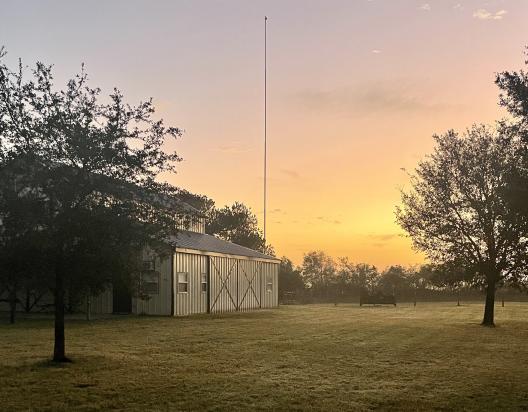
SELF-SUPPORTING TILT-OVER TOWERS





Beacon Pole, LLC

1-800-842-7622

www.b-pole.com

LM-SERIES SELF-SUPPORTING

The **LM-Series** Self-Supporting Tilt-Over Towers / Masts offer an easier, safer, and lower cost installation solution. We offer towers made in the USA with solid engineering solutions that rise to meet the industry standard. Although there are several internet tower options on the market, there are three things that make our patented tower unique.

- Safety. Our towers do not require a climber to mount the radio 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.
- 2. Appearance. There are no ugly supports or guy 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 guy 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 self-supporting towers of similar height, our towers are comparable in cost and the installation process is significantly less expensive and less complicated. The foundation consists of a 12 inch diameter hole 6ft 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 the process is less complicated, caution is necessary and safety is of utmost importance.

LM3-30 LM5-85 30 Feet to 85 Feet

WHY CLIMB?
WHEN YOU CAN * TILT * YOUR WAY TO THE TOP!!

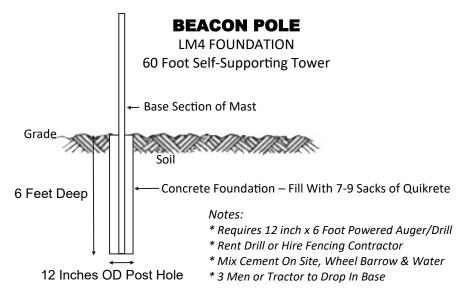
LM SERIES FEATURES

- ♦ No Climbing Risk, No Guy Wires, No Supports
- Fully Install, Erect, Service & Adjust From The Ground
- Aesthetically Pleasing With Cables Routed Internally for Protection and Appearance
- Hot-Dip High Strength Galvanized Laboratory Certified Steel For Long Life
- ◆ Typical Uses Include Small CPE Dishes, MicroPop Applications, Broadband, Lighting, Security and Two-Way Communication
- Patented.
- Made In The USA.
- ♦ Veteran Owned.
- A lockable, tilt-over, hinged design allows servicing radio antenna from the ground.
- Height Options range from 30 Feet up to 85 Feet depending on radio antenna size.



- Requires a 6-7 foot deep post hole with 6 to 10 sacks of premix concrete.
- ♦ About 6 man-hours to install and set-up—not including cure time.
- Most cost effective and eliminates the need for a crane, excavation, or a sizable heavy base like most other comparable towers.
- Unobtrusive design is perfect for subdivisions, parks of all kinds, city or rural areas, residential or commercial properties. (Check Local Regulations)
- One Year Limited Warranty On Parts If Installed According to our Installation Instructions.

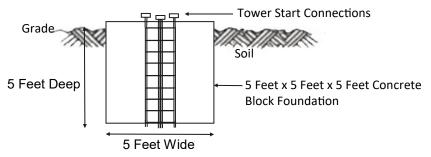




Based on Lateral Soil Bearing Capacity 0.4 ksf/ft

COMPARE TO OTHERS

TYPICAL LATTICE TOWER FOUNDATION 60 Foot Self-Supporting Tower

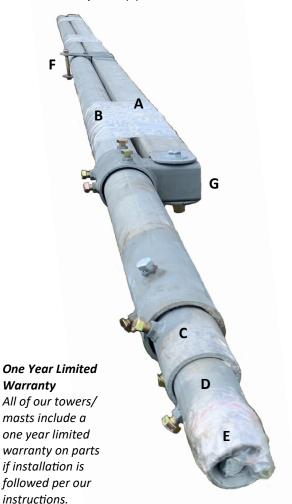


Notes:

- * Hole is $5' \times 5' \times 5' = 125 \text{ft}^3 = 4.63 \text{ yards}^3$
- * Requires Excavator to Dig Foundation
- * Requires Dump Truck to Remove Soil
- * Requires Mixer Truck for Concrete
- * Requires Concrete Reinforcement (Rebars)
- * Concrete Weight 4.63 x 4050 lbs/yd = 18,750 lbs
- * Equipment Mobilization Costs Possible

TOWER KITS

- A—Base Section—Square
- B—2nd Section—Round (Attached to Base with Toggle)
- C—3rd Section—Round (Tucked Inside 2nd Section)
- D—4th Section—Round (Tucked Inside 3rd Section)
- E—5th Section—Round (Tucked Inside 4th Section)
- F-Cheek Plates & Bolts
- G—Toggle & Bolts
- Smaller Towers May Have Only (3) Sections While Larger Towers May have (6) Sections



5

Model LM3 Series	LM3-30	LM3-40	LM3-50	LM3-60		
Height	30′	40′	50′	60′		
Sections	3	3	4	4		
Top Section OD	2.4"	2.4"	1.9"	1.9"		
Base Section OD	3"	3"	3"	3"		
Foundation	12" OD x 6' Deep Filled with 6-10 Sacks of Concrete					
Service Path	18' / 7'	28' / 7'	38' / 7'	48' / 7'		
Weight of Tower - Lbs	287+	334+	370+	404+		
Wind Loading Capacity	5 Ft ²	3 Ft ²	2 Ft ²	1 Ft ²		
Offered At	\$5133	\$5233	\$5333	\$5433		

Model LM4 Series	LM4-30	LM4-40	LM4-50	LM4-60	LM4-70	LM4-75	
Height	30′	40'	50′	60′	70′	75′	
Sections	3	3	4	4	5	5	
Top Section OD	3"	3"	2.5"	2.5"	1.88"	1.88"	
Base Sect OD	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	
Foundation	12" OD x 6' Deep Filled with 6-10 Sacks of Concrete						
Service Path	18'/6'	28'/6'	38'/6'	48'/6'	58'/6'	66'/6'	
Weight of Tower - Lbs	340+	381+	438+	485+	526+	553+	
Wind Loading Capacity	10 Ft ²	5.9 Ft ²	3.5 Ft ²	1.9 Ft ²	1.4 Ft ²	.5Ft ²	
Offered At	\$6833	\$6933	\$7033	\$7133	\$7233	\$7333	

Model LM5 Series	5-30	5-40	5-50	5-60	5-70	5-75	5-85	5-95
Height	30'	40'	50'	60′	70'	75'	85'	95'
Sections	3	3	4	4	5	5	6	6
Top Section OD	4"	4"	3.5"	3.5"	3"	3"	2.375"	2.375:
Base Sect OD	4.5"	4.5"	4.5"	4.5"	4.5"	4.5"	4.5"	4.5"
Foundation	12" OD x 7' Deep Filled with 6-10 Sacks of Concrete							
Service Path	18'/7'	28'/7'	38'/7'	48'/7'	58'/7'	66'/7'	72'/7'	82'/7'
Weight of Tower— Lbs	444+	499+	571+	627+	683+	720+	783+	833+
Wind Loading Capacity	16 Ft ²	10.5 Ft ²	7 Ft ²	4.4 Ft ²	3.1 Ft ²	2.5 Ft ²	1.9 Ft ²	1 Ft ²
Offered At	\$11733	\$11833	\$11933	\$12033	\$12133	\$12233	\$12333	\$12433

<u>LM Series Self-Supporting Tilt-Over Tower Design Notes For All Charts Shown</u>

- Prices Are Subject To Change Without Notice
- Designed Capacity at 75mph Fastest Mile Equals 95mph 3 Second Gusts
- No Ice Considered
- General Accordance with ANSI/NAAMM FP 1001-07 & Reference to ASCE 7-16 fig. 26.5-1
- Foundation Soils: Lateral Bearing Capacity 0.4ksf/ft
- Transmission Lines: Run Inside Hollow Structure

MOST COST EFFECTIVE INSTALL: Tools Required

- DIY INSTALLATION INSTRUCTIONS available at www.b-pole.com
- A—(1) 120v Electric Winch with Strap (Clutchless Preferred)
- B-(1) Base Mounting Plate (to Attach to Winch to Lower Tower/Mast)
- C—(1) 1-Ton Forged Lifting Hook/Safety Clip to Attach to Bow Shackle (See Note and Configuration Top of Page 6)
- D—(1) 5/16 Inch Bow Shackle to Attach to Winch & Lifting Hook
- E—(1) 5 Inch OD Flat Belt Pulley
- F—(1) Lifting Strap (See Configuration Top Page 6)
- G—(1) Strap Clamp with Buckle
- H—(2) 10 Inch Spud Wrenches
- *I—(1) Fish Tape 100 Foot*
- J—(1) Emergency Manual Winch Crank
- K—(2) Magnetic Spirit Levels
- L—(1) 24 Inch Pipe Wrench (Aluminum if Available)
- M—(1) 24-30 Inch Steel Wrecking Bar
- N—(2) U-Bolts
- O—2 Inch x 10 Inch board 8 Feet Long (Optional—not pictured)
- P—(1) 10 Foot Heavy Duty Stepladder (not pictured)
- Q—Saw Horse to Rest End of Tower with Radio Antenna (not pictured)
- R—Equipment to Drill 12 Inch OD hole x 6-7 ft Deep and Cement Base Section using Pre-Mix Quikrete Concrete. Most Fence Contractors Could Complete This Portion (not pictured)
- S—Ethernet / Cat 5 or Cat 6 Cable & Strain Relief (Usually Provided by your ISP) (not pictured)
- T—Conduit (Only if preferred, but not necessary) (not pictured)



DIY INSTALLATION KIT (Optional)



Assembled As A Kit To Help Those Who Do Not Already Have These Tools:

- A—Emergency Manual Winch Crank
- B—(2) U-Bolts 1/2 Inch x 5 Inches x 6 Inches
- C—120v Electric Winch with Strap
- D—Base Mounting Plate to Lower Tower/Mast (Attached to Back of Winch)
- E—5/16 Inch Bow Shackle (Attached to Winch)
- F—1-Ton Forged Lifting Hook/Safety Clip (Attached to Bow Shackle on Winch)
- G—5 Inch OD Flat Belt Pulley
- H—Lifting Strap
- I—Strap Clamp with Buckle
- Offered at \$850.00 per Kit

IF YOU ARE UNFAMILIAR with this type of work, we recommend a local fence contractor be hired.

DIY INSTALLATION INSTRUCTIONS available at www.b-pole.com. Please also feel free to reach out via email at beacon@b-pole.com or call 1.800.842.7622 with any questions.

Safety First

- Please read through the instructions before beginning this project.
- We recommend a licensed, well qualified contractor or Internet Service Provider be employed to install the tower/mast, however, we offer Do It Yourself Installation, which is the most economical option.
- Installers must wear appropriate personal protective Safety Gear Including:
 - Steel Toed Shoes
 - Safety Glasses
 - Work Gloves
 - Hard Hat
- Always consider that any tower/mast may fail in extreme circumstances. <u>Never</u> place any tower/mast where it could fall and strike power lines, buildings, automobiles or people.
- Do Your Homework.
 - Get underground utilities marked before installation.
 - Mark pipes and electric cables before drilling or trenching.
 - Keep tower/masts away from power lines, height +15ft.
- Bury and cement the ground pole to the minimum specified depth.
- Ground the radio/antenna using a separate copper conductor and ground rod to local code.
- Install lightning/power surge protection in Ethernet cable at base of pole and where it enters a building.
- Do not overload the tower/mast with multiple or oversized antennas, lighting or cameras.
- Keep Alert.
 - Installation of any tower/mast should not be attempted in windy conditions. Don't raise or lower tower/mast in more than a gentle breeze.
 - Always stand and work to the sides of the Cheek Plates.
 - No one should stand under or in the path of the tower/ mast while it is being assembled, raised, or lowered.
 - Inspect all tools, winch & accessories, cable, and ladder for wear or damage.



Let's Place an Order

Call your representative to receive best pricing or dial **1.800.842.7622.** You may also go to our website at <u>www.b-pole.com.</u> All on-line orders will be verified.

BUILT TO ORDER. We operate LEAN with only a small inventory. We manufacture and build our towers to order right here in the state of TX—MADE IN THE USA. A Veteran Owned Small Business.

CUSTOM TOWERS. If there is serious interest, please let us know what you require and we will be happy to consider designing a custom tower to meet your needs

SHIPPING requires a SHARED PARTIAL LTL on a flat bed semi or a HOT SHOT truck with

trailer depending on destination and size of the load. Loads may be customer arranged. Approximately 50+ Masts can be shipped on a 30 Foot flatbed trailer.

<u>VETERAN OWNED, SMALL BUSINESS</u> TOWERS MADE IN USA

We are a small, innovative Texas company employing modern CNC fabrication techniques and high strength materials to make sturdy free-standing towers / masts that can be installed, erected, serviced and adjusted from the ground without climbing.

We want you to be completely satisfied with your experience. If you have any questions about us, our products, or even shipping, please get in touch! We support you every step of the way. If there is an issue, our customer service staff is ready to help you over email or a phone call.

1.800.842.7622 or 979.865.4300 beacon@b-pole.com www.b-pole.com



Self-Supporting Tilt-Over Towers / Masts

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> www.b-pole.com * beacon@b-pole.com (Affiliated with J&G Sales, Inc.)