

ICC-ES TEST REPORT

ANSI A161.1-2024

RENDERED TO: 802 Cabinetry 353 Howard Street Brockton, MA 02302

PRODUCT: Shaker & beveled, painted and stained cabinets

Report No.: CABC101424-110 Test Date(s): 11/4/24 - 12/19/24 Report Date: 1/15/2025 Pages: 18

257 E Randolph St, Nappanee, IN 46550 | 574-773-7975 | www.ICC-NTA.org



TEST REPORT

For ANSI A161.1

Rendered to: 802 Cabinetry 353 Howard Street Brockton, MA, 02302

Product:

Report No.: CABC101424-110 **Report Date:** 1/15/2025

Project Summary

ICC-ES, LLC was contracted by 802 Cabinetry to evaluate in accordance with ANSI A161.1. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at ICC-ES's facility in Nappanee, IN.

Qualifications

ICC-ES in Nappanee, IN has demonstrated compliance with ISO/IEC 17025 and is consequently accredited as a Testing Laboratory. ICC-ES is accredited to perform all testing reported herein.

Product Sampling

No evidence was provided that a third-party agency sampled materials for the testing reported herein. All test specimens were supplied by 802 Cabinetry As needed, ICC-ES provided commonly-available construction materials and assembled each specimen to the client's specifications, and where applicable, average quality lumber was used in the construction of specimens.

Results

The cabinets tested meet the requirements of ANSI A161.1.

Prepared By:

Justin Doran Project Manager

Reviewed By:

Joe Springer Project Manager Date: 1/15/2025

Date: 1/15/2025

This report contains only findings and results arrived at after employing the specific test procedures listed herein. It does not constitute a recommendation for, endorsement of, or certification of the product or material tested. Unless differently required, ICC-ES, LLC reports apply the "Simple Acceptance" rule, also called "Shared Risk approach", of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity. ICC-ES makes no warranty, expressed or implied, except that the test has been performed, and a report prepared, based upon the specimen specified by the client. Extrapolation of data, from the test data provided herein, to the batch or lot from which the specimens were obtained may not correlate and should be interpreted with extreme caution. ICC-ES assumes no responsibility for variations in quality, composition, appearance, performance, or other features of similar materials produced by the client, other persons, or under conditions over which ICC-ES has no control. ICC-ES has issued this report for the exclusive use of the client to whom it is addressed. Any use or duplication of this report shall not be made without their consent. This report shall only be reproduced in its entirety.



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Section 2-3: General Requirements

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

General				
Performed By:	Dave Lane			
Witnessed By:	Justin Doran			
Test Date:	11/8/2024			

Test Description: <u>General construction requirements</u> Test Modifications:

	-	Results		_			
Туре	Sub section	Description	Pass/Fail		Con	nments	
	2.1	Wall cabinets fully enclosed (backs, bottoms, sides, tops) Base cabinets fully enclosed (backs, bottoms, sides)					
	2.2	Equipment cabinets have acess panels for service or replacement of equipment	N/A				
ction	2.3	Toe space minimum is 51 mm (2") deep and 76 mm (3") high	Pass				
onstru	2.4	Utility cabinets are fully enclosed backs, bottoms, sides, and tops	N/A				
General Construction	2.7	Metal cabinets shall be rust resistant and all edges shall be free of sharpness	N/A				
Gen	2.8	Moisture content of wood materials shall be less than 10%	Pass	Base 1:8.3	Base 2:7.8	Wall 1:7.9	Wall 2:8
	2.9	Exposed construction joints shall meet tolerances shown in 2.9A, 2.9B, 2.9C, 2.9D, 2.9E in the standard	Pass				
	4.0	Exposed cabinet hardware shall comply with ANSI A156.9	N/A				
s.	2.5.1	Doors and drawers are properly aligned with cabinet	Pass				
Doors and Drawers	2.5.2	Doors and drawers close without excessibe binding or looseness	Pass				
Ŭ U	2.5.3	Doors and drawers funciton effectively with typical industry hardware.	Pass				
ction	2.6.1	Cabinet material shall be sufficient gauge or thickness for rigidity	Pass				
onstrue	2.6.2 Cabinet face frames shall be thick enough to provide rigidity		Pass				
inet Co	2.6.1 Cabinet material shall be sufficient gauge of unckness for rigidity 2.6.2 Cabinet face frames shall be thick enough to provide rigidity 2.6.3 Frameless cabinets sides, tops, and backs shall be thick enough to provide rigidity 2.6.4 Corner or linear bracing shall be used where necessary to provide rigidity		N/A				
Cabi	2.6.4	Corner or linear bracing shall be used where necessary to provide rigidity	Pass				
s	3.1	All tests are made on cabinets installed according to manufacture instruction	Pass				
General Test Requirements	3.2	Tests are run at temperature of 68°F to 80°F and relative humidity of 35% to 75%. Reported in each test section.	Pass				
Gener Requir	3.4	Observations are made with lighting of 100-200 ft. candles.	Pass				
Ι	3.5	Instructions are included with cabinet or provided elsewhere	Pass				



Section 5.1 Static Loading on Shelves and Bottoms of Cabinets

Date Received:	11/4/2024
Constructed By:	Dave Lane

Product Description

Manufacturer: 802 Cabinetry

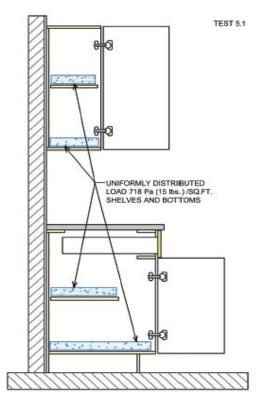
Model number:

	General]	Lab Conditions	
Performed By:	Dave Lane		Temp (°F):	73.5
Witnessed By:	Justin Doran		RH (%):	41.5
Test Date:	11/20/2024		Sensor Asset No.	01932

Test Description: <u>Shelves and cabinet bottoms were uniformly loaded at 15 PSF for 7 days.</u> Test Criteria: <u>There shall be no visible sign of joint seperation or failure and no deflection more than 0.0625 in. per linear foot between</u>

supports. Test Modifications:

	Results									
	(ft.)	(ft.)	(ft.)	(lb.)	(lb.)	(in.)	(in.)			
	Width	Depth	Linear distance between supports	Required weight	Actual weight	Allowable deflection	Actual deflection	Pass/Fail		
Wall Top shelf	2' 7 3/16"	0' 10 1/2 "	2' 7 5/16"	34	34.5636	0.16309	0.04738	Pass		
Wall Middle shelf	2'73/16"	0' 10 1/2 "	2' 7 5/16"	34	34.4	0.16309	0.04858	Pass		
Wall Bottom	2'75/16"	0' 10 1/2 "	2' 7 5/16"	34	34.393	0.16309	0.00842	Pass		
Base Shelf	2'41/4"	1' 6 0/1 "	2' 4 1/4 "	53	53.1325	0.14714	0.0469	Pass		
Base Bottom	2'41/4"	1' 10 1/2 "	2' 4 1/4 "	66	66.25	0.14714	0.01776	Pass		



	Section 5.1 Images	
	N/A	
P		



Section 5.2: Static Loading for Mounted Wall Cabinets and Wall Hung Base Cabinets

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General	[Lab (
Performed By:	Joe Springer		Temp (°F
Witnessed By:	Jaxon Miller		RH (%):
Test Date:	12/13/2024		Sensor Asset

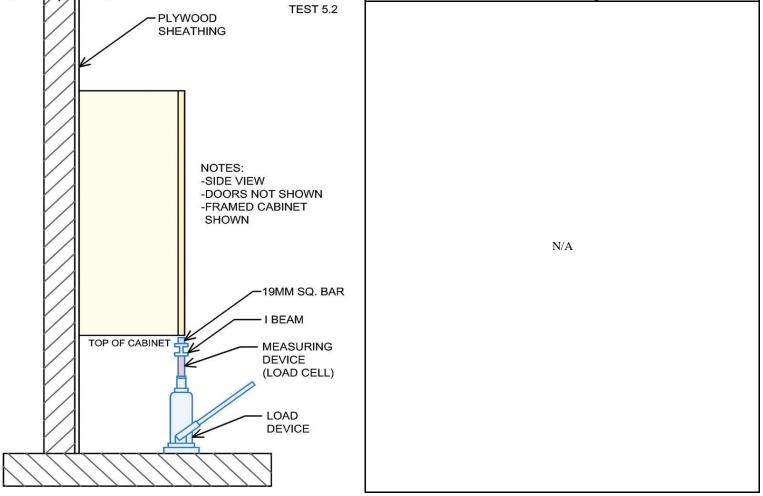
Lab Conditions					
Temp (°F):					
RH (%):					
Sensor Asset No.	01932				

 Test Description:
 The front center of the cabinet was loaded to 600 lb.+ over a duration of 4 minutes.

 Test Criteria:
 There shall be no visible sign of failure in the cabinet or mounting system.

 Test Modifications:

				F	Results	
	Width (in.)	Required load (lb.)	Load/min (lb./min.)	Actual load (lb.)	Pass/Fail	Comments
Wall cabinet	33	600	150	603	Pass	
Wall base cabinet	N/A	N/A	150		Fail	
			TEST 5.2		Section 5.2 Images	





Section 5.3: Base Front Joint Loading

Date Received:

11/4/2024

Product Description

Manufacturer: 802 Cabinetry

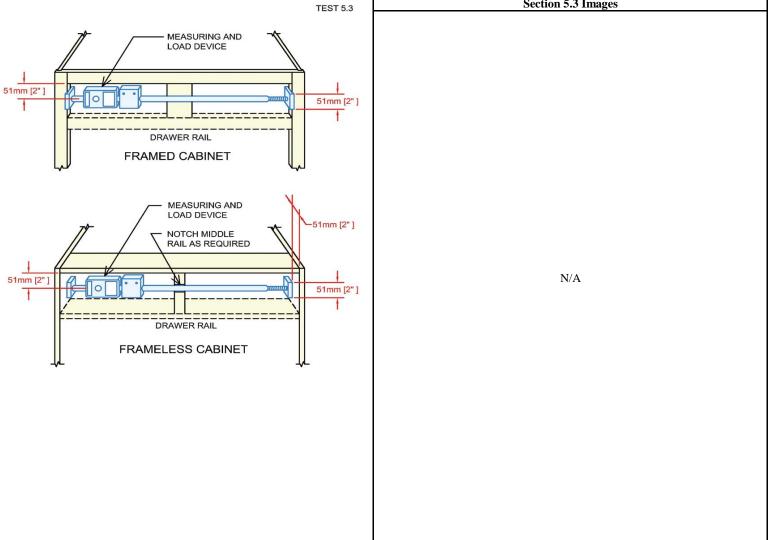
Model number:

	General]	Lab Conditions	
Performed By:	Jaxon Miller		Temp (°F):	73.0
Witnessed By:	Justin Doran		RH (%):	22.3
Test Date:	12/13/2024		Sensor Asset No.	01932

Test Description: The base front joints were loaded to 250 lb over a duration of 4 minutes.

Test Criteria: There shall be no visible sign of joint failure on exposed face of cabinet when full load is reached. Test Modifications: <u>RH out of spec.</u>

Results						
Drawer rail (Y/N)	Required load (lb.)	Load/min (lb./min.)	Actual load (lb.)	Pass/Fail	Comments	
Y	250	62.5	250	Pass		
TEST 5.3					Section 5.3 Images	





Section 5.4-5.5: Impact on Shelves, Cabinet Bottoms, Drawer Bottoms, and Base Cabinet Door

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

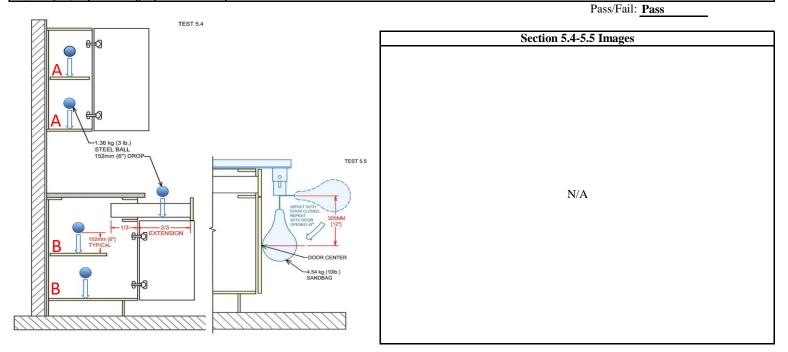
	General]	Lab Conditions	5
Performed By:	Dave Lane		Temp (°F):	71.0
Witnessed By:	Justin Doran		RH (%):	45.2
Test Date:	11/15/2024]	Sensor Asset No.	01932

Test Description: The shelves, bottoms, and drawers were impacted by a 3 lb. steel ball from 6 in. height. The base cabinet front and door were impacted by a 10 lb. sandbag while the door was opened and closed.

Test Criteria: The shelves and bottoms shall not be damaged and shall retain original positions. The drawer shall not be damaged and shall operate normally. There shall be no joint seperation or failure in cabinet or mounting system.

Test Modifications:

	Results						
Location	Required load	Actual load (lb.)	Comments				
Cabinet shelf (A)	3 lb. steel ball	3.07					
Cabinet bottom (A)	3 lb. steel ball	3.07					
Cabinet shelf (B)	3 lb. steel ball	3.07					
Cabinet bottom (B)	3 lb. steel ball	3.07					
Drawer	3 lb. steel ball	3.07					
Door (closed)	10 lb. sandbag	10.05					
Door (45° open)	10 lb. sandbag	10.05					





Section 6.1 Door Racking and Hinge Loading

Date Received:	11/4/2024
Constructed By:	Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General		Lab Conditions	5
Performed By:	Dave Lane		Temp (°F):	71.2
Witnessed By:	Justin Doran		RH (%):	45.4
Test Date:	11/15/2024		Sensor Asset No.	01932

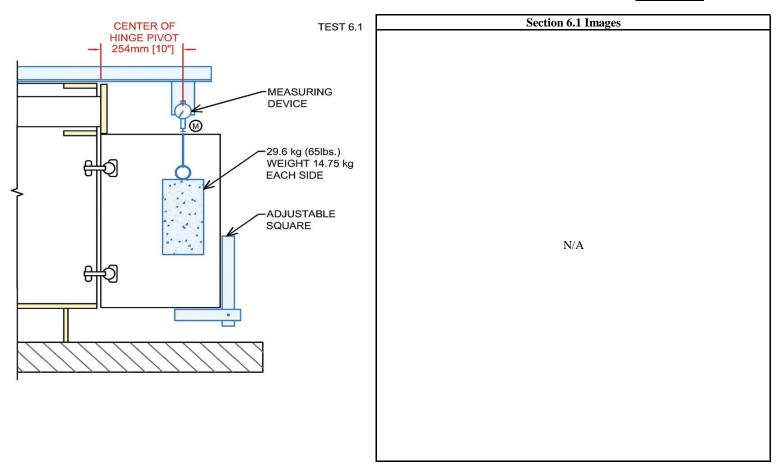
Test Description: <u>A 32.5 lb weight was applied to both sides of the door simultaneously to create a racking load while the door is operated 10 times. Deflection was measured 10 in. from the hinges.</u>

Test Criteria: The Door, hinges, and cabinet shall show no signs of damage or loss in functionality. The door holding device shall be able to hold door in closed position. The deflection shall be less than 0.065 in. Hardware shall not become loose.

Test Modifications:

	Results									
(lb.)	(lb.)	(in.)	(in.)	(in.)	(min.)	(min.)				
Weight (1) actual	Weight (2) actual	Distance of hinge pivot	Allowable deflection	Actual deflection	Loading on time	Loading off time	Comments			
32.5325	32.926	10	0.06500	0.03690	10	10				

Pass/Fail: Pass





Section 6.2: Door, Door-Holding, and Hinge Operation

Date Received:	11/4/2024
Constructed By:	Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General		Lab Conditions			
Performed By:	Justin Doran		Temp (°F):	71.7		
Witnessed By:	Justin Doran		RH (%):	41.7		
Test Date:	12/18/2024		Sensor Asset No.	01932		

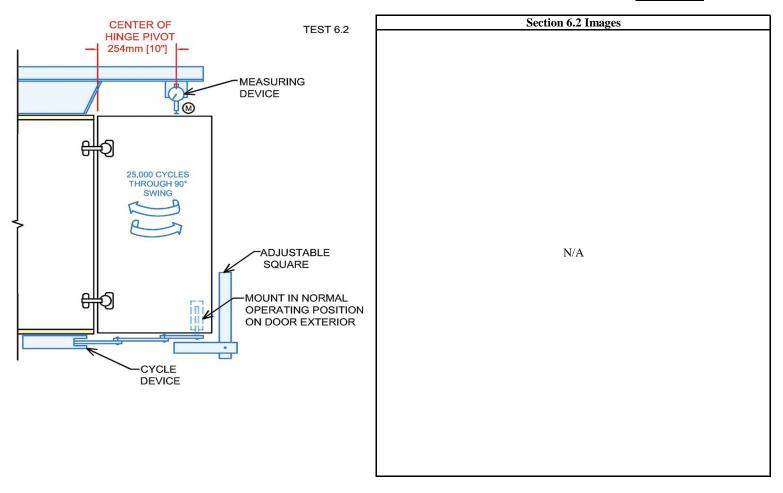
 Test Description:
 The cabinet door was operated from open (90°) to closed 25,000 times at a rate of 20 cycles per minute.

 Test Criteria:
 The door shall not lose functionality and the door holding device shall be able to hold door in closed position. The deflection shall be less than 0.065 in. The hinges shall not be damaged. The hardware shall not become loose.

Test Modifications:

	Results									
(cpm)	(cycles)	(in.)	(in.)	(in.)						
Cycles per	Cycles	Distance of	Allowable	Actual	Comments					
minute	completed	hinge pivot	deflection	deflection	connicits					
20	25000	10	0.06500	0.02462						

Pass/Fail: Pass





Section 7.1: Drawer Operation

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General		Lab Conditions	
Performed By:	Dave Lane		Temp (°F):	71.5
Witnessed By:	Justin Doran		RH (%):	41.1
Test Date:	12/16/2024		Sensor Asset No.	01932

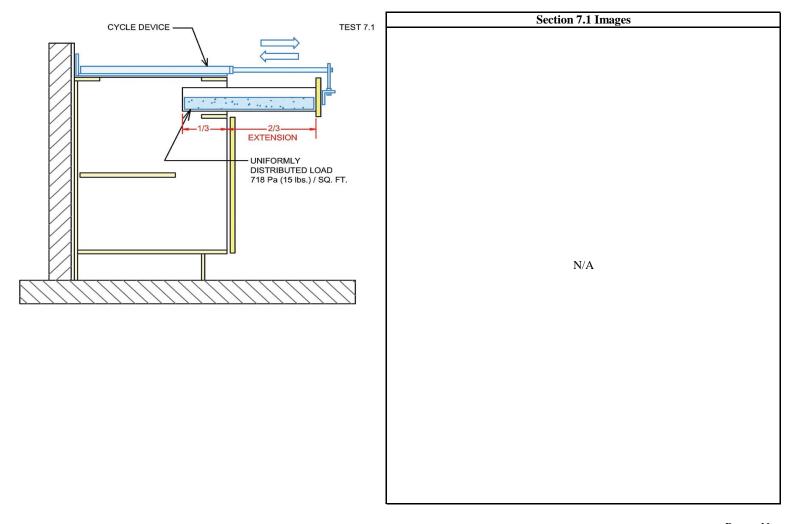
 Test Description:
 The drawer was operated from open (2/3 extension) to closed 25,000 times at a rate of 20 cycles per minute.

 Test Criteria:
 The drawer shall remain operable. There shall be no failure in any part of the drawer assembly. The drawer bottom shall not deflect to a point of interference with drawer operation.

Test Modifications:

	Results									
Drawer width (ft.)	Drawer length (ft.)	Required weight (lb.)	Actual weight (lb.)	Cycles per minute (cpm)	Cycles completed	Comments				
2' 1 1/8 "	1' 7 7/8 "	52.02	52.67	20	25000					

Pass/Fail: Pass





Section 7.2 Drawer-Closing Impact

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General]	Lab Conditions	;
Performed By:	Joe Springer		Temp (°F):	72.6
Witnessed By:	Justin Doran		RH (%):	26.7
Test Date:	12/11/2024		Sensor Asset No.	01932

 Test Description:
 The interior back of the drawer was impacted 10 times by a 3 lb. steel ball from 8 in. height to simulate closing impact.

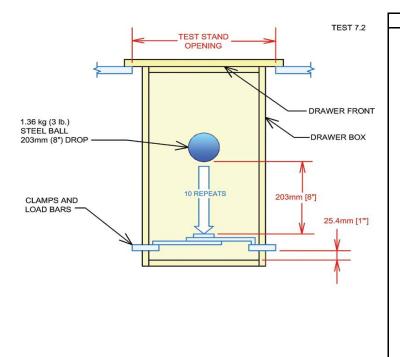
 Test Criteria:
 There shall be no looseness or attachment failure in any part of the drawer front assembly.

 Test Modifications:
 RH out of spec.

Results										
Ball drop	1	2	3	4	5	6	7	8	9	10
Pass/Fail	Pass									

Ball weight: 3.07 lb.

Comments:







Section 8.0: Finish Specifications

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General	Lab Conditions	5
Performed By:	Dave Lane	Temp (°F):	70.2
Witnessed By:	Justin Doran	RH (%):	45.4
Test Date:	11/15/2024	Sensor Asset No.	01932

Test Description: <u>Visual examination of the specimen.</u> **Test Modifications:**

	Results	
Туре	Criteria	Pass/Fail
Exterior	Shall be free of saw marks and other imperfections.	Pass
Exterior	Shall be filled and sanded, edge-banded or otherwise finished.	Pass
Exterior	Free from finish defects, e.g., runs, orange peel, fatty edges, blushing, etc.	Pass
Exterior	Finish shall be clean and free of scratches and residue.	Pass
Exterior	Touch-up colors and/or burn-in repairs shall be matched with the surrounding areas of the finished surfaces.	Pass
Exterior	Nail and staple set and holes filled.	Pass
Exterior	The finish shall be free of any printing that may be caused by packing material.	Pass
Interior	Shall be free of saw marks and other imperfections.	Pass
Interior	Free of poor workmanship.	Pass
Interior	Exposed surfaces are covered or finished.	Pass



Section 9.2: Shrinkage and Heat Resistance

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Pe W Manufacturer: 802 Cabinetry

Model number:

General		Lab Conditions	
erformed By:	Justin Doran	Temp (°F):	73.0
/itnessed By:	Justin Doran	RH (%):	50.0
Test Date:	11/19/2024	Sensor Asset No.	00577

Test Description:The cabinet door was exposed to 120°F and 70% relative humidity for 24 hours.Test Criteria:The door finish shall show no discoloration, evidence of blistering, or checks.Test Modifications:Both finishes tested at the sam

Temperature (°F): 120

RH (%): 70

Time at start: 11/19/24 3:30 PM

Time at end: 11/20/24 3:30 PM

Pass/Fail: Pass

Pass/Fail (14-day):

Comments: Both finishes passed.

Section 9.2	2 Images



Section 9.3: Hot and Cold Check Resistance

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

General		Lab Condi	tions
Performed By:	Justin Doran	Temp (°F):	73.0
Witnessed By:	Justin Doran	RH (%):	50.0
Test Date:	11/20/2024	Sensor Asset No.	00577

 Test Description:
 Cycled as follows (5 cycles): 120°F and 70% humidity for 1 hour, lab conditions for 0.5 hour, and -5°F for 1 hour.

 Test Criteria:
 The finish shall show no discoloration, blistering, or checks.

 Test Modifications:
 Both finishes tested at the sam

Temperature hot (°F): 120

RH (%): 70

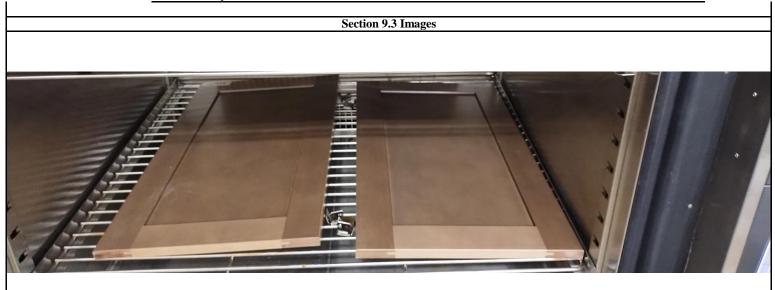
Temperature cold (°F): -5

Pass/Fail: Pass

Pass/Fail (14-day):

Program Preview				
80				Temperature
60			0	Emperature Humidity
20			9	ç
0				
-20			8	<u>ه</u>
-40	;	2	3	4 5

Comments: Both finishes passed.





Section 9.4: Chemical Resistance

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General	Lab Conditions	Lab Conditions	
Performed By:	Justin Doran	Temp (°F):	73.5	
Witnessed By:	Justin Doran	RH (%):	19.2	
Test Date:	12/12/2024	Sensor Asset No.	01932	

 Test Description:
 1 mL of the following chemicals were applied to the door front, drawer front, front frame, and end panel for 24 hours.

 Test Criteria:
 There shall be no discoloration, stain, or whitening that will not disperse with ordinary polishing.

 Test Modifications:
 Both finishes tested at the sam

	Door	r front	Drawe	er front	Front	frame	End	panel
Chemical	Initial	14-day	Initial	14-day	Initial	14-day	Initial	14-day
Lemon juice	Pass		Pass		Pass		Pass	
Orange juice	Pass		Pass		Pass		Pass	
Grape juice	Pass		Pass		Pass		Pass	
Ketchup	Pass		Pass		Pass		Pass	
Coffee	Pass		Pass		Pass		Pass	
Vinegar	Pass		Pass		Pass		Pass	
Olive oil	Pass		Pass		Pass		Pass	
Alcohol*	Pass		Pass		Pass		Pass	
Detergent**	Pass		Pass		Pass		Pass	
Mustard***	Pass		Pass		Pass		Pass	

* 100-proof

** A liquid solution consisting of water plus one-half percent (by weight) of an unconcentrated liquid dishwashing detergent intended for hand washing

*** shall be applied and then observed at 1 hour

Time applied (all chemicals):	12/12/24 2:51 PM
Time removed (all chemicals):	12/13/24 2:51 PM
Time applied (mustard):	12/12/24 11:51 AM
Time removed (mustard):	12/12/24 12:51 PM

Comments: Both finishes passed.

Section 9.4 Images





Section 9.5: Detergent and Water Resistance

Date Received:	11/4/2024
Constructed By:	Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

	General	Lab Conditions	
Performed By:	Justin Doran	Temp (°F):	71.5
Witnessed By:	Justin Doran	RH (%):	41.8
Test Date:	12/18/2024	Sensor Asset No.	01932

Test Description: The cabinet door edge was exposed to a detergent (0.5% weight with water) soaked sponge for 24 hours. see figure below for testing set up.

Test Criteria: There shall be no delamination or swelling, no discoloration, no blistering, checking, or whitening. Test Modifications: Both finishes tested at the sam

Test duration: 24 hours

Time start: 12/18/24 2:16 PM

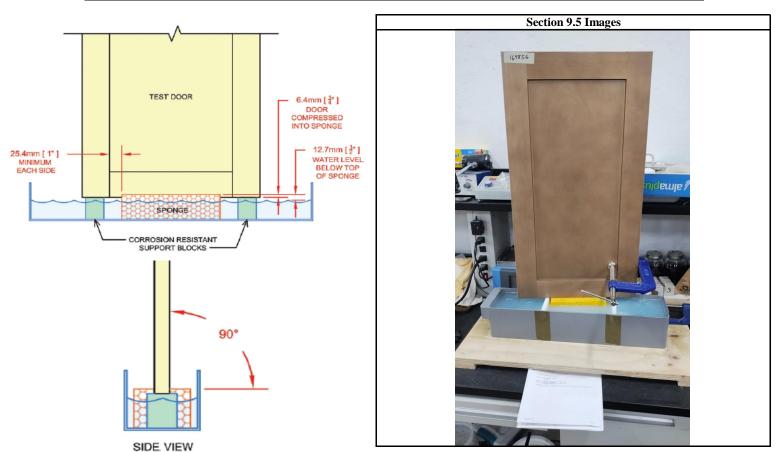
Time end: 12/19/24 2:16 PM

Pass/Fail: Pass

Pass/Fail

(14-day):

Comments: Both finishes passed.



ODL



Section 9.7 Water Holdout of Interior Surfaces

Date Received:11/4/2024Constructed By:Dave Lane

Product Description

Manufacturer: 802 Cabinetry

Model number:

General		Lab Conditions	
Performed By:	Justin Doran	Temp (°F):	71.5
Witnessed By:	Justin Doran	RH (%):	34.7
Test Date:	12/16/2024	Sensor Asset No.	01932

Test Description: A ceramic coffee cup was placed upside down in boiling water. The cup was then placed upside down on a cabinet shelf for 24 hours.

Test Criteria: There shall be no delamination or swelling, no discoloration, and no blistering, checking, or whitening. **Test Modifications:** Both finishes tested at the sam

Time start: 12/16/24 10:45 AM

Time end: 12/17/24 10:45 AM

Pass/Fail: Pass

Pass/Fail

(14-day):

Comments: Both finishes passed.

