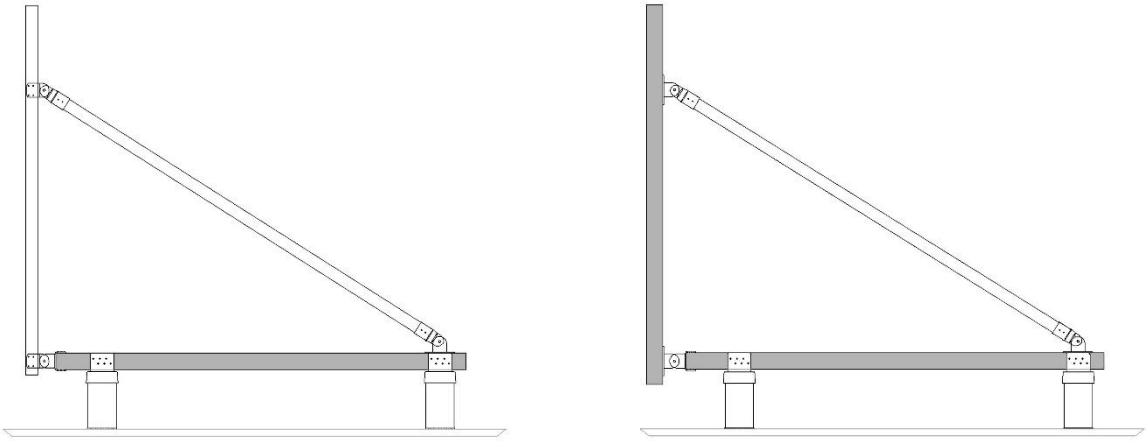
# HSS Frames



*Examples of RoofScreen HSS Frame Configurations*

**Description:**

The HSS frame is a heavy-duty framing system comprised of round galvanized tubes and hollow structural sections. The frame comes in two variations: One with horizontal HSS, one with horizontal and vertical HSS. All our Standard Frame configurations are available as an HSS variant; see the corresponding frame Product Data Sheet for more details.

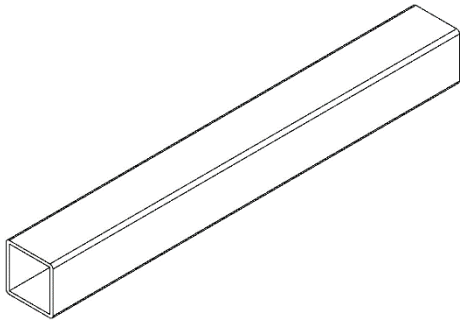
**Application:**

HSS frames are designed to be used as the primary structural supports for equipment screens on flat and low sloped commercial rooftops. The frames can accommodate virtually any type of face panels or materials to achieve the desired aesthetics for the building. The Base Support system can attach in a watertight manner to any type of roof construction, occasionally needing additional structural blocking or reinforcement.

**Materials/Components:**

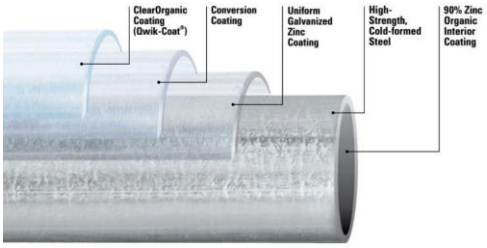
HSS:

- 3.5x3.5x.125” ; 3.5x3.5x.1875” ; 3.5x3.5x.25"
- G90 Hot Dipped Galvanized
- A500 Grade B Steel
- Minimum 46 ksi yield and 58 ksi tensil



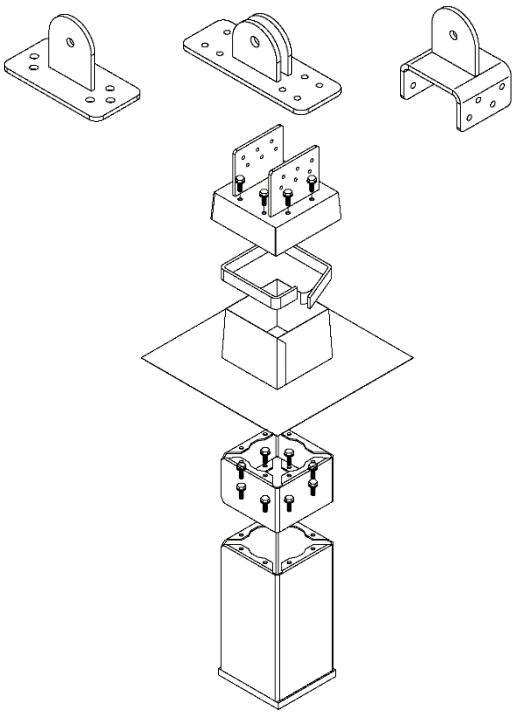
Tubing:

- High-strength Gatorshield Galvanized Steel Tubing. Superior corrosion resistance with triple layer of protection conforming to the highest standards of ASTM A1057.
- 2.5" O.D., 16ga and 11ga.
- Minimum 50 ksi yield and 55 ksi tensile.




Connector Brackets:

- AISI Type 304 Stainless Steel



Hardware:

- Nuts and bolts used for connectors are corrosion resistant 18-8 stainless steel.
- Tek Screws and Sealing Bolts are carbon steel with premium coating.

Roof Connections:

- RoofScreen's Square Base Roof Attachment System.
- Welded steel Base Support.
- Flashing boot matching roof type.
- Foam rubber gasket for added protection from ice and splashing water.
- Stainless steel Base Cap with integral counter-flashing.
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**Structural Notes:**

The modular design allows the frame configuration and spacing to be adapted to any wind load. In high wind load regions, the frames are installed closer together and use heavier materials. The horizontal HSS members are attached with self-drilling screws through the pre-punched holes in the vertical Base Cap fins after final adjustment are made. This creates a moment absorbing connection, reducing the torque that would otherwise be transferred into the roof structure.

All projects require analysis and calculations by a licensed professional engineer to ensure the design is appropriate for the specific conditions that apply.

**Installation:**

For typical RoofScreen projects, the frame tubes are delivered pre-cut based on the dimensions of the tallest frame on the project. Depending on the amount of roof slope, some tubes may require field trimming during installation. The installation consists of connecting the tubes together with pre-assembled fittings, adjusting for levelness then locking them together with self-drilling tek screws. A full installation manual is available, and most projects include full shop drawings showing project specific details.

**Warranty:**

When the system is designed and engineered by RoofScreen Mfg., we include a 20-year limited warranty.