SC3R Frame (Cantilevered Three-Member Frame with Round Posts)

Description:
The SC3R frame consists of 3 round galvanized tube members, stainless steel connector fittings and our Round Post Support system which allows adjustment for roof slope and a watertight connection. This system is highly adjustable during installation and does not require perfect alignment of the front Base Supports from frame to frame.

Application:
SC3R 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 Round Post Support system can attach in a watertight manner to any type of roof construction, occasionally needing additional structural blocking or reinforcement.

Materials/Components:
Tubing:
- High-strength Gatorsheet 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 Fittings:
- Formed from AISI Type 304 Stainless Steel.
- Mill finish.

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

Roof Connections:
- RoofScreen’s Round Post attachment system.
- Welded steel Round Post Support.
- Flashing boot matching roof type.
- Draw band and EPDM storm collar for added protection.
- Stainless steel Slip-On Cap.

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. When used with the SC3R frame configuration, the Round Post Supports do not resist moment (torque) at the roof connection and are best suited for very strong decks/structures, such as steel beams or concrete.

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.