



**ÇAĞIN**  
Elevator & Escalator

**CRIPPA** **TURBO**  
ELEVATOR COMPANY  
T.T.

**DOORS THAT  
DEFY FIRE!..**

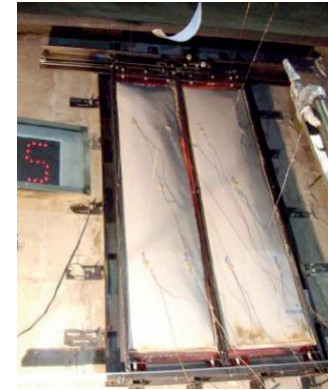
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In accordance with the "Regulation on Fire Protection of Buildings", popularly referred to as the "Fire Regulation" in Türkiye; elevator stall doors are required to be at least 30/60 minutes from a fire.

When a fire breaks out on any floor of a building, the well of the elevator poses

measures are not taken, it is inevitable that the fire will spread to all floors in a building in a short time by means of an lift well. In order to prevent this danger, the elevator landing doors should act as a 'fire barrier'. This is also what is intended for fire tests.



resistance certificates. In 2009, the Crippa 2-panel telescopic and central landing doors that we had tested in Slovakia used special

insulation material and were rated with EI120 and EI 90 at the end of the successful tests. Insulated doors can be requested by institutions such as BOTAŞ, TPAO.

In 2019, the tests of our 2 panel glazed (telescopic and central) landing doors, 3 panel telescopic doors, 4 panel central doors and semi-automatic (glazed in the middle) landing doors from our Crippa branded landing doors were carried out in Turkish Standards Institute (TSE) Fire and Acoustics Laboratory located in Gebze, Türkiye, according to TS EN 81-58:2018 standard. If we summarize



a great risk for this fire to spread to other buildings. That is, if the necessary

As Çağın Elevator, we are the first elevator company in Turkey to obtain a fire

the fire tests, the test oven temperature rose to 500 °C degrees in the fifth minute from the moment the test started, while the 120-minute tests eventually reached 1050 °C degrees. Landing doors, the integrity of which does not deteriorate for 120 minutes and -except for the permissible amount- does not leak smoke, were certified with the E120 classification. According to the standard, the fire certificate of the product is valid within a tolerance of ±30 of the width of the tested door. In addition, the door height can be increased by another 15% of the sample that passed the test. If we open this with an example;

The dimensions of our 4 panel central landing door, which has been subjected to fire testing, are 1700\*2300 mm. Since the relevant tests have been successfully completed, according to the fire report obtained from the TSE, our certificate remains valid on our 4 panel central doors

with a net entrance width of 1190 mm to 2210 mm. At the same time, we can also increase the net input height up to 2645 mm.

**Classification of fire resistance:**

The fire resistance class is expressed as a combination of the criteria's given above and period of time in minutes. Period of time shall be rounded down to the nearest fire classification period hereafter: 15 min, 20 min, 30 min, 45 min, 60 min, 90 min or 120 min. For example: an elevator landing door with an E: 67 min., W: 44 min. and I: 28 min. It is classified as E 60 and/or EW 30 and/or EI 20.

The fire resistance performance of the landing door should be affixed with an information label on the lifting well side of the door panel or door frame.

We designed and released a newly door this year which is called 'Turbo T.T:' The

tests of our 'branded door' were also tested in the aforementioned laboratory of TSE. These new and original designed doors, which have been tested according to TS EN 81-58: 2018 standard, have also successfully completed fire tests and have been presented to our customers.

The fire resistance performance of elevator doors has been examined from three angles according to EN 81-58:2018 standard. Fire tests are carried out together for Integrity (E), Thermal Insulation (EI) and Radiation (EW) conditions.

**E (Integrity)**

The main requirement for lift door fire resistance is integrity. The criteria is following:

- no sustained flaming in well side for more than 10 s at any time;
- the leakage rate per meter width of the door opening does not exceed 3,0 m<sup>3</sup>/ (min•m) after 14 minutes fire.

**Thermal insulation (I)**

The average surface temperature rise of the lift door should not exceed 140 K during a defined period of time.

For door panel, over panel and side panel with a width ≥ 300 mm, the maximum temperature rise on shall not exceed 180 K during a defined period of time.

For side panel width and/or over panel height of greater than 100 mm, but less than 300 mm, then the maximum temperature rise of these members shall not exceed 360 K during a defined period of time.

**Radiation (W)**

The radiation shall not exceed the value of 15,0 kW/m<sup>2</sup> during a defined period of time, measured as specified in EN 1363-2:1999

