

COLONIAL BOLLARD LED SERIES

SPECIFICATIONS

BOLLARD

Durable, corrosion resistant, heavy cast low copper aluminum assembly (A356 alloy, <0.2% copper). Minimum wall thickness is .188". Traditional styling of the housing provided with cast aluminum housing top hinges for easy access. All hardware is stainless steel.

✓LED[®] OPTICAL MODULE

Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered 3/16" glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are arrayed to produce IES Type II, III, IV, and V-SQ distributions. The entire ✓LED[®] Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord. Lens, module and drivers are field replaceable.

LED EMITTERS

High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER

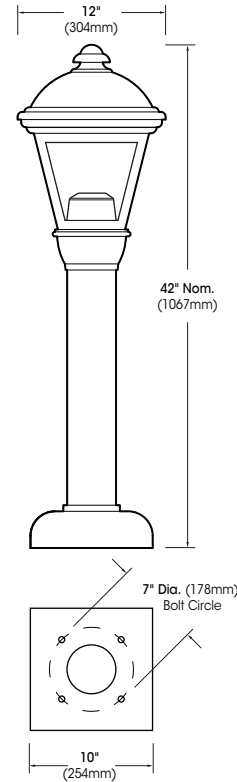
UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

PROJECT NAME: _____

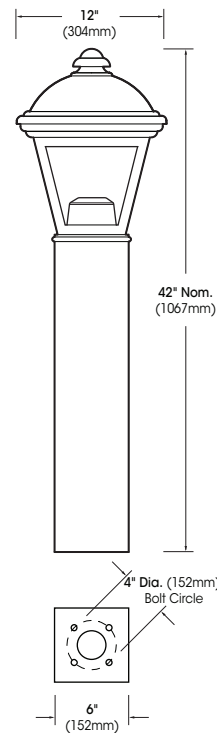
FIXTURE TYPE: _____



COLB1



PATENT PENDING



COLB2



PATENT PENDING

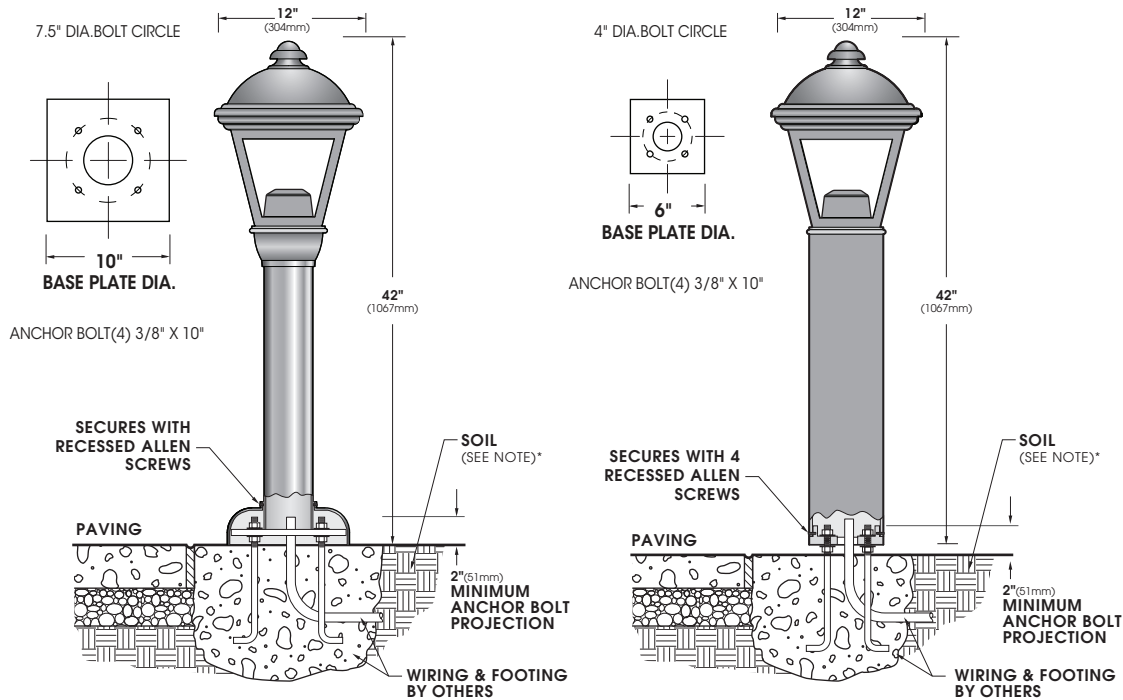


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COLONIAL BOLLARD LED SERIES

SPECIFICATIONS

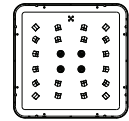
INSTALLATION



*When mounting in soil, anchor bolt fasteners and other hardware must be protected from soil by grouting.

Spec/Order Example: COLB2/VLED-ASY/24LEDNW480/RAL8019/DF

OPTICS



VLED-VLED[®] MODULE

SPEC / ORDERING INFORMATION

LUMINAIRE	OPTICS	No. LEDs	COLOR TEMP - CCT	VOLTAGE	FINISH	OPTIONS
LUMINAIRE	OPTICS	LED MODE		FINISH	OPTIONS	
LUMINAIRE	VLED [®]	No. LEDs	COLOR TEMP - CCT	VOLTAGE	STANDARD TEXTURED FINISH	
<input type="checkbox"/> COLB1-LED (ROUND RISER) <input type="checkbox"/> COLB2-LED (SQUARE RISER)	<input type="checkbox"/> TYPE ASYMMETRIC VLED - ASY <input type="checkbox"/> TYPE SYMMETRIC VLED - SYM	<input type="checkbox"/> 24LED (28 Watts)	<input type="checkbox"/> NW (4000K)* <input type="checkbox"/> CW (5000K) <input type="checkbox"/> WW (3000K) OTHER LED COLORS AVAILABLE CONSULT FACTORY	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480	<input type="checkbox"/> BLACK RAL-9005-T <input type="checkbox"/> WHITE RAL-9003-T <input type="checkbox"/> GREY RAL-7004-T <input type="checkbox"/> DARK BRONZE RAL-8019-T <input type="checkbox"/> GREEN RAL-6005-T FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9005) CONSULT FACTORY FOR CUSTOM COLORS	<input type="checkbox"/> HOUSE SIDE SHIELD HS <input type="checkbox"/> DIMMABLE DRIVER(S) (0-10V) DIM <input type="checkbox"/> HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR HLSW <input type="checkbox"/> 10KV SURGE PROTECTOR 10SP <input type="checkbox"/> 20KV SURGE PROTECTOR (277V & 480V Only) 20SP <input type="checkbox"/> PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) PC+V <input type="checkbox"/> SINGLE FUSE (120V, 277V) SF <input type="checkbox"/> DOUBLE FUSE (208V, 240V) DF <input type="checkbox"/> OPAL POLYCARBONATE DIFFUSER WP CONSULT FACTORY FOR DIMMING OPTIONS

COLONIAL BOLLARD-WA LED SERIES

SPECIFICATIONS

BOLLARD

Four piece opal white acrylic lenses provided with heavy cast low copper aluminum corrosion resistant (A356 alloy, <0.2% copper) traditionally styled housing and top. Minimum wall thickness is .188". Top hinges for easy access. Silicone gasket between housing and hood. All hardware is stainless steel.

LED POWER ARRAY™

Three-dimensional array of individual LED Tubes fastened to a retaining plate. Each LED Tube consists of circuit board populated with a multiple of LED's and is mechanically fastened to a radial aluminum heat sink. An acrylic Lens and end cap protects each LED Tube's internal components.

VERTICAL POWER ARRAY™: LED Tubes are aligned vertically and equally arranged radially to produce an even raw light distribution that simulates standard light sources. Produces a minimal glare, symmetric diffuse light distribution. Used in conjunction with an opal smooth acrylic diffusing lens.

LED EMITTERS

High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER

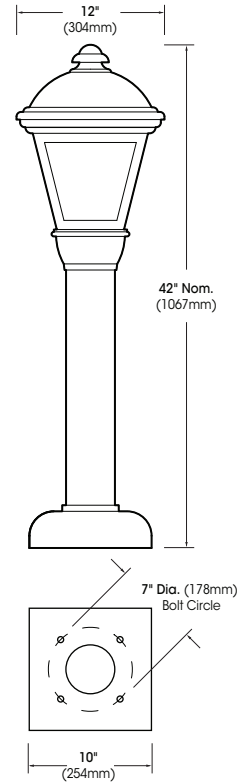
UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

PROJECT NAME: _____

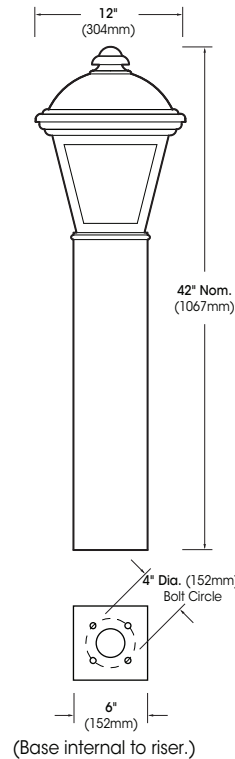
FIXTURE TYPE: _____



COLB1-WA



PATENT PENDING



COLB2-WA



PATENT PENDING

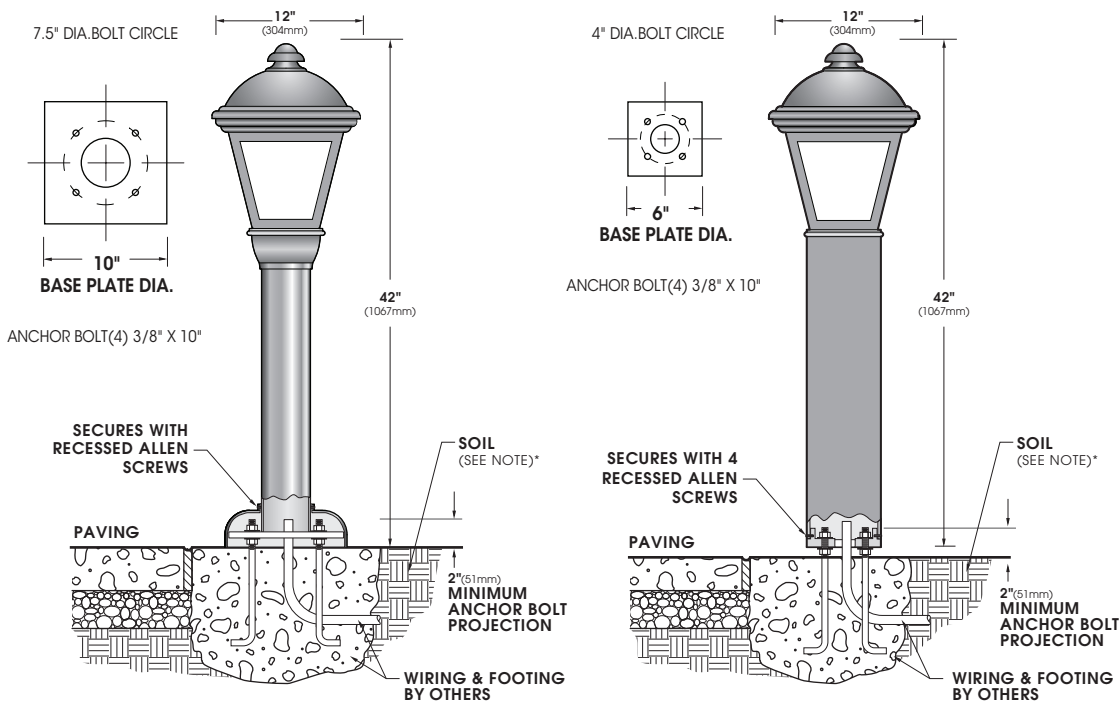


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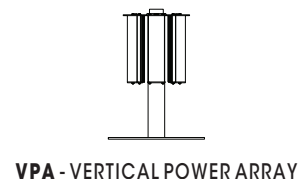
COLONIAL BOLLARD-WA LED SERIES

S P E C I F I C A T I O N S

INSTALLATION



OPTICS



*When mounting in soil, anchor bolt fasteners and other hardware must be protected from soil by grouting.

Spec/Order Example: COLB1-WA/VPA-SYM/24LEDNW277/RAL-6005/WP

S P E C / O R D E R I N G I N F O R M A T I O N

BOLLARD	OPTICS	No. LEDs	COLOR TEMP - CCT	VOLTAGE	FINISH	OPTIONS
BOLLARD	OPTICS	LED MODE		FINISH	OPTIONS	
BOLLARD	VERTICAL POWER ARRAY	No. LEDs	COLOR TEMP - CCT	VOLTAGE	STANDARD TEXTURED FINISH	
<input type="checkbox"/> COLB1-WA-LED (ROUND RISER)	<input type="checkbox"/> TYPE SYMMETRIC VPA - SYM.	<input type="checkbox"/> 24LED (28 Watts)	<input type="checkbox"/> NW (4000K)* *STANDARD	<input type="checkbox"/> 120	<input type="checkbox"/> BLACK RAL-9005-T	<input type="checkbox"/> HOUSE SIDE SHIELD HS
<input type="checkbox"/> COLB2-WA-LED (SQUARE RISER)		<input type="checkbox"/> 12LED (14 Watts)	<input type="checkbox"/> CW (5000K)	<input type="checkbox"/> 208	<input type="checkbox"/> WHITE RAL-9003-T	<input type="checkbox"/> DIMMABLE DRIVER(S) (0-10V) DIM
			<input type="checkbox"/> WW (3000K)	<input type="checkbox"/> 240	<input type="checkbox"/> GREY RAL-7004-T	<input type="checkbox"/> HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR HLSW
			OTHER LED COLORS CONSULT FACTORY AVAILABLE	<input type="checkbox"/> 347	<input type="checkbox"/> DARK BRONZE RAL-8019-T	<input type="checkbox"/> 10KV SURGE PROTECTOR 10SP
				<input type="checkbox"/> 480	<input type="checkbox"/> GREEN RAL-6005-T	<input type="checkbox"/> 20KV SURGE PROTECTOR (277V & 480V Only) 20SP
					FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9005)	<input type="checkbox"/> PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) PC+V
						<input type="checkbox"/> SINGLE FUSE (120V, 277V) SF
						<input type="checkbox"/> DOUBLE FUSE (208V, 240V) DF
						<input type="checkbox"/> OPAL POLYCARBONATE DIFFUSER WP
						CONSULT FACTORY FOR DIMMING OPTIONS

SOLID STATE AREA LIGHTING

COLONIAL BOLLARD-CPA LED SERIES

SPECIFICATIONS

BOLLARD

Four piece clear patterned acrylic lenses provided with heavy cast corrosion resistant low copper aluminum (A356 alloy, <0.2% copper) traditionally styled housing and top. Minimum wall thickness is .188". Top hinges for easy access. Silicone gasket between housing and hood. All hardware is stainless steel.

LED POWER ARRAY™

Three-dimensional array of individual LED Tubes fastened to a retaining plate. Each LED Tube consists of circuit board populated with a multiple of LED's and is mechanically fastened to a radial aluminum heat sink. An acrylic Lens and end cap protects each LED Tube's internal components.

VERTICAL POWER ARRAY™: 6 or 8 LED tubes with frosted lenses are mounted to a retaining plate in equal radial increments for an even light distribution. The raw output of the LED emitter is utilized to simulate a standard light source and the clear patterned lenses produce a symmetric (Type V) distribution pattern.

LED EMITTERS

High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER

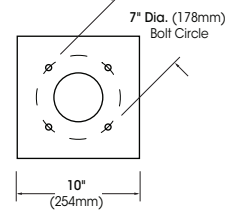
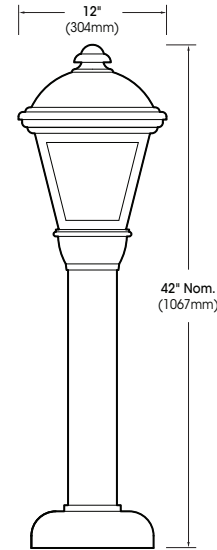
UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

PROJECT NAME: _____

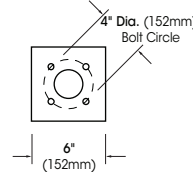
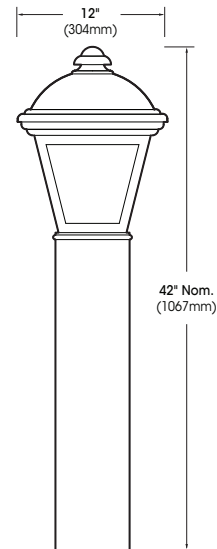
FIXTURE TYPE: _____



COLB1-CPA



PATENT PENDING



(Base internal to riser.)

COLB2-CPA



PATENT PENDING

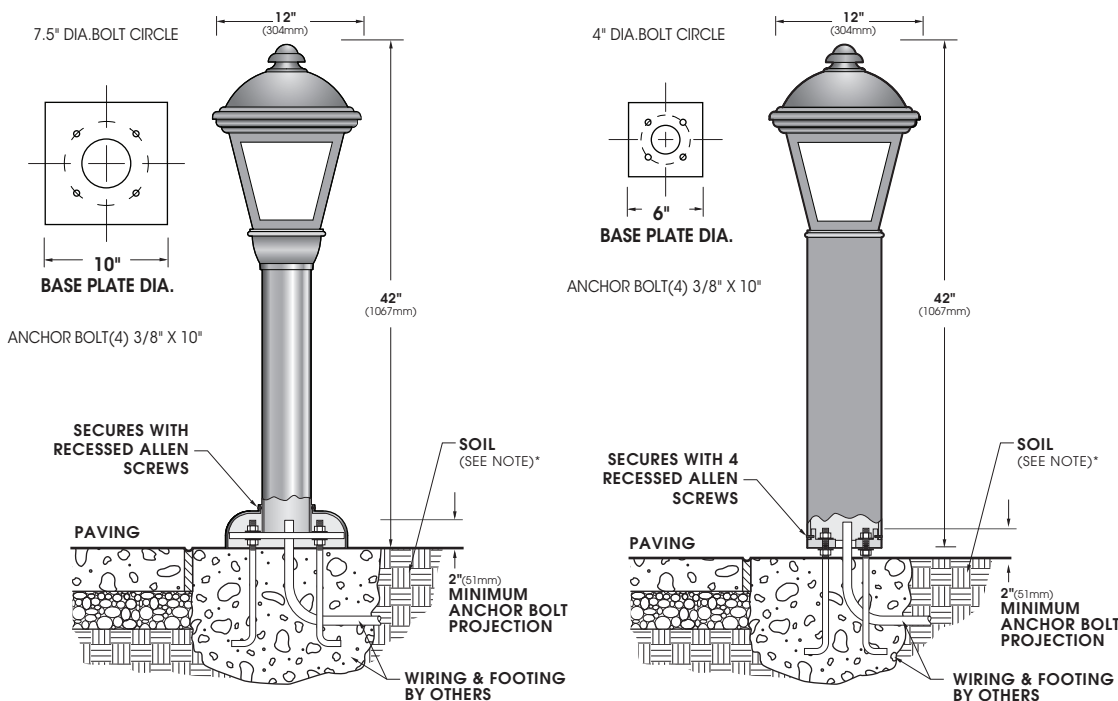


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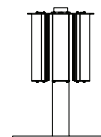
COLONIAL BOLLARD-CPA LED SERIES

S P E C I F I C A T I O N S

INSTALLATION



OPTICS




VPA - VERTICAL POWER ARRAY

*When mounting in soil, anchor bolt fasteners and other hardware must be protected from soil by grouting.

Spec/Order Example: COLB1-CPA/VPA-SYM/12LEDWW120/RAL-7004-T

S P E C / O R D E R I N G I N F O R M A T I O N

LUMINAIRE	OPTICS	No. LEDs	COLOR TEMP - CCT	VOLTAGE	FINISH	OPTIONS
LUMINAIRE	OPTICS	LED MODE			FINISH	OPTIONS
LUMINAIRE	VERTICAL POWER ARRAY	No. LEDs	COLOR TEMP - CCT	VOLTAGE	STANDARD TEXTURED FINISH	
<input type="checkbox"/> COLB1-CPA-LED (ROUND RISER) <input type="checkbox"/> COLB2-CPA-LED (SQUARE RISER)	<input type="checkbox"/> TYPE SYMMETRIC* VPA-SYM  *NOTE: For Asymmetric distribution, use VPA-SYM with house side shield option.	<input type="checkbox"/> 24LED (28 Watts) <input type="checkbox"/> 12LED (14 Watts)	<input type="checkbox"/> NW (4000K)* *STANDARD <input type="checkbox"/> CW (5000K) <input type="checkbox"/> WW (3000K) OTHER LED COLORS AVAILABLE CONSULT FACTORY	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480	<input type="checkbox"/> BLACK RAL-9005-T <input type="checkbox"/> WHITE RAL-9003-T <input type="checkbox"/> GREY RAL-7004-T <input type="checkbox"/> DARK BRONZE RAL-8019-T <input type="checkbox"/> GREEN RAL-6005-T FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9005)	<input type="checkbox"/> HOUSE SIDE SHIELD HS <input type="checkbox"/> DIMMABLE DRIVER(S) (0-10V) DIM <input type="checkbox"/> HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR HLSW <input type="checkbox"/> 10KV SURGE PROTECTOR 10SP <input type="checkbox"/> 20KV SURGE PROTECTOR (277V & 480V Only) 20SP <input type="checkbox"/> PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) PC+V <input type="checkbox"/> SINGLE FUSE (120V, 277V) SF <input type="checkbox"/> DOUBLE FUSE (208V, 240V) DF
						CONSULT FACTORY FOR DIMMING OPTIONS