

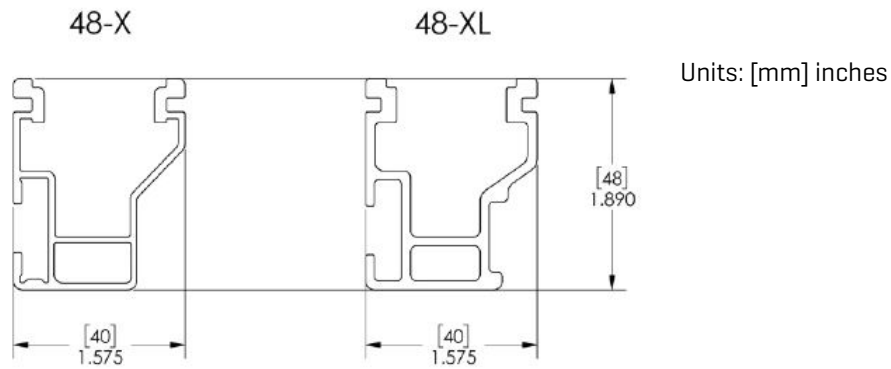
# CrossRail Tilt Up Multi Row

## TECHNICAL SHEET

Item Number	Description	Part Number
1	CrossRail 44X/ 48-X / 48-XL	4000019[Mill], 4000020[Dark] / 4000662[Mill], 4000663[Dark] / 4000695[Mill], 4000705[Dark]
2	CrossRail Mid Clamp	4000601-H[Mill], 4000602-H[Dark]
3	Climber Set w/ Hole	4006042-H[48X/48XL], 4006043 [44X]
4	Everest Ground Lug	4000006-H[13mm]
5	L-Foot Slotted Set	4000630 [mill]
6	CrossRail Tilt Connector Set	4000505 [mill]
7	CrossRail (Standard) End Clamp	4000090 (Mill 30-40mm), 4000091 (Dark 30-40mm), 4000092 (Mill 40-47mm) 4000093 (Dark 40-47mm)
8	Yeti Hidden End Clamp for CR	4000050-H
9	CR Micro Inverter and Optimizer Mounting Kit	4000629-H (13mm)
10	Rail Connector	4000051 (44X Mill), 4000052 (44X Dark), 4000385 (48X/48XL Mill), 4000386 (48X/48XL Dark)

NOTES

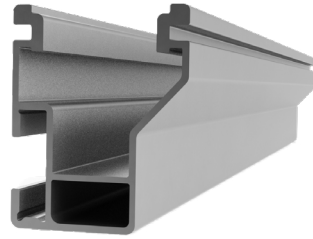
- ▶ Inclined system of two rows for reduced spaces.
- ▶ A single type of rail for front legs, rear legs, East-West rail, reducing material waste.



## Technical Information

	CrossRail Tilt Up Multi Row
Roof type	Low slope, membrane, standing seam
Material	High corrosion resistance stainless steel and high grade aluminum
Finish	Aluminum
Roof Connection	5/16" lag screw
Flexibility	Flexible to various tilt angles and pre-engineered for tilts from 7° to 35°
PV Modules	For all common module types
Module Orientation	Portrait and landscape
System Components	T-Foot, Powerclamp Standard, L-Foot
Structural Validity	According to the standard ASCE7-10
Certification	UL 2703
Warranty	25 years

# CROSSRAIL 48-X



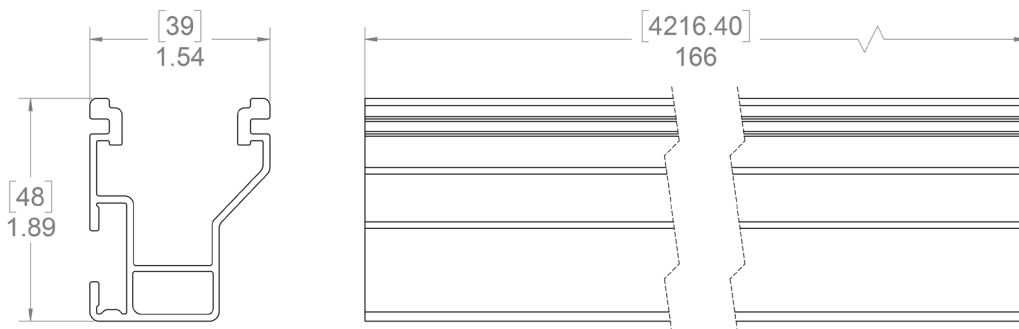
## Mechanical Properties

	CrossRail 48-X
Material	600 series aluminum
Ultimate Tensile Strength	37.7 ksi [260 MPa]
Yield Strength	34.8 ksi [240 MPa]
Weight	0.56 lbs/ft [0.833 kg/m]
Finish	Mill

## Sectional Properties

	CrossRail 48-X
Sx	0.1980 in <sup>3</sup> [3.245 cm <sup>3</sup> ]
Sy	0.1510 in <sup>3</sup> [2.474 cm <sup>3</sup> ]
A [X-Section]	0.4650 in <sup>2</sup> [2.999 cm <sup>2</sup> ]

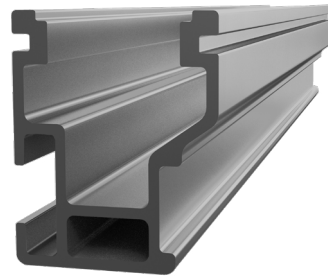
Units: [mm] inches



### Notes:

- ▶ Structural values and span charts determined in accordance with Aluminum Design Manual and ASCE 7-16
- ▶ UL2703 Listed System for Fire and Bonding

# CROSSRAIL 48-XL



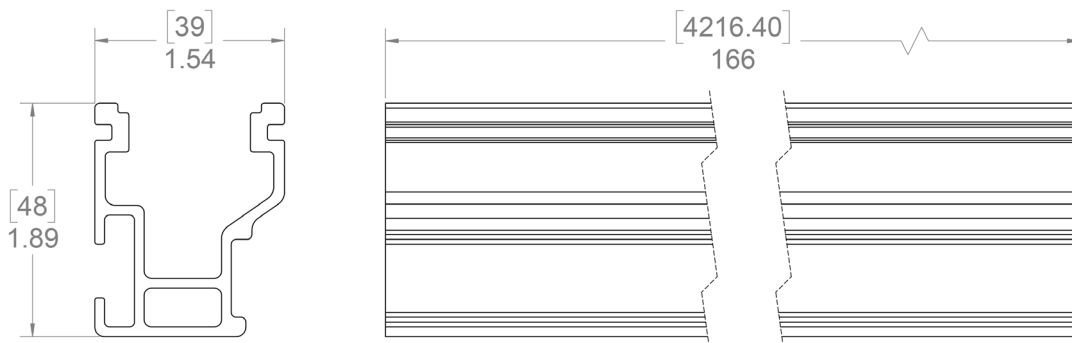
## Mechanical Properties

	CrossRail 48-XL
Material	6000 Series Aluminum
Ultimate Tensile Strength	37.7 ksi [260 MPa]
Yield Strength	34.8 ksi [240 MPa]
Weight	0.76 lbs/ft [1.13 kg/m]
Finish	Mill

## Sectional Properties

	CrossRail 48-XL
Sx	0.2420 in <sup>3</sup> [3.966 cm <sup>3</sup> ]
Sy	0.2140 in <sup>3</sup> [3.507 cm <sup>3</sup> ]
A [X-Section]	0.6520 in <sup>2</sup> [4.206 cm <sup>2</sup> ]

Units: [mm] inches



### Notes:

- ▶ Structural values and span charts determined in accordance with Aluminum Design Manual and ASCE 7-16
- ▶ UL2703 Listed System for Fire and Bonding

# Tilt Up Multi Row Installed Dimensions

The Tilt Up Multi-Row system is a completely customized solution. Figure 1 and Table 1. The following provide recommended installation dimensions based on a standard PV module of 72 cells with clamp locations 1/6 of the module edge dimension. Always make sure that dimensions are suitable for the project site.

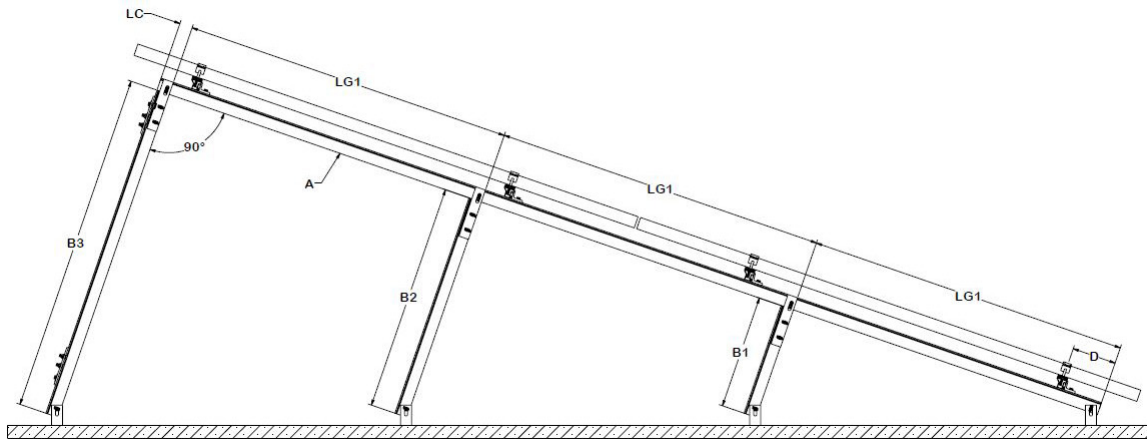


Figure 1: Assembly Dimension Drawing for a 2-Row, Multi-Row Tilt Up System

**Note: ALL-dimensions are in mts and ft**

**Table 1: Installation Dimensions for a 2-Row Tilt Up, Multi-Row System**

Dimension	Description	Vertical 72 Cells	
		A	Front Leg N-S
B1	Rear Leg 1	0.43 m	1'5"
B2	Rear Leg 2	0.86 m	2'10"
B3	Rear Leg 3	1.04 m	3'5"
D	Front Rail Offset	0.19 m	7"
LC	Rear Rail Offset	0.11 m	4"
LG-1	Rail Spacing	1.17 m	3'10"