INTEGRITY TESTING LABORATORIES

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LABORATORY NO: F1809251-3
DATE: October 19, 2018
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STANDARDS: ANSI/BHMA 156.9-15
ANSI/KCMA A161.1-12, ANSI/BIFMA X5.5-14

SAMPLE 22" SIDE MOUNT BALL BEARING DRAWER SLIDES,
P/N LDSM3P-25-22, CERTIFIES LENGTHS FROM 10"-22"
TESTED WITH AN 18 INCH WIDE DRAWER

ABSTRACT

This report serves to document the testing of the above sample to specific applicable drawer test paragraphs of ANSI/BHMA 156.9-2015, ANSI/KCMA A161.1-12, and ANSI/BIFMA X5.5-14. 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 50 lb drawer test load was utilized for all testing procedures.

This report applies only to the sample or samples submitted for testing and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, or these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed, and upon that condition that it not be used, in whole or in part, in any advertising or publicity matter without prior written authorization from these laboratories.

OBSERVATIONS AND RESULTS
ANSI/BHMA A156.9-15

LABORATORY DETERMINATION	LABORATORY OBSERVATION	ANSI/BHMA A156.9-15 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 45 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 50,000 cycles with a **50 lb.** test load. Drawer opening force = 4.5 lbs.	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 A161.1-12

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 50,000 cycles with a 50 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 42 lbs.	**PASS**

ANSI/BIFMA X5.5-14

LABORATORY DETERMINATION	LABORATORY OBSERVATION	ANSI/BIFMA X5.5-14 REQUIREMENTS	TEST RESULT
Extendible member proof load test, X5.5, Paragraph 5.7	Load extendible member with 50 lbs instead of 45 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 50 lbs instead of 34 as required. Open and close member for a total of 50,000 cycles. After completion, pull forces were recorded to be 4.5 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 50 lbs instead of 34 as required. Measure and record pull force to be 4.5 lbs. adjust apparatus to apply 9.5-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 50 lbs instead of 34 as required. Measure and record pull force to be 4.5 lbs. adjust apparatus to apply 9.5-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.

LABORATORY DETERMINATION	LABORATORY OBSERVATION	ANSI/BIFMA X5.5-14 REQUIREMENTS	TEST RESULT
Rebound test, X5.5 paragraph 12	Load extendible member with 50 lbs instead of 34 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 LDSM3P-25-22 drawer suspension performed well with no structural breakage or failure with the above load. Sample lengths of 10" to 22" conform by similarity of construction. This sample submitted for testing met all of the drawer slide test requirements and **conforms** to ANSI/BIFMA X5.5-14, ANSI/KCMA A161.1-12, and ANSI/BHMA A156.9-2015 for **Grade 1** products

Respectfully submitted,

Edwin A. Leach, Laboratory Manager
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