

# Music pavilion, Kirchdorf

2017



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## The project

In Kirchdorf, the music pavilion is the last building block of the new educational campus. It is a free-standing solitaire visible from all sides with the stage to the south and a bus stop for the school bus to the north. The folding structure of solid wooden panels was developed from its acoustic requirements. On the one hand, the sound should be directed to the audience, on the other hand, the musicians have to hear each other in order to play together.

## The construction

The supporting structure of the building is a so-called tetrahedron - folded structure, which is sealed on the outside by means of a membrane. The folded structure is made of cross-laminated timber, with the visible inner joints flexurally rigid and the non-visible outer joints articulated.

## The challenge

The foremost yoke of the shell is 15 m wide and 7 m high, which is a considerable structural challenge given the very high snow loads in Kirchdorf. Due to the different angles of the folding structure and the high loads to be transmitted, the joint center design also became very relevant economically.



#### **Construction Data**

- Material: cross laminated timber

#### **Services of Timbatec**

- Statics and construction

#### **Architect**

markus fuchs architektur ZT gmbh and parc ZT gmbh

#### **Client**

Kirchdorfer Gemeinde Immobilien GmbH & Co KG

#### **Timber construction engineer**

Timbatec Holzbauingenieure

#### **Timber construction**

Holzbau Oberleitner GmbH

#### **Civil engineer**

DI Dr Stefanoudakis / Hanel Ingenieure