

M I T R E



ARCHITECTURAL AREA LIGHTING

“to create, inspire and nurture excellence in each other”



Energy Efficiency

The Mitre is designed to use electrical energy in the most efficient possible way. The reflectors are designed to direct the illumination on the ground with no stray light which translates into wasted energy. The result is more light with less energy consumption.

Light Pollution

The Mitre reflectors are designated as a full cutoff which means there is no light emitted above 90 degrees horizontal.



IDA Approved Dark-Sky Friendly versions of these luminaires are available.

Longevity

We manufacture all our products to have a life span as long as the building or space they illuminate. The primary material used for both our luminaire and pole products is aluminum to resist corrosion and the need for maintenance. Aluminum will not need the periodic refinishing required of steel products that will eventually rust and corrode. All our internal parts and fasteners are made of aluminum or stainless steel. Our reflector enclosures are kept dust free and dry with the use of silicone gaskets to prevent light degradation from contaminants.

Sustainability

AAL develops our products with recycling and resource management in mind. We recycle all incoming packaging materials. Our products are shipped in easy to recycle packaging materials. Our state of the art finishing system uses eco friendly cleansing and preparation chemicals that are harmless enough to send to the drain without further processing. Our powder coating process eliminates the release of volatile chemicals into the atmosphere. The Mitre, like all AAL products is produced with renewable materials such as aluminum and stainless steel, and made in the USA.

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MITRE

The Mitre is an expression of classic geometric form. Designed to compliment architectural expressions of precision, structure, and line. The simple elegance of the Mitre series belies its engineered strength and enduring quality. State of the art optical systems provide precise, energy efficient illumination. The Mitre series is offered in three sizes with a matching bollard for proper scale and application where form is a prerequisite to function.



M2PXA-H3-PR4 and M1P-H3-PR4

M1 *Large Scale*

- Pole mount
- Wall mount
- Streets
- Building facades
- Parking area

M2 *Medium Scale*

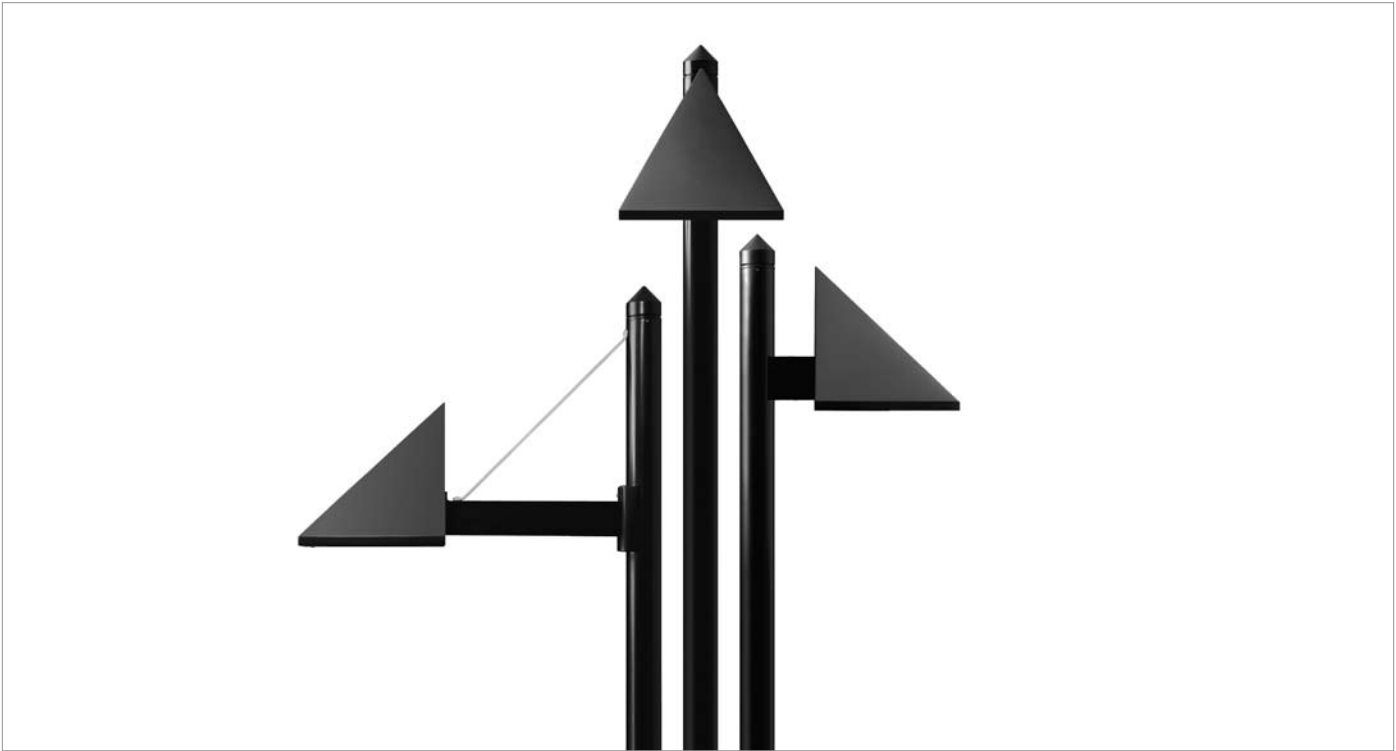
- Pole mount
- Wall mount
- Up or down orientation
- Site lighting
- Streetscapes
- Building facades
- Emergency/Egress

M3 *Wall Sconce*

- Wall mount
- Building facades
- Emergency/Egress
- Interiors

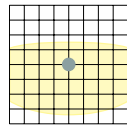
M4 *Bollard*

- Single or double head
- Building entrances
- Pedestrian areas
- Emergency/Egress

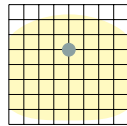


The Mitre is designed to use ED-17 and T-6 ceramic metal halide lamps to ensure color accuracy and consistency. High output fluorescent lamps are available in the M2 for instant on requirements and high color rendering applications such as retail sites and schools.

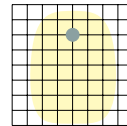
Distribution Patterns



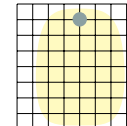
TYPE 2
Wide



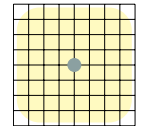
TYPE 3
Asymmetric



TYPE 4
Forward
Throw



FORWARD
THROW



TYPE 5
Symmetric

M1 Large Scale

- 150 to 400 watts HID (HPS and PSMH)
- Type 2, 3, 4, forward throw, square Type 5

M2 Medium Scale

- 57 and 70 watts High Output Fluorescent
- 50 to 150 watts HID (HPS, MH, PSMH)
- Type 2, 3, 4, square Type 5

M3 Wall Sconce

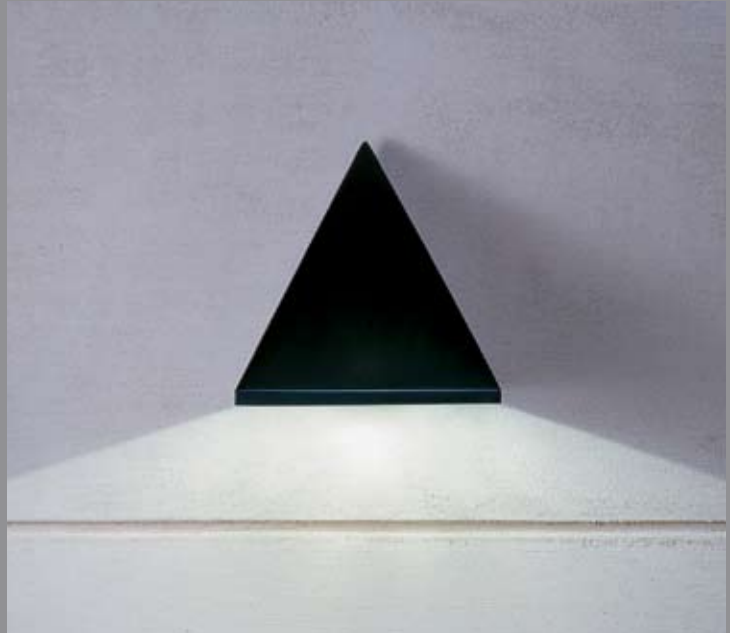
- 26/32/42 watt CF lamp
- Type 3

M4 Bollard

- 26/32/42 watt CF lamp
- Type 2

Lighting Performance

AAL reflectors are IES rated as full cutoff for reduced glare, dark sky compliance and excellent lighting performance.



Full Cutoff Reflector Systems

- Uniform illumination for a sense of security
- Wide pole spacing for lower installation costs
- Glare control for better night vision
- Energy efficiency for lower operating costs
- Sealed optics for lasting performance



Rugged Construction

- Cast 356 aluminum construction.
- One-piece unitized castings (M2, M3, and M4) with integral reinforcing web for maximum impact resistance.
- Rigid cast door frame ensures gasket seal.

Optical Performance

- Totally sealed optics for long term performance.
- Molded memory retentive silicone gaskets.
- Captive pressure lock fasteners.
- Tempered glass lens.

Trouble Free Operation

- Easy access to the lamp and ballast.
- Stainless steel hardware and hinges.
- Door hooks off for maintenance.
- ETL listed for wet location use.
- Electrical components are installed, wired, and tested before shipping.



Design Quality

Vandal Resistant

Vandal resistant lighting is no longer limited to a palette of unsightly fixtures. The Mitre is designed with aesthetics and vandal resistance on an equal footing. The cast aluminum housing will not crack like a die casting when struck by an object. The integral reinforcing web keeps the housing rigid and resistant to damage.



Impact Resistant Lens

An optional impact resistant lens for the M2 of Plexiglas® DR® acrylic helps protect from vandalism.

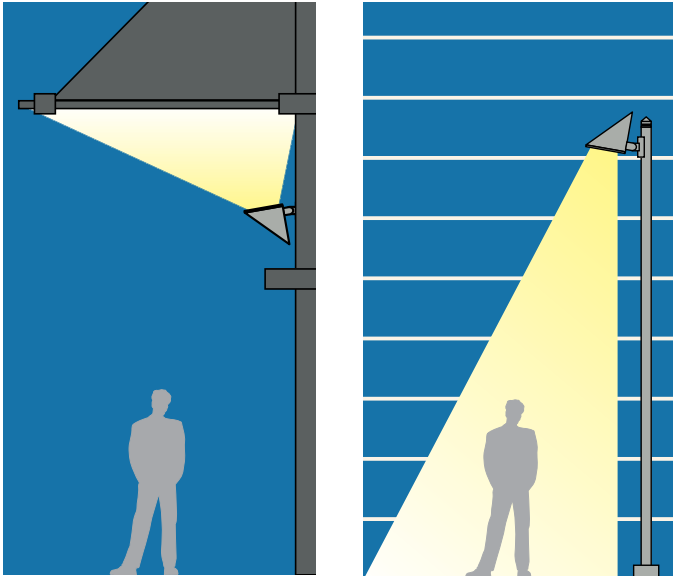


Finish

The Mitre undergoes a state of the art finishing process starting with a five stage pretreatment regimen of: clean/degrease, rinse, phosphate etch, deionized water rinse, and polymer sealer/undercoat. The parts are then oven dried, coated and cured. The powder coat finish is designed to meet the stringent criteria of the AAMA 2604-02 specification (American Architectural Manufacturers Association) to maximize gloss retention, while minimizing color fade and chalking resistance.



ARTICULATING ARM



An articulating arm is available for the M2. It allows adjustment of $\pm 20^\circ$ for fixture aiming. Aiming the fixture can provide control of light trespass or uplighting



a vaulted space. The rugged cast aluminum painted arm is fully gasketed and is available for wall or pole mounting.

XA ARM FOR THE M2



M2PXA-H3-PR4

An extended arm is available for the M2 fixture. Wall or pole mounted versions add to the versatility of the design. The cast arm fits to the side of a four inch diameter pole and comes with a complementary cast pole cap. The angled strap is painted to match the color of the fixture.

Egress



M2WD-H2

The Mitre has a full range of egress lighting options.

- **M1 & M2**

Two emergency lighting options are available with the M1 and M2.

1. QRS—The quartz restrike option uses an electronic controller to energize a quartz lamp, providing illumination until the HID lamp is started or restored to full brightness.
2. QL— An auxiliary quartz lamp that is wired to a separate emergency power circuit.



M2WD-H2

- **M3 & M4**

The M3 Sconce and M4 Bollard can be fitted with a back up power supply - BBU - that will power the compact fluorescent lamp to approximately 23% of the lumen output for up to ninety minutes. BBU for the M3 is remotely mounted.



M3-CF



2-M1P-H5-PR5 & M2WD-H4

M2P-H3-PR4





M2PX4-H3-PR4

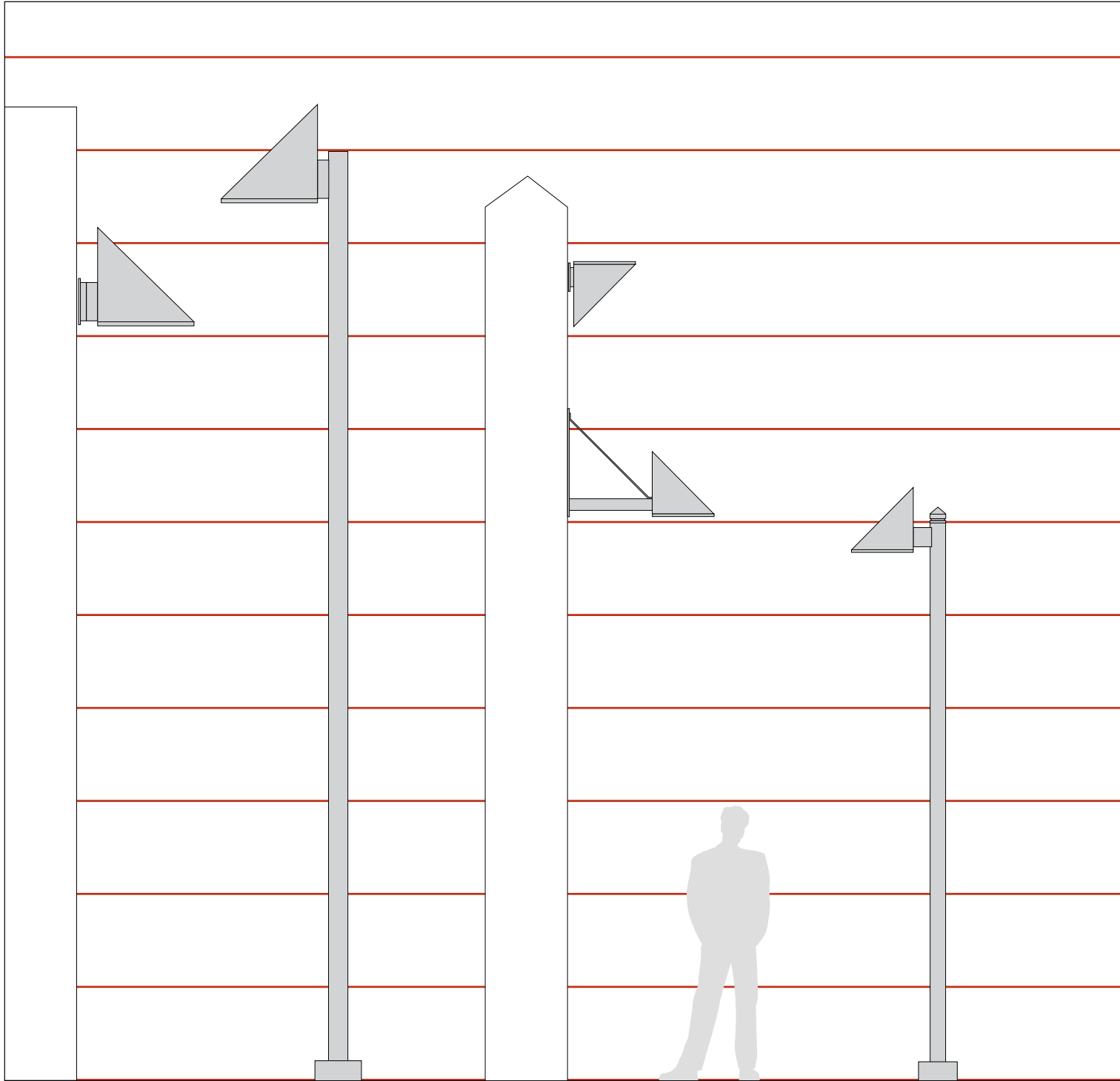
M4



4-M1P-FT-PS5



MITRE



FIXTURE
POLE

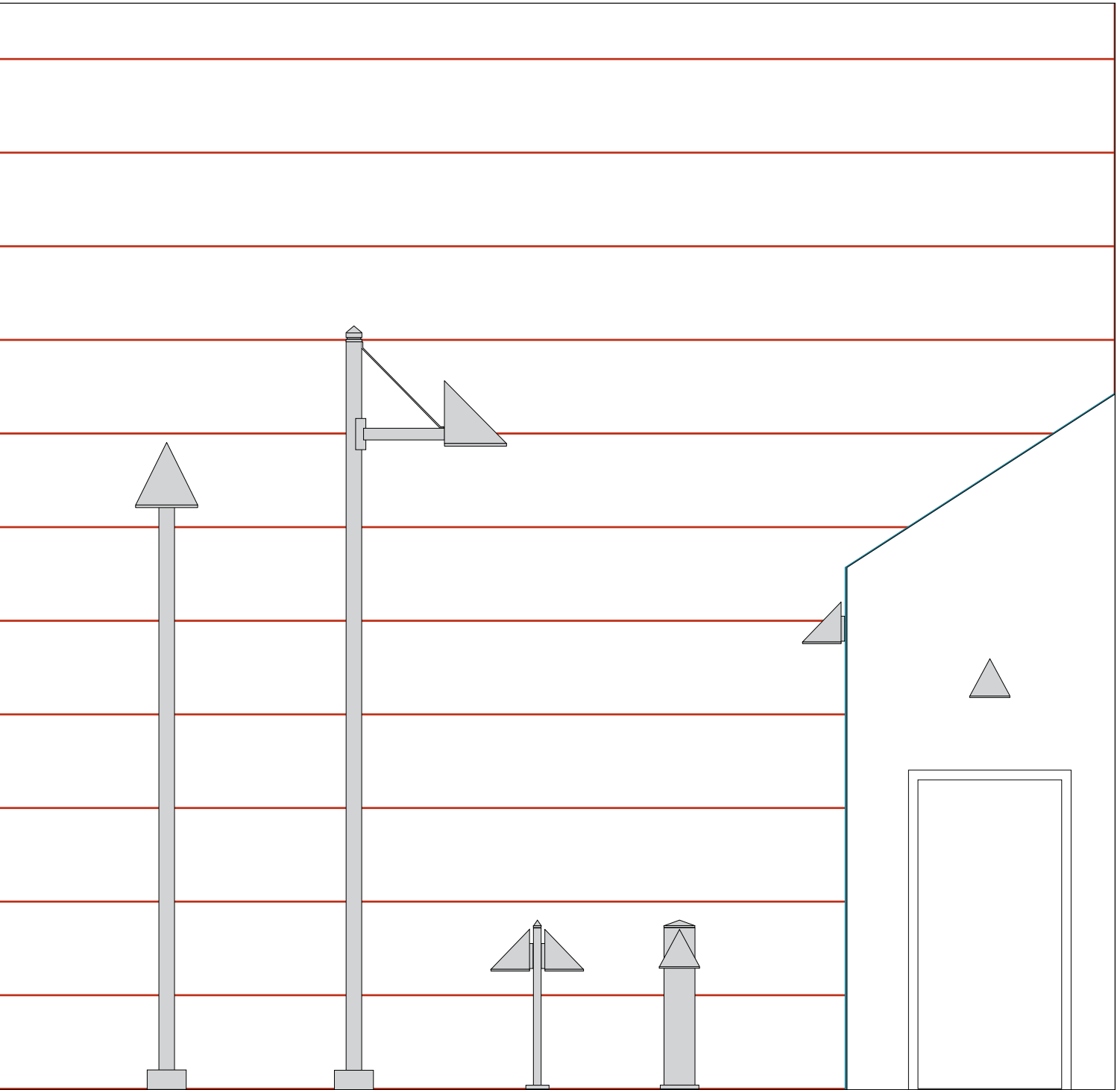
M1WD

M1P
PR5-5R20

M2WU

M2WDXA

M2P
PR4-4R12



M2P
PR4-4R14

M2PXA
PR4-4R16

M4T

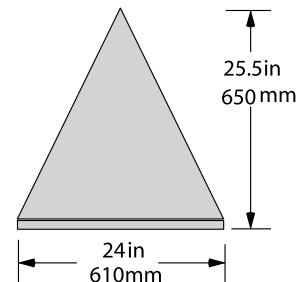
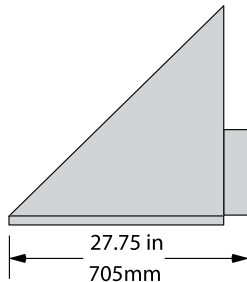
M4

M3-CF

M3-CF

Ordering Examples

FIXTURE	LAMP/BALLAST	POLE	OPTIONS	COLOR
M1WD-H2	150HPS	•	•	AWT
M1P-H3	250PSMH	PR5-5R16-188	•	BLK



Pole Mounted

M1P-H2	Pole mounted, type 2 horizontal reflector
M1P-H3	Pole mounted, type 3 horizontal reflector
M1P-H4	Pole mounted, type 4 horizontal reflector
M1P-FT	Pole mounted, forward throw reflector
M1P-H5	Pole mounted, type 5 horizontal reflector

WEIGHT: 46 POUNDS EPA: 2.0; IP: 55

Wall Mounted

M1WD-H2	Wall mounted, type 2 horizontal reflector
M1WD-H3	Wall mounted, type 3 horizontal reflector
M1WD-H4	Wall mounted, type 4 horizontal reflector
M1WD-FT	Wall mounted, forward throw reflector

WEIGHT: 46 POUNDS EPA: 2.0; IP: 55

Lamp/Ballast

150PSMH	Pulse start 150 watt metal halide ballast 120/208/240/277 volt. Use a mogul base, ED-28 lamp.
250PSMH	Pulse start 250 watt metal halide ballast 120/208/240/277 volt. Use a mogul base, ED-28 lamp.
320PSMH	Pulse start 320 watt metal halide 120/208/240/277 volt ballast. Use a mogul base, ED-28 lamp.
350PSMH	Pulse start 350 watt metal halide 120/208/240/277 volt ballast. Use a mogul base, ED-28 lamp.
400PSMH	Pulse start 400 watt metal halide multitap ballast 120/208/240/277 volt. Use a mogul base, ED-28 lamp.
150HPS	150 watt high pressure sodium multitap ballast 120/208/240/277 volt. Use a mogul base, ED-23 ¹ / ₂ lamp.
200HPS	200 watt high pressure sodium 120/208/240/277 volt ballast. Use a mogul base, ED-18 lamp.
250HPS	250 watt high pressure sodium multitap ballast 120/208/240/277 volt. Use a mogul base, ED-18 lamp.
400HPS	400 watt high pressure sodium multitap ballast 120/208/240/277 volt. Use a mogul base, ED-18 lamp.

All ballasts are factory wired for 277 volts, unless specified. Lamps not included.

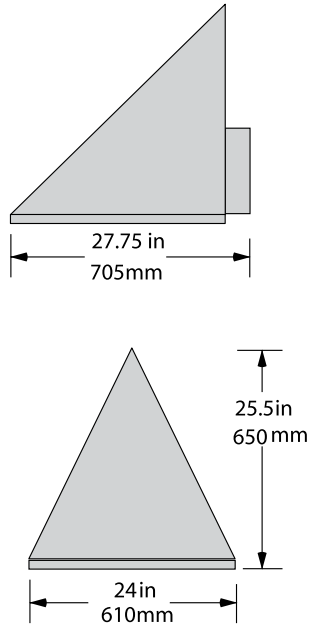
All applicable ballasts are EISA compliant.

For horizontal reflector models with PSMH mogul base ballasts, use a lamp approved for horizontal burning.

Options

QL	Socket for a T-4 mini-cand halogen lamp. Field wired to a separate electrical circuit. (Lamp wattage not to exceed ballast wattage).
QRS	Restrike controller and socket for a T-4 mini-cand halogen lamp. Not required with electronic ballast. (Lamp wattage not to exceed ballast wattage.)
LA	12 inch long arm extension, for a 5 inch O.D. pole.
HSS	House Side Shield. Factory Installed. <i>Not for type 5.</i>
347	120/277/347 volt ballast.

Specifications



HOUSING

The fixture housing shall be a one-piece cast 356 aluminum back and integral arm, with a minimum wall thickness of .188 in. The housing shall have cast in place threaded inserts for mounting the electrical components. The door frame shall be cast of 356 aluminum. The door frame shall be attached to the housing with two stainless steel hinges and opened by loosening four captive stainless steel fasteners. The door frame shall seal to the housing with a molded memory retentive silicone gasket. The cast arm shall be contoured to fit a five inch diameter pole. The wall mounting plate shall be cast aluminum and fully gasketed.

The lens shall be clear tempered glass, sealed to the cast aluminum door frame with a silicone gasket and held in place with eight clips around the perimeter.

The optical assembly shall consist of a housing module with die formed, specular Alzak® reflector panels. The reflector module shall be removable for easy access to the ballast. The reflector system(s) shall be tested by an independent testing laboratory and classified as IES full cutoff optics.

ELECTRICAL

The sockets are mogul base, pulse rated porcelain. Fixtures shall have the ballast assembly installed, wired and tested prior to shipment.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

EISA COMPLIANCE

AAL is committed to complying with U.S. EISA requirements. All applicable products manufactured for sale in the United States after January 1, 2009, will meet EISA requirements.

CERTIFICATION

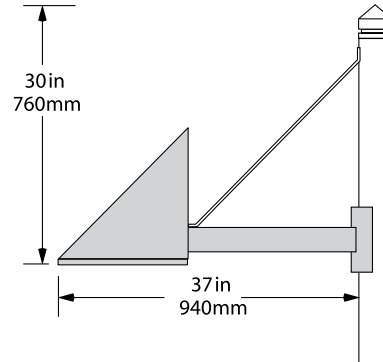
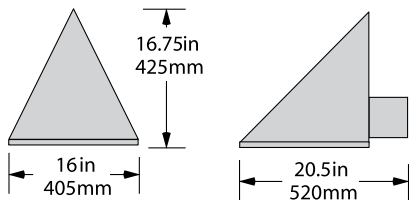
Fixtures shall be listed with ETL for outdoor, wet location use, UL 1598 and Canadian CSA C22.2 no.250. IP = 55

WARRANTY

Fixture is warranted for three years. Ballast components carry the ballast manufacturer's limited warranty. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by AAL and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. Contact AAL for complete warranty language, exceptions, and limitations.

Ordering Examples

FIXTURE	LAMP/BALLAST	POLE	OPTIONS	COLOR
M2PXA-H2	150PSMHT6	PR4-4R12	VRL	BLK
M2WD-H2	70MHT6	•	VRL	DGN



Pole Mount

M2P-H2	Pole mounted, type 2 horizontal reflector
M2P-H3	Pole mounted, type 3 horizontal reflector
M2P-H4	Pole mounted, type 4 horizontal reflector
M2P-H5	Pole mounted, type 5 horizontal reflector

WEIGHT: 32 POUNDS EPA: .90; IP: 65

Extension Arm

M2PXA-H2	Pole mounted, type 2 horizontal reflector
M2PXA-H3	Pole mounted, type 3 horizontal reflector
M2PXA-H4	Pole mounted, type 4 horizontal reflector
M2PXA-H5	Pole mounted, type 5 horizontal reflector

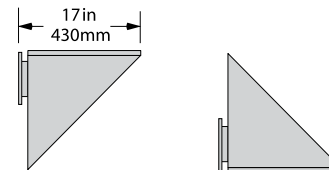
WEIGHT: 41 POUNDS EPA: 1.55; IP: 65

Wall Mount

Up Light

M2WU-H2	Wall mounted, type 2 horizontal reflector
M2WU-H3	Wall mounted, type 3 horizontal reflector
M2WU-H4	Wall mounted, type 4 horizontal reflector

WEIGHT: 32 POUNDS EPA: .90; IP: 65



Down Light

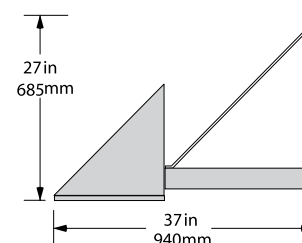
M2WD-H2	Wall mounted, type 2 horizontal reflector
M2WD-H3	Wall mounted, type 3 horizontal reflector
M2WD-H4	Wall mounted, type 4 horizontal reflector

WEIGHT: 32 POUNDS EPA: .90; IP: 65

Down Light with Extended Arm

M2WDX-H2	Wall mounted, type 2 horizontal reflector
M2WDX-H3	Wall mounted, type 3 horizontal reflector
M2WDX-H4	Wall mounted, type 4 horizontal reflector

WEIGHT: 32 POUNDS EPA: .90; IP: 65



Ordering Examples

FIXTURE	LAMP	POLE	OPTIONS	COLOR
M2PXA-H2	150MHT6	PR4-4R12	VRL	BLK
M2PXA-H3	150HPS	PR4-4R16	•	DGN

Lamp/Ballast

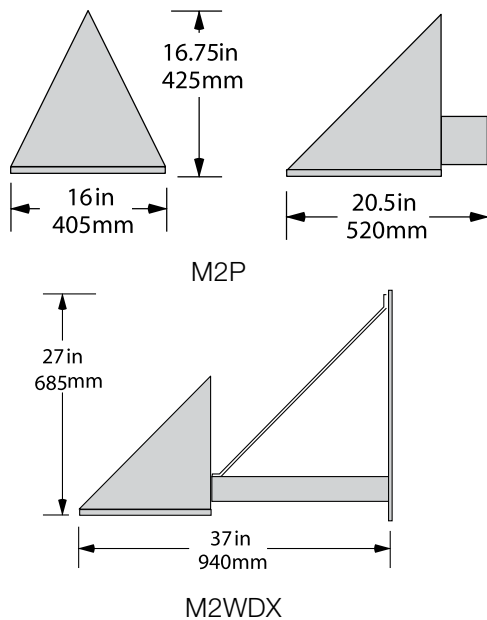
PL57	57 watt compact fluorescent ballast 120 thru 277 volt. Use a GE F57QBX lamp.
PL70	70 watt compact fluorescent ballast 120 thru 277 volt. Use a GE F70QBX lamp.
50MH	50 watt metal halide 120/277 volt ballast. Use a medium base, clear ED-17 lamp.
50MHEB	50 watt electronic metal halide ballast 120 thru 277 volt. Use a medium base, ED-17 lamp.
70MH	70 watt metal halide multitap ballast 120/208/240/277 volt. Use a medium base, clear ED-17 lamp.
70MHEB	70 watt electronic metal halide ballast 120 thru 277 volt. Use a medium base, clear ED-17 lamp.
70MHT6	70 watt metal halide ballast 120/277 volt. Use a G12 base, clear T-6 ceramic MH lamp.
70MHT6EB	70 watt electronic metal halide multitap ballast 120 thru 277 volt. Use a G12 base, clear T-6 ceramic MH lamp.
100MH	100 watt metal halide multitap ballast 120/208/240/277 volt. Use a medium base, clear ED-17 lamp.
150PSMH	Pulse start 150 watt metal halide multitap ballast 120/208/240/277 volt. Use a medium base, clear ED-17 lamp.
150PSMHT6	Pulse start 150 watt metal halide multitap ballast 120/208/240/277 volt. Use a G12 base, clear T-6 ceramic MH lamp.
175MH	175 watt metal halide multitap ballast 120/208/240/277 volt. Use a medium base, clear ED-17 lamp.
70HPS	70 watt high pressure sodium ballast 120/208/240/277 volt. Use a medium base, clear ED-17 lamp.
100HPS	100 watt high pressure sodium ballast 120/208/240/277 volt. Use a medium base, clear ED-17 lamp.
150HPS	150 watt high pressure sodium ballast 120/208/240/277 volt. Use a medium base, clear ED-18 lamp.

All fixtures prewired for 277 volts. Lamps not included.

Options

PVW	Arm pivots 20o with cast aluminum wall plate. Not for extended arm models (wall mount models only).
PV	Articulating arm pivots 20o, contoured to fit to a 4 in/100 mm pole
VRL	Vandal resistant, acrylic lens. Down position only.
QL	Socket for a T-4 mini-cand halogen lamp. Field wired to a separate electrical circuit. (Lamp wattage not to exceed ballast wattage).
QRS	Restrike controller and socket for a T-4 mini-cand halogen lamp. Not required with electronic ballast. (Lamp wattage not to exceed ballast wattage.)
HSS	House Side Shield. Factory Installed. Not for type 5.
347	120/277/347 volt ballast.

Specifications



HOUSING

The fixture housing shall be one-piece cast 356 aluminum with a minimum wall thickness of .188 inch. The housing shall have cast in place threaded inserts for mounting the electrical components. The door frame shall be cast of 356 aluminum. The door frame shall be attached to the housing with two stainless steel hinges and be opened by loosening two captive fasteners. The door frame shall seal to the housing with a molded memory retentive silicone gasket.

The lens shall be clear tempered glass that is sealed to the cast aluminum door frame with a silicone gasket and held in place with eight clips around the perimeter.

The optical assembly shall consist of a housing module with die formed, specular Alzak® reflector panels. The reflector module shall be removable for easy access to the ballast. The reflector system(s) shall be tested by an independent testing laboratory and classified as a IES full cutoff optics.

ELECTRICAL

The sockets are medium base, pulse rated porcelain for E-17 or G12 base for T-6 ceramic metal halide lamps. Fixtures shall have the ballast assembly installed, wired and tested before shipment.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

EISA COMPLIANCE

AAL is committed to complying with U.S. EISA requirements. All applicable products manufactured for sale in the United States after January 1, 2009, meet EISA requirements.

CERTIFICATION

Fixtures shall be listed with ETL for outdoor, wet location use, UL 1598 and Canadian CSA C22.2 no.250. IP = 65

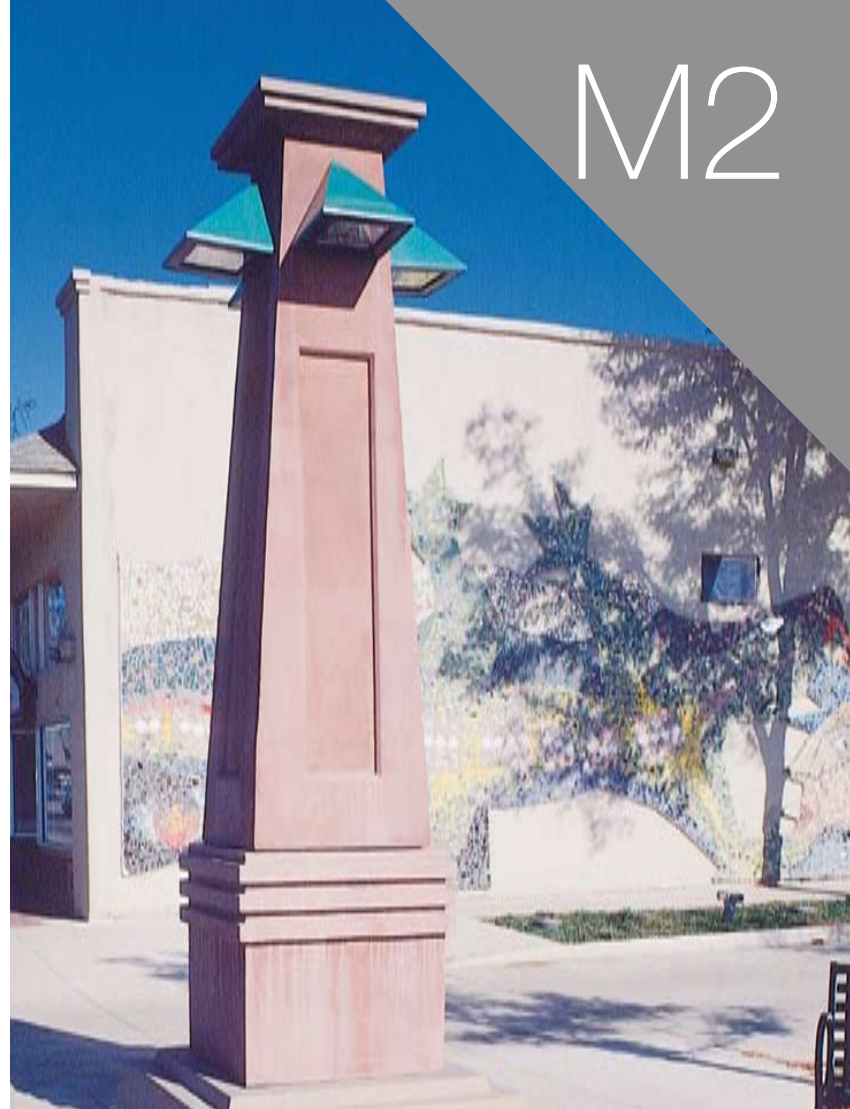
WARRANTY

Fixture is warranted for three years. Ballast components carry the ballast manufacturer's limited warranty. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by AAL and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. Contact AAL for complete warranty language, exceptions, and limitations.

M2



M2PXA-H5



M3-CF

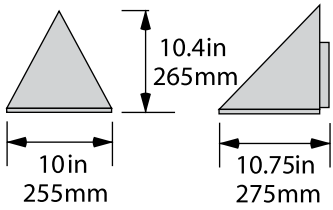


M2WU-H4

MITRE

M3

Wall Sconce



FIXTURE

M3-CF Wall Sconce with 120 thru 277 volt electronic ballast for 26, 32 or 42 watt 4 pin compact fluorescent lamp. Installs onto a standard octagonal j-box. *Must specify 26, 32 or 42.*

WEIGHT: 10 POUNDS IP: 65

M3 is for a down position only.

OPTIONS

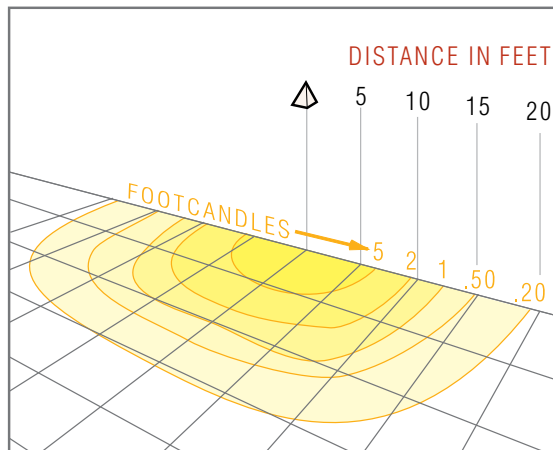
BBU Battery backup powers a compact fluorescent lamp for up to 90 minutes during a power failure. Output of the 26 watt lamp will be 450 lumens. Output of the 32 watt lamp will be 575 lumens. Output of the 42 watt lamp will be 750 lumens. BBU for the M3 is remotely mounted.

M3 REFLECTOR DESIGN



The M3 wall sconce incorporates an efficient, forward throw reflector. The reflector is designed to effectively illuminate entrances, corridors and for egress applications using the optional standby battery. The reflector is matched to a high efficiency, triple tube compact fluorescent lamp that is available in three color temperatures.

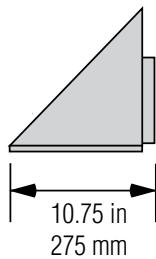
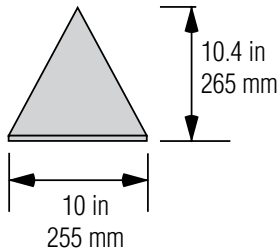
M3 PHOTOMETRY



The chart illustrates the footcandle values for an M3 wall sconce with a 42 watt (3200 lumen) lamp. The 26 watt (1800 lumen) lamp can be substituted by multiplying the footcandle (fc) values by .56. The 32 watt (2400 lumen) lamp can be substituted by multiplying the footcandle (fc) values by .75.

All testing performed by a certified independent laboratory.

Specifications



HOUSING

The fixture shall be one-piece cast 356 aluminum with a minimum wall thickness of .188 inch. The housing shall mount over a 3¾ inch octagonal wall box. The lens is clear DR acrylic, sealed to the housing with a silicone gasket. The fixture is relamped by loosening four captive stainless steel fasteners.

The optical assembly shall consist of a die formed, specular Alzak® reflector with forward throw optics. The reflector is easily removed for easy access to the ballast.

The ballast shall be electronic, rated for -30°C starting with a 4 pin, 26, 32 or 42 watt lamp socket. The ballast is factory mounted and wired in the housing.

The fixture is attached with two stainless steel screws to an adapter ring that mounts to a 3¾ inch octagonal wall box. Adapter ring and hardware are included.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

EISA COMPLIANCE

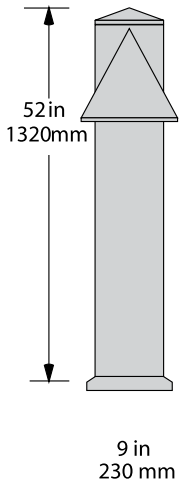
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CERTIFICATION

Fixtures shall be listed with ETL for outdoor, wet location use, UL 1598 and Canadian CSA C22.2 no.250. IP = 65

WARRANTY

Fixture is warranted for three years. Ballast components carry the ballast manufacturer's limited warranty. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by AAL and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. Contact AAL for complete warranty language, exceptions, and limitations.



FIXTURE

M4-CF Bollard with 120 through 277 volt electronic ballast for 26, 32 or 42 watt 4 pin compact fluorescent lamp. Must specify 26, 32, or 42 watt.

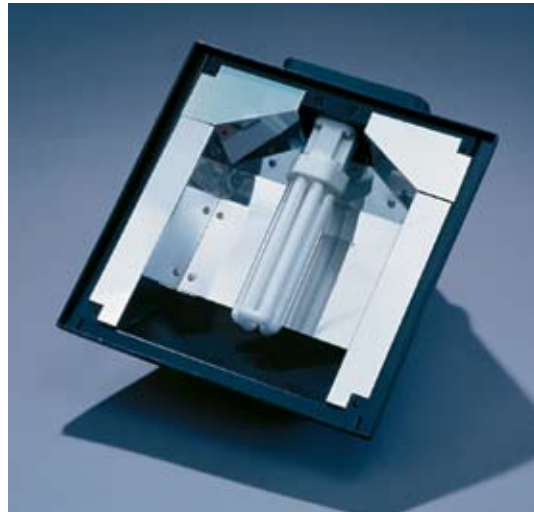
M4T-CF Twin head bollard with 120 through 277 volt electronic ballast for 26, 32 or 42 watt 4 pin compact fluorescent lamp. Must specify 26, 32, or 42 watt.

WEIGHT: 10 POUNDS; IP: 65

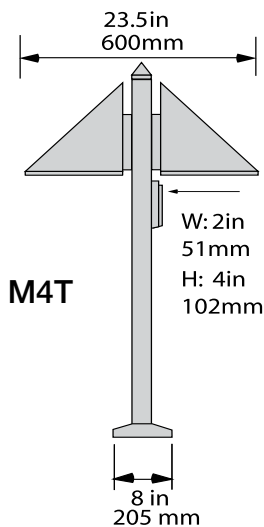
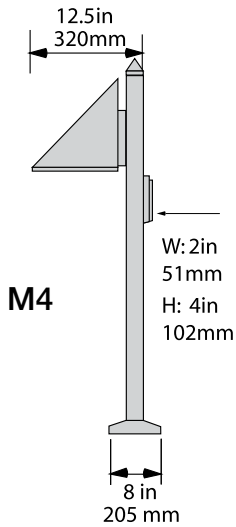
OPTIONS

BBU Battery backup powers a compact fluorescent lamp for up to 90 minutes during a power failure. Output of the 26 watt lamp will be 450 lumens. Output of the 32 watt lamp will be 575 lumens. Output of the 42 watt lamp will be 750 lumens.

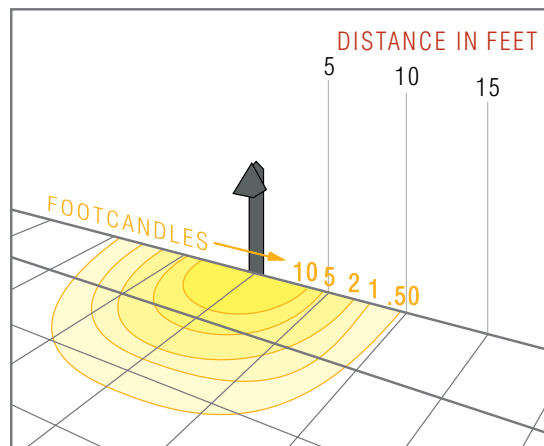
M4 REFLECTOR DESIGN



The M4 reflector is designed to illuminate pathways and pedestrian areas with its wide distribution. The reflector is matched to a high efficiency, triple tube compact fluorescent lamp that is available in three color temperatures.



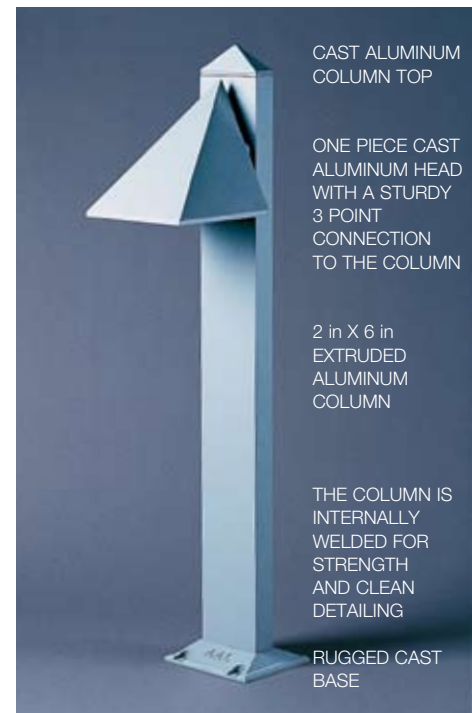
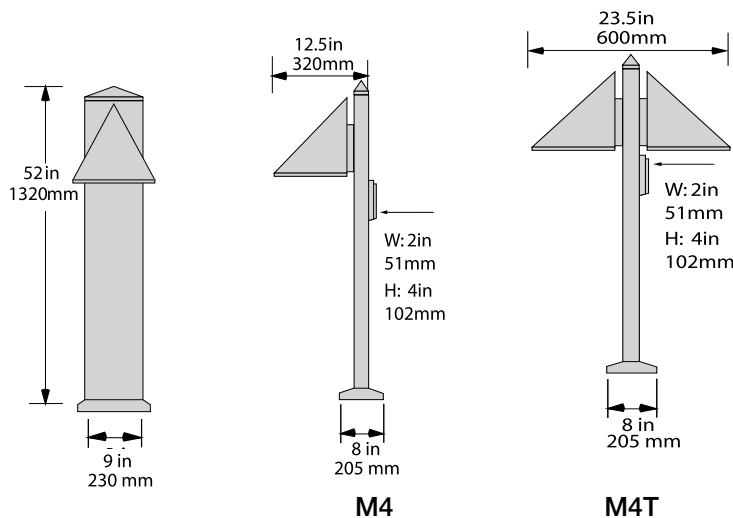
M4 PHOTOMETRY



The chart illustrates the footcandle values for an M3 wall sconce with a 42 watt (3200 lumen) lamp. The 26 watt (1800 lumen) lamp can be substituted by multiplying the footcandle (fc) values by .56. The 32 watt (2400 lumen) lamp can be substituted by multiplying the footcandle (fc) values by .75.

All testing performed by a certified independent laboratory.

Specifications



HOUSING

The fixture shall be one-piece cast 356 aluminum with a minimum wall thickness of .188 inch. The lens is clear DR acrylic, sealed to the housing with a silicone gasket. The fixture is relamped by loosening four captive stainless steel fasteners. The base is heavy cast 356 aluminum with a minimum .250 inch wall thickness. The column is extruded 6061 T-6 aluminum internally welded to the base. The top cap shall be cast 356 aluminum. The fixture is mounted to the column with three stainless steel 1/4-20 fasteners and is fully gasketed.

The optical assembly shall consist of a die formed, specular Alzak® reflector with wide throw type 2 optics. The reflector is easily removed for easy access to the ballast.

The ballast shall be electronic, rated for -30°C starting with a 4 pin, 26, 32 or 42 watt lamp socket. The ballast is factory mounted and wired in the housing.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

EISA COMPLIANCE

AAL is committed to complying with U.S. EISA requirements. All applicable products manufactured for sale in the United States after January 1, 2009, meet EISA requirements.

CERTIFICATION

Fixtures shall be listed with ETL for outdoor, wet location use, UL 1598 and Canadian CSA C22.2 no.250. IP = 65

WARRANTY

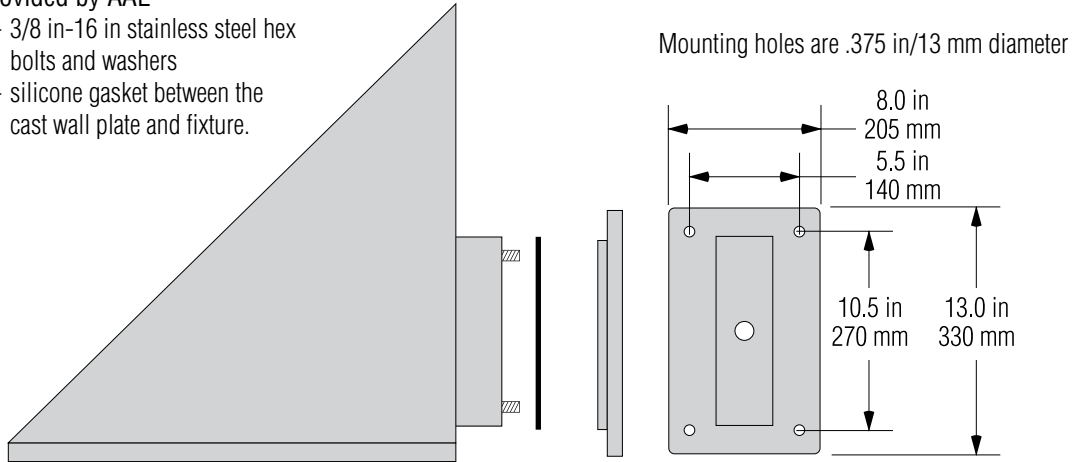
Fixture is warranted for three years. Ballast components carry the ballast manufacturer's limited warranty. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by AAL and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. Contact AAL for complete warranty language, exceptions, and limitations.

M1WD Large Scale Wall Mount

Provided by AAL

2 - 3/8 in-16 in stainless steel hex bolts and washers

1 - silicone gasket between the cast wall plate and fixture.



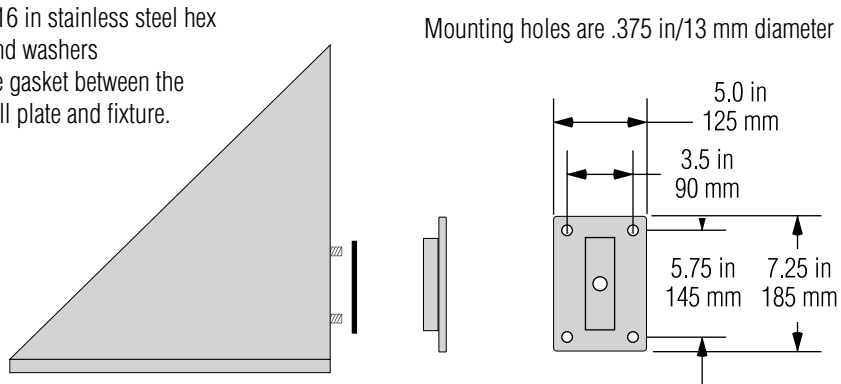
M2WU Medium Scale Wall Mount, Up Light

M2WD Medium Scale Wall Mount, Down Light

Provided by AAL

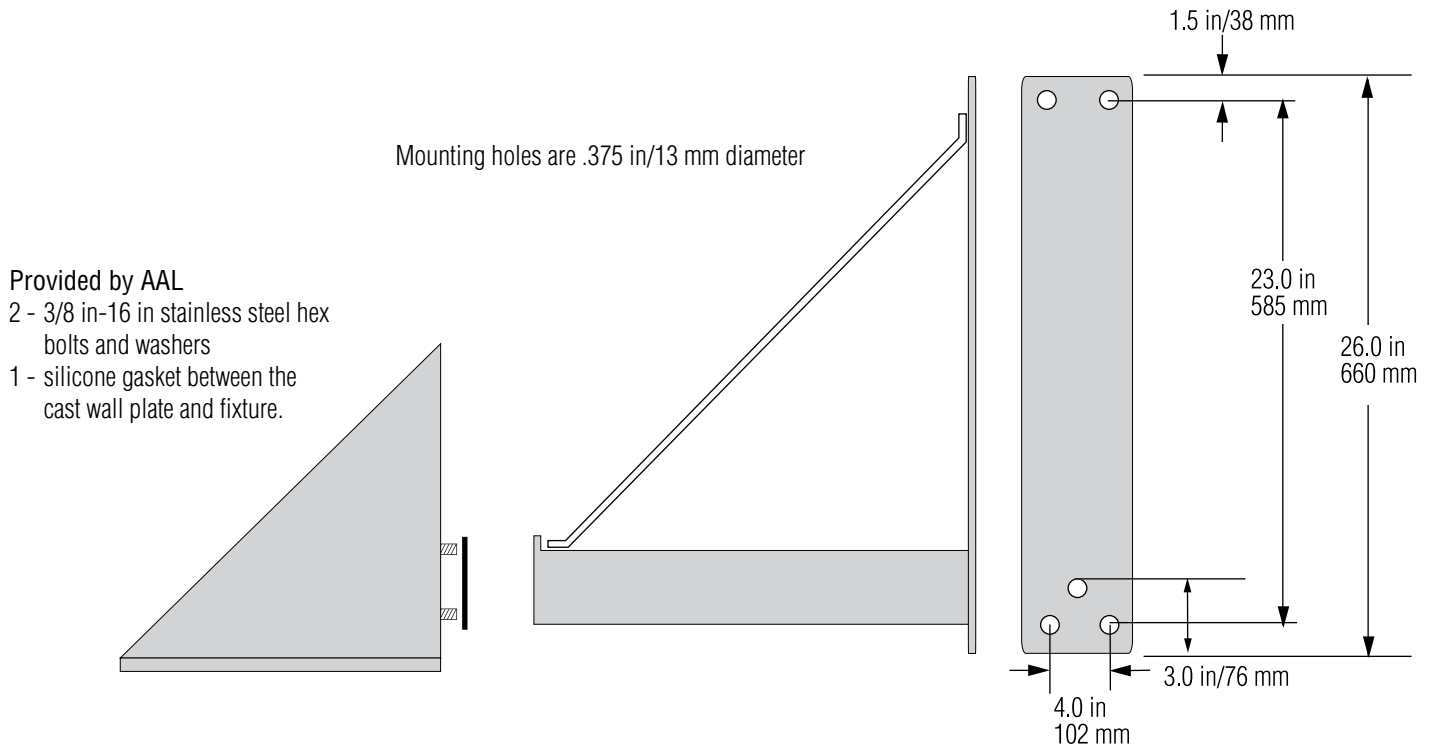
2 - 3/8 in-16 in stainless steel hex bolts and washers

1 - silicone gasket between the cast wall plate and fixture.

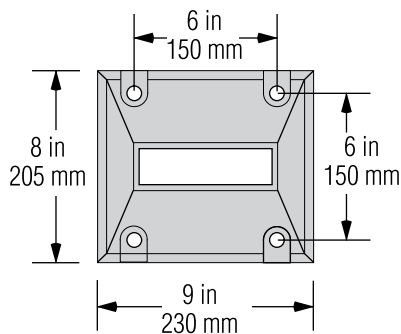


Installation Details

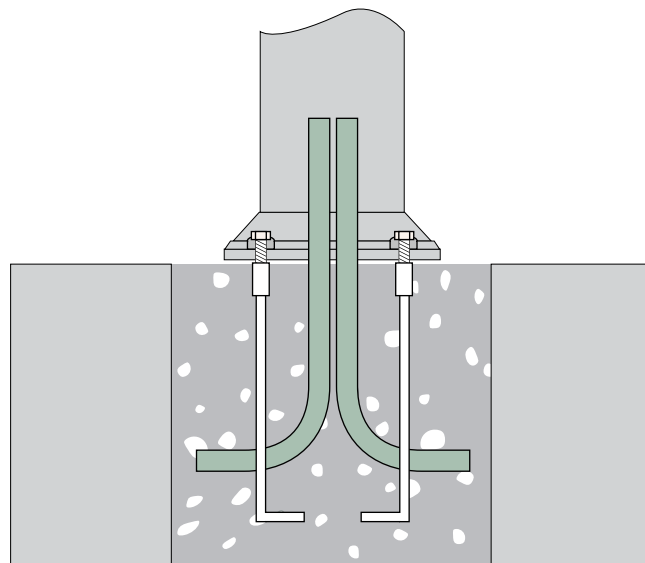
M2WD-XA Medium Scale Wall Mount, Down Light, Extended Arm



M4 Bollard



- Provided by AAL
- 4 - 3/8 in x 10 in galvanized anchor bolts with threaded sleeves.
 - 4 - 3/8-16 stainless steel attachment bolts and washers.
 - 1 - template for setting anchor bolts.





M4T-CF



M3-CF



M4-CF



M3-CF

Photometry

LAMP TYPE	LUMENS	CONVERSION FACTOR	
		M1	M2
70 MH	5500-GE	0.19	.58
100 MH	9000-GE	0.32	.95
150 MH	12500-GE	.44	1.32
150 PSMH	12600-V	.44	1.32
250 MH BT28	23000-GE	0.81	2.42
400 MH BT28	40000-GE	1.4	4.21
70 HPS ED-23.5	6300-P	0.22	0.66
100 HPS	9500-GE	.33	1
150 HPS	16000-GE	.56	1.68
250 HPS	28500-P	1.00	3
400 HPS	50000-P	1.75	5.26

NOTE: If using a lamp with different lumen output than listed above, consult

The values below are in initial footcandles. Discount values to account for light losses due to voltage, temperature and atmospheric variations which affect light output.

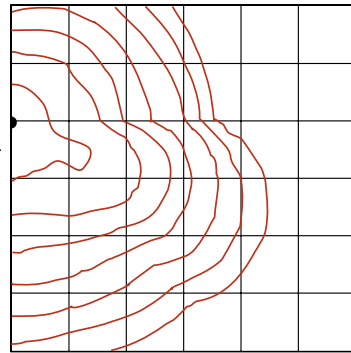
To substitute another lamp in the isocandle charts below, multiply the chart values by the lamp conversion factor on the left. Mounting height is to the lamp center.

All testing performed by a certified independent laboratory.

M1 H3 250HPS ED-18

16' MOUNTING HEIGHT
ONE GRID SQUARE EQUALS
ONE MOUNTING HEIGHT

	14'	16'	18'	20'
6.55	5.00	3.95	3.20	
2.62	2.00	1.58	1.24	
1.31	1.00	.79	.64	
.66	.50	.40	.32	
.26	.20	.16	.13	

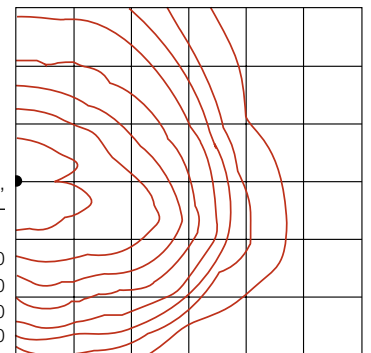


1 2 3 4 5 6

M2 H2 150HPS ED-17

14' MOUNTING HEIGHT
ONE GRID SQUARE EQUALS
ONE MOUNTING HEIGHT

	12'	14'	16'	18'
6.80	5.00	3.85	3.00	
2.72	2.00	1.54	1.20	
1.36	1.00	.77	.60	
.68	.50	.39	.30	
.27	.20	.15	.12	

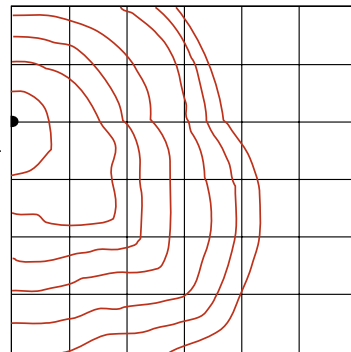


1 2 3 4 5 6

M1 H4 250HPS ED-18

16' MOUNTING HEIGHT
ONE GRID SQUARE EQUALS
ONE MOUNTING HEIGHT

	14'	16'	18'	20'
6.55	5.00	3.95	3.20	
2.62	2.00	1.58	1.24	
1.31	1.00	.79	.64	
.66	.50	.40	.32	
.26	.20	.16	.13	

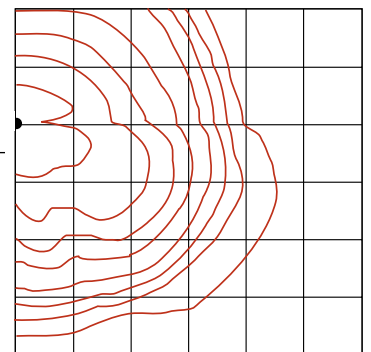


1 2 3 4 5 6

M2 H3 150HPS ED-17

14' MOUNTING HEIGHT
ONE GRID SQUARE EQUALS
ONE MOUNTING HEIGHT

	12'	14'	16'	18'
6.80	5.00	3.85	3.00	
2.72	2.00	1.54	1.20	
1.36	1.00	.77	.60	
.68	.50	.39	.30	
.27	.20	.15	.12	

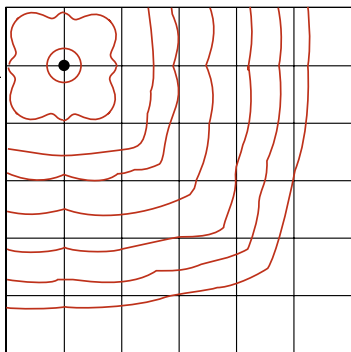


1 2 3 4 5 6

M1 H5 250HPS ED-18

16' MOUNTING HEIGHT

	14'	16'	18'	20'
6.55	5.00	3.95	3.20	
2.62	2.00	1.58	1.24	
1.31	1.00	.79	.64	
.66	.50	.40	.32	
.26	.20	.16	.13	

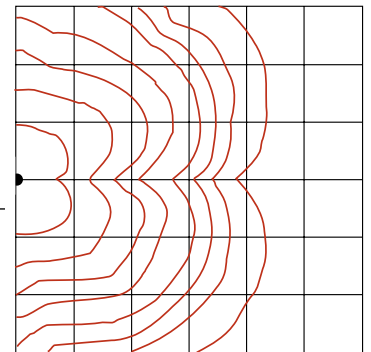


1 2 3 4 5 6

M2 H5 150HPS ED-17

14' MOUNTING HEIGHT
ONE GRID SQUARE EQUALS
ONE MOUNTING HEIGHT

	12'	14'	16'	18'
6.80	5.00	3.85	3.00	
2.72	2.00	1.54	1.20	
1.36	1.00	.77	.60	
.68	.50	.39	.30	



1 2 3 4 5 6



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