

INTEGRITY TESTING LABORATORIES

a division of ErgoLabs, Inc.

CLIENT:

Wurth Wood Companies
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Attention: Bob Dour

LABORATORY NO: F0904211-1A
DATE: May 12, 2009
CLIENT P.O. NO.: Email, B. Dour
STANDARDS: ANSI/BHMA 156.9-03
ANSI/KCMA A161.1-00, ANSI/BIFMA X5.5-08,
SEFA 8-99

SAMPLE: 18" FULL EXTENSION DRAWER SLIDES, P/N PRO100,
TESTED WITH A 24 INCH WIDE TEST DRAWER

ABSTRACT

This report serves to document the testing of the above sample to specific applicable drawer test paragraphs of ANSI/BHMA 156.9-2003, ANSI/KCMA A161.1-00, ANSI/BIFMA X5.5-08, and the cycle test portion of SEFA 8-99. The sample was tested to meet the requirements of all of the above standards, including the BHMA product grade 1 classification required for WI hardware approval. The remainder of this report will show how the drawer slides submitted for testing **met the requirements needed for conformance** to these standards.

PROCEDURES

A rigid test frame was assembled in order to simulate the interior of a cabinet, and provide a means to assemble the drawer and slide suspension. The drawer slides were installed and assembled with the test drawer and frame in accordance with the manufacturer's instructions. Each test was performed in accordance with the respective test paragraph for each standard. A 100 lb drawer test load was utilized for all testing procedures. The drawer slide hardware successfully completed 150,000 operating cycles with this test load, far greater than any of the minimum requirements of the stated standards

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**OBSERVATIONS AND RESULTS
 ANSI/BHMA A156.9-03**

LABORATORY DETERMINATION	LABORATORY OBSERVATION	ANSI/BHMA A156.9-03 GRADE 1 REQUIREMENT	TEST RESULT
Drawer removal and load placement BHMA section 4.11.2	The slides permitted complete drawer removal. Placement of loads did not cause removal or partial removal from the drawer's suspended position when operated.	Drawer slides shall permit complete drawer removal. Load placement shall not cause the drawer to be removed or partially removed from its suspended position during drawer operation.	PASS
Drawer slide stop test BHMA section 4.11.4.1	The stop position provided 25 lbs., or ten times the operating force.	The stop position shall provide at least ten times the normal drawer operating force.	PASS
Drawer cycle life test BHMA section 4.11.4.2	Drawer operated for a total of 150,000 cycles with a 100 lb. test load. Drawer opening force = 2.5 lbs. after the performance of the test.	Drawer shall be cycled 2/3 of the total travel for 50,000 cycles with a 50 lb. test load. Drawer shall be completely operable after the performance of the test.	PASS
Drawer edge load test BHMA section 4.11.4.3	There was no structural breakage or loss of serviceability of the slide suspensions with an additional 75 lb. edge load applied	There shall be no failure of the slides with an additional 75 lb. mass applied to the drawer edge in the half-extended position.	PASS

ANSI/KCMA A161.1-00

LABORATORY DETERMINATION	LABORATORY OBSERVATION	ANSI/KCMA A161.1-00 REQUIREMENT	TEST RESULT
Drawer Operating Life Cycle Test Section 7.1	There was no structural breakage or loss of serviceability after the performance of 150,000 cycles with a 100 lb test load.	The drawer suspension shall remain completely operable after the performance of 25,000 cycles. The required load for the test drawer size was 55 lbs.	PASS

SEFA 8-99

LABORATORY DETERMINATION	LABORATORY OBSERVATION	SEFA 8-99, LABORATORY LOAD REQUIREMENT	TEST RESULT
Drawer Cycle Test Section 6.5.2	There was no structural breakage or loss of serviceability after the performance of 150,000 cycles with a 100 lb test load.	The drawer suspension shall remain completely operable after the performance of 50,000 cycles with a 100 lb load.	PASS

ANSI/BIFMA X5.5-08

LABORATORY DETERMINATION	LABORATORY OBSERVATION	ANSI/BIFMA X5.5-08 REQUIREMENTS	TEST RESULT
Extendible member proof load test, X5.5, Paragraph 5.7	Load extendible member with 100 lbs instead of 60.7 as required. Close member for 15 minutes, extend member for 15 minutes and remove load	There shall be no sudden and major change in structural integrity of the product.	PASS- there was no loss of serviceability of the slide suspensions.
Extendible member cycle test, X5.5 paragraph 10	Load extendible member with 100 lbs instead of 45 as required. Open and close member for a total of 50,000 cycles. After completion, pull forces were recorded to be 2.5 lbs.	There shall be no loss of serviceability. Pull forces shall be less than 11.2 lbs.	PASS- there was no loss of serviceability of the slide suspensions. The pull forces recorded were well within the allowable maximum.
Extendible member Retention Impact and Durability test, X5.5 paragraph 11.3	Load extendible member with 100 lbs instead of 45 as required. Measure and record pull force to be 2.5 lbs. adjust apparatus to apply 7.5-lb outward load for 80% of drawer travel. Repeat 4 more times	There shall be no loss of serviceability. Pull forces shall be less than 11.2 lbs.	PASS- there was no loss of serviceability of the slide suspensions. The pull forces recorded were well within the allowable maximum.
Extendible member Retention Impact and Durability test, X5.5 paragraph 11.3	Load extendible member with 100 lbs instead of 45 as required. Measure and record pull force to be 2.5 lbs. adjust apparatus to apply 7.5-lb outward load against outstops device for 15,000 cycles.	There shall be no loss of serviceability. Pull forces shall be less than 11.2 lbs.	PASS- there was no loss of serviceability of the slide suspensions. The pull forces recorded were well within the allowable maximum.
Rebound test, X5.5 paragraph 12	Load extendible member with 100 lbs instead of 45 as required. Adjust apparatus to apply 40-lb inward load, releasing 2" from the fully closed position. Repeat 4 more times	There shall be no loss of serviceability. Pull forces shall be less than 11.2 lbs. All five final rest positions shall be no more than 1.5" from the fully closed position.	PASS- there was no loss of serviceability of the slide suspensions. The pull forces recorded were well within the allowable maximum. All final rest positions were less than 1.5" from the fully closed position.

CONCLUSION

During the execution of the testing program, the model PRO100, 18" drawer slide suspension performed well with no structural breakage or failure with the above load. This sample submitted for testing met all of the drawer slide test requirements and **conforms** to ANSI/BIFMA X5.5-08, ANSI/KCMA A161.1-00, ANSI/BHMA A156.9-2003 for **Grade 1** products, and the drawer cycle portion of SEFA 8-99.



Respectfully submitted,

[Handwritten Signature]
 Edwin A. Leach, Laboratory Manager
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