1. **Plumbing**
   A. **General Requirements**
      1. Provide access doors to all Pipe Spaces (Approx. 2’ X 4”, Min.6” off floor).
      2. All access panels are to be hinged and lockable. (See Door & Lock Section)
      3. Pipe Space Minimum of 3’ wide in new construction (especially between gang bathrooms).
      4. All concealed valves, trap primers, air chambers, mechanical devices, etc., concealed within a wall or ceiling require stainless steel, hinged, lockable access panels measuring no less than 12” X 12”.
      5. Floor grade to all shower and floor drains must be sufficient to allow drainage from entire floor area to the drain.
      6. Shower pans required on all construction projects with shower perimeter reinforcement on stud walls for support (i.e. pressure treated 1” X 4” or 1” X 6”).
      7. Utilize Taco inline circulating pumps.
      8. Provide water softener (See Manager of Facility Maintenance for specific type of softener) that utilizes an exterior underground brine tank (accessible for truck deliveries) with bypass valves for service.

   B. **Supply Piping**
      1. All Underground water lines need to be a minimum of 3’ below grade level.
      2. All copper water lines, including branch lines from water mains or meters, above grade, including distribution lines, are to be Type L Only.
      3. All copper water lines below grade are to be Type K.
      4. All solder joints on copper water lines below grade will be silver solder.
      5. All solder joints on copper water lines above grade will be made with lead-free solder.

   C. **Drainage Piping**
      1. Drainage piping in labs where chemicals are used must be caustic or acid resistant.
      2. Sewer DWV piping – minimum schedule 40.

   D. **Valves**
      1. Do not use gate valves; utilize Ball Valves up to 6” and 3-piece valves.
      2. Provide one shutoff per water line at all fixtures.
      3. Provide Minimum of one (Accessible) shutoff per restroom that shuts down all toilets in the restroom.
4. Provide Minimum of two (Accessible) shutoffs (Hot/Cold) that shut down all sinks in each restroom and/or Janitors Bins.
5. Provide a Minimum of two (Accessible) shutoffs (Hot/Cold) that shut down all showers in each restroom.

E. Fixtures
1. Toilet seats to be white open front, less cover, stainless check, and solid plastic in dorm and academic buildings.
2. Toilet seats to be white closed front, with cover, stainless check, and solid plastic in apartments.
3. Grid strainers on all lavatories in academic or administration buildings.
4. Grid strainers on 50% of all lavatories in areas with two or more lavatories in each residential area.
5. Flush valves, Sloan preferred and Zurn will be considered.
6. Utilize Oasis Model PF8AM water fountains with Oasis 033879-001 filters, 100% lead-free fountains; recess water fountains in alcoves when possible.
7. All wall-hung fixtures (to include toilets and lavatories) require reinforced walls, block walls only, in addition to the required carrier or mounting systems. NO drywall, green board, blue board or concrete board.

F. Antifreeze Hose Bibs
1. Provide an antifreeze hose bib near outside heating/cooling equipment (especially near chillers)
2. Provide an antifreeze hose bib near all building entrances.
3. All outside hose bibs must be frost-free hydrants and with an easily accessible and interior shutoff, supplied by non-softened water.

G. Insulation and Labeling
1. All piping must be insulated (fiberglass is acceptable on non-chilled water lines) and labeled with function and directional arrows.
2. Any existing insulation disturbed must be replaced.
3. Pipe insulation must be provided (Fiberglass is allowed on non-cooling lines).
4. All accessible Pipes need to be marked with description and directional arrows.
5. All Valves must be labeled.
Submitted Model No.: 120

Specific Features:

4" (102 mm) - 8" (203 mm) - 360° Swing Spout
8" (203 mm) Centers

1/2"-14 NPSM

Dimension A
1 7/8" (48 mm) - 4" (102 mm) Spout
3 1/2" (89 mm) - 6" (152 mm) Spout
4 3/4" (121 mm) - 8" (203 mm) Spout (Standard)
4 3/4" (121 mm) - 10" (254 mm) Spout
5 3/4" (143 mm) - 12" (305 mm) Spout

KITCHEN FAUCETS

- Single Handle
- Deck Mount
- 3 and 4 Hole Sink Applications
- 8" Centers
- Quick Snap® Vegetable Sprayer Hose Installation on Model 420 Series

UL LISTED
UL Listed to US and Canadian Safety Standards and Classified in accordance with ANSI/NSF 61 - 21FL

COMPLIES WITH:
- ASME A112.18.1
- CSA 3125
- NSF 61
- Indicates ADA compliance to ICC/ANSI A117.1
- IAPMO Listed
- CSA Certified

STANDARD SPECIFICATIONS:
- Single handle kitchen deck faucets for mounting on three and four hole sinks
- Solid brass fabricated body
- 8" (203 mm) long spout swings 360°
- Lever handle: Control mechanism shall be of the rotating stainless steel ball type with replaceable non-metallic seats operating in stainless steel lined sockets.
- Control handle shall return to neutral position when valve is turned off.
- 1/2"-14 NPSM threaded male inlet shanks.
- Model 420 series with spray attachment has anti-siphon device as integral part of valve body.
- Quick Snap® vegetable sprayer hose installation on model 420 series.

Pressure (kPa)

Flow (U.S. Gallons Per Minute)

Delta reserves the right (1) to make changes in specifications and materials, and (2) to change or discontinue models, both without notice or obligation. Dimensions are for reference only.
## Standard Features

<table>
<thead>
<tr>
<th>Feature</th>
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### Available Options for Field Conversion:
- 4” (102 mm) long swing spout. Order RP5881.
- 6” (152 mm) long swing spout. Order RP9633.
- 10” (254 mm) long swing spout. Order RP5653.
- 12” (305 mm) long swing spout. Order RP6042.
- 6” (152 mm) long elbow handle with red/blue indicators. Order RP5645.
- Swivel Aerator. Order RP2189.
**DELTA**

**LAVATORY FAUCETS**
- Single Handle
- Deck Mount
- 2 and 3 Hole Sink Applications
- 4" Centerset

Submitted Model No.: [Blank]
Specific Features: [Blank]

**COMPLIES WITH:**
- ASME A112.18.1M-1996
- CSA B125-93
- Indicates ADA compliance to CABA/ANSI A117.1-1992
- IAPMO Listed
- CSA Certified
- ASTM F409 (for non-metallic drain)

**STANDARD SPECIFICATIONS:**
- Single handle lavatory deck faucets for exposed mounting on two and three hole sinks.
- 4" (122 mm) centerset.
- Solid brass fabricated body.
- 4 1/2" (114 mm) long spout.
- Lever handle. Control mechanism shall be of the rotating stainless steel ball type with replaceable non-metallic seats operating in stainless steel lined sockets.
- Control handle shall return to neutral position when valve is turned off.
- Models with suffix "XF" supplied with 1/2"-14 NPSM adapters.
- Models 505 and 525 Series supplied with 1/2"-14 NPSM threaded male inlet shanks.
- Models with Snap-N-Pop-Up® drain have polypropylene pop-up type fitting with plated flange and stopper.
- Models with metal drain have pop-up type fitting with plated flange and stopper.

---

Delta reserves the right (1) to make changes in specifications and materials, and (2) to change or discontinue models, both without notice or obligation. Dimensions are for reference only.
<table>
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</table>
DESCRIPTION

- P-trap, 1-1/4" - 17 gauge.
- Includes: (1) low pattern steel flange, (1) regular quarter bend, (1) regular short "J", (2) J.D. rubber washers, (2) zinc die cast nuts.
- Chrome-plated.

Specifications

P-TRAP
701-1

Dimensions:

- 1-14" O.D.
- 3-1/8" APPROX. SEAL
- 1-3/4" Approx. Slip
- 4-9/16"
- 1-9/16" R
- 7-7/8"
- 3-1/8"
- 11"
- 3-1/8"
DESCRIPTION
- P-trap, 1-1/2" - 17 gauge.
- Includes: (1) regular pattern steel flange, (1) regular quarter bend, (1) regular short "J", (2) rubber union washers, (2) zinc die cast nuts.
- Chrome-plated.
**Features**
- 12" (30.5 cm) rough-in
- Round front
- 1.6 gpf (6 lpf)
- **Ingenium\textsuperscript{TM}** flushing system
- Combination toilet
- Includes polished chrome trip lever
- Less seat and supply
- With Insuliner\textsubscript{e} insulated tank lining (-U)
- With tank cover locks (-T)
- 2' (5.1 cm) glazed trapway
- 10-1/2' (26.7 cm) x 8-7/8" (22.5 cm) water area
- With right-hand trip lever (-RA)
- With bedpan lugs (-L)
- With Insuliner\textsubscript{e} insulated tank lining

**Colors/Finishes**
- 0: White
- Other: Refer to Price Book for additional colors/finishes

**Accessories:**
- 0: White
- CP: Polished Chrome
- PB: Polished Brass
- Other: Refer to Price Book for additional colors/finishes

**Codes/Standards Applicable**
- Specified model meets or exceeds the following:
  - ASME A112.19.6
  - ASME A112.19.2
  - IAPMO/UPC
  - CSA B45

**Specified Model**

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<th>Description</th>
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<td>Toilet with tank cover locks (left-hand trip lever)</td>
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<td>K-3423-U</td>
<td>Toilet with Insuliner tank (left-hand trip lever)</td>
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<td>Toilet with Insuliner tank &amp; tank cover locks (LH trip lever)</td>
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<td>K-4277-L &amp; K-4620-RA</td>
<td>Toilet with bed pan lugs (right-hand trip lever)</td>
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</table>

**Product Specification:**
The round front combination elongated toilet compact toilet shall be 12" (30.5 cm) rough-in. Toilet shall be made of vitreous china. Toilet shall have 10-1/2' (26.7 cm) x 8-7/8" (22.5 cm) water area. Toilet shall be 1.6 gpf (6 lpf) with **Ingenium\textsuperscript{TM}** flushing system. Toilet shall have a 2' (5.1 cm) glazed trapway. Toilet shall include polished chrome trip lever. Toilet shall be less seat and supply. Toilet shall have right-hand trip lever. Toilet shall have bed pan lugs (-L). Toilet shall have Insuliner\textsubscript{e} insulated tank lining (-U). Toilet shall have tank cover locks (-T). Toilet shall be Kohler Model K-3423-______.______.
### Installation Notes

Install this product according to the installation guide.

---

#### Product Diagram

**WELLWORTH™ TOILET**

Page 2 of 2

114903-4-AD
KOHLER.

FEATURES
- Gravity flush
- 12" rough-in
- Vitreous china
- Elongated bowl
- 1.6 gpf
- Includes polished chrome trip lever
- Combination toilet
- 16-1/2" high bowl is ADA compliant
- 2" glazed trapway
- Less seat and supply
- With right-hand trip lever (-RA)
- With bedpan lugs (-L)
- With Insuliner® insulated tank lining (-U)
- With tank cover locks (-T)

CODES/STANDARDS APPLICABLE
Specified model meets or exceeds the following:
- ADA
- ASME/ANSI A112.19.2M
- ASME/ANSI A112.19.6M
- CABO/ANSI A117.1
- Canadian Standards Association (CSA)
- IAPMO/UPC
- States of Massachusetts, New York, & Texas
- City of Los Angeles, CA

SPECIFIED MODEL:

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Colors/Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-3427</td>
<td>Elongated bowl toilet</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-3427-T</td>
<td>Toilet with tank cover locks</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-3427-U</td>
<td>Toilet with Insuliner tank</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-3427-UT</td>
<td>Toilet with tank cover locks and insuliner tank</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-4274-L &amp; K-4620</td>
<td>Toilet with bed pan lugs (left-hand trip lever)</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-3427-RA</td>
<td>Elongated bowl toilet (right-hand trip lever)</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-3427-TR</td>
<td>Toilet with tank cover locks (right-hand trip lever)</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-3427-UR</td>
<td>Toilet with Insuliner tank (right-hand trip lever)</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-4274-L &amp; K-4620-RA</td>
<td>Toilet with bed pan lugs (right-hand trip lever)</td>
<td>□ 0 White</td>
</tr>
</tbody>
</table>

Recommended Accessories

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Description</th>
<th>Colors/Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-4652</td>
<td>Lustra™ seat with cover</td>
<td>□ 0 White</td>
</tr>
<tr>
<td>K-4652-A</td>
<td>Lustra™ seat with cover (includes anti-microbial agent)</td>
<td>□ 0 White</td>
</tr>
</tbody>
</table>

PRODUCT SPECIFICATION:
The elongated combination toilet shall be 12" rough-in. Toilet shall be made of vitreous china. Toilet shall be 1.6 gpf. Toilet shall include polished chrome trip lever. Toilet shall be ADA compliant with 16-1/2" high bowl. Toilet shall have 2" glazed trapway. Toilet shall be less seat and supply. Toilet shall have right-hand trip lever (-RA). Toilet shall have Insuliner® insulated tank lining (-U). Toilet shall have tank cover locks (-T). Toilet shall be Kohler Model K-3427-

We reserve the right to make revisions without notice in the design of fixtures or in packaging unless this right has specifically been waived at the time the order is accepted.

Page 1 of 2
114872-4-AA (E)
HIGHLINE

Recommended Accessories (cont.)

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<th>Item</th>
<th>Description</th>
<th>Color Options</th>
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<tr>
<td>K-4650</td>
<td>Lustra™ open front seat</td>
<td>□ White □ Other</td>
</tr>
<tr>
<td>K-4670-C</td>
<td>Lustra™ open front seat</td>
<td>□ White □ Other</td>
</tr>
<tr>
<td>K-7637</td>
<td>Angle supply with stop</td>
<td>□ CP □ PB □ Other</td>
</tr>
</tbody>
</table>

Optional Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Color Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-9404-L</td>
<td>Trip lever (non-CP)</td>
<td>□ PB □ Other</td>
</tr>
</tbody>
</table>

PRODUCT INFORMATION

Fixture:

- Configuration: 2-piece, elongated
- Gallons per flush: 1.6
- Passageway: 2"
- Water depth from rim: 6"
- Seat post hole centers: 5-1/2"

Included Components:

- Bowl: K-4274
- Tank: K-4620
- Tank cover: 84635
- Trip lever: K-9404

PRODUCT DIAGRAM

K-3427 Highline™ Toilet
Page 2 of 2
114872-4-AA (E)
SPECIFICATIONS

GENERAL
Sink bowls are seamlessly drawn of #22 gauge nickel-bearing stainless steel.

DESIGN FEATURES
Bowl Depths: 6-1/2".
Coved Corners: Interior vertical and horizontal corners are rounded to a minimum of 2-3/4" radii.
Faucet Deck: Raised.
Finish: Exposed surfaces are polished to a satin finish with high shine bowl radius.
Underside: As described below.
Self-rimming: Sink is furnished with appropriate number of clamps to provide a secure, watertight installation.

OTHER
Drain opening: 3-1/2".
Faucet Holes: 3 or 4 holes as indicated, 4" center to center.
Note: Unless otherwise specified, sink is furnished with 4 faucet holes as shown.
ANSI Standard 112.19.3M compliant.

SINK DIMENSIONS

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Overall A</th>
<th>B</th>
<th>Inside Bowl C</th>
<th>D</th>
<th>E</th>
<th>Flange Width F</th>
<th>G</th>
<th>Cutout in Countertop 1/4&quot; Radius Corners</th>
<th>Number of Faucet Openings</th>
<th>Snip. Wt. Lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-23321</td>
<td>33</td>
<td>21&quot;</td>
<td>14</td>
<td>15%</td>
<td>6&quot;</td>
<td>4</td>
<td>11/16</td>
<td>32% 20%</td>
<td>3 or 4</td>
<td>6 1/4</td>
</tr>
<tr>
<td>D-23322</td>
<td>33</td>
<td>22&quot;</td>
<td>14</td>
<td>15%</td>
<td>6&quot;</td>
<td>4</td>
<td>11/16</td>
<td>32% 21 1/4</td>
<td>3 or 4</td>
<td>6 1/2</td>
</tr>
<tr>
<td>D-23321</td>
<td>33</td>
<td>12&quot;</td>
<td>14</td>
<td>15%</td>
<td>6&quot;</td>
<td>4</td>
<td>11/16</td>
<td>32% 20%</td>
<td>3 or 4</td>
<td>4 1/4</td>
</tr>
<tr>
<td>D-23322</td>
<td>33</td>
<td>12&quot;</td>
<td>14</td>
<td>15%</td>
<td>6&quot;</td>
<td>4</td>
<td>11/16</td>
<td>32% 21 1/4</td>
<td>3 or 4</td>
<td>4 1/2</td>
</tr>
<tr>
<td>D-50-23321</td>
<td>33</td>
<td>21&quot;</td>
<td>14</td>
<td>15%</td>
<td>6&quot;</td>
<td>4</td>
<td>11/16</td>
<td>32% 20%</td>
<td>3 or 4</td>
<td>6 1/4</td>
</tr>
<tr>
<td>D-50-23322</td>
<td>33</td>
<td>22&quot;</td>
<td>14</td>
<td>15%</td>
<td>6&quot;</td>
<td>4</td>
<td>11/16</td>
<td>32% 21 1/4</td>
<td>3 or 4</td>
<td>6 1/2</td>
</tr>
</tbody>
</table>

D-Pref sinks are packed one per shipping carton. Sink bowl is fully undercoated.
D-6-Pref sinks are packed six sinks per shipping carton. Sink bowls are sound deadened on bottom only.
D-50-Pref sinks are nested 50 sinks per shipping carton. Sink bowls are sound deadened on bottom only.

*E* = Equals Depth
Model D-23322-4 Illustrated

ALL DIMENSIONS IN INCHES. TO CONVERT TO MILLIMETERS MULTIPLY BY 25.4.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice.

This specification describes an Elkay product with design, quality and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

Elkay Manufacturing Company
www.elkay.com
2222 Camden Court
Oak Brook, IL 60523
Printed in U.S.A.
(Rev. 1/99) 2-14C
SNAP-n-LOC. MODEL SS-306

The most innovative basket strainer in history. The basket seals to the body through a ball bearing in the post creating a positive leakproof seal. Deep cup body and basket are 300 series stainless steel and both are buffed creating a high polish finish. Hand knob and post are chrome plated brass and the ball bearing is 300 series stainless steel. Zinc nuts are standard. Available with a brass tailnut (SS-306BTN) or brass tailnut and locknut (SS-306B). Fits 3 1/2" to 4" sink openings.

CELCON SNAP-n-LOC. MODEL 307

Jomar's CELCON® SNAP-N-LOC BASKET STRAINER fits all 3 1/2" sink openings. It is dishwasher safe and is guaranteed not to crack, chip or fade. Snap-N-Loc is easy to install. Available in 5 dynamic colors: White, Brite White, Bone, Biscuit and Linen.


CELCON. FIT-ALL MODEL DS 311

Jomar's CELCON® FIT-ALL/SINK DISPOSER STRAINER fits inside most existing disposers and strainer flanges. It is dishwasher safe and is guaranteed not to crack, chip or fade.
Available in 5 dynamic colors: White, Brite White, Bone, Biscuit and Linen.

BATH MIXING VALVES

- Valve Only (1305 Series)
- Shower Only (1325 Series)
- Tub/Shower (1345 Series)
- Single Handle
- Monitor® with Scald-Guard® Valve
- Pressure Balance
- Temperature Only Controlled with Handle

COMPLIES WITH:
- ASME A112.18.1
- CSA 8125
- Indicates ADA compliance to CABO/ANSI A117.1
- ASSE 1016
- IAPMO Listed
- CSA Certified
- City of L.A. approved

STANDARD SPECIFICATIONS:
- Pressure balanced single handle bath mixing valve.
- Requires 1 1/2" (38 mm) wall cavity.
- Back-to-back installation capability.
- Solid brass fabricated body.
- Vandal resistant blade handle.
- Monitor® with Scald-Guard® valve. Valve accomplishes pressure balancing by using a stainless steel spool and sleeve in a replaceable cartridge. Cartridge utilizes integral check valves to prevent the cross flow of water within the valve. Scald-Guard® valve reduces the flow of water to 5 gpm (19 L/min) within 5 seconds of the complete loss of pressure in the cold water supply line. Outlet water temperature is maintained within ±3°F variation with changes in either hot or cold supply of up to 50 percent of the normal supply pressure.
- Temperature only controlled by handle with cold water always coming on first if cartridge is installed correctly.
- Field adjustable to limit handle rotation into hot water zone. Per ASSE 1016.
- 120° maximum handle rotation.
- Screwdriver stops.
- All parts shall be replaceable from front of valve.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>A (in)</th>
<th>B (in)</th>
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<tbody>
<tr>
<td>I.P.S. or C.W.T.</td>
<td>2 3/8&quot; (60 mm)</td>
<td>5/8&quot; (16 mm)</td>
</tr>
<tr>
<td>I.P.S. or C.W.T. with stops</td>
<td>5 5/16&quot; (135 mm)</td>
<td>3/8&quot; (10 mm)</td>
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</table>

Delta reserves the right (1) to make changes in specifications and materials, and (2) to change or discontinue models, both without notice or obligation. Dimensions are for reference only.
### Standard Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>1395-WSHDF</th>
<th>1395-CWSHDF</th>
<th>1325-WSHDF</th>
<th>1325-CWSHDF</th>
<th>1345-WSHDF</th>
<th>1345-CWSHDF</th>
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<tbody>
<tr>
<td>Washerless</td>
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<tr>
<td>Scald-Guard® Valve</td>
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<td>✔</td>
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<td>Back-to-Back Installation</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>1/2&quot; I.P.S. Inlets and Outlets</td>
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<td>✔</td>
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<td>✔</td>
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<tr>
<td>1/2&quot; C.W.T. Sweat Inlets and Outlets</td>
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<td>Replaceable Cartridge</td>
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<tr>
<td>Adjustable Rotational Limit Stop</td>
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<tr>
<td>Vandal Resistant Metal Blade Handle</td>
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<tr>
<td>Screwdriver Stops</td>
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<td>Metal Shower Arm and Flange</td>
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<tr>
<td>Push-Clean™ Showerhead/1 Spray Pattern</td>
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<tr>
<td>Metal Tub Filler with Pull-Up Diverter</td>
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<td>✔</td>
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<tr>
<td>Chrome Finish</td>
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<td>✔</td>
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</tr>
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</table>

### Available Options for Field Conversion:
- Cambridge Brass vandal resistant front mounting wall mount showerhead. Universal 1/2" FIP copper sweat inlet. Non-adjustable 30° spray angle from wall. 2.5 gpm @ 80 psi (9.5L/min @ 552 kPa). Cast brass with cast brass anchor plate. Chrome plated. Order 76262.
- Vandal resistant brass THE EMBRACER® showerhead - five spray patterns - 2.5 gpm @ 80 psi (9.5L/min @ 552 kPa). Chrome plated. Order RPW68HDF. See installation wrench below.
- Spanner Wrench for RPW68HDF. Order RP13456.
- Shower Arm. Order RP6023.
- Shower Flange. Order RP6025.
- Metallic tub filler with pull-down diverter for 1/2" C.W.T. or 1/2" I.P.S. Order RP17454.
- Non-metallic tub filler with pull-down diverter for 1/2" C.W.T. or 1/2" I.P.S. Order RP17453.
- Non-metallic slip-on tub filler with pull-down diverter for 1/2" C.W.T. Order RP5836.
- Metallic tub filler with pull-up diverter for 1/2" C.W.T. or 1/2" I.P.S. Order RP7533.
- Non-metallic tub filler with pull-up diverter for 1/2" C.W.T. or 1/2" I.P.S. Order RP5834.
- Non-metallic slip-on tub filler with pull-up diverter for 1/2" C.W.T. Order RP19820.
- Bath waste assemblies and bath accessories also available separately.
**DESCRIPTION**

- End Outlet sink waste, 1-1/2" x 16" - 20 gauge.
- Includes: (1) regular waste arm, (1) tailpiece, T.O.E.
  1-1/2" x 3", (3) 1-1/2" die cast nuts, (3) 1-1/2" rubber washers, (1) 1-1/2" tee.
- Chrome-plated.
### BrassCraft

**NOVI, MICHIGAN**  
A Subsidiary of Masco Corporation

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<th>I.D.</th>
<th>CHROME</th>
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<td>R19 C</td>
<td>R19 R</td>
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#### DESCRIPTION

1/2 NOM. SWEAT x 3/8 O.D. COMP. VALVE ASSEMBLY (SUBMITTAL)

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<th>DATE</th>
<th>MATERIAL</th>
<th>ITEM DESCRIPTION</th>
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<tbody>
<tr>
<td>SCHUTTE</td>
<td>5/16/97</td>
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#### CHECKED

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<td>JPS</td>
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#### APP'D.

<table>
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<tr>
<th>APP'D.</th>
<th>DATE</th>
</tr>
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</table>

**NOTE:** UNLESS OTHERWISE SPECIFIED

- TWO PLACE DECIMALS: \(+/-0.010\)
- THREE PLACE DECIMALS: \(+/-0.005\)
- ANGULARITY: \(+/-1\)°

---

#### DRAWING NO.

VPA0539B

---

### Diagram

- **61-6 COMP. NUT**
- **60-6 COMP. SLEEVE**
- **R19 VALVE ASSY**

**Approx.**

- 1.63 OPEN
- 1.30 CLOSED
ITEM I.D. | ITEM DESC. | LENGTH 'A'
---|---|---
P1-12A | P1-12A | 11.50
P1-15A | P1-15A | 14.50
P1-20A | P1-20A | 19.50
P1-30A | P1-30A | 29.50
P1-36A | P1-36A | 35.50

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**TUB/SHOWER**

60-INCH MODEL  

**CM-60 (Smooth Wall)**

<table>
<thead>
<tr>
<th>Rough-In Dimensions</th>
<th>60&quot; wide x 33&quot; deep x 73-1/2&quot; high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Dimensions</td>
<td>60&quot; wide x 31-1/2&quot; deep x 72&quot; high</td>
</tr>
</tbody>
</table>

**Unit Features**

- One-Piece Gelcoated Fiberglass
- 2" Dia. Drain/RH or LH (see reverse side for location)
- 2-1/2" Dia. Overflow (see reverse side for location)
- Twin / Elevated Back Wall Shelves
- Single / Lower Level, Center Soap Ledge with Acrylic Bar
- Textured Floor Pattern
- Balsa Wood "Anti-flex" Floor Construction

**Special Notes**

- Unit Complies with ANSI Z 124 Series
- Unit Complies with HUD / FHA UM-73a (use of materials)
- Unit Available with Extended Apron (see reverse side for details)
CM-60L (Illustrated)
Sump Bottom: 16" wide x 42" long
Sump Depth: 13-1/2" deep
Sump Capacity: 36 gallons (to overflow)

Plain Tub/Shower
Order No.: CM - 60R (RH Drain/Clear Acrylic Bar)
          CM - 60L (LH Drain/Clear Acrylic Bar)

60" x 31-1/2", One-Piece, Gelcoated Fiberglass Tub/Shower with 16" apron, wall surround, acrylic bar and drain on end indicated.

Tub/Shower Accessories
Order No.: ENC-BPTS601-CH (Chrome trim)
          ENC-BPTS601-PB (Polished Brass trim)

Custom fit, no trim tub/shower enclosure with caulkless wall channels, by-pass doors, obscure glass, and EZ Kleen door track.

Order No.: ABFLR (17-3/4" apron)

Extended apron height to allow for above the floor plumbing system on unit listed above.

Dimensions shown are maximum. Due to the nature of the materials involved, actual unit dimensions can vary. (Tolerances: ±0/-3/8 inch)
UNDER SINK PROTECTIVE PIPE COVERS

DESIGN FEATURES

- Universal design fits virtually all lavatory applications
- Antimicrobial vinyl maintains sanitary conditions
- Lock Lid™ on valve stops tampering & allows service
- Cleanout nut cap allows service on trap without disassembly
- Snap-Clip™ fastener is flush, nonabrasive & reusable
- Internal ribs enhance K value & soften impact cushioning

LAV GUARD Kits Fit:
- All P-trap assemblies, cast brass or tubular - 1 1/4" or 1 1/2"
- All straight tail piece assemblies - 1 1/4" or 1 1/2"
- All standard 5 1/4" offset wheelchair strainers. (Acc. #105)
- All angle stop valves - handled or keyed type 3/8" or 1/2"

*NOTE: LAV GUARD Kits will not fit Schedule 40 plastic P-traps

Models Available: White or Grey
Select model and color.

- Model #99  ☐ white  ☐ grey
  One angle valve and supply cover only

- Model #100  ☐ white  ☐ grey
  One P-trap cover only.

- Model #101  ☐ white  ☐ grey
  One P-trap cover, one angle valve an supply cover.

- Model #102  ☐ white  ☐ grey
  One P-trap cover, two angle valve an supply covers.

- Model #103  ☐ white  ☐ grey
  One P-trap cover, two angle valve an supply covers, one offset tailpiece wheelchair strainer cover. (Acc. #105)

- Accessory #105  ☐ white  ☐ grey
  One offset tailpiece wheelchair strainer cover only.

Approved By:

TRUEBRO, Inc.
7 Main Street • Ellington, CT 06029
(203) 875-2868 • 1-800-340-5969
Fax: (203) 872-0300
Furnished with two #12 1/2" chrome plated wood screws

Wall brace assembly

Vacuum breaker

Lever handles with color coded indexes

8" [203mm] C/C Adjustable from 7 3/4" to 8 1/4" [197 to 210mm]

2 5/8" [51mm] flanges

BUILT-IN-STOPS (B.S.T.)

8 7/8" [225mm]

14 3/4" [375mm]

6 1/2" [165mm]

3/4" garden hose thread outlet

1/2" IPS female inlets

2 3/6" [60mm]

Product Description:
Service sink faucet w/ built in stops, vacuum breaker, lever handles, wall brace, and available with rough or polished chrome finish.

Drawn: WJS
Checked: MW
Scale: 3" = 1'
Approved: CA
Date: 11/22/95
Laundry Faucet

- Laundry faucets
- 2 Hole installation
- 4" Centerset
- 5½" Long, 6½" high spout swings 360°
- Blade handles
- Standard with 1/2" I.P.S. shanks
- 1/8" Trap seal primer plug *

<table>
<thead>
<tr>
<th>Finish</th>
<th>Model No.</th>
<th>Price</th>
<th>Case Quantity</th>
</tr>
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<tbody>
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<td>Chrome</td>
<td>2131</td>
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<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Vandal Resistant Vacuum Breaker for use with Model 2131
- Includes Stream Straightener without Hose Thread

<table>
<thead>
<tr>
<th>Finish</th>
<th>Model No.</th>
<th>Price</th>
<th>Case Quantity</th>
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<tr>
<td>Chrome</td>
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</tbody>
</table>

* Plug can be removed to attach a line which will enable floor drain trap to be refilled everytime faucet is used.
Submitted Model No.: 
Specific Features: 

**DELTA®**
**SPECIALTY FAUCETS**
- Two Handle Laundry Faucet
- Deck Mount
- 2 Hole Sink Applications
- 4" (102 mm) Centerset

**COMPLIES WITH:**
- ASME A112.18.1M-1996
- CSA B125-93
- Indicates ADA compliance to CABO/ANSI A117.1-1992
- CSA Certified

**STANDARD SPECIFICATIONS:**
- Two handle deck faucets for exposed mounting on 2 hole sinks.
- Solid brass fabricated body.
- 4" (102 mm) Centerset.
- 5 5/8" (143 mm) long, 6 1/2" (165 mm) high spout swings 360°.
- Hot and cold stems are interchangeable.
- Control mechanism shall be of the rotating cylinder type with stainless steel plate and 180° rotation, with replaceable non-metallic seats operating in stainless steel lined sockets.
- 1/2"-14 NPSM threaded male shanks.
- Trap seal primer plug.

**Graph:**
- Flow (U.S. Gallons Per Minute) vs. Pressure (PSI)
- Pressure (kPa) vs. Flow (Liters Per Minute)
MUSTEE Thermoplastic and Durastone® Laundry/Utility Trays

MUSTEE

UTILATUB® 19/18

Model #: MU19F

Mustee's UTILATUBS® are designed with many built-in features. Sturdy floor and wall mounted models are extra tough, stain-resistant, attractive... and provide years of dependable performance.

When it's time to tackle those "tough" cleanup jobs... messy painting utensils and garden tools, family pets, grimy dirt from working on your car, doing the laundry, etc., etc., nothing works better than the convenience of a UTILATUB®. So don't wait, install one next to your workbench, in your basement, garage, utility room, breezeway, on your patio... or anywhere.

Quality Plumbing Products... (E&M) Shower Stalls • Enclosures • Bathtub and Shower Walls • Shower Floors Shower Assemblies • Laundry Trays • Spa Basins • Accessories
**Manufacturers' Specifications**

- **Sturdy, 1-Piece Molded Tubs, Made with Structural Thermoplastic**
- **Leakproof 1 1/2" Integral Drain**
- **Floor and Wall Mounted Models, Levelers and Stopper Included**
- **18 Gallon Capacity, 13" Deep, Only 20" Wide**
- **Smooth White Surface, Rust-Resistant**
- **Easy to Install**

**American National Standards Institute (ANSI) — Specification Z 124.6**

**International Association of Plumbing and Mechanical Officials (IAPMO®) — listed file #0820**

**Warnock Hersey® (Canada) — CSA #B45.0 and B45.5**

---

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Top View</th>
<th>Side View</th>
<th>MOUNTING BRACKET</th>
<th>Model No.</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>10&quot; (254)</td>
<td>14 1/2&quot; (365.1)</td>
<td>Floor Mount</td>
<td>19F</td>
<td>Floor</td>
</tr>
<tr>
<td>24&quot; (609.6)</td>
<td>34&quot; (863.6)</td>
<td>Wall Mount</td>
<td>19W</td>
<td>Wall</td>
</tr>
<tr>
<td>20&quot; (508)</td>
<td>1/2&quot; Level Adjustment</td>
<td>FLOOR</td>
<td>19F</td>
<td>Floor</td>
</tr>
</tbody>
</table>
| Metric | FILLER PANELS | OVERFLOW TUBE | 27,500 — prevents water overflow | Handiflow® fitting 
| #93.600—chrome plated brass body, 4" center set, swing spout with hose end | 34" (863.6) | PITCH | 94.700 — discharges water from washer into tub |
| 191.604—chrome plated celcon body and tubular swing spout with hose end, 4" center set | | | | |
| FAUCET #50.700—clamp-on, for overhead water supply, brass body with swing spout and hose end | | | | |
| MOLED FAUCET BLOCK #20.600—used with clamp-on faucet | | | | |

General: Furnish and install as shown on plans, UTILATUB® Laundry/Utility Tub model (19F, 19W), as manufactured by E.L. Mustee & Sons, Inc. Tub shall be one-piece molded construction using structural thermoplastic with matched metal molds under extreme heat and pressure. Tub to include integrally molded drain assembly, stopper and floor or wall mounting hardware. Shall meet ANSI Specification Z 124.6. White color, 19F weight 23 lbs., 19W 20 lbs., cubic ft. 4.8.
JSTEE
TILATUB® Laundry/Utility Trays

Sturdy, one-piece construction — molded under extreme heat and pressure with matched metal dies.

Choice of floor or wall mounting.

Gallon capacity — extra deep 13-inch bowl.

Smooth interior surfaces — prevent fine fabric snags.

20 inches wide — fit where others can't.

St and leak-resistant — easy to clean.

Tack'n easy to assemble and install.

LT-IN FEATURES

Sturdy legs slide into snug fitting leg supports. Leveling devices included.

Leakproof 1/4" drain molded as integral part of tray, no gaskets or seals required.

Built-in twin soap/storage shelves with retaining surface permit rapid drainage of soapy water and suds.

TILATUB® Laundry Trays

Additional optional accessories:

FAUCET — standard "P" type cold and hot water faucet with hose and spreader.

OVERRUN TUBE — prevents water overflow.

DRAIN NOSE — flexible 3/4" connector hose. Part No. 12,301A.

Materials

Thermoplastic — structural polymer materials with cellular construction, white color.

Durastone®—mixture of fiberglass and crushed stone, blended with special formulated resins, marbelized while white.

Specifications & Ordering Information

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Material</th>
<th>Mounting</th>
<th>Size (L x W x H)*</th>
<th>Capacity</th>
<th>Weight</th>
<th>Cu. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>19F</td>
<td>Thermoplastic</td>
<td>Floor</td>
<td>24&quot; x 20&quot; x 35&quot;</td>
<td>19 Gal.</td>
<td>23 lbs.</td>
<td>4.8</td>
</tr>
<tr>
<td>19W</td>
<td>Thermoplastic</td>
<td>Wall</td>
<td>24&quot; x 20&quot; x AdJ.</td>
<td>19 Gal.</td>
<td>20 lbs.</td>
<td>4.8</td>
</tr>
<tr>
<td>18F</td>
<td>Durastone®</td>
<td>Floor</td>
<td>24&quot; x 20&quot; x 35&quot;</td>
<td>19 Gal.</td>
<td>32 lbs.</td>
<td>4.8</td>
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<tr>
<td>18W</td>
<td>Durastone®</td>
<td>Wall</td>
<td>24&quot; x 20&quot; x AdJ.</td>
<td>19 Gal.</td>
<td>28 lbs.</td>
<td>4.8</td>
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</table>

Note: When ordering "6-Paks" (dual cartons) use following suffix codes:

19FK for floor mounted trays and hardware, 110 lbs., 13.5 cubic ft.
19WK for wall mounted trays and hardware, 102 lbs., 13.5 cubic ft.
18FK for floor mounted trays and hardware, 159 lbs., 13.5 cubic ft.
18WK for wall mounted trays and hardware, 146 lbs., 13.5 cubic ft.

General: Furnish and install as shown on plans. UTILATUB® laundry tray(s) as manufactured by E.L. Mustee & Sons, Inc., Model 19F/W.

Models 19F/W. One-piece molded construction using structural thermoplastic, complete with drain assembly and floor or wall mounting hardware.

Models 18F/W. One-piece molded construction using natural crushed stone with polyester resin, complete with drain assembly and floor or wall mounting hardware.

To reorder this literature specify catalog number ADV-281.

Notice: Our continuous commitment to product improvement may result in changes to product specifications without notice.

R&D: R397-80 Made and Printed in USA.

E.L. MUSTEE & SONS, INC.

5421 W. 186th Street • Cleveland, Ohio 44143
Regal® Model
Flushometer

186
186-1
186-0.5

Description
Exposed Urinal Flushometer, for ¾" top spud urinals.

Flush Cycle
☐ Model 186 Water Saver (1.5 gpl/5.7 Lpf)
☐ Model 186-1 Low Consumption (1.0 gpl/3.8 Lpf)
☐ Model 186-0.5 (0.5 gpl/1.9 Lpf)

Specifications
Quiet, Exposed, Diaphragm Type, Chrome Plated Urinal Flushometer with the following features:
 • Metal Oscillating Non-Hold-Open Handle
 • ¾" I.P.S. Screwdriver Bak-Chek™ Angle Stop
 • Vandal Resistant Stop Cap
 • Adjustable Tailpiece
 • Vacuum Breaker Flush Connection
 • Spud Coupling, Wall and Spud Flange for ¾" Top Spud
 • Low Consumption flush accuracy controlled by Para-Flo™ Inside Parts Kit
 • Handle Packing, Stop Seat and Vacuum Breaker to be molded from PERMEX™ rubber compound for Chloramine resistance

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance to the applicable sections of ASSE 1037, ANSI/ASME 112.19.6, and Military Specification V-29193.

Variations
☐ ADA ADA Compliant Handle
☐ BG Bio-Gard™ Handle
☐ YB Sweat Solder Adapter Kit with Stamped Flange
☐ YBYC Sweat Solder Adapter & Cast Wall Flange w/ Set Screw

REGAL XL
Flushometer includes ADA Compliant Handle, Vandal Resistant Stop Cap with Set Screw, and Sweat Solder Adapter with Cover Tube and Cast Set Screw Wall Flange.

See Accessories Section of the Sloan catalog for details on these and other Flushometer variations.

© Certified
© Listed by I.A.P.M.O.

This space for Architect/Engineer approval

The information contained in this document is subject to change without notice.

Made in the U.S.A.

SLOAN
SLOAN VALVE COMPANY • 10500 SEYMOUR AVE. • FRANKLIN PARK, IL 60131
PHONE: 1-800 982-5839 • FAX: 1-800 447-8329 • http://www.sloanvalve.com
Sensor Operated
Royal® Model Flushometer

195 ES-S
195-1 ES-S
195-0.5 ES-S

Description
Concealed Sensor Operated Urinal Flushometer, for 3/4" back spud urinals.

Flush Cycle
☐ Model 195 ES-S Water Saver (1.5 gpf/5.7 Lpf)
☒ Model 195-1 ES-S Low Consumption (1.0 gpf/3.8 Lpf)
☐ Model 195-0.5 ES-S (0.5 gpf/1.9 Lpf)

Specifications
Quiet, Concealed, Diaphragm Type, Rough Brass Urinal Flushometer for either left or right hand supply with the following features:
- Dual Filtered By-Pass
- OPTIMA® EL-1500 Self Adaptive Infrared Sensor with Indicator Light
- Non-Hold-Open Integral Solenoid Operator
- Chrome Plated Wall Cover Plate (for 2-gang Electrical Box) with Vandal Resistant Screws
- 3/4" I.P.S. Wheel Handle Bak-Chek™ Angle Stop
- Sweat Solder Adapter
- Adjustable Tailpiece
- High Back Pressure Vacuum Breaker Flush Connection and Spud Coupling for 3/4" Concealed Back Spud

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037, ANSI/ASME A112.19.6 and Military Specification V-29193. Installation conforms to ADA requirements.

L Dimension
Specify the "L" Dimension for the proper length of the Flush Connection. The "L" Dimension is equal to the Wall Thickness (to the nearest whole inch) plus 2¼".

Accessories
☐ EL-154 Transformer (120 VAC/24 VAC 50 VA.)
☐ EL-342 Transformer (240 VAC/24 VAC 50 VA.)

See Accessories Section and Optima Accessories Section of the Sloan catalog for details on these and other Optima Flushometer variations.

UL® Listed  CS® Listed  UFL® Listed by I.A.P.M.O.

This space for Architect/Engineer approval

Job Name ____________________________ Date _____________________

Model Specified ____________________________ Quantity __________

Variations Specified ____________________________

Customer/Wholesaler ____________________________

Contractor ____________________________

Architect ____________________________

Automatic
Sloan OPTIMA® equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There are no handles to trip or buttons to push. The Flushometer operates by means of an infrared sensor that adapts to its surroundings. Once the user enters the sensor’s effective range and then steps away, the Flushometer Solenoid initiates the flushing cycle to flush the fixture.

Hygienic
User makes no physical contact with the Flushometer surface. Helps to control the spread of infectious diseases. 24 Hour Sentinel Flush keeps fixture fresh during periods of non-use.

Economical
Automatic operation provides savings in water over other flushing devices. Reduces maintenance and operation costs.

Practical
Solid state electronic circuitry assures years of dependable, trouble-free operation. The operational components of the Flushometer are identical to a handle operated Royal Flushometer, proven by 90 years of experience.

Warranty
3 year (limited)

Made in the U.S.A.

The information contained in this document is subject to change without notice.
**ELECTRICAL SPECIFICATIONS**

Control Circuit
- Solid State
- 24 VAC Input
- 24 VAC Output
- 6 sec. Arming Delay
- 24 Hour Sentinel Flush

OPTIMA Sensor Range
- Nominal 15°-30° (381-762mm)
- Self-adaptive Window: ± 8° (203mm)

- Solenoid Operator
  - 24 VAC, 50/60 Hz

- Transformers
  - Sloan Part #EL-154
  - 120 VAC, 50/60 Hz Primary
  - 24 VAC, 50/60 Hz Secondary
  - Class II, UL Listed
  - 50 VA.

One Transformer serves up to ten (10) OPTIMA Closet/Urinal Flushometers. Specify number of transformers required accordingly.

**OPERATION**

A luminous, invisible beam is emitted from the OPTIMA Sensor.

1. **Solenoid Operator**
   - 24 VAC, 50/60 Hz

2. **Transformers**
   - Sloan Part #EL-154
   - 120 VAC, 50/60 Hz Primary
   - 24 VAC, 50/60 Hz Secondary
   - Class II, UL Listed
   - 50 VA.

3. **When the user steps away**
   - From the OPTIMA Sensor, the circuit immediately initiates an electrical "once-time" signal that operates the Solenoid. This initiates the flushing cycle to flush the fixture. The Circuit then automatically resets and is ready for the next user.

**ELECTRICAL BOX INSTALLATION**

**SENSOR LOCATION AND POSITIONING IS CRITICAL**

Failure to properly position the electric boxes to the plumbing rough-in will result in improper installation and impair product performance. All tradesmen (plumbers, electricians, tile setters, etc.) involved with the installation of this product must coordinate their work to assure proper product installation.

**DIAGRAM:**

- Wiring diagram showing connections and components.
- Installation instructions for electrical boxes.
- Diagrams for sensor positioning and box installation.

**CONTACT:**

OAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, ILLINOIS 60131

Ph: 1-800 982-5839 • Fax: 1-800 447-8329 • http://www.sloanvalve.com

Printed in the U.S.A.
Regal® Model Flushometer

**Description**
Exposed Water Closet Flushometer, for floor mounted or wall hung top spud bowls.

**Flush Cycle**
- Model 110 Water Saver (3.5 gpf/13.2 Lpf)
- Model 111 Low Consumption (1.6 gpf/6.0 Lpf)

**Specifications**
Quiet, Exposed, Diaphragm Type, Chrome Plated Closet Flushometer with the following features:
- Metal Oscillating Non-Hold-Open Handle
- 1" I.P.S. Screwdriver Bak-Chek™ Angle Stop
- Vandal Resistant Stop Cap
- Adjustable Tailpiece
- Vacuum Breaker, Flush Connection
- Spud Coupling, Wall and Spud Flanges for 1½" Top Spud
- Low Consumption flush accuracy controlled by Para-Flo™ Inside Parts Kit
- Handle Packing, Stop Seat and Vacuum Breaker to be molded from PERMEX™ rubber compound for Chloramine resistance

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance to the applicable sections of ASSE 1037, ANSI/ASME 112.19.8, and Military Specification V-29193.

**Variations**
- ADA ADA Compliant Handle
- BG Bio-Gard™ Handle
- TP Trap Primer
- YB Sweat Solder Adapter Kit with Stamped Flange
- YBYC Sweat Solder Adapter & Cast Wall Flange w/ Set Screw
- YO Bumper on Angle Stop

- REGAL XL
Flushometer includes ADA Compliant Handle, Vandal Resistant Stop Cap with Set Screw, and Sweat Solder Adapter with Cover Tube and Cast Set Screw Wall Flange.

See Accessories Section of the Sloan catalog for details on these and other Flushometer variations.

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SLOAN VALVE COMPANY • 10500 SEYMOUR AVE. • FRANKLIN PARK, IL 60131
PHONE: 1-800 982-5839 • FAX: 1-800 447-8329 • http://www.sloanvalve.com

4-1
Sensor Operated
Royal® Model
Flushometer

152 ES-S
152-1.6 ES-S

Description
Concealed Sensor Operated Water Closet Flushometer, for wall hung back spud bowls.

Flush Cycle
- Model 152 ES-S Water Saver (3.5 gpf/13.2 Lpf)
- Model 152-1.6 ES-S Low Consumption (1.6 gpf/6.0 Lpf)

Specifications
- Quiet, Concealed, Diaphragm Type, Rough Brass Closet Flushometer with the following features:
  - Dual Filtered By-Pass
  - OPTIMA® EL-1500-L Self Adaptive Infrared Sensor with Indicator Light
  - Courtesy Flush™ Over-ride Button
  - Non-Hold-Open Integral Solenoid Operator
  - Chrome Plated Wall Cover Plate (for 2-gang Electrical Box) with Vandal Resistant Screws
  - 1" I.P.S. Wheel Handle Bak-Chek™ Angle Stop
  - Sweat Solder Adapter
  - Adjustable Tailpiece
  - High Back Pressure Vacuum Breaker Flush Connection and Spud Coupling for 1½" Concealed Back Spud

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037, ANSI/ASME A112.19.6 and Military Specification V-29193. Installation conforms to ADA requirements.

L Dimension
Specify the "L" Dimension for the proper length of the Flush Connection. The "L" Dimension is equal to the Wall Thickness (to the nearest whole inch) plus 2½".

Variations
- TP Trap Primer Elbow
- YI Two Wall Bumpers (for open front seat without cover)

Accessories
- EL-154 Transformer (120 VAC/24 VAC 50 VA.)
- EL-342 Transformer (240 VAC/24 VAC 50 VA.)

See Accessories Section and Optima Accessories Section of the Sloan catalog for details on these and other Optima Flushometer variations.

This space for Architect/Engineer approval!

Job Name ___________________________ Date ___________________________
Model Specified ___________________________ Quantity ___________________________
Variations Specified ___________________________
Customer/Wholesaler ___________________________
Contractor ___________________________
Architect ___________________________

Automatic
Sloan OPTIMA® equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There are no handles to trip or buttons to push. The Flushometer operates by means of an infrared sensor that adapts to its surroundings. Once the user enters the sensor's effective range and then steps away, the Flushometer Solenoid initiates the flushing cycle to flush the fixture.

Hygienic
User makes no physical contact with the Flushometer surface. Helps to control the spread of infectious diseases. 24 Hour Sentinel Flush keeps fixture fresh during periods of non-use.

Economical
Automatic operation provides savings in water over other flushing devices. Reduces maintenance and operation costs.

Practical
Solid state electronic circuitry assures years of dependable, trouble-free operation. The operational components of the Flushometer are identical to a handle operated Royal Flushometer, proven by 90 years of experience.

Warranty
3 year (limited)

Made in the U.S.A.

The information contained in this document is subject to change without notice.
**WIRING DIAGRAM**

One Transformer serves up to ten (10) OPTIMA Closet/Urinal Flushometers. Specify number of transformers required accordingly.

**ERATION**

Continuous, invisible beam is emitted from OPTIMA Sensor.

1. As the user enters the beam's effective range (22° to 42°) the beam is reflected into the OPTIMA's Scanner Window and transformed into a low voltage electrical circuit. Once activated, the output circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor.

2. When the user steps away from the OPTIMA Sensor, the circuit waits 3 seconds (to prevent false flushing) then initiates an electrical "one-time" signal that operates the Solenoid. This initiates the flushing cycle to flush the fixture. The circuit then automatically resets and is ready for the next user.

**ELECTRICAL BOX INSTALLATION**

**SENSOR LOCATION AND POSITIONING IS CRITICAL**

Failure to properly position the electrical boxes to the plumbing rough-in will result in improper installation and impair product performance. All tradesmen (plumbers, electricians, tile setters, etc.) involved with the installation of this product must coordinate their work to assure proper product installation.

**CONTROL CIRCUIT**

- **Solid State**
- 24 VAC Input
- 24 VAC Output
- 8 sec. Arming Delay
- 3 sec. Flush Delay
- 24 Hour Sentinel Flush

**OPTIMA Sensor Range**

Nominal 22°-42° (559-1067mm)
Self-adaptive Window: ± 10° (254mm)

**Solenoid Operator**

24 VAC, 50/60 Hz

**Transformers**

Sloan Part #EL-154
120 VAC, 50/60 Hz Primary
24 VAC, 50/60 Hz Secondary
Class II, UL Listed
50 VA

Sloan Part #EL-342
240 VAC, 50/60 Hz Primary
24 VAC, 50/60 Hz Secondary
Class II, UL Listed
50 VA
8110-MC
8111-MC

Description
Exposed, Battery Powered, Sensor Operated Royal Water Closet Flushometer with Metal Cover, for floor mounted or wall hung top spud bowls.

Flush Cycle
☐ Model 8110-MC Water Saver (3.5 gpf/13.2 Lpf)
☒ Model 8111-MC Low Consumption (1.6 gpf/6.0 Lpf)

Specifications
Quiet, Exposed, Diaphragm Type, Chrome Plated Closet Flushometer for either left or right hand supply with the following features:
- ADA Compliant OptimaPLUS® Battery Powered Infrared Sensor for automatic "No Hands" operation
- Dual Filtered By-Pass
- Diaphragm, Stop Seat and Vacuum Breaker to be molded from PERMEX™ rubber compound for Chloramine resistance
- Chrome Plated, Die Cast Metal Cover Assembly with Tempered Glass Window
- User friendly 3 second Flush delay
- Courtesy Flush™ Over-ride Button
- Four (4) size AA Batteries included
- "Low Battery" Flashing LED
- Infrared Sensor Range Adjustment Screw
- Initial Set-Up Range Indicator Light (first 10 minutes)
- Solid Handle Cap
- 1" I.P.S. Screwdriver Bak-Chek™ Angle Stop
- Free Spinning Vandal Resistant Stop Cap
- Sweat Solder Adapter with Cover Tube and Cast Set Screw Wall Flange
- Adjustable Tailpiece
- High Back Pressure Vacuum Breaker Flush Connection with One-piece Bottom Hex Coupling Nut
- Spud Coupling and Flange for 1½" Top Spud

Valve Body, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037, ANSI/ASME A112.19.6 and Military Specification V-29193. Valve shall conform to A.D.A. requirements.

Variations
☐ LH Less Handle Opening

See Accessories Section and Optima Accessories Section of the Sloan catalog for details on these and other Optima Plus Flushometer variations.

ADA Compliant

Automatic
Sloan OPTIMA Plus® equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There is no need for AC hookups or wall alterations. The Flushometer operates by means of a battery powered infrared sensor. Once the user enters the sensor’s effective range and then steps away, the Flushometer Solenoid initiates the flushing cycle to flush the fixture.

Hygienic
User makes no physical contact with the Flushometer surface except to initiate the Over-ride Button when required. Helps to control the spread of infectious diseases.

Economical
Automatic operation provides savings in water usage over other flushing devices. Reduces maintenance and operation costs.

Warranty
3 year (limited)
Made in the U.S.A.

UL® Listed
CSA® Listed

This space for Architect/Engineer approval

Job Name ___________________________ Date ____________
Model Specified _____________________ Quantity __________
Variations Specified _________________ __________________
Customer/Wholesaler __________________________
Contractor ____________________________
Architect ____________________________
**Description**
Exposed, Battery Powered, Sensor Operated Royal Water Closet Flushometer with Metal Cover, for floor mounted or wall hung top spud bowls.

**Flush Cycle**
- Model 8110-MC Water Saver (3.5 gpf/13.2 Lpf)
- Model 8111-MC Low Consumption (1.6 gpf/6.0 Lpf)

**ELECTRICAL SPECIFICATIONS**

- **Control Circuit**
  - Solid State
  - 6 VDC Input
  - 8 sec. Arming Delay
  - 3 sec. Flush Delay
  - 24 Hour Sentinel Flush

- **OPTIMA Sensor Type**
  - Active Infrared

- **OPTIMA Sensor Range**
  - Nominal 22°-42° (559-1067mm), adjustable ± 8° (203mm)

- **Battery Type**
  - (4) AA Alkaline

- **Battery Life**
  - 3 years @ 4,000 flushes/month

- **Indicator Lights**
  - Range Adjustment/Low Battery

- **Sentinel Flush**
  - Once every 24 hours after the last flush

**OPERATION**
Continuous, invisible light is emitted from the AA Plus Sensor.

1. As the user enters the beam’s effective range (22° to 42°) the beam is reflected into the OPTIMA Plus’ Scanner Window and transformed into a low voltage electrical circuit. Once activated, the Output Circuit continues in a “hold” mode for as long as the user remains within the effective range of the Sensor.

2. When the user steps away from the OPTIMA Plus Sensor, the circuit waits 3 seconds (to prevent false flushing) then initiates an electrical signal that operates the Solenoid. This initiates the flushing cycle to flush the fixture. The Circuit then automatically resets and is ready for the next user.

**VARIATIONS**

- LH
  - LESS HANDLE OPENING

OAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, ILLINOIS 60131

Ph: 1-800 982-5839 • Fax: 1-800 447-8329 • http://www.sloanvalve.com
Printed in the U.S.A.
8186
8186-1.0
8186-0.5

- **Description**
  Exposed, Battery Powered, Sensor Operated Royal Urinal Flushometer.

- **Flush Cycle**
  - Model 8186 Water Saver (1.5 gpf/5.7 Lpf)
  - Model 8186-1.0 Low Consumption (1.0 gpf/3.8 Lpf)
  - Model 8186-0.5 (0.5 gpf/1.9 Lpf)

- **Specifications**
  Quiet, Exposed, Diaphragm Type, Chrome Plated Urinal Flushometer for either left or right hand supply with the following features:
  - ADA Compliant OptimaPLUS® Battery Powered Infrared Sensor for automatic "No Hands" operation
  - Dual Filtered By-Pass
  - Diaphragm, Stop Seat and Vacuum Breaker to be molded from PERMEX™ rubber compound for Chloramine resistance
  - Engineered Plastic Cover Assembly with Integral Window
  - Four (4) size AA Batteries included
  - "Low Battery" Flashing LED
  - Infrared Sensor Range Adjustment Screw
  - Initial Set-Up Range Indicator Light (first 10 minutes)
  - Solid Handle Cap
  - 3/4" I.P.S. Screwdriver Bak-Chek™ Angle Stop
  - Free Spinning Vandal Resistant Stop Cap
  - Sweat Solder Adapter with Cover Tube and Cast Set Screw Wall Flange
  - Adjustable Tailpiece
  - High Back Pressure Vacuum Breaker Flush Connection with One-piece Bottom Hex Coupling Nut
  - Spud Coupling and Flange for 3/4" Top Spud

Valve Body, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037, ANSI/ASME A112.18.6 and Military Specification V-29183. Valve shall conform to A.D.A. requirements.

- **Variations**
  - BD Beam Deflector (for targeting small children and wheelchair users)
  - LH Less Handle Opening
  - MC Metal Cover

See Accessories Section and Optima Accessories Section of the Sloan catalog for details on these and other Optima Plus Flushometer variations.

- **ADA Compliant**
- **Automatic**
  Sloan OPTIMA Plus® equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There is no need for AC hookups or wall alterations. The Flushometer operates by means of a battery powered infrared sensor. Once the user enters the sensor's effective range and then steps away, the Flushometer Solenoid initiates the flushing cycle to flush the fixture.

- **Hygienic**
  User makes no physical contact with the Flushometer surface. Helps to control the spread of infectious diseases.

- **Economical**
  Automatic operation provides savings in water usage over other flushing devices. Reduces maintenance and operation costs.

- **Warranty**
  3 year (limited)

Made in the U.S.A.

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16-13
8186
8186-1.0
8186-0.5

Description
Exposed, Battery Powered, Sensor Operated Royal Urinal Flushometer.

Flush Cycle
☐ Model 8186 Water Saver (1.5 gpf/5.7 Lpf)
☐ Model 8186-1.0 Low Consumption (1.0 gpf/3.8 Lpf)
☐ Model 8186-0.5 (0.5 gpf/1.9 Lpf)

ELECTRICAL SPECIFICATIONS

Control Circuit
Solid State
6 VDC Input
8 sec. Arming Delay
24 Hour Sentinel Flush

OPTIMA Sensor Type
Active Infrared

OPTIMA Sensor Range
Nominal 15°-30° (381-762mm), adjustable ± 8° (203mm)

Electrical Rating

Battery Type
(4) AA Alkaline

Battery Life
3 years @ 4,000 flushes/month

Indicator Lights
Range Adjustment/Low Battery

Sentinel Flush
Once every 24 hours after the last flush

INSTRUCTIONS
Continuous, invisible light is emitted from the
OPTIMA Plus Sensor.

1. As the user enters the beam's effective range (15°
to 30°) the beam is reflected into the OPTIMA Plus' Scanner Window and transformed into a low volt-
age electrical circuit. Once activated, the Output Circuit continues in a "hold" mode for as long as the user remains within the effective range of the Sensor.

2. When the user steps away from the OPTIMA Plus Sensor, the Sensor initiates an electrical signal that operates the Solenoid. This initiates the flushing cycle to flush the fixture. The Circuit then automatically resets and is ready for the next user.

VARIATIONS

BD
Beam Extender

LH
Less Handle Opening

MC
Metal Cover

Use when targeting small children and wheelchair users.

SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, ILLINOIS 60131
Ph: 1-800 982-5839 • Fax: 1-800 447-8329 • http://www.sloanvalve.com
Printed in the U.S.A.
Description
Battery Powered, Sensor Operated Retro Fit Conversion Kit for Exposed Closet Flushometers.

Flush Cycle
- Model RESS-C-4.5 MC (4.5 gpf/17 Lpf)
- Model RESS-C-3.5 MC (Water Saver 3.5 gpf/13.2 Lpf)
- Model RESS-C-1.6 MC (Low Consumption 1.6 gpf/6.0 Lpf)

ELECTRICAL SPECIFICATIONS

- Control Circuit
  - Solid State
  - 6 VDC Input
  - 8 sec. Arming Delay
  - 3 second Flush Delay
  - 24 Hour Sentinel Flush

- OPTIMA Sensor Type
  - Active Infrared

- OPTIMA Sensor Range
  - Nominal 22°-42° (559-1,067mm), adjustable ± 8° (203mm)

- Battery Type
  - (4) AA Alkaline

ERATION

illuminous, invisible light is emitted from the VA Plus Sensor.

ROUGH-IN
(on existing Sloan Model 110/111 Flushometer)

- 2½" MIN. (57 mm)
- 4½" (121 mm)

- 1½" (38 mm)
- 1" UPS. SUPPLY (25 mm)

* Typical Water Supply Rough-in dimensions of existing Sloan Model 110/111 Flushometer.

VARIATIONS

- BD BEAM DEFLECTOR

Specify when water supply rough-in is greater than 16" (406 mm) above the top of the bowl.

Sloan Valve Company • 10500 Seymour Avenue • Franklin Park, Illinois 60131
Ph: 1-800-982-5839 • Fax: 1-800-447-8329 • http://www.sloanvalve.com
Printed in the U.S.A.
Description
Battery Powered, Sensor Operated Retro Fit Conversion Kit for Exposed Urinal Flushometers.

Flush Cycle
- Model RESS-U-3.5 MC (3.5 gpf/13.2 Lpf)
- Model RESS-U-1.5 MC (Water Saver 1.5 gpf/5.7 Lpf)
- Model RESS-U-1.0 MC (Low Consumption 1.0 gpf/3.8 Lpf)
- Model RESS-U-0.5 MC (0.5 gpf/1.9 Lpf)

Specifications
Quiet, Exposed, OPTIMA Plus, Battery Powered, Sensor Operated Urinal Flushmeter Retro Fit Conversion Kit for Sloan Royal® and Regal® Flushometers with the following features:
- ADA Compliant OptimaPLUS® Battery Powered Infrared Sensor for automatic "No Hands" operation
- Inside Parts Kit with Dual Filtered By-Pass
- Diaphragm to be molded from PERMEX™ rubber compound for Chloramine resistance
- Chrome Plated Die Cast Metal Cover Assembly with Tempered Glass Window
- Four (4) size AA Batteries included
- "Low Battery" Flashing LED
- Infrared Sensor Range Adjustment Screw
- Initial Set-Up Range Indicator Light (first 10 minutes)
- Free Spinning, Vandal Resistant Stop Cap for Sloan H-600 SeriesControl Stop
- Chrome Plated Metal Handle Cap
- Installation Tools provided

Variations
- BD Beam Deflector (for targeting small children and wheelchair users)
- Z Locking Ring for Zurn® Flush Valve bodies

ADA Compliant

Automatic
Sloan OPTIMA Plus® equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There is no need for AC hookups or wall alterations. The Flushometer operates by means of a battery powered infrared sensor. Once the user enters the sensor's effective range and then steps away, the Flushometer Solenoid initiates the flushing cycle to flush the fixture.

Hygienic
User makes no physical contact with the Flushometer surface. Helps to control the spread of infectious diseases.

Economical
Automatic operation provides savings in water usage over other flushing devices. Reduces maintenance and operation costs.

Warranty
3 year (limited)
Made in the U.S.A.

UL® Listed  SE® Listed

The information contained in this document is subject to change without notice.

This space for Architect/Engineer approval

Job Name ___________________________ Date ___________________________
Model Specified ___________________________ Quantity ________________
Variations Specified ___________________________
Customer/Wholesaler ___________________________
Contractor ___________________________
Architect ___________________________

RESS-U-MC shown installed on an existing Sloan Flushometer.
RESS-U-MC units do NOT include a Valve Body, Supply Stop, or Vacuum Breaker.

16-5
Description
Battery Powered, Sensor Operated Retro Fit Conversion Kit for Exposed Urinal Flusher motors.

Flush Cycle
- Model RESS-U-3.5 MC (3.5 gpf/13.2 Lpf)
- Model RESS-U-1.5 MC (Water Saver 1.5 gpf/5.7 Lpf)
- Model RESS-U-1.0 MC (Low Consumption 1.0 gpf/3.8 Lpf)
- Model RESS-U-0.5 MC (0.5 gpf/1.9 Lpf)

Electrical Specifications
- Control Circuit: Solid State
  - 8 sec. Arming Delay
  - 24 Hour Sentinel Flush
- OPTIMA Sensor Type: Active Infrared
- OPTIMA Sensor Range: Nominal 15'-30' (361-762mm), adjustable ± 8" (203mm)
- Battery Type: (4) AA Alkaline
- Battery Life: 3 years @ 4,000 flushes/month
- Indicator Lights: Range Adjustment/Low Battery
- Sentinel Flush: Once every 24 hours after the last flush
- Operating Pressure: 15-100 PSI (104-689 kPa)

Operation
- Continuous, invisible light is emitted from the AA Plus Sensor.

Rough-In
(on existing Sloan Model 186 Flushometer)

![Diagram of Rough-In Dimensions]

Variations
- BD BEAM DEFLECTOR

Use when targeting small children and wheelchair users.

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Ph: 1-800 982-5839 • Fax: 1-800 447-8329 • http://www.sloanvalve.com Printed in the U.S.A.
WASHBROOK URINAL

- Vitreous china
- Low-consumption (3.8 Lpf/1.0 gpf)
- Flushing rim
- Elongated 14" rim from finished wall
- Washout flush action
- Extended sides for privacy
- 3/4" inlet spud
- Outlet connection threaded 2" inside (NPTF)
- 2 wall hangers
- Fixture only
- Meets ANSI flush requirements at 0.7 to 1.0 GPF

6501.010 Top spud
6506.011 Back spud

Nominal Dimensions:
470 x 359 x 692mm
(18-1/2" x 14" x 27-1/4")

Recommended working pressure - between
20 psi at valve when flushing and 80 psi static.

Compliance Certifications -
Meets or Exceeds the Following Specifications:
- ASME A112.19.2M (and 19.6M) for Vitreous
China Fixtures - includes Flush Performance,
Ball Pass Diameter, Trap Seal Depth and
all Dimension

To Be Specified
- Color:  White  Bone  Silver  Shell  Black
- Flush Valve: Sloan Royal 186-1 (top spud)
  Sloan Royal 195-1 (back spud)
- Alternative Flush Valve:
- Stainless Steel Strainer: 047068-0070A

● When installed so top of rim is 387mm (15-1/4") from finished floor.
MEETS THE AMERICAN DISABILITIES ACT GUIDELINES AND
ANSI A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND
FACILITIES - CHECK LOCAL CODES.

WASHBROOK™
URINAL
VITREOUS CHINA

COM/INS-034
© 2000 American Standard Inc.
Revised 6/00
LUCERNE™ WALL-HUNG LAVATORY

- Vitreous china
- Front overflow
- D-shaped bowl
- Self-draining deck area with contoured back and side splash shields
- Faucet ledge

**Faucet holes on 203mm (8") centers (Illus.):**
- 0356.028 For exposed bracket support
  Shown with 4801.862 Amarilis Heritage faucet with Triune Cross handles
  (not included)
- 0356.015 For wall hanger (included) or concealed arms support

**Faucet holes on 102mm (4") centers:**
- 0355.027 For exposed bracket support
- 0355.012 For wall hanger (included) or concealed arms support

**Single center faucet hole (Illus.):**
- 0356.041 For exposed bracket support
  Shown with 1340.000 metering faucet (not included)
- 0356.421 For wall hanger (included) or concealed arms support

Nominal Dimensions:
521 x 464mm (20-1/2" x 18-1/4")

Bowl sizes:
381mm (15") wide, 254mm (10") front to back, 171mm (6-3/4") deep

**Compliance Certifications - Meets or Exceeds the Following Specifications:**
- ASME A112.19.2M for Vitreous China Fixtures

To Be Specified:
- Color: [ ] White [ ] Bone [ ] Silver [ ] Black
- [ ] Shell
- [ ] Faucet*
- [ ] Faucet Finish:
- [ ] Supplies:
- [ ] 1-1/4" Trap:
- [ ] Nipple:
- [ ] Bracket Support (by others):
- [ ] Concealed Arms Support (by others):

* See faucet section for additional models available

NOTE: Roughing-in information shown on reverse side of page
AFWALL™ ELONGATED TOILET

- Vitreous china
- Low-consumption (6.0 Lpf/1.6 gpf)
- Wall-mounted elongated bowl
- Fully glazed trapway
- Condensation channel
- Direct-fed siphon jet action
- 1-1/2" inlet spud
- 2" ballpass trapway
- 10" x 12" water surface area
- 100% factory flush tested

- 2257.103 Top spud
- 2256.194 Top spud with slotted rim for bedpan holding (White only)
- 2258.125 Back spud
- 2254.127 Back spud with slotted rim for bedpan holding (White only)

Recommended working pressure—between 30 psi at valve when flushing and 80 psi static

Nominal Dimensions:
635 x 375 x 381mm (25" x 14-3/4" x 15")

Fixture only, less seat and bolt caps

Compliance Certifications -
Meets or Exceeds the Following Specifications:
- ASME A112.19.2M (and 19.6M) for Vitreous China Fixtures - includes Flush Performance, Ball Pass Diameter, Trap Seal Depth and all Dimensions

To Be Specified
- Color: □ White □ Bone □ Silver □ Shell □ Black
- Seat: Olsonite #95 open front seat less cover
- Seat: Church #9500C open front seat less cover
- Alternate Seat:
- Flush Valve: Sloan Royal #111 (Top Spud)
- Sloan Royal #144-1.5 (Back Spud)
- Alternate Flush Valve:
- Carrier Fitting (by others):

NOTE: Roughing-in information shown on reverse side of page

- When installed so top of seat is 432 to 483mm (17" to 19") from the finished floor.
MEETS THE AMERICAN DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USEABLE BUILDING FACILITIES CHECK LOCAL CODES.

SPS 2254/2256/2257/2258

© 1998 American Standard Inc.
WATER FOUNTAIN WITH LEAD FILTER

DESCRIPTION
PF8AM
SANDSTONE

MODEL
PF8AM

PROD
503027

S/N
0430571464

OASIS CORPORATION
265 N. HAMILTON RD. COLUMBUS, OHIO 43213 U.S.A.

CHLORINE, TASTE & ODOR, and LEAD & CYST REDUCTION
033879-001

Service Life
1 Year / 1500 Gallons (5670 Liters)

Maximum Flow
.50 GPM (1.9 LPM)

Maximum Pressure
125 PSIG (8.6 bar)

Maximum Temperature
100 F (38 C)

Minimum Temperature
35 F (2 C)

NOTES:
✓ Do not use where water is microbiologically unsafe or of unknown quality without adequate disinfection before or after unit.
✓ Install in cold water applications only

A. Unscrew old cartridge from head.
B. Screw in new cartridge until lightly seated. DO NOT overtighten.
C. Check for leaks. If leaks occur, repeat Steps 1 through 3. If leaks persist, discontinue use and call your supporting dealer.
D. Flush 4 gallons of water through filter before use.
E. Install and dispose of in compliance with local and state regulations.

OASIS Corporation
265 North Hamilton Road
Columbus, Ohio 43213
800-64 OASIS (800-646-2747)
OasisWaterCoolers.com
STANDARD SPECIFICATIONS
These features are common to all Series S19-310 units except where indicated with individual model numbers.

Shower Head
10" (254mm) diameter yellow impact-resistant plastic or corrosion-resistant stainless steel.

Shower Valve*
Chrome plated brass 1" IPS stay-open ball valve is operated by stainless steel pull rod with triangular handle (except models S19-310HFP and S19-310NN).

Eye Wash Bowl
10" (254mm) diameter yellow impact-resistant plastic or corrosion-resistant stainless steel (except models S19-310HFP and S19-310GG—no bowls).

Sprayhead Assembly*
The integral flow control assures safe, steady flow under varying water supply conditions.

Standard

Face Spray Ring
Chrome plated circular spray ring provides supplemental face spray. Flow control assures adequate flow from eye wash nozzles and face spray ring.

Eye Wash Valve*

Pipe and Fittings*
1-1/4" galvanized steel protected with Bradtact safety yellow coating (except S19-310LL).

Water Supply
1-1/4" IPS

*NOTE: Models S19-310GC and S19-310SS are all stainless steel.

ADDITIONAL FEATURES
Available on certain models.

Hinged Dust Cover
Stainless steel cover keeps contaminants, dust, and debris from eye washing area.

Hand or Foot Operated
Eye wash valve is activated by push flag handle or stainless steel foot pedal. Closes manually by pulling flag handle.

Eye/Face Wash Spray Heads
Twin perforated disc eye/face wash heads with removable nozzles.

Model S19-310
Plastic Shower Head and Bowl

Model S19-310DC
Stainless Steel Hinged Dust Cover and Bowl with Plastic Shower Head

Model S19-310JJ
Stainless Steel Shower Head and Bowl Bright mirror finish is superior in laboratory use and in areas where appearance is tantamount.

Should be model S19-310DC Stainless steel cover  & bowl with plastic shower head
Keep eye wash clean in work area see patent

Model S19-310AC
Plastic Shower Head Stainless Steel Bowl Hand or Foot Operated

Model S19-310DCR
Stainless Steel Hinged Dust Cover

Model S19-310F
Stainless Steel Shower Head and Bowl
Combination SHOWERS/EYE WASHES

Standard Specifications

Series S19-310
- Shower head — 10" (254mm) diameter yellow impact-resistant plastic or corrosion-resistant stainless steel. Exceeds minimum water flow: 20 GPM at 30 PSI.
- Eye wash bowl — 10" (254mm) diameter yellow impact-resistant plastic or corrosion-resistant stainless steel.
  - Hinged stainless steel dust cover (available on specified models) covers bowl to keep out contaminants and debris from eye wash area. Dust cover opens when handle is activated.
- Sprayhead assembly: All sprayhead assemblies include flow control to assure safe, steady water flow under varying water supply conditions and pop-off protective sprayhead dust covers.
  - Eye wash features chrome-plated brass soft-flow sprayheads designed to gently cleanse the eyes. Exceeds minimum water flow: 4 GPM at 30 PSI.
  - Eye/e face wash features ABS plastic perforated disc sprayheads designed to gently cleanse eyes and face. Exceeds minimum water flow: 3 GPM at 30 PSI.
  - Face spray ring features chrome-plated circular spray ring designed with a wider spray pattern for full face spray.
- Shower valve — 1/2" IPS chrome-plated brass stay-open ball valve is operated by stainless steel pull rod with triangular handle.
- Eye wash valve — 1/2" IPS chrome-plated brass stay-open ball valve is operated by a highly visible yellow, PVC or stainless steel (where specified) push handle.
- Pipe and fittings — 1-1/4" galvanized steel pipe (2" for PVC shower) protected with Bradectyl yellow coating (unless otherwise specified). Includes 9" diameter floor flange (6" for PVC shower).
- Water supply — 1-1/4" IPS female. 2" IPS (S19-310PVC).
- Waste — 1-1/4" IPS female.

Optional Attachments
(All combination models)

Model S19-430EH or S19-430SH
Drench hose spray kit. Available for all combination shower and eye wash models — see page 19.

Model S45-572
Foot treadle kit available for pedestal-mount eye washes and combination drench showers/eye washes — see page 19.

Model S45-620
Foot treadle kit for model S19-310PVC shower only — see page 19.