

# UNIVERSAL TRACK RACK™ POLE INSTALLATION

## LOCATION CONSIDERATIONS:

For installations in sandy or muddy areas, for tall mounting poles, or for any mounting different from the situations described in these instructions, you will need to consult a local structural engineer.

Large TRACK RACKS can receive significant wind loads, so a strong mounting pole and foundation is very important. The site should receive the maximum possible sunlight from AM to PM, in the Winter and Summer. Avoid shade from buildings and trees, including shade that may occur in other seasons.

The height of the pole should result in adequate ground clearance for the mounted modules.

**CAUTION** – Be careful working around the rack after installation on the pole.

Some of the structural members may be at head level.

- Customer provided poles are recommended to be a 2-1/2” (nominal) schedule 40 steel pipe with a 3” OD (UTR-020 only). 3” (nominal) schedule 40 steel pipe with a 3-1/2” OD (UTR-040 only). 6” (nominal) schedule 40 steel pipe with a 6-5/8” OD (F-64, F-90 & F-120) or a 8” (nominal) schedule 40 steel pipe with a 8-5/8” OD (F-168 only).
- Pole can be black or galvanized steel pipe.
- **Note:** Heavier schedule steel pipe (schedule 80, schedule 160 can be used as long as OD is 6-5/8” or 8-5/8”.
- Using the chart below, find the **minimum** acceptable pole height above your finished grade. Our largest UTRF 168 will be approximately 34” above grade when the rack is tilted to the maximum winter angle when rotated to the extreme east or west stop. It is strongly recommended that the pole height be 6 to 12 ft. above grade.
- The minimum recommended hole depth is 1/3 the pole length, 1/3 in the ground, 2/3 above the ground.  
**Example:** 5’ below grade, 10’ above grade, total of a 15’ pole.
- Center the pipe in the hole, and using a level, make sure pole is vertical.
- Fill the hole with concrete (3000-psi minimum strength), and check level of the pole.
- The pole may be filled with concrete for added strength (only to approximate ground level).
- Allow concrete and pole to set for a minimum of 36 hrs. **before** installing the tracker.

## MOUNTING POLE RECOMMENDATIONS:

Description	Universal UTR020	Universal UTR040	F-Series UTRF64	F-Series UTRF90	F-Series UTRF120	F-Series UTRF168		
Minimum Schedule 40 Steel Pipe	2.5” (3” OD)	3” (3½” OD)	6” (6½” OD)	6” (6½” OD)	6” (6½” OD)	8” (8½” OD)		
Min. Pole Height	76”	84”	96”	108”	120”	144”		
Min. Pole Depth	38”	42”	48”	54”	60”	72”		
Ground Clearance at 45° Tilt NS & E/W	55”	34”	13”	30”	28”	34”		
Minimum Recommended hole diameter	18” diameter Pipe set in concrete	18” diameter Pipe set in concrete	24” diameter Pipe set in concrete	24” diameter Pipe set in concrete	24” diameter Pipe set in concrete	30” diameter Pipe set in concrete		
Rack Dimensions (up to but NOT to exceed Sq. Ft.)	67” EW/ 36” NS 20 Sq. Ft. of Module Area	107” EW/ 67” NS 40 Sq. Ft. of Module Area	143” EW 136” NS 64 Sq. Ft. of Module Area	143” EW 148” NS 90 Sq. Ft. of Module Area	143” EW 160” NS 120 Sq. Ft. of Module Area	169” EW 192” NS 168 Sq. Ft. of Module Area		
								<p>CONCRETE</p> <p>EARTH</p> <p>76” to 144”</p> <p>38” to 72”</p> <p>18” to 30”</p> <p>SLOPE AWAY FROM POLE FOR DRAINAGE</p>
								<b>POLE INSTALLATION DETAIL</b>

**Important Note:** ZOMEWORKS CORP. assumes no liability for the structural integrity of the pole and its installation. Soil and wind conditions vary. If there is any doubt, consult with a local Structural Engineer.