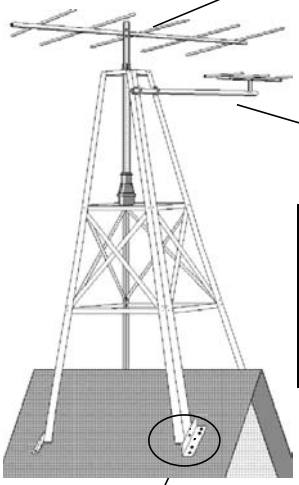
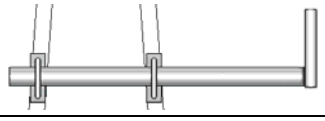
Lightning Rod kit with Aluminum Tapered Point, Mast Clamp, 8' Ground Rod & clamps,& leg Grounding Lug. Order wire separately below.
LR-8400
#4 Ground Wire, order next longer length from tip of mast to ground rod
CW-2540 25 feet **CW-5040 50 feet**
CW-7540 75 feet **CW-1040 100 feet**
CW-1240 125 feet **CW-1540 150 feet**
GR-5080 5/8 by 8 ft. ground rod weight 8lbs
GR-4400 Ground rod wire clamp weight .5lb
TL-0470 Terminal lug, for wire size to 4 /00

Thrust Bearing premium weatherized twin bearing for rotating setups, 1.3" to 2.6" mast diameter; **TB-25**

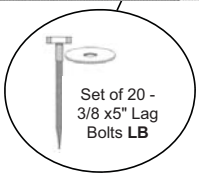
Mast Adaptor for non-rotating setups. Secures masts, 1.3" to 2.1" dia. two required, one at tower top and one at base of mast. **MC-10**

Side Arm for adding other antennas, weather gear, etc. 7" high by 1.31" diameter mast,U bolt mounting hardware included.
24" Long # **RA-6024** 48" Long # **RA-6048**





MASTS Select the mast that matches your needs		
M1049	9' X 1.90" OD X .145 wall galv. steel heavy dty	25 lbs
MA2069	9' X 2.375" OD ,.154 wall aluminum heavy dty	12 lbs
MA1049	9' X 1.90" OD, .145 wall aluminum medium dty	9 lbs
MA5050	5' X 1.315 OD, .133 wall aluminum light duty	3 lbs
MA1050	5' X 1.90 OD, .145 wall aluminum medium duty	5 lbs



GLENMARTIN
Division of TWR Group

Call (800) 486-1223
http://www.glenmartin.com

RT-2632

TAPERED TOWER

OWNER'S MANUAL

RT-2632 IS THE ASSEMBLY OF RT-1832 AND RT-2732. IN THIS MANUAL SPECIFICATIONS ARE INDICATED FOR THE WHOLE RT-2632 ASSEMBLED TOWER, AND DETAIL ASSEMBLY INSTRUCTIONS ARE PROVIDED FOR THE BOTTOM SECTION RT-2732.

DATE PURCHASED:

CONTENTS	**PAGE #**

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8/22/11
rt2632.pub

RT-2632 TOWER SPECIFICATIONS

Maximum Height	26 Feet / 5.33 Meters (When combined with RT-1832)
Maximum Width	42 Inches / 0.81 Meters
Material	6061-T6 Al. 1/8"x 2"x 2" Angle
Stainless steel Hardware	Nylon self-locking Nuts
Maximum Mast Diameter	2-3/8 Inches / 6 cm
Maximum length of Mast	9 Feet / 2.74 Meters
Max. balanced load weight	125 pounds / 55kg (center balanced)
Rotator Plate	Fits most 4-bolt mounted rotators
Distance form rotator plate to top plate	37.62 inches

1) Tower designed in accordance with applicable IBC, AASHTO, and ANSI/ TIA-222 standards
2) Tower designed with 3-Second gust, exposure C, structure class II, topographic 1
3) Max. projected area is the total equipment wind area the tower can support under a specific wind speed
4) Roof elevation assumed to be 100 ft. Wind areas in loading chart based on this assumption
5) Specific structure study may be required if roof is significant higher than 100 ft and with heavy loading
6) Reactions at tower legs and base are factored per ASCE 7's load combinations
7) Roof shall be verified to meet specified reactions listed in loading chart before installation
8) Concrete pier sizes based on presumptive soil and recommended for ground mounting
9) RT-2732 is tower section adding to bottom of RT-1832 and make a total height of 26 ft tower
10) Loading, reactions, and concrete in loading chart are for the 26 ft height tower

SAFETY RULES

1. Never mount any tower system close to wires or power lines. Stay at least 1½ times the overall height away from any power lines or wires.

2. Never attempt to touch someone who is in contact with power lines or wires.

3. Never climb the tower. Serious injury could result from a fall. This is even more dangerous when you are on a roof top.

4. If you drop something while working on a roof, NEVER try to catch or stop it. Let it fall and keep your own balance secure.

5. Use the buddy system. Always have someone helping nearby.

6. Always keep children away.

7. NEVER attempt to install or attempt to repair equipment while under the influence of drugs, alcohol or any medication.

8. Certain applications may require field drilling.

Please keep these instructions in a safe place after installation. If you sell your tower, pass these instructions on to the new owner.

Glenmartin WARRANTY

Glenmartin warrants the RT-2632 Roof Tower for one full year.
If this tower fails to give the original purchaser complete satisfaction within one year from the original date of purchase, return it to the nearest authorized distributor and GlenMartin, Inc. will repair it, free of charge. GlenMartin, Inc. will not be liable for loss or damage to property or any incidental or consequential loss or expense from property damage due directly or indirectly from the use of this product.

GLENMARTIN

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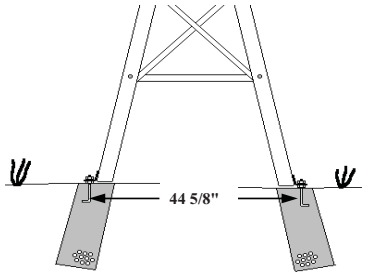
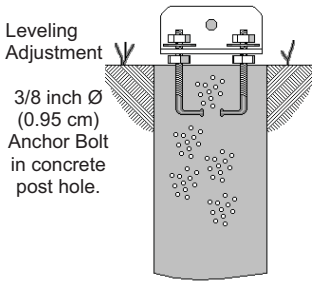
(800) 486-1223

Ground Installation Recommendations





GROUND INSTALLATION RECOMMENDATIONS

1. Place 5 concrete post holes according to recommendations in loading chart on page 2 per specific wind and loading

2. Use 3/8" (0.95cm) anchor bolts with leveling nuts (GME # EL-3744) to secure mounting brackets. Ensure at least 3"-4" (8-10cm) of the anchor bolt is above the concrete surface.

3. Always install an adequate grounding system on your tower.

RECOMMENDATIONS ON MOUNTING ANTENNAS

1. Mount rotator.

2. We recommend using a Thrust Bearing (GME #TB-25) to support mast.

3. Use the shortest mast necessary to match installation.

4. Always keep tower, mast & antennas 1½ times the height away from overhead power lines.

5. Adjust rotator, thrust bearing and mast so they are concentric (centered).

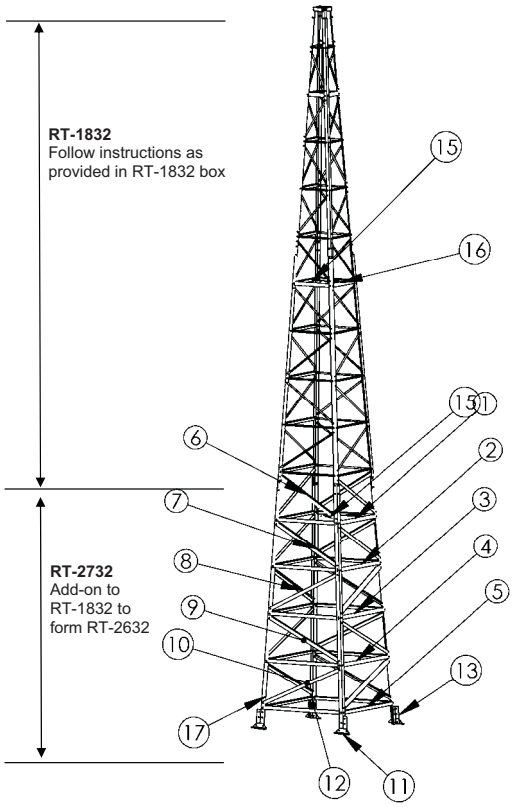
6. We **strongly** advise lightning protection for your new tower. Ground your system to achieve a goal of ground resistance at 25 ohms or less. See our tower accessories on Page 8 of this manual.

Wind speed (mph)	85	90	95	100	105	110	115	120
Max. projected area (sq.ft)	7.9	7.1	6.6	6	5.5	5	4.7	4.3
Down at leg (kip)	3.79	4.05	4.35	4.65	4.94	5.24	5.59	5.83
Uplift at leg (kip)	3.70	3.97	4.30	4.60	4.91	5.23	5.60	5.86
Shear at leg (kip)	0.48	0.49	0.54	0.58	0.63	0.67	0.73	0.74
Shear at base (kip)	1.48	1.62	1.78	1.94	2.11	2.28	2.47	2.66
O.T.M (kip-ft)	20.17	21.61	23.29	24.88	26.51	28.18	30.12	31.93
Hole/Pier diameter (in)	8	8	8	8	8	8	8	8
Hole/Pier depth (in)	44	46	50	54	58	60	66	68
Concrete yard (cu. yard)	0.19	0.20	0.22	0.23	0.25	0.26	0.28	0.29

USE THIS AS AN INVENTORY CHECK ONLY.

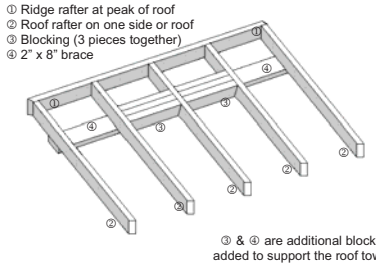
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	STEP29.92	1 1/2 X 1 1/2 ANGLE X 30 1/2"
2	4	STEP32.27	1 1/2 X 1 1/2 ANGLE X 32 7/8"
3	4	STEP34.62	1 1/2 X 1 1/2 ANGLE X 35 1/4"
4	4	STEP36.98	1 1/2 X 1 1/2 ANGLE X 37 5/8"
5	4	STEP39.33	1 1/2 X 1 1/2 ANGLE X 40"
6	4	DIAG33.20	1 1/2 X 1 1/2 ANGLE X 33 13/16"
7	4	DIAG35.10	1 1/2 X 1 1/2 ANGLE X 35 3/4"
8	4	DIAG37.19	1 1/2 X 1 1/2 ANGLE X 37 7/8"
9	4	DIAG39.31	1 1/2 X 1 1/2 ANGLE X 39 15/16"
10	4	DIAG41.45	1 1/2 X 1 1/2 ANGLE X 42 1/8"
11	4	RT2732-Foot	1 1/2 X 2 ANGLE X 7"
12	4	CLIP	1 7/8X1 7/8 ANGLE X7 1/2"
13	4	CLIP2	1 7/8X1 7/8 ANGLE X7 1/2"
15	4	RT2632-CROSSBRACE2	1 X1/8 X 20 1/2"
16	4	RT2632Step17.9	1 1/2 X 1 1/2 ANGLE X 18 1/2"
17	4	RT2632-Leg	1 1/2 X 1 1/2 ANGLE X 107"

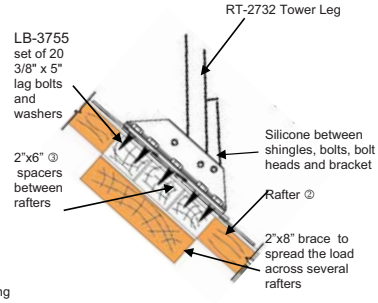
RT-2732 PART LOCATOR



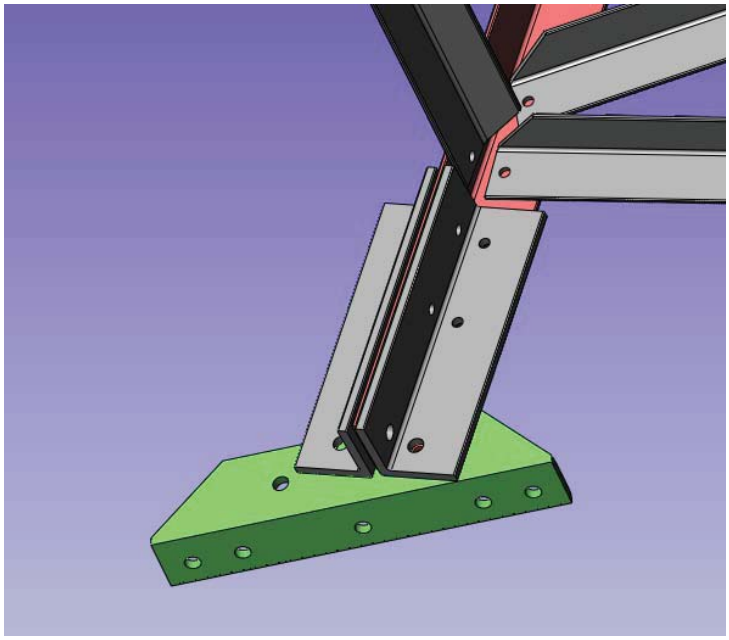
TYPICAL ROOF INSTALLATION

1. These instructions assume a composition shingle roof on wood.
2. When possible, it is best to bolt the mounting brackets directly to the center of rafters. If that is not possible, bracing should be added as in the drawing shown below.
3. Silicone is applied under and between the shingle flaps, then under the tower mounting brackets.
4. Drill 5/16" pilot holes for the lag bolts (GME part # LB-3755). Fill the pilot holes with silicone before inserting lag bolts.
5. Once lag bolts are tight, caulk heads of bolts with additional silicone.
6. Use a level across the thrust bearing plates to ensure plumbness.





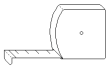
7. Assemble the required reinforcing for the RT-1832, as specified on PARTS 15, 16 & 17.
8. Carefully tighten all nuts.
9. Attach the RT-2732 attachment to the RT-1832. Use the diagram on page 6-7 for part numbers required.



TOOLS YOU'LL NEED FOR ASSEMBLY AND INSTALLATION

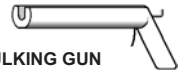
SOCKET SET

ADJUSTABLE END WRENCH



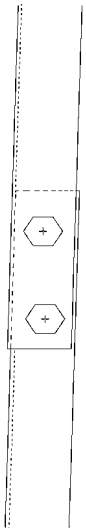
TAPE MEASURE

ELECTRIC DRILL
5/16" & 3/8" DRILL BITS



CAULKING GUN

ASSEMBLY



1. Use this manual in conjunction with the manual for the RT-1832.

2. Lay out four sides of the tower with all braces laid in place according to illustration on page 4. This will help keep track of the wide variety of brace lengths. Determine that all parts are present.

3. Lay out four tower leg sections (PART 1) positioned in an inverted "V" . ***The upper section of the tower overlaps the lower legs (See illustration)***.

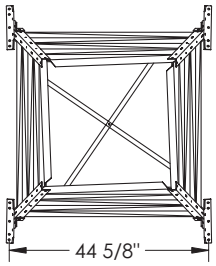
4. Bolt in the leg reinforcement clips (PART 12, 13 & 14) to the inside of each leg at the bottom. (See illustration at right) When the tower is assembled on site, the pre-punched holes in the leg are used as a guide to attach the leg reinforcement clips and tower feet. Drill out the holes to accept the 3/8" hardware. The second hole will need to be field drilled to accommodate the angle of the mounting surface. Some modification may be necessary depending on the surface angle. Use 3/8" hardware to attach clips, legs, and feet in the bottom holes.

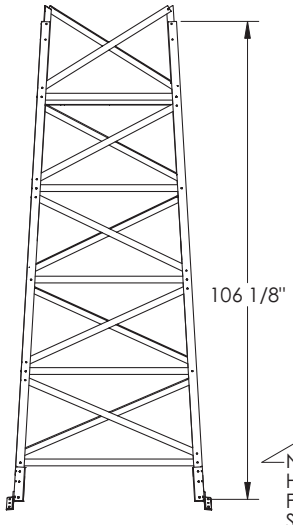
4. All four sides of the tower are similar. Use the diagram on the previous page to assemble the tower. Start with one side of the tower. Do not tighten the bolts at this time. Remember that the illustration on page 4 is an outside view.

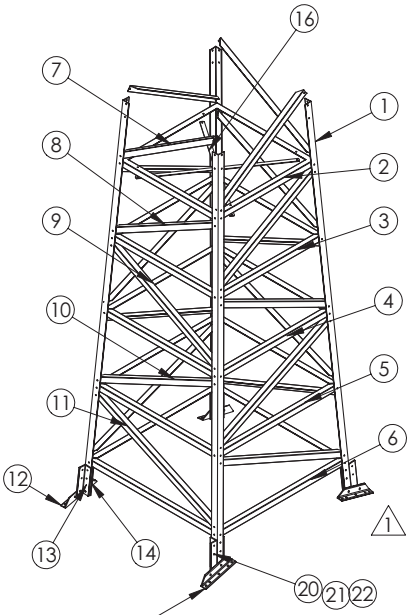
5. Repeat the process for the other legs, bolting all braces on the inside of the angle legs. You should now have two sides of your tower completed.

6. Join the previously assembled sides at the top and bottom. Now continue to bolt the horizontal and diagonal braces in place on the two remaining sides of the tower.

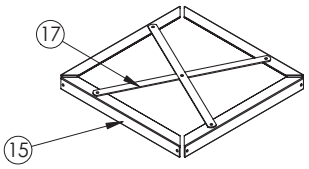
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	FOOT BASE UPDATED	8/22/2011	XIN







RT-2732 : 9' ROOFTOP ADDITION TO MAKE RT-2632			
ITEM	QTY.	PART #	DESCRIPTION
1	4	PR12855	RT-2732 LEG - 2.0" X 2.0" X .25" ALUM
2	4	PR12856	HORIZONTAL BRACE - 1.5" X 1.5" X .132" ALUM - 30.63"
3	4	PR12857	HORIZONTAL BRACE - 1.5" X 1.5" X .132" ALUM - 32.94"
4	4	PR12858	HORIZONTAL BRACE - 1.5" X 1.5" X .132" ALUM - 35.31"
5	4	PR12859	HORIZONTAL BRACE - 1.5" X 1.5" X .132" ALUM - 37.67"
6	4	PR12860	HORIZONTAL BRACE - 1.5" X 1.5" X .132" ALUM - 40.02"
7	4	PR12861	DIAGONAL BRACE - 1.5" X 1.5" X .132" ALUM - 33.66"
8	4	PR12862	DIAGONAL BRACE - 1.5" X 1.5" X .132" ALUM - 35.81"
9	4	PR12863	DIAGONAL BRACE - 1.5" X 1.5" X .132" ALUM - 37.88"
10	4	PR12864	DIAGONAL BRACE - 1.5" X 1.5" X .132" ALUM - 39.97"
11	4	PR12865	DIAGONAL BRACE - 1.5" X 1.5" X .132" ALUM - 42.19"
12	4	PR12866	ROOF MOUNT FOOT - 2.0" X 1.5" X .25" X 83 DEG. ALUM - 7"
13	4	PR12867	OUTER LEG CLIP - 2.0" X 2.0" X .25" ALUM - 7.5"
14	4	PR12868	INTERNAL LEG CLIP - 2.0" X 2.0" X .25" ALUM - 7.5"
15	4	PR13141	RT-1832 ADDITION REPLACEMENT - 1.5" X 1.5" X .132" ALUM - 18.59"
16	2	PR13140	INT. CROSS BRACE BASE SEC. - 1.0" X .125" ALUM - 37"
17	2	PR13139	RT-1832 ADDITION INT. CROSS BRACE - 1.0" X .125" ALUM - 20.81"
18	135	ZL-9602	1/4" -20 NYLON INSERT LOCK NUT 18-8 SS
19	135	ZH-9201	1/4" -20 X 3/4" HEX BOLT - 18-8 SS
20	15	ZL-9610	3/8" -16 NYLON INSERT LOCK NUT - 18-8 SS
21	15	ZW-9714	3/8" FLAT WASHER - 18-8 SS
22	15	ZH-9226	3/8" -16 X 1" HEX BOLT - 18-8 SS



NOTE: ABOVE ASSEMBLY IS INSERTED INTO UPPER TOWER SECTION, RT-1832. REPLACES EXISTING BRACES RT12821(3) & PR11122(1) IN THE RT-1832 TOWER ADDITION.

NOTE: WHEN TOWER IS ASSEMBLED ON SITE THE PRE-PUNCHED HOLE IN THE LEG IS USED. THE SECOND HOLE WILL NEED TO BE FIIELD DRILLEDTO ACCOMIDATE THE ANGLE OF THE MOUNTING SURFACE. SOME MODIFICATION MAY BE NECESSARY DEPENDING ON THE SURFACE ANGLE. USE 3/8" HARDWARE TO ATTACH CLIPS, LEGS, AND FEET IN THE BOTTOM HOLES.

CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN TEA	2002
REVIEWED	
ENGINEER	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/16" DECIMALS .XX ± .01 .XXX ± .005 ANGLES ± .5°

SCALE 1:20

MATERIAL SEE BOM

FINISH ANODIZED

GLENMARTIN
TEL (660) 882 2734
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9' ROOF-TOP ADDITION

SIZE B | DWG. NO. RT-2732 R1 | REV. 1

CAD FILE:

SHEET 1 of 1

C:\Glen\07_Roof_Top2\RT-2732\RT-2732 R1