

# ELKAY<sup>®</sup>

## SPECIFICATIONS

### Pacemaker<sup>®</sup> Double Bowl Sink 20 Gauge - Type 304 - Self-Rim Model PSR Series

#### GENERAL

Fine quality Pacemaker double bowl hospitality sink seamlessly drawn of #20 gauge, type 304 (18-8) nickel bearing stainless steel. Self-rimming.

#### DESIGN FEATURES

Bowl Depths: 7-1/4" (PSR3319 and PSR4322), 7-1/2" (PSR3321).

Coved Corners: 1-3/4".

Bowl and Faucet Deck Recess: 3/16" drop ledge.

Finish: Exposed surfaces are polished to a lustrous, highlighted bright satin finish.

Underside: Fully undercoated to prevent condensation and deaden sound. PSR3321 underside is fully protected by heavy duty Sound Guard<sup>®</sup> undercoating.

#### OTHER

Drain Openings: 3-1/2".

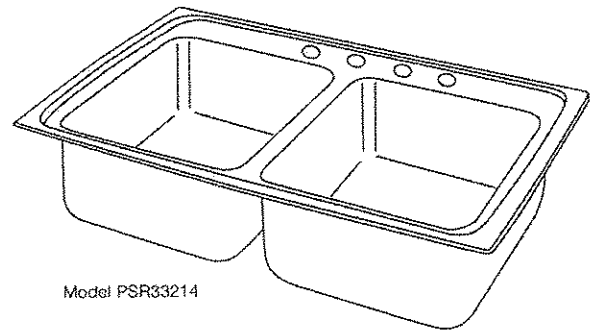
Faucet Holes: Available with 0, 1, 2, MR2, 3, 4 or 5, 1-1/2" diameter faucet holes 4" centers.

NOTE: Unless otherwise specified, sink is furnished with 4 faucet holes.

These sinks comply with ANSI Standard A112.19.3M.



These sinks are listed by the International Association of Plumbing and Mechanical Officials as meeting the requirements of the Uniform Plumbing Code.



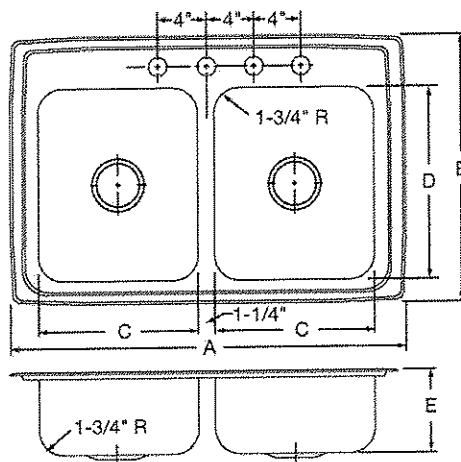
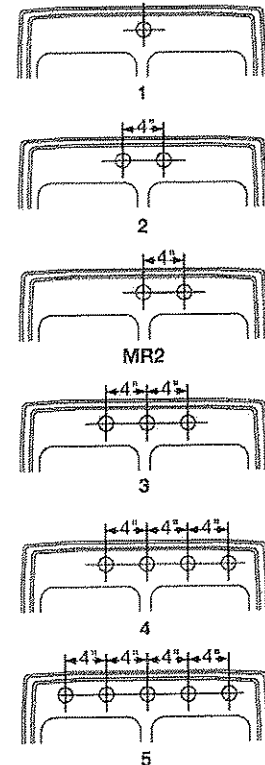
Model PSR33214

#### SINK DIMENSIONS (INCHES)\*

Model Number	Overall		Inside Each Bowl			Cutout in Countertop (1 1/2" Radius Corners)		No. of 1 1/2" Dia. Faucet Holes 4" Center	Minimum Cabinet Size	Ship. Wt. Lbs.
	L	W	L	W	D	L	W			
PSR3319	33	19 1/2	14	14	7 1/4	32 3/8	18 7/8	1, 2, MR2, 3, 4 or 5	36	16
PSR3321	33	21 1/4	13 1/2	16	7 1/2	32 3/8	20 3/8	1, 2, MR2, 3, 4 or 5	36	17
PSR4322	43	22	19	16	7 1/4	42 3/8	21 3/8	1, 2, MR2, 3, 4 or 5	48	20

\*Length is left to right. Width is front to back.

#### HOLE DRILLING CONFIGURATIONS



Model PSR33214 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

www.elkayusa.com

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Oak Brook, IL 60523

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(Rev. 10/03) 1-75D

► **Description**  
Exposed, Battery Powered, Sensor Activated, Sloan® Optima® SMOOTH™ 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:

**Flushometer**

- High Chloramine Resistant PERMEX™ Synthetic Rubber Diaphragm with Linear Filtered Bypass and Vortex Cleansing Action™
- ADA Compliant Metal Oscillating Non-Hold-Open Handle with Triple Seal Handle Packing
- 1" I.P.S. Screwdriver Bak-Chek™ Angle Stop
- Vandal Resistant Stop Cap
- Adjustable Tailpiece
- Vacuum Breaker with Flush Connection
- Spud Coupling and Spud Flange for 1½" Top Spud
- Sweat Solder Adapter with Cover Tube and Cast Wall Flange
- High Copper, Low Zinc Brass Castings for Dezincification Resistance
- Non-Hold-Open Handle and No External Volume Adjustment to Ensure Water Conservation
- Low Consumption flush accuracy
- Handle Packing, Stop Seat and Vacuum Breaker Molded from PERMEX™ Rubber Compound for Chloramine Resistance

**Optima SMOOTH Unit**

- ADA Compliant OPTIMA® SMOOTH™ Battery Powered Infrared Sensor for automatic "Hands-free" operation
- Sensor with Automatic Range Adjustment
- Chrome Plated Metal Sensor Housing
- Mechanical Manual Override Flush Handle
- Four (4) Size C Batteries included
- "Low Battery" Flashing LED
- "User in View" Flashing LED
- 25 to 80 psi Operating Range

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 A 12.19.2, and Military Specification V-29193.

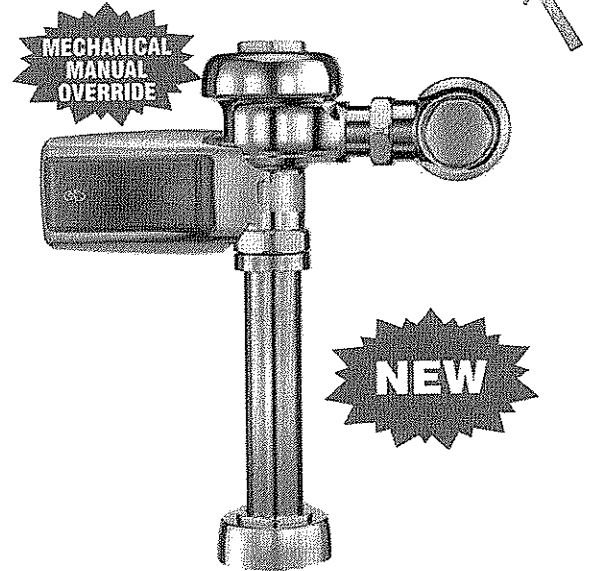
► **Variations**

- TP Trap Primer
- DFB Dual Filtered Fixed Bypass Diaphragm
- YG Extended Bumper on Angle Stop (for seat with cover)



This space for Architect/Engineer approval	
Job Name _____	Date _____
Model Specified _____	Quantity _____
Variations Specified _____	
Customer/Wholesaler _____	
Contractor _____	
Architect _____	

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



► **ADA Compliant**

► **Automatic**

Sloan SMOOTH™ 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 SMOOTH™ Unit initiates the flushing cycle to flush the fixture. State-of-the-art Technology enables activation of a manual override without "double flushing" occurring as the user departs (locks out sensor for approximately 10 seconds).

► **Hygienic**

The Sloan® Optima® SMOOTH™ Flushometer is the next advancement in hygiene. It uses sensor technology to transform manual installations into electronic, hands-free operation. User makes no physical contact with the Flushometer surface except to initiate the Override Handle when required. Helps control the spread of infectious diseases.

► **Economical**

Automatic operation provides water usage savings over other flushing devices. Reduces maintenance and operation costs. Installation and battery replacement does not require turning off water to the valve.

► **Warranty**

3 year (limited)

## Model

# 110/111

### ► Description

Exposed, Battery Powered, Sensor Activated, Sloan® Optima® SMOOTH™ Water Closet Flushometer for floor mounted or wall hung top spud bowls.

### ► Flush Cycle

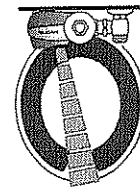
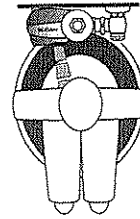
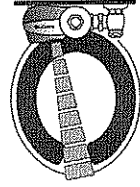
- Model 110 Water Saver (3.5 gpf/13.2 Lpf)
- Model 111 Low Consumption (1.6 gpf/6.0 Lpf)

## ELECTRICAL SPECIFICATIONS

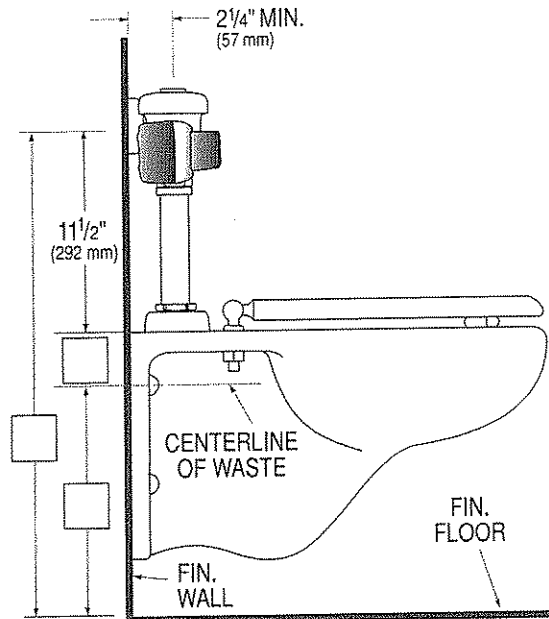
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|---|--|
| ► <b>Control Circuit</b><br>6 VDC Input   | ► <b>Battery Type</b><br>(4) Size C Alkaline           |
| ► <b>OPTIMA Sensor Type</b><br>Active Infrared with Automatic Adjustment  | ► <b>Battery Life</b><br>2 Years @ 4,000 Flushes/Month |
| ► <b>OPTIMA Sensor Range</b><br>Normal Range:<br>26" - 32" (660 mm-813 mm)<br>Reduced Range:<br>20" - 26" (508 mm-660 mm) | ► <b>Indicator Lights</b><br>User in View/Low Battery  |
|   | ► <b>Operating Pressure</b><br>25-80 psi (172-552 kPa) |

## OPERATION

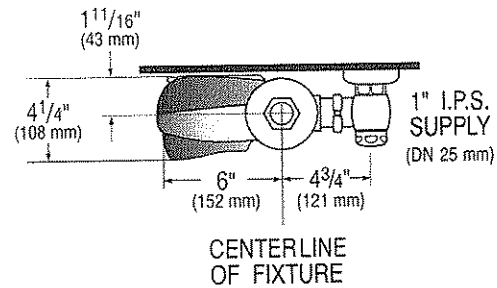
1. A continuous, invisible light beam is emitted from the SMOOTH unit's Infrared Sensor.
2. When the user enters the sensor's effective range, the Red LED light in the sensor window flashes for eight seconds. After eight seconds of sensing the user, the light will stop flashing and the unit waits for the user to step away before initiating a flush cycle.
3. When the user steps away, the unit initiates a flush cycle. The unit then automatically resets and is ready for the next user.



## DIMENSIONS



Side View



Top View

**SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131**

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► **Description**  
Exposed, Battery Powered, Sensor Activated, Sloan® Optima® SMOOTH™ Urinal Flushometer for 3/4" top spud urinals.

- **Flush Cycle**
- Model 186 Water Saver (1.5 gpf/5.7 Lpf)
  - Model 186-1.0 Low Consumption (1.0 gpf/3.8 Lpf)
  - Model 186-0.5 (0.5 gpf/1.9 Lpf)

► **Specifications**  
Quiet, Exposed, Diaphragm Type, Chrome Plated Urinal Flushometer with the following features:

**Flushometer**

- High Chloramine Resistant PERMEX™ Synthetic Rubber Diaphragm with Linear Filtered Bypass and Vortex Cleansing Action™
- ADA Compliant Metal Oscillating Non-Hold-Open Handle with Triple Seal Handle Packing
- 3/4" I.P.S. Screwdriver Bak-Chek™ Angle Stop
- Vandal Resistant Stop Cap
- Adjustable Tailpiece
- Vacuum Breaker with Flush Connection
- Spud Coupling and Spud Flange for 3/4" Top Spud
- Sweat Solder Adapter with Cover Tube and Cast Wall Flange
- High Copper, Low Zinc Brass Castings for Dezincification Resistance
- Non-Hold-Open Handle and No External Volume Adjustment to Ensure Water Conservation
- Low Consumption flush accuracy
- Handle Packing, Stop Seat and Vacuum Breaker Molded from PERMEX™ Rubber Compound for Chloramine Resistance

**Optima SMOOTH Unit**

- ADA Compliant OPTIMA® SMOOTH™ Battery Powered Infrared Sensor for automatic "Hands-free" operation
- Sensor with Automatic Range Adjustment
- Chrome Plated Metal Sensor Housing
- Mechanical Manual Override Flush Handle
- Four (4) Size C Batteries included
- "Low Battery" Flashing LED
- "User in View" Flashing LED
- 25 to 80 psi Operating Range

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 A112.19.2, and Military Specification V-29193.

► **Variations**

- DFB Dual Filtered Fixed Bypass Diaphragm



This space for Architect/Engineer approval	
Job Name _____	Date _____
Model Specified _____	Quantity _____
Variations Specified _____	
Customer/Wholesaler _____	
Contractor _____	
Architect _____	

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► **ADA Compliant**

► **Automatic**

Sloan SMOOTH™ 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 SMOOTH™ Unit initiates the flushing cycle to flush the fixture. State-of-the-art Technology enables activation of a manual override without "double flushing" occurring as the user departs (locks out sensor for approximately 10 seconds).

► **Hygienic**

The Sloan® Optima® SMOOTH™ Flushometer is the next advancement in hygiene. It uses sensor technology to transform manual installations into electronic, hands-free operation. User makes no physical contact with the Flushometer surface except to initiate the Override Handle when required. Helps control the spread of infectious diseases.

► **Economical**

Automatic operation provides water usage savings over other flushing devices. Reduces maintenance and operation costs. Installation and battery replacement does not require turning off water to the valve.

► **Warranty**

3 year (limited)

# Model 186

## ► Description

Exposed, Battery Powered, Sensor Activated, Sloan® Optima® SMOOTH™ Urinal Flushometer for ½" top spud urinals.

## ► Flush Cycle

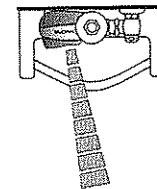
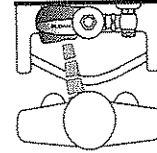
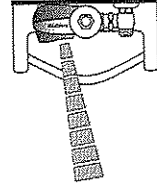
- Model 186 Water Saver (1.5 gpf/5.7 Lpf)
- Model 186-1.0 Low Consumption (1.0 gpf/3.8 Lpf)
- Model 186-0.5 (0.5 gpf/1.9 Lpf)

## ELECTRICAL SPECIFICATIONS

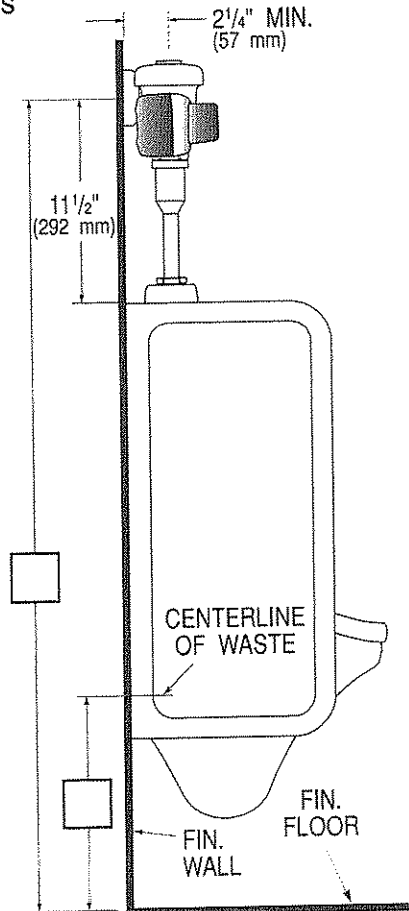
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|---|--|
| ► <b>Control Circuit</b><br>6 VDC Input   | ► <b>Battery Type</b><br>(4) Size C Alkaline           |
| ► <b>OPTIMA Sensor Type</b><br>Active Infrared with Automatic Adjustment  | ► <b>Battery Life</b><br>2 Years @ 4,000 Flushes/Month |
| ► <b>OPTIMA Sensor Range</b><br>Normal Range:<br>26" - 32" (660 mm-813 mm)<br>Reduced Range:<br>20" - 26" (508 mm-660 mm) | ► <b>Indicator Lights</b><br>User in View/Low Battery  |
|   | ► <b>Operating Pressure</b><br>25-80 psi (172-552 kPa) |

## OPERATION

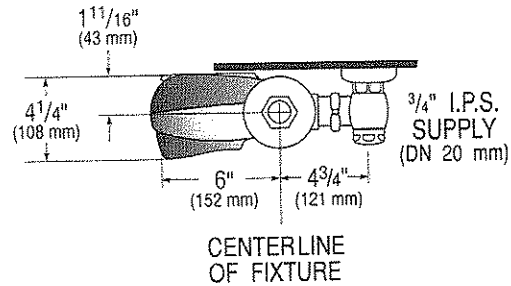
1. A continuous, invisible light beam is emitted from the SMOOTH unit's Infrared Sensor.
2. When the user enters the sensor's effective range, the Red LED light in the sensor window flashes for eight seconds. After eight seconds of sensing the user, the light will stop flashing and the unit waits for the user to step away before initiating a flush cycle.
3. When the user steps away, the unit initiates a flush cycle. The unit then automatically resets and is ready for the next user.



## DIMENSIONS



Side View



CENTERLINE  
OF FIXTURE

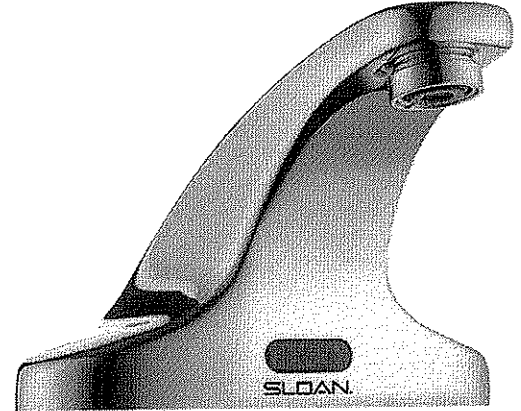
Top View

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# SLOAN® Faucets

## Sensor Activated Electronic Handwashing Faucet

# SF-2300 SF-2350 ←



- ▶ **Description**  
Sensor Activated, Electronic, 4 inch Centerset Hand Washing Faucet for tempered or hot/cold water operation.
- ▶ **Models**
  - SF-2300 Series 6 VDC Plug-in Transformer Powered with Battery Backup
  - SF-2350 Series Battery Powered
- ▶ **Flow Rate**
  - 0.5 gpm/1.9 Lpm Max Flow Spray Head
- ▶ **Specifications**  
ADA Compliant, Sensor Activated, 6 VDC, Chrome Plated Brass, Hand Washing Faucet with the following features:
  - Splash-proof Circuit Control Module
  - Adjustable Infrared Sensor Range
  - 36" (914 mm) Long Sensor Cable
  - 24" (610 mm) Long Flex Hose
  - Filtered Solenoid Valve with serviceable Strainer Filter
  - Bak-Chek™ Tee for Hot/Cold Supply
  - 6 VDC Plug-in Transformer (Model SF-2300 only)
  - Aerator Spray Head
  - Includes Four (4) AA-size Batteries
  - Includes appropriate Mounting Hardware
- ▶ **Variations (add suffix to Model Number for inclusion with Faucet)**
  - **Temperature Mixing Valves**
    - BDM MIX-60-A Below Deck Mechanical Mixing Valve
- ▶ **Accessories (specify separately)**
  - **Standard Outlet**
    - SFP-13 0.5 gpm/1.9 Lpm Spray Head
    - SFP-23 2.2 gpm/8.3 Lpm Aerator
  - **Vandal Resistant Outlet**
    - EAF-15 0.5 gpm/1.9 Lpm Vandal Resistant Spray Head
    - SFP-24 2.2 gpm/8.3 Lpm Vandal Resistant Aerator
  - **Transformers**
    - SFP-6 120 VAC/6 VDC Plug-in Transformer
    - SFP-20 240 VAC/6 VDC Type G Rectangular (UK) Plug-in Transformer
    - SFP-25 240 VAC/6 VDC Type C Round Pin (Euro) Plug-in Transformer
    - SFP-26 240 VAC/6 VDC Type A Flat Blade (Asia) Plug-in Transformer
    - SFP-35-A Gang Transformer Kit, includes 1 Plug-in Gang Transformer, 5 Splitter Cables and 1 Extension Cable
    - SFP-36 71" (1800 mm) 120 VAC/6 VDC Plug-in Gang Transformer
    - SFP-38 51" (1300 mm) Splitter Cable
    - SFP-37 51" (1300 mm) Extension Cable

- ▶ **ADA Compliant**
- ▶ **Automatic**  
The Sloan SF-2300 and SF-2350 Electronic Hand Washing Faucets operate by means of an infrared sensor. When the user enters the sensor's effective range, the Solenoid activates the water flow. Tempered water flows from the Faucet until the user steps away. The Faucet then automatically shuts off.
- ▶ **Hygienic**  
The ultimate in sanitary protection — there are no handles to turn or buttons to push. Helps to control the spread of infectious diseases.
- ▶ **Economical**  
Automatic operation provides water usage savings over other faucet devices. Reduces maintenance and operation costs.
- ▶ **Warranty**  
1 year (limited)
- ▶ **Compliant to:**  
ASME A112.18.1 and CSA B125.1



Listed by I.A.P.M.O.



Certified



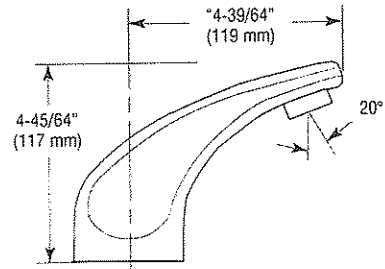
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Job Name .....	Date .....
Model Specified .....	Quantity .....
Variations Specified .....	
Customer/Wholesaler .....	
Contractor .....	
Architect .....	

# SF-2300 SF-2350

- ▶ **Description**  
Sensor Activated, Electronic, 4 inch Centerset Hand Washing Faucet for tempered or hot/cold water operation.
- ▶ **Models**
  - SF-2300 Series 6 VDC Plug-in Transformer Powered with Battery Backup
  - SF-2350 Series Battery Powered
- ▶ **Flow Rate**  
□ 0.5 gpm/1.9 Lpm Max Flow Spray Head

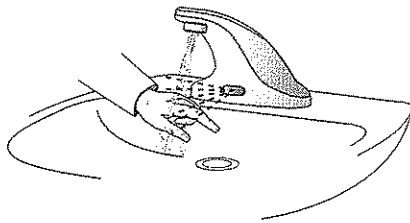
## ELECTRICAL SPECIFICATIONS

- ▶ **Control Circuit**  
6 VDC Input/Output
- ▶ **Transformer**  
6 VDC Plug-in (Model 2300 only)
- ▶ **Battery Life**  
Four (4) Alkaline AA Batteries  
2 years at 8,000 cycles/month
- ▶ **Solenoid Valve**  
6 VDC,  
Serviceable Strainer,  
3/8" Compression Inlet,  
1/2" NPSM Outlet
- ▶ **Sensor Range**  
Nominal:  
4" - 7" (102 mm - 178 mm)

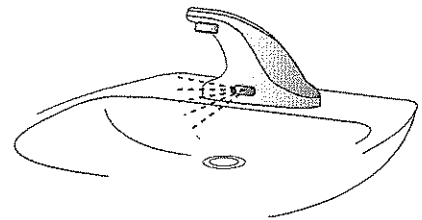


## OPERATION

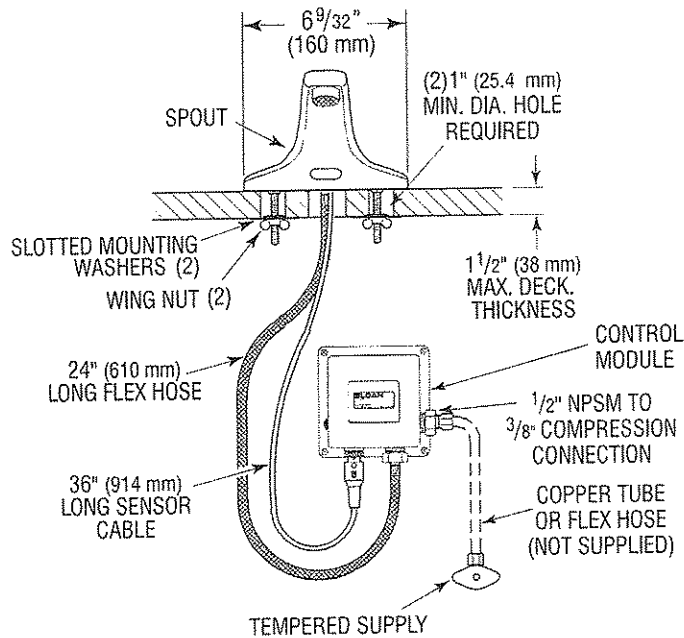
1. When a user's hands enter the sensing range, water flows from the spout.



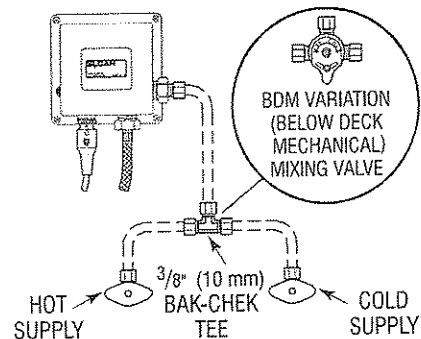
2. When hands are removed, the water flow stops.



## ROUGH-IN DIMENSIONS



## HOT AND COLD WATER SUPPLY APPLICATIONS (SPECIFY IN MODEL VARIATION)



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# ELKAY<sup>®</sup>

## SPECIFICATIONS

### Two Station Wall Mount Water Coolers Barrier-Free Access (Adult and Child) NSF/ANSI 61 Compliant – Models EZTL8C, EZSTL8C, EZTLDDC and EZSTLDDC

#### GENERAL

Self-contained, wall hung electric refrigerated water cooler. Chilling capacity of 50°F drinking water, based upon 80°F inlet water and 90°F ambient.

**Model EZSTL8C** has self-closing Easy-Touch Controls on front, left and right of each unit.

**Model EZTL8C** has self-closing Easy-Touch Controls on the front of each unit.

**Model EZSTLDDC** non-refrigerated. Same as EZSTL8C without cooling system. (Requires outlet for power cord.)

All models have a hooded stream projector with Easy-Touch Controls that require less than 3 pounds of force to activate commercial-grade solenoid based flow control. Patented\* valve with built-in flow regulator provide constant stream from 20 to 105 psi water pressure. Bubbler orifice fully protected to meet all sanitary codes.

**NOTE:** Minimum 40 psi supply line pressure required in special circumstances where both sides of bi-level are in use simultaneously to ensure adequate stream height. Does not apply to non-refrigerated units.

This model cooler consists of a refrigerated lower unit which requires a water supply, drain outlet and electrical supply.

#### ADA COMPLIANT

These Water Coolers comply with the requirements of A.D.A. (Americans with Disabilities Act) when properly installed. Unit is compliant if installed in an alcove and is also compliant when mounted on an exposed wall if a wing wall is located on the left side or if LKAPREZL apron is installed under upper unit. Also meets the guidelines for children's environments providing the floor to orifice height is 30" or less on the lower unit and proper clear floor space is provided for parallel approach. (Based on Architectural and Transportation Barriers Compliance Board final ruling.) Check Local and State Codes.

#### NO LEAD DESIGN

These Water Coolers are certified to be lead-free as defined by the Safe Drinking Water Act. Elkay Water Coolers are manufactured with a waterway system utilizing copper components and completely lead-free materials. These waterways have no lead because all lead materials, such as leaded brass, have been removed. All joints are brazed using silver solder only. No lead solder is permitted. A strainer with an easily cleanable screen is provided to allow trapping and convenient removal of waterborne particulate of 140 microns and larger prior to their entry into the water cooler.

These water coolers are certified to NSF/ANSI 61.

#### CAPACITIES CHART

Model Number	Base Rate	**GPH of 50°F Drinking Water			Rated Watts	Full Load Amps	Glass Filler Option	Ship. Wt. Lbs.
		Room Temperature °F						
		70°F	80°F	90°F				
EZSTL8C	8.0	9.7	8.8	8.0	370	4.0	Yes	89
EZTL8C	8.0	9.7	8.8	8.0	370	4.0	Yes	89
EZTLDDC	–	–	–	–	–	–	Yes	66
EZSTLDDC	–	–	–	–	–	–	Yes	66

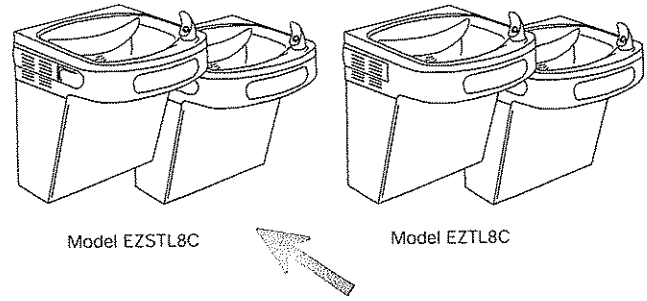
\*\*Based on 80°F inlet water temperature. †Glass filler available at extra cost. Requires factory preparation to receive glass filler. Upper unit only.

Rated watts shown are based on operational (run) time, in compliance with A.R.I. Standard 1010 conditions. Specific applications will determine the actual watts consumed per hour. Watts consumed will be based on number of people served per hour (usage), ambient temperatures, and inlet water temperature.

#### COOLING SYSTEM

**Motor Compressor:** Hermetically sealed, reciprocating type, 115VAC, 60Hz single phase. Sealed-in lifetime oil supply. Equipped with electric cord and three prong molded rubber plug (domestic models).

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



**Condenser:** Fan cooled, copper tube with aluminum fins. Fan motor is permanently lubricated.

**Cooling Unit:** Combination tube-tank type. Tube portion is continuous coil of copper tubing. Tank is stainless steel. Fully insulated with EPS foam which meets Underwriters Laboratories Inc. requirements for self-extinguishing material.

**Refrigerant Control:** Refrigerant HFC-134a is controlled by accurately calibrated capillary tube for positively trouble-free operation.

**Temperature Control:** Enclosed adjustable thermostat is factory preset. Requires no adjustment other than for altitude requirements. Easily accessible.

#### CONSTRUCTION

**Frame:** Galvanized structural steel chassis supports refrigeration system and fastens to wall. Provides increased structural integrity and rigidity to cooler.

**Stainless Steel Basin:** Type 304, one piece polished to a uniform Elkay bright luster finish. Basin has integral drain grid, embossed bubbler pad. No exposed fasteners.

**Exclusive Flexi-Guard® Safety Bubbler\*:** Innovative design utilizes an infused anti-microbial pliable polyester elastomer to prevent accidental mouth injuries. Flexes on impact, then returns to original position. Strong. Abrasion-resistant. Anti-sweat. Keyed in location to prevent rotation.

**Upper Shroud:** Contoured shock-absorbing, provides additional protection against accidental injury. No exposed fasteners.

**Lower Shroud:** One piece easy to remove and replace. Allows access to internal components from three sides.

**Cabinet:** Cabinet design allows for flush to wall mounting. No recess space is required.

**Color Selection:** Unless otherwise specified cabinet is two-tone gray upper shroud with textured gray lower shroud. Stainless Steel lower shrouds available at extra cost.

**5 YEAR LIMITED WARRANTY** on the refrigeration system of the unit. Electrical components and water system are warranted for 12 months from date of installation. Sample Certificate available on request.

Elkay Pressure-Type Water Coolers are designed to operate on 20 psi to 105 psi supply line pressure. If inlet pressure is above 105 psi, a pressure regulator must be installed in the supply line. Any damage caused by reason of connecting this product to supply line pressures lower than 20 psi or higher than 105 psi is not covered by the warranty.

#### STANDARDS



Elkay Electric Air Cooled Water Coolers meet the requirements of NSF/ANSI 61. Unit complies with A.R.I. Standard 1010.

\* Patent #4,481,971

*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

elkayusa.com

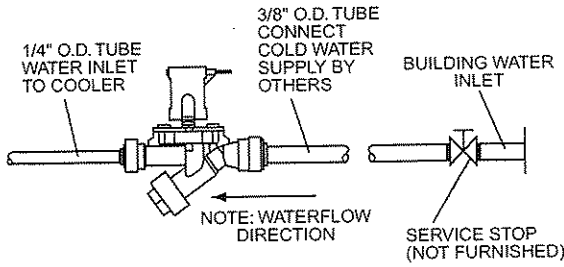
2222 Camden Court  
Oak Brook, IL 60523

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(Rev. 2/09) 12-24E

**Two Station Wall Mount Water Coolers  
Barrier-Free Access (Adult and Child)  
NSF/ANSI 61 Compliant – Models EZTL8C,  
EZSTL8C, EZTLDDC and EZSTLDDC**

**ELKAY®  
ROUGH-IN DIMENSIONS**



**IMPORTANT!  
INSTALLER PLEASE NOTE:**

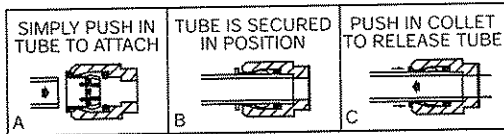
This water cooler has been designed and built to provide water to the user which has not been altered by materials in the cooler waterways.

The grounding of electrical equipment such as telephone, computers, etc., to water lines is a common procedure. This grounding may be in the building but may also occur away from the building. This grounding can cause electrical feedback into a water cooler creating an electrolysis which creates a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by installing the cooler using the proper materials as shown below.

**NOTICE**

This water cooler must be connected to the water supply using a dielectric coupling. The cooler is furnished with a non-metallic strainer which meets this requirement. The drain trap which is provided by the installer should also be plastic to completely isolate the cooler from the building plumbing system.

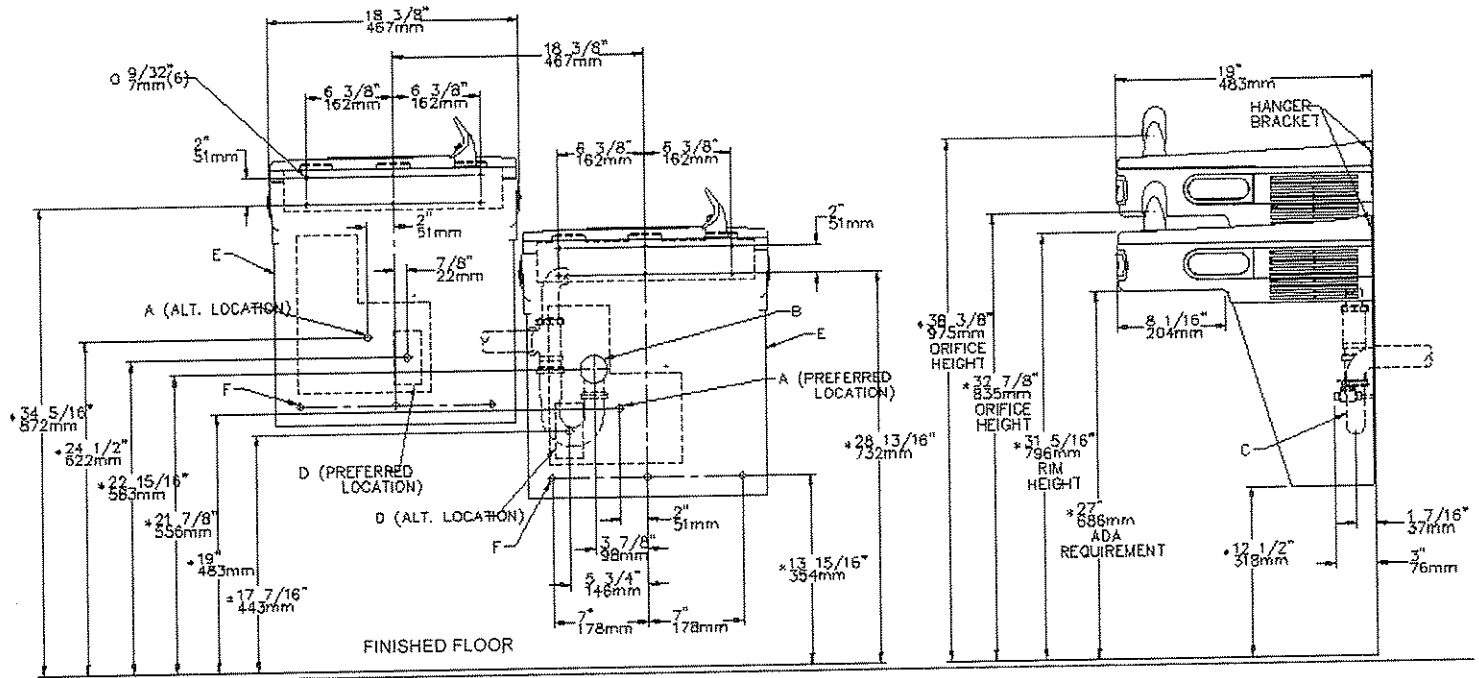
**OPERATION OF QUICK CONNECT FITTINGS**



PUSHING TUBE IN BEFORE PULLING IT OUT HELPS TO RELEASE TUBE

**FRONT VIEW**

**SIDE VIEW**



\*REDUCE HEIGHT BY 3 INCHES FOR INSTALLATION OF CHILDREN'S ADA COOLER

**LEGEND**

- A = RECOMMENDED WATER SUPPLY LOCATION 3/8 O.D. UNPLATED COPPER TUBE CONNECT STUB WITH SHUT OFF (BY OTHERS) 3 IN. (76mm) MAXIMUM OUT FROM WALL
- B = RECOMMENDED LOCATION FOR WASTE OUTLET TO ACCOMODATE 1-1/2" NOMINAL DRAIN. DRAIN STUB 2 IN. OUT FROM WALL
- C = 1-1/2 TRAP NOT FURNISHED
- D = ELECTRICAL SUPPLY (3) WIRE RECESSED BOX DUPLEX OUTLET
- F = 7/16 BOLT HOLES FOR FASTENING UNIT TO WALL

INSURE PROPER VENTILATION BY MAINTAINING 6" (152mm) MINIMUM CLEARANCE FROM CABINET LOUVERS TO WALL.

# ELKAY<sup>®</sup>

## SPECIFICATIONS

### Wall Mount Water Coolers Barrier-Free Access (Adult & Child) NSF/ANSI 61 Compliant Models EZ4, EZ8, EZS4, EZS8, EZSD and EZD

#### GENERAL

Self-contained, wall hung electric refrigerated water cooler. Chilling capacity of 50°F drinking water, based upon 80°F inlet water and 90°F ambient.

Models **EZS4** and **EZS8** have self-closing Easy-Touch Controls on front and both right and left sides.

Models **EZ4** and **EZ8** each have self-closing Easy-Touch Controls on the front only.

Model **EZSD** is non-refrigerated. Same as **EZS8** without cooling system. (Requires outlet for power cord.)

All models have a hooded stream projector with Easy-Touch Controls that require less than 3 pounds of force to activate. Patented\* valve with built-in flow regulator provide constant stream from 20 to 105 psi, water pressure. Bubbler orifice fully protected to meet all sanitary codes.

Non-pressurized stainless steel cooling tank is standard. Non-pressurized water tank is located after bubbler valve, so that tank is subject to line pressure only when Easy-Touch Control is pressed.

#### ADA COMPLIANT

These Water Coolers comply with the requirements of A.D.A. (Americans with Disabilities Act) when properly installed. Also meets the guidelines for children's environments providing the floor to orifice height is 30" or less and proper clear floor space is provided for parallel approach. (Based on Architectural and Transportation Barriers Compliance Board final ruling.) Check Local and State Codes.

#### NO LEAD DESIGN

These Water Coolers are certified to be lead-free as defined by the Safe Drinking Water Act. Elkay Water Coolers are manufactured with a waterway system utilizing copper components and completely lead-free materials. These waterways have no lead because all lead materials, such as leaded brass, have been removed. All joints are brazed using silver solder only. No lead solder is permitted. A strainer with an easily cleanable screen is provided to allow trapping and convenient removal of waterborne particulate of 140 microns and larger prior to their entry into the water cooler.

These water coolers are certified to NSF/ANSI 61.

#### CAPACITIES CHART

Model Number	Base Rate	**GPH of 50°F Drinking Water			Rated Watts	Full Load Amps	Glass† Filler Option	Ship. Wt. Lbs.
		Room Temperature °F						
		70°F	80°F	90°F				
EZS4	4.0	5.0	4.4	4.0	370	4.0	Yes	56
EZS8	8.0	9.7	8.8	8.0	370	4.0	Yes	56
EZ4	4.0	5.0	4.4	4.0	370	4.0	Yes	56
EZ8	8.0	9.7	8.8	8.0	370	4.0	Yes	56
EZSD	-	-	-	-	-	-	Yes	18
EZD	-	-	-	-	-	-	Yes	18

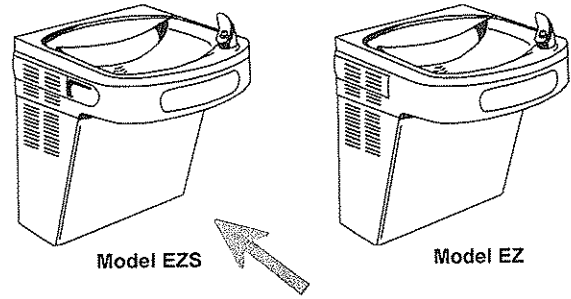
\*\*Based on 80°F inlet water temperature. †Glass filler available at extra cost. Requires factory preparation to receive glass filler.

Rated watts shown are based on operational (run) time, in compliance with A.R.I. Standard 1010 conditions. Specific applications will determine the actual watts consumed per hour. Watts consumed will be based on number of people served per hour (usage), ambient temperatures, and inlet water temperature.

#### COOLING SYSTEM

**Motor Compressor:** Hermetically sealed, reciprocating type, 115V, 60 Hz single phase. Sealed-in lifetime oil supply. Equipped with electric cord and three prong molded rubber plug (domestic models).

**Condenser:** Fan cooled, copper tube with aluminum fins. Fan motor is permanently lubricated.



**Cooling Unit:** Combination tube-tank type. Self cleansing. Tube portion is continuous coil of copper tubing. Tank is stainless steel. Fully insulated with EPS foam which meets Underwriters Laboratories Inc. requirements for self-extinguishing material.

**Refrigerant Control:** Refrigerant HFC-134a is controlled by accurately calibrated capillary tube for positively trouble-free operation.

**Temperature Control:** Enclosed adjustable thermostat is factory pre-set. Requires no adjustment other than for altitude requirements. Easily accessible.

#### CONSTRUCTION

**Frame:** Galvanized structural steel chassis supports refrigeration system and fastens to wall. Provides increased structural integrity and rigidity to cooler.

**Stainless Steel Basin:** One piece polished to a uniform Elkay bright luster finish. Basin has integral drain grid, embossed bubbler pad. No exposed fasteners.

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**5 YEAR LIMITED WARRANTY** on the refrigeration system of the unit. Electrical components and water system are warranted for 12 months from date of installation. Sample Certificate available on request.

Elkay Pressure-Type Water Coolers are designed to operate on 20 psi to 105 psi supply line pressure. If inlet pressure is above 105 psi, a pressure regulator must be installed in the supply line. Any damage caused by reason of connecting this product to supply line pressures lower than 20 psi or higher than 105 psi is not covered by the warranty.

#### STANDARDS



Elkay Electric Air Cooled Water Coolers meet the requirements of NSF/ANSI 61. Unit complies with A.R.I. Standard 1010.

\* Patent #4,481,971

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.

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Elkay

elkayusa.com

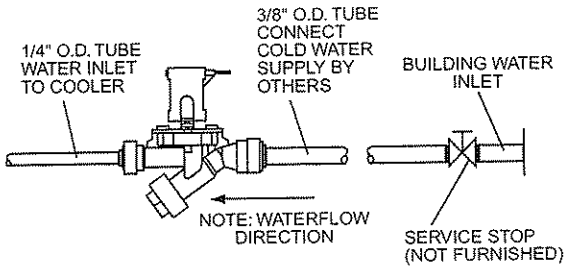
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Oak Brook, IL 60523

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(Rev. 9/06) 12-23C

**Wall Mount Water Coolers**  
**Barrier-Free Access (Adult & Child)**  
**NSF/ANSI 61 Compliant**  
**Models EZ4, EZ8, EZS4, EZS8, EZSD and EZD**

**ELKAY®**  
**ROUGH-IN DIMENSIONS**



Open space rough-in design permits new installation or replacement of existing fountains and coolers with this Elkay cooler when rough-in is within the outline shown. When the cooler is mounted as shown the location available is from 15" to 21-11/16" from floor and 1-1/16" to 7-1/4" from the left of centerline. Space is also available from 21-11/16" to 24-5/8" from floor and 2-3/4" to 7-1/4" from the left of centerline. Additional space is also available from 24-5/8" to 26-11/16" from floor and 3-3/4" to 7-1/4" from the left of centerline. Connections approaching the limits of these areas may be restricted and should only be considered for use until after an examination of the cooler has been made.

**IMPORTANT!**  
**INSTALLER PLEASE NOTE:**

This water cooler has been designed and built to provide water to the user which has not been altered by materials in the cooler waterways.

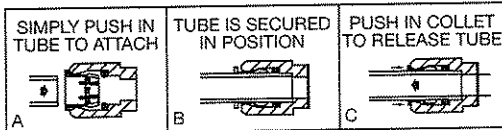
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**NOTICE**

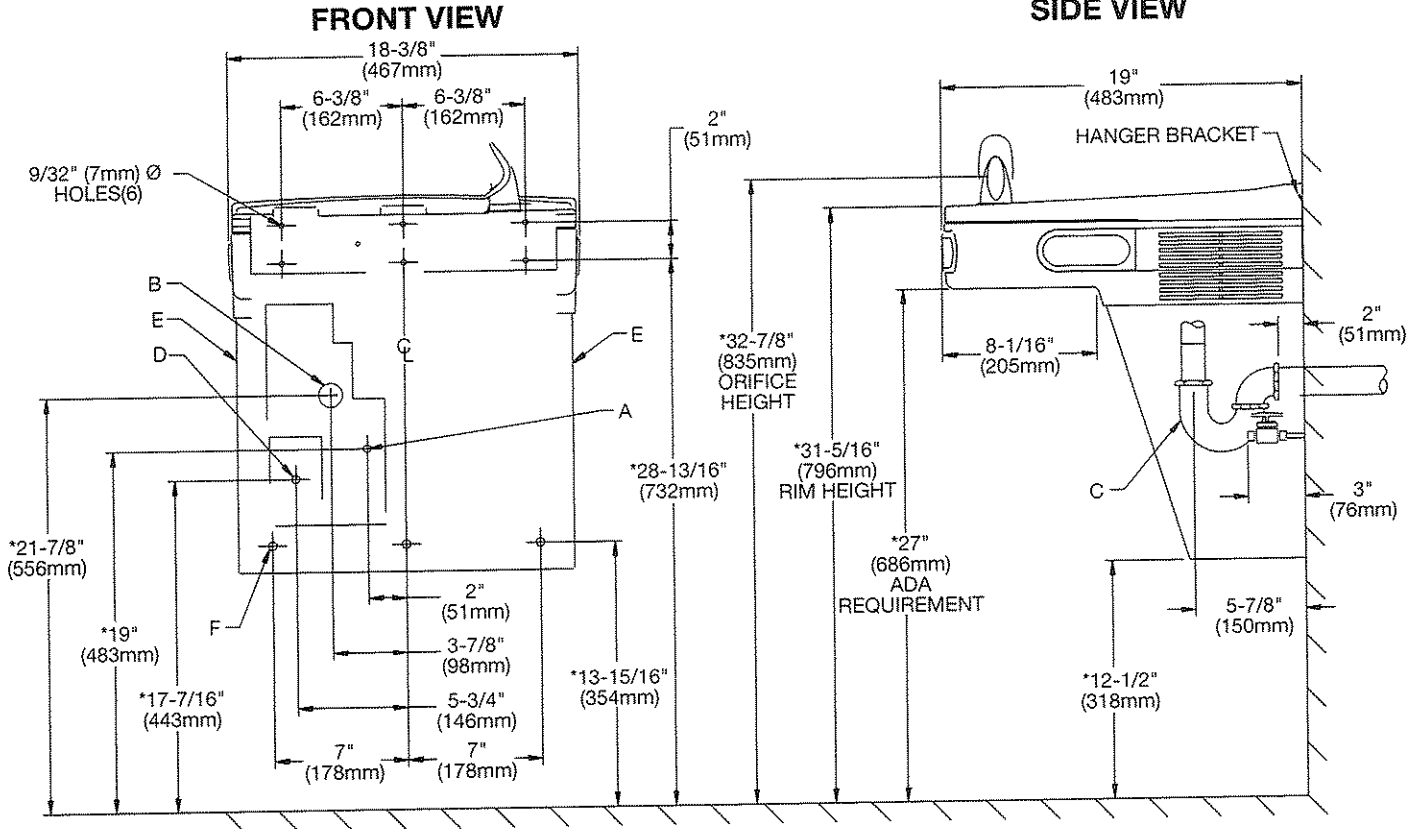
This water cooler must be connected to the water supply using a dielectric coupling. The cooler is furnished with a non-metallic strainer which meets this requirement.

The drain trap which is provided by the installer should also be plastic to completely isolate the cooler from the building plumbing system.

**OPERATION OF QUICK CONNECT FITTINGS**



PUSHING TUBE IN BEFORE PULLING IT OUT HELPS TO RELEASE TUBE



**LEGEND**

- A = RECOMMENDED WATER SUPPLY LOCATION 3/8" O.D. UNPLATED COPPER TUBE CONNECT STUB WITH SHUT OFF (BY OTHERS) 3 IN. (76mm) MAXIMUM OUT FROM WALL.
  - B = RECOMMENDED LOCATION FOR WASTE OUTLET 1-1/4" O.D. DRAIN STUB 2 IN. (51mm) OUT FROM WALL.
  - C = 1-1/4" TRAP NOT FURNISHED.
  - D = ELECTRICAL SUPPLY (3) WIRE RECESSED BOX.
  - E = INSURE PROPER VENTILATION BY MAINTAINING 6" (152mm) (MIN.) CLEARANCE FROM CABINET LOUVERS TO WALL.
  - F = 7/16" BOLT HOLES FOR FASTENING UNIT TO WALL.
- \*REDUCE HEIGHT BY 3 INCHES FOR INSTALLATION OF CHILDRENS ADA COOLER.



# S19-310AC, S19-310SBFW, S19-310TT Combination Drench Shower and Eye/Face Wash Unit

- Complies with American National Standard Z358.1-2004
- Galvanized Steel Protected with BRADTECT™ Safety Yellow Coating
- Universal Identification Sign and Inspection Tag Included
- Full, One-Year Warranty
- Patent Pending



**CERTIFIED  
MODEL  
Z358.1-2004**

## Specifications

Combination Drench Shower and Eye/Face Wash Unit saves space and fits easily into any work environment. Shower valve operates quickly by a pull rod with a triangular handle. Shower provides a superior washdown with a more even spray pattern. Eye/face wash operated by a large, highly visible push handle. Safe, steady water flow under varying water supply conditions from 30–90 PSI is assured by integral flow control in the sprayhead assembly. NOTE: The ANSI Z358.1 standard requires an uninterrupted supply of flushing fluid at a minimum 30 PSI flowing pressure.

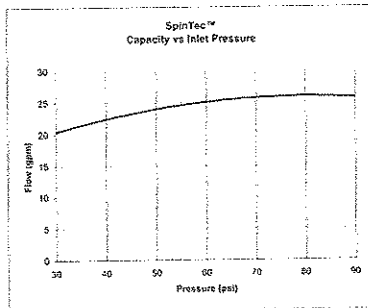
### cUPC Approved:

S19-310AC, S19-310SBFW and S19-310TT are certified to comply with the requirements of the Uniform Plumbing Code and the National Plumbing Code of Canada by the International Association of Plumbing and Mechanical Officials (IAPMO).

## Standard Equipment

### SpinTec™ Showerhead

3.1" (78.7mm) diameter highly visible yellow impact-resistant plastic. Model S19-310TT includes a 10-3/4" (273mm) diameter corrosion-resistant stainless steel shroud. SpinTec drench showerhead features integral 23 GPM flow control, conserving water and helping to accurately size your tepid water system.



### Eyewash Bowl

10" (254mm) diameter yellow impact-resistant plastic or 10-3/4" (273mm) diameter corrosion-resistant stainless steel.

### Standard Sprayhead Assembly

Twin perforated-disc eye/face wash heads with protective pop-off sprayhead covers, operated by a large, highly visible push handle or a foot treadle (S19-310AC only). Safe, steady water flow under varying water supply conditions from 30–90 PSI is assured by integral flow control in the sprayhead assembly. NOTE: The ANSI Z358.1 standard requires an uninterrupted supply of flushing fluid at a minimum 30 PSI flowing pressure.

### Shower Valve

Chrome-plated brass 1" NPT stay-open ball valve. Operated by a stainless steel pull rod with triangular handle.

### Eyewash Valve

Chrome-plated brass 1/2" NPT stay-open ball valve. Hand operated by highly visible safety yellow PVC push handle (S19-310SBFW and S19-310TT) or stainless steel push handle (S19-310AC).

### Pipe and Fittings

1-1/4" galvanized steel with BRADTECT™ safety yellow coating.

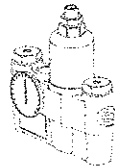
### Water Supply

1-1/4" NPT.

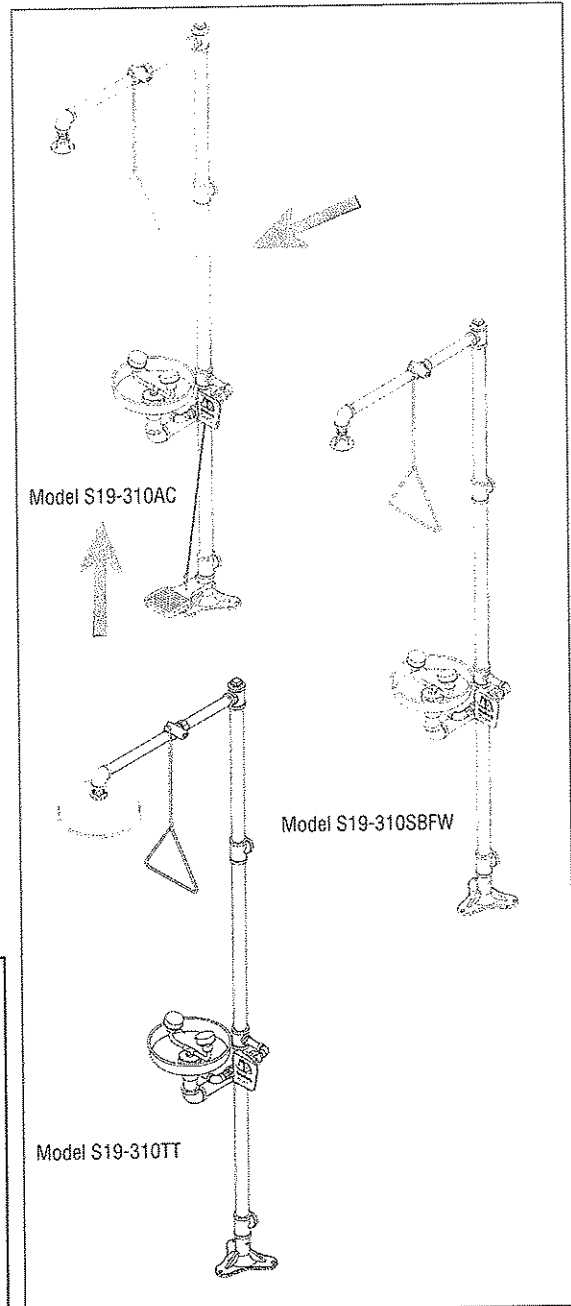
### Recommended Option:

Navigator S19-2100 EFX25  
Emergency Thermostatic Mixing Valve

**NAVIGATOR**



Satisfies ANSI Z358.1-2004  
tepid water requirements.



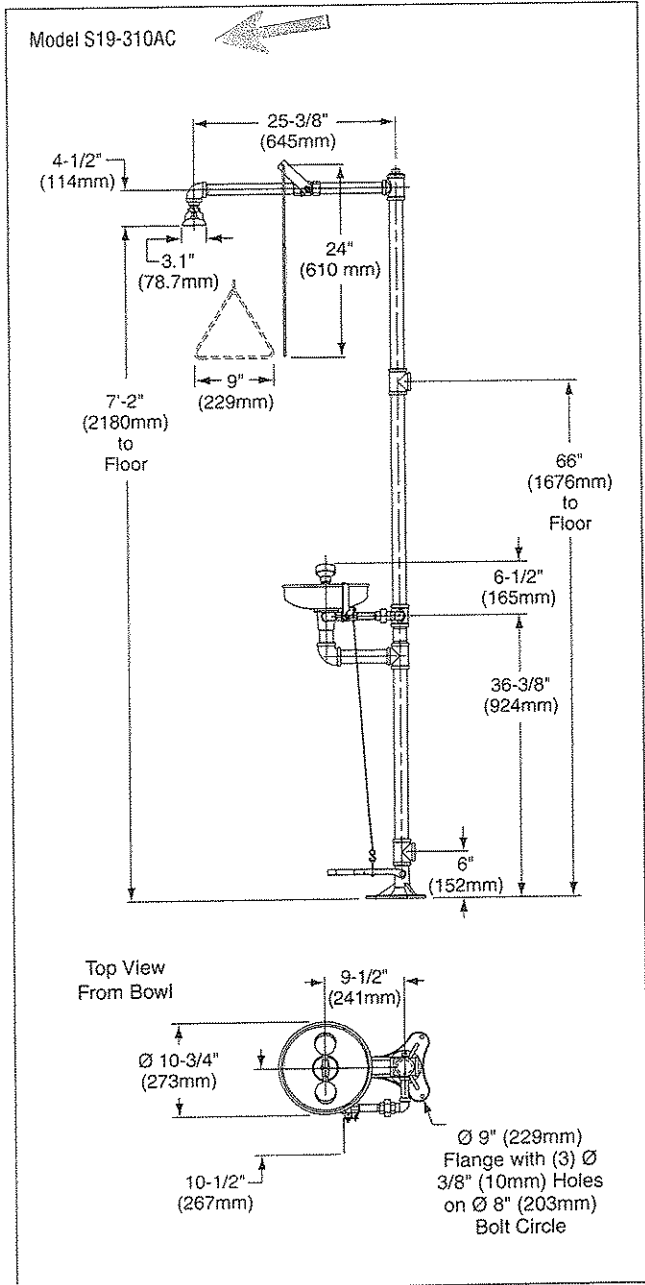


# S19-310AC, S19-310SBFW, S19-310TT Combination Drench Shower/Eye/Face Wash Unit

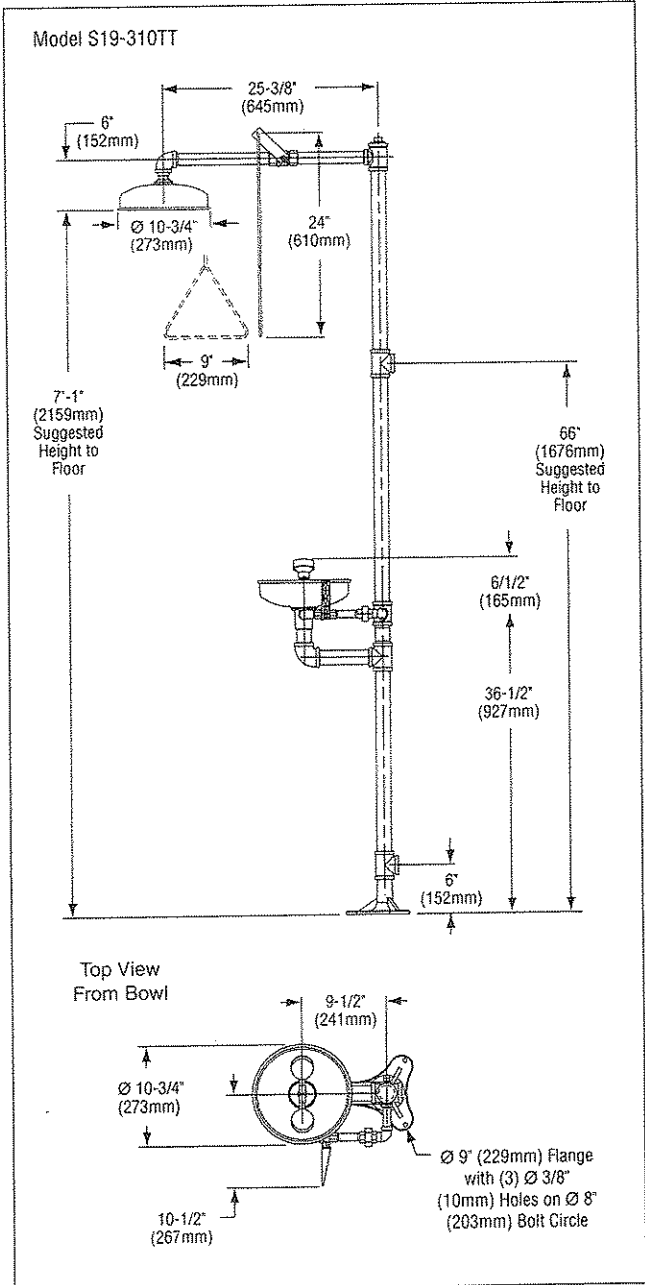
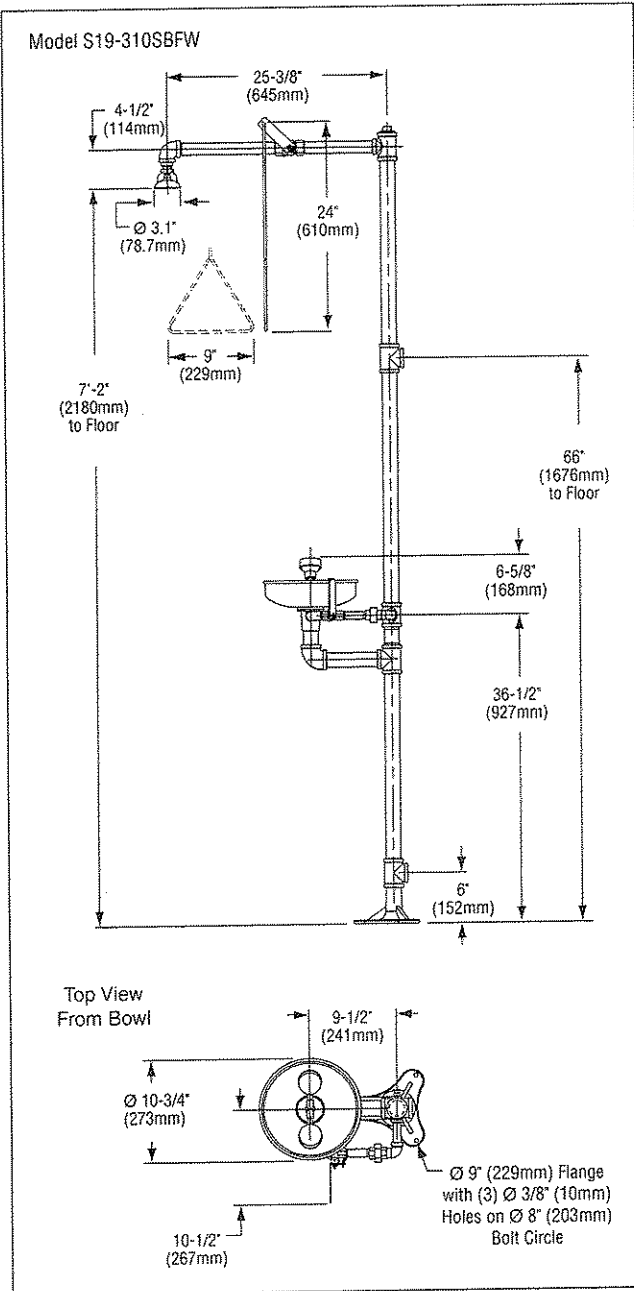
Model	Description
<input type="checkbox"/> S19-310AC	Drench Shower/Eyewash - Plastic Showerhead and Stainless Steel Bowl with Foot Treadle Operation
<input type="checkbox"/> S19-310SBFW	Drench Shower/Eyewash - Plastic Showerhead and Stainless Steel Bowl
<input type="checkbox"/> S19-310TT	Drench Shower/Eyewash - Stainless Steel Showerhead and Stainless Steel Bowl
<input type="checkbox"/> S19-2100	Navigator EFX25 - Emergency Thermostatic Mixing Valve



Local codes may require the installation of a backflow prevention valve to complete proper installation. Compliance with local codes is the responsibility of the installer. Valve must be tested annually to verify that it is functioning properly. Backflow prevention valves are not included with the fixture and may be supplied by the contractor or purchased from Bradley Corporation.



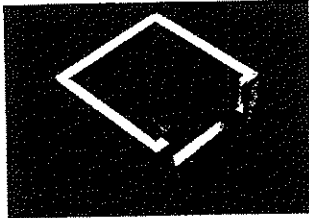
All dimensions assume standard thread engagement. Variations in manufacturing allow for +/- 1/8" (3mm) per threaded joint. To find the tolerance of a dimension, add the number of thread joints in between a dimension and multiply it by 1/8" (3mm).



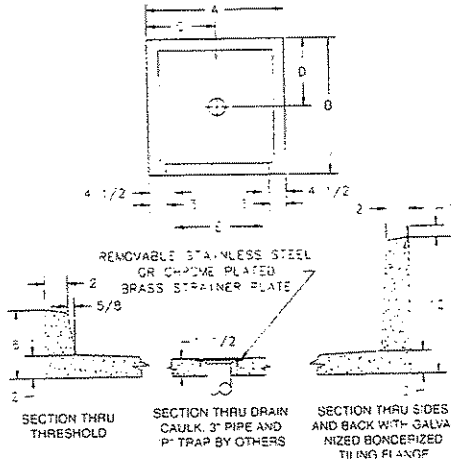
All dimensions assume standard thread engagement. Variations in manufacturing allow for +/- 1/8" (3mm) per threaded joint. To find the tolerance of a dimension, add the number of thread joints in between a dimension and multiply it by 1/8" (3mm).

**SERIES TSB-3000** (Square and Rectangular - 6" dropped front with 12" high side and back walls)

Models TSB-3000, TSB-3001, TSB-3002 and TSB-3003 shall be supplied with continuous stainless steel caps on all curbs (See Table II)



**MODEL TSB-3010 SHOWN**  
Models TSB-3010, TSB-3011, TSB-3012 and TSB-3013 shall be supplied with stainless steel cap on dropped threshold curb only (See Table III)



**TABLE II - Series TSB-3000**  
**With Stainless Steel Caps On All Curbs**

MODEL	SIZE	A	B	C	D	E
TSB-3000	24x24x12	24	24	12	12	15
TSB-3001	32x32x12	32	32	16	16	23
TSB-3002	36x36x12	36	36	18	18	27
TSB-3003	36x24x12	36	24	18	12	27

**TABLE III -- Series TSB-3000**  
**With Stainless Steel Threshold Only**

MODEL	SIZE	A	B	C	D	E
TSB-3010	24x24x12	24	24	12	12	15
TSB-3011	32x32x12	32	32	16	16	23
TSB-3012	36x36x12	36	36	18	18	27
TSB-3013	36x24x12	36	24	18	12	27



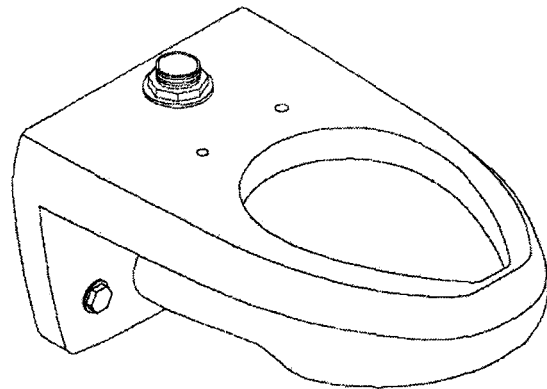
**KINGSTON™**

**BOWL  
K-4330**

**ADA**

**Features**

- 1-1/2" top spud
- Vitreous china
- Elongated bowl
- Wall-mount
- 1.6 gpf (6 lpf)
- ADA compliant when installed at required height of 17"-19" from floor to top of seat
- With bedpan lugs (-L)
- Siphon jet
- 12-3/8" (31.4 cm) x 11-3/8" (28.9 cm) water area



**Codes/Standards Applicable**

Specified model meets or exceeds the following:

- ADA
- ASME A112.19.2
- ASME A112.19.6
- ICC/ANSI A117.2
- Energy Policy Act of 1992 (EPACT)
- IAPMO/UPC
- CSA B125

**Colors/Finishes**

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

**Accessories**

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

**Specified Model**

Model	Description	Colors/Finishes	
K-4330	Elongated bowl toilet	<input checked="" type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
K-4330-L	Elongated bowl toilet with bedpan lugs	<input type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
Recommended Accessories			
K-4670-C	Lustra™ open front seat	<input type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
K-4670-CA	Lustra™ open front seat (with anti-microbial agent)	<input type="checkbox"/> 0 White	

**Product Specification:**

The elongated bowl shall be wall-mount with a 1-1/2" top spud. Bowl shall be made of vitreous china. Bowl shall have 12-3/8" (31.4 cm) x 11-3/8" (28.9 cm) water area. Bowl shall be 1.6 gpf (6 lpf). Bowl shall be ADA compliant when installed at required height of 17" (43.2 cm) - 19" (48.3 cm) from the floor to the top of the seat. Bowl shall have bedpan lugs (-L). Bowl shall have siphon jet. Bowl shall be Kohler Model K-4330-\_\_\_\_\_

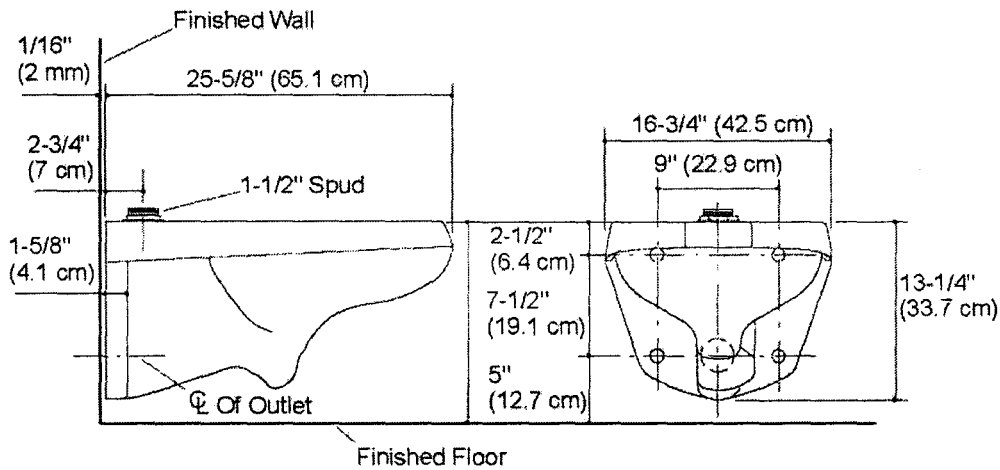
# KINGSTON™

## Technical Information

ADA compliant	
Fixture:	
Configuration	top spud, elongated
Water per flush	1.6 gallons (6 L)*
Spud size	1-1/2"
Passageway	2-1/4" (5.7 cm)
Water area	12-3/8" (31.4 cm) x 11-3/8" (28.9 cm)
Water depth from rim	5-1/4" (13.3 cm)
Seat post hole centers	5-1/2" (14 cm)
* Designed to flush with 1.6 (6 L) gallons of water when installed with a 1.6 (6 L) gpf flush valve.	
Included components:	
Spud	18357
Flush valve requirements: Refer to manufacturer and local codes.	

## Installation Notes

Install this product according to the installation guide.

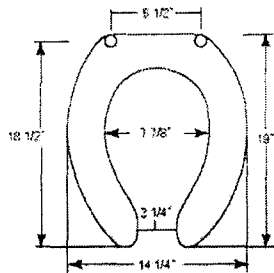


## Product Diagram

COMMERCIAL PLASTIC SEATS



Seats shall be No. \_\_\_\_\_ as manufactured by Church Seats. Seats shall be heavy weight and injection molded of solid plastic. Seats shall be open front less cover for elongated bowl and feature large molded-in bumpers. External check hinges to feature 300 Series stainless steel posts that stop seat 11 degrees beyond vertical. Uses 300 Series stainless steel hardware. Color to be \_\_\_\_\_ (specify white or fixture manufacturer's color.) Hinges shall be \_\_\_\_\_.

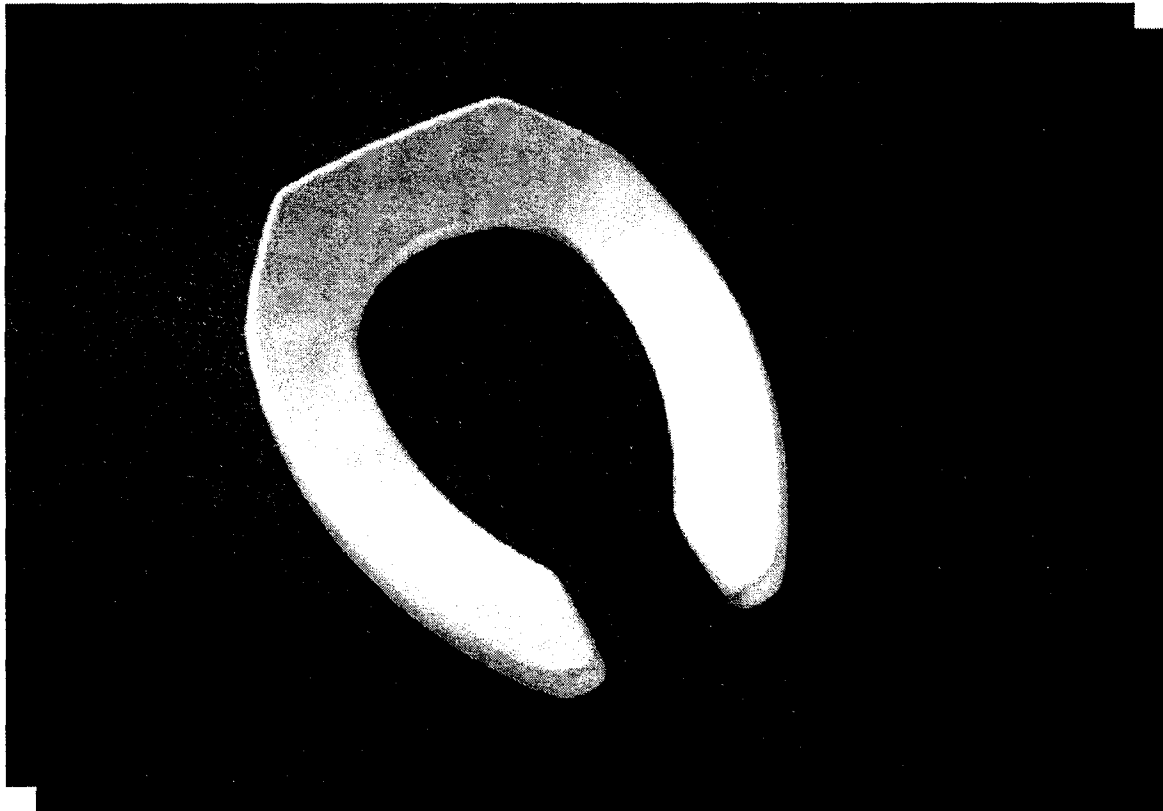


MODEL 295C ←

- ◆ ELONGATED SEAT  
OPEN FRONT LESS COVER
- ◆ SOLID PLASTIC
- ◆ EXTERNAL 300 SERIES  
STAINLESS STEEL CHECK HINGES



- 295C Open front seat less cover/external check hinge stops seat 11° beyond vertical.
- 295SSC Open front seat less cover/stainless steel, self-sustaining and external check hinge holds seat in any raised position up to 11° beyond vertical.
- Ring thickness is 13/16"
- Ring thickness including the bumper is 1"
- Height of the seat is 2-1/4"





Z-1203-N ADJUSTABLE HORIZONTAL SIPHON JET- No-Hub

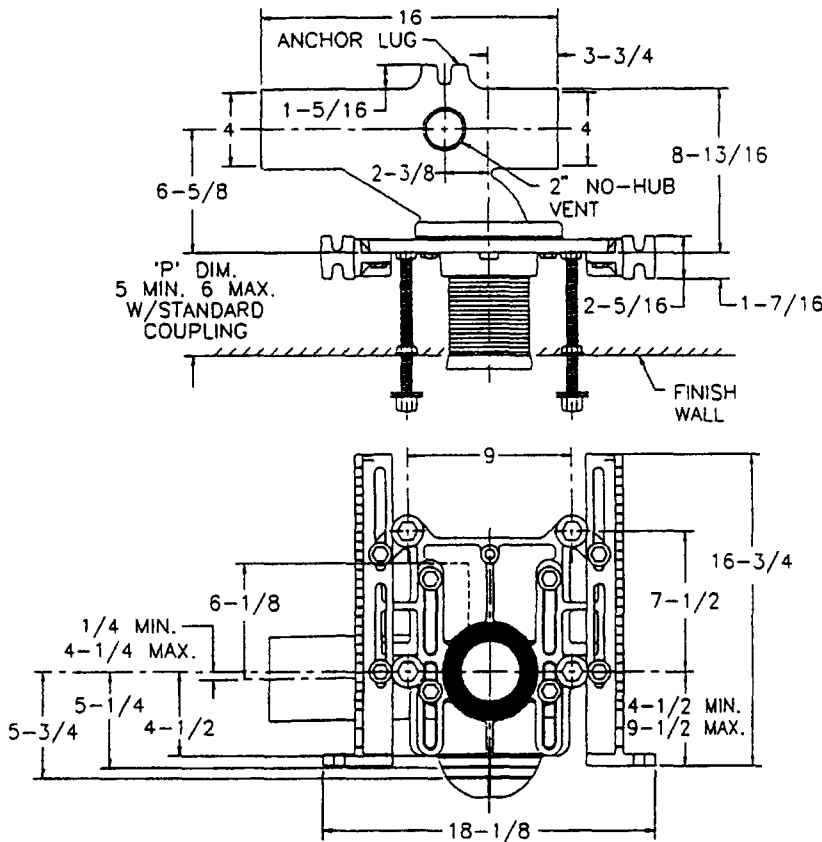
TAG \_\_\_\_\_

Dimensions Subject to Manufacturing Tolerances

Product No.	Approx. Wt. Lbs.
Z-1203-NL4	67
Z-1203-NR4	

Note:

1. Min. 'P' Dim. Obtainable = 1-3/4"
2. Feet bolted to floor using min. 1/2 dia. bolts and back slots on carrier feet.
3. Back anchor foot required for secure installation.



**ENGINEERING SPECIFICATION:** ZURN Z-1203-N ( ) Adjustable, horizontal siphon jet water closet "Rigid System" with 4" No-Hub connections. Complete with Dura-Coated cast iron right hand or left hand main fitting, with 2" vent, adjustable gasketed face plate, universal floor mounted foot supports, corrosion resistant adjustable ABS coupling with integral test cap, fixture bolts, trim, and stud protectors. Rear anchor tie down and bonded "Neo-Seal" gasket.

PRODUCT/DEFINITION

- \_\_\_\_\_ Z-1203-NR4 4" No-Hub Right Hand Inlet with Flow to Left
- \_\_\_\_\_ Z-1203-NL4 4" No-Hub Left Hand Inlet with Flow to Right

PREFIXES

- \_\_\_\_\_ Z- D.C.C.I. System with Zurn "ZZ" Adjustable Coupling\*
- \_\_\_\_\_ ZQ- D.C.C.I. System with Non-Adjustable Coupling

SUFFIXES

- |           |  |           |   |
|-----------|--|-----------|---|
| _____ -A  | Auxiliary Support Assembly (For P-Dim. greater than 18")             | _____ -VP | Vandal Proof Trim   |
| _____ -B  | Blowout Type Fixture Support   | _____ -W  | Adapter for Womens Urinal   |
| _____ -BC | Back Cleanout  | _____ -29 | Mechanical Test Cap Assembly (Previously Z-1210-29)   |
| _____ -CC | Cast Iron Coupling 6" Long   | _____ -45 | Finishing Frame for Siphon Jet System (For Blowout System specify -45-B) (Previously Z-1210-45) |
| _____ -CL | Coupling Length Greater than 12" (Specify length if greater than 6") | _____ -50 | Flush Valve Supply Support for W.C. (Previously Z-1210-50)                                      |
| _____ -F  | Floor Mounted Back Outlet, Fixture Support                           | _____ -61 | "ZZ" Coupling Wrench  |
| _____ -G  | Galvanized Cast Iron   |           |   |
| _____ -M  | Auxiliary Foot Support (For P-Dim. 10"-18")                          |           |   |
| _____ -T  | Threaded Stack Connection (Available on Restricted Basis Only)       |           |   |

REV. A DATE: 9/20/91 C.N. NO. 67825

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED DRAWING NO. 54353 PRODUCT NO. Z-1203-N

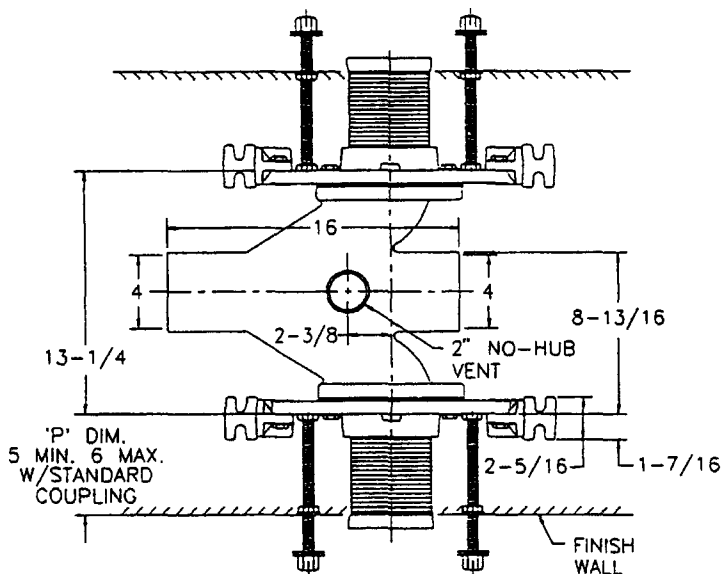


Z-1203-ND ADJUSTABLE HORIZONTAL  
BACK TO BACK SIPHON JET- No-Hub

TAG \_\_\_\_\_

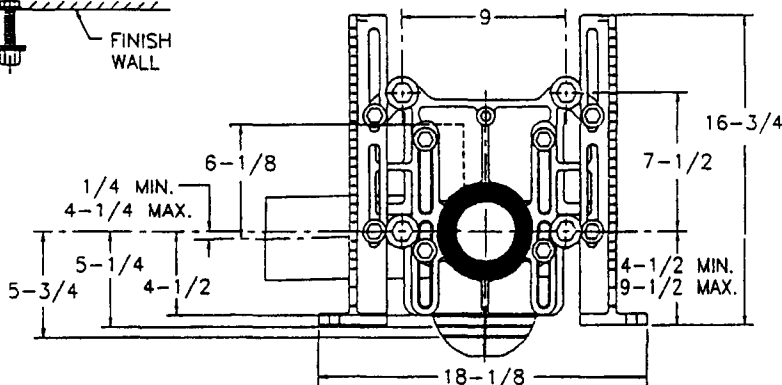
Dimensions Subject to Manufacturing Tolerances

Product No.	Approx. Wt. Lbs.
Z-1203-ND4	120



Note:

1. Min. 'P' Dim. Obtainable = 1-3/4"
2. Feet bolted to floor using min. 1/2 dia. bolts and back slots on carrier feet.



**ENGINEERING SPECIFICATION:** ZURN Z-1203-ND4 Adjustable, horizontal siphon jet water closet "Rigid System" with 4" No-Hub connections. Complete with Dura-Coated cast iron fitting, with 2" vent, adjustable gasketed face plates, universal floor mounted foot supports, corrosion resistant adjustable ABS couplings with integral test cap, fixture bolts, trim, and stud protectors. Rear anchor tie down and bonded "Neo-Seal" gaskets.

**PRODUCT/DEFINITION**

\_\_\_\_\_ Z-1203-ND4 4" No-Hub Back to Back Inlet (Double)

**PREFIXES**

\_\_\_\_\_ Z- D.C.C.I. System with Zurn "ZZ" Adjustable Coupling\*  
 \_\_\_\_\_ ZQ- D.C.C.I. System with Non-Adjustable Coupling

**SUFFIXES**

_____ -A	Auxiliary Support Assembly (For P-Dim. greater than 18")	_____ -VP	Vandal Proof Trim
_____ -B	Blowout Type Fixture Support	_____ -W	Adapter for Womens Urinal
_____ -BC	Back Cleanout	_____ -29	Mechanical Test Cap Assembly (Previously Z-1210-29)
_____ -CC	Cast Iron Coupling 6" Long	_____ -45	Finishing Frame for Siphon Jet System (For Blowout System specify -45-B) (Previously Z-1210-45)
_____ -CL	Coupling Length Greater than 12" (Specify length if greater than 6")	_____ -50	Flush Valve Supply Support for W.C. (Previously Z-1210-50)
_____ -F	Floor Mounted Back Outlet, Fixture Support	_____ -61	"ZZ" Coupling Wrench
_____ -G	Galvanized Cast Iron		
_____ -M	Auxiliary Foot Support (For P-Dim. 10"-18")		
_____ -T	Threaded Stack Connection (Available on Restricted Basis Only)		

REV. A DATE: 9/20/91 C.N. NO. 67825

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED DRAWING NO. 54354 PRODUCT NO. Z-1203-ND

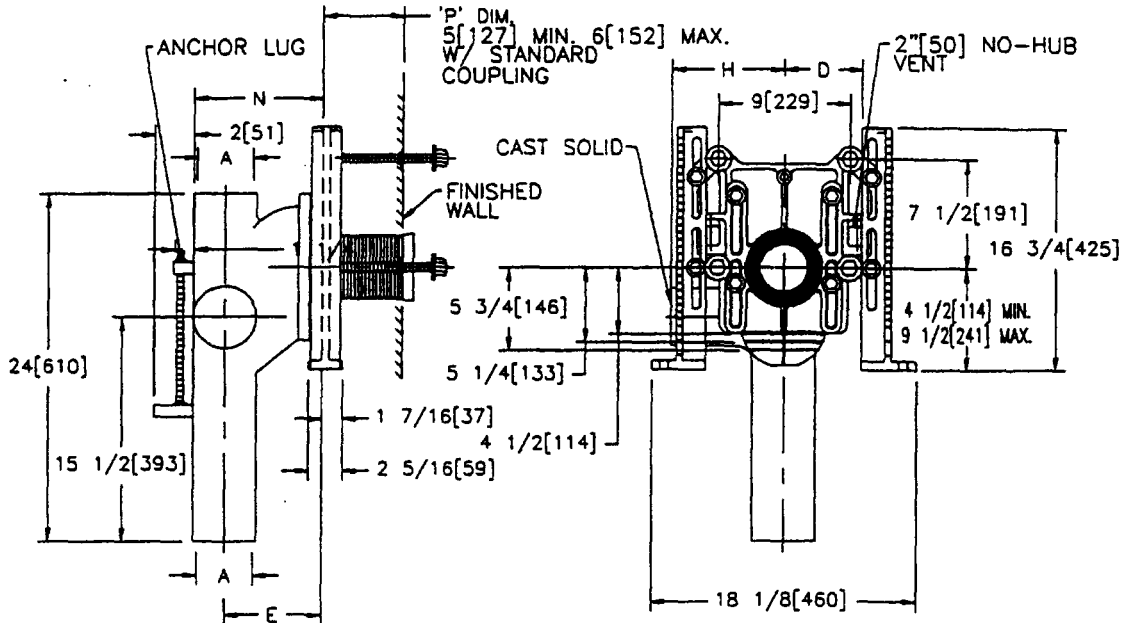


**Z-1204-N**  
**ADJUSTABLE VERTICAL SIPHON**  
**JET-NO-HUB**

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (Inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



**Note:**

1. Min. 'P' Dim. Obtainable=2 [51]
2. 2 No-Hub vent connection regularly furnished on right hand side. Left hand available when specified (Suffix- VL)
3. Auxiliary inlet available right (~JR) or left (~JL) or both sides (~JJ) when specified.
4. Feet bolted to floor using min. 1/2 [13] dia. bolts and back slots on carrier feet.
5. Back anchor foot required for secure installation.

Product No.	Dimensions in Inches					Approx. Wt.Lbs. [kg]
	A	D	E	H	N	
Z-1204-N4	4 [102]	5 [127]	6 5/8 [168]	5 1/2 [140]	8 7/8 [225]	80 [36]
Z-1204-N5	5 [127]	5 1/2 [140]	6 5/8 [168]	6 1/2 [165]	9 3/8 [238]	85 [39]
Z-1204-N6	6 [152]	6 [152]	7 1/8 [181]	6 1/2 [165]	10 3/8 [264]	95 [43]

**ENGINEERING SPECIFICATION:**

ZURN Z-1204-N( ) Adjustable, vertical siphon jet water closet "Rigid System" with ( ) size No-Hub connections and ( ) side inlets. Complete with Dura-Coated cast iron left hand fitting, with 2 [51] vent, adjustable gasketed face plate, universal floor mounted foot supports, corrosion resistant adjustable ABS coupling with integral test cap, fixture bolts, trim, and stud protectors. Rear anchor tie down, and bonded "Neo-Seal" gasket.

**PRODUCT/DEFINITION**

\_\_\_\_\_ Z-1204-N No-Hub Stack, Single Inlet, 2 [51] Right Hand Vent

**PREFIXES**

- \_\_\_\_\_ Z- D.C.C.I. System with Zurn "ZZ" Adjustable Coupling
- \_\_\_\_\_ ZQ- D.C.C.I. System with NPT Face Plate, Non-Adjustable Coupling

**SUFFIXES**

- \_\_\_\_\_ -A Auxiliary Support Assembly (For P-Dim. greater than 18 [457])
- \_\_\_\_\_ -B Blowout Type Fixture Support
- \_\_\_\_\_ -BC Back Cleanout
- \_\_\_\_\_ -CC Corrosion Resistant 6 [152] Long Cast Iron Coupling
- \_\_\_\_\_ -CL Coupling Length Greater than 12 [305] (Specify length if greater than 6 [152])
- \_\_\_\_\_ -F Floor Mounted Back Outlet, Closet Connection
- \_\_\_\_\_ -G Galvanized Cast Iron
- \_\_\_\_\_ -JJ Two 2 [51] Auxiliary Inlet
- \_\_\_\_\_ -JL 2 [51] Left Hand Auxiliary Inlet
- \_\_\_\_\_ -JR 2 [51] Right Hand Auxiliary Inlet
- \_\_\_\_\_ -M Auxiliary Foot Support (For P-Dim. 10 [254] to 18 [457])
- \_\_\_\_\_ -T Threaded Stack Connection
- \_\_\_\_\_ -VL Left Hand Vent Connection
- \_\_\_\_\_ -VP Vandal Proof Trim
- \_\_\_\_\_ -W Adapter Assembly for Womens Urinal
- \_\_\_\_\_ -29 Mechanical Test Cap Assembly (Previously Z-1210-29)
- \_\_\_\_\_ -45 Finishing Frame for Siphon Jet Closet (For Blowout System specif -45-B)
- \_\_\_\_\_ -50 Flush Valve Supply Support for W.C. (Previously Z-1210-50)
- \_\_\_\_\_ -61 Adjusting Wrench for "ZZ" Coupling

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. DATE: 03/21/95 C.N. NO. 71120

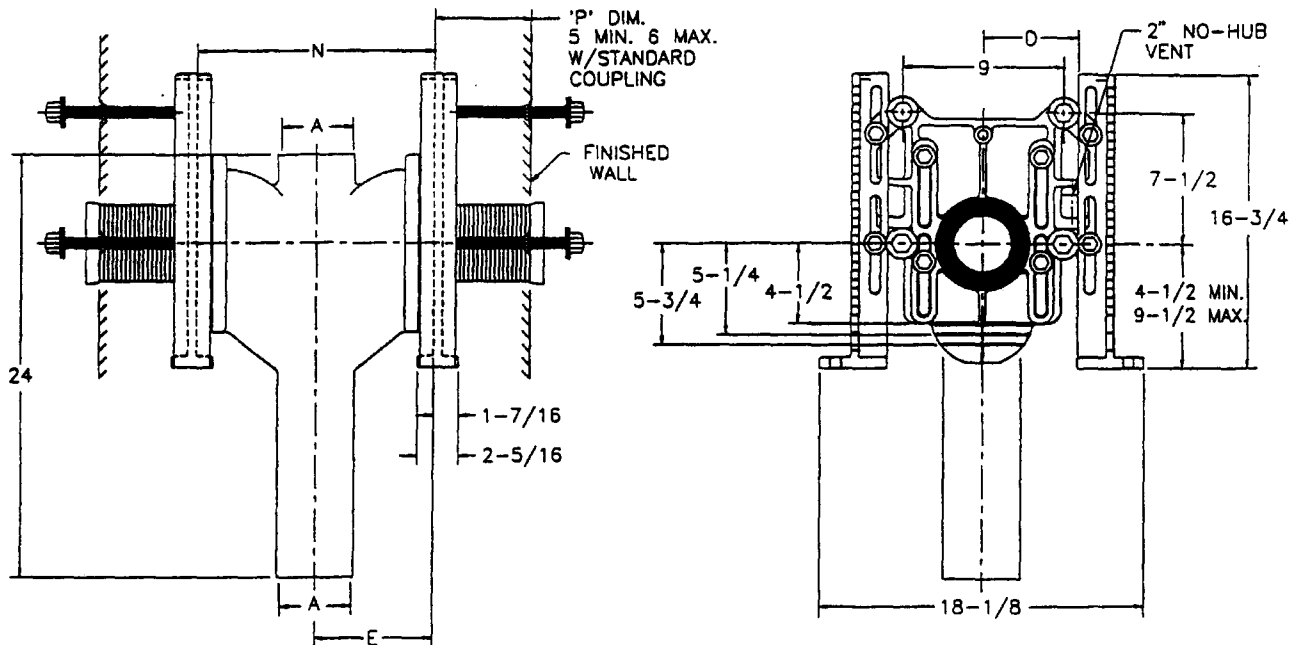
DWG. NO. 58842 PRODUCT NO. Z-1204-N



**Z-1204-ND ADJUSTABLE VERTICAL SIPHON JET-No-Hub**

**TAG** \_\_\_\_\_

Dimensions Subject to Manufacturing Tolerances



Product No.	Dimensions in Inches					Approx. Wt. Lbs.
	A	D	E	H	N	
Z-1204-ND4	4	5	6-5/8	5-1/2	13-1/4	139
Z-1204-ND5	5	5-1/2	6-5/8	6-1/2	13-1/4	140
Z-1204-ND6	6	6	7-1/8	6-1/2	14-1/4	145

- Note:**
1. Min. 'P' Dim. Obtainable=2"
  2. Two 4" or 5" side inlets as indicated.
  3. Feet bolted to floor using min. 1/2 dia. bolts and back slots on carrier feet.

**ENGINEERING SPECIFICATION:** ZURN Z-1204-ND( ) Adjustable, vertical siphon jet water closet "Rigid System" with ( ) size No-Hub connections and ( ) side inlets. Complete with Dura-Coated cast iron right and left hand fitting, with 2" vent, adjustable gasketed face plate, universal floor mounted foot supports, corrosion resistant adjustable ABS coupling with integral test cap, fixture bolts, trim, and stud protectors. Rear anchor tie down, and bonded "Neo-Seal" gasket.

**PRODUCT/DEFINITION**

\_\_\_\_\_ Z-1204-ND No-Hub Stack, Double Inlets, 2" Vent.

**PREFIXES**

- \_\_\_\_\_ Z- D.C.I. System with Zurn "ZZ" Adjustable Coupling
- \_\_\_\_\_ ZQ- D.C.I. System with NPT Face Plate, Non Adjustable Coupling

**SUFFIXES**

- |           |  |           |   |
|-----------|--|-----------|---|
| _____ -A  | Auxiliary Support Assembly (For P-Dim. greater than 18")             | _____ -T  | Threaded Stack Connection   |
| _____ -B  | Blowout Type Fixture Support   | _____ -VL | Left Hand Vent Connection   |
| _____ -BC | Back Cleanout  | _____ -VP | Vandal Proof Trim   |
| _____ -CC | Cast Iron Coupling 6" Long   | _____ -W  | Adapter for Womens Urinal   |
| _____ -CL | Coupling Length Greater than 12" (Specify length if greater than 6") | _____ -29 | Mechanical Test Cap Assembly (Previously Z-1210-29)   |
| _____ -F  | Floor Mounted Back Outlet, Fixture Support                           | _____ -45 | Finishing Frame for Siphon Jet System (For Blowout System specify -45-B) (Previously Z-1210-45) |
| _____ -G  | Galvanized Cast Iron   | _____ -50 | Flush Valve Supply Support for W.C. (Previously Z-1210-50)                                      |
| _____ -JJ | 2" Auxiliary Inlet   | _____ -61 | "ZZ" Coupling Wrench  |
| _____ -JL | 2" Left Hand Auxiliary Inlet   |           |   |
| _____ -JR | 2" Right Hand Auxiliary Inlet  |           |   |
| _____ -M  | Auxiliary Foot Support (For P-Dim. 10"-18")                          |           |   |

REV. A DATE: 8/9/94 C.N. NO. 69939

DRAWING NO. 56985 PRODUCT NO. Z-1204-ND

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECI-

ZURN INDUSTRIES, INC., HYDROMECHANICS DIV., 1801 Pittsburgh Ave., Erie, PA 16514 Phone: 814/455-0921 Fax: 814/454-7929



**CHESAPEAKE™**

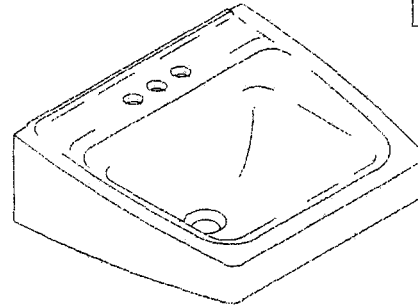
**WALL-MOUNT LAVATORY**

**K-1722, K-1724,  
K-1728**

**ADA**

**FEATURES**

- 19-1/4"(48.9cm) x 17-1/4"(43.8cm)
- Vitreous china
- Ledge-back
- 8"(20.3cm) centers (K-1724), 4"(10.2cm) centers (K-1728) or single-hole (K-1722)
- With overflow
- ADA compliant
- With hanger
- Drilled for concealed arm carrier



**CODES/STANDARDS APPLICABLE**

Specified model meets or exceeds the following:

- ADA
- ASME/ANSI A112.19.2M
- CABO/ANSI A117.1
- IAPMO/UPC
- State of Massachusetts

**COLORS/FINISHES**

- 0 White
- Other Refer to Fixtures Price Book for additional colors

**Accessories:**

- CP Polished Chrome
- Other Refer to Faucets Price Book for additional finishes

**SPECIFIED MODEL:**

Model	Description	Colors/Finishes	
K-1724	8" (20.3cm) centers lavatory	<input type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
K-1728	4" (10.2cm) centers lavatory	<input checked="" type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
K-1722	Single-hole lavatory	<input type="checkbox"/> 0 White	<input type="checkbox"/> Other _____

Recommended Accessories			
K-8998	Trap	<input type="checkbox"/> CP	<input type="checkbox"/> Other _____

**PRODUCT SPECIFICATION:**

The lavatory shall be 19-1/4" (48.9cm) in length, and 17-1/4" (43.8cm) in width. Lavatory shall be made of vitreous china. Lavatory shall be ledge-back with hanger. Lavatory shall have 8" (20.2cm) centers (K-1724), 4" (10.2cm) centers (K-1728), or single-hole (K-1722) drilling. Lavatory shall be drilled for concealed arm carrier. Lavatory shall have overflow. Lavatory shall be ADA compliant. Lavatory shall be Kohler Model K-\_\_\_\_\_.

*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  
105028-4-CB

# CHESAPEAKE™

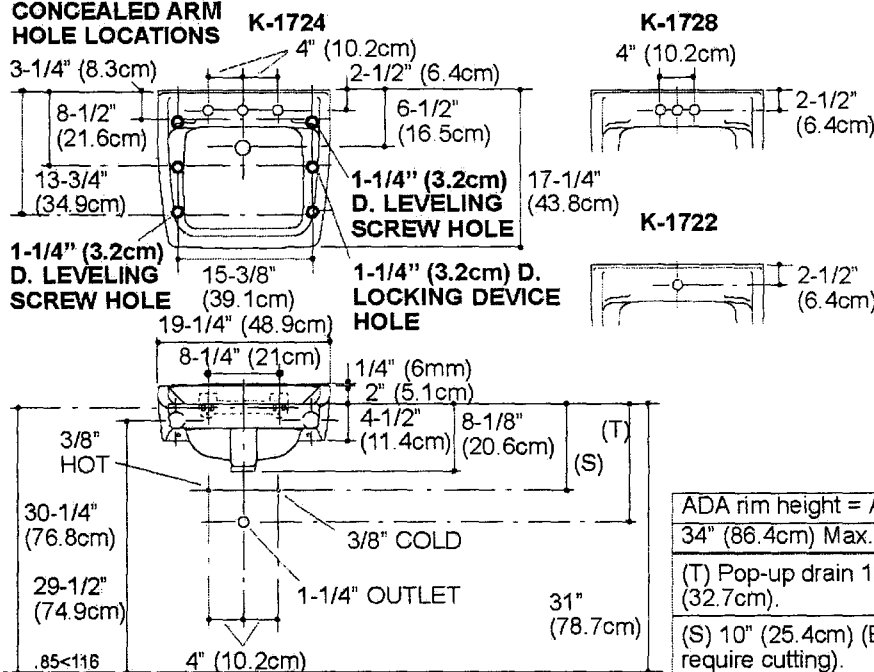
## PRODUCT INFORMATION

ADA compliant.			
Fixture*:		basin area	water depth
Lavatory		14" (35.6cm) x 11" (27.9cm)	4-7/8" (12.4cm)
Drain hole	1-3/4" D. (4.4cm)		
* Approximate measurements for comparison only.			
Holes	<b>K-1724</b>	<b>K-1728</b>	<b>K-1722</b>
Spout	1-3/8" D. (3.5cm)	1-1/4" D. (3.2cm)	1-3/8" D. (3.5cm)
Faucet	1-3/8" D. (3.5cm)	1-1/4" D. (3.2cm)	
Soap dispenser			1-1/4" D. (3.2cm)
Included Components:			
Hanger			64839

## INSTALLATION NOTES

Install this product according to the installation guide. Fixture dimensions are nominal and conform to tolerances in ASME Standard A112.19.2M. Concealed arm carrier required, **NOT** supplied by Kohler Co. Supplied hanger not used with concealed arm carrier.

### CONCEALED ARM HOLE LOCATIONS




STANDARD INSTALLATION

ADA rim height = A	ADA arm carrier height = B
34" (86.4cm) Max.	33" (81.9cm) Max.
(T) Pop-up drain 13-3/4" (34.9cm), grid drain 12-7/8" (32.7cm).	
(S) 10" (25.4cm) (Based on 12" (30.5cm) riser which may require cutting).	

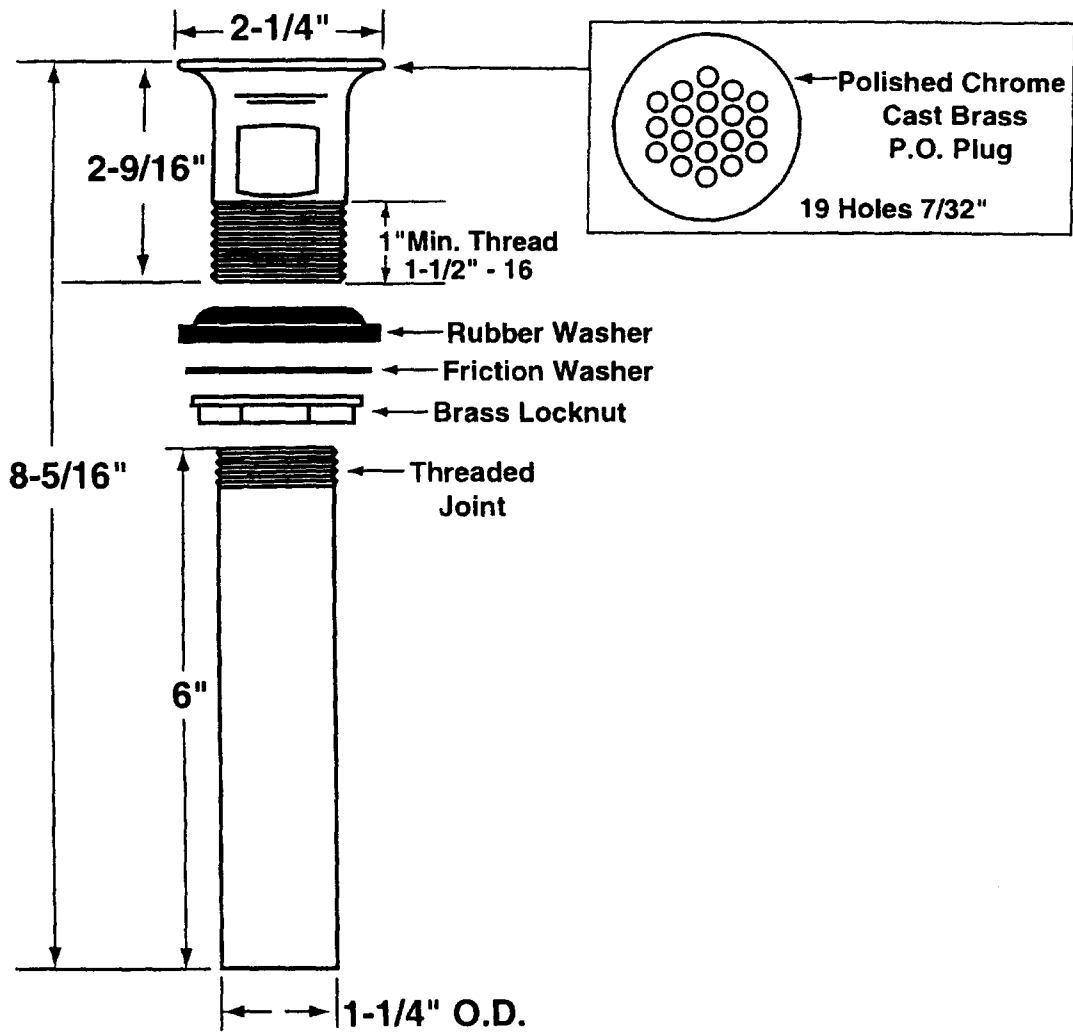
## PRODUCT DIAGRAM

K-1722, K-1724, K-1728 Chesapeake™ Lavatory  
 Page 2 of 2  
 105028-4-CB

THE BOLD LOOK  
 OF **KOHLER**®

	<p><b>McGUIRE MFG. CO., INC.</b>                  60 Grandview Court                  P.O. Box 746 ♣ Cheshire, CT 06410                  203-699-1801 ♣ Fax 203-699-1813</p>	<p><b>Part No.</b>                  155A ←</p> <p>Open Grid P.O. Plug</p>
<p><b>Product Specification</b></p>		

**Job Name:** \_\_\_\_\_ **Submittal Number:** \_\_\_\_\_



\*Available with 1 1/2" O.D. brass tailpiece, specify Part # 155A2



See accessories section for details on product variations.

**Specifications:**

Cast Brass Chrome Plated Open Grid P.O. Plug with 17 gauge 1-1/4" x 6" seamless brass tailpiece, brass locknut, heavy rubber basin washer and fiber friction washer. P.O. plug shall be in compliance with CSA or other recognized testing authority and bear both manufacturer and testing mark.



**FEATURES**

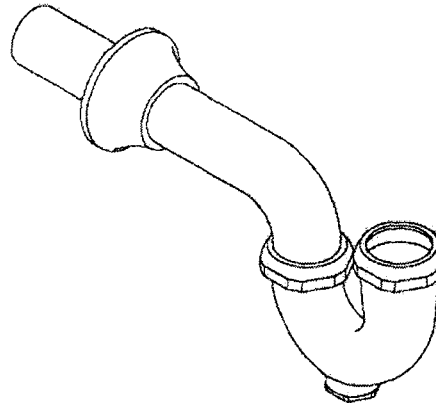
- Cast brass construction
- Adjustable rotation on tube outlet
- Slip-joint inlet
- Cleanout plug
- Flange

**P-TRAP  
K-8998**  
ALSO K-8999, K-9000

**CODES/STANDARDS APPLICABLE**

Specified model meets or exceeds the following:

- ASME/ANSI A112.18.1M
- IAPMO/UPC



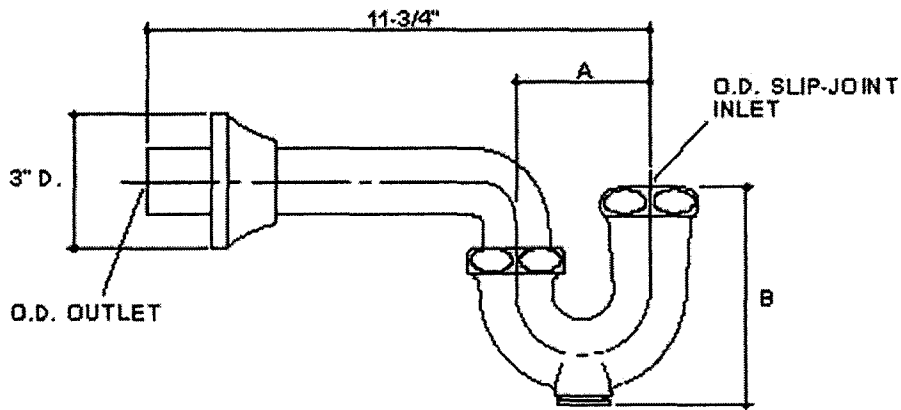
**COLORS/FINISHES**

- CP Polished Chrome
- Other Refer to Faucets Price Book for additional finishes

**SPECIFIED MODEL:**

Model	Description	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____
K-8998	With 1-1/4" O.D. Inlet and 1-1/4" O.D. Outlet	<input type="checkbox"/>	<input type="checkbox"/>
K-8999	With 1-1/4" O.D. Inlet and 1-1/2" O.D. Outlet ←	<input checked="" type="checkbox"/>	
K-9000	With 1-1/2" O.D. Inlet and 1-1/2" O.D. Outlet	<input type="checkbox"/>	

**PRODUCT SPECIFICATION:**  
 P-trap shall be of cast brass construction. Adjustable P-trap shall include cleanout plug, and flange. Optional features shall be 1-1/4" or 1-1/2" O.D. slip-joint inlet and 1-1/4" or 1-1/2" O.D. outlet. Product shall be Kohler Model K-\_\_\_\_\_-\_\_\_\_\_-.



Roughing-In Notes				
	A	B	O.D. OUTLET	O.D. INLET
K-8998	2-3/4'	4-3/8"	1-1/4'	1-1/4"
<b>K-8999</b>	3'	4-7/8"	1-1/2'	1-1/4"
K-9000	3'	4-7/8"	1-1/2'	1-1/2"

14

**PRODUCT DIAGRAM**

**K-8998, K-8999, K-9000** Cast Brass P-Trap  
 Page 2 of 2  
 115170-4-BA (A)





**McGUIRE MFG. CO., INC.**

60 Grandview Court  
 P.O. Box 746 ♣ Cheshire, CT 06410  
 203-699-1801 ♣ Fax 203-699-1813  
 www.mcguiremfg.com

**Part No.**

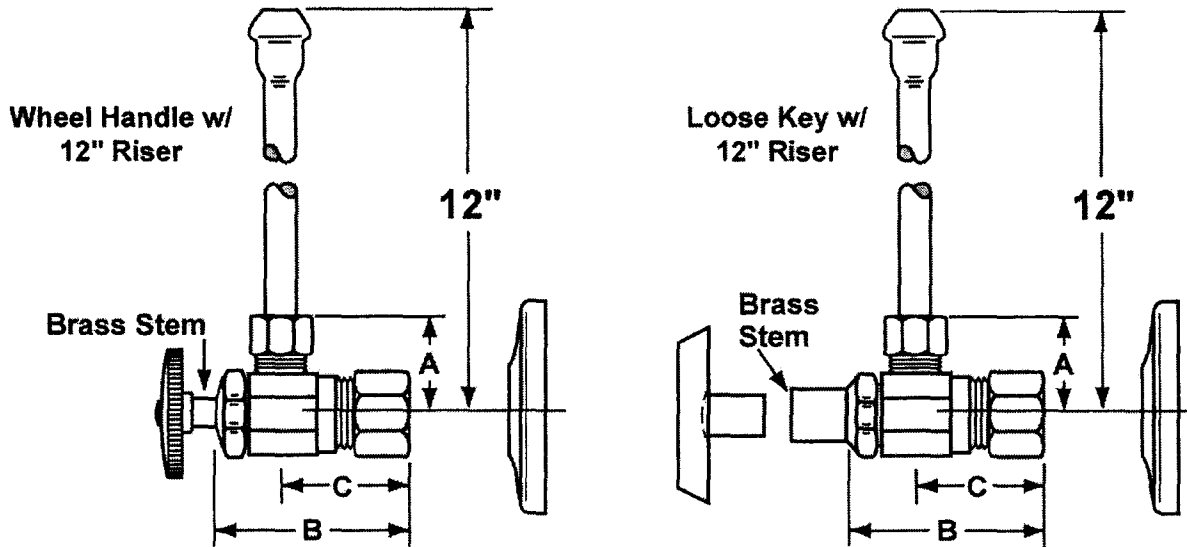
2165CC, 2165CCLK,  
 2167CC, 2167CCLK

**Product Specification**

Compression x Compression  
 Lavatory Supply

Job Name: \_\_\_\_\_

Submittal Number: \_\_\_\_\_



NO.	ROUGHING MEASUREMENTS	A	B	C
2165CC	1/2" Nominal x 3/8" O.D.	1"	1-1/2"	3/4"
2165CCLK	1/2" Nominal x 3/8" O.D.	1"	2-1/4"	3/4"
2167CC	1/2" Nominal x 1/2" O.D.	1"	1-1/2"	3/4"
2167CCLK	1/2" Nominal x 1/2" O.D.	1"	2-1/4"	3/4"

LK designates *Loose Key*



See options and accessories section for details on product variations.

**Specifications:**

Supply kit shall include chrome plated brass stops with full turn brass stem, no plastic, (12, 15, 20) inch chrome plated copper risers and (shallow, deep, bell) (steel, brass) or (forged brass with set screw) flange. Inlet shall be (3/8, 1/2) inch (IPS, sweat, compression). Outlet shall be (3/8, 1/2) inch (IPS, compression). Supply kit shall be McGuire \_\_\_\_\_. Supply kit shall be certified by CSA or other recognized testing authority and bear manufacturer and testing mark. Stop to be certified to 200 psi line pressure.

**SUBMITTAL SHEET**

**PRODUCT DESCRIPTION**

LAV GUARD waste and supply piping covers satisfy all ADA compliance requirements with its unique and universal design, allowing for easy installation over virtually all tubular and cast brass P-p assemblies, as well as angle valve and supply tube assemblies, regardless of their geometry or rotational offset. Smooth, flush Snap Clip™ fasteners firmly secure piping covers in place.

**SAMPLE SPECIFICATIONS**

Handicap lavatory P-trap and angle valve assemblies shall be covered with the soft, antimicrobial, **LAV GUARD**, piping cover manufactured by **TRUEBRO, Inc.** Model # \_\_\_\_\_, Accessory # \_\_\_\_\_, color \_\_\_\_\_ (white or grey). Piping cover shall be secured with Snap Clip™ flush mounted fasteners. Angle stop valve shall be secured with locking lid access cover. Cover shall be non-yellowing and fire retardant.



**UNDERSINK 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

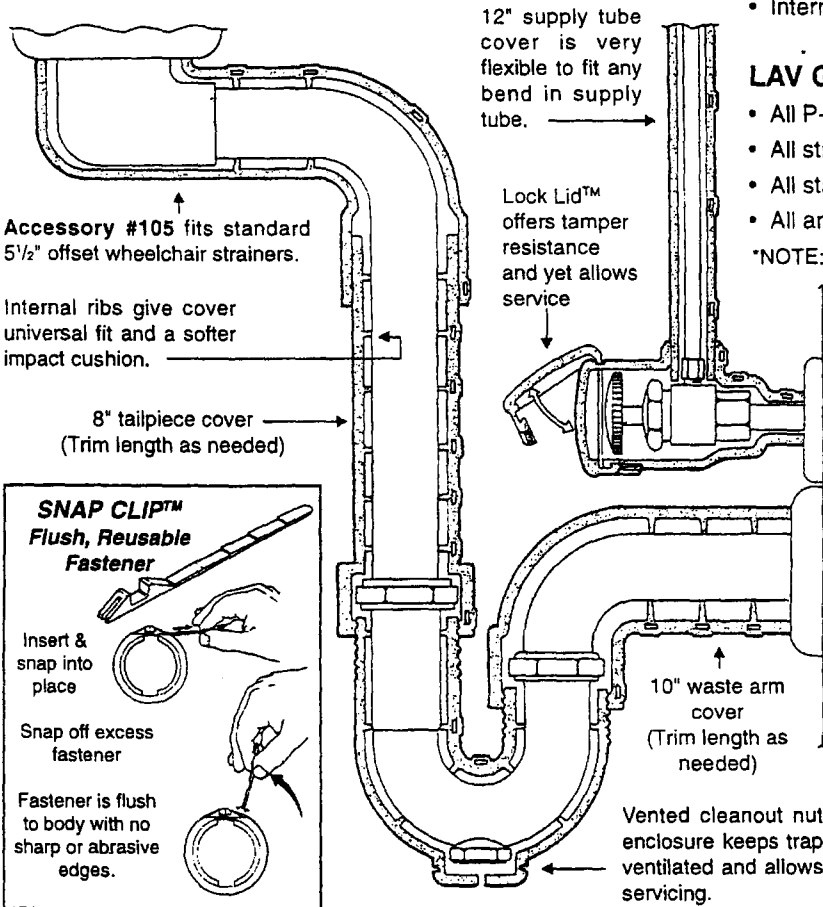
**LAV GUARD Kits Fit:**

- 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 1/2" 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 and supply cover.
- **Model #102**     white     grey  
One P-trap cover, two angle valve and supply covers.
- **Model #103**     white     grey  
One P-trap cover, two angle valve and 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

<b>MATERIAL:</b>	MOLDED CLOSED CELL VINYL
<b>NOM. WALL:</b>	1/8 INCH CONSTANT
<b>DUROMETER:</b>	55 - 65 - SHORE A
<b>UV PROTECTION:</b>	WILL NOT FADE OR DISCOLOR
<b>DURABILITY:</b>	VIRTUALLY INDESTRUCTIBLE
<b>FASTENERS:</b>	SNAP-CLIP™, FLUSH, REUSABLE
<b>COLOR:</b>	LIGHT GREY OR WHITE
<b>PAINTABILITY:</b>	APPLY ACRYLIC ENAMEL
<b>BURNING CHARACTERISTICS</b>	SELF-EXTINGUISHED
<b>ASTM D 635:</b>	5 SEC (ATB) 10 MM (AEB)
<b>THERMAL CONDUCTIVITY</b>	BTU - IN/HR - FT² - °F
<b>ASTM C 177:</b>	K VALUE = 1.17
<b>BACTERIA/FUNGUS RESIST:</b>	ANTIMICROBIAL VINYL FORMULA
<b>MAINTENANCE:</b>	USE COMMON DETERGENTS

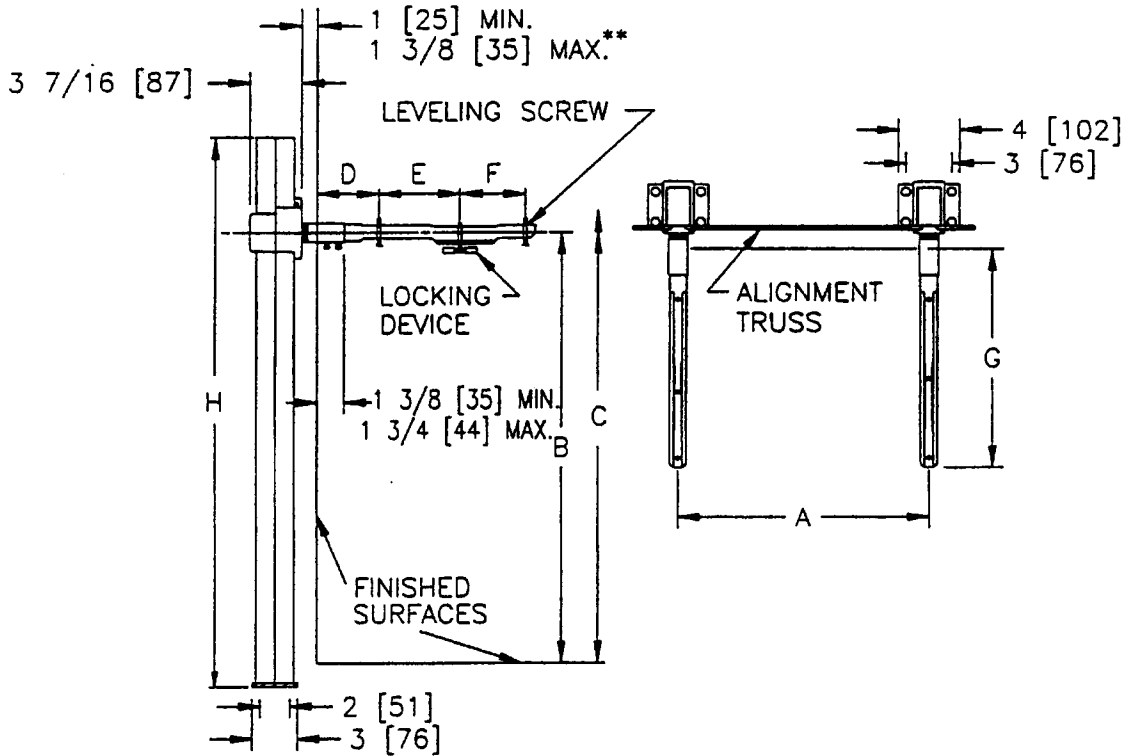


**Z-1231** ←  
**CONCEALED ARM SYSTEM**  
**WALL LAVATORIES**

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



\*\* WITH STANDARD SLEEVE LENGTH OF 3 1/4 [83].

Product No.	Approx. Wt. Lbs. [kg]
Z-1231	45 [20]

**ENGINEERING SPECIFICATION:** ZURN Z-1231 Lavatory support system with concealed arms. Complete with Dura-Coated rectangular steel uprights with welded feet, cast iron adjustable headers, concealed arms, steel sleeves, alignment truss, and mounting fasteners.

**OPTIONS** (Check/specify appropriate options)

**PREFIXES**

\_\_\_ Z- Dura-Coated System with Support Plate\*

**SUFFIXES**

- \_\_\_ -AL Adapter Lug
- \_\_\_ -CU Floor to Ceiling Upright (Specify Height Required)
- \_\_\_ -D Back to Back System
- \_\_\_ -E2 Concealed Arm Escutcheons 2 [51] Long
- \_\_\_ -E4 Concealed Arm Escutcheons 4 [102] Long
- \_\_\_ -E6 Concealed Arm Escutcheons 6 [152] Long
- \_\_\_ -SL Stud Length Over 3 1/4 [82] (Specify Length)
- \_\_\_ -WS Wall Support Valve Plate (Specify Valve Name and Number)
- \_\_\_ -79 Paraplegic Rough-in

REV. DATE: 03/21/95 C.N. NO. 71133

DWG. NO. 58855 PRODUCT NO. Z-1231

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

ZURN INDUSTRIES, INC. • HYDROMECHANICS DIV., • 1801 Pittsburgh Ave. • Erie, PA 16514 • Phone: 814/455-0921 Fax: 814/454-7929  
 In Canada: ZURN INDUSTRIES LIMITED • 6540 Gottardo Court • Mississauga, Ontario L5T 2A2 • Phone: 905/795-8844 Fax: 905/795-8850



**CHESAPEAKE™**

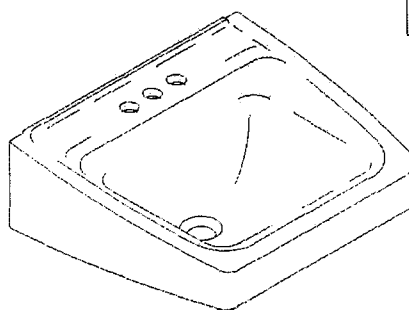
**WALL-MOUNT LAVATORY**

**K-1722, K-1724,  
K-1728**



**FEATURES**

- 19-1/4"(48.9cm) x 17-1/4"(43.8cm)
- Vitreous china
- Ledge-back
- 8"(20.3cm) centers (K-1724), 4"(10.2cm) centers (K-1728) or single-hole (K-1722)
- With overflow
- ADA compliant
- With hanger
- Drilled for concealed arm carrier



**CODES/STANDARDS APPLICABLE**

Specified model meets or exceeds the following:

- ADA
- ASME/ANSI A112.19.2M
- CABO/ANSI A117.1
- IAPMO/UPC
- State of Massachusetts

**COLORS/FINISHES**

- 0 White
- Other Refer to Fixtures Price Book for additional colors

**Accessories:**

- CP Polished Chrome
- Other Refer to Faucets Price Book for additional finishes

**SPECIFIED MODEL:**

Model	Description	Colors/Finishes	
K-1724	8" (20.3cm) centers lavatory	<input type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
K-1728	4" (10.2cm) centers lavatory ←	<input checked="" type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
K-1722	Single-hole lavatory	<input type="checkbox"/> 0 White	<input type="checkbox"/> Other _____
Recommended Accessories			
K-8998	Trap	<input type="checkbox"/> CP	<input type="checkbox"/> Other _____

**PRODUCT SPECIFICATION:**

The lavatory shall be 19-1/4" (48.9cm) in length, and 17-1/4" (43.8cm) in width. Lavatory shall be made of vitreous china. Lavatory shall be ledge-back with hanger. Lavatory shall have 8" (20.2cm) centers (K-1724), 4" (10.2cm) centers (K-1728), or single-hole (K-1722) drilling. Lavatory shall be drilled for concealed arm carrier. Lavatory shall have overflow. Lavatory shall be ADA compliant. Lavatory shall be Kohler Model K-\_\_\_\_\_.

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  
105028-4-CB

# CHESAPEAKE™

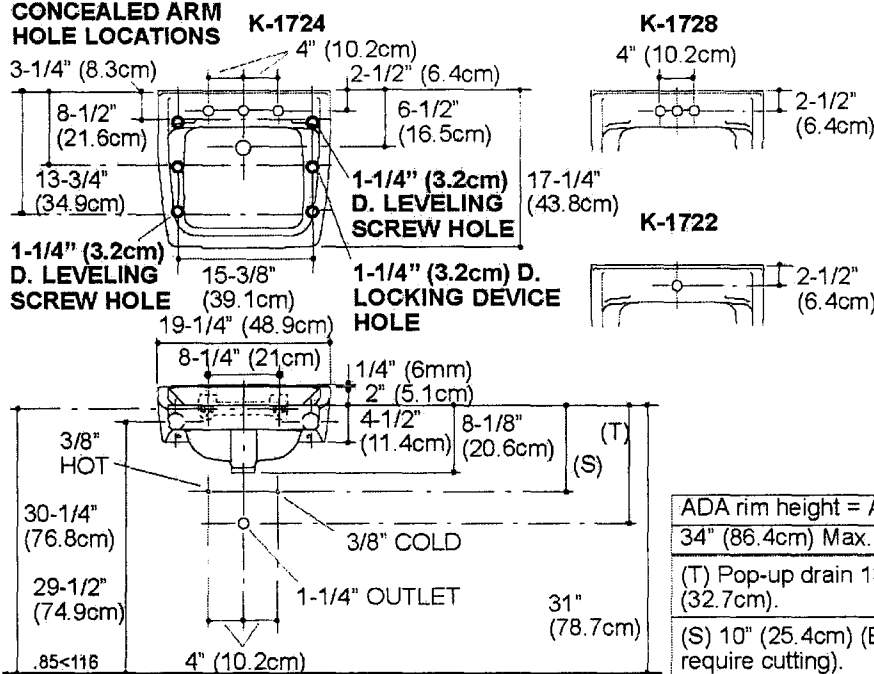
## PRODUCT INFORMATION

ADA compliant.			
Fixture*:		basin area	water depth
Lavatory		14" (35.6cm) x 11" (27.9cm)	4-7/8" (12.4cm)
Drain hole	1-3/4" D. (4.4cm)		
* Approximate measurements for comparison only.			
Holes	<b>K-1724</b>	<b>K-1728</b>	<b>K-1722</b>
Spout	1-3/8" D. (3.5cm)	1-1/4" D. (3.2cm)	1-3/8" D. (3.5cm)
Faucet	1-3/8" D. (3.5cm)	1-1/4" D. (3.2cm)	
Soap dispenser			1-1/4" D. (3.2cm)
Included Components:			
Hanger			64839

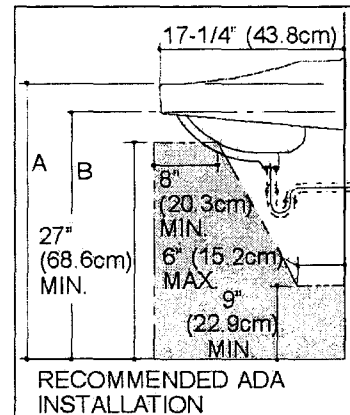
## INSTALLATION NOTES

Install this product according to the installation guide. Fixture dimensions are nominal and conform to tolerances in ASME Standard A112.19.2M. Concealed arm carrier required, **NOT** supplied by Kohler Co. Supplied hanger not used with concealed arm carrier.

### CONCEALED ARM HOLE LOCATIONS



STANDARD INSTALLATION



ADA rim height = A	ADA arm carrier height = B
34" (86.4cm) Max.	33" (81.9cm) Max.
(T) Pop-up drain 13-3/4" (34.9cm), grid drain 12-7/8" (32.7cm).	
(S) 10" (25.4cm) (Based on 12" (30.5cm) riser which may require cutting).	

## PRODUCT DIAGRAM

K-1722, K-1724, K-1728 Chesapeake™ Lavatory  
 Page 2 of 2  
 105028-4-CB

THE BOLD LOOK  
 OF **KOHLER**®



# McGUIRE MFG. CO., INC.

60 Grandview Court  
P.O. Box 746 ♣ Cheshire, CT 06410  
203-699-1801 ♣ Fax 203-699-1813

## Product Specification

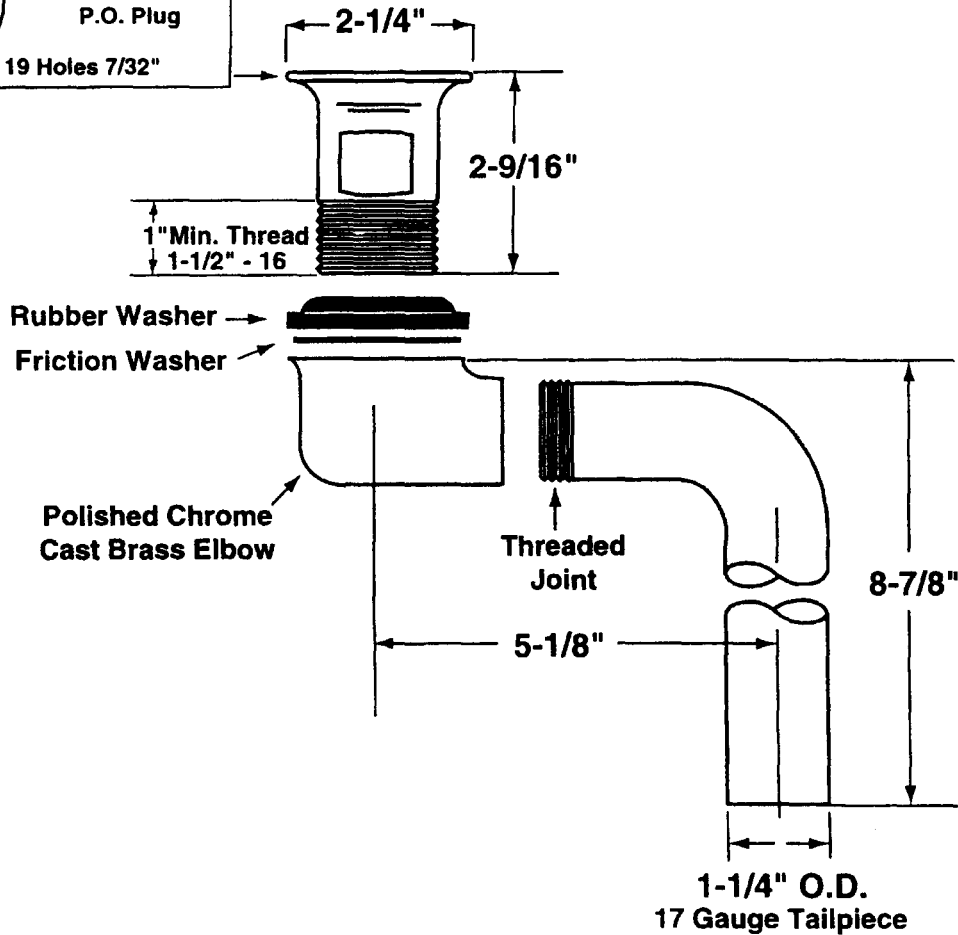
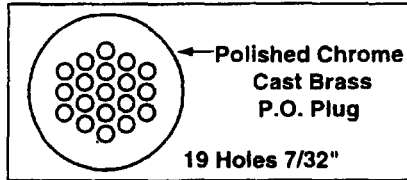
### Part No.

155WC

Offset Lavatory  
Grid Strainer

Job Name:

Submittal Number:



A.D.A.



Certified

See accessories section for details on product variations.

### Specifications:

Cast Brass Chrome Plated Offset Wheelchair Strainer with polished chrome cast brass elbow, 17 gauge 1-1/4 inch seamless brass offset tailpiece, heavy rubber basin washer and fiber friction washer. Offset lavatory strainer shall be in compliance with CSA or other recognized testing authority and bear both manufacturer and testing mark.



**FEATURES**

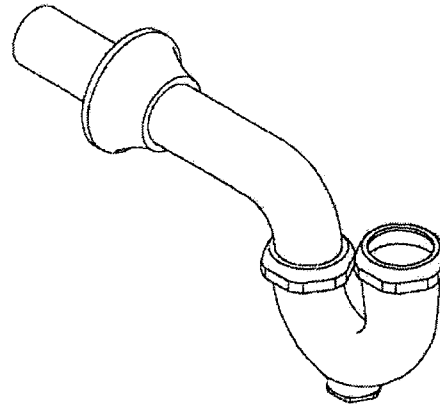
- Cast brass construction
- Adjustable rotation on tube outlet
- Slip-joint inlet
- Cleanout plug
- Flange

**P-TRAP**  
**K-8998**  
 ALSO K-8999, K-9000

**CODES/STANDARDS APPLICABLE**

Specified model meets or exceeds the following:

- ASME/ANSI A112.18.1M
- IAPMO/UPC



**COLORS/FINISHES**

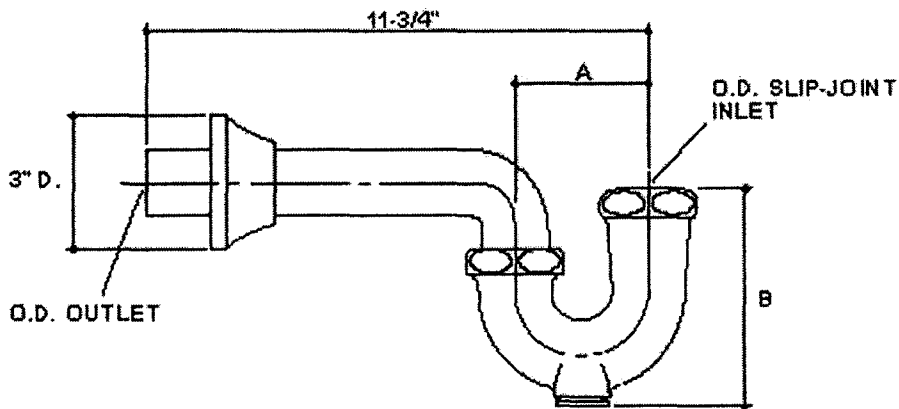
- CP Polished Chrome
- Other Refer to Faucets Price Book for additional finishes

**SPECIFIED MODEL:**

Model	Description	<input type="checkbox"/> CP	<input type="checkbox"/> Other _____
K-8998	With 1-1/4" O.D. Inlet and 1-1/4" O.D. Outlet	<input type="checkbox"/>	<input type="checkbox"/>
K-8999	With 1-1/4" O.D. Inlet and 1-1/2" O.D. Outlet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
K-9000	With 1-1/2" O.D. Inlet and 1-1/2" O.D. Outlet	<input type="checkbox"/>	<input type="checkbox"/>

**PRODUCT SPECIFICATION:**

P-trap shall be of cast brass construction. Adjustable P-trap shall include cleanout plug, and flange. Optional features shall be 1-1/4" or 1-1/2" O.D. slip-joint inlet and 1-1/4" or 1-1/2" O.D. outlet. Product shall be Kohler Model K-\_\_\_\_\_-\_\_\_\_\_-.



Roughing-In Notes				
	A	B	O.D. OUTLET	O.D. INLET
K-8998	2-3/4"	4-3/8"	1-1/4"	1-1/4"
<b>K-8999</b>	3"	4-7/8"	1-1/2"	1-1/4"
K-9000	3"	4-7/8"	1-1/2"	1-1/2"

14

PRODUCT DIAGRAM

K-8998, K-8999, K-9000 Cast Brass P-Trap  
 Page 2 of 2  
 115170-4BA (A)





**McGUIRE MFG. CO., INC.**

60 Grandview Court  
 P.O. Box 746 ♣ Cheshire, CT 06410  
 203-699-1801 ♣ Fax 203-699-1813  
 www.mcguiremfg.com

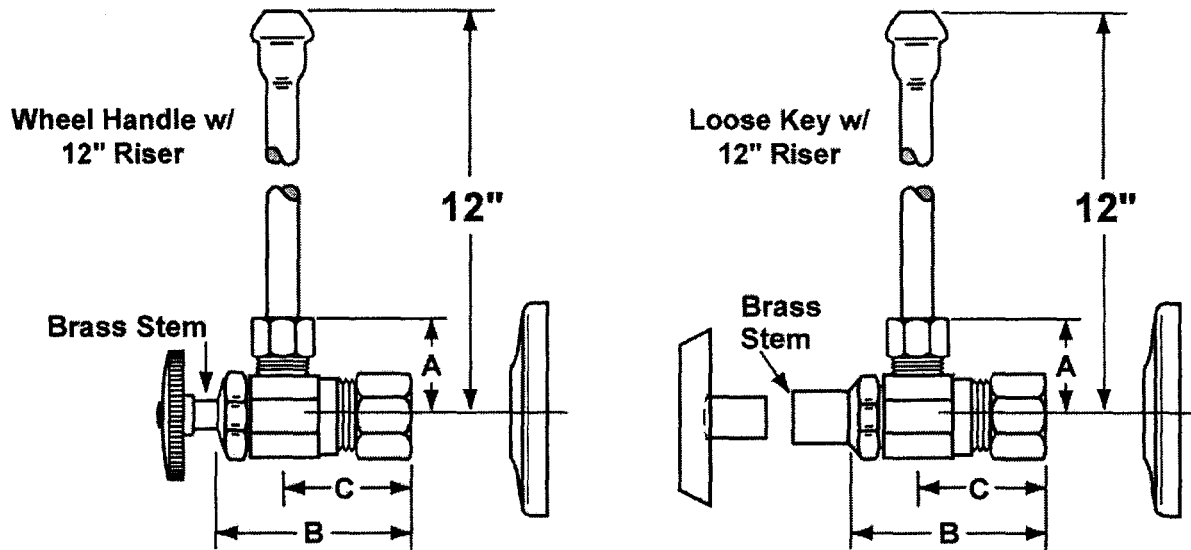
**Part No.**

2165CC, 2165CCLK,  
 2167CC, 2167CCLK

**Product Specification**

Compression x Compression  
 Lavatory Supply

**Job Name:** \_\_\_\_\_ **Submittal Number:** \_\_\_\_\_



NO.	ROUGHING MEASUREMENTS	A	B	C
2165CC	1/2" Nominal x 3/8" O.D.	1"	1-1/2"	3/4"
2165CCLK	1/2" Nominal x 3/8" O.D.	1"	2-1/4"	3/4"
2167CC	1/2" Nominal x 1/2" O.D.	1"	1-1/2"	3/4"
2167CCLK	1/2" Nominal x 1/2" O.D.	1"	2-1/4"	3/4"

LK designates *Loose Key*



See options and accessories section for details on product variations.

**Specifications:**

Supply kit shall include chrome plated brass stops with full turn brass stem, no plastic, (12, 15, 20) inch chrome plated copper risers and (shallow, deep, bell) (steel, brass) or (forged brass with set screw) flange. Inlet shall be (3/8, 1/2) inch (IPS, sweat, compression). Outlet shall be (3/8, 1/2) inch (IPS, compression). Supply kit shall be McGuire \_\_\_\_\_. Supply kit shall be certified by CSA or other recognized testing authority and bear manufacturer and testing mark. Stop to be certified to 200 psi line pressure.

**SUBMITTAL SHEET**

**PRODUCT DESCRIPTION**

LAV GUARD waste and supply piping covers satisfy all ADA compliance requirements with its unique and universal design, allowing for easy installation over virtually all tubular and cast brass P-trap assemblies, as well as angle valve and supply tube assemblies, regardless of their geometry or rotational offset. Smooth, flush Snap Clip™ fasteners firmly secure piping covers in place.

**SAMPLE SPECIFICATIONS**

Handicap lavatory P-trap and angle valve assemblies shall be covered with the soft, antimicrobial, **LAV GUARD**, piping cover manufactured by **TRUEBRO, Inc.** Model # \_\_\_\_\_, Accessory # \_\_\_\_\_, color \_\_\_\_\_ (white or grey). Piping cover shall be secured with Snap Clip™ flush mounted fasteners. Angle stop valve shall be secured with locking lid access cover. Cover shall be non-yellowing and fire retardant.



**UNDERSINK 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 1/2" offset wheelchair strainers. (Acc. #105)
- All angle stop valves - handed or keyed type 3/8" or 1/2".

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

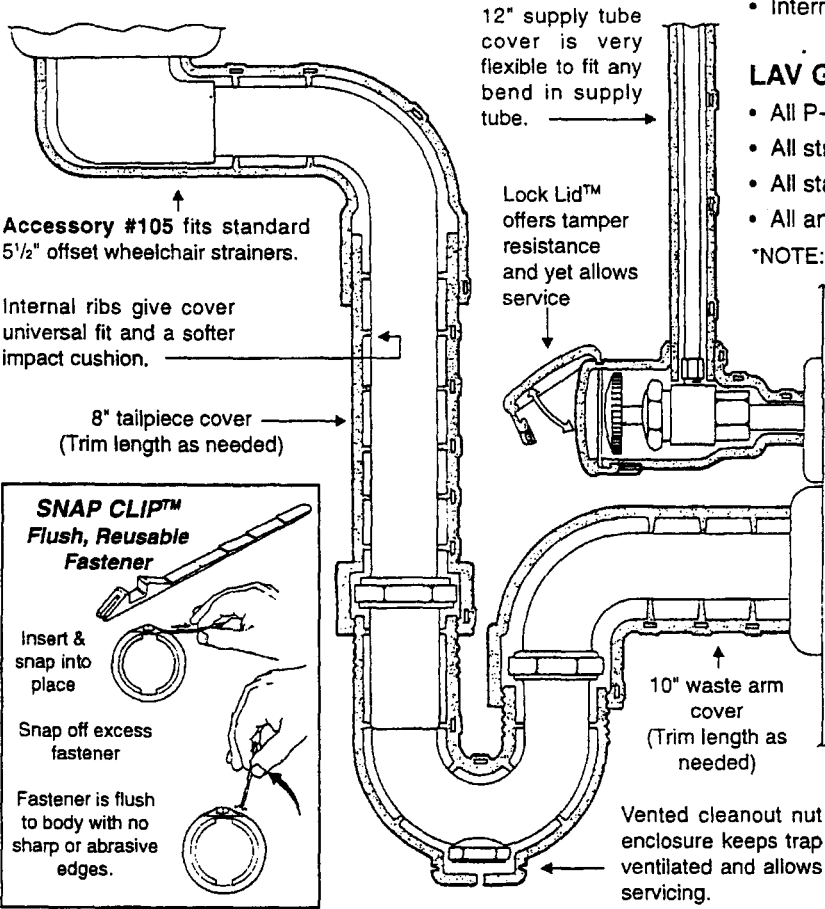
**Models Available: White or Grey**  
Select model and color.

- **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 and supply cover.
- **Model #102**  white  grey  
One P-trap cover, two angle valve and supply covers.
- **Model #103**  white  grey  
One P-trap cover, two angle valve and 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



<b>MATERIAL:</b>	MOLDED CLOSED CELL VINYL
<b>NOM. WALL:</b>	1/8 INCH CONSTANT
<b>DUROMETER:</b>	55 - 65 - SHORE A
<b>UV PROTECTION:</b>	WILL NOT FADE OR DISCOLOR
<b>DURABILITY:</b>	VIRTUALLY INDESTRUCTIBLE
<b>FASTENERS:</b>	SNAP-CLIP™, FLUSH, REUSABLE
<b>COLOR:</b>	LIGHT GREY OR WHITE
<b>PAINTABILITY:</b>	APPLY ACRYLIC ENAMEL
<b>BURNING CHARACTERISTICS</b>	SELF-EXTINGUISHED
<b>ASTM D 635:</b>	5 SEC (ATB) 10 MM (AEB)
<b>THERMAL CONDUCTIVITY</b>	BTU - IN/HR - FT <sup>2</sup> - °F
<b>ASTM C 177:</b>	K VALUE = 1.17
<b>BACTERIA/FUNGUS RESIST:</b>	ANTIMICROBIAL VINYL FORMULA
<b>MAINTENANCE:</b>	USE COMMON DETERGENTS

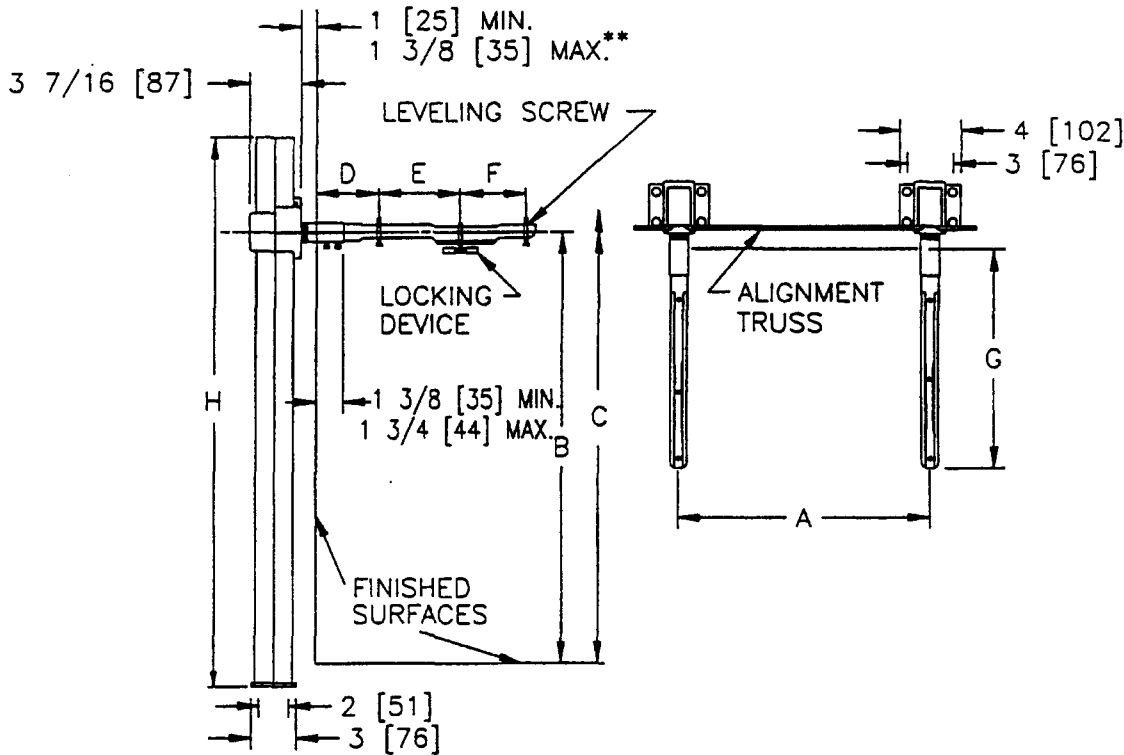


**Z-1231**  
**CONCEALED ARM SYSTEM**  
**WALL LAVATORIES**

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



\*\* WITH STANDARD SLEEVE LENGTH OF 3 1/4 [83].

Product No.	Approx. Wt. Lbs. [kg]
Z-1231	45 [20]

**ENGINEERING SPECIFICATION:** ZURN Z-1231 Lavatory support system with concealed arms. Complete with Dura-Coated rectangular steel uprights with welded feet, cast iron adjustable headers, concealed arms, steel sleeves, alignment truss, and mounting fasteners.

**OPTIONS** (Check/specify appropriate options)

**PREFIXES**

\_\_\_ Z- Dura-Coated System with Support Plate\*

**SUFFIXES**

- \_\_\_ -AL Adapter Lug
- \_\_\_ -CU Floor to Ceiling Upright (Specify Height Required)
- \_\_\_ -D Back to Back System
- \_\_\_ -E2 Concealed Arm Escutcheons 2 [51] Long
- \_\_\_ -E4 Concealed Arm Escutcheons 4 [102] Long
- \_\_\_ -E6 Concealed Arm Escutcheons 6 [152] Long
- \_\_\_ -SL Stud Length Over 3 1/4 [82] (Specify Length)
- \_\_\_ -WS Wall Support Valve Plate (Specify Valve Name and Number)
- \_\_\_ -79 Paraplegic Rough-in

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV.	DATE: 03/21/95	C.N. NO. 71133
DWG. NO. 58855	PRODUCT NO. Z-1231	

ZURN INDUSTRIES, INC. • HYDROMECHANICS DIV., • 1801 Pittsburgh Ave. • Erie, PA 16514 • Phone: 814/455-0921 Fax: 814/454-7929  
 In Canada: ZURN INDUSTRIES LIMITED • 6540 Gottardo Court • Mississauga, Ontario L5T 2A2 • Phone: 905/795-8844 Fax: 905/795-8850

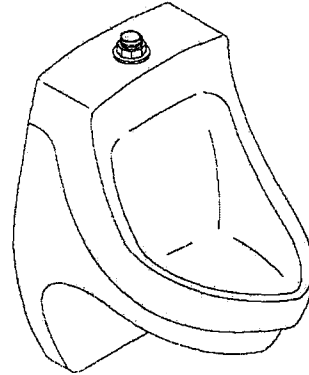


**DEXTER™**

**URINAL**

**K-5016-ET**

**ADA**



**FEATURES**

- Vitreous china
- Siphon jet
- 3/4" top spud
- 14-1/2" (36.8cm) extended rim
- Includes inlet & outlet spuds and hangers
- Includes anti-backsplash wall
- 1.0 gallon (3.78L) or less flush
- ADA compliant when rim is mounted no higher than 17" (43.2cm) from finished floor

**CODES/STANDARDS APPLICABLE**

Specified model meets or exceeds the following:

- ADA when rim is mounted no higher than 17" (43.2cm) from finished floor
- ASME/ANSI A112.19.2M
- ASME/ANSI A112.19.6M
- CABO/ANSI A117.1
- IAPMO/UPC
- Energy Policy Act of 1992 (EPACT)
- States of Massachusetts, New York, & Texas
- City of Los Angeles, CA

**COLORS/FINISHES**

- 0 White
- Other Refer to Fixtures Price Book for additional colors

**SPECIFIED MODEL:**

Model	Description	Colors/Finishes
K-5016-ET	3/4" top spud urinal	<input checked="" type="checkbox"/> 0 White <input type="checkbox"/> Other _____

**PRODUCT SPECIFICATION:**

The siphon jet urinal shall be made of vitreous china with a 3/4" top spud. Urinal shall have 14-1/2" (36.8cm) extended rim. Urinal shall include inlet & outlet spuds and hangers. Urinal shall include anti-backsplash wall. Urinal shall be 1.0 gallon (3.78L) or less flush. Urinal shall be ADA compliant when rim is mounted no higher than 17" (43.2cm) from finished floor. Urinal shall be Kohler Model K-5016-ET-\_\_\_\_\_.

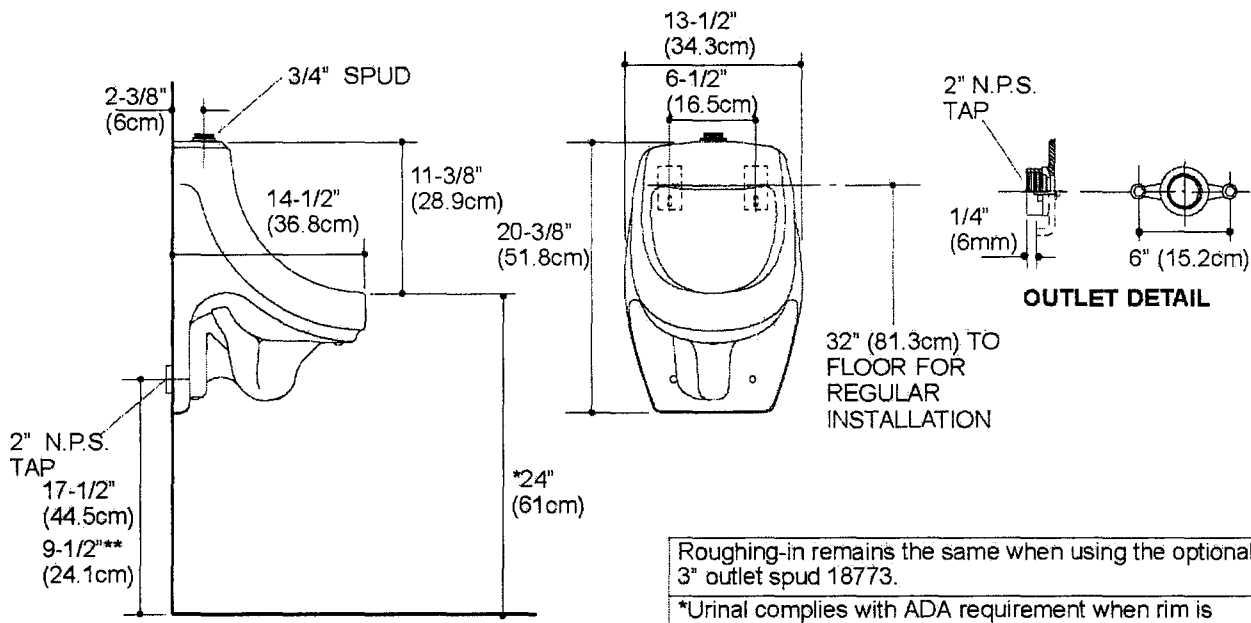
*We reserve the right to make revisions without notice in the design of fixtures or in packaging unless this right has specifically been waived at the time the order is accepted.*

Page 1 of 2  
116345-4- AC

# DEXTER <sup>112</sup>

## PRODUCT INFORMATION

ADA compliant.	
Fixture:	
Configuration	Top spud
Spud inlet size	3/4"
Gallons per flush	< 1 gallon* (3.78L)
*Designed to flush with less than one gallon (3.78L) of water when installed with a water saving flush valve.	
Included Components:	
3/4" inlet spud	18376
2" outlet spud	18766
Hanger (2 required)	64512
Flush valve requirements: Refer to manufacturer's instructions and local codes.	



Roughing-in remains the same when using the optional 3" outlet spud 18773.

\*Urinal complies with ADA requirement when rim is mounted no higher than 17" (43.2cm) from finished floor.

\*\*Outlet height for ADA compliance.

1.25>116

## PRODUCT DIAGRAM

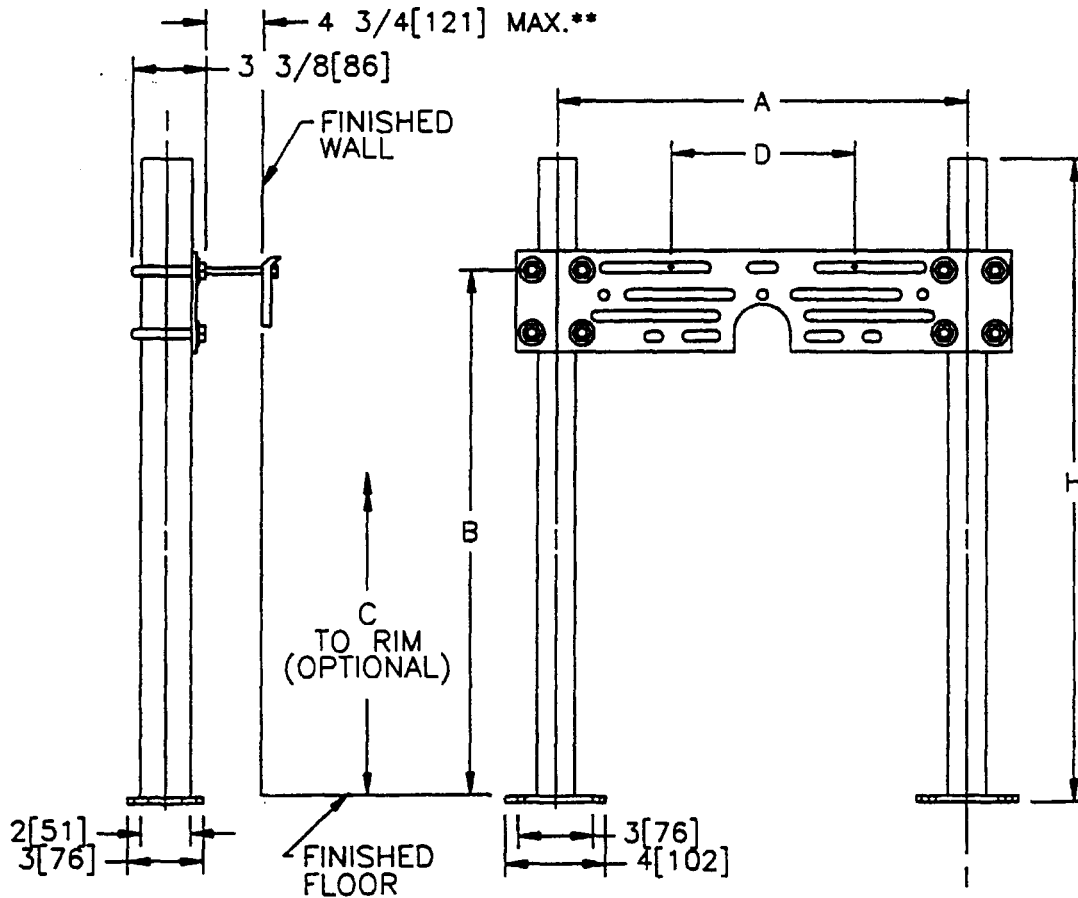


**Z-1221**  
**PLATE TYPE SYSTEM**  
**WALL URINALS**

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



\*\* WITH STANDARD STUD LENGTH OF 6 [152]

Product No.	Approx. Wt. Lbs. [kg]
Z-1221	50 [23]

**ENGINEERING SPECIFICATION:** ZURN Z-1221 Wall urinal support system with top support plate. Complete with Dura-Coated rectangular steel uprights with welded feet, adjustable support plate, and mounting fasteners.

OPTIONS (Check/specify appropriate options)

**PREFIXES**

\_\_\_ Z- Dura-Coated System with Universal Plate\*

**SUFFIXES**

- \_\_\_ -CU Floor to Ceiling Upright
- \_\_\_ -D Back to Back System
- \_\_\_ -SL Stud Length Greater Than 6 [152] (Specify Length)
- \_\_\_ -58 Flush Valve Supply Support for Urinals

REV. DATE: 03/21/95 C.N. NO. 71127

DWG. NO. 58849 PRODUCT NO. Z-1221

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED



STAINLESS STEEL  
SQUARE CORNER SCULLERY  
**BUDGET SINKS**

"400" Series "600" Series

**Item #:** \_\_\_\_\_ **Qty #:** \_\_\_\_\_  
**Model #:** \_\_\_\_\_  
**Project #:** \_\_\_\_\_



**ONE COMPARTMENT**



**THREE COMPARTMENT**



**TWO COMPARTMENT**



**FOUR COMPARTMENT**

**MATERIAL:**

"400" Series is 16 gauge type 430 Series.  
 "600" Series is 16 gauge type 304 Series.  
 Galvanized tubular legs.  
 1" adjustable plastic bullet feet.

**CONSTRUCTION:**

All heli-arc welded.  
 Welded areas blended to match adjacent surfaces and to a satin finish.

**MECHANICAL:**

Supply is 1/2" hot & cold.  
 Faucet holes on 8" O.C.  
 Waste drains are 1 1/2" IPS basket type and are included.  
 Faucets are not included (see accessories).  
 Four compartment units require two faucets.  
 Three compartment units with 24" sink bowls require two faucets.

**DETACHABLE DRAINBOARDS**



Model #	Qty
N-5-818	
N-5-18	
N-5-24	
N-5-30	
N-5-36	
N-5-48	
N-54-24	
N-54-36	
N-54-48	

Drainboards 36" and 48" are supplied with legs for support.



**NEW YORK**  
 (800) 645-3166  
 Fax: (631) 242-6900

**GEORGIA**  
 (800) 832-1218  
 Fax: (770) 775-5625

**TEXAS**  
 (800) 527-0353  
 Fax: (972) 932-4795

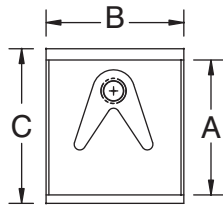
**NEVADA**  
 (800) 446-8684  
 Fax: (775) 972-1578

# DIMENSIONS and SPECIFICATIONS

TOL Overall: ± .500" Interior: ± .250"

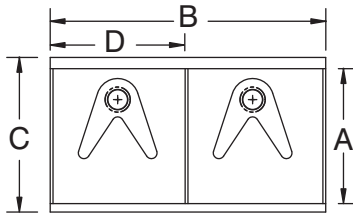
ALL DIMENSIONS ARE TYPICAL

## ONE COMPARTMENT



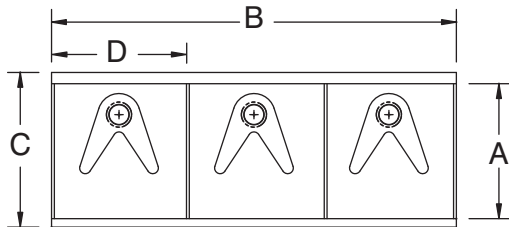
A	B	C	"400" Series 16 Ga. S/S "430"	"600" Series 16 Ga. S/S "300"	Ship Weight
18"	18"	21 1/2"	<b>4-81-18</b>	<b>6-81-18</b>	45 lbs.
21"	18"	24 1/2"	<b>4-1-18</b>	<b>6-1-18</b>	47 lbs.
21"	24"	24 1/2"	<b>4-1-24</b>	<b>6-1-24</b>	53 lbs.
21"	36"	24 1/2"	<b>4-1-36</b>	<b>6-1-36</b>	66 lbs.
24"	24"	27 1/2"	<b>4-41-24</b>	<b>6-41-24</b>	53 lbs.
24"	36"	27 1/2"	<b>4-41-36</b>	<b>6-41-36</b>	69 lbs.

## TWO COMPARTMENTS



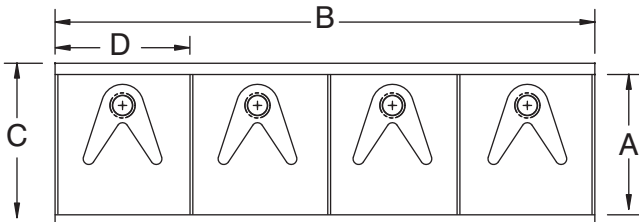
A	B	C	D	"400" Series 16 Ga. S/S "430"	"600" Series 16 Ga. S/S "300"	Ship Weight
21"	36"	24 1/2"	18"	<b>4-2-36</b>	<b>6-2-36</b>	73 lbs.
21"	48"	24 1/2"	24"	<b>4-2-48</b>	<b>6-2-48</b>	86 lbs.
21"	60"	24 1/2"	30"	<b>4-2-60</b>	<b>6-2-60</b>	100 lbs.
24"	48"	27 1/2"	24"	<b>4-42-48</b>	<b>6-42-48</b>	88 lbs.
24"	60"	27 1/2"	30"	<b>4-42-60</b>	<b>6-42-60</b>	108 lbs.

## THREE COMPARTMENTS



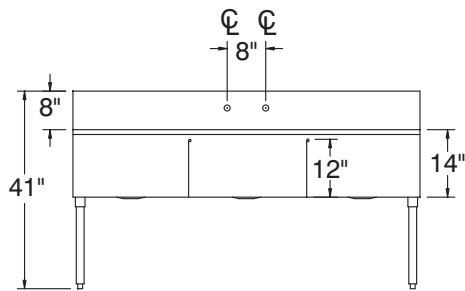
A	B	C	D	"400" Series 16 Ga. S/S "430"	"600" Series 16 Ga. S/S "300"	Ship Weight
21"	36"	24 1/2"	12"	<b>4-3-36</b>	<b>6-3-36</b>	78 lbs.
21"	48"	24 1/2"	16"	<b>4-3-48</b>	<b>6-3-48</b>	91 lbs.
21"	54"	24 1/2"	18"	<b>4-3-54</b>	<b>6-3-54</b>	98 lbs.
21"	72"	24 1/2"	24"	<b>4-3-72</b>	<b>6-3-72</b>	115 lbs.
24"	60"	27 1/2"	20"	<b>4-43-60</b>	<b>6-43-60</b>	105 lbs.
24"	72"	27 1/2"	24"	<b>4-43-72</b>	<b>6-43-72</b>	120 lbs.

## FOUR COMPARTMENTS

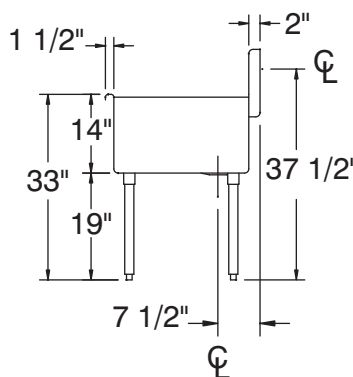


A	B	C	D	"400" Series 16 Ga. S/S "430"	"600" Series 16 Ga. S/S "300"	Ship Weight
21"	48"	24 1/2"	12"	<b>4-4-48</b>	<b>6-4-48</b>	96 lbs.
21"	60"	24 1/2"	15"	<b>4-4-60</b>	<b>6-4-60</b>	115 lbs.
21"	72"	24 1/2"	18"	<b>4-4-72</b>	<b>6-4-72</b>	120 lbs.

## FRONT VIEW



## PLUMBING ROUGH-IN



## DETACHABLE DRAINBOARDS

Size	18 Ga. S/S "430"	Ship Weight
18 x 18	<b>N-5-818</b>	10 lbs.
21 x 18	<b>N-5-18</b>	11 lbs.
21 x 24	<b>N-5-24</b>	12 lbs.
21 x 30	<b>N-5-30</b>	22 lbs.
21 x 36	<b>N-5-36</b>	25 lbs.
21 x 48	<b>N-5-48</b>	28 lbs.
24 x 24	<b>N-54-24</b>	18 lbs.
24 x 36	<b>N-54-36</b>	32 lbs.
24 x 48	<b>N-54-48</b>	36 lbs.





**SINK STRAINER  
K-9115  
ALSO K-9118**

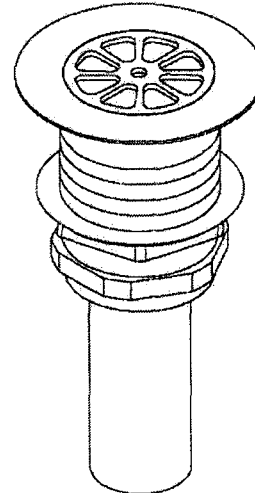
**FEATURES**

- Brass construction
- Intended for sink installations with 2" outlet
- Perforated strainer
- Brass tailpiece

**CODES/STANDARDS APPLICABLE**

Specified model meets or exceeds the following:

- ASME/ANSI A112.18.1M



**COLORS/FINISHES**

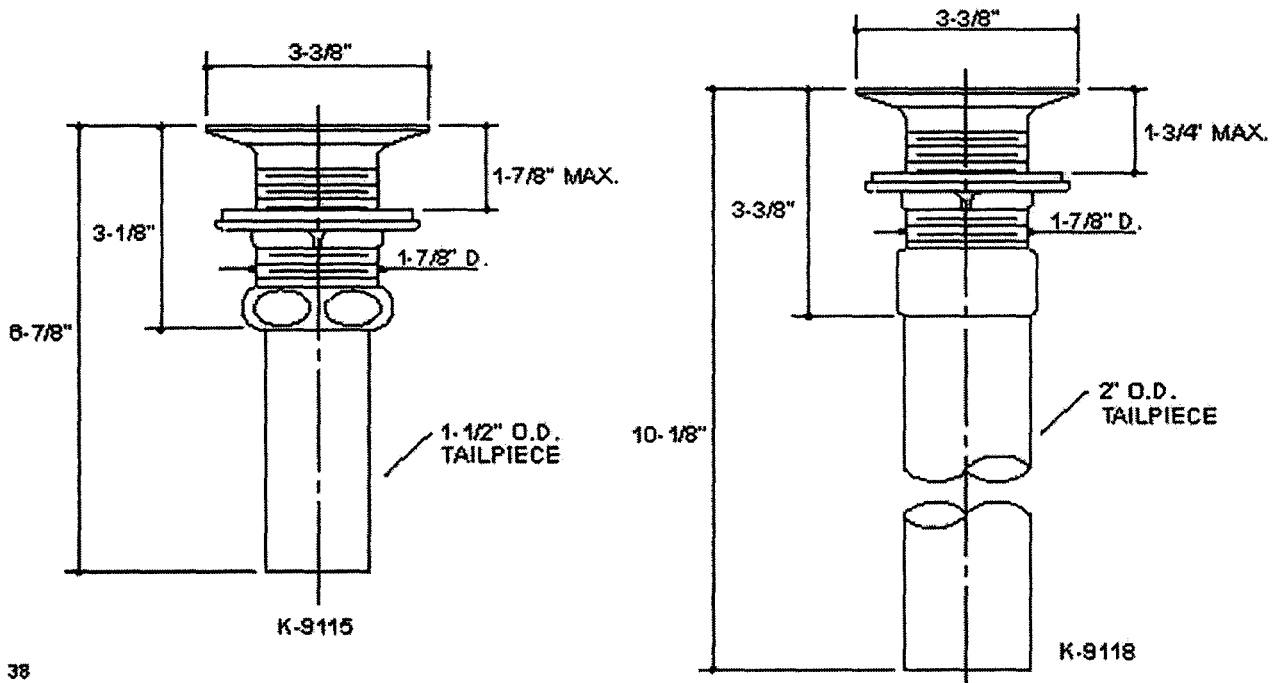
- CP Polished Chrome

**SPECIFIED MODEL:**

Model	Description	
K-9115	With 1-1/2" O.D. Tailpiece	<input checked="" type="checkbox"/> CP
K-9118	With 2" O.D. Tailpiece	<input type="checkbox"/> CP

**PRODUCT SPECIFICATION:**

Sink strainer shall be of brass construction. Product shall feature perforated strainer, cast brass body, and brass tailpiece. Product is intended for sink installations with 2" outlet. Optional feature shall be 1-1/2" O.D. or 2" O.D. tailpiece. Strainer shall be Kohler Model K-\_\_\_\_\_-CP.



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PRODUCT DIAGRAM

K-9115, K-9118 Sink Strainers  
Page 2 of 2  
115179-4-BA (A)

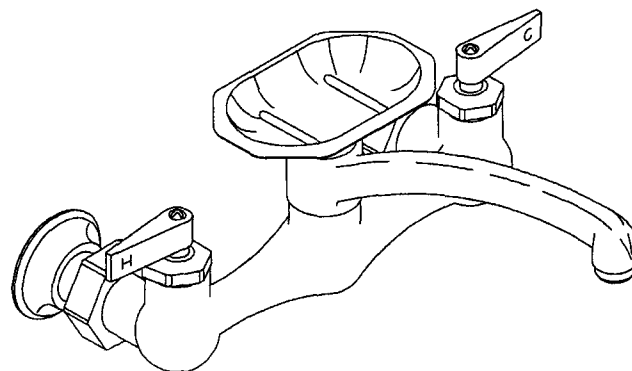


**SINK SUPPLY FAUCET  
K-7853  
ALSO K-7855, K-7856**

**ADA**

**Features**

- Brass construction
- Brass valve bodies
- Valvet® valves
- Rotating spout
- For 8" (20.3 cm) centers
- Cross and lever handles are ADA compliant
- Optional soap dish
- Inside threaded couplings
- Available with 8" (20.3 cm) or 12" (30.5 cm) spout reach
- Available with ADA compliant cross or lever handles
- 2.2 gpm (8.3 lpm) maximum flow rate



**Codes/Standards Applicable**



Specified model meets or exceeds the following at date of manufacture:

- ADA
- ASME A112.18.1/CSA B125.1
- ICC/ANSI A117.1
- NSF 61
- Energy Policy Act of 1992
- All applicable US Federal and State material regulations

**Colors/Finishes**

- CP: Polished Chrome
- Other: Refer to Price Book for additional colors/finishes

**Specified Model**

Model	Description	 <b>ADA</b>		 <b>ADA</b>	
		<input type="checkbox"/> CP	<input type="checkbox"/> Other_____	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____
K-7853	Sink supply faucet – 8" (20.3 cm) spout reach and lever handles, less soap dish	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____
K-7855-3	Sink supply faucet – 8" (20.3 cm) spout reach and cross handles, with soap dish	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____
K-7855-4	Sink supply faucet – 8" (20.3 cm) spout reach and lever handles, with soap dish	<input checked="" type="checkbox"/> CP	<input type="checkbox"/> Other_____	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____
K-7856-3	Sink supply faucet – 12" (30.5 cm) spout reach and cross handles, with soap dish	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____
K-7856-4	Sink supply faucet – 12" (30.5 cm) spout reach and lever handles, with soap dish	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____	<input type="checkbox"/> CP	<input type="checkbox"/> Other_____

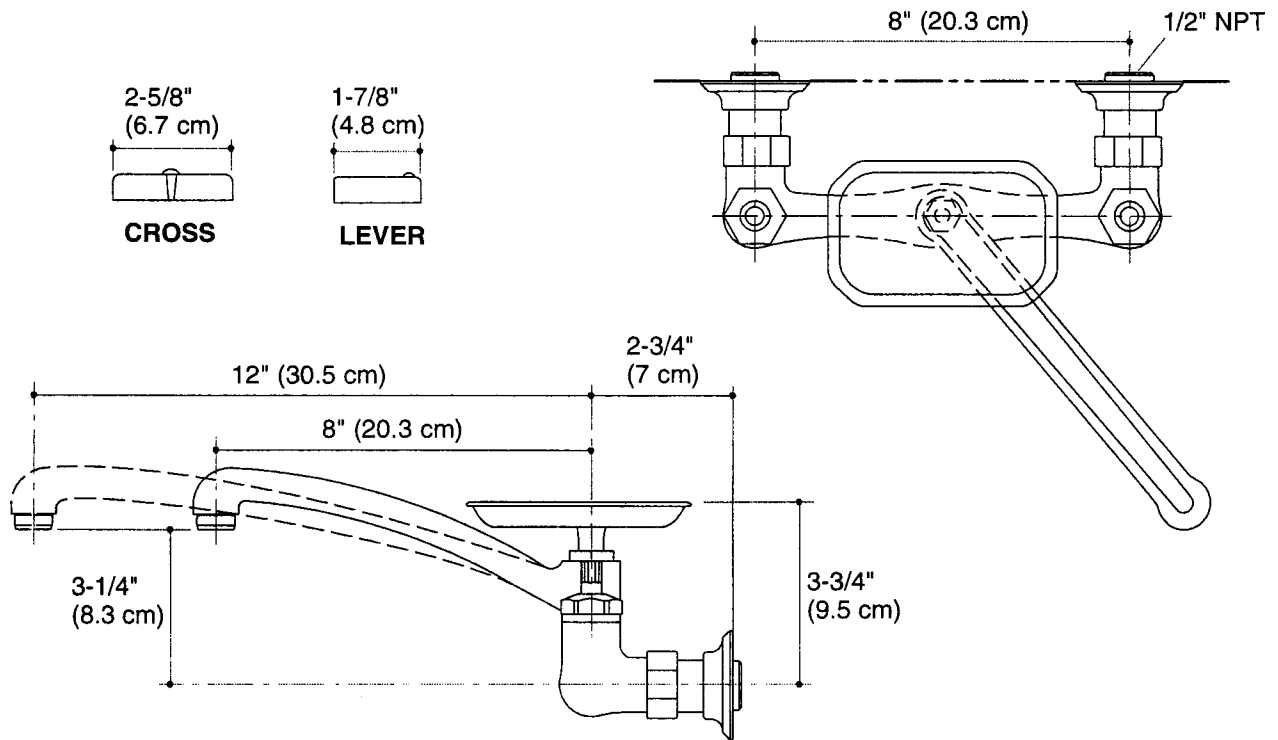
**Product Specification**

The two-handle sink supply faucet shall be of brass construction and brass valve bodies. Product shall feature Valvet valves, inside threaded couplings, and a rotating spout. Product shall be for 8" (20.3 cm) centers. Product shall be available with a 8" (20.3 cm) or 12" (30.5 cm) spout reach. Product shall be available with cross handles or lever handles which are ADA compliant. Product shall have optional soap dish. Faucet shall be Kohler Model K-\_\_\_\_-\_\_\_\_-\_\_\_\_.

# CLEARWATER®

## Installation Notes

Install this product according to the installation guide.



**Product Diagram**

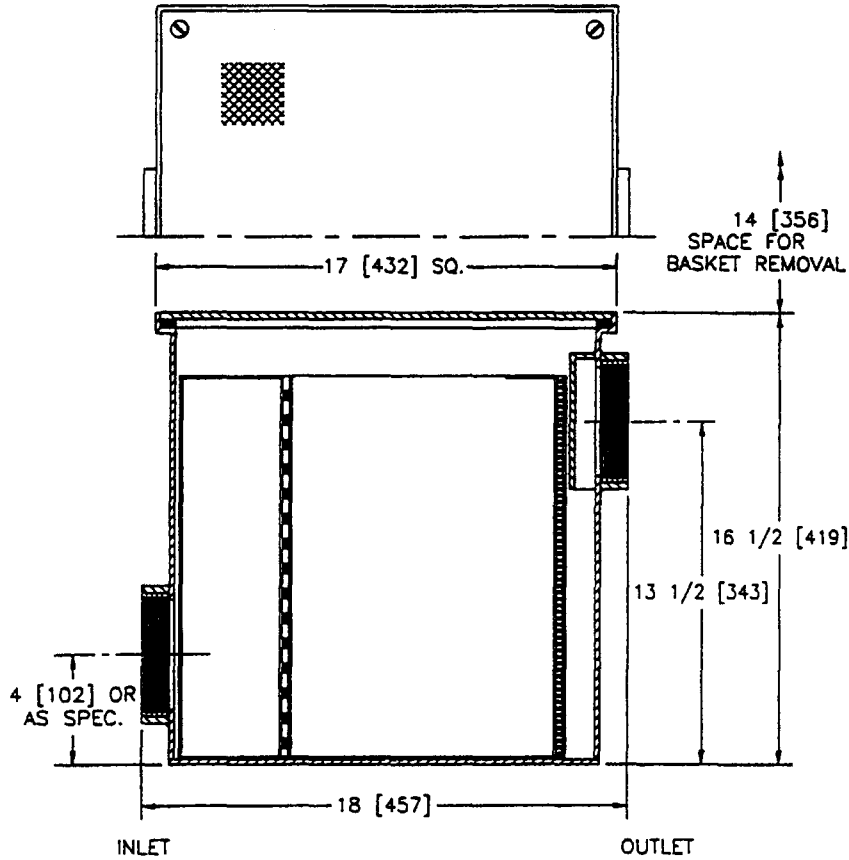


**Z-1181** ←  
**SOLIDS INTERCEPTOR**

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



Inlet/Outlet Inches	Flow Rate GPM [L]	Approx. Wt. Lbs. [kg]
1-1/2, 2** [38, 50]	30 [113]	40 [18]

**ENGINEERING SPECIFICATION:** ZURN Z-1181 Large capacity Acid Resistant Coated fabricated steel solids interceptor, in lieu of fixture 'P' trap, for on-floor or flush with floor installation, with removable primary and secondary flow diffusing/intercepting screens, and sediment bucket, with gasketed non-skid cover. Regularly furnished with 2 [50] low inlet and high outlet.\*\*

**OPTIONS** (Check/specify appropriate options)

**PREFIXES**

- \_\_\_ Z- Acid Resistant Coated Fabricated Steel\*
- \_\_\_ ZS- All Fabricated Type 304 Stainless Steel

**SUFFIXES**

- \_\_\_ -SS Custom Stainless Mesh Screen for Bucket (Specify opening size)
- \_\_\_ -YR Replacement Basket Assembly

REV.	DATE: 03/21/95	C.N. NO. 71196
DWG. NO. 58913	PRODUCT NO. Z-1181	

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

ZURN INDUSTRIES, INC. • HYDROMECHANICS DIV., • 1801 Pittsburgh Ave. • Erie, PA 16514 • Phone: 814/455-0921 Fax: 814/454-7929  
 In Canada: ZURN INDUSTRIES LIMITED • 6540 Gottardo Court • Mississauga, Ontario L5T 2A2 • Phone: 905/795-8844 Fax: 905/795-8850

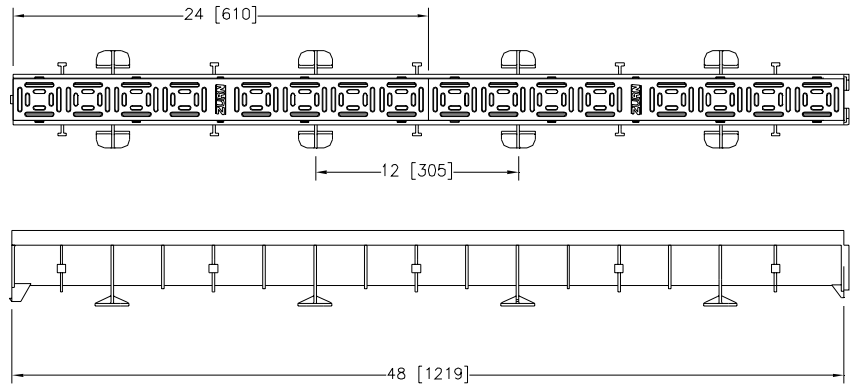
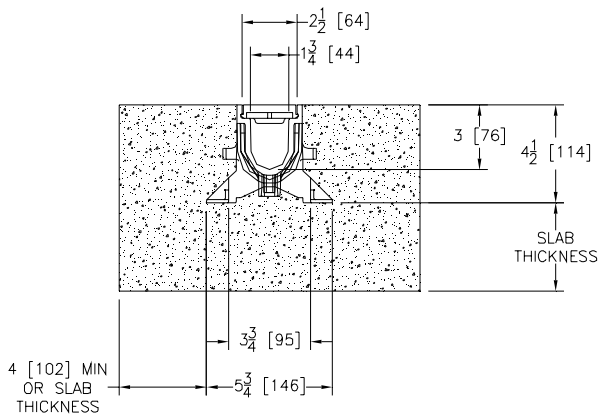


# Z880 2 1/2 [64] WIDE TRENCH DRAIN SYSTEM

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



## ENGINEERING SPECIFICATION

**Zurn Z880 2 1/2 [64] Wide Trench Drain System** shall be 48 [1220] long and 2 1/2 [63.5] wide. Drain shall be 3 [76] deep. Drain shall be made of (HDPE) High Density Polyethylene, and is UV-10 stabilized. Drain shall have bedding feet and/or bedding feet shall be used for positioning and anchoring purposes. Drain shall have tongue and groove snap fit connection. Drain shall be Flo-Thru Z880. 24 [610] long high-density polyethylene decorative grate (-POG) provided as standard.

## PREFIX OPTIONS

**Z\***- 48 [1219] linear high density polyethylene modular drain channel with high-density polyethylene decorative grate.

## OPTIONS

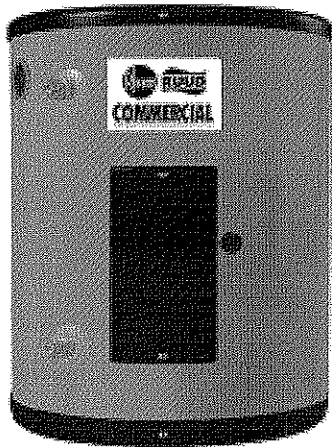
- \_\_\_\_\_ **-E1** End Cap
- \_\_\_\_\_ **-E1.5** 1-1/2 [38] No Hub End Outlet
- \_\_\_\_\_ **-U1.5** 1-1/2 [38] No Hub Bottom Outlet
- \_\_\_\_\_ **-C45** 45 Degree Channel
- \_\_\_\_\_ **-C90** 90 Degree Channel
- \_\_\_\_\_ **-G45** 45 Degree Plastic Pool Grate
- \_\_\_\_\_ **-G90** 90 Degree Plastic Pool Grate
- \_\_\_\_\_ **-BZ** Bronze Decorative Grate
- \_\_\_\_\_ **-POG** Heel-Proof Polyethylene Grate
- \_\_\_\_\_ **-SOG** Stainless Steel Decorative Grate

\*Regularly Furnished Unless Otherwise Specified

REV. C	DATE: 07/19/06	C.N. NO. 109009
DWG. NO. 64442	PRODUCT NO. Z880	

ZURN INDUSTRIES, INC., FLO-THRU DIV., 2640 South Work Street, Falconer, NY 14733  
Phone: 716/665-1132, Fax: 716/665-1135, World Wide Web: www.zurn.com

In Canada: ZURN INDUSTRIES LIMITED, 3544 Nashua Drive, Mississauga, Ontario L4V1L2, Phone: 905/405-8272 Fax: 905/405-1292  
In UK: Zurn Industries Ltd, Riverside Rd, Pottington Business Park, Barnstaple, Devon EX31 1QN, Phone 01271-340350 Fax 01271-344660



120, 208, 240,  
277 and 480  
voltages



## Available in Sizes Ranging From 2-1/2 – 30 Gallon Tank-Type Models

### ▶ 1440 Watts thru 6000 Watts

Rheem-Ruud point-of-use electric commercial water heaters are designed to provide hot water at the consumption point, eliminating costly temperature loss in long piping runs. Well suited for a wide variety of applications, point-of-use heaters are small enough for installation in limited spaces under counters, mop sinks, cabinets, or any remote area where modest quantities of hot water are required. They are ideally suited for applications in retail stores, public restrooms, office washrooms, kitchen and mop or bar sinks.

### Construction Features:

- **Long life tank design** – proprietary steel formulation with a unique coat of high temperature porcelain enamel to maximize corrosion resistance resulting in a superior tank design. A patented R-Tech anode rod provides advanced technology; equalizing aggressive water action while prolonging the effective life of the anode rod and in turn the life of the tank.
- **Long life heating elements** – Our patented resistor elements are designed with a specially treated, double layer of magnesium oxide and copper to resist corrosion.
- **Efficient design** – Rigid polyurethane foam insulation provides superior insulating qualities resulting in reduced operating costs.
- **Optional wall mounting kit** – The wall mounting kit provides an easy way to mount the unit off the floor, out of the way for more useable floor space in a small area. Each kit is designed to be used on walls with 16" stud centers. All necessary parts are included in this easy to install kit. (Note: The 2-1/2 gallon model comes standard with a wall mounting kit.)
- **Automatic temperature control** – A surface mounted thermostat automatically cycles on and off to maintain the water temperature at a desired preset level.
- **Temperature limiting control** – Automatically and safely cuts off the power in the unlikely event that the water temperature exceeds 190°F.
- **Temperature and pressure relief valve** – AGA/ASME rated and factory installed.

### Certifications and Ratings:

- **Efficiency** – these models meet or exceed thermal efficiency and standby loss requirements of current ASHRAE standards. (Part of the Federally mandated Energy Policy Act (EPact)). Also exceeds energy efficiency codes of all states including California Energy Commission (CEC).
- **Safety and construction** – these products are design certified by Underwriters Laboratories (UL) to meet UL standard 174 as electric storage tank water heaters. All models are North Carolina Code compliant. **CERTIFIED FOR A 150 PSI MAXIMUM WORKING PRESSURE.**

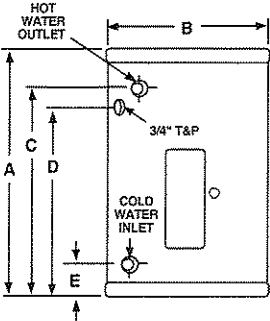
<b>DIMENSIONAL INFORMATION (All dimensions shown in English and Metric)</b>																
MODEL NUMBER	MIN WATTS	MAX WATTS	TANK CAPACITY		A		B		C		D		E		APPROXIMATE SHIPPING WEIGHT	
			GALLONS	LITERS	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	LBS.	KGS.
EGSP2	1,440	1,500	2.5	9	14	356	9-3/4	248	—	—	—	—	—	—	18	8
EGSP6	1,500	6,000	6	23	15-1/8	384	15-3/4	400	12-5/8	321	11-5/8	295	4-1/4	108	41	19
EGSP10	1,500	6,000	10	38	22-7/8	581	15-3/4	400	20-3/8	518	19-3/8	492	4-1/4	108	53	24
EGSP15	1,500	6,000	15	57	24-1/4	616	17-3/4	451	21-7/8	556	19-3/8	492	4-5/8	117	65	29
EGSP20	1,500	6,000	19.9	75	25-1/8	638	19-3/4	502	22-5/8	575	19-3/8	492	5-1/8	130	76	34
EGSP30	1,500	6,000	30	114	30	762	21-3/4	533	23	584	23	584	2-3/4	70	115	52
<b>Water Temperature Ratings:</b>			Thermostat Type: Surface Mounted				Minimum Temperature: 110°F (43.3°C)			Maximum Temperature: 170°F (76.7°C)			High Temperature Limit: 190°F (87.8°C)			

NOTE: Basic model numbers are listed. When ordering, specify electrical input and kW to determine specific model number.

**MODELS:**

- EGSP6
- EGSP10
- EGSP15
- EGSP20
- EGSP30

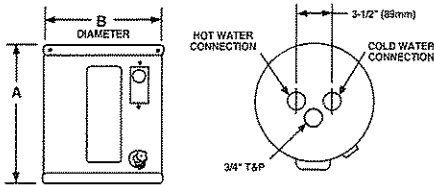
Water Connections  
3/4" NPT



**MODEL:**

- EGSP2

Water Connections  
1/2" NPT



**Recommended Specifications:**

Water heater(s) shall be model \_\_\_\_\_, manufactured by RHEEM-RUUD, having electrical input of \_\_\_\_\_ kW and a recovery rate of \_\_\_\_\_ GPH at a 100°F temperature rise. Water heater(s) shall have a storage capacity of \_\_\_\_\_ gallons. Water heater(s) shall have the UL seal of certification and be factory equipped with an AGA/ASME rated temperature and pressure relief valve. Tank(s) interior shall be coated with a high temperature porcelain enamel and furnished with an R-Tech resistored magnesium anode rod rigidly supported. Water heater(s) shall meet or exceed the energy factor requirements of ASHRAE. Tanks shall have a working pressure rating of 150 psi, and shall be completely assembled. Water heater(s) shall be equipped with a copper, resistored, "screw-in" type element. Tank shall be insulated with rigid polyurethane foam insulation. Water heater(s) shall be equipped with a surface mounted thermostat with an integral, manual reset, high limit control. Water heater(s) shall be covered by a three year limited warranty against tank leaks.

**Limited Warranty:**

This product features a three year limited warranty against tank leaks. Please refer to Commercial Warranty Information brochure for complete warranty information.

**PRODUCT AVAILABILITY**

ELEMENT WATTAGE	SINGLE PHASE OPERATION ONLY				
	120 V	208 V	240 V	277 V	480 V
1,440	Y**	NA	NA	NA	NA
1,500	Y	Y	Y**	N/A	N/A
2,000	Y	Y	Y	Y	Y
2,500	Y	Y	Y	NA	NA
3,000	Y	Y	Y	Y	Y
4,500	NA	Y	Y*	Y*	Y*
6,000	NA	Y	Y	Y	Y

\*Not available in EGSP6 & EGSP10  
\*\*EGSP2 available only in these configurations

**ELECTRICAL CHARACTERISTICS**

ELEMENT WATTAGE	SINGLE PHASE OPERATION ONLY - AMPS				
	120 V	208 V	240 V	277 V	480 V
1,440	12.0	NA	NA	NA	NA
1,500	12.5	7.2	6.3	N/A	N/A
2,000	16.7	9.6	8.3	7.2	4.2
2,500	20.8	12.0	10.4	NA	NA
3,000	25.0	14.4	12.5	10.8	6.3
4,500	NA	21.6	18.8	16.2	9.4
6,000	NA	28.8	25.0	21.7	12.5

All models employ 1 heating element resulting in a 2-wire outlet (single phase) electrical configuration.

**RECOVERY CAPACITIES**

Recovery in U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temperature Rises

ELEMENT WATTAGE	40°F (22°C)		60°F (33°C)		80°F (45°C)		100°F (56°C)		120°F (67°C)	
	GPH	LPH	GPH	LPH	GPH	LPH	GPH	LPH	GPH	LPH
1,440	15	55	10	37	7	28	6	22	5	18
1,500	15	58	10	38	8	29	6	23	5	19
2,000	20	77	14	51	10	38	8	31	7	26
2,500	25	96	17	64	13	48	10	38	8	32
3,000	30	115	20	77	15	58	12	46	10	38
4,500	46	173	30	115	23	86	18	69	15	58
6,000	61	230	41	153	30	115	24	92	20	77



**COMMERCIAL WATER HEATERS**

In keeping with its policy of continuous progress and product improvement, Rheem-Ruud reserves the right to make changes without notice.

Rheem Water Heating • 101 Bell Road, Montgomery, Alabama 36117-4305 • www.rheem.com

Rheem Canada Ltd./Ltée, 128 Barton Street West, Hamilton, Ontario L8N 3P3

# RECOMMENDED PRODUCT SPECIFICATION

CHARLOTTE  
PIPE AND FOUNDRY COMPANY

## Suggested Specification

**System:** PVC Schedule 40 Pressure Pipe and Fitting System

**Scope:** This specification covers PVC Schedule 40 pipe and fittings for pressure applications. This system is intended for pressure applications where the operating temperature will not exceed 140°F.

**Specification:** Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a Cell Class of 12454 as identified in ASTM D 1784.

PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785. PVC Schedule 40 fittings shall conform to ASTM D 2466. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer. All pipe and fittings shall be manufactured in the United States. Pipe and fittings shall conform to National Sanitation Foundation (NSF) Standard 61 or the health effects portion of NSF Standard 14.

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all local plumbing, building, and fire code requirements. Solvent cement joints shall be made in a two step process with primer manufactured for thermoplastic piping systems and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents not compatible with PVC compounds. Systems shall be hydrostatically tested after installation. Testing with compressed air or gas is not recommended.

### Referenced Standards:

→	ASTM D 1784	Rigid Vinyl Compounds
→	ASTM D 1785	PVC Plastic Pipe, Schedule 40
→	ASTM D 2466	PVC Plastic Fittings, Schedule 40
→	ASTM D 2564	Solvent Cements for PVC Pipe and Fittings
	NSF Standard 14	Plastic Piping Components and Related Materials
	NSF Standard 61	Drinking Water System Components - Health Effects

Note: Latest revision of each standard applies.

### Short Specification:

Pipe and fittings shall be manufactured from PVC compound with a cell class of 12454 per ASTM D 1784 and conform with National Sanitation Foundation (NSF) standards 14 and 61. Pipe shall be iron pipe size (IPS) conforming to ASTM D 1785. Fittings shall conform to ASTM D 2466.

All pipe and fittings to be produced by a single manufacturer and to be installed in accordance with manufacturer's recommendations and local code requirements. Solvent cements shall conform to ASTM D 2564, primer shall conform to ASTM F 656. The system to be manufactured by Charlotte Pipe and Foundry Company and is intended for pressure applications where the temperature will not exceed 140°F.

# RECOMMENDED PRODUCT SPECIFICATION

CHARLOTTE  
PIPE AND FOUNDRY COMPANY

GENERAL INFORMATION

## Suggested Specification

**System:** PVC Schedule 40 Solid Wall Pipe and PVC DWV Fitting System

**Scope:** This specification covers PVC Schedule 40 solid wall pipe and PVC DWV fittings used in sanitary drain, waste, and vent (DWV), sewer, and storm drainage applications. This system is intended for use in non-pressure applications where the operating temperature will not exceed 140°F.

**Specification:** Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a Cell Class of 12454 as identified in ASTM D 1784.

PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785 and ASTM D 2665. PVC DWV fittings shall conform to ASTM D 2665. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer. All pipe and fittings shall be manufactured in the United States. All systems shall utilize a separate waste and vent system. Pipe and fittings shall conform to National Sanitation Foundation Standard 14.

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all local plumbing, building, and fire code requirements. Solvent cement joints shall be made in a two step process with primer manufactured for thermoplastic piping systems and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents not compatible with PVC compounds. Systems shall be hydrostatically tested after installation. Testing with compressed air or gas is not recommended.

### Referenced Standards:

→	ASTM D 1784	Rigid Vinyl Compounds
→	ASTM D 1785	PVC Plastic Pipe, Schedule 40
→	ASTM D 2665	PVC Drain, Waste, and Vent Pipe & Fittings
→	ASTM D 2564	Solvent Cements for PVC Pipe and Fittings
	NSF Standard 14	Plastic Piping Components and Related Materials

Note: Latest revision of each standard applies.

### Short Specification:

Pipe and fittings shall be manufactured from PVC compound with a cell class of 12454 per ASTM D 1784 and conform with National Sanitation Foundation (NSF) standard 14. Pipe shall be iron pipe size (IPS) conforming to ASTM D 1785 and ASTM D 2665. Fittings shall conform to ASTM D 2665.

All pipe and fittings to be produced by a single manufacturer and to be installed in accordance with manufacturer's recommendations and local code requirements. Solvent cements shall conform to ASTM D 2564, primer shall conform to ASTM F 656. The system to be manufactured by Charlotte Pipe and Foundry Company and is intended for non-pressure drainage applications where the temperature will not exceed 140°F.

# PHYSICAL PROPERTIES OF ABS AND PVC MATERIALS

Plastics Technical Manual

PROPERTY	UNITS	ABS	ASTM NO.	PVC	ASTM NO.
Specific Gravity	g/cc	1.05	D 792	1.40	D 792
Tensile Strength (73°F) Minimum	Psi	4,500	D 638	7,000	D 638
Modulus of Elasticity in Tension (73°F) Minimum	Psi	240,000	D 638	400,000	D 638
Flexural Strength (73°F)	Psi	10,585	D 790	14,000	D 790
Izod Impact (notched at 73°F) Minimum	ft lb/ in.	6.00	D 256	0.65	D 256
Hardness (Durometer D)		70	D 2240	80 ± 3	D 2240
Hardness (Rockwell R)		100	D 785	110 - 120	D 785
Compressive Strength (73°F)	Psi	7,000	D 695	9,600	D 695
Hydrostatic Design Stress	Psi	N/A		2,000	D 1598
Coefficient of Linear Expansion	in./ in./ °F	5.5 x 10 <sup>-5</sup>	D 696	3.0 x 10 <sup>-5</sup>	D 696
Heat Distortion Temperature at 264 psi Minimum	degrees F	180	D 648	160	D 648
Coefficient of Thermal Conductivity	BTU/ hr/sq ft/ °F/ in.	1.1	C 177	1.2	C 177
Specific Heat	BTU/ °F/lb	0.35	D 2766	0.25	D 2766
Water Absorption (24 hrs at 73°F)	% weight gain	0.40	D 570	.05	D 570
Cell Classification - Pipe		42222	D 3965	12454	D 1784
Cell Classification - Fittings		32222	D 3965	12454	D 1784

Above data is based upon information provided by the raw material manufacturers. It should be used only as a recommendation and not as a guarantee of performance.

## ABS and PVC Standards

TYPE PIPE / FITTING	STANDARD SPECIFICATIONS	
	MATERIAL	DIMENSIONS
<b>ABS DWV</b>		
Schedule 40 DWV Foam Core Pipe	ASTM D 3965	ASTM F 628
Schedule 40 DWV Fittings	ASTM D 3965	ASTM D 2661
<b>PVC DWV</b>		
Schedule 40 DWV Pipe	ASTM D 1784	ASTM D 2665 & ASTM D 1785
Schedule 40 DWV Foam Core Pipe	ASTM D 4396	ASTM F 891
Schedule 40 DWV Fittings	ASTM D 1784	ASTM D 2665
<b>PVC Pressure</b>		
Schedule 40 Plain End Pipe	ASTM D 1784	ASTM D 1785
Schedule 40 Bell End Pipe	ASTM D 1784	ASTM D 1785
Schedule 40 Bell End Well Casing	ASTM D 1784	ASTM D 1785 & ASTM F 480
SDR 21 (PR 200) Bell End Pipe	ASTM D 1784	ASTM D 2241
SDR 26 (PR 160) Bell End Pipe	ASTM D 1784	ASTM D 2241
Schedule 40 Fittings	ASTM D 1784	ASTM D 2466
Schedule 80 Plain End Pipe	ASTM D 1784	ASTM D 1785
Schedule 80 Fittings	ASTM D 1784	ASTM D 2464 & ASTM D 2467

# OUTSIDE DIAMETER AND THICKNESS

CHARLOTTE  
PIPE AND FOUNDRY COMPANY

## PVC Pipe: Schedule 40

NSF

>> PVC Schedule 40 Pipe - Plain End

PVC SCHEDULE 40 (WHITE)		PLAIN END		PVC 1120	ASTM D 1785	
PART NO.	NOM. SIZE	UPC # 611942-	AVG. OD (IN.)	MIN. WALL (IN.)	MAX WORK PRESSURE AT 23° C OR 73° F	WT. PER 100 FT. (LBS.)
PVC 4005	1/2"x10'	06658	.840	.109	600 PSI	15.9
PVC 4005	1/2"x20'	03922	.840	.109	600 PSI	15.9
PVC 4007	3/4"x10'	06661	1.050	.113	480 PSI	21.1
PVC 4007	3/4"x20'	03925	1.050	.113	480 PSI	21.1
PVC 4010	1"x10'	06664	1.315	.133	450 PSI	31.3
PVC 4010	1"x20'	03928	1.315	.133	450 PSI	31.3
PVC 7100*	1 1/4"x10'	03945	1.660	.140	370 PSI	42.4
PVC 7100*	1 1/4"x20'	03946	1.660	.140	370 PSI	42.4
PVC 7112*	1 1/2"x10'	03947	1.900	.145	330 PSI	50.7
PVC 7112*	1 1/2"x20'	03948	1.900	.145	330 PSI	50.7
PVC 7200*	2"x10'	03949	2.375	.154	280 PSI	68.1
PVC 7200*	2"x20'	03950	2.375	.154	280 PSI	68.1
PVC 4025*	2 1/2"x20'	04205	2.875	.203	300 PSI	108.0
PVC 7300*	3"x10'	03951	3.500	.216	260 PSI	141.2
PVC 7300*	3"x20'	03952	3.500	.216	260 PSI	141.2
PVC 7400*	4"x10'	03953	4.500	.237	220 PSI	201.2
PVC 7400*	4"x20'	03954	4.500	.237	220 PSI	201.2
PVC 7500*	5"x20'	04837	5.563	.258	190 PSI	272.5
PVC 7600*	6"x10'	03955	6.625	.280	180 PSI	353.7
PVC 7600*	6"x20'	03956	6.625	.280	180 PSI	353.7
PVC 7800*	8"x20'	03958	8.625	.322	160 PSI	532.3
PVC 7910*	10"x20'	03959	10.750	.365	140 PSI	754.7
PVC 7912*	12"x20'	03961	12.750	.406	130 PSI	997.9
PVC 7914*	14"x20'	04862	14.000	.437	130 PSI	1180.1
PVC 7916*	16"x20'	04918	16.000	.500	130 PSI	1543.1

\* Dual marked ASTM D 1785 and ASTM D 2665.

NOTE: When ordering, please specify plain end or bell end.

NSF Listed. Meets All Requirements of ASTM D 1784 and ASTM D 1785.

PVC piping products are not recommended for use with compressed air or gases.

All Charlotte Pipe and Foundry Company Products are made in U.S.A.

You can't beat the system.®

# OUTSIDE DIAMETER AND THICKNESS

Plastics Technical Manual

## PVC Schedule 40 Pipe - Bell End\*

PVC SCHEDULE 40 (WHITE)			BELL END		PVC 1120	ASTM D 1785	
PART NO.	NOM. SIZE	UPC # 611942-	AVG. OD (IN.)	MIN. WALL (IN.)	MAX WORK PRESSURE AT 23° C OR 73° F	BELL DEPTH (IN.)	WT. PER 100 FT. (LBS.)
PVC 4005B**	1/2"x10'	04986	.840	.109	600 PSI	2.00	15.9
PVC 4005B**	1/2"x20'	03923	.840	.109	600 PSI	2.00	15.9
PVC 4007B**	3/4"x10'	04987	1.050	.113	480 PSI	2.25	21.1
PVC 4007B**	3/4"x20'	03926	1.050	.113	480 PSI	2.25	21.1
PVC 4010B**	1"x10'	04988	1.315	.133	450 PSI	2.50	31.3
PVC 4010B**	1"x20'	03929	1.315	.133	450 PSI	2.50	31.1
PVC 4012B§	1 1/4"x10'	04989	1.660	.140	370 PSI	2.75	42.4
PVC 4012B§	1 1/4"x20'	03930	1.660	.140	370 PSI	2.75	42.4
PVC 4015B§	1 1/2"x10'	04990	1.900	.145	330 PSI	3.00	50.7
PVC 4015B§	1 1/2"x20'	03931	1.900	.145	330 PSI	3.00	50.7
PVC 4020B†	2"x10'	04991	2.375	.154	280 PSI	4.00	69.2
PVC 4020B†	2"x20'	03932	2.375	.154	280 PSI	4.00	69.2
PVC 4025B‡	2 1/2"x10'	04992	2.875	.203	300 PSI	4.00	110.0
PVC 4025B‡	2 1/2"x20'	04206	2.875	.203	300 PSI	4.00	110.0
PVC 7300B§	3"x10'	04853	3.500	.216	260 PSI	4.00	145.1
PVC 4030B†	3"x20'	03933	3.500	.216	260 PSI	4.00	144.5
PVC 7400B§	4"x10'	04835	4.500	.237	220 PSI	4.00	207.9
PVC 9400B†	4"x20'	03964	4.500	.237	220 PSI	5.00	206.2
PVC 7600B§	6"x10'	04850	6.625	.280	180 PSI	6.50	371.4
PVC 9600B†	6"x20'	03965	6.625	.280	180 PSI	6.50	365.5
PVC 7800B†	8"x10'	09903	8.625	.322	160 PSI	7.00	556.9
PVC 9800B†	8"x20'	03967	8.625	.322	160 PSI	7.00	552.3
PVC 7910B†	10"x10'	00990	10.750	.365	140 PSI	9.00	791.9
PVC 7910B†	10"x20'	03960	10.750	.365	140 PSI	9.00	785.4
PVC 7912B†	12"x20'	03962	12.750	.406	130 PSI	10.00	1046.7
PVC 7914B†	14"x20'	04863	14.000	.437	130 PSI	10.00	1180.1
PVC 7916B†	16"x20'	04929	16.000	.500	130 PSI	10.00	1543.1

\* Bell dimensions meet either ASTM D 2672 or ASTM F 480, depending upon pipe diameter  
 \*\* ASTM D 1785

§ Dual Marked ASTM D 1785 & ASTM D 2665  
 † Triple Marked ASTM D 1785 & ASTM D 2665 & ASTM F 480  
 ‡ Dual Marked ASTM D 1785 & ASTM F 480

PVC piping products are not recommended for use with compressed air or gases.



# “SINGLE POINT”

## CODE COMPLIANT HANDWASHING HEATERS

Instant Comfort...Endless Savings

# ELECTRIC TANKLESS WATER HEATERS

9/06

### MODELS:

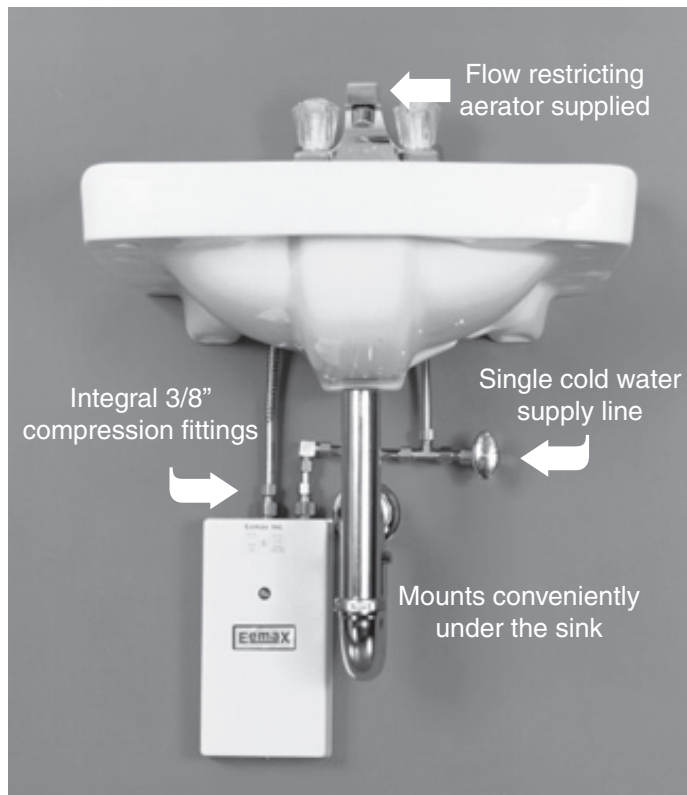
	Volts	kW	Amps
SP2412	120V	2.4kW	20A
SP3012	120V	3.0kW	25A
SP3512	120V	3.5kW	29A
SP3208	208V	3.0kW	14.4A
SP4208	208V	4.1kW	19.7A
SP35	240V	3.5kW	14.6A
SP48	240V	4.8kW	20A
SP55	240V	5.5kW	22.9A
SP3277	277V	3.0kW	10.8A
SP4277	277V	4.1kW	14.8A

### SPECIFICATION OPTIONS

- FC = Flex Connector braided-stainless steel water connections available. (EX176, EX177)  
Example: SP3512FC

### APPLICATIONS:

- Shopping Malls
- Office and Tenant Spaces
- Commercial Buildings (restaurants, etc.)
- Modular Buildings/Modular Offices
- Public Hand Washing
- Service Stations
- Schools
- Concessions Stands, Stadiums



Designed to comply with .5 GPM handwashing code target outlet temperature 105° - 110°.

**ADVANCED TECHNOLOGY • HIGHEST EFFICIENCY**  
**DESIGNED FOR DURABILITY**

**MADE IN USA**

### QUALITY FEATURES

- **On Demand Hot Water** - no delay.
- **Cut Energy Waste** - flow switch activates heater only on demand (no standby heat loss). **99% efficient**
- **Continuous Hot Water** - no storage capacity to run out.
- **Reduces Installation Cost** - no T & P relief valve needed (check local codes).
- **Easy Installation** - only one cold water line need be brought to lavatory - integral 3/8" compression fittings on top (no sweat connections). Mounts on wall at point-of use.
- **Integral Flow Restrictor** - Built in to ensure proper temperature rise. Complies with U.S. Federal regulations.
- **Faucet Aerator** - with excellent spray pattern supplied with unit.
- **Hands Free**, sensor and metering faucet compatible
- **Prevents Legionella Bacteria Growth**
- **Reduces Liming, Calcification and Sedimentation.**
- **Complies with Handicap Requirements**
- **Ni Chrome Element** - a unique, patented flow path ensures optimum heat transfer and extended element life.
- **Compact Size** - dimensions 10.75" x 5.25" x 2.875"; weight 3 lbs.
- **Field Serviceable Element** - replaceable cartridge element (1 year warranty).
- **Warranty** - Full Factory Warranty - Heaters are guaranteed against failure due to leaks of "Heater Body/Element Assembly" for a period of FIVE YEARS.
- **High Temperature Limit Switch** - protects against element burn out, with reset button.

## SUGGESTED SPECIFICATION

Tankless Water Heater shall be an Eemax Model \_\_\_\_\_ with \_\_\_\_\_ vac, \_\_\_\_\_ to heat 0.5 GPM

@ a temperature rise of \_\_\_\_\_ degrees F. Unit shall have \_\_\_\_\_

amperage  
ABS-UL 94Vo rated cover. Element shall be replaceable cartridge insert. Unit shall have a replaceable filter in the inlet connector and a flow regulator in the outlet connector. Element shall be iron free, nickel chrome material. Heater shall be fitted with 3/8" compression nuts and sleeves to eliminate need for soldering. Heater shall be installed upright with water connections on top only. Hot water storage tanks prohibited. Unit shall be Eemax or approved equal.

NOTE: Refer to rating chart for product information.

NOTE: Flow Activated 0.5 GPM

OPERATING PRESSURE	
Min.	Max.
25 PSI	150 PSI

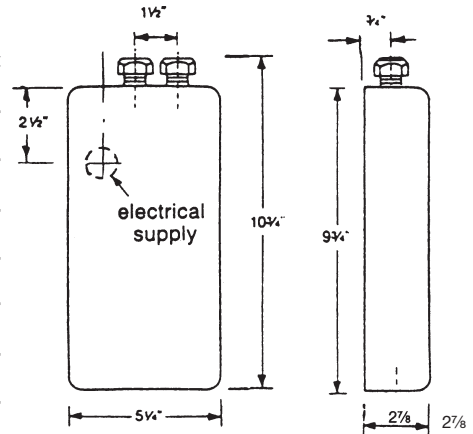
### OPTIONAL FLEX CONNECTOR ACCESSORY (FC)

Stainless steel braid reinforced flexible water connector.

- 3/8" C x 1/2" FIP - 16" faucet supply (EX176)
- or
- 3/8" C x 3/8" C - 16" faucet supply (EX177)

## RATINGS OF SINGLE POINT UNITS { Cold water feed only }

MODEL	VOLTS	kW	AMPS	RISE AT 0.5 GPM	RECOMMENDED WIRE SIZE
SP2412	120V	2.4kW	20A	33°	10AWG
SP3012	120V	3.0kW	25A	41°	10AWG
SP3512	120V	3.5kW	29A	48°	10AWG
SP3208	208V	3.0kW	14.4A	41°	14AWG
SP4208	208V	4.1kW	19.7A	56°	12AWG
SP35	240V	3.5kW	14.6A	48°	14AWG
SP48	240V	4.8kW	20A	65°	12AWG
SP55	240V	5.5kW	22.9A	75°	10AWG
SP3277	277V	3.0kW	10.8A	40°	14AWG
SP4277	277V	4.1kW	14.8A	56°	14AWG



### SPECIFICATIONS:

Dimensions: 10.75" x 5.25" x 2.875"

Weight: 3 lbs.

Materials:

Cover: ABS UL rated 94Vo.

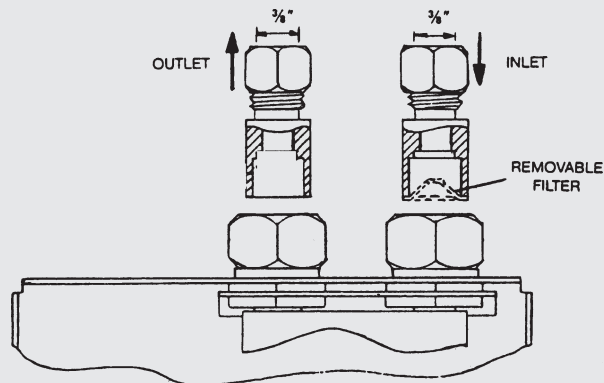
Color: White

Element: Replaceable cartridge insert

Pipe-Fittings: 3/8" compression at top of unit

UL Listed: E86887 (M)

U.S. Patent #'s: 4,762,980 and 4,960,976



### EEMAX SUBMITTAL

Engineer/Architect: \_\_\_\_\_

Job Name/Customer: \_\_\_\_\_

Location: \_\_\_\_\_

Contractor: \_\_\_\_\_

Representative: \_\_\_\_\_

HEATER SPECIFICATIONS:

Option	Quantity	kW	Voltage	AMPS	GPM
Single Point Model # SP _____					

### SPECIAL DESIGN SERVICE

INQUIRIES FOR UNITS FOR UNIQUE APPLICATIONS ARE WELCOME. CALL OUR TECHNICAL SERVICE DEPT. 1-800-543-6163

# Eemax® Inc.

353 Christian Street, Oxford, CT 06478

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FAX: (203) 267-7975

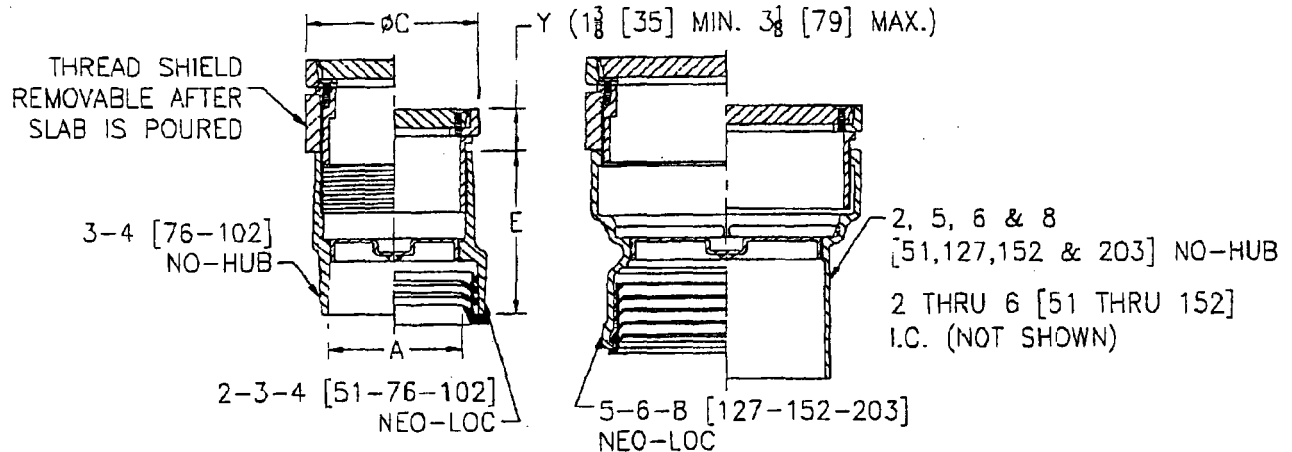


# Z1400 "LEVEL-TROL" ADJUSTABLE FLOOR CLEANOUT

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



**ENGINEERING SPECIFICATION: ZURN Z1400**

"Level-Trol" Adjustable floor cleanout, Dura-Coated cast iron body, with gas and watertight ABS tapered thread plug, and round scoriated secured top (Specify finish Z, ZB, ZN, ZS) adjustable to finished floor.

**OPTIONS (Check/specify appropriate options)**

Dimension In Inches			Approx. Wt. Lbs. [kg.]
A-Pipe Size	C	E	
<b>Inside Caulk</b>			
2 [51]	6 1/8 [156]	6 7/8 [175]	13.8 [6.3]
3 [76]	6 1/8 [156]	6 7/8 [175]	14 [6.4]
4 [102]	7 1/4 [184]	6 7/8 [175]	18.3 [8.3]
5 [127]	8 1/4 [210]	6 7/8 [175]	22.6 [10.3]
6 [152]	9 1/4 [235]	6 7/8 [175]	32.2 [14.6]
<b>No-Hub</b>			
2 [51]	4 1/8 [105]	7 1/2 [191]	7 [3]
3 [76]	4 1/8 [105]	5 3/8 [137]	7.7 [3.5]
4 [102]	5 1/8 [130]	5 3/8 [137]	10.3 [4.7]
5 [127]	7 1/4 [184]	7 1/2 [191]	17.6 [8]
6 [152]	8 1/4 [210]	7 1/2 [191]	22.2 [10.1]
8 [203]	9 1/4 [235]	7 1/2 [191]	29.9 [13.6]
<b>Neo-Loc</b>			
2 [51]	4 1/8 [105]	5 3/8 [137]	7.9 [3.6]
3 [76]	5 1/8 [130]	5 3/8 [137]	10.6 [4.8]
4 [102]	5 1/8 [130]	5 3/8 [137]	11.9 [5.4]
5 [127]	7 1/4 [184]	6 1/2 [165]	18.7 [8.5]
6 [152]	8 1/4 [210]	6 1/2 [165]	21.9 [9.9]
8 [203]	9 1/4 [235]	6 1/2 [165]	23.5 [10.7]

**PREFIXES**

- Z Dura Coated Cast Iron\*
- ZB D.C.C.I. w/ Polished Bronze Top (Deduct 1/2 [13] from 'Y' Dim.)
- ZN D.C.C.I. w/ Polished Nickel Bronze Top (Deduct 1/2 [13] from 'Y' Dim.)
- ZS D.C.C.I. w/ Polished Stainless Steel Top

**SUFFIXES**

- AR Acid Resisting Epoxy Coated Finish
- BP Bronze Plug
- CF Carpet Flange Cover (ZB and ZN only)
- CM Carpet Marker
- DC Duresist Cover
- DX Round ZB or ZN Top with Dex-o-tex Flange (2 thru 4 [51 thru 102] Sizes only)
- G Galvanized Cast Iron
- HD Heavy-Duty Top (Add 1/8 [3] to 'Y' Dim.) (ZB and ZN only)
- SG Solid Gasketed Cover
- SM Special Marking Stamped on Top
- T Square Top
- TX Square Top Recessed for 1/8 [3] Tile (ZB and ZN only)
- VP Vandal-Proof Screws
- X Round Top Recessed for 1/8 [3] Tile (ZB or ZN only)
- Z Round Top Recessed for 1 1/4 [32] Terrazzo (ZB or ZN only)

**PIPE SIZE**

- 2 thru 6 [51 thru 152]
- 2 thru 6-8 [51 thru 152-203]
- 2 thru 6-8 [51 thru 152-203]

(Specify size/type) **OUTLET**

- IC Inside Caulk
- NH No-Hub
- NL Neo-Loc

**'E' BODY HT. DIM.**

- See Chart
- See Chart
- See Chart

REV. K DATE: 10/19/05 C.N. NO. 93985

DWG. NO. 58757 PRODUCT NO. Z1400

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

ZURN INDUSTRIES, INC. • SPECIFICATION DRAINAGE OPERATION • 1801 Pittsburgh Ave. • Erie, PA 16514

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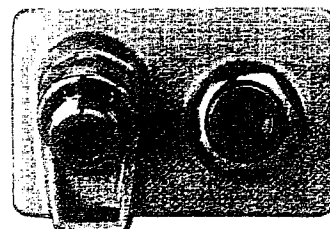
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WOODFORD



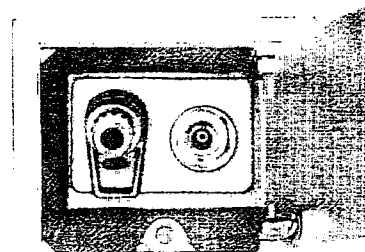
# Anti-Siphon Freezeless Wall Hydrants Model 65/B65

The Model 65 and B65 are automatic draining, freezeless wall hydrants with anti-siphon vacuum breakers. The Model B65 is enclosed in a flush mounted wall box. Both models are designed to blend in with modern architecture for installation on restaurants, schools, office buildings, churches, apartments, motels, stores, shopping centers and industrial buildings.



MODEL 65

Exterior Finish:  
Standard - Chrome (CH)  
Optional - Brass (BR) Polished Brass (PB)



MODEL B65

Exterior Finish: Box & Door  
Standard - Chrome (CH)  
Optional - Brass (BR) Polished Brass (PB)  
Other Options: Anodized or Powder Coated Aluminum Box

**SPECIFICATIONS:**

**MODEL 65/B65** – Approved under ASSE Standard 1019-B and listed by IAPMO®. Meets Government Specification WW-P-541b Type 205.

**VACUUM BREAKER – ANTI-SIPHON** - NIDEL® Model 34HA with 3/4 inch male hose thread, approved under ASSE Standard 1011, Canadian Standards Association and listed by IAPMO®.

**VALVE SEAT** – Permanent type brass valve body with hemispherical seating surface.

**VALVE** – One piece valve plunger accurately controls both flow and drainage with a minimum number of turns and without need for adjustments.

**DRAIN** – Under nozzle away from hands of operator and with a lip to divert water away from building.

**CASING** – Copper tubes.

**NO LEAD SOLDER** - All solder joints.

**STEM** – Hardened stainless steel stem resists damage.

**TEE KEY** – Loose key operates hydrant.

**OPERATING ROD** – 3/8" solid brass operating rod.

**INLETS** – As shown.

**WALL CLAMP** – Furnished on all 65 series except close coupled.

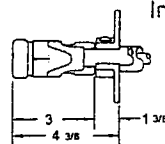
**MAX PRESSURE** – 125 p.s.i.

**MAX TEMPERATURE** - 120° F

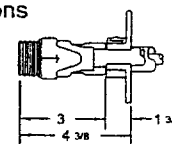
**Specify as follows:**

Wall hydrant shall be Woodford Model (65-exposed type) or (B65-concealed box type), automatic draining with anti-siphon vacuum breaker. ASSE Standard 1019-B approved. 3/4" inlet and outlet (specify type of inlet). Hardened stainless steel operating stem and one-piece valve plunger to control both flow and drain functions. Exterior finish to be Chrome Plated (options: Polished Brass or Rough Brass). Loose tee key to be furnished with each hydrant. Wall thickness to be \_\_\_\_\_ inches.

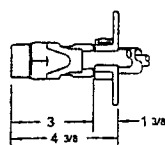
**Inlet Descriptions**



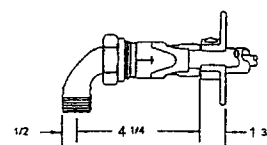
P Inlet  
3/4" FEMALE  
PIPE THREAD



P1 Inlet  
1" MALE  
PIPE THREAD



C Inlet  
3/4" COPPER  
WATER TUBE



EP Inlet  
UNION ELBOW  
WITH 3/4" MALE  
PIPE THREAD

VALVES - freezeless

15P

09 75

WOODFORD MFG. CO.

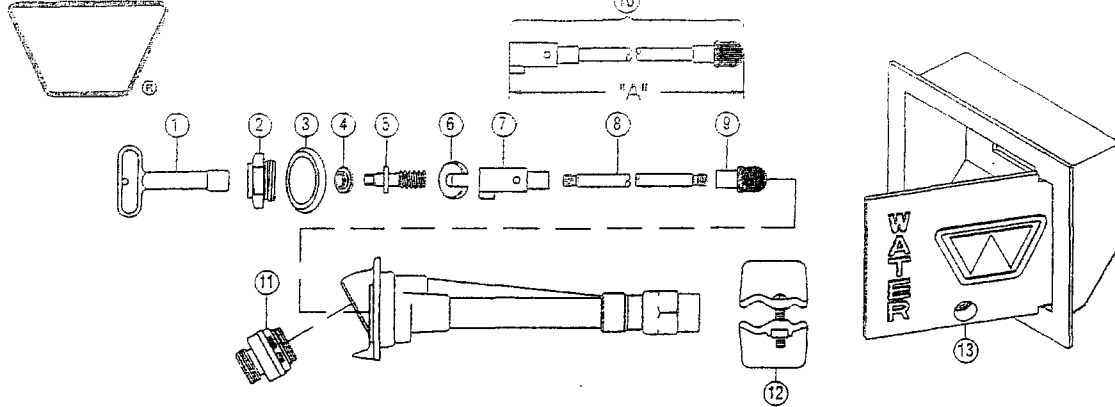
WOODFORD MFG. CO.

09 75

15P

VALVES

WOODFORD



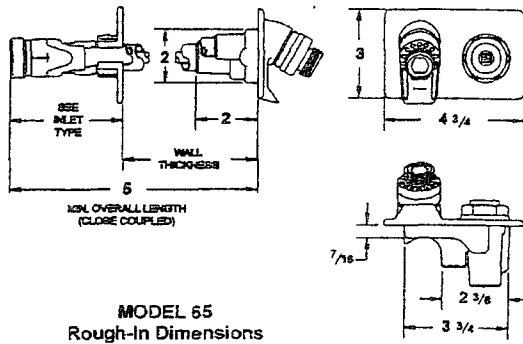
**MODEL 65/B65 PARTS LIST**

ITEM	PART #	DESCRIPTION
1	50009	Tee Key
	50010	Long Tee Key (Box Models)
2	50264	Head Nut - chrome
	50265	Head Nut - brass
3	50583	I.D. RING
4	50252	Stem Washer
5	55062	Stem Screw
6	50251	"C" washer
7	51014	Yoke Nut
8		Operating Rod (Sold With Item 10 Only)
9	50250	Plunger
10	554XX	Operating Rod Assembly (Includes Items 7,8,9) (Select required assembled length from table below)
11	55058	Vacuum Breaker - chrome
	55057	Vacuum Breaker - brass
12	55063	Wall Clamp Assembly
13	55070	Box/Door Assembly - brass
	55071	Box/Door Assembly - polished brass
	55072	Box/Door Assembly - chrome
	55431	Box/Door Assembly - Anodized Aluminum
	55432	Box/Door Assembly - Powder Coated Aluminum

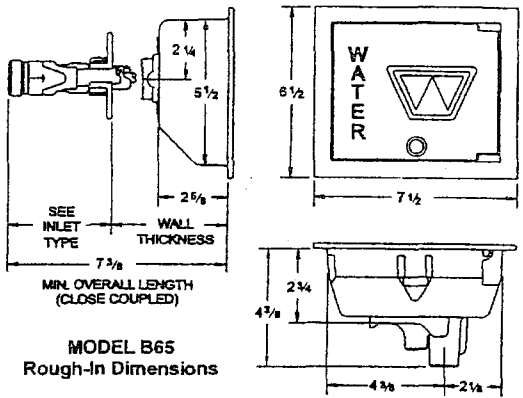
RK-65 Chrome Repair Kit (Includes Items 1-7 & 9)

Operating Rod Assy. "A"			
Wall Thickness		Length	Part No.
65	B65		
CC	CC	3 1/2"	55401
N/A	4	4 1/2"	55402
4	6	6 1/2"	55404
6	8	8 1/2"	55406
8	10	10 1/2"	55408
10	12	12 1/2"	55410
12	14	14 1/2"	55412
14	16	16 1/2"	55414
16	18	18 1/2"	55416
18	20	20 1/2"	55418
20	22	22 1/2"	55420
22	24	24 1/2"	55422
24	N/A	26 1/2"	55424

Manufactured under one or more of the following patents:  
 U.S. Patents:  
 3,414,001  
 4,178,956  
 4,316,481  
 4,532,954  
 D216,790  
 D216,791  
 D277,365  
 D277,366  
 Canada Patents:  
 852,529  
 865,995  
 1,146,438



**MODEL 65**  
Rough-In Dimensions



**MODEL B65**  
Rough-In Dimensions

Wall Thickness (In)	CC	4	6	8	10	12	14	16	18	20	22	24
Overall Length*	5	8	10	12	14	16	18	20	22	24	26	28
Shipping Wt. (Lbs)**	3.8	4.4	4.8	5.2	5.5	6	6.4	6.8	7.2	7.6	8	8.4

\*\* Add 7.4 Lbs for brass box models.  
 \*\* Add 2.5 Lbs for Aluminum box models.  
 \*Add 3/8" for all box hydrants  
 except CC units add 2 3/8".

NOTE: Close Coupled Models are not recommended for use in freezing climates and cannot use wall clamp

**WOODFORD MANUFACTURING COMPANY**

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 To view our complete product line visit: [www.woodfordmfg.com](http://www.woodfordmfg.com)

FOR NON-FREEZING AREAS ONLY

WOODFORD

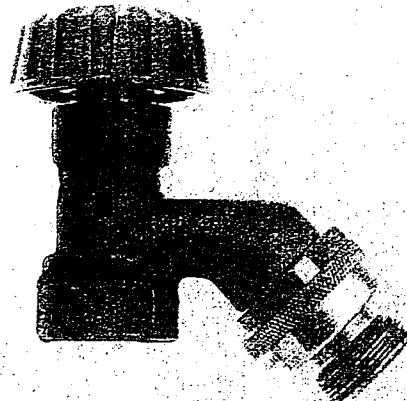
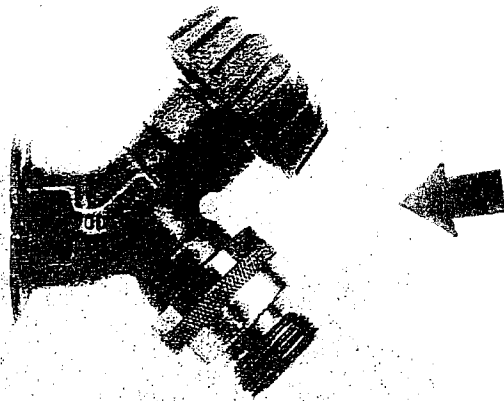


For maximum protection, vacuum breaker replacement every three to five years is strongly recommended.

## Anti-Contamination Wall and Lawn Faucets

WALL FAUCET MODEL 24

LAWN FAUCET MODEL Y24



**24P - 1/2**

INLET - 1/2" FPT

INLET - 3/4" FPT

**24P - 3/4**

**24CP**

INLET - 1/2" COPPER  
TUBE INSIDE

1/2" MPT  
OUTSIDE

**24C**

INLET - 1/2" COPPER  
TUBE INSIDE

3/4" COPPER  
COUPLING OUTSIDE

**Y24**

INLET - 3/4" NPT  
FEMALE THREAD

Model 24 is an anti-siphon vacuum breaker protected wall faucet for use in mild climate areas on homes, service stations, churches, motels, drive-in restaurants, etc.

Model Y24 is an anti-siphon vacuum breaker protected lawn faucet for use in garden, lawn and other water systems in mild climate areas.

**SPECIFICATIONS:** 24P-1/2, 24P-3/4, 24CP, 24C and Y24

**ANTI-SIPHON VACUUM BREAKER** — NIDEL® Model 34HF with 3/4 inch male hose thread, approved under ASSE Standard 1011, Canadian Standards Association, listed by IAPMO® and accepted by U.S. Department of Health.

**EXTERIOR FINISH** — Brass. Optional polished chrome, polished brass or chrome plated casting with chrome plated vacuum breaker.

**OPERATING HANDLE** — Wheel handle. Polycarbonate. Optional loose tee key. Polished chrome standard loose tee key. Optional wheel handle.

**TAMPER PROOF LOCK SHIELD**

**BRASS CONSTRUCTION** — Adjustable packing nut with deep stem guard. Teflon impregnated packing and standard "O" size washer.

**SHIPPING WEIGHT** — 10 lbs. (approximate weight per master carton of ten units.)

*When ordering specify model number, inlet and finish.*

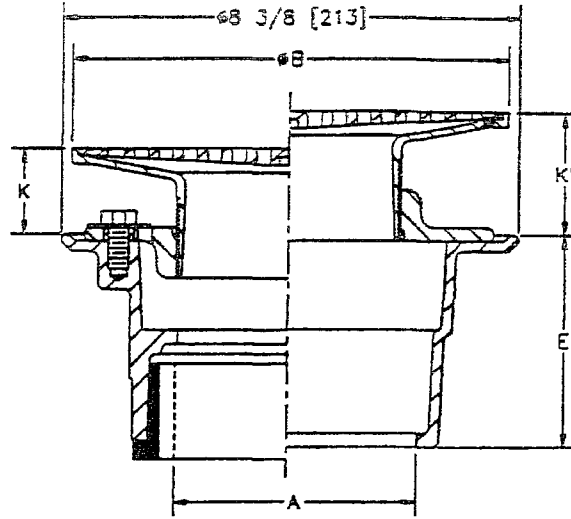
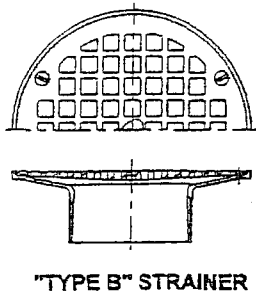


Z-415  
BODY ASSEMBLY WITH  
"TYPE B" STRAINER

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (Inches and [ mm ]) are Subject to Manufacturing Tolerances and Changes Without Notice



Dimensions in Inches						Approx. Wt. Lbs. [kg]	Strainer Open Area Sq. In. [cm <sup>2</sup> ]
A - Pipe Size	B Strainer Dia.	K		K'			
		Min.	Max.	Min.	Max.		
2-3 [50-75]	5 [127]	1/2 [13]	1 5/8 [41]	1 3/8 [35]	2 3/8 [60]	11 [5]	8 [52]
2-3-4 [50-75-100]	6 [152]	3/4 [19]	1 3/4 [44]	1 5/8 [41]	2 3/4 [70]	13 [6]	9 [58]
2-3-4 [50-75-100]	7 [178]	1 [25]	2 1/4 [57]	2 [51]	3 1/8 [79]	14 [6]	12 [77]
3-4 [75-100]	8 [203]	1 1/8 [29]	2 1/4 [57]	2 [51]	3 1/8 [79]	16 [7]	18 [116]
6 [150]	8 [203]	1 1/8 [29]	2 1/4 [57]	2 [51]	3 1/8 [79]	18 [8]	18 [116]
6 [150]	10 [254]	1 5/8 [41]	2 5/8 [67]	2 5/8 [67]	3 1/2 [89]	22 [10]	26 [168]

**ENGINEERING SPECIFICATION:** ZURN ZN-415 Floor and shower drain, Dura-Coated cast iron body with bottom outlet, combination invertible membrane clamp and adjustable collar with "TYPE B" polished nickel bronze strainer.

**OPTIONS** (Check/specify appropriate options)

PIPE SIZE	(Specify size/type) OUTLET	'E' BODY HT. DIM.
2 thru 4 [50 thru 100]	___ IC Inside Caulk	3 7/8 [98]
2 [50]	___ IP Threaded	2 3/8 [60]
3 [75]	___ IP Threaded	2 5/8 [67]
4 [100]	___ IP Threaded	2 7/8 [73]
6 [150]	___ IP Threaded	2 3/4 [70]
2 thru 4 [50 thru 100]	___ NH No-Hub	3 7/8 [98]
2 thru 4 [50 thru 100]	___ NL Neo-Loc	4 5/8 [117]

**PREFIXES**

- \_\_\_ ZB- D.C.C.I. Body Assembly w/Polished Bronze Top
- \_\_\_ ZN- D.C.C.I. Body Assembly w/Polished Nickel Bronze Top\*
- \_\_\_ ZS- D.C.C.I. Body Assembly w/6 [152] Dia. Stainless Steel Top

**SUFFIXES**

- |  |   |
|--|---|
| ___ -AR Acid Resisting Epoxy Coated Cast Iron                | ___ VP Vandal Proof Secured Top                             |
| ___ -G Galvanized Cast Iron                                  | ___ -Y Sediment Bucket                                      |
| ___ -HD Heavy Duty Grate                                     | ___ -90 90° Threaded Side Outlet Body (2 [50], 3 [75] Only) |
| ___ -P Trap Primer Connection (Specify 1/2 [13] or 3/4 [19]) |   |
| ___ -U 3 [76] High Extension Adapter                         |   |
| ___ -V Backwater Valve                                       |   |

REV. DATE: 03/17/95 C.N. NO. 71067

DWG. NO. 58789 PRODUCT NO. Z-415-B

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

ZURN INDUSTRIES, INC. • HYDROMECHANICS DIV., • 1801 Pittsburgh Ave. • Erie, PA 16514 • Phone: 814/455-0921 Fax: 814/454-7929  
In Canada: ZURN INDUSTRIES LIMITED • 6540 Gottardo Court • Mississauga, Ontario L5T 2A2 • Phone: 905/795-8844 Fax: 905/795-8850

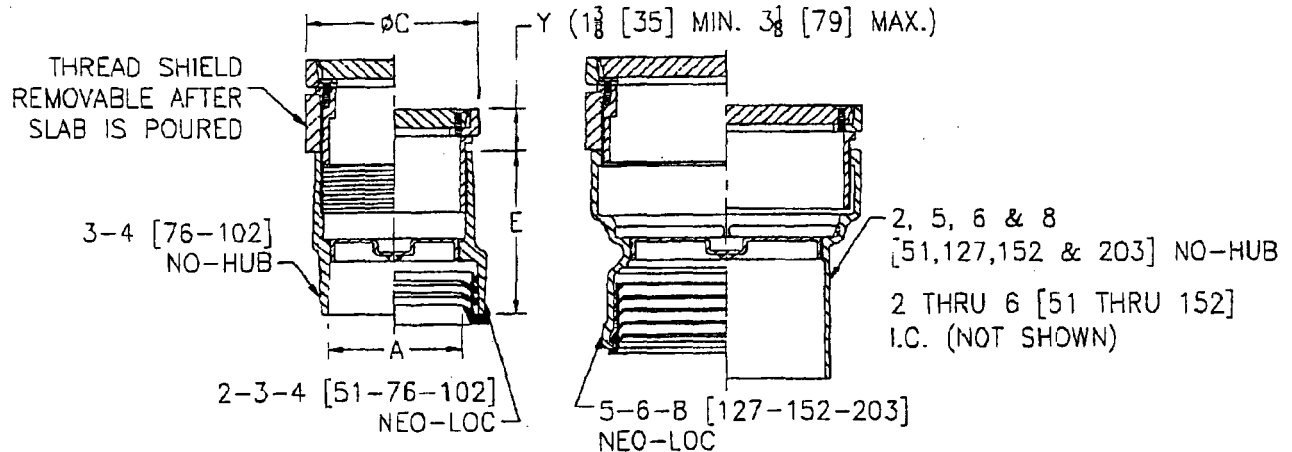


# Z1400 "LEVEL-TROL" ADJUSTABLE FLOOR CLEANOUT

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



**ENGINEERING SPECIFICATION: ZURN Z1400**

"Level-Trol" Adjustable floor cleanout, Dura-Coated cast iron body, with gas and watertight ABS tapered thread plug, and round scoriated secured top (Specify finish Z, ZB, ZN, ZS) adjustable to finished floor.

**OPTIONS (Check/specify appropriate options)**

Dimension In Inches			Approx. Wt. Lbs. [kg.]
A-Pipe Size	C	E	
<b>Inside Caulk</b>			
2 [51]	6 1/8 [156]	6 7/8 [175]	13.8 [6.3]
3 [76]	6 1/8 [156]	6 7/8 [175]	14 [6.4]
4 [102]	7 1/4 [184]	6 7/8 [175]	18.3 [8.3]
5 [127]	8 1/4 [210]	6 7/8 [175]	22.6 [10.3]
6 [152]	9 1/4 [235]	6 7/8 [175]	32.2 [14.6]
<b>No-Hub</b>			
2 [51]	4 1/8 [105]	7 1/2 [191]	7 [3]
3 [76]	4 1/8 [105]	5 3/8 [137]	7.7 [3.5]
4 [102]	5 1/8 [130]	5 3/8 [137]	10.3 [4.7]
5 [127]	7 1/4 [184]	7 1/2 [191]	17.6 [8]
6 [152]	8 1/4 [210]	7 1/2 [191]	22.2 [10.1]
8 [203]	9 1/4 [235]	7 1/2 [191]	29.9 [13.6]
<b>Neo-Loc</b>			
2 [51]	4 1/8 [105]	5 3/8 [137]	7.9 [3.6]
3 [76]	5 1/8 [130]	5 3/8 [137]	10.6 [4.8]
4 [102]	5 1/8 [130]	5 3/8 [137]	11.9 [5.4]
5 [127]	7 1/4 [184]	6 1/2 [165]	18.7 [8.5]
6 [152]	8 1/4 [210]	6 1/2 [165]	21.9 [9.9]
8 [203]	9 1/4 [235]	6 1/2 [165]	23.5 [10.7]

**PREFIXES**

- Z Dura Coated Cast Iron\*
- ZB D.C.C.I. w/ Polished Bronze Top (Deduct 1/2 [13] from 'Y' Dim.)
- ZN D.C.C.I. w/ Polished Nickel Bronze Top (Deduct 1/2 [13] from 'Y' Dim.)
- ZS D.C.C.I. w/ Polished Stainless Steel Top

**SUFFIXES**

- AR Acid Resisting Epoxy Coated Finish
- BP Bronze Plug
- CF Carpet Flange Cover (ZB and ZN only)
- CM Carpet Marker
- DC Duresist Cover
- DX Round ZB or ZN Top with Dex-o-tex Flange (2 thru 4 [51 thru 102] Sizes only)
- G Galvanized Cast Iron
- HD Heavy-Duty Top (Add 1/8 [3] to 'Y' Dim.) (ZB and ZN only)
- SG Solid Gasketed Cover
- SM Special Marking Stamped on Top
- T Square Top
- TX Square Top Recessed for 1/8 [3] Tile (ZB and ZN only)
- VP Vandal-Proof Screws
- X Round Top Recessed for 1/8 [3] Tile (ZB or ZN only)
- Z Round Top Recessed for 1 1/4 [32] Terrazzo (ZB or ZN only)

**PIPE SIZE**

- 2 thru 6 [51 thru 152]
- 2 thru 6-8 [51 thru 152-203]
- 2 thru 6-8 [51 thru 152-203]

**(Specify size/type) OUTLET**

- IC Inside Caulk
- NH No-Hub
- NL Neo-Loc

**'E' BODY HT. DIM.**

- See Chart
- See Chart
- See Chart

REV. K DATE: 10/19/05 C.N. NO. 93985

DWG. NO. 58757 PRODUCT NO. Z1400

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In Canada: ZURN INDUSTRIES LIMITED • 3544 Nashua Drive • Mississauga, Ontario L4V1L2 • Phone: 905405-8272 Fax: 905405-1292

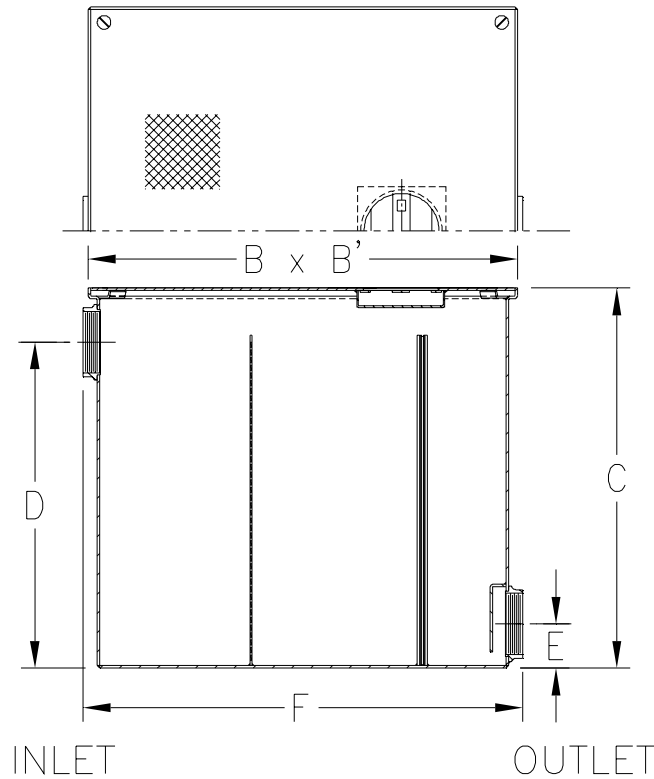


# Z1185 LINT INTERCEPTOR

SPECIFICATION SHEET

TAG \_\_\_\_\_

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice



Size No. of Machines	Inlet/Outlet Size**	Flow Rate G.P.M. [L]	Approx. Wt. Lbs. [kg]	Dimensions In Inches					
				B	B'	C	D	E	F
3	2 [51]	30 [113]	93 [42]	17 [432]	17 [432]	16 1/2 [419]	13 1/2 [343]	3 1/4 [82]	17 1/4 [438]
7	3 [76]	70 [265]	155 [70]	25 [635]	25 [635]	20 [508]	17 [432]	3 1/4 [82]	25 1/2 [648]
10	4 [102]	100 [378]	271 [123]	33 [838]	33 [838]	28 [711]	25 [635]	4 [102]	34 [864]
20	4 [102]	200 [756]	404 [183]	40 [1016]	40 [1016]	35 [889]	32 [813]	4 [102]	41 [1041]
30	6 [152]	300 [1134]	654 [297]	45 [1143]	45 [1143]	40 [1016]	36 [914]	5 [127]	46 [1168]
40	6 [152]	400 [1512]	723 [328]	48 [1219]	48 [1219]	43 [1092]	39 [991]	5 [127]	49 [1245]
50	6 [152]	500 [1890]	911 [414]	52 [1321]	52 [1321]	47 [1194]	43 [1092]	5 [127]	53 [1346]

**ENGINEERING SPECIFICATION:** ZURN Z1185 Acid Resistant Coated interior and exterior fabricated steel lint interceptor, non-skid secured cover, with stainless lint intercepting secondary screen assembly and permanent primary straining baffle. Regularly furnished with high inlet and low outlet.

**OPTIONS** (Check/specify appropriate options)

**PREFIXES**

\_\_\_\_\_ Z Acid Resistant Coated Fabricated Steel\*

**SUFFIXES**

\_\_\_\_\_ -E Acid Resistant Coated interior and exterior fabricated steel extension section  
(Specify 'C' dimension required for recessed installation).

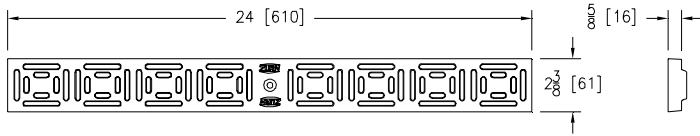
\_\_\_\_\_ -RS Stainless Steel Screen Replacement Assembly

<b>REV. D</b>	<b>DATE: 1/24/07</b>	<b>C.N. NO. 96102</b>
<b>DWG. NO. 58915</b>	<b>PRODUCT NO. Z1185</b>	

\*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

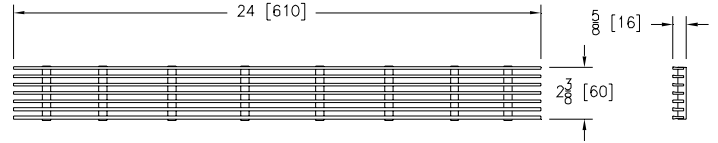


# Z880 2-3/8" WIDE GRATES



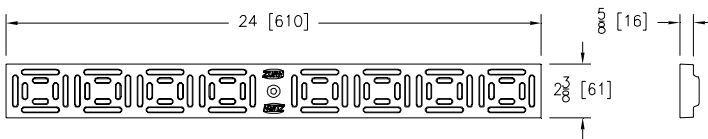
Please Check	Item No.
✓	1

AOG- Aluminum Decorative		
Material : Aluminum		
DIN Rating : Class A		
Weight: 1.12 # per ft.		
Open Area: 6.14 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No



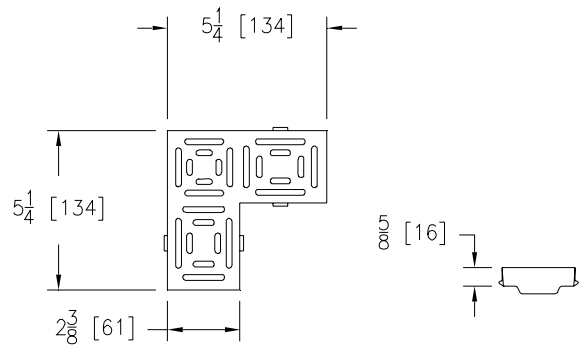
Please Check	Item No.
✓	2

AWG- Aluminum Wire		
Material : Aluminum		
DIN Rating : Class A		
Weight: .80 # per ft.		
Open Area: 15.00 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No



Please Check	Item No.
✓	3

BZ- Bronze Decorative		
Material : Bronze		
DIN Rating : Class A		
Weight: 3.00 # per ft.		
Open Area: 6.14 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No

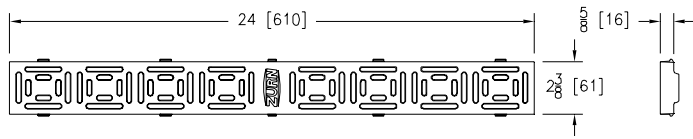


Please Check	Item No.
✓	4

G90- 90-Degree Plastic		
Material : Bronze		
DIN Rating : Class A		
Weight: .50 # per ft.		
Open Area: 10.22 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No

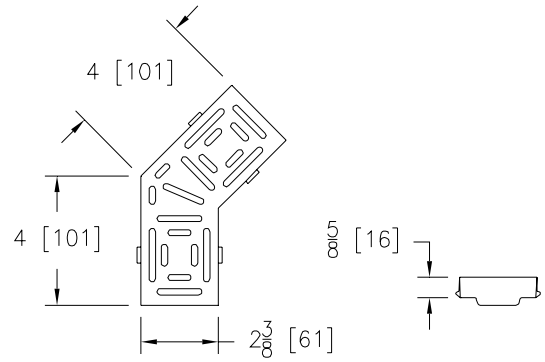


# Z880 2-3/8" WIDE GRATES



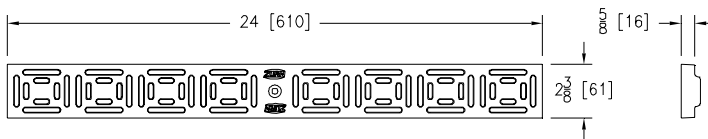
Please Check	Item No.
✓	5

POG- Heelproof Polyethylene Decorative		
Material : Polyethylene Plastic		
DIN Rating : Class A		
Weight: .50 # per ft.		
Open Area: 6.14 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No



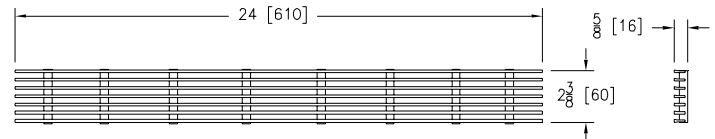
Please Check	Item No.
✓	6

S45- 45-Degree Plastic		
Material : Plastic		
DIN Rating : Class A		
Weight: .30 # per ft.		
Open Area: 5.28 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No



Please Check	Item No.
✓	7

SOG- Stainless Steel Decorative		
Material : Stainless Steel		
DIN Rating : Class A		
Weight: 2.75 # per ft.		
Open Area: 6.14 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No



Please Check	Item No.
✓	8

SWG- Stainless Steel Wire		
Material : Aluminum		
DIN Rating : Class A		
Weight: 1.30 # per ft.		
Open Area: 15.00 sq. in. per ft.		
ANSI Rating: Light Duty		
Application: Decorative Heelproof		
Slot Width/Hole Size: 0.25"		
ADA	H-20	FAA
Yes	No	No

# RECOMMENDED PRODUCT SPECIFICATIONS

CHARLOTTE  
PIPE AND FOUNDRY COMPANY

## SUGGESTED SPECIFICATION

**System:** Hubless Cast Iron Soil Pipe and Fittings

**Scope:** This specification covers hubless Cast Iron pipe, fittings, and couplings used in sanitary drain, waste, and vent (DWV), sewer, and storm drainage applications. This system is intended for use in non-pressure applications.

**Specification:** Hubless Cast Iron pipe and fittings shall be manufactured from gray cast iron with a tensile strength of not less than 21,000 psi. Regular hubless couplings shall be shielded and conform to CISPI Standard 310 or ASTM C 1277, with an elastomeric gasket meeting the requirements of ASTM C 564. Heavy duty hubless couplings shall be shielded and conform to ASTM C 1540, with an elastomeric gasket meeting the requirements of ASTM C 564.

Pipe and fittings shall comply with ASTM A 888, and CISPI 301. Hubless couplings shall comply with ASTM C 564, and CISPI Standard 310 or ASTM C 1540. All pipe and fittings shall be made in the United States, and marked with the collective trademark of the Cast Iron Soil Pipe Institute, ©®. All pipe and fittings shall be of the same manufacturer. All systems shall utilize a separate waste and vent system.

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all local plumbing, fire, and building code requirements. Joints shall be made with hubless couplings and tightened using a calibrated torque wrench. The system shall be hydrostatically (water) tested after installation to 4.3 psi. (10 feet of hydrostatic head). Testing with compressed air or gas is not recommended.

**Referenced Standards:**

ASTM A 888	Hubless Cast Iron Soil Pipe and Fittings
ASTM C 564	Rubber Gaskets for Cast Iron Soil Pipe and Fittings
CISPI 301	Hubless Cast Iron Soil Pipe and Fittings
CISPI 310	Hubless Couplings for Cast Iron Soil Pipe and Fittings
ASTM C 1277	Hubless Couplings
ASTM C 1540	Hubless Heavy Duty Couplings

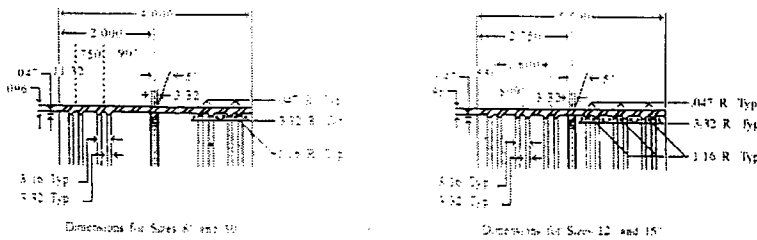
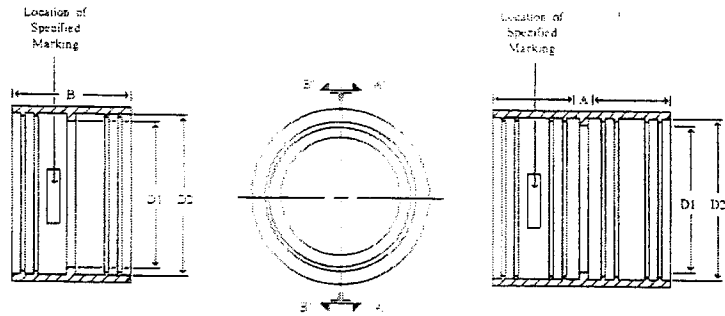
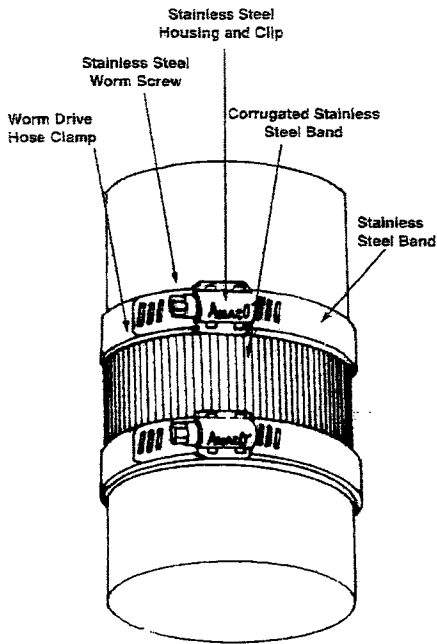
Note: Latest revision of each standard applies.

PO Box 35430 Charlotte, NC 28235 USA 704/348-6450 800/572-4199 FAX 800/553-1605

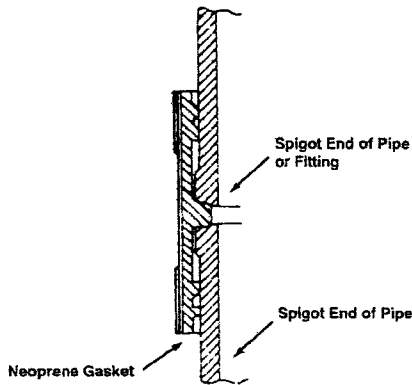
[www.charlottepipe.com](http://www.charlottepipe.com)

# specification data

Specification data for hubless cast iron sanitary system with NO-HUB<sup>®</sup> pipe fittings. Standard No. 301-97.



COUPLING BEFORE TIGHTENING



COUPLING AFTER TIGHTENING



DIMENSIONS IN INCHES										
	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"	15"
A	1.062	1.062	1.062	1.062	1.500	1.500	2.000	2.000	2.750	2.750
B	2.125	2.125	2.125	2.125	3.00	3.00	4.000	4.000	5.500	5.500
D <sub>1</sub>	1.531	1.968	2.968	4.000	4.968	5.968	7.968	9.975	12.000	15.200
D <sub>2</sub>	1.937	2.343	3.343	4.406	5.343	6.343	8.343	10.350	12.430	15.6500

## NO-HUB GASKET PHYSICAL REQUIREMENTS

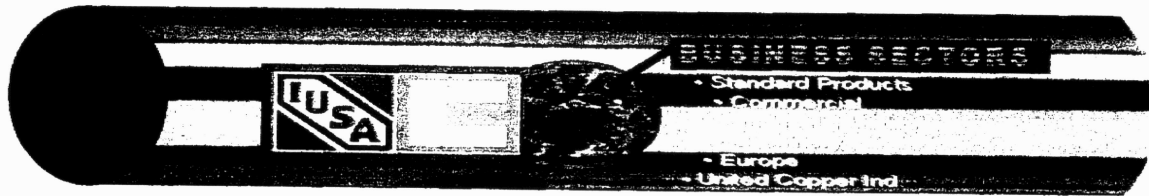
### Detail

**Material:** The gasket shall be fabricated from a compound containing high-quality elastomer.

**Physical Tests:** The test specimens shall be obtained from finished gaskets in conformance with ASTM D 15.

### Tests

Test	Physical Tests Min. or Max Requirements	ASTM Method
Tensile Strength	1500 psi min.	D 412
Elongation	250 min.	D 412
Durometer (Shore A)	70 ± 5 @ 76°F ± 5°F	D 2240
Accelerated Aging	15% max. tensile and 20% max. elongation deterioration, 10 points max. increase in hardness, all determinations after oven aging for 96 hours at 158°F.	D 573
Compression Set	15% max. after 22 hours at 158°F.	D 395
Oil Immersion	80% max. volume change after immersion in ASTM oil no. 3 for 70 hours at 212°F.	Method B D 471
Ozone Cracking	No visible cracking at 2 times magnification of the gasket after 100 hours exposure in 1.5 ppm ozone concentration at 100°F. Testing and inspection to be on gasket which is loop mounted to give approximately 20% elongation of outer surface.	D 1149
Tear Resistance	Die C; 150 lbs. min. per inch of thickness.	D 624
Water Adsorption	20% max. by weight after 7 days at 158°F.	D 471



Home Up Feedback Contents

**Product Range Print**

**COPPER TUBE PRODUCT RANGE**

Cambridge-Lee Industries manufactures a wide range of copper tube products for use in the plumbing, refrigeration, air-conditioning, and commercial industries. Described herein is our current product range, but other items and specifications are continuously being added and may be available upon request.

Product	Application	Temper	Lengths	Color	Specifications
Water Tube Type K	Domestic Water Service Fire Protection Solar, Fuel Oil HVAC	Hard Soft	10 ft. Straight lgth 20 ft. Straight lgth 60 ft. Coils 100 ft. Coils	Green	C12200, ASTM B-88 Federal WW-T-799
Water Tube Type L	Domestic Water Service Fire Protection Solar, Fuel Oil HVAC, Natural Gas	Hard Soft	10 ft. Straight lgth 20 ft. Straight lgth 60 ft. Coils 100 ft. Coils	Blue	C12200, ASTM B-88 Federal WW-T-799
Water Tube Type M	Domestic Water Service Fire Protection Solar, Fuel Oil HVAC	Hard	10 ft. Straight lgth 20 ft. Straight lgth	Red	C12200, ASTM B-88 Federal WW-T-799
ACR Tube (L cleaned and capped/degreased)	Air Conditioning Refrigeration Natural Gas	Hard	20 ft. Straight lgth	Blue	C12200, ASTM B-280
OXY/MED Tube (K & L cleaned and capped/degreased)	Medical Gas Systems	Hard	20 ft. Straight lgth	Blue	C12200, ASTM B-280 B-819
Refrigeration Tube	Air Conditioning Refrigeration Service	Soft	50 ft. Coils 100 ft. Coils	Red	C12200, ASTM B-280
DWW Tube	Drainage	Hard	20 ft. Straight lgth	Yellow	C12200, ASTM B-306

Last modified: 06/11/07

DAMIEN W. SERAUSKAS, P.E.  
PROFESSIONAL ENGINEERING SERVICES

No Exceptions Taken       Rejected  
 Approved As Noted       Resubmit

Date: 3-18-09 By: [Signature]

Review is for general conformance with the design intent and general compliance with the information given in the Project Documents. The Contractor shall be responsible for confirming all dimensions, quantities, and installation methods.

HVAC + PLUMBING + FIRE PROTECTION + SITE UTILITIES

15 CYPRESS POINT LANE NEW ORLEANS, LA 70131  
VOICE: (504) 866-2600 FAX: (504)-218-8480



# CAMBRIDGE-LEE INDUSTRIES, LLC.

Reading Tube Division

P.O. Box 14026, Reading, PA 19612 - 4026

Phone 610 - 926 4141 Fax 610 - 926 7317

<b>Distributor:</b> <b>Address:</b> <b>Order No.:</b> <b>Product:</b>	<b>Customer:</b> <b>Address:</b> <b>P.O. No.:</b>
--	---

## Standard Tube Certificate of Conformance

Tube Type	Specification No. *	Specification Title
Type K, L & M	ASTM B 88  NSF 61	Standard Specification for Seamless Copper Water Tube  ANSI/NSF Standard 61 Drinking Water System Components Health Effects <sup>1</sup>
Coils and Straight Lengths Marked as ACR	ASTM B 280	Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service
Type DWV Drainage	ASTM B 306	Standard Specification for Copper Drainage Tube (DWV)
Type K & L Straight Lengths Marked as OXY/MED	ASTM B 819	Standard Specification for Seamless Copper Tube for Medical Gas Systems

Cambridge-Lee Industries, LLC certifies that the copper tube manufactured is grade UNS C12200 and meets the chemical, mechanical, cleanliness and eddy current testing requirements of the current specification(s) indicated below.

\* Although CLI - RTD strives to meet all requirements specified in ASTM, Standard Tube<sup>2</sup> may not fully meet ASTM dimensional requirements. When specified at order placement and for an additional cost, CLI - RTD can produce Certified Tube to meet all requirements of the current ASTM standard, including dimensions.

Copper tube manufactured by Cambridge-Lee Industries does not contain mercury or come in contact with mercury, mercury compounds or mercury containing devices at any stage in manufacturing, inspection, packaging or shipping.

All of the specifications require a minimum copper plus silver content of 99.9% and a phosphorus content between .015 - .040%. As indicated by the compositional requirements, the copper tube is essentially lead free.

<sup>1</sup> Seamless Copper Tube (Alloy C12200) is certified by NSF to NSF/ANSI Standard 61 for public water supplies meeting, or in process of meeting the U.S. EPA Lead and Copper Rule (56FR 26460, June 7, 1991). Water Supplies with pH less than 6.5 may require corrosion control to limit copper solubility in drinking water.

<sup>2</sup> Standard Tube will be provided unless Certified Tube is clearly defined on Purchase Order.



**PRODUCT CERTIFICATION - SOLDER, BRAZED AND THREADED COPPER  
AND COPPER ALLOY PLUMBING FITTINGS**

Elkhart Products Corporation manufactures and/or supplies products which meet the following specifications:

MSS	SP73	<u>Brazing Joints for Copper and Copper Alloy Pressure Fittings</u>
MSS	SP104	<u>Wrought Copper Solder Joint Pressure Fittings</u>
MSS	SP106	<u>Cast Copper Alloy Flanges and Flanged Fittings: Class 125, 150 and 300</u>
MSS	SP123	<u>Non-Ferrous Threaded and Solder-Joint Unions for use with Copper Water Tube</u>
MSS	SP109	<u>Welded Fabricated Copper Solder Joint Pressure Fittings</u>
ASME/ANSI	B16.29-2001:	<u>Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV</u>
ASME/ANSI	B16.18-2001:	<u>Cast Copper Alloy Solder Joint Pressure Fittings</u>
ASME/ANSI	B16.15-1994:	<u>Cast Bronze Threaded Fittings</u>
ASME/ANSI	B16.26-1988:	<u>Cast Copper Alloy Fittings for Flared Copper Tube</u>
ASME/ANSI	B16.23-2002:	<u>Cast Copper Alloy Solder Joint Drainage Fittings - DWV</u>
ASME/ANSI	B16.24-2001:	<u>Bronze Pipe Flanges and Flanged Fittings</u>

EPC's wrought copper solder joint fittings also are manufactured to comply with the material, performance, and installation/joining dimensions of ASME/ANSI B16.22. These fittings are also compliant with the European Union's RoHS (Restrictions of Hazardous Substances) Directive, 2002/95/EC.

The materials used to manufacture these fittings are also in compliance with the following specifications:

Tubular Wrought Copper: ASTM B75 Alloy C12200.	<u>Standard specification for Seamless Copper Tube, or</u>
Products Made From Sheet: ASTM B152 Alloy C11000.	<u>Standard Specification for Copper Sheet, Strip, Plate and Rolled Bar</u>
Cast Products: ASTM B584 Alloy C84400.	<u>Standard Specification for Copper Alloy Sand Castings for General Applications; Federal Specification WW-U-516 For Type III, Class A and B Copper Alloy Unions</u>

**ELKHART PRODUCTS CORPORATION**  
Plumbing Division



Dana Buccicone  
Director of Technology

State of Massachusetts product approval  
Number P1-0698-46, granted 6.3.98.

Subscribed and sworn to before me

On this 24<sup>th</sup> day of July, 2006

Dicki A. Vergon  
NOTARY PUBLIC

DICKI A. VERGON  
NOTARY PUBLIC STATE OF INDIANA  
OSCEOLA COUNTY

MY COMMISSION EXPIRES FEB 28 2007  
1255 Oak St. • P.O. Box 118 • Elkhart, Indiana 46515 • Tel: (574) 264-1051 • Fax: (574) 264-1052  
www.ElkhartProducts.com

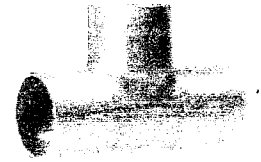
an  
Alberis Industries  
company



**Elkhart Products Corporation**  
For the perfect fit 

1255 Oak St. | Elkhart, Indiana 46515 | Ph: (574) 264-3181 | Fx: (574) 264-0103  
[www.elkhartproducts.com](http://www.elkhartproducts.com)

Publication Date: October 26, 2006  
Revision BB



## RECYCLED MATERIAL FOR "LEED" COMPLIANCE Green Building Rating System

"Each year in the United States, nearly as much copper is recovered from recycled material as is derived from newly mined ore. Excluding wire production, more than three-fourths (¾) of the amount used by copper and brass mills, ingot makers, foundries, powder metal plants and other industries comes from recycled scrap copper."

"Almost half of all recycled copper scrap is old post consumer scrap, such as discarded electric cable, automobile radiators and air conditioners."

**Elkhart Products Corporation subscribes to the above facts and encourages its suppliers to do the same.**

The copper tubing and rod used to produce all E.P.C. copper fittings is manufactured from copper cathode which in turn is made up from twenty-five (25) percent post consumer scrap as described above. Another fifty (50) percent is post industrial scrap (turnings, shavings and chips).

Dennis Thompson

Staff Engineer  
Elkhart Products Corp.

an  
Aalberts Industries  
company



# Vulcan

THREADED PRODUCTS, INC.

Vulcan Threaded Products  
#10 Crosscreek Trail  
Pelham, AL 35124  
Ph:(205) 620-5100  
Fax:(205) 620-5150

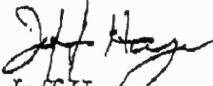
Ref: Low Carbon All-Thread Rod

September 14, 2004

This letter is to certify that the All-Thread Rod supplied by Vulcan Threaded Products will meet the minimum physical requirements of ASTM A36 & A307 and produced to a 1A fit. 1/2" to 1" All-Thread Rod is produced from 1006/1008/1010 steel. 1-1/8" to 2-1/2" is produced from 1018 steel. The entire threaded rod size range is manufactured in the United States from domestic and foreign raw material.

All Hot-Dip Galvanized threaded rod is plated according to ASTM A153 specifications. All Zinc Threaded Rod is plated according to ASTM B633.

Best Regards,



Jeff Hayes  
Purchasing Manager

DAMIEN W. SERAUSKAS, P.E.  
PROFESSIONAL ENGINEERING SERVICES

- No Exceptions Taken
- Rejected
- Approved As Noted
- Resubmit

Date: 3-18-09 By: 

Review is for general conformance with the design intent and general compliance with the information given in the Project Documents. The Contractor shall be responsible for confirming all dimensions, quantities, and installation methods.

HVAC + PLUMBING + FIRE PROTECTION + SITE UTILITIES

15 CYPRESS POINT LANE NEW ORLEANS, LA 70131  
VOICE: (504) 866-2600 FAX: (504)-218-8480

1/4" THROUGH 5/8" MANUFACTURED FROM 1006-1010 STEEL  
 3/4" THROUGH 1" MANUFACTURED FROM 1006 - 1010 OR A36 STEEL

ALL ALL-THREAD ROD WILL MEET MINIMUM TENSILE & YIELD  
 REQUIREMENTS OF ASTM A307 GRADE C

ITEM	MANUFACTURER	MATERIAL AS DESCRIBED ON INVOICE
1	VULCAN THREADED PRODUCTS	1/4"-20 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES
2	VULCAN THREADED PRODUCTS	5/16"-18 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES
3	VULCAN THREADED PRODUCTS	3/8"-16 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES
4	VULCAN THREADED PRODUCTS	1/2"-13 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES
5	VULCAN THREADED PRODUCTS	5/8"-11 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES
6	VULCAN THREADED PRODUCTS	3/4"-10 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES
7	VULCAN THREADED PRODUCTS	7/8"-09 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
8	VULCAN THREADED PRODUCTS	1"-08 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES

ITEM	HEAT#	CARBON	MANG.	PHOS.	SULPHUR	SILICON	CHROM.	NICKEL	MOLY.	COPPER
1	65800	.06	.47	.006	.010	.15	.06	.09	.02	.20
2	64241	.06	.45	.011	.024	.12	.15	.10	.03	.26
3	26863	.06	.40	.016	.025	.12	.13	.14	.00	.26
4	26864	.07	.42	.013	.02	.13	.10	.11	.00	.21
5	1030122	.04	.45	.018	.034	.11	--	--	--	--
6	65197	.17	.67	.014	.016	.18	.14	.10	.03	.32
7	62286	.22	.90	.006	.025	.23	.05	.07	.02	.16
8	62260	.15	.72	.012	.026	.19	.07	.08	.02	.21

ITEM	HEAT #	TENSILE PSI	YIELD PSI	%ELONGATION 1" GAGE	REDUCTION OF AREA	BEND TEST
1	65800	62,200	40,053	36.0	-----	-----
2	64241	61,500	40,611	34.0	-----	-----
3	26863	60,915	40,053	36.0	-----	-----
4	26864	61,641	40,611	34.0	-----	-----
5	1030122	58,853	39,885	40.0	-----	-----
6	65197	73,700	51,200	32.0	-----	-----
7	62286	78,600	50,500	31.0	-----	-----
8	62260	69,100	45,800	37.0	-----	-----

WE HEREBY CERTIFY THAT THE FOREGOING DATA IS A TRUE COPY OF THE DATA FURNISHED BY THE PRODUCING MILL. ALL DATA SUPPLIED IN THIS ABOVE TEST REPORT ARE TYPICAL OF MATERIAL FURNISHED BY VULCAN THREADED PRODUCTS.

DATE: 4/30/2004

VULCAN THREADED PRODUCTS  
 #10 CROSSCREEK TRAIL  
 PELHAM, AL 35124  
 205 620-5100  
 FAX 205 620-5150

By: [Signature]  
 AUTHORIZED AGENT  
 QUALITY CONTROL SUPERVISOR

SEP-12-2007 12:25

VULCAN THREADED PRODUCTS

1-1/8" THROUGH 2" MANUFACTURED FROM 1018 OF A36 STEEL  
 2-1/4" THROUGH 2-1/2" MANUFACTURED FROM 1018 OF A36 STEEL

ALL ALL-THREAD ROD WILL MEET MINIMUM PHYSICAL AND  
 CHEMICAL REQUIREMENTS OF ASTM A307 GRADE C

ITEM	MANUFACTURER	MATERIAL AS DESCRIBED ON INVOICE
1	VULCAN THREADED PRODUCTS	1-1/8"-7 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
2	VULCAN THREADED PRODUCTS	1-1/4"-7 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
3	VULCAN THREADED PRODUCTS	1-3/8"-6 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
4	VULCAN THREADED PRODUCTS	1-1/2"-6 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
5	VULCAN THREADED PRODUCTS	1-3/4"-5 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
6	VULCAN THREADED PRODUCTS	2"-4.5 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
7	VULCAN THREADED PRODUCTS	2-1/4"-4 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES
8	VULCAN THREADED PRODUCTS	2-1/2"-4 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE UNITED STATES

ITEM	HEAT#	CARBON	MANG	PHOS.	SULPHUR	SILICON	CHROM.	NICKEL	MOLY.	COPPER
1	589911120	.20	.80	.015	.026	.22	.10	.09	.03	.43
2	589915771	.17	.70	.02	.036	.16	.12	.10	.04	.41
3	319913248	.20	.60	.012	.040	.21	.11	.09	.04	.37
4	319913251	.18	.60	.012	.037	.21	.13	.10	.04	.33
5	151115	.14	.78	.008	.023	.21	.07	.15	.034	.37
6	151438	.17	.82	.005	.017	.23	.06	.09	.016	.21
7	681952	.18	.77	.01	.03	.22	-----	-----	-----	-----
8	640723	.18	.70	.02	.04	.22	-----	-----	-----	-----

HEAT #	TENSILE PSI MIN	YIELD PSI MIN	%ELONGATION 8" GAGE MIN %	REDUCTION OF AREA MIN %
589911120	77,400	52,100	27	-----
589915771	72,400	49,600	24	-----
319913248	71,338	48,408	25	-----
319913251	75,796	48,408	23	-----
151115	68,000	46,900	47	-----
151438	70,100	49,700	52	-----
681952	92,300	85,400	16	-----
640723	89,500	80,550	15	-----

WE HEREBY CERTIFY THAT THE FOREGOING DATA IS A TRUE COPY OF THE DATA FURNISHED BY THE PRODUCING MILL.  
 ALL DATA SUPPLIED IN THE ABOVE TEST REPORT ARE TYPICAL OF MATERIAL FURNISHED BY VULCAN THREADED PRODUCTS.

DATE: 9/13/2003

**VULCAN THREADED PRODUCTS**  
 #10 CROSSCREEK TRAIL  
 PELHAM, AL 35124  
 (205) 620-5100  
 FAX (205) 620-5150

BY: [Signature]  
 AUTHORIZED AGENT  
 QUALITY CONTROL SUPERVISOR



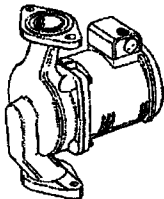
**SUBMITTAL  
A-135D**

**JOB:** SOF RIVERINE & COMBATANT CRAFT OPER. FAC. **REPRESENTATIVE:** Hydronic Technology, Inc.

**UNIT TAG:**  
**ENGINEER:**  
**CONTRACTOR:** GALLO MECHANICAL

**ORDER NO.**  
**SUBMITTED BY:** BILLY MARTINEZ  
**APPROVED BY:**

**DATE:** 5/1/2009  
**DATE:**  
**DATE:**



**SERIES PL™**  
**Permanently Lubricated  
Iron & Bronze Booster Pumps**



**DESCRIPTION**

The Series PL™ close coupled booster pumps are specifically designed for quiet operation in hydronic, radiant and geothermal heating and cooling systems. These inline permanently lubricated pumps are available in cast iron or bronze body construction.

**OPERATING DATA**

Maximum working Pressure: 150 psi (10 Bar)  
Maximum Operating Temperature: 225°F (107°C)

**CONSTRUCTION MATERIALS**

Booster Body: Cast Iron or Bronze  
Face Plate: Stainless Steel  
Impeller: 30% Glass Filled Noryl®  
(PL-55 & PL-130): Glass Filled PPS  
Shaft: Carbon Steel  
(PL-55 & PL-130): Stainless Steel  
Shaft Sleeve: Stainless Steel  
(PL-55 & PL-130): None  
Seal: Mechanical, Carbon on Silicon Carbide  
Motor Bearings: Sealed Precision Steel Ball Bearing  
Permanently Lubricated  
Motor Type: ODP  
Elastomers: EPDM

**SCHEDULE**

CAST IRON			BRONZE			STANDARD 60 CYCLE SINGLE PHASE MOTOR CHARACTERISTICS				TAGGING INFORMATION
MODEL NUMBER	PART NUMBER	QTY.	MODEL NUMBER	PART NUMBER	QTY.	HP	VOLTAGE	F.L. AMPS	RPM	
PL-30	1BL012		PL-30B	1BL013	1	1/12	115	1.4	2850	REC-1
PL-30	1BL014		PL-30B	1BL015		1/12	230	0.8	2650	
PL-36	1BL001		PL-36B	1BL003		1/6	115	2.1	3300	
PL-36	1BL006		PL-36B	1BL008		1/6	230	1.1	3300	
PL-45	1BL002		PL-45B	1BL004		1/6	115	2.1	3300	
PL-45	1BL007		PL-45B	1BL009		1/6	230	1.1	3300	
PL-50	1BL016		PL-50B	1BL017		1/6	115	1.8	3300	
PL-50	1BL018		PL-50B	1BL019		1/6	230	1.0	3300	
PL-55	1BL032		PL-55B	1BL068		2/5	115	4.7	3250	
PL-55	1BL033		PL-55B	1BL069		2/5	230	2.4	3250	
PL-75	1BL034		PL-75B	1BL035		1/6	115	2.1	3400	
PL-75	1BL036		PL-75B	1BL037		1/6	230	1.1	3400	
PL-130/2"	1BL063		PL-130B/2"	1BL065		2/5	115	4.8	3200	
PL-130/2"	1BL064		PL-130B/2"	1BL066		2/5	230	2.4	3200	
PL-130/3"	1BL070		PL-130B/3"	1BL072		2/5	115	4.8	3200	
PL-130/3"	1BL071		PL-130B/3"	1BL073		2/5	230	2.4	3200	

Note: Where potable water is pumped, use a bronze booster.  
PL boosters equipped with a drip-proof motor are recommended for indoor use only.

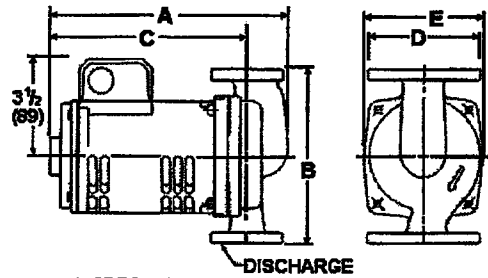
**SERIES PL - Permanently Lubricated Booster Pumps**

A-

**DIMENSIONS AND WEIGHTS**

MODEL NO.	FLANGE SIZE INCHES - NPT	MOTOR HP	DIMENSIONS - INCHES (mm)					APPROX SHIPPI V (KG)
			A	B	C	D	E	
PL-30	3/4, 1, 1-1/4 & 1-1/2	1/12	8 5/8 (219)	6 3/8 (162)	7 1/8 (181)	4 3/16 (106)	4 3/8 (111)	11.6 (E)
PL-36	3/4, 1, 1-1/4 & 1-1/2	1/8	8 5/8 (219)	6 3/8 (162)	7 1/8 (181)	4 3/16 (106)	4 3/8 (111)	13.1 (E)
PL-45	1, 1-1/4 & 1-1/2	1/8	9 1/8 (232)	8 1/2 (216)	7 1/4 (184)	4 5/8 (117)	4 1/2 (114)	14.5 (E)
PL-50	1, 1-1/4 & 1-1/2	1/8	9 1/8 (232)	8 1/2 (216)	7 1/4 (184)	4 5/8 (117)	4 1/2 (114)	14.5 (E)
PL-55	3/4, 1, 1-1/4 & 1-1/2	2/5	9 9/16 (243)	6 3/8 (162)	7 15/16 (202)	4 3/16 (106)	4 3/4 (121)	13.1 (E)
PL-75	2	1/8	9 15/16 (252)	8 1/2 (216)	7 3/8 (187)	5 3/16 (132)	4 5/8 (117)	18.5 (E)
PL-130/2"	2	2/5	10 3/4 (273)	8 1/2 (216)	8 1/4 (210)	5 3/16 (132)	5 1/8 (130)	22 (1)
PL-130/3"	3	2/5	10 3/4 (273)	8 1/2 (216)	8 1/4 (210)	6 (152)	5 1/8 (130)	27 (12)

Dimensions are approximate and subject to change. Contact factory for certified dimensions.

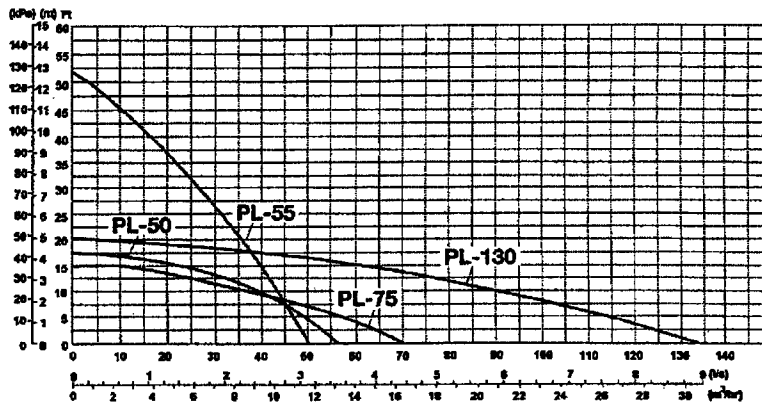
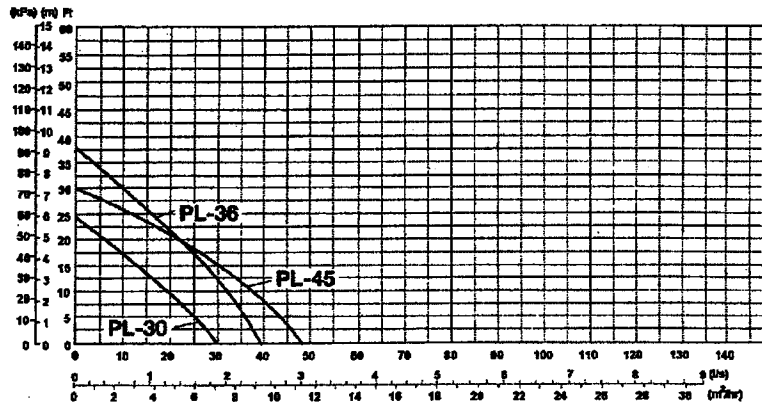


**TYPICAL SPECIFICATIONS**

The contractor shall furnish and install inline pumps as illustrated on the plans and in accordance with the following specifications:

1. The pumps shall be of the horizontal, permanently lubricated type, specifically designed and guaranteed for quiet operation.
2. The pumps shall have a steel shaft supported by permanently lubricated, sealed precision ball bearings. The pumps are to be equipped with a water-tight seal to prevent leakage. Mechanical seal faces to be carbon on silicon carbide. The motor shall be non-overloading at any point on the pump performance curve.
3. The motor shall be of the drip-proof, sealed precision ball-bearing, quiet-operating construction. The permanent split-capacitor motor shall be equipped with thermal overload protection.
4. Pumps to be suitable for 225°F (107°C) operating temperature at 150 psig (10 bar) working pressure. The pumps shall be ITT Bell & Gossett Model No. PL-\_\_\_\_\_ with a capacity of \_\_\_\_\_ GPM at \_\_\_\_\_ feet of head.

**PERFORMANCE CHARACTERISTICS CURVES**



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