

❖ Double Cantilever Flat Carport - Modules Racked in Portrait

Racked designs are perfect for increasing solar gain to carport parking structures which align North and South. 'Dual Purlin' racked design with modules facing south consists of two parallel purlins (East/West), perpendicular to the solar modules width, attachments positioned on modules long frame at optimum strength locations. Purlins are in two heights creating the desired module tilt angle. Module rows are spaced apart to avoid shading.

Column and beam supports are straight design. Beams are applied in the field by welding or bolting to the columns. Designs are available for 5, 10 or 15 degree tilts and sealed roof with decking.

Modules

60 or 72 cell (39" Wide): up to 14 columns up to 49'-6" wide

Columns

Wide Flange Beam: ASTM A992 Gr. 50

Spacing: 27ft O.C.

Finish: One coat tinted water base rust inhibitive primer

Optional: Hot Dip Galvanized ASTM A123

Beams

Wide Flange Beam: ASTM A992 Gr. 50

Spacing: 27ft O.C.

Finish: One coat tinted water base rust inhibitive primer

Optional: Hot Dip Galvanized ASTM A123

Purlins

Zee & Hat Purlins: Cold Formed #14ga. Steel ASTM A 570 Gr.55

Size: Custom Depending On Tilt Angle

Finish: ASTM A653 G90 Galvanized

Trim

Cold Formed #14ga. Steel Gr. 55

Finish: ASTM A653 G90 Galvanized

Module Mounting to Purlins

Top Clamps: W/2 Self Drilling Screws-#12

Preferred: SkyGrip Self Grounding Mid Clamps

Options:

Top Clamps W/Bolt Thru-Purlin (requires predrilled holes)

Thru-Bolt Module Frame to Purlin (requires predrilled holes)



Double Cantilever- Modules Racked 5 degrees



High Z Purlin / Low Hat Purlin



High / Low Z Purlins