve elements that can be easily unfolded and folded back together thanks to its stable suspension. Folding doors are particularly suitable for extreme widths, as they can theoretically be coupled together without any limits. In this case, Teckentrup - as one of the few manufacturers to produce such doors - has also found a particularly aesthetic design which blends in well with the hangar.

#### **Customer-centered development**

Especially for non-standard tasks, it is necessary to start planning and collaborating at an early stage, because these doors do not come "off the peg" and can be a challenge even for installation professionals. In this case, important details must be clarified before the offer is made. These include questions such as topographical conditions at the installation site, the surrounding development (i.e. are there other buildings in the vicinity of the door) or other door openings in the building. With the wishes of the project managers and the ideas of the door manufacturers, technically safe constructions can then be planned, which also take architectural and economic aspects into account. Teckentrup also offers a tailor-made service package to support the planning and execution - even where fitters are not able to get anywhere. This is particularly the case at special tasks. True to their motto "Always the best solution - your solution", Teckentrup is always at the side of its partners.



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Twelve elements can easily be slid to the edge to open the hangar up wide.

This is where our service comes into play, providing partners with clarification of the construction site situation, technical clarification, measurements and professional installation. The training of fitters using guided installation is also included.

Achim Schröter | Key-account-manager Doors

## **The Solutions**

In many cases, the solutions are based on the standard "ThermoTeck" roller doors, as roller doors are relatively easy to plan in terms of height and do not become too heavy even with large openings due to their comparatively low weight. Doors that are used as external closures must be able to cope with wind speeds of at least 100 km/h in accordance with the applicable standard. The Teckentup roller door, for example, has storm hooks, a pressure shaft, a reinforced bottom profile and specially reinforced guide rails to provide necessary stability.

Folding doors are a technically mature alternative for very wide openings, as they can be easily adapted to the required width element by element. In this respect, Teckentrup also complies with the European specifications of EN 13241-1 regarding mechanical influences, safety in use, tightness, wind load, thermal and sound insulation. XXL folding doors are therefore already designed to meet the required wind loads as standard, due to the perfectly matched components - without the need for complex special constructions.

