ARCHITECTURAL FLOODLIGHTING

7000 FAMILY
7000 SERIES
7100 SERIES
7200 SERIES
The Hydrel 7000 Family of floodlights is comprised of the 7000 Series, 7100 Series, and 7200 Series.
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PRESENTING THE HYDREL 7000 FAMILY
AN ARCHITECTURAL LIGHTING SYSTEM FOR THE 21st CENTURY

HIGH PERFORMANCE ILLUMINATION

for LONG LASTING SOLUTIONS
The 7000 Series Luminaires
Compact, high performance fixtures accommodate lamps to 70Watt HID. Numerous mounting possibilities are available for both knuckle and yoke fixtures, all achieved with a consistent styling theme. Five optical systems create a wide variety of vertical and horizontal light distributions, from tight spots to wide floods.

The 7100 Series Luminaires
Mid-sized fixtures designed for lamps to 175Watt HID set the industry standard for performance. Available mounting possibilities include knuckle, yoke, wall, ceiling, and pole fixtures – all implemented with a consistent styling theme. Seven optical systems permit a wide variety of vertical and horizontal light distributions, from narrow spots to wide floods.

The 7200 Series Luminaires
Large scale fixtures accommodate lamps to 1000Watt HID. Multiple mounting possibilities are available for knuckle, yoke, wall, and pole fixtures with a consistent styling theme. Six optical systems allow a wide variety of vertical and horizontal light distributions, from spots to wide floods.
HIGH PERFORMANCE ILLUMINATION

Hydrel is an industry leader in three prime areas of high performance illumination: BEAM CONTROL, GLARE CONTROL, and COLOR CONTROL.

Performance Solves Problems. Hydrel provides the highest quality Architectural and Landscape Floodlights. The optical performance of the 7000 Family has the capability to solve many lighting problems. Highest attention is paid to beam control, glare control, and color control in the design of these fixtures.

**Beam Control**

Hydrel optical systems deliver excellent beam and distribution control, offering numerous choices for architectural and landscape applications. Reflector designs use hydroformed and/or segmented aluminum elements with diffuse or specular surfaces to produce precise distributions, including: spots, horizontal spots, narrow horizontal spots, wide floods, vertical floods, and horizontal flood distribution.

The 7000 Family accommodates a wide variety of light distributions.
A single 7100 Series 100 Watt Metal Halide fixture with a vertical flood distribution illuminates this building. Vertical flood distribution is excellent for walls and buildings.

7200 Series 400 Watt Metal Halide flood lights illuminate the top of the Chrysler Building replica at New York, New York Casino in Las Vegas.

7200 Series 250 Watt Metal Halide floodlights illuminate the area behind this large statue at Hollywood and Highland in Los Angeles.

7200 Series luminaires, employing 250 and 400 Watt Metal Halide lamps uplight the Los Angeles City Hall. Fixtures are located at the building base, in the tower, and on the roof.
**Glare Control**

**Barn Doors (BD)**
Each door is independently mounted with set screws in the door channel. Use up to four doors. Custom door lengths available. Cuts off upward glare at 35°, side glare at 50° from beam center.

**External Glare Control**

**Grid Louver (EGL)**
A flat black aluminum grid mounted in the door channel with set screws reduces glare from various viewing angles.

**Glare Shield (GS)**
A formed aluminum shield, mounted in door channel by set screws, cuts off upward glare at 35° from beam center.

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**Dark Sky and Light Trespass**

An increasingly important feature of optical performance is glare control. Dark sky and light trespass legislation are a concern for designers. Hydrel offers external glare control for all of its outdoor product lines including louvers, shields, and barn doors. With the recent introduction of new flood, ingrade, and accent fixtures, Hydrel has introduced internal glare controls to eliminate the inconveniences of external accessories. The internal controls use source shields and baffles to eliminate inefficient, unwanted light. Internal and external glare controls are illustrated here.

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This sixty-foot-long sign is lighted by two 7100s with Horizontal Spot, 100 Watt Metal Halide sources. Located fifteen feet from the sign, they provide excellent uniformity with minimum spill light. The internal glare control minimizes glare to passers-by.

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This temple is beautifully illuminated using 7100s with Incandescent sources and wide flood distribution located inside the structure.

Stowe Landscape Gardens, National Trust, "Temple of Ancient Virtue"
Lighting by Lightscape Projects Ltd, London
Photo: Tim Soar

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A bank of 7200 Series fixtures equipped with 400 Watt Metal Halide lamps with narrow spot distribution illuminates a row of 100-foot-tall palms at Morton’s in Costa Mesa, California.
Internal Source Shields / Glare Control

The 7000 Series features internal glare control options for a number of distributions including spots, horizontal floods, and horizontal spots. These shields fasten internally, eliminating glare outside the desired distribution pattern.

Internal source shields (ISS) eliminate the need for external glare control devices such as half glare shields and barn doors – providing clean, architecturally pleasing surfaces.

7100 Series spots with Incandescent sources beautifully illuminate this memorial. The mirror effect enhances its beauty.

Swashes of color highlight walls of this interior courtyard. 7100 Series floodlights with 100 Watt colored Metal Halide lamps illuminate the Kaiser Permanente Medical Center parking structure in Fontana, California.

Stowe Landscape Gardens, National Trust. "Palladium Bridge"

Lighting by Lightscape Projects Ltd, London

Photo: Tim Soar

The tower and colonnade at the Bellagio Casino in Las Vegas are lighted by Hydrel 7200 Series 400 Watt Metal Halide floodlights.
Color filtering can alter the basic light source to produce desired effects. One must also consider the reflective characteristics of the lighted surface and the perception of the human eye as well as ambient conditions. Dark colored filters will result in some light loss with heat generation. Dichroic filters, which assist in heat transfer, are commonly used for these applications. Contact Hydrel for assistance.

Color Control

Color is an important parameter for lighting designers. Hydrel has been at the forefront in providing split glass and dichroic filters for a wide range of projects. The illustrations here show applications with the 7000 Family using filters and colored lamps. Basic sources such as Metal Halide, Incandescent, Halogen, and High Pressure Sodium produce their own distinct spectra and resultant colors.

Color filtering can alter the basic light source to produce desired effects. One must also consider the reflective characteristics of the lighted surface and the perception of the human eye as well as ambient conditions. Dark colored filters will result in some light loss with heat generation. Dichroic filters, which assist in heat transfer, are commonly used for these applications. Contact Hydrel for assistance.
This lobby is uplighted with 100 Watt Mercury Vapors and Metal Halides using symmetrical distributions.

7100 Series spots and vertical floods light this building with and without color filters. The photos show the same building with the same lighting setup except for the addition of colored filters in the photo to the right.

Hydrel recommends the use of mockups to ensure that desired effects are attained. Based on successful projects, a number of filters and recommend sources have been cataloged to simplify selection.

Below, two 100 Watt Metal Halide spots cast a blue grazing beam on the left and a green highlight on a distant tower.
Lighting on the magical Eiffel Tower replica at the Paris Casino in Las Vegas includes over seven hundred 7000 Series fixtures.
Hydrel 7000 Series Small Floodlights

This small, high performance 7000 Series flood light capitalizes on Hydrel’s proven reflector and glare control designs to provide performance previously available only in large fixtures.

A 7000 Series spot is shown here on a yoke mount. Its contemporary styling will complement any architectural statement.
7000 SERIES
This compact fixture fulfills numerous architectural and landscape applications. The 7000 Series provides equivalent spot and fluorescent flood performance in a housing only half the size of larger fixtures.

Intelligent Design
Hydrel attends to details to assure the designer that a quality product is placed on the job. Owners can expect excellence and long product life from the leader in the design of sealed fixtures. The 7000 Family delivers protected performance.

Protected Performance
Protection:
- Rugged die cast housings and doors
- Tough mountings
- Stainless steel fasteners
- Self-sealing silicone door gaskets
- Tempered glass lenses
- Textured powder coat finishes

Performance:
- High efficiency reflectors
- Variety of standard NEMA patterns
- Internal & external glare control
- Lockable aiming
- Wide dynamic range – 26 Watt Fluorescent to 70 Watt HID
- Low energy, efficient Fluorescent to high intensity HID
- High power factor magnetic and electronic ballasts
- Ease of installation and maintenance

Mounting Versatility
A wide variety of 7000 Series mounting options are available.
Stanchion Tee Mount shown above, Yoke Mount on Architectural Junction Box shown to right.

Performance
New efficient lamps and reflectors allow designers to downsize to this small one-quarter cubic foot flood light.

Construction
Critical sealing to prevent water intrusion is accomplished with Hydrel’s proven “floating door” design, in which the silicone gasketed lens and door assembly fasten to internal bracketry ensuring even sealing pressures.

7000 Knuckle Mount on Architectural Junction Box.
Compact

The 7000 Series is slightly larger than conventional accent lights yet provides significant photometric advantages – increased distributions, uniformity, and glare control.

7000 Series next to a typical accent light.

Glare Control

Internal and external glare control options are available on all 7000 Series models.

Up to 70 Watt Metal Halide spots with internal glare control.

Available with a wide range of accessories, including Architectural Junction Boxes, Stanchion Mounts, Tree Mounts, Wall Mounts, and Pole Mounts.

Low Energy

42 Watt PLT Fluorescent Floods – previously available only in larger fixtures.
### Five Floodlight Optical Systems

<table>
<thead>
<tr>
<th>System</th>
<th>Lamp Type</th>
<th>Beam Angle</th>
<th>Max Candels</th>
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<tbody>
<tr>
<td><strong>TSP</strong> Tight Spot</td>
<td>70W MH T6</td>
<td>13°x11°</td>
<td>48,042</td>
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<tr>
<td><strong>NHSP</strong> Narrow Horizontal Spot</td>
<td>70W MH T6</td>
<td>56°x15°</td>
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<tr>
<td><strong>MFL</strong> Medium Flood</td>
<td>70W MH T6</td>
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<td><strong>FL</strong> Flood</td>
<td>70W MH E17</td>
<td>73°x99°</td>
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<tr>
<td><strong>FL</strong> Fluorescent Flood</td>
<td>42W Fluor. TRT</td>
<td>78°x111°</td>
<td>571</td>
</tr>
</tbody>
</table>

**TSP**
For applications requiring a pattern with a tight, concentric beam.

**NHSP**
For applications requiring a horizontal beam.

**MFL**
For applications requiring a pattern with a wide, concentric beam.

**FL**
For applications requiring a wide horizontal pattern.

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Optional Internal Glare Control Source Shield (ISS)

Standard Internal Linear Spread Filter (LSF)

Beam shown: 70 Watt Metal Halide lamp with optional internal source shield (ISS). Fixture 6 feet from test wall.

Beam shown: 70 Watt Metal Halide lamp with standard linear spread filter (LSF). Fixture 6 feet from test wall.

Beam shown: 70 Watt Metal Halide lamp. Fixture 6 feet from test wall.

Beam shown: 70 Watt Metal Halide lamp. Fixture 6 feet from test wall.

Beam shown: 42 Watt Fluorescent lamp. Fixture 6 feet from test wall.
Architectural Detail
Below, 7000 Series illuminates classic column and building details with a 70 Watt Metal Halide lamp in medium flood distribution.

University Building
Left, big performance from a small fixture – three 7000 Series fixtures with 70 Watt Metal Halide lamps illuminate a hall at Pomona College, Claremont, California.

Sculpture
A 7000 Series fixture with a 35 Watt Metal Halide lamp in spot distribution illuminates a small sculpture.

Night Garden
Trees uplighted by a 7000 Series fixture with a 70 Watt Metal Halide lamp in flood distribution.
PERFORMANCE – 7000 SERIES

Column Detail
A 7000 Series 70 Watt HID floodlight illuminates ornate columns and eaves, while a single 70 Watt HID spotlight accents an adjacent palm.

Large Tree Canopy
The 7000 Series is an excellent choice for use in the landscape. Its small size and wide, dynamic range of lighting options allows designers to create many effects. Glare control capabilities keep the light where it is intended.
Public Art
This artistic piece is easily uplighted with a 7000 Series fixture.

Small Sculpture
Polished stone sculpture illuminated by a 7000 Series fixture with a 35 Watt Metal Halide in flood distribution.

Nightscape
Two 7000 Series equipped with 42 Watt Fluorescent lamps highlight a low meandering flowering hedge.

Paris Casino, Las Vegas
The Eiffel Tower replica at this hotel is illuminated by 7000 Series High Pressure Sodium 35 Watt fixtures attached to tower beams.
7100 SERIES
ARCHITECTURAL LIGHTING SYSTEM

7100 Series floodlights with 100 Watt filtered Metal Halide lamps illuminate the Kaiser Permanente Medical Center parking structure in Fontana, California.
Hydrel 7100 Series Medium Floodlights

These workhorse lights provide rugged watertight protection with high performance optical systems designed to meet today’s requirements for light trespass, glare control, and dark skies.

Contemporary styling to complement any architectural statement. Shown here is a 7100 Series wide flood on a yoke mount.
7100 SERIES

This medium-size fixture, the workhorse of the 7000 Family, offers a wide range of mounting and glare control options to facilitate its use in a variety of architectural and landscape applications. Intelligent design assures a quality product is placed on the job. Owners can expect long product life and superior performance from the leader in the design of sealed fixtures. The 7000 Family delivers protected performance.

Protected Performance

Protection:
- Rugged die cast housings and doors
- Tough mountings
- Stainless steel fasteners
- Self-sealing silicone door gaskets
- Tempered glass lenses
- Textured powder coat finishes

Performance:
- High efficiency reflectors
- Variety of standard NEMA patterns
- Internal & external glare control
- Lockable aiming
- Wide dynamic range – 50 Watt to 175 Watt HID
- Low energy, efficient, high intensity HID
- High power factor magnetic and electronic ballasts
- Easy installation and maintenance

Mounting Versatility

Side mounted area light.

A variety of stanchion and pole mounts allows for single and multiple fixture applications. Pole Mount Tee shown.

Construction

Rugged yoke mounted fixture on an Architectural Junction Box.

Knuckle mount makes a rugged, sealed, compact design. Architectural Junction Box provides a small, sealed entryway for easy access.
Glare Control

Wall Mount accessory (WMSA) with integral splice access is available for up or down lighting.

The Internal Source Shield (ISS) eliminates glare from intense flood lighting, providing an unobtrusive source.

Ceiling and side mounts offer the option of maintaining architectural consistency with downlights.

Yoke mount provides easy aiming and adjustments and a clean appearance.

External glare shields are available in two forms, the versatile barn doors (BD) above or the simple half shield shown to right. The barn doors can be used individually or as a set and can be added easily in the field.

The internal half shield (GS) is an easy field addition.

Internal glare controls are an option for spots, horizontal spots, and horizontal floods. These “soft” devices limit glare without altering the clean external surface of the fixture.

Distribution

A variety of NEMA distributions provides the solution for most applications.

From Narrow Spots to Wide Floods, the 7100 Series covers a wide range of distribution. Vertical Flood shown to right.

NEMKO CE
IP65 Rating
Hydrel is an ISO9001 Certified Manufacturer

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BEAM CONTROL – 7100 SERIES

Seven Floodlight Optical System

**NSP Narrow Spot**
For applications requiring a high intensity, narrow beam of light.

**SP Spot**
For applications requiring a pattern with a tight, concentric beam of light.

**NHSP Narrow Horizontal Spot**
For applications requiring a high intensity, narrow horizontal beam of light.

**HSP Horizontal Spot**
For applications requiring a pattern with a tight, concentrated, rectangular beam of light.

**Optional Internal Glare Control Source Shield (ISS)**

**NSP**
150W MH T6
50% Beam 8”x8”
Max Candel 101,550

**SP**
175W MH ED17
50% Beam 21”x15”
Max Candel 40,749

**NHSP**
175W MH ED17
50% Beam 82”x16”
Max Candel 14,680

**HSP**
175W MH ED17
50% Beam 81”x49”
Max Candel 6,383

Beam shown: 150 Watt Metal Halide lamp. Fixture 6 feet from test wall. Shown with optional Internal Source Shield (ISS).

Beam shown: 175 Watt Metal Halide lamp. Fixture 6 feet from test wall. Shown with optional Internal Source Shield (ISS).

Beam shown: 175 Watt Metal Halide lamp. Fixture 6 feet from test wall. Shown with optional Internal Source Shield (ISS).

Beam shown: 175 Watt Metal Halide lamp. Fixture 6 feet from test wall. Shown with optional Internal Source Shield (ISS).
VFL Vertical Flood
For applications requiring a vertical, rectangular pattern.

HFL Horizontal Flood
For applications requiring a wide, horizontal pattern.

WFL Wide Flood
For applications requiring a beam with a wide, concentric pattern.

Optional Internal Glare Control Source Shield (ISS)

VFL
175W MH ED17
50% Beam 84° x 84°
Max Candel 5,016

HFL
175W MH ED17
50% Beam 114° x 37°
Max Candel 7,600

WFL
175W MH ED17
50% Beam 30° x 23°
Max Candel 20,812

Beam shown: 175 Watt Metal Halide lamp. Fixture 6 feet from test wall.

Beam shown: 175 Watt Metal Halide lamp. Fixture 6 feet from test wall. Shown with optional Internal Source Shield (ISS).

Beam shown: 175 Watt Metal Halide lamp. Fixture 6 feet from test wall.
PERFORMANCE – 7100 SERIES

**Facade Detail**
The 7000 Series (35 Watt HPS) is used to illuminate the facade of the Paris Hotel in Las Vegas, Nevada.

**Contemporary High Rise**
Frost Bank Building in Austin, Texas is beautifully illuminated by 7100s with Metal Halide sources in spot and horizontal flood distributions.

**Turn-of-the Century Structure**
Hydrel 7100 Series flood lights illuminate the clock tower building at Sun Microsystems headquarters in Palo Alto, California.
Horizontal Cast Concrete Sign
This sixty-foot-long sign is lighted by two 7100’s with horizontal spot, 100 Watt Metal Halide sources. Located fifteen feet from the sign, they provide excellent uniformity with minimum spill light. The internal glare control minimizes glare to passersby.

Aspen Grove
These Aspen trees are illuminated by a 7100 with a Metal Halide source, wide flood distribution – a beautiful winter scene.

Directional Sign
A 100 Watt Metal Halide source with a horizontal flood distribution in a 7100 Series fitted with an external glare shield highlights a small directional sign.

Public Sculpture
A low wattage Metal Halide lamp in vertical flood distribution set back four feet accent this tall, intricate sculpture.
Large Trees
This beautiful deciduous tree changing colors is accented by a 7100 with a vertical flood, 100 Watt Metal Halide source, set back twenty feet.

Small Sign
Single 7100 Series 100 Watt Metal Halide fixtures are popular for lighting small signs.

Dense Foliage
This setting features a 7100, 100 Watt Metal Halide with horizontal flood distribution beneath the tree and a similar fixture with vertical flood distribution in the foreground.
Hollywood Landmark
Several 7200 Series Metal Halide spots uplight a large statue at Hollywood and Highland in Los Angeles, California.
7200 SERIES
ARCHITECTURAL LIGHTING SYSTEM

The spectacular 726-foot-high Hoover Dam is illuminated by Hydrel 7200 Series Metal Halide flood fixtures.
Hydrel 7200 Series
Large Floodlights

Designed for big applications – puts light where you need it with a variety of beam patterns and multiple mounting options as well as internal glare control options for smooth cutoff.

Contemporary styling to complement any architectural statement.
Shown here is a 7200 Series horizontal spot on a knuckle mount.
7200 SERIES

Large floodlights for big lighting jobs. The 7200’s wide range of mounting and glare control options facilitate its use in a variety of large scale architectural and landscape applications.

Intelligent design assures a quality product is placed on the job. Owners and designers can expect long product life and superior quality from Hydrel, leader in the design of sealed fixtures. The 7000 Family delivers protected performance.

Protected Performance

Protection:
- Rugged die cast housings and door
- Tough mountings
- Stainless steel fasteners
- Self-sealing silicone door gaskets
- Tempered glass lenses
- Textured powder coat finishes

Performance:
- High efficiency reflectors
- Variety of standard NEMA patterns
- Internal & external glare control
- Lockable aiming
- Wide dynamic range – 250 Watt to 1000 Watt HID
- Low energy, efficient, high performance HID
- High power factor, CWA and SCWA magnetic ballasts
- Ease of installation and maintenance

Construction

The 7200 Series displays a clean, architectural shape compatible with a variety of architectural styles.

The rugged 7200 Series knuckle has an integral junction box for a protected wireway. Versatile mountings allow protection, easy aiming, and access.

Narrow Horizontal Spot with Internal Source Shield.

NEMKO CE
IP65 Rating
Hydrel is an ISO9001 Certified Manufacturer
The 7200 Series includes several unique fixtures for a variety of lighting applications.

**Surface Mounted Ballasts**, unique to the 7200 Series fixtures, accommodate lamps to 1000 Watts HID. Shown here are a wall and base mount. A variety of extensions is available for special mountings.

**Custom Performance**

Glare Control

External glare shields are offered in two styles. The simple half shield and the versatile barn doors. The barn doors (BD) can be used individually or as a set. These glare shields (GS) are easily added in the field.

Internal glare controls may be specified as an option for spots, horizontal spots, and horizontal and vertical floods. These “soft” devices limit glare without altering the clean external surface of the fixture.

Yoke mounts offer easy aiming and adjustment in addition to a clean appearance. The Internal Source Shield (ISS) eliminates glare from intense spot lights providing an unobtrusive source.

Horizontal flood with Internal Source Shield (ISS).

As shown, a 7200 yoke mount with a half glare shield in a spot distribution.
BEAM CONTROL – 7200 SERIES
Six Floodlight Optical Systems

**SP Spot**
For large applications requiring a pattern with a tight concentric beam of light.

**NHSP Narrow Horizontal Spot**
A more concentrated version of the horizontal spot for smaller applications.

**HSP Horizontal Spot**
For applications requiring a pattern with a tight, concentrated rectangular beam of light.

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**SP**
400W MH ED37
50% Beam 8°x 8°
Max Candel 366,871

**NHSP**
400W MH ED37
50% Beam 71°x17°
Max Candel 30,694

**HSP**
400W MH ED37
50% Beam 78°x 41°
Max Candel 15,521

*Beam shown: 400 Watt Metal Halide lamp. Fixture 8 feet from test wall. Shown with optional Internal Source Shield (ISS).*
**VFL Vertical Flood**
For applications requiring a vertical, rectangular pattern.

**HFL Horizontal Flood**
For applications requiring a wide horizontal pattern.

**WFL Wide Flood**
For applications requiring a pattern with a wide concentric beam.

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**VFL**

400W MH ED37
50% Beam 84°x 57°
Max Candel 10,366

**HFL**

400W MH ED37
50% Beam 126°x 37°
Max Candel 12,768

**WFL**

400W MH ED37
50% Beam 50°x 73°
Max Candel 17,299

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Beam shown: 400 Watt Metal Halide lamp. Fixture 8 feet from test wall. Shown with optional Internal Source Shield (ISS).
Large Architectural Complex

A bank of 1000 Watt 7200 Series flood/spot lights illuminate the Cinerama Dome in Hollywood, California.
**Monumental Public Works**
This spectacular shot of Hoover Dam shows the uniformity achieved by a bank of 1000 Watt 7200 Series Metal Halide fixtures using flood and spot distributions.

**Industrial Security**
This 7200 Series Metal Halide flood lights the parking lot at a distribution center in Los Angeles, California.

Picture above shows a 400 watt 7200 Series with flood distribution.
At left a row of 1000 Watt 7200 Series flood and spot lights at Hoover Dam. Note rear extension for spot distribution.
Tall Palms
Morton’s Restaurant, Costa Mesa, California.
A row of 100-foot-tall palms is illuminated by a bank of 7200 Series fixtures equipped with 400 Watt Metal Halide lamps with spot distribution.

Wall Wash
These 7200 Series Metal Halide, 250 Watt floods uplight the walls of the New York, New York Casino in Las Vegas. Half glare shields are used in several key locations.

Highlight
A 7200 Series using a 250 Watt filtered Metal Halide lamp accents the roof on an ice skating rink in Anaheim, California.

Wall Wash
These 7200 Series Metal Halide, 250 Watt floods uplight the walls of the New York, New York Casino in Las Vegas. Half glare shields are used in several key locations.

Highlight
A 7200 Series using a 250 Watt filtered Metal Halide lamp accents the roof on an ice skating rink in Anaheim, California.

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Large Scale
Commercial
A bank of eight 7200 Series 1000 Watt spots, seen here to the immediate left mounted on a rooftop, shine across the Hollywood and Highland complex to accent the theme wall seen in photo below.

Large Sculpture
These 7200 Series, 400 Watt, Metal Halide fixtures uplight a large statue at Hollywood and Highland in Los Angeles, California.

Theme Structure
These 7200 Series, 400 Watt, Metal Halide fixtures uplight the base of a large statue at Hollywood and Highland in Los Angeles, California.
The 7000 family of Architectural Floodlights economizes installation. Advanced photometrics deliver higher lighting levels for your energy dollar.

### Trees

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<th>MH Enhances Green</th>
<th>MV Enhances Blue</th>
<th>HPS Enhances Brown</th>
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<td>35-50FL</td>
<td>50-75FL</td>
<td>35-50FL</td>
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<tr>
<td>20'-40'</td>
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<td>40'-60'</td>
<td>70-175FL</td>
<td>100-250FL</td>
<td>70-150FL</td>
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<tr>
<td>60'-80'</td>
<td>175-400FL</td>
<td>250-400FL</td>
<td>250-400FL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tight Structure</th>
<th>MH Enhances Green</th>
<th>MV Enhances Blue</th>
<th>HPS Enhances Brown</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'-20'</td>
<td>35-50SP</td>
<td>75-100SP</td>
<td>35-50SP</td>
</tr>
<tr>
<td>20'-40'</td>
<td>50-100SP</td>
<td>100-175SP</td>
<td>50-70SP</td>
</tr>
<tr>
<td>40'-60'</td>
<td>70-175SP</td>
<td>175-250SP</td>
<td>70-150SP</td>
</tr>
<tr>
<td>60'-80'</td>
<td>175-400SP</td>
<td>400SP</td>
<td>250-400SP</td>
</tr>
<tr>
<td>80'+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Signs

<table>
<thead>
<tr>
<th>Wattage Distribution</th>
<th>Setback</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Low Level Horizontal Signs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42TRT         FL</td>
<td>3'</td>
<td>4' X 6'</td>
</tr>
<tr>
<td>70M          HSP</td>
<td>4'</td>
<td>6' X 10'</td>
</tr>
<tr>
<td>175M         HSP</td>
<td>6'</td>
<td>8' X 12'</td>
</tr>
<tr>
<td>250M         HSP</td>
<td>8'</td>
<td>16' X 24'</td>
</tr>
</tbody>
</table>

| Small Low Level Vertical Signs |
| 70M          FL     | 3'      | 6' X 3'       |
| 100M         VFL    | 4'      | 10' X 5'      |
| 175M         VFL    | 5'      | 15' X 10'     |
| 250M         VFL    | 6'      | 20' X 10'     |

| Large Horizontal Signs |
| 100M         HSP    | 5'      | 10' X 20'     |
| 175M         HSP    | 10'     | 20' X 30'     |
| 250M         HSP    | 10'     | 10' X 15'     |
| 400M         HSP    | 15'     | 20' X 30'     |

| Large Vertical Signs |
| 100M         VFL    | 4'      | 10' X 5'      |
| 175M         VFL    | 6'      | 15' X 10'     |
| 250M         VFL    | 8'      | 20' X 15'     |
| 400M         VFL    | 10'     | 30' X 15'     |

**Shown here:**
- FL Flood
- HFL Horizontal Flood
- HSP Horizontal Spot
- MFL Medium Flood
- VFL Vertical Flood
- WFL Wide Flood
- SP Spot
Flags
For flag sizes 5' to 10' in width

Required wattage for pole height & number of fixtures

<table>
<thead>
<tr>
<th>Pole Ht.</th>
<th>Distribution</th>
<th>Wattage single fixture</th>
<th>Wattage two fixtures</th>
<th>Wattage three fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>15'</td>
<td>SP</td>
<td>35M</td>
<td>35M</td>
<td>35M</td>
</tr>
<tr>
<td>25'</td>
<td>SP+NSP</td>
<td>50-70M</td>
<td>50-70M</td>
<td>50-70M</td>
</tr>
<tr>
<td>40'</td>
<td>SP</td>
<td>70-100M</td>
<td>70-100M</td>
<td>70-100M</td>
</tr>
<tr>
<td>50'</td>
<td>SP</td>
<td>150-175M</td>
<td>150-175M</td>
<td>150-175M</td>
</tr>
<tr>
<td>60'</td>
<td>SP</td>
<td>175-250M</td>
<td>175-250M</td>
<td>175-250M</td>
</tr>
<tr>
<td>80'</td>
<td>SP</td>
<td>400-1000M</td>
<td>250-400M</td>
<td>250M</td>
</tr>
<tr>
<td>100'</td>
<td>SP</td>
<td>400-1000M</td>
<td>250-400M</td>
<td>250M</td>
</tr>
<tr>
<td>150'</td>
<td>SP</td>
<td>400-1000M</td>
<td>400-1000M</td>
<td>400M</td>
</tr>
<tr>
<td>200'</td>
<td>SP</td>
<td>1000M</td>
<td>400-1000M</td>
<td>400-1000M</td>
</tr>
</tbody>
</table>

Required setback from base for pole height and number of fixtures

<table>
<thead>
<tr>
<th>Pole Ht.</th>
<th>Single fixture</th>
<th>2 fixtures</th>
<th>3 fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>15' to 50'</td>
<td>2'-3'</td>
<td>1/5 of pole ht.</td>
<td>1/5 of pole ht.</td>
</tr>
<tr>
<td>50' to 200'</td>
<td>2'-3'</td>
<td>1/10 of pole ht.</td>
<td>1/12 of pole ht.</td>
</tr>
</tbody>
</table>

Walls and Buildings Uplighting
For light colored, smooth concrete walls

<table>
<thead>
<tr>
<th>Wall height</th>
<th>Wattage</th>
<th>Distribution</th>
<th>Spacing</th>
<th>Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'</td>
<td>35-70</td>
<td>FL, VFL</td>
<td>10'</td>
<td>3'</td>
</tr>
<tr>
<td>20'</td>
<td>50-100</td>
<td>VFL</td>
<td>10'</td>
<td>4'</td>
</tr>
<tr>
<td>30'</td>
<td>175</td>
<td>WFL</td>
<td>10'</td>
<td>5'</td>
</tr>
<tr>
<td>40'</td>
<td>250</td>
<td>WFL</td>
<td>10'</td>
<td>10'</td>
</tr>
<tr>
<td>50'</td>
<td>250</td>
<td>WFL</td>
<td>10'</td>
<td>10'</td>
</tr>
<tr>
<td>60'</td>
<td>400</td>
<td>WFL</td>
<td>10'</td>
<td>10'</td>
</tr>
</tbody>
</table>

Columns (Uplighting 1'-3' in diameter)
For light colored, smooth concrete columns

<table>
<thead>
<tr>
<th>Column ht.</th>
<th>Wattage</th>
<th>Distribution</th>
<th>Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'</td>
<td>35-70</td>
<td>SP</td>
<td>1'-2'</td>
</tr>
<tr>
<td>20'</td>
<td>50-100</td>
<td>SP</td>
<td>2'</td>
</tr>
<tr>
<td>30'</td>
<td>70-175</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
<tr>
<td>40'</td>
<td>150-250</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
<tr>
<td>50'</td>
<td>175-250</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
<tr>
<td>60'</td>
<td>250-400</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
</tbody>
</table>
APPLICATION INFORMATION

The 7000 family of Architectural Floodlights economizes installation. Advanced photometrics deliver higher lighting levels for your energy dollar.

<table>
<thead>
<tr>
<th>Trees</th>
<th>Wattage Distribution</th>
<th>Setback Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Structure</td>
<td>10'-20'</td>
<td>20'-40'</td>
</tr>
<tr>
<td>MH enhances green</td>
<td>35-50FL</td>
<td>50-70FL</td>
</tr>
<tr>
<td>MV enhances blue</td>
<td>50-75FL</td>
<td>75-100FL</td>
</tr>
<tr>
<td>HPS enhances brown</td>
<td>35-50FL</td>
<td>50-70FL</td>
</tr>
<tr>
<td>Tight Structure</td>
<td>10'-20'</td>
<td>20'-40'</td>
</tr>
<tr>
<td>MH enhances green</td>
<td>35-50SP</td>
<td>50-100SP</td>
</tr>
<tr>
<td>MV enhances blue</td>
<td>75-100SP</td>
<td>100-175SP</td>
</tr>
<tr>
<td>HPS enhances brown</td>
<td>35-50SP</td>
<td>50-70SP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signs</th>
<th>Wattage Distribution</th>
<th>Setback Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Low Level Horizontal Signs</td>
<td>42TRT</td>
<td>FL</td>
</tr>
<tr>
<td>70M</td>
<td>HSP</td>
<td>4'</td>
</tr>
<tr>
<td>175M</td>
<td>HSP</td>
<td>6'</td>
</tr>
<tr>
<td>250M</td>
<td>HSP</td>
<td>8'</td>
</tr>
<tr>
<td>Small Low Level Vertical Signs</td>
<td>70M</td>
<td>FL</td>
</tr>
<tr>
<td>100M</td>
<td>VFL</td>
<td>4'</td>
</tr>
<tr>
<td>175M</td>
<td>VFL</td>
<td>5'</td>
</tr>
<tr>
<td>250M</td>
<td>VFL</td>
<td>6'</td>
</tr>
<tr>
<td>Large Horizontal Signs</td>
<td>100M</td>
<td>HSP</td>
</tr>
<tr>
<td>175M</td>
<td>HSP</td>
<td>10'</td>
</tr>
<tr>
<td>250M</td>
<td>HSP</td>
<td>10'</td>
</tr>
<tr>
<td>400M</td>
<td>HSP</td>
<td>15'</td>
</tr>
<tr>
<td>Large Vertical Signs</td>
<td>100M</td>
<td>VFL</td>
</tr>
<tr>
<td>175M</td>
<td>VFL</td>
<td>6'</td>
</tr>
<tr>
<td>250M</td>
<td>VFL</td>
<td>8'</td>
</tr>
<tr>
<td>400M</td>
<td>VFL</td>
<td>10'</td>
</tr>
</tbody>
</table>

Shown here:
- HFL Horizontal Flood
- HSP Horizontal Spot
- SP Spot
- VFL Vertical flood
- NSP Narrow Spot
- WFL Wide Flood
**Flags**

For flag sizes 5' to 10' in width

<table>
<thead>
<tr>
<th>Pole Ht.</th>
<th>Distribution</th>
<th>Wattage single fixture</th>
<th>Wattage two fixtures</th>
<th>Wattage three fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>15'</td>
<td>SP</td>
<td>35M</td>
<td>35M</td>
<td>35M</td>
</tr>
<tr>
<td>25'</td>
<td>SP, HSP</td>
<td>50-70M</td>
<td>50-70M</td>
<td>50-70M</td>
</tr>
<tr>
<td>40'</td>
<td>SP</td>
<td>70-100M</td>
<td>70-100M</td>
<td>70-100M</td>
</tr>
<tr>
<td>50'</td>
<td>SP</td>
<td>150-175M</td>
<td>150-175M</td>
<td>150-175M</td>
</tr>
<tr>
<td>60'</td>
<td>SP</td>
<td>175-250M</td>
<td>175-250M</td>
<td>175-250M</td>
</tr>
<tr>
<td>80'</td>
<td>SP</td>
<td>400-1000M</td>
<td>400-1000M</td>
<td>400-1000M</td>
</tr>
<tr>
<td>100'</td>
<td>SP</td>
<td>400-1000M</td>
<td>400-1000M</td>
<td>400-1000M</td>
</tr>
<tr>
<td>150'</td>
<td>SP</td>
<td>1000M</td>
<td>1000M</td>
<td>1000M</td>
</tr>
</tbody>
</table>

Required setback from base for pole height and number of fixtures

<table>
<thead>
<tr>
<th>Pole Ht.</th>
<th>Single fixture</th>
<th>2 fixtures</th>
<th>3 fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>15' to 50'</td>
<td>2'-3'</td>
<td>1/5 of pole ht.</td>
<td>1/5 of pole ht.</td>
</tr>
<tr>
<td>50' to 200'</td>
<td>2'-3'</td>
<td>1/10 of pole ht.</td>
<td>1/10 of pole ht.</td>
</tr>
</tbody>
</table>

**Walls and Buildings Uplighting**

For light colored, smooth concrete walls

<table>
<thead>
<tr>
<th>Wall height</th>
<th>Wattage</th>
<th>Distribution</th>
<th>Spacing</th>
<th>Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'</td>
<td>35-70</td>
<td>FL, VFL</td>
<td>10'</td>
<td>3'</td>
</tr>
<tr>
<td>20'</td>
<td>50-100</td>
<td>VFL</td>
<td>10'</td>
<td>4'</td>
</tr>
<tr>
<td>30'</td>
<td>175</td>
<td>WFL</td>
<td>10'</td>
<td>5'</td>
</tr>
<tr>
<td>40'</td>
<td>250</td>
<td>WFL</td>
<td>20'</td>
<td>10'</td>
</tr>
<tr>
<td>50'</td>
<td>250</td>
<td>WFL</td>
<td>20'</td>
<td>10'</td>
</tr>
<tr>
<td>60'</td>
<td>400</td>
<td>WFL</td>
<td>20'</td>
<td>10'</td>
</tr>
</tbody>
</table>

**Columns (Uplighting 1'-3' in diameter)**

For light colored, smooth concrete columns

<table>
<thead>
<tr>
<th>Column ht.</th>
<th>Wattage</th>
<th>Distribution</th>
<th>Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'</td>
<td>35-70</td>
<td>SP</td>
<td>1'-2'</td>
</tr>
<tr>
<td>20'</td>
<td>50-100</td>
<td>SP</td>
<td>2'</td>
</tr>
<tr>
<td>30'</td>
<td>70-175</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
<tr>
<td>40'</td>
<td>150-250</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
<tr>
<td>50'</td>
<td>175-250</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
<tr>
<td>60'</td>
<td>250-400</td>
<td>SP</td>
<td>2'-3'</td>
</tr>
</tbody>
</table>
Hydrel Flood Lighting
Providing Solutions with Protected Performance

The primary function of a lighting fixture body is providing protection for electrical and optical components within. Hydrel, a long time leader in sealed lighting designs, brings its experience and expertise to flood lighting, using heavy die cast components, unique lens sealing methods, and protected wiring.
Heavy Duty Knuckle Design

The 7000 Series knuckle design, based on heavy duty machine tool technology, features a self-releasing taper, allowing infinite vertical adjustment through 180° while under heavy load. Rotational range is 360°.

Long lasting silicone gaskets protect against water and insects.

Tempered glass lens is permanently bracketed and gasketed to the door to prevent moisture penetration.

Heavy duty die cast aluminum door with integral channels for gasketing and accessory retention. The wide lip provides a guide for self-centering and positive sealing. The inside of the door is indexed for repeatable positioning of internal glare shields on the door.

Internal glare shield eliminates glare outside the desired light distribution pattern.

Stainless steel captive door fasteners are provided. Door screw grommet/casting design allows for positive sealing while preventing damage to the grommet through overtightening.

PROTECTED PERFORMANCE

The 7000 Family delivers protected performance. The Intelligent Design process recognizes that a primary function of a lighting fixture is to provide protection for its electrical and optical components. Hydrel, a long time leader in underwater lighting brings that experience to floodlighting with heavy die cast components, unique lens sealing methods, and protected wiring. Intelligent design assures a quality product is placed on the job. Owners and designers can expect long product life and high quality from Hydrel, the leader in the design of sealed lighting fixtures.

Performance:
- High efficiency reflectors
- Variety of standard NEMA patterns
- Internal & external glare control
- Lockable aiming
- Wide dynamic range – 26 Watt Fluorescent to 1000 Watt HID
- Low energy, efficient Fluorescent to high intensity HID
- High power factor magnetic and electronic ballasts
- Ease of installation and maintenance

Protection:
- Rugged die cast housings and door
- Tough mountings
- Stainless steel fasteners
- Self-sealing silicone door gaskets
- Tempered glass lenses
- Textured powder coat finishes

Indexing
Indexing scale on inside of door allows for precise positioning of internal glare shields or other devices. Positioning is not disturbed by relamping or other maintenance.

Heavy Duty Knuckle
The 7000 Series knuckle design, based on heavy duty machine tool technology, features a self-releasing taper, allowing infinite vertical adjustment through 180° while under heavy load. Rotational range is 360°. A single tamper-proof fastener secures knuckle in position. Angle indicator pointer is provided; note the raised dot angle indicator marks at 15° intervals.

Color Filters
Hydrel remains at the forefront in providing segmented glass and dichroic filters suitable for a wide range of projects.
Single Tool Convenience
Captive, tamper-proof fasteners retain doors, junction box covers, and knuckles. One common wrench provides maintenance personnel access and aiming ability.

Spring Retention
Relamping and maintenance are facilitated by door retention, captured screws, and simple bracketry. Knuckle and yoke mount fixtures use a spring retention system which easily adapts for a variety of mounting options.

Visit the Hydrel Website: www.hydrel.com
Visit our website for specification sheets, installation instructions, and a comprehensive selection of photometric data for the products in this catalog, as well as for other Hydrel products.

Go to www.hydrel.com – select “floodlights” to supplement the information in this catalog with specification sheets, installation instructions, and photometric data for all models of the 7000 Series of floodlights.
### 7000 SERIES – MOUNTING

#### Mounting Options

<table>
<thead>
<tr>
<th>KM</th>
<th>Knuckle Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>YM</td>
<td>Yoke Mount</td>
</tr>
</tbody>
</table>

#### Mounting Accessories

- **ARJB** Architectural Junction Box Knuckle/Yoke
- **PSSA** Pedestal Stanchion Mount Knuckle/Yoke
- **FJB** Flush Mount Junction Box Knuckle/Yoke
- **SMT** Stanchion Mount Tee Knuckle/Yoke
- **PAR / PAS** Pole Arm Round Pole Arm Square Knuckle/Yoke
- **PATR / PATS** Pole Arm Twin Round Pole Arm Twin Square Knuckle/Yoke
- **EWM** Extended Wall Mount Knuckle/Yoke
- **TRJB** Tree Mount Knuckle/Yoke
- **WMSA** Wall Mount Knuckle/Yoke
- **FJB** Flush Mount Junction Box Knuckle/Yoke
- **ARJB** Architectural Junction Box Knuckle/Yoke

#### Accessories

- **PSSA** Pedestal Stanchion Mount
- **SMSA18** Stanchion Mount
- **BD** Barn Doors
- **GS** Glare Shield

### 7000 SERIES – DIMENSIONS

#### Mounting Options

<table>
<thead>
<tr>
<th>KM</th>
<th>Knuckle Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>YM</td>
<td>Yoke Mount</td>
</tr>
</tbody>
</table>

#### Mounting Accessories

- **EWM** Extended Wall Mount Knuckle/Yoke
- **PAR4/PAS4** Pole Arm Round Pole Arm Square Knuckle/Yoke
- **PATR4/PATS4** Pole Arm Twin Round Pole Arm Twin Square Knuckle/Yoke
- **WMSA** Wall Mount Knuckle/Yoke
- **TRJB** Tree Mount Knuckle/Yoke
- **FJB** Flush Mount Junction Box Knuckle/Yoke
- **ARJB** Architectural Junction Box Knuckle/Yoke

#### Accessories

- **PSSA** Pedestal Stanchion Mount
- **SMSA18** Stanchion Mount
- **BD** Barn Doors
- **GS** Glare Shield

#### Dimensions (in inches/millimeters)

<table>
<thead>
<tr>
<th>KM</th>
<th>Knuckle Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>YM</td>
<td>Yoke Mount</td>
</tr>
</tbody>
</table>

- **EWM** Extended Wall Mount
  - 18
  - 608
- **PAR4/PAS4** Pole Arm Round Pole Arm Square
  - 18
  - 610
- **PATR4/PATS4** Pole Arm Twin Round Pole Arm Twin Square
  - 18
  - 610
- **WMSA** Wall Mount
  - 6
  - 152
- **TRJB** Tree Mount
  - 6
  - 152
- **FJB** Flush Mount Junction Box
  - 6
  - 152
- **ARJB** Architectural Junction Box
  - 6
  - 152

#### Notes

- **PSSA** Pedestal Stanchion Mount Knuckle/Yoke (Shown on pole)
- **PAR / PAS** Pole Arm Round Pole Arm Square Knuckle/Yoke
- **PATR / PATS** Pole Arm Twin Round Pole Arm Twin Square Knuckle/Yoke
- **EWM** Extended Wall Mount Knuckle/Yoke
- **TRJB** Tree Mount Knuckle/Yoke
**Mounting Options**

**WMSA - Wall Mount**
Consists of three pieces: a mounting plate, the fixture mounting bracket, and a splice access plate. Unit mounts over a recessed wall box installation.

**PSSA - Pedestal Stanchion Mount**
This cast aluminum unit is fitted with a base plate for surface mounting. Splice access is provided.

**SMT - Stanchion Mount Tee**
These units include a tee for mounting two fixtures. 24” (610mm) length is standard.

**SMSA18 - Single Stanchion Mount**
This cast aluminum unit includes a base plate for surface mounting. Splice access is provided. Available in a variety of lengths, consult ordering guide.

**KM - Knuckle Mount**
The 7000 Series Knuckle provides a heavy duty, self-releasing, machine tool taper allowing a continuous, lockable vertical adjustment through 180°. Rotation range is 360°.

**YM - Yoke Mount**
Heavy duty aluminum yoke is attached to body with stainless steel bolts and polymeric finish caps. Fixtures are supplied with 10 feet of 18-3 STW (U.S. Standard) cord for supply connection.

**ISS - Internal Source Shield**
Fastens to reflector mounting plate eliminating glare beyond the desired light distribution pattern.

**GS - Glare Shield**
The formed aluminum shield, mounted in the door channel with set screws, cuts off upward glare at 35° from beam center.

**YM - Yoke Mount**
Heavy duty aluminum yoke is attached to body with stainless steel bolts and polymeric finish caps. Fixtures are supplied with 10 feet of 18-3 STW (U.S. Standard) cord for supply connection.

**W/MSA - Wall Mount**
Consists of three pieces: a mounting plate, the fixture mounting bracket, and a splice access plate. Unit mounts over a recessed wall box installation.

**ARJB - Architectural Junction Box**
Two conduit openings on bottom and one fixture mounting hole on top. Two tamper-resistant captive screws secure splice access cover.

**PMSA - Pole Mount**
This unit is a slipfitter for a standard 2 3/8” O.D. x 4” Tenon. Used for pole top mounting the fixture.

**BD - Barn Doors**
Provide adjustable glare shielding. Each door independently mounts with set screws.

**PMSA - Pole Mount**
This unit is a slipfitter for a standard 2 3/8” O.D. x 4” Tenon. Used for pole top mounting the fixture.

**PAR - Pole Arm Round**
Pole Mounted Arm, 12, 18, or 24 inches long, for existing round or square pole applications. PATR and PATS Tee Mount Arms are also available.

**PAS - Pole Arm Square**
Pole Mounted Arm, 12, 18, or 24 inches long, for existing round or square pole applications. PATR and PATS Tee Mount Arms are also available.
7100 SERIES – MOUNTING

Mounting Options

KM
Knuckle Mount

YM
Yoke Mount

ARJB
Architectural Junction Box
Knuckle/Yoke

TRJB
Tree Mount
Knuckle/Yoke

WUS
Wall Mount, Side Up

WMS
Wall Mount, Side Down

Mounting Accessories

PSSA
Pedestal Stanchion Mount
Knuckle/Yoke

ARJB
Architectural Junction Box
Knuckle/Yoke

FJB
Flush Mount Junction Box
Knuckle/Yoke

TRJB
Tree Mount
Knuckle/Yoke

PMSA
Pole Mount
Knuckle/Yoke

WMSA
Wall Mount
Knuckle/Yoke

EW/M
Extended Wall Mount
Knuckle/Yoke

SMSA
Stanchion Mount
Knuckle/Yoke

SMT
Stanchion Mount Tee
Knuckle/Yoke

PMT
Pole Mount Tee
Knuckle/Yoke

PAR / PAS
Pole Arm Round
Pole Arm Square
Knuckle/Yoke

PATR / PATS
Pole Arm Twin Round
Pole Arm Twin Square
Knuckle/Yoke
Mounting Options

**KM - Knuckle Mount**
The 7100 Series Knuckle employs a heavy duty, self-releasing machine tool taper allowing a continuous, lockable vertical adjustment through 180°. Rotation range is 360°.

**YM - Yoke Mount**
A heavy duty aluminum yoke attaches to unit body by stainless steel bolts with polymeric finish caps, lock washers and nuts. Fixtures are provided with 10 feet of 18-3 STW (U.S. Standard) cord for supply connection.

**CM - Ceiling Mount**
A mounting splice box is attached to the unit. The fixture is secured with set screws.

**WMS/WUS - Fixed Wall Mount**
The 7100 Series Wall Mount includes a mounting plate and a factory installed splice box which hooks into the mounting plate for easy installation. It is secured by set screws and an access plate is provided on the underside.

**ARJB - Architectural Junction Box**
Two conduit openings on bottom and one fixture mounting hole on top. Two tamper-resistant captive screws secure splice access cover.

**WMSA - Wall Mount**
Consists of three pieces: a mounting plate; the fixture mounting bracket; and a splice access plate. This unit mounts over a recessed wall box and provides a clean installation.

**PMSA - Pole Mount**
This unit is a slipfitter for a standard 2 3/8” O.D. x 4” Tenon. Used for pole top mounting of the fixture.

**PSSA - Pedestal Stanchion Mount**
Two conduit openings on bottom and one fixture mounting hole on top. Two tamper-resistant captive screws secure splice access cover.

**SMSA - Single Stanchion Mount**
Two conduit openings on bottom and one fixture mounting hole on top. Two tamper-resistant captive screws secure splice access cover.
Mounting Accessories

**PAR - Pole Arm Round**

**PAS - Pole Arm Square**

Pole Mounted Arm, 12, 18, or 24 inches long, for existing round or square pole applications. PATR and PATS Tee Mount (Twin) Arms are also available.

**PMT - Pole Mount Tee**

Similar to the PM Pole Mount with a tee for mounting two fixtures. 24" (610mm) length is standard.

**SMT - Stanchion Mount Tee**

Similar to the SMSA, this unit provides a tee for mounting two fixtures. Standard length is 24" (610mm).

**TRJB - Tree Mount**

This unit consists of a round splice box similar in construction to the WMSA wall mount with mounting ears. It is held to the tree by a one-inch band and turnbuckle provided by others.

Accessories

**GS - Glare Shield**

Formed aluminum shield is mounted in the door channel with set screws and cuts off upward glare at 35° from beam center.

**BD - Barn Doors**

Provide adjustable glare shielding. Each door mounts independently with set screws.

**LC - Polycarbonate Cover**

This clear polycarbonate cover protects the lens from vandalism. Fitted in the door channel, affixed with set screws.
7200 SERIES – MOUNTING

Mounting Options (250 Watt & 400 Watt products)

- KM: Knuckle Mount
- YM: Yoke Mount
- TNM: Tenon Mount
- EWM: Extended Wall Mount
- SMSA: Stanchion Mount
- SMSA: Knuckle/Yoke
- PMT: Pole Mount Tee
- PMT: Knuckle/Yoke
- PATR: Pole Arm Twin Round
- PATS: Pole Arm Twin Square
- PAR: Pole Arm Round
- PAS: Pole Arm Square
- KN: Knuckle
- YM: Yoke

Mounting Accessories (250 Watt & 400 Watt products)
**Mounting Options (1000 Watt product requires SMB)**

- KM  Knuckle Mount
- YM  Yoke Mount

**Mounting Accessories (1000 Watt SMB products)**

- SMB  Surface Mount Box Knuckle/Yoke
- SMBEW/M  Extended Wall Mount Knuckle/Yoke
- SMBSMSA  Stanchion Mount Knuckle/Yoke
- SMBSMT  Stanchion Mount Tee Knuckle/Yoke
- SMBR  Remote Ballast (Can be used for a wide variety of mounting situations.)
- SMBPMT  Pole Mount Tee Knuckle/Yoke
- SMBSMT  Stanchion Mount Tee Knuckle/Yoke
7200 SERIES Dimensions

(in inches/millimeters)

Mounting Accessories (250 Watt & 400 Watt products)

Mounting Options (all 7200 Series products)

Accessories

Mounting Accessories (1000 Watt SMB products)
Mounting Accessories (1000 Watt SMB products) continued

SMB Yoke

SMB Knuckle

SMBR Remote mount (Can be used for a wide variety of mounting placements.)

SMBSMT Stanchion Tee Mount Knuckle/Yoke

SMBSMSA Stanchion Mount Knuckle/Yoke

SMBPMT Pole Tee Mount Knuckle/Yoke
7200 SERIES – MOUNTING

Mounting Options

YM - Yoke Mount
A heavy duty aluminum yoke attaches to body with stainless steel bolts with polymeric finish caps, lock washers and nuts. Fixtures are equipped with 10 feet of 16-3 STW (U.S. Standard) cord for supply connection.

KM - Knuckle Mount
The 7200 Knuckle includes an integral junction box and uses a rugged machine tool taper to lock adjustments between 0° and 180°. Rotation adjustment of 360°.

Mounting Accessories

TNM - Tenon Mount/Knuckle
Mounts in various orientations to receive standard 7200 knuckle mount.

EWM - Extended Wall Mount/ Knuckle
Accommodates standard 7200 knuckle mount for wall applications.

PAR- Pole Arm Round
PAS - Pole Arm Square
Pole Mounted Arm, 12, 18, or 24 inches long, for existing round or square pole applications. PATR and PATS Tee Mount (Twin) Arms are also available.

PMT - Pole Mount Tee/Yoke
Accepts two 7200 yoke mounts. 36” (914mm) length is standard, custom lengths are available.

SMSA - Stanchion Mount
This cast aluminum unit is provided with a base plate for surface mounting. Splice access plate is provided. Also available for yoke mount.

PMT - Pole Mount Tee/Knuckle
Accepts two 7200 knuckle mounts.

EWM - Extended Wall Mount / Knuckle
Accepts 7200 yoke version for wall applications.
**Mounting Accessories (1000 Watt SMB product)**

**SMBPMT - Pole Tee Mount, Knuckle** Accommodates two standard 7200 knuckle mounts with ballasts mounted in the extruded aluminum tee (1000 Watt units).

**SMBPMT - Pole Tee Mount, Yoke** Similar to the knuckle SMBPMT above but accepts two 7200 1000 Watt yoke mounts.

**SMB - Mount, Knuckle** Accommodates the 7200 knuckle mount with ballast mounted in the extrusion (1000 Watts). Also available for yoke mount.

**SMBSMSA - Stanchion Mount** Extruded aluminum with splice access plate and base plate which can be custom drilled. Accepts the 7200 knuckle mount with ballast located in the extrusion (1000 Watts). Also available for yoke mount.

**SMBEWM - Extended Wall Mount, Knuckle** Accommodates 7200 knuckle mount, ballast is located in the extrusion (1000 Watts). Also available for yoke mount.

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**Accessories**

**BD - Barn Doors** Provide glare shielding. Each door independently mounted by set screws. Available in custom lengths. One to four doors can be used.

**GS - Glare Shield** Formed aluminum shield mounted in the door channel with set screws cuts off upward glare at 35° from beam center.

**EGL - External Grid Louver** Door channel mounted, flat black aluminum grid cuts off glare from various viewing angles.

**LC - Polycarbonate Cover** Clear polycarbonate cover protects the lens from vandalism. Fits in the door channel, affixed with set screws.

**SMBEWM - Extended Wall Mount, Yoke** Similar to the knuckle SMBEWM above but accepts two 7200 1000 Watt yoke mounts.
FINISH OPTIONS – STANDARD

Each of the ten standard finish colors is available in its own distinctive surface texture. The particular texture associated with a particular color is indicated in these photos.

Custom finishes are available. Textures of custom finishes are dependent on the finish material specified. Please consult Hydrel.

Colors shown here are approximate, and only accurate up to the limits of the four-color printing process.

Aluminum fixture surfaces are four step pre-treated prior to being painted with a long-lasting TGIC polyester powder coat.
Custom finishes are always an option at Hydrel.

Fixtures and accessories can be finished to your specifications. Consult Hydrel for details and ordering information.
Description

The 7000 Series Flood Light is a compact, high performance outdoor fixture accommodating lamps to 70 Watt HID. This unit is designed to provide consistent styling within Hydrel’s floodlighting systems. With a variety of distributions and mounting options, the 7000 greatly extends the uniform lighting capabilities of lower level floodlights. This fixture is fully sealed and suitable for wet locations.

Features & Specifications

MATERIAL: Die cast aluminum housing and door.

LENS: Flat tempered glass.

LAMP:
- Incandescent: T-4, Mini-can to 100 Watts.
- Fluorescent: TRT Triple Tube lamps to 42 Watts.
- HID: T-6, G12 to 70 Watts, E-17 medium base to 70 Watts; Elliptical, E-27 to 80 Watts.

SOCKET:
- Incandescent: Mini-can screw base.
- Fluorescent: 4-Pin, GX24Q base. HID: G-12, medium, or E27 base pulse-rated 4KV.

VOLTAGE: See ordering guide below.

LIGHT DISTRIBUTIONS: See ordering guide below.

REFLECTORS: High purity anodized specular, semi-specular, or patterned lighting sheet in various configurations designed to provide maximum performance and uniformity.

LENS: Flat tempered glass.

MOUNTING: See ordering guide below, Mounting Options and Accessories on page 46, and Mounting Option chart on page 64 for comprehensive list of mounting capabilities.

Knuckle Mount: Die cast aluminum with 1/2” NPT galvanized nipple.

Yoke Mount: Aluminum with 10’ of 18-3 STW flexible cord for US standard, 3m of 3GX1.0mm HO7RN-F cable for European standard. Polymer yoke mount caps are black finish.

GLARE CONTROL: Internal glare control elements. External, adjustable barn doors or fixed glare shields available.

ELECTRICAL COMPONENTS: Integrally mounted ballasts rated for low temperatures. Fixtures are 100% factory tested.

FINISH: See ordering guide for colors.

FASTENERS: Stainless Steel.

LISTING: U.L., C.U.L., CE, NEMKO.

WEIGHT: 20 lbs.

EPA: 0.64

NOTE: All lamps must be rated for “Universal Burning Position” because fixture tilt changes lamp orientation.
Description

The 7100 Series Flood Light is a compact, high performance outdoor fixture accommodating lamps to 175 Watt HID. This unit is designed to provide consistent styling within Hydrel's floodlighting systems. With a wide variety of vertical and horizontal light distributions, and mounting options, the 7100 greatly extends the uniform lighting capabilities of lower to mid-level floodlights. This fixture is fully sealed and suitable for wet locations.

Features & Specifications

MATERIAL: Die cast aluminum housing and door.

LAMP:
Incandescent: T-3, RSC Quartz to 500 Watts, T-4, Minican to 250 Watts.
HID: T-6, G12 to 150 Watts, E-17 medium base to 175 Watts; Elliptical, E-27 to 150 Watts. See ordering guide for further lamp options.

SOCKET:
Incandescent: Recessed Single Contact (RSC), Minican screw base.
HID: G-12, medium, or E27 base pulse-rated 4KV.
See ordering guide below for further lamp options.

VOLTAGE: See ordering guide below.

LIGHT DISTRIBUTION: See ordering guide below.

REFLECTORS: High purity anodized specular, semi-specular, patterned lighting sheet in various configurations

LENS: Flat tempered glass.

MOUNTING: See ordering guide below. Mounting Options and Accessories on page 48, and Mounting Option chart on page 64 for comprehensive list of mounting capabilities.

Knuckle or yoke mounted (180° vertical, 360° rotation); Fixed mounted for ceiling or wall.

Knuckle Mount: Die cast aluminum with 3/4" NPT galvanized nipple standard.

Yoke Mount: Aluminum with 10' of 18-3 STW flexible cord for US standard, 3m of 3GX1.0mm HO7RN-F cable for European standard. Polymer yoke mount caps are black finish.

GLARE CONTROL: Internal glare control elements, external adjustable barn doors or fixed glare shields available.

ELECTRICAL COMPONENTS: Integrally mounted ballasts rated for low starting temp. Fixtures are 100% factory tested.

FINISH: See ordering guide below for colors.

FASTENERS: Stainless steel


WEIGHT: 37 lbs.

EPA: 1.27

NOTE: All lamps must be rated for “Universal Burning Position” because fixture tilt changes lamp orientation.
SPECIFICATIONS / ORDERING GUIDE – 7200 SERIES 400 WATT

Description

The 7200 Series of outdoor lighting fixtures is designed to provide consistent styling with a variety of light distributions. Styling is consistent with the smaller companion 7000 and 7100 Series units. Multiple optical systems achieve a wide variety of vertical and horizontal light distributions, from tight spots to wide floods. A variety of mounting orientations are available including wall, stanchion, base, knuckle, yoke, and pole mounts.

Features & Specifications

MATERIAL: Die cast aluminum housing and door.

LAMP: HID to 400 Watts.

SOCKET: Porcelain mogul base rated 5KV.

VOLTAGE: See ordering guide below.

LIGHT DISTRIBUTION: See ordering guide below.

REFLECTORS: High purity anodized specular, semi-specular, or patterned lighting sheet in various configurations to provide optimum optical performance. Reflectors are interchangeable using four screws and quick-release electrical connectors (with the exception of spot reflectors.) Reflectors include both segmented and hydroformed types to provide maximum performance and uniformity.

LENS: Flat tempered glass.

MOUNTING: See ordering guide below, Mounting Options and Accessories on page 52, and Mounting Option chart on page 64 for comprehensive list of mounting capabilities.

Fixtures can be knuckle or yoke mounted (180° vertical, 360° rotation) on pole, stanchion, wall, or tenons. All mounting accessories are aluminum, secured with stainless steel fasteners.

GLARE CONTROL: Internal glare control elements, external adjustable barn doors or fixed glare shields available.

ELECTRICAL COMPONENTS: Integrally mounted ballasts rated for low starting temp. Fixtures are 100% factory tested.

FINISH: See ordering guide for colors.

FASTENERS: Stainless Steel


WEIGHT: 50 lbs.

EPA: 3.00

NOTE: All lamps must be rated for “Universal Burning Position” because fixture tilt changes lamp orientation.


NEMKO CE

IP65 Rating

Hydrel is an ISO9001 Certified Manufacturer
Description

The 7200 Series Architectural Lighting System is a series of outdoor fixtures designed to provide consistent styling with a wide variety of vertical and horizontal light distributions. These luminaires greatly extend the uniform lighting capabilities for low level floodlights. Multiple optical systems achieve a wide variety of vertical and horizontal light distributions, from horizontal spot to vertical floods. There are also a variety of mounting options available including wall, stanchion, base, knuckle and yoke mounts. Fixture is fully sealed with silicone gasketing. Suitable for wet location.

Features & Specifications

MATERIAL: Die cast aluminum housing and door.

LAMP: HID to 1000 Watts

SOCKET: Porcelain mogul base rated 5 KV.

VOLTAGE: See ordering guide below.

LIGHT DISTRIBUTION: See ordering guide below.

REFLECTORS: High purity anodized specular, semi-specular, or patterned lighting sheet in various configurations to provide optimum optical performance. Reflectors are interchangeable using four screws and quick-release electrical connectors [with the exception of spot reflectors]. Reflectors include both segmented and hydroformed types to provide maximum performance and uniformity.

LENS: Flat tempered glass.

MOUNTING: See ordering guide below. Mounting Options and Accessories on page 53, and Mounting Option chart on page 64 for comprehensive list of mounting capabilities.

Fixtures can be knuckle or yoke mounted (180° vertical, 360° rotation) on pole, stanchion, wall, or tenons. All mounting accessories are aluminum, secured with stainless steel fasteners.

GLARE CONTROL: Internal glare control elements, external adjustable barn doors or fixed glare shields available.

ELECTRICAL COMPONENTS: Externally mounted ballasts.

FINISH: See ordering guide.

FASTENERS: Stainless steel.

LISTING: U.L., C.U.L.

WEIGHT: 40 lbs. (head only)

EPA: 3.00

NOTE: All lamps must be rated for “Universal Burning Position” because fixture tilt changes lamp orientation.
### MOUNTING OPTIONS

#### 7000 Series 26 Watt to 70 Watt

**ADJUSTABLE**
- Knuckle Mount: KNUCKLE
- Yoke Mount: YOKE

#### 7100 Series 50 Watt to 175 Watt

**ADJUSTABLE**
- Knuckle Mount: KNUCKLE
- Yoke Mount: YOKE

**FIXED**
- Wall Mount Side down/up: WMS/WUS
- Ceiling Mount: CM

#### 7200 Series 400 Watt

**ADJUSTABLE**
- Knuckle Mount: KNUCKLE
- Yoke Mount: YOKE

#### 7200 Series 1000 Watt

**ADJUSTABLE**
- Knuckle Mount: KNUCKLE
- Yoke Mount: YOKE

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*Two fixtures per mounting*
Protected Performance

Lighting an American landmark with Hydrel Series 7200 luminaires.

A project to update the lighting at Hoover Dam resulted in replacing sixty-four HPS fixtures with thirty-two 1000 Watt Metal Halide Series 7200 units using a combination of flood and spot distributions.

Uniformity and color rendering improved dramatically, while operating costs dropped by 23%.

The sturdy 7200s were chosen for their performance and rugged construction. The units are knuckle mounted on remote ballast enclosures to provide easy adjustment.

7200 MH 1000 spot and flood fixtures on surface mounted ballast enclosures aimed for maximum impact on the face of the dam.