

## COMPARISON TABLE OF TESTS ON FURNITURE

DOMESTIC USE STORAGE UNITS							
METHOD	Safety requirements EN 14749	Strength and durability requirements UNI 11663			Strength and durability requirements EN 16121 Cl. 6 Level 1 General	METHOD	Strength and durability requirements ISO 7170 Domestic Use
		Kitchen and bathroom	Other use	Small components			
Shelf retention Vertical force EN 16122 6.1.3	100 N	/	/	/	/	Shelf retention Vertical force ISO 7170 6.1.3	100 N
Shelf retention Horizontal force EN 16122 6.1.2	50% of the shelf weight	/	/	/	/	Shelf retention Horizontal force ISO 7170 6.1.2	50% of the shelf weight
Deflection of shelves EN 16122 6.1.4	/	Load: 1,5 kg/dm2 Max deflection: 0,5 %	Load: 1,0 kg/dm2 Max deflection: 0,5 %	Load: 1,0 kg/dm2 Max deflection: 0,5 %	Load: 1,0 kg/dm2 Max deflection: 0,5 %	Deflection of shelves ISO 7170 6.1.4	Kitchen: Load: 1,5 kg/dm2 Max deflection: 0,55 % Other: Load: 1,0 kg/dm2 Max deflection: 0,55 %
Shelf supports EN 16122 6.1.5	Load: 0,65 kg /dm2 Impact plate 1,7 kg	Load: 0,65 kg /dm2 Impact plate 1,7 kg	Load: 0,65 kg /dm2 Impact plate 1,7 kg	/	/	Shelf supports ISO 7170 6.1.5	Load: 1,0 kg/dm2 Max deflection: 0,5 %
Sustained load Tops/Bottoms EN 16122 6.2.1	Only for heavy appliance 0,5 kg/dm3	/	/	/	/	Sustained load Tops/Bottoms ISO 7170 6.2.1	Load: 1,0 kg/dm2 Max deflection: 0,55 %
Static load Tops/bottoms EN 16122 6.2.2	Only tops 1000 N kitchen 750 N other use	1000 N	750 N	/	/	Static load Tops/bottoms ISO 7170 6.2.2	Kitchen: 1000 N Other: 750 N
Clothes rails supports EN 16122 6.3.1	/	4 kg/dm	4 kg/dm	/	4 kg/dm	Supporti barre appendiabiti ISO 7170 6.3.1	4 kg/dm
Dislodgment of clothes rails EN 16122 6.3.2	/	5 kg/dm	5 kg/dm	/	5 kg/dm	Clothes rails supports ISO 7170 6.3.2	4 kg/dm
Strength of the structure EN 16122 6.4.1	/	350 N	300 N	/	/	Strength of the structure ISO 7170 6.4.1	350 N
Drop test EN 16122 6.4.2	/	50 mm	50 mm	/	/	Drop test ISO 7170 6.4.2	50 mm
Units with castors EN 16122 6.4.3	/	1.000 cycles	500 cycles	/	/	Units with castors ISO 7170 6.4.3	Kitchen: 1000 cycles Other: 500 cycles
Vertical load of pivoted doors EN 16122 7.1.2	30 kg	20 kg	15 kg	10 kg	/	Vertical load of pivoted doors ISO 7170 7.1.2	30 kg
Horizontal load of pivoted doors EN 16122 7.1.3	60 N	30 N	25 N	/	/	Horizontal load of pivoted doors ISO 7170 7.1.3	60 N
Slam shut of pivoted doors EN 16122 7.1.4	/	Test mass 3 kg	Test mass 2 kg	/	Test mass 3 kg	Slam shut of pivoted doors ISO 7170 7.1.4	Test mass Kitchen: 3 kg Other: 2 kg
Durability of pivoted doors EN 16122 7.1.5	/	40.000 cycles	20.000 cycles	5.000 cycles	40.000 cicl	Durability of pivoted doors ISO 7170 7.1.5	Kitchen: 40.000 cycles Other: 20.000 cycles
Slam/shut of sliding doors EN 16122 7.2.2	Test mass 4 kg	Test mass 3 kg	Test mass 2 kg	/	Test mass 4 kg	Apertura/chiusura con urto porte scorrevoli orizzontali ISO 7170 7.2.2	Test mass 4 kg
Durability of sliding/roll doors EN 16122 7.2.3	/	Sliding 20.000 cycles Roll 10.000 cycles	Sliding 10.000 cycles Roll 5.000 cycles	Sliding 5.000 cycles Roll 2.500 cycles	Sliding 20.000 cycles Roll 10.000 cycles	Slam/shut of sliding doors ISO 7170 7.2.3	Kitchen sliding 20.000 cycles Kitchen roll 10.000 cycles Other sliding 10.000 cycles Other roll 5.000 cycles
Strength of bottom hinged flaps EN 16122 7.3.1	200 N	200 N	150 N	/	/	Strength of bottom hinged flaps ISO 7170 7.3.1	200 N
Durability of flaps EN 16122 7.3.2	/	20.000 cycles	10.000 cycles	5.000 cycles	10.000 cycles	Durability of flaps ISO 7170 7.3.2	Kitchen: 20.000 cycles Other: 10.000 cycles
Drop test for top hinged flaps EN 16122 7.3.3	/	/	/	/	/	Drop test for top hinged flaps ISO 7170 7.3.3	150 cycles
Slam shut/open of vertical roll fronts EN 16122 7.4.1	/	/	/	/	/	Slam shut/open of vertical roll fronts ISO 7170 7.4.1	Test mass: 3 kg
Durability of vertical roll fronts EN 16122 7.4.2	/	10.000 cycles	5.000 cycles	2.500 cycles	10.000 cicl	Durability of vertical roll fronts ISO 7170 7.4.2	Kitchen: 10.000 cycles Other: 5.000 cycles
Strength of extension elements EN 16122 7.5.2	Load on drawer: 0,2 kg/dm3 Force: 200 N	Drawer not loaded Force: 150 N	Drawer not loaded Force: 100 N	Drawer not loaded Force: 100 N	/	Strength of extension elements ISO 7170 7.5.2	Load: Kitchen: 0,325 kg/dm3 Other: 0,2 kg/dm3 Force: 200 N
Durability of extension elements/trays EN 16122 7.5.3	/	Load: 0,2 kg/dm3 Drawers: 50.000 cycles Trays: 20.000 cycles	Load: 0,2 kg/dm3 Drawers: 20.000 cycles Trays: 10.000 cycles	Load: 0,2 kg/dm3 Drawers: 5.000 cycles Trays: /	Load: 0,2 kg/dm3 Drawers: 40.000 cicl Trays: 20.000 cicl	Durability of extension elements ISO 7170 7.5.3	Kitchen: 0,325 kg/dm3, 50.000 cycles Other: 0,2 kg/dm3, 20.000 cycles
Slam shut/open of extension elements EN 16122 7.5.4	Only open Factor k: 2,5 Velocity: 1,3 ; 1,0 m/s	Factor k: 2,5 Velocity: 1,3 ; 1,0 m/s	Factor k: 2,5 Velocity: 1,3 ; 1,0 m/s	/	Only shut Factor k: 2,5	Slam shut/open of extension elements ISO 7170 7.5.4 - 7.5.5	Factor k: 2,5 Load: Kitchen: 0,325 kg/dm3 Other 0,2 kg/dm3
Displacement of extension elements bottom EN 16122 7.5.5	/	Load: 0,2 kg/dm3 Force: 70 N	Load: 0,2 kg/dm3 Force: 60 N	Load: 0,2 kg/dm3 Force: 60 N	Load: 0,2 kg/dm3 Force: 60 N	Displacement of extension elements bottom ISO 7170 7.5.5	Kitchen: 0,325 kg/dm3 F: 70 N Other 0,2 kg/dm3 F: 60 N
Interlock test EN 16122 7.5.6	/	200 N	200 N	/	/	Interlock test ISO 7170 7.5.6	200 N
Strength for drawers locking mechanisms EN 16122 7.6.2	/	200 N	200 N	100 N	200 N	Strength for drawers locking mechanisms ISO 7170 7.6.2	Kitchen: 200 N Other: 100 N
Strength for doors locking mechanisms EN 16122 7.6.3	/	200 N	200 N	100 N	200 N	Strength for doors locking mechanisms ISO 7170 7.6.3	Kitchen: 200 N Other: 100 N
Durability of locking mechanisms EN 16122 7.6.4	/	/	/	/	/	Durability of locking mechanisms ISO 7170 7.6.4	Kitchen: 5.000 cycles Other: 2.500 cycles
Sustained load for trays EN 16122 8.2	/	1,0 kg/dm3	0,65 kg/dm3	/	0,65 kg/dm3	Sustained load for trays ISO 7170 8.2	0,65 kg/dm3
Drop test for trays EN 16122 8.3	/	700 mm	350 mm	350 mm	350 mm	Drop test for trays ISO 7170 8.3	350 mm
Strength of coat hooks EN 16122 9	/	40 N	40 N	/	40 N	Strength of coat hooks ISO 7170 9	150 N
Overload of wall hanged cabinets EN 16122 10.1.3	Nominal load: 2,5 kg/dm2	/	/	/	/	Overload of wall hanged cabinets ISO 7170 10.1.3	Nominal load: 2,5 kg/dm2
Dislodgement of wall hanged cabinets EN 16122 10.1.4	100 N	/	/	/	/	Dislodgement of wall hanged cabinets ISO 7170 10.1.4	100 N
Units attached on wall, supported by the floor EN 16122 10.2	200 N	/	/	/	/	Units attached on wall, supported by the floor ISO 7170 10.2	400 N

NON DOMESTIC - OFFICE USE STORAGE UNITS					
METHOD	Safety requirements EN 16121 par.5.7	Strength and durability requirements EN 16121 Cl. 6		METHOD	Strength and durability requirements ISO 7170 Non Domestic Use
		Level 1 General	Level 2 Severe		
Shelf retention Vertical force EN 16122 6.1.3	100 N	/	/	Shelf retention Vertical force ISO 7170 6.1.3	100 N
Shelf retention Horizontal force EN 16122 6.1.2	50% of the shelf weight	/	/	Shelf retention Horizontal force ISO 7170 6.1.2	50% of the shelf weight
Deflection of shelves EN 16122 6.1.4	/	Load: 1,0 kg/dm2 Max deflection: 0,5 %	Load: 1,5 kg/dm2 Max deflection: 0,5 %	Deflection of shelves ISO 7170 6.1.4	Load: 2,0 kg/dm2 Max deflection: 0,55 %
Shelf supports EN 16122 6.1.5	Office: 1,5 kg/dm2 Mass 2,5 kg Other: 0,65 kg /dm2 Mass 1,7 kg	/	/	Shelf supports ISO 7170 6.1.5	Load: 1,0 kg /dm2 Mass 1,7 kg or 2,5 kg
Sustained load Tops/Bottoms EN 16122 6.2.1	/	/	/	Sustained load Tops/Bottoms ISO 7170 6.2.1	Load: 2,0 kg/dm2 Max deflection: 0,55 %
Static load Tops/bottoms EN 16122 6.2.2	1000 N	/	/	Static load Tops/bottoms ISO 7170 6.2.2	Load: 1000 N
Clothes rails supports EN 16122 6.3.1	/	4 kg/dm	4 kg/dm	Supporti barre appendiabiti ISO 7170 6.3.1	5 kg/dm
Dislodgment of clothes rails EN 16122 6.3.2	/	5 kg/dm	5 kg/dm	Clothes rails supports ISO 7170 6.3.2	5 kg/dm
Strength of the structure EN 16122 6.4.1	350 N	/	/	Strength of the structure ISO 7170 6.4.1	350 N
Drop test EN 16122 6.4.2	/	/	50 mm	Drop test ISO 7170 6.4.2	180 mm
Units with castors EN 16122 6.4.3	2.000 cycles	/	/	Units with castors ISO 7170 6.4.3	2000 cycles
Vertical load of pivoted doors EN 16122 7.1.2	30 kg	/	/	Vertical load of pivoted doors ISO 7170 7.1.2	30 kg
Horizontal load of pivoted doors EN 16122 7.1.3	60 N	/	/	Horizontal load of pivoted doors ISO 7170 7.1.3	80 N
Slam shut of pivoted doors EN 16122 7.1.4	/	Test mass 3 kg	Test mass 4 kg	Slam shut of pivoted doors ISO 7170 7.1.4	Test mass: 4 kg
Durability of pivoted doors EN 16122 7.1.5	/	40.000 cycles	50.000 cycles	Durability of pivoted doors ISO 7170 7.1.5	50.000 cycles
Slam/shut of sliding doors EN 16122 7.2.2	/	Test mass 3 kg	Test mass 4 kg	Apertura/chiusura con urto porte scorrevoli orizzontali ISO 7170 7.2.2	Test mass 4 kg
Durability of sliding/roll doors EN 16122 7.2.3	/	Sliding 20.000 cycles Roll 10.000 cycles	Sliding 40.000 cycles Roll 20.000 cycles	Slam/shut of sliding doors ISO 7170 7.2.3	Sliding 20.000 cycles Roll 10.000 cycles
Strength of bottom hinged flaps EN 16122 7.3.1	200 N	/	/	Strength of bottom hinged flaps ISO 7170 7.3.1	250 N
Durability of flaps EN 16122 7.3.2	/	10.000 cycles	20.000 cycles	Durability of flaps ISO 7170 7.3.2	20.000 cycles
Drop test for top hinged flaps EN 16122 7.3.3	/	/	/	Drop test for top hinged flaps ISO 7170 7.3.3	150 cycles
Slam shut/open of vertical roll fronts EN 16122 7.4.1	/	/	/	Slam shut/open of vertical roll fronts ISO 7170 7.4.1	Test mass: 4 kg
Durability of vertical roll fronts EN 16122 7.4.2	/	10.000 cycles	20.000 cycles	Durability of vertical roll fronts ISO 7170 7.4.2	20.000 cycles
Strength of extension elements EN 16122 7.5.2	Load on drawer: 0,2 o 0,5 kg/dm3 Force: 200 N	/	/	Strength of extension elements ISO 7170 7.5.2	Load: Other: 0,325 kg/dm3 Heavy: 0,65 kg/dm3 Force: 350 N or 250 N
Durability of extension elements/trays EN 16122 7.5.3	/	Load: 0,2 kg/dm3 Drawers: 40.000 cycles Trays: 20.000 cycles	Load: 0,5 kg/dm3 Drawers: 50.000 cycles Trays: 25.000 cycles	Durability of extension elements ISO 7170 7.5.3	Other: 0,325 kg/dm3, 50.000 cycles Heavy: 0,652 kg/dm3 80.000 cycles
Slam shut/open of extension elements EN 16122 7.5.4	Slam Open only Factor k: 2,5	Slam Shut only factor k: 2,5	Slam Shut only Factor k: 2,5	Slam shut/open of extension elements ISO 7170 7.5.4 - 7.5.5	Factor k: 2,5 Load: 0,65 kg/dm3
Displacement of extension elements bottom EN 16122 7.5.5	/	Load: 0,2 kg/dm3 Force: 60 N	Load: 0,5 kg/dm3 Force: 70 N	Displacement of extension elements bottom ISO 7170 7.5.5	Other: 0,325 kg/dm3 F: 60 N Heavy: 0,652 kg/dm3 F: 70 N
Interlock test EN 16122 7.5.6	200 N	/	/	Interlock test ISO 7170 7.5.6	200 N
Strength for drawers locking mechanisms EN 16122 7.6.2	/	200 N	200 N	Strength for drawers locking mechanisms ISO 7170 7.6.2	200 N
Strength for doors locking mechanisms EN 16122 7.6.3	/	200 N	200 N	Strength for doors locking mechanisms ISO 7170 7.6.3	200 N
Durability of locking mechanisms EN 16122 7.6.4	/	/	/	Durability of locking mechanisms ISO 7170 7.6.4	5.000 cycles
Sustained load for trays EN 16122 8.2	/	0,65 kg/dm3	1,0 kg/dm3	Sustained load for trays ISO 7170 8.2	1,0 kg/dm3
Drop test for trays EN 16122 8.3	/	350 mm	700 mm	Drop test for trays ISO 7170 8.3	700 mm
Strength of coat hooks EN 16122 9	/	40 N	150 N	Strength of coat hooks ISO 7170 9	150 N
Overload of wall hanged cabinets EN 16122 10.1.3	Nominal load 2,5 kg/dm2	/	/	Overload of wall hanged cabinets ISO 7170 10.1.3	Nominal load: 2,5 kg/dm2
Dislodgement of wall hanged cabinets EN 16122 10.1.4	100 N	/	/	Dislodgement of wall hanged cabinets ISO 7170 10.1.4	100 N
Units attached on wall, supported by the floor EN 16122 10.2	200 N	/	/	Units attached on wall, supported by the floor ISO 7170 10.2	400 N

  = safety tests