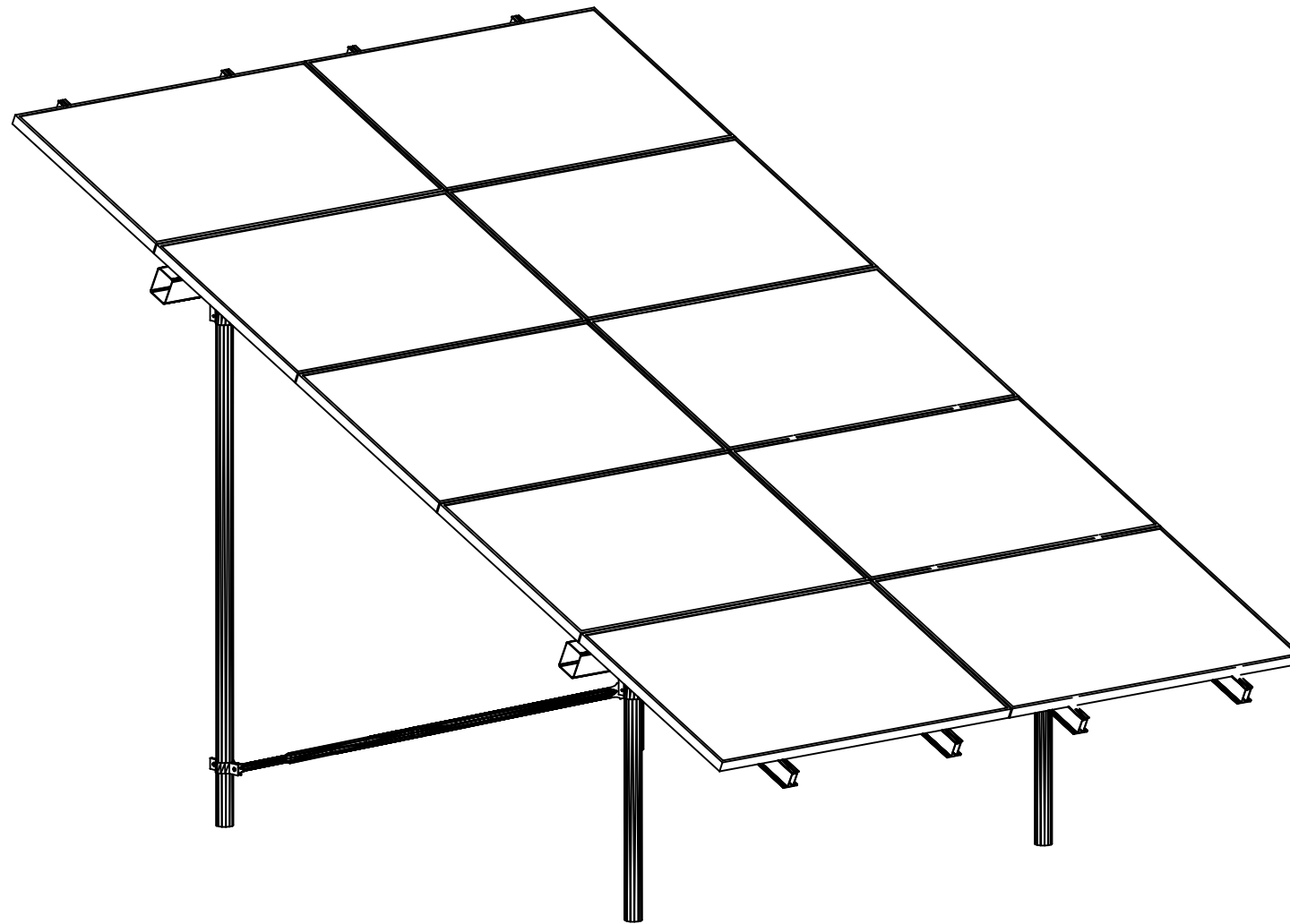


**Plan View**

NOT TO SCALE



Site Design Conditions

Basic Wind Speed: 138 MPH (Risk Category II)  
 Basic Wind Speed: 127 MPH (Risk Category I)  
 Exposure Category: C  
 Ground Snow Load: 30 PSF  
 Flat Roof Snow Load: 30 PSF (if applicable)  
 Site Contour: <5 Degree Slope

Max. Leg Axial Bearing: 2,880 lbs.  
 Max. Leg Uplift: 1,980 lbs.  
 Max. Lateral Resistance: 1,375 lbs.  
 Top Rail Max. Loading: 169.3 plf  
 Helical Pile Depth: 60" Min  
 Lateral Resistance Plate Size: Not Req'd

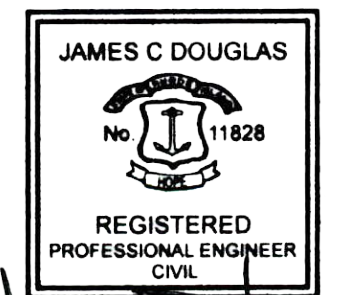
All design work has been performed in accordance with the Rhode Island State Building Code (SBC-1-2013) dated July 1, 2013 including but not limited to the 2012 International Building Code with state directed changes in SBC-1.

Net design pressures were calculated in accordance with ASCE 7-10 section 27.4.3, "Open Buildings with Monoslope, Pitched, or Troughed Roofs". All load cases were evaluated in determining the limiting design conditions. The data table above provides the results for the limiting load case. Maximum leg reaction forces represent the highest load condition seen by any leg in the structure. All legs in the structure are designed to meet the maximum load conditions.

5Lx2C Sub-Array Design Conditions

Front Leg Height: 38½"  
 Rear Leg Height: 86"  
 North-South Leg Spacing: 102"  
 West Span Leg Spacing: N/A  
 East Span Leg Spacing: N/A  
 Quantity Center Spans: 1  
 Center Span Leg Spacing: 7'-6"  
 East & West Overhang: 2'-0"  
 Overall Beam Length: 11'-6"  
 Front Edge Ground Clearance: 28"  
 Horizontal Rail Material: 5"x4"x½" HSS  
 Top Rail Material: SF Rails  
 Qty Rails per Panel: 2  
 Top Rail Length: 212"  
 Top Rail Center Span: 112½"  
 Top Rail Overhangs: 49¾"

Array Tilt Angle: 25 Degrees  
 Overall Array East-West Dim: 13'-7"  
 Number of Modules/Sub-Array: 10  
 Number of Sub-Arrays: 2  
 Module Columns/Sub-Array: 2  
 Number of Module Rows: 5  
 Module Orientation: Landscape  
 Module Column Spacing: ¾"  
 Module Row Spacing: ¼"  
 Module Model: REC445AA 72  
 Module Size: 40.39" x 81.22"  
 Individual Module Rating: 425 watt  
 Sub Array Power Rating: 4.45 kw  
 Total Power Rating: 8.9 kw



**Sheet 1 of 3**

**Sabetti Construction, Inc. DBA Newport Solar**

Date	Revision	Drawn By:	Review By:
07/20/2021	Original	MM	JD

Project:  
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