

# GRAFTON STREET

Architect  
Client  
Location  
Year

C2J ARCHITECTS – ARCHITECTS & TOWN  
PLANNERS  
ARCACIA CONSULTING LTD.  
LONDON (UK)  
2021

07863



This 48-square-meter telescopic sliding roof in London is made of moving parts that span 8 meters and slide underneath each other. It forms a complete building envelope. When closed, the roof is not only waterproof and heat-insulating, but also soundproof. Octatube designed, manufactured and installed the roof. The roof consists of four elements: one fixed element and three that can be slid underneath. This sliding method made the water proofing of the roof complex. In addition, the strength and stiffness of the structure must

meet all individual load situations as the weight of the roof shifts. We calculated the stiffness for each moment of displacement. The glass has a solar control coating that keeps the heat out while maintaining the desired transparency. The glass in the fixed roof element has a silkscreen printing that limits the greenhouse effect between the glass parts when the roof is retracted. We fully assembled the roof at our Delft factory. There it successfully passed a 100-cycle test.

**octatube**