



> FIRE RESISTANCE TESTS

Configuration for vertical elements EN 1365-1 – Loadbearing walls

For what types of structures?

Walls required to fulfill their structural function and sometimes a partitioning function during a fire.

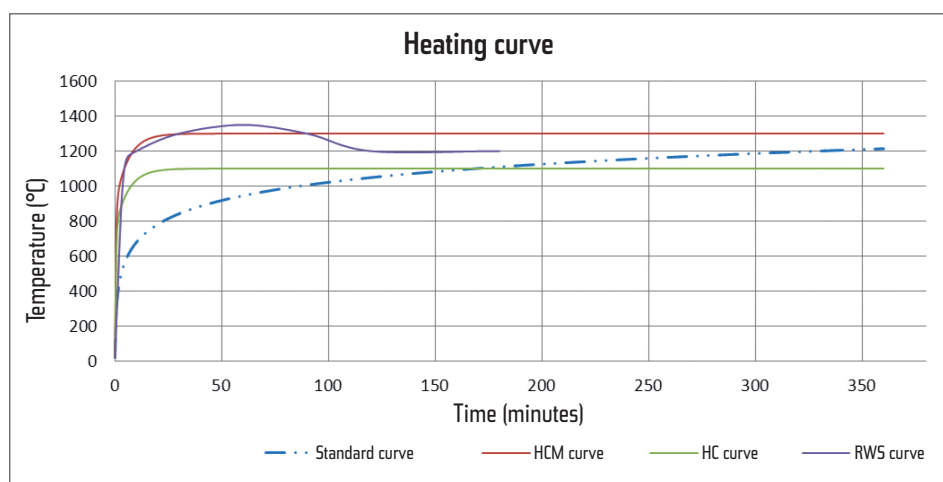
Reference scenarios

Conventional temperature-time curve described by standard EN 1363-1

HydroCarbon Majorated (HCM) curve described by the technical instruction appended to circular 2000-63

HC curve described by Eurocode 1 NF EN 1991-1-2-2003

RWS curve defined by ROBK-6 (Netherlands) and NFPA 502 (United States)



Test principle

Determination of the time during which load bearing capacity, fire integrity and thermal insulation criteria are satisfied.

Loadbearing capacity: the time during which the element remains capable of supporting the applied load, despite the effects of fire.

Fire integrity: ability of an element to prevent passage of flames and hot gases on the non-exposed face.

Thermal insulation: ability of an element to limit the temperature rise on the non-exposed face to a value less than specified levels.

Classification

The following table contains the list of classifications used by at least one Member State of the European Union:

R	15	20	30	45	60	90	120	180	240	360
RE		20	30		60	90	120	180	240	360
REI	15	20	30	45	60	90	120	180	240	360
REI-M			30		60	90	120	180	240	360
REW		20	30		60	90	120	180	240	360

Contact

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