**General Description:**
R-9811-FL-B Solar Light Bollards feature bike-locking arms to support secure bicycle storage and can be surface mounted to existing concrete. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors. Removable mountings are available.

**Specifications:**
- **Height:** 36"
- **Base Diameter:** 9 1/8"
- **Weight:** 60 lbs (Bollard Only)
- **Material:** Steel Base, Stainless Steel Bike Arms, Aluminum Cap
- **Max. Interior Security Post Size:** 3 1/2" x 20" (Diameter x Height)

**Finish Options:**
- Polyester Powdercoated

**Installation Options:**
- Fixed - Anchor Casting in New Concrete (see sheet 2 of 10)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 10)
- Fixed - Flanged in Existing Concrete (see sheet 4 of 10)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 5 of 10)
- Post Cover - New Post in New Concrete (see sheet 6 of 10)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 7 of 10)
- Removable - Anchor Casting in New Concrete (see sheet 8 of 10)
- Removable - Concrete Insert Anchor in Existing Concrete (see sheet 9 of 10)
- Removable - Premium Retractable in New Concrete (see sheet 10 of 10)

For more information on bollard post installation, please visit: www.reliance-foundry.com/bollard/installation-bollards

**Light Color Options:**
- 4500K Neutral White
- 3000K Warm White

**On-Off Program Options:**
- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

**Optional Accessories:**
- Chain Eye
- Quick Link
- Chain (5/16"
- Padlock, Brass (1 3/4"
- Padlock, Stainless Steel (2"

See Reliance Foundry's optional accessories at: www.reliance-foundry.com/bollard/accessories-bollards

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**Installation Sample**
with 5/16" Chain Accessories

Bollard Chain Eye 3/8" (Powder Coated)
Quick Link Connector 5/16" (Powder Coated)
Bollard Chain 5/16" (Powder Coated)
**Bollard R-9811-FL-B**

**General Description:**
R-9811-FL-B Solar Light Bollards feature bike-locking arms to support secure bicycle storage and can be surface mounted to existing concrete. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors. Removable mountings are available.

**Specifications:**
- Height: 36”
- Base Diameter: 9 1/8”
- Weight: 60 lbs (Bollard Only)
- Material: Steel Base, Stainless Steel Bike Arms, Aluminum Cap
- Max. Interior Security Post Size: 3 1/2” x 20” (Diameter x Height)

**Finish Options:**
- Polyester Powdercoated

See Reliance Foundry’s standard color options at: www.reliance-foundry.com/bollard/colors-bollards

**Installation Options:**
- Fixed - Anchor Casting in New Concrete (see sheet 2 of 10)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 10)
- Fixed - Flanged in Existing Concrete (see sheet 4 of 10)
- Post Cover - New Post in New Concrete (see sheet 5 of 10)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 10)
- Removable - Anchor Casting in New Concrete (see sheet 7 of 10)
- Removable - Concrete Insert Anchor in Existing Concrete (see sheet 8 of 10)
- Removable - Premium Retractable in New Concrete (see sheet 9 of 10)
- Removable - Post Cover in New Concrete (see sheet 10 of 10)

For more information on bollard post installation, please visit: www.reliance-foundry.com/bollard/installation-bollards

**Light Color Options:**
- 4500K Neutral White
- 3000K Warm White

**On-Off Program Options:**
- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

**Notes:**
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

**Tools needed:**
1) Measuring tape
2) 1 1/2” wrench
3) Special hex key

**For more information on bollard post installation, please visit:**
www.reliance-foundry.com/bollard/installation-bollards
General Description:
R-9811-FL-B Solar Light Bollards feature bike-locking arms to support secure bicycle storage and can be surface mounted to existing concrete. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors. Removable mountings are available.

Specifications:
- Height: 36" Base Diameter: 9 1/8"
- Weight: 60 lbs (Bollard Only)
- Material: Steel Base, Stainless Steel Bike Arms, Aluminum Cap
- Max. Interior Security Post Size: 3 1/2" x 20" (Diameter x Height)

Finish Options:
- Polyethylene Powder coated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:
- Fixed - Anchor Casting in New Concrete
- Fixed - Concrete Insert Anchor in Existing Concrete
- Fixed - Adhesive Anchor in Existing Concrete
- Fixed - Flanged in Existing Concrete
- Post Cover - New Post in New Concrete
- Post Cover - Existing Post with Adhesive Anchor
- Removable - Anchor Casting in New Concrete
- Removable - Concrete Insert Anchor in Existing Concrete
- Removable - Premium Retractable in New Concrete

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:
- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:
- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

Notes:
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

Tools needed:
1) Measuring tape
2) 1 1/8" wrench
3) Special hex key
4) Hammer drill
5) "1 Masonry drill bit
6) Hammer
7) Drop-in concrete insert setting tool

PARTS LIST

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>WEIGHT</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>R8911FB</td>
<td>R8911 Flanged Bollard Base w/ Bike Arms</td>
<td>Steel Powder Coated</td>
<td>41 lbs</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>R8911C</td>
<td>R8911 Bollard Solar Light Cap (Option of SYM or ASYM)</td>
<td>Cast Aluminum Powder Coated</td>
<td>19 lbs</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>R8908BAR</td>
<td>Drop-in Concrete Insert 3/4&quot; - requires 1&quot; x 3 1/8&quot; hole (dia. x depth)</td>
<td>Steel Plated</td>
<td>1/2 lbs</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>R7500</td>
<td>R7500 Threaded Bar 3/4&quot; x 2'4&quot;</td>
<td>Steel Plated</td>
<td>2 1/2 lbs</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Washer 3/4&quot; OD 2&quot;</td>
<td>Washer 3/4&quot; OD 2&quot; Thick 1/8&quot;</td>
<td>Steel Plated</td>
<td>1/8 lbs</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Hex Nut 3/4&quot;</td>
<td>Hex Nut 3/4&quot; - requires 1 1/8&quot; wrench</td>
<td>Steel Plated</td>
<td>1/8 lbs</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Button Head Bolt TR 1/4&quot; x 1/2&quot;</td>
<td>Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4&quot; x 1/2&quot; - requires special hex key</td>
<td>Stainless Steel</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Polyethylene Plug 5/8&quot;</td>
<td>Polyethylene Plug 5/8&quot;</td>
<td>Polyethylene Plastic</td>
<td></td>
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</tbody>
</table>
Bollard R-9811-FL-B

General Description:
R-9811-FL-B Solar Bollards feature bike-locking arms to support secure bicycle storage and can be surface mounted to existing concrete. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors. Removable mountings are available.

Specifications:
- Height: 36"  
- Base Diameter: 9 1/8"  
- Weight: 60 lbs (Bollard Only)  
- Material: Steel Base, Stainless Steel Bike Arms, Aluminum Cap  
- Interior Security Post Size: 3 1/2" x 20" (Diameter x Height)

Finish Options:
- Polyester Powdercoated

See Reliance Foundry’s standard color options at: www.reliance-foundry.com/bollard/colors-bollards

Installation Options:
- Fixed - Anchor Casting in New Concrete
- Fixed - Concrete Insert Anchor in Existing Concrete
- Fixed - Flanged in Existing Concrete
- Fixed - Anchor Casting in New Concrete
- Post Cover - New Post in New Concrete
- Post Cover - Existing Post with Adhesive Anchor
- Removable - Anchor Casting in New Concrete
- Removable - Concrete Insert Anchor in Existing Concrete
- Removable - Premium Retractable in New Concrete

For more information on bollard post installation, please visit: www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:
- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:
- Dim to 30% @ 5 hours
- Off @ dawn
- Dim to 30% @ 6 hours
- Off @ 5 hours

Notes:
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.
### Parts List

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Material</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>R9811FB</td>
<td>R9811 Flanged Bollard Base w/ Bike Arms</td>
<td>Steel Powder Coated</td>
<td>41 lbs</td>
</tr>
<tr>
<td>R9811FC</td>
<td>R9811 Bollard Solar Light Cap (Option of SYM or ASYM)</td>
<td>Cast Aluminum Powder Coated</td>
<td>19 lbs</td>
</tr>
<tr>
<td></td>
<td>Drop-in Concrete Insert 1/2&quot;</td>
<td>Stainless Steel</td>
<td>1/8 lbs</td>
</tr>
<tr>
<td></td>
<td>Stainless Steel Washer 1/2&quot; OD 1 1/4&quot; Thick .05&quot;</td>
<td>Stainless Steel</td>
<td>1/8 lbs</td>
</tr>
<tr>
<td></td>
<td>Button Head Bolt 1/2&quot; x 1/4&quot;</td>
<td>Stainless Steel</td>
<td>1/8 lbs</td>
</tr>
<tr>
<td></td>
<td>Button Head Bolt TK 1/4&quot; x 1/2&quot;</td>
<td>Stainless Steel</td>
<td>1/8 lbs</td>
</tr>
</tbody>
</table>

### General Description:

R-9811-FL-B Solar Light Bollards feature bike-locking arms to support secure bicycle storage and can be surface mounted to existing concrete. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors. Removable mountings are available.

### Specifications:

- **Height:** 36"  
- **Base Diameter:** 9 1/8"  
- **Weight:** 60 lbs (Bollard Only)  
- **Material:** Steel Base, Stainless Steel Bike Arms, Aluminum Cap

### Installation Options:

1. **Fixed - Anchor Casting in New Concrete**  
2. **Fixed - Concrete Insert Anchor in Existing Concrete**  
3. **Fixed - Adhesive Anchor in Existing Concrete**  
4. **Fixed - Flanged in Existing Concrete**  
5. **Post Cover - New Post in New Concrete**  
6. **Post Cover - Existing Post with Adhesive Anchor**  
7. **Removable - Anchor Casting in New Concrete**  
8. **Removable - Concrete Insert Anchor in Existing Concrete**  
9. **Removable - Premium Retractable in New Concrete**

### Notes:

1. Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.  
2. Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.  
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**Specifications:**
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- **Weight:** 60 lbs (Bollard Only)  
- **Material:** Steel Base, Stainless Steel Bike Arms, Aluminum Cap  
- **Max. Interior Security Post Size:** 3 1/2" x 20" (Diameter x Height)

**Finish Options:**
- Polyester Powder coated

See Reliance Foundry's standard color options at: [www.reliance-foundry.com/bollard/colors-bollards](http://www.reliance-foundry.com/bollard/colors-bollards)

**Installation Options:**
- **Fixed - Anchor Casting in New Concrete**  
- **Fixed - Concrete Insert Anchor in Existing Concrete**  
- **Fixed - Adhesive Anchor in Existing Concrete**  
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- **Post Cover - New Post in New Concrete**  
- **Post Cover - Existing Post with Adhesive Anchor**  
- **Removable - Anchor Casting in New Concrete**  
- **Removable - Concrete Insert Anchor in Existing Concrete**  
- **Removable - Premium Retractable in New Concrete**

For more information on bollard post installation, please visit: [www.reliance-foundry.com/bollard/installation-bollards](http://www.reliance-foundry.com/bollard/installation-bollards)

**Light Color Options:**
- 4500K Neutral White  
- 3000K Warm White

**On-Off Program Options:**
- Dim to 30% @ 5 hours  
- Off @ dawn  
- Off @ 6 hours  
- Dim to 30% @ 6 hours  
- Off @ 5 hours

**Notes:**
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.  
2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.  
3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.  
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**Tools needed:**
- Measuring tape  
- 1 1/2" wrench  
- Special hex key

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<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>R9811FLB</td>
<td>R9811 Flanged Bollard Base w/ Bike Arms</td>
<td>Steel Powder Coated</td>
<td>41 lbs</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>R9811C</td>
<td>R9811 Bollard Solar Light Cap (Option of SYM or ASYM)</td>
<td>Cast Aluminum Powder Coated</td>
<td>19 lbs</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>R7500BAR 1&quot;</td>
<td>R7500 Threaded Bar 1&quot; x 24&quot;</td>
<td>Steel Plated</td>
<td>4 1/2 lbs</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Washer 1&quot; OD 2&quot;</td>
<td>Washer 1&quot; OD 2&quot; x 1/8&quot;</td>
<td>Steel Plated</td>
<td>1/8 lbs</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>Hex Nut 1&quot;</td>
<td>Hex Nut 1&quot; - requires 1 1/2&quot; wrench</td>
<td>Steel Plated</td>
<td>1/4 lbs</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>Button Head Bolt TR 1/4&quot; x 1/2&quot;</td>
<td>Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4&quot; x 1/2&quot; - requires special hex key</td>
<td>Stainless Steel</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Polyethylene Plug 5/8&quot;</td>
<td>Polyethylene Plug 5/8&quot;</td>
<td>Polyethylene Plastic</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1) Use 1 piece of 1" nut on bar as anchor in wet concrete.  
2) Ensure the bar is centered and extend no more than 23" above grade.  
3) Wait until concrete is cured.
Notes:
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Specifications:
- Height: 36" Base Diameter: 9 1/8"
- Weight: 60 lbs (Bollard Only)
- Material: Steel Base, Stainless Steel Bike Arms, Aluminum Cap
- Max. Interior Security Post Size: 3 1/2" x 20" (Diameter x Height)

Finish Options:
- Polyester Powdercoated
- See Reliance Foundry's standard color options at: www.reliance-foundry.com/bollard/colors-bollards

Installation Options:
- Fixed - Anchor Casting in New Concrete (see sheet 2 of 10)
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- Fixed - Anchor Casting in New Concrete (see sheet 5 of 10)
- Post Cover - New Post in New Concrete (see sheet 6 of 10)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 7 of 10)
- Removable - Anchor Casting in New Concrete (see sheet 8 of 10)
- Removable - Concrete Insert Anchor in Existing Concrete (see sheet 9 of 10)
- Removable - Premium Retractable in New Concrete (see sheet 10 of 10)

For more information on bollard post installation, please visit: www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:
- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:
- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

Tools needed:
1) Measuring Tape
2) 1 1/2" wrench
3) Special hex key
4) Hammer drill
5) 1 1/8" Masonry drill bit
6) Caulking gun and utility knife

Bollard R-9811-FL-B

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Unit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canada
1-877-789-3245  info@reliance-foundry.com
www.reliance-foundry.com
### General Description:

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- Max. Interior Security Post Size: 3 1/2" x 20" (Diameter x Height)

### Finish Options:
- Polyester Powdercoated

See Reliance Foundry's standard color options at:  
www.reliance-foundry.com/bollard/colors-bollards

### Installation Options:
- **Fixed** - Anchor Casting in New Concrete  
- **Fixed** - Anchor Casting in New Concrete  
- **Fixed** - Anchor Casting in Existing Concrete  
- **Fixed** - Flanged in New Concrete  
- **Fixed** - Flanged in New Concrete
  
  **On-Off Program Options:**
  - Off @ 6 hours  
  - Fixed @ 5 hours  
  - Off @ 6 hours  
  - Off @ 6 hours

For more information on bollard post installation, please visit:  
www.reliance-foundry.com/bollard/installation-bollards

### Light Color Options:
- 4500K Neutral White  
- 3000K Warm White

### On-Off Program Options:
- **Dim** to 30% @ 5 hours  
- **Off** @ dawn  
- **Off** @ 6 hours  
- **Off** @ 6 hours

### Tools needed:
1. Measuring tape  
2. 1 1/2" wrench  
3. Special hex key

### Notes:
1. Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.  
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<td>R9811 Flanged Bollard Base w/ Bike Arms</td>
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<td>41 lbs</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>R9811C</td>
<td>R9811 Bollard Solar Light Cap (Option of SYM or ASYM)</td>
<td>Cast Aluminum Powder Coated</td>
<td>19 lbs</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>R7500A</td>
<td>R7500 Anchor Casting 1&quot;</td>
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<td>R7501B</td>
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<td>Cast Steel Hot Dip Galvanized</td>
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<tr>
<td>5</td>
<td>1</td>
<td>Washer 1&quot; OD 2&quot;</td>
<td>Washer 1&quot; OD 2&quot; Thrck 1/8&quot;</td>
<td>Steel Plate</td>
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<td>Steel Plate</td>
<td>5/8 lbs</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Button Head Bolt TR 1/4&quot; x 1/2&quot;</td>
<td>Button Head Cap Bolt Tamper Resistant 1/4&quot; x 1/2&quot; - requires special key</td>
<td>Stainless Steel</td>
<td>5/8 lbs</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Polyethylene Plug 5/8&quot;</td>
<td>Polyethylene Plug 5/8&quot;</td>
<td>Polyethylene Plastic</td>
<td>5/8 lbs</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>R7500 Lock Pin 3/4&quot; x 7&quot;</td>
<td>R7500 Lock Pin 3/4&quot; x 7&quot;</td>
<td>Steel Powder Coated</td>
<td>1 1/8 lbs</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>Padlock (Optional)</td>
<td>Optional Padlock (Brass or Stainless Steel)</td>
<td>Choice of Brass or Stainless Steel</td>
<td>5/8 lbs</td>
</tr>
</tbody>
</table>
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.

2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.

3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.

4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

5) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

6) Hammer drill

7) Special hex key

8) 1 1/8" wrench

9) 1" Masonry drill bit

10) Tighten removable mount with hammer drill to drive plug down.

11) Turn bollard base clockwise to fasten the padlock.

12) Use hammer and setting tool to drive plug down.

13) Insert drop-in anchor into hole 1" dia. x 3 1/8" depth.

14) Clean drill hole of debris.

15) Use hammer drill to make hole 1" dia. x 3 1/8" depth.

16) Align and insert lock pin through 3/4" washer and 3/4" bolt.

17) Use hammer and setting tool to drive plug down.

18) Fasten the padlock.

19) Secure bollard cap with tamper resistant bolts.
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

Notes:
1. Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2. Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3. Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
4. Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

PARTS LIST

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>WEIGHT</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>R9811FB</td>
<td>R9811 Flanged Bollard Base w/ Bike Arms</td>
<td>Steel Powder Coated</td>
<td>41 lbs</td>
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<tr>
<td>2</td>
<td>1</td>
<td>R9811C</td>
<td>R9811 Bollard Solar Light Cap (Option of SYM or ASYM)</td>
<td>Cast Aluminum Powder Coated</td>
<td>10 lbs</td>
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<tr>
<td>3</td>
<td>1</td>
<td>R7000</td>
<td>R7000 Retractable Mount w/ Spacer 5</td>
<td>Steel Hot Dip Galvanized</td>
<td>15 5/8 lbs</td>
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<tr>
<td>4</td>
<td>3</td>
<td>Button Head Bolt TR 1/4&quot; x 1/2&quot;</td>
<td>Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4&quot; x 1/2&quot; - requires special hex key</td>
<td>Stainless Steel</td>
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<td>7</td>
<td>1</td>
<td>Padlock (Optional)</td>
<td>Optional Padlock (Brass or Stainless Steel)</td>
<td>Choice of Brass or Stainless Steel</td>
<td>5/8 lbs</td>
</tr>
</tbody>
</table>

General Description:
R-9811-FL-B Solar Light Bollards feature bike-locking arms to support secure bicycle storage and can be surface mounted to existing concrete. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors. Removable mountings are available.

Specifications:
Height: 36" Base Diameter: 9 1/8" Weight: 60 lbs (Bollard Only)
Material: Steel, Stainless Steel Bike Arms, Aluminum Cap
Max. Interior Security Post Size: 3 1/2" x 20" (Diameter x Height)

Finish Options:
Polyester Powdercoated
See Reliance Foundry's standard color options at: www.reliance-foundry.com/bollard/colors-bollards

Installation Options:
- Fixed - Anchor Casting in New Concrete (see sheet 2 of 10)
- Fixed - Concrete Anchor in Existing Concrete (see sheet 3 of 10)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 10)
- Fixed - Flanged in Existing Concrete (see sheet 5 of 10)
- Post Cover - New Post in New Concrete (see sheet 6 of 10)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 7 of 10)
- Removable - Anchor Casting in New Concrete (see sheet 8 of 10)
- Removable - Concrete Anchor in Existing Concrete (see sheet 9 of 10)
- Removable - Premium Retractable in New Concrete (see sheet 10 of 10)

Light Color Options:
- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:
- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

For more information on bollard post installation, please visit: www.reliance-foundry.com/bollard/installation-bollards

Unit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canada
1-877-789-3245 info@reliance-foundry.com www.reliance-foundry.com

Bollard R-9811-FL-B

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NOT TO SCALE

SHEET 10 OF 10

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