



Safety Rail Source  
2570 Blvd. of the Generals  
Suite 200  
Norristown, PA 19403

[www.safetyrailsources.com](http://www.safetyrailsources.com)

(877) 723-3766  
[info@safetyrailsources.com](mailto:info@safetyrailsources.com)

Kee Safety, Inc.  
100 Stradtman Street  
Buffalo, NY 14206

[www.keesafety.com](http://www.keesafety.com)

Tel: (716) 896 4949

Fax: (716) 896 5696

(800) 851 5181

[info@keesafety.com](mailto:info@keesafety.com)

## Testing of STS Skylight Screen in accordance with OSHA Standard 29 CFR 1910.28 & 1910.29

**Test location** Kee Safety, Inc  
100 Stradtman Street  
Buffalo, NY 14206

**Test Date:** 09/04/2019

### OSHA Requirements

**1910.28(b)(3) Holes.** The employer must ensure:

#### **1910.28(b)(3)(i)**

Each employee is protected from falling through any hole (**including skylights**) that is 4 feet (1.2 m) or more above a lower level by one or more of the following:

#### **1910.29(e)**

**Covers.** The employer must ensure each cover for a hole in a walking-working surface:

#### **1910.29(e)(1)**

Is capable of supporting without failure, at least twice the maximum intended load that may be imposed on the cover at any one time;

#### **1910.140(d)(1)(v)**

If the personal fall arrest system meets the criteria and protocols in appendix D of this subpart, and is being used by an employee having a combined body and tool weight of less than 310 pounds (140 kg), the system is considered to be in compliance with the provisions of paragraphs (d)(1)(i) through (iii) of this section. If the system is used by an employee having a combined body and tool weight of 310 pounds (140kg) or more and the employer has appropriately modified the criteria and protocols in appendix D, then the system will be deemed to be in compliance with the requirements of paragraphs (d)(1)(i) through (iii).



Safety Rail Source  
2570 Blvd. of the Generals  
Suite 200  
Norristown, PA 19403

[www.safetyrailsources.com](http://www.safetyrailsources.com)

(877) 723-3766  
[info@safetyrailsources.com](mailto:info@safetyrailsources.com)

Kee Safety, Inc.  
100 Stradtman Street  
Buffalo, NY 14206

[www.keesafety.com](http://www.keesafety.com)

Tel: (716) 896 4949

Fax: (716) 896 5696

(800) 851 5181

[info@keesafety.com](mailto:info@keesafety.com)

**Screen Material** 0.312" diameter galvanized carbon wire in a 4" x 4" grid for OSHA requirements of 620 lbs factored load.

**Purpose of Test** To determine the ability of a Kee Safety Type STS Skylight Screen to withstand an employee having a combined body and tool weight of less than 310 pounds (140 kg), with a test load of at least twice the maximum intended load of 310lb. The test load was 620 pounds (280 kg) applied at any point on the skylight screen.

**Test Method** Kee Safety STS Style Skylight was secured to a (5' wide x 10' length) skylight.

Weights were measured at 622 lbs as per **Photo 1** and positioned on the skylight in two separate tests. At the front end and center of the skylight which was deemed worst case.

Note: Weights were stacked in a column as if someone was standing in these positions to give worst case results.

**Conclusion** The 622lb applied at the front end and center of the STS skylight in two separate tests showed the STS screen could support without failure the factored load. Once the weights were removed there was no visible sign of damage to fixings or the skylight. Deflection was 4" when weight applied to front end worst case deflection.



Safety Rail Source  
2570 Blvd. of the Generals  
Suite 200  
Norristown, PA 19403

[www.safetyrailsources.com](http://www.safetyrailsources.com)

(877) 723-3766  
[info@safetyrailsources.com](mailto:info@safetyrailsources.com)

Kee Safety, Inc.  
100 Stradtman Street  
Buffalo, NY 14206

[www.keesafety.com](http://www.keesafety.com)

Tel: (716) 896 4949

Fax: (716) 896 5696

(800) 851 5181

[info@keesafety.com](mailto:info@keesafety.com)

Photo 1. – Measured Weight for testing. (622lb)



Photo 2. Kee Safety STS Skylight secured to skylight screen as per the installation guidelines.





Safety Rail Source  
2570 Blvd. of the Generals  
Suite 200  
Norristown, PA 19403

[www.safetyrailsources.com](http://www.safetyrailsources.com)

(877) 723-3766  
[info@safetyrailsources.com](mailto:info@safetyrailsources.com)

Kee Safety, Inc.  
100 Stradtman Street  
Buffalo, NY 14206

[www.keesafety.com](http://www.keesafety.com)

Tel: (716) 896 4949

Fax: (716) 896 5696

(800) 851 5181

[info@keesafety.com](mailto:info@keesafety.com)

Photo 3. – Test weight (622lb) Center of STS Skylight



Photo 4. - Test weight (622lb) front end of STS Skylight

