

SPORTS LIGHTING



UTILITY STRUCTURES INC.

SPORTS LIGHTING

Our Sportlighting spun concrete poles are made to last. The poles have a round symmetrical cross section and are available in above grade heights from 30' to 70'. They are manufactured with a standard mold finish, but etched decor finishes are available upon request. And they will accept a variety of luminaire mounting styles and crossarm mounting configurations.

Benefits of Spun Concrete Sportslighting Poles

- Low cost direct burial design
- Hollow raceway for internal wiring and components
- Prefabricated holes, inserts and couplings
- Custom designed to meet your loading requirements
- Long maintenance free life span
- Unlike wood Resistant to insects, fire, and woodpeckers
- Unlike Steel Resistant to rot, and corrosion
- Variety of sizes and strengths (class)
- Available in above grade heights from 30' to 70'
- Manufactured product with consistent quality and strengths
- · Factory made raceways, handholes, wiring apertures, and bolt holes
- Extremely rigid product with low vibration









APPLICATIONS

Our Spun Concrete Poles offer you choice and flexibility for your next sports lighting project. Every pole is custom made, according to the site specific requirements. A combination of strength, durability, and versatility make our sports lighting concrete poles great team players, for all applications.



Football / Soccer Fields



Tennis Courts



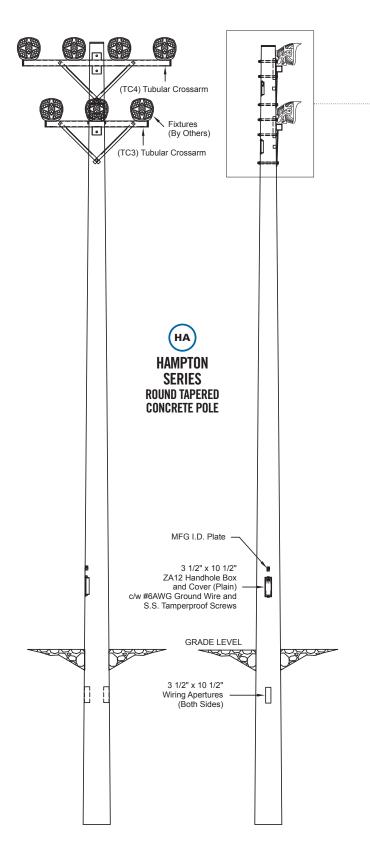
Basketball Courts / Hockey Rinks

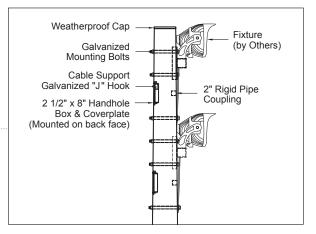


Baseball Diamonds



SPORTSLIGHTING POLES





PHYSICAL DETAILS

- Prestressed Reinforced, Spun Concrete Pole
- Hampton series pole is a typical standard
- Round symmetrical cross section
- Standard taper of 15mm/metre (0.18"/foot)
- Standard Plain Grey Colour, but other colours are available upon request
- · Standard mold finish, but etched decor finishes are available upon request
- Available in heights from: 35 feet to 79 feet overall (30' to 70' above grade)
- Will accept a variety of crossarm mounting configurations

STANDARD FEATURES

- Openings All through holes for arms, fixtures, and accessories are available, refer to the technical information section
- Above grade Handhole 3.5" x 10.5" standard handhole box is cast into pole at 36" above grade. Box and coverplate are both high density ZA12 Zinc Alloy material
- Below Grade Handhole 3.5" x 10.5" cable entry handhole, 18" below grade
- · Pole adapts to fit most fixtures, crossarms and accessories
- 2" x 8" standard handhole box with cover cast into the pole, located near the crossarms
- Electrical ground will be supplied with a #6 stranded copper wire
- Zinc (non-corrosive) inserts in 1/4", 3/8", 1/2", 5/8" or 3/4" are available
- CSA Identification name plate manufacture date, height, class and Job #
- Top wiring will be through a 2" dia. threaded coupling
- Cable Support Galvanized "J" Hook

ACCESSORIES

- Fixture mounts (Crossarms & Bullhorn brackets)
- Pole Steps
- Platforms
- Lighting Protection System
- Base Mounted Pole is generally directly buried, but base plate is optional

FIXTURES

• Supplied by Others

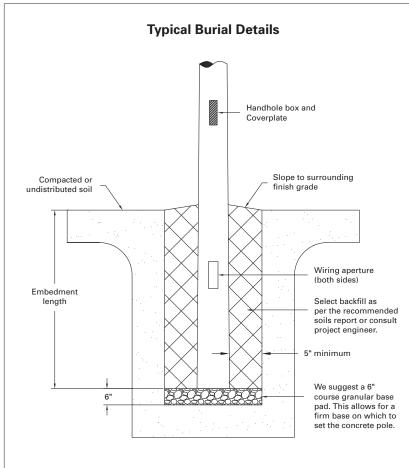


DIRECT EMBEDMENT

Simple and cost effective! The most common method and biggest advantage for installing a concrete pole is by direct embedment. The pole is placed into an augured hole lined with gravel then back filled with native soils, stone dust or cement. Depending on the soil conditions.

Advantages of direct embedment:

- Monetary Eliminates the need for a costly anchor pole base footing.
- Time Savings Faster installation, allowing more poles to be installed.
- Simple No reliance on weather, form work, or pouring schedules.
- Appearance No exposed base plates, or anchors bolts.
- Engineered The pole and footing are continuous, forming a stronger structure.
- Environmental Does not contaminate the soil, unlike direct buried wood poles which contain chemicals treatments.
- Landscaping Weather it be grass, concrete or asphalt, the surrounding ground is finished right up to the pole.
- Maintenance free Can be placed into the ground without the fear of rust or rot.



Embedment Length:

The embedment length is generally 10% of pole plus two feet. Poles in poor or questionable soils or poles with highly imbalanced loads require special design considerations. Consult your project engineer.

Installation Guidelines

Calculating the Depth of the Hole

Poles are typically set into the ground: 10% of the overall height + 2 feet, except in questionable soil conditions.

Example: Overall pole height: 30 feet, the pole should be buried: 3 feet + 2 feet = 5 feet below grade, and 25 feet above grade.

Note: always consult an engineer and review the soils report.

Calculating the Diameter and the Length of the Hole

Auger hole minimum 10 inches larger than the butt diameter of the pole, and an extra 6 inches deeper then the depth requirement.

Example: Overall pole height is: 35 feet and butt diameter is 14 inches, auger the hole Min: 24 inches in diameter and the depth 6 feet.



SPECIFYING A SPORTS LIGHTING POLE

EXAMPLE OF TYPICAL CATALOG NUMBER



35' to 79' (30' to 70' above grade) 1 Select OVERALL LENGTH

2 Select CLASS (STRENGTH)

The Hampton Series concrete pole is available in 12 different strength classifications.

CLASS	MINIMUM ULTIMATE TRANVERSE LOAD					
GLASS	(LBS)	(KN)		L		
В	900	4.0				
С	1200	5.3				
D	1500	6.7		ĺ		
E	1900	8.5				

	CLASS	MINIMUM ULTIMATE		CLASS	
	GLASS	(LBS)			
	F	2400	10.7		K
	G	3000	13.3		L
	Н	3700	16.5		М
	J	4500	20.0		N

	CLASS	MINIMUM ULTIMATE TRANVERSE LOAD					
		(LBS)	(KN)				
	К	5400	24.0				
	L	6400	28.5				
	М	7500	33.4				
	N	8700	38.7				

³ Select SURFACE FINISH

The Hampton Series is available with 3 types of surface finishes.

CODE	DESCRIPTION
1	Mold finish (standard)
N/A	Polished finish
3	Etched finish
4	Exposed finish

4 Select COLOUR

The Hampton Series is available in all 12 colours. Please visit our Colours & Finishes section for complete information. Custom colours are available upon request.

CODE	DESCRIPTION	CODE DESCRIPTION		CODE	DESCRIPTION		
AR	Autumn Red	DR	Desert Rose	0J	Oriental Jade		
AJ	Aztec Jade	DS	Desert Sand	SP	Salt & Pepper		
BE	Black Eclipse	ML	Midnight Lace	SB	Seluki Bronze		
DB	Dark Bronze	NG	Natural Grey	VW	Venetian White		



Plain Grey (PG) mold finish (1) is standard for all our poles.

CODE DESCRIPTION PG Plain Grey (Standard)

5 Select MOUNT

The Sports Lighting pole is available with 3 mounting options.

CODE	DESCRIPTION
10	Side Mount / Through Bolts
30	Steel Tenon / Post Top
90	Custom Mount

6 Select USI CROSSARM and QUANTITY

TUBULAR CROSSARM

The Sports Lighting pole is available with 5 tubular crossarm options.

CODE	DESCRIPTION
TC2	2 Light Crossarm
TC3	3 Light Crossarm
TC4	4 Light Crossarm
TC5	5 Light Crossarm
TC6	6 Light Crossarm

ANGLE IRON CROSSARM

The Sports Lighting pole is available with 5 angle iron crossarm options.

CODE	DESCRIPTION
AC2	2 Light Crossarm
AC3	3 Light Crossarm
AC4	4 Light Crossarm
AC5	5 Light Crossarm
AC6	6 Light Crossarm
-	

BULLHORN BRACKETS

The Sports Lighting pole is available with 5 bullhorn bracket options. CODE DESCRIPTION

BB2	2 Light Bullhorn @ 180°
BB3	3 Light Bullhorn @ 180°
BB3A	3 Light Bullhorn @ 120°
BB4	4 Light Bullhorn @ 180°
BB4A	4 Light Bullhorn @ 90°

7 Select ACCESSORIES

The Sports Lighting pole is available with 4 accessory options.

CODE	DESCRIPTION
PS	Pole Steps
LP	Lighting Platform
LS	Lighting Protective System
В	Base Mounted



30' | **35'** | **40'** Above grade pole heights

I The poles cataloged below represent a sampling only. Other heights and strengths (classes) are available upon request.

0

30' Above grade | **35'** overall length

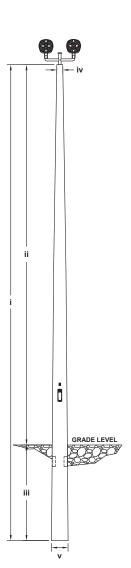
		i	ii	iii	iv	۷		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL DEPTH [ft.]	POLE TIP DIMENSION [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-350	В	35	30	5	4 3/4	11	20	16	13	10	1501
HA-350	С	35	30	5	6 1/2	12 7/8	24	19	14	11	2186
HA-350	D	35	30	5	6 1/2	12 7/8	28	22	17	14	2211
HA-350	E	35	30	5	6 1/2	12 7/8	32	26	21	18	2336

35' Above grade | 41' overall length

			i	ii	iii	iv	V		MAX	EPA		
	POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL Depth [ft.]	POLE TIP DIMENSION [in.]	POLE BUTT DIMENSION [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
	HA-410	В	41	35	6	4 3/4	12 1/8	18	14	12	9	2067
	HA-410	С	41	35	6	6 1/2	13 7/8	27	21	16	13	2905
ĺ	HA-410	D	41	35	6	6 1/2	13 7/8	35	27	22	17	2930
	HA-410	E	41	35	6	6 1/2	13 7/8	46	36	29	23	3005
ĺ	HA-410	F	41	35	6	6 1/2	13 7/8	59	47	38	31	3205

$40^{\prime}_{\text{ above grade}} \mid 46^{\prime}_{\text{ overall length}}$

		i	ii	iii	iv	v		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL DEPTH [ft.]	POLE TIP Dimension [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-460	С	46	40	6	6 1/2	14 3/4	25	19	15	11	3585
HA-460	D	46	40	6	6 1/2	14 3/4	33	26	20	16	3610
HA-460	E	46	40	6	6 1/2	14 3/4	44	34	27	22	3685
HA-460	F	46	40	6	6 1/2	14 3/4	57	45	36	29	3885
HA-460	G	46	40	6	8	16 1/4	72	57	46	37	4766



NOTE: The poles outlined represent a sampling only. Other heights and strengths (classes) are available upon request.

NOTE: The Hampton (HA) series in a Plain Grey (PG), mold finish (1) is standard for all sportslighting poles. Different colours and finishes are available upon request.

SPORTS LIGHTING POLE CODE – Standard Format





45' | 50' | 55' ABOVE GRADE POLE HEIGHTS

I The poles cataloged below represent a sampling only. Other heights and strengths (classes) are available upon request.

45' ABOVE GRADE | 52' OVERALL LENGTH

		i	ii	iii	iv	v		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL Depth [ft.]	POLE TIP Dimension [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-520	D	52	45	7	6 1/2	15 7/8	32	24	19	15	4553
HA-520	E	52	45	7	6 1/2	15 7/8	42	33	26	20	4653
HA-520	F	52	45	7	6 1/2	15 7/8	55	43	35	28	4853
HA-520	G	52	45	7	8	17 3/8	70	55	44	35	5670
HA-520	Н	52	45	7	8	17 3/8	88	69	56	46	5770
HA-520	J	52	45	7	8	17 3/8	109	86	70	57	5820

50' Above grade | **57'** Overall length

		i	ii	iii	iv	V		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL DEPTH [ft.]	POLE TIP Dimension [in.]	POLE BUTT DIMENSION [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-570	D	57	50	7	6 1/2	16 3/4	30	23	17	13	5450
HA-570	E	57	50	7	6 1/2	16 3/4	40	31	24	19	5550
HA-570	F	57	50	7	8	18 1/4	53	41	33	26	7087
HA-570	G	57	50	7	8	18 1/4	67	52	42	33	7137
HA-570	Н	57	50	7	8	18 1/4	85	67	54	43	7237
HA-570	J	57	50	7	8	18 1/4	106	84	67	55	7437

55' ABOVE GRADE | 63' OVERALL LENGTH

		i	ii	iii	iv	V		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL Depth [ft.]	POLE TIP DIMENSION [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-630	D	63	55	8	6 1/2	17 7/8	28	21	16	12	6733
HA-630	E	63	55	8	6 1/2	17 7/8	39	29	23	18	6833
HA-630	F	63	55	8	6 1/2	17 7/8	51	40	31	25	7033
HA-630	G	63	55	8	8	19 3/8	65	50	40	31	8269
HA-630	Н	63	55	8	8	19 3/8	82	65	51	41	8319
HA-630	J	63	55	8	8	19 3/8	103	81	65	53	8419

NOTE: The poles outlined represent a sampling only. Other heights and strengths (classes) are available upon request. NOTE: The Hampton (HA) series in a Plain Grey (PG), mold finish (1) is standard for all sportslighting poles. Different colours and finishes are available upon request.

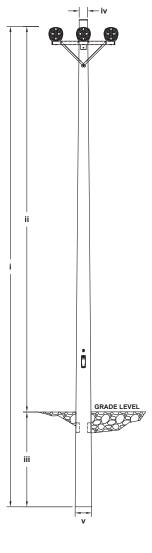
SPORTS LIGHTING POLE CODE - Standard Format





61 BONGARD AVENUE, OTTAWA, ONTARIO CANADA K2E 6V2 TEL: [613] 225-6398 • FAX: [613] 225-1681 • TOLL FREE: 1-800-267-6466 www.utilitystructures.com





60' | 65' | 70' Above grade pole heights

I The poles cataloged below represent a sampling only. Other heights and strengths (classes) are available upon request.

60' ABOVE GRADE | 68' OVERALL LENGTH

		i	ii	iii	iv	v		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL DEPTH [ft.]	POLE TIP Dimension [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-680	D	68	60	8	6 1/2	18 3/4	27	20	14	10	7884
HA-680	E	68	60	8	6 1/2	18 3/4	37	28	21	16	7984
HA-680	F	68	60	8	6 1/2	18 3/4	49	38	29	23	8184
HA-680	G	68	60	8	8	20 1/4	62	48	38	30	9613
HA-680	Н	68	60	8	8	20 1/4	80	62	49	39	9663
HA-680	J	68	60	8	8	20 1/4	100	78	63	51	9763
HA-680	К	68	60	8	9 1/2	20 1/8*	121	95	76	62	10487

65' ABOVE GRADE | 74' OVERALL LENGTH

_			i	ii	iii	iv	v		MAX	EPA		
	POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL Depth [ft.]	POLE TIP Dimension [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
	HA-740	G	74	65	9	8	19 9/16*	60	46	36	28	9863
ſ	HA-740	Н	74	65	9	8	19 9/16*	77	60	47	37	9913
	HA-740	J	74	65	9	8	19 9/16*	97	76	60	48	10013
ſ	HA-740	К	74	65	9	9 1/2	23 1/2*	117	92	74	59	15997
	HA-740	L	74	65	9	12	23 1/2*	140	109	86	69	16047
ſ	HA-740	М	74	65	9	12	23 1/2*	167	131	105	85	16097

$\textbf{70'}_{\text{above grade}} \mid \textbf{79'}_{\text{overall length}}$

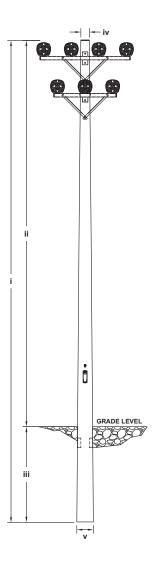
		i	ii	iii	iv	v		MAX	EPA		
POLE Catalogue Number	CLASS	OVERALL Length [ft.]	POLE HEIGHT Above grade [ft.]	DIRECT BURIAL DEPTH [ft.]	POLE TIP Dimension [in.]	POLE BUTT Dimension [in.]	90 MPH [sq. ft.]	100 MPH [sq. ft.]	110 MPH [sq. ft.]	120 MPH [sq. ft.]	NOMINAL Pole Weight [Ibs.]
HA-790	G	79	70	9	8	20 5/16*	58	44	34	26	11233
HA-790	Н	79	70	9	8	20 5/16*	75	58	45	35	11283
HA-790	J	79	70	9	8	20 5/16*	94	73	58	46	11383
HA-790	K	79	70	9	12	24 3/8*	111	85	66	52	17945
HA-790	L	79	70	9	12	24 3/8*	136	106	83	66	17995
HA-790	М	79	70	9	12	24 3/8*	163	128	101	82	18045

NOTE: The poles outlined represent a sampling only. Other heights and strengths (classes) are available upon request. NOTE: The Hampton (HA) series in a Plain Grey (PG), mold finish (1) is standard for all sportslighting poles. Different colours and finishes are available upon request. NOTE: Pole Butt Dimensions indicated with (*) have a taper of 13mm/m. Standard taper on all other poles is 15mm/m.

SPORTS LIGHTING POLE CODE – Standard Format



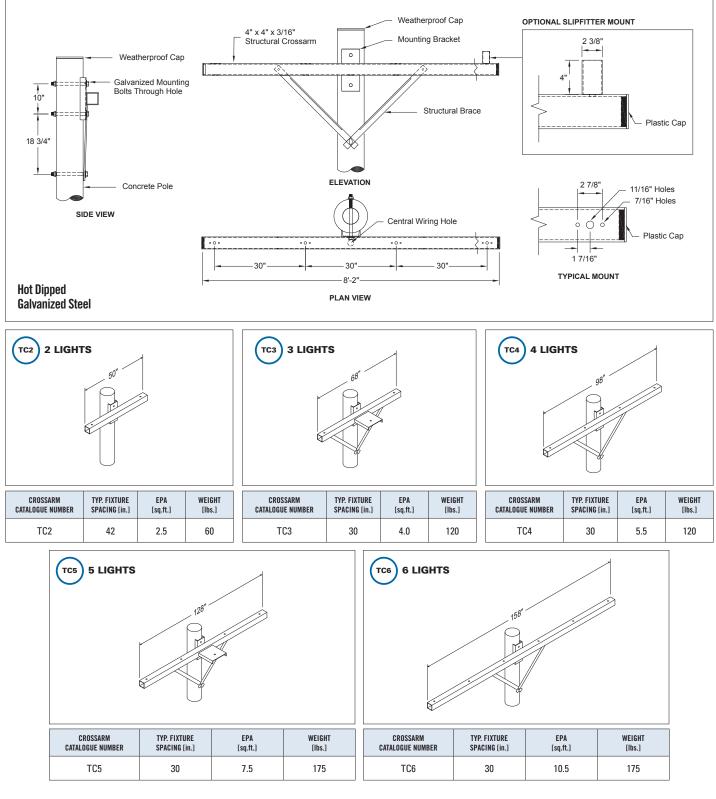






TUBULAR CROSSARMS | Heavy Duty

Output to the select Mounting Option 10 (Side Mount) when choosing Tubular Crossarms.



Select code

тС#

10

NOTE: Fixture spacing above reflects our standard. Custom spacing available upon request.



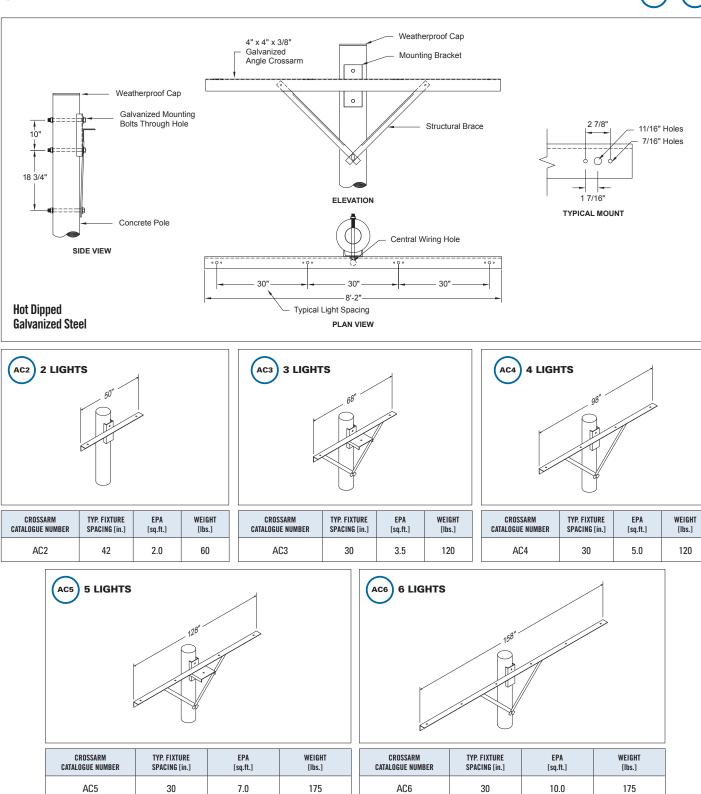
ANGLE IRON CROSSARMS | Medium Duty

Select code

AC#

10

4 You must select Mounting Option 10 (Side Mount) when choosing Angle Iron crossarms.



NOTE: Fixture spacing above reflects our standard. Custom spacing available upon request.

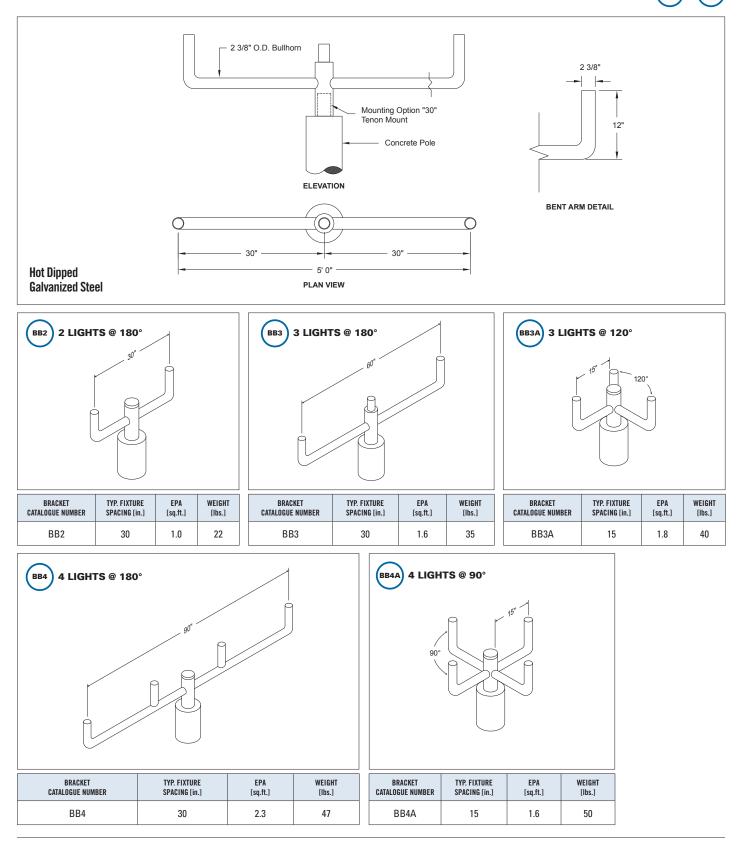


BULLHORN BRACKETS | Light Duty

Output the select Mounting Option 30 (Steel Tenon) when choosing Bullhorn Brackets.

Select code (30)-

BB#





SPORTSLIGHTING POLE ACCESSORIES

Fixtures (By Others) 8.8 . (TC4) Tubular Crossarm Ø (TC3) Tubular Crossarm 15" 15" MFG I.D Plate Ô 3 1/2" x 10 1/2" ZA12 Handhole Box and Cover c/w #6AWG Ground Wire and S.S Tamperproof Screws Grade Level 5/8" x 8" Long Galvanized Steel Machine Bolt c/w Nut (180° to each other) S. 3 1/2" x 10 1/2" Wiring Apertures (Both sides)

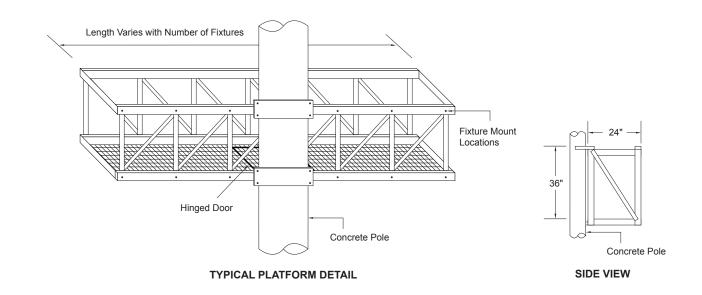
Pole length vs. number of steps

OVERALL POLE LENGTH [ft.]	TOTAL NUMBER OF STEPS
41	16
46	20
52	24
57	28
63	32
68	36
74	40
79	44

NOTE: This number of pole steps is approximate only, as the quantity will vary slightly depending on the configuration of the crossarm mount and burial depth of pole. This should be used as a guideline only.

PLATFORMS

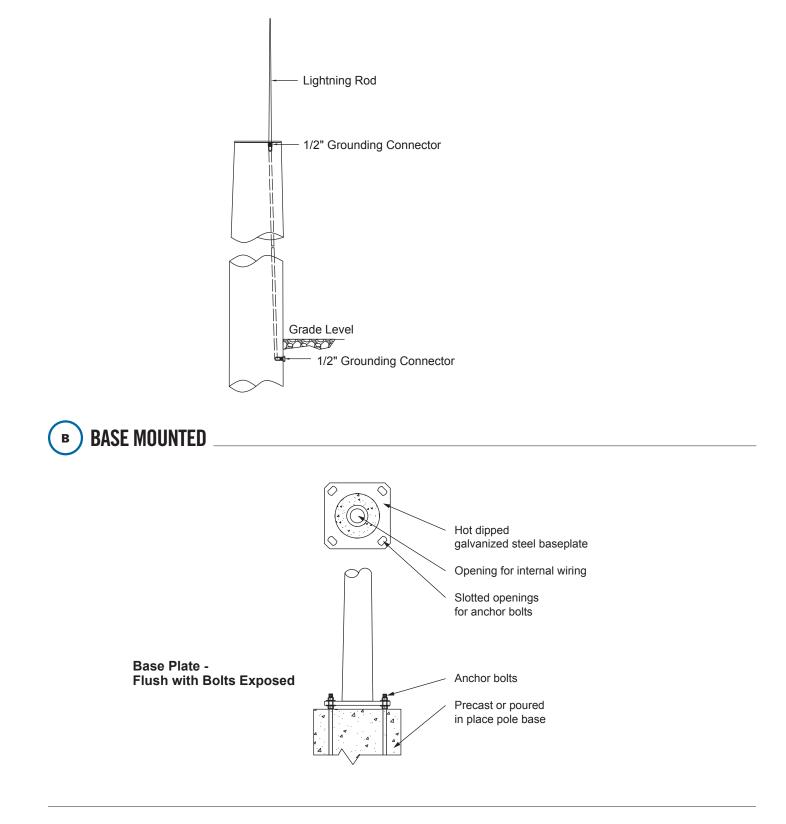
PS POLE STEPS





SPORTSLIGHTING POLE ACCESSORIES

LIGHTING PROTECTIVE SYSTEM







SPORTSLIGHTING CONCRETE POLES



UTILITY STRUCTURES INC.