

DIN EN 1364-4:2014-05 (E)

Fire resistance tests for non-loadbearing elements - Part 4: Curtain walling - Part configuration

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Test equipment	8
4.1	General testing principles	8
4.2	Furnace configuration	9
4.3	Supporting floor	9
5	Test conditions	9
6	Test specimen	10
6.1	Size	10
6.2	Number of specimens	10
6.3	Design	10
6.3.1	General	10
6.3.2	Standard configuration	11
6.3.3	Restraint of the specimen	11
6.3.4	Surfaces	12
6.3.5	Perimeter seal	12
6.4	Construction	13
6.5	Verification	13
7	Installation of the test specimen	13
7.1	General	13
7.2	Supporting floor	13
7.2.1	Standard supporting floor	13
7.2.2	Non-standard supporting floor	13
7.3	Furnace closure	14
7.4	Fixing of the framing system	14
8	Conditioning	14
9	Application of instrumentation	14
9.1	Thermocouples	14
9.1.1	Furnace thermocouples (plate thermometers)	14
9.1.2	Unexposed face thermocouples	14
9.2	Pressure	17
9.3	Radiation	17
10	Test procedure	17
11	Performance criteria	17
12	Test report	18

13	Field of direct application of test results	19
13.1	Rules for curtain walling type A	19
13.1.1	General rules	19
13.1.2	Rules for the complete construction	19
13.1.3	Framing system	21
13.1.4	Spandrel panels	24
13.2	Rules for curtain walling type B	28
13.3	Perimeter seal	28
13.3.1	General	28
13.3.2	Material	28
13.3.3	Width/depth	29
13.3.4	Fixing of the perimeter seal	29
13.3.5	Covering	29
13.4	Supporting floor	29
Annex A (informative) Guidance on testing curtain walling - part configuration		44
A.1	Standard configuration	44
A.1.1	General	44
A.1.2	Supporting floor	44
A.1.3	Parts of a curtain walling	44
A.1.4	Specimen selection	45
A.2	Test principles and requirements	45
A.3	Fire from the inside	47
A.3.1	General	47
A.3.2	Curtain walling type A	47
A.3.3	Curtain walling type B	47
A.3.4	Perimeter seal	48
A.3.5	Fixing of the framing system	48
A.4	Fire from the outside	48
Annex B (normative) Standard configurations		51
Annex C (normative) Radiation calculation		56
Annex D (normative) Field of direct application of test results for unitised construction		59
D.1	Rules for curtain walling type A	59
D.1.1	General	59
D.1.2	Exposure conditions	59
D.1.3	Rules for the complete construction	59
D.1.4	Spandrel panels	59
D.2	Rules for curtain walling type B	59
Bibliography		60