

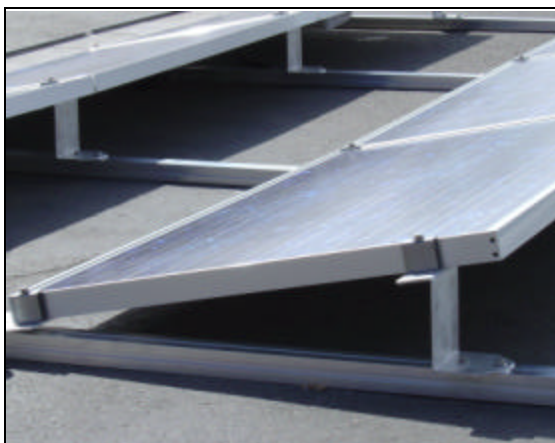
POWER TUBE CRS™

**POWER TUBE™ COMMERCIAL RACKING SYSTEM FOR FLAT ROOFS
- DESIGNED FOR SYSTEMS 10KW AND LARGER -**



FEATURES:

- aluminum and stainless components
- top-clamping module attachment
- 5- or 10-degree module tilt
- no roof penetrations



HOW DO THESE RACKS STAY ON THE ROOF?

These systems are held on the roof by three things:

1. the weight of the modules and racking components
2. concrete ballast blocks (17lb, 2.25"x8"x16" - quantity needed varies with site)
3. all components are inter-connected

ROOF LOADING

The POWER TUBE Commercial Racking System with modules and ballast blocks weighs approximately 5.8 per square foot of the area it covers (based on a system for Sharp 165 modules at a 10-degree tilt and spaced for a latitude of 40-degrees).



Ballast Pan and Bottom Bracket



Bottom Bracket and Clamp




Upper Clamp

The system is constructed of site-assembled contiguous aluminum grid system. To protect the roof and to increase the friction coefficient the grid rests on a custom designed EPDM mat. The system is very adaptable to fit the solar modules around mechanical equipment, vents, and other roof obstructions without separating the grid structure into multiple structures. The cost varies with module brand, module dimensions and the spacing required between rows to avoid shading (which depends on the module width, tilt angle and site latitude).

Wind Rating

The POWER TUBE CRS system has been reviewed and stamped by a civil engineer licensed in the State of New Mexico. The system conforms to ASCE Standard 7-98 for the following applications:

| <u>Tilt Angle</u> | <u>Exposure Category</u> | <u>Maximum Wind Speed</u> |
|-------------------|--------------------------|---------------------------|
| 5-degree tilt: | Exposure C | 125 mph winds |
| 10-degree tilt: | Exposure C | 90 mph winds |

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|---|-------------------------------|
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