

DIN EN 16121:2024-04 (E)

Non-domestic storage furniture - Requirements for safety, strength, durability and stability

Contents	Page
European foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Test sequence and tolerances	8
4.1 Individual units	8
4.2 Range of units	8
4.3 Tolerances	8
5 Safety requirements	8
5.1 Principles of safety requirements	8
5.1.1 General	8
5.1.2 Determination of centre of gravity	9
5.1.3 Determination of total mass	9
5.2 General safety requirements	9
5.3 Holes in tubular/rigid components	10
5.4 Shear and compression points	10
5.4.1 Shear and compression points when setting up and folding	10
5.4.2 Shear and compression points under influence of powered mechanisms	10
5.4.3 Shear and compression points during use	10
5.5 Hinged horizontal lids	11
5.6 Vertical glass components	11
5.7 Stability	11
5.8 Structural safety	13
5.8.1 Structural safety tests	13
5.8.2 Structural safety requirements	15
6 Strength and durability	15
6.1 General	15
6.2 Strength and durability requirements	17
7 Information for use	17
8 Test report	17
Annex A (normative) Test methods for finger entrapment and shear and compression	19
A.1 Finger entrapment	19
A.1.1 Test equipment	19
A.1.2 Test method	20
A.2 Shear and compression	23
A.2.1 Test equipment	23
A.2.2 Test method - Shear and compression points created under the influence of powered mechanisms	23
A.2.3 Test method -- Shear and compression points created during normal use	24
Annex B (normative) Requirements for primary schools, kindergartens and similar applications	25

B.1	General	25
B.2	Requirements	25
B.2.1	Shear and compression points	25
B.2.2	Principles of safety requirements	25
B.2.3	General safety requirements	25
B.2.4	Glass	25
B.2.5	Stability	25
B.2.6	Strength and durability - drop test for trays	25
B.3	Additional requirements for furniture for kindergartens	26
B.3.1	Finger entrapment	26
B.3.2	Shear and compression points under the influence of powered mechanisms	26
B.3.3	Shear and compression points during use	26
Annex C (normative) Selecting product from a range of furniture - Range of units		27
Annex D (informative) Guidance of test severity in relation to application for non-domestic storage furniture		28
Annex E (informative) Suggested loads for tests not specified in this document		29
E.1	Suggested loads	29
E.1.1	General	29
E.1.2	Stability	29
E.1.3	Strength and durability	29