Safety Tie-off Base Support

Description:

The RoofScreen Safety Tie-off Base Support is a modified and tested version of our standard Square Base Support system and includes integral D-rings to be used as fall protection and fall arrest anchor points. Integrating these Tie-off Base Supports, as required by the project's architect or safety consultant, with a RoofScreen system reduces or eliminates the added expense of installing a separate tie-off system.

Materials:

- AISI Type 304 stainless steel
- Powder coated yellow
- Zinc plated Base Cap Sealing Bolt, 5/16" x 1" with polyethylene washer

Application:

On commercial rooftops utilizing the RoofScreen Square Base equipment screen system, the Safety Tie-off Base Support may be used in lieu of the standard Base Support in strategic locations to provide adequate fall restraint[1] or fall arrest[2] anchor points for the project.

[1]Fall Restraint refers to limiting a person on the roof from reaching the edge of the building.
[2]Fall Arrest refers to stopping a person's fall before hitting the surface.

Capacity & Testing:

The RoofScreen Safety Tie-off Base Support was tested to the Newest Standard, ANSI A359.18, through a third-party testing facility. It was tested as a type A anchor which indicates a rigid anchor type design for fall arrest. The test was performed in 3 different directions including normal to the face of the base, at a 45° angle in the horizontal plane, and at a 45° angle in the vertical plane. The direction of the pull is illustrated below in Figure 1.

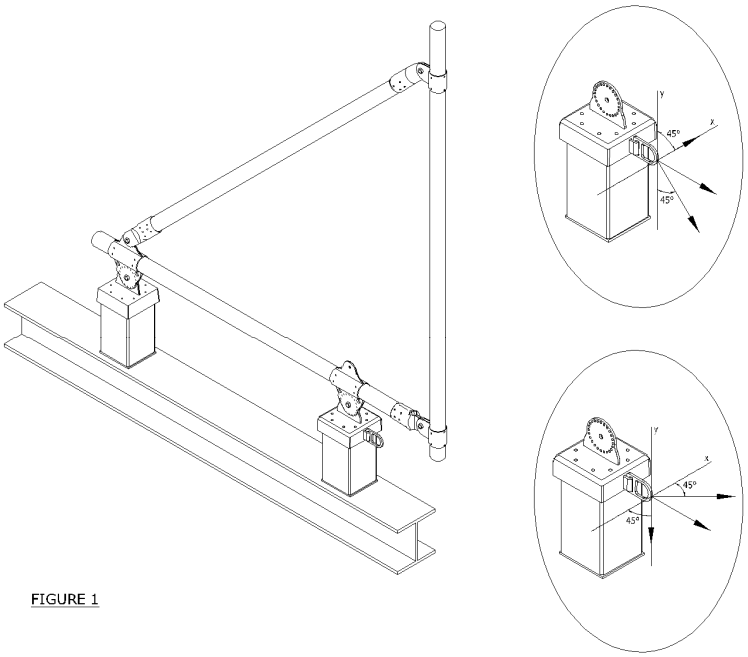

FIGURE 1

Each direction was tested to a Static Strength Test, Dynamic Strength Test, and a Residual Dynamic Strength Test. For the Static Strength Test a load is applied that gradually reaches 5,000lbs. Through the Dynamic Strength Test a 285lb load is dropped at a 3ft free fall. This free fall will mimic the load applied to the Safety Tie-off during an emergency. Finally, the Residual Dynamic Strength Test is running another drop test on a Safety Tie-off previously tested during the Dynamic Strength Test. All tests assume use of acceptable harness and connectors to the tie-off. Since our Tie-off is made of ¼" stainless steel material, no corrosion testing was necessary. The RoofScreen Safety Tie-off Base Support was able to withstand all loads Tests.

It is important to note that because the construction of each roof varies so much from project to project, this test was solely done to verify the strength of the parts rather than the attachment to a structural member. Each project will need to be engineered to determine the proper amount and type of anchorage to the roof structure.

Warranty:

When RoofScreen provides project design and engineering calculations, a 20-year limited warranty is included.