DIN 4102-16:2015-09 (E)

Fire behaviour of building materials and building components - Part 16: "Brandschacht" tests

Contents

Page

Foreword 4

1 Scope 6

2 Normative references 6

3 Brief description of method 7

4 Specimen preparation 7
4.1 General 7
4.2 Colour variations 7
4.3 Finishes (paints, coatings, wallcoverings, etc.) 7
4.4 Adjacent materials 8
4.5 Bonding agents 9

5 Number and size of specimens and test pieces 9
5.1 General 9
5.2 Reducing the scope of testing of Brandschacht tests 10
5.3 Number of tests for materials of various densities and thicknesses 11

6 Conditioning and ageing of specimens 11
6.1 Conditioning of specimens 11
6.2 Conditioning to determine ageing behaviour 11
6.3 Ageing of plastic drainage pipes and fittings 12

7 Requirements for specific materials 13
7.1 Internal wall and ceiling linings applied using adhesives 13
7.2 Wood chipboard 13
7.3 Other types of covering 14
7.3.1 High-pressure laminates (HPL) or continuous pressure laminates (CPL) (laminated sheet) used to cover wood chipboard 14
7.3.2 Other coverings on substrates not covered by this standard 14
7.4 Back-ventilated cladding 15
7.5 Thermal insulation composite systems 15
7.6 Mineral fibre insulating materials, with or without metal facing 15
7.7 Rigid polystyrene foam boards 15
7.8 Rigid polystyrene foam composite panels 16
7.9 Adhesives for use with rigid polystyrene foam board 16
7.10 Sandwich panels 16
7.11 Loose or granular insulating materials 16
7.12 In-situ foam 17
7.13 Intumescent coatings and coatings for wood and wood-based panel products 17
7.13.1 Specimen materials 17
7.13.2 Surface finishes 18
7.14 Solid timber with fire retardants applied by the vacuum/pressure process 18
7.15 Textiles 18
7.16 Fire retardants for textiles 18
7.16.1 General 18
7.16.2 Test fabrics 19
7.16.3 Fire behaviour after washing 19
7.16.4 Fire behaviour after dry cleaning 19

7.16.5 Fire behaviour after exposure to natural weathering 19
7.16.6 Number of specimens 19
7.17 Pipes, pipe insulation, lagging, jacketing 20
7.17.1 Pipes 20
7.17.2 Pipe insulation (hinged or tubular, with or without jacketing applied at works) 20
7.17.3 Cladding for insulated pipes 21
7.18 Flexible ventilation ducting 21
7.19 Jointing products (at edges) 22
7.19.1 General 22
7.19.2 Sealants 22
7.19.3 Compressible soft foam strips 22
7.20 Raised access floor panels 22
7.21 Roof underlays 22
7.22 Decorative elements 23
7.23 Cables and cable coatings 23
7.24 Plastic sheeting (hollow core or multiwall sheeting, e.g. polycarbonate) 23

8 Testing 23
8.1 General 23
8.2 Exposure to flame 23
8.3 Distance of specimens to burner 23
8.4 Testing aged specimens 24
8.5 Testing weathered specimens 24
8.6 Termination of the test 24

9 Evaluation of test results 24
9.1 Determining residual length 24
9.2 Materials with a thickness > 80 mm 25

10 Test certificate 25