



Mannheim Multihalle Gridshell Mannheim, Germany

Designed by renowned German architects Frei Otto, Carlfried Mutschler and Joachim Langner in the mid 1970s, this multifunctional hall was built as a temporary structure for a horticultural exhibition. The structure was designated a historical cultural monument in 1998, however, in recent years it has become critical to repair the aging gridshell to ensure its long-term survival.

Fast + Epp won an international competition to undertake a design review and retrofit of this historical monument, and restore the timber gridshell to its original splendor. The team has developed a solution that would allow for the building to remain a permanent cultural fixture of Mannheim and is part of an association raising funds to ensure its preservation.

This unique timber lattice roof structure remains the largest self-supporting timber gridshell in the world, with roof spans of more than 60m and peaks of approximately 19m. Single 2" X 2" (50 mm x 50 mm) hemlock laths of the roof structure are connected with bolts to form a grid, which acts in compression to efficiently carry vertical loads.

Fast + Epp

Status
In-progress

Project Cost
€11 million

Area
80,000 ft² (7,400 m²)

Architect
Carlfried Mutschler, Joachim Langner, Frei Otto

Client
Stadtpark Mannheim GmbH

