

# Lighting and Signage



# **SIGNAGE & LIGHTING CONCEPTS**

February 2019





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Hart's Road Station (October 2018)

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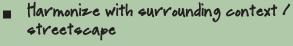
Conceptual Signage and Lighting Sketches
Conceptual Logos





# **Goals & Objectives**





- Establish cohesive character / reduce clutter
- Define sign types / hierarchy / proportion
- Identify sign locations / scale / orientation
- Consider safety / setback / visibility
- Capture aesthetics of district / railroad
- Select materials / colors / lighting / landscape
- Portray sense of permanence / timelessness

# **Design Considerations**







# **Materials & Themes**



Metal (Iron/steel/aluminum)



Tabby Shell (Composite / Aggregate)



Brick (Timeless / Permanent)



Wood (Rough Sawn / Heavy Timber)



# The William Burgess District Signage and Lighting Concepts | February 2019

# Introduction

## Introduction

The William Burgess Overlay District in eastern Nassau County is a growing community interlinked by a rich railroad heritage, diverse natural environment and unique cultural tradition. Nassau County has envisioned the formation of strong community identity inspired by its railroad roots, thriving timber industry and Florida's wild marshlands and freshwater tributaries in the built environment of three new Village centers: The Civic Center, The Crossing and the River Village. A hierarchy of signage types with a consistent aesthetic theme throughout the William Burgess District will further establish a sense of place, cultivate community character and connect the community to social gathering places, businesses and the surrounding natural areas. The aesthetic theme of the signage and lighting design components is intended to provide a sense of arrival while reinforcing a lasting sense of place, marking the identity of the District for residents and visitors.

The identity of this historic community will be emphasized through the application of a select set of materials representing "A Railroad Community Reinvented" theme. This aesthetic will be a mixture of nostalgic charm in a simple, yet modern style. Brick and tabby materials portray a sense of timelessness combined with the strong appeal of crafted metal and the bold look of timber. Street lighting fixtures will incorporate shielding to meet dark sky requirements and unified with the signage design motif.

As part of the implementation of the William Burgess District visioning, the Nassau County Planning and Economic Opportunity Department recognized the need to produce a comprehensive signage and lighting design concepts to direct and inform vehicular and pedestrian traffic throughout the District. To assist with this task, VHB met with Planning Department to understand the vision for the District and conduct a site inventory and analysis of the region. The process of making careful decisions regarding the type, style and location of signage & lighting for the William Burgess District has been fully documented and organized into the concepts as a guiding set of design standards for implementation.

# **Goals and Objectives**

- Signage and lighting design elements contribute to the visual and spatial character of the streetscape.
- Signage and lighting design elements to unify and harmonize with the surrounding context.
- The proper selection and spacing of signs and lights establishes a cohesive street character and reduces visual clutter.
- Signage and lighting elements are to be setback from the street edge for safety and visibility.

# **Design Considerations**

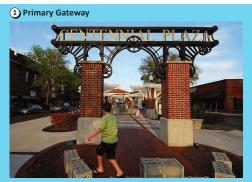
- The hierarchy of signs types are determined by size, color, scale and proportion. A "family" of lighting types help create a unifying character and rhythm along the streets.
- Warm, natural colors are preferred and bright colors are to be avoided.
- Lettering on signs are to be simple, easy to read and in scale with the sign, in general heavy bold lettering should be avoided.
- Indirect lighting is preferred; internal sign illumination is not allowed.

# **Materials and Theme**

 Materials are to portray a sense of permanence through framework of brick, tabby, metal and timber-like elements.

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# **Signage Definitions**

#### **Primary Gateway**

Primary gateway signs identify entrances to the Village centers and are typically positioned along major thoroughfares with high vehicular and pedestrian traffic. Gateways are prominent in scale and signify the arrival to a special place. Gateway features tend to set the theme and character of the neighborhood.

#### **Secondary Gateway**

Secondary gateway signs are similar in design, materials and theming to match the primary gateway signs, but are less prominent in scale and are positioned along less busy collector streets feeding into the Village centers.

#### **Directory Sign (Commercial & Industrial Tenant Sign)**

Directory are located in front of the buildings in which they serve to provide pedestrian, bicyclist and vehicular users with awareness of nearby businesses and tenants.

#### **Ground Monument (Permanent Subdivision Sign)**

Ground monument signs are located near the entrance to subdivision developments to provide pedestrian, bicyclist and vehicular users with a sense of arrival and identify boundaries.

#### **Directional Signs**

Directional signs are located on the primary streets within the neighborhood to inform pedestrians, bicyclist and vehicular traffic the location of major destinations.

#### **Informational**

Informational signs are signs which inform the public of historical, cultural and natural interest. These signs tend to be located at specific locations and/or building sites such as in front of urban plazas or near the core of the Village center.

#### **Regulatory Signs**

Regulatory street signs are to include themed design characteristics and meet FDOT and Nassau County street sign regulations.

#### **District Banner / Lighting**

Lighting features serve the dual purpose of safety and setting an architectural tone to public outdoor spaces in the District. Fixed light pole banners signify specific activity nodes and can be rotated throughout the year to celebrate seasons, holiday, anniversaries, etc.

#### **Building Signs (Hanging)**

Traditional hanging signs are supported with brackets and sized for pedestrian visibility.

#### **Building Signs (Façade)**

Flush type façade signs, either mounted or painted directly on wall surface, are oriented to pedestrian and street traffic, and regulated by size of building features.

#### **Trail Sign**

Trail signs identify and locate trails and their destinations..





# Hart's **ENCPA** Station Yulee Wildlight **ENCPA** The Crossing Civic Center ENCPA ENCPA River Village

# **Gateway Signage Opportunities**

# Key



# **Proposed Regional Gateway Location**

Signifies entrance to The William Burgess District from A1A at key access points.



# **Proposed Primary Gateway Location**

Signifies entrance to Village cores at key access points within The William Burgess District.



# **Secondary Gateway**

Signifies entrance to village cores at secondary access points within The William Burgess District.



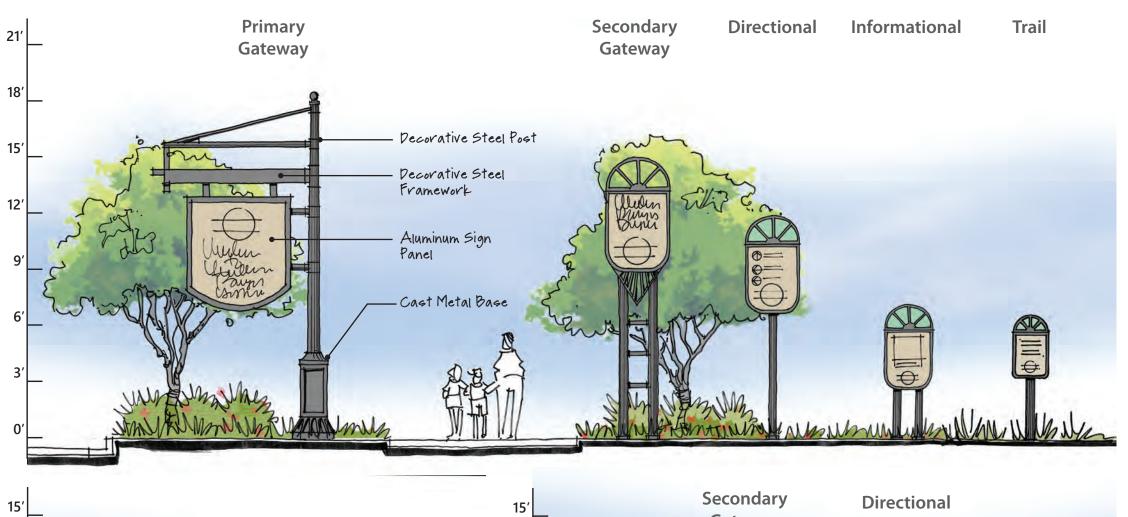
## **Primary Light Style**

Location of a boulevard style light poles. Refer to lighting plan.

# **Gateway Opportunity Summary**

Gateway signs introduce and welcome visitors in locations that offer the first impression of the community. Regional Gateways indicate entry points to the William Burgess District for vehicular, pedestrian and bicycle traffic traveling along A1A. Additionally, Primary and Secondary Gateway signs are to provide identity and a sense of arrival to the various Village centers within the District (The Crossing, Civic Center, and River Village). To cohesively tie Villages together, a single light design style is proposed along the William Burgess Boulevard and US 17 corridors, connecting the Villages and regional gateways entry points.





# **Signage Hierarchy**

Sign hierarchy assists with identifying boundaries and maneuvering through the District. The hierarchy of signage is determined by its location, category, and function. There are varying levels of importance that influence the design features of each sign type. Sign hierarchy principles dictate that the more important the information, the higher the sign visibility should be. Hierarchy guidelines and legibility at various viewing distances is dictated by the size of the sign, the location and height of the sign, and the size of the graphics (fonts and symbols).

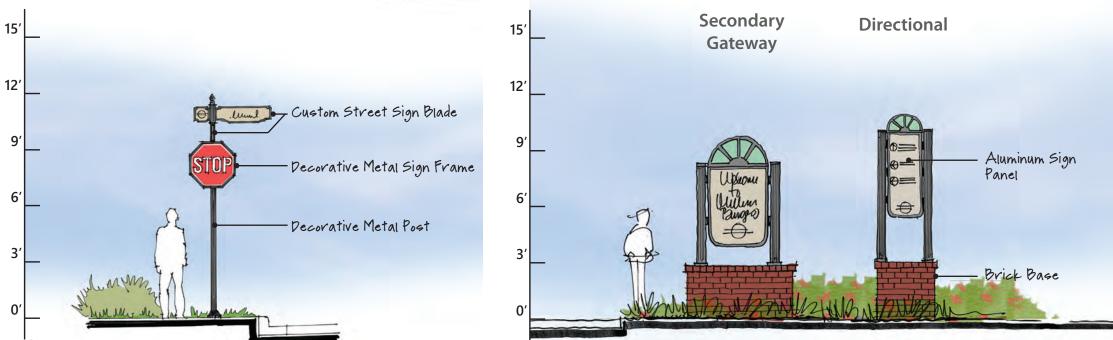
# **Regulatory Signage**

To further reinforce the identity of the William Burgess District, regulatory signage emphasizes the historic railroad theme with decorative metal sign frames and posts.

# **Signage Options**

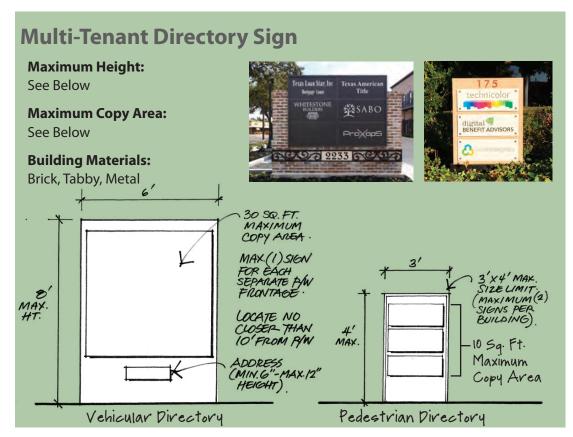
The Village areas are independently evolving around a common vision for the District. Subtle features of signage style can be modified to capture the essence of each Village. For example, the optional use of brick base features for gateway and directional signs in the Civic Center complement the brick façade of the existing judicial buildings.

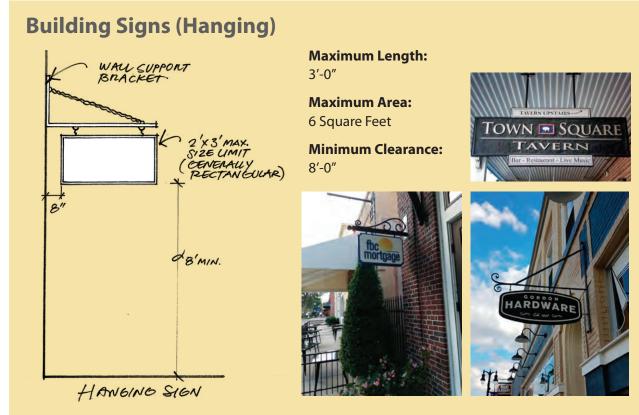




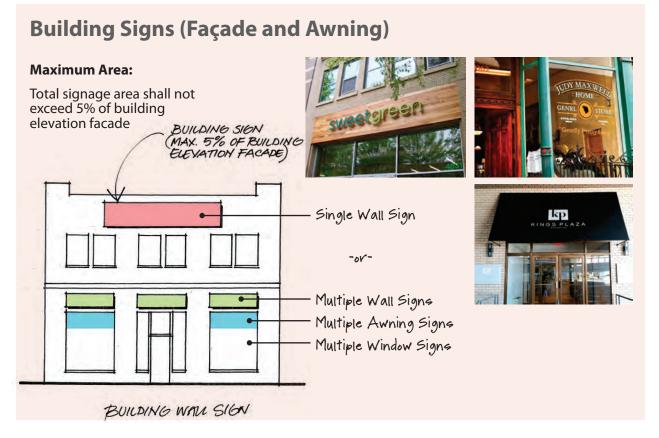
**Optional Signs in Civic Center** 

**Regulatory Signage** 









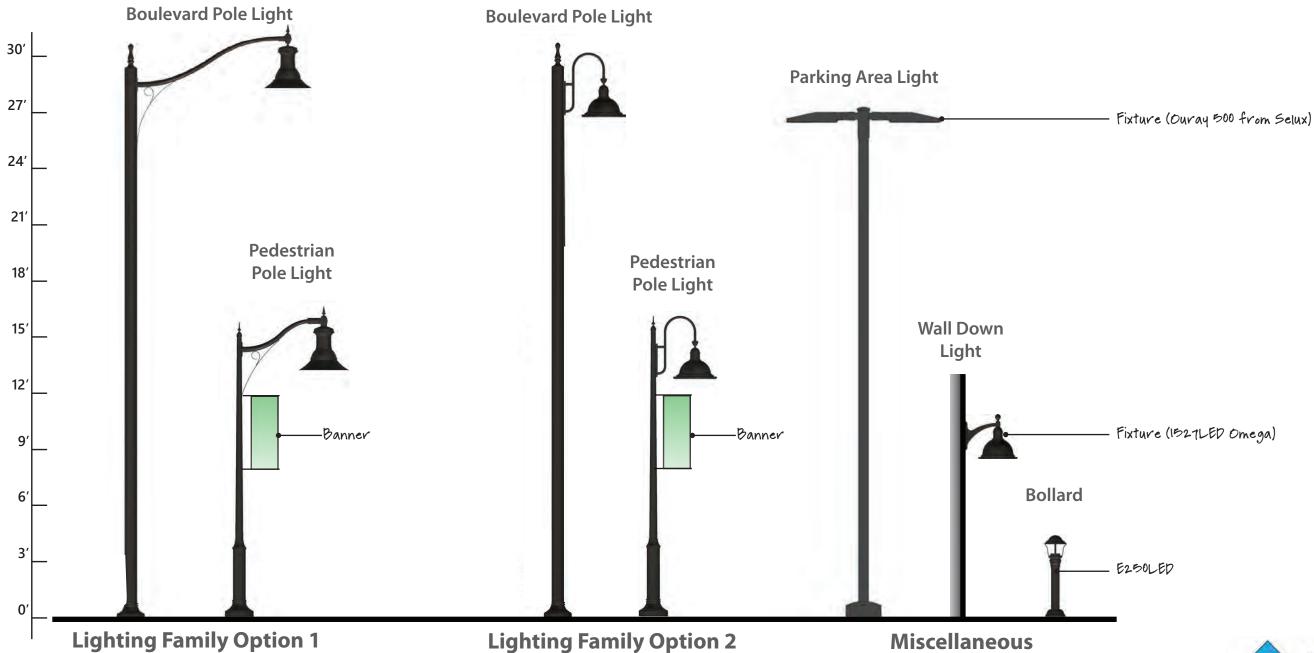






# **Street Lights**

The street lighting components for William Burgess District are from the Sternberg Lighting catalog (www.sternberglighting. com). The style of lighting fixtures is to capture the essence of Nassau County's railroad history while having Dark-Sky Friendly shielding and directional LED bulbs to reduce light pollution.





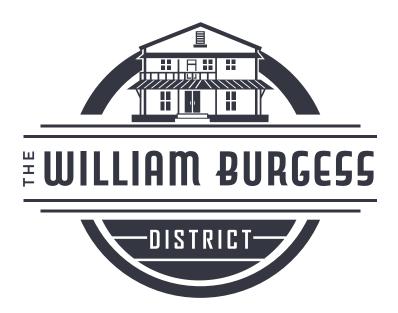
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FLORIDA



# # WILLIAM BURGESS



# **All Black Version**



# **Color Palette**

COLOR PALETTE



ACCENT COLORS





Hibiscus

# **All White Version**



# **District Logo**

Within the William Burgess District is the original Hart's Road Station. This depot was an important landmark among the rural, rail-based community as a connecting point of the Florida Railroad (1855-1861). Knowing that Hart's Road Station would remain within the District, it should be showcased as the main identifier to remember the significant role it played in history to Yulee. The colors in the primary color palette are more neutral to replicate the strong steel, iron, and timber that were used to build the rails that lasted the test of time. The accent colors were inspired by the lush environment of natural grasses, sparkling water, and tropical flowers.

The thick, outlined shape helps to both contain the graphic elements within the logo, and recall graphic elements and treatments used in logos from rail lines of the past. The circle shape used in the logo is an abstract of the top of a railroad spike, while the horizontal lines around the lettering are an abstract of the rails and railroad ties. The font is bold, strong and powerful, while still maintaining a modern style and simplicity for both large and small uses.

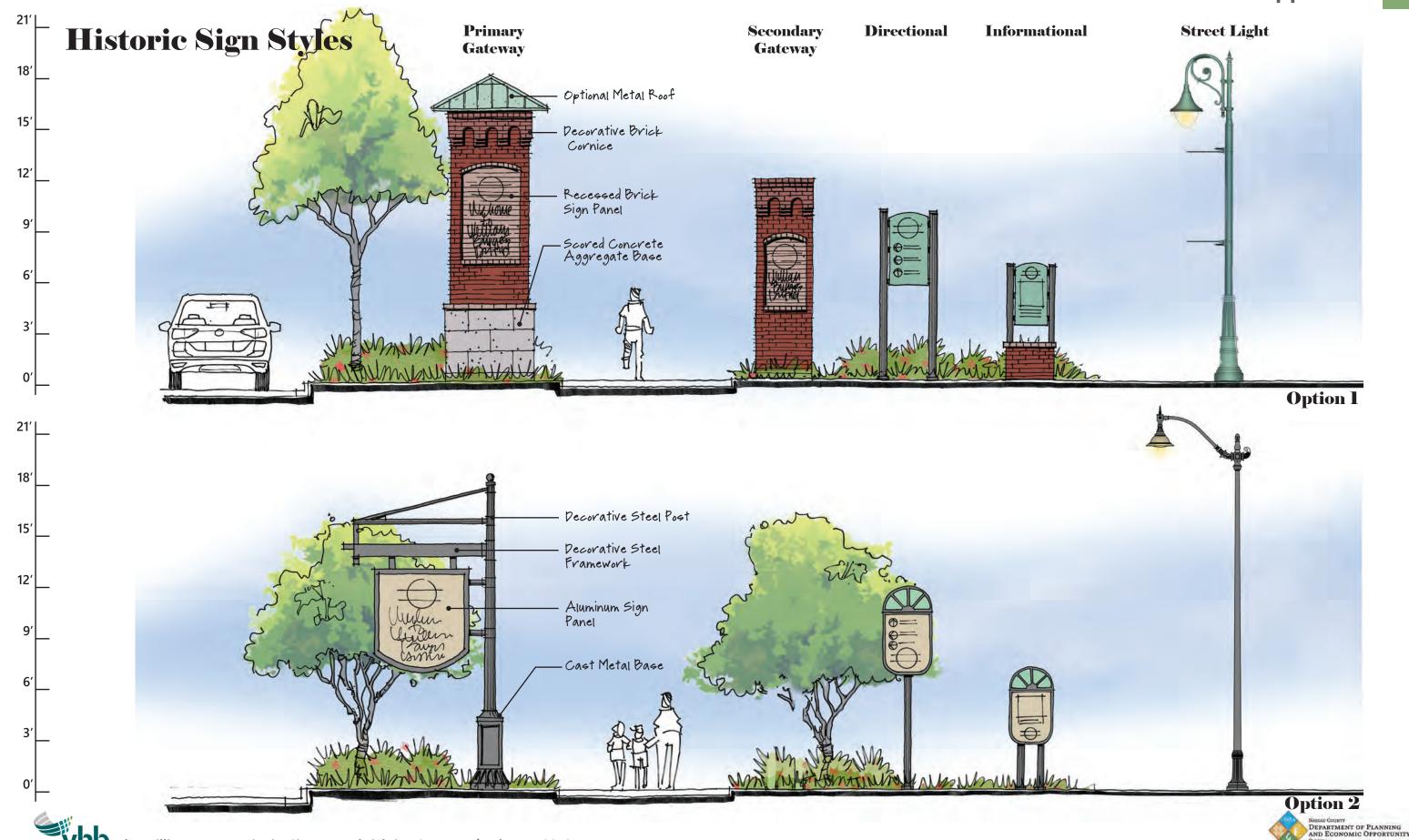




# **Preliminary Concept Design Options**

The following pages are the preliminary concept design options for signage, lighting and logos that were not selected as preferred options to move forward into final concept design.





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Option 2

# THE William Burgess

DISTRICT





COLOR PALETTE

**Option 4** 





DEPARTMENT OF PLANNING AND ECONOMIC OPPORTUNI

# 1527LED OMEGA SERIES







LUMEN RANGE 5,580 to 17.190







CLICK



RATED



JOB NAME

**MEMO** 

FIXTURE TYPE

#### **BUILD A PART NUMBER**

#### ORDERING EXAMPLE: 2A-1527LED-F-24L40T3-MDL018-SV1-HSHS/CA4/5214P5/RCC/UBKT

Mounting Config.	Fixture	Shade Edge	LED	ССТ	Distribution Type	Driver	Lens	Optional Control Receptacle	Optional Control	Option Fuse	Option Hangstraight	Option Term. Block	Option House Side Shield	Arm See Arm Spec Sheets	Pole See Pole Spec Sheets	Finish

#### **Mounting Configuration**

(Click here to link to mounting configuration specification page)

• 1W ·2A90 • 4A • SH441 • 1AM • CH441 • 1A •3A • 2A 3A90 2AM • CAT

W = Wall Mount A = Arm Mount AM = Arm Mid-Mount SH = Stem Hung CH = Chain Hung CAT = Catenary

<sup>1</sup>Include overall drop length in inches after designation for Stem/

#### **Fixture**

• 1527LED • 1527LEDSM

#### Shade Edge

· R (Round Edge) • F (Flared Edge)

#### **LED**

• 32L • 24L • 12L

#### CCT - Color Temperature (K)

•27(00) •30(00) •40(00) •50(00)

#### **Distribution Type**

• T2 • T3 • T4 • T5

#### Driver

- MDL018 (120V-277V, 180mA)
- MDH018 (347V-480V, 180mA)
- MDL0142 (120V-277V, 140mA)
- MDH0142 (347V-480V, 140mA)
- <sup>2</sup> 32L or 24L system only

#### Lens

- ·FG (Flat Glass)
- ·SG (Sag Glass)
- FSG (Frosted Sag Glass)
- SVI (Flat Soft Vue Light Diffused Acrylic)
- SV2 (Flat Soft Vue Moderate Diffused Acrylic)
- SV4 (Flat Soft Vue Maximum Diffused Acrylic)

#### **Options** (Click here to view accessories sheet)

- R3 Pin control receptacle only
- R53 5-Pin control receptacle only
- R73 7-Pin control receptacle only
- PE4 Twist-Lock Photocontrol (120v-277v)
- PE34 Twist-Lock Photocontrol (347v)
- PE44 Twist-Lock Photocontrol (480v)

- •SC<sup>4</sup> Shorting Cap
- PEC Electronic Button Photocontrol (120v-277v)
- PEC4 Electronic Button Photocontrol (480v)
- FHD<sup>5</sup> Double Fuse and Holder
- HSHS<sup>6</sup> Standard Horizontal Hangstraight, Spike Finial
- HSHN<sup>6</sup> Standard Horizontal Hangstraight, No Finial
- HSHB6 Standard Horizontal Hangstraight, Ball
- HSCB<sup>6</sup> Clamp Style Horizontal Hangstraight, Ball **Finial**
- HSCS6 Clamp Style Horizontal Hangstraight, Spike Finial
- HSCN<sup>6</sup> Clamp Style Horizontal Hangstraight, No Finial
- EZ<sup>6</sup> Vertical Hangstraight, Large, "EZ" Mount
- HSV<sup>6</sup> Vertical Hangstraight, Standard
- •TB Terminal Block
- HSS 120° House Side Shield
- BLOC Back Light Optical Control
- 3 Only available with HSH\_, HSC\_, & SM.
- 4 Requires control receptacle
- <sup>5</sup> Ships loose for installation in base.
- 6 Not for use with 1527LEDSM

#### **Arm** (Click here to link to arm specification page)

See Arms & Wall Brackets specification sheets.

· CAS

- CA CSA • FFA
- DAG • R27 • R37 • RA
- <sup>7</sup> Luminaires above grade height to be 2' higher than pole height, REQUIRES "EZ" hangstraight.

#### Pole (Click here to link to pole specification page)

See Pole specification sheets.

#### **Finish**

#### Standard Urban Finishes (Click here to view paint finish sheet)

- UGMT Gun Metal Textured
- UGM Gun Metal Matte
- UBT Urban Bronze Textured
- **UB** Urban Bronze Matte
- ULBT Urban Light Bronze Textured
- ULB Urban Light Bronze Matte
- USLT Urban Silver Textured
- USL Urban Silver Matte
- UWHT Urban White Textured • UWH Urban White Matte
- UCHS Urban Champagne Satin Smooth
- BIKT Black Textured

#### Custom Urban Finishes8

- CM Custom Match
- 8 Smooth finishes are available upon request.

# **Specifications**

#### **Fixture**

The 1527LED Omega series is medium scale, decorative downlight fixture with a spun aluminum bell styled dome. The dome is available with two types of shades: round edge (R) and flared edge (F) styles. The luminaire measures 27" outside diameter and 19" overall height. The luminaire has a hinged door for tool-less driver and LED access. The luminaire is U.L. listed in U.S. and Canada.

#### **LEDs**

The luminaire shall use high output, high brightness LED's. They shall be mounted in arrays, on printed circuit boards designed to maximize heat transfer to the heat sink surface. The arrays shall be roof mounted to minimize up-light. The LED's and printed circuit boards shall be 100% recyclable; they shall also be protected from moisture and corrosion by a conformal coating. They shall not contain lead, mercury or any other hazardous substances and shall be RoHS compliant. The LED life rating data shall be determined in accordance with IESNA LM-80. The High Performance white LED's will have a life expectancy of approximately 100,000 hours with not less than 70% of original brightness (lumen maintenance), rated at 25°C. The High Brightness, High Output LED's shall be 4000K (2700K, 3000K or 5000K option) color temperature with a minimum CRI of 70. Consult factory for custom color CCT. The luminaire shall have a minimum\_ \_ (see table) delivered initial lumen rating when operated at steady state with an average ambient temperature of 25°C (77°F).

#### **Optics**

The luminaire shall be provided with refractor type optics applied to each LED array. The luminaire shall provide Type \_\_\_ (2, 3, 4 or 5)

See next page



800-621-3376 555 Lawrence Ave., Roselle, IL 60172 info@sternberglighting.com www.sternberglighting.com

# **1527LED OMEGA SERIES**



light distribution per the IESNA classifications. Testing shall be done in accordance with IESNA LM-79.

**BLOC Optic:** An optional "Back Light Optical Control" shield can be provided at the factory. This is an internal optic level "House Side Shield" offering significantly reduced backlight and glare while maintaining the original design aesthetics of the luminaire.

#### **Electronic Drivers**

The LED driver shall be U.L. Recognized. It shall be securely mounted inside the fixture, for optimized performance and longevity. It shall be supplied with a quick-disconnect electrical connector on the power supply, providing easy power connections and fixture installation. It shall have overload, overheat and short circuit protection, and have a DC voltage output, constant current design, 50/60HZ. It shall be supplied with line-ground, line-neutral and neutral-ground electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines. It shall be a high efficiency driver with a THD less than 20% and a high power factor greater than .9. It shall be dimming capable using a 0-10v signal, consult factory for more information.

#### **Photocontrols**

Button Style: The photocontrol shall be mounted on the fixture and pre-wired to driver. The electronic button type photocontrol is instant on with a 5-10 second turn off, and shall turn on at 1.5 footcandles with a turn-off at 2-3 footcandles. Photocontrol is 120-277 volt and warranted for 6 years. This option removes the current IP rating. See pole spec sheet for pole mounted version.

Twist-Lock Style: The photocontrol shall be mounted externally on the fixture (1527LEDSM), or mounted on the hang-straight, and pre-wired to driver. The twist lock type photocontrol is instant on with a 3-6 second turn off, and shall turn on at 1.5 footcandles with a turn-off at 2-3 footcandles. Photocontrol is 120-277 volt and warranted for 6 years.

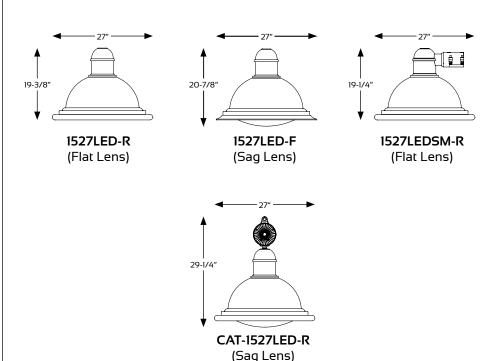
#### Warranty

Seven-year limited warranty. See product and finish warranty guide for details.

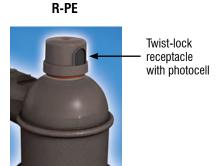
#### **Finish**

Refer to website for details.

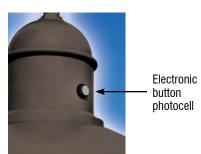
#### **Fixtures**



## **Options**



PEC



**FHD** Fuse holder





# **1527LED OMEGA SERIES**



# Performance (Based on FG Lens)

MODEL #	T2 DELIVERED LUMENS	EFFICACY (LPW)	T3 DELIVERED LUMENS	EFFICACY (LPW)	T4 DELIVERED LUMENS	EFFICACY (LPW)	T5 DELIVERED LUMENS	EFFICACY (LPW)	WATTS
32L40TMDL018	16970	107.4	17190	108.8	15925	100.8	17085	108.1	158
32L30TMDL018	16180	102.4	16390	103.7	15185	96.1	16290	103.1	158
32L27TMDL018	14630	92.6	14820	93.8	13730	86.9	14730	93.2	158
32L40TMDL014	13400	111.7	13590	113.3	12655	105.5	13590	113.3	120
32L30TMDL014	12775	106.5	12955	108.0	12065	100.5	12955	108.0	120
32L27TMDL014	11550	96.3	11715	97.6	10910	90.9	11715	97.6	120
24L40TMDL018	12955	108.0	13180	109.8	12000	100.0	12990	108.3	120
24L30TMDL018	12350	102.9	12565	104.7	11440	95.3	12385	103.2	120
24L27TMDL018	11170	93.1	11360	94.7	10345	86.2	11200	93.3	120
24L40TMDL014	9955	110.6	10050	111.7	9435	104.8	10075	111.9	90
24L30TMDL014	9490	105.4	9580	106.4	8995	99.9	9605	106.7	90
24L27TMDL014	8580	95.3	8665	96.3	8135	90.4	8685	96.5	90
12L40TMDL018	6555	107.5	6475	106.1	6125	100.4	6350	104.1	61
12L30TMDL018	6250	102.5	6175	101.2	5840	95.7	6055	99.3	61
12L27TMDL018	5650	92.6	5580	91.5	5280	86.6	5475	89.8	61



# 3300 GATEWAY SERIES

#### ARCHITECTURAL POLE

DIMENSIONS 18" Ø 48" TALL

5 YEAR WARRANTY

5

LISTED

**ETL** CLICK LISTED FOR FAQ's





**JOB NAME** FIXTURE TYPE **MEMO** 

#### **BUILD A PART NUMBER** ORDERING EXAMPLE: 3318P5-.188-BCC-GFILPIUC-SH/BKT Option Option Flag Pole Holder Option Option Option Option Option Sign Option Steel Wreath Post Ground Wall Option Option Height Shaft Planter Speaker **Finish** Center Banner Śian **Thickness** Model Burial Photocell Fault Cap Arms Arms Hub Bracket Hook Arms **Breaker**

#### Model

• 33

#### Height

. 8 • 12 • 16 .20 • 10 • 14 • 18

#### Shaft

- T5: 5"-3" Tapered Smooth
- **T54**: 5"-4" Tapered Smooth
- **T6**: 6"-3" Tapered Smooth
- T64: 6"-4" Tapered Smooth
- P5: 5" Straight Smooth
- P61: 6" Straight Smooth
- **FP5**: 5" Straight Fluted • FP62: 6" Straight Fluted

Not available in .125 wall.

<sup>2</sup>Not available in .250 wall.

#### Wall Thickness

- •.188: 3/16" Wall Thickness
- .250: 1/4" Wall Thickness

#### Post Center Cap (if required) (Click here to view post cap sheet)

• FCC BCC

·SSCC

·RCC PCC

· SCC

TFCC

#### Options (Click here to view accessories sheet)

- DB4 Direct Burial mounting style pole, with 4' direct burial section (or advise other length)
- HXB Helix Base mounting style pole
- PCD Electronic Button Photocontrol, mounted on an access door (120v-277v)
- PCD4 Electronic Button Photocontrol, mounted on an access door (480v)
- GFI IUC 15 Amp duplex GFCI receptacles with a standard in-use cover
- GFI LPIUC 15 Amp duplex GFCI receptacles with a low-profile in-use cover

- · GFB Remote Ground Fault Breaker installed in pole base (for use with NON-GFCI receptacles)
- •FH Cast Aluminum flag holder mount, for use with 1" diameter flag pole
- SBA Single Banner Arm, "PM" style mount
- **DBA** Double Banner Arms, "PM" style mount
- SBAR Single Banner Arm and Ring, for triangle banners, "PM" style mount
- HSBA Single Banner Arm, HUB mount style mount
- · HDBA Double Banner Arms, HUB mount style mount
- · BDBA6 Double Banner Arms, Break-Away style, to break with 60MPH wind aust
- · BDBA9 Double Banner Arms, Break-Away style, to break with 90MPH wind gust
- C5SBA Single Banner Arm, Clamp-Style mount, for 5" diameter poles
- · C5DBA Double Banner Arms at 180°, Clamp-Style mount, for 5" diameter poles
- DHPA Double Hooked Planter Arm
- SHPA Single Hooked Planter Arm
- DSPA Double Stepped Planter Arm
- SSPA Single Stepped Planter Arm
- PA478 Cast aluminum decorative planter
- SA78 Small cast aluminum decorative sign arm, with 24" long channel for blade sign by others
- SA478 Large cast aluminum decorative sign arm, with 24" long channel for blade sian by others
- SABA Banner arm style sign arm, with 24" long channel for blade sign by others
- SH Female threaded speaker hub, advise thread size
- Sign Bracket, vertically mounted on pole shaft
- · WHK Steel wreath hook

#### Finish (Click here to view paint finish sheet)

#### Standard Finishes<sup>3</sup> (Click here to view paint finish sheet)

- BIKT Black Textured
- · WHT White Textured
- PGT Park Green Textured
- · ABZT Architectural Medium Bronze Textured
- DBT Dark Bronze Textured

3 Smooth finishes are available upon request.

#### Sternberg Select Finishes

- · VG Old Iron
- SI Old Iron
- OWGT Old World Gray Textured

#### Standard Urban Finishes (Click here to view paint finish sheet)

- · UGMT Gun Metal Textured
- UGM Gun Metal Matte
- UBT Urban Bronze Textured
- · UB Urban Bronze Matte
- ULBT Urban Light Bronze Textured
- ULB Urban Light Bronze Matte
- USLT Urban Silver Textured
- USL Urban Silver Matte
- UWHT Urban White Textured
- · UWH Urban White Matte
- UCHS Urban Champagne Satin Smooth

#### Custom Finishes<sup>4</sup>

- CM Custom Match
- · OI Old Iron
- •RT Rust
- · WBR Weathered Brown
- CD Cedar
- · WBK Weathered Black
- •TT Two Tone
- <sup>4</sup>Custom colors require upcharge



## **Specifications**

#### Construction

The one piece base is made of a square cast aluminum shoe base with a 3/4" thick floor. The base transitions to an 8" diameter lower section made of ASTM 6063 extruded aluminum. The lower section transitions to a 5" (or 6") diameter shaft at 48" above grade (contact factory for alternate transition heights). Base includes an 18" round decorative base cover and a 8" to 5" (or 8" to 6") decorative transition collar.

#### **Tenon**

Standard tenon size to be 3" OD x 3" tall. Consult factory for additional sizes.

#### Shaft

The **straight smooth shaft** shall be made of ASTM 6063 extruded aluminum and tempered to a T6 condition

The **tapered smooth shaft** shall be made of ASTM 6063 extruded aluminum and tempered to a T6 condition

The **straight fluted shaft** shall be made of ASTM 6061 extruded aluminum and tempered to a T6 condition.

#### Installation

Four 3/4" (or 1") diameter, hot-dipped galvanized "L" type anchor bolts shall be provided with the post for anchorage, they shall be mounted in a 11-1/2" bolt circle. Post will be

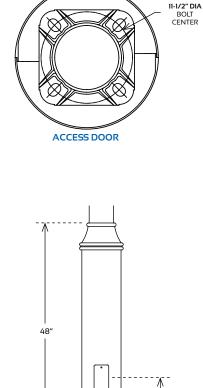
provided with an access door which shall be secured with tamper proof stainless steel hardware, includes a grounding stud behind the access door. 16' poles and shorter use 3/4" bolts, 18' poles and taller use 1" bolts.

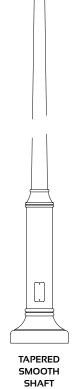
#### Warranty

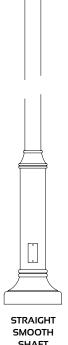
Five-year limited warranty. See product and finish warranty guide for details.

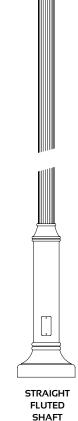
#### **Finish**

Refer to website for details.









18"

# 3300 GATEWAY SERIES

# **EPA Chart - AASHTO 2009**

# ARCHITECTURAL POLE

POLE HEIGHT	90 MPH	100 MPH	110 MPH	120 MPH	130 MPH	140 MPH	150 MPH
		T54 5"-	- 4" Stepped Taper Shaft	- 0.188" Wall Thickness			
10	58.09	46.72	38.49	32.25	27.41	23.58	20.49
12	47.40	38.00	31.26	26.17	22.22	19.09	16.57
14	39.71	31.71	26.05	21.78	18.46	15.84	13.73
16	33.87	26.92	22.08	18.42	15.59	13.36	11.56
18	28.81	22.78	18.63	15.51	13.10	11.20	9.67
20	24.47	19.21	15.66	13.01	10.95	9.34	8.04
		T54 5"	- 4" Stepped Taper Shaft	t - 0.25" Wall Thickness			
10	63.22	50.87	41.92	35.14	29.87	25.70	22.33
12	51.68	41.46	34.12	28.57	24.27	20.85	18.11
14	43.38	34.68	28.50	23.84	20.22	17.36	15.05
16	37.09	29.53	24.23	20.24	17.14	14.69	12.72
18	31.64	25.07	20.52	17.11	14.46	12.37	10.69
20	26.98	21.24	17.34	14.42	12.16	10.38	8.95
		T64 6"-	- 4" Stepped Taper Shaft	- 0.188" Wall Thickness			
10	58.40	47.21	38.93	32.64	27.75	23.88	20.76
12	47.77	38.56	31.77	26.61	22.61	19.44	16.88
14	40.12	32.35	26.62	22.28	18.90	16.23	14.08
16	34.33	27.64	22.72	18.98	16.09	13.80	11.95
18	29.32	23.57	19.33	16.13	13.64	11.68	10.11
20	25.02	20.07	16.43	13.67	11.54	9.86	8.51
		T64 6"	- 4" Stepped Taper Shaft	t - 0.25" Wall Thickness			
10	63.50	51.34	42.34	35.50	30.19	25.99	22.59
12	52.00	41.99	34.60	28.99	24.64	21.19	18.41
14	43.75	35.29	29.05	24.32	20.64	17.73	15.39
16	37.50	30.21	24.84	20.77	17.61	15.11	13.10
18	32.10	25.82	21.20	17.69	14.98	12.83	11.11
20	27.48	22.06	18.07	15.05	12.72	10.88	9.40
			Stepped Straight Shaft -				
10	57.71	46.32	38.13	31.93	27.11	23.31	20.24
12	46.94	37.52	30.83	25.78	21.87	18.76	16.27
14	39.16	31.15	25.54	21.32	18.05	15.46	13.38
16	33.24	26.28	21.49	17.90	15.12	12.92	11.16
18	28.10	22.04	17.97	14.92	12.56	10.71	9.22
20	23.68	18.39	14.92	12.34	10.35	8.79	7.54
20	20.00		' Stepped Straight Shaft -		10.00	0.70	7.01
10	62.82	50.47	41.55	34.81	29.57	25.43	22.08
12	51.20	40.97	33.68	28.17	23.91	20.52	17.80
14	42.82	34.10	27.98	23.37	19.80	16.97	14.70
16	36.44	28.87	23.64	19.70	16.65	14.24	12.31
18	30.91	24.32	19.85	16.50	13.91	11.87	10.23
20	26.17	20.40	16.58	13.74	11.54	9.82	8.43
20	20.11		Stepped Straight Shaft -		11.04	3.02	0.40
10	57.86	46.73	38.51	32.26	27.41	23.57	20.48
12	47.09	37.97	31.25	26.15	22.19	19.06	16.53
14	39.31	37.97	26.00	20.15	18.40	15.78	13.67
16	33.39	26.83	22.00	18.34	15.51	13.27	11.48
18		26.83	18.51	15.40	12.99	13.27	9.56
20	28.25	19.03	15.51	12.85	10.80	9.19	7.90
ZU	23.03		Stepped Straight Shaft -		10.00	9.19	7.90
10	60.05				20.05	05.00	20.04
10	62.95	50.86	41.92	35.13	29.85	25.68	22.31
12	51.33	41.40	34.08	28.53	24.22	20.81	18.06
14	42.94	34.59	28.43	23.76	20.14	17.28	14.97
16	36.56	29.40	24.12	20.12	17.03	14.58	12.62
18	31.03	24.89	20.38	16.96	14.32	12.23	10.56
20	26.28	21.01	17.15	14.23	11.98	10.20	8.78

<sup>\*</sup>Consult factory for other heights.
\*\*\* All EPA values expressed in square feet.





### E250 / E260 / E270 - 887B EURO LIGHTED BOLLARD

# **SPECIFICATIONS**

#### **GENERAL**

The models E250 / E260 / E270-887B decorative EURO lighted bollards are small scale, architectural designs. They feature a cylindrical body, decorative aluminum cage and dome roof on a smooth straight shaft. The Models shall be Sternberg Lighting #E250-887B / #E260-887B / or #E270-887B.

The bollard base shaft shall be 5" diameter ASTM 6061 extruded aluminum tubing having a wall thickness of 1/4" and tempered to a T6 condition. The anchor foot base shall be 11<sup>7</sup>/8" diameter and made of heavy wall, 356 alloy cast aluminum and shall be vertically fastened to bollard housing shaft. It shall have a <sup>5</sup>/8" thick floor cast as an integral part of the base. The maximum overall height of the bollard shall be 50".

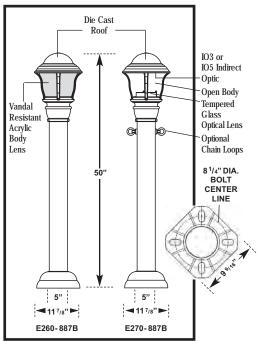
The bollard optic housing shall be die-cast aluminum alloy for high tensile strength. Overall diameter shall be 13". The housing shall be an integral part of the base shaft to prevent water and dust entry into the enclosure and to ensure high capacity heat sinking of the ballast, keeping the ballast cooler to ensure long life.

When specified with body lens it shall be made from vandal resistant clear (CA) or frosted acrylic (FA).

#### **E270-887B OPTICS**

Indirect Roof Optics (IO3 or IO5) distribution shall be delivered by a reflector system in combination with an aluminum lamp reflector which provides cut-off. The reflector cavities shall be made of specular anodized aluminum. Type 3 (IO3) and Type 5 (IO5) are available for T6 base lamps only.

E250-887B shall be equipped with high output, high brightness LED's. (See separate EURO LED lighted Bollard specifications for details).



See installation template for exact door position

Fixture shall be U.L. or E.T.L. listed in U.S. and Canada. H.I.D. ballasts shall be electronic high power factor with lamp starting down to -30 degrees C. Medium base porcelain or T6 Bi-pin sockets are 4KV rated. The ballast/socket assembly shall be pre-wired when ballast is located in the fixture. All compact fluorescent (CF) ballasts shall be instant start electronic with a starting temperature of down to 0 degrees F. They shall have a 4-pin socket to accept quad or triple tube lamps. Ballasts shall be DOE EISA compliant.

Prior to coating, each assembly is chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance and excellent adhesion for the finish coating. The finish coating shall be electrostatically applied semi-gloss, super durable polyester powder baked at 400 degrees for a durable and superior, color retentive finish. Our optional antique Verde Green finish and Swedish Iron finish are hand brushed using a 3-step process. The total assembly is wrapped in shockproof wrapping or fully enclosed in corrugated cartons.

#### INSTALLATION

Four, hot-dipped galvanized "L" type anchor bolts shall be provided with the post for bollard anchorage.

BALLASTS LAMPS

35HPS<sup>1</sup>

**WARRANTY** Five-year limited warranty. See warranty literature for details.

FINISH

LIGHT SOURCE

BALLAST WATTS/TYPE/VOLTS

#### **BUILDING A PART NUMBER**

OPTICS

OPTIONS

BOLLARD

#### PART NUMBER SELECTIONS

HPS35/MED<sup>1</sup>

HPS50/MED<sup>1</sup>

• HPS70/MED1

HPS100/MED<sup>1</sup>

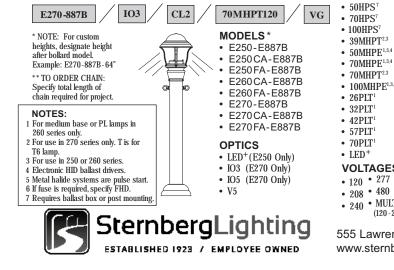
• MHP50/MED1

• MHP70/MED1

Loops 180°

• MHP70/T6<sup>2</sup>

MHP39/T6<sup>2</sup>



#### • 100MHPE<sup>1,3,4</sup> • MHP100/MED<sup>1</sup> • 26PLT1 PLT26<sup>1</sup> PLT32<sup>1</sup> 32PLT<sup>1</sup> • PLT421 42PIT<sup>1</sup> • PLT57 PLT70<sup>1</sup> • LED+

#### 57PLT<sup>1</sup> • 70PLT1 LED<sup>+</sup> **VOLTAGES OPTIONAL** • 120 • 277 • 208 • 480 • MULTI • CL2 Chain Loope 1906 • 240 • MULTI

Dark Bronze Textured \*Smooth Finishes are available upon request **CUSTOM FINISHES** • 01 Old Iron • RT Rust WBR Weathered Brown **OPTIONS** 

STANDARD FINISHES\*

**Black Textured** 

White Textured

Bronze Textured

Park Green Textured

Architectural Medium

BKT

WHT

PGT

ABZT

· PEC1 Photocell-Bimetal 120 Volt • PEC2 Photocell-Bimetal 208-277 Volt

• PEC1-E Photocell-Electronic 120 Volt

· FHD Dual Fuse and Holder-208, 240, 480 Volt · GFI Ground Fault

CHAIN LOOP \*\* • PEC2-E Photocell-Electronic 208-277 Volt Interrupter Duplex Outlet<sup>1</sup> • CL1 Chain Loop • FHS Single Fuse and Holder-120,277 Volt • LAMPS Select from List

• CD

TT

• VG

SI

• WBK

**FINISHES** 

Cedar

Two Tone

Verde Green

Swedish Iron

. OWGT Old World Gray Textured

STERNBERG SELECT

Weathered Black

<sup>1</sup>GFI not available with QR option

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