

Installed Weight of PV System on Asphalt Shingle Roof

PV Module 60 Cell Framed Solar Module

Weight = 44lbs

Area = 39" x 65" nominal (17.6 Sq. Ft.)

Mounting Rail (Extruded Aluminum) Weight = 1.03/lf

There are 80" of rail per module = 6.87 Lbs

Module + Rail = 50.87 lbs over 17.6 Sq. Ft. = ***2.89 lbs/ Sq. Ft.**

Foot Spacing is 32" O.C. Across Panel Width with 2 rows per module.

Typical layout provides 13 feet on one rail for each 10 modules in a row.

This provides for an average of 1.3 feet/ Module/rail x 2 rails = 2.6 feet/module

Module + Rail weight distributed per mounting foot = 58.87 lbs /2.6 feet = 19.56 lbs / mtg foot.

Composite Shingle Roofing = 3.8 PSF

½" Ext Ply Sheathing = 1 PSF

Installed Solar Array = **2.89 #/ Sf ***

Total Load = 7.69#/sf

IRC-Table R802.5.1(3) Rafter Spans for Common Lumber Species.

System Mount Overview continued

Project: Harnois 6.75 kW Residential Roof-mount Solar System



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