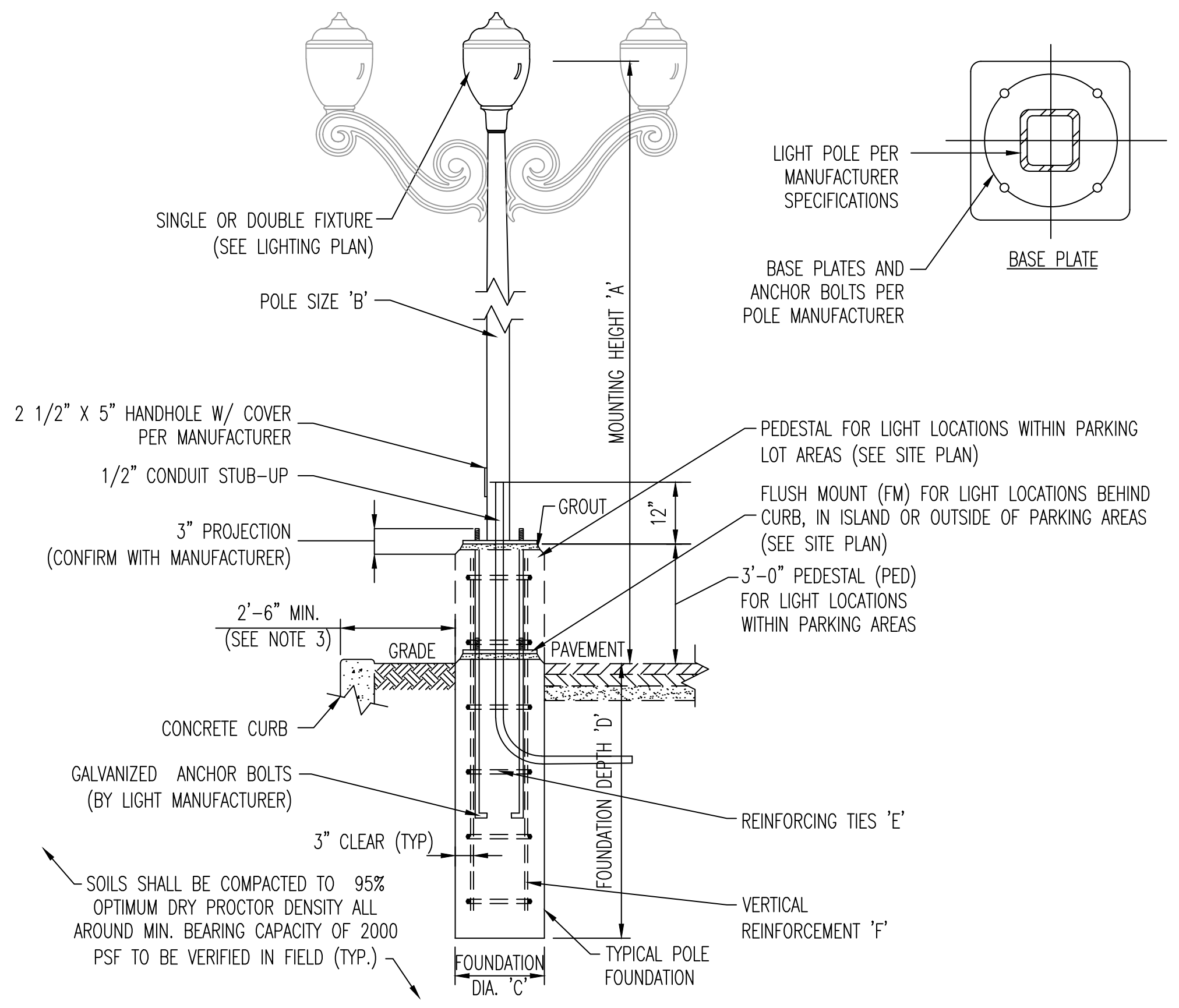
MUNICIPAL, COUNTY, STATE AND MUA DETAILS TO SUPERCEDE DYNAMIC ENGINEERING DETAILS WHERE APPLICABLE



SINGLE OR DOUBLE FIXTURE (SEE LIGHTING PLAN)
POLE SIZE 'B'
MOUNTING HEIGHT 'A'
LIGHT POLE PER MANUFACTURER SPECIFICATIONS
BASE PLATES AND ANCHOR BOLTS PER POLE MANUFACTURER
BASE PLATE
2 1/2" X 5" HANDHOLE W/ COVER PER MANUFACTURER
1/2" CONDUIT STUB-UP
GROUT
12"
3" PROJECTION (CONFIRM WITH MANUFACTURER)
PEDESTAL FOR LIGHT LOCATIONS WITHIN PARKING LOT AREAS (SEE SITE PLAN)
FLUSH MOUNT (FM) FOR LIGHT LOCATIONS BEHIND CURB, IN ISLAND OR OUTSIDE OF PARKING AREAS (SEE SITE PLAN)
3'-0" PEDESTAL (PED) FOR LIGHT LOCATIONS WITHIN PARKING AREAS
2'-6" MIN. (SEE NOTE 3)
GRADE
PAVEMENT
CONCRETE CURB
FOUNDATION DEPTH 'D'
GALVANIZED ANCHOR BOLTS (BY LIGHT MANUFACTURER)
REINFORCING TIES 'E'
3" CLEAR (TYP)
SOILS SHALL BE COMPACTED TO 95% OPTIMUM DRY PROCTOR DENSITY ALL AROUND MIN. BEARING CAPACITY OF 2000 PSF TO BE VERIFIED IN FIELD (TYP.)
VERTICAL REINFORCEMENT 'F'
FOUNDATION DIA. 'C'
TYPICAL POLE FOUNDATION

NOTE:
1. CONTRACTOR TO CONFIRM ALL LIGHT POLE & FIXTURE DIMENSIONS PRIOR TO CONSTRUCTION.
2. PROPOSED POLE IN COMBINATION WITH CONCRETE PEDESTAL TO EQUAL MOUNTING HEIGHT 'A'. ACTUAL POLE HEIGHT TO BE ADJUSTED ACCORDINGLY.
3. PROPOSED CONCRETE FOUNDATION AND POLE TO BE CONSTRUCTED WITHIN SUBJECT PROPERTY UNLESS OTHERWISE NOTED. SETBACK FROM CURB IS PREFERRED BUT TO BE ADJUSTED AS NEEDED TO PREVENT ENCROACHMENT OVER PROPERTY LINE.
4. BASE PLATE & ANCHOR BOLTS PER POLE MANUFACTURER. LARGER FOOTING DIAMETER AND/OR ALTERNATE ARANCEMENT OF REINFORCING STEEL MAY BE REQUIRED TO ACCOMMODATE ANCHOR BOLT CONFIGURATION. CONTRACTOR RESPONSIBLE TO COORDINATE DIMENSIONAL REQUIREMENTS FOR BASE PLATE, ANCHOR BOLTS & REINFORCING STEEL PRIOR TO CONSTRUCTION.

LIGHT POLE FOUNDATION SCHEDULE	
MOUNTING HEIGHT ABOVE GRADE 'A'	12'
POLE DIA. 'B'	6" SQUARE (OR PER MANUFACTURER)
# OF FIXTURES	SINGLE OR DOUBLE
FOUNDATION DIAMETER 'C'	18" DIA. ROUND
FOUNDATION DEPTH 'D'	6'
REINFORCING TIES 'E'	#4 @ 16" O.C.
VERTICAL REINFORCEMENT 'F'	(6) #5 BARS EQUALLY SPACED

SOIL NOTES
1. FOOTING DESIGN BASED ON ASSUMED MAXIMUM ALLOWABLE SOILS BEARING CAPACITY OF 2,000 SF PSF. CONTRACTOR RESPONSIBLE TO VERIFY ADEQUACY OF ASSUMED BEARING CAPACITY PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED IF INCONSISTENCIES EXIST.
2. SUBGRADE TO BE FREE OF ORGANICS AND BE SUITABLE, COMPACTED MATERIAL.

CONCRETE NOTES
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS WITH A MINIMUM CEMENT CONTENT OF 600 POUNDS PER CUBIC YARD FOR ALL FOOTINGS.
2. ALL CONCRETE SHALL HAVE A SLUMP OF NO GREATER THAN 4" TO WITHIN A TOLERANCE OF 1".
3. ALL EXPOSED CONCRETE SHALL BE AIR-ENTRAINED (WITHIN 1% TOLERANCE), CONFORMING TO ASTM C260.
4. REINFORCING FRAMEWORK AND PLACEMENT OF CONCRETE SHALL COMPLY WITH GOOD CONSTRUCTION PRACTICES AND BE IN ACCORDANCE WITH ALL LOCAL GOVERNING CODES AND REGULATIONS AS WELL AS THE ACI AND UNIFORM BUILDING CODE.

1/6/17 – JGJ

DECORATIVE LIGHT FOUNDATION DETAIL

NOT TO SCALE

SLIM™

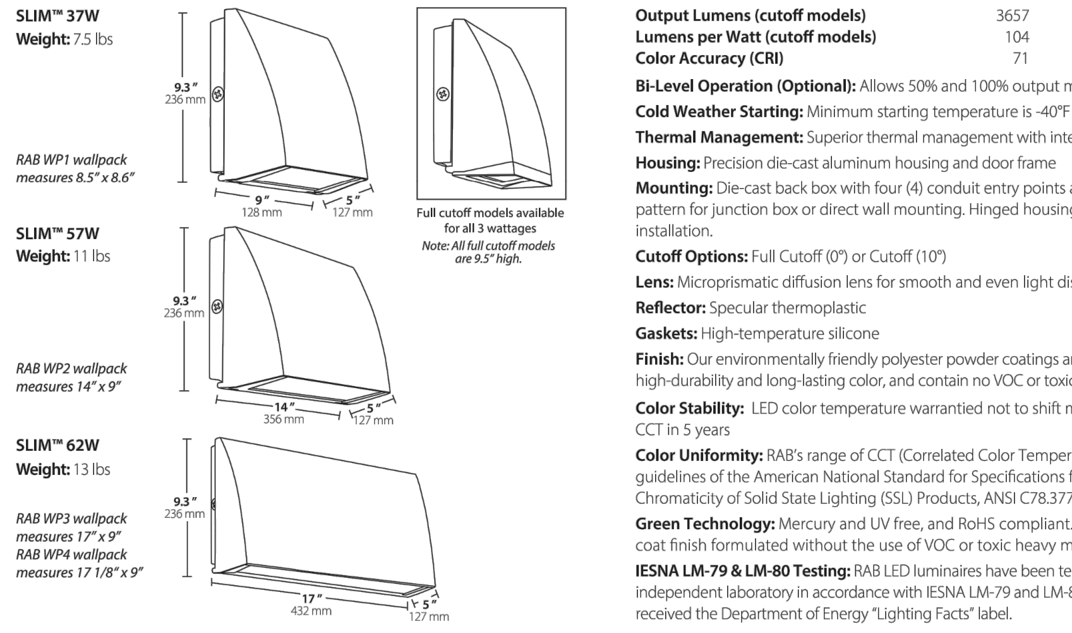
NO COMPROMISE 5 YEAR WARRANTY

- Covers footprint of most traditional wallpacks
- 37W replaces 200W MH; 57W replaces 250W MH; 62W replaces 320W MH
- Easy installation with hinged access, bubble level and multiple conduit entries
- Ultra-high efficiency, up to 115 lm/W
- Available as cutoffs or full cutoffs
- Tight-lock gasket keeps elements out
- 100,000-Hour LED lifespan

ida APPROVED
Full Cutoff Models Only

IP66
RATING

Dimensions and weight



SLIM™ 37W
Weight: 7.5 lbs
RAB WP1 wallpack measures 8.5" x 8.6"

SLIM™ 57W
Weight: 11 lbs
RAB WP2 wallpack measures 14" x 9"

SLIM™ 62W
Weight: 13 lbs
RAB WP3 wallpack measures 17" x 9"
RAB WP4 wallpack measures 17 1/8" x 9"

Full cutoff models available for all 3 wattages
Note: All full cutoff models are 9.5" high.

Specifications

UL: Suitable for wet locations. Wall mount only.

LEDs: Long-life, high-efficiency, micro-power, surface mount LEDs; binned and mixed for uniform light output and color.

Lifespan: 100,000-hour LED lifespan based on IES LM-80 results & TM-21 calculations

Drivers: Constant Current, Class 2, 100-277V and 480V, 50/60HZ
37W: : 0.6A,
57W: Constant Current, Class 2, 100-277V and 480V, 50/60Hz, 100-277VAC: 0.8A,
62W: Constant Current, Class 2, 100-277V and 480V, 50/60Hz, 100-277VAC: 0.6A,

	37W	57W	62W
5000K Color Temperature			
Nominal Watts	**37W**	**57W**	**62W**
Output Lumens (cutoff models)	3905	5579	6395
Lumens per Watt (cutoff models)	111	115	106
Color Accuracy (CRI)	73	73	73
4000K Color Temperature			
Nominal Watts	**37W**	**57W**	**62W**
Output Lumens (cutoff models)	3873	5422	6215
Lumens per Watt (cutoff models)	112	114	106
Color Accuracy (CRI)	73	73	73
3000K Color Temperature			
Nominal Watts	**37W**	**57W**	**62W**
Output Lumens (cutoff models)	3657	4977	6145
Lumens per Watt (cutoff models)	104	100	108
Color Accuracy (CRI)	71	72	72

Bi-Level Operation (Optional): Allows 50% and 100% output modes

Cold Weather Starting: Minimum starting temperature is -40°F / -40°C

Thermal Management: Superior thermal management with internal Air-Flow fins

Housing: Precision die-cast aluminum housing and door frame

Mounting: Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing for hands-free installation.

Cutoff Options: Full Cutoff (0°) or Cutoff (10°)

Lens: Microprismatic diffusion lens for smooth and even light distribution

Reflector: Specular thermoplastic

Gaskets: High-temperature silicone

Finish: Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contain no VOC or toxic heavy metals.

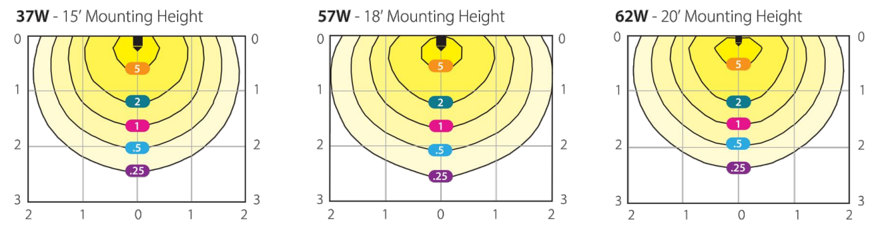
Color Stability: LED color temperature warrantied not to shift more than 200K in CCT in 5 years

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 C78.377-2015.

Green Technology: Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

IESNA LM-79 & LM-80 Testing: RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Photometrics



Gride Scale: Multiples of Mounting Height
Values Shown in Footcandles
Photometric Reports RAB02437, RAB02604 and RAB02946MOD50

Ordering information

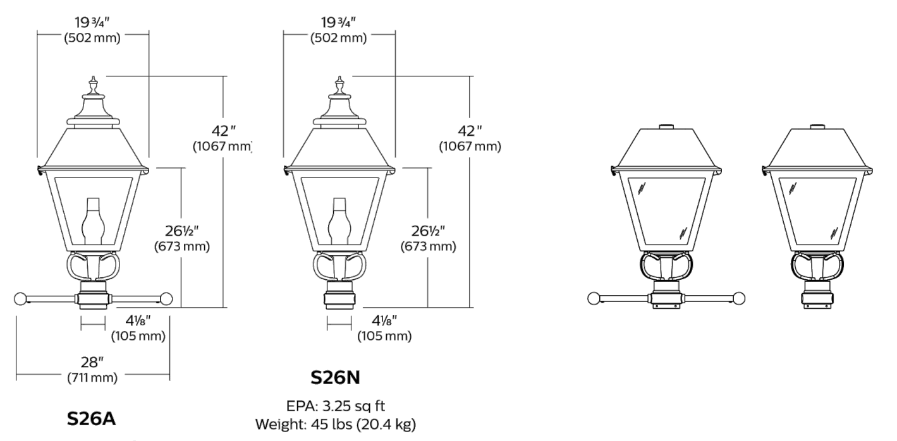
Product Family	Cutoff	Wattage	Color Temp	Finish	Driver Options	Photocell Options
SLIM	**Blank** Cutoff (10°)	**37** 37W	**Blank** 5000K	**Blank** Bronze	**/BL** Bi-Level	**/PC** 120V Photocell
	FC Full Cutoff (0°)	**57** 57W	**N** 4000K	**W** White	**/480** 480V	**/PC2** 277V Photocell
		62 62W	**Y** 3000K			**/PCS** 120V Swivel Photocell
						/PCS2 277V Swivel Photocell
						/PCS4 480V Swivel Photocell

WALL LIGHT DETAIL 'W1'

S26A-S26N Square Lantern LED Post Top

Urban Luminaire

Dimensions



S26A
EPA: 2.97 sq ft
Weight: 44 lbs (20 kg)

S26N
EPA: 3.25 sq ft
Weight: 45 lbs (20.4 kg)

LED Wattage and Lumen Values: for S26A / S26N with Clear globe

Ordering Code: Clear Globe (3000K)	Total LEDs	LED current (mA)	Average System Wattage[1] (W)	LE2			LE3			LE4			LE5		
				Lumen Output[2]	Efficacy (LPW)	BUG Rating	Lumen Output[2]	Efficacy (LPW)	BUG Rating	Lumen Output[2]	Efficacy (LPW)	BUG Rating	Lumen Output[2]	Efficacy (LPW)	BUG Rating
35W32LED3K-G2-C	32	350	37	2892	78	B1-U2-G1	2880	78	B1-U2-G1	2813	76	B1-U2-G1	2888	78	B2-U3-G1
55W32LED3K-G2-C	32	530	54	4149	77	B1-U3-G1	4131	77	B1-U3-G1	4034	75	B1-U3-G1	4143	77	B3-U3-G1
72W32LED3K-G2-C	32	700	73	5232	72	B1-U3-G1	5210	71	B1-U3-G1	5088	70	B1-U3-G2	5225	72	B3-U3-G1
55W48LED3K-G2-C	48	350	55	4338	79	B1-U3-G1	4320	78	B1-U3-G1	4219	77	B1-U3-G1	4332	79	B3-U3-G1
80W48LED3K-G2-C	48	530	81	6223	77	B1-U3-G1	6197	77	B1-U3-G2	6051	75	B1-U3-G2	6214	77	B3-U3-G1
108W48LED3K-G2-C	48	700	106	7848	74	B2-U3-G2	7816	74	B2-U3-G2	7632	72	B1-U3-G2	7837	74	B3-U3-G2

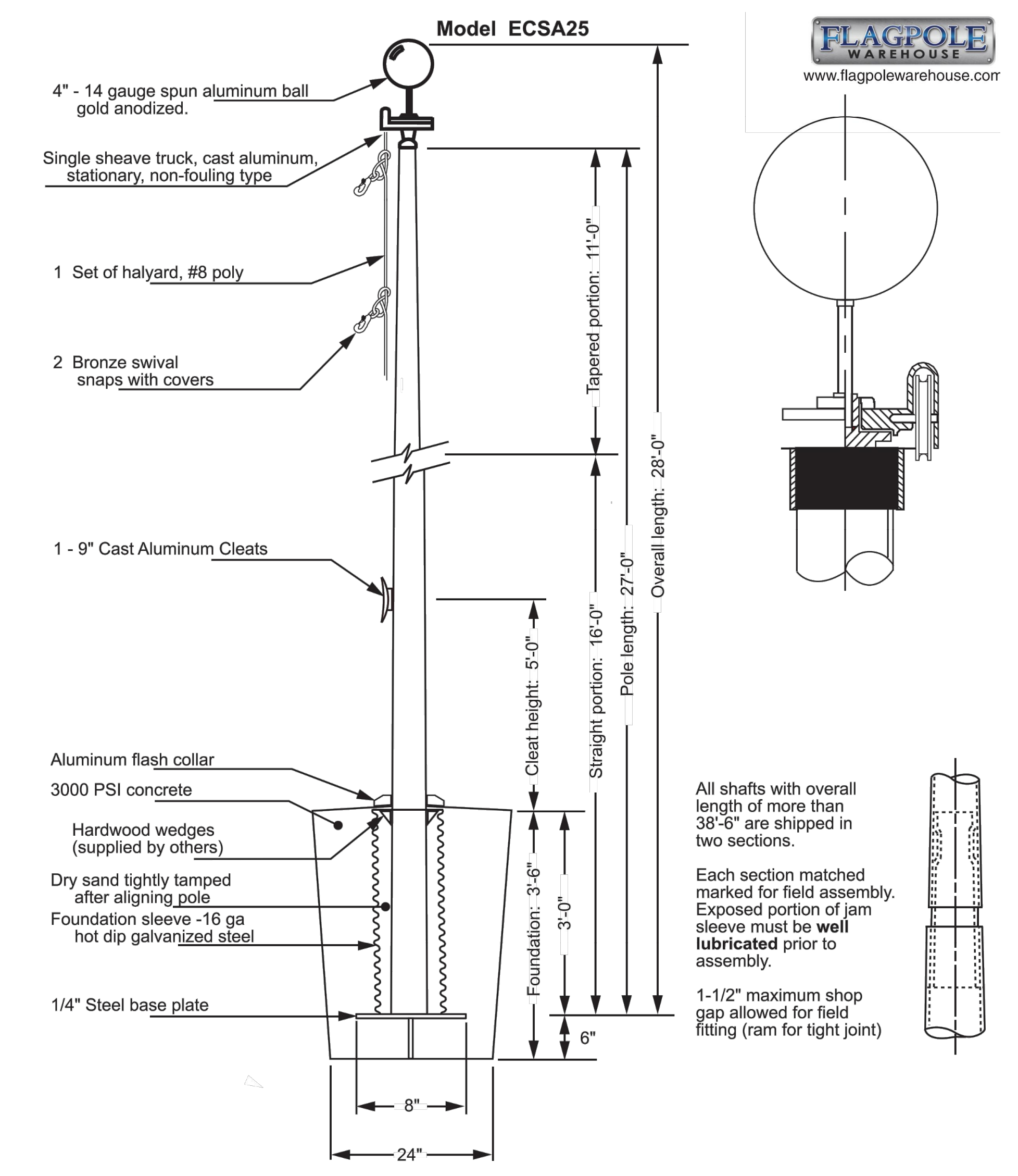
Ordering Code: Clear Globe (4000K)	Total LEDs	LED current (mA)	Average System Wattage[1] (W)	LE2			LE3			LE4			LE5		
				Lumen Output[2]	Efficacy (LPW)	BUG Rating	Lumen Output[2]	Efficacy (LPW)	BUG Rating	Lumen Output[2]	Efficacy (LPW)	BUG Rating	Lumen Output[2]	Efficacy (LPW)	BUG Rating
35W32LED4K-G2-C	32	350	37	3210	87	B1-U2-G1	3197	86	B1-U2-G1	3122	84	B1-U2-G1	3206	87	B2-U3-G1
55W32LED4K-G2-C	32	530	54	4605	85	B1-U3-G1	4586	85	B1-U3-G1	4478	83	B1-U3-G1	4598	85	B3-U3-G1
72W32LED4K-G2-C	32	700	73	5808	80	B1-U3-G1	5783	79	B1-U3-G1	5648	77	B1-U3-G2	5799	79	B3-U3-G1
55W48LED4K-G2-C	48	350	55	4816	87	B1-U3-G1	4796	87	B1-U3-G1	4683	85	B1-U3-G1	4809	87	B3-U3-G1
80W48LED4K-G2-C	48	530	81	6907	86	B2-U3-G2	6879	85	B1-U3-G2	6717	83	B1-U3-G2	6897	86	B3-U3-G2
108W48LED4K-G2-C	48	700	106	8712	82	B2-U3-G2	8675	82	B2-U3-G2	8471	80	B2-U3-G2	8699	82	B3-U3-G2

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires.
Note: Some data may be scaled based on tests on similar but not identical luminaires.

S26A-S26N-LED-spec 07/20 page 2 of 5

POST TOP SQUARE LANTERN DETAIL

NOT TO SCALE



Model ECSA25
FLAGPOLE WAREHOUSE
www.flagpolewarehouse.com
4" - 14 gauge spun aluminum ball gold anodized.
Single sheave truck, cast aluminum, stationary, non-fouling type
1 Set of halyard, #8 poly
2 Bronze swival snaps with covers
1 - 9" Cast Aluminum Cleats
Aluminum flash collar
3000 PSI concrete
Hardwood wedges (supplied by others)
Dry sand tightly tamped after aligning pole
Foundation sleeve -16 ga hot dip galvanized steel
1/4" Steel base plate
Tapered portion: 11'-0"
Straight portion: 16'-0"
Pole length: 27'-0"
Overall length: 28'-0"
Cleat height: 5'-0"
Foundation: 3'-6"
3'-0"
6"
8"
24"

All shafts with overall length of more than 38'-6" are shipped in two sections.

Each section matched marked for field assembly. Exposed portion of jam sleeve must be **well lubricated** prior to assembly.

1-1/2" maximum shop gap allowed for field fitting (ram for tight joint)

FLAG POLE DETAIL

N.T.S.

DOSB1 Bollard & Light Column Series

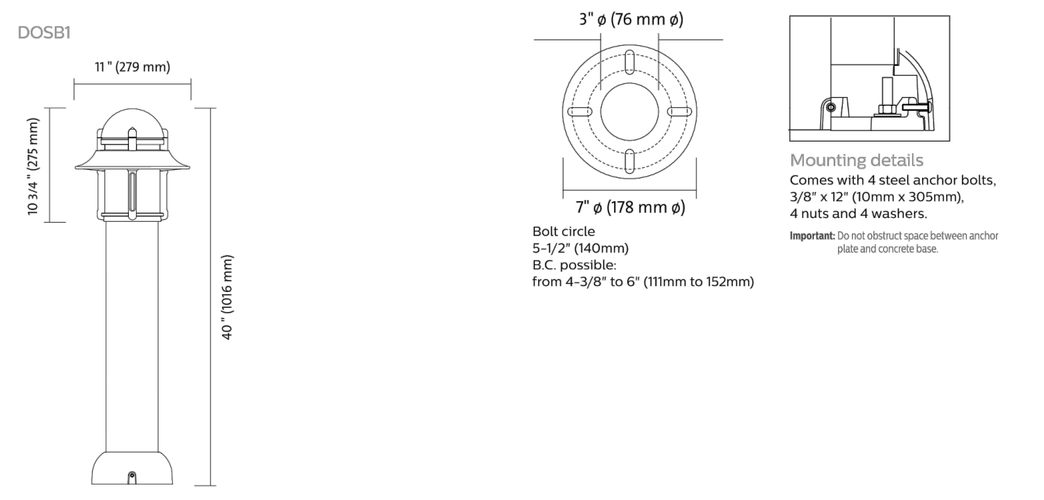
Bollard

Luminaires

Conform to the UL 1598 and CSA C22.2 No. 250.0-08 standards.

DOSB1

Anchor Plate



Bolt circle
5-1/2" (140mm)
B.C. possible:
from 4-3/8" to 6" (111mm to 152mm)

Mounting details
Comes with 4 steel anchor bolts, 3/8" x 12" (10mm x 305mm), 4 nuts and 4 washers.
Important: Do not obstruct space between anchor plate and concrete base.

Specifications

Hood
Made from cast (356) aluminum, mechanically assembled.

Housing
Round shape, made from cast (356) aluminum, c/w one louver, welded to the base.

Ballast
High power factor of 90%. Assembled on a unitized removable tray with quick disconnect plug.

Base
Made from aluminum, 5" (127mm) outside diameter, welded to the base cover.

Base cover
Made from cast (356) aluminum, mechanically secured to the anchor plate.

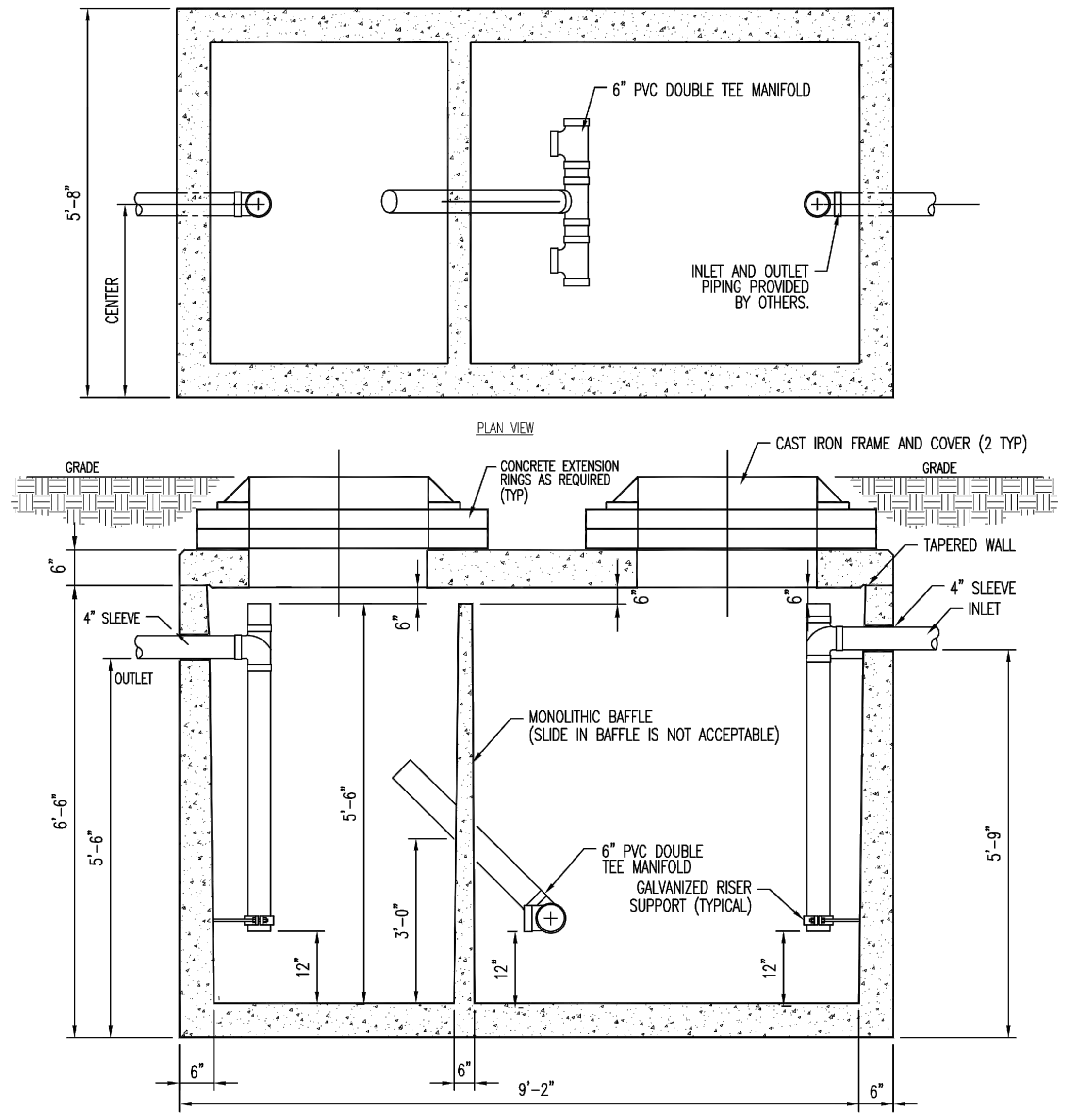
Finish
"Hot dip" chemical etching preparation. Lumital™ polyester powder coat finish. Excellent color retention as per #ASTM D2244, and outstanding salt-spray resistance according to #ASTM D2247 testing procedures.

Product DOSB1	Lamp	Voltage	Options	Finish[1]
DOSB1	**35 MH**	**120** 120V	**PH7** Photoelectric cell	**BE2TX** Midnight Blue Textured
	50 MH	**208** 208V	**VPA** Vandalproof hardware	**BE6TX** Ocean Blue Textured
		240 240V		**BE8TX** Royal Blue Textured
		277 277V		**BG2TX** Sandstone Gold Textured
		347 347V		**BKTX** Black Textured
	35 HPS			**BRTX** Bronze Textured
	50 HPS			**GN4TX** Blue Green Textured
	18 CF			**GN6TX** Forest Green Textured
	26 CF			**GN8TX** Dark Forest Green Textured
	32 CF			**GNTX** Green Textured
	20W16LED4K	**120** 120V		**GY3TX** Medium Grey Textured
	30W16LED4K	**208** 208V		**RD2TX** Burgundy Textured
		240 240V		**RD4TX** Scarlet Textured
		277 277V		**WHTX** White Textured
				NP Natural Alum.
				TG Hammer-tone
				TS Hammer-tone Silver

1. Consult Lumec's Color Chart for complete specifications.
Socket: GX24Q-2 (18W), GX24Q-3 (26 or 32W), GX24Q-4 (42W), triple tube compact fluorescent (lamp not included).

BOLLARD LIGHT DETAIL

NOT TO SCALE



6" PVC DOUBLE TEE MANIFOLD
INLET AND OUTLET PIPING PROVIDED BY OTHERS.
5'-8"
CENTER
PLAN VIEW
GRADE
CONCRETE EXTENSION RINGS AS REQUIRED (TYP)
CAST IRON FRAME AND COVER (2 TYP)
TAPERED WALL
4" SLEEVE
INLET
OUTLET
MONOLITHIC BAFFLE (SLIDE IN BAFFLE IS NOT ACCEPTABLE)
6" PVC DOUBLE TEE MANIFOLD
GALVANIZED RISER SUPPORT (TYPICAL)
6'-6"
5'-6"
5'-9"
3'-0"
12"
6"
9'-2"
ELEVATION

SPECIFICATIONS

CONCRETE: CLASS 1 CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, WALL AND BAFFLE (NO JOINTS BELOW WATER LEVEL) GROSS EMPTY WEIGHT OF APPROX. 10,000 LBS.

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL. DESIGN FOR AASHTO H-20 TRAFFIC LOADING.

C.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30. MANHOLE SHALL HAVE 24 INCH INSIDE DIAMETER AND BE TRAFFIC DUTY.

ENGINEERING DATA: INTERCEPTOR IS STRUCTURALLY AND HYDRAULICALLY ENGINEERED CONFORMING TO UNIFORM PLUMBING CODE. NOMINAL LIQUID CAPACITY IS 1500 GALLONS WITH GREASE & SOLIDS RETENTION CAPACITY OF APPROXIMATELY 1,770 & 3,130 LBS. RESPECTFULLY. RECOMMENDED FOR AVERAGE FLOW RATE OF 5 GPM & INTERMITTENT FLOW RATE UP TO 13 GPM.

FIELD EXCAVATION AND PREPARATION SHALL BE COMPLETED PRIOR TO DELIVERY OF INTERCEPTOR. USE DIMENSIONAL DATA AS SHOWN.

GREASE TRAP TO BE EPOXY COATED.

MINIMUM EQUAL TO: PARK EQUIP. CO. (1-800-256-8041)
GREASE TRAP MODEL NO. GT-1500

GREASE TRAP DETAIL

NOT TO SCALE

DYNAMIC
• ENGINEERING • EARTH
• SURVEY • TRAFFIC

REV.	DATE	COMMENTS	BY

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DRAWN BY:	DESIGNED BY:	CHECKED BY:	CHECKED BY:
AOV	DRL	DTS	–

PROJECT:
CSH DEVELOPMENT, LLC
PROPOSED ASSISTED LIVING FACILITY
BLOCK 152.22, LOT 1412.01
609 EAGLE ROCK AVENUE (CR-611)
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

811
Know what's below
Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT:
WWW.CALL811.COM

DYNAMIC ENGINEERING
LAND DEVELOPMENT CONSULTING • PERMITTING
GEOTECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING
245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222
Offices conveniently located at:
Lake Como, New Jersey • T: 732.974.0198
Chester, New Jersey • T: 908.879.9229
Newark, New Jersey • T: 973.755.7200
Toms River, New Jersey • T: 732.974.0198
Newtown, Pennsylvania • T: 267.685.0276
Philadelphia, Pennsylvania • T: 215.253.4888
Allen, Texas • T: 972.534.2100
Houston, Texas • T: 281.789.6400
Austin, Texas • T: 512.646.2646
Delray Beach, Florida • T: 561.921.8570
www.dynamicec.com

DANIEL T. SEHNAL
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 53572

JOSEPH G. JAWORSKI
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 36618

TITLE:
CONSTRUCTION DETAILS

SCALE: (H) NOT TO (V) SCALE
DATE: 01/25/2021
PROJECT No: 1423-99-005

SHEET No: 13 OF 13
Rev. #: 0

Plotted: 01/25/21 – 3:58 PM, By: jgerdes
File: P:\decpc projects\1423 capitol seniors housing\99-005 west orange\Dwg\Site Plans\D142399005SD0.dwg, ---> 13 CONSTRUCTION DETAILS

COPYRIGHT © 2021 – DYNAMIC ENGINEERING CONSULTANTS, PC – ALL RIGHTS RESERVED