

Poles - Straight Square Steel

► Poles

GENERAL SPECIFICATIONS

POLE SHAFT: The pole shaft is fabricated from weldable grade hot rolled commercial quality carbon steel and is supplied in 11 gauge (0.1196") or 7 gauge (0.1793") material thickness having a guaranteed minimum yield strength of 55,000 psi. Shafts are of one-piece construction with a full length longitudinal weld providing minimum yield strength of 46 KSI. The shaft is uniformly square in cross section with flat side, rounded corners, and no taper.

ANCHOR BASE: The anchor base (base plate) is fabricated from structural quality hot rolled carbon steel plate conforming to ASTM A36 with a minimum yield strength of 36,000 psi. The base plate telescopes the pole shaft and is circumferentially welded top and bottom. The base is provided with a slotted anchor bolt opening that enables a range of bolt circles to be utilized. The pole chart information lists bolt circle ranges for each pole type.

ANCHOR BOLTS: The anchor bolts are fabricated from carbon steel bar conforming to AASHTO M314 Grade-55 or ASTM F1554 Grade-55 that meets or exceeds a minimum strength of 50,000 psi. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end. Four anchor bolts are provided per pole. Each anchor bolt is furnished with (2) each - regular hex nuts and flat washers, unless otherwise specified.

HANDHOLE: The reinforcing handhole has a nominal rectangular 2-1/2" X 4-1/2" inside opening in the pole shaft. It is provided with a cover plate, attachment bar, and machine screw. The handhole is welded in the pole shaft and is located 16 inches above base plate and on the same side with respect to the luminaire arm. For two arms with 180° arrangement, handhole is located on the side of the pole with no luminaire arm.

ELECTRICAL GROUND: Grounding bolt is welded inside the pole shaft on the opposite side of the handhole and includes 3/8"-16 UNC hex head bolt and nut.

BASE COVER: The standard two-piece base cover completely conceals the entire base plate and anchorage.

POLE TOP CAP: A removable top cap is provided and is used in conjunction with drilled pole shafts for accommodation of a direct mounted luminaire attachment.

POLE TOP TENON (OPTIONAL): Pole top tenons are fabricated from structural quality hot rolled carbon steel with a guaranteed minimum yield strength of 30,000 psi. A pole top plate and tenon of weldable grade hot rolled commercial quality carbon steel is circumferentially welded to the top of the pole shaft. This plate provides an internal weather resistant wire way into the pole top tenon. Standard size is 2-3/8" O.D. X 4" long steel tubing.

STANDARD FINISH: Poles are finished with electrostatically applied and thermally cured TGIC polyester powdercoat. For other coating systems beyond the standard finish, please consult factory.

DESIGN: The poles as charted are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds with an appropriate gust factor under the following conditions:

The wind velocities are based on 10 mph increments from 80 mph to 100 mph. Poles standards to be located in areas of known abnormal conditions require special consideration. For example, coastal areas, airports, and areas of special winds such as canyons and mountains.

Standards are designed for ground mounted applications. Poles mounted on structures (such as buildings and bridges) may also necessitate special consideration.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard. However, for any scope beyond the standard application, please consult governing agency and qualified professional.

WARNING:

Factory supplied template must be used when setting anchor bolts. Newport Lighting will not honor any claim for incorrect anchorage placement from failure to use factory supplied templates.

The standard is intended as a general guideline only. The customer is solely responsible for proper selection of pole, luminaire, accessory and foundation under the given site conditions and intended usage. Newport Lighting assumes no responsibility for such proper analysis or product selections.

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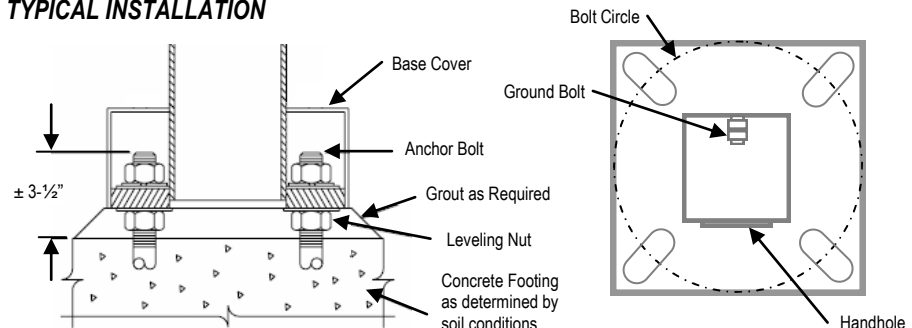
FEATURES

Straight square steel poles are fabricated from commercial quality carbon steel. The shafts are of one-piece construction and circumferentially welded to ASTM A36 base plate, providing excellent strength and integrity. Grounding bolt is conveniently welded opposite of the handhole. The poles are finished with an electrostatically applied, thermally cured TGIC polyester powdercoat. All poles typically includes anchor bolts, base cover, handhole cover and pole cap.

DIMENSIONS / WEIGHT ANCHOR BOLTS / BOLT PATTERN						ALLOWABLE EPA MAXIMUM WEIGHT					
MOUNTING HEIGHT (ft)	SHAFT SIZE O.D. (in)	WALL THK (in)	STRUCT. WEIGHT (lbs)	ANCHOR BOLTS Dia x Lngth x Rt (in)	BOLT CIRCLE Diameter (in)	80 MPH w/ 1.3 Gust		90 MPH w/ 1.3 Gust		100 MPH w/ 1.3 Gust	
						EPA (ft ²)	Weight (lbs)	EPA (ft ²)	Weight (lbs)	EPA (ft ²)	Weight (lbs)
10	4	.120	75	3/4 x 24 x 4	10 ± 1/2	30.6	765	23.8	595	18.9	473
12	4	.120	90	3/4 x 24 x 4	10 ± 1/2	24.4	610	18.8	470	14.8	370
14	4	.120	100	3/4 x 24 x 4	10 ± 1/2	19.9	498	15.1	378	11.7	293
16	4	.120	115	3/4 x 24 x 4	10 ± 1/2	15.9	398	11.8	295	8.9	223
18	4	.120	125	3/4 x 24 x 4	10 ± 1/2	12.6	315	9.2	230	6.7	168
20	4	.120	140	3/4 x 24 x 4	10 ± 1/2	9.6	240	6.7	167	4.5	150
20	5	.120	185	1 x 36 x 4	12 ± 1/2	17.7	443	12.7	343	9.4	235
20	5	.180	265	1 x 36 x 4	12 ± 1/2	28.1	703	21.4	535	16.2	405
25	4	.120	170	3/4 x 30 x 4	10 ± 1/2	4.8	150	2.6	100	1.0	50
25	4	.180	245	3/4 x 30 x 4	10 ± 1/2	10.8	270	7.7	188	5.4	135
25	5	.120	225	1 x 36 x 4	12 ± 1/2	9.8	245	6.3	157	3.7	150
25	5	.180	360	1 x 36 x 4	12 ± 1/2	18.5	463	13.3	333	9.5	238
30	4	.180	291	3/4 x 30 x 4	10 ± 1/2	6.7	168	4.4	110	2.6	65
30	5	.120	265	1 x 36 x 4	12 ± 1/2	4.7	150	2.0	50	-	-
30	5	.180	380	1 x 36 x 4	12 ± 1/2	10.7	267	6.7	167	3.9	100
30	6	.180	520	1 x 36 x 4	14 ± 1/2	19.0	475	13.2	330	9.0	225
35	5	.180	440	1 x 36 x 4	12 ± 1/2	5.9	150	2.5	100	-	-
35	6	.180	540	1 x 36 x 4	14 ± 1/2	12.4	310	7.6	190	4.2	105
40	6	.180	605	1 x 36 x 4	14 ± 1/2	7.2	180	3.0	75	-	-

Note: Mounting height is the vertical distance from the base of the lighting pole to the center of the luminaire arm at the point of luminaire attachment. Maximum weight and EPA values are determined by analyzing stress from two wind directions, across flats and across points. The design information is intended as a general guideline only. Consult governing agency and qualified professional.

TYPICAL INSTALLATION



ORDER GUIDE

POLE	SIZE	SHAPE	MATERIAL	WALL THK	LENGTH	HARDWARE	COLOR
P	4	SQ	STL	120	20	HRDWR	DB
OPTIONS	TN = TENON DTB = DIRECT BURIAL			CP = COUPLING (1/2" OR 3/4") CC = CUSTOM COLOR			