



AWI ARCHITECTURAL
WOODWORK
INSTITUTE

Performance Quality

TEST REPORT

Base Cabinet Battery (BC1 & BC2)

2021 Standard of Excellence Overall Winner
Hollywood Woodwork, Woodworker
Meyer Davis, Architect
Isaac Bird, Photographer

OFFICIAL Documentation



Performance Quality TEST REPORT Base Cabinet Battery

The purpose of this test method is to document the performance, structural integrity, and/or the physical endurance of a casework assembly that is created and documented by various joinery methods, materials, adhesives, and hardware components.

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14 Wedgewood Court,
Wedgewood Way
Hertfordshire
United Kingdom

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ORIGINAL Official Report

ISSUE DATE 07/30/2024

EXPIRATION DATE 08/31/2025

PQTR IDENTIFICATION NUMBER

AWITR 002362024A 001

Independent Testing Agency

Architectural Woodwork Institute
46179 Westlake Drive, Suite 120
Potomac Falls, VA 20165

Laboratory Testing Service Order
214890

Laboratory Customer ID
90027507

Laboratory Battery #
BCB-24009

BC1 Specimen #
BC1-24009

BC2 Specimen #
BC2-24009

Date of Receipt
07/24/2024

Date of Test(s)
07/29/2024

Authorizing Laboratory Signee of Official Results

AWI National Testing Center

Signee hereby attest the findings throughout this report are true and accurate. All data was derived exclusively from the test methodology and test results.

Hunter Morrison, Technical Director

Signee hereby attest these results have been filed with AWI's testing report database

Doug Hague, CEO

TEST SUMMARY



Base Cabinet Battery

The purpose of this test method is to document the performance, structural integrity, and/or the physical endurance of a finishing technology when exposed to adhesive elements.

3.0 Significance and Use

This test method will not determine the useful life of architectural casework resulting from the test data obtained. It will, however, indicate casework performance outcomes from test loads over time. This test method is not intended to determine serviceability of hardware components.

Test data will provide useful information for architects, design professionals, and manufacturers in making judgments on the ability of an architectural casework assembly to maintain serviceability under actual loading and operating conditions.

BC1 Duty Level Values

PERFORMANCE DUTY LEVEL	ASSEMBLED UNIT LOAD	TYPICAL APPLICATION
Duty Level 1	45 lb./sq. ft	Light Commercial
Duty Level 2	70 lb./sq. ft	Commercial
Duty Level 3	90 lb./sq. ft	Institutional
Duty Level 4	115 lb./sq. ft	Laboratory

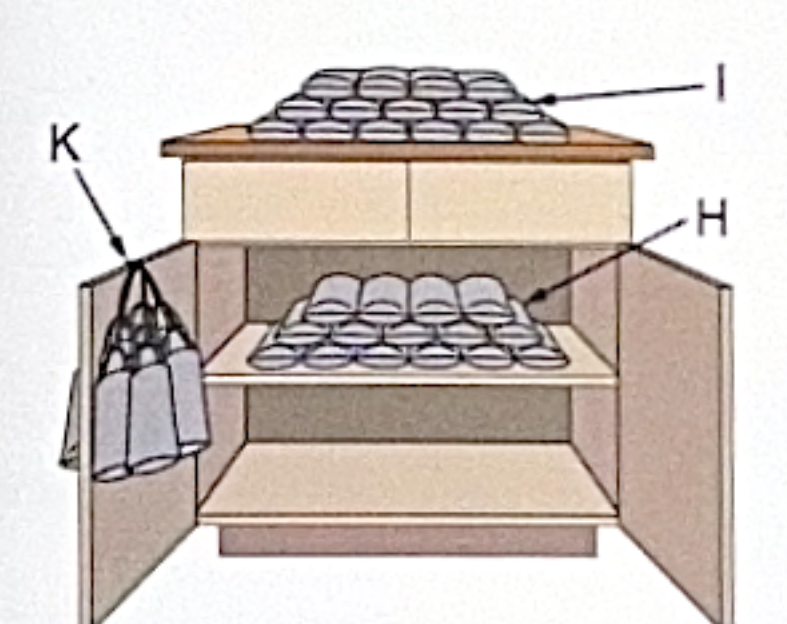


Figure 61

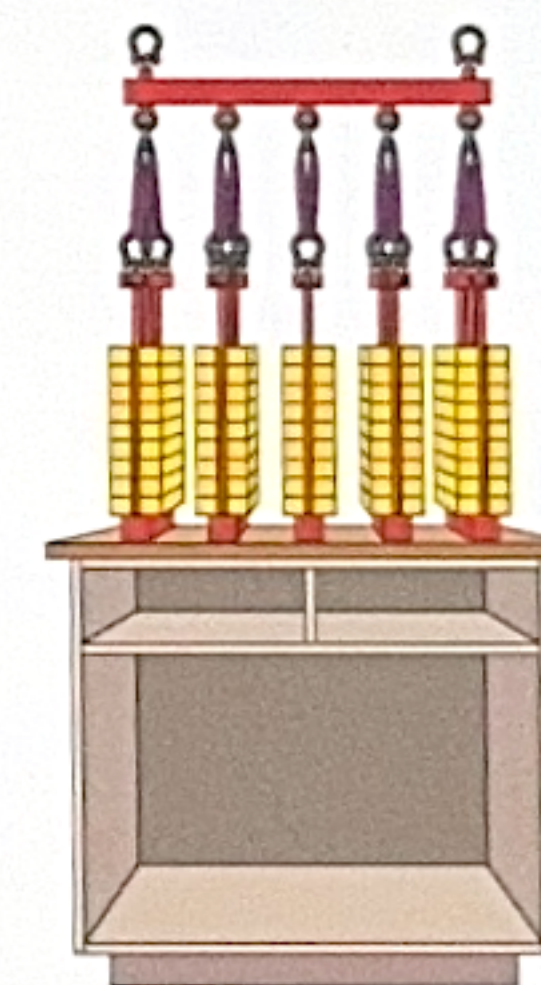


Figure 64

BC2 Duty Level Values

PERFORMANCE DUTY LEVEL	ASSEMBLED UNIT LOAD	TYPICAL APPLICATION
Duty Level 1	135 lb./sq. ft	Light Commercial
Duty Level 2	200 lb./sq. ft	Commercial
Duty Level 3	265 lb./sq. ft	Institutional
Duty Level 4	330 lb./sq. ft	Laboratory

5.2 Test Specimen Assembly

5.2.1 Specimen Materials

The base casework specimen may be constructed of any material and joinery combination, provided that the materials, fasteners, combination of fasteners, spacing, and machining operation details are fully documented by way of drawing information conveyance.

5.2.2 Specimen Size Requirements

The base casework specimen shall consist of a base cabinet primarily supported by transfer of load directly to the floor/ground with overall outside dimensions of 914 mm [36"] (+/- 1") in width, 762 mm [30"] (+/- 1") in height (863 mm [34"] with integrated base or legs), and 610 mm [24"] (+/- 1") in depth, including faces of doors and drawer fronts. The test specimen shall include, at minimum, the following assembly components:

- One left vertical side component
- One right vertical side component
- One top horizontal component
- One bottom horizontal component
- One horizontal adjustable shelf component, adjustable in the horizontal plane and placed at the interior's vertical midpoint (+/- 1"):
- One vertical back component
- Two vertical hinged doors
- Two drawers with attached fronts

DUTY LEVEL VALUES

These load values do not suggest service loads nor shall they be construed as suggesting normal casework usage loads.

TEST SUMMARY

Summarized Results of Casework Test

Base Cabinet Battery

DUTY
LEVEL **3**
Institutional

Test Battery

Findings:

There was no loss of serviceability as a result of the base cabinet test battery. Casework construction methodology BCB-24009 passes Duty Level 3.

ITEM	NOM. THICK	CORE MATERIAL	CORE GRADE	FACE MATERIAL	BACK MATERIAL
Left Vertical Side	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Right Vertical Side	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Top Horizontal Component	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Bottom Horizontal Component	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Adjustable Shelf	25mm	Particleboard (MFC)	P2	TFL	TFL
Vertical Back Component	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Hinged Doors	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Drawer Fronts	18.3mm	Particleboard (MFC)	P2	TFL	TFL
Nailer Component	N/A	N/A	N/A	N/A	N/A

Casework Test Results

TEST	SPECIMEN	TARGET DUTY LEVEL	RESULT
BC-1-Assembled Unit Test	BC1-24009	3	Passed
BC-2-Structural Integrity Test	BC2-24009	3	Passed

8.2 Nonconformities

None found during this successful attempt.

Casework Test Loads

BATTERY	SPECIMEN	TEST	COMPONENT	DIMENSIONS	AREA	DUTY LEVEL	LOAD PER ft ²	LOAD CALCULATED	LOAD ACTUAL
BCB-24009	BC1-24009	BC-1	Top	36" x 23.125"	5.78125 ft ²	3	90 lbs	520.3125 lbs	525 lbs
			Shelf	34.5" x 22.25"	5.33 ft ²	3	50 lbs	266.54 lbs	270 lbs
			Drawer	N/A	N/A	3	N/A	N/A	50 lbs/ea
			Door	N/A	N/A	3	N/A	N/A	100 lbs/ea
	BC2-24009	BC-2	Top	36" x 23.125"	5.78125 ft ²	3	265 lbs	1,532.03125 lbs	1,535 lbs

TEST SUMMARY

BC-1 Base Cabinet Assembled Unit Test

Testing was performed in accordance with the AWI Test Methodology BC-1 - Base Cabinet Assembled Unit Test.

DUTY
LEVEL **3**
Institutional

BC1-24009 Before Testing



OBSERVATIONS:

There was no loss of serviceability or structural integrity of the casework upon completion of the test.

NOTES:

- See specimen Load Summary for testing loads.
- Casework mounted according to enclosed installation guidelines.
- Top, Shelf, Door, and Drawer elements were evenly loaded with steel shot bags and steel bar weights to Duty Level 3 load.
- Load remained in place for 24 hours.
- One hour after unloading, the specimen was evaluated.

EQUIPMENT USED:

Digital Level, Tape Measure, Feeler Gauge, Depth Micrometer, Steel Shot Bags, Steel Bar Weights, Gantry Lift

BC1-24009 During Testing



BC1-24009 After Unloading



Load Summary

BATTERY	SPECIMEN	TEST	COMPONENT	DIMENSIONS	AREA	DUTY LEVEL	LOAD PER ft ²	LOAD CALCULATED	LOAD ACTUAL
BCB-24009	BC1-24009	BC-1	Top	36" x 23.125"	5.78125 ft ²	3	90 lbs	520.3125 lbs	525 lbs
			Shelf	34.5" x 22.25"	5.33 ft ²	3	50 lbs	266.54 lbs	270 lbs
			Drawer	N/A	N/A	3	N/A	N/A	50 lbs/ea
			Door	N/A	N/A	3	N/A	N/A	100 lbs/ea
	BC2-24009	BC-2	Top	36" x 23.125"	5.78125 ft ²	3	265 lbs	1,532.03125 lbs	1,535 lbs

TEST SUMMARY

BC-2 Base Cabinet Structural Integrity Test

Testing was performed in accordance with the AWI Test Methodology BC-2 Base Cabinet Assembled Unit Test.

DUTY
LEVEL 3
Institutional

BC2-24009 Before Testing



OBSERVATIONS:

There was no loss of serviceability or structural integrity of the casework upon completion of the test.

NOTES:

- See specimen Load Summary for testing loads.
- Casework was not mounted to the test fixture per the test method.
- Top elements was evenly loaded with steel bar weights to Duty Level 3 load.
- Load remained in place for 24 hours.
- One hour after unloading, the specimen was evaluated.

EQUIPMENT USED:

Digital Level, Tape Measure, Feeler Gauge, Depth Micrometer, Steel Shot Bags, Steel Bar Weights, Gantry Lift

BC2-24009 During Testing



BC2-24009 After Unloading



Load Summary

BATTERY	SPECIMEN	TEST	COMPONENT	DIMENSIONS	AREA	DUTY LEVEL	LOAD PER ft²	LOAD CALCULATED	LOAD ACTUAL
BCB-24009	BC2-24009	BC-2	Top	36" x 23.125"	5.78125 ft²	3	265 lbs	1,532.03125 lbs	1,535 lbs

Letter of Affirmation

Affidavit

I, Chris Thompson, declare that the articles listed herein were manufactured by the company above and in accordance with the provided manufacturer/supplier's documented specifications.

Signature: CR

Title: MR

Date: 06/28/2024

Test Process Verification

I, Hunter Morrison of Architectural Woodwork Institute, affirm the these tests were conducted in accordance with the described testing methodologies to Performance Duty Level 3 on 07/29/2024

Hunter Morrison