

The plan view shows a Y-junction where a single approach road splits into two diverging roads. Each of the three road segments (the approach and the two diverging branches) has a constant radius of 15.00 ft (505). The word "PLAN" is centered below the junction.

TYPE		ELEVATION	TYPE		ELEVATION
Lightning Rod		526	CL46 2x44		516
CL46 2x44		526	CL46 2x44		516
CL46 2x44		526	CL46 2x44		516
CL46 2x44		526	CL46 2x44		516
CL46 2x44		526			

MATERIAL STRENGTH					
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

1. Tower designed for Exposure C to the TIA-222-G Standard.
2. Tower designed for a 175.00 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 30.00 mph basic wind with 0.50 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60.00 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 73.4%

7/8 EHS LC=13,85 ft IT=10%

ALL REACTIONS  
ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 17 K  
SHEAR: 3 K

UPLIFT: -9 K  
SHEAR: 1 K

Diagram illustrating the structural analysis of a tower under two different wind conditions:

- Top Diagram (30.00 mph WIND - 0.50 in ICE):**
  - AXIAL: 7 K
  - SHEAR: 0 K
  - MOMENT: 1 kip-ft
  - TORQUE: 0 kip-ft
- Bottom Diagram (REACTIONS - 175.00 mph WIND):**
  - AXIAL: 3 K
  - SHEAR: 5 K
  - MOMENT: 28 kip-ft
  - TORQUE: 2 kip-ft

ALL REACTIONS ARE FACTORED

<b>World Tower Company</b> 1213 Compressor Drive Mayfield, Kentucky 42066 Phone: (270) 247-3642 FAX: www.worldtower.com	<b>Job:</b> 36' UCE24 Rooftop - Job Q14-579		
	<b>Project:</b> Miami, FL		
	<b>Client:</b>	<b>Drawn by:</b> kirk	<b>App'd:</b>
	<b>Code:</b> TIA-222-G	<b>Date:</b> 09/12/14	<b>Scale:</b> NTS
	<b>Path:</b> C:\Tower\PE Run\2014\Q14-579 wmdf roof\roofQ14-579 R1.rvt		
		<b>Dwg No:</b> E-1	