

Test Report For:

Kewaunee Scientific Corporation

**SEFA 10 – 2013 RECOMMENDED
TESTING STANDARDS FOR
LABORATORY CASEWORK**

Adaptable Laboratory Furniture Systems

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Client Contact Information

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DATE RECEIVED: 05-JUL-2017

DATES TESTED: 13-JUL-2017

DESCRIPTION OF SAMPLE:

SEFA 10 Required Test Unit
Metal Adaptable Laboratory Furniture

Model Number	Description of Sample	Condition of Sample
FE30M840272-00	Single Sided Adaptable Workstation	New

WORK REQUESTED/APPLICABLE DOCUMENTS:

To test the submitted sample per the SEFA 10 – 2013 Adaptable Laboratory Furniture Systems Standards:

Test No.	<u>Test Description</u>
6.10	Strength Test Configuration 3
6.12	Resistance to Overturning Configuration 3

Test Equipment

Asset Number	Description	Manufacturer	Cal Date DD/MM/YEAR	Cal Due DD/MM/YEAR
1	Sand bags, 10 lbs. each. Quantity as needed.	NA	NA	NA
2	50-pound bars. Quantity as needed.	NA	NA	NA
3	Digital caliper	Mitutoyo	14-APR-2017	14-APR-2018
4	Inclinometer	Pro Products	NA	NA
5	Deflectometer	Starrett	NA	NA

6.10.1 Strength Test Configuration 3

Date Tested: 13-JUL-2017

Condition of Test Sample: New

Description of Samples:

Model Number	Description of Sample	Condition of Sample
FE30M840272-00	Single Sided Adaptable Workstation	New

6.10.1 Test Procedure:

The center of the work surface was marked, and a zero vertical deflection point established below this point for measurement of deflection in the X coordinate. Then a zero deflection point was established at the upper most height of the assembly to determine Y and Z coordinate movement. The shelves were then loaded with sand bags to reach 40 lbs per sq ft (110 lbs. per shelf). Loads were applied evenly on the shelves, and deflections were recorded. A picture of the unit with applied loads is on the following page.

Deflections

X: 0.010"

Y₁: 0.100"

Y₂: 0.130"

Y_{avg} (Y₁+Y₂)/2 = 0.115"

Z: 0.000"

6.10.2 Acceptance Criteria (Maximum allowable deflection):

X: 0.125"

Y_{avg} (Y₁ +Y₂)/2: 0.125"

Z: 0.125"

Results:

The deflections measured for test 6.10.1 were within the allowable limits. Unit passes test 6.10.1.

6.10.1 Assembly shelves loaded with 40 lbs per sq ft and deflections recorded



6.10.3 Strength Test Configuration 3 Continued

Dates Tested: 13-JUL-2017

Product Condition: New

Description of Samples:

Model Number	Description of Sample	Condition of Sample
FE30M840272-00	Single Sided Adaptable Workstation	New

6.10.3 Test Procedure:

With the shelves loaded as recorded in test 6.10.1, load was added to the work surface. The work surface is Category 4, and therefore a load of 1200 lbs was applied. Deflections were again measured at X, Y1, Y2, and Z. A picture of the unit with the applied loads is on the following page

Deflections

X₁: 0.240"

Y₁: 0.070"

Y₂: 0.013"

$(Y_1+Y_2)/2 = 0.042"$

Z: 0.000"

6.10.4 Acceptance Criteria (Maximum allowable deflection):

X: 0.250"

Yavg $(Y_1+Y_2)/2$: 0.125"

Z: 0.125"

Results:

The deflections measured for test 6.10.3 were within the allowable limits. Unit passes test 6.10.3.

6.10.3 Shelves Loaded and Working Load of 1200 lbs Added to Work Surface



6.12.1 Resistance to Overturning Configuration 3

Dates Tested: 13-JUL-2017

Product Condition: New

Description of Samples:

Model Number	Description of Sample	Condition of Sample
FE30M840272-00	Single Sided Adaptable Workstation	New

6.12.1 Test Procedure:

With no load applied to the unit, tilt the unit 10 degrees from horizontal in the direction most likely to overturn. A picture of the test unit tilted to 10 degrees from horizontal is shown below.

6.12.2 Acceptance Criteria

Test unit shall not overturn.

Results:

The test unit did not overturn when tilted to 10 degrees, and therefore passes test 6.12.1.

6.12.1 Unit Tilted 10 Degrees from Horizontal

