Sloped roof mount test:

1. Name the materials that make up the typical roof structural supports.
   1. Steel
   2. Wood
   3. Concrete
2. Under the decking name two of what the main supports are called?
   1. Rafters
   2. Trusses
   3. beam
3. What is used to support and hold the PV panels in place?

The structural support system.

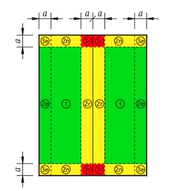
1. Describe how the elevation above the roof impacts the mounting design.

* Wind loading
* Uplift pressure
* Stress on the structural support system
* Racking strength / spacing

1. Placing the panels at the roof edge reduces wind loading.

False

1. On a gable roof, draw the pressure zones.



1. What does ASCE stand for?

American Society of Civil Engineers

1. What is the basic device that connects to the roof and the structural supports?

L bracket

1. What is needed to be added when the L bracket gets screwed or bolted into the roof?

Sealant

1. What is the most commonly used on a tiled roof to attach to the roof structure?

Tile hook

1. On a corrugated steel roof system where is the best place to drill into the support system? Why?

On the top of the ridge because it is the highest part and that makes water less likely to lay there.

1. What type of steel roof has a pronounced ridge where the sheet overlap?

Standing seam

1. Can a standing seam clamp not penetrate through the steel roof?

Yes

1. Describe what a span table is.

It is a table that tells the distance between supporting brackets for the rails. The table is dependent on where geographically the installation is.

1. Describe cantilever as it applies to mounting the PV panels.

It is the distance that the PV panel’s frame can hang out past the rail. It is defined by the rail or panel manufacturer. Either by percentage or by mounting hole locations.

1. What is the typical rafter spacing?

24 inches

1. Which two directions can the PV panels be laid out in?

Portrait and landscape

1. What is a quick method to find a rafter?

Use a hammer and tap the decking to listen for the solid noise associated with hitting something firm.

1. What can be done to create a stronger rail system?

Stagger the supports. Making them hit more rafters.

1. What is the minimum size of wire is used for bonding?

#6 AWG or 16 metric

1. Define “wire management”

It is a system used to hold wiring together and route it. It keeps the wire from hitting the roof and chafing. Manufacturers have special clips that attach to the rails.

1. What is the name of this device?

A picture containing text

Description automatically generated

Mid Clamp

1. What is the name of this device?

A picture containing wall, indoor, bathroom, dirty

Description automatically generated

End Clamp