# Tapered Square, Class B - Medium Duty Poles

# **Tapered Square, Class B - Medium Duty Poles**

# **Physical Details:**

- Square, with 1" chamfered corners, tapered shaft.
- 4.75" flat to flat pole tip.
- 0.125" per linear ft, taper increase.
- 900 lb. transverse bending strength (2 ft. from tip).
- Mold finish is standard but optional etched or polished finish and Decor colors are available.
- For various luminaire mounting details, please reference arms and accessories.

## **Direct Embedment**

Pole	Pole	Assumed	Overall	Pole Butt	Ultimate Ground-	Nominal
Catalog	Height Above	Embedment	Pole	Flat to Flat	Line Moment	Weight
Number	Grade	Depth*	Length	(Inches)	(ft. lbs.**)	(Ibs.)
E-250-BPT-G	20' 0"	5" 0"	25' 0"	7.88	16200	1030
E-275-BPT-G	22' 6"	5" 0"	27' 6"	8.19	18450	1180
E-300-BPT-G	25' 0"	5" 0"	30' 0"	8.50	20700	1340
E-325-BPT-G	27' 0"	5" 6"	32' 6"	8.82	22500	1510
E-325-BF1-G E-350-BPT-G E-375-BPT-G E-400-BPT-G F-425-BPT-G	27 0 29' 6" 32' 0" 34' 0" 36' 6"	5' 6" 5' 6" 6' 0" 6' 0"	32 6 35' 0" 37' 6" 40' 0" 42' 6"	9.13 9.44 9.75 10.06	24750 24750 27000 28800 31050	1690 1880 2120 2345
E-450-BPT-G	39' 0"	6' 0"	45' 0"	10.38	33300	2580

#### **Base Plate**

Pole Catalog Number	Pole Height Above Grade	Pole Butt Flat to Flat (Inches)	Base Plate Size (Inches)	Bolt Circle*** (Inches)	Ultimate Ground- Line Moment (ft. lbs.**)	Nominal Weight (lbs.)
P-250-BPT-G	25' 0"	7.88	14.5 x 14.5	17	20700	1105
P-275-BPT-G	27' 6"	8.19	14.5 x 14.5	17	22950	1260
P-300-BPT-G	30' 0"	8.50	14.5 x 14.5	17	25200	1420
P-325-BPT-G	32' 6"	8.82	14.5 x 14.5	17	27450	1590
P-350-BPT-G	35' 0"	9.13	14.5 x 14.5	17	29700	1770
P-375-BPT-G	37' 6"	9.44	14.5 x 14.5	17	31950	1955
P-400-BPT-G	40' 0"	9.76	14.5 x 14.5	17	34200	2210

<sup>\*</sup> Recommended burial depth for normal soils, Where large imbalanced loads are applied or soil strengths are questionable, deeper burial may be necessary.

# **Class - EPA Loading**

	Pole Height	Post Top &	Imbalanced Loads		
	Above Grade	Bal. Loads	4' arm 6' arm 8' arm		
90 mph	20	24 1/2	22 3/4	21 1/2	20
	25	22	20 3/4	19 3/4	18 1/2
	30	19 1/2	18 1/4	17 1/2	16 1/2
	35	16 3/4	15 3/4	15 1/4	14 1/4
	40	14	13 1/4	12 3/4	12
100 mph	20	18 3/4	17 1/2	16 1/2	15 1/4
	25	16 1/2	15 1/4	14 1/2	13 1/2
	30	14	13	12 1/2	11 3/4
	35	11 1/2	10 3/4	10 1/4	9 1/2
	40	9	8 1/4	7 3/4	7 1/4
110 mph	20	14 1/2	13 1/2	12 1/2	11 1/2
	25	12 1/4	11 1/4	10 3/4	10
	30	10	9 1/4	8 3/4	8
	35	7 1/2	6 7/9	6 1/2	5 3/4
	40	5	4 1/2	4	3 1/2
120 mph	20	11 1/4	10 1/4	9 3/4	8 3/4
	25	9	8 1/4	7 3/4	7 1/4
	30	6 3/4	6 1/4	5 3/4	5 1/4
	35	4 1/2	4	3 1/2	3
	40	2	1 1/2	1 1/4	3/4
130 mph	20 25 30 35 40	8 3/4 6 3/4 4 1/2 2 1/4	8 6 4 1 3/4	7 1/2 5 1/2 3 1/2 1 1/4	6 1/2 b 3 1
140 mph	20 25 30 35 40	6 3/4 4 3/4 2 1/2 1/4	6 1 1/1 2	5 1/2 3 3/4 1 3/4	5 3 1/4 1 1/4 
150 mph	20 25 30 35 40	5 1/4 3 1/4 1 	4 1/2 2 3/4 1/2 	4 2 1/4 1/4 	3 1/2 2

## **Decor Colors & Finishes**

Color	Eclipse (Black)	Ash White	Pearl Gray	Dusty Rose	Azlec Jade (Green)	Desert Sand (Buff)	Saluki Bronze (Brown)
Etched Finish	E11	E35	E40	E41	E51	E70	E90
Polished Finish	\$11	\$35	S40	\$41	S51	S70	S90

Mold finish, catalog #M00, is standard on all poles, Decor colors and finishes must be specified. A clear acrylic coating is standard on all Decor poles.

■ When selecting a pole strength class, care must be taken to ensure it will carry the desired EPA loading of arm and luminaire for the wind conditions at your location. If you are unsure of your location's wind condition, please reference Isotach Map in General and Technical section.





<sup>\*\*</sup> Ultimate Ground Line Moment = Height above grade minus 2 ft x transverse bending strength.

<sup>\*\*\*</sup> Anchor bolt information - 17" BC uses 1" Dia. anchor bolt.

#### **Streetlighting Arms and Accessories**

Spun concrete poles can be adapted to fit most arms or accessories. Our standards are detailed in the "Arms and Accessories" section of this catalogue. If a specific item is not shown, please call your local representative or our sales office.

When requesting StressCrete to supply arms, please ensure compatability with luminaire,

#### **Finishes**

Mold finish is standard on all poles. If a Decor or custom finish is desired it must be specified in the pole catalogue number. Please see lower right front page for information, or turn to Decor section.

#### **Standard Openings and Handholes**

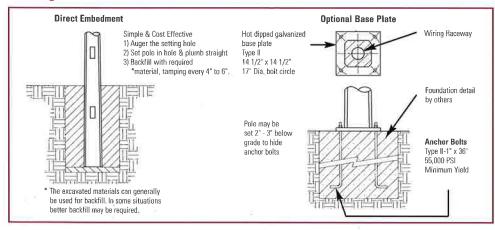
(For more detailed information, please reference General and Technical section.)

- 2 1/2" x 8" is the standard handhole box located 18" above grade. Both it and the tight fitting coverplate are available in a rugged high density cast zinc.
- Standard coverplate fasteners are 1/4" stainless steel with either Allen (hex) head for the United States or black Robertson #3 (square) head in Canada. Tamperproof and non-standard fasteners are available but must be specified.
- Standard above grade wiring apertures vary with arm selection but are generally 1 1/4" diameter holes or 1 1/2" x 3" openings. Below grade apertures are 2 1/2" x 5" double openings 18" below grade in line with handhole.
- Non-standard sizes can be made available on request; please contact our sales office.
- Galvanized steel or zinc inserts are available in 1/8" increments from 1/4" through 3/4".
- Through holes are nominal 1/2", 3/4", or 1".

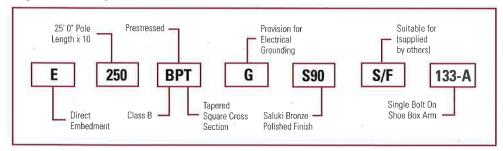
#### **Electrical Grounding**

The last letter of our pole catalogue number "G" specifies that the pole will be supplied complete with a #6 stranded copper ground wire. When properly connected, this will electrically ground the pole. If the pole is not to be electrically grounded, simply delete the letter "G" from the catalogue number.

# **Footings**



# **Typical Catalogue Numbers**



#### Typical for all types:

- 1. Select footing type direct embedment or base plate:
- 2. Select pole length if direct embedded allow for embedment length.
- 3. Select shape and strength of pole.
- 4. If required, select provision for electrical grounding of pole.
- 5. If desired, select Decor color and finish.
- Select luminaire mounting style see arms and accessories.

