

Old Residence Salzburg

Yard roofing

The framework is formed by a four chord truss girder welded from round hollow sections. The supporting structure is necessary because the membrane roofing must not be connected to the existing building. The required demountability of the structure is achieved by dividing it into 10 beam sections of max. 12 m length. To achieve a fire resistance of F30 without fire protection coating, a "hot design" of the structure was carried out. In this procedure, a residual strength of 28% of the initial value was applied, which was significantly reduced by the effect of heat. In connection with constructive measures for minimizing constraint stresses due to thermal expansion, the method proves to be an economical method of profile dimensioning.

Project details:

Year: 2012

Location: Salzburg, Austria

Building owner: Salzburger Festspielhäuser
Erhaltungs- und Nutzungsverein

Client: Temme Obermeier GmbH

Services: Structural design, workshop planning

Other parties involved: Prof. Dr.-Ing. Mike Sieder

