In addition to the prescribed test standards, CMTS has developed a number of in-house methods to meet specific requirements where no alternative standards exist.
FULL SCALE FIRE RESISTANCE TEST FURNACES
Static / Tilting Type Design (3m x 3m, 4m x 3m, 5m x 4m)

Fire resistance tests determine the behaviour of an element of construction when subjected to defined heating and pressure conditions which may be encountered in a fully developed fire. Fire resistance is the property of composite construction, it is a test of structures rather than individual materials and consequently the tests tend to be larger in scale and complexity. The test specimens are representatives of the items that go to make up buildings: doors, walls, floors, beams, columns, ceilings, etc...

Fire resistance tests are also commonly called up in codes and regulations in both the building and transport sectors.

CMTS staff work closely with clients to ensure that fire resistance test furnaces are custom built to suit confined spaces using available infrastructure. Consultancy services are tailored to provide a cost effective solution to the client’s fire testing needs.

Test can be carried out to American, British, European and international test standards, suited for construction, marine and offshore sectors.

Full Scale Fire Resistance tests for a range of construction products can be undertaken to BS EN 1363, ASTM E119, UL10B, 10C, ISO 834.

Tests are undertaken using CMTS Fire Resistance Test Furnaces on:
- Timber and Steel Fire Doors
- Wall and Partitions
- Glazed Systems, Curtain Walls
- Suspended Ceilings
- Ventilation Ducts and Dampers
- Floor Structures
- Steelwork Protection
- Shutter Systems
- Cavity Barriers
- Penetration seals
- Intumescent seals
- Linear gap seals
- Powered and Natural Ventilators
- Smoke Control Screens/Curtains
- Marine constructions

Furnace Control & Fire Test Data Management System

Using the indicative furnace it is possible to test smaller elements of structure or to undertake small scale testing before moving to full scale. The results of indicative tests can not be used in lieu of full scale tests of structures. However, a number of ad-hoc tests can be undertaken on the indicative furnace including fire resistance testing of:
- Penetration seals
- Linear gap seals
- Small sections of steelwork to assess applied fire protection
- Smoke exhaust fans
- Gas meters
- Safes
- Smoke Leakage Testing

Hose Stream Test Equipment

Overhead Travelling Crane