

7 Instrumentation

The furnace and the instrumentation of the furnace shall be in accordance with section 7 of the annex to resolution A.754(18).

8 Method of test

8.1 Commencement of test

Not more than 5 min before the commencement of the test, the initial temperatures recorded by all thermocouples shall be checked to ensure consistency and the datum values shall be noted. Similar datum values shall be obtained for deformation, and initial condition of the prototype control system shall be noted.

At the time of the test, the initial average internal temperature shall be $20 \pm 10^\circ\text{C}$ and shall be within 5°C of the initial ambient temperature.

8.2 Furnace control

The furnace control shall be in accordance with paragraph 8.3 of the annex to resolution A.754(18)

8.3 Temperatures, duration of testing and actions during test

8.3.1 The average furnace temperature shall be increased and stabilized at $200 \pm 50^\circ\text{C}$ within 5 min and kept at the level of $200 \pm 50^\circ\text{C}$ up to the end of the first 60 min. Then the average furnace temperature shall be increased according to the standard time-temperature curve beginning with the level of 200°C up to 945°C .

8.3.2 The opening and closing function of the door control mechanism shall be activated every 5 min from the beginning of the test for the duration of 60 min.

8.3.3 The automatic switchover shall isolate the door control system from the power supply at the average furnace temperature of 300°C and shall be able to keep the door closed at least up to 945°C .

8.4 Measurements and observations on the prototype control system

In case of pneumatic or hydraulic systems, the input pressure which shall be identical with the approved system pressure shall be recorded. Due to a high input pressure, necessary safety precautions shall be taken when the test is carried out.

9 Classification criteria

9.1 During the first 60 min of the test, a prototype fire door control system shall not fail.

9.2 During the period from the end of the first 60 min until the end of the test, the door shall remain closed.