

Membrane roof Esslingen

Roofing active and movement space

In an intensive coordination process with the municipal project participants, AR Ingenieure designed a roofing system that could meet the complex requirements of the task. The roofed area of approx. 150 m² had to be column-free, safe from vandalism and usable for sports and cultural activities. Four steel trussed girders are mounted on a polygonally folded concrete wall and span a three-span membrane roof over the square in front of the youth centre, projecting 11 m. The radially arranged cantilever girders are stabilized by a central support on the rear side of the wall. The flat membrane fields are prestressed by centrally arranged valley cables, whose rear low points, attached to a gargoyles, also ensure the drainage of the roof surface.

Project details:

Year: 2018

Location: Esslingen, Germany

Building owner: Grünflächenamt Esslingen

Client: Grünflächenamt Esslingen

Services:

Services of the object and structural design up to LP8, workshop planning membrane

Other parties involved: Koch Membranen GmbH, Bauunternehmung Otto Bayer

