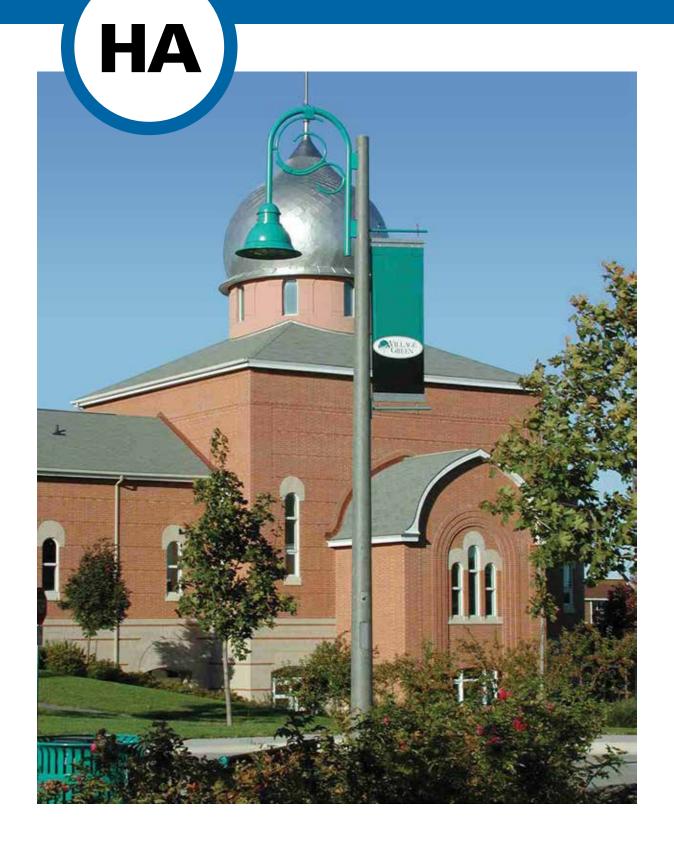


UTILITY STRUCTURES INC.

CONCRETE POLES



OF CONCRETE POLES



PHYSICAL DETAILS

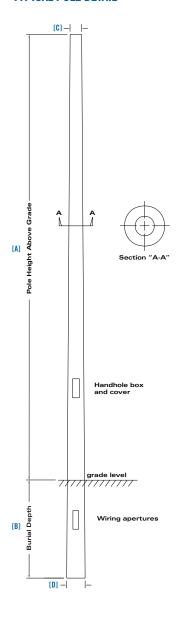
- Round tapered symmetrical cross section.
- Standard taper of 15mm/metre (0.18"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 10 feet to 70 feet above grade.
- Will accept a variety of luminaire mounting styles.

HAMPTON SPECIFYING CHART

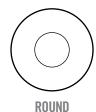
CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	(D) POLE Butt diameter (in.)	ULTIMATE GROUND Line Moment [ft.lbs.]	NOMINAL Pole Weight [Ibs.]
	HA-150-AL	11	4	4 3/4	7 7/16	5400	450
	HA-175-AL	13 1/2	4	4 3/4	7 7/8	6900	575
AL	HA-200-AL	15	5	4 3/4	8 3/8	7800	700
	HA-225-AL	17 1/2	5	4 3/4	8 13/16	9300	820
	HA-250-AL	20	5	4 3/4	9 1/4	10800	940
	HA-150-A	11	4	4 3/4	7 7/16	5400	450
	HA-175-A	13 1/2	4	4 3/4	7 7/8	6900	575
	HA-200-A	15	5	4 3/4	8 3/8	7800	700
	HA-225-A	17 1/2	5	4 3/4	8 13/16	9300	820
A	HA-250-A	20	5	4 3/4	9 1/4	10800	940
	HA-275-A	22 1/2	5	4 3/4	9 11/16	12300	1095
	HA-300-A	25	5	4 3/4	10 1/8	13800	1250
	HA-325-A	27 1/2	5	4 3/4	10 5/8	15300	1410
	HA-350-A	30	5	4 3/4	11 1/16	16800	1575
		1					
	HA-250-B	20	5	4 3/4	9 1/4	16200	940
	HA-275-B	22 1/2	5	4 3/4	9 11/16	18450	1095
	HA-300-B	25	5	4 3/4	10 1/8	20700	1250
	HA-325-B	27 1/2	5	4 3/4	10 5/8	22950	1410
В	HA-350-B	30	5	4 3/4	11 1/16	25200	1575
	HA-375-B	32 1/2	5	4 3/4	11 1/2	27450	1770
	HA-400-B	34	6	4 3/4	11 15/16	28800	1965
	HA-425-B	36 1/2	6	4 3/4	12 3/8	31050	2130
	HA-450-B	39	6	4 3/4	12 7/8	33300	2300
	HA-300-C	25	5	6	11 3/8	27600	1650
	HA-325-C	27 1/2	5	6	11 7/8	30600	1875
C	HA-350-C	30	5	6	12 5/16	33600	2100
	HA-375-C	32 1/2	5	6	12 3/4	36600	2325
	HA-400-C	34	6	6	13 3/16	38400	2550
	HA 400 D	24	c	c	12 2/16	40000	2550
	HA-400-D	34	6	6	13 3/16	48000	2550
	HA-425-D	36 1/2	6	6	13 5/8	51750	2775
D	HA-450-D	39	6	6	14 1/8	55500	3000
	HA-475-D	41	6 1/2	6	14 9/16	58500	3225
	HA-500-D	43	7	6	15	61500	3450

NOTES: The above chart outlines standard typical heights and classes. Other sizes are available upon request. The Hampton series is available from 10 to 85 feet overall, in 6" increments. It's also available from class "AL" to class "O". Pole height above grade based on recommended burial depth for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength.

TYPICAL POLE DETAIL



CROSS SECTION





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			

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	OJ	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 Grev (Standard)

EXAMPLE OF TYPICAL CATALOG NUMBER



300

OVERALL HEIGHT

CLASS

FINISH

PG COLOUR

10 MOUNT

OPTION

OPTION



POLE STYLE

Select options as required.

OPTION

OPTION

Select FIXTURE MOUNT

The Hampton Series is available with 9 fixture mount options.

CODE	DESCRIPTION			
10	Side Mounted/Through Bolts			
20	Side Mounted/Inserts			
30	Steel Tenon/Post Top			
40	Concrete Tenon/Post Top			
50	Top Mount Round			
60	Scroll Arm			
70	Clamp On			
80	Camera Mount			
90	Custom Mount			

Select OPTIONS & ACCESSORIES

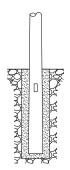
The Hampton Series has 18 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	Н	Flag Holder
A1	Aluminum Banner Arm with Scroll	L	Ladder Rest
A2	Aluminum Banner Arm with Flower Pot Holder		Ladder Rest with Scroll
А3	Aluminum Banner Arm with Scroll and Flower Pot Holder		Interior Corrosion Protection
A4	Aluminum Breakaway Banner Arm	R	GFI Receptacle
В	Base Plate - Flush with Bolts Exposed	S	Base Shroud - Square
С	Custom Accessory	S1	Base Shroud - Round
D	Double Handhole Box	W	Wire Entry
D2	Double Handhole Box with Inline Breaker	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

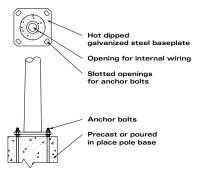
Standard and Cost Effective



- 1. Auger the appropriate
- 2. Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may

OPTION (B) Base Plate - Flush with Bolts Exposed











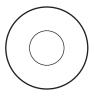
OF CONCRETE POLES



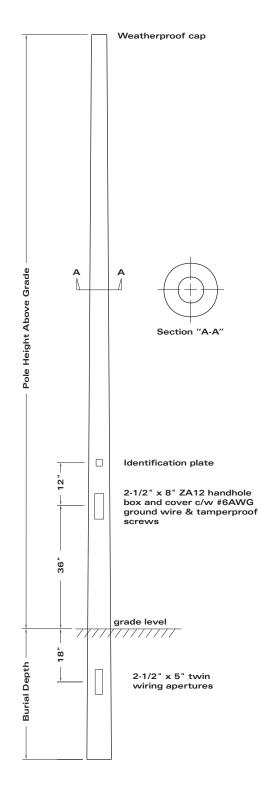


TYPICAL POLE DETAIL

CROSS SECTION



ROUND



PLEASE FILL IN CODE



OVERALL HEIGHT



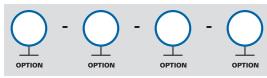






FIXTURE MOUNT

Select options as required







CONCRETE POLES



PHYSICAL DETAILS

- Round tapered symmetrical cross section with flared base.
- Standard taper of 13mm/metre (0.155"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 14 feet to 23 feet above grade.
- Will accept a variety of luminaire mounting styles.

ROCKCLIFFE SPECIFYING CHART

CLASS OF Pole	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE Butt diameter (in.)	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [ibs.]
	R0-190-A	14	5	5 3/8	10	7200	1200
	R0-200-A	15	5	5 1/4	10	7800	1270
	R0-210-A	16	5	5 3/16	10	8400	1335
	R0-220-A	17	5	4 15/16	10	9000	1395
Α	R0-230-A	18	5	4 3/4	10	9600	1450
A	R0-240-A	19	5	4 5/8	10	10200	1500
	R0-250-A	20	5	4 1/2	10	10800	1545
	R0-260-A	21	5	4 5/16	10	11400	1585
	R0-270-A	22	5	4 1/8	10	12000	1620
	R0-280-A	23	5	4	10	12600	1650

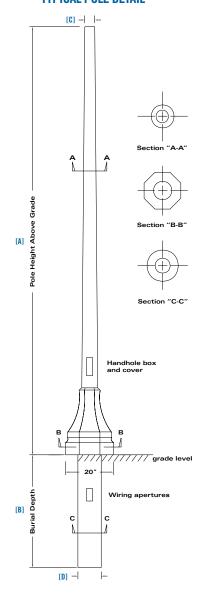
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5'0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength.



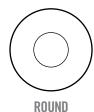


The Rockcliffe Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





The Rockcliffe Series

Select SURFACE FINISH

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

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

Select COLOUR

The Rockcliffe 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







CLASS

FINISH



30 MOUNT

OPTION

OPTION





POLE STYLE

OVERALL HEIGHT

Select options as required.

OPTION

OPTION

Select FIXTURE MOUNT

The Rockcliffe Series is available with 8 fixture mount options.

CODE	DESCRIPTION			
10	Side Mounted/Through Bolts			
20	Side Mounted/Inserts			
30	Steel Tenon/Post Top			
40	Concrete Tenon/Post Top			
50	Top Mount Round			
60	Scroll Arm			
70	Clamp On			
90	Custom Mount			

Select OPTIONS & ACCESSORIES

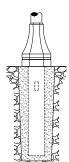
The Rockcliffe Series has 19 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L1	Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm	Р	Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed	R	GFI Receptacle
B1	Base Plate - Hidden Bolt Pockets	S	Base Shroud - Square
B2	Base Plate - Below Grade Stub	S1	Base Shroud - Round
С	Custom Accessory	Х	Exterior Silane Sealer
D	Double Handhole Box		

FOOTING DETAILS

DIRECT BURIAL

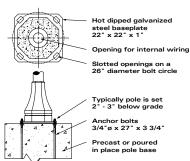
Standard and Cost Effective



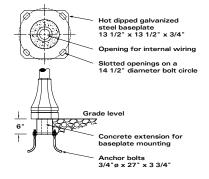
- Auger the appropriate size hole.
- 2. Set pole in hole and plumb straight.
- Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may

OPTION (B) Base Plate - Flush with Bolts Exposed



OPTION (B2) Base Plate - Below Grade Stub











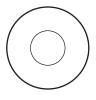
CONCRETE POLES



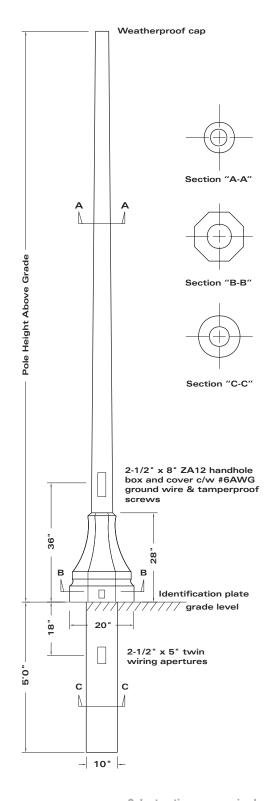


TYPICAL POLE DETAIL

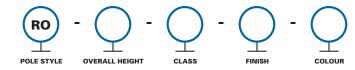
CROSS SECTION



ROUND



PLEASE FILL IN CODE

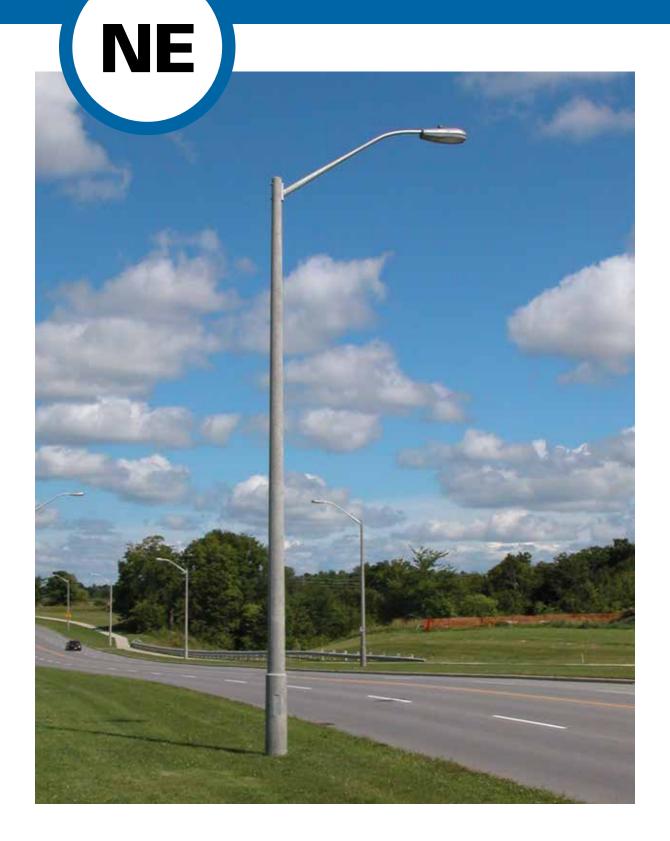


Select options as required

FIXTURE MOUNT







OF CONCRETE POLES



PHYSICAL DETAILS

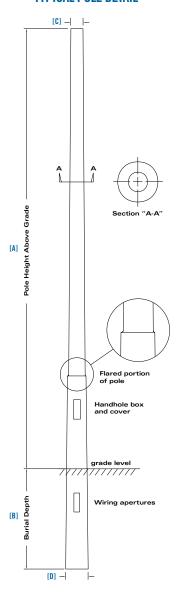
- Round tapered symmetrical cross section.
- Flared lower portion 2" larger in diameter (than upper section), for additional concrete cover of reinforcing steel.
- Standard taper of 15mm/metre (0.18"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 15 feet to 43 feet above grade.
- Will accept a variety of luminaire mounting styles.

NEWPORT SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE Butt diameter [in.]	ULTIMATE GROUND Line Moment [ft.lbs.]	NOMINAL Pole Weight [Ibs.]
	NE-200-A	15	5	6 1/2	12	4800	1100
	NE-225-A	17 1/2	5	6	12	6300	1160
	NE-250-A	20	5	5 1/2	12	7800	1260
A	NE-275-A	22 1/2	5	5	12	9300	1300
	NE-300-A	25	5	6 1/2	13 1/2	10800	1840
	NE-325-A	27 1/2	5	6	13 1/2	12300	2000
	NE-350-A	30	5	5 1/2	13 1/2	13800	2060
				Γ	Г		Γ
	NE-250-B	20	5	5 1/2	12	16200	1260
	NE-275-B	22 1/2	5	5	12	18450	1300
	NE-300-B	25	5	6 1/2	13 1/2	20700	1840
	NE-325-B	27 1/2	5	6	13 1/2	22950	2000
В	NE-350-B	30	5	5 1/2	13 1/2	25200	2060
	NE-375-B	32 1/2	5	5	13 1/2	27450	2300
	NE-400-B	34	6	6 1/4	15 1/2	28800	2690
	NE-425-B	36 1/2	6	5 3/4	15 1/2	31050	2760
	NE-450-B	39	6	5 1/4	15 1/2	33300	2840
	T			1			Ī
	NE-300-C	25	5	6 1/2	13 1/2	27600	1840
	NE-325-C	27 1/2	5	6	13 1/2	30600	2000
	NE-350-C	30	5	7 1/4	15 1/2	33600	2540
	NE-375-C	32 1/2	5	6 3/4	15 1/2	36600	2620
C	NE-400-C	34	6	6 1/4	15 1/2	38400	2690
	NE-425-C	36 1/2	6	5 3/4	15 1/2	41400	2760
	NE-450-C	39	6	7 1/2	17 1/4	44400	3800
	NE-475-C	41 1/2	6	7	17 1/4	46800	3950
	NE-500-C	43	7	6 1/2	17 1/4	49200	4100
	NE-400-D	34	6	6 1/4	15 1/2	48000	2690
	NE-425-D	36 1/2	6	8	17 1/4	51750	3760
D	NE-450-D	39	6	7 1/2	17 1/4	55500	3800
	NE-475-D	41 1/2	6	7	17 1/4	58500	3900
	NE-500-D	43	7	8 1/4	19 1/16	61500	4600

NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on recommended burial depth for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength.

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

The Newport 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				

Select COLOUR

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

COD	DESCRIPTION	CODE	CODE DESCRIPTION		DESCRIPTION
AR	Autumn Red	DR	Desert Rose	OJ	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)

EXAMPLE OF TYPICAL CATALOG NUMBER



POLE STYLE

Newport





(x10) 35'0'









OPTION

Select options as required.







Select FIXTURE MOUNT

The Newport Series is available with 9 fixture mount options.

CODE	DESCRIPTION			
10	Side Mounted/Through Bolts			
20	Side Mounted/Inserts			
30	Steel Tenon/Post Top			
40	Concrete Tenon/Post Top			
50	Top Mount Round			
60	Scroll Arm			
70	Clamp On			
80	Camera Mount			
90	Custom Mount			

Select OPTIONS & ACCESSORIES

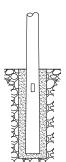
The Newport Series has 18 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm		Flag Holder
A1	Aluminum Banner Arm with Scroll	L	Ladder Rest
A2	Aluminum Banner Arm with Flower Pot Holder	L1	Ladder Rest with Scroll
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder		Interior Corrosion Protection
A4	Aluminum Breakaway Banner Arm		GFI Receptacle
В	Base Plate - Flush with Bolts Exposed	S	Base Shroud - Square
С	Custom Accessory	S1	Base Shroud - Round
D	Double Handhole Box	W	Wire Entry
D2	Double Handhole Box with Inline Breaker	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

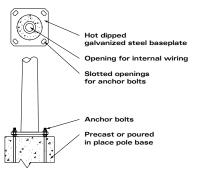
Standard and Cost Effective



- 1. Auger the appropriate
- 2. Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may

OPTION (B) Base Plate - Flush with Bolts Exposed











OF CONCRETE POLES



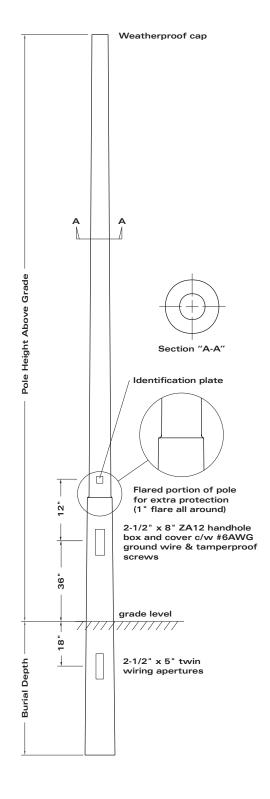


TYPICAL POLE DETAIL

CROSS SECTION



ROUND



PLEASE FILL IN CODE







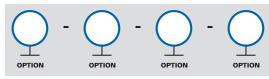




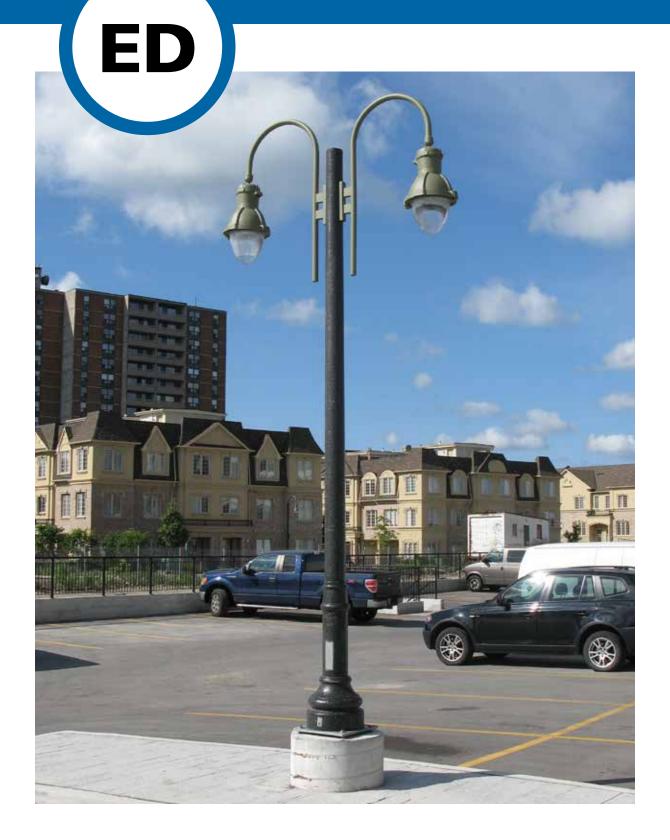


FIXTURE MOUNT

Select options as required







CONCRETE POLES



PHYSICAL DETAILS

- Round tapered symmetrical cross section with a decorative base.
- Standard taper of 10.4mm/metre (0.125"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 10 feet to 22 feet above grade.
- Will accept a variety of luminaire mounting styles.

EDINBURGH SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE Butt diameter [in.]	ULTIMATE GROUND Line Moment [ft.lbs.]	NOMINAL Pole Weight [Ibs.]
	ED-150-A	10	5	6 1/4	10	4800	830
	ED-160-A	11	5	6 1/8	10	5400	880
	ED-170-A	12	5	6 1/16	10	6000	930
	ED-180-A	13	5	5 1/16	10	6600	995
	ED-190-A	14	5	5 13/16	10	7200	1050
	ED-200-A	15	5	5 3/4	10	7800	1100
A	ED-210-A	16	5	5 5/8	10	8400	1150
	ED-220-A	17	5	5 1/2	10	9000	1200
	ED-230-A	18	5	5 7/16	10	9600	1250
	ED-240-A	19	5	5 5/16	10	10200	1300
	ED-250-A	20	5	5 3/16	10	10800	1350
	ED-260-A	21	5	5 1/8	10	11400	1400
	ED-270-A	22	5	5	10	12000	1450

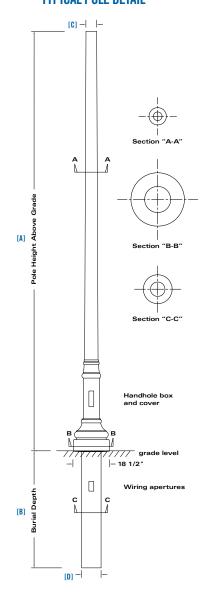
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5' 0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse



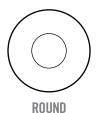


The Edinburgh Series The Edinburgh Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

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

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

Select COLOUR

The Edinburgh 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	ODE DESCRIPTION		DESCRIPTION
AR	Autumn Red	DR	Desert Rose	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER













OPTION

OPTION







POLE STYLE

OVERALL HEIGHT

Select options as required.

OPTION

OPTION

Select FIXTURE MOUNT

The Edinburgh Series is available with 8 fixture mount options.

CODE	DESCRIPTION			
10	Side Mounted/Through Bolts			
20	Side Mounted/Inserts			
30	Steel Tenon/Post Top			
40	Concrete Tenon/Post Top			
50	Top Mount Round			
60	Scroll Arm			
70	Clamp On			
90	Custom Mount			

Select OPTIONS & ACCESSORIES

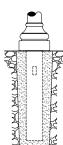
The Edinburgh Series has 19 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder		Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm		Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed		GFI Receptacle
B1	Base Plate - Hidden Bolt Pockets	S	Base Shroud - Square
B2	Base Plate - Below Grade Stub	S1	Base Shroud - Round
С	Custom Accessory	Х	Exterior Silane Sealer
D	Double Handhole Box		

FOOTING DETAILS

DIRECT BURIAL

Standard and Cost Effective



- 1. Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- Backfill with specified material, tamping every 6".

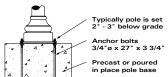
Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may be required.

OPTION (B) Base Plate - Flush with Bolts Exposed



Hot dipped galvanized steel baseplate 23" x 23" x 3/4"

Opening for internal wiring Slotted openings on a 23" diameter bolt circle



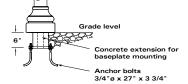
OPTION (B2) Base Plate - Below Grade Stub



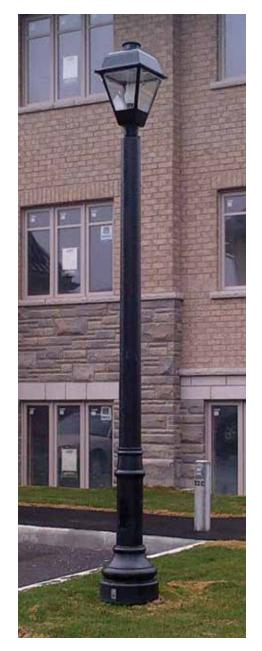
Hot dipped galvanized steel baseplate 13 1/2" x 13 1/2" x 3/4"

ening for internal wiring

Slotted openings on a 14 1/2" diameter bolt circle











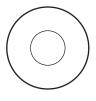
CONCRETE POLES



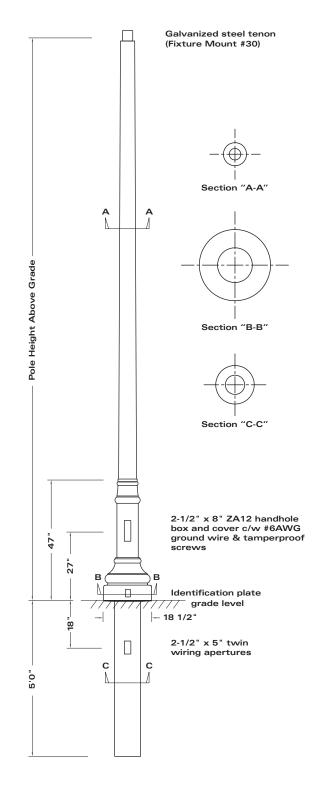


TYPICAL POLE DETAIL

CROSS SECTION



ROUND



PLEASE FILL IN CODE



OVERALL HEIGHT

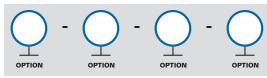




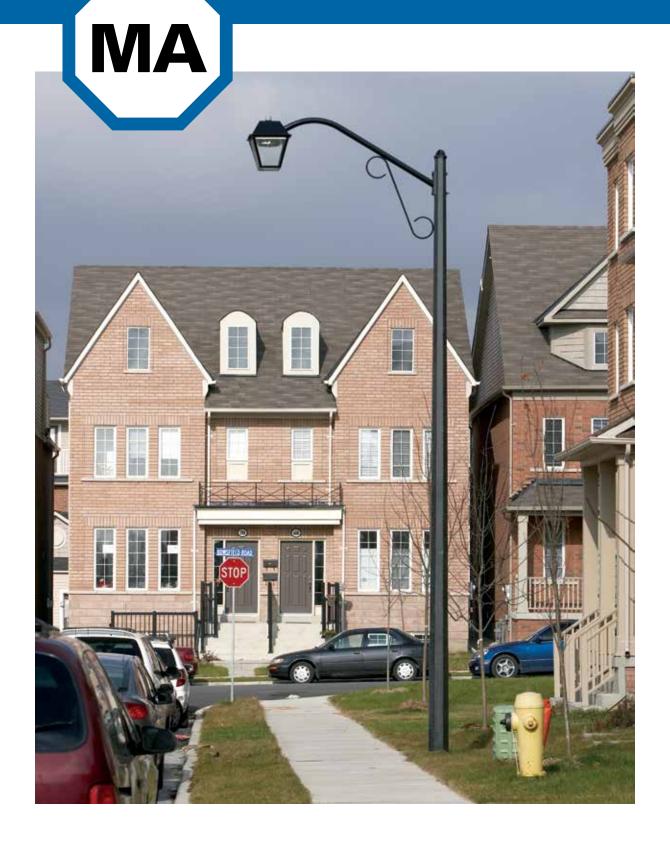




Select options as required







CONCRETE POLES



PHYSICAL DETAILS

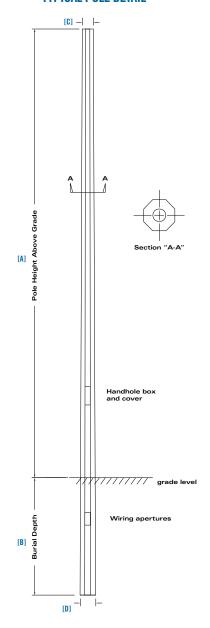
- Octagonal tapered symmetrical cross section.
- Standard taper of 15mm/metre (0.18"/foot).
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 10 feet to 50 feet above grade.
- Will accept a variety of luminaire mounting styles.

MADISON SPECIFYING CHART

CLASS OF Pole	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE Butt diameter (in.)	ULTIMATE GROUND Line Moment [ft.lbs.]	NOMINAL Pole Weight [lbs.]
	MA-150-AL	11	4	4 3/4	7 7/16	5400	475
	MA-175-AL	13 1/2	4	4 3/4	7 7/8	6900	600
AL	MA-200-AL	15	5	4 3/4	8 3/8	7800	735
	MA-225-AL	17 1/2	5	4 3/4	8 13/16	9300	860
	MA-250-AL	20	5	4 3/4	9 1/4	10800	990
			•	T			•
	MA-150-A	11	4	4 3/4	7 7/16	5400	490
	MA-175-A	13 1/2	4	4 3/4	7 7/8	6900	615
	MA-200-A	15	5	4 3/4	8 3/8	7800	750
	MA-225-A	17 1/2	5	4 3/4	8 13/16	9300	875
A	MA-250-A	20	5	4 3/4	9 1/4	10800	1005
	MA-275-A	22 1/2	5	4 3/4	9 7/8	12300	1165
	MA-300-A	25	5	4 3/4	10 1/8	13800	1325
	MA-325-A	27 1/2	5	4 3/4	10 5/8	15300	1495
	MA-350-A	30	5	4 3/4	11 1/16	16800	1680
		1					
	MA-250-B	20	5	5	9 1/2	16200	1040
	MA-275-B	22 1/2	5	5	10	18450	1210
	MA-300-B	25	5	5	10 3/8	20700	1375
	MA-325-B	27 1/2	5	5	10 7/8	22950	1554
В	MA-350-B	30	5	5	11 3/8	25200	1740
	MA-375-B	32 1/2	5	5	11 3/4	27450	1950
	MA-400-B	34	6	5	12 1/4	28800	2165
	MA-425-B	36 1/2	6	5	12 5/8	31050	2370
	MA-450-B	39	6	5	13 1/8	33300	2577
			T	T .	T		
	MA-300-C	25	5	6	11 3/8	27600	1730
	MA-325-C	27 1/2	5	6	11 7/8	30600	1970
C	MA-350-C	30	5	6	12 5/16	33600	2205
	MA-375-C	32 1/2	5	6	12 3/4	36600	2440
	MA-400-C	34	6	6	13 3/16	38400	2675
	NAA 400 D				10.0/10	40000	0075
	MA-400-D	34	6	6	13 3/16	48000	2675
	MA-425-D	36 1/2	6	6	13 5/8	51750	2915
D	MA-450-D	39	6	6	14 1/8	55500	3150
	MA-475-D	40 1/2	7	6	14 1/2	57750	3385
	MA-500-D	43	7	6	15	61500	3620

NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. The Madison series is available from 10 to 60 feet overall, in 6" increments. It's also available from class "AL" to class "E". Pole height above grade based on recommended burial depth for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip and butt dimensions are measured from flat to flat.

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

The Madison Series is available with 4 types of surface finishes.

CODE	DESCRIPTION			
1	Mold finish			
2	Polished finish			
3	Etched finish			
4	Exposed finish			

Select COLOUR

The Madison 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER













COLOUR



OPTION Fin Cap -Octagona

Select options as required.







Select FIXTURE MOUNT

The Madison Series is available with 7 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
55	Top Mount Octagonal
60	Scroll Arm
80	Camera Mount
90	Custom Mount

Select OPTIONS & ACCESSORIES

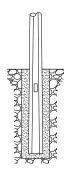
The Madison Series has 18 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	F	Fin Cap - Octagonal
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L1	Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm	Р	Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed	R	GFI Receptacle
С	Custom Accessory	S	Base Shroud - Square
D	Double Handhole Box	S1	Base Shroud - Round
D2	Double Handhole Box with Inline Breaker	Х	Exterior Silane Sealer

FOOTING DETAILS

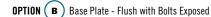
DIRECT BURIAL

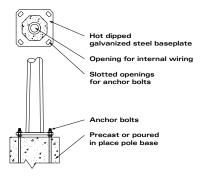
Standard and Cost Effective



- 1. Auger the appropriate
- 2. Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may













CONCRETE POLES



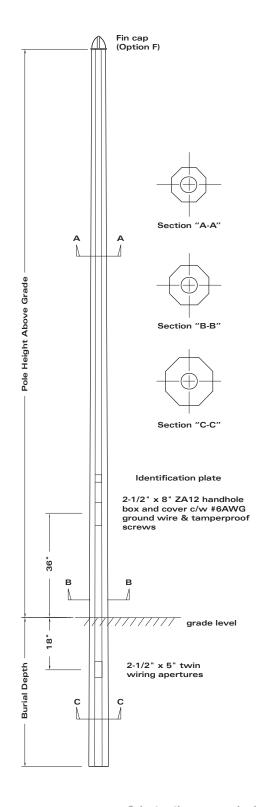


TYPICAL POLE DETAIL

CROSS SECTION



OCTAGONAL



PLEASE FILL IN CODE





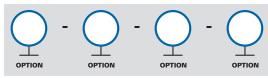




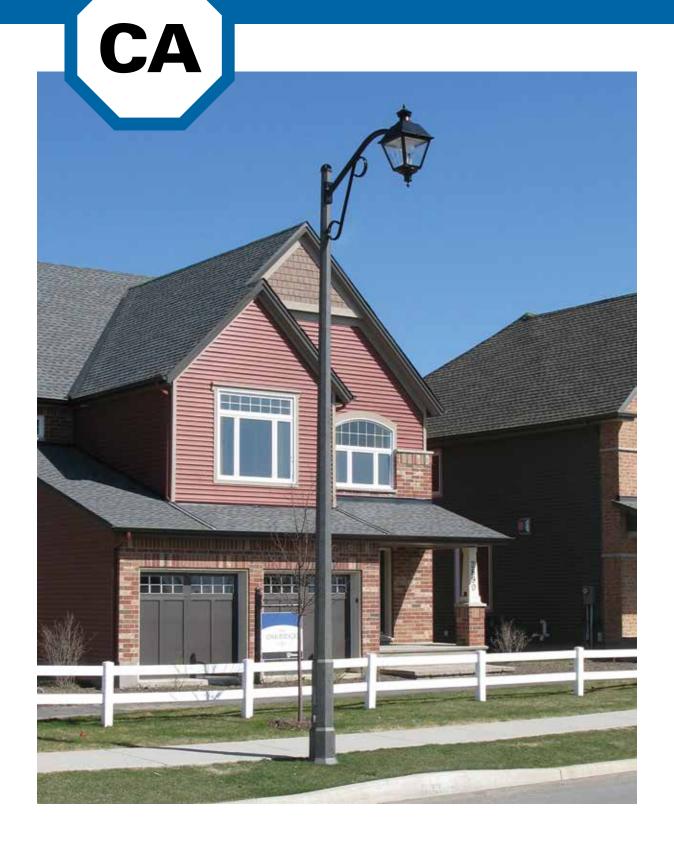




Select options as required







CONCRETE POLES



PHYSICAL DETAILS

- Three tiered octagonal symmetrical cross section.
- Standard taper of 15mm/metre (0.18"/foot).
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 17 feet to 27 feet above grade.
- Will accept a variety of luminaire mounting styles.

CAMBRIDGE SPECIFYING CHART

CLASS OF Pole	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE BUTT DIAMETER [in.]	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [ibs.]
	CA-220-A	17	5	6	10	9000	1100
	CA-230-A	18	5	5 13/16	10	9600	1145
	CA-240-A	19	5	5 5/8	10	10200	1195
	CA-250-A	20	5	5 7/16	10	10800	1250
	CA-260-A	21	5	5 1/4	10	11400	1310
A	CA-270-A	22	5	5 1/16	10	12000	1375
	CA-280-A	23	5	4 7/8	10	12600	1445
	CA-290-A	24	5	4 11/16	10	13200	1520
	CA-300-A	25	5	4 1/2	10	13800	1600
	CA-310-A	26	5	4 5/16	10	14400	1650
	CA-320-A	27	5	4 1/8	10	15000	1685

NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5' 0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip dimensions are measured from flat to flat.

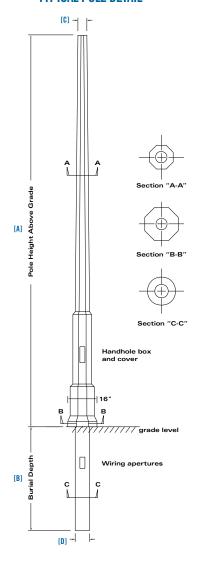






The Cambridge Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

The Cambridge Series is available with 4 types of surface finishes.

CODE	DESCRIPTION	
1	Mold finish	
2	Polished finish	
3	Etched finish	
4	Exposed finish	

Select COLOUR

The Cambridge 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



CLASS



COLOUR



OPTION

Select options as required.

OPTION

OPTION



Select FIXTURE MOUNT

The Cambridge Series is available with 6 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
55	Top Mount Octagonal
60	Scroll Arm
90	Custom Mount

Select OPTIONS & ACCESSORIES

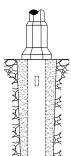
The Cambridge Series has 20 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	F	Fin Cap - Octagonal
A2	Aluminum Banner Arm with Flower Pot Holder	Н	Flag Holder
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L	Ladder Rest
A4	Aluminum Breakaway Banner Arm	L1	Ladder Rest with Scroll
В	Base Plate - Flush with Bolts Exposed	Р	Interior Corrosion Protection
B1	Base Plate - Hidden Bolt Pockets	R	GFI Receptacle
B2	Base Plate - Below Grade Stub	S	Base Shroud - Square
С	Custom Accessory	S1	Base Shroud - Round
D	Double Handhole Box	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

Standard and Cost Effective



- Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- 3. Backfill with specified material,

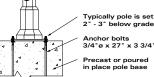
Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may

OPTION (B) Base Plate - Flush with Bolts Exposed

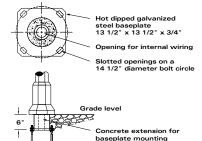


Hot dipped galvanized steel baseplate 20" x 20" x 1"

Opening for internal wiring Slotted openings on a 21" diameter bolt circle



OPTION (B2) Base Plate - Below Grade Stub











CONCRETE POLES



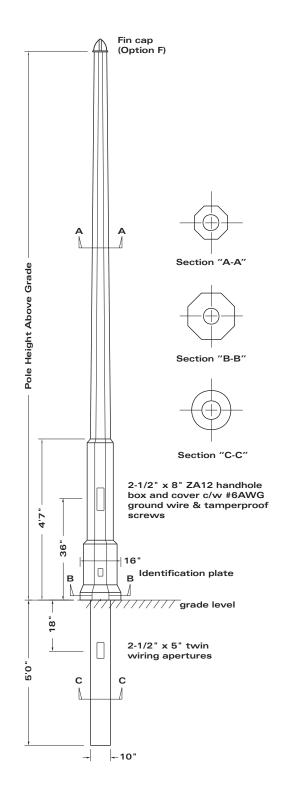


TYPICAL POLE DETAIL

CROSS SECTION



OCTAGONAL



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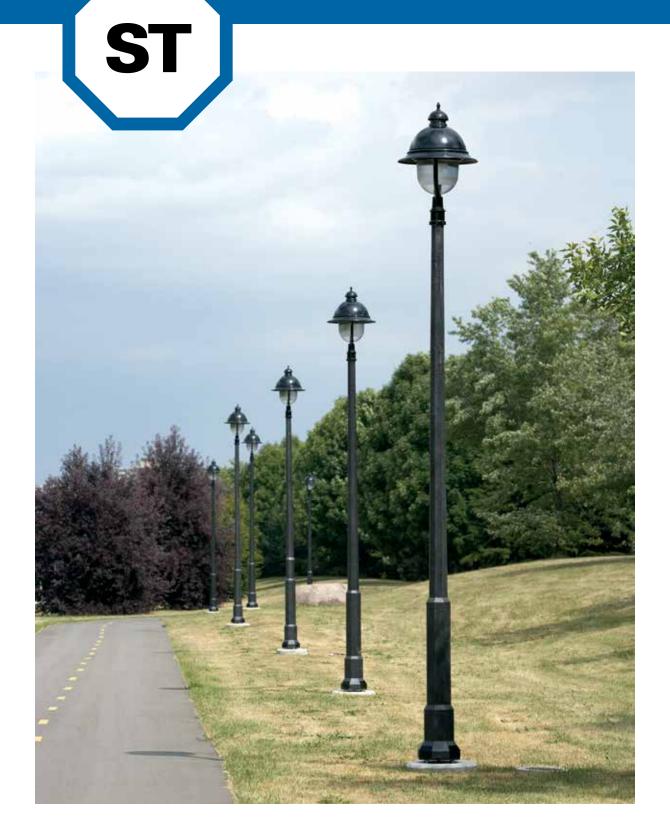




Select options as required







OF CONCRETE POLES



PHYSICAL DETAILS

- Three tiered octagonal symmetrical cross section.
- Smaller version of the Cambridge.
- Standard taper of 17mm/metre (0.206"/foot).
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 10 feet to 16 feet above grade.
- Will accept a variety of luminaire mounting styles.

STRATFORD SPECIFYING CHART

CLASS OF Pole	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE BUTT DIAMETER [in.]	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [Ibs.]
	ST-150-A	10	5	5	8 1/4	4800	760
	ST-160-A	11	5	4 3/4	8 1/4	5400	780
	ST-170-A	12	5	4 1/2	8 1/4	6000	800
A	ST-180-A	13	5	4 1/4	8 1/4	6600	820
	ST-190-A	14	5	4 1/8	8 1/4	7200	840
	ST-200-A	15	5	3 15/16	8 1/4	7800	860
	ST-210-A	16	5	3 3/4	8 1/4	8400	880

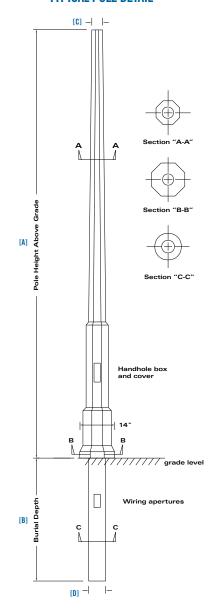
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5' 0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength.



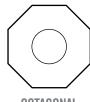


The Stratford Series base detail

TYPICAL POLE DETAIL



CROSS SECTION



OCTAGONAL





Select SURFACE FINISH

The Stratford Series is available with 4 types of surface finishes.

CODE	DESCRIPTION	
1	Mold finish	
2	Polished finish	
3	Etched finish	
4	Exposed finish	

Select COLOUR

The Stratford 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



CLASS



COLOUR



OPTION

Select options as required.



OPTION



OPTION



OPTION

Select FIXTURE MOUNT

The Stratford Series is available with 6 fixture mount options.

CODE	DESCRIPTION	
10	Side Mounted/Through Bolts	
20	Side Mounted/Inserts	
30	Steel Tenon/Post Top	
55	Top Mount Octagonal	
60	Scroll Arm	
90	Custom Mount	

Select OPTIONS & ACCESSORIES

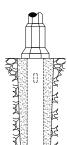
The Stratford Series has 20 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

DESCRIPTION	CODE	DESCRIPTION
Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
Aluminum Banner Arm with Scroll	F	Fin Cap - Octagonal
Aluminum Banner Arm with Flower Pot Holder	Н	Flag Holder
Aluminum Banner Arm with Scroll and Flower Pot Holder	L	Ladder Rest
Aluminum Breakaway Banner Arm	L1	Ladder Rest with Scroll
Base Plate - Flush with Bolts Exposed	Р	Interior Corrosion Protection
Base Plate - Hidden Bolt Pockets	R	GFI Receptacle
Base Plate - Below Grade Stub	S	Base Shroud - Square
Custom Accessory	S1	Base Shroud - Round
Double Handhole Box	Χ	Exterior Silane Sealer
	Aluminum Banner Arm Aluminum Banner Arm with Scroll Aluminum Banner Arm with Flower Pot Holder Aluminum Banner Arm with Scroll and Flower Pot Holder Aluminum Breakaway Banner Arm Base Plate - Flush with Bolts Exposed Base Plate - Hidden Bolt Pockets Base Plate - Below Grade Stub Custom Accessory	Aluminum Banner Arm D2 Aluminum Banner Arm with Scroll F Aluminum Banner Arm with Flower Pot Holder H Aluminum Banner Arm with Scroll and Flower Pot Holder L Aluminum Breakaway Banner Arm L1 Base Plate - Flush with Bolts Exposed P Base Plate - Hidden Bolt Pockets R Base Plate - Below Grade Stub S Custom Accessory S1

FOOTING DETAILS

DIRECT BURIAL

Standard and Cost Effective



- Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

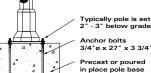
Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may be required.

OPTION (B) Base Plate - Flush with Bolts Exposed



Hot dipped galvanized

Opening for internal wiring Slotted openings on a 16" diameter bolt circle



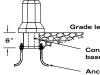
OPTION (B2) Base Plate - Below Grade Stub



Hot dipped galvanized steel baseplate 13 1/2" x 13 1/2" x 3/4"

Opening for internal wiring

Slotted openings on a 14 1/2" diameter bolt circle



Concrete extension for baseplate mounting

Anchor bolts 3/4"ø x 27" x 3 3/4"









OF CONCRETE POLES



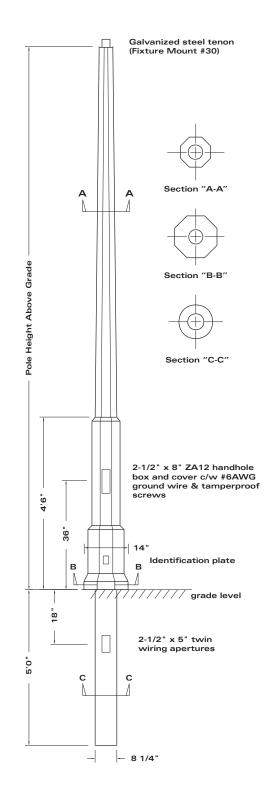


TYPICAL POLE DETAIL

CROSS SECTION



OCTAGONAL



PLEASE FILL IN CODE



OVERALL HEIGHT

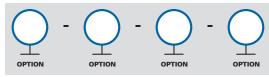




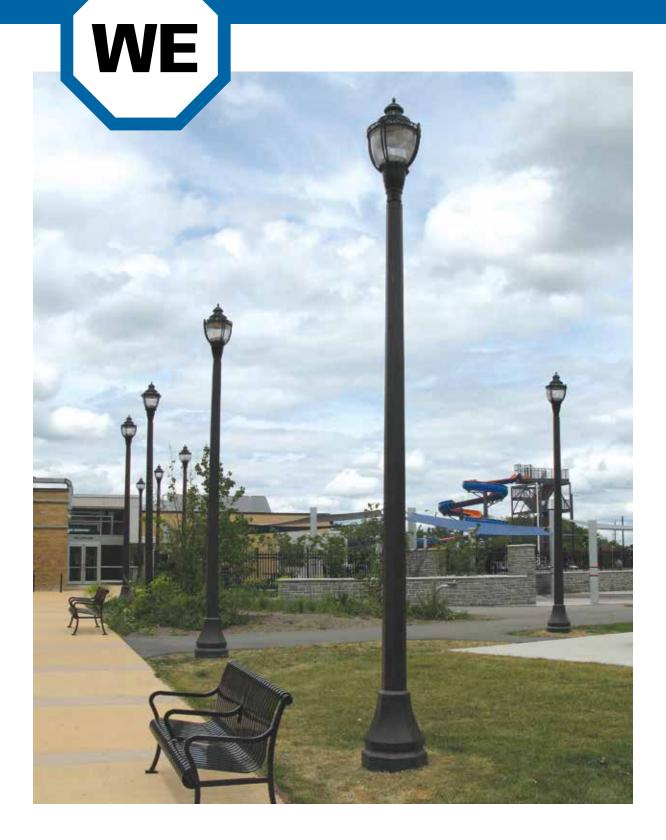




Select options as required







CONCRETE POLES



PHYSICAL DETAILS

- Octagonal tapered symmetrical cross section with flared base.
- Standard taper of 13mm/metre (0.155"/foot).
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 14 feet to 23 feet above grade.
- Will accept a variety of luminaire mounting styles.

WESTMOUNT SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION (in.)	[D] POLE Butt diameter (in.)	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [Ibs.]
	WE-190-A	14	5	5 3/8	10	7200	1200
	WE-200-A	15	5	5 1/4	10	7800	1270
	WE-210-A	16	5	5 1/16	10	8400	1335
	WE-220-A	17	5	4 15/16	10	9000	1395
A	WE-230-A	18	5	4 3/4	10	9600	1450
A	WE-240-A	19	5	4 5/8	10	10200	1500
	WE-250-A	20	5	4 1/2	10	10800	1545
	WE-260-A	21	5	4 5/16	10	11400	1585
	WE-270-A	22	5	4 1/8	10	12000	1620
	WE-280-A	23	5	4	10	12600	1650

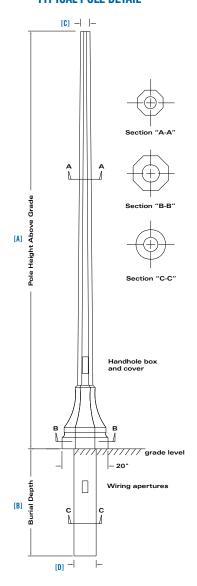
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5' 0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength.





The Westmount Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

The Westmount Series is available with 4 types of surface finishes.

CODE	DESCRIPTION		
1	Mold finish		
2	Polished finish		
3	Etched finish		
4	Exposed finish		

Select COLOUR

The Westmount 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



2 SB FINISH

COLOUR



OPTION

Select options as required.

OPTION



OPTION



OPTION

Select FIXTURE MOUNT

The Westmount Series is available with 7 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
40	Concrete Tenon/Post Top
55	Top Mount Octagonal
60	Scroll Arm
90	Custom Mount

Select OPTIONS & ACCESSORIES

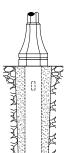
The Westmount Series has 20 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	F	Fin Cap - Octagonal
A2	Aluminum Banner Arm with Flower Pot Holder	Н	Flag Holder
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L	Ladder Rest
A4	Aluminum Breakaway Banner Arm	L1	Ladder Rest with Scroll
В	Base Plate - Flush with Bolts Exposed	Р	Interior Corrosion Protection
B1	Base Plate - Hidden Bolt Pockets	R	GFI Receptacle
B2	Base Plate - Below Grade Stub	S	Base Shroud - Square
С	Custom Accessory	S1	Base Shroud - Round
D	Double Handhole Box	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

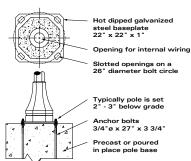
Standard and Cost Effective



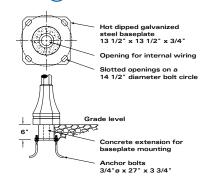
- Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may be required.

















OF CONCRETE POLES



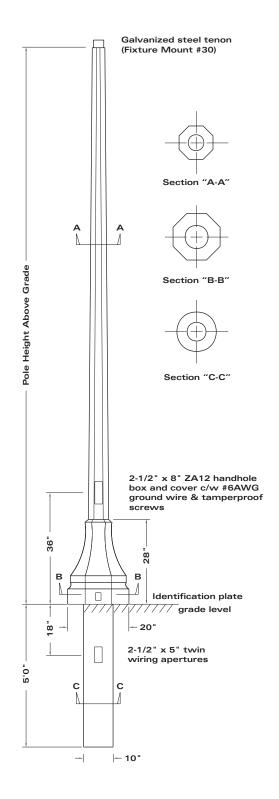


TYPICAL POLE DETAIL

CROSS SECTION



OCTAGONAL



PLEASE FILL IN CODE



POLE STYLE OVERALL HEIGHT



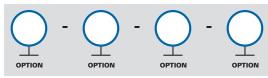








Select options as required







OF CONCRETE POLES



PHYSICAL DETAILS

- Octagonal tapered symmetrical cross section with flared base.
- Standard taper of 19mm/metre (0.228"/foot).
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 18 feet to 27 feet above grade.
- Will accept a variety of luminaire mounting styles.

PARKDALE SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION (in.)	(D) POLE BUTT DIAMETER (in.)	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [Ibs.]
	PA-230-A	18	5	6 1/8	9 3/4	9600	1345
	PA-240-A	19	5	6	9 3/4	10200	1425
	PA-250-A	20	5	5 7/8	9 3/4	10800	1500
	PA-260-A	21	5	5 3/4	9 3/4	11400	1570
A	PA-270-A	22	5	5 5/8	9 3/4	12000	1635
A	PA-280-A	23	5	5 1/2	9 3/4	12600	1695
	PA-290-A	24	5	5 3/8	9 3/4	13200	1750
	PA-300-A	25	5	5 1/4	9 3/4	13800	1800
	PA-310-A	26	5	5 1/8	9 3/4	14400	1850
	PA-320-A	27	5	5	9 3/4	15000	1890

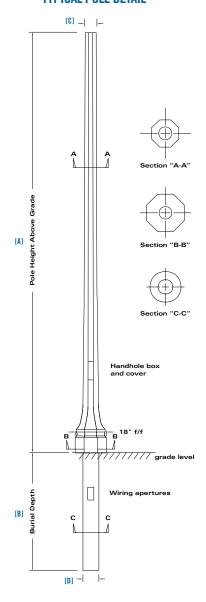
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5' 0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip dimensions are measured from flat to flat.





The Parkdale Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





The Parkdale Series

Select SURFACE FINISH

The Parkdale Series is available with 4 types of surface finishes.

CODE	DESCRIPTION
1	Mold finish
2	Polished finish
3	Etched finish
4	Exposed finish

Select COLOUR

The Parkdale 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



CLASS



COLOUR



OPTION

Select options as required.

OPTION



OPTION

OPTION

Select FIXTURE MOUNT

The Parkdale Series is available with 7 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
40	Concrete Tenon/Post Top
55	Top Mount Octagonal
60	Scroll Arm
90	Custom Mount

Select OPTIONS & ACCESSORIES

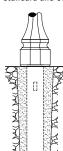
The Parkdale Series has 20 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	F	Fin Cap - Octagonal
A2	Aluminum Banner Arm with Flower Pot Holder	Н	Flag Holder
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L	Ladder Rest
A4	Aluminum Breakaway Banner Arm	L1	Ladder Rest with Scroll
В	Base Plate - Flush with Bolts Exposed	Р	Interior Corrosion Protection
B1	Base Plate - Hidden Bolt Pockets	R	GFI Receptacle
B2	Base Plate - Below Grade Stub	S	Base Shroud - Square
С	Custom Accessory	S1	Base Shroud - Round
D	Double Handhole Box	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

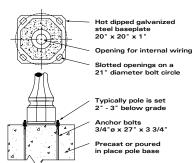
Standard and Cost Effective



- Auger the appropriate size hole.
- 2. Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

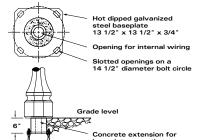
Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may

OPTION (B) Base Plate - Flush with Bolts Exposed

















OF CONCRETE POLES



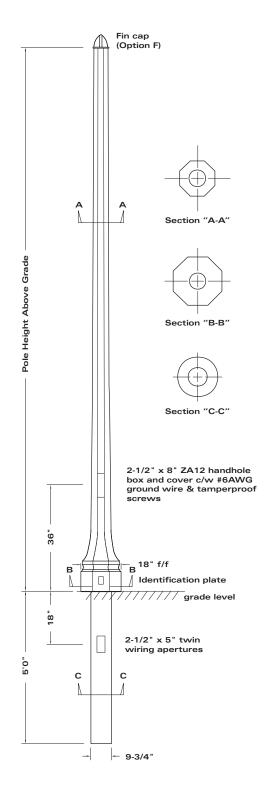


TYPICAL POLE DETAIL

CROSS SECTION



OCTAGONAL



PLEASE FILL IN CODE





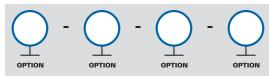




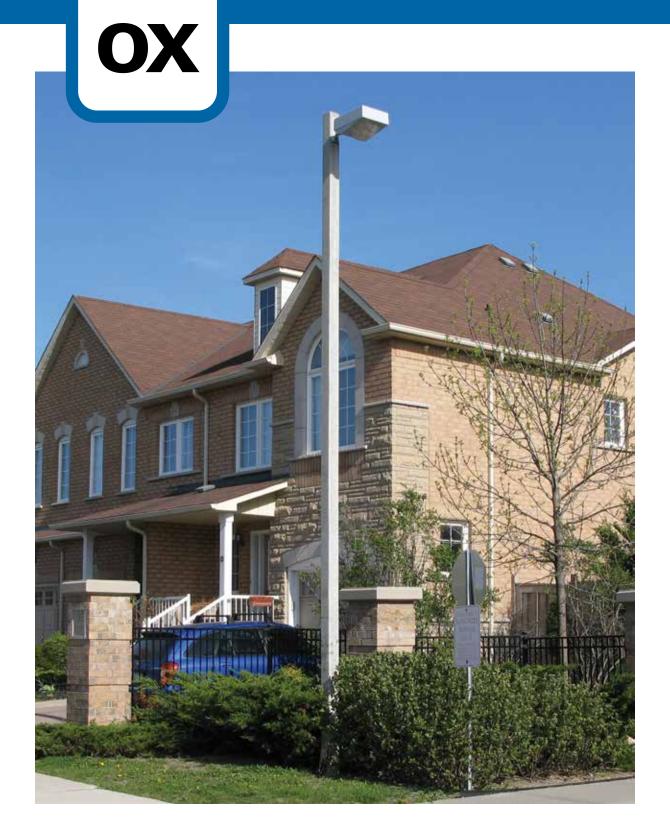




Select options as required







CONCRETE POLES



PHYSICAL DETAILS

- Square non-tapered (rounded edge) symmetrical cross section.
- 5 1/2 inch flat to flat cross section
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 8 1/2 feet to 25 feet above grade.
- Will accept a variety of luminaire mounting styles.
- Light Duty Pole

OXFORD SPECIFYING CHART

CLASS OF Pole	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE BUTT DIAMETER [in.]	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [ibs.]
	0X-125-AL	8 1/2	4	5 1/2	5 1/2	3900	350
	0X-150-AL	11	4	5 1/2	5 1/2	5400	480
	0X-175-AL	13 1/2	4	5 1/2	5 1/2	6900	610
AL	0X-200-AL	15	5	5 1/2	5 1/2	7800	740
AL	0X-225-AL	17 1/2	5	5 1/2	5 1/2	9300	870
	0X-250-AL	20	5	5 1/2	5 1/2	10800	1000
	0X-275-AL	22 1/2	5	5 1/2	5 1/2	12300	1130
	0X-300-AL	25	5	5 1/2	5 1/2	13800	1270

NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5'0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip and butt dimensions are measured from flat to flat.

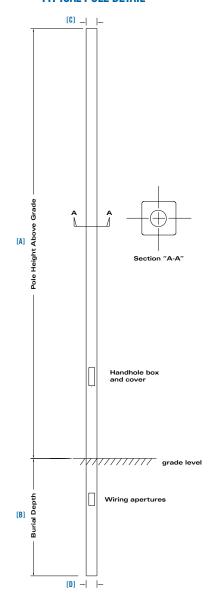






The Oxford Series base detail

TYPICAL POLE DETAIL



CROSS SECTION



SQUARE



Select SURFACE FINISH

The Oxford Series is available with 4 types of surface finishes.

CODE	DESCRIPTION		
1	Mold finish (standard)		
2	Polished finish		
3	Etched finish		
4	Exposed finish		

Select COLOUR

The Oxford 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		DESCRIPTION
AR	Autumn Red	DR	DR Desert Rose OJ Oriental.		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)

EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



CLASS



COLOUR



OPTION

Select options as required.

OPTION







Select FIXTURE MOUNT

The Oxford Series is available with 5 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
60	Scroll Arm
90	Custom Mount

Select OPTIONS & ACCESSORIES

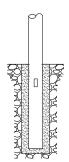
The Oxford Series has 16 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L1	Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm	Р	Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed	R	GFI Receptacle
С	Custom Accessory	S	Base Shroud - Square
D	Double Handhole Box	Х	Exterior Silane Sealer

FOOTING DETAILS

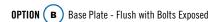
DIRECT BURIAL

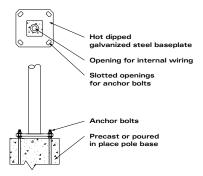
Standard and Cost Effective



- Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may be required.













CONCRETE POLES



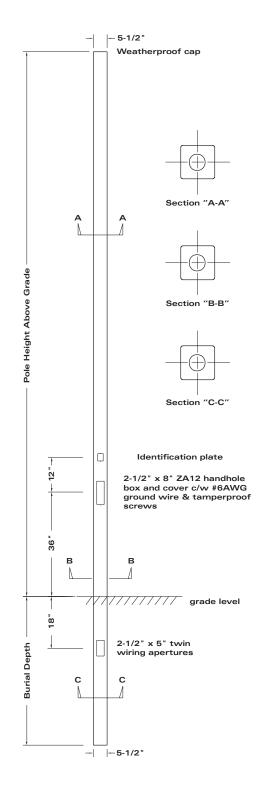


TYPICAL POLE DETAIL

CROSS SECTION



SQUARE



Select options as required

OPTION

OPTION

FIXTURE MOUNT

PLEASE FILL IN CODE

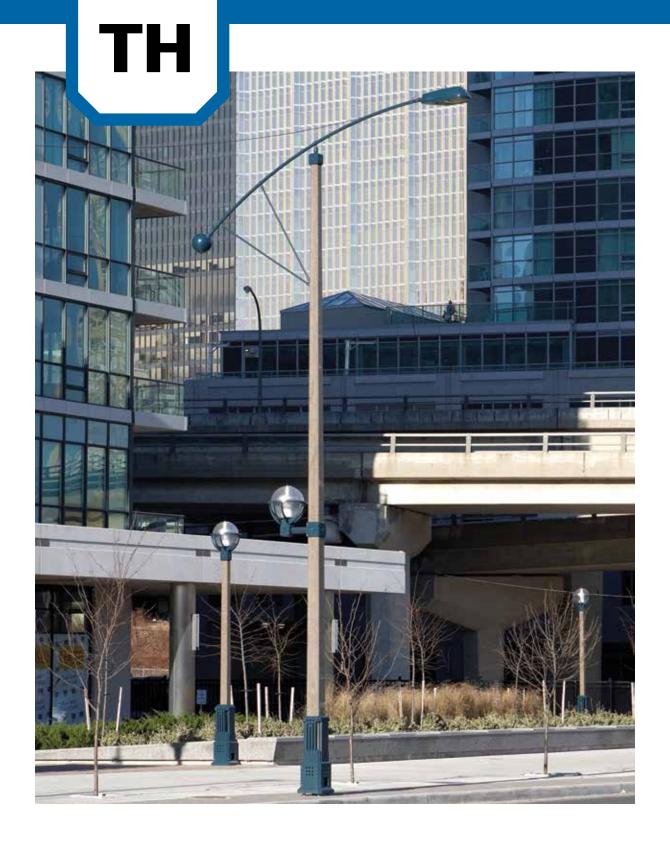




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OPTION

OPTION



CONCRETE POLES



PHYSICAL DETAILS

- Square tapered (1" chamfered corners) symmetrical cross section.
- Standard taper of 10.4mm/metre (0.125"/foot).
- Standard mold, etched, exposed or polished finishes are available in a variety of colours.
- Available in heights from 11 feet to 39 feet above grade.
- Will accept a variety of luminaire mounting styles.

THOMPSON SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	(B) DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE BUTT DIAMETER [in.]	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [Ibs.]
	TH-150-A	11	4	4 3/4	6 5/8	5400	480
	TH-175-A	13 1/2	4	4 3/4	6 1/4	6900	590
	TH-200-A	15	5	4 3/4	7 1/4	7800	700
A	TH-225-A	17 1/2	5	4 3/4	7 1/2	9300	825
	TH-250-A	20	5	4 3/4	7 7/8	10800	980
	TH-275-A	22 1/2	5	4 3/4	8 1/4	12350	1120
	TH-300-A	25	5	4 3/4	8 1/2	13800	1275
	TH-250-B	20	5	4 3/4	7 7/8	16200	1030

	TH-250-B	20	5	4 3/4	7 7/8	16200	1030
	TH-275-B	22 1/2	5	4 3/4	8 1/4	18450	1180
	TH-300-B	25	5	4 3/4	8 1/2	20700	1340
	TH-325-B	27 1/2	5	4 3/4	8 7/8	22950	1510
В	TH-350-B	30	5	4 3/4	9 1/8	25200	1690
	TH-375-B	32 1/2	5	4 3/4	9 3/8	27450	1880
	TH-400-B	34	6	4 3/4	9 3/4	28800	2120
	TH-425-B	36 1/2	6	4 3/4	10 1/8	31050	2345
	TH-450-B	39	6	4 3/4	10 3/8	34200	2580

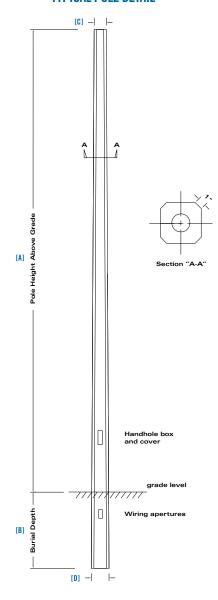
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5' 0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip dimensions are measured from flat to flat.



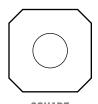


The Thompson Series

TYPICAL POLE DETAIL



CROSS SECTION



SQUARE





Select SURFACE FINISH

The Thompson Series is available with 4 types of surface finishes.

CODE	DESCRIPTION
1	Mold finish
2	Polished finish
3	Etched finish
4	Exposed finish

Select COLOUR

The Thompson 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



PG FINISH

COLOUR



OPTION

Select options as required.

OPTION



OPTION



OPTION

Select FIXTURE MOUNT

The Thompson Series is available with 6 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
60	Scroll Arm
80	Camera Mount
90	Custom Mount

Select OPTIONS & ACCESSORIES

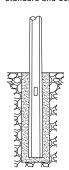
The Thompson Series has 16 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L1	Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm	Р	Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed	R	GFI Receptacle
С	Custom Accessory	S	Base Shroud - Square
D	Double Handhole Box	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

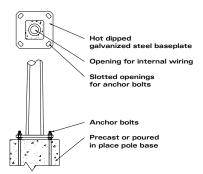
Standard and Cost Effective



- Auger the appropriate size hole.
- 2. Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may













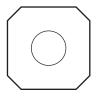
CONCRETE POLES



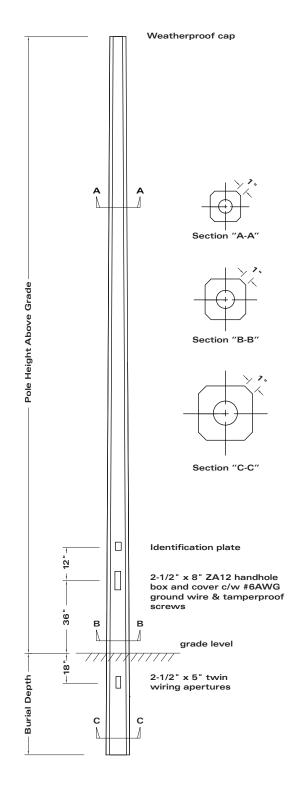


TYPICAL POLE DETAIL

CROSS SECTION



SQUARE



PLEASE FILL IN CODE



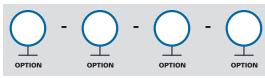








Select options as required







OF CONCRETE POLES



PHYSICAL DETAILS

- Octagonal eight fluted symmetrical cross section.
- Standard taper of 9.5mm/metre (0.114"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 10 feet to 14 feet above grade.
- Will accept a variety of luminaire mounting styles.

GRANDVIEW SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT ABOVE GRADE [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION (in.)	[D] POLE BUTT DIAMETER (in.)	ULTIMATE GROUND Line Moment [ft.ibs.]	NOMINAL Pole Weight [Ibs.]
	GR-150-A	10	5	6 1/4	9 3/4	4800	1100
	GR-160-A	11	5	6	9 3/4	5400	1175
A	GR-170-A	12	5	5 3/4	9 3/4	6000	1250
	GR-180-A	13	5	5 5/8	9 3/4	6600	1325
	GR-190-A	14	5	9 1/4*	9 3/4	7200	1400

NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on recommended burial depth for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. * Only the 14 feet above grade height of pole is available with the flared top.

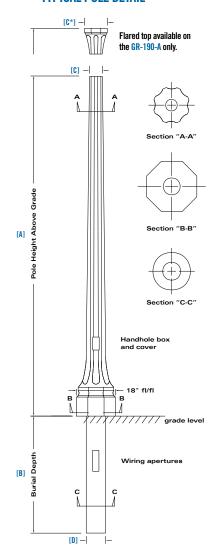




The Grandview Series

The Grandview Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

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

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

Select COLOUR

The Grandview 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER





OVERALL HEIGHT

CLASS



ML COLOUR

30 MOUNT Midnight Lace

B2 OPTION

Select options as required.

OPTION

OPTION



OPTION

Select FIXTURE MOUNT

The Grandview Series is available with 2 fixture mount options.

CODE	DESCRIPTION
30	Steel Tenon/Post Top
90	Custom Mount

Select OPTIONS & ACCESSORIES

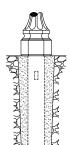
The Grandview Series has 19 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L1	Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm	Р	Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed	R	GFI Receptacle
B1	Base Plate - Hidden Bolt Pockets	S	Base Shroud - Square
B2	Base Plate - Below Grade Stub	S1	Base Shroud - Round
С	Custom Accessory	Х	Exterior Silane Sealer
D	Double Handhole Box		

FOOTING DETAILS

DIRECT BURIAL

Standard and Cost Effective



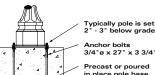
- Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may

OPTION (B) Base Plate - Flush with Bolts Exposed



Opening for internal wiring Slotted openings on a 21" diameter bolt circle



Typically pole is set 2" - 3" below grade

Precast or poured

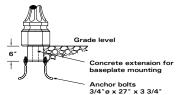
OPTION (B2) Base Plate - Below Grade Stub



Hot dipped galvanized steel baseplate 13 1/2" x 13 1/2" x 3/4"

Opening for internal wiring

Slotted openings on a 14 1/2" diameter bolt circle











OF CONCRETE POLES

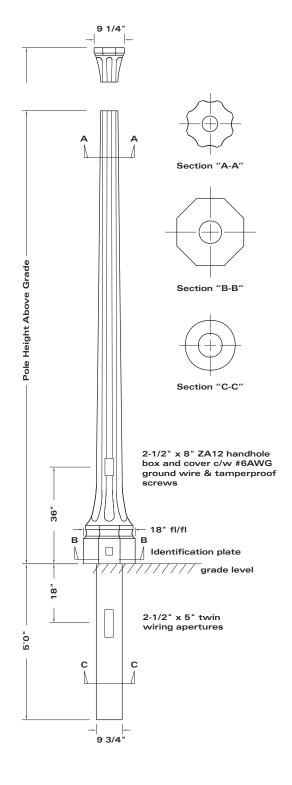




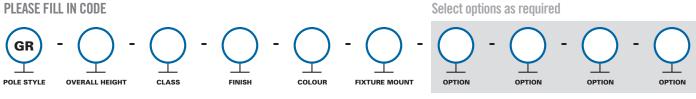
TYPICAL POLE DETAIL

CROSS SECTION

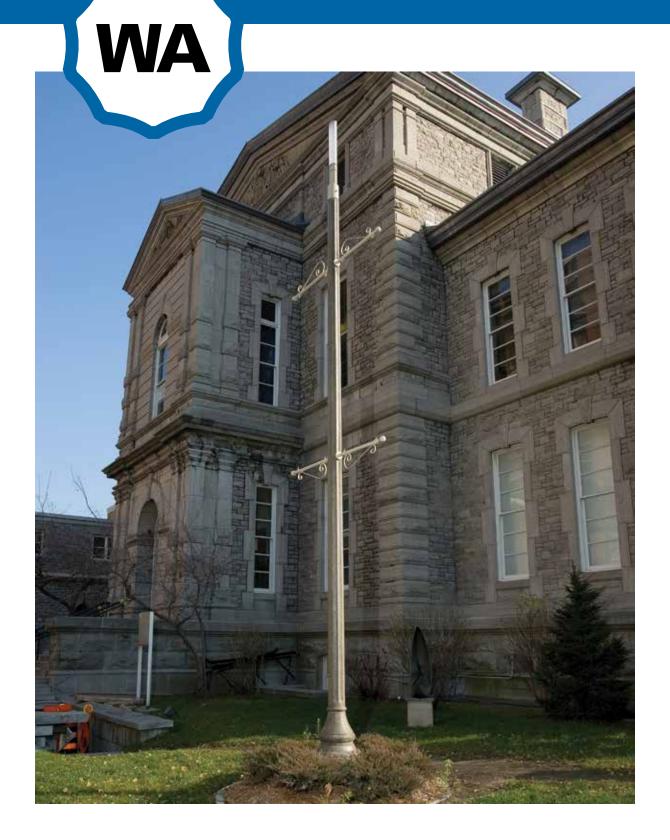




PLEASE FILL IN CODE







CONCRETE POLES



PHYSICAL DETAILS

- Ten fluted symmetrical cross section.
- Standard taper of 6.2mm/metre (0.074"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 15 feet to 30 feet above grade.
- Will accept a variety of luminaire mounting styles.

WASHINGTON SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE Butt diameter (in.)	ULTIMATE GROUND Line Moment [ft.lbs.]	NOMINAL Pole Weight [Ibs.]
	WA-200-A	15	5	6 1/8	12	7800	1540
	WA-210-A	16	5	6 1/8	12	8400	1580
	WA-220-A	17	5	6	12	9000	1620
	WA-230-A	18	5	5 7/8	12	9600	1660
	WA-240-A	19	5	5 7/8	12	10200	1700
	WA-250-A	20	5	5 3/4	12	10800	1750
	WA-260-A	21	5	5 3/4	12	11400	1780
Α	WA-270-A	22	5	5 5/8	12	12000	1810
A	WA-280-A	23	5	5 1/2	12	12600	1840
	WA-290-A	24	5	5 1/2	12	13200	1870
	WA-300-A	25	5	5 3/8	12	13800	1900
	WA-310-A	26	5	5 3/8	12	14400	1950
	WA-320-A	27	5	5 1/4	12	15000	2000
	WA-330-A	28	5	5 1/8	12	15600	2045
	WA-340-A	29	5	5 1/8	12	16200	2095
	WA-350-A	30	5	5	12	16800	2140

NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5'0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip dimensions are measured from flat to flat.

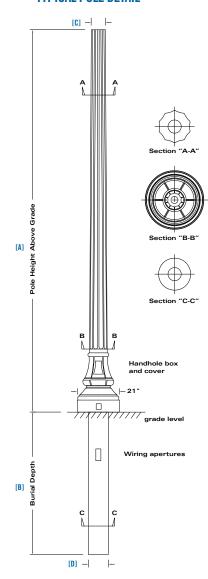






The Washington Series base detail

TYPICAL POLE DETAIL



CROSS SECTION





Select SURFACE FINISH

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

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

Select COLOUR

The Washington 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER







OVERALL HEIGHT



CLASS



COLOUR Midnight Lace



OPTION

Select options as required.

OPTION

OPTION

OPTION

Select FIXTURE MOUNT

The Washington Series is available with 5 fixture mount options.

CODE	DESCRIPTION	
10	Side Mount/Through Bolts	
20	Side Mount/Inserts	
30	Steel Tenon/Post Top	
60	Scroll Arm	
90 Custom Mount		

Select OPTIONS & ACCESSORIES

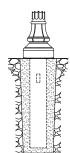
The Washington Series has 20 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	D2	Double Handhole Box with Inline Breaker
A1	Aluminum Banner Arm with Scroll	F	Fin Cap - Octagonal
A2	Aluminum Banner Arm with Flower Pot Holder	Н	Flag Holder
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L	Ladder Rest
A4	Aluminum Breakaway Banner Arm	L1	Ladder Rest with Scroll
В	Base Plate - Flush with Bolts Exposed	Р	Interior Corrosion Protection
B1	Base Plate - Hidden Bolt Pockets	R	GFI Receptacle
B2	Base Plate - Below Grade Stub	S	Base Shroud - Square
С	Custom Accessory	S1	Base Shroud - Round
D	Double Handhole Box	Х	Exterior Silane Sealer

FOOTING DETAILS

DIRECT BURIAL

Standard and Cost Effective



- 1. Auger the appropriate size hole.
- Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill.
Depending on site conditions,
alternative materials may





Hot dipped galvanized steel baseplate 23" x 23" x 1"

Opening for internal wiring Slotted openings on a 26" diameter bolt circle



Typically pole is set 2" - 3" below grade

Precast or poured

OPTION (B2) Base Plate - Below Grade Stub



Opening for internal wiring

Slotted openings on a 15" diameter bolt circle



Concrete extension for baseplate mounting

Anchor bolts 1"ø x 36" x 3 3/4"









CONCRETE POLES



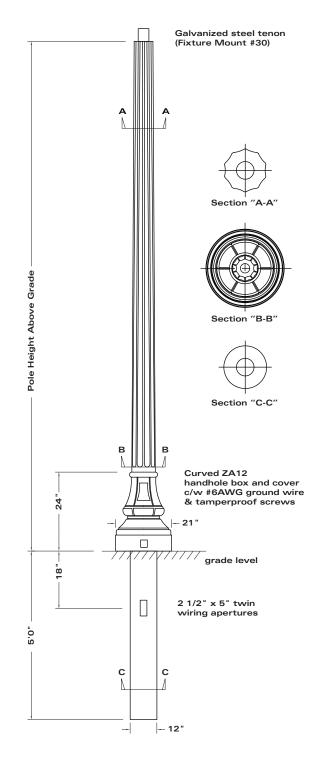


TYPICAL POLE DETAIL

CROSS SECTION



FLUTED



PLEASE FILL IN CODE



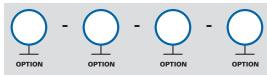
OVERALL HEIGHT







Select options as required







CONCRETE POLES



PHYSICAL DETAILS

- Eight fluted symmetrical cross section.
- Standard taper of 15mm/metre (0.18"/foot).
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Available in heights from 10 feet to 30 feet above grade.
- Will accept a variety of luminaire mounting styles.

ASTORIA SPECIFYING CHART

CLASS OF POLE	SPECIFYING POLE CODE [Style-Height-Class]	[A] POLE HEIGHT Above grade [ft.]	[B] DIRECT Burial Length [ft.]	[C] POLE TIP DIMENSION [in.]	[D] POLE Butt diameter (in.)	ULTIMATE GROUND Line Moment [ft.lbs.]	NOMINAL Pole Weight [Ibs.]
	AS-150-A	10	5	4 3/4	8 11/16	4800	715
A	AS-175-A	12 1/2	5	4 3/4	9 1/8	6300	840
A	AS-200-A	15	5	4 3/4	9 5/8	7800	925
	AS-225-A	17 1/2	5	4 3/4	10	9300	1076
	AS-250-B	20	5	4 3/4	10 1/2	16200	1320
	AS-275-B	22 1/2	5	4 3/4	10 15/16	18450	1520
В	AS-300-B	25	5	4 3/4	11 3/8	20700	1730
	AS-325-B	27 1/2	5	4 3/4	11 7/8	22950	1970
	AS-350-B	30	5	4 3/4	12 5/16	25200	2215
	AS-275-C	22 1/2	5	6	10 15/16	24600	1570
С	AS-300-C	25	5	6	11 3/8	27600	1780
	AS-325-C	27 1/2	5	6	11 7/8	30600	2025
	AS-350-C	30	5	6	12 5/16	33600	2270

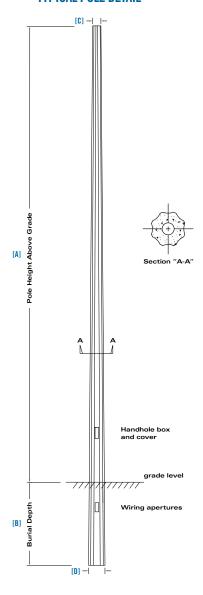
NOTES: This chart outlines typical heights and class of poles for this style. Other sizes are available upon request. Pole height above grade based on standard burial depth of 5'0" for normal soils. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Tip dimensions are measured from flat to flat.





The Astoria Series base detail

TYPICAL POLE DETAIL



CROSS SECTION







Select SURFACE FINISH

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

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

Select COLOUR

The Astoria 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	OJ	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



EXAMPLE OF TYPICAL CATALOG NUMBER













OPTION

Select options as required.







Select FIXTURE MOUNT

The Astoria Series is available with 6 fixture mount options.

CODE	DESCRIPTION
10	Side Mounted/Through Bolts
20	Side Mounted/Inserts
30	Steel Tenon/Post Top
60	Scroll Arm
80	Camera Mount
90	Custom Mount

Select OPTIONS & ACCESSORIES

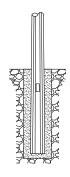
The Astoria Series has 18 standard options and accessories to choose from. Please visit our Options & Accessories section for complete information. Custom accessories are available upon request.

CODE	DESCRIPTION	CODE	DESCRIPTION
Α	Aluminum Banner Arm	F	Fin Cap - Octagonal
A1	Aluminum Banner Arm with Scroll	Н	Flag Holder
A2	Aluminum Banner Arm with Flower Pot Holder	L	Ladder Rest
A3	Aluminum Banner Arm with Scroll and Flower Pot Holder	L1	Ladder Rest with Scroll
A4	Aluminum Breakaway Banner Arm	Р	Interior Corrosion Protection
В	Base Plate - Flush with Bolts Exposed	R	GFI Receptacle
С	Custom Accessory	S	Base Shroud - Square
D	Double Handhole Box	S1	Base Shroud - Round
D2	Double Handhole Box with Inline Breaker	Х	Exterior Silane Sealer

FOOTING DETAILS

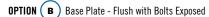
DIRECT BURIAL

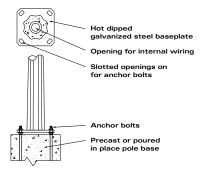
Standard and Cost Effective



- Auger the appropriate size hole.
- 2. Set pole in hole and plumb straight.
- 3. Backfill with specified material, tamping every 6".

Note: Generally the native material can be used for backfill. Depending on site conditions, alternative materials may be required.













CONCRETE POLES

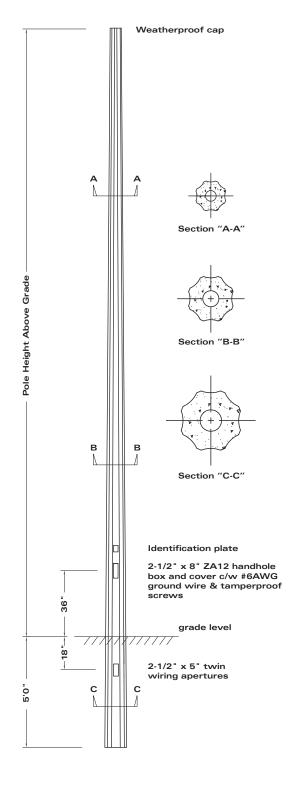




TYPICAL POLE DETAIL

CROSS SECTION





PLEASE FILL IN CODE





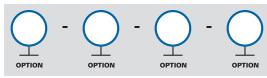








Select options as required







COLOURS & FINISHES

FOR CONCRETE POLES



COLOURS - POLISHED FINISHES (2)



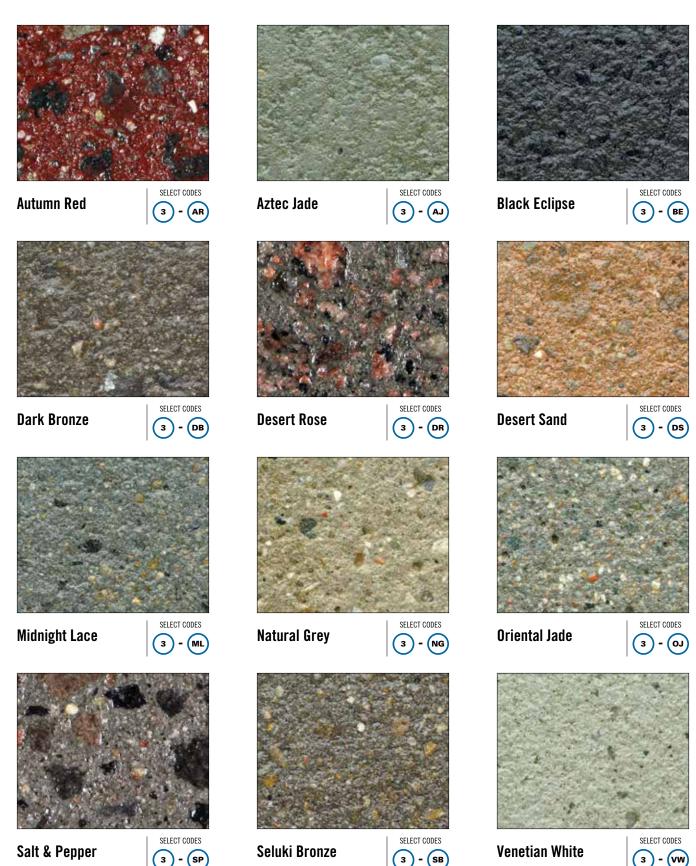


2)

(vw)

COLOURS - ETCHED FINISHES (3)





COLOURS - EXPOSED FINISHES (4)





























Natural Grey

(4) - (NG)

Oriental Jade 4) - (OJ)







Salt & Pepper



4) - (ML)

Seluki Bronze



Venetian White



4) - (DS

FINISHES

There are four pole finishes to choose from, each offering a different texture to suit the application:



TYPE 1 - PLAIN GREY (PG) MOLD FINISH

Plain Grey (PG) mold finish (1) is standard for all poles. This finish is typically used in combination with plain grey (PG), non-decorative concrete poles. Natural limestone aggregates and concrete sand combined with cement, to provide a plain grey (PG), out of the mold finish (1). This is typically used on our Hampton, Newport and Oxford series poles.



TYPE 2 - POLISHED FINISH

This surface finish is accomplished by polishing the face of the concrete pole by mechanical means. Diamond polishing discs work the surface to an ultra smooth finish. After polishing the face of the pole, a minimum of two coats of clear sealer are applied to further enhance the natural beauty of the stone.



TYPE 3 - ETCHED FINISH

This surface finish, as the name suggests is a semi-rough finish. The etching of the pole surface is accomplished by sand blasting the face of the pole. The sand blasting removes the outer layer of mortar, exposing the decorative aggregates beneath. As with the polished finish, a sealer is applied to enhance the look.



TYPE 4 - EXPOSED FINISH

This surface finish is a two-stage process. Initially the pole form is coated with a "surface retarder", which delays the hardening of the thin outer layer of the concrete. After the pole is cured, the pole surface is pressure washed with water to expose the aggregate. This finish is a rough finish, with large portions of the aggregate showing. No sealers are typically applied to this pole.



ABOUT OUR COLOURS & FINISHES

The decorative pole finish is not a veneer or a painted finish. The entire concrete matrix is a combination of specialty decorative colored aggregates, pigments, and cement. The entire pole is spun cast with this concrete mix. The combination of various concrete mix designs and surface finishes provides the client with over 36 standard finishes (custom colours available upon request) to choose from.

POSITION REFERENCE OF COLOUR AND FINISH CODE IN TYPICAL CATALOGUE NUMBER



POLE STYLE OVERALL HEIGHT

















CODE: 4 - AJ CODE: 3 - VW CODE: 2 - BE

COLOURS & FINISHES

FOR CONCRETE POLES



Concrete poles offer the flexibility to accommodate all types of fixture/arm mounts. Following are the most commonly used in the industry. If a style is not shown, tag Style 90 (custom mount) and contact our sales department.

Mounting hardware and fixtures are not included with the pole and must be ordered separately.

FIXTURE MOUNT CODES AND DESCRIPTIONS

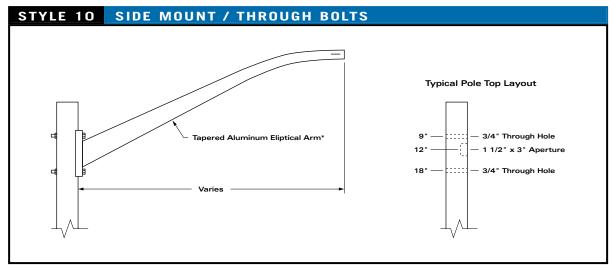
CODE	DESCRIPTION
10	Side Mount / Through Bolts
20	Side Mount / Inserts
30	Steel Tenon / Post Top
40	Concrete Tenon / Post Top
50	Top Mount / Round
55	Top Mount / Octagonal
60	Scroll Arm
70	Clamp On
80	Camera Mount
90	Custom Mount - as per client needs

POSITION REFERENCE OF FIXTURE MOUNT CODE IN TYPICAL CATALOGUE NUMBER



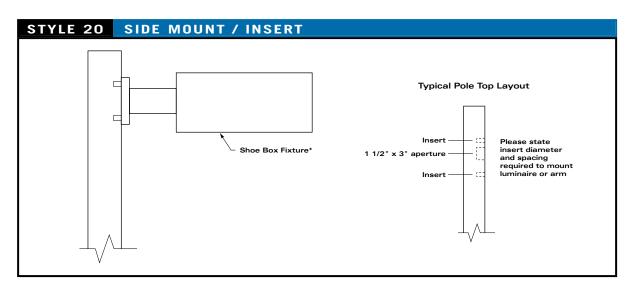


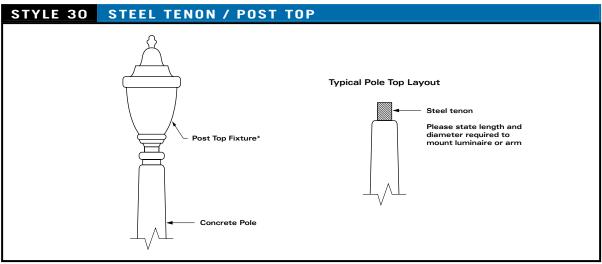
FIXTURE MOUNT DIAGRAMS

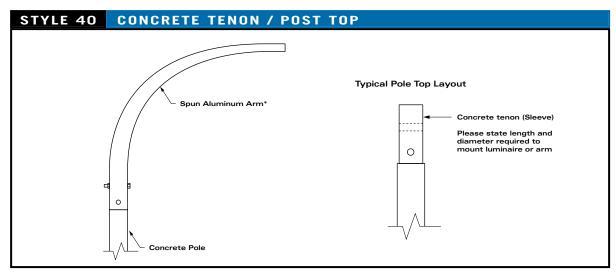


^{*} Mounting hardware, arms and fixtures are not included with pole.



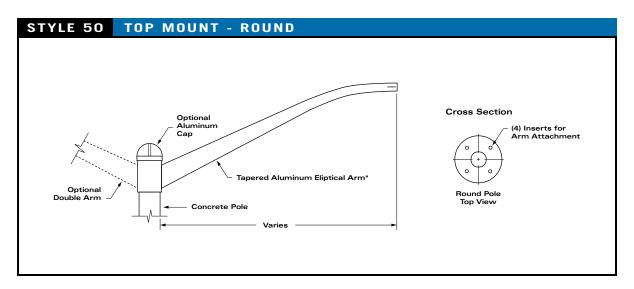


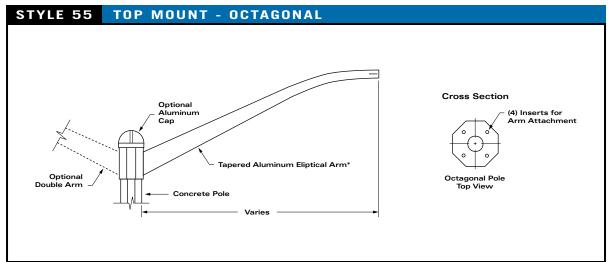


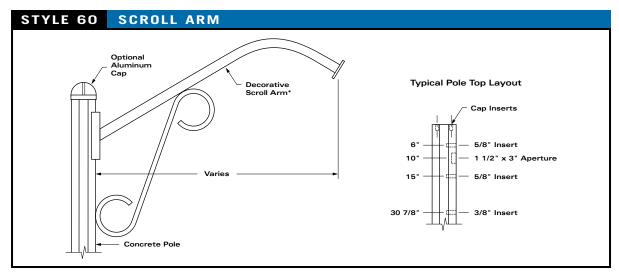


* Mounting hardware, arms and fixtures are not included with pole.



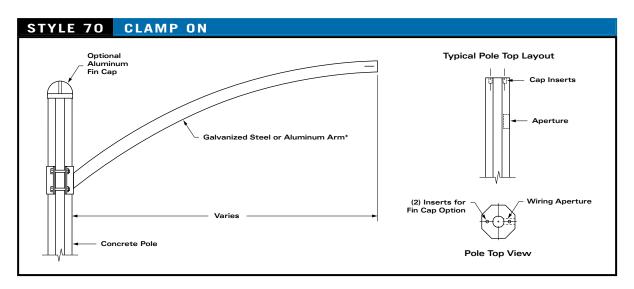


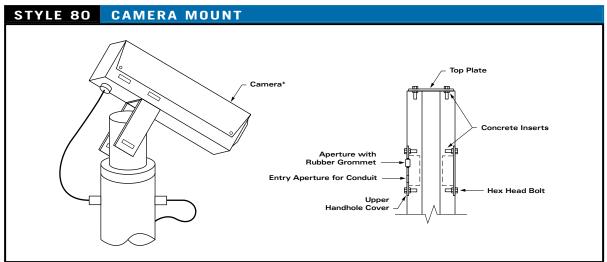




* Mounting hardware, arms and fixtures are not included with pole.







STYLE 90 CUSTOM MOUNT

USI can accommodate any style of fixture or arm. If the style you require is not shown, please tag Style 90 and contact our sales department.

* Mounting hardware, arms and fixtures are not included with pole.



OPTIONS & ACCESSORIES

Decorative Arm Options

USI Product Code	Description
А	Banner Arm
A1	Banner Arm with Scroll
A2	Banner Arm with Flower Pot Holder
А3	Banner Arm with Scroll and Flower Pot Holder
Α4	Breakaway Banner Arm
L	Ladder Arm Rest
L1	Ladder Arm Rest with Scroll

Base Plate Options

USI Product Code	Description
В	Base Plate - Flush with Bolts Exposed
B1	Base Plate - Hidden Bolt Pockets
B2	Base Plate - Below Grade Stub
S	Base Plate Shroud - Square
S1	Base Plate Shroud - Round

Miscellaneous Options

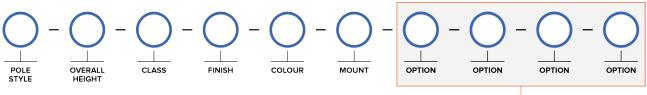
USI Product Code	Description
С	Custom Accessory
D	Double Handhole Box
D2	Double Handhole Box with In-Pole Breaker
F	Fin Caps - Octagonal
Н	Flag Holder
Р	Admixture Corrosion Protection
R	GFI Receptacle
W	Wire Entry
X	Exterior Silane Sealer

We offer you a greater selection of options and accessories.

Once you've selected the concrete pole you're looking for, relax knowing that we can help make your vision a reality and get the results you want, with our options and accessories. If you're thinking of adding a banner arm, a flower pot holder, or any other custom accessory, we've got you covered.



Position reference of **OPTIONS CODE** in typical catalogue number



More than one option may be selected by adding the code(s) to the catalogue number.

Select option(s) as required



Decorative Arm Options



Banner Arm





Select code: A



Banner Arm with Scroll





Select code: A1



Banner Arm with Flower Pot Holder





Select code: A2



Banner Arm with Scroll and Flower Pot Holder





Select code: A3



Breakaway Banner Arm





Select code: A4



Decorative Arm Options



Ladder Arm Rest





Select code: **L**



Ladder Arm Rest with Scroll





Select code: L1

Base Plate Options



Base Plate – Flush with Bolts Exposed

Select code: **B**







Base Plate – Hidden Bolt Pockets

Select code: **B1**







Base Plate – Below Grade Stub





Select code: **B2**



Base Plate Shroud – Square





Select code: **S**



Base Plate Shroud – Round





Select code: S1



Miscellaneous Options



Custom Accessory





Select code: C



Double Handhole Box





Select code: **D**



Double Handhole Box with In-Pole Breaker





Select code: **D2**



Fin Caps - Octagonal





Select code: **F**



Flag Holder





Select code: H



Miscellaneous Options



Admixture Corrosion Protection

Extend the life of reinforced concrete, with this proven migratory corrosion inhibitor. It's a liquid concrete admixture that protects steel reinforcing and other metals embedded in concrete from corrosion induced carbonation, chloride and atmospheric attack. When incorporated into the concrete mix it forms a protective layer on all metals.



Select code: P



GFI Receptacle





Select code: R



Wire Entry





Select code: W



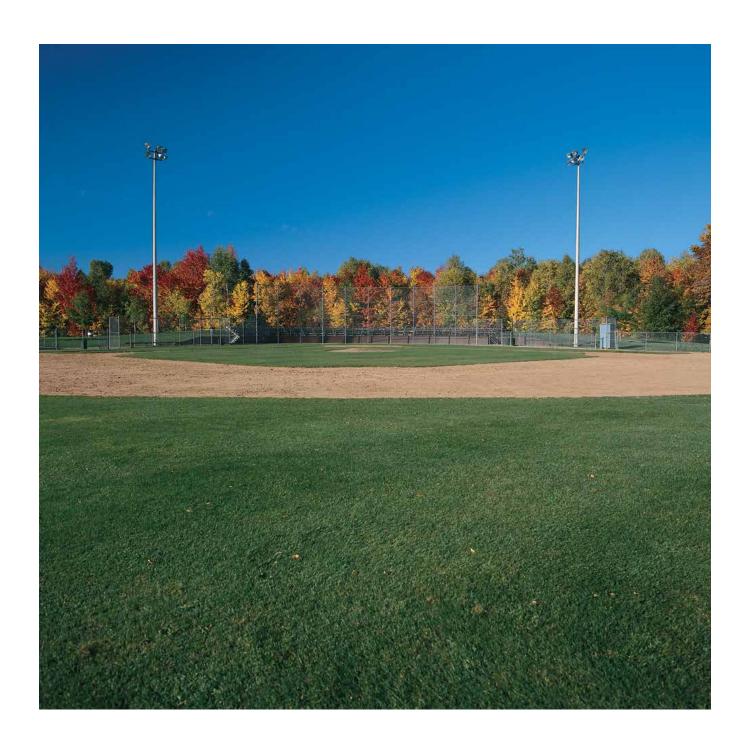
Exterior Silane Sealer

Typically applied to plain grey streetlighting poles (ie HAMPTON SERIES) this Silane Sealer is a premium high performance, breathable, VOC penetrating, clear water repellant sealer. Treated surfaces still have a totally natural appearance. This sealer is very effective in stopping the intrusion of water, salt, chemicals and acids. Typically applied 10 feet above the wiring aperture, but special arrangements can be made for severe environments. Can only be used when acrylic sealer in not applied.



Select code: X





SPORTSLIGHTING

CONCRETE POLES



SPORTSLIGHTING

PHYSICAL DETAILS

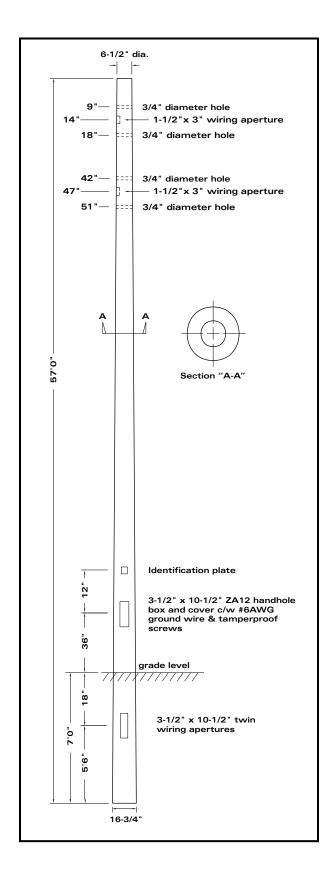
- · Hampton series pole is a typical standard.
- Round symmetrical cross section.
- Standard taper of 15mm/metre (0.18"/foot).
- Standard mold finish, but etched decor finishes are available upon request.
- Available in heights from 10 feet to 85 feet overall.
- Will accept a variety of luminaire mounting styles and crossarm mounting configurations.

STANDARD FEATURES

- Pole adapts to fit most crossarms and accessories.
 Refer to our crossarms and accessories sections for typical details
- 3 1/2" x 10 1/2" standard handhole box is cast into pole at 36" above grade. Box and coverplate are both high density ZA12 Zinc Alloy material.
- Stainless steel coverplate screws with various drives in either Robertson #3, Allen key, or Tamperproof.
- Ground feature of either an external ground lug or an internal copper ground wire. Various sizes/gauges are available.
- Zinc inserts in 1/4", 3/8", 1/2", 5/8" or 3/4" are available.
- Above and below grade wiring apertures are available in a number or various sizes. 1 1/2" x 3" is typical for above grade, and 3 1/2" x 10 1/2" is typical for below grade.
- Through holes for arms, fixtures, and accessories are available in a variety of diameters. 1/2", 3/4" and 1" are typical.

INSTALLATION DETAILS

- Pole is generally direct buried in the ground, eliminating the need for the more costly base mounted design.
- A good rule of thumb for burial depth is 10% of pole length plus 2 feet.
- In most cases the native material can be used for backfill material. If the soil is poor or there are heavy loads on the poles, select backfill may be required. Refer to the technical data sheets.





SPORTSLIGHTING POLES

CLASS Of Pole	MIN. ULT. Transverse Load (ib.)	POLE Catalogue Number	OVERALL Pole Length [ft.]	POLE HEIGHT Above grade [ft.]	SUGGESTED Burial Depth [ft.]	POLE TIP DIA. [in.]	POLE Butt DIA. [in.]	ULTIMATE GROUND Line moment [ft.lbs.]	80 mph (sq.ft.)	Max EPA 90 mph (sq.ft.)	100 mph (sq.ft.)	NOMINAL Pole Weight [lbs.]
C	1200 1200 1200	HA-410-C-1-PG HA-460-C-1-PG HA-520-C-1-PG	41' 0" 46' 0" 52' 0"	35' 0" 40' 0" 45' 0"	6' 0" 6' 0" 7' 0"	6 1/2" 6 1/2" 6 1/2"	13 7/8" 14 3/4" 15 7/8"	39600 45600 51600	22 21 20	16 15 14	12 11 10	2750 3350 4150
	1500 1500	HA-410-D-1-PG HA-460-D-1-PG	41' 0" 46' 0"	35' 0" 40' 0"	6' 0"	6 1/2" 6 1/2"	13 7/8" 14 3/4"	49500 57000	29 28	22 21	16 15	2780 3360
D	1500 1500 1500 1500	HA-520-D-1-PG HA-570-D-1-PG HA-630-D-1-PG HA-680-D-1-PG	52' 0" 57' 0" 63' 0" 68' 0"	45' 0" 50' 0" 55' 0" 60' 0"	7' 0" 7' 0" 8' 0" 8' 0"	6 1/2" 6 1/2" 6 1/2" 8"	15 7/8" 16 3/4" 17 13/16" 20 1/4"	64500 72000 79500 87000	27 22 20 19	19 15 14 13	14 10 9 8	4180 4920 5870 6000
	1900	HA-410-E-1-PG	41' 0"	35' 0"	6' 0"	6 1/2"	13 7/8"	62700	38	29	22	2790
E	1900 1900 1900	HA-460-E-1-PG HA-520-E-1-PG HA-570-E-1-PG	46' 0" 52' 0" 57' 0"	40' 0" 45' 0" 50' 0"	6' 0" 7' 0" 7' 0"	6 1/2" 6 1/2" 6 1/2"	14 3/4" 15 7/8" 16 3/4"	72200 81700 91200	37 36 30	28 27 22	21 20 16	3370 4190 4930
	1900 1900 1900	HA-630-E-1-PG HA-680-E-1-PG	63' 0" 68' 0"	55' 0" 60' 0"	8' 0" 8' 0"	8" 8"	19 5/16" 20 1/4"	100700 110200	29 27	20 19	15 13	7140 8020
	2400 2400	HA-410-F-1-PG HA-460-F-1-PG	41' 0" 46' 0"	35' 0" 40' 0"	6' 0" 6' 0"	6 1/2" 6 1/2"	13 7/8" 14 3/4"	79200 91200	50 49	38 37	30 29	3150 3770
F	2400 2400 2400	HA-520-F-1-PG HA-570-F-1-PG HA-630-F-1-PG	52' 0" 57' 0" 63' 0"	45' 0" 50' 0" 55' 0"	7' 0" 7' 0" 8' 0"	6 1/2" 8" 8"	15 7/8" 18 1/4" 19 5/16"	103200 115200 127200	48 40 39	36 30 29	28 22 21	4580 6200 7160
	2400	HA-680-F-1-PG	68' 0"	60' 0"	8' 0"	8"	20 1/4"	139200	38	27	20	8050
	3000 3000 3000	HA-460-G-1-PG HA-520-G-1-PG HA-570-G-1-PG	46' 0" 52' 0" 57' 0"	40' 0" 45' 0" 50' 0"	6' 0" 7' 0" 7' 0"	8" 8"	16 1/4" 17 3/8" 18 1/4"	114000 129000 144000	63 60 51	48 45 38	38 35 29	4500 5420 6220
G	3000 3000 3000	HA-630-G-1-PG HA-680-G-1-PG HA-740-G-1-PG	63' 0" 68' 0" 74' 0"	55' 0" 60' 0" 65' 0"	8' 0" 8' 0"	8" 8" 8"*	19 5/16" 20 1/4" 19 9/16"	159000 174000 189000	49 48 46	36 35 33	27 26 24	7240 8120 8600
	3000 3700	HA-790-G-1-PG HA-520-H-1-PG	79' 0" 52' 0"	70' 0" 45' 0"	9' 0" 7' 0"	8"*	20 5/16" 17 3/8"	204000 159100	45 76	32 58	23 45	9700 5450
н	3700 3700 3700 3700	HA-570-H-1-PG HA-630-H-1-PG HA-680-H-1-PG	52 0 57' 0" 63' 0" 68' 0"	50' 0" 55' 0" 60' 0"	7' 0" 8' 0" 8' 0"	8" 8"	17 5/6 18 1/4" 19 5/16" 20 1/4"	177600 196100 233100	65 64 62	49 48 46	38 36 35	6250 7250 8200
	3700 3700	HA-740-H-1-PG HA-790-H-1-PG	74' 0" 79' 0"	65' 0" 70' 0"	9' 0"	8"* 8"*	19 9/16" 20 5/16"	233100 233100 251600	61 59	45 43	33 32	9000 10200
	4500 4500	HA-520-J-1-PG HA-570-J-1-PG	52' 0" 57' 0"	45' 0" 50' 0"	7' 0" 7' 0"	8" 8"	17 3/8" 18 1/4"	193500 216000	95 82	73 62	57 48	5500 6300
J	4500 4500 4500	HA-630-J-1-PG HA-680-J-1-PG HA-740-J-1-PG	63' 0" 68' 0" 74' 0"	55' 0" 60' 0" 65' 0"	8' 0" 8' 0"	8" 8"	19 5/16" 20 1/4" 19 9/16"	238500 261000 283500	80 79 77	61 59 58	47 45 44	7300 8250 9400
	4500	HA-790-J-1-PG	79' 0"	70' 0"	9' 0"	8"*	20 5/16"	306000	76	56	42	10700
K	5400 5400	HA-680-K-1-PG HA-740-K-1-PG	68' 0" 74' 0"	60' 0" 65' 0"	9' 0" 8' 0"	9 1/2" 9 1/2"*	21 3/4" 21 1/16"	313200 340200	96 94	73 71	56 54	9150 10700

NOTES: This chart outlines typical heights and class of poles. Other sizes are available upon request. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Pole tip diameters indicated with an asterisk (*) have a taper of 13mm/m. Standard taper on all other poles is 15mm/m.

SPORTSLIGHTING

ACCESSORIES CODES

HOW TO SPECIFY A SPORTS LIGHT POLE

Products such as crossarms, platforms, polesteps, and GFI receptables are standard accessories available with our sportslighting poles. The poles can be manufactured to suit these products, or made to suit products supplied by others. To specify a pole with the accessories supplied by Utility Structures, include the "USI" code following the pole cata-

logue number. Then follow the "USI" code with the specific codes required for the accessories. Refer to the chart on accessories for the specific items you wish to include. If you want the pole to be designed for a particular accessories but do not want Utility Structures to supply, just leave out the "USI" code.

0005	DECODIDATION	0.	OBTIONS
CODE	DESCRIPTION	Ur	OPILIONS

SN	R	GFI Receptacle
은	PS	5/8" x 8" galvanized steel pole steps
OPTIONS	LP	Lighting Platform

ACE	1	Mold finish
A H	3	Etched and acrylic applied
SUS	4	Exposed aggregate

CODE DESCRIPTION OF COLOR

COLOR MATRIX	PG	Plain Grey
X E	ML	Midnight Lace
F	BE	Black Eclipse
Σ	SB	Seluki Bronze
9	AJ	Aztec Jade
8	0J	Oriental Jade
	DS	Desert Sand

CODE DESCRIPTION OF OPTIONS

TIONS	TC2	2 light 4" x 4" tubular crossarm
	TC3	3 light 4" x 4" tubular crossarm
ОРТІ	TC4	4 light 4" x 4" tubular crossarm
0	TC5	5 light 4" x 4" tubular crossarm
		_

CODE DESCRIPTION OF OPTIONS

S	AC2	2 light 4" structural angle crossarm
Ž	AC3	3 light 4" structural angle crossarm
OPTIONS	AC4	4 light 4" structural angle crossarm
0	AC5	5 light 4" structural angle crossarm
	AGS	5 light 4 structural angle crossarin

CODE DESCRIPTION OF OPTIONS

	BB2	2 light bullhorn bracket (straight)
S	BB3	3 light bullhorn bracket (straight)
OPTIONS	BB3A	3 light bullhorn bracket (120 degree)
9	BB4	4 light bullhorn bracket (straight)
	BB4A	4 light bullhorn bracket (90 degree)

TYPICAL CATALOGUE NUMBER



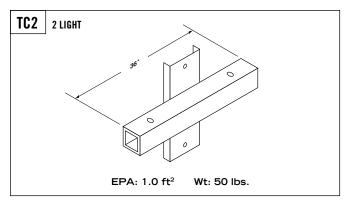
TYPICAL POLE 8" dia. **ACCESSORIES** 4 light tubular crossarm 68' 0" CLASS "H" POLE 3 light tubular crossarm . PS **POLE STEPS** 5/8" insert pole steps (see detail) 15 STEP MOUNTING DETAIL 5/8" x 8" long galvanized steel machine bolt c/w nut. Section "A - A" (180 degrees to each other.) OVERALL POLE LENGTH TOTAL NUMBER OF STEPS Identification plate 12 3-1/2" x 10-1/2" ZA12 handhole box and cover c/w #6AWG 41' 0" 16 LENGTH VS STEPS 46' 0" 20 ground wire & tamperproof screws 52' 0" 24 57' 0" 28 36" 63' 0" 32 grade level 68' 0" 36 74' 0" 40 79' 0" <u>8</u> NOTES: This number of poles steps is approximate only, as the quantity will vary slightly 3-1/2" x 10-1/2" twin depending on the configuration of the crossarm mount and burial depth of pole. wiring apertures This should be used as a guideline only. ,9,9 20-1/4"

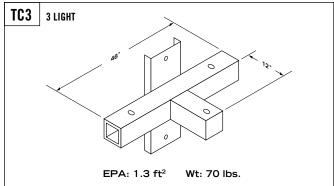
CATALOGUE NUMBER FOR POLE SHOWN

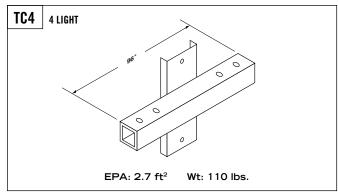


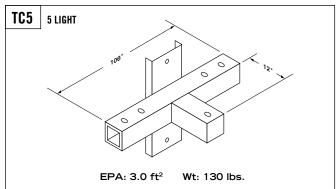
FLOODLIGHT CROSSARMS

TUBULAR CROSSARMS - 4" x 4" x 1/4" GALVANIZED STEEL

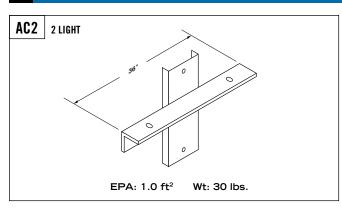


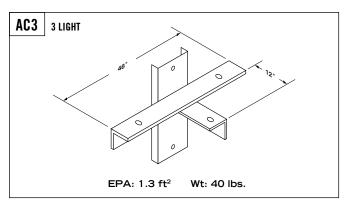


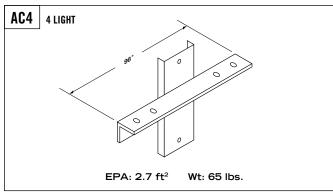


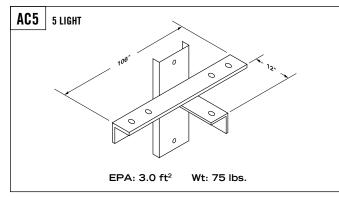


ANGLE IRON CROSSARMS - 4" x 4" x 1/4" GALVANIZED STEEL





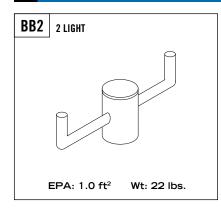


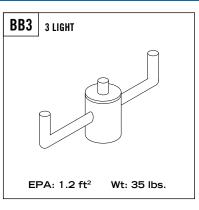


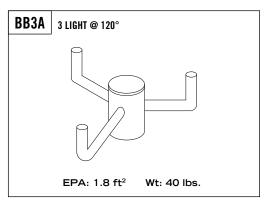
NOTE: All crossarms will be custom drilled to suit flood mount requirement.

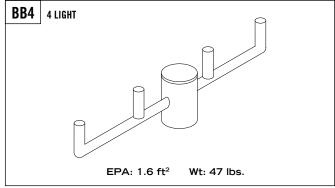
BRACKETS & PLATFORMS

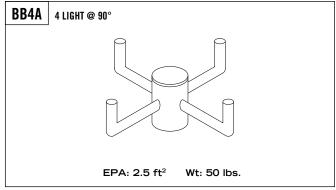
BULLHORN BRACKETS - 2 3/8" x 3" O.D. GALVANIZED STEEL



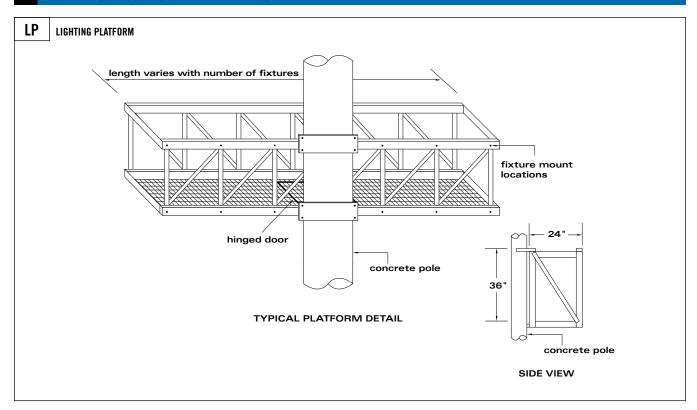








PLATFORMS - GALVANIZED STEEL









SPORTSLIGHTING

CONCRETE POLES





UTILITY DISTRIBUTION

CONCRETE POLES



PRESTRESSED CONCRETE UTILITY POLES

HA-250-C-1-PG-X 25' 0" 4' 6" 6 1/2" 11' 0" 22200 HA-300-C-1-PG-X 30' 0" 5' 0" 6 1/2" 11 7/8" 27600 HA-350-C-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 33000 HA-400-C-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 38400 HA-450-C-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 43800 HA-300-D-1-PG-X 30' 0" 5' 5" 6 1/2" 11 7/8" 34500 HA-350-D-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 41250 HA-400-D-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 48000 HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-450-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	OUND NOMINAL Ent Pole Weight [lbs.]
HA-300-C-1-PG-X 30' 0" 5' 0" 6 1/2" 11 7/8" 27600 HA-400-C-1-PG-X 40' 0" 6' 0" 6 1/2" 12 3/4" 33000 HA-450-C-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 43800 HA-300-D-1-PG-X 30' 0" 5' 0" 6 1/2" 11 7/8" 34500 HA-300-D-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 41250 HA-300-D-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 48000 HA-400-D-1-PG-X 45' 0" 6' 6" 6 1/2" 13 11/16" 48000 HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	1515
Table 1200	1985
HA-400-C-1-PG-X	2535
HA-450-C-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 43800 HA-300-D-1-PG-X 30' 0" 5' 0" 6 1/2" 11 7/8" 34500 HA-350-D-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 41250 HA-400-D-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 48000 HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	3180
HA-350-D-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 41250 HA-400-D-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 48000 HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	3925
HA-350-D-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 41250 HA-400-D-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 48000 HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	2085
D 1500 4 HA-400-D-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 48000 HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	2635
HA-450-D-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 54750 HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	3280
HA-500-D-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 61500	4025
HA OFO FA DO V	4800
HA-350-E-1-PG-X 35' 0" 5' 5" 6 1/2" 12 3/4" 52250	3135
HA-400-E-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 60800	3780
E 1900 3 HA-450-E-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 69350	4525
HA-500-E-1-PG-X 50' 0" 7' 0" 6 1/2" 15 1/2" 77900	5200
HA-550-E-1-PG-X 55' 0" 7' 6" 6 1/2" 16 3/8" 86450	5690
HA-400-F-1-PG-X 40' 0" 6' 0" 6 1/2" 13 11/16" 76800	4030
HA-450-F-1-PG-X 45' 0" 6' 6" 6 1/2" 14 5/8" 87600	4775
2400 2 HA FOO F 4 DC V FOI OII 71 OII C 4 /0II 4 F 4 /0II 00400	5450
F 2400 2 HA-500-F-I-PG-X 50 0 7 0 6 1/2 15 1/2 98400 HA-550-F-I-PG-X 55' 0" 7' 6" 6 1/2" 16 3/8" 109200	
HA-600-F-1-PG-X 60' 0" 8' 0" 6 1/2" 17 1/4" 120000	
HA-650-F-1-PG-X 65' 0" 8' 6" 6 1/2" 18 3/16" 130800	
HA-450-G-1-PG-X 45' 0" 6' 6" 8" 16 1/8" 109500	5090
HA-500-G-1-PG-X 50' 0" 7' 0" 8" 17" 123000	
HA-550-G-1-PG-X 55' 0" 7' 6" 8" 17 7/8" 136500	
G 3000 1 HA-600-G-1-PG-X 60' 0" 8' 0" 8" 18 3/4" 150000	
HA-650-G-1-PG-X 65' 0" 8' 6" 8" 19 5/8" 163500	
HA-700-G-1-PG-X 70' 0" 9' 0" 8" 20 1/2" 177000	11280
HA-750-G-1-PG-X 75' 0" 9' 6" 8" 19 3/4" * 190500	11480
HA-500-H-1-PG-X 50' 0" 7' 0" 8" 17" 151700	6190
HA-550-H-1-PG-X 55' 0" 7' 6" 8" 17 7/8" 168350	
HA-600-H-1-PG-X 60' 0" 8' 0" 8" 18 3/4" 185000	
H 3700 H1 HA-650-H-1-PG-X 65' 0" 8' 6" 8" 19 5/8" 201650	
HA-700-H-1-PG-X 70' 0" 9' 0" 8" 20 1/2" 218300	11360
HA-750-H-1-PG-X 75' 0" 9' 6" 8" 19 3/4" * 234950	
HA-800-H-1-PG-X 80' 0" 10' 0" 8" 20 1/2" * 251600	12550
HA-600-J-1-PG-X 60' 0" 8' 0" 8" 18 3/4" 225000	8650
HA-650-J-1-PG-X 65' 0" 8' 6" 8" 19 5/8" 245250	
J 4500 H2 HA-700-J-1-PG-X 70' 0" 9' 0" 8" 20 1/2" 265500	
HA-750-J-1-PG-X 75' 0" 9' 6" 8" 19 3/4" * 285750	
HA-800-J-1-PG-X 80' 0" 10' 0" 8" 20 1/2" * 306000	12700
HA-600-K-1-PG-X 60' 0" 8' 0" 9 1/2" 20 1/4" 270000	10350
5400 H3 HA-650-K-1-PG-X 65' 0" 8' 6" 9 1/2" 19 5/8" * 294300	
HA-700-K-1-PG-X 70' 0" 9' 0" 9 1/2" 20 3/8" * 318600	
HA-600-L-1-PG-X 60' 0" 8' 0" 10 1/4" 19 5/8" * 320000	10500
L 6400 H4 HA-650-L-1-PG-X 65' 0" 8' 6" 10 1/4" 20 3/8" * 348800	
HA-700-L-1-PG-X 70' 0" 9' 0" 10 1/4" 21 1/8" * 377600	

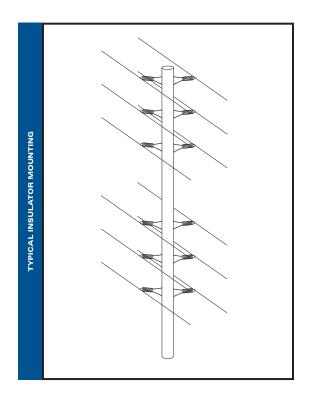
NOTES: This chart outlines typical heights and class of poles. Other sizes are available upon request. Ultimate ground line moment is calculated as follows: Height above grade minus 2 ft. times transverse bending strength. Pole tip diameters indicated with an asterisk (*) have a taper of 13mm/m. Standard taper on all other poles is 15mm/m.



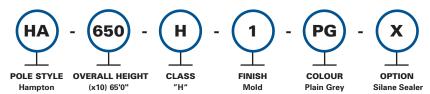
8" dia. 3/4" diameter hole (typ.) typical 10" spacing for side mount insulator brackets ... (in most cases, indentical holes are placed 1" below, and rotated 90° to the dimensioned holes.) -;----Section "A - A" 2" x 5" wiring aperture c/w #6AWG ground wire above lower aperture* Identification plate 3-1/2" x 10-1/2" ZA12 handhole box and cover c/w #6AWG ground wire & tamperproof screws 12 10.0 Capseal X-75 for 36" grade level 18 3-1/2" x 10-1/2" twin wiring apertures 7.0 19-5/8" * Capseal X-75 optional

TYPICAL DISTRIBUTION POLE DETAILS

65' O" CLASS "H" POLE



TYPICAL CATALOGUE NUMBER



UTILITY POLES

FEATURES

Utility poles are grey, tapered, round prestressed spun concrete. The Hampton Series pole is the style utilized for distribution and transmission purposes.

This specification is intended to outline the requirement of CSA A.14-07, as they pertain to prestressed concrete distribution and utility poles.

Poles are manufactured in accordance with CSA A.14-07, as well as those amendments which are specified by the clients.

Poles are designed in accordance with CSA Standard CAN3-A23.3M1984, Code for Design of Concrete Structures for Buildings. The poles are tested to confirm these designs for both bending and torsional resistance.

Utility poles have a provision for grounding which consists of either a stranded jumper copper wire (size and length specified by the client) or an insert and ground connector. Both grounding systems are connected to the continuous ground bar (embedded in the concrete) with CSA specifications. C22.2 No O-M - General Requirements - Canadian Electrical Code, Part II, C22.2 No O.4-M - Bonding and Grounding of Electrical Equipment (Protective Grounding), and C22.2 No 206-M - Lighting Poles.

The pole strengths are defined by the classes listed in the accompanying table. Poles for which no specific

mounting instructions are given, may be assumed, for design and testing purposes, to be clamped at the butt over a length equal to 10 per cent of the length of the pole, plus 2 feet. When a pole is mounted in accordance with this recommendation, it shall be capable of sustaining a transverse ultimate load (applied at two feet from the tip of the pole) equal to or greater than the value shown in the table. The same parameters applied for the axial ultimate torque.

The pole design and selection process involves determining the load magnitudes and locations for the given pole height. The classes of the poles specify the minimum ultimate transverse load the pole must withstand. The loads are tabulated and ground line moment is calculated. If the client has the pole pre-engineered, we simply classify the pole by the letter designation. Alternatively, if the pole has not been designed and the client is unaware of it's strength classification, we will assist the client with design, and determine the strength classification for them.

Traditionally utilities have utilized wood poles for their systems. The poles were readily available and were inexpensive. Many of these existing wooden utility poles are aging, and the utilities are choosing to replace them with concrete poles because of their performance and durability. The accompanying table provides a useful comparison of the classes of wood versus concrete to assist in your selection.

SPECIAL FEATURES

- Long maintenance free life span.
- Resistance to insects, fire, woodpeckers, rot, and corrosion.
- Low cost direct burial design.
- Pleasing color and lines.
- Variety of sizes and strengths (class).
- Manufactured product with consistent quality and strengths.

- Hollow raceway for internal wiring and components.
- Factory made raceways, handholes, wiring apertures, and bolt holes.
- · Extremely rigid product with low vibration.
- 10 year limited warranty on product.





BWA - WASHINGTON LIGHTING BOLLARD

LIGHTING BOLLARDS

CONCRETE BOLLARDS



THE HAMPTON LIGHTING BOLLARD

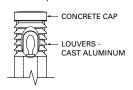


TYPICAL BOLLARD DETAIL 1067 [42"] GRADE LEVEL \times 457 [18"]

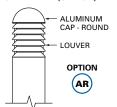
INSTALLATION OPTIONS Direct buried is standard. OPTION (в) GRADE LEVEL BASE PLATE OPTION (B2)

CAP DETAIL

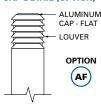
Concrete cap is standard.



CAP DETAIL (OPTION)

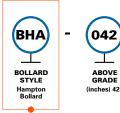


CAP DETAIL (OPTION)



BHA-042-3-AJ-AR-HPS-120V

















OPTION

Select OPTIONS

GRADE LEVEL

 $\times\times\times$

The Hampton bollard has 6 standard options to choose from.

CODE	DESCRIPTION	
В	Base Plate - Flush with Bolts Exposed	
B2	Base Plate - Below Grade Stub	
AR	Aluminum Cap - Round	
AF	Aluminum Cap - Flat	
R	GFI Receptacle	
S1	Base Shroud - Round	

Select BOLLARD STYLE

USI concrete bollards are available in 4 different styles.

CODE	DESCRIPTION
ВНА	Hampton Bollard
BMA	Madison Bollard
BST	Stratford Bollard
BWA	Washington Bollard

Select SURFACE FINISH

USI concrete bollards are available with 2 types of surface finishes.

CODE	DESCRIPTION
N/A	Polished finish
3	Etched finish
4	Exposed finish

Select COLOUR

Select options as required.

Our bollards are available in all 12 colours. Please visit our Colours & Finishes section for complete information.

CODE	DESCRIPTION
AJ	Aztec Jade
BE	Black Eclipse
DB	Dark Bronze
SP	Salt & Pepper

LAMPING OPTIONS

CODE	DESCRIPTION
HPS	High Pressure Sodium
MH	Metal Halide
LED	LED

ELECTRICAL OPTIONS

CODE	DESCRIPTION
120V	120 volts
277V	277 volts
347V	347 volts

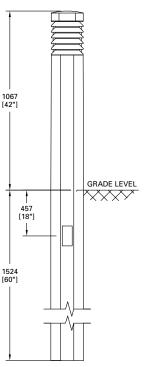
Note: Consult USI for additional voltages.



THE MADISON LIGHTING BOLLARD

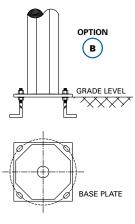


TYPICAL BOLLARD DETAIL



INSTALLATION OPTIONS

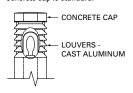
Direct buried is standard.



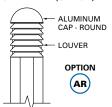


CAP DETAIL

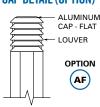
Concrete cap is standard.

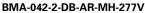


CAP DETAIL (OPTION)



CAP DETAIL (OPTION)





EXAMPLE OF TYPICAL CATALOG NUMBER





2 FINISH

DB

COLOUR

Select options as required.

OPTION



OPTION

Select OPTIONS AR

The Madison bollard has 6 standard options to choose from.

CODE	DESCRIPTION
В	Base Plate - Flush with Bolts Exposed
B2	Base Plate - Below Grade Stub
AR	Aluminum Cap - Round
AF	Aluminum Cap - Flat
R	GFI Receptacle
S1	Base Shroud - Round

Select BOLLARD STYLE

USI concrete bollards are available in 4 different styles.

CODE	DESCRIPTION
ВНА	Hampton Bollard
BMA	Madison Bollard
BST	Stratford Bollard
BWA	Washington Bollard

Select SURFACE FINISH

USI concrete bollards are available with 3 types of surface finishes.

CODE	DESCRIPTION
2	Polished finish
3	Etched finish
4	Exposed finish

Select COLOUR

Our bollards are available in all 12 colours. Please visit our Colours & Finishes section for complete information.

CODE	DESCRIPTION
AJ	Aztec Jade
BE	Black Eclipse
DB	Dark Bronze
SP	Salt & Pepper

LAMPING OPTIONS

CODE	DESCRIPTION
HPS	High Pressure Sodium
MH	Metal Halide
LED	LED

ELECTRICAL OPTIONS

CODE	DESCRIPTION
120V	120 volts
277V	277 volts
347V	347 volts

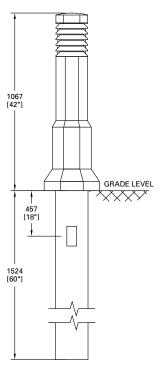
Note: Consult USI for additional voltages.



THE STRATFORD LIGHTING BOLLARD

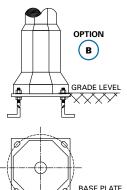


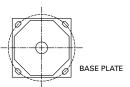
TYPICAL BOLLARD DETAIL

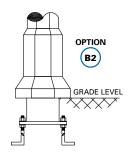


INSTALLATION OPTIONS

Direct buried is standard.

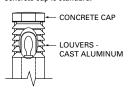




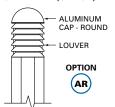


CAP DETAIL

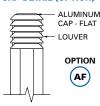
Concrete cap is standard.



CAP DETAIL (OPTION)



CAP DETAIL (OPTION)





EXAMPLE OF TYPICAL CATALOG NUMBER





(inches) 42

2 FINISH

AJ COLOUR



OPTION



OPTION

Select OPTIONS

The Stratford bollard has 5 standard options to choose from.

CODE	DESCRIPTION
В	Base Plate - Flush with Bolts Exposed
B2	Base Plate - Below Grade Stub
AR	Aluminum Cap - Round
AF	Aluminum Cap - Flat
R	GFI Receptacle

Select BOLLARD STYLE

USI concrete bollards are available in 4 different styles.

CODE	DESCRIPTION
BHA	Hampton Bollard
BMA	Madison Bollard
BST	Stratford Bollard
BWA	Washington Bollard

Select SURFACE FINISH

USI concrete bollards are available with 3 types of surface finishes.

CODE	DESCRIPTION
2	Polished finish
3	Etched finish
4	Exposed finish
4	Exposed finish

Select COLOUR

Our bollards are available in all 12 colours. Please visit our Colours & Finishes section for complete information.

CODE	DESCRIPTION
AJ	Aztec Jade
BE	Black Eclipse
DB	Dark Bronze
SP	Salt & Pepper

LAMPING OPTIONS

CODE	DESCRIPTION
HPS	High Pressure Sodium
MH	Metal Halide
LED	LED

ELECTRICAL OPTIONS

CODE	DESCRIPTION
120V	120 volts
277V	277 volts
347V	347 volts

Note: Consult USI for additional voltages.



THE WASHINGTON LIGHTING BOLLARD

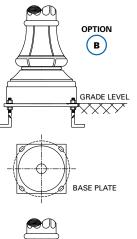


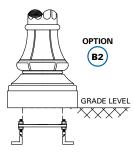
BWA-042-3-BE-LED

TYPICAL BOLLARD DETAIL 1067 [42"] GRADE LEVEL 457 [18"] 1524

INSTALLATION OPTIONS

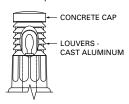
Direct buried is standard.



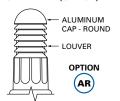


CAP DETAIL

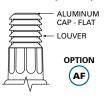
Concrete cap is standard.



CAP DETAIL (OPTION)



CAP DETAIL (OPTION)



EXAMPLE OF TYPICAL CATALOG NUMBER





3 **FINISH**



COLOUR







OPTION

AR

Select OPTIONS

The Washington bollard has 5 standard options to choose from.

CODE	DESCRIPTION	
В	Base Plate - Flush with Bolts Exposed	
B2	Base Plate - Below Grade Stub	
AR	Aluminum Cap - Round	
AF	Aluminum Cap - Flat	
R	GFI Receptacle	

Select BOLLARD STYLE

USI concrete bollards are available in 4 different styles.

CODE	DESCRIPTION
ВНА	Hampton Bollard
BMA	Madison Bollard
BST	Stratford Bollard
BWA	Washington Bollard

Select SURFACE FINISH

USI concrete bollards are available with 2 types of surface finishes.

CODE	DESCRIPTION
N/A	Polished finish
3	Etched finish
4	Exposed finish

Select COLOUR

Our bollards are available in all 12 colours. Please visit our Colours & Finishes section for complete information.

CODE	DESCRIPTION
AJ	Aztec Jade
BE	Black Eclipse
DB	Dark Bronze
SP	Salt & Pepper

LAMPING OPTIONS

CODE	DESCRIPTION
HPS	High Pressure Sodium
MH	Metal Halide
LED	LED

ELECTRICAL OPTIONS

CODE	DESCRIPTION
120V	120 volts
277V	277 volts
347V	347 volts

Note: Consult USI for additional voltages.









BHA - HAMPTON LIGHTING BOLLARD

BMA - MADISON LIGHTING BOLLARD

BHA - HAMPTON LIGHTING BOLLARD

USI LIGHTING BOLLARDS

Our decorative bollards facilitate traffic control and can complement the aesthetics of almost any landscape.

- Available in a variety of cross sections.
- Available in direct buried or base mounted.
- Available in a variety of colours and finishes.
- Applications include security and architectural uses.
- Will accept a variety of luminaire mounting styles.



BST - SRATFORD LIGHTING BOLLARD



BHA - HAMPTON LIGHTING BOLLARD

LIGHTING BOLLARDS

CONCRETE BOLLARDS





SPECIALTY POLES

CONCRETE POLES











TELECOMMUNICATIONS SECURITY COMMUNICATIONS WINDMILLS

USI SPECIALTY POLES

We can manufacture any style of pole to your specifications. Applications for our specialty poles include surveillance poles, communication bases, and camera lowering devices.

- Available in a variety of cross sections.
- Available in direct buried or base mounted.
- Standard mold, etched, exposed finishes are available in a variety of colours.
- Applications include telecommunication, security, communication and windmill.
- Will accept a variety of fixture mount styles.





PARK LIGHTING

SURVEILLANCE

SPECIALTY POLES

CONCRETE POLES





TECHNICAL INFORMATION

USI CONCRETE POLES



THE BENEFITS OF CONCRETE

WHY SPUN CONCRETE POLES?

Unlike conventional cast poles, prestressed spun concrete poles are centrifugally cast. This process involves spinning the poles at a very high rpm, which produces poles with the highest density and strength to weight ratio of any concrete available. As a result they are more durable; longer lasting and resistant to freeze/thaw cycles and chemical agents.

All our concrete pole are prestressed with high-tensile steel that is stretched before the concrete is cast, then released to maintain concrete compression. Prestressing greatly increases both the strength and resilience of the pole, providing far greater longevity than non-prestressed concrete poles.

In addition, the centrifugal (spinning) process creates a smooth, hollow raceway, tunnel inside the pole. This allows for internal routing of electrical cables.





DESIGN

Our prestressed spun concrete poles meet design criteria of the latest revisions of CSA A14 and ASTM C1089 standards. We are also an accredited CSA A23.1 certified precast plant.

MATERIALS

Cement

Shall be high early (HE) strength and shall meet all physical requirements of CSA Standard A23.1.

Reinforcing and Stressing Strands

Deformed reinforcing bars shall conform shall conform to CSA G30.12 and ASTM A615. Prestressing steel reinforcement shall conform to CSA G279 and ASTM A416. Helical reinforcing wire shall conform to ASTM A82. Galvanized or epoxy coated rebar is available upon request.

Aggregates

Coarse and fine aggregates shall meet all physical requirements of CSA standard A23.1. Aggregates shall be washed to achieve optimum quality.

Admixtures

Air entrainment, water reducers, corrosion inhibitors and accelerators shall conform to CSA A23.1. Air entrainment shall be used to produce 5-8% air content in the mix, which will improve the resistance to freeze/thaw.

Water

Shall be clear and free of any acid, alkali, sediment or organic matter.

Hardware

All Hardware and accessories shall be plated, hot dipped galvanized or stainless steel. Handhole frames & covers shall be manufactured using a high density zinc alloy.

All hardware such as inserts, fasteners, crossarms, pole steps, fin caps, and base plates shall be plated, hot dipped galvanized or stainless steel.

Pole Tops

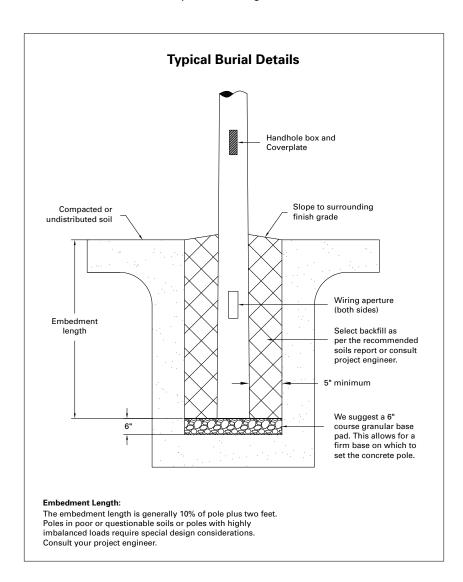
All pole tops will be equipped with a weatherproof cap, except those with a tenon top or optional fin cap.

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 chemical treatments.
- Landscaping Whether 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.



Installation Guidelines

Calculating the Depth of the Pole

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.

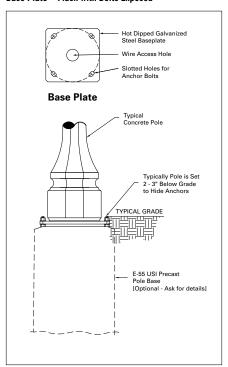
Depth Calculation: 35 feet X 10% = 3 feet, 6 inches plus 2 feet = 5 feet, 6 inches plus 6 inches for GA base = a total of 6 feet of augured depth

OTHER INSTALLATION METHODS

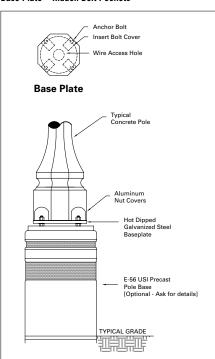
The simple direct embedment method may not be suitable for all applications. When poles are in unstable soil conditions, or with large or unbalanced loads, either an engineered base or special backfill (i.e. concrete) may be required. USI can also supply concrete poles for either the Base Plate or Socket Mounting methods.

BASE PLATE MOUNTING

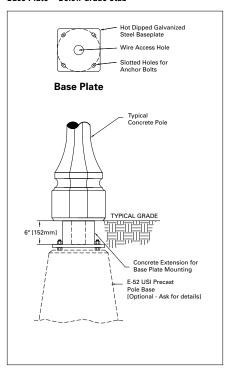
OPTION B: Base Plate – Flush with Bolts Exposed



OPTION B1: Base Plate – Hidden Bolt Pockets

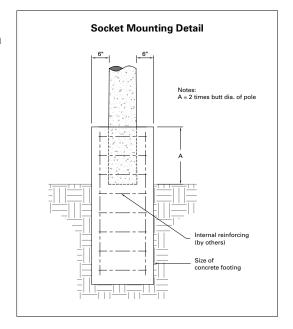


OPTION B2: Base Plate – Below Grade Stub



SOCKET MOUNTING

Socket Mounting may be installed flush to grade or poured at a desired height to act as extra protection from impact.





MOLDS

Only steel molds shall be used, with dimensions and cross sections as shown in our product catalogue. The reinforcing steel cage shall be centered and positioned in the mold by means of plastic spacers, to ensure a minimum concrete coverage of %". The prestressing steel shall be stressed to a maximum of 70% of its ultimate capacity.

CONCRETE

The minimum 28-day cylinder strength for concrete used in poles shall be 50 MPa (7250 psi) for standard grey structural concrete, and 45 MPa (6525 psi) for architectural decorative concrete. The compressive strength of concrete mixes shall be established in accordance with CAN/CSA-A23.2-9C.

CENTRIFUGAL SPINNING PROCESS

The entire steel mold shall be spun utilizing the "Vibraspun" process, which is a four stage vibration spinning cycle. The length of time and speed required will vary based on the style of concrete pole.





STORAGE AND HANDLING

USI spun poles are made of high strength prestressed concrete, making them extremely durable and flexible. USI spun concrete poles are designed to withstand specific service loads and handling loads — with safety factors considered. But storage and handling practices are easily overlooked. Attention to the following details can help minimize damage.



STORAGE

- Always store concrete poles on wood, ideally 2 x 6 hardwood, or similar wood which is finished enough to have opposite sides flat and parallel (no logs or branches). Never stack poles without proper spacing, a sufficient thickness should allow the placing of slings in between layers.
- 2. The location of wood supports shall be placed 1/5 of the total length from each end. Minimum two wood supports for poles under 30 feet, and min. three (3) wood supports for poles over 30 feet.
- 3. When poles are stored in more than one layer, each piece of wood support must be placed one above the other, so that the weight of the poles above is transmitted directly downward through each wood support and does not induce bending stresses on the poles.
- 4. Store on a level surface. If the surface is not level, place extra supports to offset and balance the load properly.
- 5. Place wedges on each of the wood supports, on round poles only, to prevent them from rolling.
- 6. Poles should be aligned on top of each other to form a straight line.

HANDLING

- 1. We only recommend nylon slings when handling concrete poles.
- 2. In lifting the pole from a single pick-up point, use either a choker sling or a loop sling with one complete extra turn around the pole just above the balance point.
- 3. We recommend using two pick-up points for poles over 40 feet, and choker-type attachment should be used on the pole.



CROSS SECTIONS

USI concrete poles are available with four (4) basic cross sections. The cross sections available are round, octagonal, square, and fluted. Shown below are the cross sections and the pole styles associated with each.

ROUND



POLE STYLES
The Hampton Series
The Rockcliffe Series
The Newport Series
The Edinburgh Series

OCTAGONAL



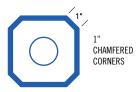
POLE STYLES
The Madison Series
The Cambridge Series
The Stratford Series
The Westmount Series
The Parkdale Series

SQUARE



ROUNDED EDGE

POLE STYLES
The Oxford Series



POLE STYLES
The Thompson Series

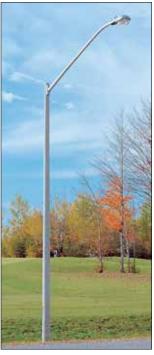
FLUTED



The Grandview Series
The Astoria Series
The Victorian Series



POLE STYLES
The Washington Series



THE HAMPTON SERIES



THE MADISON SERIES



THE THOMPSON SERIES



THE GRANDVIEW SERIES



COLOURS



Autumn Red COLOUR CODE: AR



Aztec Jade COLOUR CODE: AJ



Black Eclipse COLOUR CODE: BE



Dark Bronze COLOUR CODE: DB



Desert Rose COLOUR CODE: DR



Desert Sand COLOUR CODE: DS



Midnight Lace COLOUR CODE: ML



Natural Grey COLOUR CODE: NG



Oriental Jade COLOUR CODE: 0J



Salt & Pepper COLOUR CODE: SP



Seluki Bronze COLOUR CODE: SB



Venetian White COLOUR CODE: VW

FINISHES

The decorative pole finish is not a veneer or a painted finish. The entire concrete matrix is a combination of specialty decorative colored aggregates, pigments, and cement. The entire pole is spun cast with this concrete mix. The combination of various concrete mix designs and surface finishes provides the client with over 36 standard finishes (custom colours available upon request) to choose from.



Below are USI's three (3) finish types:

Polished Finish

FINISH CODE: 2

This surface finish is accomplished by polishing the face of the concrete pole by mechanical means. Diamond polishing discs work the surface to an ultra smooth finish. After polishing the face of the pole, a minimum of two coats of clear sealer are applied to further enhance the natural beauty of the stone.

Etched Finish

FINISH CODE: 3

This surface finish, as the name suggests is a semi-rough finish. The etching of the pole surface is accomplished by sand blasting the face of the pole. The sand blasting removes the outer layer of mortar, exposing the decorative aggregates beneath. As with the polished finish, a sealer is applied to enhance the look.

Exposed Finish

FINISH CODE: 4

This surface finish is a two-stage process. Initially the pole form is coated with a "surface retarder", which delays the hardening of the thin outer layer of the concrete. After the pole is cured, the pole surface is pressure washed with water to expose the aggregate. This finish is a rough finish, with large portions of the aggregate showing. No sealers are typically applied to this pole.

POSITION REFERENCE OF COLOUR AND FINISH CODE IN TYPICAL CATALOGUE NUMBER

EXAMPLE OF TYPICAL CATALOG NUMBER



OVERALL HEIGHT











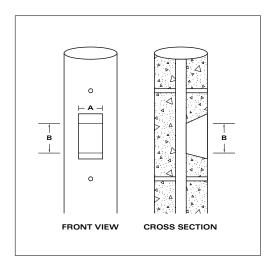




WIRING APERTURES

Through the centrifugal casting process, our spun concrete poles achieve a hallow raceway ideal for placing wiring. Access holes (top & bottom) can be cast in for getting the wires in and out of this naturally formed conduit. One end of the holes is typically sloped to provide clear acess and the other is rounded to protect the wire during installation.

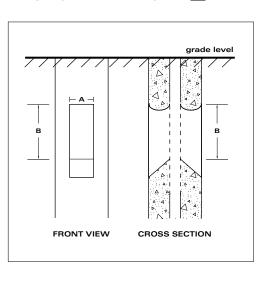
POLE TOP APERTURE



Size is standard, but location will vary with fixture mount style.

WIRING APERTURE	INSIDE CLEAR DIMENSIONS	
	А	В
1 1/2" x 3"	38mm [1 1/2"]	75mm [3"]

BELOW GRADE APERTURE B



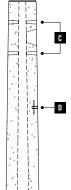
Standard location is 18" below grade level and is available in two sizes.

WIRING APERTURE	INSIDE CLEAR DIMENSIONS	
	Α	В
2 1/2" x 5"	63mm [2 1/2"]	125mm [5"]
3 1/2" x 10 1/2"	88mm [3 1/2"]	263mm [10 1/2"]



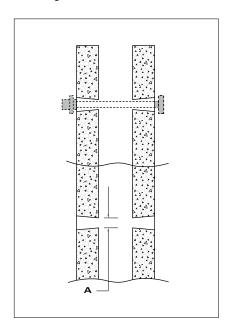
GRADE LEVEL

CABLE ENTRY



THROUGH HOLES C

Through holes for bolts are formed directly in the concrete. Size and position will vary according to fixture.



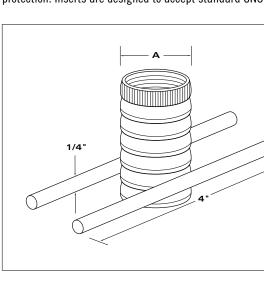
Standard diameter holes sizes:

DIMENSION	DIAMETER HOLE SIZES	
А	13mm [1/2"] 16mm [5/8"] 20mm [3/4"] 25mm [1"]	

Note: Inside clear dimensions — through holes are tapered 1mm [1/16"] Additional sizes are available upon request.

CAST IN THREADED INSERTS D

Inserts shall be cast directly into the concrete pole when required for threaded bolts or attachments. All inserts shall be hot dipped galvanized, or zinc alloy for maximum protection. Inserts are designed to accept standard UNC bolts.



Standard inserts:

DIMENSION	INSERT DIAMETERS	
А	6mm [1/4"] 9mm [3/8"]	
	13mm [1/2"] 16mm [5/8"] 20mm [3/4"]	

Note: Inserts are designed to accept standard UNC bolts. Additional sizes are available upon request.

Pole attachments with inserts

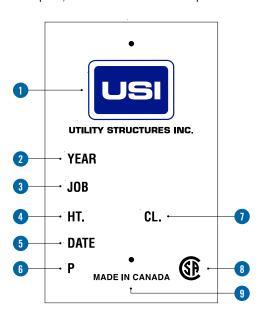
All lighting bracket arms, pole steps and scroll arm attachments that are mounted to the pole using inserts, can only be torqued to a maximum of 20 ft. - lbs.



CABLE

IDENTIFICATION PLATE **E**

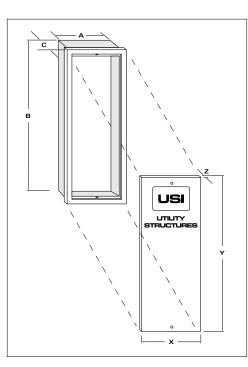
Concrete poles are built to CSA Standard A.14. All poles come equipped with this nameplate, which also outlines nine important features of each pole.



- 1. USI Utility Structures Inc. company logo
- 2. YEAR the year of manufacture
- 3. JOB Special ID tracking number
- 4. HT. the **overall height** of the pole
- 5. DATE day of manufacture
- 6. P Signifies the pole is prestressed
- 7. CL. Pole Class (the strength of the pole)
- 8. CSA the use of the C.S.A. logo states that the pole is manufactured to Canadian Standards Association A.14.
- 9. MADE IN CANADA the country in which the pole was manufactured

HANDHOLE BOXES and COVER PLATES **F**

Handhole boxes are typically 36" above grade. Our Handhole boxes and covers are comprised of a die cast (ZA 12) zinc alloy. The cover is form fitting to the box which allows for ease of access.



HANDHOLE BOXES

ВОХ	DIMENSIONS		
NUMBER	А	В	С
1	50mm [2"]	200mm [8"]	45mm [1 3/4"]
2	63mm [2 1/2"]	200mm [8"]	50mm [2"]
3	81mm [3 1/2"]	263mm [10 1/2"]	63mm [2 1/2"]

COVER PLATES

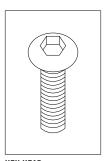
COVER	DIMENSIONS		
NUMBER	Χ	Υ	Z
1	56mm [2 1/4"]	225mm [9"]	3mm [1/4"]
2	70mm [2 3/4"]	225mm [9"]	3mm [1/4"]
3	170mm [3 3/4"]	288mm [11 1/2"]	3mm [1/4"]

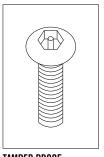
GRADE LEVEL

CABLE

STAINLESS STEEL SCREWS G

Handhole Covers are fastened with stainless steel (18-8), button head cap screws. They are available in the following two head styles; Hex head, and Tamper proof hex head.





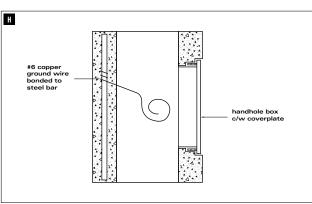
SCREW TYPE	DIMENSIONS	
SOMEM LIFE	DIAMETER	LENGTH
HEX HEAD	6mm [1/4"] - 20	20mm [3/4"]
TAMPER PROOF HEX HEAD	6mm [1/4"] - 20	20mm [3/4"]

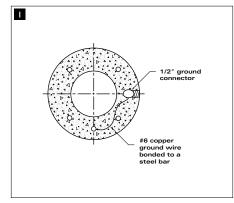
HEX HEAD

TAMPER PROOF Hex Head

ELECTRICAL GROUNDING H + II

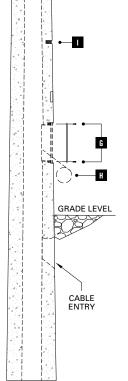
CSA requires at least one ground connection providing adequate electrical contact to one steel rod. The ground bar is continuous throughout the length of the pole and metallically connected to all other reinforcing rods. Grounding will consist of a #6 bare copper strand. The following two methods are approved by CSA:





STANDARD WIRE GROUND

OPTIONAL 1/2" GROUND CONNECTOR INSERT





UTILITY STRUCTURES INC. 10-YEAR WARRANTY

Utility Structures Inc. warrants its products against defects in material and workmanship. Without charge Utility Structures Inc. will either repair or replace any properly installed Utility Structures Inc. product which fails under normal operating conditions within a ten (10) year period from the date of shipment, providing our inspection determines it to be defective under the terms of this warranty. Utility Structures Inc. reserves the right in its solo discretion to decide between repair and replacement.

This warranty covers only products manufactured by Utility Structures Inc. and does not extend to transportation or installation charges, nor does it apply to any equipment of another manufacturer used in conjunction with Utility Structures Inc. products. This express warranty is in lieu of all other representations, warranties or conditions expressed or implied. In no event shall Utility Structures Inc's liability under this warranty exceed the amount paid by the customer to Utility Structures Inc. and in no event shall Utility Structures Inc. be liable for any special, indirect or consequential damages.

We currently expect our spun concrete poles to have a life expectancy of fifty (50) years or more. Through new concrete technology, advanced manufacturing processes, and stringent quality control we can assure the client of this long life.

QUALITY CONTROL

Through our fifty plus years in the precast industry USI has developed a reputation for high quality products. As an accredited CSA A23.1 certified plant, we must maintain a quality control program. This compliance control program assures the product is inspected through shop drawing, production practices and record keeping.

Every pole carries a unique ID numbered tagging system, which ensures traceability of all components and manufacturing procedures for that pole. The concrete mix shall be tested regularly to CSA standards. A Quality Control technician shall inspect and approve the pole through each stage. A final inspection and stamp are required after the entire manufacturing process is completed.



Over fifty years and still testing strong (circa 1960).

