

60.0 ft

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
PS-5AC	60	Air Fiber AF24 dish	50
ARE Tri-Mount 12" Standoff	60	ARE Tri-Mount 12" Standoff	40
2 ft standard	60	EP-R8	40
ARE Tri-Mount 12" Standoff	50		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-G Standard.
2. Tower designed for a 89 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft

DESIGN STANDARD:	TIA-222-G
ULTIMATE DESIGN WIND SPEED:	115 MPH
NOMINAL DESIGN WIND SPEED:	89 MPH
TOPOGRAPHIC:	1
K_{zt}:	1
EXPOSURE:	C
MIN ULTIMATE BEARING PRESSURE:	7000 PSF
UNIT WEIGHT:	110 PCF
FRICTION ANGLE:	30°
PJF RECOMMENDS THAT A SITE-SPECIFIC GEOTECHNICAL REPORT BE OBTAINED PRIOR TO CONSTRUCTION TO VERIFY THAT THE IN-SITU SOILS ARE CAPABLE OF PROVIDING THE MINIMUM ULTIMATE BEARING PRESSURE.	

Critical Deflections and Radius of Curvature - Service Wind

Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
60.00	2 ft standard	39	8.50	1.108	0.000	14298
50.00	Air Fiber AF24 dish	39	6.22	1.035	0.000	7149
40.00	EP-R8	39	4.11	0.925	0.000	3574

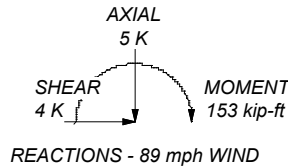
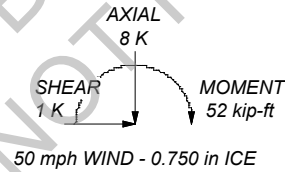
1	29.50	12	0.197	1.75	8.500	13.066	0.7
2	29.50	12	0.197	2.25	12.402	16.968	0.9
3	5.00	12	0.236	16.226	17.000		0.2
							1.8

30.5 ft

2.8 ft

0.0 ft

ALL REACTIONS ARE FACTORED



EMBEDDED PORTION WEIGHT:
746 LBS

GRAVEL BACKFILL ASSUMED

-16 FT

19.477"
ACROSS FLATS

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Job: 60-FT DIRECT EMBED; WACO TX			
Project: 21221-0016.001.7000			
Client: ARE TELECOM & BROADBAND	Drawn by: tdehnke	App'd:	
Code: TIA-222-G	Date: 03/10/21	Scale: NTS	
Path:	Dwg No. E-1		