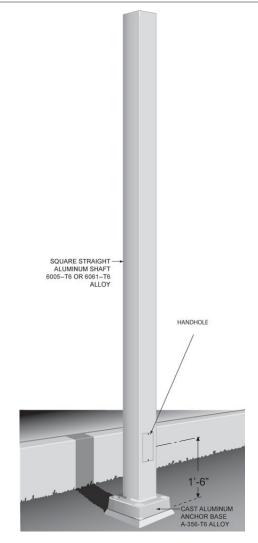
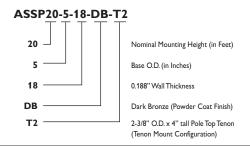
### Straight Square Aluminum Pole

Туре:	Job:	Job:				
Catalog Number:						
		_				
Series (pole type and height)	Base O.D.	Gauge (wall thickness)	Finish	Mounting Designation (arm or tenon mounting configuration)	Date:	



#### Straight Square Aluminum Pole (ASSP)

See below for ordering example to specify a 20' Straight Square Aluminum Pole, having a 5.00" O.D. Base dimension, 0.188" wall thickness, Dark Bronze powder coat Finish, with a 2-3/8" O.D. x 4" tall pole top tenon.



### Specifications

All aluminum alloys shall comply with metallurgical and mechanical properties set forth in the Aluminum Association Standards.

#### Anchor Bolts

Each anchor base shall include four steel hot dip galvanized anchor bolts. Each anchor bolt is furnished with two hex nuts and two flat washers.

#### Anchor Base

The anchor base shall be a permanent mold casting from A356 alloy aluminum. The shaft shall be inserted into the base casting and joined by a continuous circumferential weld at the outside top and inside bottom of the anchor base. The assembly shall be heat treated to a T6 temper after all structural welding has been completed. The anchor bolt recesses in the anchor base casting shall be flush covered by four tamper resistant aluminum nut cover disks. See Anchor Base and Bolt Detail.

#### Pole Shaft

The pole shaft shall be extruded from seamless 6000 series alloy aluminum tubing.

#### Handhole

All square poles shall include a surface-mounted covered handhole centered 18" above the bottom of the pole. The opening shall be rectangular in shape with the major dimensions along the vertical axis. The opening in the 4" square poles shall be  $2" \times 4$ ". The opening in the 5", 6", and 6.75" square poles shall be  $2-1/2" \times 4$ ". Consult factory for availability of larger openings.

#### Pole Top Cap and Arm Mounting

Square shafts shall be supplied with a top cap when the shafts are to be drilled for side mounting of luminaires. Specify choice of drill mounting (D1 through D6) for luminaire arm mounting configuration required. Specify appropriate Drill Template (Y) for intended luminaire mounting type.

#### Pole Top Tenon

Aluminum pole top tenons may be specified. Standard tenon sizes are 2-3/8" O.D.  $\times$  4" tall (T2), 3.0" O.D.  $\times$  5-5/8" tall (T3), or 4" O.D.  $\times$  5-5/8" tall (T4) vertical tubing. Bullhorn accessories are available.

#### Finish

Standard available finishes are Satin Brushed finish (SBF) and polyester powder coat, electrostatically applied and oven cured, in the colors listed. Poles with the Satin Brushed finish shall be longitudinally polished, resulting in a high quality brushed finish. After finishing, each pole shall be fully wrapped with neutral PH krinkle/kraft paper for protection in shipment.

#### Fastening Hardware

All structural fasteners are galvanized high strength carbon steel. All other fasteners are galvanized or zinc plated carbon steel or stainless steel.

#### Design

#### Consult Wind Velocity Map to ensure suitability for location and application.

Standards (poles) are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate gust factor under the following conditions: Wind velocities are based on 10 mph increments from 80 mph through 100 mph.

**Note:** Standards (poles) to be located in areas of known abnormal conditions require special consideration. For example: coastal areas, airports, and areas of special winds such as the Chinook Winds along the eastern slope of the Rocky Mountains.

Standards (poles) are designed for ground mounted applications. Consult factory for special consideration for mounting on structures (such as bridges and buildings). 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 into the standard.



## Straight Square Aluminum Pole

Туре:	Job:			Page 2 of 4			
Series/Pole Height (1) Base (2)		Wall Thickness (3)	Finish	Mounting Designation Options			
□ ASSP08 8' pos □ ASSP10 10' ps □ ASSP12 12' ps □ ASSP14 14' ps □ ASSP16 16'	5   6   6   6   6   75	□ 12 0.125" □ 18 0.188" □ 25 0.250"	SBF Satin Brushed Finish  GR (4) Gray  SA (4) Satin Aluminum	Arm Mount Configurations (5)  D1-DT(Y) 1 @ 90°, specify drill template (Y)  D2-DT(Y) 2 @ 180°, specify drill template (Y)  D4-DT(Y) 4 @ 90°, specify drill template (Y)  D5-DT(Y) 2 @ 90°, specify drill template (Y)  D6-DT(Y) 3 @ 90°, specify drill template (Y)			
☐ ASSP18 18' g ☐ ASSP20 20' g ☐ ASSP25 25' g ☐ ASSP30 30' g ☐ ASSP35 35' g	pole pole		Dark Bronze  BLK (4) Black  WHT (4) White	Tenon Mount Configurations (6)  12 2.375" (2-3/8") O.D. x 4.0" tall tenon (7)  13 3.0" O.D. x 5.625" (5-5/8") tall tenon  14 4.0" O.D. x 5.625" (5-5/8") tall tenon			

- (2) Outside dimension of pole shaft across flats, in inches.
- (3) See chart for availability with desired pole height.
- (4) Powder coat finish. Consult factory for special colors or finishes.
- (5) Drill Mounting patterns for Square Pole. D3 (3@120°) not available with square poles. Specify appropriate Drill Template (Y) for intended luminaire to be arm mounted.
- (6) T2 suitable for use with all poles.
  T3 suitable for poles with pole top O.D. of 4" or more.
  T4 suitable for use with 6" pole top O.D. only. Standard pole top pipe tenon options listed. Consult factory to specify custom size.
- (7) 4-1/2" tall tenon available as special order. Consult factory when specifying with PTRD or PTSQ (EAL post top mounting options).

## Pole Information Chart (1,2)

Nominal	Pole Shaft			Max. Allowable	Maximum Allowable Luminaire EPA (ft²)				
Mounting Height (ft)	Catalog Number	Base O.D. (in)	Wall Thickness (in)	Luminaire Weight (lbs)	70 MPH w/1.3 Gust	80 MPH w/1.3 Gust	90 MPH w/1.3 Gust	100 MPH w/1.3 Gust	110 MPH w/1.3 Gust
8	ASSP08- 4 -12-XXX-XX	4.00	0.125	350	26.6	19.9	15.2	11.9	9.5
10	ASSP10- 4 -12-XXX-XX	4.00	0.125	260	20.6	15.2	11.4	8.8	6.8
12	ASSP12- 4 -12-XXX-XX	4.00	0.125	260	16.0	11.5	8.5	6.3	4.6
14	ASSP14- 4 -12-XXX-XX	4.00	0.125	200	12.9	9.0	6.4	4.5	3.1
15	ASSP15- 4 -12-XXX-XX	4.00	0.125	200	9.1	6.2	4.2	2.8	1.8
16	ASSP16- 4 -12-XXX-XX	4.00	0.125	200	7.9	5.3	3.4	2.1	1.1
	ASSP16- 4 -18-XXX-XX	4.00	0.188	200	13.3	9.4	6.7	4.7	3.3
18	ASSP18- 4 -12-XXX-XX	4.00	0.125	100	6.4	4.0	2.3	1.1	NA
	ASSP18- 4 -18-XXX-XX	4.00	0.188	150	11.0	7.4	5.0	3.3	2.0
	ASSP18- 5 -18-XXX-XX	5.00	0.188	260	19.2	13.5	9.6	6.8	4.7
20	ASSP20- 4 -12-XXX-XX	4.00	0.125	150	4.5	2.3	NA	NA	NA
	ASSP20- 4 -18-XXX-XX	4.00	0.188	150	8.8	5.6	3.5	1.9	NA
	ASSP20- 5 -18-XXX-XX	5.00	0.188	150	16.4	11.2	7.6	5.0	3.2
	ASSP20- 6 -18-XXX-XX	6.00	0.188	150	26.1	18.3	13.0	9.2	6.4
	ASSP20- 6 -25-XXX-XX	6.00	0.250	260	35.4	25.4	18.6	13.7	10.1
25	ASSP25- 5 -18-XXX-XX	5.00	0.188	100	10.2	6.0	3.2	1.1	NA
	ASSP25- 6 -18-XXX-XX	6.00	0.188	260	16.6	10.6	6.5	3.5	1.3
	ASSP25- 6 -25-XXX-XX	6.00	0.250	260	24.4	16.5	11.2	7.3	4.5
30	ASSP30- 6 -25-XXX-XX	6.00	0.250	260	14.8	9.0	5.0	2.1	NA
	ASSP30-6.75-25-XXX-XX	6.75	0.250	260	21.1	13.5	8.2	4.5	1.7
32	ASSP32- 6 -25-XXX-XX	6.00	0.250	150	12.7	7.1	3.3	NA	NA
35	ASSP35- 6 -25-XXX-XX	6.00	0.250	100	9.4	4.3	NA	NA	NA
	ASSP35-6.75-25-XXX-XX	6.75	0.250	150	14.1	7.6	3.1	NA	NA

Pole Information Chart Notes:

<sup>(2)</sup> Chart shows allowable weight and size (cumulative EPA) of luminaires and/or brackets suitable for pole.



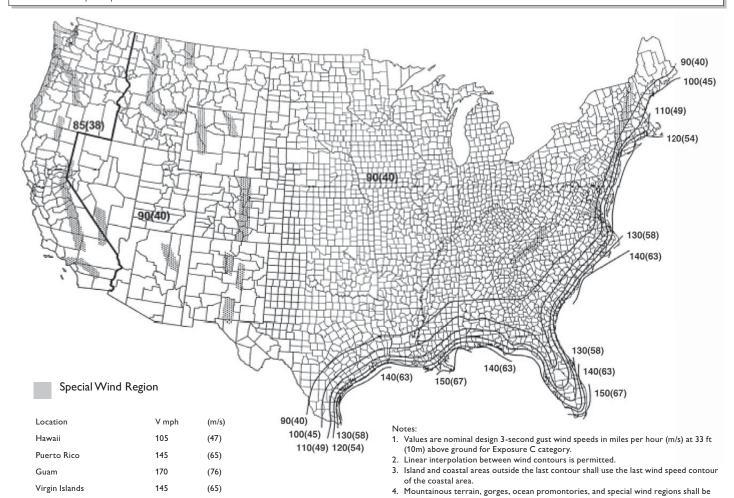
Square Straight Aluminum Pole Series. Consult Pole Information Chart for available base outside dimension and pole shaft wall thickness.

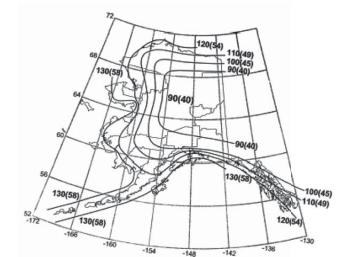
<sup>(1) 4&</sup>quot; square poles provided with 2" x 4" nominal handhole. 5", 6", and 6.75" square poles provided with 2.5" x 4" nominal handhole.

## Straight Square Aluminum Pole

Type: Job: Page 3 of 4

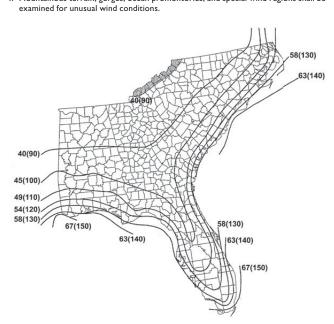
Wind Velocity Map





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(56)





American Samoa

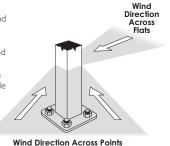
## Straight Square Aluminum Pole

Type: Job: Page 4 of 4

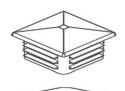
### Wind Direction detail

Maximum weight and EPA values are determined by analyzing stress from two wind directions as shown.

Due to the increased area and reduced section properties, stress levels across the points generally control the allowable loads.



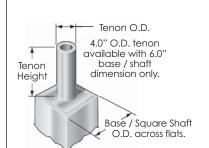
### Pole Top Cap detail



pole top caps are standard with drilled poles.

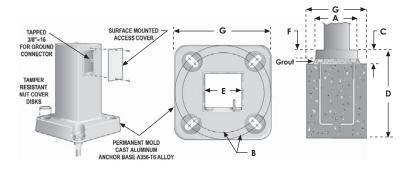
Black plastic

Cast caps with screws are available as an adder.



Square Pole Tenon detail

#### Anchor Base and Bolt detail



A B		С	D	E	F	G	
Square Size	Bolt Circle	Bolt Projection	Bolt Size	Conduit Opening	Base Height	Base Size	
4"	8-1/2"-9-5/8"	3-1/8"±1/8"	3/4"x17"	3-1/2"	2"	9-15/16"	
5"	10-1/2"-11-1/2"	3-1/4"±1/8"	3/4"x17"	4-1/2"	2-1/2"	11-15/16"	
6"	12"-13"	4"±1/8"	1"x36"	5-1/2"	2-3/4"	12-3/4"	
6.75"	14-1/8"-15-1/8"	4-1/4"±1/8"	1"x36"	6-1/4"	3-5/8"	15-1/8"	

Notes

