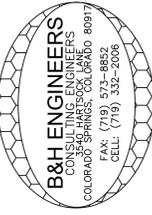


PHOTOMETRIC PLAN

SCALE: 1/16" = 10'



B&H ENGINEERS
CONSULTING ELECTRICAL, MECHANICAL, & PLUMBING ENGINEERS
3500 HARTSOCK BLVD
COLORADO SPRINGS, CO 80917
(719) 332-2006

DATE: _____
JOB NO. _____
DRAWN BY: B&H
CHECKED BY: B.P.

REVISION/DATE _____
FILE NAME _____

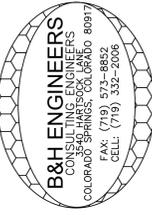
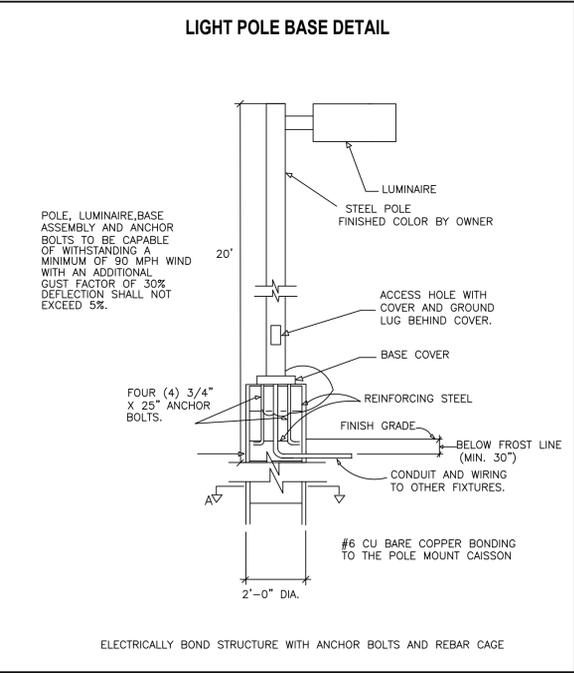
**BLACKWOOD CROSSING
7408 BLACK FOREST RD
COLORADO SPRINGS, COLORADO 80923**

GENERAL NOTES

- ALL WORK SHALL BE DONE IN COMPLIANCE WITH 2017 NEC, IBC 2015, 2015 IECC, 2017 PPRBC, 2015 IMC, 2015 IPC, AND ALL OTHER LOCAL CODES.
 - ELECTRICAL CONTRACTOR SHALL VISIT SITE AND EXAMINE DRAWINGS OF OTHER TRADES ON THIS PROJECT, ARCHITECTURAL AND MECHANICAL, TO DETERMINE ANY ADDITIONAL WORK THAT MAY BE REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL INSTALLATION AND SHALL INCLUDE AN ALLOWANCE FOR THIS WORK IN HIS BID.
 - CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VERIFICATION OF EXISTING JOB CONDITIONS PRIOR TO BID. NO ADDITIONAL COSTS SHALL BE AWARDED TO THE SUCCESSFUL CONTRACTOR OR HIS SUBCONTRACTORS.
 - THE CONDUIT SYSTEM AND ALL CONDUCTING WIRE ENCLOSURES SHALL BE SECURELY BONDED TOGETHER.
5. LAND DEVELOPMENT STANDARDS:
 6.2.3. Lighting
 (A) General
 (1) Purpose
 The purpose of this Section is to address the physical effects of lighting, and the affect that lighting may have on the surrounding neighborhood.
 (2) Applicability
 This Section applies in all zoning districts, except as otherwise provided.
 (3) Existing Lighting Allowed
 Lighting existing at the time of adoption of this Section is not required to be modified to conform to this Section.
 (4) Lighting Plan to Reflect Standards
 A lighting plan for meeting these standards shall be submitted in accordance with submittal requirements for lighting plans described in the Procedures Manual.
 (B) Design Standards and Requirements
 (1) Limitations on Extent of Lighted Area
 (c) Concealed or Shielded
 Light fixtures shall be arranged and positioned such that the light sources are concealed and fully shielded so that no direct light or reflection creates a nuisance or hazard to any adjacent ownership or right-of-way and that up-light, spill-light, glare, and unnecessary diffusion are minimized. Light fixtures, except as otherwise permitted herein, are required to be full cutoff as defined by the Illuminating Engineers Society of North America (IESNA). The cut-off angle of an exterior light source shall not exceed 90 degrees. Full cut-off fixtures may not be tilted or aimed in a manner that results in light distribution above the horizontal plane. The use of semi-cutoff or cutoff (as opposed to full cutoff) fixtures shall be permitted to illuminate areas other than parking lots provided the pole or mounting point is no more than 10' in height and the maximum lumen output does not exceed 1800 lumens per lamp.
 (b) Non-Security Lighting During Non-Operating Hours
 Exterior lighting, including but not limited to floodlights used to light a building facade, shall be reduced, activated by motion sensor devices, or turned off during the principal use's non-operating hours. Lighting necessary for security shall not be subject to this provision.
 (c) Upward Lighting
 Upward lighting for architectural, landscape or decorative purposes shall have at least 90% of the total distribution pattern within the profile of the illuminated structure or feature. Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform, shall use a narrow cone of light that does not extend beyond the illuminated object.
 (d) Maximum Levels
 Maximum on-site lighting levels shall not exceed 10 foot candles, except for loading and unloading platforms where the maximum lighting level shall be 20 foot candles.
 (e) Measurement at Property Boundaries
 Light levels measured at the property line of the development site adjacent to residential property or public right of way shall not exceed 0.1 foot candles as a direct result of the on-site lighting. All light fixtures mounted within 15' of any residential property line of the site shall be classified as IES Type II or Type III, or fixture demonstrated to provide similar distribution patterns and shielding properties. Fixtures shall be fitted with "house side shield" reflectors on the sides facing the residential property line.
 (f) Light Standards and Fixtures
 The style of light standards and fixtures shall be consistent with the style and character of architecture proposed on the site. Poles shall be anodized or coated to minimize glare from the light source. Ballards or similar light fixtures intended to illuminate landscape features or walkways are permitted which do not exceed 4 feet in height, 2 fixtures per ballard and 1 lamp not exceeding 900 lumens per fixture.
 (g) Lamp Types
 All outdoor light fixtures should utilize one of the following lamp types: metal halide, induction lamp, compact fluorescent, incandescent (including tungsten-halogen), or high-pressure sodium. Alternatives are permitted provided they are demonstrated to be more effective for the proposed use based on IESNA recommendations.
 (h) Canopy Lighting
 Light fixtures associated with canopies, including but not limited to fuel islands, seasonal outdoor sales areas, shopping malls, theaters, bank drive-thrus, and hotels shall be full cutoff or mounted so that the bottom of the lens is recessed or flush with the bottom surface of the canopy. All light emitted from the canopy shall be substantially confined to the ground directly beneath the perimeter of the canopy. No lighting of any kind, except as permitted by sign regulations, shall be allowed on the top or sides of a canopy. The design of the canopy in terms of height above grade, and the spacing between the fixtures within the canopy, shall be such that the illuminance level under the canopy does not exceed 20 foot-candles.
 (i) Consideration of Pilots
 No lighting shall make it difficult for pilots to distinguish airport lights from others, result in glare in the eyes of the pilots using an aviation facility, impair visibility in the vicinity of an aviation facility or, in any way create a hazard or endanger the landing, take-off, or maneuvering of aircrafts intending to use an aviation facility.
 (2) Height
 No freestanding light fixtures shall be mounted higher than 15 feet, except parking lot light fixtures which shall be mounted no higher than 20 feet unless an alternative lighting proposal is approved in accordance with this Code.
 (3) Requirements for Outdoor Recreation Facilities
 Ball diamonds, playing fields, tennis courts, and other outdoor recreational uses shall be required to meet the following standards:
 (a) Maximum Pole Height
 The maximum light pole height shall be 80 feet.
 (b) Cut-Off Angle
 The cut-off angle from a lighting source that illuminates an outdoor recreational use may exceed 90 degrees provided the light source is shielded to prevent light and glare from spilling to adjacent residential properties.
 (c) Hours of Use
 Exterior lighting for an outdoor recreational use shall be extinguished no later than 10:00 p.m. or immediately after the conclusion of the final event of the day, whichever is later.
 (C) Prohibited Lighting
 The following are considered prohibited lighting:
 Site lighting that may be confused with warning, emergency or traffic signals, except as authorized by a federal, State or County government;
 Any fixed light not designed for roadway illumination that produces incident or reflected light that could be disturbing to the operator of a vehicle;
 Blinking, flashing or changing intensity lights and lighted signs, except for temporary holiday displays or lighting required by the FAA for air traffic control and warning purposes;
 The use of laser source light or any similar high intensity light for outdoor advertising or entertainment when projected above the horizontal;
 The private operation of searchlights; and
 The nighttime use of white lighting or white strobe lighting in communication tower lighting.
 (D) Exemptions
 The following lighting shall be exempt from the requirements of this Section:
 Holiday lights in the nature of decorations, clearly incidental and customary and commonly associated with any national, local or religious holiday. Holiday lights may be of any type, number, area, height, location, illumination or animation, except that they shall not produce incident or reflected light that may be confused with or construed as a traffic control device;
 Any lighting required by the FAA for air traffic control, navigation, and warning purposes;
 Emergency lighting as required by law enforcement or emergency services personnel to protect life or property provided the lighting is temporary and is discontinued immediately on abatement of the emergency necessitating the lighting;
 Road lighting;
 Construction lighting provided the lighting is temporary and is discontinued immediately on completion of the construction work;
 Traffic control signals and devices;
 Vehicular lights;
 Temporary use of low wattage or low voltage lighting for public festivals, celebrations, and carnivals approved as a temporary use; and
 Single family residential lighting, except as prohibited herein
 (E) Alternative Lighting Proposal
 (1) Authority
 The PCD Director may approve a proposal that offers an alternative approach for meeting the standards of this Section. A lighting plan proposing an alternative approach for meeting these standards shall be submitted in accordance with submittal requirements for lighting plans described in the Procedures Manual. The plan shall clearly identify and discuss the modifications and alternatives proposed and describe how the proposal would better accomplish the purpose of this Section.
 (2) Review Criteria
 The PCD Director shall find the alternative lighting proposal accomplishes the purposes of this Section as well as a lighting plan that complies with this Section. The PCD Director will consider the extent to which the proposed design protects natural areas from light intrusion; how it enhances neighborhood continuity and connectivity, how it fosters non-vehicular access; and how it demonstrates innovative design and use of fixtures or other elements.

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	9	RAB LIGHTING INC.	[WP, A]LED26			1	ALED26-RAB-#12101101-8a.ies	3851	1	28.6505
	B	15	WAC Lighting	WS-W68627-BZ A010416	WALL MOUNTED		1	WS-W68627-BZ A010416.IES	731	1	23.5

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.4 fc	4.5 fc	0.0 fc	N/A	N/A



B&H ENGINEERS
 CONSULTING ELECTRICAL, MECHANICAL, & PLUMBING ENGINEERS
 3550 HARTSOCK PLANE
 COLORADO SPRINGS, COLORADO 80917
 (719) 573-8952
 (719) 332-2006
 REVISION/DATE
 DATE: _____
 JOB NO. _____
 DRAWN BY: B&H
 CHECKED BY: B.P.
 FILE NAME

BLACKWOOD CROSSING
7408 BLACK FOREST RD
COLORADO SPRINGS, COLORADO 80923

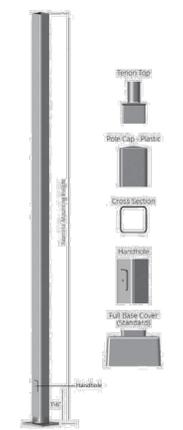
Project Name _____ Pole Type _____
 Catalog # _____



Square Straight Steel Light Poles, Anchor Base

Product Overview

- Pole Shaft** - The pole shaft is fabricated from hot rolled welded steel tubing of one-piece construction with a minimum yield strength of 55 KSI.
- Pole Top** - A removable top cap is provided for poles receiving drilling patterns for side-mounted luminaire arm assemblies. Other pole top options include Tenon Top, Top Cap Only or Open Top which is typical when the pole top diameter matches the necessary slip-fit dimensions.
- Hand Hole** - A reinforced hand hole with grounding provision is provided at 1'-6" from the base end of the pole assembly. Each hand hole includes a cover and cover attachment hardware. All pole assemblies are provided with a 2.5' x 5' rectangular hand hole (dimensions are nominal).
- Base Cover** - A two-piece full base cover fabricated from ABS plastic is provided with each pole assembly. Additional base cover options, including a cast aluminum and fabricated steel cover, are available upon request.
- Anchor Bolts** - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.
- Hardware** - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.
- Finish** - Standard finishes are either Galvanized or Finish Painted. Additional finish options including Finish Paint over Galvanizing are available upon request.
- Design Criteria** - Standard EPA (Effective Projected Area) and weight values are based on Standard Commercial Criteria (with 1.3 gust factor) for side mounted fixtures only. Satisfactory performance of light poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.



lightpoles PLUS.com
 206 W. McWilliams St. | 888-791-1463
 Suite 101 | quotes@lightpolesplus.com
 Fond du Lac, WI 54935 | LightPolesPlus.com

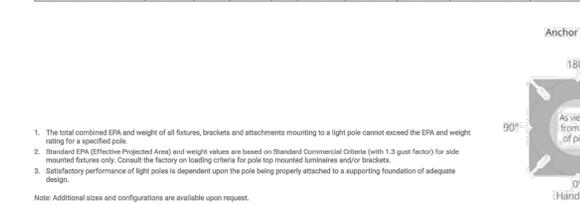
Rev. V09122018
 This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.

EPA Load Information

BASE MODEL	80 MPH w/1.3 GUST		90 MPH w/1.3 GUST		100 MPH w/1.3 GUST	
	MAX EPA (SOFT)	MAX WEIGHT (LBS)	MAX EPA (SOFT)	MAX WEIGHT (LBS)	MAX EPA (SOFT)	MAX WEIGHT (LBS)
VS-SSA-10-4040-11-AB-FP	30.5	745	23.8	595	18.9	473
VS-SSA-12-4040-11-AB-FP	24.4	610	18.8	470	14.8	370
VS-SSA-14-4040-11-AB-FP	19.9	498	15.1	378	11.7	293
VS-SSA-15-4040-11-AB-FP	15.9	398	11.8	295	8.9	223
VS-SSA-16-4040-11-AB-FP	15.9	398	11.8	295	8.9	223
VS-SSA-18-4040-11-AB-FP	12.6	315	9.2	230	6.7	168
VS-SSA-20-4040-11-AB-FP	9.6	240	6.7	167	4.5	150
VS-SSA-20-4040-07-AB-FP	15.8	240	12.7	167	9	150
VS-SSA-20-5050-11-AB-FP	17.7	443	12.7	343	9.4	235
VS-SSA-20-5050-07-AB-FP	28.1	703	21.4	535	16.2	405
VS-SSA-25-4040-11-AB-FP	4.8	150	2.6	100	1	50
VS-SSA-25-4040-07-AB-FP	10.8	270	7.7	198	5.4	135
VS-SSA-25-5050-11-AB-FP	9.8	245	6.3	157	3.7	150
VS-SSA-25-5050-07-AB-FP	18.5	463	13.3	333	9.5	238
VS-SSA-30-4040-07-AB-FP	6.7	168	4.4	110	2.6	65
VS-SSA-30-5050-11-AB-FP	4.7	150	2	50	N/A	N/A
VS-SSA-30-5050-07-AB-FP	10.7	267	6.7	167	3.9	100
VS-SSA-30-6060-07-AB-FP	19	475	13.2	330	9	225
VS-SSA-35-5050-07-AB-FP	5.9	150	2.5	100	N/A	N/A
VS-SSA-35-6060-07-AB-FP	12.4	310	7.6	190	4.2	105
VS-SSA-40-6060-07-AB-FP	7.2	180	3	75	N/A	N/A

Designation & Dimensional Information

BASE MODEL	NOMINAL NOMINATING HEIGHT	POLE DIMENSIONS			WALL STRUCTURE		BASE PLATE		ANCHOR BOLTS	
		TOP SQ (IN)	BASE SQ (IN)	THK (GA)	WTRK (LBS)	WT (LBS)	BOLT CIRCLE DIA (IN)	SQ (IN) THICK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)
VS-SSA-10-4040-11-AB-FP	10'-0"	4	4	11	75	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-12-4040-11-AB-FP	12'-0"	4	4	11	90	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-14-4040-11-AB-FP	14'-0"	4	4	11	100	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-15-4040-11-AB-FP	15'-0"	4	4	11	110	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-16-4040-11-AB-FP	16'-0"	4	4	11	115	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-18-4040-11-AB-FP	18'-0"	4	4	11	125	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-20-4040-11-AB-FP	20'-0"	4	4	11	140	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-20-4040-07-AB-FP	20'-0"	4	4	7	200	8.0-9.0	8.25 x 0.875	0.75 x 17.00 x 3.00	3.38-3.88	
VS-SSA-20-5050-07-AB-FP	20'-0"	5	5	11	185	10.0-12.0	11 x 1	0.75 x 17.00 x 3.00	3.5-4	
VS-SSA-25-4040-11-AB-FP	25'-0"	4	4	11	170	8.0-9.0	8.25 x 0.75	0.75 x 17.00 x 3.00	3.25-3.75	
VS-SSA-25-4040-07-AB-FP	25'-0"	4	4	7	245	8.0-9.0	8.25 x 0.875	0.75 x 17.00 x 3.00	3.38-3.88	
VS-SSA-25-5050-11-AB-FP	25'-0"	5	5	11	225	10.0-12.0	11 x 1	0.75 x 17.00 x 3.00	3.5-4	
VS-SSA-25-5050-07-AB-FP	25'-0"	5	5	7	360	10.0-12.0	11 x 1	0.75 x 17.00 x 3.00	3.5-4	
VS-SSA-30-4040-07-AB-FP	30'-0"	4	4	7	291	8.0-9.0	8.25 x 0.875	0.75 x 17.00 x 3.00	3.38-3.88	
VS-SSA-30-5050-11-AB-FP	30'-0"	5	5	11	265	10.0-12.0	11 x 1	0.75 x 17.00 x 3.00	3.5-4	
VS-SSA-30-6060-07-AB-FP	30'-0"	5	5	7	360	10.0-12.0	11 x 1	0.75 x 17.00 x 3.00	3.5-4	
VS-SSA-30-6060-07-AB-FP	30'-0"	6	6	7	520	11.0-13.0	12.5 x 1	1.00 x 36.00 x 4.00	4-4.5	
VS-SSA-35-5050-07-AB-FP	35'-0"	5	5	7	440	10.0-12.0	11 x 1	0.75 x 17.00 x 3.00	3.5-4	
VS-SSA-35-6060-07-AB-FP	35'-0"	6	6	7	540	11.0-13.0	12.5 x 1	1.00 x 36.00 x 4.00	4-4.5	
VS-SSA-40-6060-07-AB-FP	40'-0"	6	6	7	605	11.0-13.0	12.5 x 1	1.00 x 36.00 x 4.00	4-4.5	

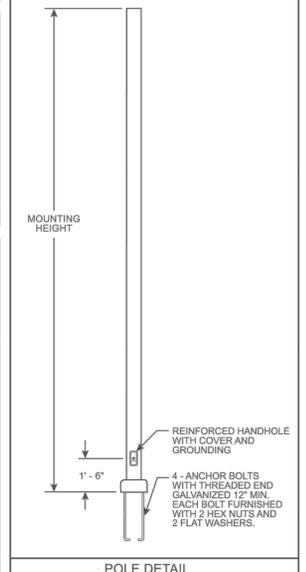
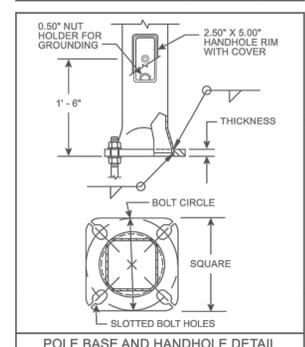
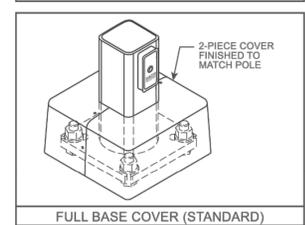
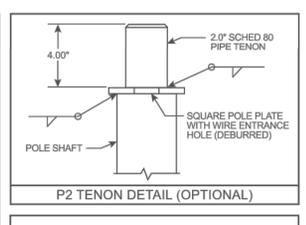
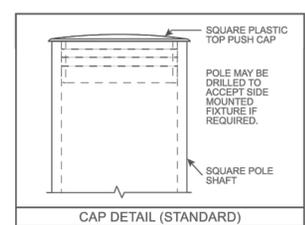


1. The total combined EPA and weight of all fixtures, brackets and attachments mounting to a light pole cannot exceed the EPA and weight rating for a specified pole.
 2. Standard EPA (Effective Projected Area) and weight values are based on Standard Commercial Criteria (with 1.3 gust factor) for side mounted fixtures only. Consult the factory on loading criteria for pole top mounted luminaires and/or brackets.
 3. Satisfactory performance of light poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.

Note: Additional sizes and configurations are available upon request.
 ** Indicates a vibration damper is standard

lightpoles PLUS.com
 206 W. McWilliams St. | 888-791-1463
 Suite 101 | quotes@lightpolesplus.com
 Fond du Lac, WI 54935 | LightPolesPlus.com

Rev. V09122018
 This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.



lightpoles PLUS.com
 206 W. McWilliams St. | 888-791-1463
 Suite 101 | quotes@lightpolesplus.com
 Fond du Lac, WI 54935 | LightPolesPlus.com

Rev. V09122018
 This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.

Ordering Information

Designation	Length	Base OD	Top OD	Thickness	Anchor Bolts	Finish Type	Painted Color	Fixture Mounting
VS-SSA = Square Straight Steel Anchor Base	10 to 40	40 = 4" 50 = 5" 60 = 6"	40 = 4" 50 = 5" 60 = 6"	07 = 7ga 11 = 11ga	AB = Anchor Bolts LAB = Anchor Bolts	GV = Galvanized Only (No Paint) FP = Finish Painted FPQV = Paint over Galvanizing	DB = Dark Bronze MB = Medium Bronze LG = Light Gray DG = Dark Green HG = Hunter Green SG = Slate Gray BK = Black WH = White SL = Silver SC = Custom	D1 = Single D2 = @180 deg. D3 = @120 deg. D4 = @90 deg. D5 = @90 deg. D6 = @90 deg.

Description	Description	Description
SPL = Special Cut Length (Please Specify)	ULH = UL Compliant Hand Hole	STAMP = Engineering Services, Signed & Sealed Calculations
BCSPCL = Special Base Plate to Match Existing Bolt Circle (May Add 2 Weeks to Production Lead Time, May Require Special Base Cover)	NEDRH = NEC 410.30 Compliant Hand Hole & Cover	STAMP CA = Engineering Services, CA Signed & Sealed Calculations
VDA = Internal Vibration Damper, Factory Installed	EHH = Additional Hand Hole Opening w/ Cover	PRE750 = Pre-Ship Anchor Bolts - 0.75" x 17" x 3"
VDF = Internal Vibration Damper, Field Installable	ASB = Assembly (Specify Pole Height & Orientation)	PRE100 = Pre-Ship Anchor Bolts - 1.0" x 36" x 4"
FBCS = Steel Full Base Cover	FST = Fastener Provision, Electrical by Others (Specify Pole Height & Orientation)	
FBPC = ABS Plastic Full Base Cover	CPL = NPT Pipe Coupling (Specify Pole Height & Orientation)	
	PXD = Side Drill + Tenon w/ Additional Hand Hole (Specify Tenon OD & Length)	

Note: Please consult factory or your sales representative to verify options and accessories will work with your light pole part number.

lightpoles PLUS.com
 206 W. McWilliams St. | 888-791-1463
 Suite 101 | quotes@lightpolesplus.com
 Fond du Lac, WI 54935 | LightPolesPlus.com

Rev. V09122018
 This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.

Ex. VS-SSA-10-4040-11-AB-FP-DB-D1-EHH

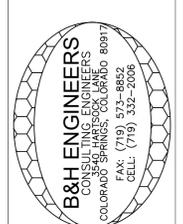
Designation	Length	Base OD	Top OD	Thickness	Anchor Bolts	Finish Type	Painted Color	Fixture Mounting
VS-SSA = Square Straight Steel Anchor Base	10 to 40	40 = 4" 50 = 5" 60 = 6"	40 = 4" 50 = 5" 60 = 6"	07 = 7ga 11 = 11ga	AB = Anchor Bolts LAB = Anchor Bolts	GV = Galvanized Only (No Paint) FP = Finish Painted FPQV = Paint over Galvanizing	DB = Dark Bronze MB = Medium Bronze LG = Light Gray DG = Dark Green HG = Hunter Green SG = Slate Gray BK = Black WH = White SL = Silver SC = Custom	D1 = Single D2 = @180 deg. D3 = @120 deg. D4 = @90 deg. D5 = @90 deg. D6 = @90 deg.

Description	Description	Description
SPL = Special Cut Length (Please Specify)	ULH = UL Compliant Hand Hole	STAMP = Engineering Services, Signed & Sealed Calculations
BCSPCL = Special Base Plate to Match Existing Bolt Circle (May Add 2 Weeks to Production Lead Time, May Require Special Base Cover)	NEDRH = NEC 410.30 Compliant Hand Hole & Cover	STAMP CA = Engineering Services, CA Signed & Sealed Calculations
VDA = Internal Vibration Damper, Factory Installed	EHH = Additional Hand Hole Opening w/ Cover	PRE750 = Pre-Ship Anchor Bolts - 0.75" x 17" x 3"
VDF = Internal Vibration Damper, Field Installable	ASB = Assembly (Specify Pole Height & Orientation)	PRE100 = Pre-Ship Anchor Bolts - 1.0" x 36" x 4"
FBCS = Steel Full Base Cover	FST = Fastener Provision, Electrical by Others (Specify Pole Height & Orientation)	
FBPC = ABS Plastic Full Base Cover	CPL = NPT Pipe Coupling (Specify Pole Height & Orientation)	
	PXD = Side Drill + Tenon w/ Additional Hand Hole (Specify Tenon OD & Length)	

Note: Please consult factory or your sales representative to verify options and accessories will work with your light pole part number.

lightpoles PLUS.com
 206 W. McWilliams St. | 888-791-1463
 Suite 101 | quotes@lightpolesplus.com
 Fond du Lac, WI 54935 | LightPolesPlus.com

Rev. V09122018
 This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.



B&H ENGINEERS
 CONSULTING ELECTRICAL, MECHANICAL, & PLUMBING ENGINEERS
 3550 HARTSTOCK PLANE
 COLORADO SPRINGS, COLORADO 80917
 (719) 332-2006
 (719) 332-2006

BLACKWOOD CROSSING
 7408 BLACK FOREST RD
 COLORADO SPRINGS, COLORADO 80923

ALED26



Color: Bronze Weight: 6.3 lbs

RAB

Project: _____ Type: _____
 Prepared By: _____ Date: _____

Driver Info		LED Info	
Type	Constant Current	Watts	28.00W
120V	0.17A	Color Temp	5000K (Cool)
208V	0.11A	Color Accuracy	72 CRI
240V	0.10A	L70 Lifespan	100,000
277V	0.09A	Lumens	3,483
Input Watts	29.10W	Efficacy	119.7 LPW
Efficiency	89%		

Technical Specifications

Listings
UL Listed:
 Suitable for wet locations
IESNA LM-79 & IESNA LM-80 Testing:
 RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.
Dark Sky Conformance:
 Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).
DLC Listed:
 This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. DLC Product Code: P00001700
LED Characteristics
Lifespan:
 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations
Lumen Maintenance:
 The LED will deliver 70% of its initial lumens at 100,000 hours of operation
Color Consistency:
 7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:
 LED color temperature is warranted to shift no more than 200K in CCT over a 5-year period
Color Uniformity:
 RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.
Construction
IP Rating:
 Ingress Protection rating of IP66 for dust and water
IES Classification:
 The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semi-circular distribution with essentially the same candpower at lateral angles from 90° to 270°.

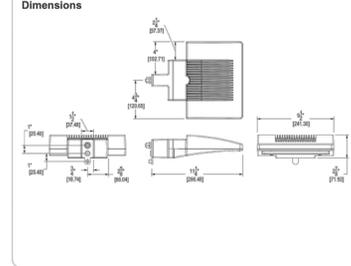
Finish:
 Formulated for high durability and long-lasting color
Green Technology:
 Mercury and UV free. RoHS-compliant components.
Ambient Temperature:
 Suitable For use in 40°C (104°F)
Cold Weather Starting:
 Minimum starting temperature is -40°C (-40°F)
Other
Patents:
 The ALED design is protected by U.S. PATENT D608,040 and patents pending in the U.S., Canada, China, Taiwan and Mexico.

ALED26

Technical Specifications (continued)

Other
 Equivalent to 125W Pulse Start Metal Halide
Warranty:
 RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.
Buy American Act Compliance:
 RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical
BUG Rating:
 B1 U0 G0
Electrical
Driver:
 Multi-chip 26W high output long life LED Driver Constant Current, 720mA, Class 2, 6kV Surge Protection, 100V-277V, 50-60 Hz, 100-240V-4 Amps.
THD:
 11.91% at 120V, 9.56% at 277V
Power Factor:
 99.1% at 120V, 93.1% at 277V

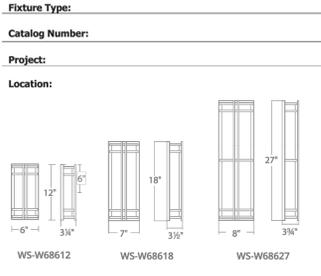


Features
 High output LED light engine
 Maintains 70% of initial lumens at 100,000-hours
 Weatherproof high temperature silicone gaskets
 Superior heat sinking with die cast aluminum housing and external fins

SKYSCRAPER Exterior Sconces
 WS-W68612 / WS-W68618 / WS-W68627



MODERN FORMS



PRODUCT DESCRIPTION
 Elevate your space. A classic architectural design thoughtfully engineered for robustness to withstand commercial use for interiors or exteriors. A UV stabilized acrylic diffuser and marine grade stainless steel structure complete this specification-grade wall mount luminaire. Available in either black, bronze or stainless steel finish.

FEATURES

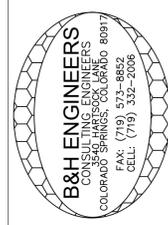
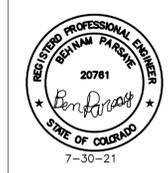
- F1-rated acrylic
- Weather-resistant powder coat
- SS - 316 marine-grade stainless steel or bronze-finished aluminum (BZ & BK - Aluminum construction)
- No transformer or driver needed
- 277V options available
- Dimmer: ELV
- Rated Life: 80,000 hours
- Color temp: 3000K
- 2700K and 3500K special order
- CRI:90

SPECIFICATIONS
Construction: Aluminum
Light Source: High output LED
Finish: Black (BK), Bronze (BZ), Stainless Steel (SS)
Standards: ETL & cETL Wet Location listed, IP65, CEC Title 24 Compliant, ADA Compliant

ORDER NUMBER

Model	Height	Wattage	Voltage	LED Lumens	Delivered Lumens	Finish
WS-W68612	12"	12W		605	418	BK Black
WS-W68618	18"	19W	120V	1098	741	BZ Bronze
WS-W68627	27"	24W		1272	880	SS Stainless Steel

Example: WS-W68612-BZ
 For 277V special order, add an "F" before the finish: WS-W68612F-BZ
 For 2700K add "-27"; 3500K add "-35" before the finish: WS-W68618-35-SS



CONSULTING ELECTRICAL, MECHANICAL, & PLUMBING ENGINEERS
 B&H ENGINEERS
 3550 HARTSHOCK BLVD
 COLORADO SPRINGS, CO 80917
 (719) 573-8952
 (719) 573-2952
 REVISION/DATE
 FILE NAME

DATE: _____
 JOB NO. _____
 DRAWN BY: B&H
 CHECKED BY: B.P.

BLACKWOOD CROSSING
7408 BLACK FOREST RD
COLORADO SPRINGS, COLORADO 80923