MOUNTS: 3X-TPM-series

Top-of-Pole Mounting (TPM) :

Ameresco Solar manufactures and distributes a complete line of mounting kits to accommodate a wide range of off-grid applications. From single module top-of-pole mounts to complex multi-panel arrays, our mounting line has the flexibility to meet your mounting needs.

Our Top-of-Pole Mounts Feature:

Rugged Materials and Construction,
Precision Engineering and Expert Support

Pole Selection:

- Determine solar panel or solar array area (SQ. FT)
- Select pole size based on selection guidelines in Table 1.
Ameresco Solar do not supply poles with our mounting kits).

3X-TPM Series:
- Available for 2",3",4" and 6" SCH 40 pipe

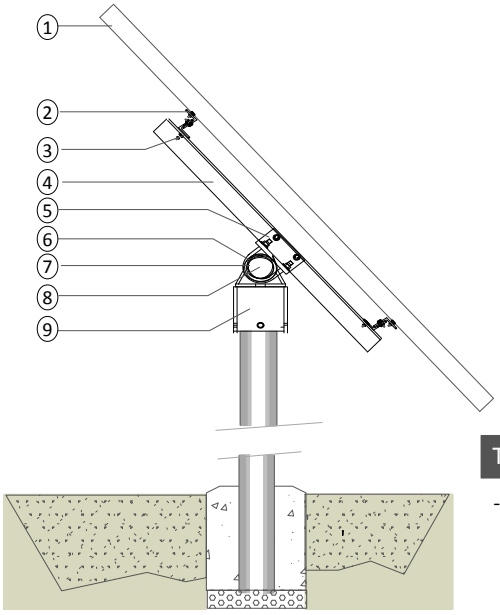
Top-of-Pole : Guidelines For Pole Selection

Module Area	Pole Size	Depth In Ground	Height Above Ground	Hole Diameter
15 SQ. FT.	2" SCH40 (2-3/8" OD)	30"-36"	48"-72"	8"-12"
28 SQ. FT.	3" SCH40 (3-1/2" OD)	36"-42"	48"-72"	12"-16"
35 SQ. FT.	3" SCH40 (3-1/2" OD)	38"-44"	60"-72"	12"-16"
60 SQ. FT.	4" SCH40 (4-1/2" OD)	42"-48"	60"-72"	16"-24"
90 SQ. FT.	6" SCH40 (6-5/8" OD)	48"-60"	60"-84"	24"-30"
120 SQ. FT.	6" SCH40 (6-5/8" OD)	48"-72"	72"-84"	24"-30"

Table 1

* Module Area (SQ. FT) = W (Panel Width in FT) x L (Panel Length in FT)
* Solar Array Area (SQ. FT) = W (Panel Width in FT) x L (Panel Length in FT) x Number of Panels per Array

Photographs are intended to portray typical mount appearance, actual appearance my vary.



1. Solar Panel
2. Panel Kit Rail (Horizontal)
3. L-Bracket (Small)
4. Support Rail (Vertical)
5. L-Bracket (Large)
6. U-Bolts
7. Cross Pipe
8. Pipe End Caps
9. T-Sleeve

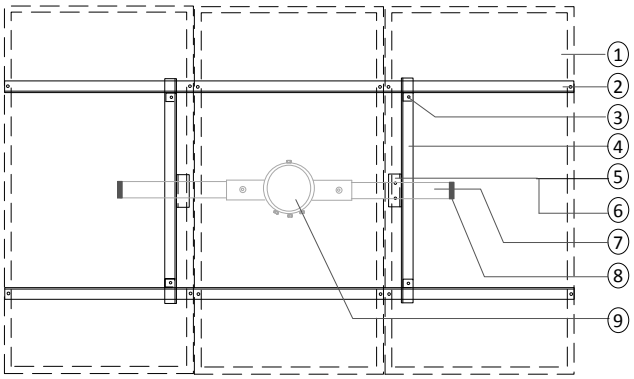


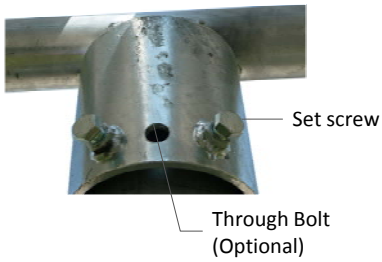
Figure 1. Mounting kit components

T-Sleeve : Hot Dipped Galvanized Steel

- Comes with four 1/2" set screws
- Through bolt option for locations with higher windspeeds
- Consult Table one to confirm he fitment of T-sleeve to pole

T-Sleeve : Lower Set Screws

- Secure T-Sleeve to pole



T-Sleeve : Upper Set Screws

- Secure T-Sleeve to cross pipe

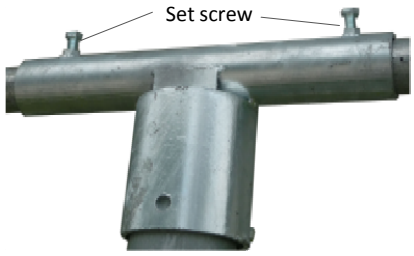
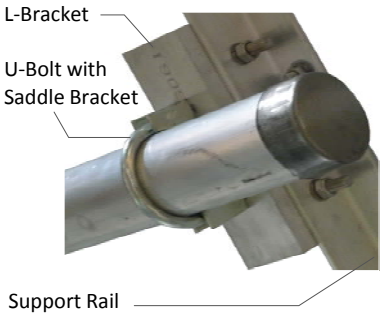
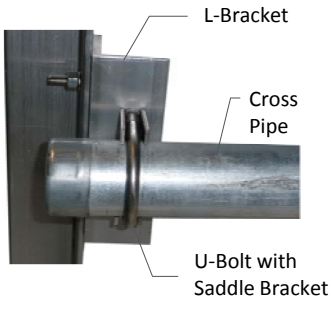


Figure 2. T-Sleeve attaches to pole and cross pipe using set screws.

L-Bracket (Large): Two L-Brackets per kit - Attachment to Support Rail



L-Bracket (Large): Two L-Brackets per kit - Attachment to Cross Pipe



L-Bracket (Small): Four L-Brackets per kit - Attachment to Panel Kit Rail

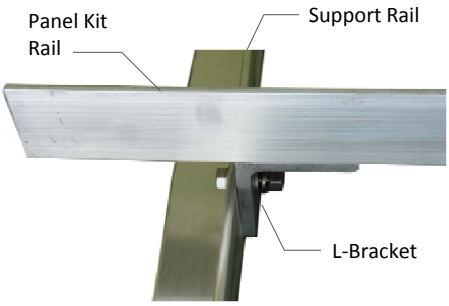


Figure 3. Use L-brackets to attach to the panel kit-, support rails and to cross pipe.

Array Tilt Angle Selection: (see Table 2)

SITE LATITUDE: (In Degrees)	FIXED TILT ANGLE
0° TO 15°	15°
15° TO 25°	SAME AS LATITUDE
25° TO 30°	SAME AS LATITUDE +5°
30° TO 35°	SAME AS LATITUDE +10°
35° TO 40°	SAME AS LATITUDE +15°
40° +	SAME AS LATITUDE +20°

Table 2.

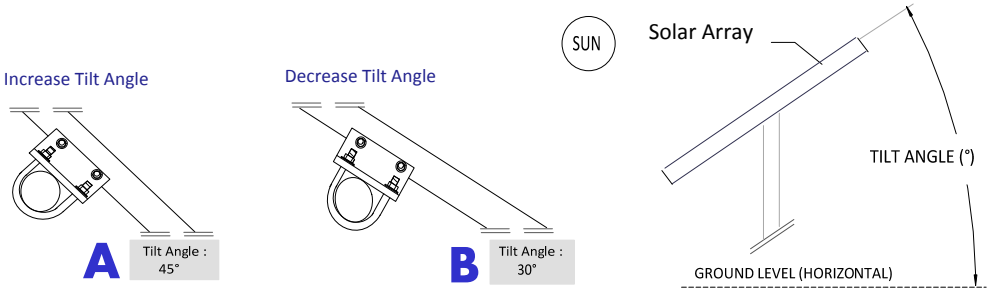


Figure 4. Tilt Angle Adjustment: Adjust solar Array tilt angle by rotating U-bolts to desired angle.

Locate array in an unshaded area facing equator and tilted from the horizontal at desired tilt angle (See Table 1).
Solar arrays in the Northern Hemisphere face South for optimum energy production. Solar Arrays in the Southern hemisphere face North.
When choosing a site, avoid trees, overhead power lines, buildings or obstructions which could cast shadows on the solar modules.
This is especially true during the winter months when the arc of the sun is lowest to the horizon.