



Lightweight structural concrete solution



“I’m delighted that Tarmac’s new TOPLIGHT C has provided a perfect solution for a complete rework of a postmodern office building situated in the heart of the City of London”

Stephanie Upton-Roddy, sustainability advisor

TOPLIGHT C is a lightweight structural concrete produced using specialist engineered high strength lightweight aggregate and admixtures to provide much lower densities compared to standard conventional concrete.

Using TOPLIGHT C means designers can reduce the thickness of the slab, columns and foundations whilst, also reducing the amount of steel mesh required. The product allows you to use less material which makes it a cost effective and resource efficient solution.

The project at 60 London Wall aimed to extensively refurbish, reconfigure, reinvent and reposition the building. The objective was to strip back the building to its frame and re-core to provide efficient high quality modern workplace accommodation with a prime retail offering at ground floor level. Due to the addition of a composite metal deck floor extension and additional steel frame for the top floors, the concrete was ideal as it could be pumped to the top floors and ensured a weight loss at no jeopardy to the structural concrete performance.

The lightweight concrete mix design, containing structural lightweight aggregates was pumped 60 metres (12 storeys) vertically on to the new composite deck floors. The use of lightweight concrete reduced the load by 30 percent which minimised the need for underpinning the existing frame and structures. The construction programme time was significantly reduced by using TOPLIGHT C which insured completion of the work was done in the shortest time possible for this 32,000m² prime City of London office space.

