

## Certificate

For all German fire doors a general certificate issued by the 'Institut für Bautechnik' in Berlin is required. Door, frame and fittings must form an integrate whole.

## Test Instruction

In test institutes at least 2 fire-tests with the same type of doors have to be performed successfully (first with the closing side towards the furnace and second with the opening side towards the furnace).

Before starting the fire-test the door's stability has to be proved by 200.000 operations.

## Changes of the Construction

Each technically important change of the construction, especially glass openings or the assembly into light-weight partition walls requires an appropriate test.

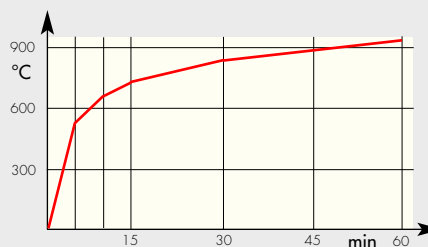
## Control / Quality Assessment

With the certificate of the "Institut für Bautechnik" in Berlin the door set components are subject to a regular control to ensure the quality standards during series production.

## Fire-Test **DIN 4102 Teil 2 (German Standard)**

### Temperature in the furnace :

5 min	556°C
10 min	658°C
15 min	719°C
30 min	822°C
60 min	925°C



### Overpressure in the furnace :

at the top rail 8 - 12 Pa

### Test criteria :

- no open flame
- cotton pad test
- surface temperature

at any position

average change in temperature : < 140 K

maximum change in temperature : < 180 K

## European Test Institutes

### MPA

38106 Braunschweig  
Tel. :+49 531/ 391-5400  
Fax: +49 531/ 391-5900

### MFPA Leipzig GmbH

04319 Leipzig-Engelsdorf  
Tel. :+49 341/ 6582-134  
Fax: +49 341/ 6582-197

### MPA der Universität

70569 Stuttgart  
Tel. :+49 711/ 685-3323  
Fax: +49 711/ 685-7681

### PTE Rosenheim GmbH

83026 Rosenheim  
Tel. :+49 8031/261 251 00  
Fax: +49 8031/261 259 00

### MPA NRW

44287 Dortmund  
Tel. :+49 231/ 45 02 0  
Fax: +49 231/ 45 85 49

### Chiltern House

UK - High Wycombe  
Tel. :+44 1494/ 56 98 00  
Fax: +44 1494/ 56 48 95

### DANSK Institut

DK - 2650 Hvidovre  
Tel. :+45 36/ 34 90 00  
Fax: +45 36/ 34 90 01

### Warrington

GB - Warrington  
Tel. :+44 1925/ 655-116  
Fax: +44 1925/ 655-419

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