Logistics and Sales of Construction/Industrial Products - Export

Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266



### **ROADWAY LIGHTING**

EVA 150w-400w MH, HPS



**Features** 

- Die-cast aluminum housing and door
- Heat and impact-resistant tempered glass
- Mogul base porcelain socket for lamps up to 400w
- Housing opens from top for easy maintenance
- Features a dacron polyester filter which extends lamp life
- Ballast and electrical components mount on tray in the rear of housing
- Four-bolt slipfitter for horizontal bracket

**OVA Decorative Roadway** 



**Features** 

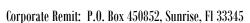
- Die-cast aluminum base with stainless steel bail latch
- Adjustable mogul-base porcelain socket
- Optical system has an aluminum reflector with polyester filter
- Standard grey polyester powdercoat finish
- Bottom of the reflector has protrusion design to protect the bulb
- Aluminum top housing has hinges for easy installation and maintenance
- Ballast has encapsulated starter for protection from environment abuse
- Standard two position tunnel type compression terminal block

**OVD Deep Prismatic Glass** 



- Die-cast aluminum housing with stainless steel bail latch
- Adjustable mogul-base porcelain socket
- Available in Type II and Type III optical distributions
- Integral hinges for ease of maintenance
- Adjustable mogul- or medium-base socket
- Borosilicate glass refractor
- Hydroformed anodized aluminum reflector
- Optional swing-down ballast module
- Optional NEMA twistlock photocontrol receptacle

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### OVH LED



### **OVH Flat Glass**



**OVY Low-Profile Drop Prismatic** 



- Die-cast aluminum housing, door and two-position latch
- Integral hinges for hands-free maintenance and tool-less entry
- Optical design creates consistent distribution and scalability
- Choice of 15 high-efficiency, patent pending AccuLED Optics™
- Offered standard in 4000K (+/-275K) CCT and nominal 70 CRI
- Suitable for operation in -30°C to 40°C ambient environments
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Proprietary circuit module withstands 10kV of transient line
- Features a 5-year limited warranty

**Features** 

- Die-cast aluminum housing, door and two-position latch
- Integral hinges for hands-free maintenance and tool-less entry
- Adjustable mogul-base porcelain socket
- Hydroformed anodized aluminum reflector
- Flat or drop glass lens
- Available in Type II and Type III optical distributions
- Two-bolt/one clamp slipfitter fits 1-1/4" or 2" mast arm
- Supplied standard with NEMA twistlock receptacle

Features

- Die-cast aluminum housing with stainless steel bail latch
- Integral hinges for hands-free, toolless maintenance
- Adjustable mogul-base porcelain socket
- Hydroformed anodized aluminum reflector
- Borosilicate glass refractor
- Available in Type I, Type III or Type V optical distributions
- Two-bolt/one clamp slipfitter fits 1-1/4" or 2" mast arm
- Supplied standard with NEMA twistlock receptacle
- Optional swing-down ballast module

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RMA/RMC Security Light



**Features** 

- Precision die-cut aluminum housing with natural finish
- Medium or mogul-base porcelain socket
- Fluted, formed specular aluminum refractor
- Twelve-inch open bottom acrylic refractor or cutoff reflector
- Pole- or wall-mount options
- Available in three optical distributions
- Available with 18", 24" or 30" mounting bracket
- Optional NEMA twistlock photocontrol for dusk-to-dawn operation
- Housing slip fits over 1-5/8" to 2-2/3" O.D. pipe

HMX High-Mast Area Luminaire



**Features** 

- Die-cast aluminum housing, cover and door
- Tempered convex glass lens, with optional clear flat glass lens
- Hinged and latched door for ease of maintenance
- Anodized, spun aluminum reflector housing
- 360° field-rotatable optical assembly
- Vertical lamp position
- Choice of three optical distributions
- Clamp-type slipfitter fits 2-3/8" O.D.
- NEMA twistlock receptacle or button-type photocontrol

RY Roadway Cobra head



- Die-cast aluminum housing, door and two-position latch
- Integral hinges for hands-free maintenance
- Adjustable mogul-base porcelain socket
- Hydroformed, anodized-aluminum reflector
- Acrylic, polycarbonate, glass refractor or flat-glass lens
- Type II and Type III optical distributions
- Two-bolt, one-clamp slipfitter fits 1-1/4" or 2" mast arm
- Optional swing-down ballast module
- NEMA twistlock photo control receptacle. Ideal for roadways, storage or construction sites, parking areas, residential neighborhoods and bridge structures. It is U.L. wet location listed, EISA compliant and 3G vibration rated.

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### **FLOODLIGHTING**

### AH Arrowhead Slipfitter Mount



### **Features**

- Compact, affordable solution for general floodlighting applications
- Durable, dark bronze polyester powder coat die-cast aluminum housing
- Heavy-duty slipfitter or trunnion models optimize mounting
- Formed aluminum reflector optimizes wide beam efficiency and control
- Tempered glass is heat and impact resistant
- Stainless steel screws secure the integral hinged door
- Offered in 150W-400W metal halide and high pressure sodium
- Available with optional NEMA twistlock or button photocontrol

### ALF Acura Large Flood



### **Features**

- Formed-aluminum flush draw-action latches for tool-less entry
- Die-cast aluminum door has integral cast hinges for tool-less removal
- Closed-cell silicone door gasket for maximum protection
- Tool-less removable power assembly for ease of maintenance
- Flush-mounted heat and impactresistant tempered glass lens
- Nine distributions and two lamp orientations
- Slipfitter and yoke-mount configurations

### AMF Acura Medium Flood



- Formed-aluminum flush draw-action latches for tool-less entry
- Die-cast aluminum door has integral cast hinges for tool-less removal
- Closed-cell silicone door gasket for maximum protection
- Tool-less removable power assembly for ease of maintenance
- Flush-mounted heat and impactresistant tempered glass lens
- Eight distributions and two lamp orientations
- Slipfitter and yoke-mount configurations

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### **EXIT AND EMERGENCY LIGHTING**

6V/12V Weatherproof Plastic Head



### Features

- 6V DC and 12V DC
- Flame- and impact-resistant thermoplastic PAR36 style lamp holders
- Die-cast, gasketed mounting plate
- Swivel assembly for 80° adjustment from vertical with 358° rotation
- Sealed swivel and coated lamp terminals resist oil, water, and dust
- Standard industrial white finish
- Wedge base lamp incorporated into a unique sealed beam unit
- One-year warranty



#### **Features**

- Dual 120/277 VAC 60Hz input
- Two-step charger
- Line-latched transfer circuit, brownout protection
- "Self-Check" diagnostics
- Sealed, maintenance-free, long-life lead calcium battery
- White powder-coat on 20-gauge cold-rolled steel
- Universal mounting knockouts provided



#### **Features**

- Dual 120/277 VAC, 60Hz input
- Solid-state circuitry (no mechanical relay is used)
- Output short-circuit and reverse polarity protected
- Brownout protection
- Sealed, maintenance-free lead calcium battery
- 11 watts of remote capability
- Injection molded, color-stable components
- Easily removed, changeable directional chevrons
- Variety of electrical and universal Jbox mounting knockouts

XLCNY8L LED Combo

**EMERGENCY EXIT LIGHTING** 

LC2-RU Exit Sign

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#### **Features**

- Dual-voltage input 120/277 VAC,
- Solid-state circuitry (no mechanical relay is used)
- Output short-circuit and reverse polarity protected
- Transfer with AC line-latching
- Brownout protection
- Sealed, maintenance-free lead calcium battery
- Formed 20-gauge steel housing and faceplate
- Easily removed updated directional chevrons
- Low-profile mounting canopy

# Light Pole Gallery: Roadway &Area Lighting

RTA — Breakaway T-Base



#### Traffic Pole

These products are manufactured in the USA and meet the criteria for the Buy American Requirement under Section 1605 of the American Recovery and Reinvestment Act of 2009

### **Aluminum Advantages**

### **❖** Corrosion Resistant

Aluminum is naturally resistant to corrosion and may be left unpainted. On contact with air it forms a resistant layer of aluminum oxide that guards against corrosion. The below poles are constructed of aluminum alloy 6063, a marine grade alloy also used in the manufacture of boat hulls. This alloy exhibits extremely high resistance to corrosion when compared to ferrous-based products. 6063 is highly weld able, and heat treats the material to obtain a T6 temper adding strength to the material.

### Lightweight

Aluminum is lightweight, allowing for easier installation than steel which provides savings in both labor and equipment. In fact, aluminum is approximately one-third the weight of steel, making it much easier to handle and less expensive to ship. Aluminum has a high strength-to-weight ratio. Pound for pound, it is stronger than steel.

### Flexible Design

Aluminum is used in breakaway designs, offering greater breakaway safety.

Our manufacturer is an industry leader in breakaway provisions and design, offering the following Federal Highway Administration (FHWA) accepted breakaway devices:

- Anchor Base —Saves installation and hardware costs and improves aesthetics. Anchor bases cannot be used with steel.
- Couplings Widely used.
- X-Base Saves installation and hardware costs and improves aesthetics.X-Bases cannot be used with steel.
- Transformer Base "T-Base" Industry standard and widely used.
- **Direct Buried Poles** –Direct buried poles can provide significant savings, eliminating the need for foundation, base, and hardware. Aluminum poles are used in direct buried applications throughout the country, having over 60 years of successful installations. *Cannot be offered with steel*.

### Easy to Clean, Including Graffiti

Satin finished poles can be treated with solvents or sanded to remove unwanted paint without compromising the corrosive resistance or the finish.

### Durable

Aluminum light poles have been in use for over 60 years, and many of the original installations are still in service without structural problems or noticeable difference in appearance. The fact that Aluminum is maintenance-free allows it to be a tremendous value on the overall cost of pole

### Valuable

Aluminum offers significantly higher scrap value than steel, allowing a return on investment in the event of a knock down. The scrap value of aluminum is more than ten times that of steel.

### 100% Recyclable

Aluminum is the most abundant mineral in the earth's crust. Aluminum has a low impact on the environment, unlike the galvanization process of steel which emits zinc chloride and ammonium chloride into the atmosphere. Aluminum can also be recycled without losing any of its superior characteristics or integrity, making it appealing to both environmental and economic criteria. Simply put, aluminum never has to be thrown away. Aluminum provides an environmentally responsible choice of material and approach within the burgeoning green movement. It allows specifies to aggressively pursue a design that will be based

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upon sustainable principles.

### Durable Powder Coating

Our manufacturer use Super Durable
Thermoset Powder Coating as the standard for
all powder coated poles. Super Durable is
designed specifically for architectural
applications where color and gloss retention is
critical. The American Architectural
Manufacturers Association (AAMA) provides
classifications for powder coating.
These specifications have been widely
recognized as the standards for powder
coating. AAMA classifies Super Durable Powder
Coating as AAMA 2604. Super Durable is
formulated with advance polyester resin
technology that utilizes

higher performance pigments, and gives superior gloss and color retention over the standard powder coating (AAMA 2603) that many manufacturers use as their standard. Powder Coating is very compliant with environmental regulations without release of Volatile Organic Compounds (VOC). This is opposed to liquid paints which must contain solvents and release VOC's into the atmosphere, contributing to pollution. Additionally, there is no hazardous waste from the powder coating process. Most waste powder is also recycled.

### AA SHTO Approved

Selecting the precise pole for a project may result in significant savings. Our manufacturer's engineering team can design and manufacture poles to AA SHTO specifications and or applicable building codes. All poles are designed to American Association of State Highway & Transportation Officials (AASHTO) standards. Not all manufacturers design to AA SHTO, which is conservative by nature. Our manufacturer meets applicable material ASTM standards. All welders are American Welding Society (AWS) certified.



#### Lead Times

Our producer can provide lead times on aluminum poles which in many instances are one half that of steel. One of our manufacturer's main suppliers of extrusions is located within 20 miles, allowing for quick delivery of material. Our manufacturer's stateof-the-art machinery and manufacturing principles dedicated to efficiency allowing us to be the industry leader in lead times. All aspects of manufacture (tapering, welding, drilling, heat treating, fluting, powder coating) are done in house (with the exception of castings and anodizing) eliminating the need for out sourcing. The result is tremendous time savings as well as cost. Quicker lead times can ease stocking requirements as well as insure faster replacement of knockdowns. Our manufacturer has more than 50 years of experience engineering and manufacturing high quality aluminum and steel light poles & brackets. Our manufacturer offers a wide range of products and styles certain to address your design and lighting needs.



RTA — with 12' Truss Arm-Spec sheet available



RSS — 30' Truss Arm

# Building & Technology Supplies, LLC Logistics and Sales of Construction/Industrial Products - Export

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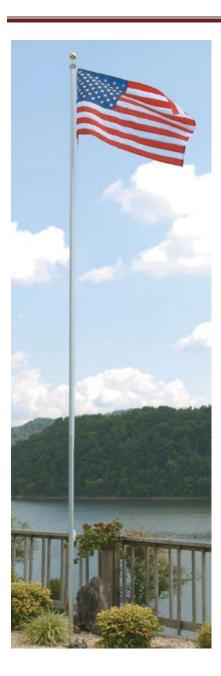


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Advantages of Aluminum Poles

#### **Benefits of Aluminum**

- Corrosion Resistant
- Maintenance Free
- Lighter weight for Easy and Cost Efficient Installation
- Longer Life than Steel and Fiberglass
- 100% Recyclable
- Direct Buried Applications
- Breakaway Designs offer Greater Safety on Highways
- Less Deflection than Fiberglass
  The Best Value for Outdoor Lighting Poles &
  Brackets

Steel Strength • Visible rust and corrosion

- Weighs twice as much as aluminum
- · Limited recycle value
- Should not be direct buried

**Fiberglass** Can be direct buried • Does not have proven longevity

Lightweight • No recycle value - difficult and expensive

to dispose

- Unless direct buried needs aluminum base casting
- Limited breakaway designs
- Ultraviolet damage is common
- Expensive maintenance costs
- Can be damaged by mowing & trimming Concrete Can be direct buried Heavy Expensive shipping costs
  Strength No breakaway performance
- Never needs painting No recycle value Difficult to install Requires expensive
- installation equipment
- More hazardous than other materials

### Warranty

The equipment, apparatus, and parts are warranted against defects in materials and workmanship for a period of one (1) year from the date of shipment, excepting those items normally consumed in service, unless failure is due to improper installation or misapplication. The manufacturer MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH MERCHANDISE OR FOR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LIQUIDATED DAMAGES AND BACK CHARGES. The manufacturer will, at its

sole option, repair, replace or credit Buyer's account for any equipment or part which proves defective under its warranty provided that the Buyer notifies the manufacturer in writing of such defect within the appropriate warranty period. This warranty does not include reimbursement for the expense of installation, removal of equipment, transportation or any other expenses that may be incurred. Authorization must be obtained from manufacturer before any material is returned. The foregoing states the Buyer's sole remedy for any breach of warranty by the manufacturer.

### **Design & Applications**

Our manufacturer leads the industry in engineering and manufacturing innovation. They patented the first successful pole vibration damper and breakaway safety coupling and pioneered traffic signal pole design by conducting wind tunnel tests on traffic signals (in cooperation with a traffic signal manufacturer.) They initiated wind tunnel tests on elliptical arm shapes to insure more efficient designs.

Our manufacturer has an in-house test facility providing a means to test full-scale poles and brackets under static and cyclic load conditions. Thousands of tests have been conducted in the interest of product improvement. These tests, in addition to the above mentioned research projects, provide the basis for their present design criteria.

They can provide designs based on AASHTO requirements or local building codes.

### WIND FORCES

Wind tunnel testing is one of the most reliable methods of determining wind forces for use in designing structures exposed to natural winds. Our manufacturer has conducted wind tunnel tests on luminaries, traffic signals and sections of various round and elliptical tubes. Wind tunnel test data is also available on other objects of similar shape to lighting equipment. This data is used whenever possible in calculating wind loads on structures. EPA ratings of luminaries are based on wind tunnel test data.

### **OTHER FORCES**

The stresses caused by the **weight of the luminaries** (and of the bracket arm) exist continuously throughout

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the life of the installation and are subject to fluctuation caused by the aerodynamics of the luminaries or other characteristics of the assembly. Therefore, these stresses must be limited to a conservative value to eliminate the possibility of fatigue. Other vertical loads are the effects of ice and other intermittent loads. Generally, these are of relatively little significance (except when applied to overhead wiring). Our manufacturer's poles will also withstand the forces produced by a ladder leaning against the assembly, although such factors as the degree of impact and the positioning of the ladder should be considered. Overhead wiring must be treated as a special loading challenge. The forces anticipated in a particular installation must be known in order to select the correct pole. Generally, standard poles can be used for tangent applications. The selection of dead-end and corner poles will usually be based on the deflections caused by the anticipated forces.

### WIND VELOCITY SELECTION

A mean recurrence isotach 50 year wind map produced by the Environmental Data Service (National Oceanic and Atmospheric Administration, U.S. Department of Commerce) is included in this catalog. This wind map should be used to determine wind velocity for your specific location. If you are located between two different velocity Isotach lines, the higher velocity should be used. A gust factor of 1.3 is applied to the isotach wind velocity to account for gusts in calculating design wind forces.

For example, 104 mph gust velocity is used to calculate wind forces for 80 mph Isotach.

Our manufacturer has learned from years of experience that there are local isolated high wind conditions that can be devastating to poles and luminaries not designed for such conditions. Additionally, constant winds in the 10-25 mph range can severely damage certain poles and luminaries by vibration. Vibration is a local, site specific condition that may be overlooked when selecting a pole. Destructive vibration is NOT an indication of substandard material, workmanship, or pole design. Please advise us of any unusual wind conditions prior to purchase of poles. Heavier poles and/or vibration dampers may be necessary to avoid wind damage.

Pole failures as a result of wind induced vibration are NOT covered under manufacturer's warranty, unless our manufacturer's vibration dampers are installed. SEE "DAMPERS" for our manufacturer's policy regarding vibration.

### **USA WIND MAP**



### METHODS OF ANALYSIS – ALLOWABLE VALUES

Many pole designs permit a simple analysis of the combined bending stresses caused by the various types of loads.

Each type of joint configuration is evaluated by the structural engineer to determine the stress that is permissible, and the recommended loads are limited to stay within that allowable stress value. For example, higher allowable stresses are permitted for a joint of the socket type than for a joint comprised of a tube welded to a flat plate. There are many types of joint configurations, a variety of materials, unusual characteristics of specific styles of poles, etc., each of which requires the judgment of the design engineer. It is not possible to include all of these in this discussion.

Stresses caused by dead weight alone are limited to very low values for the reasons indicated in the discussion under "OTHER FORCES." In evaluating the effect of the maximum anticipated wind velocities, higher stresses may be permitted since the high velocity winds are only expected to occur a few times during the life of the installation.

Stiffness considerations are included in the analysis of our pole. For example, the effect of the weight of the arm and luminaries in causing the bending of the pole shaft in a single arm application is evaluated. The deflection of the shaft is limited to provide an attractive appearance under this condition of load. The

allowable deflection is based on the angular deflection or rotation of the shaft top (which is the characteristic that is the best measure of appearance under this type of load condition) rather than linear displacement of the top or "radius of curvature" which are used by some manufacturers.

Poles in this catalog are designed to meet the strength requirements of AASHTO. Please advise us of any additional requirements you may have.

### Specifications: Area & Roadway Lighting Poles SHAFT

The shaft (round or square) shall be constructed of seamless extruded tube of 6063 or 6061 aluminum alloy per the requirements of ASTM B221 of sufficient nominal thickness to meet the design requirements without the use of internal reinforcing sleeve. No longitudinal shaft welds shall be allowed. The shaft shall be full-length heat-treated after welding to produce a T6 temper. The heat-treating oven used shall be certified to meet the requirements of ASTM B597 and Mil-H-6088 specifications. Pole shaft cap, when required, shall be cast aluminum of 443 or 356F aluminum alloy and attached utilizing stainless steel screws. Poles without transformer bases shall include a reinforced handhole centered 18" above the bottom of the shaft. Handholes are located 90 degrees clockwise from the plane of the bracket arm as viewed from the top. A cover with stainless steel attachment screws shall be provided for the handhole.

#### **BASE FLANGE**

The base flange for the attachment of the shaft to the foundation or to the transformer base shall be one piece castsocket of aluminum alloy 356 per ASTM B26 or B108. Base flange shall be joined to pole shaft by means of complete circumferential welds; externally at the top of flange and internally at bottom of shaft tube. Four anchor bolt covers of cast aluminum and stainless steel screws for their attachment shall be provided.

### HANDHOLE

### (Round and Square Poles 6" to 10")

Handhole shall be 4" X 6", with the exception of 6" and 6 5/8" poles, which shall be 3" X 5". Handhole in round poles shall be reinforced

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with a cast frame of aluminum alloy 356 per ASTM B26 or B108. Handhole cover shall be aluminum and attached by means of two stainless steel screws.

### (Round and Square Poles 4" to 5")

Handhole shall be 2" X 4". Handhole cover shall be aluminum and attached by means of two stainless steel screws.

### TRANSFORMER BASE

The breakaway transformer base, if required, shall be an aluminum casting (alloy 356-T6) with removable access door held in place with one stainless steel screw. The base shall be 17" tall with access door 11 3/4" high with a width of 9 ¼" at the top and 9 ¾" at the bottom. It shall connect to 1" diameter anchorage. Three bases with bolt circles ranging from 10" to 17 1/4" can be used with shafts in size from 6" to 10" diameter dependant on their proper application and specific loading restrictions. The base shall meet 2001 AASHTO breakaway requirements. Four 1" diameter long galvanized steel hex-head machine bolts with nuts and washer shall be supplied to attach the transformer bases to the base flange of the pole shaft. Eight 1/2" thick x 2 3/4" diameter galvanized steel heavy washers shall be provided to properly distribute the bolt forces in the top and bottom flanges of the transformer base.

### ANCHORAGE

Each anchor base pole shall be supplied with anchor bolts. Anchor bolts shall have minimum yield strength of 55,000 psi per AASHTO M314-90. Steel anchor bolts threaded and hot-dipped galvanized at the threaded end per ASTM A153 shall be supplied with each lighting pole. The bolts shall include a right angle hook at the unthreaded end. Each bolt shall include one nut, one flatwasher and one lockwasher galvanized per ASTM A153 shall be supplied with each anchor bolt.

### **DIRECT BURIED POLES**

Direct buried poles shall have a 1  $\frac{1}{2}$ " grommeted cable entry located 18" below grade, in line with the handhole. An anti-rotational device shall be provided by means of partial flattening the butt of the pole into an oval cross-section, if specified.

### **GROUNDING**

Each pole shaft shall contain an internal ground provision for the purpose of attaching a grounding connector. Grounding connector

### supplied by others or sold separately. **MISCELLANEOUS HARDWARE**

All nuts, bolts, and washers used in the fabrication of the pole shall be Grade 18-8 stainless steel, except for anchorage hardware.

#### WELDING

Welding shall be done by inert gas shielded metal arc method with consumable electrode. Aluminum alloy 4043 electrode shall be used. Welding shall be in accordance with AWS Specification D1.2, Structural Welding Code – Aluminum.

#### INSPECTION AND PACKAGING

Each coated part shall be inspected for appearance uniformity and mil thickness. Any part that does not meet the specified coating thickness shall be recoated. Coated product shall be spiral wrapped with cross woven textile, foam backed 5-mil polyethylene film or burlap material of sufficient tensile and elongation that exceeds requirement characteristics to ensure protection during handling and shipping. The product shall be bundled with sufficient dunnage and strapping to prevent damage during shipment.

#### SURFACE FINISH

The pole shaft shall be provided with a satin finish accomplished by mechanical rotary grinding, mechanically abrading or thermoset powder coat painted as required by the specifier. The mast, truss and floodlight crossarm bracket shall be provided with a satin etched finish by mechanically abrading. The davit bracket arms shall have the same finish as is on the shaft. All materials shall be cleaned and free from dents and unsightly scratches.

### SURFACE PREPARATION

Pole shafts shall be satin ground, chemically etched, sanded or shot blasted to ensure proper powder coat surface adhesion. To ensure that the prepared parts are kept clean and not exposed to dirt, dust, grease or oil and to ensure maximum powder coat adhesion, the product shall proceed continuously and immediately to the powder coating process within the same facility where the poles and arms are manufactured.

### **POWDER COATING**

Powder coating material shall be a thermosetting Polyester Powder Coating. A minimum coating thickness of 2.0 mils

shall be maintained. Application of powder shall be electro statically applied by a closed loop automated powder coating system featuring twelve automatic spray guns with computerized controls and positioners to assure mil thickness conformance. The powder coating system shall employ a powder recovery system utilizing closed loop quick-change technology to achieve efficient and contamination free color changes. The powder shall be applied only when both the ambient and part temperatures are 50 degrees F. or above. Once powder coated, the product shall proceed through a curing oven operating at 400 degrees F. that has been surveyed and certified for temperature uniformity. The product shall move continuously through the oven from beginning to end and shall attain the time at temperature in accordance with the paint manufacturer's recommendations. Once oven cured, the product shall move immediately to and continuously through a forced air cooling tunnel designed to restore the product to acceptable packaging temperature prior to inspection and packaging. Upon exiting the cooling tunnel the product shall be immediately inspected and packaged.

NOTICE: Anodizing inherently results in color variations on aluminum where there are chemical or physical differences in the materials. Extreme color variation occurs between the tube (Alloy 6063-T6), castings (Alloy 356) and weld metal (Alloy 4043). These color variations in anodized finishes are unavoidable and not covered under our manufacturer's warranty.

# Our manufacturer recommends thermo set powder paint for guaranteed uniformity of color.

### **HAPCO WARRANTY**

Seller warrants to repair or replace, at seller's option, any equipment which fails due to defects in material or workmanship within one year from date of shipment, unless failure is due to improper installation or misapplication. This guarantee is limited to the repair or replacement of the material involved and does not include reimbursement for the expense of installation, removal of equipment, transportation, or any other expenses which may be incurred. Authorization must be obtained from our manufacturer before any material is returned.

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### NOTE

These specifications are only intended for general information. In a continuing effort to improve our products, our manufacturer reserves the right to change materials and designs without prior notice.

#### **Finishes**

#### STANDARD ALUMINUM FINISH

Satin aluminum achieved by rotary sanding or mechanical abrading.

#### THERMOSET POWDER PAINT

Thermoset Powder Paint finishes are resistant to scratching, chipping or peeling and have excellent color retention. Standard colors are a textured design for improved mar resistance and reduced dirt buildup. Standard textured finishes have achieved 3000 hours on Salt Spray testing.



Dark Bronze BM



1Gray GC

Finish Coat: Weather-resistant polyester thermoset powder is electrostatically applied, oven cured and bonded to a minimum dry film thickness of 2.0 mils.

### **GUARANTEED COLOR UNIFORMITY**

Our standard thermoset powder coating is a minimum 2.0 mils of triglycidyl isocyanurate (TGIC) polyester thermoset powders. The National Association of Architectural Metal Manufacturers, Metal Finishes Manual, rates

the outdoor life of these powders at 15 plus years.

### FACTORY-APPLIED POWDER COATING WARRANTY

Our manufacturer warrants its factory-applied powder coatings against cracking, peeling, excessive color change and fading due to normal climatic exposure for a period of five (5) years from the date of shipment for aluminum, and one (1) year from the date of shipment for steel. Damage to the finish coating caused by mechanical abuse, such as rough handling during installation or vandalism, is not covered by this warranty. This warranty is limited to the repair or replacement of the material involved and does not include reimbursement of consequential expenses such as installation or removal or equipment or transportation costs.

### THERMOSET POWDER PAINT VERSUS ANODIZED FINISH

A color finish on aluminum poles can be obtained by either painting or anodizing. Due to the superior color stability of powder, we recommend powder rather than anodized. Anodized colors are limited to clear, black and various shades of bronze. Anodizing will inherently result in color variations and color uniformity is not guaranteed. When there are variations in the physical, chemical or color of metals, there is a high probability this will occur on a pole assembly. These color variations in anodized finishes are unavoidable and not covered under our manufacturer warranty. Our manufacturer recommends Thermoset Powder Paint for guaranteed uniformity of color.

Powder offers uniform color and appearance between all variations of metal while maintaining a more attractive price and lead time compared to anodized products.

### Market Leader

With more than 50 years experience, our manufacturer is a leader in the market. Meeting customers' needs with a major share of the Aluminum Light Pole market, they has the largest Aluminum Pole manufacturing facility in the United States.

### **Engineering Leader**

Our manufacturer 's engineering was the first to patent many safety features, devices and

accessories. By utilizing the in-house testing facilities, literally thousands of tests have been performed on full-scale poles and brackets in the interest of product improvement. These facilities also provide their engineers with the ability to create and examine new and existing products.

The experience and knowledge of their team ensures the quality and safety of the products provided by our manufacturer.

### **Special Products and Services**

Our manufacturer designs and manufactures hinged poles, camera poles, and various custom products of meet the growing needs of our customers. Contact us for more information for your special project.

Value. Durability. Safety



Logistics and Sales of Construction/Industrial Products - Export

Corporate Remit: P.O. Box 450852, Sunrise, Fl 33345

Phone: 954-839-7403 / 954-656-1266







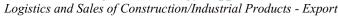




- Round Tapered Aluminum Pole, without arm, 4 Bolt Base(51 Series)
- Round Tapered Aluminum Pole, without arm, 3 bolt base (76C Series)
- Round Tapered Aluminum Pole, without arm, hinged base(73142 Series)
- Round Tapered Aluminum Pole, without arm, Bee Hive Base (77 Series
- Round Tapered Aluminum Pole, without arm, direct buried (50 Series)
- Round Tapered Aluminum Pole, without arm, T-base (52 Series)
- Round Tapered Aluminum Pole, single mast arm, 4 bolt base(21 Series)
- Round Tapered Aluminum Pole, single mast arm, direct buried

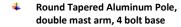
### (20 Series)

Round Tapered Aluminum Pole, single mast arm, T-base (23 Series)



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### (22 Series)

Round Tapered Aluminum Pole, double mast arm, direct buried

### (29 Series)

- Round Tapered Aluminum Pole, double mast arm, T-base (24 Series)
- Round Tapered Aluminum Pole, single truss arm, 4 bolt base

#### (31 Series)

Round Tapered Aluminum Pole, single truss arm, direct buried

### (30 Series)

- Round Tapered Aluminum Pole, single truss arm, T-base (33 Series)
- Round Tapered Aluminum Pole, double truss arm, 4 bolt base

### (32 Series)

Round Tapered Aluminum Pole, double truss arm, direct buried

### (39 Series)

- Round Tapered Aluminum Pole, double truss arm, T-base (34 Series)
- Decorative Poles & Base



TWO-PIECE BASE SIZES:

Cast Aluminum

### 17" W x 21" H

**Shaft Options:** 

Butt diameter - Mounting Height

4" up to 18'

5" up to 20'

### 20" W x 23" H

**Shaft Options:** 

Butt diameter - Mounting Height

5" up to 20'

6" up to 25'

7" up to 30'

8" up to 40'
24" W x 28" H

### Shaft Options:

Butt diameter - Mounting Height

7" up to 30'

8" up to 40'

9" up to 40'

. 10" up to 40'

30" W x 45" H

Shaft Options:

Butt diameter - Mounting Height 10" up to 40' 12" up to 50' Arlen family of bases - Two Piece Tube cross section options are based on maximum mounting height. Shafts with

shorter mounting heights may have more

cross section options available.



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The smooth curves of the Covington complement a wide array of architectural styles. The size of this base allows it to be used with larger poles, which enhances the beauty of larger lamp posts. Straight-fluted, tapered-fluted, round straight and round tapered shafts are available with the Covington base.



TWO PIECE BASE SIZE: 20.25" W x 50" H

Cast Aluminum

### **Shaft Options:**

**Butt Diameters - Mounting Heights** 

5" up to 20'

6" up to 25'

7" up to 30'

8" up to 40'

### **TUBE CROSS SECTIONS:**

### Covington family of bases

Tube cross section options are based on maximum mounting height. Shafts with shorter mounting heights may have more cross section options available.

5"- 7"

5"- 6"

5"-7"

5"- 8" 5"

Straight Flat 12 Flute Tapered Soft 12 Flute Straight Soft 12 Flute Straight Sharp 12 Flute Tapered Octaflute Round Straight or Tapered Tapered Sharp 16 Flute

Tapered 4

### Georgetown family of bases

Accenting a garden or gracing the entrance to the oldest street in town, the classic lines of the Georgetown complement a variety of landscape designs. Straight-fluted, tapered-fluted, round

straight and round tapered shafts are available with the Georgetown base.

### STRUCTURAL BASE SIZE

10.125" W x 44" H Cast Aluminum

### **Shaft Options:**

Butt Diameters - Mounting Heights

4" up to 18' 5" up to 20'

**TUBE CROSS SECTIONS:** 

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Georgetown Family Base

There are more styles and designs made by our mill.