

DIN EN 15650:2010-09 (E)

Ventilation for buildings - Fire dampers

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Fire damper requirements	8
4.1	General	8
4.1.1	Fire resistance	8
4.1.2	General application	8
4.2	Construction and components: characteristics	8
4.2.1	Construction and operation	8
4.2.2	Protection against corrosion	9
4.2.3	Actuators	9
4.3	Fire resistance performance criteria	9
4.3.1	Fire dampers: integrity, insulation, leakage, operational reliability	9
4.3.2	Fire resistance classification and designation	10
4.3.3	Durability	10
4.3.4	Other performance criteria	11
5	Test methods	11
5.1	Ambient Leakage Tests	11
5.2	Fire resistance test	11
5.2.1	General	11
5.2.2	Fire damper: integrity and insulation	11
5.2.3	Leakage rated fire damper	12
5.2.4	Response delay of a fire damper	12
5.2.5	Sensing element: response temperature and load bearing capacity	12
5.3	Salt Spray Exposure Test	12
5.4	Cycling Tests	12
5.4.1	Pre-fire test cycling	12
5.4.2	Damper durability cycling	12
5.5	Damper Aerodynamic Performance	12
6	Evaluation of conformity	13
6.1	General	13
6.2	Initial type testing	13
6.2.1	General	13
6.2.2	Modifications	14
6.2.3	Previous tests and product families	14
6.2.4	Test samples	15
6.2.5	Test report	15
6.3	Factory Product Control (FPC)	15
6.3.1	General	15
6.3.2	General requirements	15
6.3.3	FPC specific requirements	16
6.3.4	Initial inspection of factory and FPC	18
6.3.5	Continuous surveillance of FPC	18

6.3.6	Procedure for modifications	18
6.4	One-off fire dampers, pre-production fire dampers (e.g. prototypes) and fire dampers produced in very low quantities	18
7	Marking and documentation	19
8	Product, installation and maintenance information (documentation)	20
8.1	Product specification	20
8.2	Installation information	20
8.3	Maintenance information	20
	Annex A (informative) Typical fire damper descriptions	21
	Annex B (normative) Salt spray exposure test	22
	Annex C (normative) Cycling Tests	23
	Annex D (informative) Example of inspection and maintenance procedure	25
	Annex E (normative) Factory Production Control - TEST PLAN	26
	Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive (Construction products Directive 89/106/EEC)	27
	Bibliography	33