

Martela AB
Brogatan 2
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Sweden

Testing of Combo 5846O40 cabinet

Summary

Combo 5846O40 cabinet meets the requirements for strength and safety according to EN 14073:2004, EN 14074:2004 and ISO 7170:2005 clause 6.1.3, 6.3.1 and 6.3.2.

1 Introduction

On behalf of Martela AB, a Combo 5846O40 cabinet has been tested by SP in accordance with EN 14073-2:2004, EN 14073-3:2004, EN 14074:2004 and ISO 7170:2005 clause 6.1.3, 6.3.1 and 6.3.2.

2 Test object



Figure 1 Combo 5846O40 cabinet

Dimensions: H=1650, W=600, D=440 mm
Frame: 22 mm laminated particle board at top and bottom, 18 mm on the sides
Doors: Laminated particle board, H=1555, W=300, D=17 mm
Shelf: Laminated particle board, H=22, W=560, D=345 mm
Clothes rail: In steel

The test object was selected by the client and arrived at SP 2012-09-25.

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3 Test methods and test procedure

The test was carried out according to:

- SS-EN 14073-3:2004 Office furniture – Storage furniture Part 3: Test methods for the determination of stability and strength of the structure.
- SS-EN 14073-2:2004 Office furniture – Storage furniture Part 2: Safety requirements.
- SS-EN 14074:2004 Office furniture – Tables and desks and storage furniture – Test methods for the determination of strength and durability of moving parts.
- ISO 7170:2005 Furniture – Storage units – Determination of strength and durability.

The test was carried out in climate $23 \pm 2^\circ \text{C}$ and $50 \pm 5\%$ relative humidity.

The test methods are explained in table 1.

The test was carried out over the period 2012-10-18 – 2012-11-30.

4 Results

Table 1

Tests	Reference	Cycles	Loads	Results
General safety requirements	EN 14073-2:2004 Clause.3.4			√
Vertical static strength of extension elements	EN 14074:2004 Clause.6.2.1	10	250 N (max)	-
Durability test of extension elements	EN 14074:2004 Clause.6.2.2	50 000	0,5 kg/dm ³	-
Slam open of extension elements	EN 14074:2004 Clause.6.2.3	10	1,3 m/s	-
Interlock test	EN 14074:2004 Clause.6.2.4	10	200 N	-
Vertical load on doors	EN 14074:2004 Clause.6.3.1	10	30 kg	√
Horizontal static force on open door	EN 14074:2004 Clause.6.3.2	10	80 N	√
Durability test on hinged and pivoted doors	EN 14074:2004 Clause.6.3.3	50 000		√
Durability test of sliding doors and horizontal roll fronts	EN 14074:2004 Clause.6.4.1	40 000		-
Slam shut/open of sliding doors and horizontal roll fronts	EN 14074:2004 Clause.6.4.2	10		-
Durability of vertical roll front	EN 14074:2004 Clause.6.5.1	20 000		-
Strength of flaps	EN 14074:2004 Clause.6.6.1	10	250 N	-
Durability of flaps	EN 14074:2004 Clause.6.6.2	20 000		-

Tests	Reference	Cycles	Load	Results
Rolling test for mobile filing pedestals	EN 14074:2004 Clause.6.7	2 000		-
Stability	EN 14073-3 Clause.5.5.1 and 5.5.2			√
Strength of unit	EN 14073-3 Clause.5.2	10	350 N	√
Pull out of shelves	EN 14073-3 Clause.5.3.1		20 N (max)	√
Strength of shelf supports	EN 14073-3 Clause.5.3.2	10	2,5 kg	√
Strength of top surfaces	EN 14073-3 Clause.5.4	10	1 000 N	-
Dislodgment of screen and wall hanging cabinets and shelves	EN 14073-3 Clause.5.6.2		100 N	-
Strength of screen and wall attachment devices (1 week)	EN 14073-3 Clause.5.6.4		<i>EN 14073-3 Table 1</i>	-
Floor standing unit attached to the building	EN 14073-3 Clause.5.7		200 N	-
Deflection of shelves. (1 week)	ISO 7170:2005 Clause.6.1.3 Level 3		2 kg/dm ²	√
Strength of clothes-rail supports	ISO 7170:2005 Clause. 6.3.1			√
Dislodgement of clothes rail	ISO 7170:2005 Clause. 6.3.2			√

- √ The test has been completed without any remarks.
- ⊗ The requirements are not fulfilled.
- Test is not relevant / not tested

5 Conclusion

At the end of the test, the tested piece did not exhibit any faults, fractures or other damage judged to affect its safety, function or appearance when used in accordance with EN 14073:2004, EN 14074:2004 and ISO 7170:2005 clause 6.1.3, 6.3.1 and 6.3.2.

The test results apply solely to the specimen tested.

SP Technical Research Institute of Sweden Wood Technology

Performed by

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