

UNIVERSAL PRECAST LIGHT POLE FOUNDATION



Features

- Adjustable Bolt Circle
- Adjustable Bolt Diameter
- Flexible Conduit Opening
- Attractive Natural Stone Texture
- Designed for Light Poles up to 40' High x 8" Diameter



A NEW SOLUTION FROM RECON

AESTHETICS YOU WANT, PERFORMANCE YOU NEED

The ReCon Advantage

Universal

- The unique anchor bolt attachment system allows the bolts to be attached in the field. Bolts of 3/4" or 1" in diameter can be utilized. A bolt circle diameter from 7" to 13 1/2" can be accommodated, a range that is sure to fit most commercial light pole base plate configurations.
- The flexible conduit openings allow the conduit to be buried from as little as 6" to as much as 30" below finished grade, when the full 36" of textured foundation is exposed.

In Stock — On Time Availability

- The ReCon Universal Precast Light Pole Foundation (ReCon UPLPF) can be produced in advance without knowing the specific light pole that will be selected for the project.
- All other precast light pole foundations must be produced after a unique specification has been agreed upon, because the bolts must be cast into the foundation and the bolt size and spacing is dependent on the light pole that will be utilized on the project. In addition, conduit openings must be positioned for that specific project.

Aesthetics

- ReCon's UPLPF comes with a natural stone texture in an ashlar pattern. The Stones can be stained to further enhance the appeal of the foundation.
- The liner that creates the stone texture is removable, so custom textures are also an option.
- No longer does the customer need to settle for a smooth concrete foundation with those occasional sonotube lines around the circumference of the foundation.

Installation Efficiency

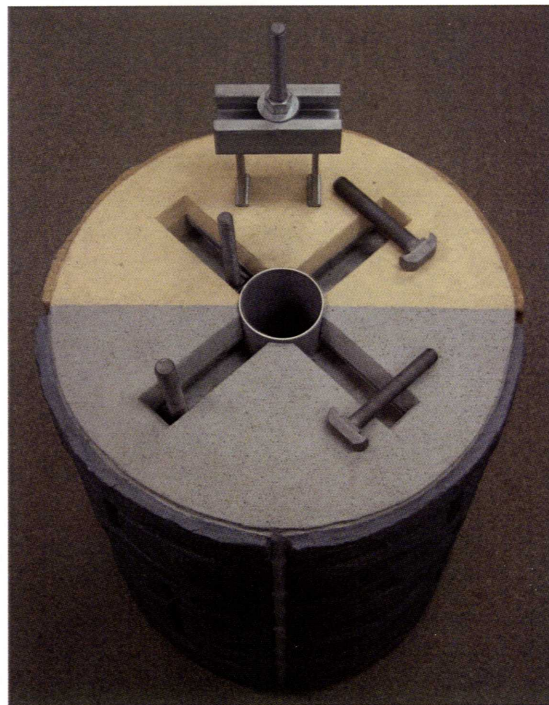
- The ReCon UPLPF is fully cured and ready for installation when it arrives at the job site.
- The crew size needed to set the precast foundation can be smaller than those required to cast a foundation on site.
- Backfilling can begin immediately.
- Attaching the pole to the foundation can begin within 24 hours of grouting the universal channel on the top of the foundation.
- Weather is not a significant factor that can delay installation.
- Delays associated with inspection sign-off of the rebar placement for a cast in place foundation are eliminated.

Strength and Durability

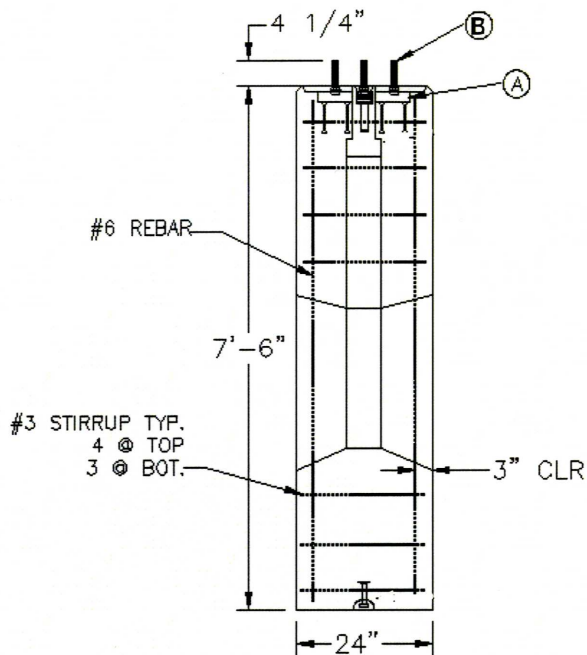
- Made of wet-cast, air-entrained concrete with a minimum psi of 5,000 (34MPa).
- Designed to standup to the challenges of freeze thaw cycles and harsh deicing chemicals.

Quality

- With precast concrete, the production is done by trained personnel in a controlled environment. Mix designs are documented and a quality assurance plan is followed, resulting in predictable and consistent quality.



ReCon Universal Precast Light Pole Foundation Specification



Specifications

Base Height: 7' 6" Total Height

Exposed Height: Maximum 3' Exposed Texture

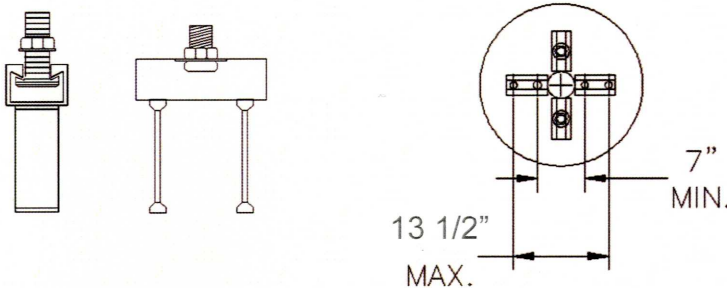
Diameter: 24" Diameter

Mass: 2864 lb.

Concrete: Minimum 5,000 psi

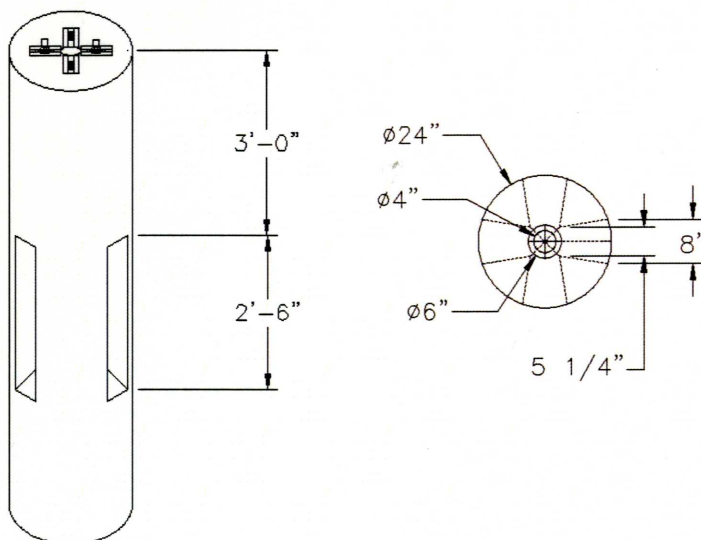
Anchor Type: Halfen 7248—HTA 6" Anchor - (A)

Anchor Bolt: Halfen M20 or M24 Tee Bolt (3/4" or 1") - (B)



Adjustable Anchor Design

ReCon's anchor bolt track will accept anchor tee bolts 3/4" and 1" in diameter. The bolts can be spaced as close as 7" or as far as 13 1/2" apart to accommodate a wide variety of anchor plate hole spacing.



Flexible Conduit Openings

Large Flexible conduit openings allow for adequate space to install necessary conduit during light pole installation. The foundation and its conduit openings shall be properly backfilled with compacted coarse aggregate (i.e., 3/8" #8 stone) or flowable fill after the conduit has been installed.

Engineering and Installation Guidelines

Design and Specification

The majority of light poles are designed by the pole manufacturers. Often the pole manufacturer will be given a specification with design criteria such as a design loading or a specific wind speed and the code to design by. Light poles may be designed by three different criteria or standards:

- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (AASHTO LTS)
- State Specific DOT Standards
- Commercial Criteria

While the pole manufacturer may design the light pole, it is recommended to have a Professional Engineer design the foundation. For this, the base reactions for the pole may be given by (or should be requested from) the pole designer. With the base reactions known, the appropriate bolt size and spacing can be determined and the ReCon Universal Precast Light Pole Foundation can be checked for Overturning & Torsion, given the site specific soil properties as well as the site specific foundation embedment (below finished grade) and foundation projection (above finished grade).

Sample ReCon UPLPF Selection Chart

Pole Specifications

Pole Height	40'	30'	25'	30'	25'
Pole Shape	Round	Round	Round	Square	Square
Pole Width / Diameter	8"	6"	6"	6"	6"
Corner Radius of Sq. Pole	N/A	N/A	N/A	.125"	.125"
Wind Speed	90mph	90mph	90mph	90mph	90mph
Fixture Contact Area	4 ft ²	4 ft ²	4 ft ²	4 ft ²	4 ft ²
Calculated Moment	13019	8124	5876	13139	9228
Calculated Shear	533	430	363	764	631

Minimum Bolt Circle Diameter

Assuming 1" Diameter Bolt	10"	7"	7"	10"	7"
Assuming 3/4" Diameter Bolt	12"	8"	7"	12"	9"

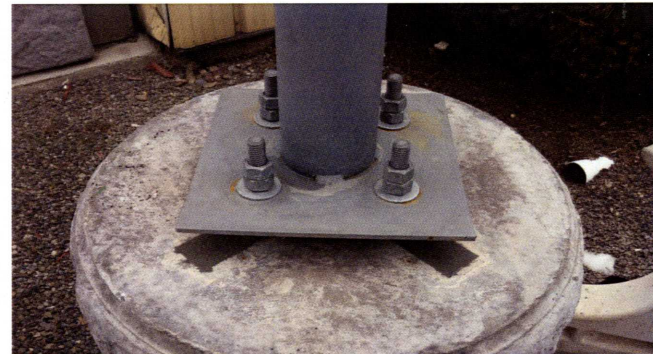
Max Exposed Height / Min Required Embedment

34 Degree Soil	3' / 4.5'	3' / 4.5'	3' / 4.5'	3' / 4.5'	3' / 4.5'
30 Degree Soil	3' / 4.5'	3' / 4.5'	3' / 4.5'	2.9' / 4.6'	3' / 4.5'
26 Degree Soil	2.8' / 4.7'	3' / 4.5'	3' / 4.5'	2.7' / 4.8'	3' / 4.5'

Calculations to be verified by professional engineer.

Installation Guidelines

- Drill foundation hole.
- Place granular base leveling material at bottom of shaft (6" Min).
- Place precast pole foundation in shaft.
- Place the necessary conduit lines.
- Level pole foundation.
- Backfill hole around level pole foundation.
- Place the T-bolts in the Halfen Anchor channels, positioned in accordance with bolt circle template supplied by pole manufacturer. Tighten the bolts.
- Fill the Halfen channels with grout.
- Place the leveling nuts on the T-bolts to fine-tune a level surface for the placement of the light pole.
- Install the light pole per manufacturer's instructions.



The installation steps represent a basic outline for a ReCon Universal Precast Light Pole Foundation installation and are not meant to serve as a complete construction or installation guide. Designers and other industry professionals can view online or download a complete ReCon design and construction reference manual at www.reconwalls.com.

ReCon Universal Precast Light Pole Foundation is produced and marketed pursuant to a license agreement with ReCon Wall Systems, Inc. U.S. Patents Pending.



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