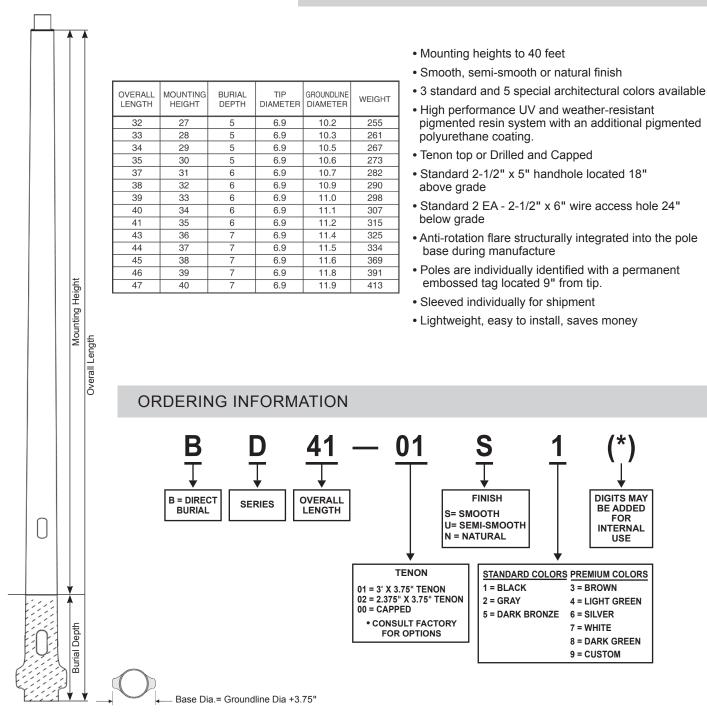




# ROUND TAPERED COMPOSITE LIGHT POLE DIRECT BURIAL INSTALLATION

#### SHAKESPEARE D-SERIES DIRECT BURIAL POLES



## **D-SERIES**



### ROUND TAPERED COMPOSITE LIGHT POLE - DIRECT BURIAL INSTALLATION

#### SPECIFICATIONS

- 1. Lighting poles shall be fiberglass reinforced composite per Shakespeare design.
- 2. Wind loading shall be calculated for the appropriate wind velocity with a 3 second gust factor per ASCE.
- 3. Effective projected area (EPA) is the actual area adjusted with the appropriate drag coefficient (shape factor) to result in an equivalent area having a drag coefficient equal to one (1) using ANSI 136.20

#### MATERIALS

- 1. The round tapered pole shall be constructed by the filament winding process from thermosetting polyester resin and contain a minimum of 65 percent "E" type fiberglass by weight. The filament windings shall be continuously applied with uniform tension and shall be placed on the pole helically at low angles to provide axial strength. Additional windings shall be placed on the pole in a circular manner to provide compressive strength.
- 2. The resin to make the pole shall be ultraviolet resistant and pigmented approximately the same color as the final coating to be applied. A highly weather resistant, pigmented, polyurethane coating shall be applied to the pole. The coating shall have a minimum thickness of 1.5 mils.
- 3. The poles shall be flame resistant per ASTM D635. Specimens must cease to burn before the gauge mark of 100mm (3.9 inches) is reached.
- 4. (If applicable) The poles shall be delivered predrilled and capped (if applicable) to accommodate the lighting fixture(s) or mast arm(s) specified.
- 5. (If applicable) Tenons shall be permanently bonded to the fiberglass shaft and shall be hot-dipped galvanized steel to ASTM A153 or shall be 6061-T6 or A356-T6 aluminum.
- 6. The handhole opening shall be 2.5" x 5". The handhole cover is attached with a 1/4" socket head screw.

#### **IDENTIFICATION & PACKAGING**

Each pole shall bear an identification tag which shall list the model, catalog number, month and year of manufacture. Each pole shall be individually packaged for protection during shipping.

#### TESTING

The surface shall have been tested for a minimum of 5000 hours of accelerated testing in accordance with ASTM G154 (UV-A Lamp 340 NM wavelength 130° F, cycle lamp 4 hours on, 4 hours off) with the following performance results:

Fiber exposure: None | Crazing: None | Chalking: None | Color: Slight dulling may occur

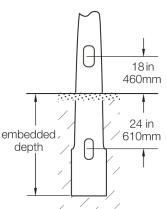
#### WIND LOADING DATA

Wind speed (mph) values calculated as per ANSI C136.20 for a 3-second gust factor.

OVERALL LENGTH	MOUNTING HEIGHT	LUMINAIRE MAX WEIGHT (LBS.)	90 MPH	100 MPH	110 MPH	120 MPH	130 MPH	140 MPH	150 MPH
32	27	300	32.2	25.8	21.0	17.1	14.0	11.6	9.7
33	28	300	31.7	25.4	20.6	16.7	13.7	11.3	9.4
34	29	300	31.2	25.0	20.2	16.4	13.4	11.0	9.1
35	30	300	30.8	24.6	19.9	16.1	13.1	10.8	8.9
37	31	300	30.3	24.2	19.5	15.8	12.8	10.5	8.6
38	32	300	29.9	23.9	19.2	15.4	12.5	10.2	8.4
39	33	300	29.5	23.6	18.8	15.1	12.3	10.0	8.1
40	34	300	29.1	23.2	18.5	14.9	12.0	9.7	7.9
41	35	300	28.7	22.9	18.2	14.6	11.7	9.5	7.7
43	36	300	28.3	22.6	17.9	14.3	11.5	9.2	7.4
44	37	300	28.0	22.3	17.5	14.0	11.2	9.0	7.2
45	38	300	27.6	21.9	17.2	13.7	10.9	8.7	6.9
46	39	300	27.2	21.5	16.9	13.4	10.6	8.5	6.7
47	40	300	26.9	21.2	16.6	13.1	10.4	8.2	6.5

#### Direct Embedded Detail

Shakespeare





COMPOSITE STRUCTURES

SPC7699 11/15 skp-cs.com carries the most current spec information and supercedes these guidelines.