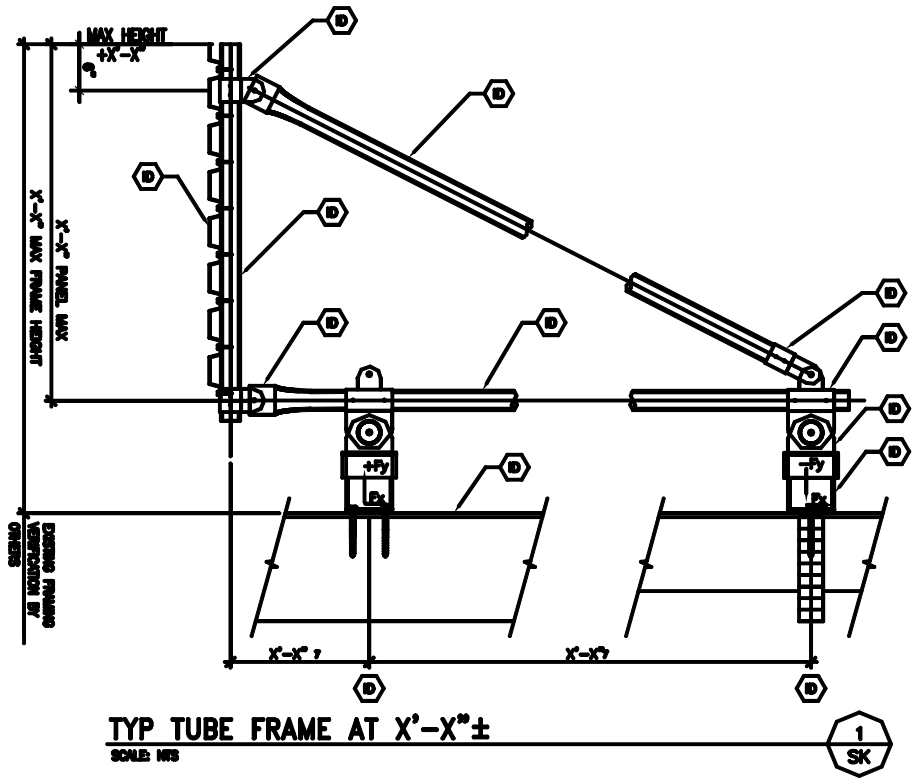
Introduction

Our goal is to make your RoofScreen installation as fast and economical as possible. To do this, we provide the service of pre-cutting the frame tubes to exact lengths for each frame to eliminate 90% or more of the cutting on the roof during installation.

This guide will explain the procedure for field measuring the RoofScreen frames and how to submit those measurements to RoofScreen Mfg. for processing.

Preparation

To prepare, you will need a copy of the engineering CAD drawing which is part of the structural calculation packet provided by RoofScreen for your project. If RoofScreen Mfg. provided shop drawings for your project, this drawing will be included on the details page. Here is a sample of what it will look like:



Optional Methods

There are two methods available for determining the measurements required for correct tubing lengths: the first is to field measure the frame heights with a laser level, the second is to have the tubing cut to the dimensions on the engineering drawing. Both of these methods are explained in detail below.

It is not economical for us to ship full length stock tubing for a number of reasons:

1. Flatbed shipping, which is more expensive, would be required, since the stock lengths are 24’ long.
2. More tubing would be needed because of scrap, and drops, due to random lengths required.
3. More connector fittings would be needed since the ends of the tubes cannot be crimped in the field.

Method 1: Pre-cut to Engineering

The engineering CAD drawing for your project specifies two important dimensions: the maximum height of the frame, and the span between the front and rear Base Supports.

We can cut the tubes for all the frames according to the dimensions on the engineering CAD drawing, if you prefer not to field measure the project.

Some important things to consider if tubes are cut to the engineering dimensions:

1. The frame height on the engineering CAD drawing is the maximum frame height you can build. This would be the frame that is located at the lowest point in the roof slope. All the frames would be cut to this height.
2. Any frames located at a higher point in the roof slope would require field cutting of the tubing to keep the top of the RoofScreen level.
3. The span (center to center distance between the front and rear Base Supports) is a critical dimension. If the span distance in the field ends up being more than the dimension shown on the engineering, the tubes will be too short and new tubes will need to be cut and shipped. If the span dimension in the field is less than the dimension shown on the engineering, the tubes will be too long and require field trimming.

Method 2: Pre-cut to Field Measurements

This method is recommended, especially for large projects and roofs with pitch. The measurements you provide will be loaded into a software program that calculates the length of each tube for each frame. When the frames are installed, they will be the correct height to account for the roof pitch, while maintaining a level elevation at the top of the screen.
This method requires the use of a laser level and a little time to take the measurements, but the labor savings can be significant as the tubing doesn’t have to be cut on the roof.

Laser Measuring Procedure

Referring to figure 1, set the laser level on the roof deck in a location where there is a clear line of sight to all areas where the new RoofScreen will be located. Raise or lower the tripod to get the laser beam equal to the height of the top of the new RoofScreen. This may take a little finesse, but it is well worth the time because it reduces the potential for math errors.

If you cannot set up the laser beam height to the top of the new RoofScreen, it will be necessary to add or subtract the difference between the laser beam height and the desired RoofScreen height on the measurement list.

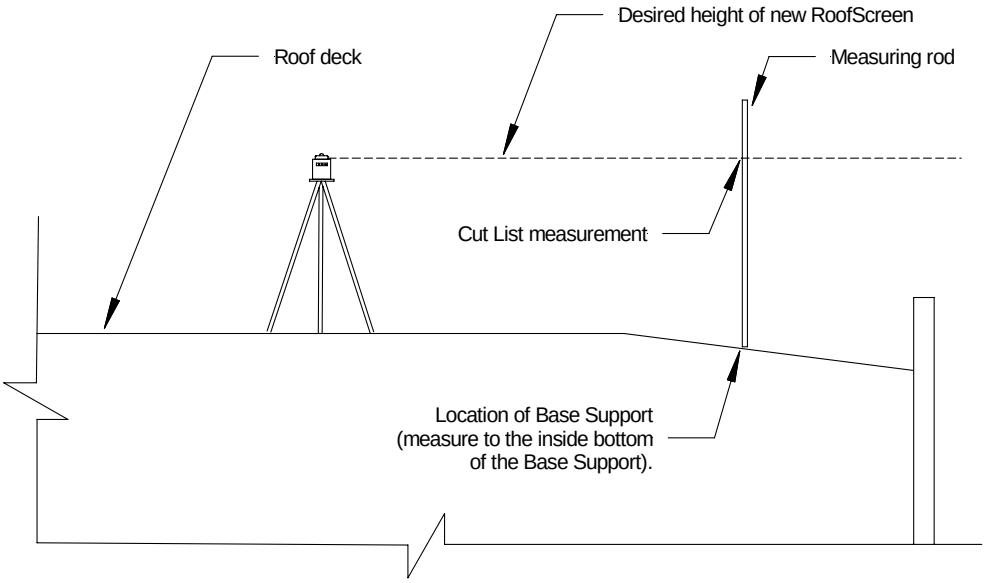


Figure 1

If you have a numbered roof plan layout from RoofScreen, start measuring at frame number one. If you don't have a roof plan, you will need to create a sketch of the layout and number the frames. When we process the tubes, we will mark them with the frame numbers so you know where each tube goes on the roof.

Using the laser level and measuring rod, measure the height (in inches) for each frame and record the dimensions on the Field Measuring Form as described below. Keep in mind that our software assumes you measure to the bottom of the Base Support. If the Base Supports are already installed, and you measure to the top of the Base Support, you must add the height of the Base Support to your dimensions.

Front Height: Record the vertical height (in inches) from the bottom of the front Base Support to the laser beam.
Rear Height: Record the vertical height (in inches) from the bottom of the rear Base Support to the laser beam
Span: Record the distance (center to center) between Base Supports for each frame.

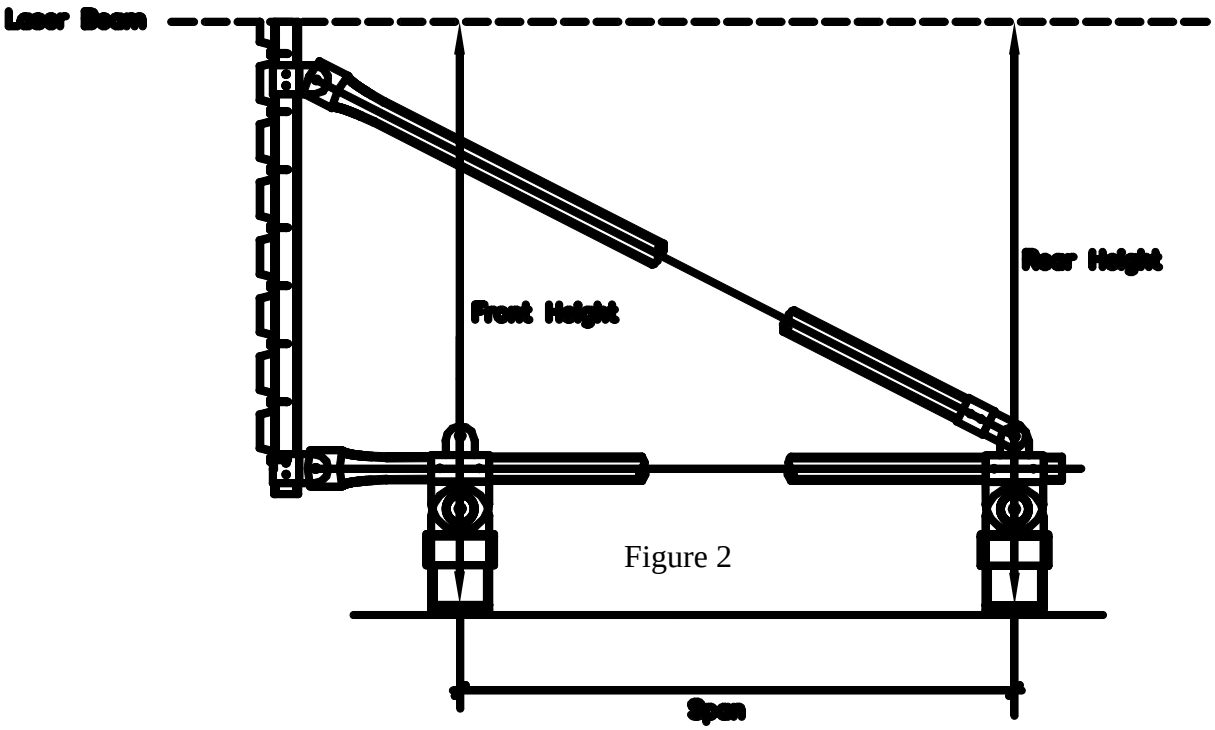


Figure 2

When you have finished measuring all the frames, you will submit your measurements to RoofScreen Mfg. There are two methods for submitting these measurements:

1. **Submit online:** This is our preferred method because the dimensions are electronically entered into our system and the potential for errors is greatly reduced. To submit online, please go to www.roofscreen.com and click on the Submit Field Data button. Follow the instructions online to submit your measurements.
2. **Fax in:** You may also fax your dimensions to us on the form provided. Please make sure you write legibly so we don't misread your dimensions. Also, make sure you include the job name, your name and your phone number. Fax the form to 866-253-0738

When we receive the field measurements, we will review them and call you to discuss lead time and delivery issues.

Important Note: Our pre-cutting tube calculator is very accurate, but there are many variables that occur in the field that can change the lengths, you should be prepared to field trim some of the tubing if necessary.

RoofScreen Mfg. 347 Coral St. Santa Cruz, CA 95060
(Toll Free) 866-766-3727 (Fax) 866-253-0738

PLEASE ENTER ALL DIMENSIONS IN INCHES!

Date:	Project:	Name:

Frame Number	Front Height	Rear Height	Span	Notes