

DIN EN 1628:2011-09 (E)

Pedestrian doorsets, windows, curtain walling, grilles and shutters - Burglar resistance - Test method for the determination of resistance under static loading

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Definitions	5
4	Apparatus	6
4.1	Test rig	6
4.2	Load applicators	6
4.3	Hooks	6
4.4	Straps	6
4.5	Pressure pads	7
4.6	Measuring equipment	7
4.7	Sub-frame	7
4.8	Tolerances	7
5	Test specimen	8
5.1	General	8
5.2	Preparation and examination of the test specimen	8
6	Procedure	9
6.1	Test room climate	9
6.2	General	9
6.3	Testing of group 1 and group 2 construction products	9
6.3.1	Loading points for group 1 and group 2 products	9
6.3.2	Test procedure for the infill medium retention system (product groups 1 and 2)	10
6.3.3	Test procedure for the leaf (product group 1, burglar resistance class 1)	10
6.3.4	Test procedure for the leaf (product group 1, burglar resistance classes 2 and higher)	11
6.3.5	Test procedure for the leaf (product group 2, burglar resistance class 1)	11
6.3.6	Test procedure for the leaf (product group 2, burglar resistance classes 2 and higher)	11
6.4	Expression of results for product groups 1 and 2	11
6.5	Testing of group 3 construction products	12
6.5.1	Loading points	12
6.5.2	Loading direction	12
6.5.3	Loading and measurement procedure	12
6.5.4	Expression of results	13
6.6	Testing of group 4 construction products	14
6.6.1	General	14
6.6.2	Resistance of moving element	14
6.6.3	Resistance of other loading points	14
6.6.4	Expression of results	14
7	Test report	14
Annex A (normative)	Test Equipment	16
A.1	Examples for loading points F1 and F3	16
A.2	Example of test rig	18
A.3	Examples for pressure pads for door sets, windows and shutters	19

A.4	Examples for pressure pads for door sets, windows and shutters in places where it is necessary to bridge any item of furniture or a lock	19
A.5	Examples for pressure pads for roller shutters	20
A.6	Examples for pressure pads for roller shutters - separate test for guide rails	20
A.7	Examples for pressure pads for grilles	21
A.8	Examples of loading equipment for sliding doors, double leaf sliding doors, sliding windows and shutters	22
A.9	Examples for hooks	23
A.10	Gap gauges	24
A.11	Examples of mounting arrangements for door sets	25
A.12	Examples of mounting arrangements for windows	27
A.13	Examples of mounting arrangements for wing and folding shutters	28
A.14	Examples of mounting arrangements for guide rails and roller shutters into the test rig ..	31
A.15	Examples of mounting arrangements for grilles into in the test rig	34
A.16	Loading points on door sets (load F3 and F2) in resistance class 1 to 6	36
A.17	Loading points on door sets (load F3) in resistance class 1 to 6	38
A.18	Loading points on door sets (load F1 and F3) in resistance class 1 to 6	40
A.19	Loading points on door sets (load F3) in resistance class 1 to 6	41
A.20	Loading points on door sets (load F3 and F3.a) in resistance class 1	42
A.21	Additional loading points on door sets (load F3.a and F3) in resistance class 1	43
A.22	Additional loading points on door sets (load F3, F3.a and F2) in resistance class 1	45
A.23	Loading points on windows (loads F1 and F3) in resistance class 1 to 6	46
A.24	Additional loading points on windows (load F3.a and F3) in resistance class 1	47
A.25	Additional loading points on double hinged windows	48
A.26	Additional loading points on windows (load F3.a) in resistance class 1	49
A.27	Additional loading points on windows (load F3.a and F3) in resistance class 1	50
A.28	Loading points on windows (loads F1 and F3) in resistance class 1 to 6	51
A.29	Loading points on a single leaf shutter (load F3) in resistance class 1 to 6	52
A.30	Loading points on a multi leaf shutter (loads F1 and F3) in resistance class 1 to 6	53
A.31	Loading points on a multi leaf wing shutter (loads F1 and F3) in resistance class 1 to 6 ...	54
A.32	Guide rail single test on roller shutters	55
A.33	Loading points on roller shutters (load F3) in resistance class 1 to 6	56
A.34	Loading points on roller shutters (load F2) in resistance class 1 to 6	57
A.35	Loading points on roller shutters (load F1) in resistance class 1 to 6	58
A.36	Loading points on fixed grilles (load F3) in resistance class 1 to 6	59
A.37	Loading points on moveable grilles (load F3) in resistance class 1 to 6	60
A.38	Loading points on roller grilles (load F3.2) in resistance class 1 to 6	61
Annex B (normative) Test sequence for static loading test in resistance classes 1 to 6		63
Annex C (normative) Dislocation of window hardware against the locking direction		65
C.1	General	65
C.2	Test criteria	65
C.3	Test method	65
Bibliography		67