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Jan. 28, 2009

Pepco Inc
1615 Roberson Road - P.O. Box 457
Moberly, MO 65270-0475

Attention: Mr. David Patton
Regarding: SEFA 8 Testing of a Wood and a Metal Science Table
Our Job # 08537 P.O. No. 10779

Dear Mr. Patton:

This report describes the procedures and results of the SEFA 8 Tests that were conducted on two Science Tables submitted by Pepco, Inc. Testing was conducted between January 15 and January 20, 2009 at Gaynes Labs, Inc., Bridgeview, IL.

TEST MATERIALS:

- (1) Free Standing Oak Frame Science Table, CS-246036-EPX8-BLK-00
- (1) Free Standing Steel Frame Science Table, SS-246036-EPX8-BLK-00

TEST PROCEDURES:

Testing was based on the Scientific Equipment & Furniture Association (SEFA) Tests.

SEFA 8-W 2007 Recommended Practices for Wood Laboratory Grade Furniture, Casework, Shelving and Tables.

Section 10.1 Description of Test Unit: The Wood Table was evaluated in regard to dimensional measurements, general construction, and materials.

SEFA 8 W, Section 10.2 Table Static Load: The table was placed on a smooth level concrete floor. A dial indicator was placed directly below the mid span of each long side rail. Each dial indicator was zeroed prior to loading the table top. The top of the table was evenly loaded and equally spaced with solid metal bars, each weighing 50 lbs. When a total of 1000 lbs. was loaded onto the table, each dial indicator reading was recorded. The table was inspected for structural damage. Refer to photo 1 for an overview of the loaded table. Per Pepco's request, additional loading of the table top was conducted. The dial indicators were removed, and equal loading of the table top continued until 3000 lbs. was attained or until failure, which ever occurred first (see photo 2).

TEST PROCEDURES (for Wood Tables continued):

SEFA 8 W, Section 10.3 Table Racking: The table was placed on a smooth level concrete floor. A common 2 x 4 wood rail was clamped onto the centerline of the top parallel to the ends of the table. The table was then positioned at 45°, with one pair of legs on the floor and the other raised and supported. Five 50-lb. bars were loaded onto the table top and held in place by the 2 x 4 rail. The table remained in this position for 72 hours (see photo 3). Following the 72 hours, the table was unloaded and lowered onto the leveled surface.

SEFA 8-M 2007 Recommended Practices for Metal Laboratory Furniture, Casework, Shelving and Tables.

SEFA 8 M, Section 8.1 Description of Test Unit: The Metal Table was evaluated in regard to dimensional measurements, general construction, and materials.

SEFA 8 M, Section 8.2 Table Static Load: The table was placed on a smooth level concrete floor. A dial indicator was placed directly below the mid span of each long side rail. Each dial indicator was zeroed prior to loading the table top. The top of the table was evenly loaded and equally spaced with solid metal bars, each weighing 50 lbs. When a total of 1000 lbs. was loaded onto the table, each dial indicator reading was recorded. The table was inspected for structural damage. Refer to photo 4 for an overview of the loaded table. Per Pepco's request additional loading of the table top was conducted. The dial indicators were removed, and equal loading of the table top continued until 3000 lbs. was attained or until failure, which ever occurred first (see photo 5).

SEFA 8 M, Section 8.3 Table Racking: The table was placed on a smooth level concrete floor in its upright position with its floor glides fully retracted and blocked to prevent from sliding. The table was then positioned at 45°, with one pair of legs on the floor and the other raised and supported. The table remained in this position for 30 minutes (see photo 6). Following the 30 minutes, the table was lowered to the leveled surface without shock and evaluated. The procedure was repeated on the opposite end of the table.

TEST RESULTS of Wood Table:

Section 10.1 Description of Test Unit: Free standing, four legged rectangular Wood Table with apron (appears to be solid oak) and solid epoxy top.

Top - 23 15/16" x 59 15/16" x 1" thick

Legs: - 2 1/4" x 2 1/4" x 34 3/4" high (excluding leveling glides), overall table height 36 1/4"

O.D. span of Legs- 57 1/2" (longest dimension), 21 1/2" (shortest dimension)

Apron - 4" high, 13/16" thick

Section 10.2.3 Acceptance Level (Static Load): The table meets the acceptance level of 10.2.3. There was no structural breakage resulting from application of the 1000 lb. load. The deflection of the apron rails did not deflect more than 1/360 of the span of the table.

TEST RESULTS (of Wood Table continued):

There was no structural breakage resulting from application of the 3000 lb. load.

Section 10.3.3 Acceptance Level (Racking): After the table was returned to its normal position, there was no permanent damage.

TEST RESULTS of Metal Table:

Section 8.1 Description of Test Unit: Free standing, four legged rectangular Steel Table with apron (appears to be tubular steel) and solid epoxy top.

Top - 23 15/16" x 59 15/16" x 1" thick

Legs: - 1 1/2" x 1 1/2" x 34 3/4" high (excluding leveling glides), overall table height 36 1/4"

O.D. Span of Legs- 58 1/4" (longest dimension), 22" (shortest dimension)

Apron - 2" high, 1" thick steel rectangular tube

Section 8.2.3 Acceptance Level (Static Load): The table meets the acceptance level of 8.2.3. There was no structural breakage resulting from application of the 1000 lb. load. The deflection of the apron rails did not deflect more than 1/360 of the span of the table.

There was no structural breakage resulting from application of the 3000 lb. load.

Section 8.3.3 Acceptance Level (Racking): After the table was returned to its normal position, there was no permanent damage.

The tables shall be returned to Pepco Inc for further evaluation.

Report Prepared By: Leonard Roesner
Leonard Roesner



Photo 1 - Wood Table Under 1000 Lb. Load



Photo 2 - Wood Table Under 3000 Lb. Load



Photo 3 - Wood Table Racking



Photo 4 - Metal Table Under 1000 Lb. Load



Photo 5 - Metal Table Under 3000 Lb. Load



Photo 6 - Metal Table Racking Test