

Steel Glazing Systems



SUCCESSFUL FIRE TEST – 2020 – WRIGHTSTYLE

Wrightstyle are pleased to announce that it has successfully achieved a milestone fire test.

The test at Warrington fire, on Wrightstyle's steel and glass advanced curtain wall system, has a breakthrough significance for a number of fire safety applications.

The company tested its WSL SR60 curtain wall framing system with SCHOTT PYRANOVA® 120 glass to 148 minutes integrity and insulation.

Additionally, the test was carried out with the exterior building surface facing into the furnace. This made the test significantly more demanding on the system components. It also means that the system is dual directional fire resistant.

It makes the Wrightstyle system an ideal solution in places where a high level of integrity and insulation is required and where the fire risk could be from either side of the glazing – for example, in atriums, airports, shopping malls and between buildings.

This also gives a tested advantage to provide fire protection between higher risk areas such as car parks and workshops and lower risk areas such as offices and a building's reception.

In addition to adding further test evidence to an already comprehensive list, the test incorporated steel spandrel panels, making it one of the first alternative infill options to achieve two hours of integrity and insulation performance.

SR60 Curtain Walling - System Attributes.

- Tested to BS476 Part 22 and EN1364-3
- Dual Directional Fire Applications up to EI-148 Minutes.
- Dry Gasket Glazed
- Self-Draining.
- Pressure Equalised.
- Thermally Broken.
- Roof Glazing Applications.
- Air Permeability AE (> 600 Pa)
- Water Resistance (Pa) RE₁₆₅₀
- U Value <0.9 W/(m²K)
- Sound Insulation up to R_w 48dB
- Burglar Resistant as per DIN EN1627 up to RC3
- Bullet Resistance to BR8.
- Steel Faced Spandrel Panels.

Of key importance is that the SR60 system is also fully weather certified, being a gasket glazed system, an enormous advance on more commonly-used tape glazed system.

Spandrel panels can have both a functional and aesthetic purpose, and generally have to meet thermal, acoustic, fire performance and moisture requirements.

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The target performance for the Wrightstyle test was to achieve EI120 (120 minutes integrity and insulation). The test ran for a period of 148 minutes, exceeding the criteria for a pass by 23%, an overrun that is rare in high performance tests.

Full furnace temperature was achieved after some 60 minutes into the test, with a peak temperature of 1050 degrees C.

The test module size was three metres by three metres and the test was jointly carried out by Wrightstyle and SCHOTT Technical Glass Solutions GmbH, one of the world's leading speciality glass manufacturers.

Helmut Kugelmann, Sales Director for Fire Resistant and Security Glazing at SCHOTT, commented, "SCHOTT were very happy to work with Wrightstyle on this fire test and look forward to further cooperation, in developing the worldwide demand for fully tested safe solutions that exceed local building code requirements."

The SR60 curtain wall framing system, which can be installed internally or externally, also gives Wrightstyle renewal of a full global assessment and fresh test evidence to underline the capabilities of the system.

"This gives architects and specifiers new confidence in the WSL SR60 system, allowing them to push the boundaries of fire safety," said Chris Peters.

"Including spandrel panel in the test adds a new level of fire safety to an aspect of the building envelope where a curtain wall framing system is used – these should not to be confused with rain skin over cladding systems, which are an entirely different product," he said.

