



The Rotunda Birmingham Carbon Fibre Reinforcement





Project information

VolkerLaser was awarded the contract for structural capacity of the 21 storey Rotunda building in Birmingham. This iconic symbol of the city is being transformed by developers Urban Splash from tired office accommodation into stylish, desirable apartments.

Client

Urban Splash

Value

£850,000

Duration

24 weeks

enable a streamlined solution that increases the load bearing capacity of the floors. CFRP plates, in contrast to more traditionally used steel plates, have the advantage of being substantially lighter. The handling on site is therefore much easier. The plates are also corrosion-resistant and exhibit excellent fatigue strength.

accredited procedures.

Our team worked closely with the client and design team to ensure the most suitable solutions to their structural requirements and carried out all operations in a safe and controlled manner.

VolkerLaser was awarded the contract for upgrading the structural capacity of the 21 storey Rotunda building in Birmingham. This iconic symbol of the city is being transformed from tired office accommodation into stylish, desirable apartments. Although the building has always sparked controversy, its celebrity and fabulous views over the second city ensured that the apartments sold out within just two and a half hours of their public launch.

Floor to ceiling windows to capitalize on fantastic city views limited the design of structural strengthening. VolkerLaser bonded carbon fibre reinforced polymer (CFRP) plates to the soffit of the concrete floor slabs to

Working from the Structural Engineer's designs, VolkerLaser installed 4,500 metres of CFRP plates, with the specified modulus properties. VolkerLaser also erected temporary works prior to the demolition of concrete walls, using precision drill stitching to form new openings, which were then reinforced with CFRP plates.

The load capacity of selected internal concrete walls was increased by the application of sprayed concrete. As the members of the Sprayed Concrete Association, VolkerLaser ensures that its direct workforce is adequately trained in the safe and appropriate application of this product and operates in line with our