

TREDO GROUP

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FLOOR PLAN
GENERAL NOTES

- A. EXTERIOR DIMENSIONS ON FLOOR PLAN ARE NOMINAL AND ARE BASED ON FACE-OF-MASONRY TO FACE-OF-MASONRY. INTERIOR DIMENSIONS ON FLOOR PLAN ARE NOMINAL AND ARE BASED ON FACE-OF-WALL TO FACE-OF-WALL.
- B. EXTERIOR WALL TYPE ASSEMBLIES ARE DESCRIBED SEQUENTIALLY FROM THE OUTSIDE SURFACE TO THE INSIDE SURFACE.
- C. SEAL ALL WALL PENETRATIONS AT PERIMETER AND FIRESTOP ALL FIRE RATED PARTITIONS.
- D. 100'-0" ELEVATION IS EQUIVALENT TO CIVIL XX'-X", REFER TO CIVIL DRAWINGS.

EXTERIOR WALL ASSEMBLIES

- WL-1 **CAST-IN-PLACE CONCRETE FOUNDATION WALL - FROST WALL**
 STRUCTURE: CAST-IN-PLACE, REINFORCED CONCRETE WALL.
 INSULATION: 2" RIGID BOARD INSULATION ON INTERIOR FACE OF WALL EXTENDING 48" VERTICALLY (MINIMUM) ON WALL AND 24" (MINIMUM) UNDER SLAB.
- WL-2 **METAL STUD WALL WITH MASONRY VENEER**
 EXTERIOR FINISH: BRICK VENEER.
 AIR & DRAINAGE CAVITY: 2" NOMINAL AIR & DRAINAGE CAVITY.
 INSULATION: 2" RIGID BOARD INSULATION.
 WEATHER BARRIER: BUILDING WRAP.
 SHEATHING: 5/8" GYPSUM SHEATHING.
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 INSULATION: R-21 FIBERGLASS BATT INSULATION IN STUD CAVITIES.
 VAPOR BARRIER: POLYETHYLENE FILM VAPOR RETARDER.
 INTERIOR FINISH: (1) LAYER 5/8" GYPSUM BOARD.
- WL-3 **METAL STUD WALL WITH POLY-ASH TONGUE & GROOVE SIDING**
 EXTERIOR FINISH: POLY-ASH TONGUE & GROOVE SIDING INSTALLED HORIZONTALLY OVER 3/4" VERTICAL METAL HAT CHANNELS.
 INSULATION: 2" RIGID BOARD INSULATION WITH METAL "Z" FURRING INSTALLED HORIZONTALLY BETWEEN BOARD INSULATION AT 24" OC BUILDING WRAP.
 WEATHER BARRIER: 5/8" GYPSUM SHEATHING.
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 INSULATION: R-21 FIBERGLASS BATT INSULATION IN STUD CAVITIES.
 VAPOR BARRIER: POLYETHYLENE FILM VAPOR RETARDER.
 INTERIOR FINISH: (1) LAYER 5/8" GYPSUM BOARD.
- WL-4 **METAL STUD WALL WITH DOUBLE-LOCK STANDING SEAM ZINC SIDING**
 EXTERIOR FINISH: DOUBLE-LOCK STANDING SEAM ZINC SIDING INSTALLED VERTICALLY OVER 1/2" WOOD SHEATHING SUBSTRATE.
 FURRING: 4" METAL "Z" FURRING INSTALLED VERTICALLY.
 INSULATION: 2" RIGID BOARD INSULATION WITH METAL "Z" FURRING INSTALLED HORIZONTALLY BETWEEN BOARD INSULATION AT 24" OC.
 WEATHER BARRIER: BUILDING WRAP.
 SHEATHING: 5/8" GYPSUM SHEATHING.
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 INSULATION: R-21 FIBERGLASS BATT INSULATION IN STUD CAVITIES.
 VAPOR BARRIER: POLYETHYLENE FILM VAPOR RETARDER.
 INTERIOR FINISH: (1) LAYER 5/8" GYPSUM BOARD.
- WL-5 **METAL STUD PARAPET WALL WITH POLY-ASH TONGUE & GROOVE SIDING**
 EXTERIOR FINISH: POLY-ASH TONGUE & GROOVE SIDING INSTALLED HORIZONTALLY OVER 3/4" VERTICAL METAL HAT CHANNELS.
 INSULATION: 2" RIGID BOARD INSULATION WITH METAL "Z" FURRING INSTALLED HORIZONTALLY BETWEEN BOARD INSULATION AT 24" OC BUILDING WRAP.
 WEATHER BARRIER: 5/8" GYPSUM SHEATHING.
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 INSULATION: R-21 FIBERGLASS BATT INSULATION IN STUD CAVITIES.
 SHEATHING: 5/8" GYPSUM SHEATHING.
 INSULATION: 2" RIGID BOARD INSULATION.
 ROOF MEMBRANE: ROOF MEMBRANE.
- WL-6 **METAL STUD WALL AT ROOF**
 ROOF MEMBRANE: ROOF MEMBRANE.
 INSULATION: 2" RIGID BOARD INSULATION.
 SHEATHING: 5/8" GYPSUM SHEATHING.
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 INSULATION: R-21 FIBERGLASS BATT INSULATION IN STUD CAVITIES.
 VAPOR BARRIER: POLYETHYLENE FILM VAPOR RETARDER.
 INTERIOR FINISH: (1) LAYER 5/8" GYPSUM BOARD.

EXTERIOR WALL ASSEMBLY GENERAL NOTES:

- A. WALL TYPE ASSEMBLIES ARE DESCRIBED SEQUENTIALLY FROM THE OUTSIDE SURFACE TO THE INSIDE SURFACE.

INTERIOR PARTITION ASSEMBLIES

- PRT-1 **TYPICAL GYPSUM PARTITION**
 METAL FRAMING: 3-5/8" STEEL STUDS AT 16" OC.
 INSULATION: SOUND ATTENUATING FIBERGLASS BATT INSULATION - FULL THICKNESS OF STUDS.
 SIDE 1: (1) LAYER 5/8" GYPSUM BOARD.
 SIDE 2: (1) LAYER 5/8" GYPSUM BOARD.
- PRT-2 **TYPICAL GYPSUM PARTITION**
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 INSULATION: SOUND ATTENUATING FIBERGLASS BATT INSULATION - FULL THICKNESS OF STUDS.
 SIDE 1: (1) LAYER 5/8" GYPSUM BOARD.
 SIDE 2: (1) LAYER 5/8" GYPSUM BOARD.
- PRT-3 **TYPICAL GYPSUM PARTITION**
 METAL FRAMING: 6" STEEL STUDS AT 16" OC.
 FURRING: 2" WOOD FURRING.
 SIDE 1: (1) LAYER 5/8" GYPSUM BOARD.
 SIDE 2: (1) LAYER 5/8" GYPSUM BOARD.

GENERAL NOTES:

- A. ALL INTERIOR PARTITIONS TO BE PRT-1 UNLESS NOTED OTHERWISE.

PROJECT NAME

LIVING WORD

XXX XXXXXXXXXXXX
WAUKESHA
WISCONSIN 53188

DRAWING ISSUE HISTORY

CD - xx-xx-2019 CONSTRUCTION SET

SET TYPE

CD SET

AA PROJECT NUMBER

16023

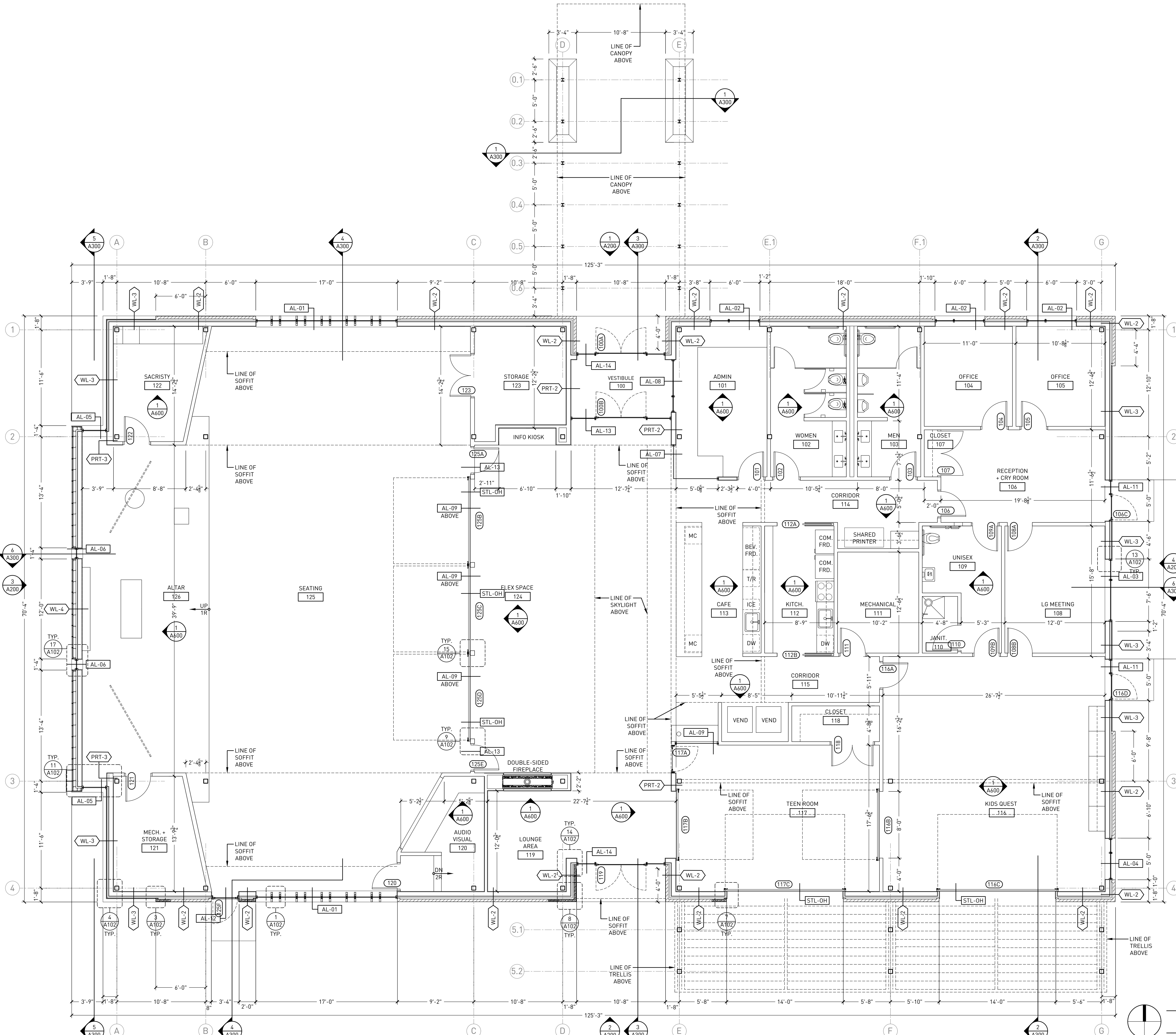
DATE

02-25-2019

SHEET TITLE

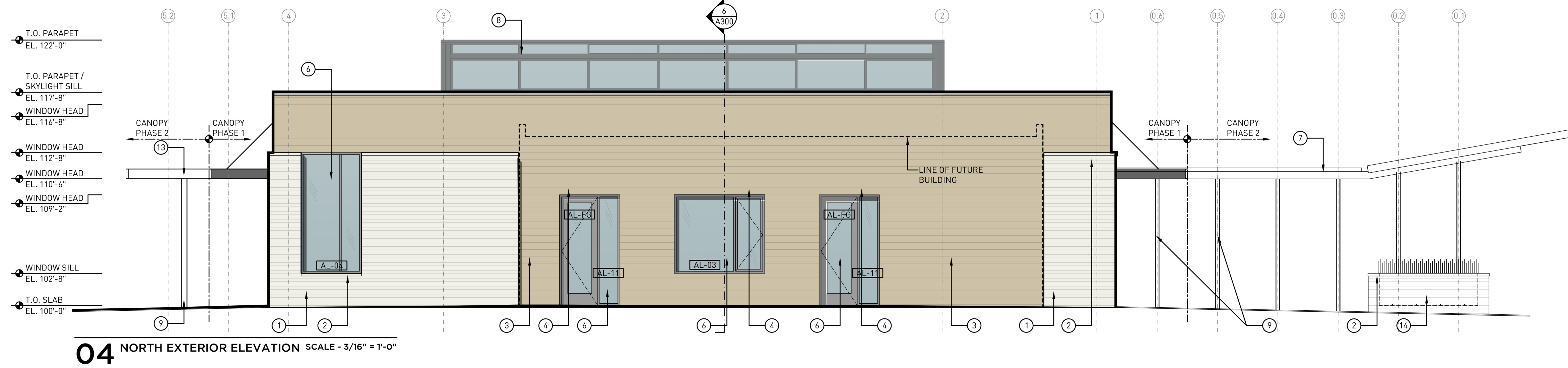
FLOOR PLAN

SHEET NUMBER

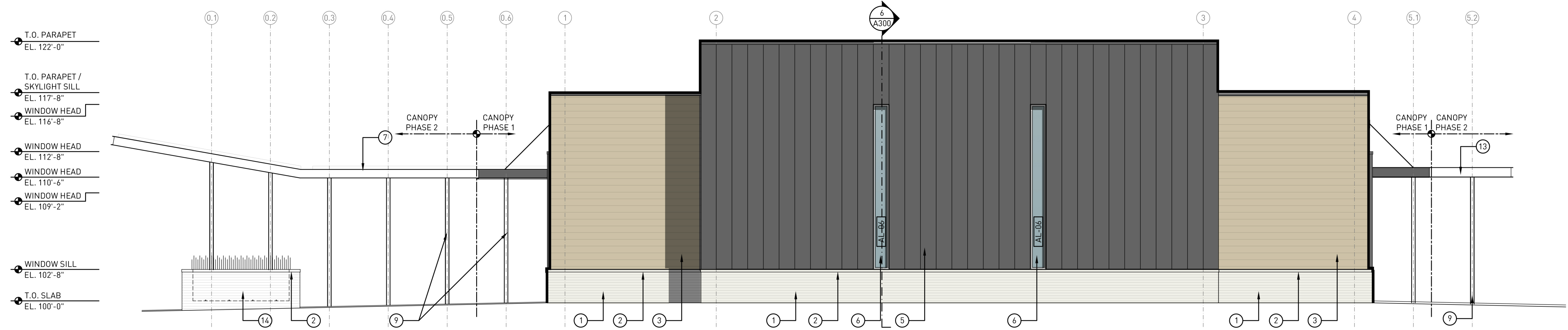


EXTERIOR ELEVATION KEYNOTES

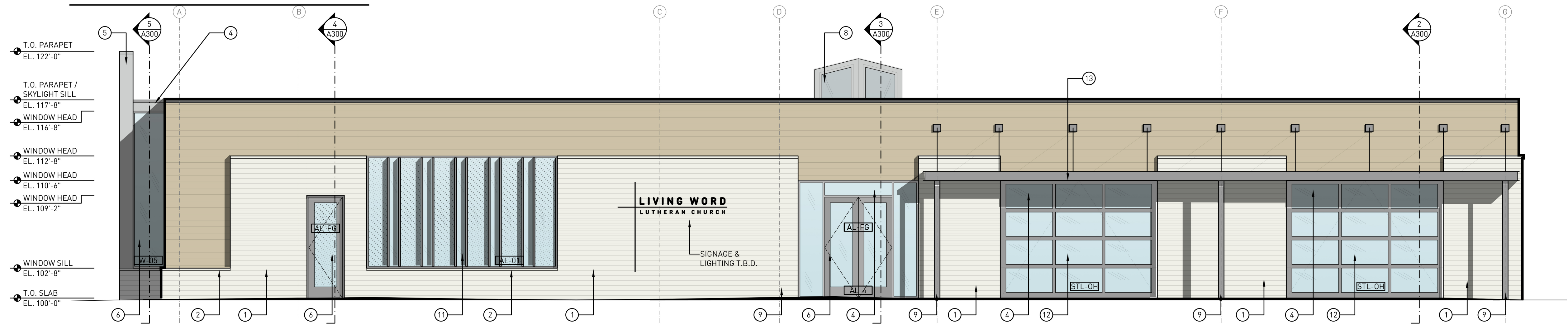
1. MODULAR BRICK VENEER
2. PRECAST STONE SILL
3. POLY-ASH SIDING
4. POLY-ASH TRIM
5. DOUBLE-LOCK STANDING SEAM ZINC SIDING
6. ALUMINUM STOREFRONT SYSTEM
7. METAL CANOPY FASCIA
8. SKYLIGHT
9. STEEL COLUMN - PAINTED
10. FLUSH COMPOSITE WOOD SIDING
11. ALUMINUM STOREFRONT SYSTEM W/ VERTICAL FINS
12. ALUMINUM GARAGE DOOR SYSTEM
13. STEEL TRELLIS CANOPY
14. MODULAR BRICK VENEER PLANTER WALL



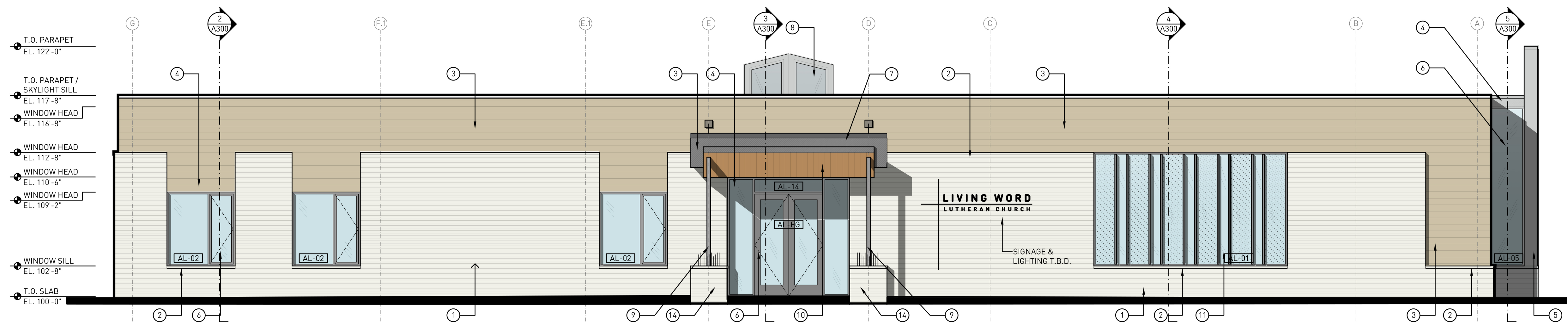
04 NORTH EXTERIOR ELEVATION SCALE - 3/16" = 1'-0"



03 SOUTH EXTERIOR ELEVATION SCALE - 3/16" = 1'-0"



02 EAST EXTERIOR ELEVATION SCALE - 3/16" = 1'-0"

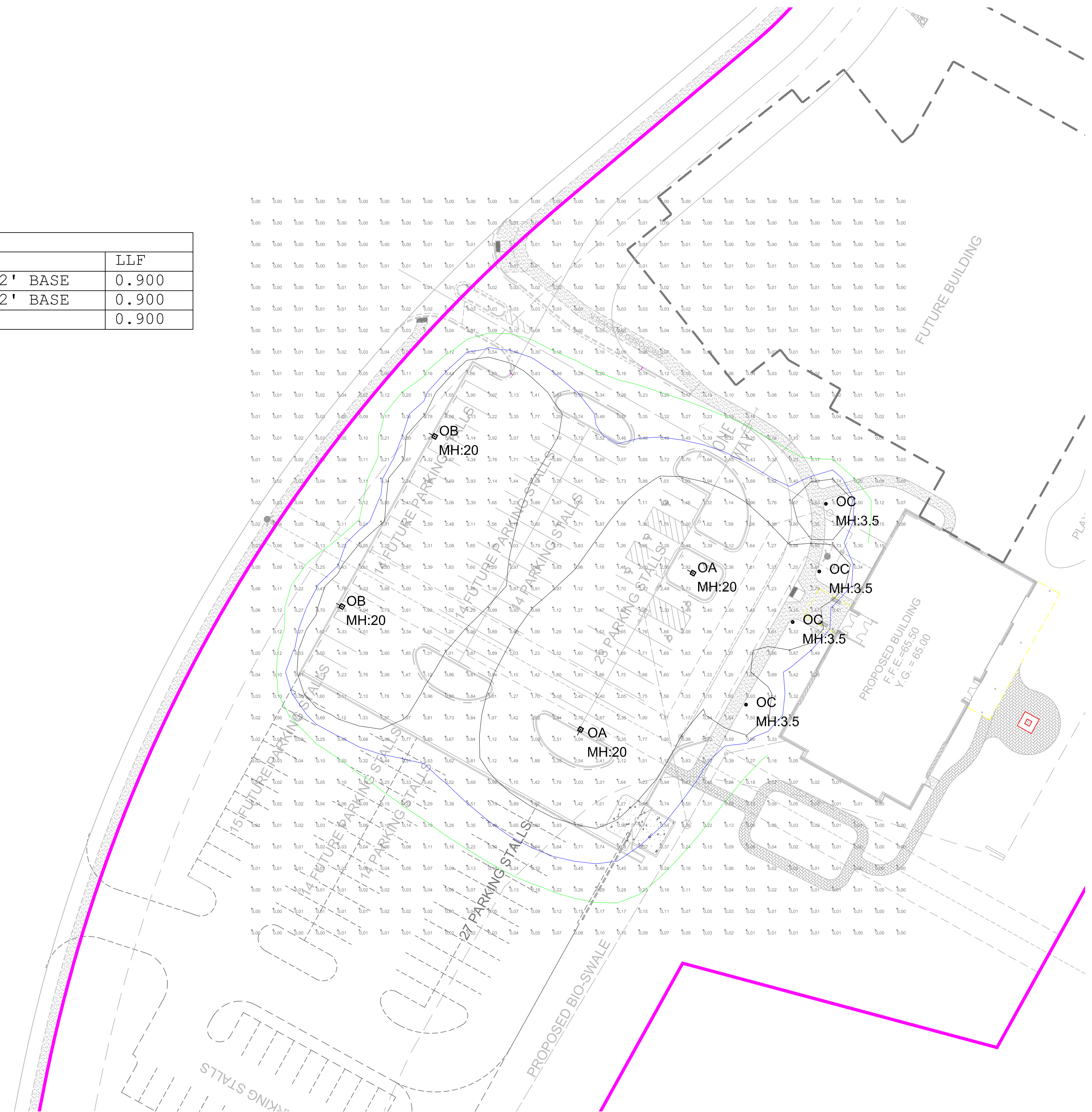


01 WEST EXTERIOR ELEVATION SCALE - 3/16" = 1'-0"

SIGHT LIGHTING PLAN CALCS

Luminaire Schedule				
Qty	Label	Manufacturer	Description	LLF
2	OA	McGraw-Edison	GLEON-AF-03-LED-E1-5WQ + 18' POLE + 2' BASE	0.900
2	OB	McGraw-Edison	GLEON-AF-03-LED-E1-SL4 + 18' POLE + 2' BASE	0.900
4	OC	Cree	PWY-EDG-5M-P4-02-E-UL-xx-350-40K	0.900

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot	1.79	5.2	0.5	3.58	10.40



Cree Edge™ Series

LED Pathway Luminaire

Product Description

Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance. Pole mounts to rugged die cast aluminum internal flange secured by three 3/8" - 16x6" anchor bolts with 1-1/4" hook (provided). **Note:** T45 Torx 3/8" socket required for head installation. Top mounted LEDs for superior optical performance and light control.

Applications: Landscape, walk-ways and general site lighting

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

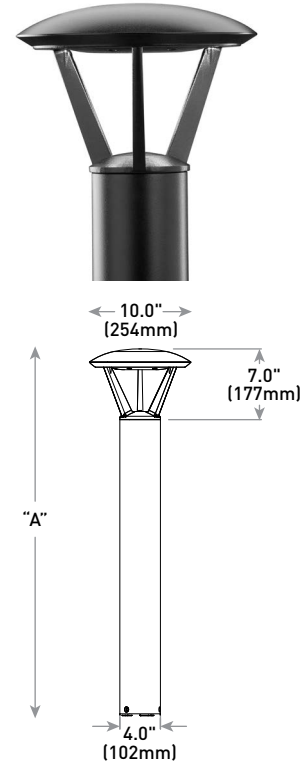
CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed
Upgrade Kit - Used for replacement of existing bollards with a bolt hole circle of 5.75" (146mm) XA-XBP8RSV XA-XBP8RWH XA-XBP8RBK XA-XBP8RBZ



Model	Dim. "A"	Weight*
Landscape (P0)	13" (330mm)	12.7 lbs. (5.8kg)
Landscape (P1)	18" (457mm)	13.3 lbs. (6.0kg)
Pathway (P3)	36" (914mm)	17.9 lbs. (8.1kg)
Pathway (P4)	42" (1068mm)	18.6 lbs. (8.4kg)
Pedestrian (P8)	96" (2438mm)	28.4 lbs (12.9kg)

* Add 4.5 lbs. (2.0kg) for 347-480V

Ordering Information

Example: PWY-EDG-2M-P0-02-E-UL-SV-350

PWY-EDG			02	E				
Product	Optic	Mounting	LED Count (x9)	Series	Voltage	Color Options	Drive Current	Options
PWY-EDG	2M Type II Medium 3M Type III Medium 5M Type V Medium 5S Type V Short	P0 13" (330mm) landscape P1 18" (457mm) landscape P3 36" (914mm) pathway P4 42" (1067mm) pathway P8 96" (2438mm) pedestrian	02	E	UL Universal 120-277V UH* Universal 347-480V - Available with P3, P4, and P8 mounts only 12 120V 27 277V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA - Available with P1, P3, P4, and P8 mounts only	F Fuse - When code dictates fusing, use time delay fuse - Refer to ML spec sheet for availability with ML options HL Hi/Low (Dual Circuit Input) - Available with UL voltage and 525mA driver current only - Refer to HL spec sheet for details - Sensor not included TL Two-Level (175/525 w/integrated sensor control) - Available with 12 or 27 voltages only - Refer to TL spec sheet for details TL2 Two-Level (0/350 w/integrated sensor control) - Available with 12 or 27 voltages only - Refer to TL spec sheet for details TL3 Two-Level (0/525 w/integrated sensor control) - Available with 12 or 27 voltages only - Refer to TL spec sheet for details WB Welded Base Plate - Standard on P8 mount option, available with P3 and P4 mount - Includes welded base cover 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire

* 347-480V utilizes magnetic step-down transformer. For input power for 347-480V, refer to the Electrical Data table



Rev. Date: V5 08/11/2016



LIGHT BOLLARD

Cree Edge™ LED Pathway Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance
- Pole mounts to rugged die cast aluminum internal flange secured by three 3/8"-16x6" anchor bolts with 1-1/4" hook (provided).
Note: T45 Torx 3/8" socket required for head installation
- Top mounted LEDs for superior optical performance and light control
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** See Dimension and Weight Chart on pages 1 and 4

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load at 120V
- **Total Harmonic Distortion:** < 20% at full load at 120V
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details

Electrical Data* (A)								
LED Count (x9)	System Watts 120-277V	System Watts 347-480V	Total Current					
			120V	208V	240V	277V	347V	480V
350mA								
02	22	28	0.18	0.12	0.10	0.10	0.09	0.13
525mA								
02	34	40	0.29	0.19	0.17	0.15	0.12	0.13

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF) ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	0.99	0.97	0.95	0.93
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.91
20°C (68°F)	1.01	0.96	0.94	0.92	0.90
25°C (77°F)	1.00	0.95	0.93	0.91	0.89

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

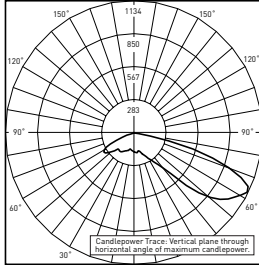
LIGHT BOLLARD

Cree Edge™ LED Pathway Luminaire

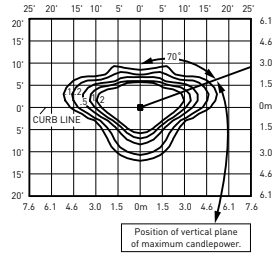
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/bollards-and-pathway/cree-edge-pathway>

2M



RESTL Test Report #: PL5758-001
 PWY-EDG-2M-**-02-E-UL-350-40K
 Initial Delivered Lumens: 1,549



PWY-EDG-2M-**-02-E-UL-350-40K
 Mounting Height: 3' [0.9m] A.F.G.
 Initial Delivered Lumens: 1,565
 Initial FC at grade

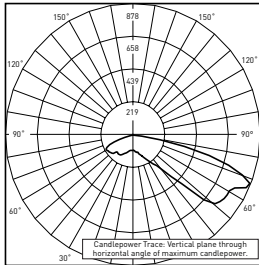
Type II Medium Distribution

LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,565	B1 U0 G1	1,625	B1 U0 G1
525mA				
02	2,191	B1 U0 G1	2,276	B1 U0 G1

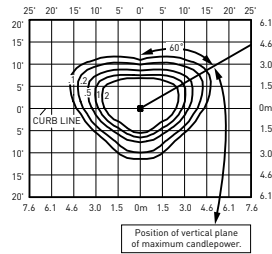
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

3M



RESTL Test Report #: PL5698-001
 PWY-EDG-3M-**-02-E-UL-350-40K
 Initial Delivered Lumens: 1,470



PWY-EDG-3M-**-02-E-UL-350-40K
 Mounting Height: 3' [0.9m] A.F.G.
 Initial Delivered Lumens: 1,389
 Initial FC at grade

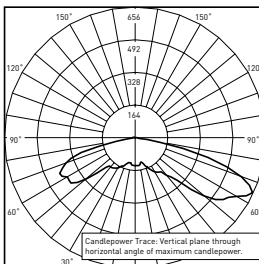
Type III Medium Distribution

LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,389	B1 U0 G1	1,442	B1 U0 G1
525mA				
02	1,944	B1 U0 G1	2,019	B1 U0 G1

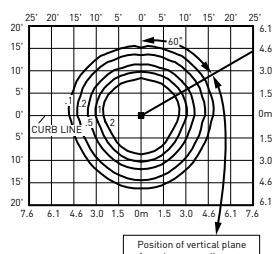
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

5M



RESTL Test Report #: PL5798-001
 PWY-EDG-5M-**-02-E-UL-350-40K
 Initial Delivered Lumens: 1,780



PWY-EDG-5M-**-02-E-UL-350-40K
 Mounting Height: 3' [0.9m] A.F.G.
 Initial Delivered Lumens: 1,666
 Initial FC at grade

Type V Medium Distribution

LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,666	B1 U2 G1	1,730	B1 U2 G1
525mA				
02	2,333	B2 U2 G2	2,422	B2 U2 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

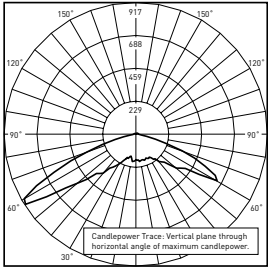
LIGHT BOLLARD

Cree Edge™ LED Pathway Luminaire

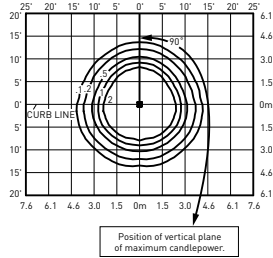
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/bollards-and-pathway/cree-edge-pathway>

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RESTL Test Report #: PL5759-001
 PWY-EDG-5S-**-02-E-UL-350-40K
 Initial Delivered Lumens: 1,897



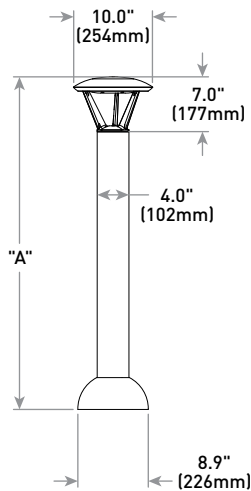
PWY-EDG-5S-**-02-E-UL-350-40K
 Mounting Height: 3' [0.9m] A.F.G.
 Initial Delivered Lumens: 1,868
 Initial FC at grade

Type V Short Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,868	B1 U2 G1	1,940	B1 U2 G1
525mA				
02	2,615	B1 U2 G1	2,716	B1 U2 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

with Welded Base



Model	Dim. "A"	Weight*
Pathway (P3)	36" [914mm]	17.9 lbs. [8.1kg]
Pathway (P4)	42" [1068mm]	18.6 lbs. [8.4kg]
Pedestrian (P8)	96" [2438mm]	28.4 lbs [12.9kg]

* Add 4.5 lbs. [2.0kg] for 347-480V

LIGHT FIXTURE

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.

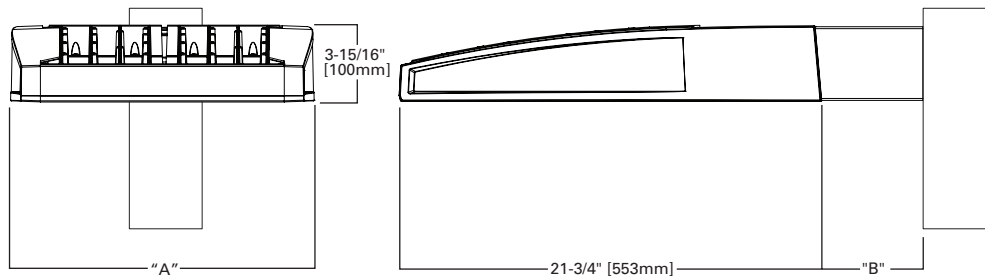


GLEON GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

DIMENSIONS

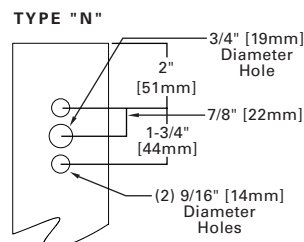


DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA

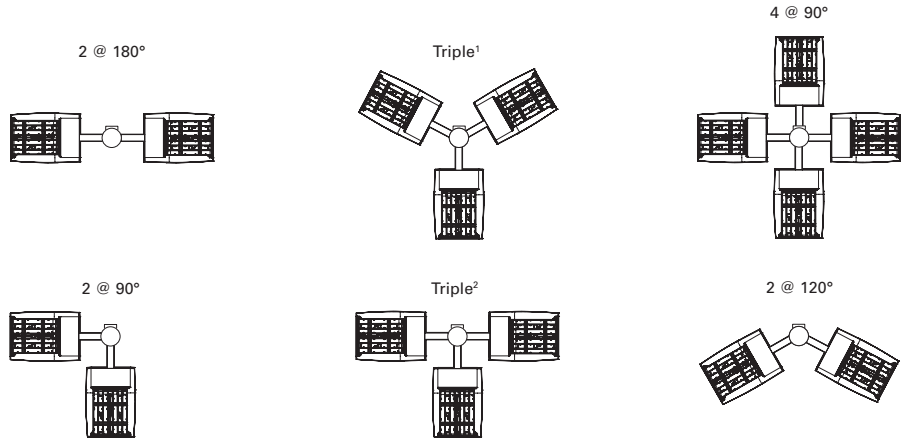
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

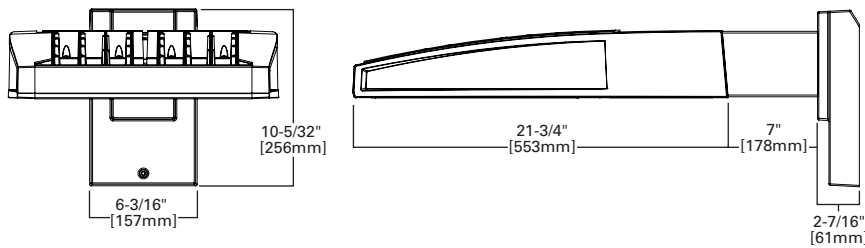
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

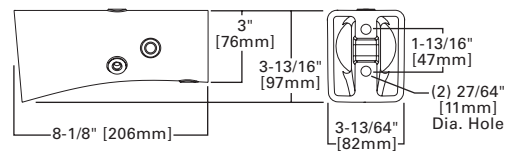


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

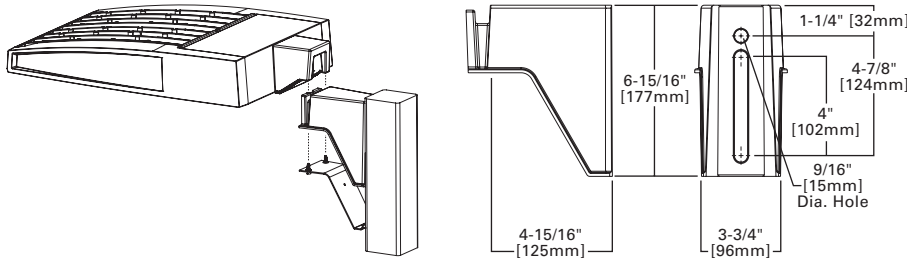
STANDARD WALL MOUNT



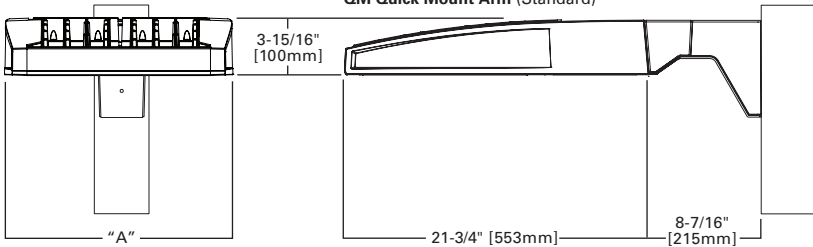
MAST ARM MOUNT



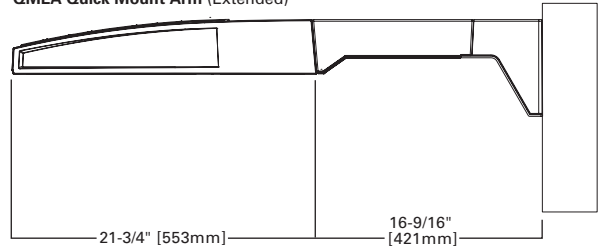
QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QM Quick Mount Arm (Standard)



QMEA Quick Mount Arm (Extended)

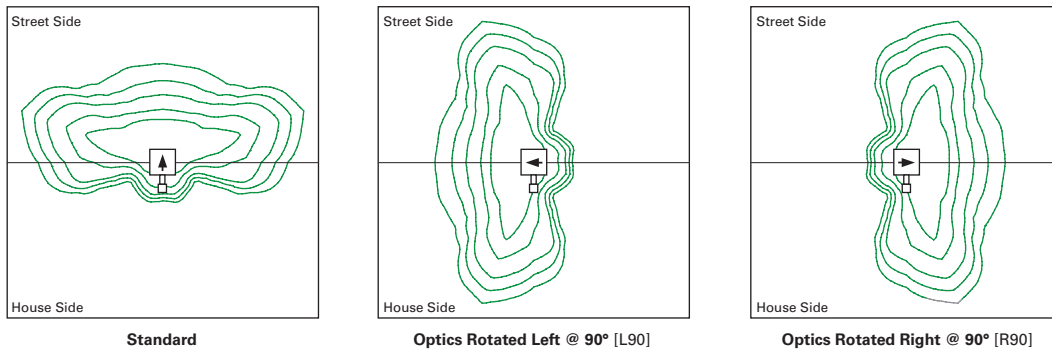


QUICK MOUNT ARM DATA

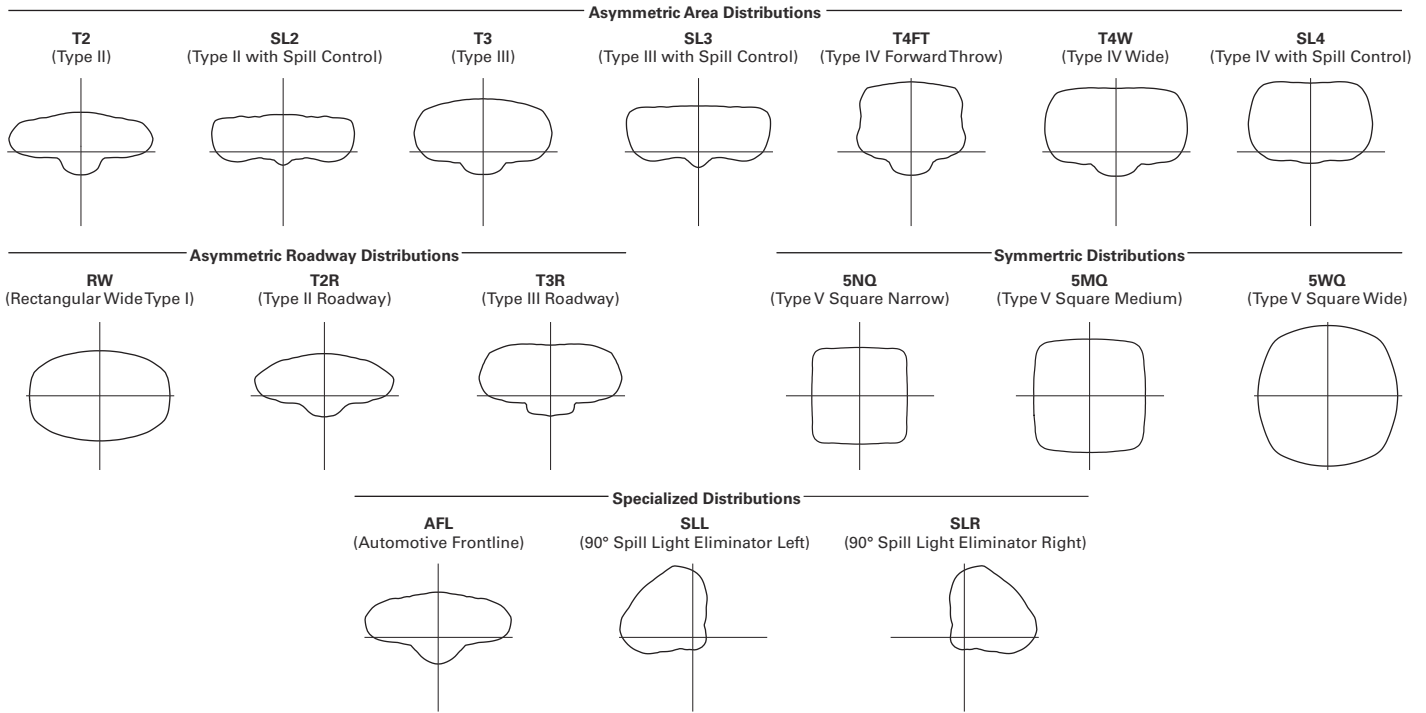
Number of Light Squares ^{1,2}	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 ³	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

OPTIC ORIENTATION



OPTICAL DISTRIBUTIONS

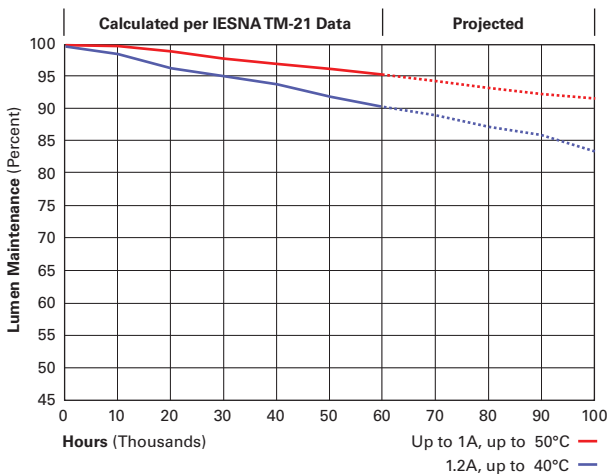


LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	416,000
1.2A	Up to 40°C	> 90%	205,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97



POLE FOR LIGHT FIXTURE

Steel Poles



RTS ROUND TAPERED STEEL

Catalog #		Type
Project		
Comments		Date
Prepared by		

FEATURES

- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on RTS poles
- 20'-50' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. [Learn more.](#)

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

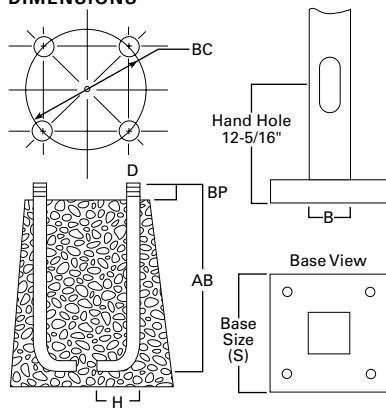
ORDERING INFORMATION

SAMPLE NUMBER: RTS8A30SF2XXG

Product Family	Shaft Size (Inches) ¹	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
RTS=Round Tapered Steel	6=6" 7=7" 8=8" 9=9" 0=10"	A=0.120" D=0.180"	20=20' 25=25' 30=30' 35=35' 39=39' 45=45' 50=50'	S=Square Steel Base	F=Dark Bronze G=Galvanized Steel J=Summit White K=Carbon Bronze L=Dark Platinum R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 9=3" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling C=Type C Drilling E=Type E Drilling F=Type F Drilling G=Type G Drilling J=Type J Drilling K=Type K Drilling M=Type M Drilling N=Type N Drilling R=Type R Drilling S=Standard Upsweep Arm Z=Type Z Drilling	1=Single 2=2 at 180° 3=Triple ² 4=4 at 90° 5=2 at 90° 6=3 at 90° 7=2 at 120° X=None	X=None	A=1/2" Tapped Hub ³ B=3/4" Tapped Hub ³ C=Convenience Outlet ⁴ E=GFCI Convenience Outlet ⁴ G=Ground Lug H=Additional Hand Hole ⁵ V=Vibration Damper

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 3 at 120°. 3. Tapped Hub is located 5' below the pole top and on the same side of pole as hand hole, unless specified otherwise. 4. Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 5. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



POLE FOR LIGHT FIXTURE

Effective Projected Area (At Pole Top)

Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Base Square ³ (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Taper ³ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
									80 mph	90 mph	100 mph	110 mph	
MH			S	BC	BP	B	D x AB x H						
20	RTS6A20S	0.120	10-1/2	11	4-1/2	6.3 x 3.5	3/4 x 25 x 3	145	19.6	15.0	11.6	9.5	100
25	RTS7A25S	0.120	10-1/2	11	4-1/2	7.0 x 3.5	3/4 x 25 x 3	187	14.7	11.0	8.6	6.8	200
30	RTS8A30S	0.120	12-1/2	12-1/2	5	7.7 x 3.5	1 x 36 x 4	254	18.0	13.5	10.5	8.4	300
35	RTS8A35S	0.120	12-1/2	12-1/2	5	8.4 x 3.5	1 x 36 x 4	305	16.1	11.9	9.1	7.2	300
35	RTS9D35S	0.180	12-1/2	12-1/2	5	8.4 x 3.5	1 x 36 x 4	452	20.5	15.4	12.0	9.6	300
39	RTS9A39S	0.120	12-1/2	12-1/2	5	8.9 x 3.5	1 x 36 x 4	347	14.5	10.7	8.1	6.2	300
39	RTS9D39S	0.180	12-1/2	12-1/2	5	8.9 x 3.5	1 x 36 x 4	516	16.9	12.5	9.6	7.5	300
45	RTS0A45S ⁵	0.120	13-1/2	13-1/2	5	10.2 x 4.2	1 x 36 x 4	466	14.5	10.1	7.7	5.8	300
45	RTS0D45S ⁵	0.180	13-1/2	13-1/2	6	10.2 x 4.2	1-1/4 x 42 x 6	670	27.0	20.5	16.1	13.0	300
50	RTS0A50S ⁵	0.120	13-1/2	13-1/2	5	10.2 x 3.5	1 x 36 x 4	490	7.4	4.9	3.3	2.2	400
50	RTS0D50S ⁵	0.180	13-1/2	13-1/2	6	10.2 x 3.5	1-1/4 x 42 x 6	704	19.8	14.7	11.2	8.6	400

Effective Projected Area (Two Feet Above Pole Top)

Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Base Square ³ (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Taper ³ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
									80 mph	90 mph	100 mph	110 mph	
MH			S	BC	BP	B	D x AB x H						
20	RTS6A20S	0.120	10-1/2	11	4-1/2	6.3 x 3.5	3/4 x 25 x 3	145	17.4	13.4	10.4	8.4	100
25	RTS7A25S	0.120	10-1/2	11	4-1/2	7.0 x 3.5	3/4 x 25 x 3	187	13.7	10.0	7.8	6.2	200
30	RTS8A30S	0.120	12-1/2	12-1/2	5	7.7 x 3.5	1 x 36 x 4	254	16.7	12.6	9.7	7.7	300
35	RTS8A35S	0.120	12-1/2	12-1/2	5	8.4 x 3.5	1 x 36 x 4	305	15.1	11.2	8.6	6.7	300
35	RTS9D35S	0.180	12-1/2	12-1/2	5	8.4 x 3.5	1 x 36 x 4	452	19.5	14.6	11.3	9.0	300
39	RTS9A39S	0.120	12-1/2	12-1/2	5	8.9 x 3.5	1 x 36 x 4	347	13.8	10.1	7.6	5.9	300
39	RTS9D39S	0.180	12-1/2	12-1/2	5	8.9 x 3.5	1 x 36 x 4	516	16.1	11.9	9.1	7.1	300
45	RTS0A45S ⁵	0.120	13-1/2	13-1/2	5	10.2 x 4.2	1 x 36 x 4	466	13.2	9.8	7.3	5.6	300
45	RTS0D45S ⁵	0.180	13-1/2	13-1/2	6	10.2 x 4.2	1-1/4 x 42 x 6	670	26.0	19.8	15.5	12.4	300
50	RTS0A50S ⁵	0.120	13-1/2	13-1/2	5	10.2 x 3.5	1 x 36 x 4	490	7.1	4.7	3.7	2.1	400
50	RTS0D50S ⁵	0.180	13-1/2	13-1/2	6	10.2 x 3.5	1-1/4 x 42 x 6	704	19.0	14.1	10.7	8.3	400

NOTES:

1. Catalog number includes pole with hardware kit. Anchor bolts not included. Before installing, make sure proper anchor bolts and templates are obtained.
2. Tenon size or machining for rectangular arms must be specified. Hand hole position relative to drill location.
3. Shaft size, base square, anchor bolts and projections may vary slightly. All dimensions nominal.
4. EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.
5. Two-piece pole.