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ONE POINTE SOLUTIONS
Date: January 18, 2017
P.O. No. N / A

Report No.:102497392GRR-001
Quote No.: 744066

Test Report For:

One Pointe Solutions

SEFA 8M-2016 RECOMMENDED TESTING STANDARDS FOR LABORATORY GRADE METAL CASEWORK

Base Cabinet – Part No. BASE-3548-12
Wall Cabinet – Part No. WALL-314813-S
Table Frame – BTABLE-355822

James Jantz
Project Manager Strength and Durability

Andrew Barber
Reviewer

Gary Liu
Sr. Project Engineer Materials

Kevin W. Arnett
Reviewer

Attention: Kyle Sattler
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DATE RECEIVED: 03/11/2016 & 11/30/2016
DATES TESTED: 03/23/2016 – 01/04/2017

DESCRIPTION OF SAMPLES:
SEFA 8M-2016 Required Test Units

Model Number	Description of Sample
BASE-3548-12	Base Cabinet
WALL-314813-S	Wall Cabinet
BTABLE-355822	Table Frame

WORK REQUESTED/APPLICABLE DOCUMENTS:
To test the submitted samples per the SEFA 8M-2016 Laboratory Furniture Standard for the following tests:

Test No.	Test Description
4.2	Cabinet Load Test
4.3	Cabinet Concentrated Load Test
4.4	Cabinet Torsion Test
5.1	Door Hinge Test
5.2	Door Impact Test
5.3	Door Cycle Test
6.1	Drawer Static Test
6.2	Drawer and Door Pull Test
6.3	Drawer Impact Test
6.4	Drawer Internal Impact Test
6.5	Drawer Cycle Test
7.2	Shelf Load Test
8.1	Chemical Spot Test
8.2	Hot Water Test
8.3	Impact Test
8.4	Paint Adhesion Test
8.5	Paint Hardness Test
9.2	Load Test
10.2	Table Static Load Test
10.3	Table Racking Test

CONCLUSION:
The submitted sample met the acceptance criteria of all the tests listed above, and therefore is Certified to be SEFA Compliant with the Recommended Practice SEFA 8M-2016. This entitles One Pointe Solutions to promote the tested product as **Certified SEFA 8M Compliant**.

TEST EQUIPMENT:

Asset #	Description	Last Cal	Next Due
138012	Scale/0-1,000#	10/18/2016	10/18/2017
138112	Graduated Rule 36"	10/11/2013	10/11/2018
138148	Digital Protractor	09/20/2016	09/20/2017
138279	FORCE GAUGE	3/4/2016	3/4/2017
138296.1 - .41	STEEL BAR	1/4/2012	1/4/2017
138341	DIAL INDICATOR	5/9/2016	5/9/2017
138386	DIAL INDICATOR	2/29/2016	2/28/2017
138402	SCIENTIFIC STOPWATCH	4/26/2016	4/26/2017

4.1 SEFA 8M-2016 – DESCRIPTION OF TEST UNIT:

Dates Tested: 03/12/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample	Dimensions
BASE-3548-12	Base Cabinet	48” x 35” x 22”
WALL-314813-S	Wall Cabinet	47.875” x 30” x 12.875”
BTABLE-355822	Table Frame	60” x 23” x 35”

Part Description:

Base unit has one drawer, two doors and shelf.

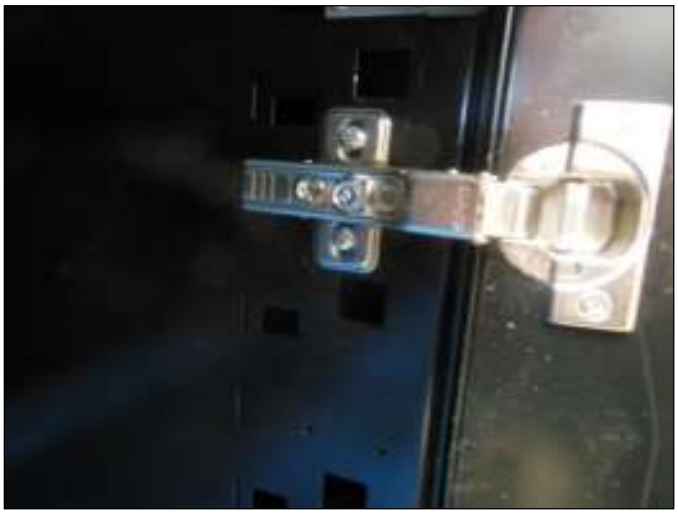
Wall cabinet has one shelf and two doors.

Table Frame Gauge: 14 gauge legs with 18 gauge connector rails
Shelf Gauge: 18 gauge with 18 gauge hat

The hardware on the units is as follows:

Model Number	Description of Sample
71B3650	Soft-Close Concealed Inset Hinges
FR5210ECD.SMT- 450MM	Slides

Base Cabinet



Hinge

Drawer Slide

Leveling Bolt Mounted in Cabinet

Door Pull

Drawer Pull

Shelf Support

Wall Cabinet

Table

4.2 SEFA 8M-2016 – CABINET LOAD TEST:

Date Tested: 3/24/2016
Condition of Test Samples: New
Number of Samples Tested One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

4.2.2 Test Procedure:

Test Method: Verify that the cabinet is level. Load the cabinet top by using 2000 lbs. (907.2 kg) of solid steel bars (Per Section 3.1) stacked 5 high and evenly spaced. After 10 minutes, unload the cabinet.

Number of Samples Tested: One (1)

4.2.3 Acceptance Level:

The cabinet will have no signs of permanent failure.

Results:

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Cabinet Load Test

4.3. SEFA 8M-2016 – CABINET CONCENTRATED LOAD TEST:

Date Tested: 3/24/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

4.3.2 Test Procedure:

Test Method: Using 50 lb. solid weights or 10 lb sandbags (per Section 3.1), apply a total of 200 lbs. (90.70 kg) to the top of the cabinet along the cabinet centerline and operate doors and drawers.

Number of Sample Tested: One (1)

4.3.3 Acceptance Level:

Door and drawer operation shall be normal under condition of test load. There shall be no sign of permanent deformation to front rail, cabinet joinery, doors, or drawers, doors and drawers shall operate normally.

Results:

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Cabinet Concentrated Load Test

4.4 SEFA 8M-2016 – CABINET TORSION:

Date Tested: 3/24 – 3/25/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

4.4.2 Test Procedure:

Test Method: The cabinet shall be tested in its normal upright position, raised not less than four inches off the floor and supported on rear and one front corner. The area of support under the cabinet shall be centered on the leveling feet of the cabinet. Per Section 3.1, secure the cabinet diagonally from the supported corner with seven solid steel bars so that 350 lbs. (158.75 kg.) of weight is placed on the top of the cabinet to prevent over-turning. Apply four solid steel bars (200 lbs (90.72 kg.)) to the unsupported corner for a period of 24 hours. Remove weight and place the cabinet on the floor in its normal upright position and observe the cabinet joinery. Level the cabinet and measure the face and back of the cabinet across the diagonal corners.

4.4.3 Acceptance Level:

When returned to normal position, the operation of the cabinet shall be normal, and there will be no signs of permanent damage. The difference between the two measurements taken from measuring the diagonal corners shall be no more than 1/8” (3.175 mm).

Results:

The submitted sample met the acceptance criteria for the test described above. There was no difference in measurement. Refer to the following page for photograph.

Cabinet Torsion

5.1 SEFA 8M-2016 – DOOR HINGE TEST:

Date Tested: 3/29/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

5.1.2. Test Procedure:

Test Method: Remove the shelf for this test. With unit and top set as described in Section 4.1, add sufficient weight to the top in order to prevent overturning. With cabinet door opened 90 degrees, hang a sling made up of two 100 lb. (45.35 kg) weights (shot bags or solid weights) over top of the door at a point 12” (304.8 mm) out from the hinge center-line. Slowly move door through the two full cycles of the hinge up to a 160 degree arc. Remove weight and swing door through its full intended range of motion and close door.

5.1.3 Acceptance Level:

The open door shall withstand a load of 200 lbs. (90.70 kg) when applied at a point 12” (304.8 mm) from the hinge centerline without significant permanent distortion. Operation of the door, after test, shall show no significant permanent distortion that will cause binding of the door or hinges or that will adversely affect operation of the catch.

Results:

The submitted sample met the acceptance criteria of the test. The door operated normally through its entire range of motion, and the door catch operated normally. Refer to the following page for photograph.

Door Hinge Test

5.2 SEFA 8M -2016 - DOOR IMPACT TEST:

Date Tested: 1/4/2017
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet with additional screw attached to the frame.

5.2.2. Test Procedure:

Test Method: With unit and top set as described in Section 4.1, add sufficient weight to the top in order to prevent overturning. A 20 lb. (9.07 kg.) sand bag (per Section #3.1) shall be suspended and dropped to provide an impact of 240 inch-pounds (27.1 Nm) at the center of the closed door.

5.2.3 Acceptance Level:

After the test, the door and catch shall operate normally and show no signs of permanent damage. A dent or depression is an indication of permanent damage. This test is not intended to evaluate the cabinet finish.

Results:

The submitted sample met the acceptance criteria of the test. The door operated normally through its entire range of motion, and the door catch operated normally. Refer to the following page for photograph.

Door Impact Test

5.3 SEFA 8M -2016 – DOOR CYCLE TEST:

Date Tested: 3/16/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

5.3.2. Test Procedure:

Test Method: This test shall be in conformance to the ANSI test procedure A156.9, Grade 1, requirements for cycle testing of doors. A cycling mechanism shall swing door 90-degrees. Door shall operate for 100,000 cycles with a speed not greater than 15 cycles per minute.

5.3.3 Acceptance Level:

Door shall operate for the full cycle period without deterioration that will significantly affect the function of the door. The door shall operate freely without binding.

Results:

There was no functional or structural damage to the unit. The doors operated freely without binding. The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Door Cycle Test

6.1 SEFA 8M -2016 - DRAWER STATIC LOAD TEST:

Date Tested: 1/4/2017
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

6.1.2. Test Procedure:

Test Method: With unit and top set as described in Section # 4.1, add sufficient weight to the top in order to prevent overturning. Open the drawer to 13" (330.2 mm.) of travel and hang 150 pounds (68.0 kg.) from the drawer head at the centerline of the drawer for five minutes. Remove the weight and operate the drawer through the full cycle.

6.1.3. Acceptance Level:

There shall be no permanent damage that will interfere with the normal operation of the drawer and the drawer head should remain tightly fastened to the drawer.

Results:

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Drawer Static Load Test

6.2 SEFA 8M -2016 - DRAWER AND DOOR PULL TEST:

Date Tested: 3/29/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

6.2.2. Test Procedure:

Test Method: Pulls are to be installed in accordance with manufacturer's practice using specified attaching hardware and method. Block door and drawer closed. Using a cable, pulley and weight assembly, apply a force of 50 pounds (22.676 Kg) perpendicular to each pull. Revise setup to hang weight from each pull. Remove weight.

6.2.3. Acceptance Level:

Pulls shall resist force and support weight without breakage. After completion of test and removal of weight, there shall be no significant permanent distortion. Some pull designs will require variations to Set Up apparatus. These pulls shall be tested in conformance to the applied pull forces.

Results:

There was no functional or structural damage to the unit. The drawer and door operated freely. The submitted sample met the acceptance criteria for the test described above. Refer to the following pages for photographs.

Drawer and Door Pull Test; Drawer Horizontal

Drawer and Door Pull Test; Drawer Vertical

Drawer and Door Pull Test; Door Horizontal

Drawer and Door Pull Test; Door Vertical

6.3 SEFA 8M -2016 - DRAWER IMPACT TEST:

Date Tested: 3/29/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

6.3.2. Test Procedure:

Test Method: Open the drawer to 13” of travel. Drop a 10 lb. sand or shot bag from a height of 24” above the inside of the drawer at the center of the width and 6” from the inside back face of the drawer. Remove the sand or shot back.

6.3.3. Acceptance Level:

Operate the drawer through the full cycle. Drawer shall operate normally. Any deformation will not cause binding or interference with the operation of the drawer.

Results:

The submitted sample met the acceptance criteria of the test described above. Refer to the following page for a photograph.

Drawer Impact Test

6.4 SEFA 8M -2016 - DRAWER INTERNAL IMPACT TEST:

Date Tested: 3/29/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

6.4.2. Test Procedure:

Test Method: Position the drawer on a table at a 45 degree angle. Place a 2” (50.8 mm.) diameter by 12” (304.8 mm.) long steel rod (approximately 10 lbs. (4.535 kg.) 13” (330.2 mm.) from the target impact area such that the rod will roll freely to impact the back of the drawer. Subject the back to three impacts and reverse the drawer to subject the front to three additional impacts.

6.4.3. Acceptance Level:

The drawer shall show no signs (other than minor scratches and dents) of permanent damage. All joinery shall be intact and the drawer, when replaced in the base cabinet, shall operate normally. Minor scratches and dents are acceptable.

Results:

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Drawer Internal Impact Test-Front to Rear

Drawer Internal Impact Test- Rear to Front

6.5 SEFA 8M-2016 – DRAWER CYCLE TEST:

Date Tested: 11/11 – 11/17/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet

6.5.2. Test Procedure:

Test Method: Laboratory Load (100 lbs. (45.35 kg.) – A static load of 100 lbs. (45.35 kg.) (using ten 10 pound (4.535 kg.) sand bags per Section #3.1) shall be uniformly distributed in the drawer. Measure force required to activate the drawer. Operate from a closed position to within ¼" (6.35 mm) of full extension for 50,000 cycles at a rate not to exceed 10 cycles per minute.

6.5.3. Acceptance Level:

The drawer shall operate freely without evidence of dragging rubbing or binding. The force required to open and close loaded drawer shall not be more than a 20% increase of that required prior to test and shall not be greater than 8 pounds (3.628 kg.) to activate hardware.

Results:

The submitted sample met the acceptance criteria for the test described above. Prior to the test the force required to open the drawer was 6.8 lbs, after the test the force required to open the drawer was 2.9 lbs. The soft close feature stopped working after 32,145 cycles due to a spring fracture. This did not adversely affect the slides from operating freely. Refer to the following page for photograph.

Drawer Cycle Test

7.2 SEFA 8M -2016 – SHELF LOAD TEST:

Date Tested: 04/21/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BASE-3548-12	Base Cabinet
WALL-314813-S	Wall Cabinet

This test is only shelf deflection of the shelf in a base and wall cabinet.

7.2.2 Test Procedure:

Test Method: A shelf shall be mounted in the manner in which it is designed. Measure the distance from the underside of the shelf to a reference point perpendicular to the center of the shelf. Use shot or sand bags weighing 10 lbs. (4.535 kg) each. Unless otherwise specified, load the shelf uniformly to 40 lbs. (18.14 kg) per square foot shelf area to a maximum of 200 lbs. (90.70 kg). Measure the deflection on the shelf by measuring the distance to the reference point and calculating the difference between the two measurements. Record data and remove load from the shelf.

7.2.3. Acceptance Level:

The allowable maximum deflection of a shelf is 1/180 of the span and not in excess of .25” (6.35 mm.). Maximum allowable deflection shall not exceed 0.25”.

Results:

Shelf Type	Shelf Load	Deflection Measured	Description of Results
Base Cabinet Shelf	200	0.205”	Pass
Wall Mount Shelf	139	0.196”	Pass

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photographs.

Shelf Load Test – Base Cabinet

Shelf Load Test – Wall Mount Cabinet

8.1 SEFA 8M -2016 – CHEMICAL SPOT TEST:

Date Received: 01/13/2017
Date Tested: 01/17/2017 – 01/19/2017

Description of Samples:
Part Description: Dark Grey Painted Steel Panels
Material Submitted: Two (2) of Dark Grey Painted Metal 14” x 24” Coupons
Material Specification: SEFA 8M-2016
Condition of Test Sample: Production

Test Procedure:
Test Method: SEFA 8M-2016, Sec 8.1
The received sample to be tested for chemical resistance as described herein: Place panel on flat surface, clean with soap (Liqui-Nox at 5% concentration) and water and blot dry. Condition the panel for 48 hours at 73±3°F (23±2°C) and 50 ± 5% relative humidity. Test the panel for chemical resistance using forty-nine (49) different chemical reagents by the following methods.

Method A: Test volatile chemicals by placing a cotton ball saturated with reagent in the mouth of a 1 oz. (29.574 cc) bottle and inverting the bottle on the surface of the panel. The cotton ball shall remain in contact with the sample for duration of the test.

Method B: Test non-volatile chemicals by placing five drops of the reagent on the surface of the panel and covering with a 24 mm. watch glass, convex side down.

For both of the above methods, leave the reagents on the panel for a period of one hour. Wash off the panel with water, clean with detergent (Liqui-Nox at 5% concentration) and naphtha, and rinse with deionized water. Dry with a towel and evaluate after 24 hours at 73±3°F (23±2°C) and 50 ± 5% relative humidity using the following rating system.

Rating Scale:

Level 0	No detectable change.
Level 1	Slight change in color or gloss.
Level 2	Slight surface etching or severe staining.
Level 3	Pitting, cratering, swelling, or erosion of coating. Obvious and significant deterioration.

Number of Samples Tested: One (1) Panel

Acceptance Criteria:
The Range of Results is provided to establish the acceptance range for Laboratory Grade Finish. Results will vary from manufacturer to manufacturer. Laboratory Grade finishes should result in no more than four Level 3 conditions. Suitability for a given application is dependent upon the chemicals used in a given laboratory.

Results: Take pic, **Take pic of rating 2 and 3's**

Volatile Chemicals				
Test No.	**Chemical (% by Vol.)**	**Method**	**Rating**	**Comments**
1	Acetate, Amyl	A	1	Gloss Change
2	Acetate, Ethyl	A	1	Gloss Change
4	Acetone	A	1	Gloss Change
6	Alcohol, Butyl	A	0	
7	Alcohol, Ethyl	A	1	Gloss Change
8	Alcohol, Methyl	A	1	Gloss Change
10	Benzene	A	1	Gloss Change
11	Carbon Tetrachloride	A	0	
12	Chloroform	A	1	Gloss Change
14	Cresol	A	1	Gloss Change
15	Dichloroacetic Acid	A	3	Surface Swelling
16	Dimethylformanide	A	1	Gloss Change
17	Dioxane	A	1	Gloss Change
18	Ethyl Ether	A	0	
19	Formaldehyde, 37%	A	0	
21	Furfural	A	1	Gloss Change
22	Gasoline	A	0	
27	Methyl Ethyl Ketone	A	1	Gloss Change
28	Methylene Chloride	A	1	Gloss Change
29	Monochlorobenzene	A	1	Gloss Change
30	Naphthalene	A	0	
34	Phenol, 90%	A	1	Gloss Change
46	Toluene	A	1	Gloss Change
47	Trichloroethylene	A	1	Gloss Change
48	Xylene	A	0	

Non-volatile Chemicals				
Test No.	**Chemical (% by Vol.)**	**Method**	**Rating**	**Comments**
3	Acetic Acid, 98%	B	1	Gloss Change
5	Acid Dichromate, 5%	B	1	Gloss Change
9	Ammonium Hydroxide, 28%	B	0	
13	Chromic Acid, 60%	B	2	Slight Surface Etch/ Gloss & Color change
20	Formic Acid, 90%	B	2	Slight Surface Etch/ Gloss & Color change
23	Hydrochloric Acid, 37%	B	1	Gloss Change
24	Hydrofluoric Acid, 48%	B	1	Gloss Change
25	Hydrogen Peroxide, 30%	B	1	Gloss Change
26	Iodine, Tincture of	B	2	Staining
31	Nitric Acid, 20%	B	1	Gloss Change
32	Nitric Acid, 30%	B	1	Gloss Change
33	Nitric Acid, 70%	B	3	Surface Swelling
35	Phosphoric Acid, 85%	B	1	Gloss Change
36	Silver Nitrate, Saturated	B	0	
37	Sodium Hydroxide, 10%	B	0	
38	Sodium Hydroxide, 20%	B	0	
39	Sodium Hydroxide, 40%	B	0	
40	Sodium Hydroxide, Flake	B	0	
41	Sodium Sulfide, Saturated	B	0	
42	Sulfuric Acid, 33%	B	0	
43	Sulfuric Acid 77%	B	1	Gloss Change
44	Sulfuric Acid, 96%	B	3	Surface Erosion
45	Sulfuric Acid, (77%) and Nitric Acid (70%), equal parts	B	2	Slight Surface Etch/ Gloss & Color change
49	Zinc Chloride, Saturated	B	1	

Totals			
Items	**Requirement**	**No. Reagent with 3 Ratings**	**Results**
Volatile Subtotal	.	1	---
Non-volatile Subtotal		2	---
Grand Totals	No More than Four Level 3 Conditions	3	Conforming

* Suitability for a given application is dependent upon the chemicals used in a given laboratory.

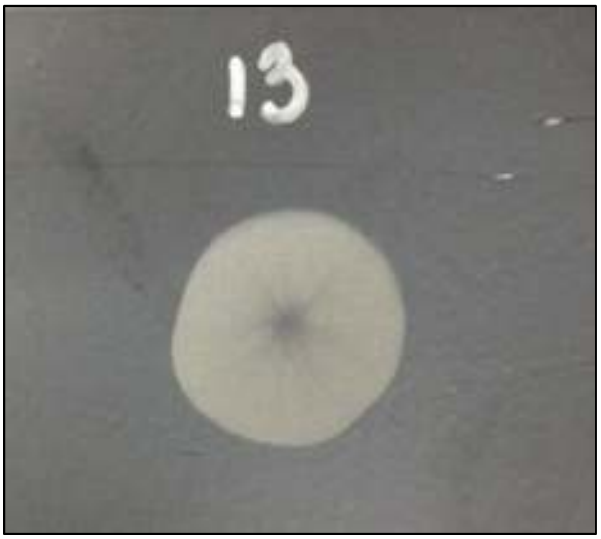
Results:
The submitted samples did conform to the acceptance criteria for the test described above.
Refer to the following pages for photographs.

Chemical Spot Test “As Received” Test Panel

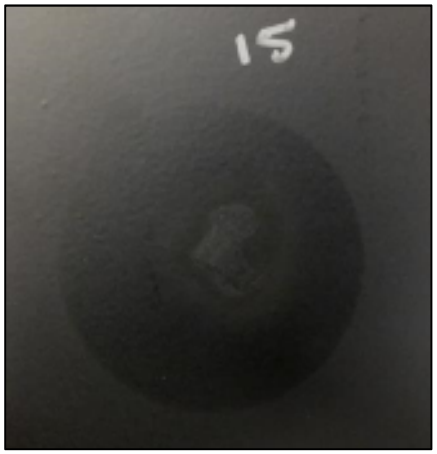
Chemical Spot Test Volatile Chemical Set-up

Chemical Spot Test Non-volatile Chemical Set Up

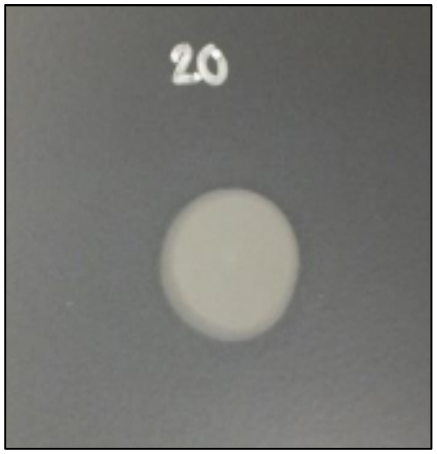
Chemical Spot Test Panel after Exposure



**Chemical Spot Test 13 Chromic Acid 60%, Rating 2,
Slight Surface Etch/ Gloss & Color change**

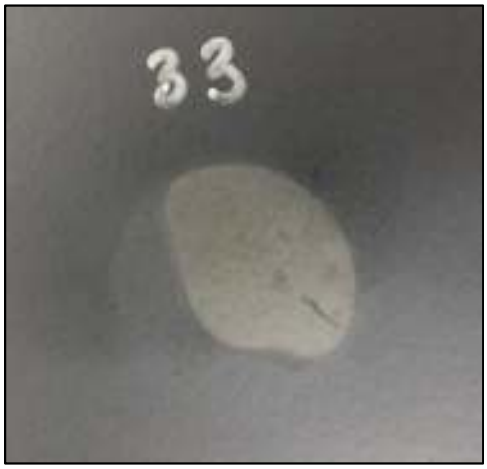


Chemical Spot Test 15 Dichloroacetic Acid, Rating 3, Surface Swelling



**Chemical Spot Test 20 Formic Acid 90%, Rating 2,
Slight Surface Etch / Gloss & Color change**

Chemical Spot Test 26 Iodine, Tincture, Rating 2, Staining



Chemical Spot Test 33 Nitric Acid 70%, Rating 3, Surface Swelling

Chemical Spot Test 44 Sulfuric Acid 96%, Rating 3, Surface Erosion

Chemical Spot Test 45 Sulfuric Acid (77%) and Nitric Acid (70%) equal parts, Rating 2, Slight Surface Etch/ Gloss & Color change

8.2 SEFA 8M -2016 - HOT WATER TEST:

Date Received: 11/30/2016
Date Tested: 12/15/2016
Condition of Test Samples: New

Description of Samples:
Part Description: White Painted Steel Panels
Material Submitted: Three (3) of White Painted Metal 14” x 24” Coupons
Material Specification: SEFA 8M-2016
Condition of Test Sample: Production

Test Procedure:
Test Method: SEFA 8M-2016, Sec 8.2
Procedure: Hot water (88 to 96°C) shall be allowed to trickle (with a steady stream and at a rate of not less than 6 ounces [177.44cc] per minute) on the finished surface, which shall be set at an angle of 45-degrees, for a period of five minutes.

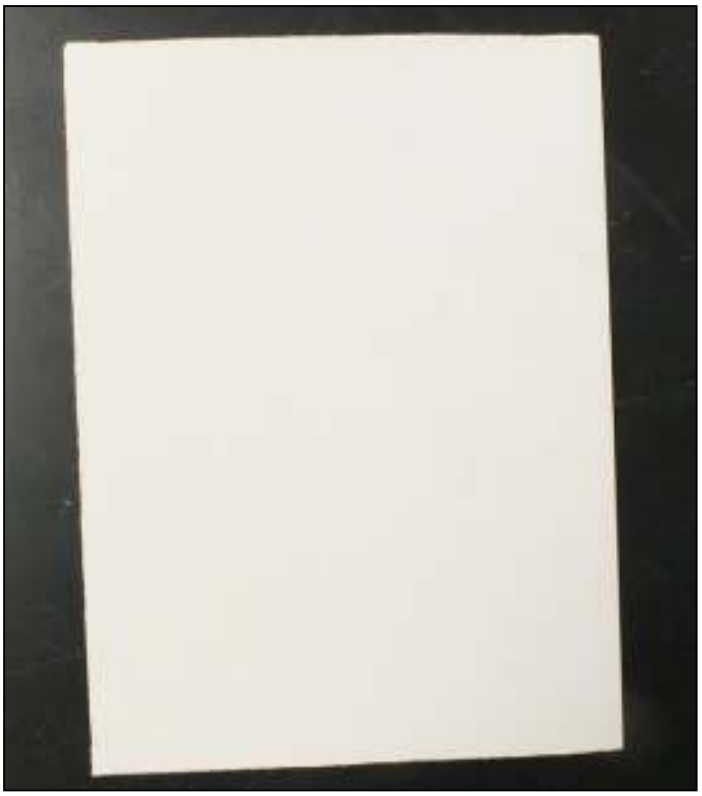
Number of Samples Tested: One (1)

Acceptance Criteria:
After cooling and wiping dry, the finish shall show no visible effect from the hot water.

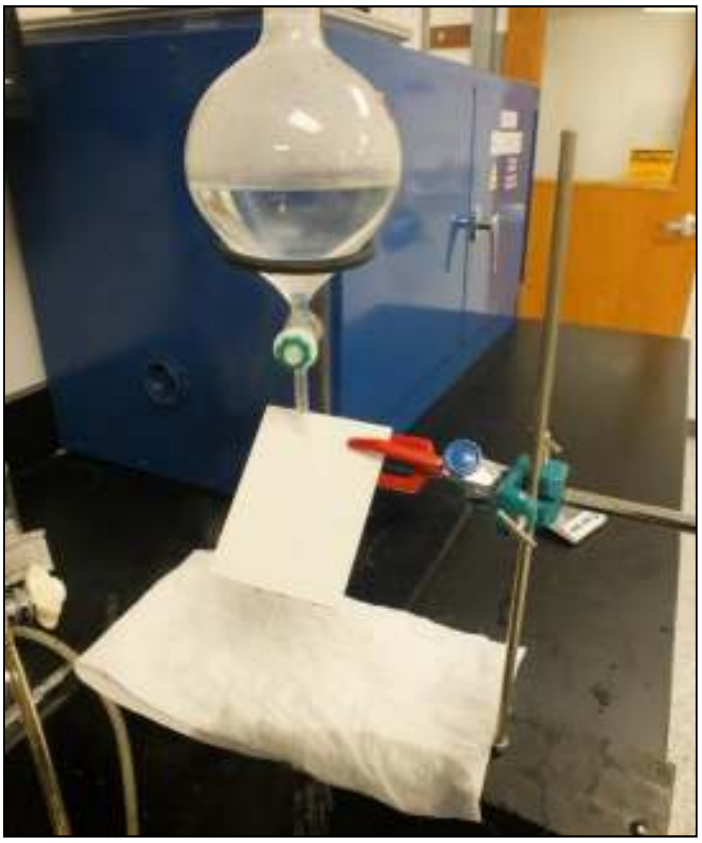
Results:

Sample ID	Visible Effects From Hot Water	Results
1	No Visual Effects	Conforming

The submitted sample conformed to the acceptance criteria for the test described above. Refer to the following pages for photographs.



Hot Water Test "As Received" Test Panel



Hot Water Test Set Up

Hot Water Test after Exposure

8.3 SEFA 8M -2016 – IMPACT TEST:

Date Received: 11/30/2016
Date Tested: 12/14/2016

Description of Samples:
Part Description: White Painted Steel Panels
Material Submitted: Three (3) of White Painted Metal 14” x 24” Coupons
Material Specification: SEFA 8M-2016
Condition of Test Sample: Production

Test Procedure:
Test Method: SEFA 8M-2016, Sec 8.3
Procedure: Position the panel on a smooth concrete floor. A one-pound ball (approximately 2" [50.8mm] in diameter) shall be dropped from a distance of 12" (304.8 mm) onto a flat horizontal surface.

Number of Samples Tested: One (1)

Acceptance Criteria:
There shall be no visual evidence to the naked eye of cracks or checks in the finish due to impact.

Results:

Sample ID	Cracks or Checks in Finish	Results
1	None	Conforming

The submitted sample conformed to the acceptance criteria for the test described above. Refer to the following page for photographs.

Finish Impact Test Before Impact

Finish Impact Test After Impact

8.4 SEFA 8M -2016 – PAINT ADHESION ON STEEL PROCEDURE:

Date Received: 11/30/2016
Date Tested: 12/14/2016

Description of Samples:
Part Description: White Painted Steel Panels
Material Submitted: Three (3) of White Painted Metal 14” x 24” Coupons
Material Specification: SEFA 8M-2016
Condition of Test Sample: Production

Test Procedure:
Test Method: SEFA 8M-2016, Sec 8.4: ASTM D3359-02, Method B, Cross-Cut Tape Test
Procedure: Two sets of six parallel lines 2 mm apart shall be cut with a razor blade to intersect at right angles thus forming a grid of 25 squares. The cuts shall be made just deep enough to go through the coating, but not into the substrate. They shall then be brushed lightly with a soft brush then place a piece of tape over the grid. Rub the tape firmly with the eraser of a pencil to ensure good contact. Remove the tape by rapidly pulling it back upon itself as close to an angle of 180° as possible.
Tape: SEMicro’s CHT

Number of Samples Tested: One (1) Panel

Acceptance Criteria:
A 4B rating or better (ninety five percent or more of the grid area shall show finish intact.)

Results:

Sample ID	Tape Rating	% of Intact Squares	Results
1	5B	100	Conforming

The submitted sample conformed to the acceptance criteria for the test described above.
Refer to the following page for photograph.

Paint Adhesion on Steel Test after Impact

8.5 SEFA 8M -2016 - PAINT HARDNESS ON STEEL PROCEDURE:

Date Received: 11/30/2016
Date Tested: 12/14/2016

Description of Samples:

Part Description: White Painted Steel Panels
Material Submitted: Three (3) of White Painted Metal 14” x 24” Coupons
Material Specification: SEFA 8M-2016
Condition of Test Sample: Production

Test Procedure:

Test Method: SEFA 8M-2016, Sec 8.5; ASTM D3363-05
Procedure Clip a corner of the sample at 45° exposing a raw metal edge. Place the sample on a raw metal base plate so that the exposed metal edge of the sample makes contact with the turned up side of the base plate (see figure below).

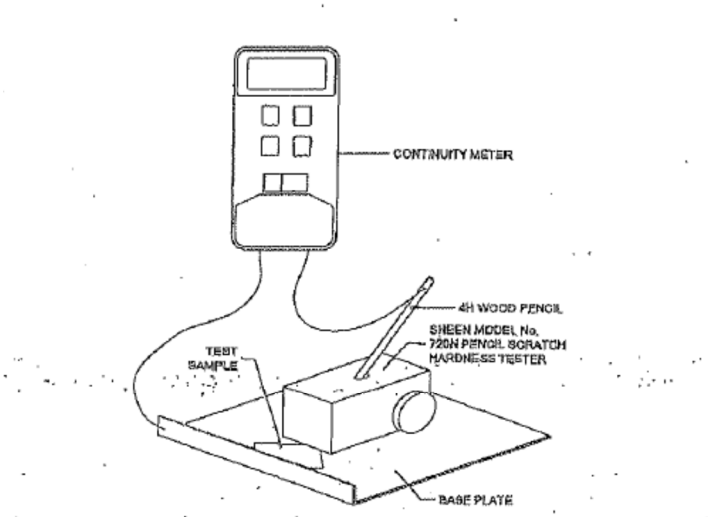


Figure 16. Paint Hardness on Steel Test Configuration

Figure 17. 4H Pencil Configuration

Remove approximately 6 mm of wood from a 4H pencil, being careful to leave an undisturbed smooth cylinder of lead. Holding the pencil at an angle of 90° to an abrasive paper, rub the lead against the paper marinating an exact angle of 90° until a flat, smooth, and circular cross section is obtained. On the other end of the pencil, remove approximately 13 mm of wood form one half of the pencil (see figure above.)

Install the pencil into a Sheen Model 720 N Pencil Scratch Hardness Tester. Connect a continuity meter to the base plate and to the top of the pencil, being sure to make good contact with the exposed portion of the lead.

Following the manufacturer's instructions, place the tester on the surface of the test sample and push it forward approximately 13 mm. Rotate the pencil 90° in the holder and repeat the test to one side of the first test. Repeat this two more times for a total of four tests, each with a different quadrant of the pencil lead.

Pencils Used: Berol Turquoise

Number of Samples Tested: One (1) Panel

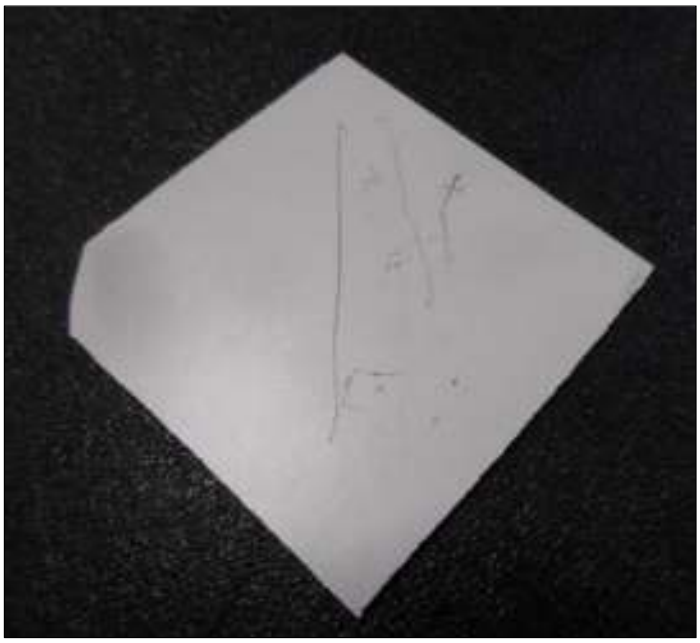
Acceptance Criteria:
The paint finish shall withstand the abrasion of a 4H pencil without penetrating through to the substrate and completing a continuous circuit.

Results:

Sample ID	Pencil Hardness	Pencil Penetrating to Substrate	Completing a Continuous Circuit	Results
1	4H	No	No	Conforming

The submitted sample conformed to the acceptance criteria for the test described above. Refer to the following page for photographs.

Paint Hardness on Steel Test Set-Up



Paint Hardness on Steel Test After Exposure

9.2 SEFA 8M -2016 - WALL MOUNTED CABINET LOAD TEST:

Date Tested: 12/01/-12/2/2016
Condition of Test Samples: New

Description of Samples:

Model Number	Description of Sample
WALL-314813-S	Wall Cabinet

9.2.2. Test Procedure:

Test Method: A wall mounted cabinet shall be mounted as per manufacturer's instructions and is to have the standard number of shelves. Use shot or sand bags weighing 10 lbs. (4.535 kg) each. Load the shelves per Section 7.0 including the bottom, each shelf, and top uniformly with 40 lbs. (18.14 kg) per square foot shelf area to a maximum of 200 lbs. (90.70 kg).

9.2.3. Acceptance Level:

With weights in place after a period of 24 hours, operate the doors through full travel to verify normal operation of the doors. Remove weights and operate doors to verify normal operation. Verify that there is no permanent deflection of the cabinet top, cabinet back, cabinet bottom, or shelves. After weights are removed, the cabinet shall show no permanent damage to the cabinet, cabinet bottom, or shelves.

Results:

Shelf Type	Static Load	Description of Results
Cabinet Top	171 lbs.	Pass
Cabinet Bottom	153 lbs.	Pass
Shelves	138 lbs.	Pass

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Wall Mounted Cabinet Load Test

10.2 SEFA 8M -2016 - TABLE STATIC LOAD TEST:

Date Tested: 03/15/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples

Model Number	Description of Sample
BTABLE-355822	Table Frame

10.2.2. Test Procedure:

Test Method: Verify that the table is level. Load the table top by using solid steel bars (per Section 3,1) stacked evenly and spaced. (Weight on the top is included in the total load.)

Mobile Table Load: 300 lb. (136.077 kg.)
Free Standing Table Load: 600 lb. (272.155 kg.)
Fixed Table: 2,000 lb. (907.184 kg.)
Dimensions of Product: 60” x 23” x 35”

10.2.3. Acceptance Level:

No structural breakage shall result from application of the load. With the full load, the apron rails shall not deflect more than 1/360 of the span of the table and not exceed 1/8” (3.175 mm).

Results:

Static Load	Deflection (in.)	Description of Results
600 lbs.	0.103”	Pass

The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Table Static Load

10.3 SEFA 8M -2016 - TABLE RACKING TEST:

Date Tested: 3/16/2016
Condition of Test Samples: New
Number of Samples Tested: One (1)

Description of Samples:

Model Number	Description of Sample
BTABLE-355822	Table Frame

10.3.2 Test Procedure:

Test Method:

Racking Angle: 45 degrees
Time Under Test: 72 hours
Test Load: 250 lbs

10.3.3 Acceptance Level:

There shall be no structural damage to end panels, legs, or bases. The operation of the table shall be normal.

Results:
The submitted sample met the acceptance criteria for the test described above. Refer to the following page for photograph.

Table Racking Test

Revisions Made To Test Report

Date	Revision Description	Revised by	Revised by
18-Jan-2016	Initial release.	James Jantz