

C30 SHELL

Architect
Client
Location
Year

JACOBS
DE VRIES EN VERBURG BOUW & SHELL
DEN HAAG
2020

7561



Octatube was invited to cover one of the monumental courtyards of the Shell headquarters with a gridshell dome canopy. We defined the geometry of the gridshell by using parametric design. The dome consists of a double curved grid of approx. 30x30m, covered with cold twisted glass panels. The steel construction consists of unique profiles. For this reason we implemented a file-to-factory method: by means of a script the data of the profiles was sent to the laser cutter – guaranteeing correct dimensions.

The edge beam holds the roof together; like a colander. The turrets interrupt the edge, resulting in loss of stiffness. Tension rods keep the gridshell in place. The order in which the roof is built up is therefore important. First the edge beams, then the tension rods and from there the corners and frames are built. In the end, a square-shaped void remains. As the structure can't rest on the scaffold, the last part works as a reciprocal frame. To place this last frame, two cranes worked simultaneously.