

# 2 SERIES LVS

## SHALLOW REGRESS

Our smallest aperture family of pin-hole fixtures offers high-output illumination for high-drama design statements in discerning residential, retail, and hospitality environments.

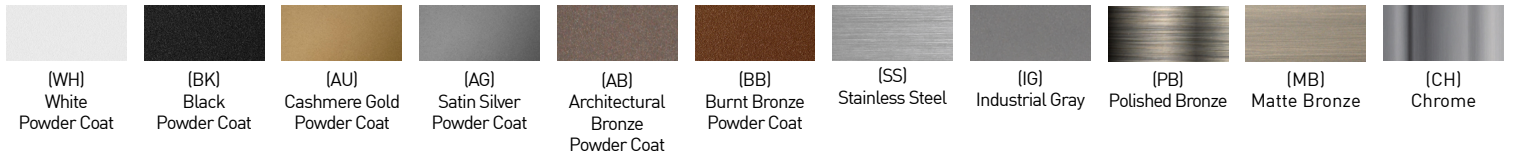
PROJECT NAME:	TYPE:
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### ORDERING INFORMATION

Quick Ship Product. All rough in components ship within 10 days up to quantities of 100.

TRIM	RATING	FLANGE FINISH	LUMEN PACKAGE	CCT	OPTIC	INSTALL TYPE	CEILING THICKNESS	POWER SUPPLY	EFFECTS DEVICE	FLANGE CONFIGURATION
2RS Round Expanded 2PS Round Pinhole 2SS Square Expanded	1 Dry / Damp 2 Wet* *(Lens sealed in place)	WH White BK Black AU Cashmere Gold AG Satin Silver PR Primer AB Arch Bronze BB Burnt Bronze SS Stainless Steel* IG Industrial Gray PB Polished Bronze* MB Matte Bronze* CH Chrome* CF Custom* *(Consult Factory)	<p><b>STATIC WHITE</b></p> <p><b>80CA12L</b> 80+ CRI, 1200 Source Lumens (Delivered - 2PS 846, 2RS 899, 2SS 886)</p> <p><b>80CA16L</b> 80+ CRI, 1600 Source Lumens (Delivered - 2PS 1164, 2RS 1238, 2SS 1219)</p> <p><b>80CA23H</b> 80+ CRI, 2300 Source Lumens (Delivered - 2PS 1602, 2RS 1703, 2SS 1678)</p> <p><b>90CA10L</b> 90+ CRI, 1000 Source Lumens (Delivered - 2PS 726, 2RS 772, 2SS 761)</p> <p><b>90CA14L</b> 90+ CRI, 1400 Source Lumens (Delivered - 2PS 994, 2RS 1058, 2SS 1042)</p> <p><b>90CA19H</b> 90+ CRI, 1900 Source Lumens (Delivered - 2PS 1373, 2RS 1460, 2SS 1438)</p> <p><b>97CA10L</b> 97+ CRI, 1000 Source Lumens (Delivered - 2PS 647, 2RS 688, 2SS 677)</p> <p><b>97CA12L</b> 97+ CRI, 1200 Source Lumens (Delivered - 2PS 885, 2RS 942, 2SS 927)</p> <p><b>97CA17H</b> 97+ CRI, 1700 Source Lumens (Delivered - 2PS 1224, 2RS 1301, 2SS 1282)</p> <p><b>WARM DIM</b></p> <p><b>90WA11H</b> 90+ CRI, 1130 Source Lumens Incandescent Profile (Delivered - 2PS 820, 2RS 869, 2SS 858)</p> <p><b>90WA13H</b> 90+ CRI, 1360 Source Lumens Halogen Profile (Delivered - 2PS 863, 2RS 915, 2SS 903)</p> <p>*SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.</p> <p><b>L = 3.73" tall Low Flux Housing</b> <b>H = 6.5" tall High Flux Housing</b></p> <p>*ALL DELIVERED LUMEN OUTPUTS REFLECT 3000K PAIRED WITH 40° OPTIC AND SOFT FOCUS LENS.</p>	22 2200K* *(Only available with 90+ CRI) 27 2700K 30 3000K 35 3500K 40 4000K	10 10°* *(Only available with 80CA12L, 90CA10L and 97CA10L. Not available with 2200K) 20 20° 40 40° 60 60°* *(Not available for 2PS)	<p><b>Housing (HR)</b></p> <p>NR NIC, Remote IR IC, Remote AR IC, Airtight, Chicago Plenum</p> <p><b>Remodel</b></p> <p>RR Remote-Remodel</p>	0 0.125" - 0.49"* *(RR Install Type only) 1 0.50" - 0.75" 2 0.76" - 1.25" 3 1.26" - 2.00" 4 2.01" - 3.00"	<b>LVS</b> LVS Low Voltage System	<p><b>Standard Effects Device</b></p> <p>04 Soft Focus Lens 00 No Lens* *(Standard for 10° optic, Not available for wet location or Warm Dim)</p> <p><b>Alternate Effects Device</b></p> <p>02 Honeycomb Louver* *(Not available for wet location or Warm Dim) 03 Clear Glass Lens* *(Not available for Warm Dim) 05 Frosted Glass Lens 09 Ultra Violet Lens 11 Shatterproof Soft Focus Lens 12 Shatterproof Frosted Lens 26 Frosted Linear Spread Lens* *(Not available for wet location)</p>	<p>F Flange Overlay (No Applique)</p> <p>G Zero Sightline Gypsum (1/16" Applique)* *(Not available for wet location)</p> <p>P Zero Sightline Plaster (1/8" Applique)* *(Not available for wet location)</p>



### PART NUMBER NOTES




- Trims ships as e.g., 2RS1-WH-80CA16L1-2HR1-LVS04
- Housing ships as e.g., NCL-2RF-1-LED-01-LVS
- Applique ships with housing

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## APPLICATION NOTES

- Lucifer Lighting will not supply a fixture with a POE node or power supply inside the fixture. This allows for easier site install with nodes of 2 or more outputs.
- Consult node manufacturer for maximum remote wiring distances.
- Housing and Fixture feature 18 Gauge wiring.
- Wiring connections are made in the splicing compartment or on the fixture using customer supplied connectors, ex. wire nuts, push-in connectors, or terminal blocks.
- Confirm node compatibility with factory if it is not listed.
- Customers are responsible for ensuring POE node drive current is set to correct values shown below.
- Customers must ensure voltage range of the proposed POE node encompasses the fixtures complete Vf range, both maximum and minimum. If assistance is required contact LLC rep or factory.

## NODE COMPATIBILITY

Manufacturer	Model Number
 Igor® Enabling Smart Buildings™	NP50-60-C-F-5
 molex	180996-1001 180996-1002 180996-2001 180996-2002
 PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

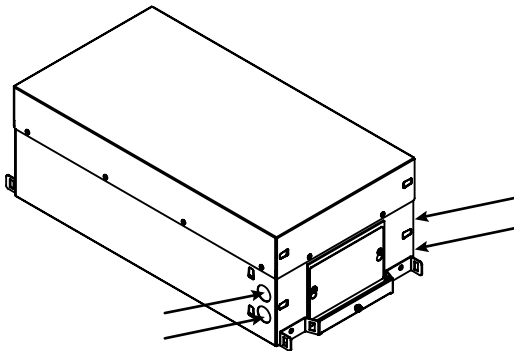
## DRIVE CURRENT SPECIFICS

	80CA			90CA			97CA			90W	
	12L	16L	23H	10L	14L	19H	10L	12L	17H	11H	13H
Minimum Vf	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Maximum Vf	39	39	39	39	39	39	39	39	39	39	39
Current mA	250	350	500	250	350	500	250	350	500	350	350
Wattage W	8.2	11.8	17.4	8.2	11.8	17.4	8.2	11.8	17.4	11.8	11.8

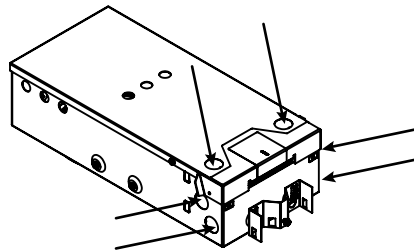
	10 DEGREE OPTIC		
	80CA12L	90CA10L	97CA10L
Minimum Vf	30.5	30.5	30.5
Maximum Vf	39	39	39
Current mA	350	350	350
Wattage W	11.8	11.8	11.8

## WIRING DIAGRAM AND HOUSING ENTRY/ EXIT POINTS

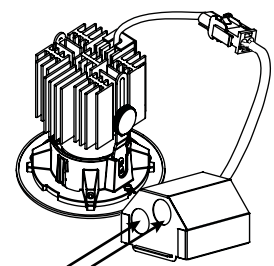
ICH/NCH HOUSING



ICL/NCL HOUSING

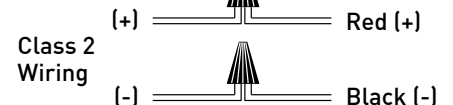


REMODEL



LV CONSTANT  
CURRENT SOURCE:  
POE NODE OR  
REMOTE DRIVER

HOUSING OR  
REMODEL  
FIXTURE



# 2 SERIES LVS SHALLOW REGRESS

## ACCESSORIES

### ALTERNATE EFFECTS DEVICES

- HCL-2** Honeycomb Louver\*  
\*(Not available for wet location or Warm Dim)
- CGL-2** Clear Glass Lens\*  
\*(Not available for Warm Dim)
- SFL-2** Soft Focus Lens
- FGL-2** Frosted Glass Lens
- UVL-2** Ultra Violet Lens
- FLSL-2** Frosted Linear Spread Lens\*  
\*(Not available for wet location)
- SFL-2-SP** Shatterproof Soft Focus Lens
- FGL-2-SP** Shatterproof Frosted Lens

### HANGER BAR EXTENDER KIT

- Extends hanger bars from 24.0" to 46.0" maximum.
- 2S-HBE-46** Extender, Hanger Bar

### REPLACEMENT OPTIC

- Interchangeable optics accessible through fixture aperture.
- RO-50-20-2** 20° optic
  - RO-50-40-2** 40° optic
  - RO-50-60-2** 60° optic\*  
\*(Not available for 2PS)

### ROUTER TOOL GUIDE (Dry / Damp locations only)

- Recommended for Zero-Sightline installations in wood ceilings.
- DLA-RTG-2S-RD** Tool, router guide, round; reusable
  - DLA-RTG-2S-SQ** Tool, router guide, square; reusable

## PERFORMANCE - 3000K

LUMEN PACKAGE	WATTAGE	SHALLOW REGRESS - 40° OPTIC - SOFT FOCUS LENS					
		2RS		2PS		2SS	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80CA12L	10	899	91	846	86	886	90
80CA16L	14	1238	88	1164	83	1219	87
80CA23H	21	1703	81	1602	76	1678	80
90CA10L	10	772	78	726	73	761	77
90CA14L	14	1058	75	994	71	1042	74
90CA19H	21	1460	70	1373	66	1438	69
97CA10L	10	688	70	647	65	677	69
97CA12L	14	942	67	885	63	927	66
97CA17H	21	1301	62	1224	58	1282	61
90WA11H	14	869	62	820	59	858	61
90WA13H	14	915	66	863	62	903	65

LUMEN PACKAGE	WATTAGE	SHALLOW REGRESS - 10° OPTIC - NO SOFT FOCUS LENS					
		2RS		2PS		2SS	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80CA12L	14	797	55	708	49	779	54
90CA10L	14	675	47	600	42	660	45
97CA10L	14	623	43	553	38	609	42

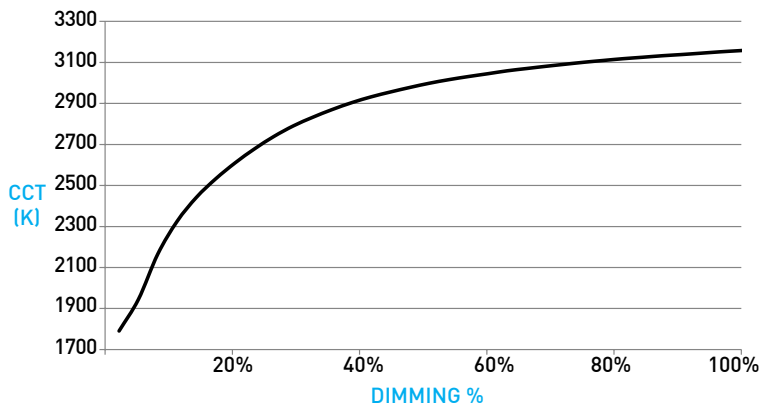
OUTPUT MULTIPLIER	
CCT	CCT SCALE
2200K	0.800
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

LIGHT LOSS FACTOR MULTIPLIER	
No Lens	Multiplier
No Lens	1.05
CGL	1.05
SFL	1.00
SP SFL	1.00
FGL	0.90
SP FGL	0.90
FLSL	0.83
HCL	0.65

## WARM DIM PERFORMANCE - 40° OPTIC - SOFT FOCUS LENS

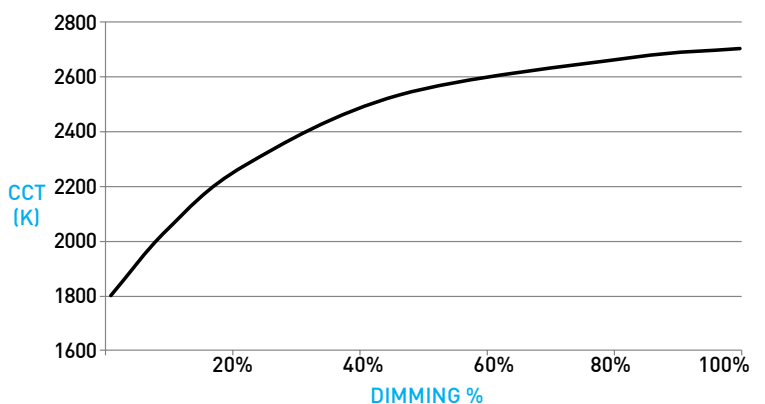
### WARM DIM TO MIRROR HALOGEN DIMMING PROFILE

90WA13H 3200K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	3200	3150	3100	3000	2700	2200	1800
Light Output (Lm)	1360	1050	900	630	250	115	25
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	92	93	90	90	83	76	74



### WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

90WA11H 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2620	2520	2180	1950	1800
Light Output (Lm)	1130	880	770	550	220	110	30
Power (W)	14	11	10	7	3	1.5	0.5
Efficacy (LPW)	80	80	77	77	73	73	60



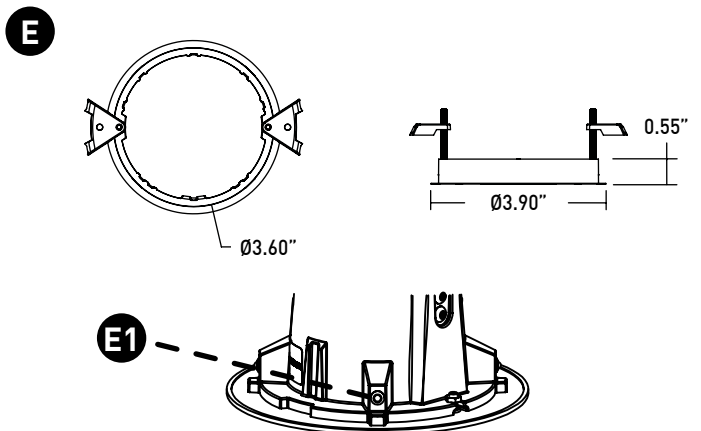
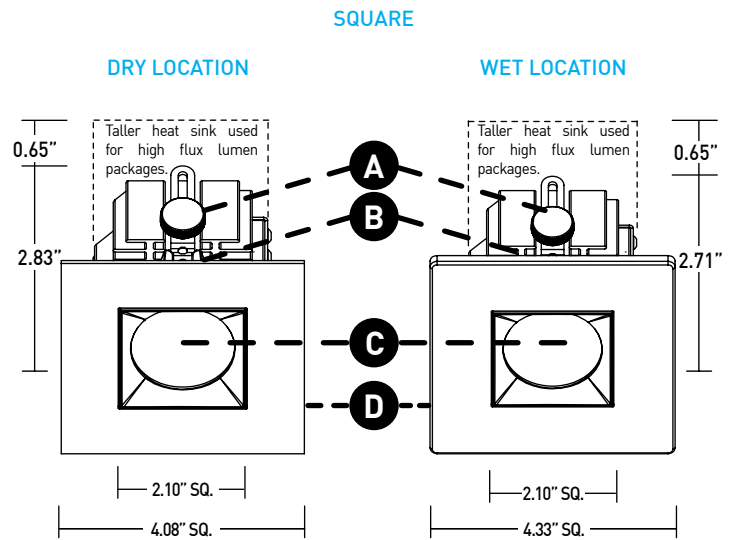
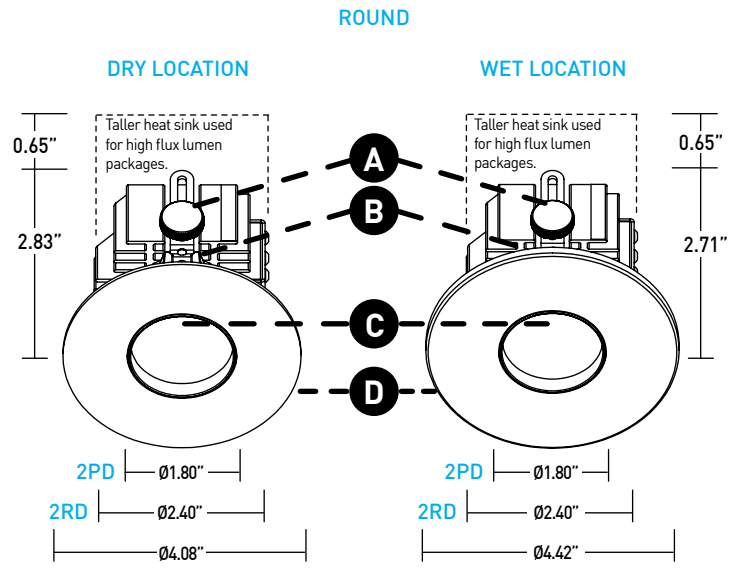
# 2 SERIES LED SHALLOW REGRESS

## DOWNLIGHT

Die-cast shallow baffle minimizes aperture glare and conceals view into housing. Black finish standard.

- A** **ADJUSTABLE YOKE**  
Adjustable yoke allows for quick exchange of optics and effects devices. Accommodates up to 2 effects devices; add 0.16" to fixture height with use of each effects device.
- B** **OPTICS**  
Proprietary optic integrates Reflection, Refraction and TIR offering 10°, 20°, 40° & 60° beams.
- C** **EFFECTS DEVICES**  
Soft Focus Lens standard; effects device must be specified. Lens is sealed in place on Wet location fixture. Secondary effects device available.
- D** **TRIM PLATE**  
Wet location features integral silicone gasket.
  - Dry / Damp Location: Thickness measures 0.065".
  - Wet Location: 0.15" return, installed as flange overlay only.
- E** **DOWNLIGHT TRIM ADAPTER**  
Included with fixture and required for installation. Uses (2) #6-32 flat-head screws with varying lengths to accommodate ceiling depth. Installed after ceiling is complete. Requires 3.75" diameter cutout for flange overlay applications.
- E1** **RETENTION**  
Engineered integral ball plungers correspond to trim adapter ensuring snug fit against finished ceiling.

## DIMENSIONS / DRAWINGS



# 2 SERIES LVS SHALLOW REGRESS

## HOUSING

- F LOW FLUX NO INSULATION CONTACT (NON-IC) HOUSING (NCL)**
  - Included with NR Low Flux lumen packages.
  - Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of housing.
  - Minimum 3.00" setback from insulation material having max R-Value 30 on all sides and top of housing.
  - Minimum 6.00" setback from polycell spray foam insulation having max R-Value 60.
- LOW FLUX INSULATION CONTACT (IC) HOUSING (ICL)**
  - Included with IR and AR LOW Flux lumen packages.
  - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.
- G HIGH FLUX IC / NON-IC HOUSING (ICH/NCH)**
  - Included with all HIGH Flux lumen packages.
  - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of IC housing.

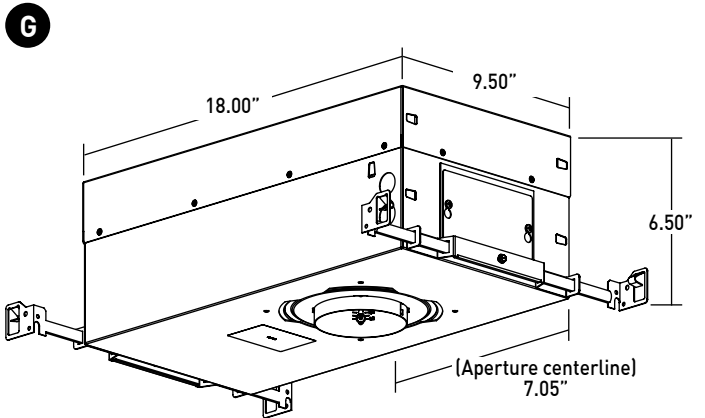
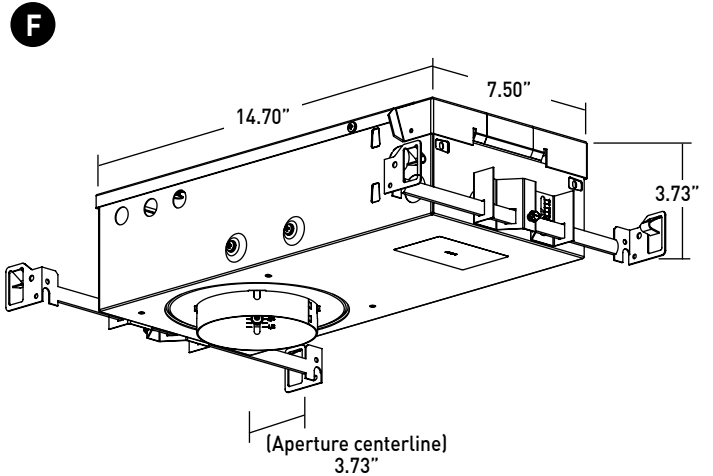
## HOUSING MOUNTING NOTES

- AR install type is required for Chicago Plenum, Airtight and Title 24 (JA8) applications.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short side of housing, and long side of Low Flux housings; extend from 14.0" to 24.0", but may be field cut to accommodate narrow stud spacing. Can be extended up to 46" maximum with 2S-HBE-46 kit.
- Hanger bars and brackets add 4.00" to the overall dimension, but are exclusive of the setback requirements.
- Driver assembly ships with trim, not housing. Housing and trim feature mating quick-connect plugs for ease of installation.

## REMODEL NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.

## DIMENSIONS / DRAWINGS

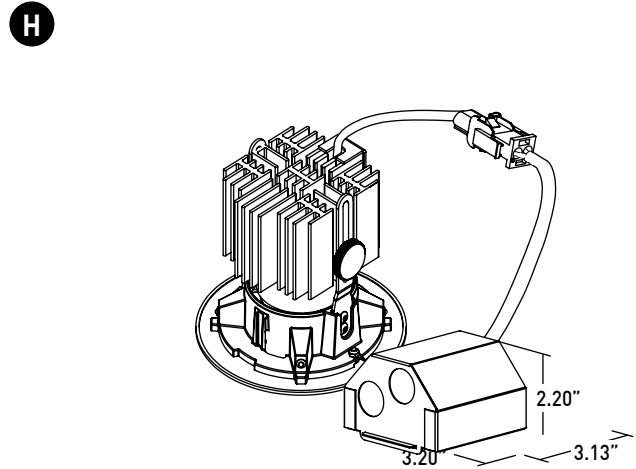


# 2 SERIES LVS SHALLOW REGRESS

## REMODEL NOTES

- H REMODEL WITH NON-IC TETHERED JUNCTION BOX**
- Provided with RR install type.
  - UL2043 listed for air-handling plenum.
  - Installs without conventional housing using integral mounting clamps.
  - Tethered junction box with quick-connect plug between fixture and junction box.
  - Minimum 0.75" clearance from top of trim.
  - Minimum setback from combustible and non-combustible materials of 6.63" radius from fixture centerline.
  - Minimum additional 3.00" setback from insulation material with max R-Value 30 from any surface of downlight fixture assembly.
  - Minimum additional 6.00" setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fixture assembly.
  - Do not install in environments where ambient temperatures exceed 40°C (104°F).
  - All splice connections serviceable from room side.
  - Consult factory for spacing requirements for any installations exceeding R-Value 60.

## DIMENSIONS / DRAWINGS

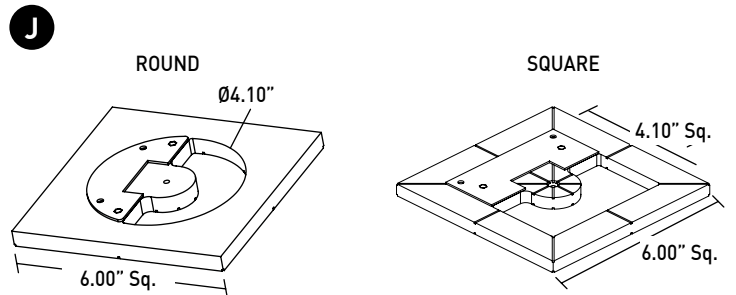
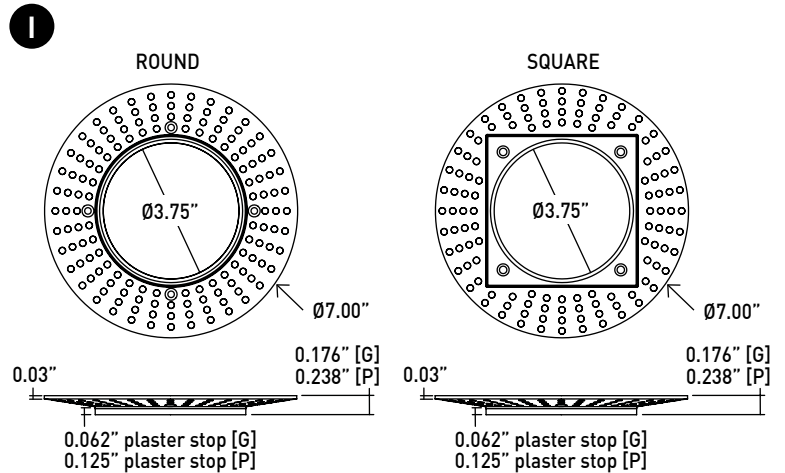


## ZERO-SIGHTLINE INSTALLATIONS

Zero-Sightline installations available for Dry / Damp location fixtures only. When installed according to manufacturer's instructions and ceiling conditions are met, fixture is flush with the ceiling plane. Consult 2-Series Installation Guidelines for appropriate ceiling cutouts and instructions for proper Zero-Sightline installations.

- I APPLIQUÉ**
- Specified on Flange Configuration and ships with housing; ships separately on remodel installations.
  - For use in sheetrock ceiling applications.
  - 1/16" Appliqué (G Flange Configuration) recommended for gypsum ceiling installations and has plaster stop thickness of 1/16".
  - Recommended for painted ceiling applications.
  - 1/8" Appliqué (P Flange Configuration) offers double thick plaster stop of 1/8" where a heavier application of mud is preferred. Recommended for colorfast and venetian plaster applications.
  - Not recommended for stucco applications.

- J ROUTER TOOL GUIDE**
- Specified separately and used with Flange Overlay configurations.
  - For use in wood ceiling applications.
  - **DLA-RTG-2S-RD** or **DLA-RTG-2S-SQ** required for wood Zero-Sightline ceiling installations.
  - Router tool guide is reusable and suitable for multiple fixtures.



6.00" Sq.

# 2 SERIES LVS SHALLOW REGRESS

## TECHNICAL INFORMATION

### CONSTRUCTION

**Downlight:** Steel and aluminum; extruded aluminum heat-sink; painted finishes are granulated powder coat. 304 corrosion resistant stainless steel faceplate for wet location fixtures.

**Trim Adapter:** High-impact composite and stainless steel.

**Housing:** 22 Gauge galvanized steel.

**Appliqué:** Zinc alloy.

### STATIC WHITE LED

2-step MacAdam ellipse LED module available in 80+, 90+ and 97+ CRI configurations in color temperatures of 2200K, 2700K, 3000K, 3500K and 4000K. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

### WARM DIM LED

3-step MacAdam ellipse warm dim LED module available in 90+ CRI configuration. 3200K or 2700K at full brightness, warming to 1800K at full dim. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

### LISTING

cTUVus listed to UL2108 standard for Dry / Damp and Wet locations.

Chicago Plenum and Airtight Listed.

### WARRANTY

Manufacturer's 1-year warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service. 5-year warranty on LED to operate with 70% of the original flux and remain within a range of 3 duv. Warranty period begins from the date of shipment by Seller. [Consult website for full warranty terms and conditions.](#)

### CHANGE LOG

1.01/12/2021: ADDED 2200K, 2700K-1800K WARM DIM AND 10 DEGREE OPTIC OFFERINGS.