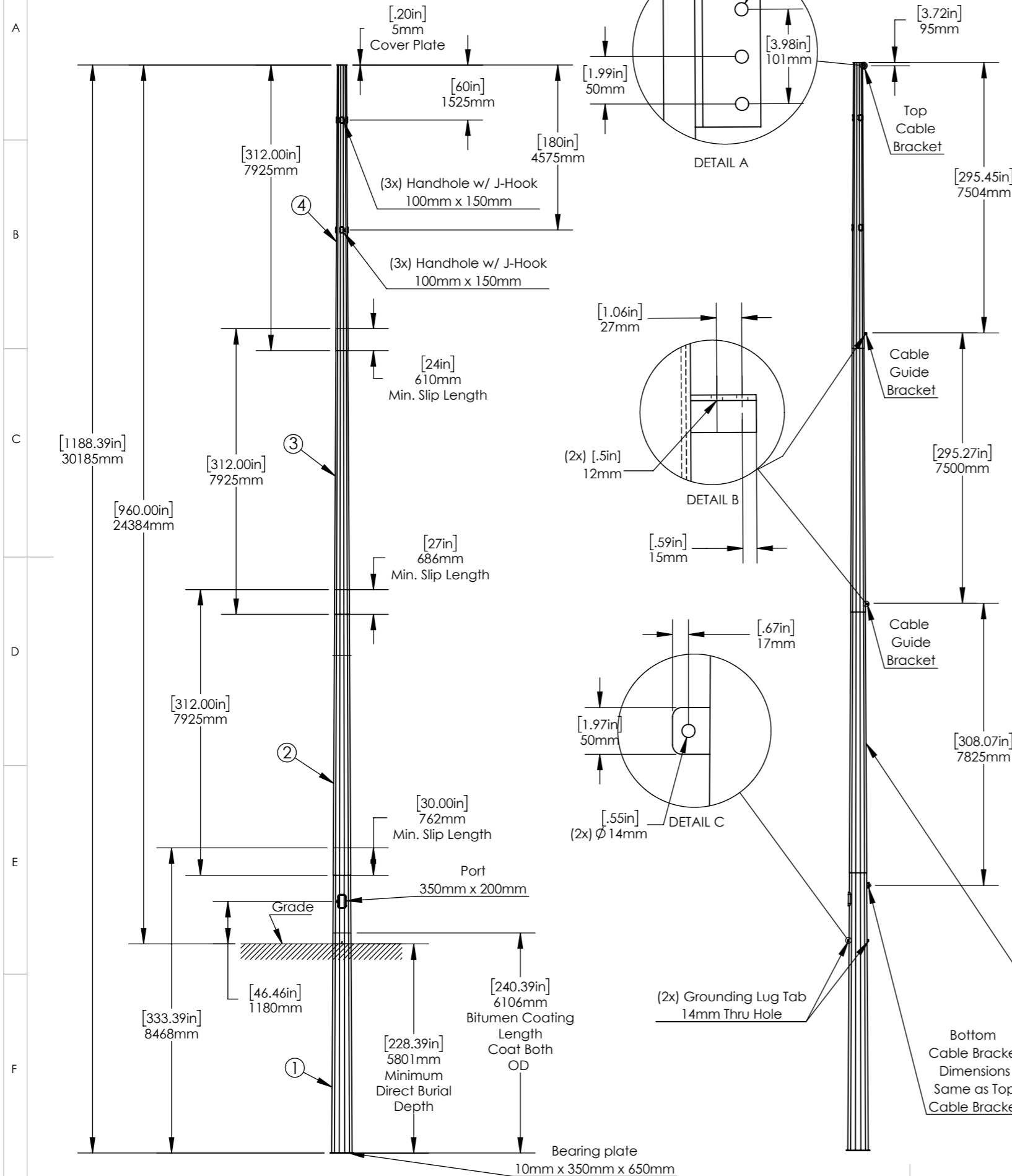


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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	initial release	6/9/20	MGC
B	Added pole section, reduced length below 30'	6/12/20	MGC
C	Added bearing plate	8/13/21	MGC



- Survival Wind Speed: Per Code
 - Structure Class - Per Code
 - Topographic - Per Code
 - Exposure - Per Code
- Design and Welding Codes:
 - TIA-222-G
 - AWS D1.1
- Material (or Equivalent)
 - Pole: ASTM A572 GR65
 - Equivalent (Q420B)
- Finish: Hot dip Galvanizing per ASTM A123
- Pole has 12 sides
- Pole Section Details

Pole Section	#1	#2	#3	
Thickness - (in)/ (mm)	0.197/ 5	0.197/ 5	0.197/ 5	0.197/5
Length - (in)/ (m)	333/ 8.458	312/ 7.925	312/ 7.925	312/ 7.925
Top Dia. - (in)/ (mm)	18.5/ 470.2	15.7/ 397.7	12.8/ 324.3	9.8/ 250
Bottom Dia. - (in)/ (mm)	22.4/ 567.6	19.3/ 488.9	16.4/ 415.6	13.4/ 341.3
Min Slip - (in)/ (mm)		30/ 762	27/ 686	24/ 610
Weight (lbs)/ (kg)	1231/ 559.7	970.6/ 441.2	808.5/ 367.5	663.5/ 301.6

Climbing Pegs
This Side
Placed Between
Top & Bottom
Cable Brackets
(Pegs - M16 x 200mm)

Bottom
Cable Bracket
Dimensions
Same as Top
Cable Bracket

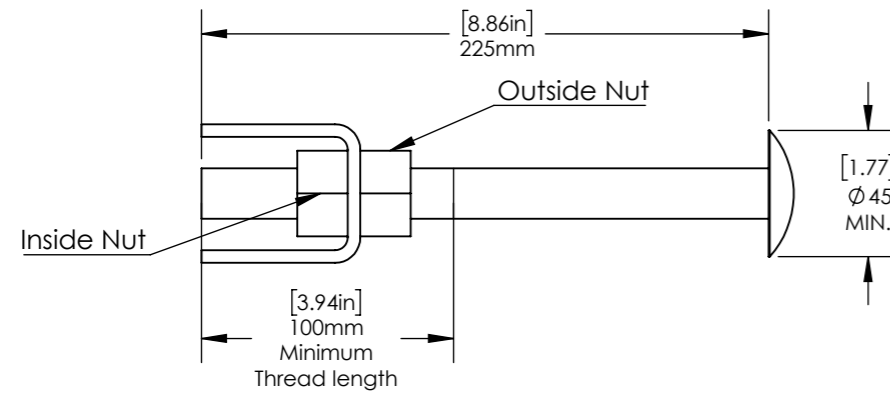
Total Weight 3674 lbs (1670 kg) Does not include fasteners	APPROVALS	DATE	 ARE Telecom & Broadband 1041 Grand Avenue, # 213 St. Paul, MN 55105 (651) 330-1263
	DRAWN MGC	6/9/20	
MATERIAL See Notes	RESP ENG		80ft 4 Section Direct Burial Pole CAD file: Details and dimensions not shown on this drawing can be found in CAD file.
FINISH See Notes	MFG ENG		
DO NOT SCALE DRAWING	QUAL ENG		scale NA rev. C size NA sheet 1 of 3

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#	DESCRIPTION (Optional Grade)	QTY	Weight (lb/ kg)
1	Clip - ASTM A572 GR 50 (Q345 or Q355)	*1	1.2/ 0.54
2	Step Bolt - M20x2.5 x 225mm - A449 (GR 8.8) HDG	*1	0.88/ 0.64
3	Heavy Hex Nut, M20x2.5 - A563 GR DH (GR 8.8) HDG	*2	0.224/ 0.11

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	initial release	10/12/20	MGC
B	Revised BOM bolt length to 225mm	11/2/20	MGC

CLIP-STEP BOLT

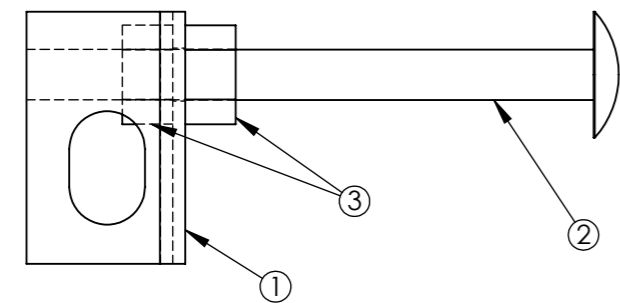


Fabrication Notes:

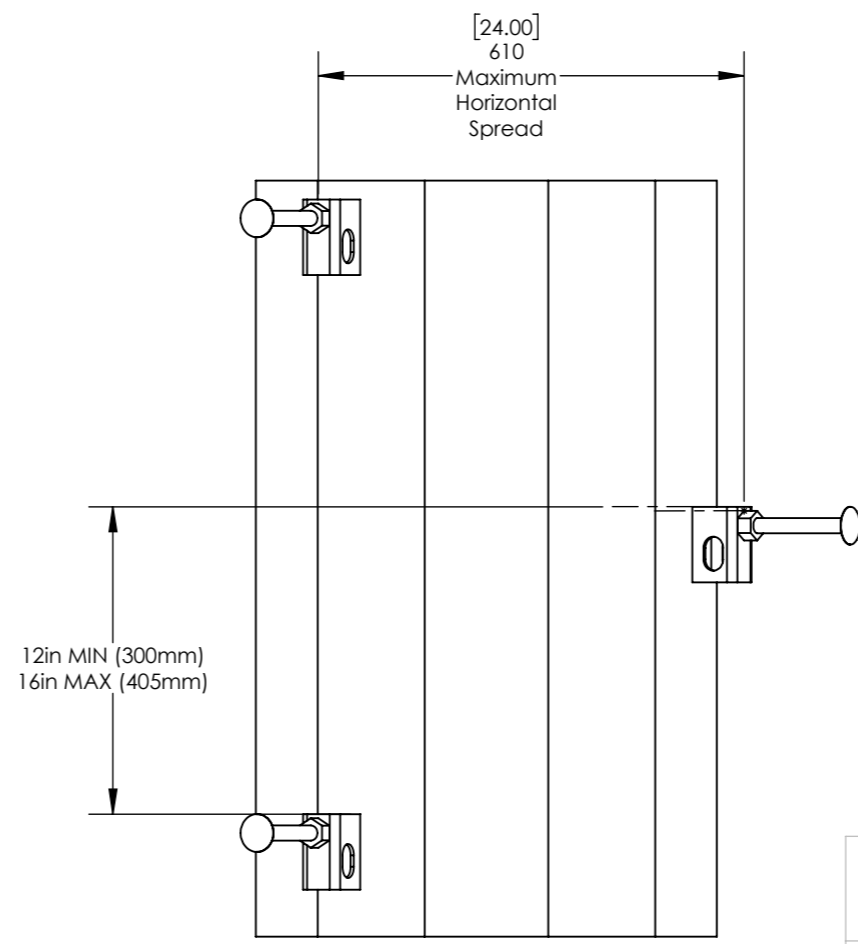
- *The number of Clips/ Step Bolts will vary based on height of pole and shall be equally spaced between the upper and lower cable mount brackets (see pg. 2).
- All plate material shall have a minimum yield strength of 345 MPa (50 ksi)
- All welding shall conform to the minimum requirements of AWS D1.1
- All welding shall be done by welders qualified under AWS specifications, using E70XX, low hydrogen electrodes
- Hot Dip Galvanized in accordance with ASTM A123
- Debur all sharp edges

Installation Steps:

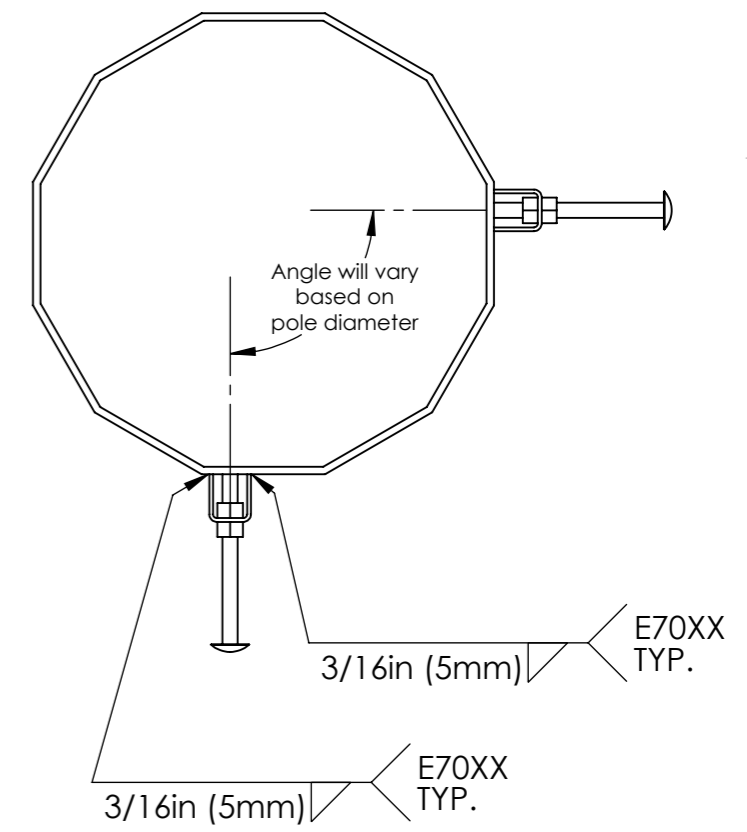
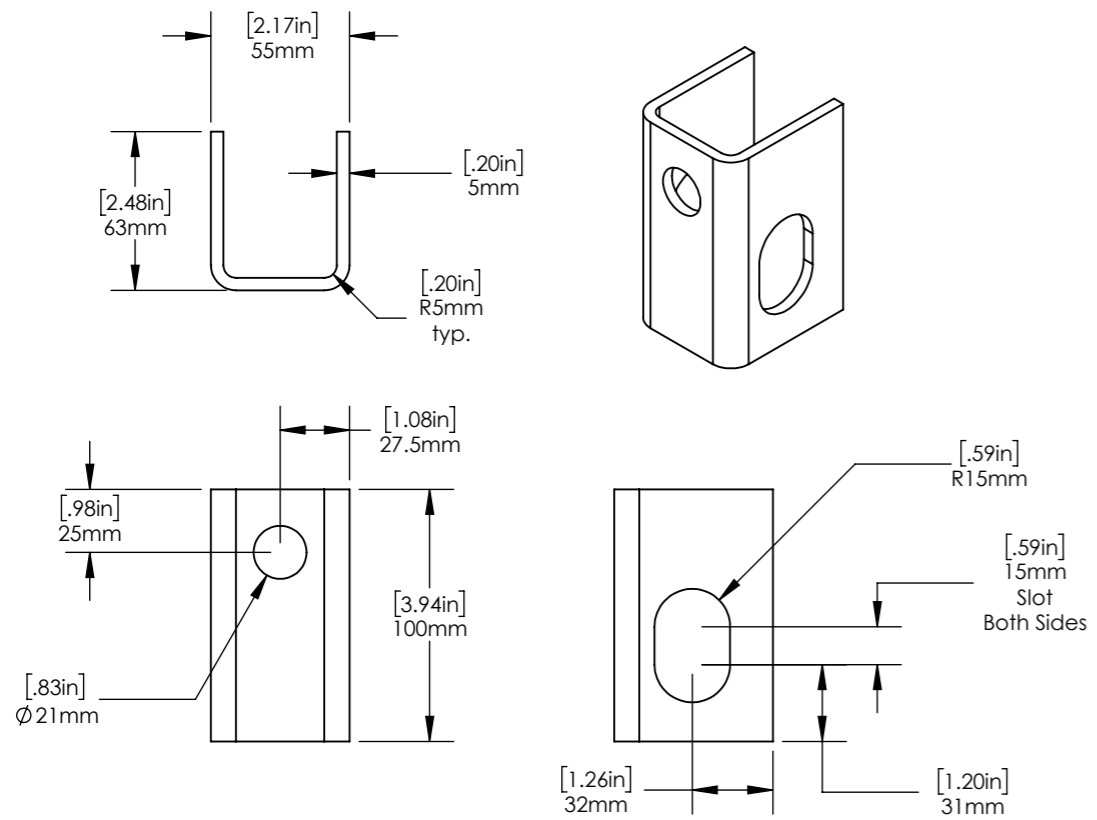
- Outside nut shall be turned to end of step bolt threads prior to installation.
- Step bolt shall be turned through inside nut until bolt makes snug contact with pole.
- Outside nut shall be snugged against clip then tightened 1/4 to 1/2 turn to achieve proper step bolt preload.



CLIP-STEP BOLT SPACING



CLIP



CAD-generated drawing do not manually update

ARE Telecom + Broadband

1041 Grand Ave., #213
St. Paul, MN 55105
(651) 330-1263
www.aretelcom.com

Total Weight: 3.1 lbs (1.41 kg)

APPROVALS	DATE
DRAWN MGC	10/12/20
CHECKED	
RESP ENG	
MFG ENG	
QUAL ENG	

Step Bolt/ Clip

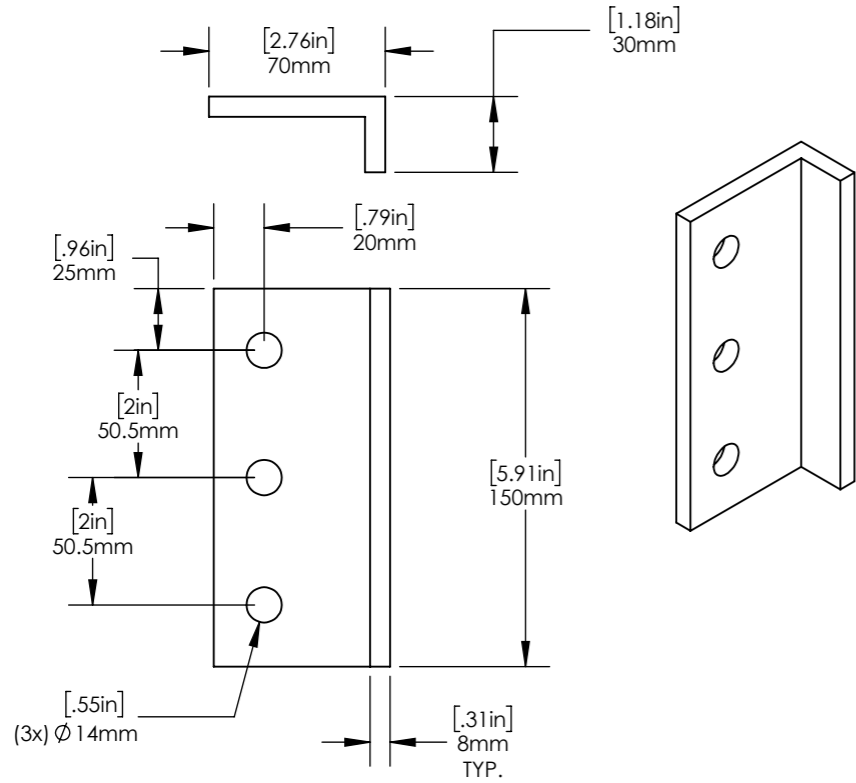
CAD file: Details and dimensions not shown on this drawing can be found in CAD file.

DO NOT SCALE DRAWING

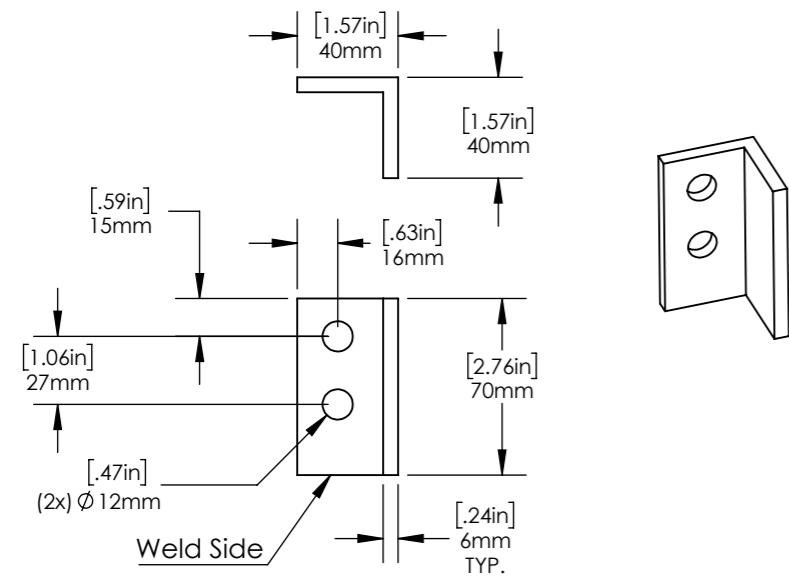
scale NA rev. B size NA sheet 2 of 3

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Cable Mount Bracket

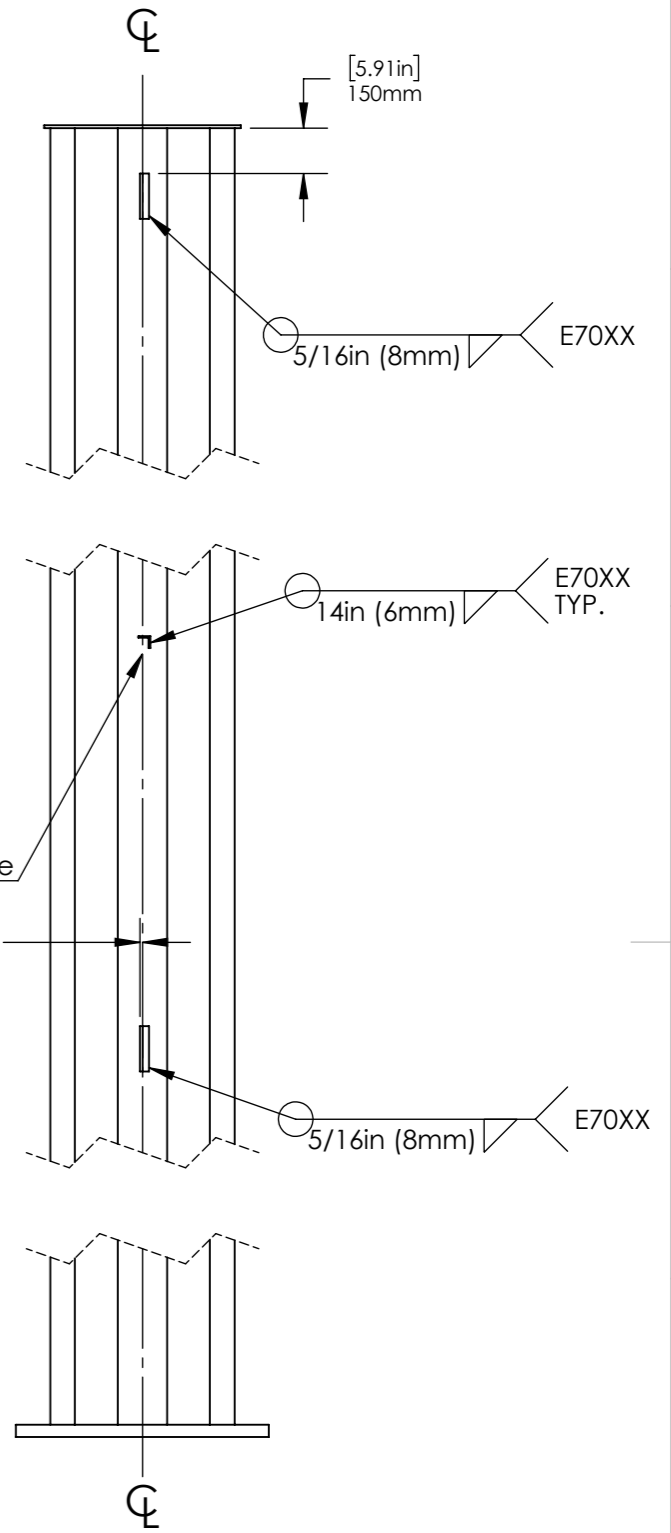
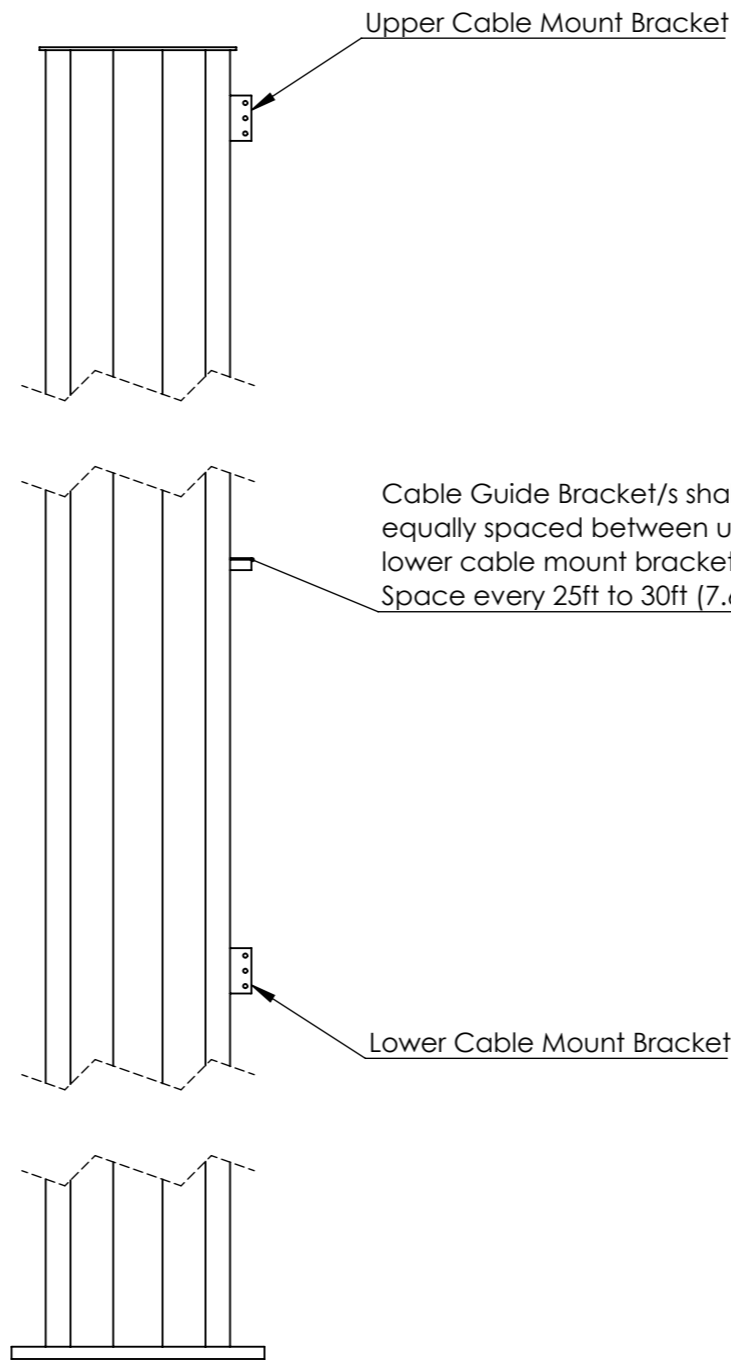


Cable Guide Bracket



Fabrication Notes:

- *The number of cable guides will vary based on height of pole and shall be equally spaced between the upper and lower cable mount brackets.
- All plate material shall have a minimum yield strength of 345 MPa (50 ksi)
- All welding shall conform to the minimum requirements of AWS D1.1
- All welding shall be done by welders qualified under AWS specifications, using E70XX, low hydrogen electrodes
- Hot Dip Galvanized in accordance with ASTM A123
- Debur all sharp edges



#	DESCRIPTION (Optional Grade)	QTY	Weight lb/ kg
1	Cable Mount Bracket-ASTM A572 GR 50 (Q345 or Q355)	2	1.85/ 0.84
2	Cable Guide Bracket-ASTM A572 GR 50 (Q345 or Q355)	*1 or more	0.51/ 0.23

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Cable Mount/ Guide Brackets

Part #
 scale NA rev. B size NA sheet 3 of 3