Exova Warringtonfire has completed a major rebuild of facilities at its Gent laboratory, which will increase both testing capability and capacity and offer more flexibility for customers.

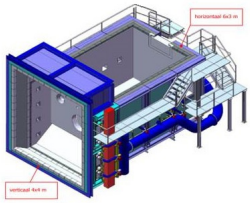
The laboratory has invested in new equipment to be used in testing large partitions, screens, doors, floor and ceiling assemblies, long-loaded structural beams and the functional integrity of electrical cable support systems. This includes a combination furnace which can run tests in both the vertical and horizontal plane, and at larger sizes than previous equipment allowed, with a high level of computer control using the latest IT based dashboard control station.

The investment also means the lab can test two ducts at a time to the EN 1366-1 and the BS 476: Part 24:1987 test standards with a variety of combinations using vertical and horizontal specimens either individually or together.

State of the art fire testing furnace

The furnace, combination type, is designed for fire resistance tests on vertical elements of sizes (4x4, 3x3) m² or horizontal elements of sizes (3x3; 4x3, 6x3, 7x3) m². Prior to this it was just a horizontal furnace with maximum dimensions of 6x3.

The materials to be tested are mounted in test frames outlined in concrete. The furnace fulfils the requirements of EN 1363-1 and is technically related to the ISO 834-1 standard on fire resistance tests of elements. The following standards are covered: EN 1363, EN 1364-x-x, ISO 834-x, ASTM E119, NFPA 252, UL 9, UL 10B, UL 10C, UL 263, BS476-20, BS476-22 (-X means all parts of the mentioned standard).



The side wall was enlarged so that we not only can test horizontal elements, but also vertical elements up to a size of 4m x 4m. There are larger specimens (fire doors) where a 3x3 furnace

will not work or a customer simply wants to be able to get more specimens into their test. It also means we now have two large scale vertical furnaces at Gent.

This anticipates to the European interpolation rules that allow for a broader field of application if elements are tested to bigger dimensions.