

COMBINING FIRE PROTECTION AND ANTI-CORROSION SYSTEMS FOR LONDONS TALLEST BUILDING

Designed by the Italian architect Renzo Piano, The Shard is an 87-storey skyscraper forming part of the London Bridge Quarter development. Standing approximately 306m (1,004ft) tall, The Shard was (until 2021) the tallest building in the European Union.

The structure was inspired by a vision to create a striking vertical city incorporating retail, offices, hotel, apartments, restaurants and a public viewing gallery. Opened in 2012, a million people visited the Shard's viewing platform in the first year, and up to 6,000 people a day visit the building's restaurants and bars.

SHERWIN-WILLIAMS WAS ASKED TO SUPPLY BOTH FIRE PROTECTION AND ANTI-CORROSION COATINGS SYSTEMS FOR THE LANDMARK BUILDING. THESE SYSTEMS HAD TO GIVE 20 YEARS EXTERNAL CORROSION PROTECTION, AND ALSO 90/120 MINUTES FIRE PROTECTION.

CLIENT:

Severfield Reeve (fabricator) WSP (structural engineer)

MAIN CONTRACTOR: Mace



THE SHARD, LONDON





SOLUTION

Sherwin-Williams partnered with Severfield Reeve, the fabricator on The Shard, and worked with structural engineer WSP and main contractor Mace to provide a solution for the intumescent fire protection that could be applied at works rather than on-site.

This allowed Mace to reduce the project completion time on-site by eliminating a complete painting step in the critical construction programme whilst also providing a much higher degree of quality control and aesthetic finish to the fire protected steelwork.

Sherwin-Williams offered full specification/technical and practical advice from the early design stages to the completion of the project, with staff providing a complete fire take-off and inspection service.

Coatings used for corrosion protection were Macropoxy™ C400V3 primer and Acrolon™ C137V2 top coat.

Coatings used for fire protection were FIRETEX® C69 fast track blast primer, FIRETEX M95 epoxy intumescent coating, FIRETEX FX2002, FIRETEX FX4000 with Acrolon C137V2 as a top coat.

SUBSTRATE

Steel.

REQUIREMENTS

20 years external corrosion protection, 90/120 minutes fire protection.

SPECIFICATIONS

Blast cleaned to Sa2½ (ISO 8501-1:2007)

- Macropoxy C400V3
- Acrolon C137V2 (corrosion)
- FIRETEX C69
- FIRETEX M95/FX2002/FX4000
- Acrolon C137V2 (fire protection).

AREA COATED

12,500 tons of structural steelwork.

THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe. Our broad portfolio of highperformance coatings and systems that excel at combating corrosion helps customers achieve smarter, time-tested asset protection. We serve a wide array of markets across our rapidly growing international distribution footprint, including oil and gas, water and wastewater, bridge and highway, steel fabrication, flooring, food and beverage, rail and power, marine and passive fire protection.

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