

ISO 14934-4:2014-08 (E)

Fire tests - Calibration and use of heat flux meters - Part 4: Guidance on the use of heat flux meters in fire tests

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General information on heat flux meters	1
4.1	General	1
4.2	Principle of measurement	2
4.3	Design of heat flux meter	3
4.4	Measurement characteristics	5
4.5	Physical shape of heat flux meter	8
5	Attachments to heat flux meters	9
5.1	Air purging	9
5.2	Windows	10
5.3	Cooling system	11
6	Selection of a suitable heat flux meter	12
6.1	General	12
6.2	Range of measurement	12
6.3	Type, dimensions and orientation	13
6.4	View angle	14
6.5	Response time	14
6.6	Sensitivity to convective heat transfer	14
7	Performing a measurement	14
7.1	Installation	14
7.2	Target surface	15
7.3	Electronics	15
7.4	Relationship between output voltage and total heat flux	15
8	Calibration	16
8.1	Secondary standard heat flux meter	16
8.2	Working standard heat flux meters	16
8.3	Frequency of calibration	16
9	Maintenance	16
9.1	Absorber	16
9.2	Wiring	16
9.3	Water supply	16
10	Use of heat flux meters in fire tests	16
10.1	General	16
10.2	Ignitability test: ISO 5657	17
10.3	Spread of flame test: ISO 5658 series	17
10.4	Heat release, smoke production and mass loss: ISO 5660 series and ISO 17554	18

10.5	Full-scale room test for surface products: ISO 9705 and ISO 13784 series	18
10.6	Façade tests: ISO 13785 series	18
10.7	Spread of flame test for floor coverings: ISO 9239 series	18
	Bibliography	19