

Attachment M - Light Fixture Cut Sheets & Photometric Report

# VIPER L

OPTICS

## STRIKE

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.
- Ambient operating temperature -40°C to 40°C
- 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.hubbelling.com/sitesync](http://www.hubbelling.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.

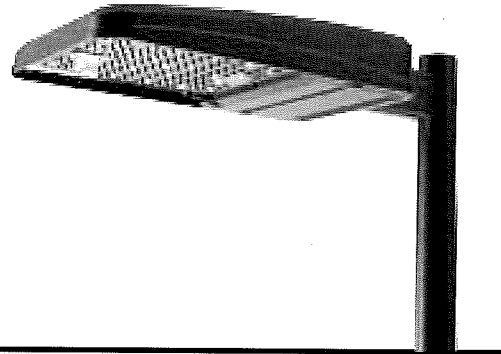
#### Certifications/Ratings:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: <http://www.designlights.org/QPL>
- Certified to UL 1598, UL 8750, and CSA C22.2
- 3G rated for ANSI C136.31 high vibration applications with MAF 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)

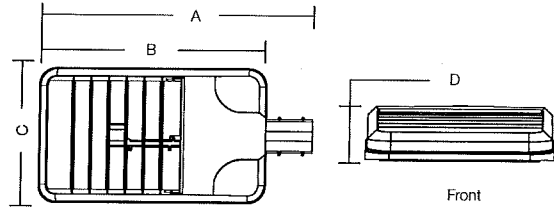
#### Warranty:

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

### PRODUCT IMAGE(S)

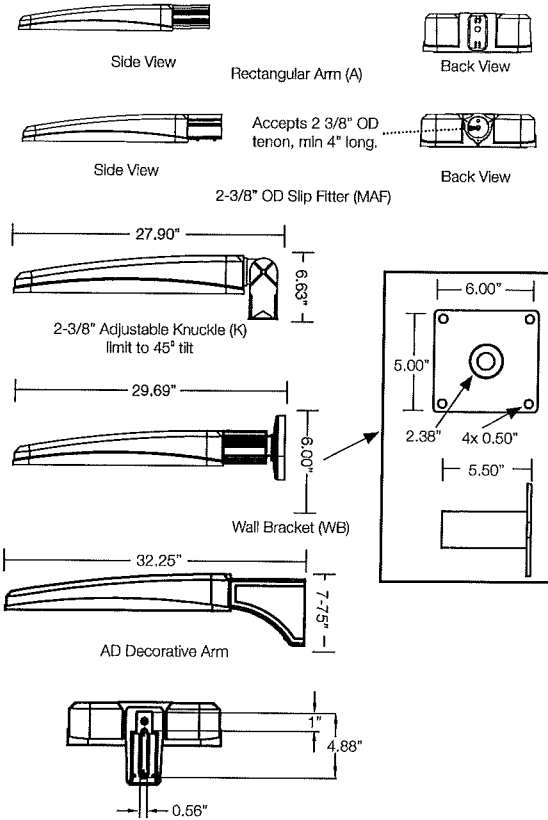


### DIMENSIONS



A	B	C	D	Weight:	EPA
29.9"	24.19"	14.25"	4.13"	25.0 lbs	1.2 ft <sup>2</sup>
(741 mm)	(614 mm)	(362 mm)	(105 mm)	(11.3 kg)	

### MOUNTING OPTIONS



### CERTIFICATIONS/LISTINGS



\*3000K and warmer CCTs only



Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928  
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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**ORDERING INFORMATION** ORDERING EXAMPLE: VPL/96L-280/4K7/4W/UNV/A/DBT/7PR-TL/GENI-04/BC

VPL								
SERIES	LED ENGINE	CCT/CRI <sup>1</sup>	ROTATION	VOLTAGE	COLOR	OPTIONS		
VPL Viper	64L-135 135W LED array 80L-180 180W LED array 80L-235 235W LED array 96L-220 220W LED array 96L-280 280W LED array 96L-315 315W LED array 96L-395 395W LED array	3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI	Leave blank for no rotation L <sup>5</sup> Optic rotation left R <sup>5</sup> Optic rotation right	UNV 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DBT Dark Bronze Textured BMT Black Matte Textured PS Platinum Silver Smooth WHT White Textured CC Custom Color (RAL#)	F Fusing BSP Bird Spikes BC Backlight control (limited to Type 4W only)		

DISTRIBUTION
FR Type 1/Front Row
2 Type 2
3 Type 3
4 Type 4
4W Type 4 Wide
5QM Type 5QM
5QN Type 5QN
5R Type 5R (rectangular)
5W Type 5W (round wide)

MOUNTING
A Rectangular Arm (formerly RA) for square or round pole
MAF Mast Arm Fitter (formerly SF2) for 2-3/8" OD horizontal arm
K Knuckle (formerly PK2) limit to 45° tilt or 2-3/8" OD horizontal arm or vertical tenon
WB Wall Bracket
AD Universal Arm for square pole
AD3 Universal Arm for 2.4"-4.1" round pole
AD4 Universal Arm for 4.2"-5.3" round pole
AD5 Universal Arm for 5.5"-5.9" round pole
AD6 Universal Arm for 6.0"-6.5" round pole

CONTROL OPTIONS
7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others)
7PR-SC 7-Pin Receptacle w/Shorting Cap
7PR-TL 7-Pin Receptacle w/Twist Lock photo control
SCP/_F <sup>1,2,5</sup> Programmable Occupancy Sensor w/ daylight control (120-277 volts only)
GENI-XX <sup>3</sup> ENERGENI
SWP <sup>1,4</sup> SiteSync Pre-Commission
SWPM <sup>1,2,4</sup> SiteSync Pre-Commission w/ Sensor

**HOUSE SIDE SHIELD ACCESSORIES**

HSS/EVP-L/90-FB/XXX 90° shield front or back  
 HSS/EVP-L/90-LR/XXX 90° shield left or right  
 HSS/EVP-L/270-FB/XXX 270° shield front or back  
 HSS/EVP-L/270-LR/XXX 270° shield left or right  
 HSS/EVP-L/360/XXX Full shield

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

**MOUNTING ACCESSORIES**

VPL-AD-RPA3 2.4"-4.1" Round Pole Adapter for AD arm  
 VPL-AD-RPA4 4.2"-5.3" Round Pole Adapter for AD arm  
 VPL-AD-RPA5 5.5"-5.9" Round Pole Adapter for AD arm  
 VPL-AD-RPA6 6.0"-6.5" Round Pole Adapter for AD arm

**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.hubbell-automation.com/products/sitesync/](http://www.hubbell-automation.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.

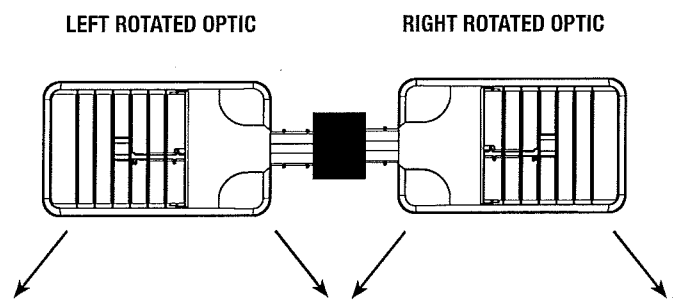
Examples: VP-L/80L-235/4K7/3/UNV/A/DBT/SWP/ SiteSync only  
 VP-L/80L-235/4K7/3/UNV/A/DBT/SWPM-40F/ SiteSync with Motion Control

<sup>1</sup> Not available with other wireless control or sensor options  
<sup>2</sup> Specify mounting height; 8 = 8' or less, 40 = 9' to 40'  
<sup>3</sup> Specify routine setting code (example GENI-04). See ENERGENI brochure and instructions for setting table and options. Not available with sensor or SiteSync options.  
<sup>4</sup> Specify group and zone at time of order. See [www.hubbell.com/lighting/sitesync/](http://www.hubbell.com/lighting/sitesync/) for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node  
<sup>5</sup> Only available with 1A, 2, 3, 4, 4W and 5R distributions  
<sup>6</sup> Order at least one SCP-REMOTE per project location to program and control  
<sup>7</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\\_files/Finer\\_Large\\_LED\\_turtle\\_spec\\_sheet.pdf](http://cdn.beaconproducts.com/content/products/specs/specs_files/Finer_Large_LED_turtle_spec_sheet.pdf)

**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

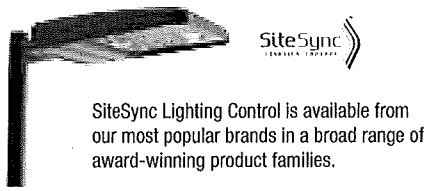
\* When ordering SiteSync at least one of these two interface options must be ordered per project.  
 + If needed, an additional Bridge Node can be ordered.



**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.



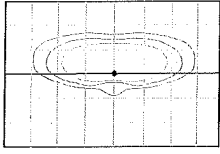
PERFORMANCE DATA				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW <sup>1</sup>	B	U	G	LUMENS	LPW <sup>1</sup>	B	U	G	LUMENS	LPW <sup>1</sup>	B	U	G
64	625 mA	135W	FR	18220	132	2	0	2	18783	137	2	0	2	16341	119	2	0	2
			2	17228	125	2	0	2	17761	129	2	0	2	15452	112	2	0	2
			3	17257	125	2	0	3	17791	129	2	0	3	15478	112	2	0	3
			4	16864	123	1	0	4	17386	126	1	0	4	15125	110	1	0	3
			4W	16797	122	2	0	3	17317	126	2	0	3	15066	109	2	0	3
			5QM	17259	125	4	0	2	17792	129	4	0	2	15479	112	4	0	2
			5QN	18023	131	4	0	0	18580	135	4	0	0	16165	117	4	0	0
			5R	17410	127	4	0	4	17948	130	4	0	4	15615	113	4	0	4
			5W	16498	120	4	0	2	17009	124	4	0	3	14797	108	4	0	2
80	700 mA	180W	FR	23230	128	2	0	2	23948	132	2	0	2	20835	115	2	0	2
			2	21965	121	3	0	3	22645	125	3	0	3	19701	109	2	0	3
			3	22003	121	2	0	4	22683	125	3	0	4	19734	109	2	0	4
			4	21502	119	2	0	4	22167	122	2	0	4	19285	106	2	0	4
			4W	21416	118	2	0	4	22079	122	2	0	4	19209	106	2	0	4
			5QM	22005	121	4	0	2	22686	125	4	0	2	19736	109	4	0	2
			5QN	22979	127	4	0	1	23689	131	4	0	1	20610	114	4	0	0
			5R	22197	122	4	0	4	22884	126	4	0	4	19909	110	4	0	4
			5W	21035	116	5	0	3	21686	120	5	0	3	18867	104	4	0	3
80	875 mA	235W	FR	27849	121	2	0	2	28711	125	2	0	2	24978	108	2	0	2
			2	26334	114	3	0	3	27148	118	3	0	4	23619	102	3	0	3
			3	26378	114	3	0	4	27194	118	3	0	4	23659	103	3	0	4
			4	25777	112	2	0	4	26575	115	2	0	5	23120	100	2	0	4
			4W	25675	111	3	0	4	26469	115	3	0	4	23028	100	3	0	4
			5QM	26381	114	4	0	2	27196	118	4	0	2	23661	103	4	0	2
			5QN	27548	119	5	0	1	28400	123	5	0	1	24708	107	5	0	1
			5R	26611	115	5	0	5	27434	119	5	0	5	23868	104	4	0	4
			5W	25218	109	5	0	3	25998	113	5	0	3	22618	98	5	0	3
96	700 mA	220W	FR	27876	128	2	0	2	28738	132	2	0	2	25002	115	2	0	2
			2	26359	121	3	0	3	27174	125	3	0	4	23641	109	3	0	3
			3	26403	121	3	0	4	27220	125	3	0	4	23681	109	3	0	4
			4	25802	119	2	0	4	26600	122	2	0	5	23142	106	2	0	4
			4W	25700	118	3	0	4	26494	122	3	0	4	23050	106	3	0	4
			5QM	26406	121	4	0	2	27222	125	4	0	2	23683	109	4	0	2
			5QN	27575	127	5	0	1	28427	131	5	0	1	24732	114	5	0	1
			5R	26637	122	5	0	5	27460	126	5	0	5	23890	110	4	0	4
			5W	25242	116	5	0	3	26023	120	5	0	3	22640	104	5	0	3
96	875 mA	280W	FR	33419	121	3	0	2	34453	125	3	0	2	29974	108	2	0	2
			2	31600	114	3	0	4	32577	118	3	0	4	28342	102	3	0	4
			3	31654	114	3	0	5	32633	118	3	0	5	28390	103	3	0	4
			4	30933	112	2	0	5	31889	115	2	0	5	27744	100	2	0	5
			4W	30810	111	3	0	5	31763	115	3	0	5	27634	100	3	0	4
			5QM	31657	114	5	0	3	32636	118	5	0	3	28393	103	4	0	2
			5QN	33058	119	5	0	1	34080	123	5	0	1	29650	101	5	0	1
			5R	31933	115	5	0	5	32921	119	5	0	5	28641	104	5	0	5
			5W	30262	109	5	0	4	31198	113	5	0	4	27142	98	5	0	3
96	1000mA	315W <sup>2</sup>	FR	35666	113	3	0	2	36769	117	3	0	2	31989	101	2	0	2
			2	33725	107	3	0	4	34768	110	3	0	4	30248	96	3	0	4
			3	33782	107	3	0	5	34827	110	3	0	5	30299	96	3	0	4
			4	33012	105	2	0	5	34033	108	2	0	5	29609	94	2	0	5
			4W	32882	104	3	0	5	33899	107	3	0	5	29492	93	3	0	5
			5QM	33785	107	5	0	3	34830	110	5	0	3	30302	96	5	0	2
			5QN	35280	112	5	0	1	36371	115	5	0	1	31643	100	5	0	1
			5R	34080	108	5	0	5	35134	111	5	0	5	30567	97	5	0	5
			5W	32302	102	5	0	4	33301	106	5	0	4	28972	92	5	0	4
96	1225mA	395W <sup>2</sup>	FR	39569	101	3	0	4	43125	110	3	0	3	37518	96	3	0	2
			2	39569	101	3	0	4	40793	104	3	0	4	35490	91	3	0	4
			3	39619	101	3	0	5	40845	104	3	0	5	35535	91	3	0	5
			4	38723	98	3	0	5	39921	101	3	0	5	34731	88	2	0	5
			4W	38570	98	3	0	5	39763	101	3	0	5	34594	88	3	0	5
			5QM	39623	101	5	0	3	40848	104	5	0	3	35538	90	5	0	3
			5QN	41394	105	5	0	1	42675	109	5	0	1	37127	95	5	0	1
			5R	39969	102	5	0	5	41205	105	5	0	5	35848	91	5	0	5
			5W	37877	97	5	0	4	39048	100	5	0	4	33986	87	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.  
<sup>2</sup> 315W and 395W 3000K versions are not DLC QPL listed. Reference highlighted cells in table.

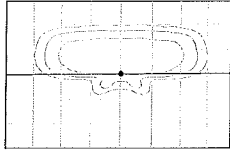


# PHOTOMETRICS

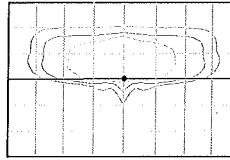
Type FR - Front Row/Auto Optic



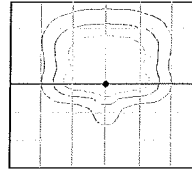
Type 2



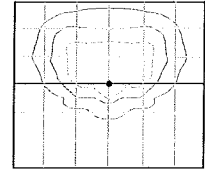
Type 3



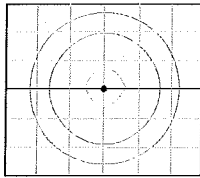
Type 4



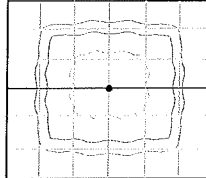
Type 4W



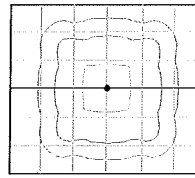
Type 5W



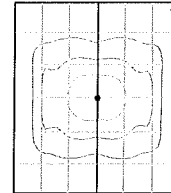
Type 50N



Type 50M



Type 5R



## ELECTRICAL DATA

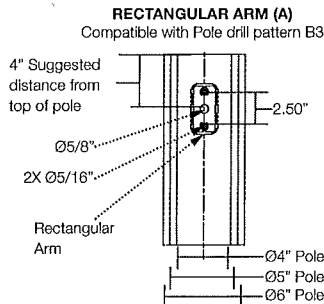
# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
64	1	625 mA	120	135	1.4
			277		0.6
			347		0.5
			480		0.3
80	2	700 mA	120	180	1.8
			277		0.8
			347		0.6
			480		0.5
80	2	875 mA	120	235	2.4
			277		1.0
			347		0.8
			480		0.6
96	2	700 mA	120	220	2.2
			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	1000 mA	120	315	3.2
			277		1.4
			347		1.1
			480		0.8
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°C	1	0.98	0.97	0.97	0.96	>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.

## 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



## TENON TOP POLE BRACKET ACCESSORIES (Order Separately)

(2 3/8" OD tenon)

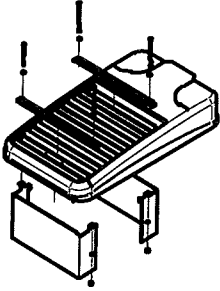
Catalog Number	Description
SETA2-XX <sup>1,2</sup>	Square tenon adapter (4 at 90 degrees)
RETA2-XX <sup>1,3</sup>	Round tenon adapter (4 at 90 degrees)
TETA2-XX <sup>1,2</sup>	Hexagonal tenon adapter (3 at 120 degrees)

1 Replace XX with color choice, eg.: DB for Dark Bronze

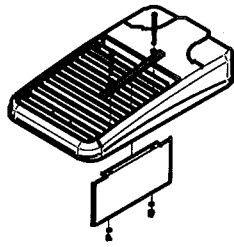
2 Only for use with AD mounting option

3 Only for use with AD3 mounting option

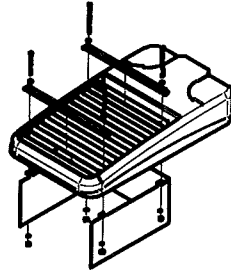
## HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



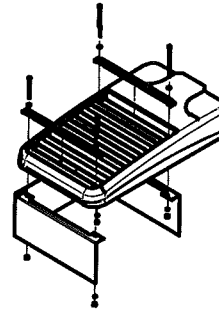
**HSS/EVP-L/90-FB/XXX**  
90° shield front or back  
(2 shields shown)



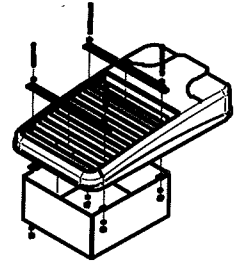
**HSS/EVP-L/90-LR/XXX**  
90° shield left or right  
(1 shield shown in left orientation)



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

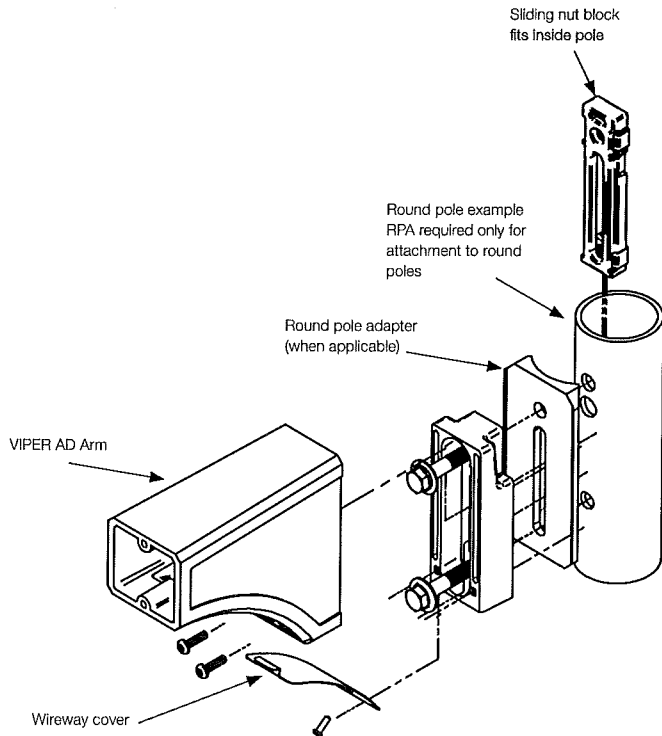


**HSS/EVP-L/270-LR/XXX**  
270° shield left or right  
(1 shield shown in right orientation)



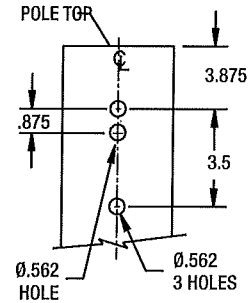
**HSS/EVP-L/360/XXX**  
Full shield  
(1 shield shown)

## AD ARM MOUNTING INSTRUCTIONS



## DECORATIVE ARM (AD)

Compatible with pole drill pattern S2













Vertical Angle	Horizontal Angles										
	90	95	105	115	125	135	145	155	165	175	180
0	0	0	0	0	0	0	0	0	0	0	0
2.5	1550	1536	1504	1470	1445	1415	1395	1364	1358	1343	1357
5	1476	1448	1393	1335	1259	1192	1142	1094	1044	1004	1023
7.5	1337	1288	1182	1068	974	934	842	785	772	780	785
10	1234	1132	895	695	624	553	577	619	654	655	664
12.5	1137	983	659	502	428	355	377	426	472	486	497
15	1235	1077	691	463	304	251	253	275	319	349	353
17.5	1208	1077	734	465	243	175	172	185	226	251	260
20	1052	925	633	401	212	129	120	125	141	143	149
22.5	872	756	491	301	169	108	96	89	71	66	65
25	662	529	333	206	123	92	81	71	60	57	58
27.5	523	349	190	138	94	78	68	61	51	48	49
30	531	323	155	100	74	67	59	50	41	41	41
32.5	543	317	146	90	68	58	52	43	36	33	34
35	542	301	137	84	65	54	46	36	31	30	30
37.5	533	282	127	79	59	49	39	32	30	30	30
40	498	229	111	68	54	45	37	32	31	30	30
42.5	478	196	96	60	47	39	35	32	31	30	30
45	464	179	85	55	43	37	33	30	29	29	29
47.5	468	165	78	50	41	37	34	30	30	29	29
50	486	153	72	48	39	36	34	32	30	30	29
52.5	530	142	67	45	39	36	35	33	32	30	30
55	630	140	63	43	37	36	36	34	32	31	32
57.5	627	129	61	41	37	37	37	35	32	31	32
60	635	122	58	41	37	37	37	34	32	29	30
62.5	584	108	54	40	37	36	36	33	30	26	28
65	528	96	49	39	36	35	32	30	26	22	25
67.5	447	85	44	39	35	32	28	26	23	17	20
68	424	83	43	38	35	32	27	25	22	17	19
70	313	72	40	37	34	28	24	23	20	14	16
72.5	215	59	37	35	30	24	19	19	16	10	10
75	146	48	34	32	25	19	15	14	12	6	6
77.5	105	39	32	27	20	14	12	11	8	3	3
80	70	28	26	21	16	12	10	7	4	1	0
82.5	50	19	20	16	13	10	8	5	1	0	0
85	28	14	14	12	10	8	6	3	0	0	0
87.5	10	10	10	10	8	6	4	1	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0