



Photo: BWM Designers & Architects

# Austrian Pavilion EXPO25

## Osaka, Japan

The spiral sculpture, designed by BWM Designers & Architects, was woven from individual thin wooden slats and only dowelled after being twisted into shape. It can withstand wind speeds of up to 200 km/h. Thanks to the principle of 'screws instead of glue', the entire structure can be completely dismantled and reused. This construction method enables sustainable use of the materials beyond Expo 2025. At the same time, this method saves CO<sub>2</sub>.

The wooden music ribbon is 91 metres long and 4.3 metres high. The structure consists of an upper and lower belt, which are interwoven by 265 diagonal rods. The double intertwined shape is supported by five steel pylons and reaches a height of 16 metres. The music ribbon is a prime example of innovative Austrian timber construction expertise, demonstrates engineering at the highest level and, with wood as its raw material, stands for sustainability. It thus combines tradition and modernity.





## Technology Award/Companies involved

#### Client

- · Federal Ministry of Economy, Energy and Tourism
- · Austrian Federal Economic Chamber

### Architecture and general planning

• BWM Designers & Architects

#### Construction

Graf Holztechnik GmbH

#### Statics, technical development, structural design

werkraum ingenieure

#### **Facts**

#### **EXPO** pavilion

- Completed in 2025
- Total area: 800 m

#### **Environmental aspects**

- The sculpture can be dismantled and reused thanks to the 'screws instead of glue' principle.
- CO<sub>2</sub> savings thanks to almost complete absence of glue.

#### **Key figures**

- 15 tonnes of certified Austrian spruce wood
- 91 metres long, 4.3 metres high music roll
- 16.5 metres high and 21.5 metres long sculpture
- Minimum curve radius of 3 m

