



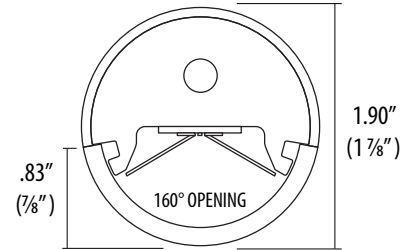
IVR2 1.9" Solid State Illuminated Rail

Integral Power Supply

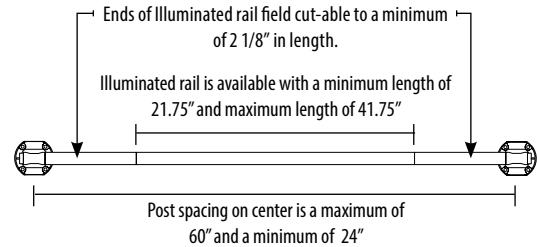
JOB NAME		CATALOG NUMBER	
NOTES		TYPE	



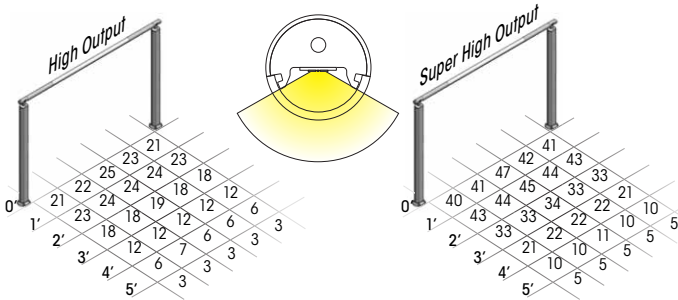
U.S. Patent # D615,217S issued
Other patents pending



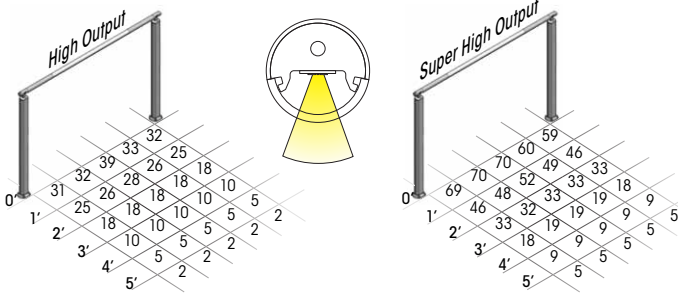
Exact decimal and common fraction is shown



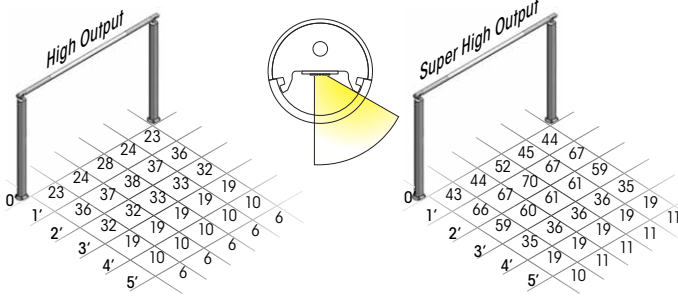
60° Symmetric Beam



20° Symmetric Beam



30° Asymmetric Beam



Construction:

Internal Rail Construction: Heavy duty extruded 6061-T6 Aluminum Alloy.

External Rail Jacket: Available in brushed satin 304 stainless steel. Standard aluminum finishes include silver, white, black, or bronze powder-coat. Consult factory for custom powder coat finishes (AAMA 2604).

LED Light Source:

Closely packed array of small LEDs allow for smooth seamless illumination with immediate overlap to avoid pixilation and provide a continuous flow of light. Color temperatures options include 3000K, 3500K or 4000K.

- 85 CRI
- 50,000 of average rated life at 70% output
- LED components are easily accessible to allow for easy maintenance

Power Consumption (per foot):

- High Output: 4.2W
- Super High Output: 8.4W

Lumen Output (per foot):

- High Output**
- Cool White 4000K: 241 lm
 - Neutral White 3500K: 207 lm
 - Warm White 3000K: 202 lm

Super High Output

- Cool White 4000K: 483 lm
- Neutral White 3500K: 415 lm
- Warm White 3000K: 404 lm

Light Distribution & Output:

The V-Rail optical system includes a unique reflector that allows you to put the light where it is needed. Factory preset distributions include 60° symmetric, 20° symmetric and 30° asymmetric.

Reflector System:

Internal reflector system is constructed of an innovative material that has 99% reflectance properties. Reflector allows up-to 140° total adjustment. Right to left side reflector panels are independently field-adjustable from -30° to 70°. When the outer reflector panel is adjusted toward a stairway, ramp or walkway, the reflector panel will act as a glare shield from distant viewing angles below an elevated-platform.

Optical Lens System:

High-impact acrylic lens is sealed with silicon. Lens is secured with (2) countersunk flush screws, (1) at each end. Vandal resistant "TORX" is also available. Consult factory.

Mounting / Installation:

Each rail support is secured to the swivel mount on specified mounting system. Wall, post or embedded mount is available. See mounting submittal sheets for detailed information.

Listings:

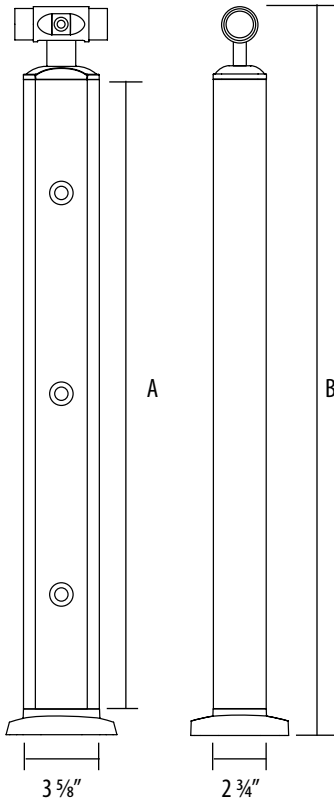
- UL Wet Location Listed. File #E333075
- IIDA
- ADA compliant



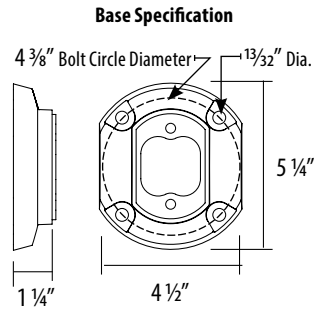


IVR2 V-Rail Intergral Power Supply Post Mount Assembly

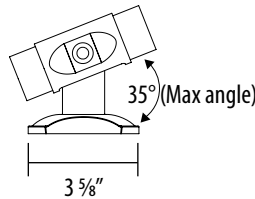
JOB NAME		CATALOG NUMBER	
NOTES		TYPE	



Dimensions	
Guard Rail	Hand Rail
A Post Height: 36 15/16"	Post Height: 30 15/16"
B Total Height: 42"	Total Height: 36"



Post Top Swivel Specification



Construction:

Post mount assembly is available in heavy duty 6061-T6 Aluminum alloy or No.4 polished 304 stainless steel. Standard aluminum finishes include silver, white, black, or bronze powder-coat. Consult factory for custom powder coat finishes (AAMA 2604).

Power Supply:

- Electronic 24V DC Class 2 LED Power Supply Universal 120-277V
- Protected against open circuit, overload and overheating conditions
- Rated for outdoor, damp locations
- UL recognized and FCC compliant
- RoHS Compliant
- Nominal Input Current (Amps) = .75 @ 120V / .32 @ 277V
- Power Factor @120V = .99
- Output voltage Current = 24V
- Maximum Output Power = 75W

Dimming Option:

- Dimming range: 0-100%
- -20°C through 50°C ambient operation
- 10V-24 VDC input voltage
- Utilizes pulse width modulation, (PWM) to control LED performance and provides flicker-free lighting
- Controlled by 1-10V DC controllers, 1-10V converters, or 100 k Ohm linear potentiometers

Maintenance:

Posts include a driver access door where power supply components are easily accessible. Tamper proof hardware and special tools are standard and included.

Mounting / Installation:

Post are to be spaced at a maximum of 60" and minimum of 24" on centers. Post mount is to be surface mounted to concrete utilizing 3/8" anchor bolts (supplied by others). Anchoring means must be determined by local codes. Not to be supplied or engineered by Intense Lighting. See post mount installation chart for more information. Anchorage template available by request.

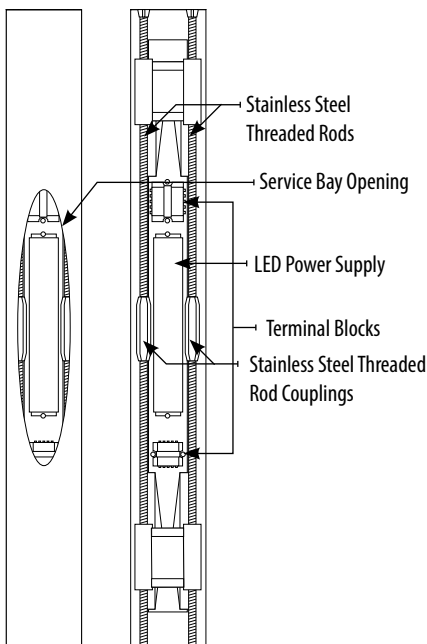
Operation:

Post with integral power supply will power up-to 83 1/2" of illuminated rail.

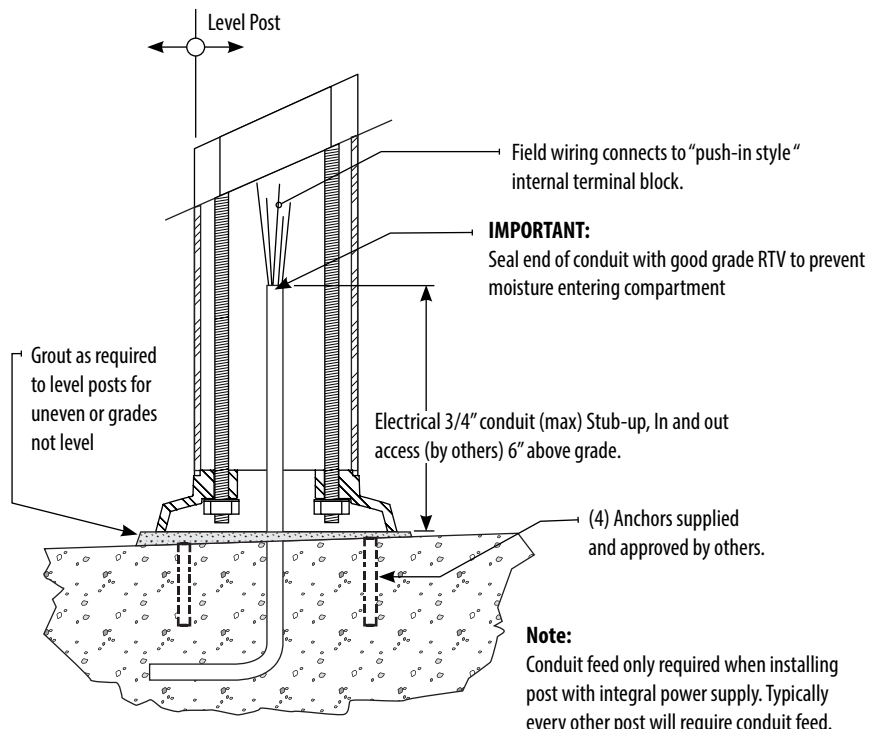
Fittings:

Consult factory for standard fittings and epoxy weld adhesive.

Post Specification with Integral Power Supply



Post Mount Installation Detail



Note:

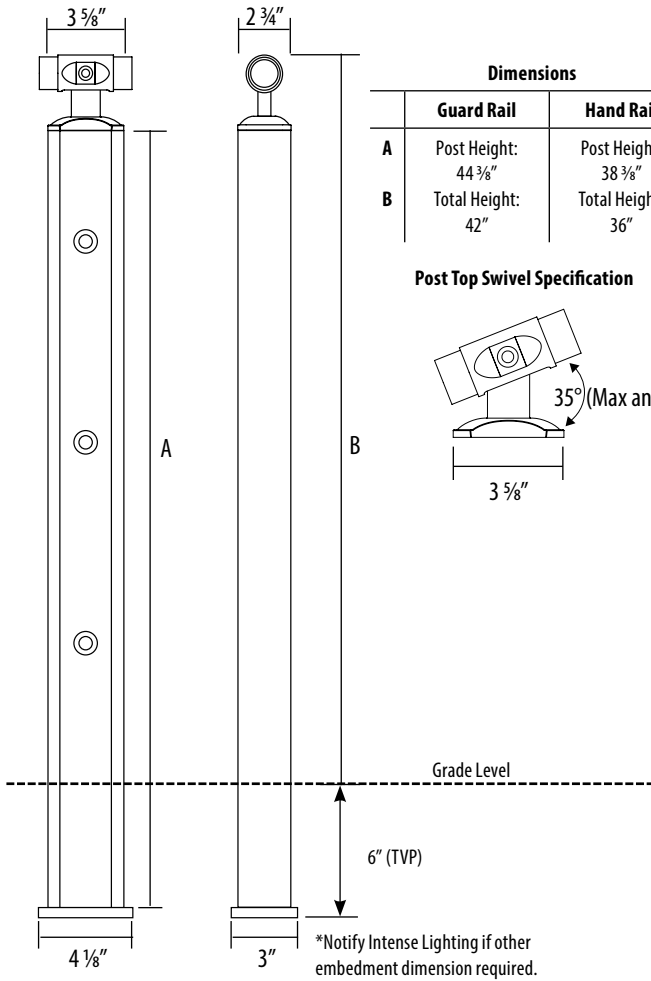
Conduit feed only required when installing post with integral power supply. Typically every other post will require conduit feed.





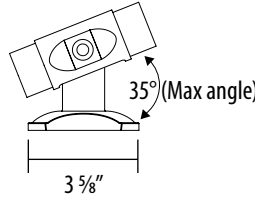
IVR2 V-Rail Intergral Power Supply Embedded Post Assembly

JOB NAME		CATALOG NUMBER	
NOTES		TYPE	



Dimensions		
	Guard Rail	Hand Rail
A	Post Height: 44 3/8"	Post Height: 38 3/8"
B	Total Height: 42"	Total Height: 36"

Post Top Swivel Specification



Construction:

Embedded mount assembly is available in heavy-duty 6061-T6 Aluminum alloy or No.4 polished 304 stainless steel. Standard aluminum finishes include silver, white, black, or bronze powder-coat. Consult factory for custom powdercoat finishes(AAMA 2604).

Power Supply:

- Electronic 24V DC Class 2 LED Power Supply Universal 120-277V
- Protected against open circuit, overload and overheating conditions
- Rated for outdoor, damp locations
- UL recognized and FCC compliant
- RoHS Compliant
- Nominal Input Current (Amps) = .75 @ 120V / .32 @ 277V
- Power Factor @120V = .99
- Output voltage Current = 24V
- Maximum Output Power = 75W

Dimming Option:

- Dimming range: 0-100%
- -20°C through 50°C ambient operation
- 10V-24 VDC input voltage
- Utilizes pulse width modulation, (PWM) to control LED performance and provides flicker-free lighting
- Controlled by 1-10V DC controllers, 1-10V converters, or 100 k Ohm linear potentiometers

Maintenance:

Posts include a driver access door where power supply components are easily accessible. Tamper proof hardware and special tools are standard and included.

Mounting / Installation:

Post are to be spaced at a maximum of 60" and minimum of 24" on centers. Embedded mount post are set into place using Rockite® or Kwixset® anchor cement. A minimum of 6" post must be embedded into concrete to structurally secure post. Anchoring means must be determined by local codes. Not to be supplied or engineered by Intense Lighting. See Embedded Mount Installation chart for more information.

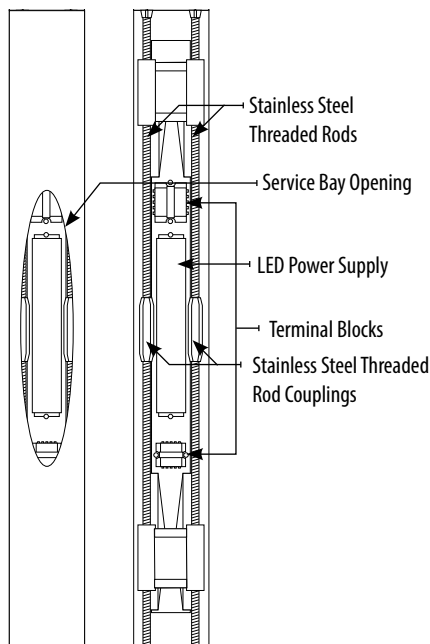
Operation:

Post with integral power supply will power up-to 83 1/2" of illuminated rail.

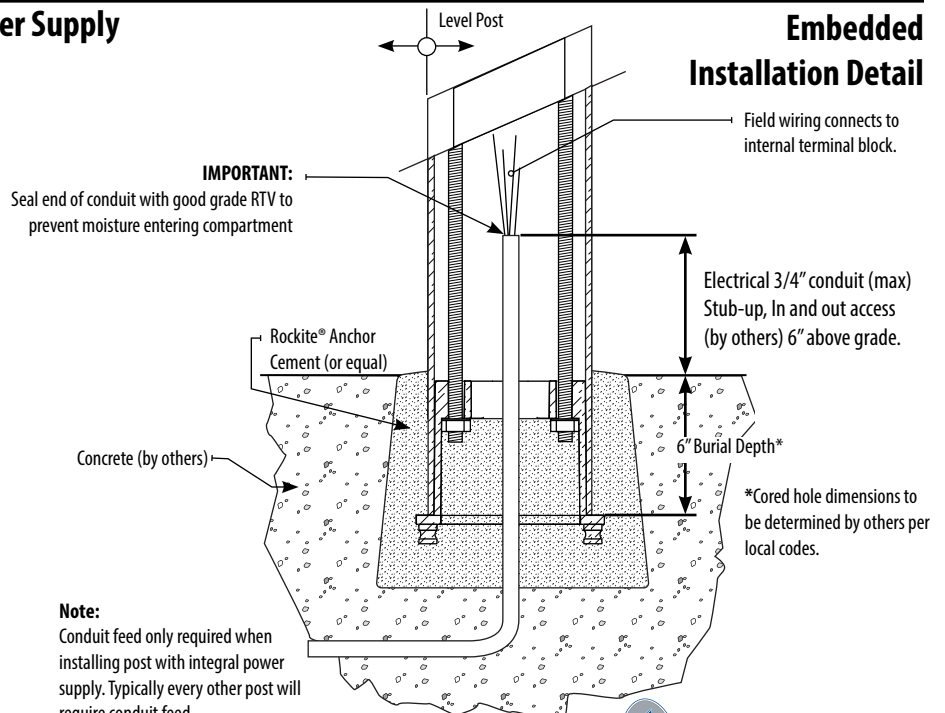
Fittings:

Consult factory for standard fittings and epoxy weld adhesive.

Post Specification with Integral Power Supply



Embedded Installation Detail



Note:
Conduit feed only required when installing post with integral power supply. Typically every other post will require conduit feed.

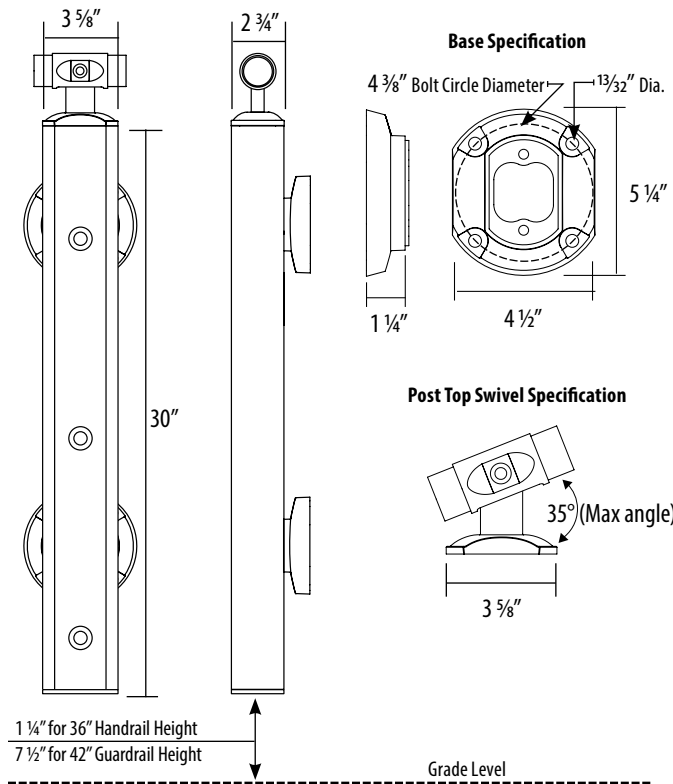




IVR2 V-Rail Intergral Power Supply

Wall Mounted Post Assembly

JOB NAME		CATALOG NUMBER	
NOTES		TYPE	



Construction:

Wall mount assembly is available in heavy-duty 6061-T6 Aluminum alloy or No.4 polished 304 stainless steel. Standard aluminum finishes include silver, white, black, or bronze powder-coat. Consult factory for custom powdercoat finishes.

Power Supply:

- Electronic 24V DC Class 2 LED Power Supply Universal 120-277V
- Protected against open circuit, overload and overheating conditions
- Rated for outdoor, damp locations
- UL recognized and FCC compliant
- RoHS Compliant
- Nominal Input Current (Amps) = .75 @ 120V / .32 @ 277V
- Power Factor @120V = .99
- Output voltage Current = 24V
- Maximum Output Power = 75W

Dimming Option:

- Dimming range: 0-100%
- -20°C through 50°C ambient operation
- 10V-24 VDC input voltage
- Utilizes pulse width modulation, (PWM) to control LED performance and provides flicker-free lighting
- Controlled by 1-10V DC controllers, 1-10V converters, or 100 k Ohm linear potentiometers

Maintenance:

Posts include a driver access door where power supply components are easily accessible. Tamper proof hardware and special tools are standard and included.

Mounting / Installation:

Post are to be spaced at a maximum of 60" and minimum of 24" on centers. Wall mount assembly is to be mounted to concrete wall utilizing anchor bolts (supplied by others). Anchoring means must be determined by local codes. Not to be supplied or engineered by Intense Lighting. See Wall Mount Installation chart for more information. Anchorage template available by request.

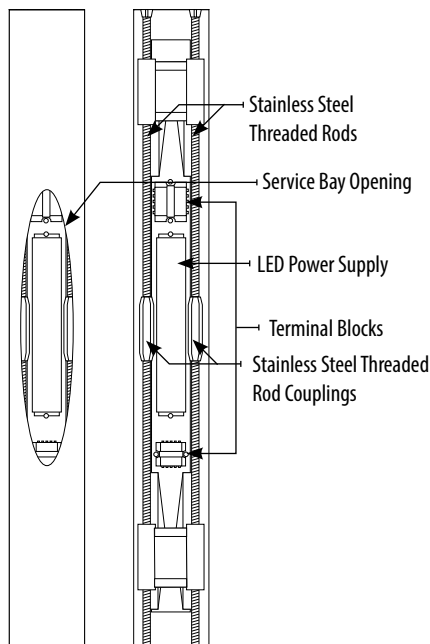
Operation:

Post with integral power supply will power up-to 83 1/2" of illuminated rail.

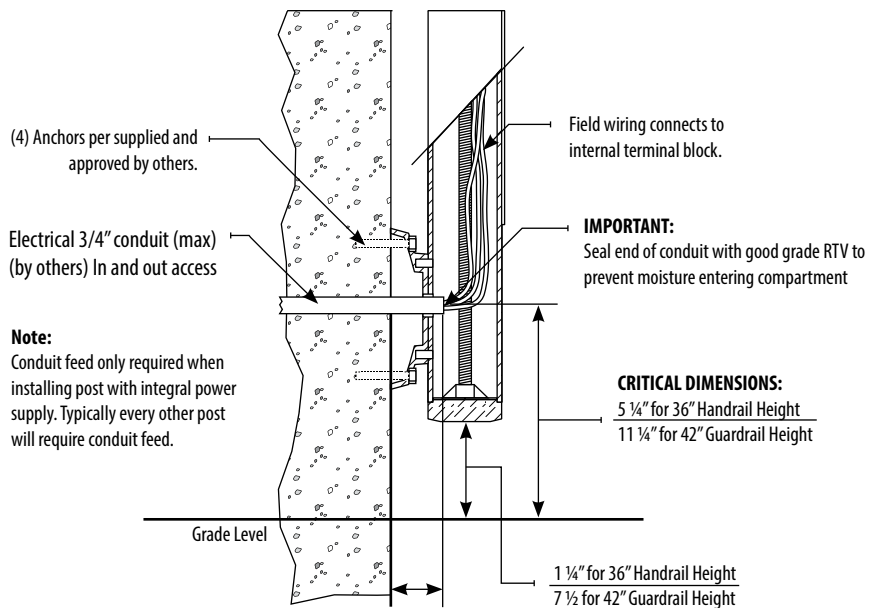
Fittings:

Consult factory for standard fittings and epoxy weld adhesive.

Post Specification with Integral Power Supply



Wall Mounted Installation Detail





IVR2 V-Rail Intergral Power Supply Specification Guide

Example: IVR2-ST-E36-H030-60S-DIM

(Specify quantity by foot)

JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

A	B	C	D	E	F	G	H	I
A Family		C Mounting			F LED Color		H Electrical	
IVR2 1.9" OD w/ Integral Power Supply		-E Embedded Mount -P Post Mount -W Wall Mount			27 2700K Warm White 30 3000K Warm White 35 3500K Neutral White 40 4000K Cool White		blank 120/277V -DIM 120/277V Dimming	
B Finish		D Rail Height			G Light Distribution		I Options	
-ST 304 Stainless Steel ¹ -W White Aluminum -B Black Aluminum -BR Bronze Aluminum -SV Silver Aluminum -SN Brushed Satin Nickel Aluminum		36 36" Rail Height 42 42" Rail Height			-60S 60° Symmetric -20S 20° Symmetric -30AS 30° Asymmetric C Custom ³		-EM Emergency Infill ³	
		E LED Output						
		-HO High Output -SHO Super High Output -NL No LED (Rail Only) ²						

Notes:

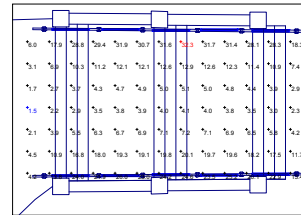
- 1 - 316 stainless steel available by special order
- 2 - No LED (rail only). Please omit sections F, G, H, and I
- 3 - Special order, consult factory

Specification and Delivery Process

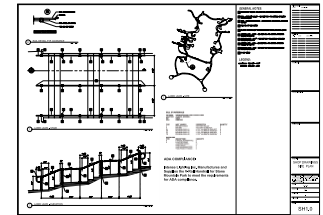
Architectural drawings or detailed elevation drawings are required for a V-Rail quotation. A photometric layout will be provided if requested. Once an order is placed, Intense Lighting will provide detailed shop drawings for approval.

V-Rail will be delivered to the job site ready for installation. A detailed assembly drawing will be provided along with dimensions and power drop locations. All products included

will be labeled clearly to match the assembly drawing. Certain tools and equipment will be required for the assembly of V-Rail. A detailed list of tools can be found in the V-Rail Installation Guide. Installation guide available upon request, consult factory.



Photometric Layout



Shop Drawing / Assembly Guide



Completed Project

Notes:

