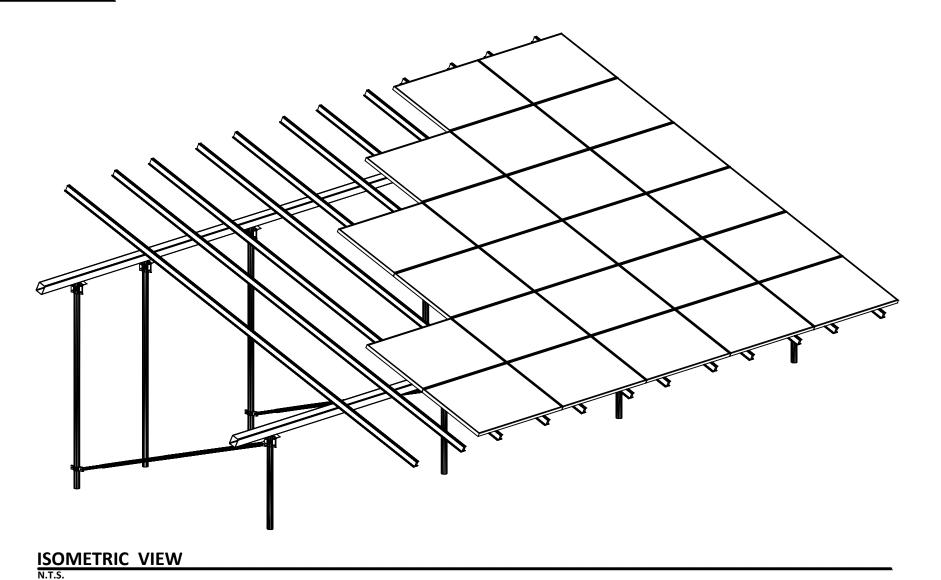


PLAN VIEW



Site Design Conditions

Site Contour:	<5 Degree Slope	Lateral Resistance Plate Size:	Not Req'd
Flat Roof Snow Load:	30 PSF	Helical Pile Depth:	60" Min
Ground Snow Load:	35 PSF	Top Rail Max. Loading:	123.9 plf
Exposure Category:	В	Max. Lateral Resistance:	1,570 lbs
Basic Wind Speed: (Risk Category I)	123 MPH	Max. Leg Uplift:	2,215 lbs
Basic Wind Speed: (Risk Category II)	133 MPH	Max. Leg Axial Bearing:	4,560 lbs

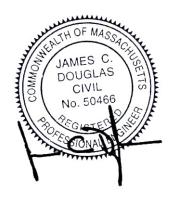
All design work has been performed in accordance with the Massachusetts State Building Code, Ninth Edition, Base Volume (780 CMR) including but not limited to the 2015 International Building Code as amended by 780 CMR.

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.

6Lx7C Sub-Array Design Conditions

Front Leg Height:	29¼"	Array Tilt Angle:	23 Degrees
Rear Leg Height:	84¾"	Front Edge Ground Clearance:	18"
North-South Pile Spacing:	: 130¾"	Overall Array East-West Dim:	43'-4"
West Span Pile Spacing:	11'-6"	Number of Modules/Sub-Array:	42
East Span Pile Spacing:	11'-6"	Number of Sub-Arrays:	1
Quantity Center Spans:	1	Module Columns/Sub-Array:	7
Center Span Pile Spacing:	11'-6"	Number of Module Rows:	6
East & West Overhang:	4'-0"	Module Orientation:	Landscape
Overall Beam Length:	42'-6"	Module Column Spacing	¾"
Horizontal Beam Material:	5"x4"x1%" HSS	Module Row Spacing	1/4"
Top Rail Material:	SF Rails	Module Model: Q.PEAK DUO	BLK ML-G10+
Qty Rails per Panel:	2	Module Size: 4	41.14" x 73.98"
Top Rail Length:	254"	Individual Module Rating:	405 watts
Top Rail Center Span:	142"	Sub Array Power Rating:	17.01 kw
Top Rail Overhangs:	56"	Total Power Rating:	17.01 kw

1 Additional North Column is to be installed per field direction. The Column is to support equipment mounting needs. It is not required for North beam support.



SHEET 1 OF 3 DATE REVISION 10/24/2023 ORIGINAL JB JD

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