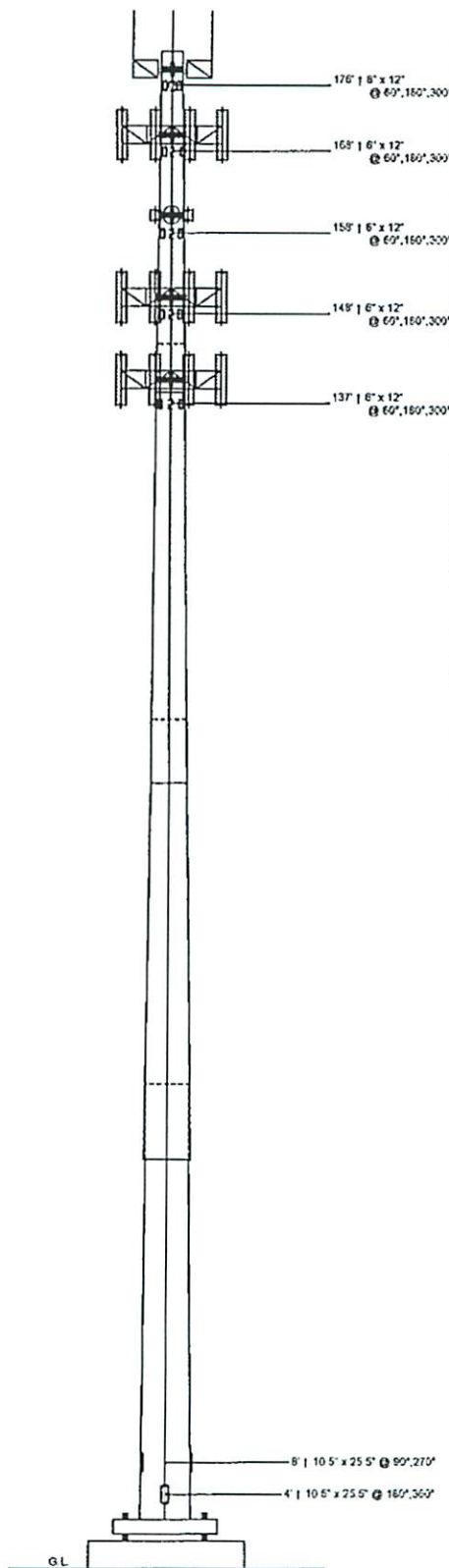


SIZES ARE PRELIMINARY AND MAY CHANGE UPON FINAL DESIGN

Section	1	2	3	4
Length (ft)	41'-0"	53'-8"	53'-8"	53'-3"
Number Of Sides	18	18	18	18
Lap Splice (ft)	8'-0"	7'-9"	9'-3"	9'-3"
Top Diameter (in)	41.54"	41.54"	52.30"	62.09"
Bottom Diameter (in)	43.58"	55.08"	65.5"	76.18"
Taper (in/ft)			0.253	
Grade			A572-45	
Weight (lbs)	4832	11093	15746	23068



Designed Appurtenance Loading

Elev	Description	Tx-Line
185.29	(3) DB222s	(3) 1 5/8"
160	(3) Dish Mount (Monopole Only) - Pipe Mount (up to 6' Dish)	
160	(3) 3ft Sidearms	
160	(3) 6' H.P. Dishes	(3) EW52
170	3T-Boom - 12ft Face - 3ft Standoff	
170	(12) 6' x 1' x 3in Panel Antennas	(12) 1 5/8"
160	(2) Dish Mount (Monopole Only) - Pipe Mount (8'-10' Dish)	
160	Flush Mount (Monopole Only)	
160	(2) 2' H.P. Dishes	(2) 7/8"
160	(2) 1' x 1' x 3in Panel Antennas	(2) 7/8"
150	3T-Boom - 12ft Face - 3ft Standoff	
150	(12) 6' x 1' x 3in Panel Antennas	(12) 1 5/8"
140	3T-Boom - 12ft Face - 3ft Standoff	
140	(12) 6' x 1' x 3in Panel Antennas	(12) 1 5/8"

Load Case Reactions

Description	Axial (klps)	Shear (klps)	Moment (ft-k)	Deflection (ft)	Sway (deg)
3s Gusted Wind	78.1	44.1	5559	5.6	3.26
3s Gusted Wind 0.9 Dead	58.7	44	5521	5.5	3.23
3s Gusted Wind/Ice	108.1	9.4	1147	1.1	0.64
Service Loads	64.6	11	1377	1.4	0.81

Base Plate Dimensions

Shape	Diameter	Thickness	Bolt Circle	Bolt Qty	Bolt Diameter
Round	89.5"	2"	83.5"	16	2.25"

Notes

- 1) Antenna Feed Lines Run Inside Pole
- 2) All dimensions are above ground level, unless otherwise specified.
- 3) Weights shown are estimates. Final weights may vary.
- 4) The Monopole was designed for a basic wind speed of 90 mph with 0" of radial ice, and 40 mph with 3/4" of radial ice, in accordance with ANS/TIA-222-G-2 (2009), Structure Class II, Exposure Category C, Topographic Category 1.
- 5) Full Height Step Bolts



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Quote: 13-3700-TJH-R2
Customer: MIDAMERICA TOWERS INC
Site Name: Orland Park, IL
Description: 180' Monopole
Date: 11/6/2012 By: JN Page: 1