

DIN EN 16122:2012-10 (E)

Domestic and non-domestic storage furniture - Test methods for the determination of strength, durability and stability

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	General test conditions	7
4.1	Preliminary preparation	7
4.2	Application of forces	8
4.3	Tolerances	8
4.4	Prevention of movement during test	8
4.5	Loading	8
5	Test equipment and apparatus	8
6	Test procedures for non-movable parts	10
6.1	Shelves	10
6.1.1	General	10
6.1.2	Shelf retention test - horizontal outward force	10
6.1.3	Shelf retention test - vertical downward force	10
6.1.4	Deflection of shelves	10
6.1.5	Strength of shelf supports	11
6.2	Tops and bottoms	12
6.2.1	Sustained load test for tops and bottoms	12
6.2.2	Static load test for tops and bottoms	12
6.3	Clothes rails and supports	12
6.3.1	General	12
6.3.2	Dislodgement of clothes rails	13
6.4	Strength of the structure	14
6.4.1	Test for structure and underframe	14
6.4.2	Drop test	16
6.4.3	Tests for units with castors or wheels	17
7	Test procedures for movable parts	17
7.1	Pivoted doors	17
7.1.1	General	17
7.1.2	Strength of pivoted doors Vertical load of pivoted doors	17
7.1.3	Horizontal load of pivoted doors	18
7.1.4	Slam shut of pivoted doors	19
7.1.5	Durability of pivoted doors	20
7.2	Sliding doors and horizontal roll fronts	21
7.2.1	General	21
7.2.2	Slam shut/open of sliding doors and horizontal roll fronts	21
7.2.3	Durability of sliding doors and horizontal roll fronts	22
7.3	Flaps	22
7.3.1	Strength of bottom-hinged flaps	22
7.3.2	Durability of flaps	23
7.3.3	Drop test for horizontally top-hinged doors/flaps	23
7.4	Vertical roll fronts	24

7.4.1	Slam shut/open of vertical roll fronts	24
7.4.2	Durability of vertical roll fronts	25
7.5	Extension elements	25
7.5.1	General	25
7.5.2	Strength of extension elements	25
7.5.3	Durability of extension elements	26
7.5.4	Slam shut and open of extension elements	28
7.5.5	Displacement of extension element bottoms	29
7.5.6	Interlock test	29
7.6	Locking and latching mechanism tests	29
7.6.1	General	29
7.6.2	Strength test for locking and latching mechanisms for extension elements	29
7.6.3	Locking and latching mechanisms for doors, flaps and roll fronts	30
7.6.4	Locking and latching mechanism durability test	30
8	Trays	30
8.1	General	30
8.2	Sustained load test for trays	30
8.3	Drop test for trays	30
9	Coat hooks Strength of coat hooks	31
10	Units mounted to the building or other structure	32
10.1	Units not supported by the floor	32
10.1.1	General	32
10.1.2	Movable parts, shelf supports, tops and bottoms	32
10.1.3	Overload	32
10.1.4	Dislodgement test	33
10.2	Units supported by the floor	33
11	Stability tests	33
11.1	General	33
11.2	Doors, extension elements and flaps closed, all storage units unloaded	33
11.2.1	Units that are, or can be, adjusted to a height of 1000 mm or less	33
11.2.2	Units that are, or can be, adjusted to a height of more than 1000 mm	34
11.3	Opening doors, extension elements and flaps, all storage units unloaded	34
11.4	Doors, extension elements and flaps opened and unlocked	34
11.4.1	All storage areas unloaded and all doors, extension elements and flaps open	34
11.4.2	All storage areas unloaded with overturning load	34
11.4.3	All storage areas loaded with overturning load	34
11.5	Doors, extension elements and flaps closed and locked, all storage units loaded	35
11.6	Dynamic stability test for units with castors	35
12	Test report	35
Annex A (normative)	Apparatus for slam-shut/open test of extension elements	37
A.1	Principle	37
A.2	Apparatus	37
A.3	Calibration	39
A.3.1	Pneumatic apparatus	39
A.3.2	Weight and string system	39