

ISO 9705-1:2016-02 (E)

Reaction to fire tests - Room corner test for wall and ceiling lining products - Part 1: Test method for a small room configuration

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Fire test room	2
5.1	Dimensions	2
5.2	Doorway	3
5.3	Construction material	3
6	Ignition source	3
6.1	General	3
6.2	Location	4
6.3	Gas	4
6.4	Heat output	4
7	Hood and exhaust duct	4
8	Instrumentation in the exhaust duct	4
8.1	General	4
8.2	Volume flow rate	4
8.3	Gas analysis	5
8.3.1	Sampling line	5
8.3.2	Oxygen	5
8.3.3	Carbon dioxide	5
8.4	Optical density	5
8.4.1	General	5
8.4.2	Lamp	5
8.4.3	Lenses	5
8.4.4	Aperture	5
8.4.5	Detector	5
8.4.6	Location	6
9	System performance	6
9.1	System response	6
9.1.1	Procedure	6
9.1.2	Delay times	7
9.1.3	Response times	7
9.1.4	Calculations	7
9.2	Daily Check	7
9.3	Precision	8
9.4	Methanol calibration	8
9.4.1	Frequency of calibration	8
9.4.2	Container	8

9.4.3	Methanol	8
9.4.4	Procedure for methanol calibration	8
9.4.5	Requirements for methanol calibration	9
10	Preparation of test specimens	9
10.1	Specimen configuration	9
10.2	Boards	9
10.3	Mounting	9
10.4	Substrates	9
10.5	Paints and varnishes	9
10.6	Conditioning	10
11	Testing	10
11.1	Initial conditions	10
11.1.1	Ambient temperature	10
11.1.2	Ambient wind speed	10
11.1.3	Burner	10
11.1.4	Photographs	10
11.2	Procedure	10
11.2.1	Automated recording of data	10
11.2.2	Adjustment of burner and exhaust flow	11
11.2.3	Photographs	11
11.2.4	Observations	11
11.2.5	Termination of test	11
11.2.6	Damage of tested sample	11
11.2.7	Unusual behaviour	11
11.2.8	Additional measurements	12
12	Test report	12
	Annex A (normative) Ignition source	14
	Annex B (informative) Instrumentation of test room	17
	Annex C (informative) Design of exhaust system	21
	Annex D (informative) Instrumentation in exhaust duct	24
	Annex E (normative) Calculation	31
	Annex F (informative) Specimen configurations	39
	Annex G (informative) Precision	40
	Annex H (informative) Laser smoke photometer	41
	Bibliography	42