

# VIPER L SERIES

LARGE VIPER LUMINAIRE

Cat.#

Job

Type

Approvals



## SPECIFICATIONS

### Intended Use:

The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS. Luminaires are suitable for wet locations.

### Construction:

- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant.
- One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and microcellular polyurethane foam gasket ensures a weather-proof seal around each individual optic.

### Electrical:

- Luminaire accepts 100V through 277V, 50 Hz to 60 Hz (UNV), 347V, or 480V input.
- Power factor is  $\geq .90$  at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Surge protection - 20kA.
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

### Controls/Options:

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see [www.beaconproducts.com/products/energeni](http://www.beaconproducts.com/products/energeni)).
- In addition, Viper can be specified with **SiteSync™** wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: [www.hubbellinglighting.com/sitesync](http://www.hubbellinglighting.com/sitesync)

### Installation:

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

### Finish:

- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

### Listings:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: <http://www.designlights.org/QPL>
- Certified to UL 1598 and CSA C22.2 No. 250.0 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications with SF2 mounting
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: [http://www.beaconproducts.com/products/viper\\_large](http://www.beaconproducts.com/products/viper_large)

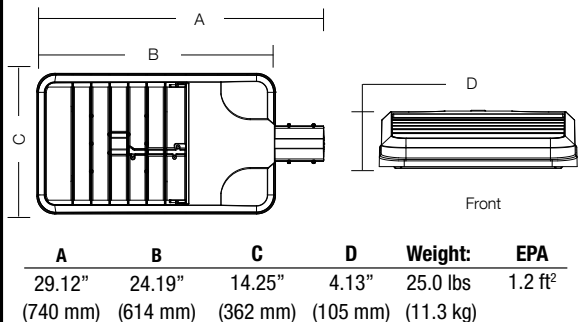
### Warranty:

Five year limited warranty for more information visit: [www.hubbellinglighting.com/resources/warranty](http://www.hubbellinglighting.com/resources/warranty)

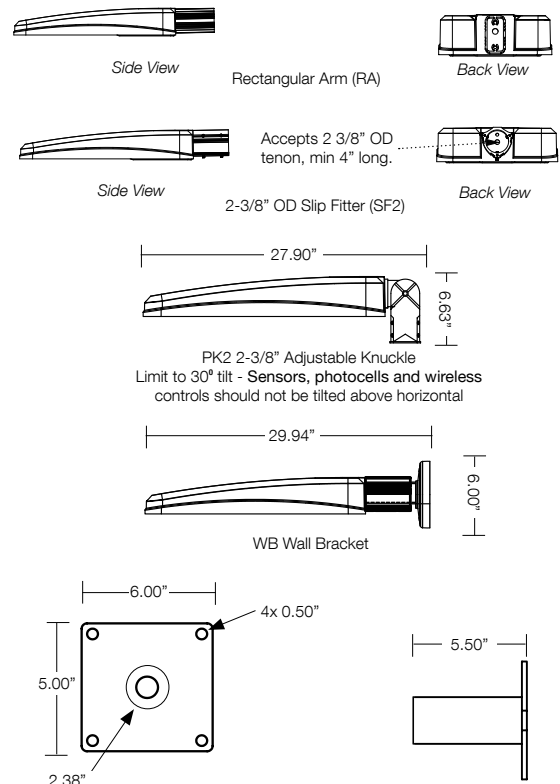
## PRODUCT IMAGE(S)



## DIMENSIONS



## MOUNTING OPTIONS



## CERTIFICATIONS/LISTINGS



\*3000K and warmer CCTs only



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# ORDERING INFORMATION ORDERING EXAMPLE: VP-L/96NB-280/4K/T4/UNV/PEC/BLC/RA/BBT

VP-L									
SERIES	ENGINE-WATTS		LED COLOR <sup>9</sup>	VOLTAGE		ELECTRICAL OPTIONS		BIRD DETERRENT	FINISH
VP-L Viper	64NB-135	135W LED array	3K 3000K	UNV	120-277V	7PR <sup>10</sup>	7-PIN Receptacle only	BSP bird spike	BBT Basic Black Textured
	80NB-180	180W LED array	4K 4000K	347V	347K	7PR-TL	7-PIN Receptacle w/ Twist Lock photo control		BMT Black Matte Textured
	80NB-235	235W LED array	5K 5000K	480V	480V	7PR-SC	7-PIN Receptacle w/ Shorting Cap		WHT White Textured
	96NB-220	220W LED array				PEC	photocell, button		MBT Metallic Bronze Textured
	96NB-280	280W LED array				2PF <sup>7</sup>	dual power feed		BZT Bronze Textured
	96NB-395	395W LED array							DBT Dark Bronze Textured
OPTICS <sup>4</sup>		LEFT RIGHT OPTICS <sup>4</sup>		CONTROL OPTIONS		MOUNTING OPTIONS		OPTIONS	
T1	Type I	T1L	Type 1 left	GENI-XX <sup>6</sup>	Energeni	RA	rectangular arm for round or square pole mount. Round Pole Adapter included.	BLC <sup>9</sup>	Backlight Control
T2	Type II	T1R	Type 1 right	SWF <sup>5</sup>	SiteSync Field Commission	SF2	2 3/8" OD slip-fitter		
T3	Type III	T2L	Type 2 left	SWP <sup>1,5</sup>	SiteSync Wireless Pre-Commission	PK2	2 3/8" adjustable knuckle		
T4	Type IV	T2R	Type 2 right	SWPM <sup>1,2,5</sup>	SiteSync Wireless Pre-Commission w/ Motion Detection	WB	wall bracket (use with SF2 or PK2), SF2 standard		
T5R	Type V, rectangular	T3L	Type 3 left						
T5QM	Type V, square medium	T3R	Type 3 right						
T5W	Type V, round wide	T4L	Type 4 left						
FR	Front row auto optic	T4R	Type 4 right						
		FRL	Front row left						
		FRR	Front row right						

## HOUSE SIDE SHIELD ACCESSORIES

HSS/VP-L/90-FB/XXX 90° shield front or back

HSS/VP-L/90-LR/XXX 90° shield left or right

HSS/VP-L/270-FB/XXX 270° shield front or back

HSS/VP-L/270-LR/XXX 270° shield left or right

HSS/VP-L/360/XXX Full shield

(Replace XXX with notation for desired finish color)  
(Refer to page 5 for shield images)

<sup>1</sup> Must specify group and zone information at time of order. See [www.hubbellighting.com/sitesync](http://www.hubbellighting.com/sitesync) for further details

<sup>2</sup> Specify mounting height.

<sup>3</sup> T4 optic only

<sup>4</sup> To rotate optics left or right 90 degrees, specify L or R after the optical distribution example T4L.

<sup>5</sup> Not available with other control or sensor options.

<sup>6</sup> When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options.

<sup>7</sup> Not available for 347V or 480V input.

<sup>8</sup> Order at least one SCP-REMOTE per project location to program and control the occupancy sensor.

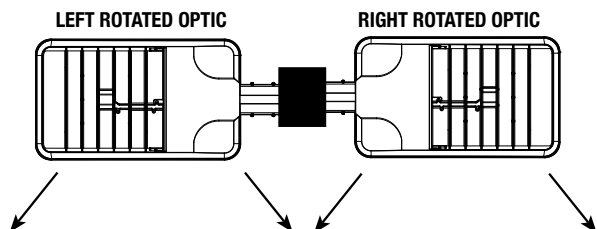
<sup>9</sup> This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: [http://cdn.beaconproducts.com/content/products/specs/specs/Viper\\_Large\\_LED\\_turtle\\_spec\\_sheet.pdf](http://cdn.beaconproducts.com/content/products/specs/specs/Viper_Large_LED_turtle_spec_sheet.pdf)

<sup>10</sup> Shorting cap, phot control, or wireless control provided by others

**PRECOMMISSIONED SITESYNC ORDERING INFORMATION:** When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit [www.HubbellLighting.com/products/sitesync](http://www.HubbellLighting.com/products/sitesync) or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-S/80NB-235/5K/T3/UNV/SWP/RA/DBT SiteSync only  
VP-S/80NB-235/5K/T3/UNV/SWP-20F/RA/DBT SiteSync with Motion Control



## Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
SWTAB*	Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node.
SWBRG	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.
SCP-REMOTE	Remote Control for SCP/_F option. Order at least one per project to program and control
SW7PR*	SiteSync 7 Pin on fixture module On/Off/Dim, Daylight Sensor 120-480VAC

\* When ordering SiteSync at least one of these two interface options must be ordered per project.

+ Available as a SiteSync retrofit solution for fixtures with an existing 7pin receptacle.

## Hubbell Control Solutions - Accessories (sold separately)

Catalog Number	Description	HCS System
NXOFM-1R1D-UNV	On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC	NX Distributed Intelligence™
WIR-RME-L	On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110-480VAC	wiSCAPE® Lighting Control

For additional information related to these accessories please visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com). Options provided for use with integrated sensor, please view specification sheet ordering information table for details.

## SiteSync 7-Pin Module



SW7PR

- SiteSync features in a new form
- Available as an accessory for new construction or retrofit applications (with existing 7-Pin receptacle)
- Does not interface with occupancy sensors



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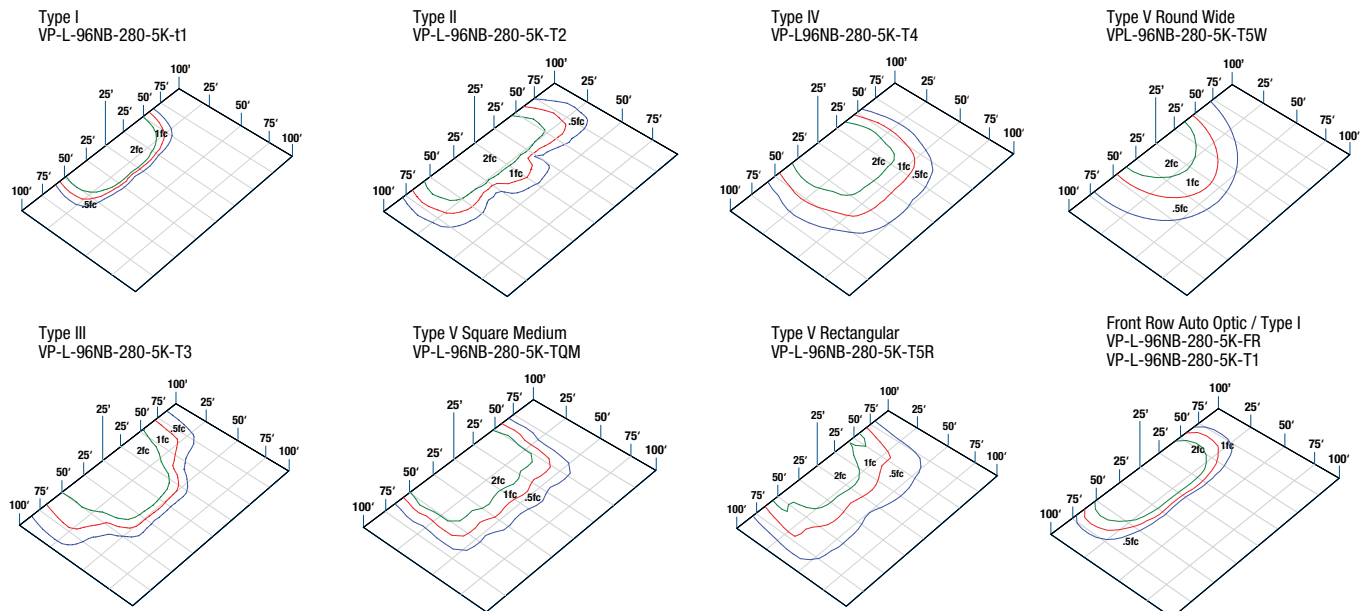


**HUBBELL**  
Lighting

PERFORMANCE DATA				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW <sup>1</sup>	B	U	G	LUMENS	LPW <sup>1</sup>	B	U	G	LUMENS	LPW <sup>1</sup>	B	U	G
64	625 mA	136W	FR/T1	15922	116	2	0	1	15762	115	2	0	1	13534	99	2	0	1
			T2	14274	104	3	0	3	14131	103	3	0	3	12133	89	3	0	3
			T3	14137	103	3	0	3	13996	102	3	0	3	12017	88	3	0	3
			T4	15511	113	2	0	4	15356	112	2	0	3	13184	96	2	0	3
			T5QM	15511	113	4	0	2	15356	112	4	0	2	13184	96	3	0	2
			T5R	15785	115	4	0	4	15627	114	4	0	4	13417	98	4	0	4
80	700 mA	180W	T5W	15372	112	4	0	2	15217	111	4	0	2	13067	95	4	0	2
			FR/T1	21132	117	2	0	2	20322	113	2	0	2	17447	97	2	0	2
			T2	18888	105	3	0	4	18699	104	3	0	4	16055	89	3	0	3
			T3	18700	104	3	0	3	18513	103	3	0	3	15895	88	3	0	3
			T4	20571	114	3	0	4	20365	113	3	0	4	17485	97	3	0	3
			T5QM	20571	114	4	0	2	20365	113	4	0	2	17485	97	4	0	2
80	875 mA	235W	T5R	20944	116	4	0	4	20733	115	4	0	4	17803	99	4	0	4
			T5W	20290	113	5	0	3	20088	112	5	0	3	17065	95	4	0	2
			FR/T1	24866	106	2	0	2	24615	105	2	0	2	21136	90	2	0	2
			T2	23070	98	3	0	4	22839	97	3	0	4	19609	83	3	0	4
			T3	21947	93	3	0	4	21725	92	3	0	4	18655	79	3	0	3
			T4	24360	103	3	0	4	24028	102	3	0	5	20632	88	3	0	4
96	700 mA	220W	T5QM	23138	98	4	0	2	22905	97	4	0	2	19667	84	4	0	2
			T5R	24779	105	5	0	5	24541	104	5	0	5	21070	90	4	0	4
			T5W	24175	103	5	0	3	23931	102	5	0	3	20548	87	5	0	3
			FR/T1	25358	113	2	0	2	25104	112	2	0	2	21554	96	2	0	2
			T2	22665	101	3	0	4	22438	100	3	0	4	19265	86	3	0	4
			T3	22440	100	3	0	4	22216	99	3	0	4	19134	86	3	0	3
96	875 mA	280W	T4	24685	110	3	0	5	24438	109	3	0	5	20982	94	3	0	4
			T5QM	24685	110	4	0	2	24438	109	4	0	2	20982	94	4	0	2
			T5R	25133	112	5	0	5	24882	111	5	0	5	21363	96	4	0	4
			T5W	24349	109	5	0	3	24106	108	5	0	3	20803	93	5	0	3
			FR/T1	29839	106	3	0	2	29541	105	3	0	2	25363	90	2	0	2
			T2	27369	98	4	0	5	27096	97	4	0	5	23264	83	3	0	4
96	1225mA	395W	T3	26336	93	3	0	4	26073	92	3	0	4	22365	79	3	0	4
			T4	29129	102	3	0	5	28837	103	3	0	5	24759	88	3	0	5
			T5QM	28890	103	5	0	3	28601	102	5	0	3	24556	88	4	0	2
			T5R	29185	105	5	0	5	28893	104	5	0	5	24809	89	5	0	5
			T5W	29011	102	5	0	4	28720	101	5	0	4	24263	86	5	0	3
			FR/T1	39653	101	3	0	2	39260	100	3	0	2	33371	85	3	0	2
			T2	35997	91	4	0	5	35641	90	4	0	5	30295	77	4	0	5
			T3	35840	91	4	0	5	35485	90	4	0	5	30162	77	3	0	4
			T4	35455	90	3	0	5	35104	89	3	0	5	29839	76	3	0	4
			T5QM	38388	97	5	0	3	38008	96	5	0	3	32306	82	5	0	2
			T5R	39117	99	5	0	5	38730	98	5	0	5	32921	83	5	0	5
			T5W	36984	93	5	0	4	36528	93	5	0	4	31049	79	5	0	4

<sup>1</sup> Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

## PHOTOMETRICS



## ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
64	1	625 mA	120	135	1.4
			277		0.6
			347		0.5
			480		0.3
80	2	700 mA	120	180	1.8
			277		0.8
			347		0.6
			480		0.5
80	2	875 mA	120	235	2.4
			277		1.0
			347		0.8
			480		0.6
96	2	700 mA	120	220	2.2
			277		1.0
			347		0.8
			480		0.6
96	2	875 mA	120	280	2.8
			277		1.2
			347		1.0
			480		0.7
96	2	1225 mA	120	395	4.0
			277		1.7
			347		1.4
			480		1.0

## PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°F	1	0.95	0.93	0.93	0.89	>377,000

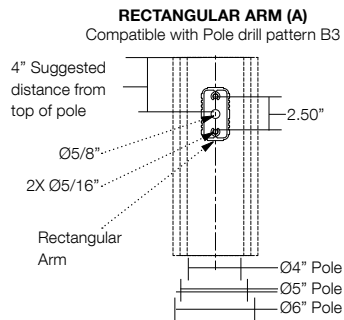
<sup>1</sup> Projected per IESNA TM-21-11

Data references the extrapolated performance projections for the 700mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

AMBIENT TEMPERATURE	LUMEN MULTIPLIER
0°C 32°F	1.02
10°C 50°F	1.01
20°C 68°F	1.00
25°C 77°F	1.00
30°C 86°F	0.98
40°C 104°F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

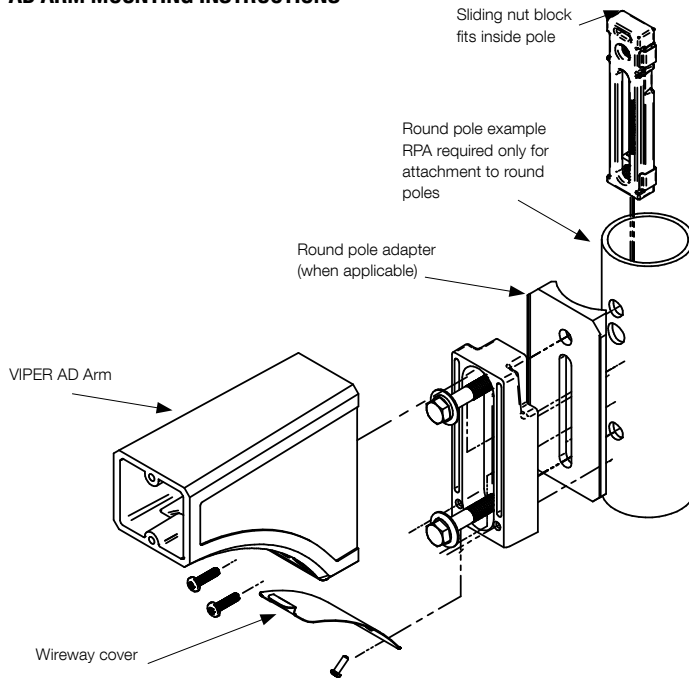
## DRILL PATTERN



## EPA

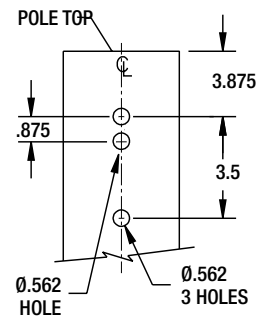
Config.	EPA	Config.	EPA
1	1.2	3 @ 120°	3.0
2 @ 90°	1.9	3 @ 90°	3.1
2 @ 180°	2.4	4 @ 90°	3.8

## AD ARM MOUNTING INSTRUCTIONS

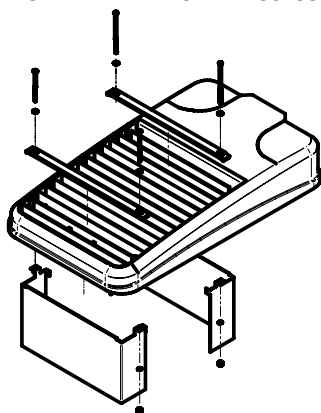


## DECORATIVE ARM (AD)

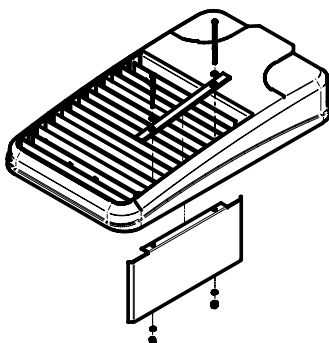
Compatible with pole drill pattern S2



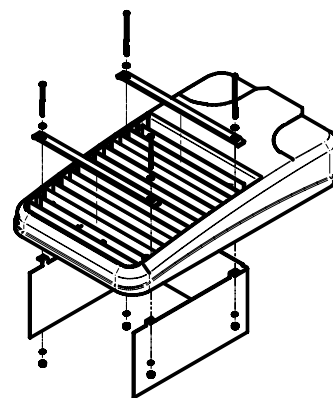
## HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



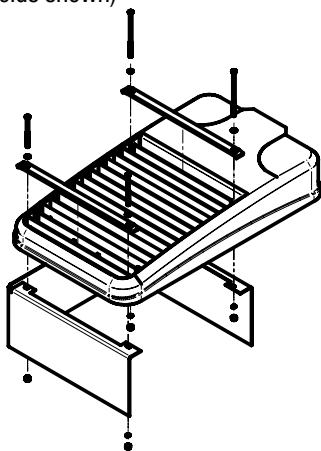
**HSS/VP-L/90-FB/XXX**  
90° shield front or back  
(2 shields shown)



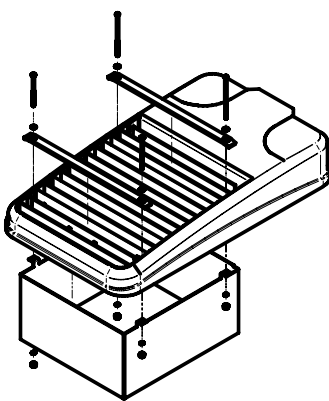
**HSS/VP-L/90-LR/XXX**  
90° shield left or right  
(1 shield shown in left orientation)



**HSS/VP-L/270-FB/XXX**  
270° shield front or back  
(1 shield shown in back orientation)



**HSS/VP-L/270-LR/XXX**  
270° shield left or right  
(1 shield shown in right orientation)



**HSS/VP-L/360/XXX**  
Full shield  
(1 shield shown)