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Designed to highlight the country's rich musical heritage alongside sustainability and its role in technology and design, Austria's national pavilion at Osaka Expo 2025 includes a landmark timber sculpture that was granted PEFC Project Certification.

Spanning an overall area of 940m² and serving as a 'hub of ideas',
Austria's pavilion includes exhibition space reflecting their role as a pioneer in 'green technologies, sustainable architecture and digital innovation'.

Designed by BWM Designers & Architects, the concept behind the pavilion is a musical interpretation of Osaka Expo's motto – 'Designing Future Society for Our Lives'.

The idea being that in Austria, the future is not 'designed' but 'composed' providing its title 'Composing the Future'.

Sustainability was a central aspect of the overall vision of 'prosperity, people and planet' for the pavilion with timber playing a central part. The 16.5m high sculpture is made from PEFC-certified spruce from Austian forests and was manufactured by Graf Holztechnik.

The design represents the first bars of Ludwig van Beethoven's 'Ode to Joy' – the European anthem.

The pavilion also employs circular economy principles. The musical staff uses 'screws instead of glues' to eliminate the use of adhesives and composite materials as far as possible, and can be dismantled after Osaka Expo and reassembled.

The exhibition hall is also a modular design so that can be easily moved and repurposed.

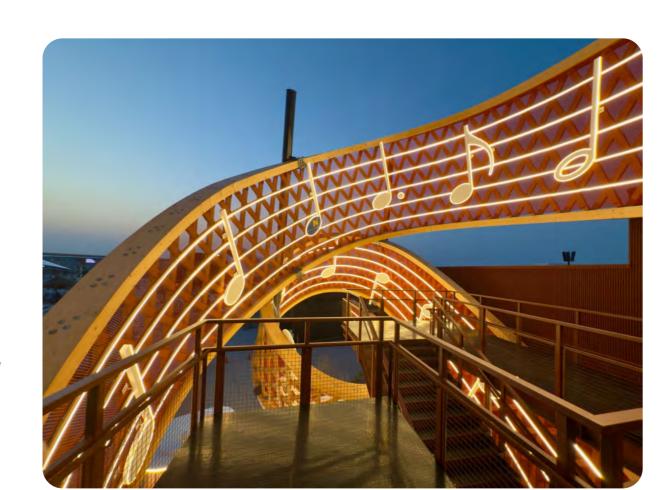


The structure combines unique geometry with precision timber technology and traditional craftsmanship. "A sculptural spiral rises up into the sky – this is both an eye-catching visual beacon and the guide through the exhibition," says Johann Moser, the pavilion's architect from BWM Designers & Architects.

"When you get closer, you realise that it is an oversized, curling musical staff constructed from wooden slats bolted together."

The sculpture was in production for three months at the facility in Horn, Austria before being packed in sections and shipped to Japan.

It uses 32m² of timber and is designed as a 'geodesic ribbon construction woven from individual, wooden slats' and after bending into shape was bolted together with approx. 6,000 fully threaded screws.



The design went through a series of tests, calculations and computer modelling and is designed around typhoon wind loads in Japan and can withstand gusts of up to 201 km/h.

Stefan Graf, CEO of Leyrer + Graf said: "With the highest precision in development and production, we have tested the limits of what is feasible and created an unlikely work of engineering from an original vision. I would like to congratulate everyone involved on this impressive success. Together, we have shown what is possible with passion and team spirit."

All the national pavilions at Osaka Expo 2025 are housed within a huge giant wooden ring. The Grand Roof – designed by Japanese architect Sou Fujimoto – is 20m high, with a 2km circumference, and an 8m walkway and is being hailed as one of the largest wooden structures ever built.

See much more at: www.expo2025.or.jp/en

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