

# 5 Broadgate

London



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**Situated in the City of London's Square Mile and built around and above Liverpool Street Station, MAX FRANK supplied to the new '5 Broadgate' office estate.**

Situated in the City of London's Square Mile and built around and above Liverpool Street Station, Max Frank Ltd. supplied Shearail® punching shear reinforcement to the new '5 Broadgate' office estate.

The new 12-storey 'groundscraper' will be built on the site that was previously occupied by 4 & 6 Broadgate and will provide over 700,000 sq ft (66,890 sq m) of new space for clients & staff of UBS. The entire site comprises over 4 million sq ft of office, retail and leisure space where over 30,000 people work each day.

MAX FRANK worked closely with the Byrne Bros. site team and with the Structural Engineers throughout the project to ensure a successful conclusion. Shear links had already been designed for this project so MAX FRANK's technical design engineer's easily converted and successfully replaced shear links with [Shearail®](#) to comply with the original design.

Numerous independent tests have demonstrated the stud heads form positive end anchorage flush with the top layer of tension reinforcement. Whereas the anchorage of the links is based mainly on bond, the improved end anchorage of the stud controls the shear cracks and enhances the aggregate interlock.

Extensive material research was undertaken during the design process and product selection of this project, to maximise the recycled content of the building and reduce carbon emissions.

## Type of building:

### Architect:

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### Engineers/ Specialist Planners:

Buro Happold

### Building contractor:

Mace, Byrne Bros (Formwork)

### Completion:

2016

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## Products used:



Punching shear reinforcement  
Shearail®



5 Broadgate Development  
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