

Function

Smoke control doors hinder the smoke to penetrate into the room on the other side, so that this can be used as escape route in case of fire.

Therefore the function of the door must not be impaired up to a temperature of 200°C.

Smoke control doors are not fire resisting within the meaning of DIN 4102 (German Standard).

They do not require an official certificate of the 'Institut für Bautechnik', Berlin.

Test following German Standard DIN 18 095

- Imperviousness

At 2 doors the leak rate Q is measured in the test room :

- with overpressure increased stepwise
- at room temperature or at 200°C.

- Permanent operability

The permanent operability has to be proved by 200.000 door operations.

Test conditions for smoke control doors according to **DIN 18 095 Part 2**

Air temperature in the test room

measurement at room temperature and 200 °C

Pressure in the test room

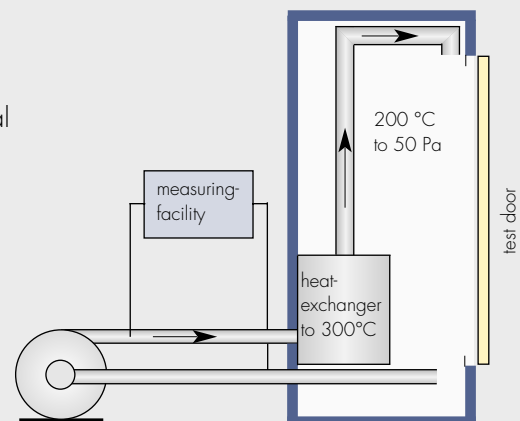
stepwise increase of pressure in the test room up to 50 pascal

Measurement of the air volume flow

- difference between the quantity of air blown in and the quantity suck off.
- calculation by the difference of pressure and temperature at the fan.

Permissible leak rate :

- 20 m³/h single-leaf smoke control doors
- 30 m³/h double-leaf smoke control doors



Possible Constructions :

The requirements on smoke control doors are mainly influenced by choice and structure of the seal system.

Application of SAUERLAND BOARDS :

For smoke control doors single-layer solid boards or multilayer solid boards can be used as cores.