SELF-SUPPORTING TOWERS

Beacon Pole, LLC

A Monopole Solution Affiliated With J&G Sales, Inc.

1-800-842-7622

www.b-pole.com

LM-SERIES
SELF-SUPPORTING

The LM-Series self-supporting towers offer an easier, safer, most economical and lower cost installation solution. We offer towers made in the USA with solid engineering solutions that match the industry standard. Although, there are several internet tower options on the market, there are three things that make our patented tower unique.

1. **Safety.** Our towers do not require a climber to mount the receiver/antenna. The tower can easily be lowered by the owner, the receiver mounted to the tower, then erected vertically. Once vertical, the tower can be rotated from the ground to dial in the best reception for the receiver. That's the patented part of the design.

2. **Appearance.** There are no ugly supports or guyed wires necessary for anchoring the tower to the ground. Our towers are much more aesthetically appealing than anything else offered on the market. Most other towers either have to be attached to the side of an existing structure, or require 3-4 sets of support wires extending outward from the tower itself. These guy wires require a much larger footprint and substantial foundations to place the tower in any particular area. Our towers require a very limited amount of space.

3. **Most Economical.** For comparable towers of similar height, our towers are significantly less expensive and the installation process is much less complicated allowing for even more savings. The foundation consists of a 12" diameter hole 6 to 7ft deep, poured full with concrete. Setting the foundation and base section of the tower is very similar to setting a large fence post or gate post. Although less complicated, caution is necessary and safety is of utmost importance.
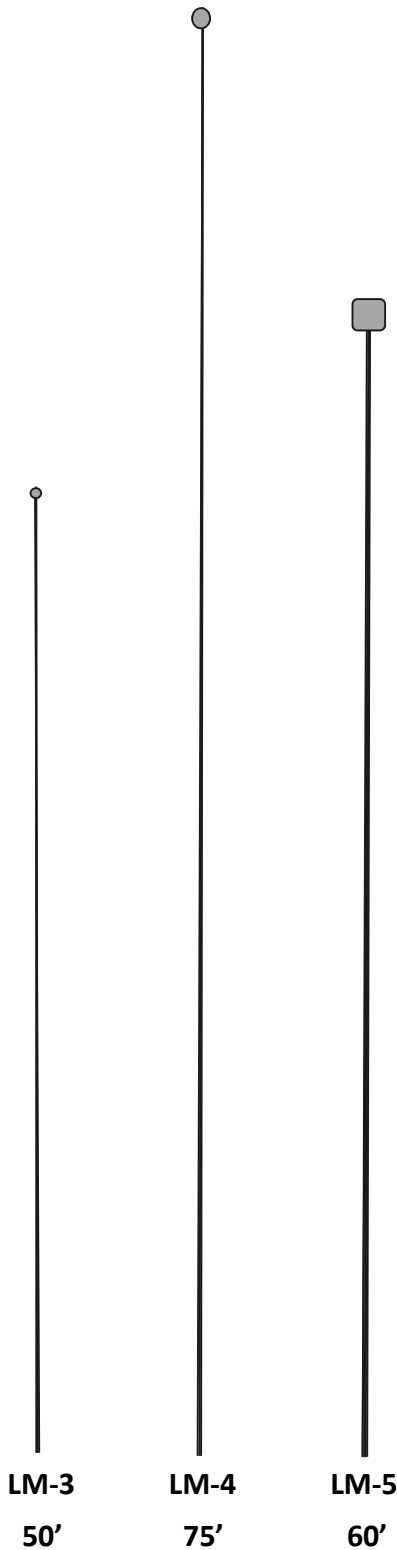
WHY CLIMB?

WHEN YOU CAN *TILT* YOUR WAY TO THE TOP!!

LM-SERIES
SELF-SUPPORTING

GENERAL USE

The LM-Series self-supporting towers / tilt-over masts offer an easier, safer, lower cost and less complicated installation solution. We offer towers made in the USA with solid solutions that meet the industry standard.

Features

- *No Climbing Risk, No Guy Wires, No Supports*
- *Aesthetically Pleasing With Cables Routed Internally for Protection and Appearance*
- *Hot-Dip Galvanized Steel For Long Life*
- *Pre-Engineered Loading Charts for Individual Specs*
- *Typical Uses Include Small CPE Dishes, MicroPop Applications, Broadband, Security and Two-Way Communication*
- *LM Series Towers Have a 'Fixed' Base*
- *Made In The USA*
- *Veteran Owned*

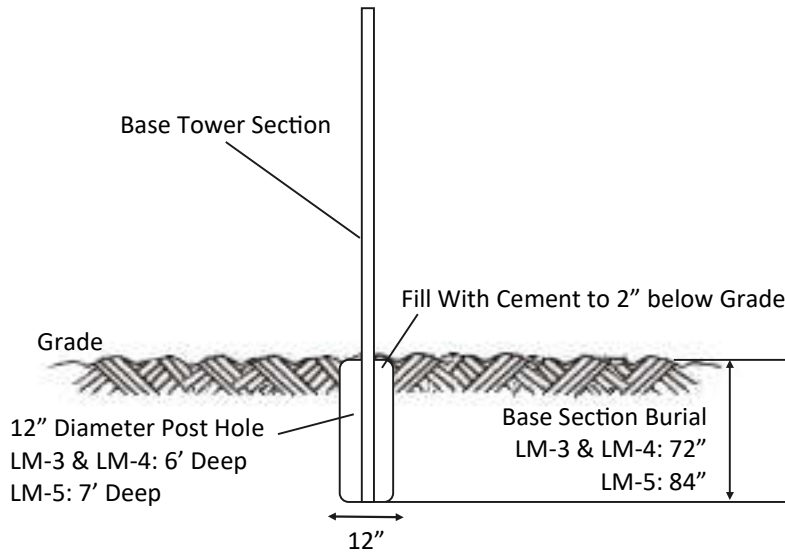## Kits *(See Installation Brochure for Details)*

- **_Tower Kits_** Include All Sections and Connection Hardware

  - *Up To (5) Sections*
  - *(2) Cheek Plates & Bolts*
  - *(1) Toggle & Bolts*

- **_Installation Kits_** are Available for Those Who do not Already Have the Necessary Tools
  - *Emergency Manual Winch Crank*
  - *2) U-Bolts*
  - *120v Electric Winch with Cable*
  - *Base Mounting Plate to Lower Tower/Mast (attached to back of Winch)*
  - *5/16" Bow Shackle attached to Winch*
  - *1-Ton Forged Lifting Hook/Safety Clip*
  - *attached to Bow Shackle on Winch*
  - *5" OD Pulley*
  - *Lifting Strap (See top of page)*
  - *Strap Clamp with Buckle*

LM-3
50'

LM-4
75'

LM-5
60'

LM-SERIES SPECS COMPARISON

SELF-SUPPORTING

75 mph Basic Wind Speed Is Comparable to 90 mph 3-Second Gust			
MODEL	**LM-3**	**LM-4**	**LM-5 ROBUST**
Drilled Hole Diameter	12"	12"	12"
Base Section Burial	72"	72"	84"
Grout to	-2"	-2"	-2"
Max Mast Height	50'	75' / 63'	60'
Max Antenna Load	18" Dish	10" Dish / 18" Dish	4.2 ft^2
Weight	500 lbs.	600 lbs.	800 lbs.
RETAIL PRICE	$5,333.33	$7,333.33	$10,333.33

SELF-SUPPORTING LM-SERIES FOUNDATION

Base Tower Section

Fill With Cement to 2" below Grade

Grade

12" Diameter Post Hole
LM-3 & LM-4: 6' Deep
LM-5: 7' Deep

Base Section Burial
LM-3 & LM-4: 72"
LM-5: 84"

12"

ELEVATION VIEW

SELF-SUPPORTING TOWER FOUNDATION

LM-SERIES COMPARISON

SELF-SUPPORTING

ALLOWABLE ANTENNA AREAS (SQ. FT.)

FASTEST MILE			
Ft² at 70 MPH Fastest Mile - No Icing			
Height	**LM-3**	**LM-4**	**LM-5 Robust**
30'	9.0	13.2	23.9
35'	6.4	9.5	17.5
40'	4.6	7.0	13.3
45'	3.8	5.8	12.3
50'	3.2	4.8	10.6
55'	2.2	3.4	8.9
60'	1.4	2.3	7.0
70'		1.9	4.1
78'		1.2	2.4
Ft² at 80 MPH Fastest Mile - No Icing			
Height	**LM-3**	**LM-4**	**LM-5 Robust**
30'	6.5	9.6	17.6
35'	4.4	6.7	12.6
40'	3.0	4.7	9.3
45'	2.4	3.8	7.7
50'	1.9	3.1	6.3
55'	1.2	2.0	4.4
60'	0.5	1.0	2.8
70'		0.7	2.2
78'			1.1
Ft² at 90 MPH Fastest Mile - No Icing			
Height	**LM-3**	**LM-4**	**LM-5 Robust**
30'	4.7	7.1	13.3
35'	3.1	4.8	9.3
40'	1.9	3.1	6.6
45'	1.4	2.4	5.3
50'	1.0	1.9	4.2
55'	0.4	1.0	2.7
60'		0.1	1.3
70'			0.8
78'			

Side labels: 70 MPH Fastest Mile, 80 MPH Fastest Mile, 90 MPH Fastest Mile

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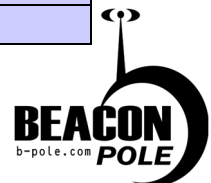
LM-SERIES COMPARISON

SELF-SUPPORTING

ALLOWABLE ANTENNA AREAS (SQ. FT.)

3 SECOND GUST						
Ft² at 90 MPH 3 Second Gust - No Icing						
Height	**LM-3**		**LM-4**		**LM-5 Robust**	
	Exp B	**Exp C**	**Exp B**	**Exp C**	**Exp B**	**Exp C**
30'	7.6	4.6	10.9	6.8	18.4	12.8
35'	5.3	3.0	7.8	4.7	13.3	9.0
40'	3.7	1.9	5.6	3.1	9.9	6.4
45'	3.0	1.4	4.6	2.5	8.3	5.2
50'	2.5	1.1	3.8	2.0	7.0	4.2
55'	1.6	0.6	2.5	1.3	5.1	2.7
60'	0.8		1.5	0.6	3.7	1.6
70'			1.1		3.0	1.0
78'			0.5		2.1	

Ft² at 100 MPH 3 Second Gust - No Icing						
Height	**LM-3**		**LM-4**		**LM-5 Robust**	
	Exp B	**Exp C**	**Exp B**	**Exp C**	**Exp B**	**Exp C**
30'	5.7	3.4	8.4	5.1	14.4	9.8
35'	3.9	2.1	5.8	3.3	10.3	6.7
40'	2.6	1.1	4.0	2.1	7.5	4.6
45'	2.0	0.7	3.2	1.5	6.2	3.5
50'	1.5	0.5	2.5	1.2	5.1	2.8
55'	0.9		1.5	0.6	3.6	1.5
60'			0.6		2.3	0.5
70'			0.3		1.9	
78'					1.0	

Ft² at 110 MPH 3 Second Gust - No Icing						
Height	**LM-3**		**LM-4**		**LM-5 Robust**	
	Exp B	**Exp C**	**Exp B**	**Exp C**	**Exp B**	**Exp C**
30'	4.4	2.5	6.5	3.9	11.4	7.7
35'	2.8	1.4	4.4	2.4	8.0	5.1
40'	1.7	0.6	2.8	1.3	5.6	3.2
45'	1.2		2.1	0.8	4.5	2.3
50'	0.9		1.6	0.6	3.7	1.7
55'	0.3		0.8		2.4	0.7
60'					1.3	
70'					0.8	
78'						

90 MPH 3-Second Gust

100 MPH 3-Second Gust

110 MPH 3-Second Gust

N O T E S

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