

# SOLAR PANEL DEAD WEIGHT LOADING CALCULATION

**System:**

Solar panel consists of \_\_\_\_\_ solar modules

Mounting system has \_\_\_\_\_ points of connection with the roof

**Panel Weight Calculation:**

Solar Module Weight = \_\_\_\_\_ lbs.

Mounting System Weight = \_\_\_\_\_ lbs.

Total Panel Weight = ((# of modules)x(module wt.))+(mounting system wt. = (  x  ) +  =  lbs.

**Point Load Calculation:**

Point Load =  $\frac{(\text{total panel wt.})}{(\text{\# of points of connection})}$  =  $\frac{\text{}}{\text{}}$  =  lbs.

**Distributed Load Calculation:**

Solar Module Area =  $\frac{\text{length" x width"}}{144}$  =  $\frac{\text{ x }}{144}$  =  ft<sup>2</sup>

Total Solar Module Area = (# of modules) x (solar mod. area) =  x  =  ft<sup>2</sup>

Inter-module Spacing =  in.

Total Spacing Area =  $\frac{(\text{\# spaces bet. modules}) \times (\text{inter-mod spacing}) \times (\text{panel length or width})}{144}$  =  $\frac{\text{} \times \text{} \times \text{}}{144}$  =  ft<sup>2</sup>

Total Panel Area = (total solar modular area) + (total spacing area) =  +  =  ft<sup>2</sup>

Distributed Load =  $\frac{(\text{total panel wt.})}{(\text{total panel area})}$  =  $\frac{\text{}}{\text{}}$  =  lbs./ft<sup>2</sup>

*The point loading and distributed loading should be below building department requirements for structural analysis.*

*Distributed loading - Max. 5 lbs/ft<sup>2</sup>*