

Rhine-Neckar-Arena

"Floating Roof" for the new football arena of TSG Hoffenheim

Since January 2009 it has been completely finished: the new Rhine-Neckar-Arena in Sinsheim. A stand roofing system made of technical textiles round off the newly built stadium and offers protection for more than 30,000 spectators.

CENO TEC GmbH produced and installed the roofing system within few months only.



A total area of 19,500 sq. metres will be covered by technical textiles. The amount of material used will be around 60,000 sq. metres.

For optical and acoustic reasons not only the upper side, but also the lower side of the steel supporting structure is hung with the membranes. Two different membranes will be used, depending on the function.



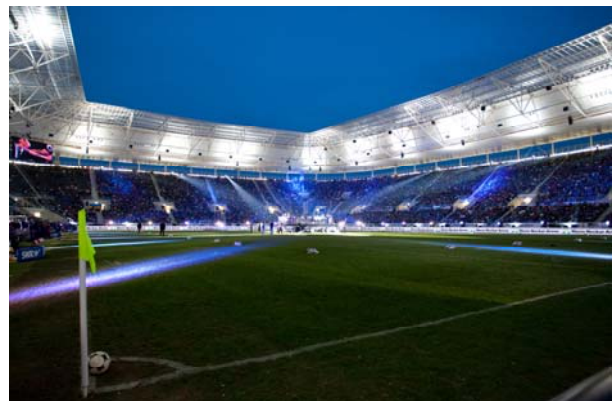
picture of assembly

The upper membrane that faces the outside is intended to protect against the weather whilst at the same time allowing light through onto the stands. 56 roof fields, each with 5 support arches, are hung with architectural membranes made of translucent PVC-coated polyester fabric (type III) having a dirt-repellent fluoropolymer coating. This varnish is more weathering resistant than traditional varnishes.

The lower membrane that faces the stands is intended to have an optically calming effect. A fine-meshed PVC-coated polyester screen fabric is used for this. A total of 750 steel frames will be hung with semi-transparent material.



The roof edge glazing planned for the inside of the stadium is also part of CENO TEC's scope of delivery. Around 6,000 sq. metres of polycarbonate panelling will provide for protection against the weather and translucence around the entire circumference of the playing field.





Project data

General planning: agn Niederberghaus & Partner GmbH
Membrane support structure planning: form TL Ingenieure für Tragwerk und Leichtbau
Structural steelwork planning: AHW Ingenieure GmbH
Architects: agn Niederberghaus & Partner GmbH
Membrane construction manufacturer: CENO TEC GmbH (D)
Design: Arched membrane / flat stretched lower membrane frame
Type of membrane: Coated polyester fabric with PVDF surface refinement

photos: Uwe Grün – www.kraichgaufoto.de

arial photo: Jürgen Strobel

