## CENTRAL PLAZA

Architect Client

HINES IN PARTNERSHIP WITH THE PETERSON **DUBLIN** 2020



The two-story glass roof structure with 360-degree views of the city is a striking landmark. The contemporary, geometric design follows the visible supports of the building - with cantilevered triangles as a reference to the original design. We built the new roof structure on top of the existing one. Hidden bolted connections connect RHS steel beams to form a monolithic frame with no expansion joints. Steel production of more than 4,000 custom-made parts took place at our factory in Delft. The roof can slide over the façade

during thermal expansion. Thanks to fully glazed corners and disconnection of the façade from the roof, the roof can expand and retract by 30 and 15 millimetres respectively. We used a mock-up of the roof to test various components. The structure is covered with 152 triangular, quadrangular or pentagonal glass elements. This provides plenty of light and transparency. The glass is screen-printed to contain the solar load. This provides plenty of light and transparency. The glass is screenprinted to contain the solar load.