



Weaver

CONSTRUCTION MANAGEMENT

3679 S Huron Street, Suite 404 Englewood, Colorado 80110

Phone: (303) 789-4111 FAX: (303) 789-4310

SUBMITTAL TRANSMITTAL

August 20, 2012

Submittal No: 15400-006

PROJECT: **Harold Thompson Regional WRF**
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: **GMS, Inc.**
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: **Lower Fountain Metropolitan
Sewage Disposal District**
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: **Mesa Plumbing**
Gary Cunningham
gcunninghamph@qwestoffice.net

SUBJECT: Plumbing for Operations Building- (TAGS: CBV-1, EEW-1, FD-1&2, L-1&2, MS-1, OB-1&2, S-1,2&3, SH-1, TMV-1, UR-1, WC-1, WCO, WHA-1, LGV-1, LWV-1, WH-1 RCP-1)

SPEC SECTION: 15400: Plumbing

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: ___ YES X NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver Construction Management and, unless indicated otherwise, has been found to be in conformance with the intent of the contract documents.

Contractor's Stamp:

Date: 8/20/12

Reviewed by: Adam Roeder

(X) Reviewed Without Comments

() Reviewed With Comments

ENGINEER'S
COMMENTS: _____

Engineer's Stamp:

Rampart

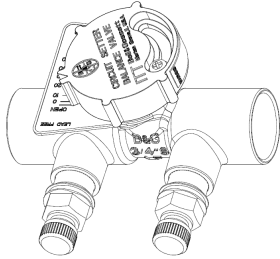
A Colorado Corporation Since 1968

PHONE (719) 471-7200 FAX (719) 471-2004
P.O. BOX 1089· COLORADO SPRINGS, CO 80901
1801 N. UNION BLVD. · COLORADO SPRINGS, CO 80909

MESA PLUMBING & HEATING

**HAROLD D THOMPSON REG WTR REC FAC
LOWER FOUNTAIN MET SEWAGE DISP DIST
SUBMITTALS**

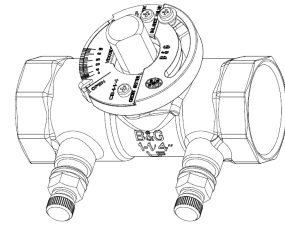
JOB:	REPRESENTATIVE:	
UNIT TAG:	ORDER NO.	DATE:
ENGINEER:	SUBMITTED BY:	DATE:
CONTRACTOR:	APPROVED BY:	DATE:



Circuit Setter® Plus

Calibrated Balance Valves
with NPT and Solder Connections

LEAD FREE*



DESCRIPTION

The Bell & Gossett CIRCUIT SETTER PLUS and CIRCUIT SETTER PLUS "RF" calibrated balance valve is a precision machined ball type triple purpose balancing instrument. It is precisely calibrated for use as a presettable balance valve, variable orifice flow meter and positive shut-off service valve.

Valves are furnished with a calibrated nameplate and memory stop indicator which permits the valve to be preset to a fixed open position and then closed for service without disturbing valve setting.

Valves are equipped with capped readout valves fitted with internal check valves and 1/4" NPT tapped and plugged drain port.

CONSTRUCTION

Body: Brass ASTM B283-C69300*
Ball: 304 Stainless Steel
Seat Rings: Glass and Carbon filled TFE
Readout Valves: Brass with EPT check valves
Stem "O" Ring: EPDM

MAXIMUM WORKING PRESSURE

NPT Models: 400 psig (2069 kPa)
Sweat Models: See table below

MAXIMUM OPERATING TEMPERATURE

-4°F (-20°C) to 250°F (121°C)

* Contains less than 0.25% lead content by weight on wetted surfaces.

CSA CERTIFIED: AB1953; Vermont S152; Maryland House Bill 372 [statute 12-605]. ANSI/NSF-61 Annex G Compliant.

Type Solder	Maximum Pressure Limitations for 1/2"-1" With Solder Connections	
	Pressure PSI (KPa)	Temp °F (°C)
95-5 Tin-Antimony	300 (2069)	200 (93)
	250 (1724)	225 (107)
	200 (1379)	250(121)

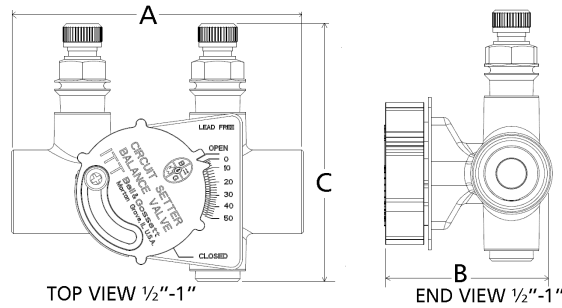
SCHEDULE

MODEL NO.	PART NUMBER	TAGGING INFORMATION	QUANTITY
RF-1/2S	117410LF		
RF-3/4S	117411LF		
CB-1/2S	117412LF		
→ CB-3/4S	117413LF		
CB-1S	117401LF		
CB-1/2	117414LF		
CB-3/4	117415LF		
CB-1	117416LF		

CBV-1

CIRCUIT SETTER PLUS Calibrated Balance Valves

A-549LFP



DIMENSIONS AND WEIGHTS *

MODEL NUMBER	SIZE	CONNECTION TYPE	DIMENSIONS IN INCHES (MM)			WEIGHT IN LBS. (KG)
			A	B	C	
RF-1/2S	1/2"	SWEAT	2.91 (73.9)	1.82 (46.2)	2.85 (72.4)	0.6 (0.27)
RF-3/4S	3/4"	SWEAT	3.51 (89.2)	2.05 (52.1)	3.10 (78.7)	0.75 (0.34)
CB-1/2S	1/2"	SWEAT	2.91 (73.9)	1.82 (46.2)	2.85 (72.4)	1 (0.5)
→ CB-3/4S	3/4"	SWEAT	3.51 (89.1)	2.05 (52.1)	3.10 (78.7)	1.25 (0.6)
CB-1S	1"	SWEAT	4.29 (109)	2.33 (59.2)	3.33 (84.6)	2 (0.9)
CB-1/2	1/2"	NPT	2.94 (74.6)	1.98 (50.3)	3.02 (76.7)	1.25 (0.6)
CB-3/4	3/4"	NPT	3.06 (77.7)	2.17 (55.1)	3.12 (79.2)	1.5 (0.7)
CB-1	1"	NPT	3.81 (96.8)	2.47 (62.7)	3.42 (86.9)	2 (0.9)

*All dimensions +/-0.125 (3.2 mm) tolerance. Dimensions are subject to change. Not to be used for construction purposes unless certified.

TYPICAL SPECIFICATION

Furnish and install as shown on plans with manufacturer recommendations Model CB or "RF" calibrated balance valves.

PRE-SET BALANCE FEATURE

Valves to be designed to allow installing contractor to pre-set balance points for proportional system balance prior to system start-up in accordance with pre-set balance schedule.

VALVE DESIGN AND CONSTRUCTION

All valves 1/2" to 1" pipe size to be of Lead Free Brass** body/SS ball construction with glass and carbon filled TFE seat rings. Valves to have differential pressure read-out ports across valve seat area. Read-out ports to be fitted with internal EPT inserts/check valves. Valve bodies to have 1/4" NPT tapped drain/purge port. Valves to have memory stop feature to allow valve to be closed for service and then reopened to set point without disturbing balance position. All valves to have calibrated nameplates to assure specific valve settings. Valves shall be designed for positive shut-off.

DESIGN PRESSURE/TEMPERATURE

A. 1/2" - 1" NPT connections 400 psig (2069 kPa) at 250°F (121°C)

B. 1/2" - 1" Sweat connections (see table page 1)

All balance valves to be ITT Bell & Gossett Model No. CB-_____ or Model No. RF-_____ (note sizes).

IMPORTANT:

When monitoring system flow, care must be exercised to avoid direct skin or eye contact with liquids that may escape. Liquids with temperatures in excess of 120°F (49°C) may cause burns.

Bell & Gossett Circuit Setter Balance Valves are not recommended for use with meter connections pointing downward.

** Contains less than 0.25% lead content by weight on wetted surfaces.

CSA CERTIFIED: AB1953; Vermont S152; Maryland House Bill 372 [statute 12-605]. ANSI/NSF-61 Annex G Compliant.

ITT
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone (847)966-3700
Facsimile (847)966-9052
www.bellgossett.com



S19314 Series Combination Drench Shower and Halo™ Eyewash or Eye/Face Wash



- Halo™ and SpinTec™ Deliver the Most Effective Shower and Eye/Face Washdown Coverage and Spray Pattern
- Exceeds American National Standard Z358.1 Specifications
- Industry's Only Self-Draining Design – The Aquaduct™
- Separate Supply and Waste Pipes – Meets CEN and Plumbing Requirements
- Ergonomic Hand Activation Eyewash Paddle – Easy to Reach from Any Direction
- Fully-Assembled and Factory-Tested Eyewash or Eye/Face Wash with Hinged Dust Covers
- Yellow Transparent Plastic and Stainless Steel Bowl Covers Available
- Antimicrobial Protection
- Barrier Free Options Are Available ♿
- Universal Identification Sign and Inspection Tag Included
- Classified by Underwriters Laboratories Inc. to ANSI Z358.1.
- SpinTec™ showerheads are covered by one or more of the following patents: 8113446; D594,089; Reg. Comm. Des. D001079560-0001. Other patents pending.

Specifications

Standard and Barrier-Free Combination Drench Shower/Eyewash or Eye/Face Wash Units save space and fit 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. Halo eyewash or eye/face wash, operated by an ergonomic, highly visible push handle, provides effective wash down coverage and spray pattern. Integral strainer reduces debris in the water and also prevents clogging. Includes antimicrobial protection.

This plumbing fixture is not intended to dispense water for human consumption through drinking or for preparation of food or beverages.

Halo
EYE/FACEWASH

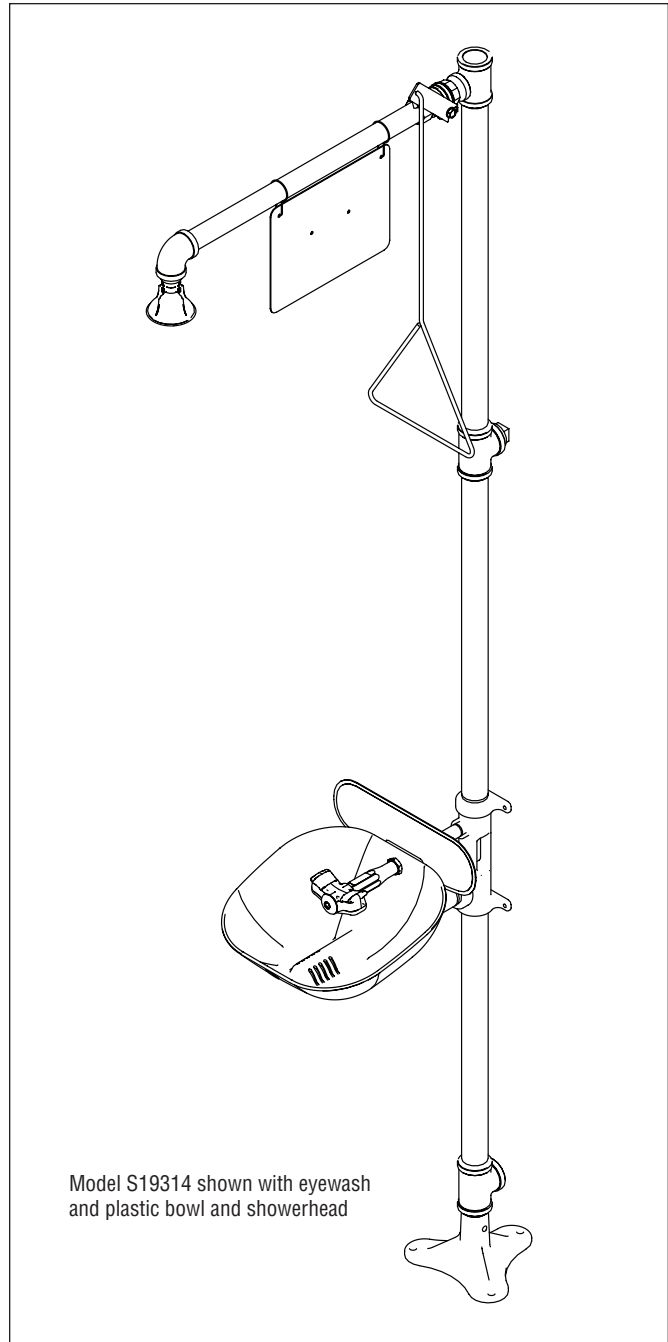
Recommended Option:

Navigator S19-2100 EFX25
Emergency Thermostatic Mixing Valve

NAVIGATOR



Satisfies ANSI Z358.1
tepid water requirements.



Pipe and Fittings

1¼" piping assembly manufactured of one of the following materials:

- Galvanized steel with BradTect® safety yellow coating
- Type 304 corrosion resistant stainless steel
- Type 316 corrosion-resistant stainless steel
- Chrome plated red brass.

Ball Valve

1" shower ball valve and ½" stay-open eye and eye/face wash valve manufactured of the following materials and supplied with either type 304 or 316 stainless steel pull rod and handle:

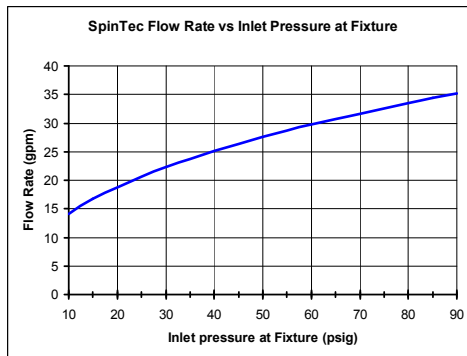
- Chrome-plated brass
- Type 316 stainless steel
- Self-closing shower valve and stay-open eyewash ball valve.



Self-closing shower valve may not meet local requirements for shower activation.

SpinTec™ Showerhead

Standard showerhead is 3.1" (78.7mm) diameter highly visible yellow impact-resistant plastic. Optional 10" (254mm) diameter yellow impact-resistant plastic or 10¾" (273mm) diameter corrosion-resistant stainless steel shroud. High performance Type 304 or Type 316 corrosion-resistant stainless steel showerhead measures 1½" (38mm) in diameter. SpinTec drench showerhead features integral 22 GPM flow control (exceeds minimum water flow of 20 GPM at 30 PSI), conserving water and helping to accurately size your tepid water system.



Eyewash

The Halo eyewash system offers a high performance rinsing platform that provides rapid relief to an individual's eyes that have been injured by chemicals or particulate. The eyewash provides 4.8 gpm of water at a safe velocity while maintaining its effectiveness (exceeds minimum water flow of 0.4 GPM at 30 PSI). The eyewash is protected by flip open dust covers that open when the product is activated or by a full bowl dust cover that activates the unit when it is opened. Contains an antimicrobial agent to protect the Halo eyewash. Safe, steady water flow under varying water supply conditions from 30–90 PSI is assured by integral flow control in the sprayhead assembly.

Eye/Face Wash

The Halo eye/face wash system offers a high performance rinsing platform that provides rapid relief to an individual's eyes and face that have been injured by chemicals or particulate. This system provides the most complete face wash available in the market. The eye/face wash provides 4.8 gpm of water at a safe velocity while maintaining its effectiveness (exceeds minimum water flow of 0.4 GPM at 30 PSI). The eye/face wash is protected by flip open dust covers that open when the product is activated or by a full bowl dust cover that activates the unit when it is opened. Contains an antimicrobial agent to protect the Halo eye/face wash. Safe, steady water flow under varying water supply conditions from 30–90 PSI is assured by integral flow control in the sprayhead assembly.

Bowl and Dust Cover

Bowl is constructed of yellow impact-resistant plastic, Type 304 corrosion-resistant stainless steel or Type 316 corrosion-resistant stainless steel. Dust cover is constructed of transparent yellow impact-resistant plastic, Type 304 corrosion-resistant stainless steel or Type 316 corrosion-resistant stainless steel.

Activation

Type 304 Stainless steel push handle with optional aluminum or type 304 stainless steel foot pedal. Type 316 stainless steel push handle with optional Type 316 stainless steel foot pedal.

Drench Hose

Perforated sprayhead with protective sprayhead cover is ABS plastic and provides soft spray for cleansing eyes and face. Chrome-plated brass valve with extended handle stays open once handle is squeezed. 8' (2438mm) yellow reinforced thermoplastic hose has ¾" NPT male thread. Burst strength is 450 PSI. Attachment Kit includes ½" NPT supply, fittings and hanger for attaching hose to eyewashes or drench showers. The sprayhead contains an antimicrobial agent to protect the sprayhead.

Backflow Prevention

Series N9 dual-check backflow preventer has a chrome-nickel plated brass body and includes atmospheric vent for continuous pressure applications. The check valve comes with ¾" female dual NPT female inlet and outlet connections. It can sustain a maximum pressure of 125 PSI (8.6 bars). The check valve is certified to CSA B64.8.

Series 9D dual-check backflow preventer with intermediate atmospheric vent can be used under continuous pressure. The primary check valve uses a rubber disc seating adjacent to a mating rubber part to ensure tight closing. A second check valve employs a rubber disc-to-metal seating.



Halo Pre-Configured Models

Halo Model Number	Description
Eyewashes	
<input type="checkbox"/> S19314EW	Halo Eyewash, plastic showerhead & bowl
<input type="checkbox"/> S19314P	Halo Eyewash, plastic showerhead & bowl w/ hose spray
<input type="checkbox"/> S19314SB	Halo Eyewash, plastic showerhead, stainless steel bowl
<input type="checkbox"/> S19314LL	Halo Eyewash, plastic showerhead, stainless steel bowl, hand/foot activated
<input type="checkbox"/> S19314F	Halo Eyewash, plastic showerhead w/ stainless steel shroud & bowl
<input type="checkbox"/> S19314UU	Halo Eyewash, plastic showerhead w/ stainless steel shroud & bowl, hand/foot operated eyewash
Eyewashes with Dust Cover	
<input type="checkbox"/> S19314PDC	Halo Eyewash, plastic showerhead & bowl w/ dust cover
<input type="checkbox"/> S19314DC	Halo Eyewash, plastic showerhead, stainless steel bowl & hinged dust cover
Eye-Face Washes	
<input type="checkbox"/> S19314FW	Halo Eye/face wash, plastic showerhead & bowl
<input type="checkbox"/> S19314SBFW	Halo Eye/face wash, plastic showerhead, stainless steel bowl
<input type="checkbox"/> S19314AC	Halo Eye/face wash, plastic showerhead, stainless steel bowl, hand/foot operated eyewash
<input type="checkbox"/> S19314TT	Halo Eye/face wash, plastic showerhead w/ stainless steel shroud & bowl
<input type="checkbox"/> S19314SPR	Halo Eye/face wash, stainless steel showerhead & bowl, hand/foot operated eyewash
<input type="checkbox"/> S19314BFPB	Halo Eye/face wash, barrier-free, plastic showerhead & bowl
<input type="checkbox"/> S19314BF	Halo Eye/face wash, barrier-free, plastic showerhead, stainless steel bowl
Eye-Face Washes with Dust Covers	
<input type="checkbox"/> S19314PDCFW	Halo Eye/face wash, plastic showerhead & bowl w/ dust cover
<input type="checkbox"/> S19314DCFW	Halo Eye/face wash, plastic showerhead, stainless steel bowl & hinged dust cover
<input type="checkbox"/> S19314DCBF	Halo Eye/face wash, barrier-free, plastic showerhead, stainless steel bowl w/ dust cove
Eye-Face Washes without Eyewash Bowl	
<input type="checkbox"/> S19314GG	Halo Eye/face wash, plastic showerhead, no bowl

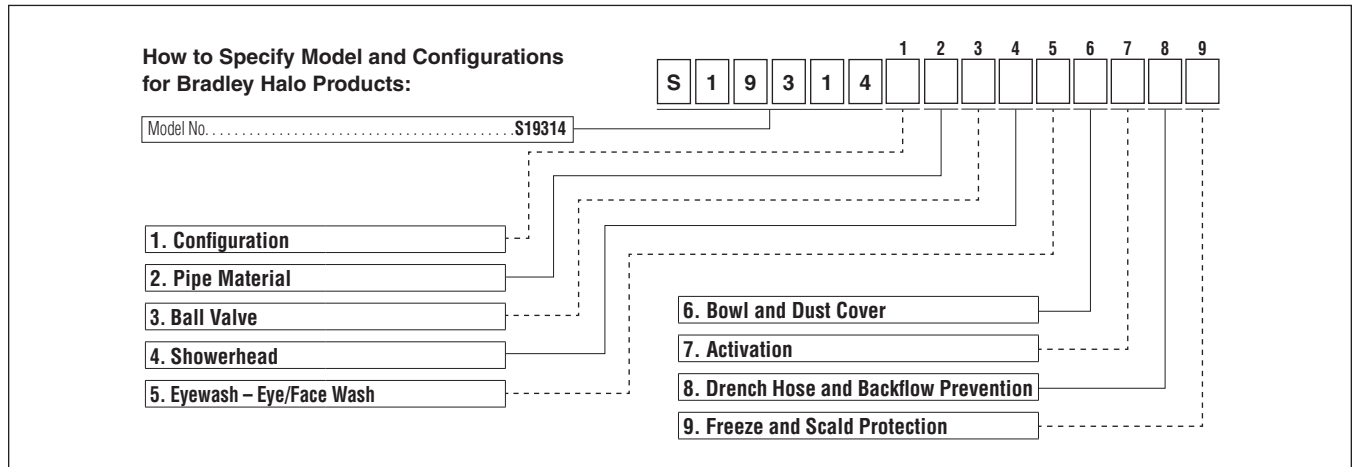


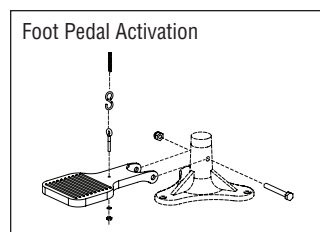
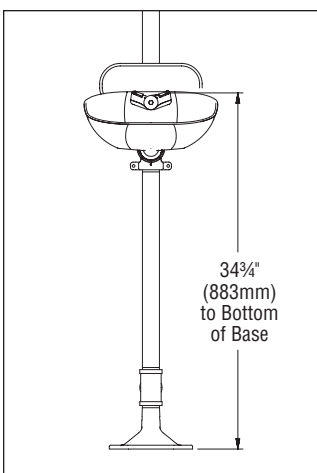
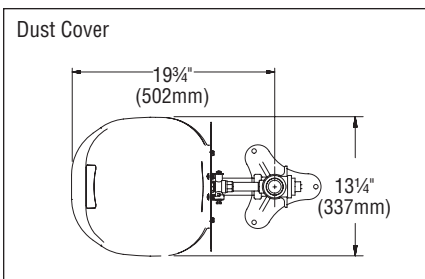
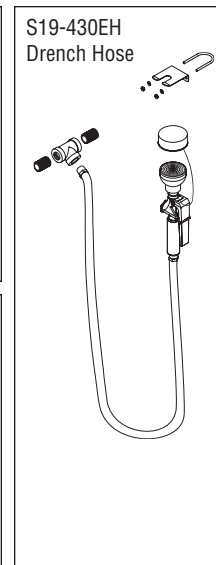
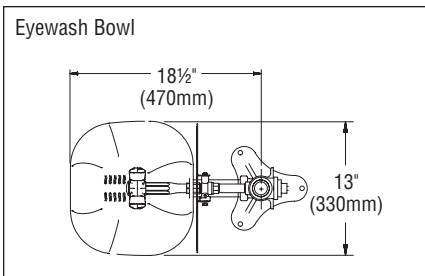
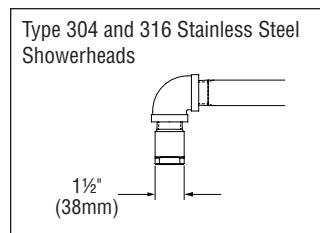
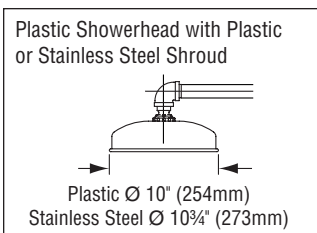
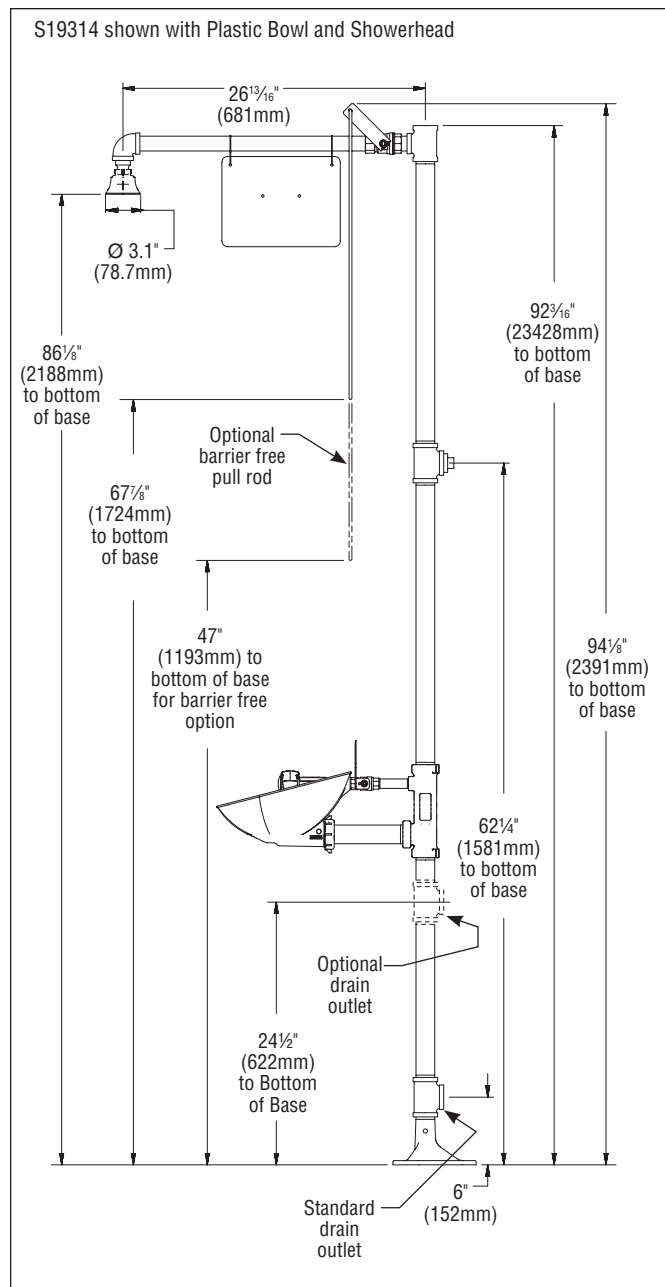
Halo Configurator

Standard Selections (Must select one from each category)		Bowl and Dust Cover	
Configuration <input checked="" type="checkbox"/> A Barrier Free <input type="checkbox"/> B 24" Drain Height <input type="checkbox"/> C 24" Drain Height, Barrier Free <input type="checkbox"/> O Standard, 6" Drain Height		<input type="checkbox"/> A Plastic Bowl, No Dust Cover <input type="checkbox"/> B Plastic Bowl, Plastic Dust Cover <input type="checkbox"/> D 304 SS, No Dust Cover <input checked="" type="checkbox"/> E 304 SS, 304 SS Dust Cover <input type="checkbox"/> F 304 SS, Plastic Dust Cover <input type="checkbox"/> G 316 SS, No Dust Cover <input type="checkbox"/> H 316 SS, 316 SS Dust Cover <input type="checkbox"/> J 316 SS, Plastic Dust Cover <input type="checkbox"/> O No Bowl or Dust Cover	
Pipe Material <input type="checkbox"/> A NPT, Yellow BradTect Galvanized Steel <input checked="" type="checkbox"/> B NPT, All 304 Stainless Steel <input type="checkbox"/> C NPT, All 316 Stainless Steel* <input type="checkbox"/> D NPT, Chrome-Plated		Activation <input checked="" type="checkbox"/> A 304 SS Handle <input type="checkbox"/> B 316 SS Handle <input type="checkbox"/> C 304 SS Handle with Aluminum Foot Pedal* <input type="checkbox"/> D 304 SS Handle with Stainless Steel Foot Pedal* <input type="checkbox"/> E 316 SS Handle with 316 Stainless Steel Foot Pedal*	
Ball Valve <input type="checkbox"/> 1 Stay-Open Shower and Eyewash, Chrome-Plated Brass <input checked="" type="checkbox"/> 2 Stay-Open Shower and Eyewash, 316 SS <input type="checkbox"/> 3 Self-Closing Shower and Stay-Open Eyewash, Chrome-Plated Brass**		Drench Hose and Backflow Prevention <input checked="" type="checkbox"/> A Drench Hose Kit with Vacuum Breaker <input type="checkbox"/> B Drench Hose Kit with N9 Backflow Preventer <input type="checkbox"/> C Drench Hose Kit with 9D Backflow Preventer <input type="checkbox"/> D Drench Hose Kit without Backflow Preventer <input type="checkbox"/> O No Drench Hose and No Backflow Prevention	
Showerhead <input type="checkbox"/> A Plastic Showerhead <input type="checkbox"/> B Plastic Showerhead with Plastic Shroud <input type="checkbox"/> C Plastic Showerhead with Stainless Steel Shroud <input checked="" type="checkbox"/> D 304 SS High Performance Showerhead <input type="checkbox"/> E 316 SS High Performance Showerhead		Freeze and Scald Protection <input type="checkbox"/> N Anti-Freeze Valve <input type="checkbox"/> P Anti-Scald Valve <input type="checkbox"/> R Anti-Freeze and Anti-Scald Valves <input checked="" type="checkbox"/> O No Anti-Freeze Valve and No Anti-Scald Valve	
Eyewash – Eye/Face Wash <input type="checkbox"/> A Halo Eyewash <input type="checkbox"/> B Halo Eye/Face Wash <input type="checkbox"/> D Halo Eyewash, 304 SS Yoke <input checked="" type="checkbox"/> E Halo Eye/Face Wash, 304 SS Yoke <input type="checkbox"/> G Halo Eyewash, 316 SS Yoke <input type="checkbox"/> H Halo Eye/Face Wash, 316 SS Yoke			

* Not available with barrier-free configurations.

** Self-closing valves are not ANSI Z358.1 compliant.





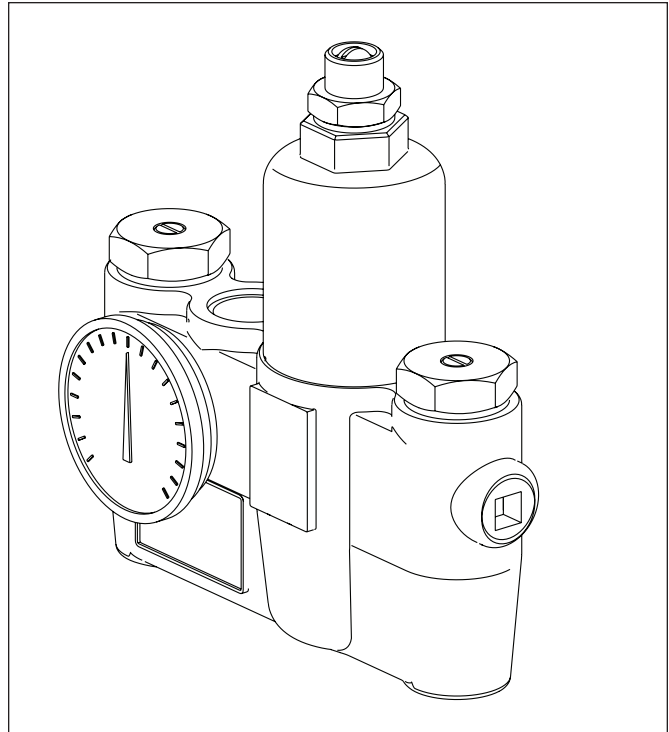
All dimensions assume standard thread engagement. Variations in manufacturing allow for +/- 1/8" (3mm) per threaded joint. To find the tolerance of a dimension, add the number of thread joints across the length of the dimension and multiply it by 1/8" (3mm).



S19-2100, S19-2200

Emergency Fixture Thermostatic Mixing Valves

- Meets ANSI Z358.1-2009
- Reliable Liquid-Filled Thermostat with 10-Year Warranty
- Integral Strainer Checkstops on Inlets
- Adjustable Set Point within Temperature Range
- Accurate Temperature Control to within $\pm 3^\circ$ F
- Built-in Cold Water Bypass, Assuring Cold Flow
- Positive Shutoff of Hot Supply When Cold Supply is Lost
- Easy Installation and Serviceability
- Dirt and Lime Resistant
- Dial Thermometer
- Factory Assembled and Tested
- Universal Mounting Capability
- Cabinet Features:
 - 18 Gauge Body & Door
 - Left-Hand Hinge
 - Cylinder Lock
 - Inlet/Outlet Knock-Out Holes for Mounting Flexibility
 - Stainless Steel or Baked White Enamel Finishes
 - Surface-Mounted or Recessed Style



Valve Specifications

Maximum Operating Pressure

125 PSI (860 kPa)

Maximum Inlet Temperature

180° F (82° C)

Recommended Inlet Temperature

120° F (49° C) – 140° F (60° C)

Temperature Range

Std. 65° F (18° C) to 95° F (35° C) **Set Point** 85° F (29° C)

Flow Capacities – GPM (L/Min)

Model	Min. Flow	Pressure Drop – PSI (Bar)						
		5 (.5)	10 (1.0)	15 (1.5)	20 (2.0)	30 (2.5)	45 (3.0)	60 (4.0)
S19-2100	2.0 (5.5)	10.5 (48.5)	15.0 (68.5)	18.5 (84.0)	21.3 (97.0)	26.0 (108.5)	32.0 (119.0)	37.0 (137.0)
	Cold Bypass Only	8.0 (37.0)	11.5 (52.0)	14.0 (64.5)	16.5 (74.0)	20.0 (83.0)	24.5 (91.0)	28.0 (105.0)
S19-2200	2.0 (7.5)	22.0 (99.5)	31.0 (141)	38.0 (172.5)	43.5 (199.0)	53.5 (222.5)	65.5 (244.0)	75.5 (281.5)
	Cold Bypass Only	16.5 (76.3)	23.5 (108.0)	29.0 (132.0)	33.5 (152.5)	41.0 (170.5)	50.0 (187.0)	58.0 (216.0)

Models (Must select one)

Model	Description
<input checked="" type="checkbox"/> S19-2100	EFX25-Thermostatic Mixing Valve
<input type="checkbox"/> S19-2200	EFX60-Thermostatic Mixing Valve

Optional Selections

Finish

C Chrome Plated

Piped Assembly

P Piped Assembly with Inlet and Outlet Shutoff
 N Piped Assembly only

Cabinets

SS Surface Mount Stainless Steel
 RS Recessed Stainless Steel
 SE Surface Mount White Enamel
 RE Recessed White Enamel
 W Plexi-glass Window in Door

Engineer's Approval _____

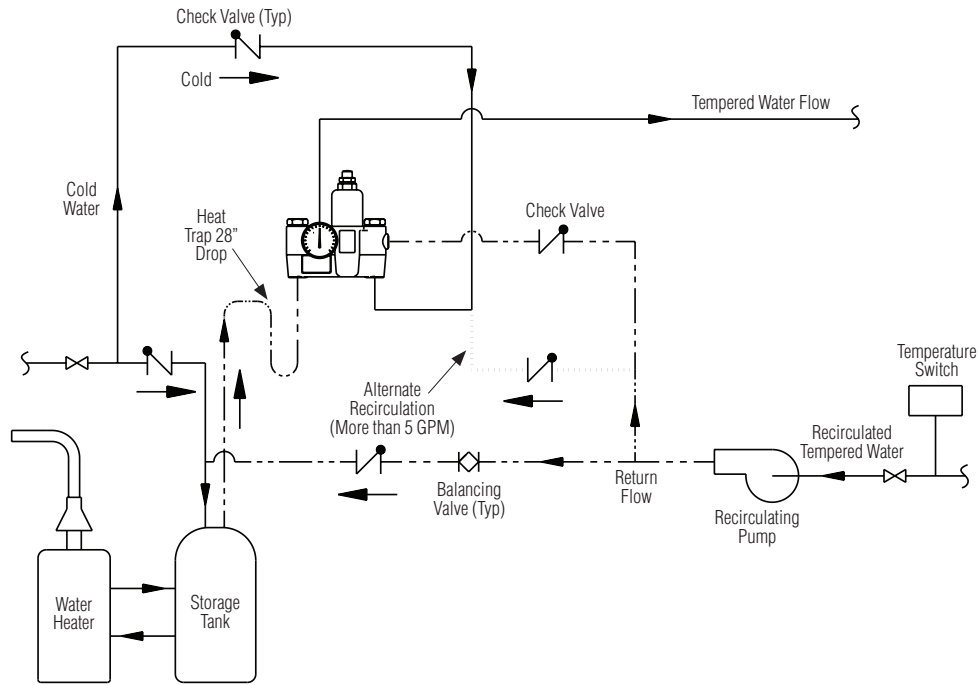
Plumbing Fixtures
Document No. 5900

Page 1 of 4
This information is subject to change without notice.
9/30/2011

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P.O. Box 309, Menomonee Falls, WI 53052-0309
Phone: 800.BRADLEY(800.272.3539) Fax: 262.253.4161
bradleycorp.com

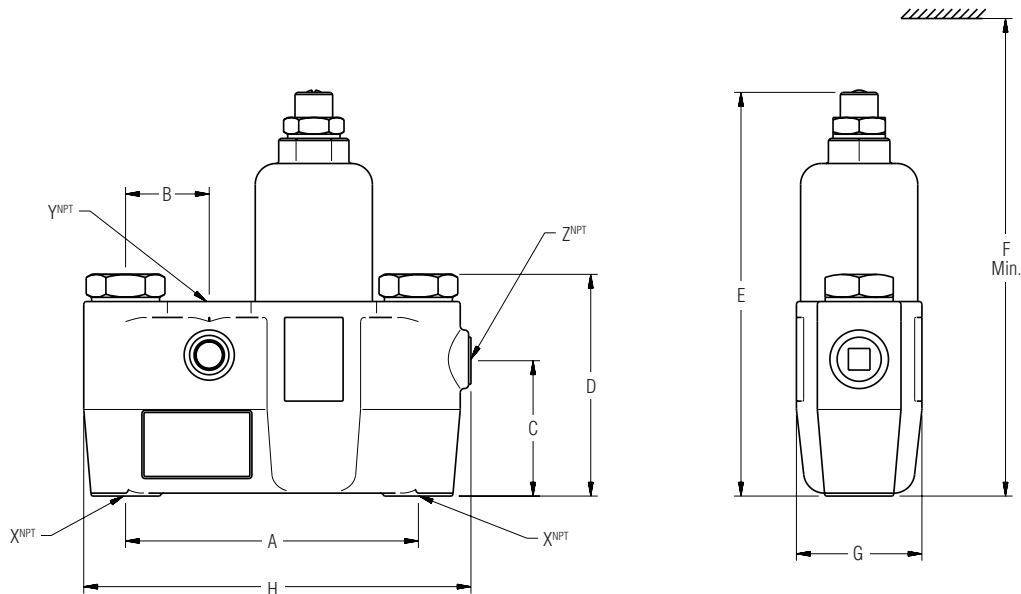
Recirculation Diagram

(mm)



Dimensions

Model	A	B	C	D	E	F	G	H	X ^{NPT}	Y ^{NPT}	Z ^{NPT}
S19-2100	7" (178)	2" (51)	3-1/4" (84)	4-3/4" (119)	8" (203)	14" (356)	3-1/8" (79)	9-1/4" (234)	3/4"	1"	3/4"
S19-2200	8-3/4" (224)	2-1/2" (64)	3-1/2" (89)	5-1/4" (135)	12-1/4" (312)	19" (483)	3-5/8" (91)	11-3/8" (290)	1"	1-1/4"	3/4"



EEW-1



S19-2100, S19-2200

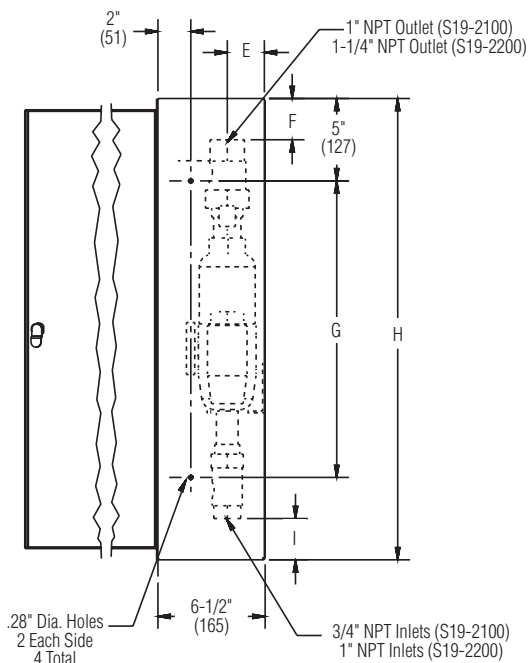
Emergency Fixture Thermostatic Mixing Valves

Dimensions — Surface-Mounted Cabinet

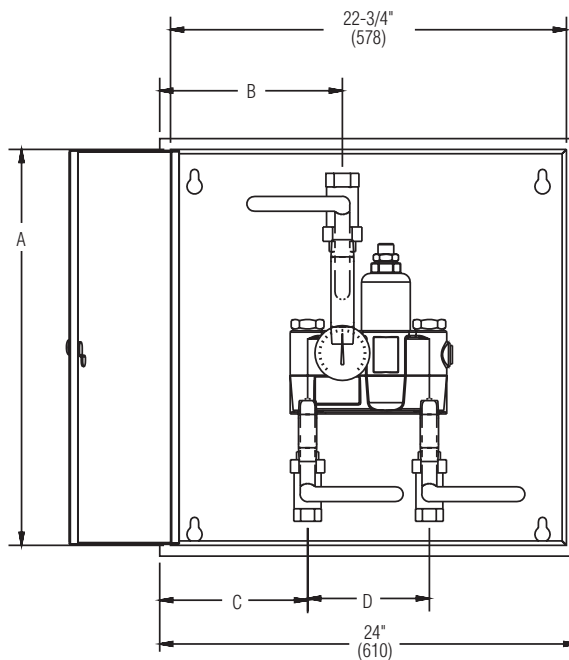
(mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M
S19-2100	22-3/4" (578)	10-1/2" (267)	8-1/2" (216)	7" (178)	2" (51)	2" (51)	14" (356)	24" (610)	2" (51)	6-1/4" (159)	7-1/2" (191)	20" (508)	8-7/16" (214)
S19-2200	26-3/4" (679)	10-3/16" (259)	7-5/8" (194)	8-3/4" (222)	2-1/4" (57)	2-1/2" (64)	18" (457)	28" (711)	2-1/2" (64)	5-1/8" (130)	9-3/4" (248)	24" (610)	9-3/16" (233)

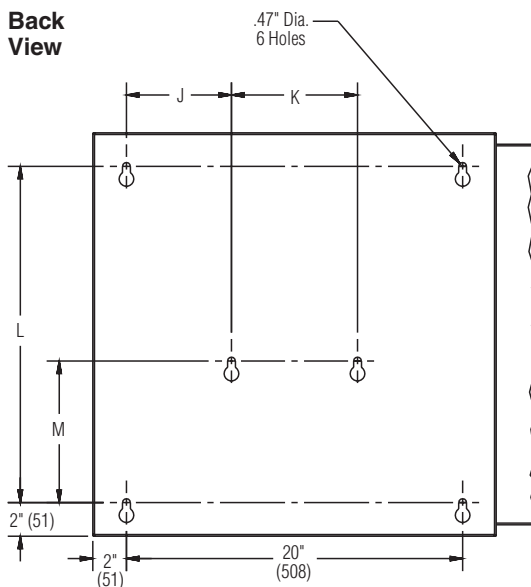
Side View



Front View



Back View



EEW-1



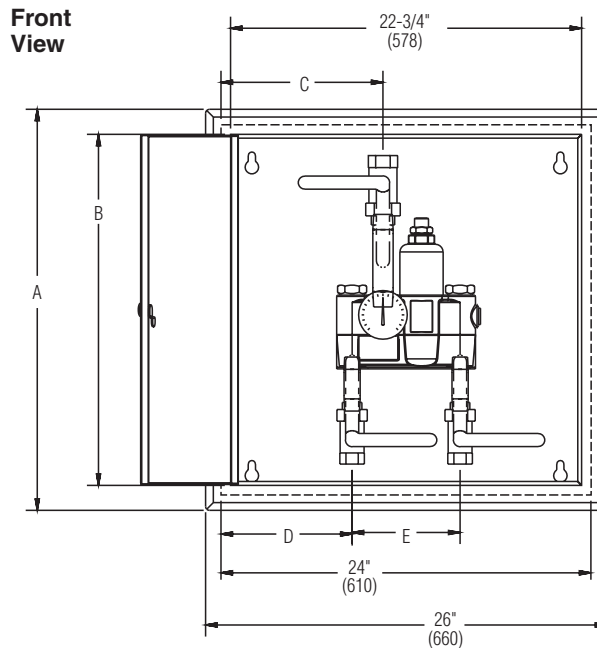
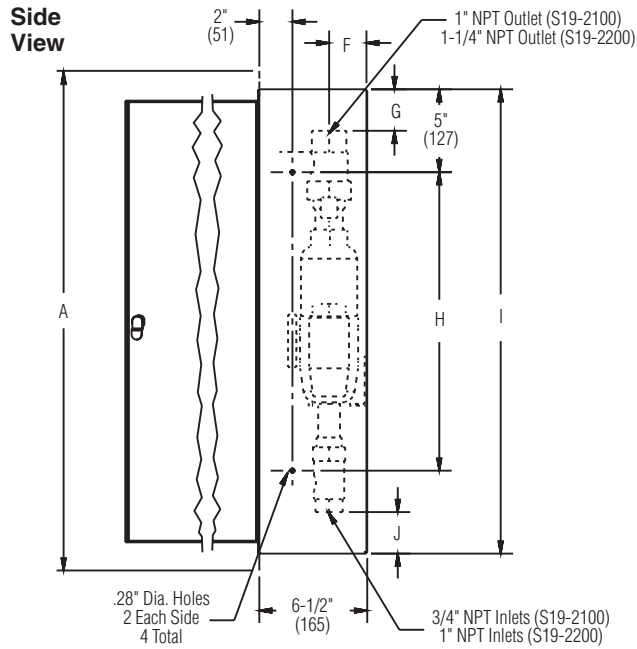
S19-2100, S19-2200

Emergency Fixture Thermostatic Mixing Valves

Dimensions — Recessed Cabinet

(mm)

Model	A	B	C	D	E	F	G	H	I	J
S19-2100	26" (660)	22-3/4" (578)	10-1/2" (267)	8-1/2" (216)	7" (178)	2" (51)	2" (51)	14" (356)	24" (610)	2" (51)
S19-2200	30" (762)	26-3/4" (679)	10-3/16" (259)	7-5/8" (194)	8-3/4" (222)	2-1/4" (57)	2-1/2" (64)	18" (457)	28" (711)	2-1/2" (64)



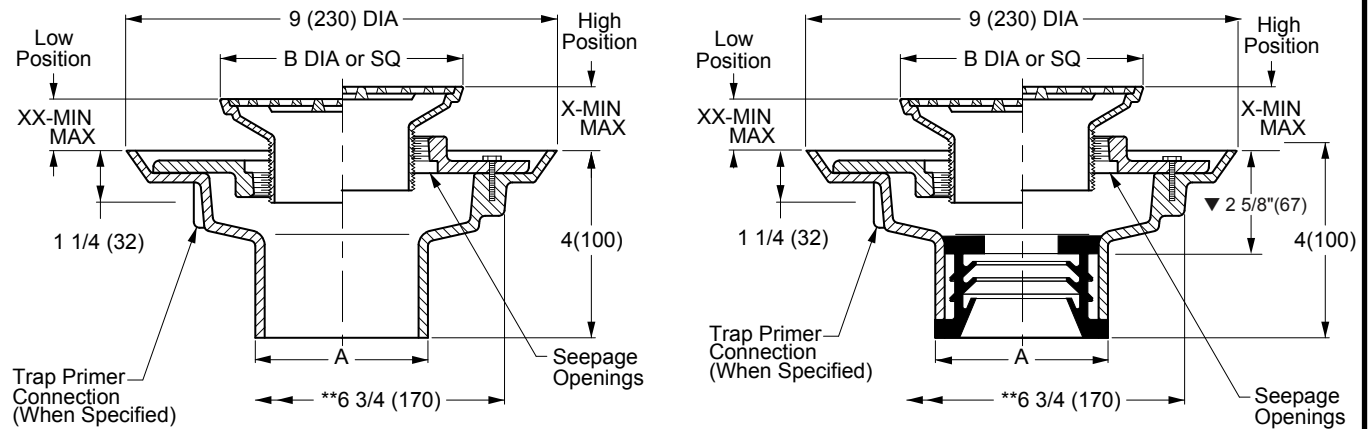
SMITH® JAY R. SMITH MFG. CO.®
 DIVISION OF SMITH INDUSTRIES, INC.
 POST OFFICE BOX 3237
 MONTGOMERY, ALABAMA 36109-0237 (USA)
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com



LOCATION

FLOOR OR SHOWER DRAINS WITH ADJUSTABLE STRAINER HEADS

FUNCTION: General service floor drain for use in showers, toilets, kitchens and other finished areas where foot traffic is expected. The round top strainer head is used for all types of poured finished floors. The square top is particularly adaptable to floors that are finished in material of square or straight line pattern. Reversible flashing collar permits adjustment of the strainer to meet finished floor level.



A (Pipe Size) = 02(50), 03(75), 04(100), 05(125) or 06(150)

NO-HUB OUTLET

- Fig. 2005Y.....(A) ROUND TOP
- Fig. 2005Y.....(B) SQUARE TOP

SPEEDI-SET OUTLET

- Fig. 2005L.....(A) ROUND TOP
- Fig. 2005L.....(B) SQUARE TOP

Outlet Size	Nickel Bronze Strainer Head
▲ 02(50)	05(125) DIA or SQ
▲ 03(75)	06(150) DIA or SQ
▲ 04(100)	08(205) DIA or SQ

Strainer Size B	*Collar In High Position X		*Collar In Low Position XX		Free Area SQ IN (SQ CM)	
	MIN	MAX	MIN	MAX	ROUND	SQUARE
05 (125)	1 1/4(32)	2 1/4(57)	3/4(19)	1 5/8(41)	7(45)	6.5(42)
06 (150)	1 1/4(32)	2 1/4(57)	3/4(19)	1 5/8(41)	9(58)	12.5(81)
07 (180)	1 1/4(32)	2 1/4(57)	7/8(22)	1 7/8(48)	14(90)	11(71)
08 (205)	1 1/2(38)	2 1/2(64)	1(25)	1 7/8(48)	17(110)	14(90)
*09 (230)	1 1/2(38)	2 3/8(60)	1(25)	1 7/8(48)	18(116)	16(103)
*10 (255)	1 1/2(38)	2 3/8(60)	1(25)	1 7/8(48)	23(48)	16(103)

- ▼ This dimension to internal stop of speedi-set gasket.
- Add 3/8"(10) to all min/max dimensions for round strainers.
- * Collar is reversible to obtain extreme high and low strainer positions.
- ** Not available for 5"(125) size strainer.
- ** MIN 6 3/4"(170) hole required for core drilled application.

REGULARLY FURNISHED:
 Duco Cast Iron Body with Flashing Collar and Adjustable Strainer Head as Indicated by Suffix Letter Selected.

NOTE: Dimensions shown in parentheses are in millimeters.

- ▲ Meets ASME Standard A112.6.3-2001 02(50), 03(75) or 04"(100) sizes only.

VARIATIONS:

- Flapper Type Backwater Valve -V
- ** Hinged Grate -H
- L Speedi-Set Service Weight 2(50), 3(75) & 4"(100) only
- LXH Speedi-Set Extra Heavy 2(50), 3(75) & 4"(100) only
- Sediment Bucket -B
- Trap Primer Connection -P050 1/2" (13) & -P075 3/4" (19)
- Vandal Proof Screws -U
- Wide Flanged Strainer (Specify Fig. DX2005)
- T Threaded Outlet

OPTIONAL MATERIALS:

- Bronze Body -BB
- Chrome Plated Strainer -CP
- Galvanized Cast Iron Body -G
- Nickel Bronze Strainer -NB
- Polished Bronze Strainer -PB
- Stainless Steel (Specify Fig. 9700-A)

SEE PM0457 FOR OPTIONAL STRAINER HEADS.

DRAWING NUMBER
S2005

SIZE
A

SCALE:
NONE

DATE:
5-17-85

APPROVED BY:
TD

CHECKED BY:
TD

DRAWN BY:
PJ

2005

FIGURE NUMBER

REV.	DATE	DESCRIPTION	BY	CKD.
M	10/24/06	NO-HUB to SPEEDI-SET	RN	CL
L	9/22/06	Revised ANSI Note	RN	CL
K	05/10/05	Revised ANSI Note	JJ	AM
J	04/10/03	Added 6" to Pipe Size	JJ	CL

WEIGHT POUNDS	VOLUME CUBIC FEET

FIGURE NUMBER
2005

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA



Precision Plumbing Products

"Specify with Confidence - Install with Pride"

LOW LEAD

PRIME-RITE SERIES
TRAP PRIMER VALVES

FD-1

www.pppinc.net

"... Automatically maintains
a constant water seal in floor
drain traps."

NO Adjustment Required!

Just the facts:

This innovative trap priming system automatically primes up to two floor drain traps using our patented water distribution system. The PRIME-RITE Series requires no adjustment but must be installed on a cold water line of 1 1/2" (38mm) diameter or less and must serve a frequently used fixture such as a urinal or a water closet. The priming valve is automatically activated when it senses a pressure drop of 10 PSIG (70 kpa). The valve's operating range is 20 to 80 PSIG (138 to 552 kpa).

PRIME-RITE SERIES TRAP PRIMING VALVE SPECIFICATIONS:

PPP Model # PR-500LL is machined from C69300 ECO corrosion resistant brass.

PPP Model # PR-500AUS is machined from DZR corrosion resistant brass.

PPP Model #PR-500AUS approved to Australian Standards Lic. #IP92.

This priming valve contains: No springs, diaphragms, or plastic parts.

PROJECT SUBMITTAL

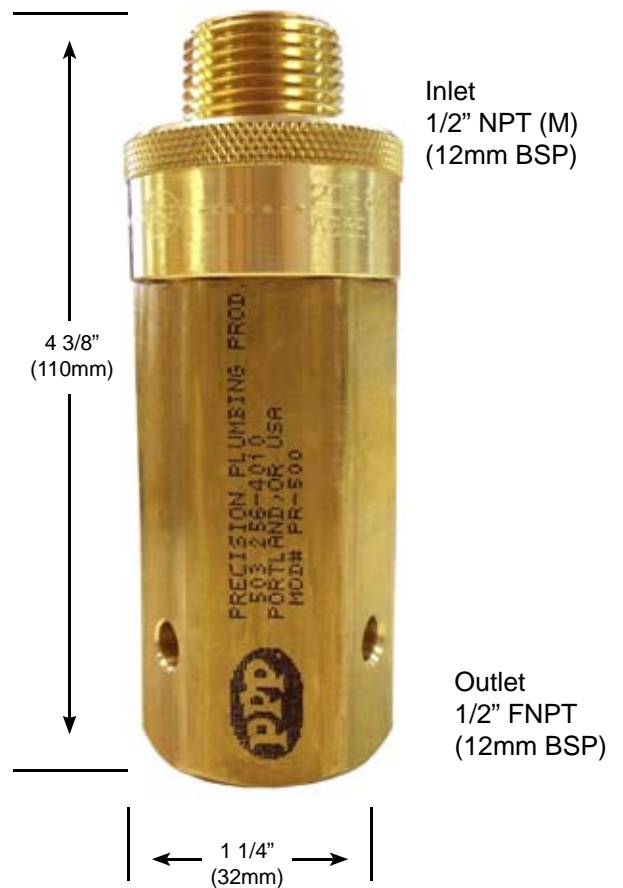
Project: _____

Contractor: _____

Engineer: _____

Date Submitted: _____

Prepared By: _____



PART NO's:

- **PR-500**
- PR-500LL**
- PR-500AUS**

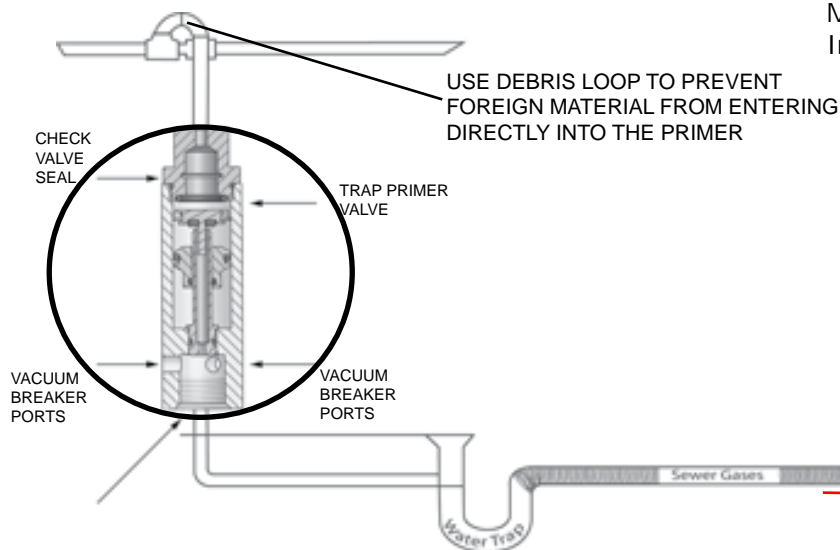
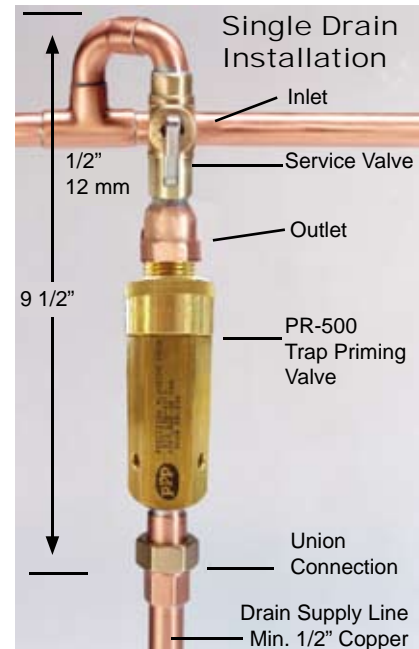
TRAP PRIMER DISTRIBUTION UNITS

DISTRIBUTION UNIT DU-4 & DU-U. **FD-1**

A metered amount of water from the floor drain trap primer is distributed to as many as two (2) floor drain traps by means of the patented distribution unit. The priming valve must have a minimum elevation of 12" inches (305mm) above the finished floor.

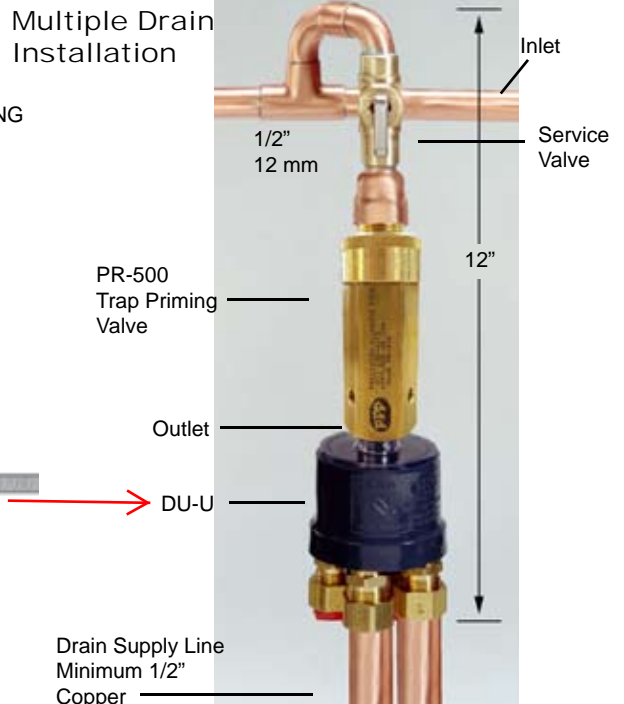
DISTRIBUTION UNIT INSTALLATION:

- Must be installed level.
- Must be installed with clear plastic cover.
- Must be installed with access for periodic inspection.
- Do not subject trap primer valve to rough-in pressure test.
- For further detail see information sheet specific for the distribution units.



THE PRIMING VALVE MUST HAVE A MINIMUM ELEVATION OF 12 INCHES (305MM) ABOVE THE FINISHED FLOOR

NOTE: Consult plumbing inspector prior to installing distribution units.



Precision Plumbing Products
Division of JL Industries, Inc.

Airport Business Center
6807 NE 79th Court, Suite E
Portland, Oregon 97218

T (503) 256-4010
F (503) 253-8165

www.pppinc.net



Complies with Low lead Law

Rev 02/10



Precision Plumbing Products
"Specify with Confidence - Install with Pride"

FD-1

**FLOOR DRAIN TRAP PRIMER
 FRESH WATER DISTRIBUTION SYSTEMS**

UNIVERSAL DISTRIBUTION UNIT

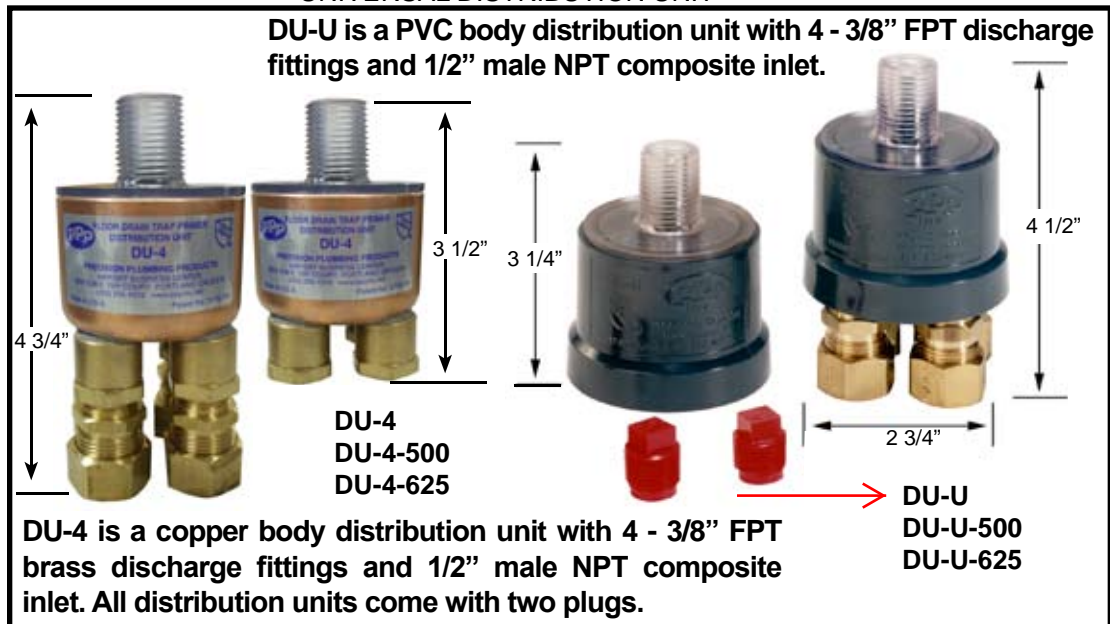


Fig. 1 www.pppinc.net



Parts not supplied.
 For installation dimension see table below.

Just the facts:

The Trap Priming Distribution Systems are patented designs that incorporate both copper and PVC materials. These designs give the installer a simple and positive means to prime multiple floor drains using only one Precision Plumbing Trap Priming Valve. It is our recommendation that the distribution unit be mounted level. The fresh water supply line, running from the distribution unit to the trap, must be a minimum of 1/2" O.D. copper tube.

PROJECT SUBMITTAL

Model #: _____
 Project: _____
 Contractor: _____
 Engineer: _____
 Date Submitted: _____
 Prepared By: _____

INSTALLATION DIMENSION (see fig. 1)				
PRIMER MODEL:	DU-4	DU-4-500/625	DU-U	DU-U-500/625
P1	12 1/2"	12 3/4"	12"	12 1/4"
P2	12 1/2"	12 3/4"	12"	13 1/4"
PRIME-RITE	12 1/2"	12 3/4"	12"	13 1/4"
OREGON #1	14 1/2"	14 3/4"	13 1/2"	14 3/4"
CPO-500	14 1/2"	14 3/4"	13 1/2"	14 3/4"
SP-500	12"	12 3/4"	11 1/2"	12 3/4"
MP-500	12"	12 3/4"	11 1/2"	12 3/4"
MPB-500	17 3/4"	19"	17 1/2"	18 3/4"
PRO1-500	6 1/2"	7 3/4"	6 1/8"	7 1/4"

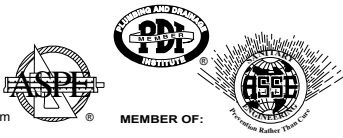


Precision Plumbing Products
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 Portland, Oregon 97218
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 www.pppinc.net



U.S. Patent No. 3,776,269-6,325,091

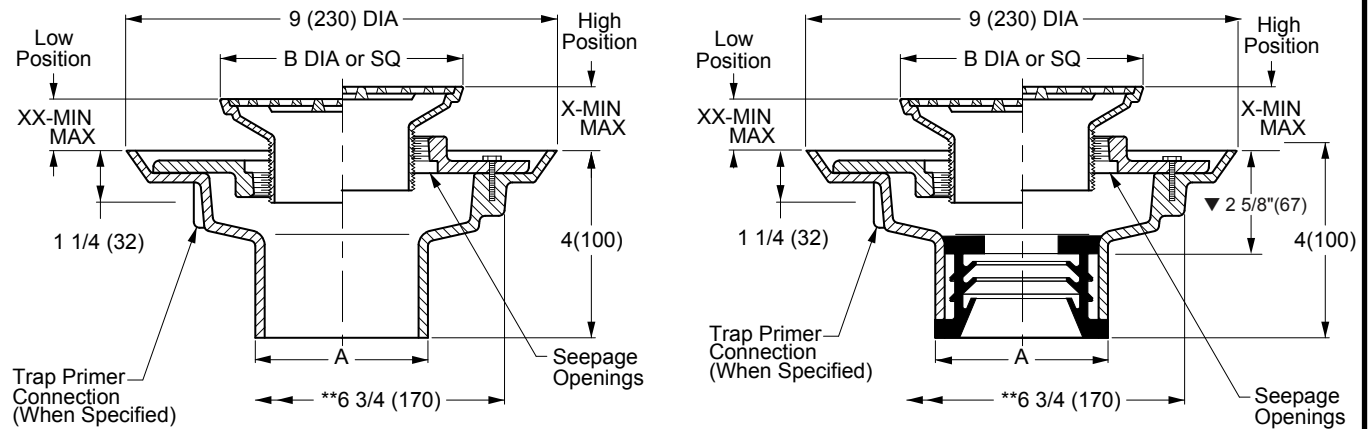
SMITH® JAY R. SMITH MFG. CO.®
 DIVISION OF SMITH INDUSTRIES, INC.
 POST OFFICE BOX 3237
 MONTGOMERY, ALABAMA 36109-0237 (USA)
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com



LOCATION

FLOOR OR SHOWER DRAINS WITH ADJUSTABLE STRAINER HEADS

FUNCTION: General service floor drain for use in showers, toilets, kitchens and other finished areas where foot traffic is expected. The round top strainer head is used for all types of poured finished floors. The square top is particularly adaptable to floors that are finished in material of square or straight line pattern. Reversible flashing collar permits adjustment of the strainer to meet finished floor level.



A (Pipe Size) = 02(50), 03(75), 04(100), 05(125) or 06(150)

NO-HUB OUTLET

- Fig. 2005Y.....(A) ROUND TOP
- Fig. 2005Y.....(B) SQUARE TOP

SPEEDI-SET OUTLET

- Fig. 2005L.....(A) ROUND TOP
- Fig. 2005L.....(B) SQUARE TOP

Outlet Size	Nickel Bronze Strainer Head
▲ 02(50)	05(125) DIA or SQ
▲ 03(75)	06(150) DIA or SQ
▲ 04(100)	08(205) DIA or SQ

Strainer Size B	*Collar In High Position X		*Collar In Low Position XX		Free Area SQ IN (SQ CM)	
	MIN	MAX	MIN	MAX	ROUND	SQUARE
05 (125)	1 1/4(32)	2 1/4(57)	3/4(19)	1 5/8(41)	7(45)	6.5(42)
06 (150)	1 1/4(32)	2 1/4(57)	3/4(19)	1 5/8(41)	9(58)	12.5(81)
07 (180)	1 1/4(32)	2 1/4(57)	7/8(22)	1 7/8(48)	14(90)	11(71)
08 (205)	1 1/2(38)	2 1/2(64)	1(25)	1 7/8(48)	17(110)	14(90)
*09 (230)	1 1/2(38)	2 3/8(60)	1(25)	1 7/8(48)	18(116)	16(103)
*10 (255)	1 1/2(38)	2 3/8(60)	1(25)	1 7/8(48)	23(48)	16(103)

- ▼ This dimension to internal stop of speedi-set gasket.
- Add 3/8"(10) to all min/max dimensions for round strainers.
- * Collar is reversible to obtain extreme high and low strainer positions.
- ** Not available for 5"(125) size strainer.
- ** MIN 6 3/4"(170) hole required for core drilled application.

REGULARLY FURNISHED:
 Duco Cast Iron Body with Flashing Collar and Adjustable Strainer Head as Indicated by Suffix Letter Selected.

NOTE: Dimensions shown in parentheses are in millimeters.

- ▲ Meets ASME Standard A112.6.3-2001 02(50), 03(75) or 04"(100) sizes only.

VARIATIONS:

- Flapper Type Backwater Valve -V
- ** Hinged Grate -H
- L Speedi-Set Service Weight 2(50), 3(75) & 4"(100) only
- LXH Speedi-Set Extra Heavy 2(50), 3(75) & 4"(100) only
- Sediment Bucket -B
- Trap Primer Connection -P050 1/2" (13) & -P075 3/4" (19)
- Vandal Proof Screws -U
- Wide Flanged Strainer (Specify Fig. DX2005)
- T Threaded Outlet

OPTIONAL MATERIALS:

- Bronze Body -BB
- Chrome Plated Strainer -CP
- Galvanized Cast Iron Body -G
- Nickel Bronze Strainer -NB
- Polished Bronze Strainer -PB
- Stainless Steel (Specify Fig. 9700-A)

SEE PM0457 FOR OPTIONAL STRAINER HEADS.

DRAWING NUMBER
S2005

SIZE
A

SCALE:
NONE

DATE:
5-17-85

APPROVED BY:
TD

CHECKED BY:
TD

DRAWN BY:
PJ

2005

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

M	10/24/06	NO-HUB to SPEEDI-SET	RN	CL	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER 2005
L	9/22/06	Revised ANSI Note	RN	CL			
K	05/10/05	Revised ANSI Note	JJ	AM			
J	04/10/03	Added 6" to Pipe Size	JJ	CL			
REV.	DATE	DESCRIPTION	BY	CKD.			



Precision Plumbing Products

"Specify with Confidence - Install with Pride"

LOW LEAD

PRIME-RITE SERIES
TRAP PRIMER VALVES

FD-2

www.pppinc.net

"... Automatically maintains
a constant water seal in floor
drain traps."

NO Adjustment Required!

Just the facts:

This innovative trap priming system automatically primes up to two floor drain traps using our patented water distribution system. The PRIME-RITE Series requires no adjustment but must be installed on a cold water line of 1 1/2" (38mm) diameter or less and must serve a frequently used fixture such as a urinal or a water closet. The priming valve is automatically activated when it senses a pressure drop of 10 PSIG (70 kpa). The valve's operating range is 20 to 80 PSIG (138 to 552 kpa).

PRIME-RITE SERIES TRAP PRIMING VALVE SPECIFICATIONS:

PPP Model # PR-500LL is machined from C69300 ECO corrosion resistant brass.

PPP Model # PR-500AUS is machined from DZR corrosion resistant brass.

PPP Model #PR-500AUS approved to Australian Standards Lic. #IP92.

This priming valve contains: No springs, diaphragms, or plastic parts.

PROJECT SUBMITTAL

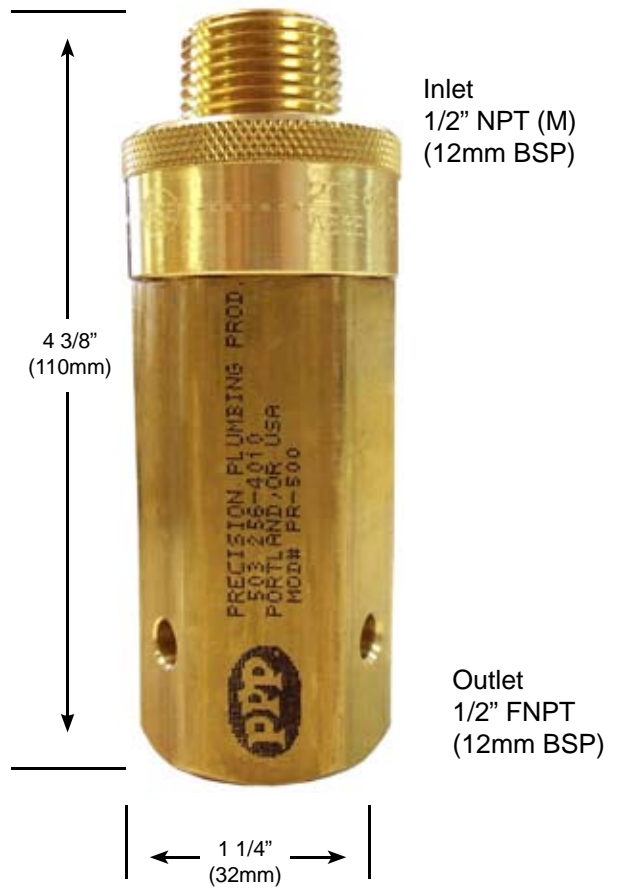
Project: _____

Contractor: _____

Engineer: _____

Date Submitted: _____

Prepared By: _____



PART NO's:

- **PR-500**
- PR-500LL**
- PR-500AUS**

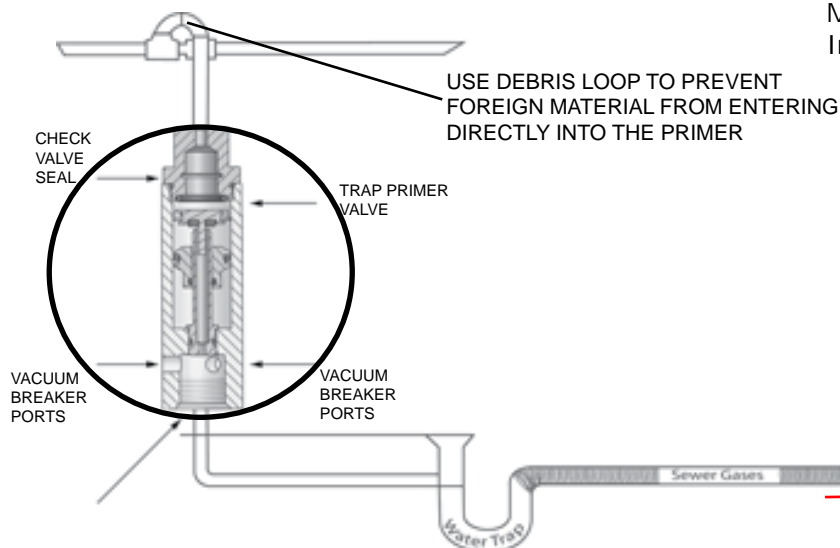
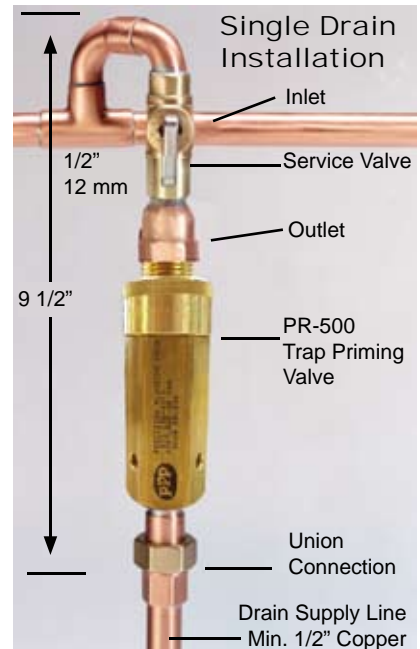
TRAP PRIMER DISTRIBUTION UNITS

DISTRIBUTION UNIT DU-4 & DU-U. **FD-2**

A metered amount of water from the floor drain trap primer is distributed to as many as two (2) floor drain traps by means of the patented distribution unit. The priming valve must have a minimum elevation of 12" inches (305mm) above the finished floor.

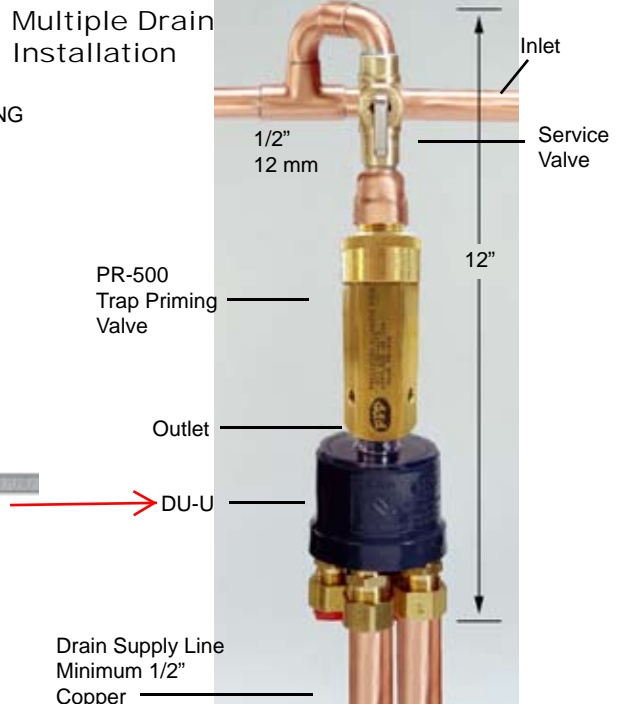
DISTRIBUTION UNIT INSTALLATION:

- Must be installed level.
- Must be installed with clear plastic cover.
- Must be installed with access for periodic inspection.
- Do not subject trap primer valve to rough-in pressure test.
- For further detail see information sheet specific for the distribution units.



THE PRIMING VALVE MUST HAVE A MINIMUM ELEVATION OF 12 INCHES (305MM) ABOVE THE FINISHED FLOOR

NOTE: Consult plumbing inspector prior to installing distribution units.



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Portland, Oregon 97218

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Precision Plumbing Products
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FD-2

**FLOOR DRAIN TRAP PRIMER
 FRESH WATER DISTRIBUTION SYSTEMS**

UNIVERSAL DISTRIBUTION UNIT

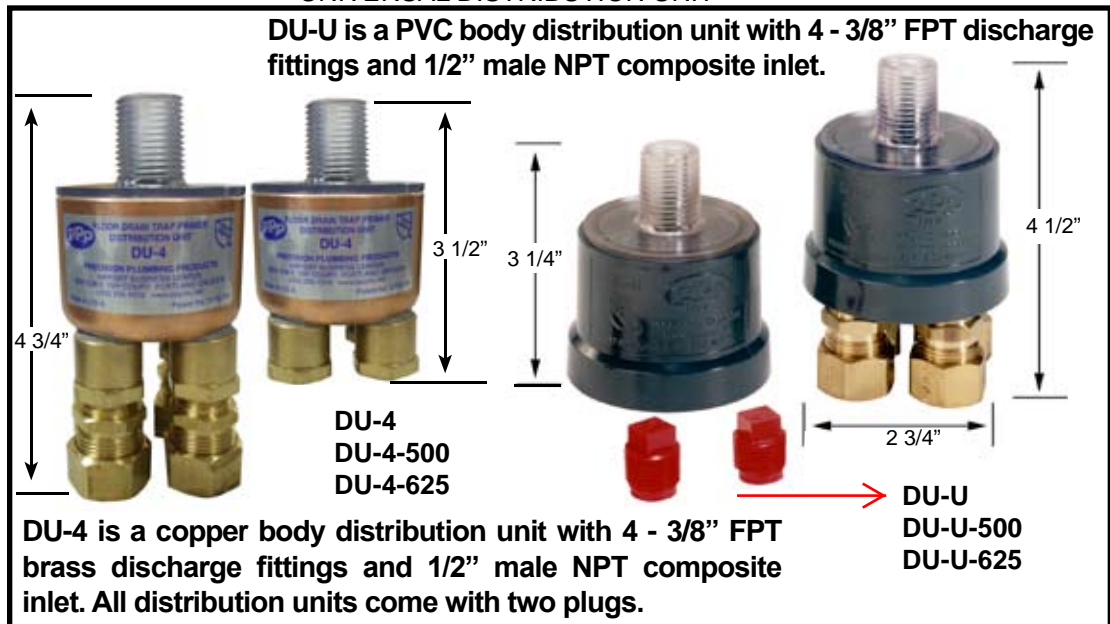


Fig. 1 www.pppinc.net



Parts not supplied.
 For installation dimension see table below.

Just the facts:

The Trap Priming Distribution Systems are patented designs that incorporate both copper and PVC materials. These designs give the installer a simple and positive means to prime multiple floor drains using only one Precision Plumbing Trap Priming Valve. It is our recommendation that the distribution unit be mounted level. The fresh water supply line, running from the distribution unit to the trap, must be a minimum of 1/2" O.D. copper tube.

PROJECT SUBMITTAL

Model #: _____
 Project: _____
 Contractor: _____
 Engineer: _____
 Date Submitted: _____
 Prepared By: _____

INSTALLATION DIMENSION (see fig. 1)				
PRIMER MODEL:	DU-4	DU-4-500/625	DU-U	DU-U-500/625
P1	12 1/2"	12 3/4"	12"	12 1/4"
P2	12 1/2"	12 3/4"	12"	13 1/4"
PRIME-RITE	12 1/2"	12 3/4"	12"	13 1/4"
OREGON #1	14 1/2"	14 3/4"	13 1/2"	14 3/4"
CPO-500	14 1/2"	14 3/4"	13 1/2"	14 3/4"
SP-500	12"	12 3/4"	11 1/2"	12 3/4"
MP-500	12"	12 3/4"	11 1/2"	12 3/4"
MPB-500	17 3/4"	19"	17 1/2"	18 3/4"
PRO1-500	6 1/2"	7 3/4"	6 1/8"	7 1/4"



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U.S. Patent No. 3,776,269-6,325,091

American Standard

Style That Works Better

 BARRIER FREE**WHEELCHAIR
USERS LAVATORY**
VITREOUS CHINA**WHEELCHAIR USERS LAVATORY**

- Vitreous china
- Wall mount sink
- Front overflow
- For concealed arms support (by others)
- Faucet ledge (faucet not included)

Faucet Holes on 102mm (4") centers

- 9141.011** Faucet holes on 102mm (4") centers (Illustrated)
- 9141.029** Faucet holes on 102mm (4") centers
 - Extra right-hand hole
- 9141.035** Faucet holes on 102mm (4") centers
 - Extra left-hand hole
- 9141.911** Faucet holes on 102mm (4") centers
 - Less overflow

Faucet Holes on 267mm (10-1/2") centers

- 9140.013** Faucet holes on 267mm (10-1/2") centers
- 9140.021** Faucet holes on 267mm (10-1/2") centers
 - Extra right-hand hole
- 9140.039** Faucet holes on 267mm (10-1/2") centers
 - Extra left-hand hole
- 9140.913** Faucet holes on 267mm (10-1/2") centers
 - Less overflow

Faucet Holes center hole only

- 9140.047** Center hole only
- 9140.947** Center hole only
 - Less overflow

Nominal Dimensions:

508 x 686mm
(20" x 27")

Bowl Sizes:

14" (356mm) wide
14-3/4" (375mm) front to back
4-3/4" (121mm) deep

Compliance Certifications -**Meets or Exceeds the Following Specifications:**

- ASME A112.19.2 for Vitreous China Fixtures



SEE REVERSE FOR ROUGHING-IN DIMENSIONS

To Be Specified:

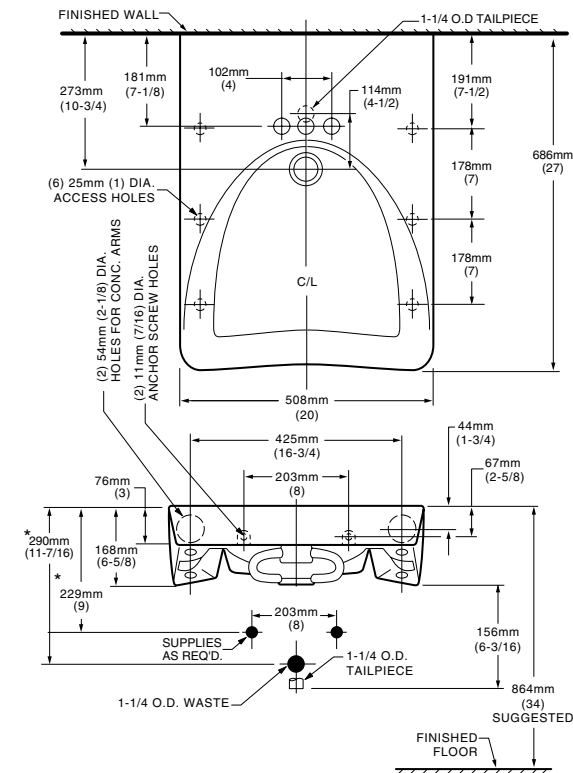
- Color: White Bone Silver
- Faucet*:
- Faucet Finish:
- Supplies with Stop:
- 1-1/4" Trap:
- Nipple:
- Concealed Arms Support (by others):
- Offset Grid Drain Assembly: 7723.018

* See faucet section for additional models available

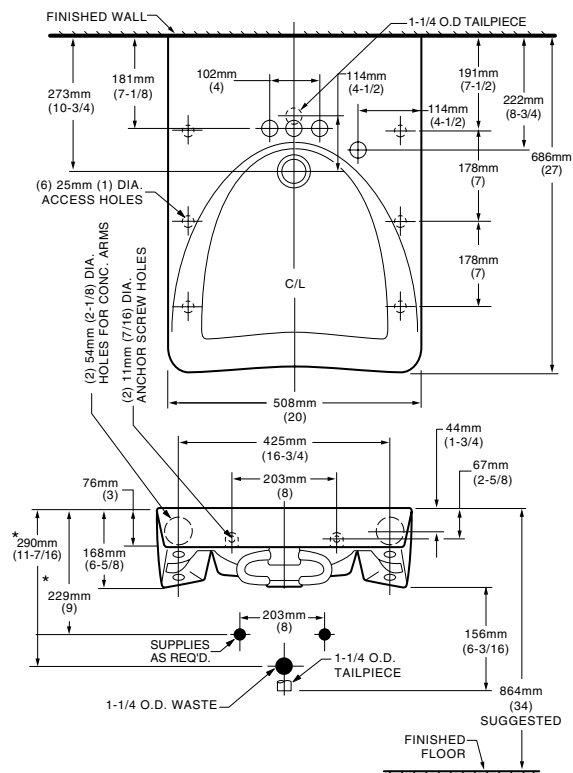


MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.
Top of front rim mounted 864mm (34") from finished floor.

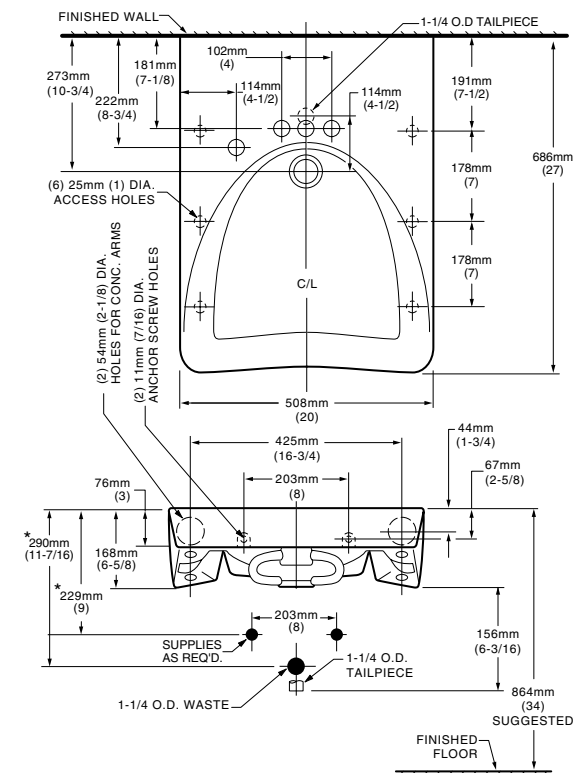
9141.011



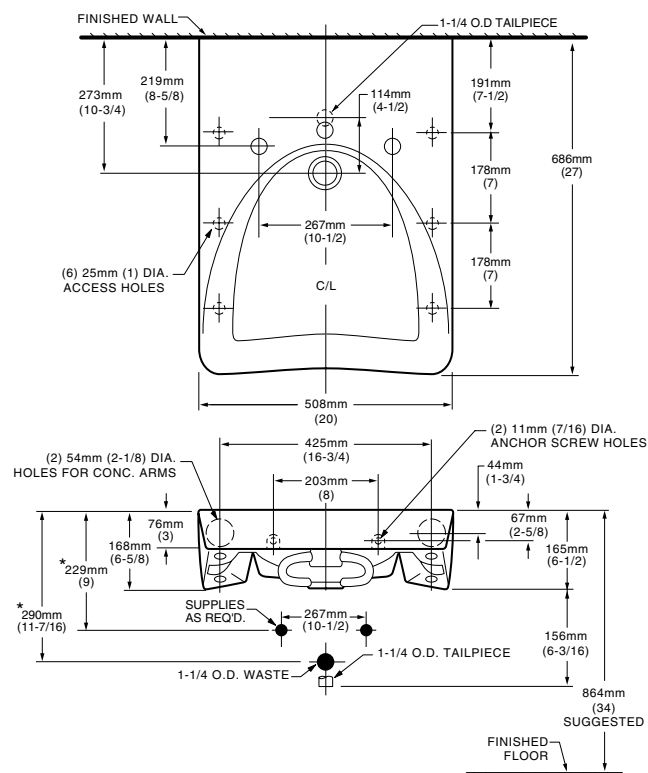
9141.029



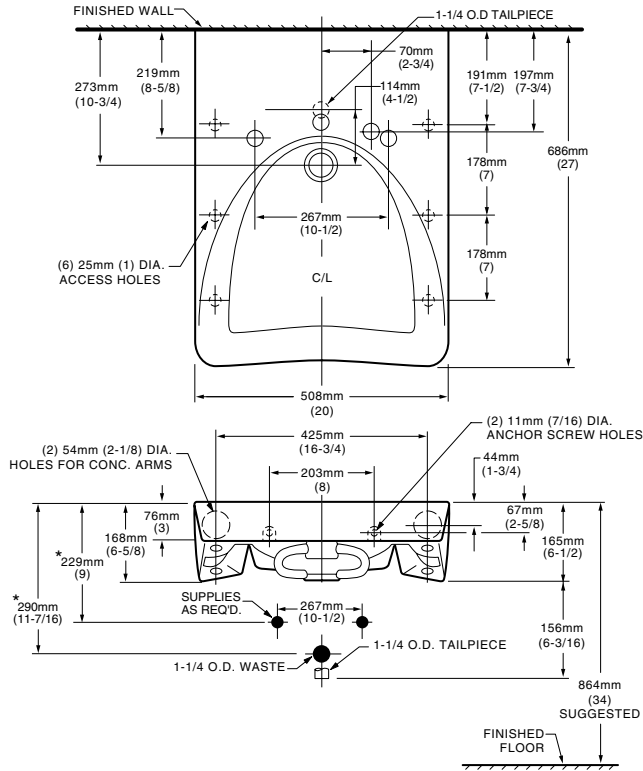
9141.035



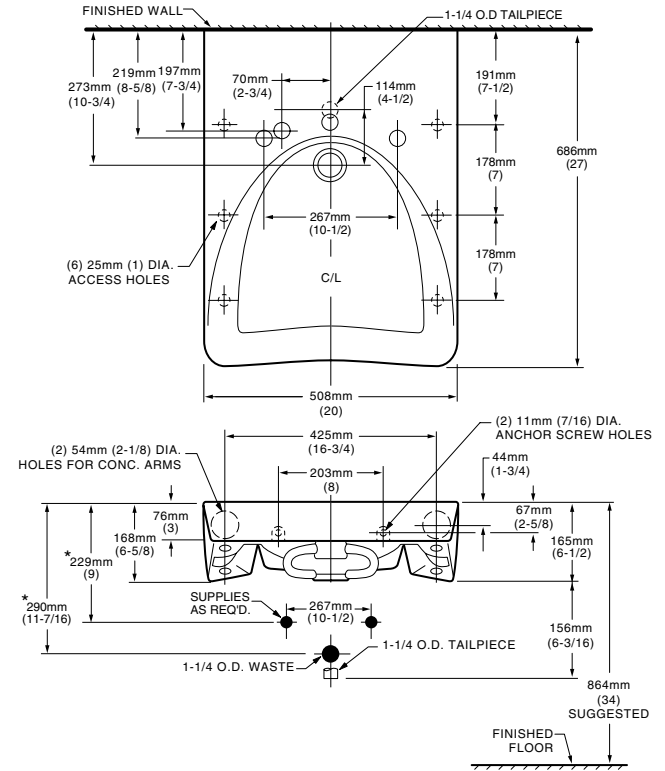
9140.013



9140.021



9140.039



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.

Top of front rim mounted 864mm (34") from finished floor.

NOTES:

* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED. CONCEALED ARM SUPPORT AS REQUIRED TO BE FURNISHED BY OTHERS. FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY. PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



GENERAL DESCRIPTION:

Electronic faucet with proximity operation. Vandal-resistant solid brass construction with single post mounting. Operates on DC (battery) or AC permanent power. Water pressure range from 20 to 125 psi. Single inlet 15" flexible stainless steel hose with 3/8" compression fitting for spout connection.

PRODUCT FEATURES:

Vandal-Resistant Brass Body: Durable - Excellent in high use applications.

Power Options:

- **Battery** - Lithium CR-P2 battery. Battery Life - Approx. 200,000 cycles (4 years @ 4,000 cycles per month).
- **Plug-In** - Plug-In - Universal low voltage transformer (80 - 250 VAC, 50 - 60 Hz) with 6 foot long cord. One power supply can run up to 15 faucets and/or flush valves in series.

Easy and Flexible Installation:

Single post mounting with optional 4" and 8" Deck plate. Water resistant solenoid enclosure mounts to wall.

Integrated; Easy Service Strainer:

Patented integrated strainer enclosed in removable debris cup protects the solenoid valve and aerator from debris. Perforated stainless steel strainer is low maintenance and can be easily accessed.

Temperature Mixing:

Optional thermostatic mixing valve. Mixing valve will connect directly to solenoid inlet and is housed in matching enclosure.

Lead Free: Faucet contains $\leq 0.25\%$ total lead content by weighted average.

MODEL NUMBER:

■ DC POWERED; single inlet

- 6055.104** with cast spout, 0.35 GPM pressure compensating, vandal-resistant non-aerate spray. CR-P2 Lithium Battery included. Faucet is factory set for 7.5 seconds running time to deliver 0.044 gallons per cycle.

■ AC POWERED; single inlet

- 6056.104** with cast spout, 0.35 GPM pressure compensating, vandal-resistant non-aerated spray. Includes AC power supply (M950169-0070A). Faucet is factory set for 7.5 second running time to deliver 0.044 gallons per cycle.

■ OPTIONAL 4" or 8" Deck plates

- 605P.400** 4" brass deck plate with 1/4" fixation studs and quick spin nuts. (6-1/8"x 2-1/8"x 1/2")
- 605P.800** 8" brass deck plate with 1/4" fixation studs and quick spin nuts. (10-1/8"x 2-3/8"x 1/2")

■ OPTIONAL Mixing Valve

- 605XTMV** Thermostatic mixing valve, flex hoses 3/8" compression 20" hose length.

RECOMMENDED SPECIFICATION

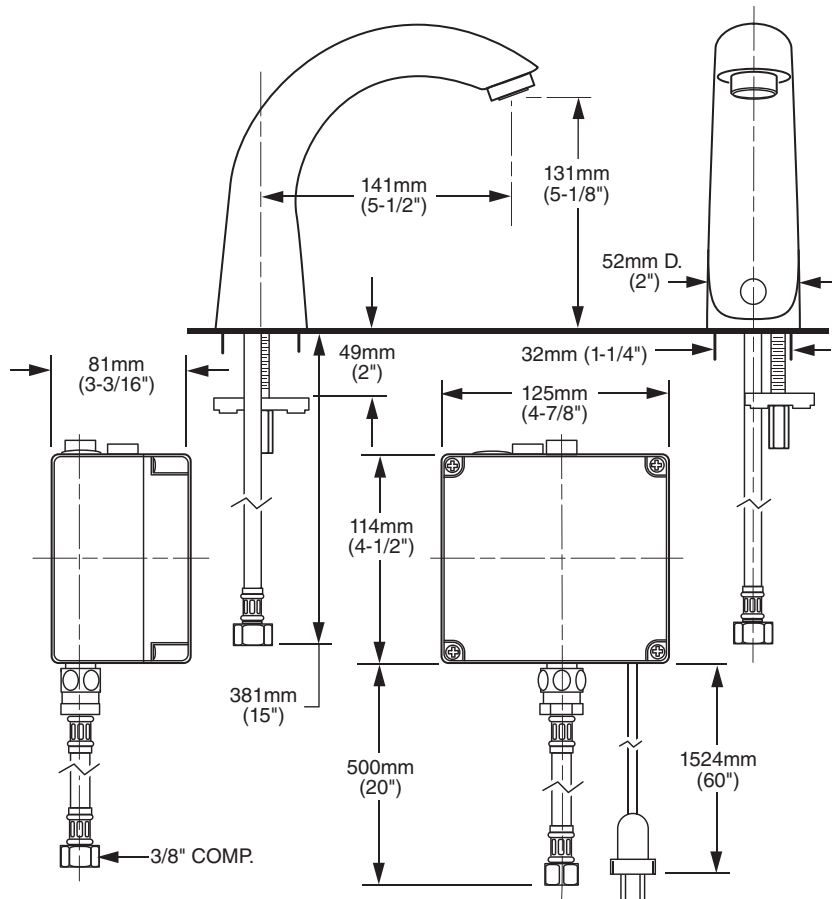
Electronic Proximity Metering Faucet shall feature vandal resistant all brass body with single inlet, and in-line strainer. Shall also feature a low energy use electronically operated solenoid valve and microprocessor controlled proximity sensors. Shall meet ANSI A112.18.1 and ANSI 117.1 codes. Shall feature 0.35 gpm pressure compensating vandal-resistant non-aerated spray. Faucet is factory set for 7.5 seconds running time to deliver 0.044 gallons per cycle. Fitting shall be American Standard Model # 6055.104, 6056.104.

CODES AND STANDARDS

These products meet or exceed the following codes and standards:

ANSI A117.1
ASME A112.18.1
CSA B 125
NSF 61/Section 9, Annex G
CALGreen

 MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES





4675 W. 160th St.
Cleveland, Ohio 44135
Ph: (800) 321-9532
Fax: (800) 321-9535
www.dearbornbrass.com

SUBMITTAL SPECIFICATION

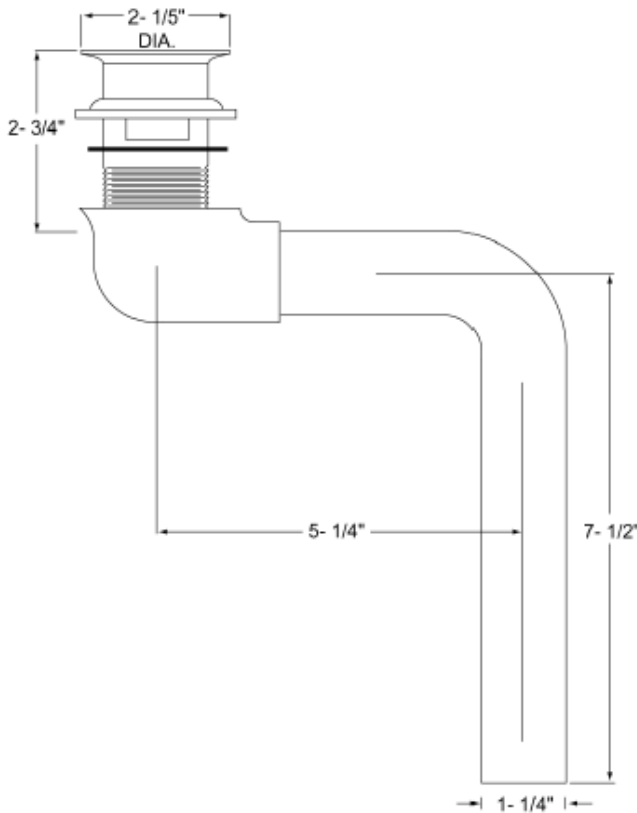
**CAST GRID WHEELCHAIR
PATENT OUTLET PLUG**

Engineering Specification: Dearborn Brass Semi-Cast Wheelchair Grid Patent Overflow Plug with 1- 1/4" – 17 gauge tailpiece.

Job Reference

DESCRIPTION

- Chrome Finished
- Includes: Cast Grid, P.O. Plug with nuts and washers, 90° Elbow and 17 gauge tailpiece
- Designed for installation in most commercial applications



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
	760W-1	Semi-Cast Grid Wheelchair Patent Overflow Plug with 1-1/4" – 17 gauge Tailpiece	10	14

Data is subject to manufacturing tolerances.



4675 W. 160th St.
Cleveland, Ohio 44135
Ph: (800) 321-9532
Fax: (800) 321-9535
www.dearbornbrass.com

SUBMITTAL SPECIFICATION

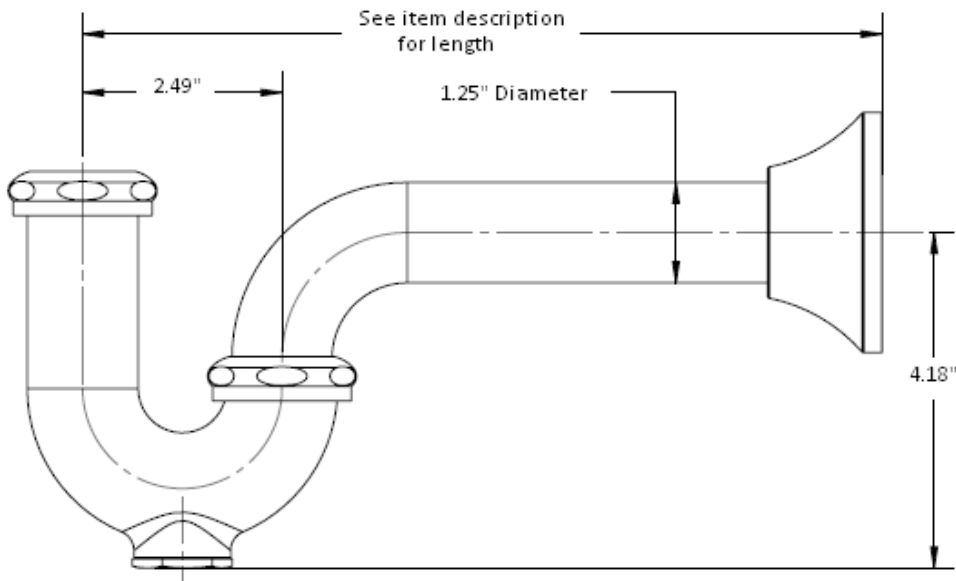
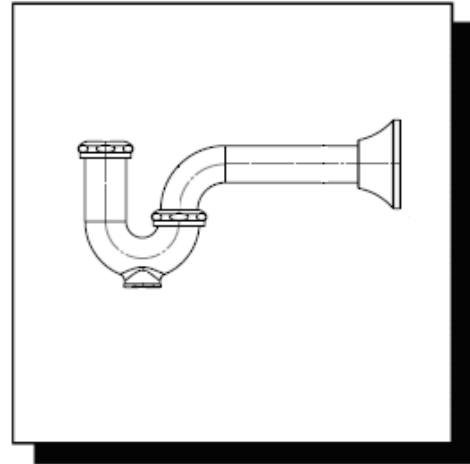
**BRASS TUBULAR
1-¼" SEMI-CAST P-TRAPS**

Engineering Specification: Dearborn Brass 1-¼" Semi-Cast Brass P-Traps are designed for installation in commercial applications.

Job Reference

DESCRIPTION

- Chrome Finished
- 17 Gauge Brass
- Semi-Cast P-Trap
 - Cast J-Bend with Cleanout
 - Quarter Bend
 - Deep Metal Flange
 - Cleanout Plug
 - Fiber Cleanout Washer
 - (2) Brass Nuts
 - (1) 1-½" x 1-¼" Reducing Washer
 - (2) 1-¼" Poly Washers
 - (2) 1-¼" Rubber Washers
- Designed for installation in commercial applications



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
→	507-1	1-¼" x 12" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts	12	17
	5507-1	1-¼" x 12" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts – White Box	12	17
	5507A-1	1-¼" x 15" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts	12	19

Data is subject to manufacturing tolerances.

For Residential and Commercial Applications

Job Name		Engineer / Architect	
Job Location		Wholesaler	
Submittal Date		Contractor	

OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Use: For use with water in accessible locations only. Not intended for recirculating water systems that produce continuous use temperatures above 115° F. For those applications, use our KT™ series ball stop supply kits.

Design Features:

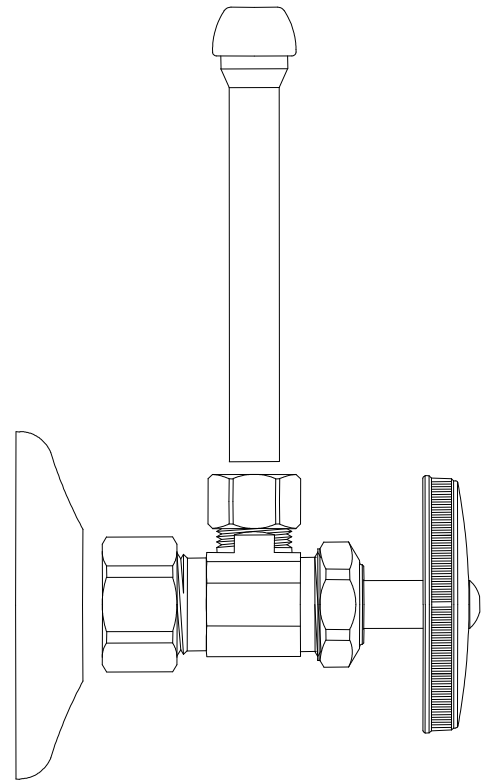
- **Everything you need.** These kits combine our trusted BrassCraft® supply stop, copper riser, and escutcheon for an easy-to-install connection
- **100% compliant kits** available 

Copper riser provides:

- **One-piece construction**
- **Cut-to-length** for a clean, professional installation

Multi-Turn stop provides:

- **Machined one-piece brass body** provides strength, durability and long-lasting performance
- **Oval knurled handle** provides a secure grip and smooth on/off operation
- **Easy-to-remove handle** with screw attachment helps protect against accidental stop operation during rough-ins



Operating Specifications:

Temperature: 40°- 140° F
Pressure: 125 PSI maximum

Tubing Diameter: 0.375" OD

Standard

CONNECTOR MATERIAL SPECIFICATIONS	
Tube	Copper or chrome-plated copper
Insert	POM

Compliant

CONNECTOR MATERIAL SPECIFICATIONS	
Tube	Copper or chrome-plated copper
Insert	POM

This specification and all information contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft Mfg. This specification must be returned to BrassCraft Mfg if requested.



OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Standard

STOP MATERIAL SPECIFICATIONS	
Body	Brass or chrome-plated brass
Stem	POM or brass
Bib & Packing Washers	Nitrile rubber
Packing Nut	Brass or chrome-plated brass
Handle	Metal, chrome-plated ABS or Polycarbonate
Handle Screw	Steel, zinc-plated
Loose Key	Zinc die-cast
Loose Key Stem	Brass, chrome-plated
Lock Shield	Brass, chrome-plated

Escutcheon	Stainless steel
-------------------	-----------------

Compliant

STOP MATERIAL SPECIFICATIONS	
Body	Compliant brass, chrome-plated
Stem	POM or compliant brass
Bib & Packing Washers	Nitrile rubber
Packing Nut	Brass or chrome-plated brass
Handle	Metal, chrome-plated ABS or Polycarbonate
Handle Screw	Steel, zinc-plated
Loose Key	Zinc die-cast
Loose Key Stem	Brass, chrome-plated
Lock Shield	Brass, chrome-plated

Escutcheon	Stainless steel
-------------------	-----------------

Standard Part Listing:

- OCR1912A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1912A R 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, rough finish
- OCR1912AZ C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1915A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920AZ C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920AZ R 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, rough finish
- OCR1920A BZ 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, oil rubbed bronze
- OCR1920A NS 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, satin nickel
- SCR1912A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1915A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1920A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, loose key, chrome plated

This specification and all information contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft Mfg. This specification must be returned to BrassCraft Mfg if requested.

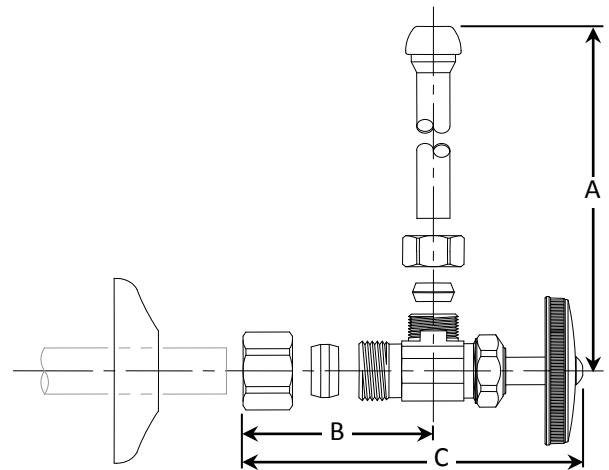
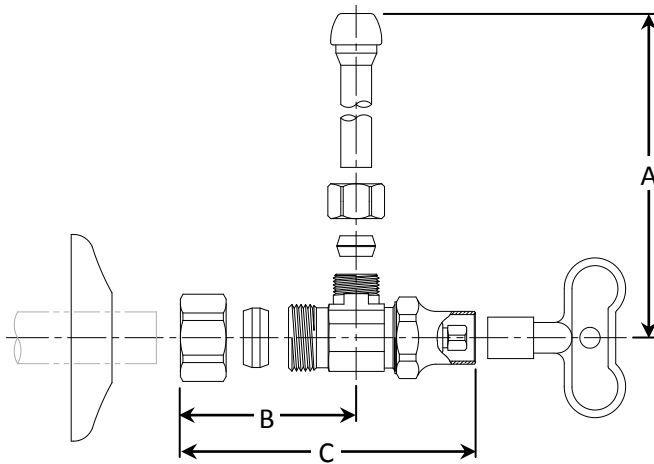
BrassCraft[®]

OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Compliant Part Listing:

- OCR1912AX C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1912AZX C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1915AX C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, chrome plated
- SCR1912AX C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1915AX C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1920AX C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated

PART DIMENSIONS (Inches)			
Model	DIM. A	DIM. B	DIM. C
OCR1912A /AZ /AX/ AZX	12.00	1.16	2.84
OCR1915A /AX	15.00	1.16	2.84
OCR1920A /AZ	20.00	1.16	2.84
SCR1912A /AX	12.00	1.20	2.64
SCR1915A /AX	15.00	1.20	2.64
SCR1920A /AX	20.00	1.20	2.64



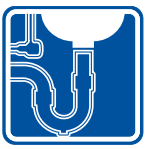
Listings & Certifications:

- IAPMO listed to ASME A112.18.1 / CSA B125.1 (File # 0645)
- CSA listed to ASME A112.18.1 / CSA B125.1 (File # 204593)
- Compliant product CSA listed to Low Lead Content Certification Program – Plumbing Products Class 6853-0



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LAV GUARD²
FAST FIT UNDERSINK PIPING COVERS

L-1



ADA-compliant undersink protection



Submittal Sheet

General Description:

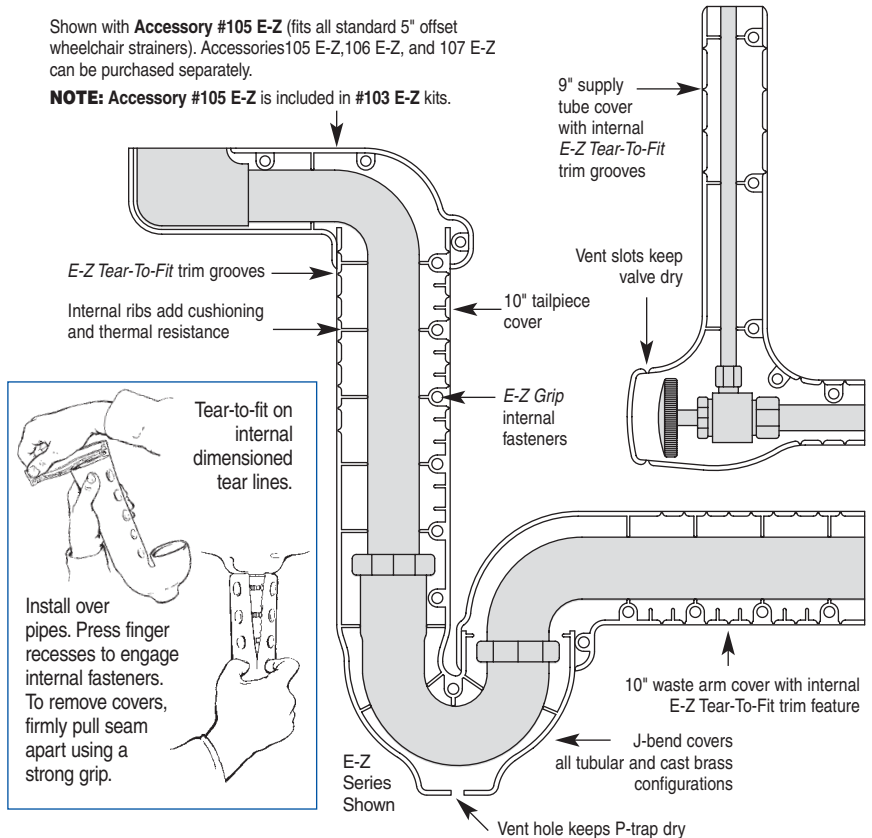
LAV GUARD² E-Z Series waste and supply piping covers satisfy ADA compliance requirements. Built-in *E-Z Grip* internal fasteners and internal, *E-Z Tear-To-Fit* trimming feature allow for fast installation without tools. *Series #100 E-Z* kits are designed to fit on all tubular and cast brass P-trap assemblies. *Series #400* kits are the "original" LAV GUARD design and fit schedule 40 ABS and PVC P-trap assemblies — regardless of their geometry or rotational offset. Valve cover completely encloses angle valve and supply tube for both handled and keyed type water stops.

Material	Molded vinyl
Nominal Wall	1/8" constant
Durometer	70 - 80 - Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming (E-Z Series)	Internal, <i>E-Z Tear-To-Fit</i> trim feature
Fasteners (E-Z Series)	Internal <i>E-Z Grip</i> fasteners (reusable)
Color	China white
Paintability	Apply Latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) 0 mm (AEB)
Bacteria/Fungus Resistance	ASTM G21 and G22/ Result: 0 growth
Maintenance	Use common detergents

Manufactured under one or more of the following U.S. or Canadian patents. Other patents pending.
5,303,730 5,360,031 5,524,669 5,564,463 5,678,598 5,699,828 5,915,412 5,915,413 5,901,739 5,960,820 2,075,324 2,119,427 2,136,027 2,158,083



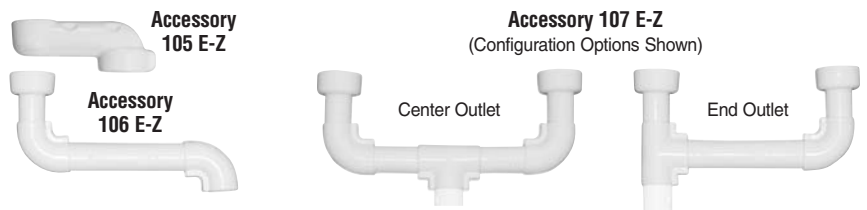
IPS Corporation, 202 Industrial Park Lane, Collierville, TN 38017
(901) 853-5001 (800) 340-5969 FAX: (901) 853-5008
e-mail: info@truebro.com Internet: http://www.truebro.com



#100 E-Z Series (shown above right) for tubular and cast brass P-trap assemblies.
#400W* Series (original design) for schedule 40 P-trap assemblies.

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Model #99 E-Z
One angle valve and supply cover <input type="checkbox"/> Model #100 E-Z
One P-trap cover <input type="checkbox"/> Model #400W*
One P-trap cover <input type="checkbox"/> Model #101 E-Z
One P-trap cover, one angle valve cover <input type="checkbox"/> Model #401W*
One P-trap cover, one angle valve cover | <ul style="list-style-type: none"> <input type="checkbox"/> Model #102 E-Z
One P-trap cover, two angle valves and covers <input type="checkbox"/> Model #402W*
One P-trap cover, two angle valves and covers <input checked="" type="checkbox"/> Model #103 E-Z
One P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover <input type="checkbox"/> Accessory #105 E-Z
One 5" offset tailpiece wheelchair strainer assembly | <ul style="list-style-type: none"> <input type="checkbox"/> Accessory #105-K
Kohler 6" offset <input type="checkbox"/> Accessory #106 E-Z
One basket strainer cover and offset waste cover (adjustable to 18") <input type="checkbox"/> Accessory #107 E-Z
Two basket strainer covers and center or end outlet waste cover (adjustable) <input type="checkbox"/> Accessory #Ex99 E-Z
One 16" extension for water supply <input type="checkbox"/> Accessory #Ex100 E-Z
One 16" extension for drain waste arm or tailpiece |
|--|--|--|

*All #400W series items are the "original" LAV GUARD² design and construction. Specifications may change without notice.



Job/Location _____

Designer _____

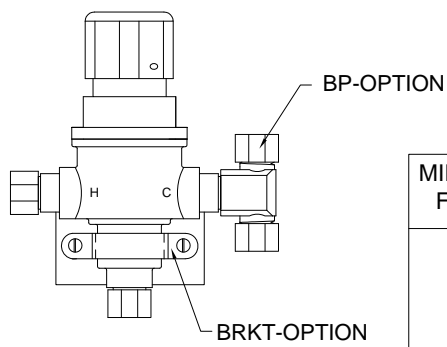
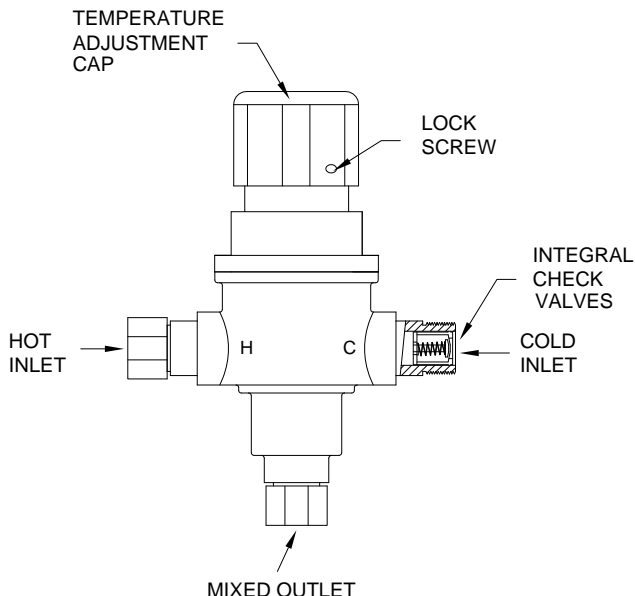
TRUEBRO reserves the right to make product and material changes at any time without notice.

THERMOSTATIC MIXING VALVE

MODEL 170

THERMOSTATIC POINT OF USE MIXING VALVE

MODEL 3/8" inlets, 3/8" outlet, compression connections



MATERIALS:

- Bronze body
- Locked temperature adjustment cap (vandal resistant)
- Copper encapsulated thermostat assembly with polymer thermoplastic shuttle
- Stainless steel springs
- Buna-N O'rings
- Integral check valves on hot and cold inlets
- Compression fittings on inlets and outlet

PRESSURE-TEMPERATURE:

- Minimum Flow: 0.5 GPM (1.9 l/Min)
- Maximum Pressure: 125 PSI (8.6 BAR)
- Maximum Hot Water temperature: 200°F- (93°C)
- Approach Temperature 5°F (2.8°C) above set point.

OPTION: (Furnished separately)

- ___BP- Cold water By-Pass
- ___BRKT- Mounting Bracket

ASSE 1070 Certified

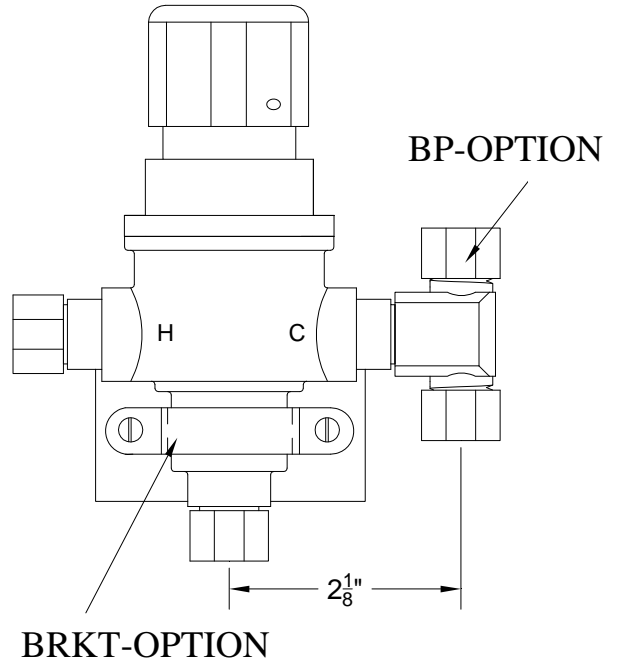
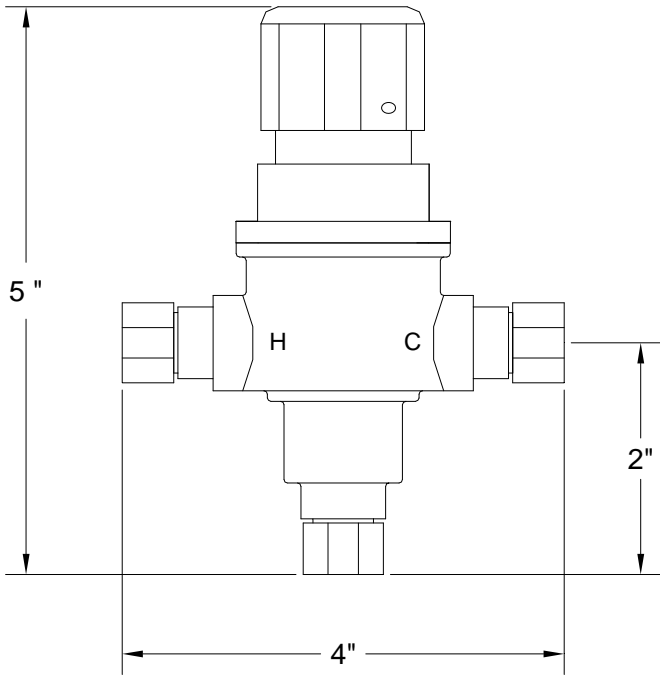


MINIMUM FLOW	PRESSURE DROP						PSI
	5	10	20	30	40	50	
	.35	.70	1.4	2.1	2.8	3.4	BAR
0.5	1.7	2.3	3.0	3.6	4.4	5.0	GPM
1.9	6.4	8.7	11.4	14	17	19	l/min

Engineer's Approval	Job # _____
	Arch/Eng. _____
	Contractor _____

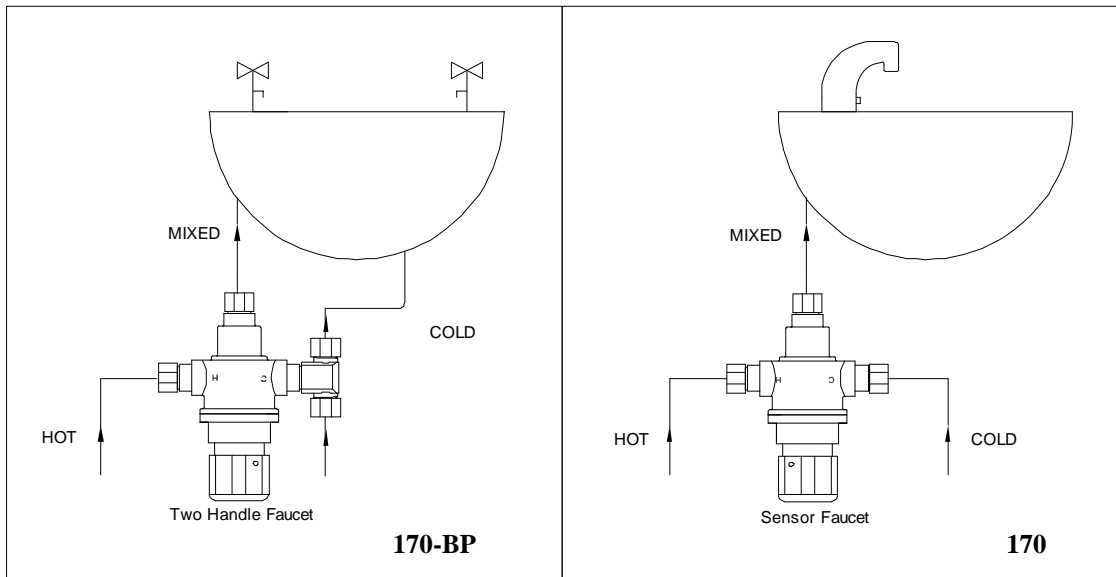


1360 Elmwood Avenue, Cranston, RI 02910 USA
 Phone: 401.461.1200 Fax: 401.941.5310
 Email: info@leonardvalve.com
 Web Site: <http://www.leonardvalve.com>



APPLICATION

The Model 170 is a high performance Temperature Actuated Mixing Valve used to supply single outlets. Can be used to supply one sensor faucet or one two handle manual faucet.



Note: Leonard Valve Company reserves the right of product, or design modifications without notice or obligation.







1360 Elmwood Avenue, Cranston, RI 02910 USA

Phone: 401.461.1200 Fax: 401.941.5310

Email: info@leonardvalve.com

Web Site: <http://www.leonardvalve.com>

D	 <p>SMITH® JAY R. SMITH MFG. CO. DIVISION OF SMITH INDUSTRIES, INC. POST OFFICE BOX 3237 MONTGOMERY, ALABAMA 36109-0237 (USA) TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com</p>	<p>MEMBER OF:</p>   	<p>LOCATION</p>
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FIXTURE SUPPORT FLOOR MOUNTED WITH CONCEALED ARMS

FOR FLAT SLAB WHEELCHAIR PATIENTS LAVATORY

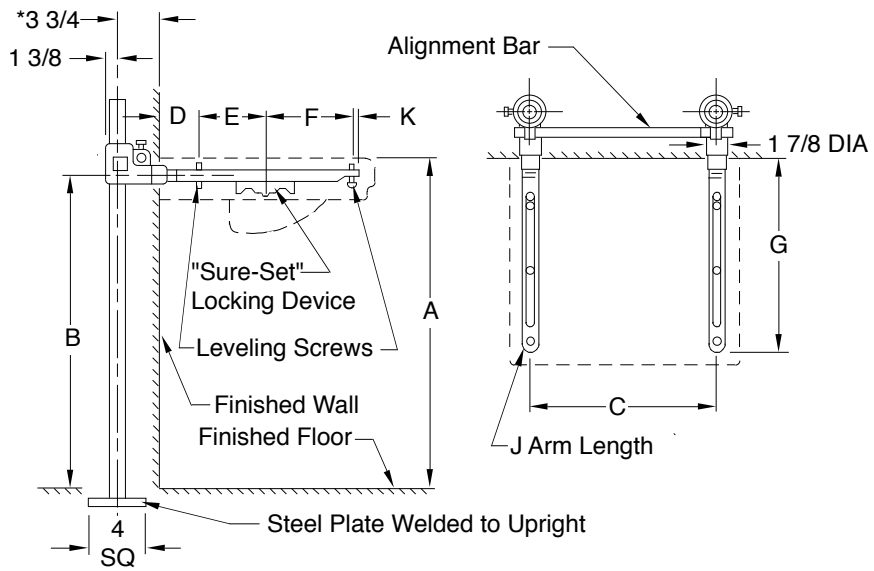
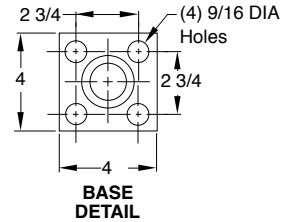


Fig. 0700 (-27) . . . FOR HIGH BACK LAVATORIES (shown)

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

NOTE: *This dimension can be increased when fixture support is to be installed behind the wall. (Specify when required and wall thickness).



ROUGHING-IN TABLE

FIXTURE MFG.	NAME	NUMBER	SIZE	A	B	C	D	E	F	G	J	K
AM. STD.	WHEELCHAIR	9140.013	20 x 27	34	32 3/8	16 3/4	7 1/2	7	7	22	25	1/2
AM. STD.	WHEELCHAIR	9141.011	20 x 27	34	32 3/8	16 3/4	7 1/2	7	7	22	25	1/2
CRANE●	WHEELCHAIR	IH-360	20 x 27	34	32 1/2	16 7/8	6	7 1/2	7 1/2	21 1/2	25	1/2
ELJER●●	WHEELCHAIR	051-2964, 68	20 x 27	34	33	16 3/4	7 1/2	7	7	22	25	1/2
KOHLER	MORNINGSIDE	K-12634, 5, 6	20 x 27	34	32 1/2	16 3/4	7 1/2	7	7	22	25	1/2
BRIGGS●●●	GRACE	6640, 5	20 x 27	34	32 3/8	16 3/4	7 1/2	7	7	22	25	1/2
ARMITAGE SHANKS	WHEELCHAIR	315	20 x 27	35	33 3/8	17	7 1/2	7	8 3/4	23 1/4	25	1/2

- Furnish (4) 1/4 - 20 x 4 1/2 R.H. machine screws for rear leveling screws
- Furnish (4) 1/4 - 20 x 2 1/2 R.H. machine screws for rear leveling screws
- Furnish (2) 1/4 - 20 x 1 1/2 slotted R.H. M.S. for front leveling screws

0700 (-27)

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

FIGURE NUMBER	D	10-19-94	Submittal Update	EMB	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER 0700 (-27)
	REV.	DATE	DESCRIPTION	BY	CKD. BY		

SMITH® JAY R. SMITH MFG. CO.®
 DIVISION OF SMITH INDUSTRIES, INC.
 POST OFFICE BOX 3237
 MONTGOMERY, ALABAMA 36109-0237 (USA)
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com



LOCATION

LABOR SAVER® LAVATORY SUPPORT FLOOR MOUNTED WITH CONCEALED ARMS

FOR FLAT SLAB WHEELCHAIR PATIENTS LAVATORY

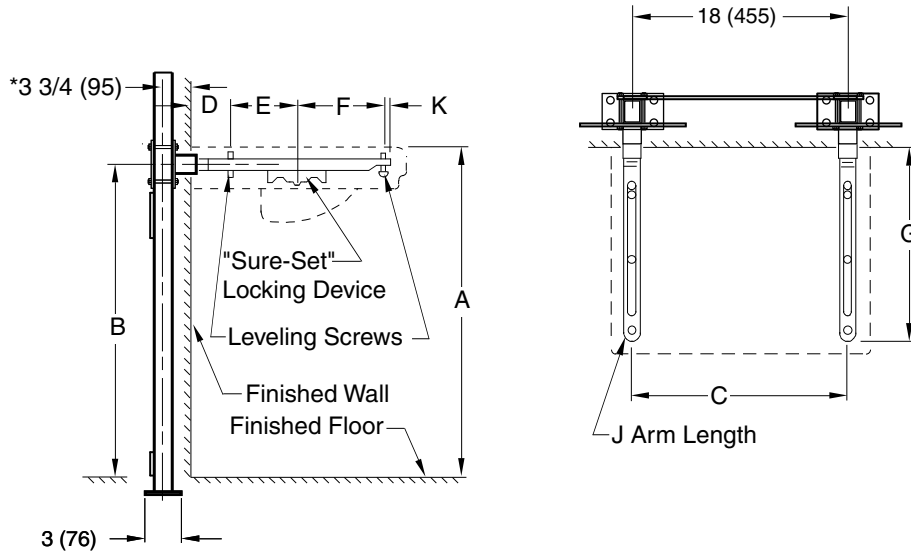
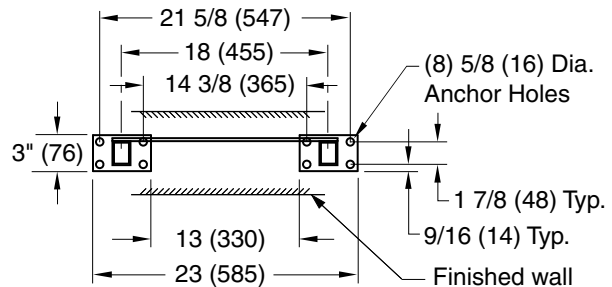


Fig. 0710 (-27) ... FOR HIGH BACK LAVATORIES (shown)

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

NOTE: *This dimension includes a wall thickness of 1/2". For greater wall thickness, specify centerline of upright to finished wall dimension.

NOTE: Dimensions shown in parentheses are in millimeters.



BASE DETAIL

ROUGHING-IN TABLE

FIXTURE MFG.		NAME		NUMBER		SIZE		
A	B	C	D	E	F	G	J	K

D	07/22/08	Revised Plate Configuration	JJ	CL	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER 0710 (-27)
C	12/09/02	Revised per George Flegel	JJ	AM			
B	7/16/02	Changed Fig. 0700 to 0710	RN	AM			
A	12/19/01	Changed Hole Size in Base	JJ	AM			
REV.	DATE	DESCRIPTION	BY	CKD. BY			

DRAWING NUMBER: S0710 (-27)
 SIZE: A
 SCALE: NONE
 DATE: 07/11/01
 APPROVED BY: AM
 CHECKED BY: CR
 DRAWN BY: JJ
 FIGURE NUMBER: 0710 (-27)

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA
 DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

American Standard

Style That Works Better

 BARRIER FREE**LUCERNE™
WALL-HUNG LAVATORY**
VITREOUS CHINA**LUCERNE™ WALL-HUNG LAVATORY**

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

Faucet holes on 203mm (8") centers (Illus.):

- 0356.028** For exposed bracket support
Shown with 4801.862 Amarelis Heritage faucet with Triune Cross handles (not included)
- 0356.015** For wall hanger (included) or concealed arms support
- 0356.037** For wall hanger (included) or concealed arms support
 - Extra right-hand hole
- 0356.073** For wall hanger (included) or concealed arms support
 - Extra left-hand hole

Faucet holes on 102mm (4") centers:

- 0355.027** For exposed bracket support
- 0355.012** For wall hanger (included) or concealed arms support
- 0355.034** For wall hanger (included) or concealed arms support
 - Extra right-hand hole
- 0355.056** For wall hanger (included) or concealed arms support
 - Extra left-hand hole

Single center faucet hole (Illus.):

- 0356.041** For exposed bracket support
Shown with 1340.000 metering faucet (not included)
- 0356.421** For wall hanger (included) or concealed arms support
- 0356.137** For wall hanger (included) or concealed arms support
 - Extra right-hand hole
- 0356.115** For wall hanger (included) or concealed arms support
 - Extra left-hand hole

Nominal Dimensions:

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

Bowl sizes:

381mm (15") wide
254mm (10") front to back
165mm (6-1/2") deep

Compliance Certifications -**Meets or Exceeds the Following Specifications:**

- ASME A112.19.2 for Vitreous China Fixtures

**0356.028****0356.041**

SEE REVERSE FOR ROUGHING-IN DIMENSIONS

To Be Specified:

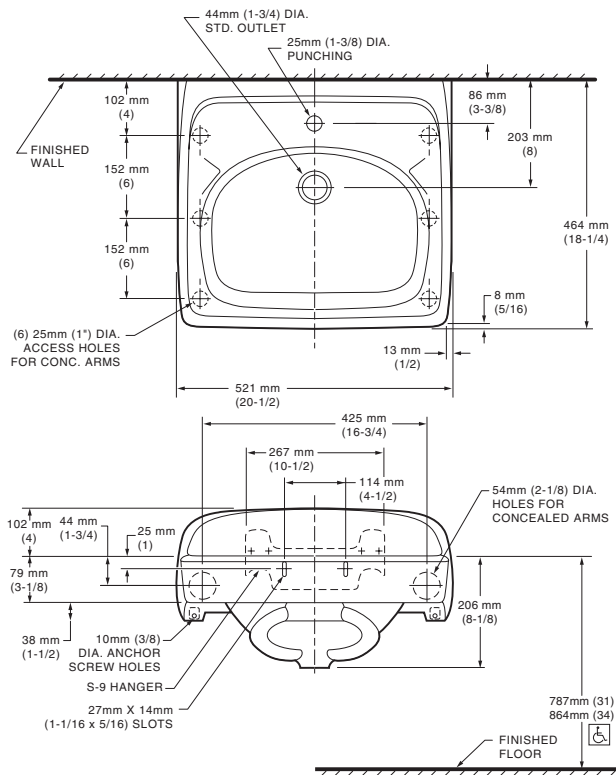
- Color: White Bone Silver
 Black Linen
- Faucet*:
- Faucet Finish:
- Supplies:
- 1-1/4" Trap:
- Nipple:
- Bracket Support (by others):
- Concealed Arms Support (by others):

* See faucet section for additional models available

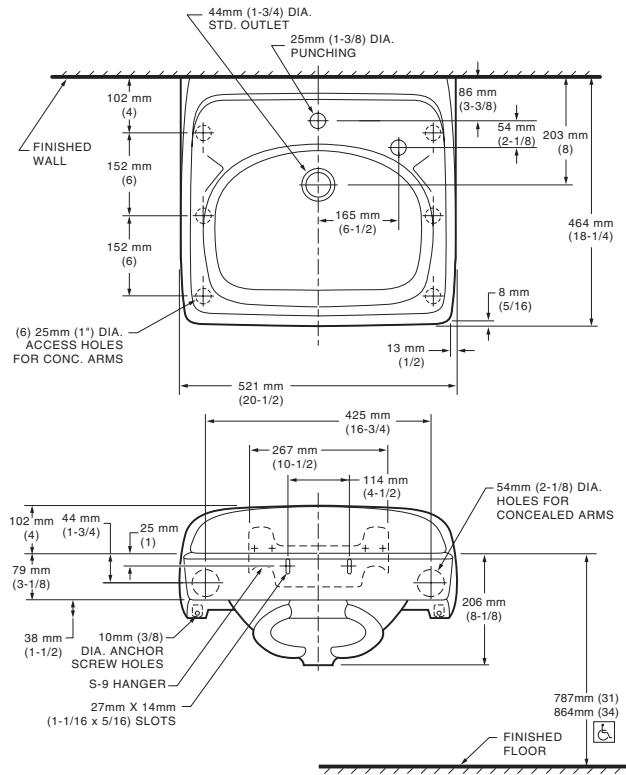


MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.
Top of front rim mounted 864mm (34") from finished floor.

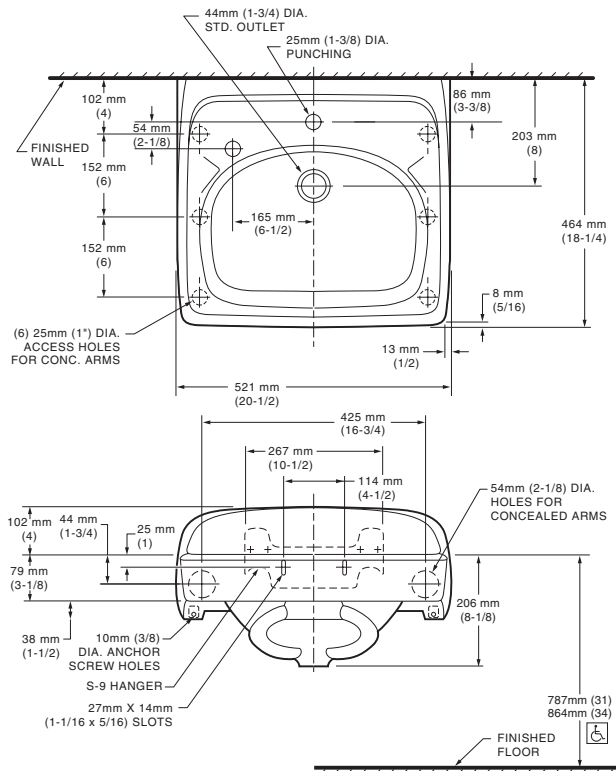
➔ **0356.421** SINGLE CENTER HOLE FOR WALL HANGER OR CONCEALED ARMS



0356.137 SINGLE CENTER HOLE FOR WALL HANGER OR CONCEALED ARMS WITH EXTRA RIGHT HAND HOLE



0356.115 SINGLE CENTER HOLE FOR WALL HANGER OR CONCEALED ARMS WITH EXTRA LEFT HAND HOLE



NOTES:

* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED. PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS. FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY. CONCEALED ARM SUPPORT AS REQUIRED TO BE FURNISHED BY OTHERS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



LAVATORY DESIGNED TO MEET ADA HANDICAPPED GUIDELINES WITH MOUNTING HEIGHT SET AT 864MM (34") ABOVE FINISHED FLOOR.



GENERAL DESCRIPTION:

Electronic faucet with proximity operation. Vandal-resistant solid brass construction with single post mounting. Operates on DC (battery) or AC permanent power. Water pressure range from 20 to 125 psi. Single inlet 15" flexible stainless steel hose with 3/8" compression fitting for spout connection.

PRODUCT FEATURES:

Vandal-Resistant Brass Body: Durable - Excellent in high use applications.

Power Options:

- **Battery** - Lithium CR-P2 battery. Battery Life - Approx. 200,000 cycles (4 years @ 4,000 cycles per month).
- **Plug-In** - Plug-In - Universal low voltage transformer (80 - 250 VAC, 50 - 60 Hz) with 6 foot long cord. One power supply can run up to 15 faucets and/or flush valves in series.

Easy and Flexible Installation:

Single post mounting with optional 4" and 8" Deck plate. Water resistant solenoid enclosure mounts to wall.

Integrated; Easy Service Strainer:

Patented integrated strainer enclosed in removable debris cup protects the solenoid valve and aerator from debris. Perforated stainless steel strainer is low maintenance and can be easily accessed.

Temperature Mixing:

Optional thermostatic mixing valve. Mixing valve will connect directly to solenoid inlet and is housed in matching enclosure.

Lead Free: Faucet contains $\leq 0.25\%$ total lead content by weighted average.

MODEL NUMBER:

■ DC POWERED; single inlet

- 6055.104** with cast spout, 0.35 GPM pressure compensating, vandal-resistant non-aerate spray. CR-P2 Lithium Battery included. Faucet is factory set for 7.5 seconds running time to deliver 0.044 gallons per cycle.

■ AC POWERED; single inlet

- 6056.104** with cast spout, 0.35 GPM pressure compensating, vandal-resistant non-aerated spray. Includes AC power supply (M950169-0070A). Faucet is factory set for 7.5 second running time to deliver 0.044 gallons per cycle.

■ OPTIONAL 4" or 8" Deck plates

- 605P.400** 4" brass deck plate with 1/4" fixation studs and quick spin nuts. (6-1/8"x 2-1/8"x 1/2")
- 605P.800** 8" brass deck plate with 1/4" fixation studs and quick spin nuts. (10-1/8"x 2-3/8"x 1/2")

■ OPTIONAL Mixing Valve

- 605XTMV** Thermostatic mixing valve, flex hoses 3/8" compression 20" hose length.

RECOMMENDED SPECIFICATION

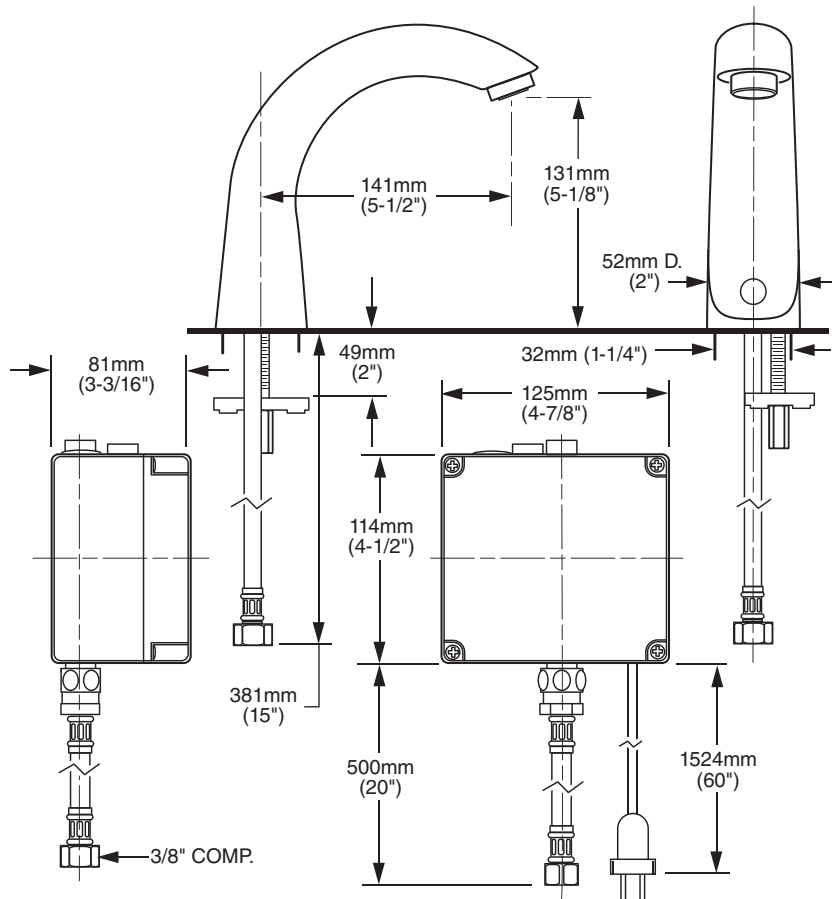
Electronic Proximity Metering Faucet shall feature vandal resistant all brass body with single inlet, and in-line strainer. Shall also feature a low energy use electronically operated solenoid valve and microprocessor controlled proximity sensors. Shall meet ANSI A112.18.1 and ANSI 117.1 codes. Shall feature 0.35 gpm pressure compensating vandal-resistant non-aerated spray. Faucet is factory set for 7.5 seconds running time to deliver 0.044 gallons per cycle. Fitting shall be American Standard Model # 6055.104, 6056.104.

CODES AND STANDARDS

These products meet or exceed the following codes and standards:

ANSI A117.1
ASME A112.18.1
CSA B 125
NSF 61/Section 9, Annex G
CALGreen

 MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES





4675 W. 160th St.
Cleveland, Ohio 44135
Ph: (800) 321-9532
Fax: (800) 321-9535
www.dearbornbrass.com

SUBMITTAL SPECIFICATION

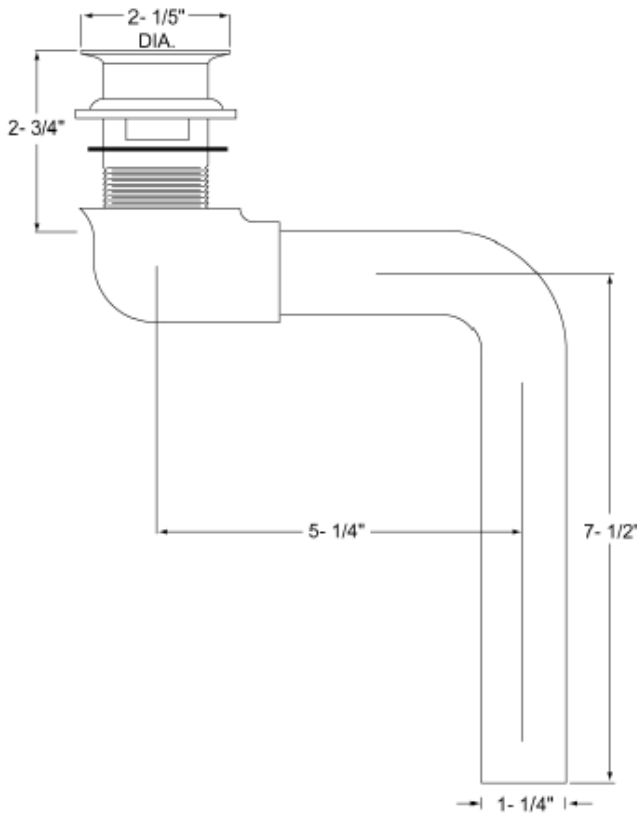
**CAST GRID WHEELCHAIR
PATENT OUTLET PLUG**

Engineering Specification: Dearborn Brass Semi-Cast Wheelchair Grid Patent Overflow Plug with 1- 1/4" – 17 gauge tailpiece.

Job Reference

DESCRIPTION

- Chrome Finished
- Includes: Cast Grid, P.O. Plug with nuts and washers, 90° Elbow and 17 gauge tailpiece
- Designed for installation in most commercial applications



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
	760W-1	Semi-Cast Grid Wheelchair Patent Overflow Plug with 1-1/4" – 17 gauge Tailpiece	10	14

Data is subject to manufacturing tolerances.



4675 W. 160th St.
Cleveland, Ohio 44135
Ph: (800) 321-9532
Fax: (800) 321-9535
www.dearbornbrass.com

SUBMITTAL SPECIFICATION

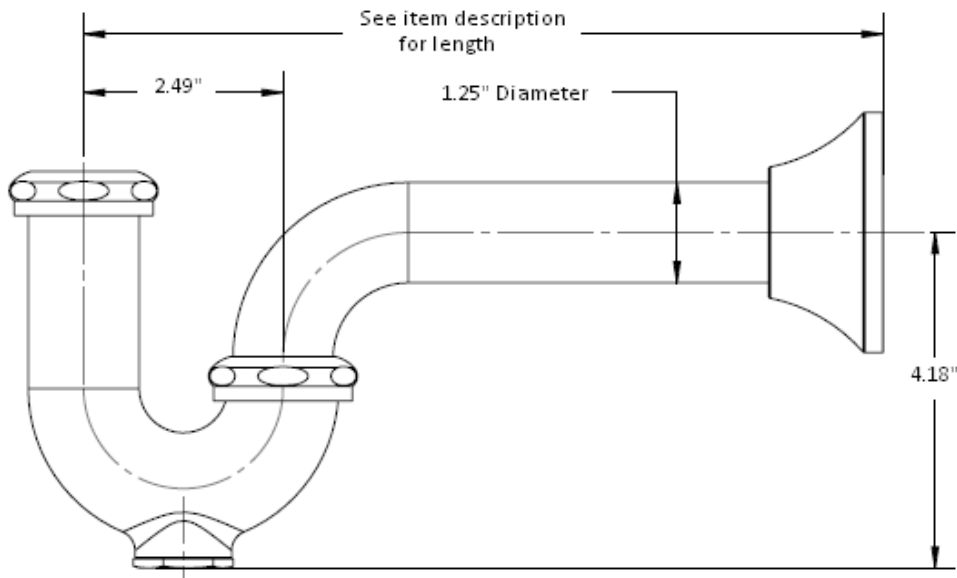
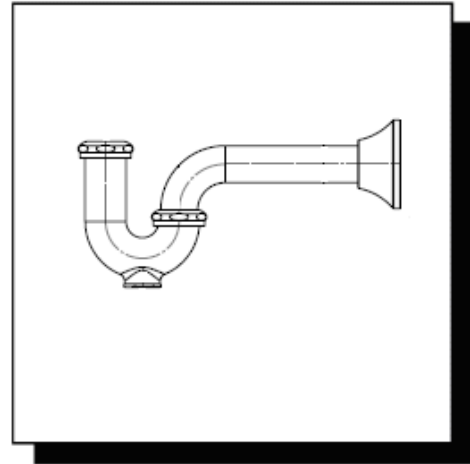
**BRASS TUBULAR
1-¼" SEMI-CAST P-TRAPS**

Engineering Specification: Dearborn Brass 1-¼" Semi-Cast Brass P-Traps are designed for installation in commercial applications.

Job Reference

DESCRIPTION

- Chrome Finished
- 17 Gauge Brass
- Semi-Cast P-Trap
 - Cast J-Bend with Cleanout
 - Quarter Bend
 - Deep Metal Flange
 - Cleanout Plug
 - Fiber Cleanout Washer
 - (2) Brass Nuts
 - (1) 1-½" x 1-¼" Reducing Washer
 - (2) 1-¼" Poly Washers
 - (2) 1-¼" Rubber Washers
- Designed for installation in commercial applications



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
→	507-1	1-¼" x 12" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts	12	17
	5507-1	1-¼" x 12" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts – White Box	12	17
	5507A-1	1-¼" x 15" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts	12	19

Data is subject to manufacturing tolerances.

For Residential and Commercial Applications

Job Name		Engineer / Architect	
Job Location		Wholesaler	
Submittal Date		Contractor	

OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Use: For use with water in accessible locations only. Not intended for recirculating water systems that produce continuous use temperatures above 115° F. For those applications, use our KT™ series ball stop supply kits.

Design Features:

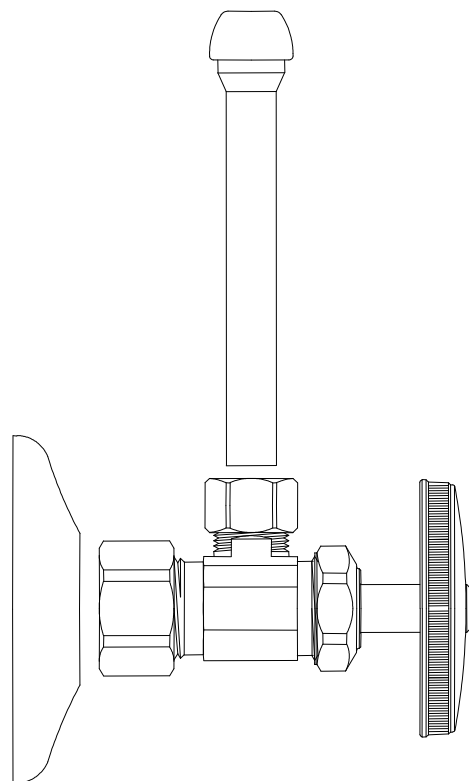
- **Everything you need.** These kits combine our trusted BrassCraft® supply stop, copper riser, and escutcheon for an easy-to-install connection
- **100% compliant kits** available 

Copper riser provides:

- **One-piece construction**
- **Cut-to-length** for a clean, professional installation

Multi-Turn stop provides:

- **Machined one-piece brass body** provides strength, durability and long-lasting performance
- **Oval knurled handle** provides a secure grip and smooth on/off operation
- **Easy-to-remove handle** with screw attachment helps protect against accidental stop operation during rough-ins



Operating Specifications:

Temperature: 40° - 140° F
Pressure: 125 PSI maximum

Tubing Diameter: 0.375" OD

Standard

CONNECTOR MATERIAL SPECIFICATIONS	
Tube	Copper or chrome-plated copper
Insert	POM

Compliant

CONNECTOR MATERIAL SPECIFICATIONS	
Tube	Copper or chrome-plated copper
Insert	POM

This specification and all information contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft Mfg. This specification must be returned to BrassCraft Mfg if requested.



OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Standard

STOP MATERIAL SPECIFICATIONS	
Body	Brass or chrome-plated brass
Stem	POM or brass
Bib & Packing Washers	Nitrile rubber
Packing Nut	Brass or chrome-plated brass
Handle	Metal, chrome-plated ABS or Polycarbonate
Handle Screw	Steel, zinc-plated
Loose Key	Zinc die-cast
Loose Key Stem	Brass, chrome-plated
Lock Shield	Brass, chrome-plated

Escutcheon	Stainless steel
-------------------	-----------------

Compliant

STOP MATERIAL SPECIFICATIONS	
Body	Compliant brass, chrome-plated
Stem	POM or compliant brass
Bib & Packing Washers	Nitrile rubber
Packing Nut	Brass or chrome-plated brass
Handle	Metal, chrome-plated ABS or Polycarbonate
Handle Screw	Steel, zinc-plated
Loose Key	Zinc die-cast
Loose Key Stem	Brass, chrome-plated
Lock Shield	Brass, chrome-plated

Escutcheon	Stainless steel
-------------------	-----------------

Standard Part Listing:

- OCR1912A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1912A R 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, rough finish
- OCR1912AZ C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1915A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920AZ C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920AZ R 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, rough finish
- OCR1920A BZ 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, oil rubbed bronze
- OCR1920A NS 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, satin nickel
- SCR1912A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1915A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1920A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, loose key, chrome plated

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BrassCraft[®]

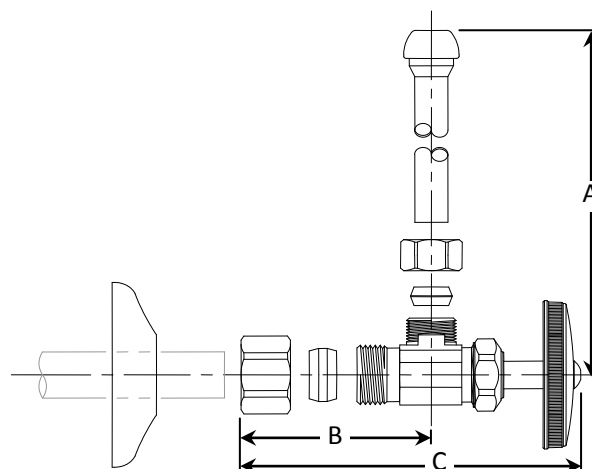
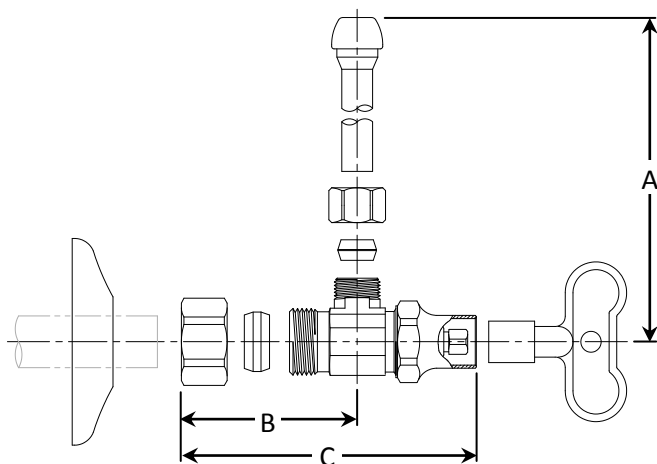
OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Compliant Part Listing:

- | | | |
|--------------------------|--------------|--|
| <input type="checkbox"/> | OCR1912AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated |
| <input type="checkbox"/> | OCR1912AZX C | 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated |
| <input type="checkbox"/> | OCR1915AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, chrome plated |
| <input type="checkbox"/> | SCR1912AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, loose key, chrome plated |
| <input type="checkbox"/> | SCR1915AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, loose key, chrome plated |
| <input type="checkbox"/> | SCR1920AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated |

PART DIMENSIONS (Inches)

Model	DIM. A	DIM. B	DIM. C
OCR1912A /AZ /AX/ AZX	12.00	1.16	2.84
OCR1915A /AX	15.00	1.16	2.84
OCR1920A /AZ	20.00	1.16	2.84
→ SCR1912A /AX	12.00	1.20	2.64
SCR1915A /AX	15.00	1.20	2.64
SCR1920A /AX	20.00	1.20	2.64



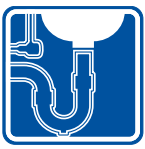
Listings & Certifications:

- IAPMO listed to ASME A112.18.1 / CSA B125.1 (File # 0645)
- CSA listed to ASME A112.18.1 / CSA B125.1 (File # 204593)
- Compliant product CSA listed to Low Lead Content Certification Program – Plumbing Products Class 6853-0



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BrassCraft®



LAV GUARD²
FAST FIT UNDERSINK PIPING COVERS

L-2



ADA-compliant undersink protection



Submittal Sheet

General Description:

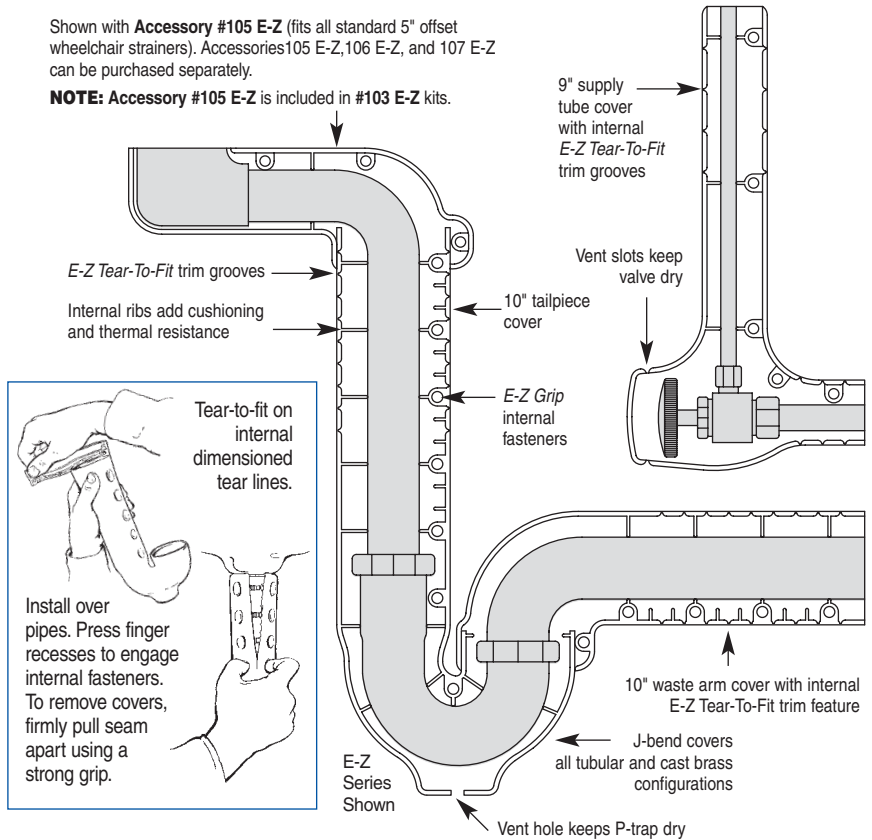
LAV GUARD² E-Z Series waste and supply piping covers satisfy ADA compliance requirements. Built-in *E-Z Grip* internal fasteners and internal, *E-Z Tear-To-Fit* trimming feature allow for fast installation without tools. *Series #100 E-Z* kits are designed to fit on all tubular and cast brass P-trap assemblies. *Series #400* kits are the "original" LAV GUARD design and fit schedule 40 ABS and PVC P-trap assemblies — regardless of their geometry or rotational offset. Valve cover completely encloses angle valve and supply tube for both handled and keyed type water stops.

Material	Molded vinyl
Nominal Wall	1/8" constant
Durometer	70 - 80 - Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming (E-Z Series)	Internal, <i>E-Z Tear-To-Fit</i> trim feature
Fasteners (E-Z Series)	Internal <i>E-Z Grip</i> fasteners (reusable)
Color	China white
Paintability	Apply Latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) 0 mm (AEB)
Bacteria/Fungus Resistance	ASTM G21 and G22/ Result: 0 growth
Maintenance	Use common detergents

Manufactured under one or more of the following U.S. or Canadian patents. Other patents pending.
5,303,730 5,360,031 5,524,669 5,564,463 5,678,598 5,699,828 5,915,412 5,915,413 5,901,739 5,960,820 2,075,324 2,119,427 2,136,027 2,158,083

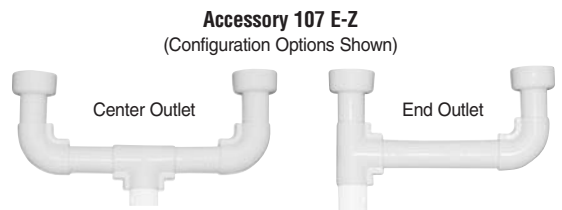
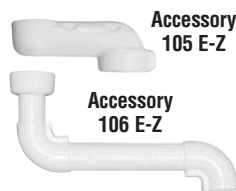


IPS Corporation, 202 Industrial Park Lane, Collierville, TN 38017
(901) 853-5001 (800) 340-5969 FAX: (901) 853-5008
e-mail: info@truebro.com Internet: http://www.truebro.com



#100 E-Z Series (shown above right) for tubular and cast brass P-trap assemblies.
#400W* Series (original design) for schedule 40 P-trap assemblies.

- | | | |
|---|--|--|
| <input type="checkbox"/> Model #99 E-Z
One angle valve and supply cover | <input type="checkbox"/> Model #102 E-Z
One P-trap cover, two angle valves and covers | <input type="checkbox"/> Accessory #105-K
Kohler 6" offset |
| <input type="checkbox"/> Model #100 E-Z
One P-trap cover | <input type="checkbox"/> Model #402W*
One P-trap cover, two angle valves and covers | <input type="checkbox"/> Accessory #106 E-Z
One basket strainer cover and offset waste cover (adjustable to 18") |
| <input type="checkbox"/> Model #400W*
One P-trap cover | <input checked="" type="checkbox"/> Model #103 E-Z
One P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover | <input type="checkbox"/> Accessory #107 E-Z
Two basket strainer covers and center or end outlet waste cover (adjustable) |
| <input type="checkbox"/> Model #101 E-Z
One P-trap cover, one angle valve cover | <input type="checkbox"/> Accessory #105 E-Z
One 5" offset tailpiece wheelchair strainer assembly | <input type="checkbox"/> Accessory #Ex99 E-Z
One 16" extension for water supply |
| <input type="checkbox"/> Model #401W*
One P-trap cover, one angle valve cover | <p>*All #400W series items are the "original" LAV GUARD² design and construction. Specifications may change without notice.</p> | |



Job/Location _____

Designer _____

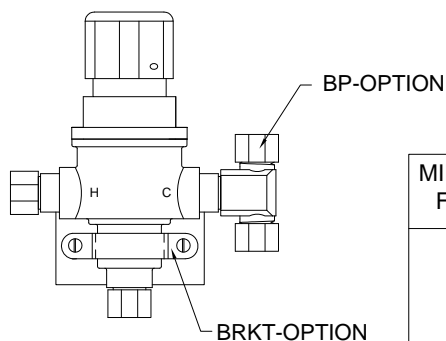
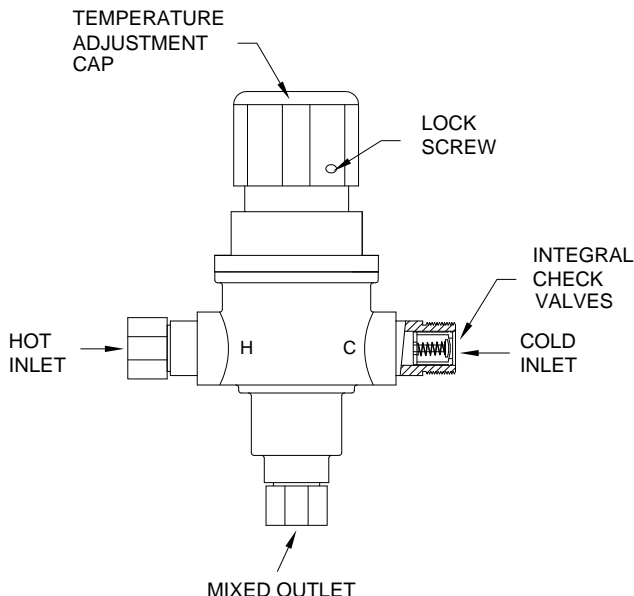
TRUEBRO reserves the right to make product and material changes at any time without notice.

THERMOSTATIC MIXING VALVE

MODEL 170

THERMOSTATIC POINT OF USE MIXING VALVE

MODEL 3/8" inlets, 3/8" outlet, compression connections



MATERIALS:

- Bronze body
- Locked temperature adjustment cap (vandal resistant)
- Copper encapsulated thermostat assembly with polymer thermoplastic shuttle
- Stainless steel springs
- Buna-N O'rings
- Integral check valves on hot and cold inlets
- Compression fittings on inlets and outlet

PRESSURE-TEMPERATURE:

- Minimum Flow: 0.5 GPM (1.9 l/Min)
- Maximum Pressure: 125 PSI (8.6 BAR)
- Maximum Hot Water temperature: 200°F- (93°C)
- Approach Temperature 5°F (2.8°C) above set point.

OPTION: (Furnished separately)

- ___BP- Cold water By-Pass
- ___BRKT- Mounting Bracket

ASSE 1070 Certified



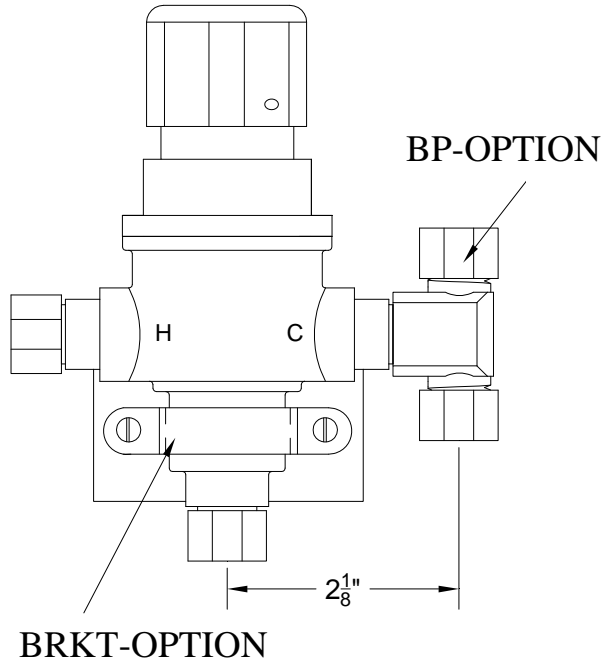
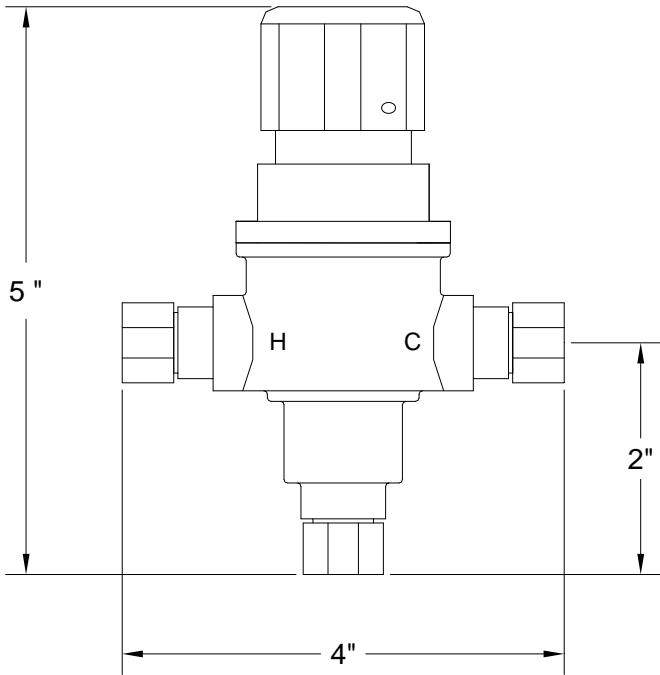
MINIMUM FLOW	PRESSURE DROP						PSI
	5	10	20	30	40	50	
	.35	.70	1.4	2.1	2.8	3.4	BAR
0.5	1.7	2.3	3.0	3.6	4.4	5.0	GPM
1.9	6.4	8.7	11.4	14	17	19	l/min

Engineer's Approval	Job # _____
	Arch/Eng. _____
	Contractor _____



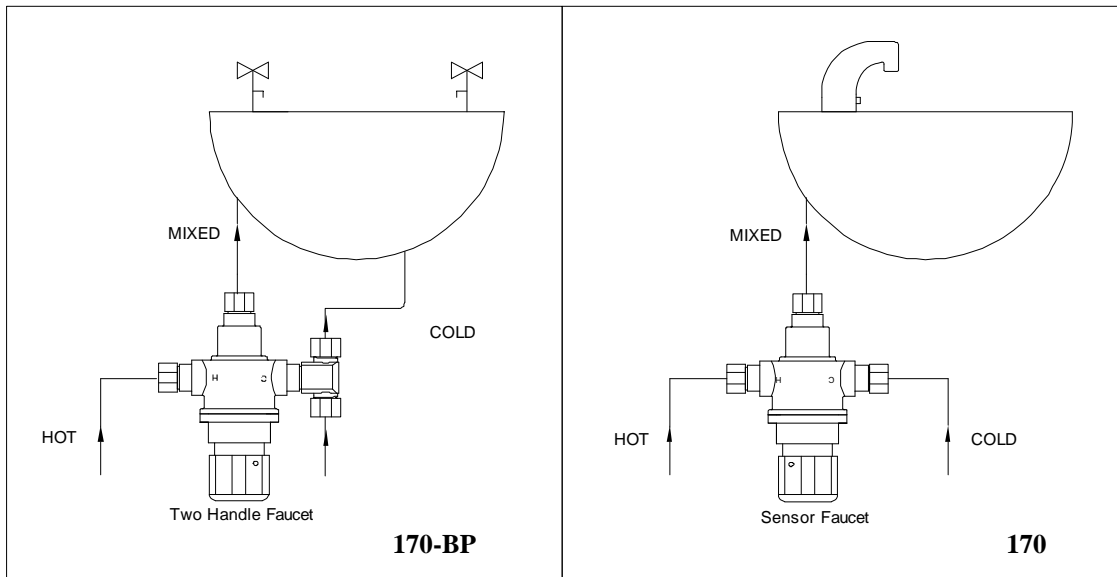
1360 Elmwood Avenue, Cranston, RI 02910 USA
 Phone: 401.461.1200 Fax: 401.941.5310
 Email: info@leonardvalve.com
 Web Site: <http://www.leonardvalve.com>

L-2



APPLICATION

The Model 170 is a high performance Temperature Actuated Mixing Valve used to supply single outlets. Can be used to supply one sensor faucet or one two handle manual faucet.



Note: Leonard Valve Company reserves the right of product, or design modifications without notice or obligation.



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 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com



LOCATION

LAVATORY SUPPORTS WITH CONCEALED ARMS

FLOOR MOUNTED WITH "PRO-SET" UPRIGHTS

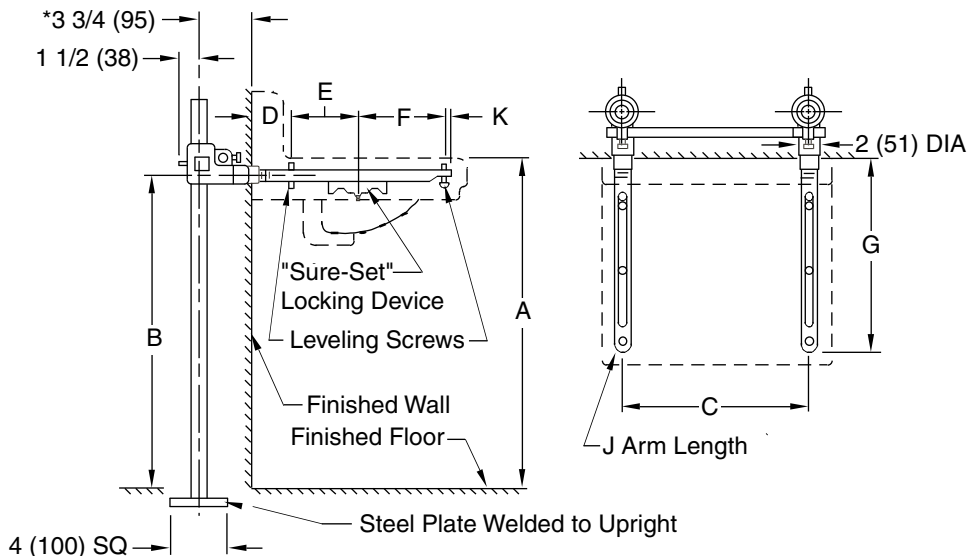
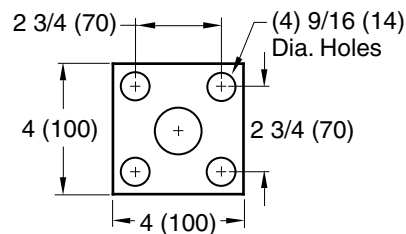


Fig. 0700 ... FOR HIGH BACK LAVATORIES (shown)

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

NOTE: Dimensions shown in parentheses are in millimeters.



BASE DETAIL

ROUGHING-IN TABLE

FIXTURE MFG.	NAME	NUMBER	SIZE	A	B	C	D	E	F	G	J	K
AM. STD.	LUCERNE	0355.012	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	LUCERNE	0356.015	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	LUCERNE	0356.421	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	LUCERNE	0356.439	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	MURRO	0954.000	22 (560) x 21 (535)	34 (865)	32 3/8 (823)	16 3/4 (425)	4 (100)	6 (150)	4 (100)	14 1/2 (370)	17M (430)	1/2 (13)
AM. STD.	MURRO	0955.000	22 (560) x 21 (535)	34 (865)	32 3/8 (823)	16 3/4 (425)	4 (100)	6 (150)	4 (100)	14 1/2 (370)	17M (430)	1/2 (13)
AM. STD.	MURRO	0958.000	22 (560) x 21 (535)	34 (865)	32 3/8 (823)	16 3/4 (425)	4 (100)	6 (150)	4 (100)	14 1/2 (370)	17M (430)	1/2 (13)
CRANE	HARWICH	1-412	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 1/4 (415)	4 (100)	5 5/8 (143)	4 3/8 (111)	16 1/2 (420)	18 (455)	2 1/2 (64)
ELJER	DELWYN	051-1634, 1838	18 (455) x 15 (380)	31 (785)	29 1/4 (745)	15 1/2 (395)	3 (76)	5 (125)	4 3/4 (120)	13 1/2 (345)	17M (430)	3/4 (19)
ELJER	SIGNATURE	051-2101, 4, 8	20 (510) x 18 (455)	34 (865)	32 (815)	17 (430)	4 (100)	5 5/8 (143)	5 5/8 (143)	15 3/4 (400)	18 (455)	1/2 (13)
KOHLER	GREENWICH	K-2030, 1, 2, 4, 6	20 (510) x 18 (455)	31 (785)	29 (735)	17 1/4 (440)	3 1/4 (83)	5 1/4 (135)	5 1/4 (135)	14 1/4 (360)	16 (405)	1/2 (13)
KOHLER	SOHO	K-2053, 4	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 1/2 (420)	3 1/4 (83)	5 1/4 (135)	5 1/4 (135)	14 1/4 (360)	17M (430)	1/2 (13)
U. RUNDLE	NEW CAMDEN	4648, 9	20 (510) x 18 (455)	31 (785)	29 3/8 (746)	16 1/4 (415)	4 1/2 (115)	2 1/2 (64)	4 (345)	13 1/2 (345)	16 (405)	2 1/2 (64)

NOTE: *This dimension can be increased when fixture support is to be installed behind the wall. (Specify when required and wall thickness).

DRAWING NUMBER S0700
 SIZE A
 SCALE: NONE
 DATE: 2-20-85
 APPROVED BY: SJM
 CHECKED BY: SJM
 DRAWN BY: CR
 FIGURE NUMBER 0700
 DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE
 WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

J H G	09/27/10 11/23/05 03/19/04	Updated Drawing Revised Roughing-in Table Revised Roughing-in Table	JJ JJ JJ	CL CL CL	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER 0700
REV.	DATE	DESCRIPTION	BY	CKD. BY			

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MEMBER OF:

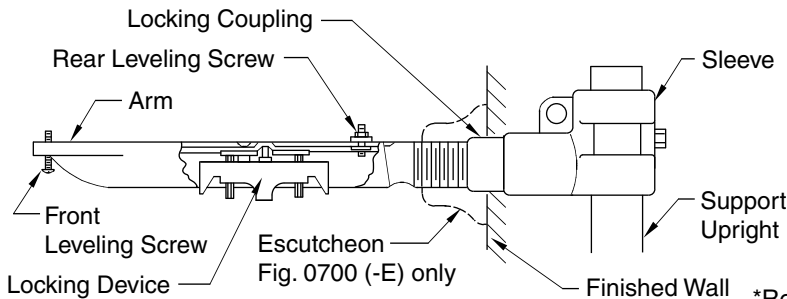
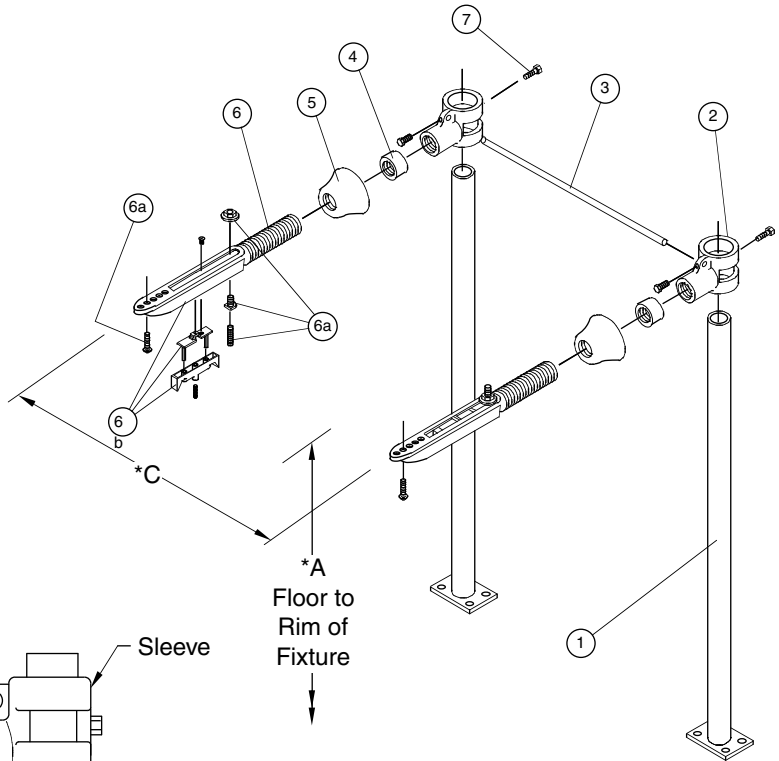
LOCATION

INSTALLATION INSTRUCTIONS FOR CONCEALED ARM CARRIERS

BEFORE starting rough-in be certain you:
 a) know correct fixture number and name
 b) have a copy of Smith submittal (rough-in) drawing with dimensions for fixture to be used.

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

PART	QTY	DESCRIPTION
1	2	Upright (w/welded base)
2	2	Sleeve Assembly
3	1	Alignment Bar
4	2	Locking Coupling
5	2	Escutcheon Fig. 0700 (-E)
6	2	Arm Assembly
6a	2	Rear Leveling Screw Assy
6b	2	Locking Device
6c	2	Front Leveling Screw



INSTALLATION INSTRUCTIONS FOR CONCEALED ARM CARRIERS

1. Uprights (Part #1) must be spaced according to the "C" dimension (shown on the submittal drawing). Uprights should not be bolted rigidly to the floor at this time.
2. Position sleeves (Part #2) by using the "B" dimension (shown on the submittal drawing). Secure to uprights with 5/16 (8)-18 hex head bolts (furnished) on the back of the sleeve.
3. Slide alignment bar (Part #3) into the sleeves. Recheck the "C" dimension at the center of the uprights. Secure the alignment bar with 5/16 (8) hex head bolts (furnished). Uprights should now be bolted securely to the floor. Uprights must be plumb: if necessary, shim to compensate for uneven floors.
4. Thread escutcheon (Part #5), Fig. 0700 (-E) only onto arm (Part #6). Thread locking coupling (Part #4) onto arm. Thread arms into sleeves (Part #2) to dimension "G" (shown on the submittal drawing). Lock arms in place by tightening locking coupling (Part #4). Recheck "C" dimension at the end of the arms.
5. Rear leveling screw assemblies (Part #6a) must be set according to the "D" dimension (shown on the submittal drawing). Position the locking devices (Part #6b) to the "E" dimension (shown on the submittal drawing). Install the front leveling screws (Part #6b) to the "E" dimension (shown on the submittal drawing).
6. Level lavatory with leveling screws as required and secure in place with locking device.

DRAWING NUMBER
S0700 INS

SIZE
A

SCALE:
NONE

DATE:
8-8-85

APPROVED BY:
KG

CHECKED BY:
CR

DRAWN BY:
VGD

0700, 0700 (-E)
INSTALLATION INSTRUCTIONS

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

E	09/27/10	Updated Drawing	JJ	CL
D	2/16/01	Revised Submittal	RN	
C	01/11/00	Revised Base Plate	JJ	BS
REV.	DATE	DESCRIPTION	BY	CKD. BY

WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER 0700, 0700 (-E) INSTALLATION INSTRUCTIONS
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 DIVISION OF SMITH INDUSTRIES, INC.
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 MONTGOMERY, ALABAMA 36109-0237 (USA)
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com



MEMBER OF:

LOCATION

LABOR SAVER™ LAVATORY SUPPORTS

FLOOR MOUNTED TYPE WITH CONCEALED ARMS

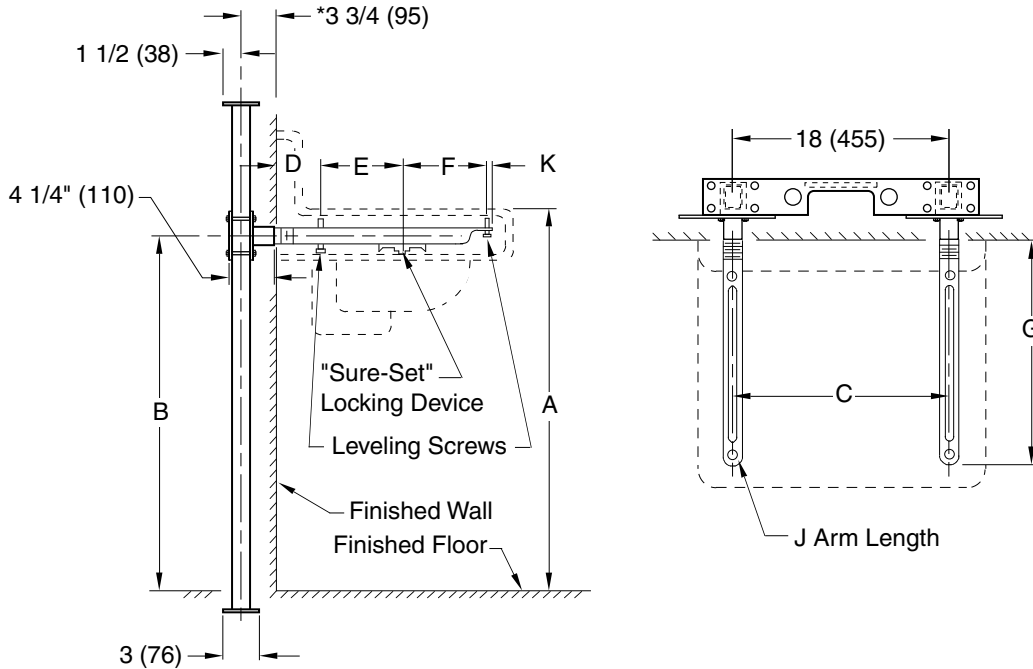
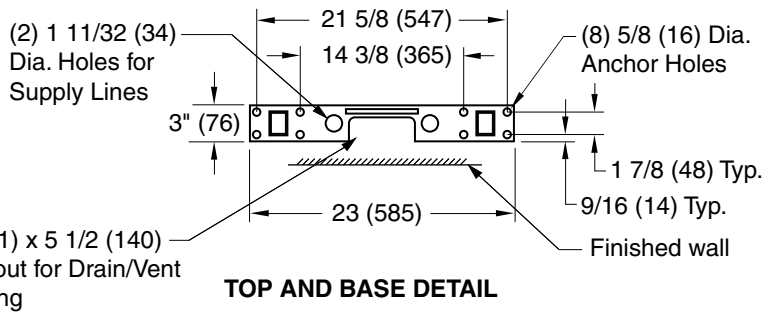


Fig. 0710 . . . FOR HIGH BACK LAVATORIES (shown)

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

NOTE: *This dimension can be increased when fixture support is to be installed behind the wall. (Specify when required and wall thickness).

NOTE: Dimensions shown in parentheses are in millimeters.



ROUGH-IN TABLE

FIXTURE MFG.	NAME	NUMBER	SIZE					
A	B	C	D	E	F	G	J	K

DRAWING NUMBER
S0710

SIZE
A

SCALE:
NONE

DATE:
12/29/00

APPROVED BY:
AM

CHECKED BY:
CR

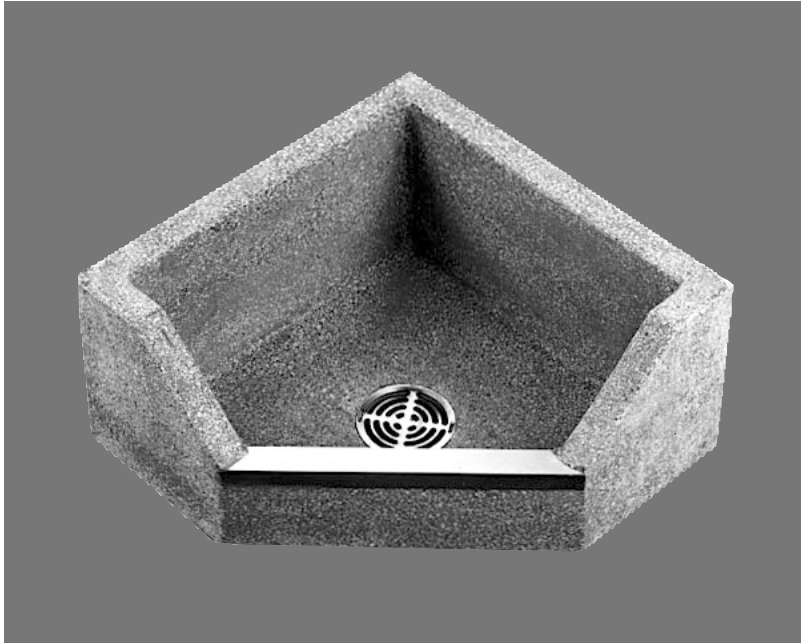
DRAWN BY:
JJ

0710

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

REV.	DATE	DESCRIPTION	BY	CKD. BY	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER
B A	11/06/02 12/19/01	Changed per George Flegel Changed Hole Size in Base	JJ JJ	AM AM			0710



6" Deep Mop Service Basin

FEATURES

- SB / SBC / TSB / TSBC / TSBCR

The mop service basin is a one piece, precast terrazzo as manufactured by Fiat Products. The shoulders shall not be less than 6" high outside, 4" inside at lowest wall (series TSB-3000 is supplied with 12" shoulders). The shoulder width shall be 2" on all sides with a 1/2" pitch toward the inside. The drain body shall be stainless steel or chrome plated brass, cast integral and shall provide for a caulk connection not less than 1" deep to a 3" pipe. Terrazzo shall be made of black and white marbel chips cast in gray portland cement to produce a compressive strength not less than 3000 P.S.I. seven days after casting. Terrazzo surface shall be ground and polished with all air holes and/or pits to be grouted and excess removed. Integral galvanized bonderized steel tiling flanges are available as required at no extra charge, but shall be supplied only if specified with the order, as to quantity and location. Stainless steel tiling flanges are also available at an extra cost.

For the installation you need to establish 1/4" clearance between mop basin and wall. It is important that the entire area between the mop basin and the building floor have a layer of mortar in order that the mop basin be level.

NOTES

- The Wall Guard is manufactured of heavy guage stainless steel and is used to protect walls adjacent to Mop Basins. Two panels are supplied for corner installations, a third panel is required for a recessed installation. (MSG2424; MSG2828; MSG3624; MSG3636)



- SB2424 Series (with plain curbs):
SB2424; SB3030; SB3232; SB3636; SB3624

- SBC3636 Series (with plain curbs):
SBC3636

- TSB3000 Series (with caps on all curbs):
TSB3000; TSB3001; TSB3002; TSB3003

- TSB3000 Series (with stainless steel threshold only):
TSB3010; TSB3011; TSB3012; TSB3013

- TSBC1610 Series (Stainless steel threshold only)
TSBC1610; TSBC1611; TSBC1612

- TSBCR1000 Series
TSBCR1000

- TSBCR1000 Series (Stainless steel threshold only)
TSBCR1100

OPTIONS

- Mop Service Basin Fitting (830AA)



- Aluminum Bumperguard with Vinyl Insert. (1239BB)

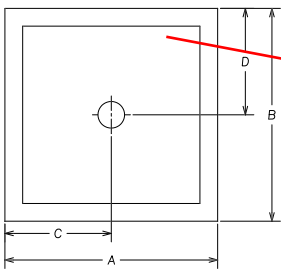
- Hose and Bracket Combination. (832AA)

- Silicone selant. (833AA)



FIAT PRODUCTS
A CRANE PLUMBING COMPANY

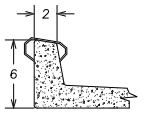
Terrazzo Shower Floor



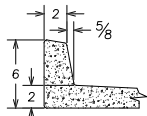
**Series SB
With Plain Curbs**

MODEL	SIZE	A	B	C	D
SB-2424	24 x 24 x 6	24	24	12	12
SB-3030	30 x 30 x 6	30	30	15	15
SB-3232	32 x 32 x 6	32	32	16	16
SB-3636	36 x 36 x 6	36	36	18	18
SB-3624	36 x 24 x 6	36	24	18	12

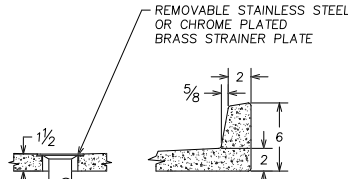
MODELS SB-2424, SB-3232, SB-3636 AND SB-3624 SHALL BE SUPPLIED WITH PLAIN CURBS. STAINLESS STEEL CAPS AS REQUIRED AND ORDERED AVAILABLE OPTIONALLY.



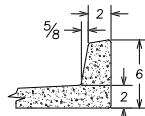
SECTION THRU THRESHOLD WITH OPTIONAL ALUMINUM BUMPER GUARD



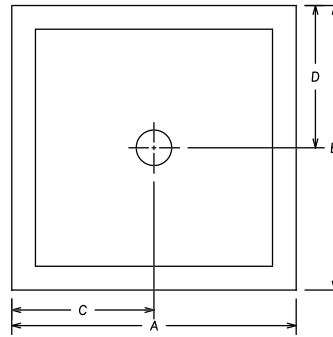
SECTION THRU THRESHOLD



SECTION THRU DRAIN (LEAD CAULK & 3" PIPE & "P" TRAP BY OTHERS)



SECTION THRU SIDES

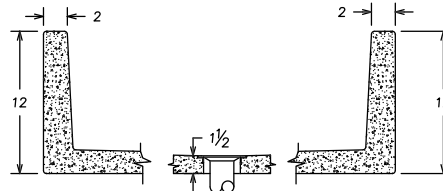


**Series TSB - 100
With Stainless Steel Caps On All Curbs**

MODEL	SIZE	A	B	C	D
TSB - 100	24 x 24 x 12	24	24	12	12
TSB - 300	32 x 32 x 12	32	32	16	16
TSB - 500	36 x 36 x 12	36	36	18	18
TSB - 700	36 x 24 x 12	36	24	18	12

**Series TSB - 100
With Plain Curbs**

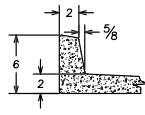
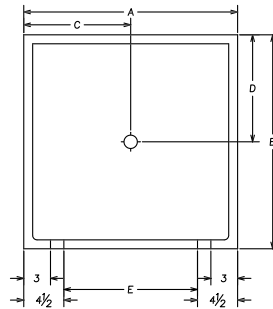
MODEL	SIZE	A	B	C	D
TSB - 200	24 x 24 x 12	24	24	12	12
TSB - 400	32 x 32 x 12	32	32	16	16
TSB - 600	36 x 36 x 12	36	36	18	18
TSB - 800	36 x 24 x 12	36	24	18	12



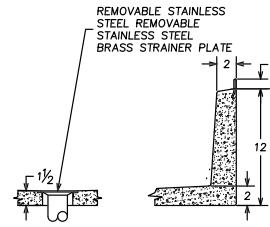
SECTION THRU THRESHOLD

SECTION THRU DRAIN (LEAD CAULK & 3" PIPE & "P" TRAP BY OTHERS)

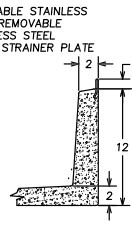
SECTION THRU SIDES



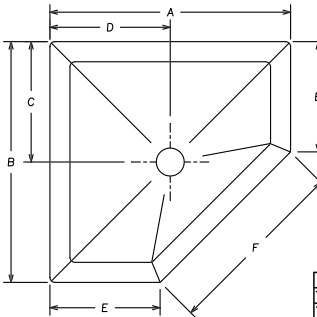
SECTION THRU THRESHOLD



SECTION THRU DRAIN (LEAD CAULK & 3" PIPE & "P" TRAP BY OTHERS)



SECTION THRU SIDES BONDERIZED WITH GALVANIZED TILING FLANGE



**Series TSBC - 6000
With Stainless Steel Caps On All Curbs**

MODEL	SIZE	A	B	C	D	E	F
TSBC - 6010	24 x 24 x 12	24	24	12	12	11	18 1/4
TSBC - 6011	32 x 32 x 12	32	32	12	12	14	25 3/8
TSBC - 6012	36 x 36 x 12	36	36	12	12	18	25 3/8

**Series TSB - 6000
With Plain Curbs**

MODEL	SIZE	A	B	C	D	E	F
TSBC - 6000	24 x 24 x 12	24	24	12	12	11	18 1/4
TSBC - 6001	32 x 32 x 12	32	32	12	12	14	25 3/8
TSBC - 6002	36 x 36 x 12	36	36	12	12	18	25 3/8

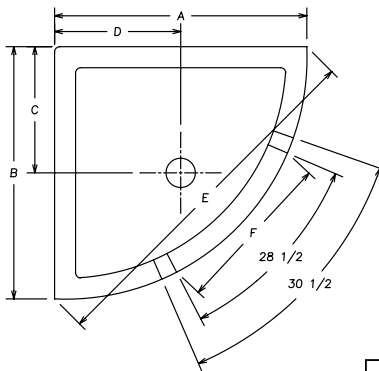
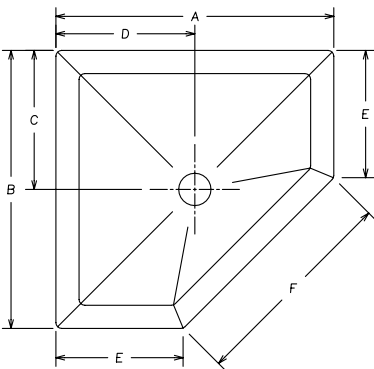
MODELS TSB-3010, TSB-3011, TSB-3012 AND TSB-3013 SHALL BE SUPPLIED WITH STAINLESS STEEL CAP ON DROPPED THRESHOLD CURB ONLY (SEE TABLE 3)

**SERIES TSB-3000
Stainless Steel Caps On All Curbs**

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

**SERIES TSB-3000
With Stainless Steel Threshold Only**

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



**SERIES TSB-1100
Stainless Steel Caps On All Curbs**

MODEL	SIZE	A	B	C	D	E
TSBCR-1100	28 x 28 x 12	28	28	12	12	28 1/2

**SERIES TSB-1000
With Stainless Steel Threshold Only**

MODEL	SIZE	A	B	C	D	E
TSBCR-1000	28 x 28 x 12	28	28	12	12	28 1/2

**Series TSBC - 1610
With Stainless Steel Caps Threshold Only**

MODEL	SIZE	A	B	C	D	E	F
TSBC - 1610	24 x 24 x 12	24	24	12	12	11	18 1/4
TSBC - 1611	32 x 32 x 12	32	32	12	12	14	25 3/8
TSBC - 1612	36 x 36 x 12	36	36	12	12	18	25 3/8

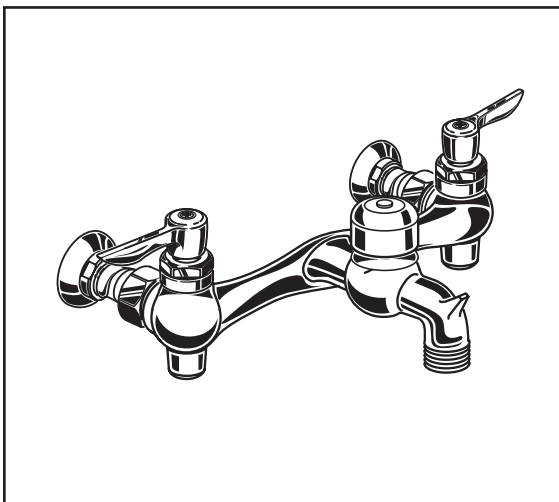
**Series SBC - 3636
With Plain Curbs**

MODEL	SIZE	A	B	C	D	E	F
SBC - 3636	36 x 36 x 12	36	36	12	12	18	25 3/8

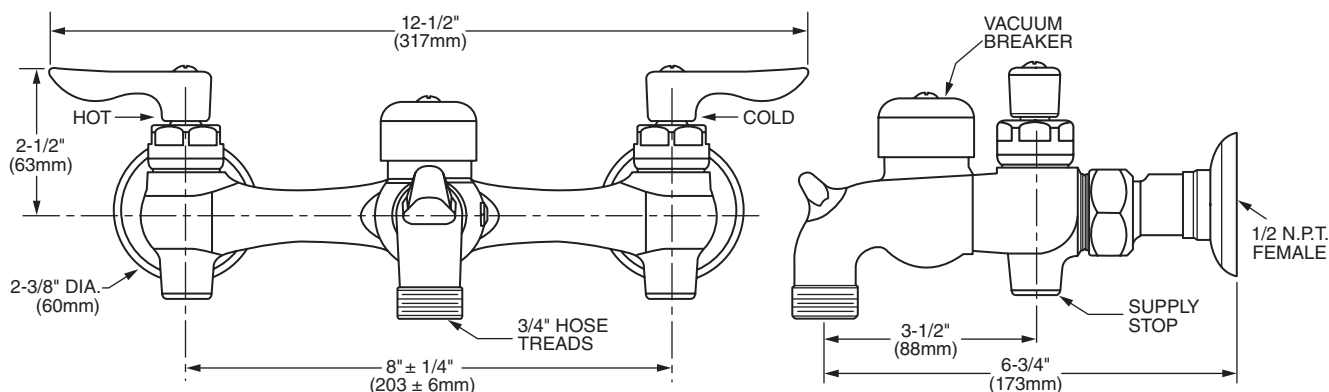


FIAT PRODUCTS
ACRANE PLUMBING COMP ANY

IMPORTANT: Rounding in dimensions may vary 1/2" and are subject to change or cancellation without prior notice.

**EXPOSED YOKE WALL-MOUNT
UTILITY FAUCET
WITH VACUUM BREAKER****MODEL NUMBER:**

- **8350.243 Exposed Yoke Wall-Mount Utility Faucet**
3" Cast brass spout with vacuum breaker. Ceramic disc valves. Integral supply stops. Vandal-resistant metal lever handles. Bucket hook. 3/4" Threaded hose end. 1/2" NPT female inlets.

**GENERAL DESCRIPTION:**

Cast brass body. Metal lever handles with hot and cold indicators and vandal-resistant screws. 1/4 turn ceramic disc valve cartridges. Vacuum breaker prevents back flow. Integral supply stops. Spout with bucket hook and threaded hose end. 1/2" female inlets with adjustable centers from 7-3/4" - 8-1/4" (197mm - 210mm).

PRODUCT FEATURES:

Cast Brass Construction: Durable - Excellent in high use applications.

Ceramic Disc Valve Cartridges: Assure a lifetime of drip-free performance.

Vacuum Breaker: Prevents back flow.

Integral Supply Stops: Permits easy and convenient access.

Choice of Finishes: Available in Polished Chrome (002) or Rough Chrome (004).

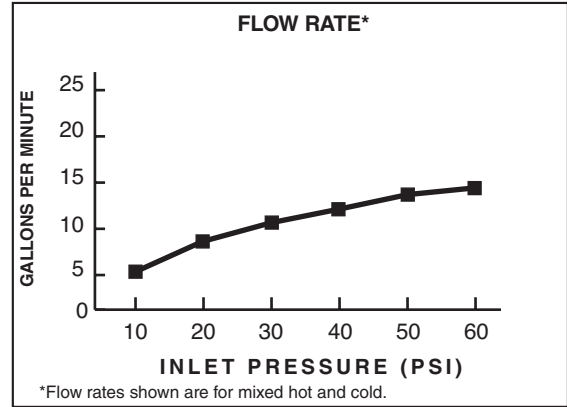
SUGGESTED SPECIFICATION

Exposed yoke wall-mount utility faucet shall feature a cast brass body with integral supply stops. Cast brass spout with bucket hook and vandal-resistant metal lever handles. Shall feature a vacuum breaker. Shall also feature 1/4 turn washerless ceramic disc valve cartridges. Fitting shall be American Standard Model # 8350.243.____.

CODES AND STANDARDS

These products meet or exceed the following codes and standards:

- ASME A112.18.1
- CSA B 125
- ANSI A117.1



Product Number	Description	Finish Options	
		Polished Chrome 002	Rough Chrome 004
8350.243	Exposed yoke wall-mount utility faucet. Ceramic disc valves. Integral supply stops. Vandal-resistant lever handles.		

 MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES



TAINLESS STEEL WALL GUARDS

MS-1

MSG2424 , MSG2828
MSG3232 , MSG3636
MSG3624



FEATURES

- **GENERAL:** Model No.s MSG2424, MSG2828, MSG3232, MSG3636 and MSG3624 are used with the 36" x 24" x 10" Molded-Stone Mop Service Basin with Shelf (MSB-3624) and the 24" x 24" x 10" Molded-Stone Mop Services Basin less Shelf (MSB-2424).

NOTES

OPTIONS



FIAT PRODUCTS[®]
A CRANE PLUMBING COMPANY



FEATURES

- **GENERAL:** Long flexible, heavy duty $\frac{5}{8}$ " rubber hose. Cloth reinforced with $\frac{3}{4}$ " brass coupling at one end. Bracket is 5" long x 3" wide, stainless steel with rubber grip. Hose and Hose Bracket are used with the 36" x 24" x 10" Molded-Stone Mop Service Basin with Shelf (MSB-3624) and the 24" x 24" x 10" Molded-Stone Mop Services Basin less Shelf (MSB-2424).

NOTES

OPTIONS



4700 W. 160th St.
Cleveland, Ohio 44135
Ph: (800) 321-9532
Fax: (800) 321-9535
www.oatey.com

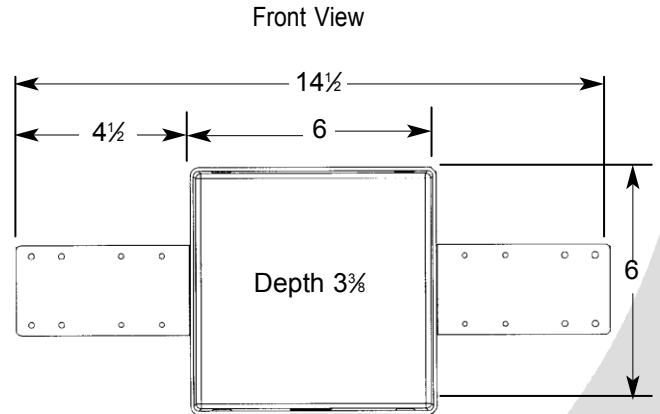
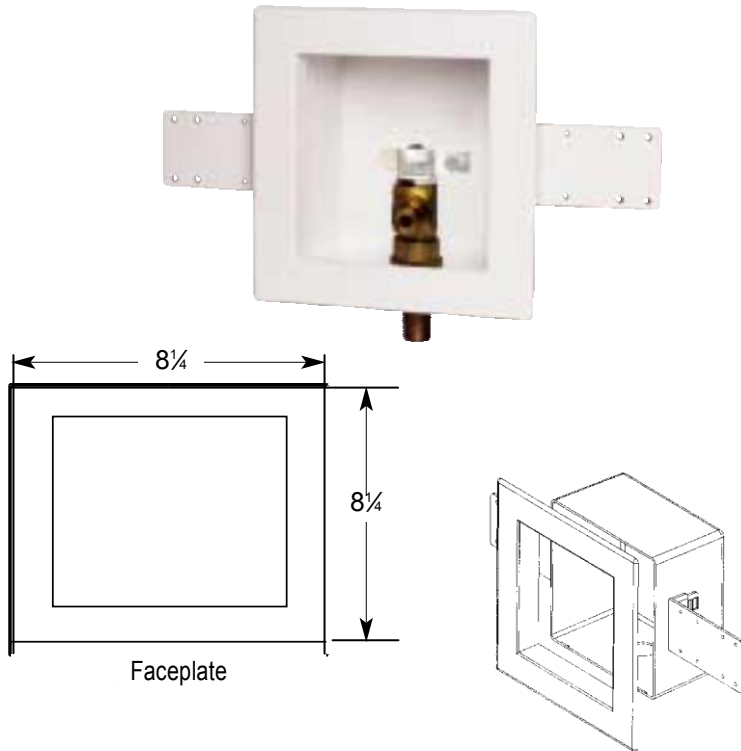
OB-1 Ice Maker Outlet Boxes



SUBMITTAL SPECIFICATION

Engineering Specification: Oatey Ice Maker boxes can be used in commercial or residential applications which require supply valves recessed into the wall. Available water hammer arrestor option provides water pressure shock arrestors required for installation on supply lines to quick closing valves.

Job Reference



(All dimensions in inches)

- Provides quick, safe water supply and shut-off for refrigerator ice maker and water dispenser
- Box made of high impact polystyrene
- 2 support brackets
- Snap-on faceplate frame accommodates up to 1" drywall
- Valves comply with requirements of NSF 61, Section 9

✓	Prod. No	Description
	38574	1/4 Turn Brass Ball Valve - Copper Sweat - Standard Pack w/6' Stainless Steel Hose
	38570	1/4 Turn Brass Hammer Ball Valve - Copper Sweat - w/6' Stainless Steel Hose
	38575	1/4 Turn Brass Ball Valve - 1/2" ASTM F1807 PEX- Standard Pack
	38572	1/4 Turn Brass Hammer Ball Valve - 1/2" ASTM F1807 PEX- Standard Pack
	38578	1/4 Turn Brass Hammer Ball Valve - ASTM F1807 PEX
	38579	1/4 Turn Brass Hammer Ball Valve - 3/8" PEX
	38602	1/4 Turn Brass Hammer Ball Valve - CPVC - Standard Pack (6 per)
	38604	1/4 Turn Brass Hammer Ball Valve - ASTM F1807 PEX - Standard Pack (6 per)
	38605	1/4 Turn Brass Hammer Ball Valve - ASTM F1960 - Standard Pack (6 per)
	38607	1/4 Turn Brass Hammer Ball Valve - Copper Sweat - Display Pack (6 per)
	38608	1/4 Turn Brass Hammer Ball Valve - Copper Sweat - Standard Pack (6 per)
	38623	1/4 Turn Brass Ball Valve - CPVC - Standard Pack w/6' Stainless Steel Hose
	38624	1/4 Turn Brass Ball Valve - ASTM F1960 PEX - w/6' Stainless Steel Hose
	38571	1/4 Turn Brass Hammer Ball Valve - CPVC - Standard Pack w/6' Stainless Steel Hose
	38680	1/4 Turn Brass Ball Valve - CPVC - Standard Pack (6 per)
	38681	1/4 Turn Brass Ball Valve - Copper Sweat - Standard Pack (6 per)
	38683	1/4 Turn Brass Ball Valve - Copper Sweat - Contractor Pack (12 per)
	38684	1/4 Turn Brass Ball Valve - ASTM F1807 PEX - Standard Pack (6 per)
	38685	1/4 Turn Brass Ball Valve - CPVC - Contractor Pack (12 per)
	38690	1/4 Turn Brass Ball Valve - Copper Sweat - No Faceplate - Tract Pack (6 per)
	38691	1/4 Turn Brass Ball Valve - ASTM F1807 PEX - Contractor Pack (12 per)
	38692	1/4 Turn Brass Ball Valve - ASTM F1974 PEX - Standard Pack (6 per)
	38693	1/4 Turn Brass Ball Valve - ASTM F1960 PEX - Standard Pack (6 per)
	38739	Boiler Drain Valve - Copper Sweat - Contractor Pack (12 per)
	38805	Plain Box - No Valve - No Hole - Standard Pack (6 per)
	38806	Plain Box - No Valve - No Hole - Standard Pack - With Grommet (6 per)
	38807	North American Boiler Drain Valve - Copper Sweat - Standard Pack (6 per)
	38808	1/4 Turn Brass Ball Valve - Copper Sweat - Display Bag
	38810	Plain Box - No Valve - Standard Pack (6 per)
	38812	Plain Box - No Valve - No Faceplate - Tract Pack (6 per)
	38823	1/4 Turn Brass Ball Valve - Copper Sweat - Display Box
	38950	1/4 Turn Brass Ball Valve - ASTM F1807 PEX - Display Bag
	38951	Boiler Drain Valve - CPVC - Standard Pack (6 per)

Valves meet ASME A112.18.1 Water Ham
Data is subject to manufacturing tolerances.



4700 W. 160th St.
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OB-2

QUADTRÖ® Washing Machine Outlet Boxes

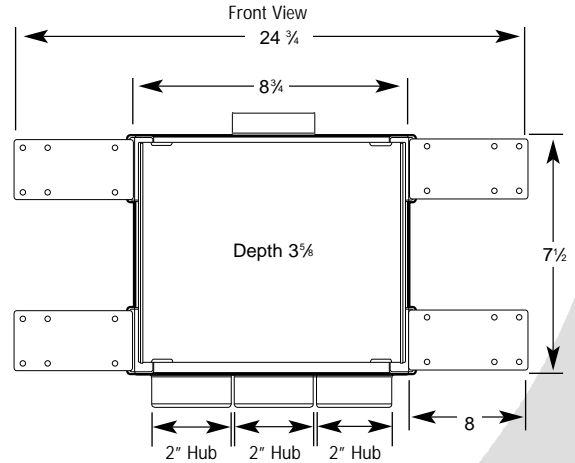
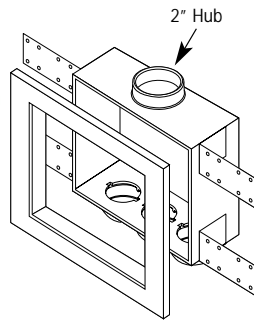
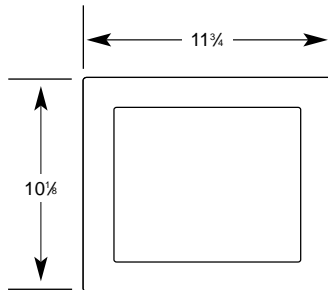


SUBMITTAL SPECIFICATION

Engineering Specification: Oatey QUADTRÖ® washing machine outlet boxes can be used in commercial or residential applications which require supply valves and waste drain recessed into the wall. Available water hammer arrestor option provides water pressure shock arrestors required for installation on supply lines to quick closing valves.

Job Reference

Visit www.oatey.com for updates.



- (All dimensions in inches)
- 2" drain opening fits PVC or ABS Sch. 40 DWV pipe
 - All washing machine outlet boxes are shipped 12 per carton
 - Box made of high impact polystyrene
 - 4 support brackets included for mounting
 - Easy to remove knockout
 - Snap-on faceplate frame accommodates up to 1" drywall

✓	Part #	Description
	38530	1/4 Turn Brass Ball Valve – Copper Sweat – Standard Pack
	38531	1/4 Turn Brass Ball Valve – CPVC – Standard Pack
	38532	1/4 Turn Brass Ball Valve – ASTM F1807 PEX – Standard Pack
	38533	1/4 Turn Brass Ball Valve – ASTM F1960 PEX – Standard Pack
	38534	1/4 Turn Brass Ball Valve – ASTM F1974 PEX – Standard Pack
	38535	Single Lever Ball Valve – Copper Sweat – Standard Pack
	38536	Single Lever Ball Valve – CPVC – Standard Pack
	38537	Single Lever Ball Valve – ASTM F1807 PEX – Standard Pack
	38538	Single Lever Ball Valve – ASTM F1960 PEX – Standard Pack
	38539	Single Lever Ball Valve – ASTM F1974 PEX – Standard Pack
	38540	1/4 Turn Brass Hammer Ball Valve – Copper Sweat – Standard Pack
	38541	1/4 Turn Brass Hammer Ball Valve – CPVC – Standard Pack
	38542	1/4 Turn Brass Hammer Ball Valve – ASTM F1807 PEX – Standard Pack
	38543	1/4 Turn Brass Hammer Ball Valve – ASTM F1960 PEX – Standard Pack
	38544	1/4 Turn Brass Hammer Ball Valve – ASTM F1974 PEX – Standard Pack
	38545	Single Lever Hammer Ball Valve – Copper Sweat – Standard Pack
	38546	Single Lever Hammer Ball Valve – CPVC – Standard Pack
	38547	Single Lever Hammer Ball Valve – ASTM F1807 PEX – Standard Pack
	38548	Single Lever Hammer Ball Valve – ASTM F1960 PEX – Standard Pack
	38549	Single Lever Hammer Ball Valve – ASTM F1974 PEX – Standard Pack
	38550	Plain Box – No Valves – Standard Pack
	38551	1/4 Turn Brass Ball Valve – Compression – Standard Pack
	38552	Brass Boiler Drain Valve – Copper Sweat – Standard Pack
	38553	Brass Boiler Drain Valve with Screw Driver Stop – Copper Sweat – Standard Pack
	38554	North American Brass Boiler Drain Valve – Copper Sweat – Standard Pack
	38555	1/4 Turn Brass Ball Valve – F2080 PEX – Standard Pack
	38556	1/4 Turn Brass Ball Valve – 3/8" PEX – Standard Pack
	38557	1/4 Turn Brass Ball Valve – Standard Pack
	38560	1/4 Turn Brass Ball Valve – Copper Sweat – Contractor Pack
	38561	1/4 Turn Brass Ball Valve – CPVC – Contractor Pack
	38562	1/4 Turn Brass Ball Valve – ASTM F1807 PEX – Contractor Pack
	38563	1/4 Turn Brass Ball Valve – ASTM F1960 PEX – Contractor Pack
	38564	1/4 Turn Brass Ball Valve – ASTM F1974 PEX – Contractor Pack
	38566	1/4 Turn Brass Hammer Ball Valve – F2080 PEX
	38567	Single Lever Hammer Ball Valve – F2080 PEX

US Patent # 6,155,286 and Patents Pending

10/07



Data is subject to manufacturing tolerances.

Valves meet ASME A112.18.1
Water Hammer Arrestors meet ASSE 1010

ELKAY[®]

SPECIFICATIONS

S-1

Gourmet[®] Double Bowl Sinks Models LR and LRQ Series Models LRAD and LRADQ – A.D.A. Compliant Series

GENERAL

Highest quality sink formed of #18 (1.2mm) gauge, type 304 (18-8) nickel bearing stainless steel. Top mount.

DESIGN FEATURES

LR Bowl Depths: 7-7/8" (200mm) (LR(Q)3321) or 7-5/8" (194mm) (all others).

LRAD Bowl Depths: 4" (102mm), 4-1/2" (114mm), 5" (127mm), 5-1/2" (140mm), 6" (152mm) or 6-1/2" (165mm).

Coved Corners: 1-3/4" (44mm) vertical and horizontal radius.

Bowl and Faucet Deck Recess: 3/16" (5mm) below outside edge of sink.

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

Underside: Fully undercoated to dampen sound and reduce condensation. LR(Q)3321 is fully protected by heavy duty Sound Guard[®] undercoating.

OTHER

LR Series Drain Openings: 3-1/2" (89mm) and centered in bowls as illustrated.

LRAD(Q)2918 Drain Openings: 3-1/2" (89mm) and centered in the bowls.

LRAD(Q)2922, LRAD(Q)3319, LRAD(Q)3321 and LRAD(Q)3722 Drain Openings: 3-1/2" (89mm) and located centered left-to-right and off-center front-to-back in each bowl as illustrated.

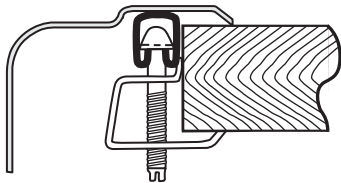
NOTE: Unless otherwise specified, sink is furnished with 4 faucet holes as shown.

Sink complies with ASME A112.19.3-2008 / CSA B45.4-08

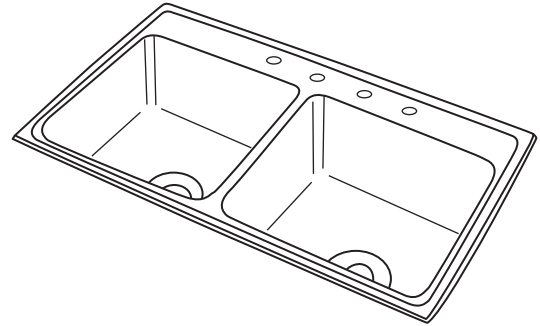
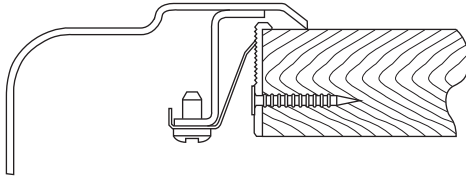
 These sinks are listed by the International Association of Plumbing and Mechanical Officials as meeting the requirements of the Uniform Plumbing Code.



U-Channel Type Mounting System

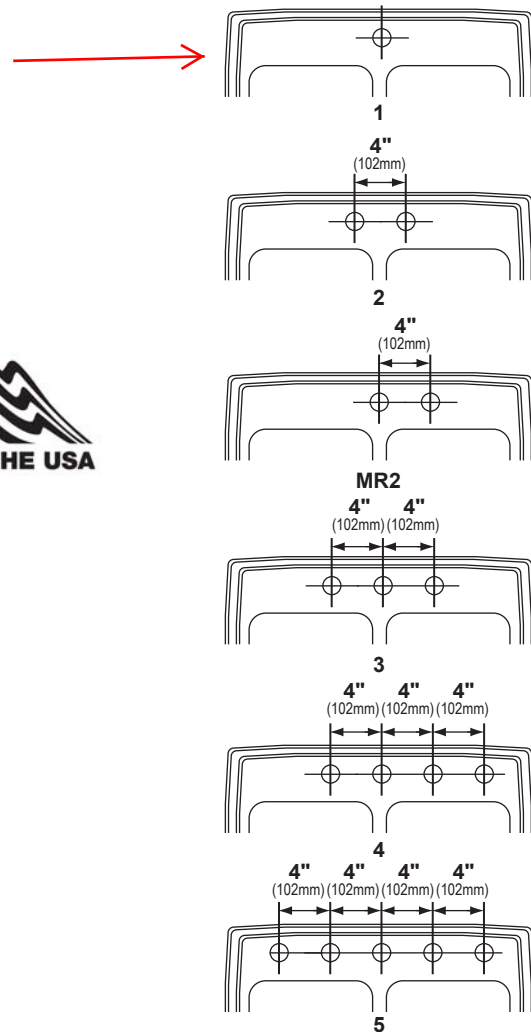


Quick-Clip[®] Mounting System



Model LR(Q)33214

HOLE DRILLING CONFIGURATIONS



SEE OTHER SIDE FOR PRODUCT DIMENSIONS.

THIS PRODUCT, AS CONSTRUCTED IS SUBJECT TO INTERPRETATION OF A.D.A. REQUIREMENTS. THE UNOBSTRUCTED KNEE SPACE REQUIRED TO SATISFY A.D.A. STANDARDS MAY NOT BE DESIRABLE.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkayusa.com for most current version of Elkay product specification sheets.

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.

Gourmet® Double Bowl Sinks
Models LR and LRQ Series
Models LRAD and LRADQ – A.D.A. Compliant Series

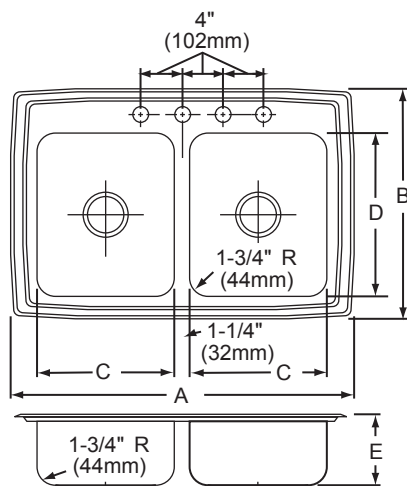
ELKAY®
SPECIFICATIONS

SINK DIMENSIONS*

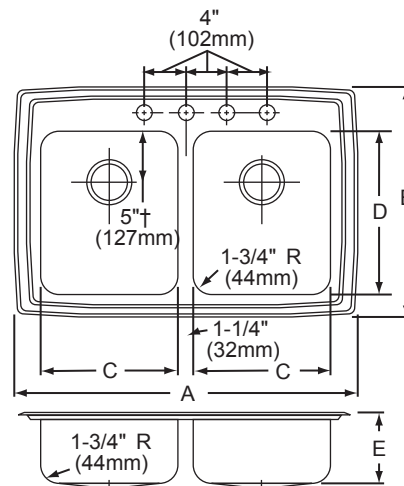
U-Channel Model Number	Quick-Clip® Model Number	Overall		Inside Each Bowl			Cutout in Countertop (1-1/2" (38mm) Radius Corners)		No of 1-1/2" (38mm) Faucet Holes	3 1/2" (89mm) Drain Openings (see other side for details)	Minimum Cabinet Size
		L	W	L	W	D	L	W			
		A	B	C	D	E	L	W			
LR(Q) Series											
LR2519	LRQ2519	25 (635mm)	19-1/2 (495mm)	10 (254mm)	14 (356mm)	7-5/8 (194mm)	24-3/8 (619mm)	18-7/8 (479mm)	1,2,MR2,3,4, or 5	Centered	30 (762mm)
LR2918	LRQ2918	29 (737mm)	18 (457mm)	12 (305mm)	12 (305mm)	7-5/8 (194mm)	28-3/8 (721mm)	17-3/8 (441mm)	1,2,MR2,3,4, or 5	Centered	33 (838mm)
LR2922	LRQ2922	29 (737mm)	22 (559mm)	11-1/2 (292mm)	16 (406mm)	7-5/8 (194mm)	28-3/8 (721mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Centered	33 (838mm)
LR3319	LRQ3319	33 (838mm)	19-1/2 (495mm)	14 (356mm)	14 (356mm)	7-5/8 (194mm)	32-3/8 (822mm)	18-7/8 (479mm)	1,2,MR2,3,4, or 5	Centered	36 (914mm)
LR3321	LRQ3321	33 (838mm)	21-1/4 (540mm)	13-1/2 (343mm)	16 (406mm)	7-7/8 (200mm)	32-3/8 (822mm)	20-5/8 (524mm)	1,2,MR2,3,4, or 5	Centered	36 (914mm)
LR3722	LRQ3722	37 (940mm)	22 (559mm)	16 (406mm)	16 (406mm)	7-5/8 (194mm)	36-3/8 (924mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Centered	42 (1067mm)
LR4322	LRQ4322	43 (1092mm)	22 (559mm)	19 (483mm)	16 (406mm)	7-5/8 (194mm)	42-3/8 (1076mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Centered	48 (1219mm)
LRAD(Q) Series											
LRAD2918	LRADQ2918	29 (737mm)	18 (457mm)	12 (305mm)	12 (305mm)	**	28-3/8 (721mm)	17-3/8 (441mm)	1,2,MR2,3,4, or 5	Centered	33 (838mm)
LRAD2922	LRADQ2922	29 (737mm)	22 (559mm)	11-1/2 (292mm)	16 (406mm)	**	28-3/8 (721mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Off-Centered	33 (838mm)
LRAD3319	LRADQ3319	33 (838mm)	19-1/2 (495mm)	14 (356mm)	14 (356mm)	**	32-3/8 (822mm)	18-7/8 (479mm)	1,2,MR2,3,4, or 5	Off-Centered	36 (914mm)
LRAD3321	LRADQ3321	33 (838mm)	21-1/4 (540mm)	13-1/2 (343mm)	16 (406mm)	**	32-3/8 (822mm)	20-5/8 (524mm)	1,2,MR2,3,4, or 5	Off-Centered	36 (914mm)
LRAD3722	LRADQ3722	37 (940mm)	22 (559mm)	16 (406mm)	16 (406mm)	**	36-3/8 (924mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Off-Centered	42 (1067mm)

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

**Available in 4" (102mm), 4-1/2" (114mm), 5" (127mm), 5-1/2" (140mm), 6" (152mm) and 6-1/2" (165mm) depths. Please consult your sales representative for other depths or modifications.



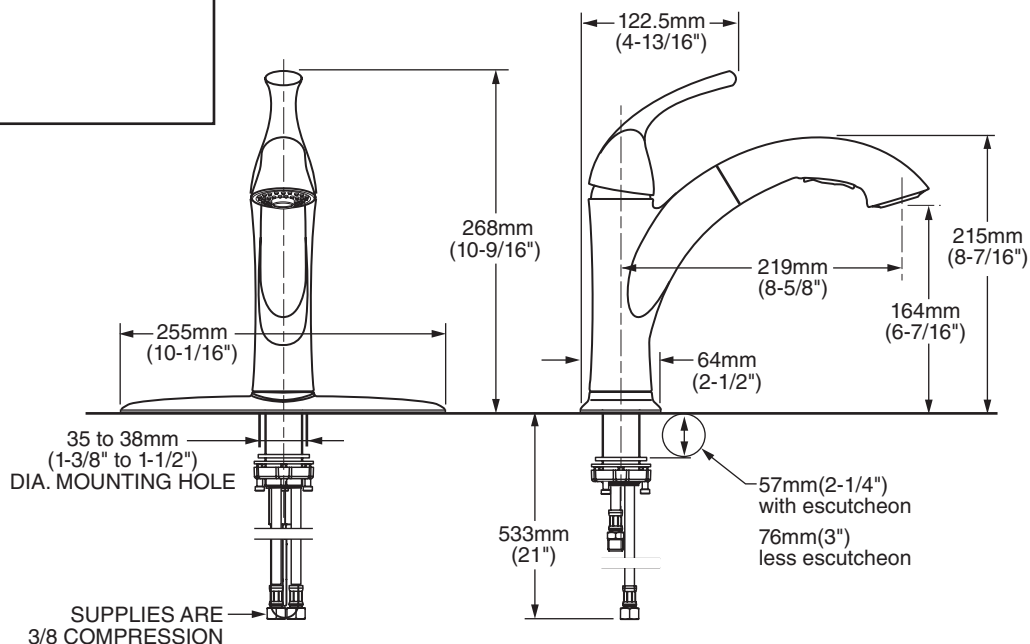
Model LR(Q) Series Illustrated
 Model LRAD(Q) Series Centered Drain



Model LRAD(Q) Series Off-Centered Drain
 Model Only Illustrated
 † 4-1/2" (114mm) LRAD(Q)2922

**MODEL NUMBER:**

➔ **4433.100 Kitchen Faucet with Pull-out Spray**
 Escutcheon plate, (use is optional).

**GENERAL DESCRIPTION:**

Metal handle and escutcheon plate. Metal swivel pull-out spray spout. Adjustable spray pattern with toggle button activation. Washerless 40mm ceramic disc valve cartridge. Braided flexible supply hoses with 3/8" compression connections. Metal mounting shank with brass fixation ring. Complete with two integral check valves. 2.2gpm/8.3L/min. maximum flow rate. Fitting can be mounted with or without escutcheon plate (escutcheon size 10-1/16"L x 2-1/2"W).

PRODUCT FEATURES:

Ceramic Disc Valve Cartridge: Assures smooth, precise valve control and a lifetime of drip-free, maintenance-free performance.

Memory Position Valving: Allows user to turn valve on and off at preferred temperature setting without readjusting handle position each time.

Lead Free: Faucet contains $\leq 0.25\%$ total lead content by weighted average.

Integral Check Valves: Prevents back flow.

Pull-out Spray Spout: Switches water flow from a stream to a spray. Simplifies even the most difficult cleaning tasks.

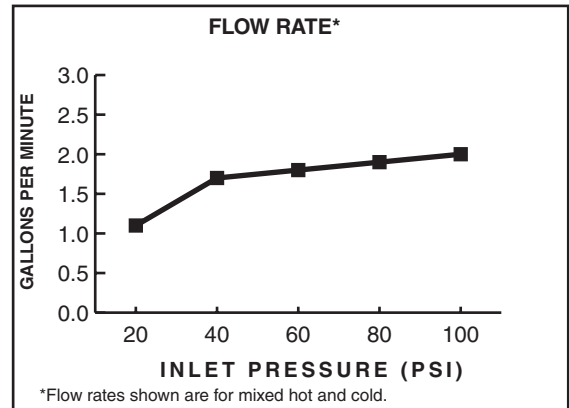
SUGGESTED SPECIFICATION:

Single control kitchen pull-out faucet shall feature a swivel pull-out spray spout with two check valves, metal escutcheon plate and handle. Shall also feature washerless ceramic disc valve cartridge and flexible supply hoses. Faucet shall be American Standard Model # 4433.100._____

CODES AND STANDARDS


These products meet or exceed the following codes and standards:

- ANSI A117.1**
- ASME A112.18.1**
- NSF 61/Section 9 & Annex G**
- CSA B125**



2.2gpm/8.3L/min. FLOW RATE

Product Number	Description	Finish Options		
		Polished Chrome	Stainless Steel (PVD)	Oil Rubbed Bronze
4433.100	Pull-out kitchen faucet.	002	075	224

 Meets the American Disabilities Act Guidelines and **ANSI A117.1** Requirements for the physically challenged.

ELKAY[®]

SPECIFICATIONS

S-1

Sink Accessories
Drain Fitting
 Models **LK35**, LK35B, LK335 and LK35L

GENERAL

LK35

- Type 304 stainless steel body and removable conical basket strainer with metal stem and rubber stopper
- Fits 3-1/2" (89mm) opening
- Polished finish
- Chrome plated brass 1-1/2" (38mm) x 4" (102mm) tailpiece

LK35B

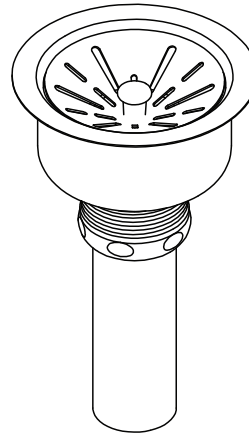
- Type 304 stainless steel body and removable conical basket strainer with metal stem and rubber stopper
- Fits 3-1/2" (89mm) opening
- Polished finish
- Type 304 stainless steel 1-1/2" (38mm) x 4" (102mm) tailpiece

LK335

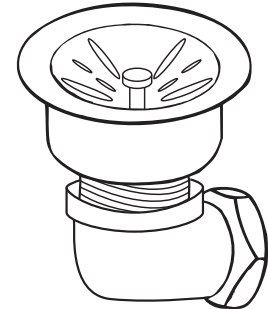
- Type 316 stainless steel body and removable conical basket (chrome plated brass knob) strainer with metal stem and rubber stopper
- Fits 3-1/2" (89mm) opening
- Polished finish
- Type 316 stainless steel 1-1/2" (38mm) x 4" (102mm) tailpiece

LK35L

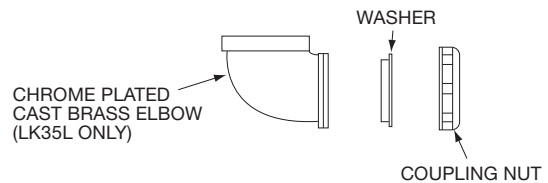
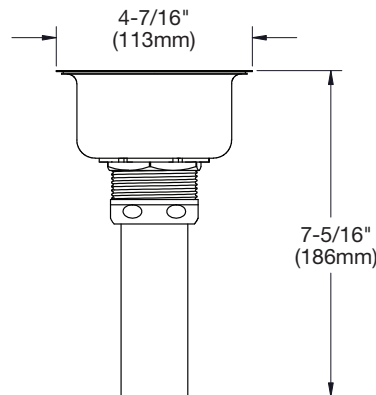
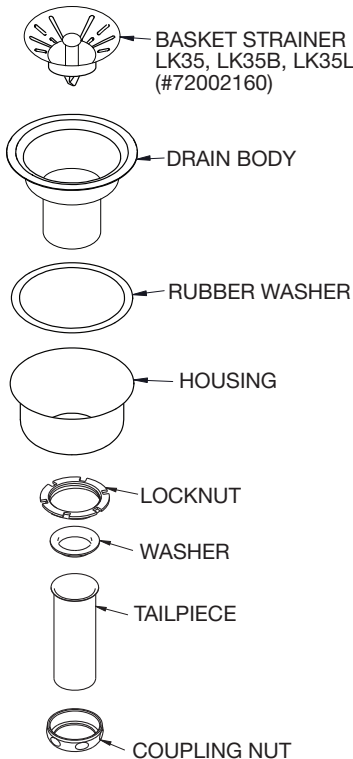
- Type 304 stainless steel body and removable conical basket strainer with metal stem and rubber stopper
- Fits 3-1/2" (89mm) opening
- Polished finish
- Chrome plated cast brass 1-1/2" (38mm) 90° elbow



Models LK35,
LK35B, LK335



Model LK35L



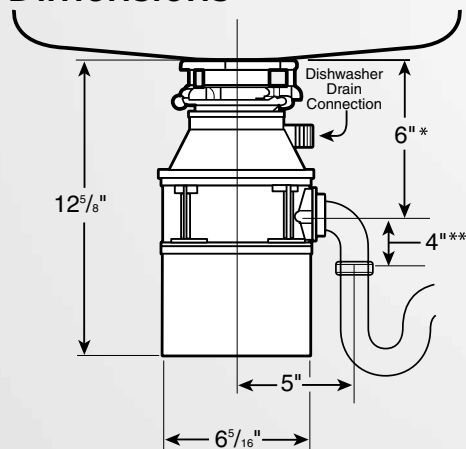
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This specification describes an Elkay product with design, quality and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

S-1 Food Waste Disposers

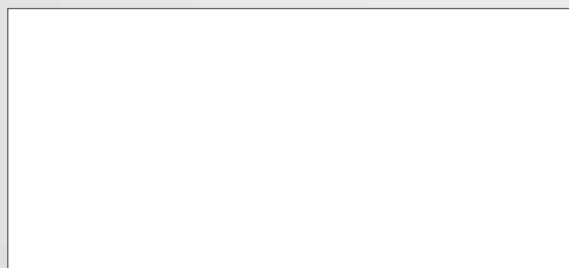


Dimensions



* Distance from bottom of sink to center line of disposer outlet.
Add 1/2" when stainless steel sinks are used.
** Length of tailpipe from center line of disposer outlet to end of tailpipe.
NOTE: Plumb waste line to prevent standing water in disposer motor housing.

Job Specifications



Submittal Sheet

This popular model offers the following features and benefits:

- 1/2 Horsepower Heavy Duty Motor (Quiet Dura-Drive® Induction Motor)
- 2-Year *We Come To You*® In-Home Parts And Labor Service Warranty
- Rugged Galvanized Steel Construction (For Disposer Durability)
- Space-Saving Compact Design

Sample Specification

Food Waste Disposer(s) shall be InSinkErator Badger® 5, continuous feed, with 1/2 H.P. motor, galvanized steel grinding elements with two stainless steel 360° swivel lugs. Self-service wrench.

Warranty:
2- Year parts and in-home service.

* The complete InSinkErator warranty is included in the Care & Use Booklet packed with each unit.

Specifications

Type of Feed	Continuous
On/Off Control	Wall Switch
Motor	Single Phase
HP	1/2
Volts	120
HZ	60
RPM	1725
Amp. (Avg. Load)	6.9
Time Rating	Intermittent
Lubrication	Permanently Lubricated Upper & Lower Bearings
Shipping Weight (Approx.)	14 lbs.
Unit Finish	Waterborne Grey Enamel
Overall Height	12- 5/8"
Grind Chamber Capacity	26 oz.
Motor Protection	Manual Reset Overload
Average Water Usage	Approx. 1 Gallon per Person Per Day
Average Electrical Usage	3-4 KWH per Year
Drain Connection	1-1/2" Cushioned Slip Joint
Dishwasher Drain Connection	Yes



Food waste disposers can provide an environmentally responsible alternative to transporting food waste to landfills. And they can help reduce greenhouse gas emissions. At capable wastewater treatment plants, food waste can be recycled to produce renewable energy. Additionally, capable wastewater treatment plants can process food waste into fertilizer. (Check the plant in your area.)



The Emerson logo is a trademark and service mark of Emerson Electric Co. The mounting collar configuration is a trademark of Emerson Electric Co.

InSinkErator may make improvements and/or changes in the specifications at any time, in its sole discretion, without notice or obligation and further reserves the right to change or discontinue models.

1-800-558-5700
www.insinkerator.com



4675 W. 160th St.
Cleveland, Ohio 44135
Ph: (800) 321-9532
Fax: (800) 321-9535
www.dearbornbrass.com

SUBMITTAL SPECIFICATION

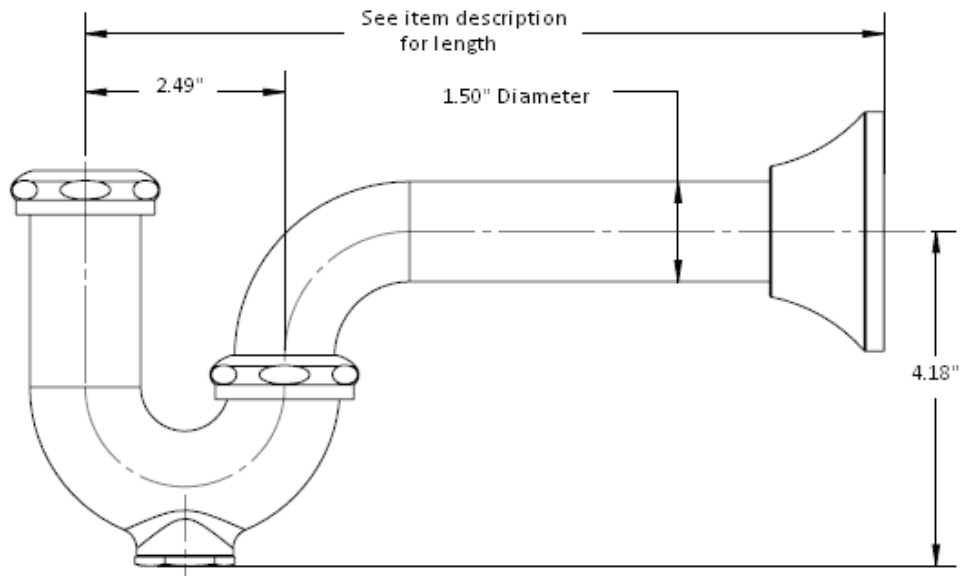
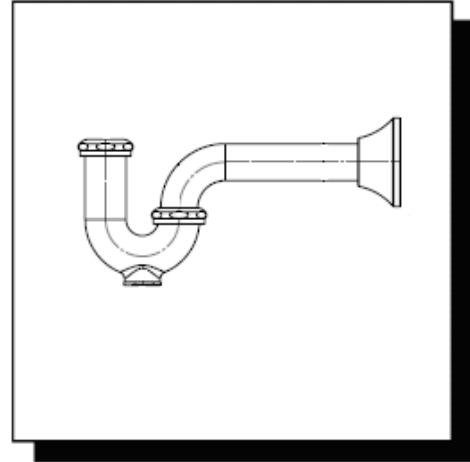
BRASS TUBULAR 1-1/2" SEMI-CAST P-TRAPS

Engineering Specification: Dearborn Brass 1-1/2" Semi-Cast Brass P-Traps are designed for installation in commercial applications.

Job Reference

DESCRIPTION

- Chrome Finished
- 17 Gauge Brass
- Semi-Cast P-Trap
 - Cast J-Bend with Cleanout
 - Quarter Bend
 - Deep Metal Flange
 - Cleanout Plug
 - Fiber Cleanout Washer
 - (2) Brass Nuts
 - (1) 1-1/2" x 1-1/4" Reducing Washer
 - (2) 1-1/2" Poly Washers
 - (2) 1-1/2" Rubber Washers
- Designed for installation in commercial applications



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
→	510-1	1-1/2" x 12" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts	12	19
	5510-1	1-1/2" x 12" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts – White Box	12	19
	5510A-1	1-1/2" x 15" Semi Cast Brass P-Trap – 17 Gauge with Deep Flange & Brass Nuts	12	21

Data is subject to manufacturing tolerances.

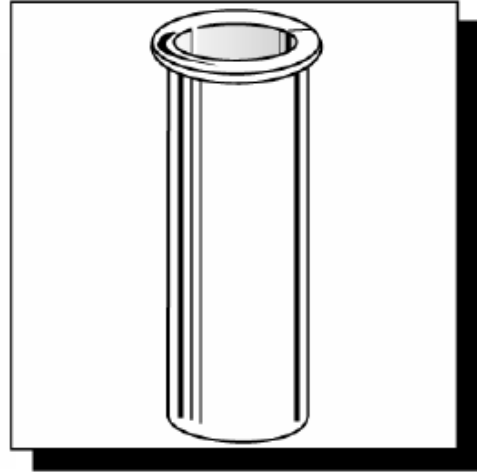
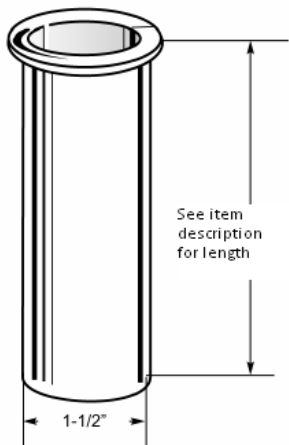
BRASS TUBULAR FLANGED STRAINER TAILPIECES

Engineering Specification: Dearborn Brass Flanged Strainer Tailpieces are designed for use in tubular drain applications. Available in 17, 20 or Budget Gauge Brass. Options include Unfinished Brass, Flanged one or both ends and various tube lengths.

Job Reference

DESCRIPTION

- Chrome or Rough Brass Finish
- Sink Strainer Tailpieces
 - Flanged Strainer Tailpiece
 (Flanged one or both ends)



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
	795-1	1-½" x 1-¼" x 6" Flanged Strainer Tailpiece – 20 Gauge	10	3
	796-1	1-½" x 1-¼" x 8" Flanged Strainer Tailpiece – 20 Gauge	10	3
	798-1	1-½" x 1-¼" x 12" Flanged Strainer Tailpiece – 20 Gauge	10	4
	799-1	1-½" x 4" Flanged Strainer Tailpiece – Budget Gauge	10	1
	799-3	1-½" x 4" Flanged Strainer Tailpiece – Budget Gauge – Unfinished Brass	10	1
	800-1	1-½" x 6" Flanged Strainer Tailpiece – Budget Gauge	10	2
	801-1	1-½" x 8" Flanged Strainer Tailpiece – Budget Gauge	10	3
	803-1	1-½" x 12" Flanged Strainer Tailpiece – Budget Gauge	10	4
	803BD-1	1-½" x 12" Double Flanged Strainer Tailpiece – Budget Gauge	10	4
	803ED-1	1-½" x 16" Double Flanged Strainer Tailpiece – Budget Gauge	10	5
	800-20-1	1-½" x 6" Flanged Strainer Tailpiece – 20 Gauge	10	3
	801-20-1	1-½" x 8" Flanged Strainer Tailpiece – 20 Gauge	10	4
	801-20-3	1-½" x 8" Flanged Strainer Tailpiece – 20 Gauge – Unfinished Brass	10	4
	803-20-1	1-½" x 12" Flanged Strainer Tailpiece – 20 Gauge	10	5
	803-20-3	1-½" x 12" Flanged Strainer Tailpiece – 20 Gauge – Unfinished Brass	10	5
	803ED-20-1	1-½" x 16" Double Flanged Strainer Tailpiece – 20 Gauge	10	7
	803ED-20-3	1-½" x 16" Double Flanged Strainer Tailpiece – 20 Gauge – Unfinished Brass	10	7
	799-17-1	1-½" x 4" Flanged Strainer Tailpiece – 17 Gauge	10	4
	799-17-3	1-½" x 4" Flanged Strainer Tailpiece – 17 Gauge – Unfinished Brass	10	4
	800-17-1	1-½" x 6" Flanged Strainer Tailpiece – 17 Gauge	10	4
	800-17-3	1-½" x 6" Flanged Strainer Tailpiece – 17 Gauge – Unfinished Brass	10	4
	801-17-1	1-½" x 8" Flanged Strainer Tailpiece – 17 Gauge	10	5
	801-17-3	1-½" x 8" Flanged Strainer Tailpiece – 17 Gauge – Unfinished Brass	10	5
	803-17-1	1-½" x 12" Flanged Strainer Tailpiece – 17 Gauge	10	7
	803-17-3	1-½" x 12" Flanged Strainer Tailpiece – 17 Gauge – Unfinished Brass	10	7
	803ED-17-1	1-½" x 16" Flanged Strainer Tailpiece – 17 Gauge	10	10
	803ED-17-3	1-½" x 16" Flanged Strainer Tailpiece – 17 Gauge – Unfinished Brass	10	10

Data is subject to manufacturing tolerances.

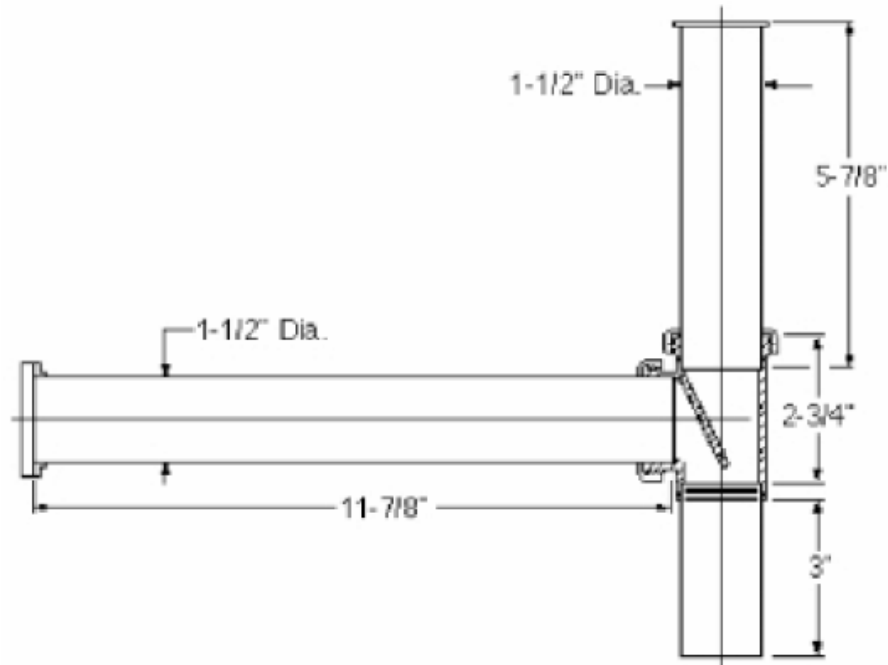
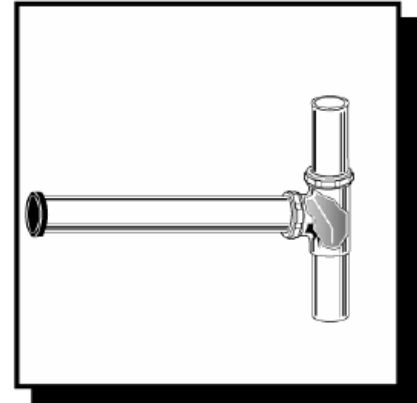
**BRASS TUBULAR
 1-½" CENTER TO END DISPOSER KITS**

Engineering Specification: Dearborn Brass 1-½" Center to End Brass Tubular Disposer Kits are designed for use in tubular drain applications. Available in 17, 20 or Budget Gauge Brass.

Job Reference

DESCRIPTION

- Chrome Finish
- Brass Tubular Disposer Kits
 - Threaded Tailpiece
 - 6" Sink Strainer Tailpiece
 - 12" Sink Strainer Tailpiece
 - 1-½" Tee with Baffle
 - Rubber Discharge Gasket
 - (2) Zinc Nuts
 - (2) Rubber Washers



✓	Product No.	Description	Carton Quantity	Carton Weight (lbs)
	100-22-1	1-½" x 13" Center to End Disposer Kit – Budget Gauge	10	15
→	100-20-1	1-½" x 13" Center to End Disposer Kit – 20 Gauge	10	18
	100-17-1	1-½" x 13" Center to End Disposer Kit – 17 Gauge	10	21

Data is subject to manufacturing tolerances.

For Residential and Commercial Applications

Job Name		Engineer / Architect	
Job Location		Wholesaler	
Submittal Date		Contractor	

OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Use: For use with water in accessible locations only. Not intended for recirculating water systems that produce continuous use temperatures above 115° F. For those applications, use our KT™ series ball stop supply kits.

Design Features:

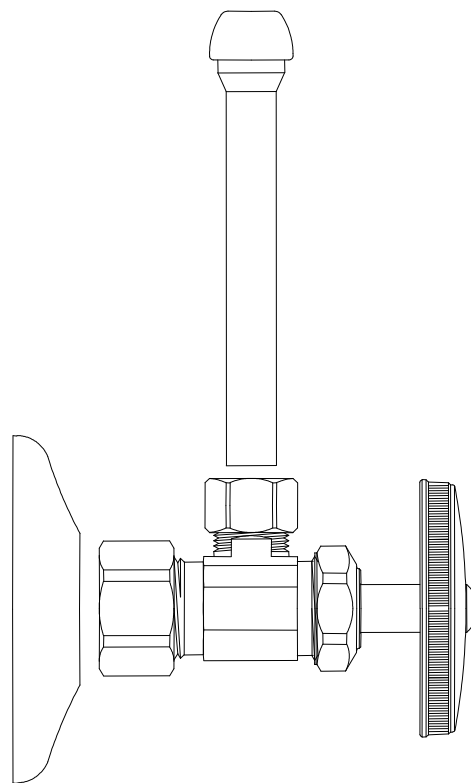
- **Everything you need.** These kits combine our trusted BrassCraft® supply stop, copper riser, and escutcheon for an easy-to-install connection
- **100% compliant kits** available 

Copper riser provides:

- **One-piece construction**
- **Cut-to-length** for a clean, professional installation

Multi-Turn stop provides:

- **Machined one-piece brass body** provides strength, durability and long-lasting performance
- **Oval knurled handle** provides a secure grip and smooth on/off operation
- **Easy-to-remove handle** with screw attachment helps protect against accidental stop operation during rough-ins



Operating Specifications:

Temperature: 40°- 140° F
Pressure: 125 PSI maximum

Tubing Diameter: 0.375" OD

Standard

CONNECTOR MATERIAL SPECIFICATIONS	
Tube	Copper or chrome-plated copper
Insert	POM

Compliant

CONNECTOR MATERIAL SPECIFICATIONS	
Tube	Copper or chrome-plated copper
Insert	POM

This specification and all information contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft Mfg. This specification must be returned to BrassCraft Mfg if requested.



OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Standard

STOP MATERIAL SPECIFICATIONS	
Body	Brass or chrome-plated brass
Stem	POM or brass
Bib & Packing Washers	Nitrile rubber
Packing Nut	Brass or chrome-plated brass
Handle	Metal, chrome-plated ABS or Polycarbonate
Handle Screw	Steel, zinc-plated
Loose Key	Zinc die-cast
Loose Key Stem	Brass, chrome-plated
Lock Shield	Brass, chrome-plated

Escutcheon	Stainless steel
-------------------	-----------------

Compliant

STOP MATERIAL SPECIFICATIONS	
Body	Compliant brass, chrome-plated
Stem	POM or compliant brass
Bib & Packing Washers	Nitrile rubber
Packing Nut	Brass or chrome-plated brass
Handle	Metal, chrome-plated ABS or Polycarbonate
Handle Screw	Steel, zinc-plated
Loose Key	Zinc die-cast
Loose Key Stem	Brass, chrome-plated
Lock Shield	Brass, chrome-plated

Escutcheon	Stainless steel
-------------------	-----------------

Standard Part Listing:

- OCR1912A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1912A R 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, rough finish
- OCR1912AZ C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated
- OCR1915A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920AZ C 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated
- OCR1920AZ R 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, rough finish
- OCR1920A BZ 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, oil rubbed bronze
- OCR1920A NS 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, satin nickel
- SCR1912A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1915A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, loose key, chrome plated
- SCR1920A C 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, loose key, chrome plated

This specification and all information contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft Mfg. This specification must be returned to BrassCraft Mfg if requested.

BrassCraft[®]

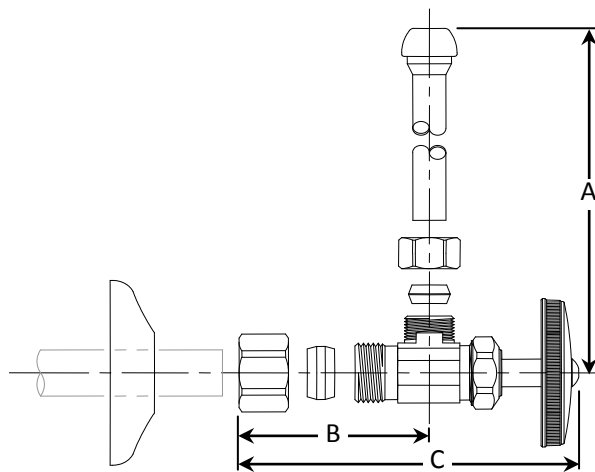
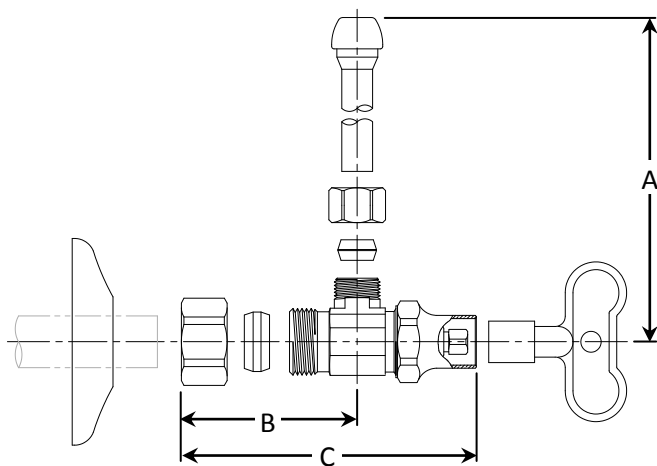
OCR1912A/ OCR1915A/ OCR1920A Copper Faucet Supply Kit - Compression Multi-Turn Angle Stop

Compliant Part Listing:

- | | | |
|--------------------------|--------------|--|
| <input type="checkbox"/> | OCR1912AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated |
| <input type="checkbox"/> | OCR1912AZX C | 1/2" nom compression x 3/8" OD compression stop, brass stem with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, chrome plated |
| <input type="checkbox"/> | OCR1915AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, chrome plated |
| <input type="checkbox"/> | SCR1912AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 11-1/2" length riser & shallow escutcheon, loose key, chrome plated |
| <input type="checkbox"/> | SCR1915AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 14-1/2" length riser & shallow escutcheon, loose key, chrome plated |
| <input type="checkbox"/> | SCR1920AX C | 1/2" nom compression x 3/8" OD compression stop with 3/8" OD tube x 19-1/2" length riser & shallow escutcheon, chrome plated |

PART DIMENSIONS (Inches)

Model	DIM. A	DIM. B	DIM. C
OCR1912A /AZ /AX/ AZX	12.00	1.16	2.84
OCR1915A /AX	15.00	1.16	2.84
OCR1920A /AZ	20.00	1.16	2.84
SCR1912A /AX	12.00	1.20	2.64
SCR1915A /AX	15.00	1.20	2.64
SCR1920A /AX	20.00	1.20	2.64



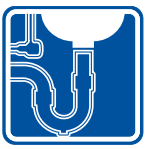
Listings & Certifications:

- IAPMO listed to ASME A112.18.1 / CSA B125.1 (File # 0645)
- CSA listed to ASME A112.18.1 / CSA B125.1 (File # 204593)
- Compliant product CSA listed to Low Lead Content Certification Program – Plumbing Products Class 6853-0



This specification and all information contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft Mfg. This specification must be returned to BrassCraft Mfg if requested.

BrassCraft®



LAV GUARD²
FAST FIT UNDERSINK PIPING COVERS

S-1



ADA-compliant undersink protection



Submittal Sheet

General Description:

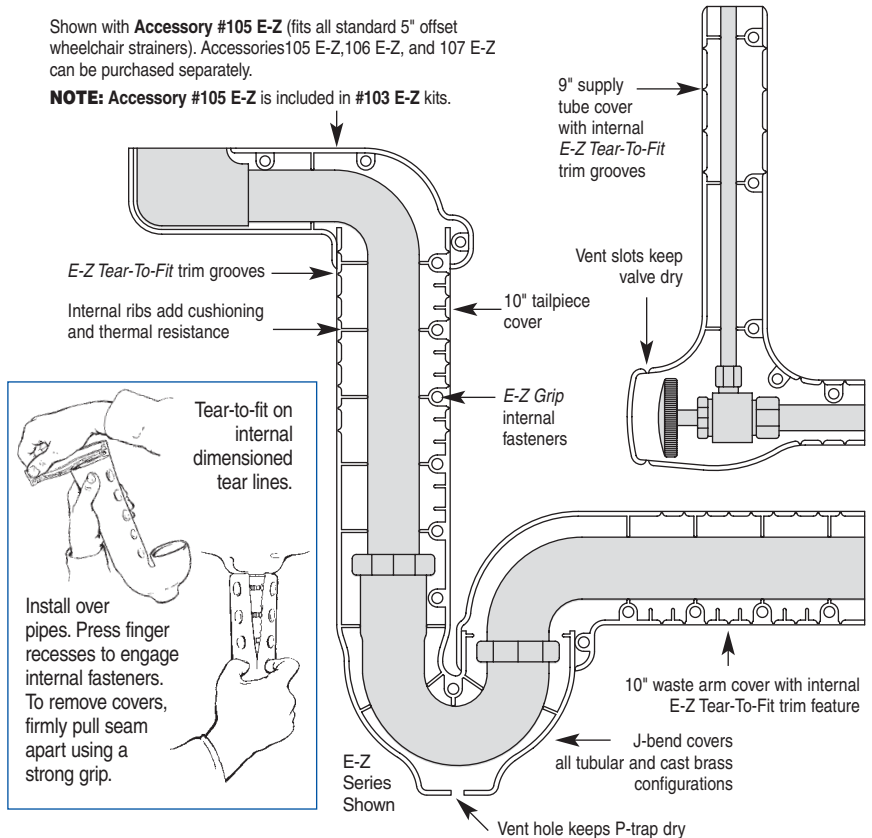
LAV GUARD² E-Z Series waste and supply piping covers satisfy ADA compliance requirements. Built-in *E-Z Grip* internal fasteners and internal, *E-Z Tear-To-Fit* trimming feature allow for fast installation without tools. *Series #100 E-Z* kits are designed to fit on all tubular and cast brass P-trap assemblies. *Series #400* kits are the "original" LAV GUARD design and fit schedule 40 ABS and PVC P-trap assemblies — regardless of their geometry or rotational offset. Valve cover completely encloses angle valve and supply tube for both handled and keyed type water stops.

Material	Molded vinyl
Nominal Wall	1/8" constant
Durometer	70 - 80 - Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming (E-Z Series)	Internal, <i>E-Z Tear-To-Fit</i> trim feature
Fasteners (E-Z Series)	Internal <i>E-Z Grip</i> fasteners (reusable)
Color	China white
Paintability	Apply Latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) 0 mm (AEB)
Bacteria/Fungus Resistance	ASTM G21 and G22/ Result: 0 growth
Maintenance	Use common detergents

Manufactured under one or more of the following U.S. or Canadian patents. Other patents pending.
5,303,730 5,360,031 5,524,669 5,564,463 5,678,598 5,699,828 5,915,412 5,915,413 5,901,739 5,960,820 2,075,324 2,119,427 2,136,027 2,158,083

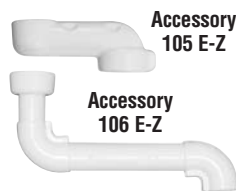


IPS Corporation, 202 Industrial Park Lane, Collierville, TN 38017
(901) 853-5001 (800) 340-5969 FAX: (901) 853-5008
e-mail: info@truebro.com Internet: http://www.truebro.com



#100 E-Z Series (shown above right) for tubular and cast brass P-trap assemblies.
#400W* Series (original design) for schedule 40 P-trap assemblies.

<input type="checkbox"/> Model #99 E-Z One angle valve and supply cover	<input checked="" type="checkbox"/> Model #102 E-Z One P-trap cover, two angle valves and covers	<input type="checkbox"/> Accessory #105-K Kohler 6" offset
<input type="checkbox"/> Model #100 E-Z One P-trap cover	<input type="checkbox"/> Model #402W* One P-trap cover, two angle valves and covers	<input type="checkbox"/> Accessory #106 E-Z One basket strainer cover and offset waste cover (adjustable to 18")
<input type="checkbox"/> Model #400W* One P-trap cover	<input type="checkbox"/> Model #103 E-Z One P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover	<input type="checkbox"/> Accessory #107 E-Z Two basket strainer covers and center or end outlet waste cover (adjustable)
<input type="checkbox"/> Model #101 E-Z One P-trap cover, one angle valve cover	<input type="checkbox"/> Accessory #105 E-Z One 5" offset tailpiece wheelchair strainer assembly	<input type="checkbox"/> Accessory #Ex99 E-Z One 16" extension for water supply
<input type="checkbox"/> Model #401W* One P-trap cover, one angle valve cover	<small>*All #400W series items are the "original" LAV GUARD² design and construction. Specifications may change without notice.</small>	



Job/Location _____

Designer _____

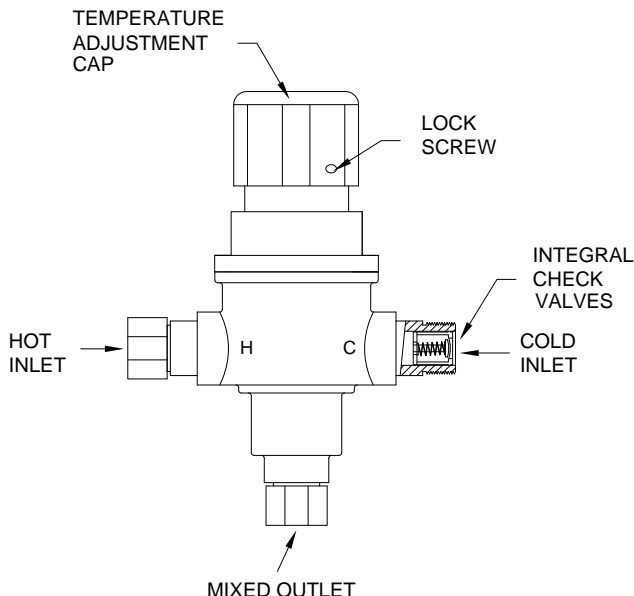
TRUEBRO reserves the right to make product and material changes at any time without notice.

THERMOSTATIC MIXING VALVE

MODEL 170

THERMOSTATIC POINT OF USE MIXING VALVE

MODEL 3/8" inlets, 3/8" outlet, compression connections



MATERIALS:

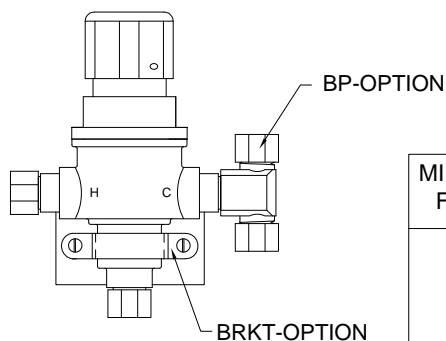
- Bronze body
- Locked temperature adjustment cap (vandal resistant)
- Copper encapsulated thermostat assembly with polymer thermoplastic shuttle
- Stainless steel springs
- Buna-N O'rings
- Integral check valves on hot and cold inlets
- Compression fittings on inlets and outlet

PRESSURE-TEMPERATURE:

- Minimum Flow: 0.5 GPM (1.9 l/Min)
- Maximum Pressure: 125 PSI (8.6 BAR)
- Maximum Hot Water temperature: 200°F- (93°C)
- Approach Temperature 5°F (2.8°C) above set point.

OPTION: (Furnished separately)

- ___BP- Cold water By-Pass
- ___BRKT- Mounting Bracket



ASSE 1070 Certified



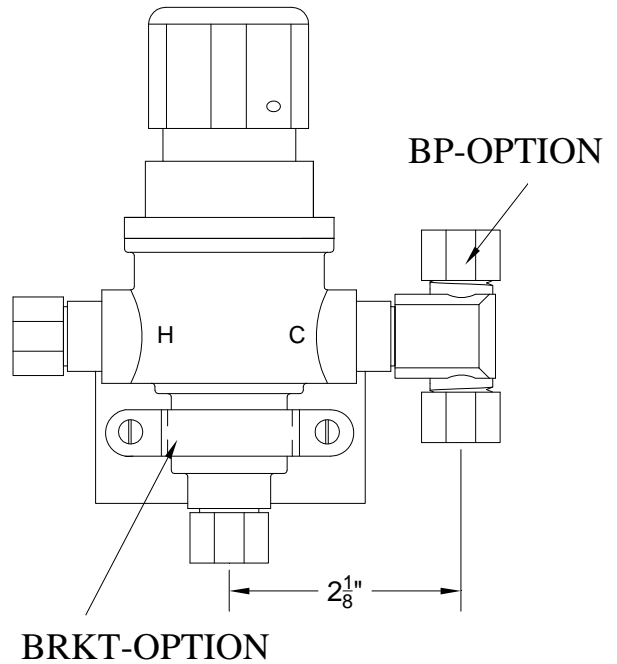
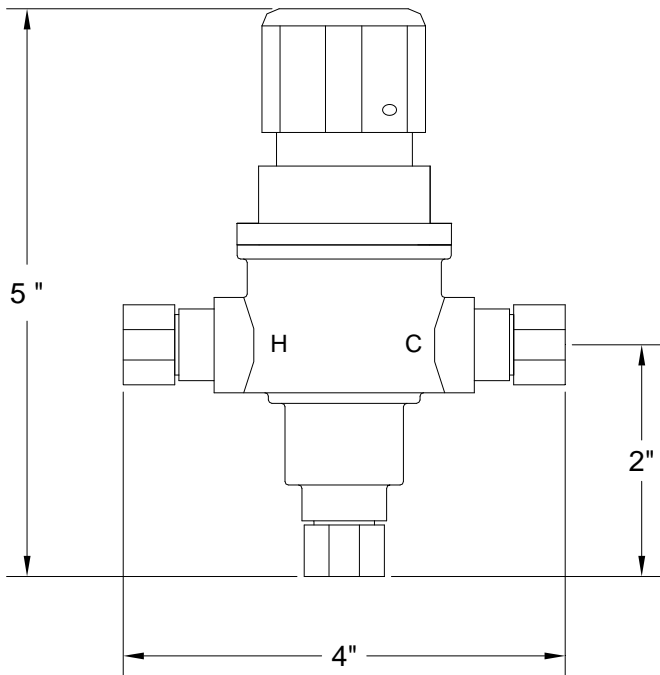
MINIMUM FLOW	PRESSURE DROP						PSI
	5	10	20	30	40	50	
	.35	.70	1.4	2.1	2.8	3.4	BAR
0.5	1.7	2.3	3.0	3.6	4.4	5.0	GPM
1.9	6.4	8.7	11.4	14	17	19	l/min

Engineer's Approval	Job # _____
	Arch/Eng. _____
	Contractor _____



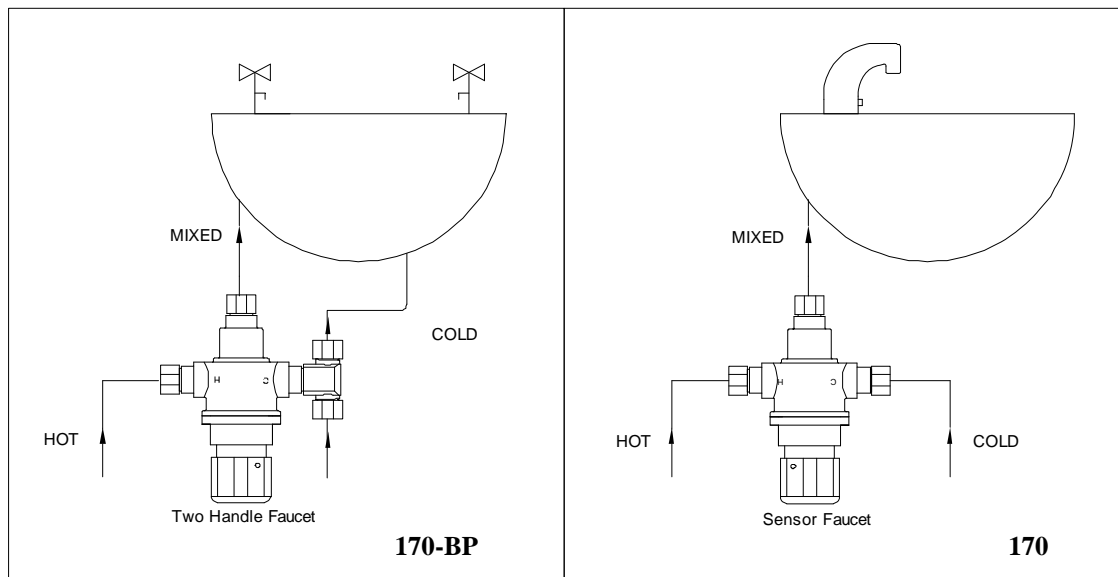
1360 Elmwood Avenue, Cranston, RI 02910 USA
 Phone: 401.461.1200 Fax: 401.941.5310
 Email: info@leonardvalve.com
 Web Site: <http://www.leonardvalve.com>

S-1



APPLICATION

The Model 170 is a high performance Temperature Actuated Mixing Valve used to supply single outlets. Can be used to supply one sensor faucet or one two handle manual faucet.



Note: Leonard Valve Company reserves the right of product, or design modifications without notice or obligation.



1360 Elmwood Avenue, Cranston, RI 02910 USA

Phone: 401.461.1200 Fax: 401.941.5310

Email: info@leonardvalve.com

Web Site: <http://www.leonardvalve.com>

ELKAY[®]

SPECIFICATIONS

Gourmet[®] Double Bowl Sinks Models LR and LRQ Series Models LRAD and LRADQ – A.D.A. Compliant Series

GENERAL

Highest quality sink formed of #18 (1.2mm) gauge, type 304 (18-8) nickel bearing stainless steel. Top mount.

DESIGN FEATURES

LR Bowl Depths: 7-7/8" (200mm) (LR(Q)3321) or 7-5/8" (194mm) (all others).

LRAD Bowl Depths: 4" (102mm), 4-1/2" (114mm), 5" (127mm), 5-1/2" (140mm), 6" (152mm) or 6-1/2" (165mm).

Coved Corners: 1-3/4" (44mm) vertical and horizontal radius.

Bowl and Faucet Deck Recess: 3/16" (5mm) below outside edge of sink.

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

Underside: Fully undercoated to dampen sound and reduce condensation. LR(Q)3321 is fully protected by heavy duty Sound Guard[®] undercoating.

OTHER

LR Series Drain Openings: 3-1/2" (89mm) and centered in bowls as illustrated.

LRAD(Q)2918 Drain Openings: 3-1/2" (89mm) and centered in the bowls.

LRAD(Q)2922, LRAD(Q)3319, LRAD(Q)3321 and LRAD(Q)3722 Drain Openings: 3-1/2" (89mm) and located centered left-to-right and off-center front-to-back in each bowl as illustrated.

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

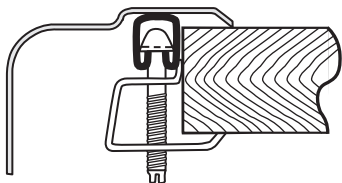
Sink complies with ASME A112.19.3-2008 / CSA B45.4-08



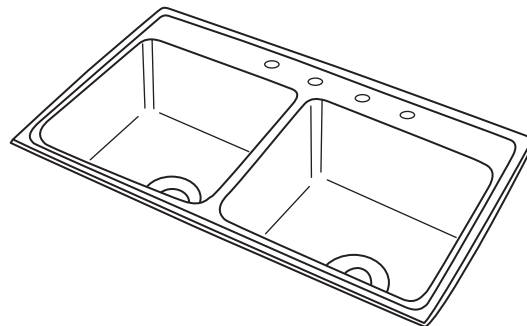
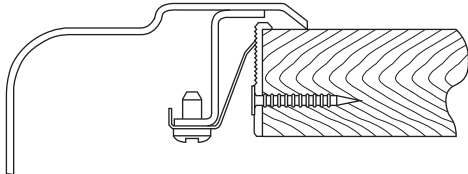
These sinks are listed by the International Association of Plumbing and Mechanical Officials as meeting the requirements of the Uniform Plumbing Code.



U-Channel Type Mounting System

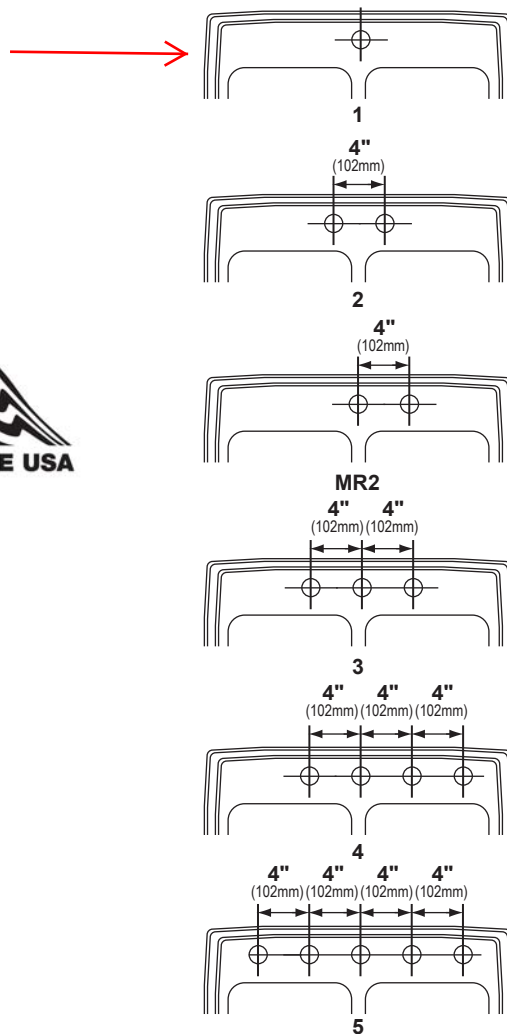


Quick-Clip[®] Mounting System



Model LR(Q)33214

HOLE DRILLING CONFIGURATIONS



SEE OTHER SIDE FOR PRODUCT DIMENSIONS.

THIS PRODUCT, AS CONSTRUCTED IS SUBJECT TO INTERPRETATION OF A.D.A. REQUIREMENTS. THE UNOBSTRUCTED KNEE SPACE REQUIRED TO SATISFY A.D.A. STANDARDS MAY NOT BE DESIRABLE.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkayusa.com for most current version of Elkay product specification sheets.

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.

Gourmet® Double Bowl Sinks
Models LR and LRQ Series
Models LRAD and LRADQ – A.D.A. Compliant Series

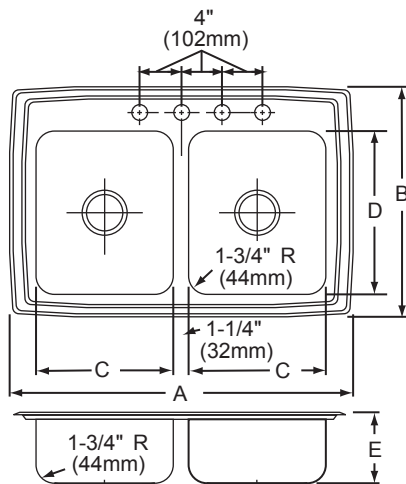
ELKAY®
SPECIFICATIONS

SINK DIMENSIONS*

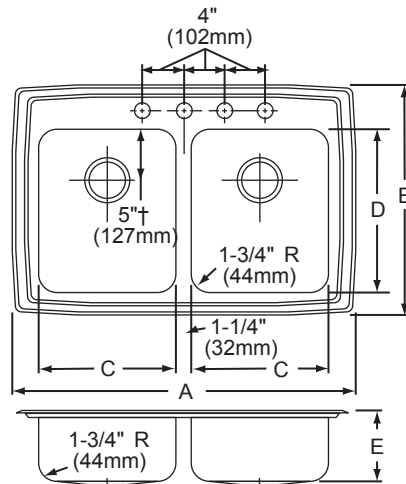
U-Channel Model Number	Quick-Clip® Model Number	Overall		Inside Each Bowl			Cutout in Countertop (1-1/2" (38mm) Radius Corners)		No of 1-1/2" (38mm) Faucet Holes	3 1/2" (89mm) Drain Openings (see other side for details)	Minimum Cabinet Size
		L	W	L	W	D	L	W			
		A	B	C	D	E	L	W			
LR(Q) Series											
LR2519	LRQ2519	25 (635mm)	19-1/2 (495mm)	10 (254mm)	14 (356mm)	7-5/8 (194mm)	24-3/8 (619mm)	18-7/8 (479mm)	1,2,MR2,3,4, or 5	Centered	30 (762mm)
LR2918	LRQ2918	29 (737mm)	18 (457mm)	12 (305mm)	12 (305mm)	7-5/8 (194mm)	28-3/8 (721mm)	17-3/8 (441mm)	1,2,MR2,3,4, or 5	Centered	33 (838mm)
LR2922	LRQ2922	29 (737mm)	22 (559mm)	11-1/2 (292mm)	16 (406mm)	7-5/8 (194mm)	28-3/8 (721mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Centered	33 (838mm)
LR3319	LRQ3319	33 (838mm)	19-1/2 (495mm)	14 (356mm)	14 (356mm)	7-5/8 (194mm)	32-3/8 (822mm)	18-7/8 (479mm)	1,2,MR2,3,4, or 5	Centered	36 (914mm)
LR3321	LRQ3321	33 (838mm)	21-1/4 (540mm)	13-1/2 (343mm)	16 (406mm)	7-7/8 (200mm)	32-3/8 (822mm)	20-5/8 (524mm)	1,2,MR2,3,4, or 5	Centered	36 (914mm)
LR3722	LRQ3722	37 (940mm)	22 (559mm)	16 (406mm)	16 (406mm)	7-5/8 (194mm)	36-3/8 (924mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Centered	42 (1067mm)
LR4322	LRQ4322	43 (1092mm)	22 (559mm)	19 (483mm)	16 (406mm)	7-5/8 (194mm)	42-3/8 (1076mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Centered	48 (1219mm)
LRAD(Q) Series											
LRAD2918	LRADQ2918	29 (737mm)	18 (457mm)	12 (305mm)	12 (305mm)	**	28-3/8 (721mm)	17-3/8 (441mm)	1,2,MR2,3,4, or 5	Centered	33 (838mm)
LRAD2922	LRADQ2922	29 (737mm)	22 (559mm)	11-1/2 (292mm)	16 (406mm)	**	28-3/8 (721mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Off-Centered	33 (838mm)
LRAD3319	LRADQ3319	33 (838mm)	19-1/2 (495mm)	14 (356mm)	14 (356mm)	**	32-3/8 (822mm)	18-7/8 (479mm)	1,2,MR2,3,4, or 5	Off-Centered	36 (914mm)
LRAD3321	LRADQ3321	33 (838mm)	21-1/4 (540mm)	13-1/2 (343mm)	16 (406mm)	**	32-3/8 (822mm)	20-5/8 (524mm)	1,2,MR2,3,4, or 5	Off-Centered	36 (914mm)
LRAD3722	LRADQ3722	37 (940mm)	22 (559mm)	16 (406mm)	16 (406mm)	**	36-3/8 (924mm)	21-3/8 (543mm)	1,2,MR2,3,4, or 5	Off-Centered	42 (1067mm)

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

**Available in 4" (102mm), 4-1/2" (114mm), 5" (127mm), 5-1/2" (140mm), 6" (152mm) and 6-1/2" (165mm) depths. Please consult your sales representative for other depths or modifications.



Model LR(Q) Series Illustrated
 Model LRAD(Q) Series Centered Drain



Model LRAD(Q) Series Off-Centered Drain
 Model Only Illustrated
 † 4-1/2" (114mm) LRAD(Q)2922

201-AGN2BVBE7-317CP

Water Faucets

Product Type

Deck Mounted 8" Fixed Centers Concealed Hot and Cold Water Sink Faucet

Features & Specifications

- 8" Fixed Centers
- 6" Rigid / Swing Gooseneck Spout with Atmospheric Vacuum Breaker
- Full Flow Nozzle
- 4" Wristblade Handle
- Quatern Compression Operating Cartridge
- 1/2" NPSM Supply Inlets and Coupling Nut for 3/8" or 1/2" Flexible Riser
- Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications
- Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications

Performance Specification

- Rated Operating Pressure: 20-125 PSI
- Rated Operating Temperature: 40-140°F

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Codes & Standards

- ASME A112.18.1/CSA B125.1
- Certified to NSF/ANSI 61, Section 9 by CSA
- ASSE 1001
- ADA ANSI/ICC A117.1

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

Date _____

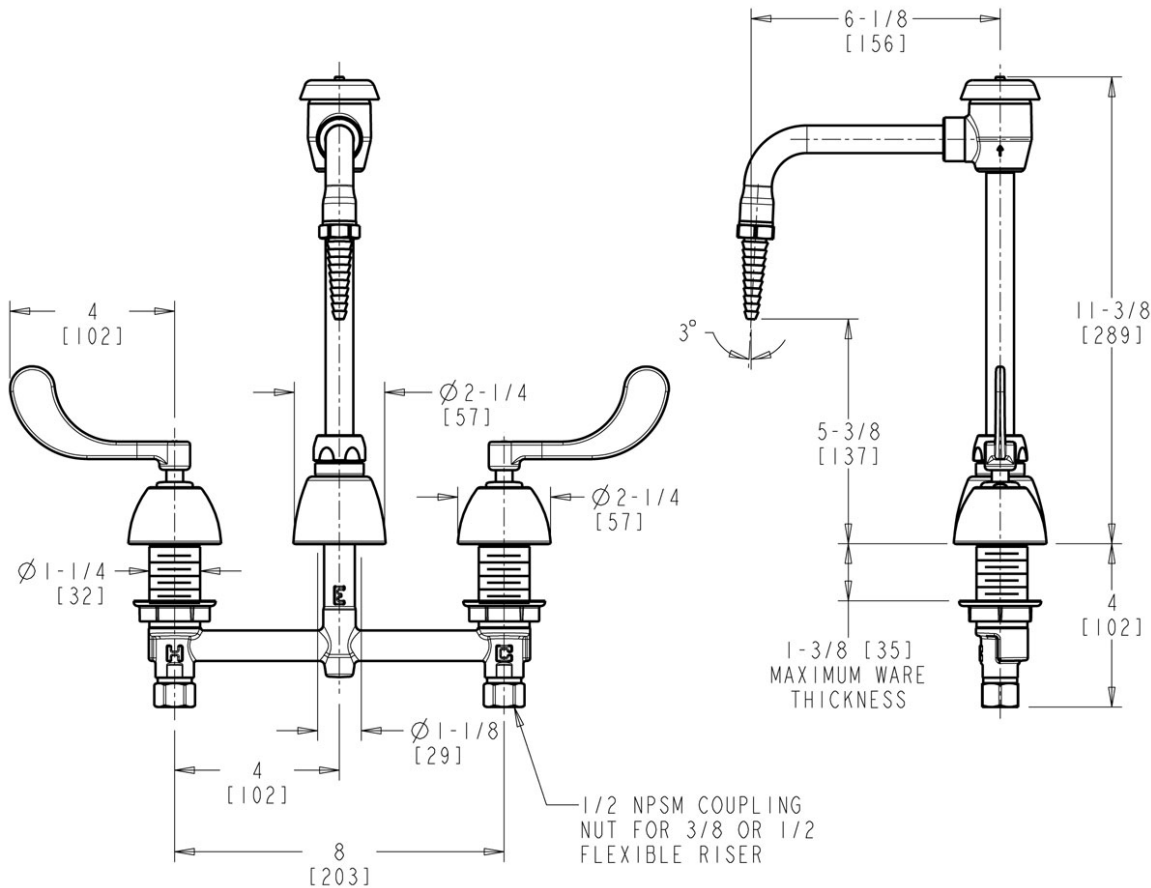


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Technical: 800/TEC-TRUE
www.chicagofaucets.com

Water Faucets

Architect/Engineer Specification

Chicago Faucets No. 201-AGN2BVBE7-317CP, Deck Mounted 8" Fixed Centers Concealed Hot and Cold Water Sink Faucet, polished chrome plated solid brass construction 6" Center to Center Rigid / Swing Gooseneck Spout with Atmospheric Vacuum Breaker. Full Flow Laboratory Serrated Nozzle. 4" Metal Wristblade handle(s) with Sixteen Point Tapered Broach and Secured Blue and Red Buttons. Quatum™ rebuildable compression cartridge, opens and closes 90°, closes with water pressure, features square tapered stem. 1/2" NPSM Supply Inlets and Coupling Nut for 3/8" or 1/2" Flexible Riser. Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications. Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications. This product meets ADA ANSI/ICC A117.1 requirements and is tested and certified to industry standards: ASME A112.18.1/CSA B125.1, Certified to NSF/ANSI 61, Section 9 by CSA, and ASSE 1001.



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

Chicago Faucets, member of the Geberit Group, is the leading brand of commercial faucets and fittings in the United States, offering a complete range of products for schools, laboratories, hospitals, office buildings, food service, airports and sport facilities. Call 1.800.TECTRUE or 1.847.803.5000 Option 1 for installation or other technical assistance.



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828-ASAM

Pure Water Faucets

Product Type

Deck Mounted Polypropylene Polypropylene Pure Water Faucet

Features & Specifications

- Polypropylene
- 2 1/2" Cross Handle
- 3/8" NPT Polypropylene Male Thread Inlet

Performance Specification

- Rated Operating Pressure: 80 PSI
- Rated Operating Temperature: 90°F
- The antimicrobial protection is formulated to last beyond the useful life of the product on an undamaged surface.

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

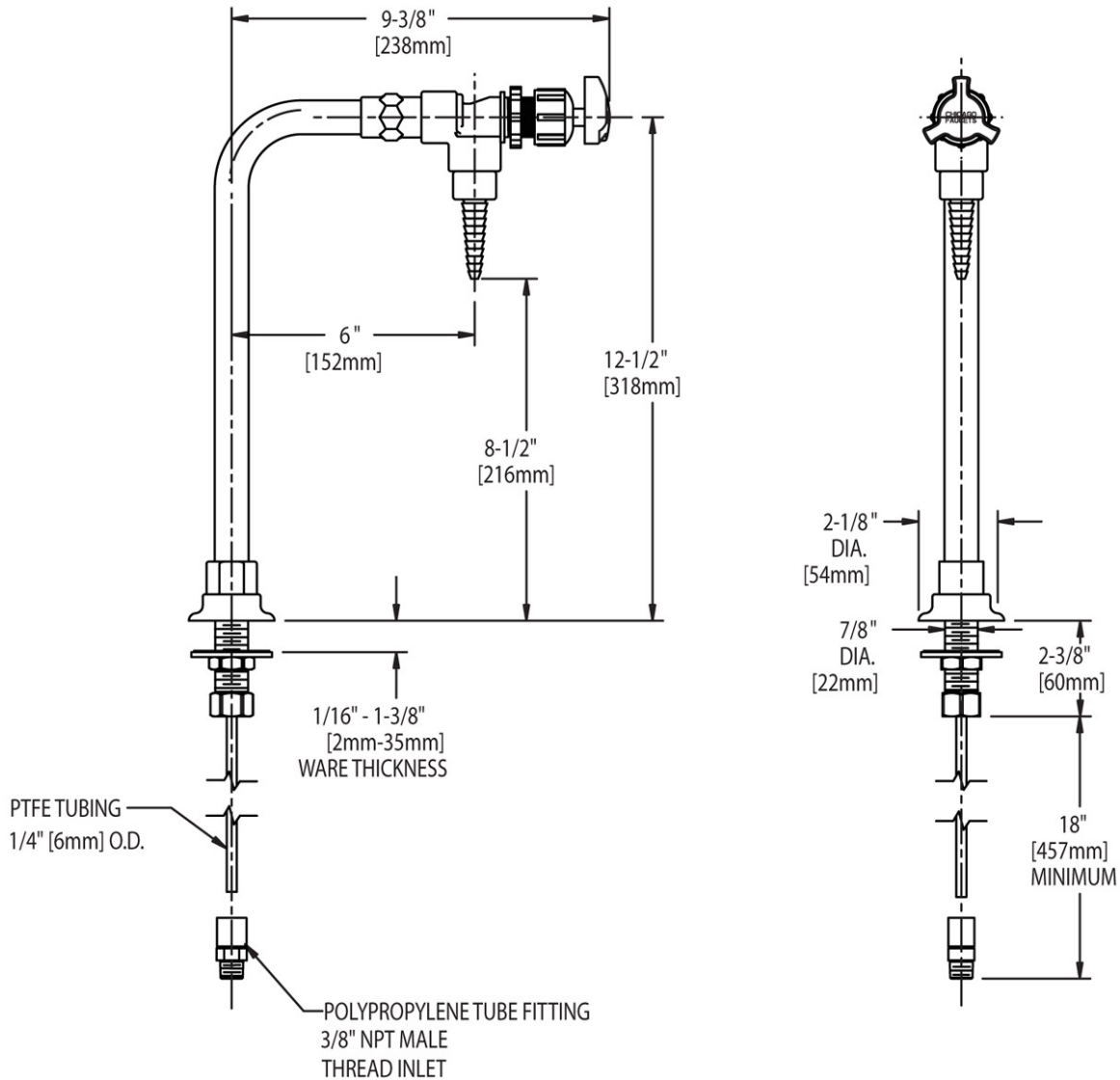
Date _____



Pure Water Faucets

Architect/Engineer Specification

Chicago Faucets No. 828-ASAM, Deck Mounted Polypropylene Polypropylene Pure Water Faucet , polished chrome plated solid brass construction 2 1/2" Metal Cross handle(s) with Eight Point Tapered Broach and CW Button. 3/8" NPT Polypropylene Male Thread Inlet . .



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

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LabWaste™ Dilution Traps

LabWaste™ 1-Gallon CPVC Dilution Traps

Provides chemical dilution from water rinse during use. Designed for under-sink installations as a trap. CPVC construction with Glass or PP Jar type tank.

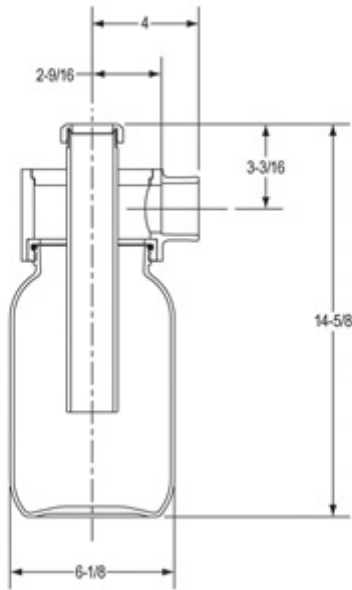
Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet	Outlet	CPVC Tank Part Glass Jar Tank No./Price	Disc Code
1	1-1/2	Slip	Socket	T4001G1612	169
				384.23	

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet	Outlet	CPVC Tank Part Polypropylene Jar Tank No./Price	Disc Code
1	1-1/2	Slip	Socket	T4001P1612	169
				276.64	

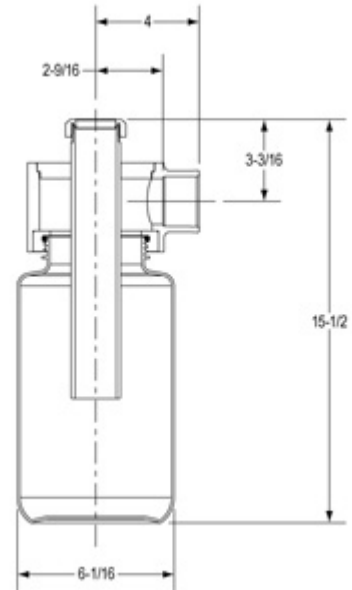
Note: Slip connections are for sink drain tailpiece.



Dimensions



Glass



Polypropylene

NOT FOR USE WITH COMPRESSED AIR OR GAS

Made in the U.S.A.

Progressive Products from Spears® Innovation and Technology

ELKAY® SPECIFICATIONS

Gourmet® Single Bowl Sink Models LR, LRQ, LRS and LRSQ Series

GENERAL

Highest quality sink formed of #18 (1.2mm) gauge, type 304 (18-8) nickel bearing stainless steel. Top mount.

DESIGN FEATURES

LR(Q) Bowl Depth: 8" (203mm) (LR[Q]2521), 7-1/2" (191mm) (LR[Q]1919), 7-5/8" (194mm) (all others).

Coved Corners: 1-3/4" (44mm) vertical and horizontal radius.

Bowl and Faucet Deck Recess: 3/16" (5mm) below outside edge of sink.

Finish: Exposed surfaces are hand blended to a lustrous satin finish.

Underside: Fully undercoated to dampen sound and prevent condensation. LR(Q)2521 is fully protected by heavy duty Sound Guard® undercoating.

OTHER

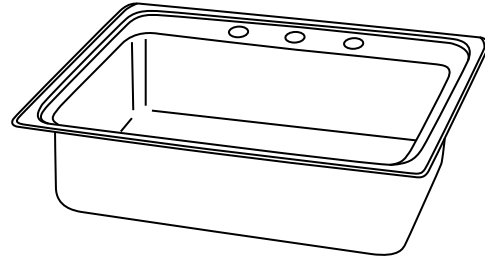
Drain Opening: 3-1/2" (89mm).

NOTE: Unless otherwise specified, models with one, two, three or OS4 faucet hole option are furnished with 3 faucet holes as shown; models with choice of one, two, three, four or five faucet hole option are furnished with 4 faucet holes standard.

These sinks comply with ASME A112.19.3.

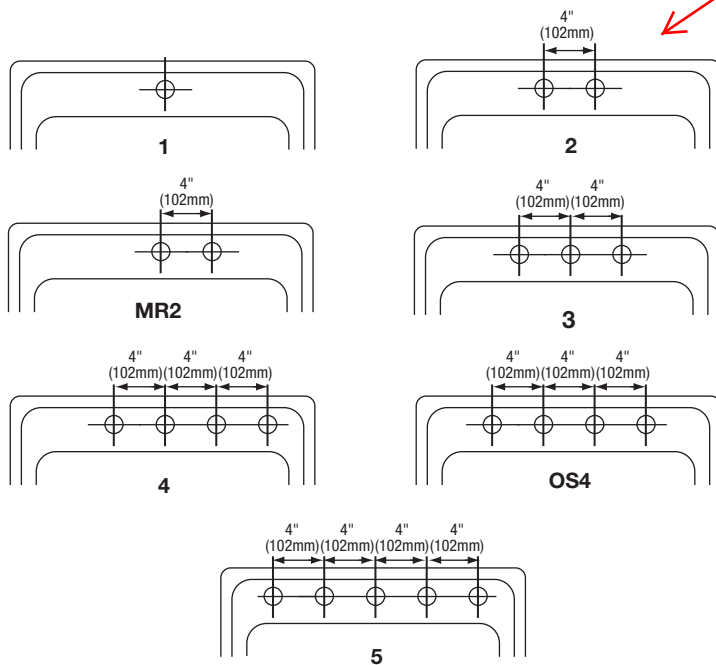


These sinks are listed by the International Association of Plumbing and Mechanical Officials as meeting the requirements of the Uniform Plumbing Code.

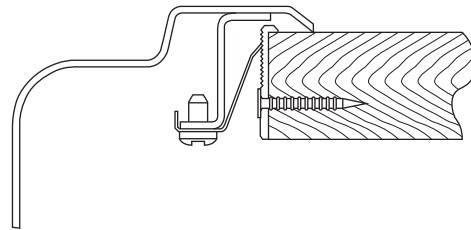


Model LR(Q)22193

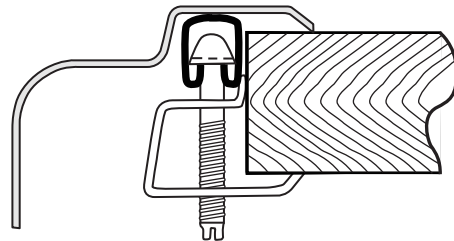
HOLE DRILLING CONFIGURATIONS



Quick-Clip® Mounting System



U-Channel Type Mounting System



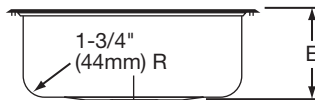
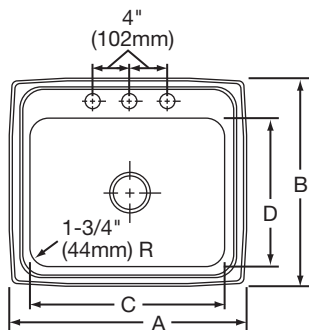
In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkayusa.com for most current version of Elkay product specification sheets.

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.

SINK DIMENSIONS*

U-Channel Model Number	Quick-Clip® Model Number	Overall		Inside Bowl			Cutout in Countertop [1 1/2" (38mm) Radius Corners]		No. of 1 1/2" (38mm) Dia. Faucet Holes 4" (102mm) Center	Minimum Cabinet Size
		L	W	L	W	D	L	W		
		A	B	C	D	E	L	W		
LR1316	LRQ1316	13 (330mm)	16 (406mm)	10 (254mm)	10 (254mm)	7 5/8 (194mm)	12 3/8 (321mm)	15 3/8 (391mm)	1, 2, MR2 or 3	18 (457mm)
LR1517	LRQ1517	15 (381mm)	17 1/2 (445mm)	12 (305mm)	12 (305mm)	7 5/8 (194mm)	14 3/8 (371mm)	16 7/8 (429mm)	1, 2, MR2 or 3	18 (457mm)
LR1522	LRQ1522	15 (381mm)	22 (559mm)	11 1/2 (292mm)	16 (406mm)	7 5/8 (194mm)	14 3/8 (371mm)	21 3/8 (543mm)	1, 2, MR2 or 3	18 (457mm)
LR1716	LRQ1716	17 (432mm)	16 (406mm)	14 (356mm)	10 (254mm)	7 5/8 (194mm)	16 3/8 (422mm)	15 3/8 (391mm)	1, 2, MR2, 3 or OS4	21 (533mm)
LR1720	LRQ1720	17 (432mm)	20 (508mm)	14 (356mm)	14 (356mm)	7 5/8 (194mm)	16 3/8 (422mm)	19 3/8 (492mm)	1, 2, MR2, 3 or OS4	21 (533mm)
LR1722	LRQ1722	17 (432mm)	22 (559mm)	13 1/2 (343mm)	16 (406mm)	7 5/8 (194mm)	16 3/8 (422mm)	21 3/8 (543mm)	1, 2, MR2, 3 or OS4	21 (533mm)
LR1918	LRQ1918	19 (483mm)	18 (457mm)	16 (406mm)	11 1/2 (292mm)	7 5/8 (194mm)	18 3/8 (467mm)	17 3/8 (441mm)	1, 2, MR2, 3 or OS4	24 (610mm)
LR1919	LRQ1919	19 1/2 (495mm)	19 (483mm)	16 (406mm)	13 1/2 (343mm)	7 1/2 (190mm)	18 7/8 (479mm)	18 3/8 (467mm)	1, 2, MR2, 3 or OS4	24 (610mm)
LR2022	LRQ2022	19 1/2 (495mm)	22 (559mm)	16 (406mm)	16 (406mm)	7 5/8 (194mm)	18 7/8 (479mm)	21 3/8 (543mm)	1, 2, MR2, 3 or OS4	24 (610mm)
LR2219	LRQ2219	22 (559mm)	19 1/2 (495mm)	18 (457mm)	14 (356mm)	7 5/8 (194mm)	21 3/8 (543mm)	18 7/8 (479mm)	1, 2, MR2, 3, 4 or 5	27 (686mm)
LR2222	LRQ2222	22 (559mm)	22 (559mm)	19 (483mm)	16 (406mm)	7 5/8 (194mm)	21 3/8 (543mm)	21 3/8 (543mm)	1, 2, MR2, 3, 4 or 5	27 (686mm)
LR2521	LRQ2521	25 (635mm)	21 1/4 (540mm)	21 (533mm)	15 3/4 (400mm)	8 (203mm)	24 3/8 (619mm)	20 5/8 (524mm)	1, 2, MR2, 3, 4 or 5	30 (762mm)
LR3122	LRQ3122	31 (787mm)	22 (559mm)	28 (711mm)	16 (406mm)	7 5/8 (194mm)	30 3/8 (772mm)	21 3/8 (543mm)	1, 2, MR2, 3, 4 or 5	36 (914mm)
LRS3322	LRSQ3322	33 (838mm)	22 (559mm)	28 (711mm)	16 (406mm)	7 5/8 (194mm)	32 3/8 (822mm)	21 3/8 (543mm)	1, 2, MR2, 3, 4 or 5	36 (914mm)

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



LRQ Series Illustrated

930-317XKCP

Water Faucets

Product Type

Deck Mounted Single Hole Hot and Cold Water Mixing
Faucet with Vacuum Breaker

Features & Specifications

- Single Hole
- 6" Rigid / Swing Gooseneck Spout with Atmospheric Vacuum Breaker
- Full Flow Nozzle
- 4" Wristblade Handle
- Ceramic 1/4 Turn Operating Cartridge
- 3/8" O.D. Copper Supply Tubes
- Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications
- Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications
- CFNow! Item Ships in 5 Days

Performance Specification

- Rated Operating Pressure: 20-125 PSI
- Rated Operating Temperature: 40-140°F

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Codes & Standards

- ASME A112.18.1/CSA B125.1
- Certified to NSF/ANSI 61, Section 9 by CSA
- ADA ANSI/ICC A117.1

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

Date _____

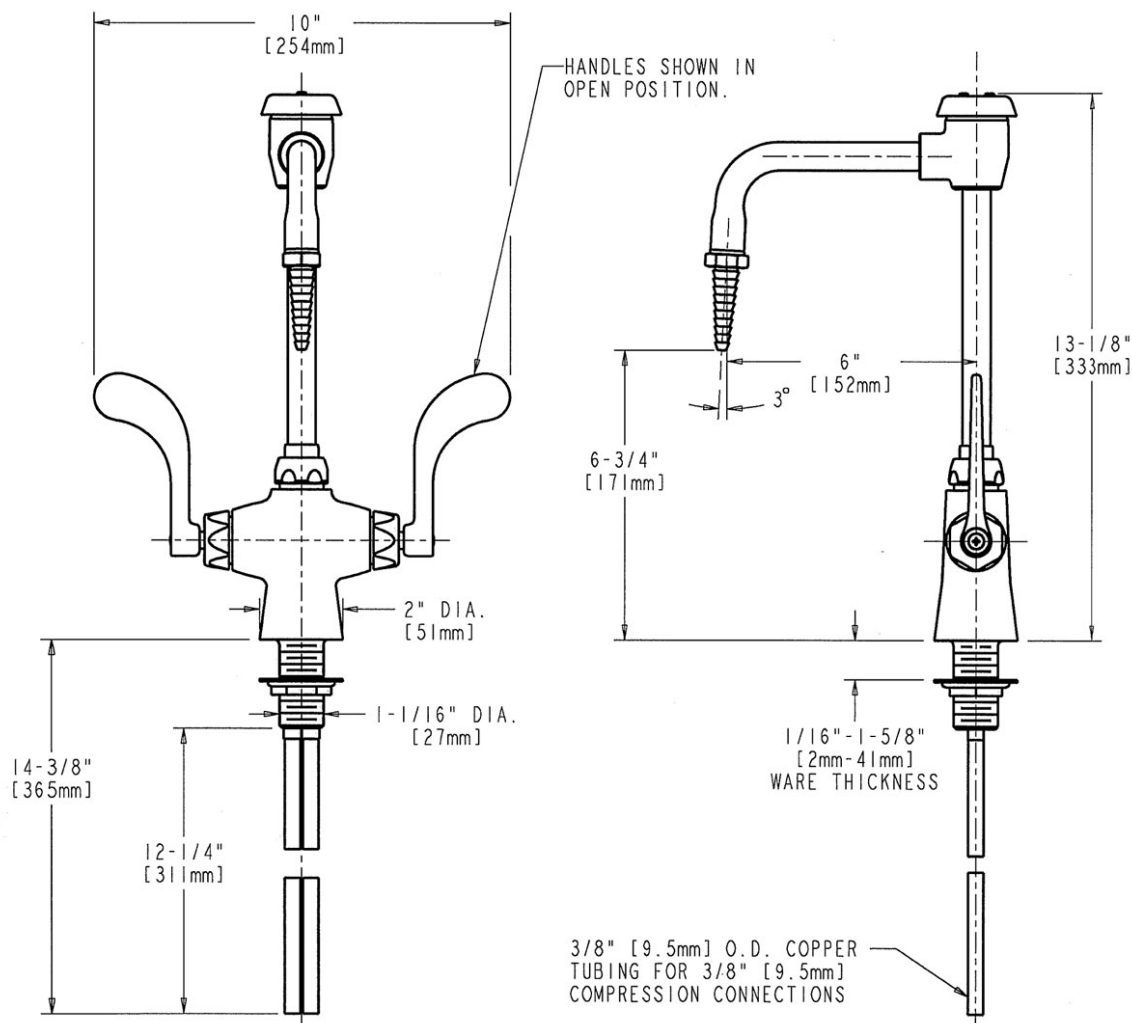


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F: 847/803-5454
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Water Faucets

Architect/Engineer Specification

Chicago Faucets No. 930-317XKCP, Deck Mounted Single Hole Hot and Cold Water Mixing Faucet with Vacuum Breaker, polished chrome plated solid brass construction 6" Center to Center Rigid / Swing Gooseneck Spout with Atmospheric Vacuum Breaker. Full Flow Laboratory Serrated Nozzle. 4" Metal Wristblade handle(s) with Sixteen Point Tapered Broach and Secured Blue and Red Buttons. Ceramic quarter turn cartridge, features square tapered stem. 3/8" O.D. Copper Supply Tubes. Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications. Atmospheric Vacuum Breaker, Not Intended for Continuous Pressure Applications. This product meets ADA ANSI/ICC A117.1 requirements and is tested and certified to industry standards: ASME A112.18.1/CSA B125.1, and Certified to NSF/ANSI 61, Section 9 by CSA.



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

Chicago Faucets, member of the Geberit Group, is the leading brand of commercial faucets and fittings in the United States, offering a complete range of products for schools, laboratories, hospitals, office buildings, food service, airports and sport facilities. Call 1.800.TECTRUE or 1.847.803.5000 Option 1 for installation or other technical assistance.



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828-ASAM

Pure Water Faucets

Product Type

Deck Mounted Polypropylene Polypropylene Pure Water Faucet

Features & Specifications

- Polypropylene
- 2 1/2" Cross Handle
- 3/8" NPT Polypropylene Male Thread Inlet

Performance Specification

- Rated Operating Pressure: 80 PSI
- Rated Operating Temperature: 90°F
- The antimicrobial protection is formulated to last beyond the useful life of the product on an undamaged surface.

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

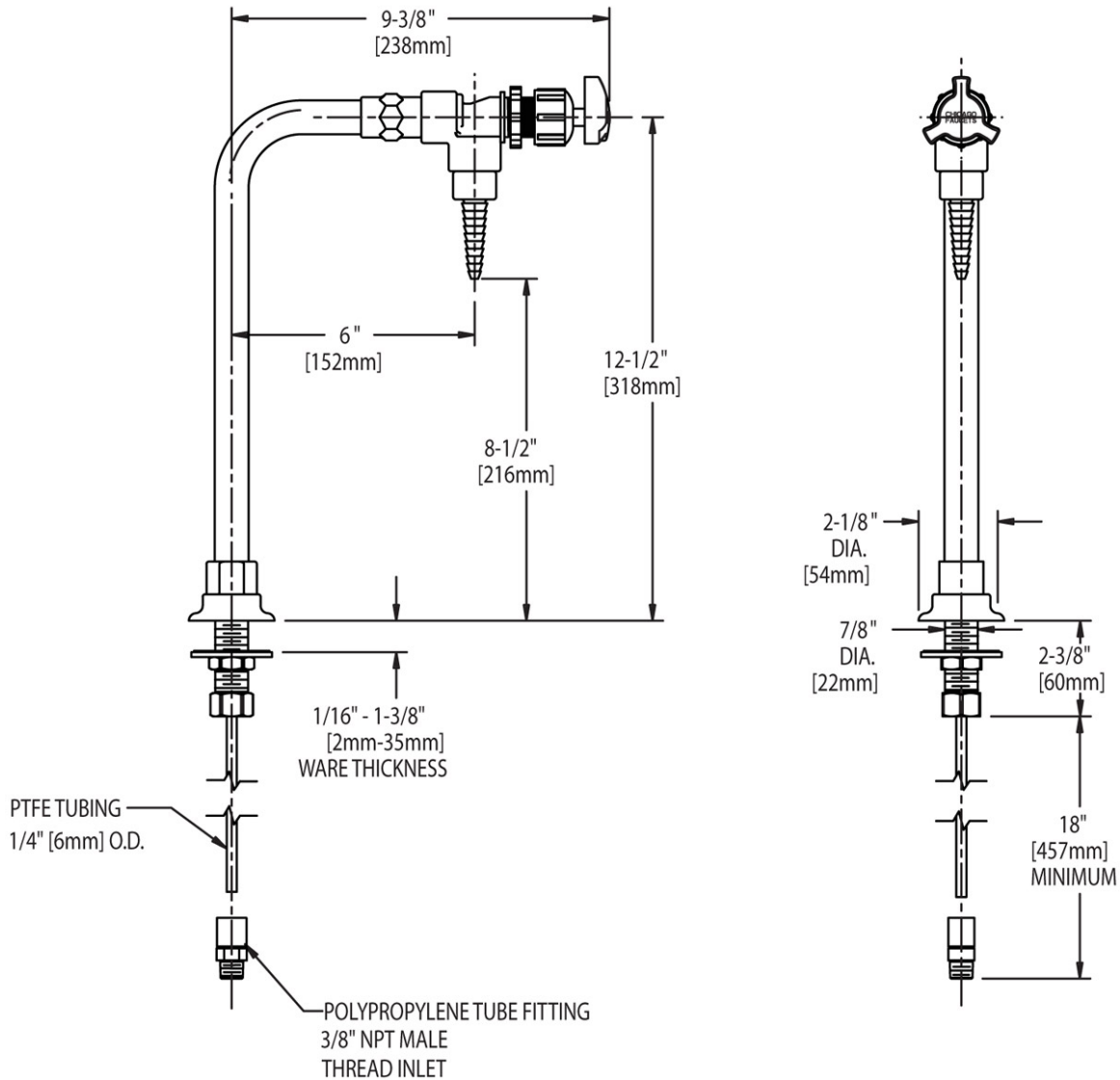
Date _____



Pure Water Faucets

Architect/Engineer Specification

Chicago Faucets No. 828-ASAM, Deck Mounted Polypropylene Polypropylene Pure Water Faucet , polished chrome plated solid brass construction 2 1/2" Metal Cross handle(s) with Eight Point Tapered Broach and CW Button. 3/8" NPT Polypropylene Male Thread Inlet . .



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

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LabWaste™ Dilution Traps

LabWaste™ 1-Gallon CPVC Dilution Traps

Provides chemical dilution from water rinse during use. Designed for under-sink installations as a trap. CPVC construction with Glass or PP Jar type tank.

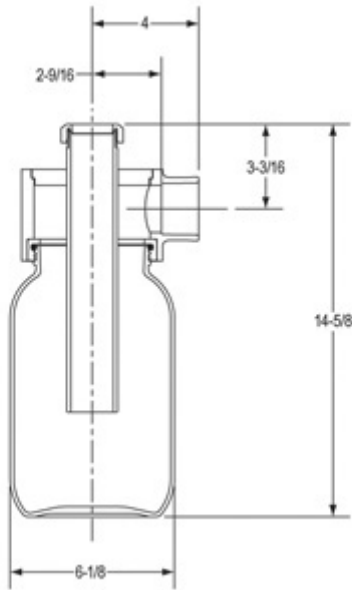
Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet	Outlet	CPVC Tank Part Glass Jar Tank No./Price	Disc Code
1	1-1/2	Slip	Socket	T4001G1612	169
				384.23	

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet	Outlet	CPVC Tank Part Polypropylene Jar Tank No./Price	Disc Code
1	1-1/2	Slip	Socket	T4001P1612	169
				276.64	

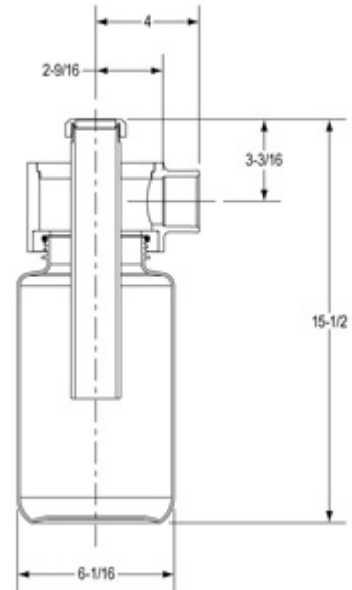
Note: Slip connections are for sink drain tailpiece.



Dimensions



Glass



Polypropylene

NOT FOR USE WITH COMPRESSED AIR OR GAS

Made in the U.S.A.

Progressive Products from Spears® Innovation and Technology

THERMOSTATIC MIXING VALVE

MODEL 270

THERMOSTATIC POINT OF USE MIXING VALVE

MODEL 1/2" inlets, 1/2" outlet, (MIPS connections)

MATERIALS:

- Bronze body
- Locked temperature adjustment cap (vandal resistant)
- Copper encapsulated thermostat assembly with polymer thermoplastic shuttle
- Stainless steel springs
- Buna-N: O-rings
- Integral check valves on hot and cold inlets

PRESSURE-TEMPERATURE:

- Minimum Flow: 0.5 GPM (1.9 l/Min)
- Maximum Pressure: 125 PSI (8.6 BAR)
- Maximum Hot Water temperature: 200°F- (93°C)
- Approach Temperature 5°F (2.8°C) above set point.

ASSE 1017 Certified



ASSE 1070 Certified

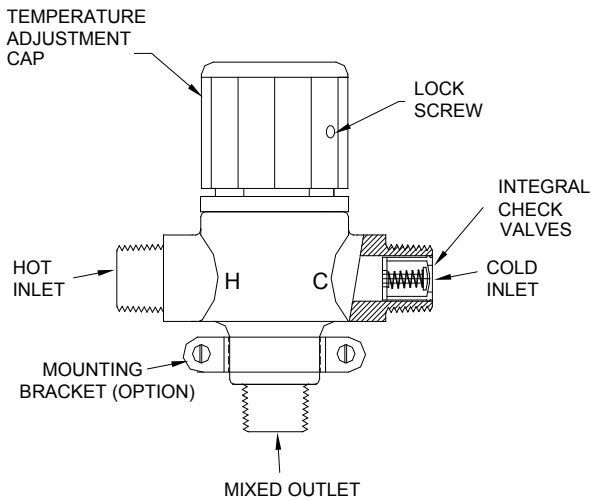
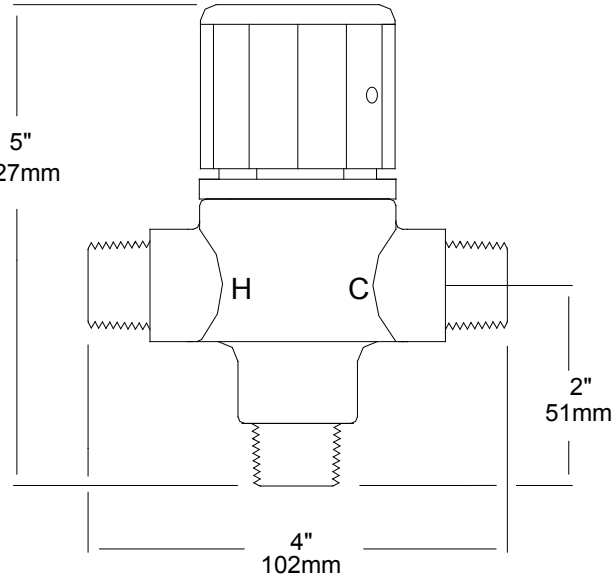


Valve is CUPC listed



OPTIONS:

- ___ SUFFIX BRKT- Mounting bracket
- ___ SUFFIX BV- Inlet ball valves (shipped loose)
- ___ SUFFIX SW- Sweat connections



PRESSURE DROP							
5	10	20	30	40	50	PSI	
.35	.70	1.4	2.1	2.8	3.4	BAR	
3.5	5.5	7.5	9.5	10.5	12	GPM	
13	21	28	36	40	45	l/min	

Engineer's Approval	Job # _____
	Arch/Eng. _____
	Contractor _____



1360 Elmwood Avenue, Cranston, RI 02910 USA

Phone: 401.461.1200 Fax: 401.941.5310

Email: info@leonardvalve.com

Web Site: <http://www.leonardvalve.com>

CAE148 – ACRYLIC SHOWERS

inches (mm)

48 x 36 x 78 (1220 x 915 x 1980) • Fax on Demand #1164

MODEL #CAE1480

→ MODEL #CAE148L/R (1 seat, LH or RH)



FEATURES

- Stylized smooth wall
- 1 integral footrest (1 seat models)
- 2 integral footrest (no seat models)
- 1 molded seat or no seat
- Slip-resistant floor
- Center drain
- Lucite cast acrylic surface
- Limited 5-year warranty

OPTIONS

- Brass drain
- Designer metallic grab bar: Chrome, Oil-Rubbed Bronze, Polished Brass, Brushed Nickel
- Shower door series: L0517

AQUATIC
ADVANTAGE

- National distribution
- 6 manufacturing facilities
- Private fleet
- Centralized customer service
- Field support
- 24-hour fax-on-demand

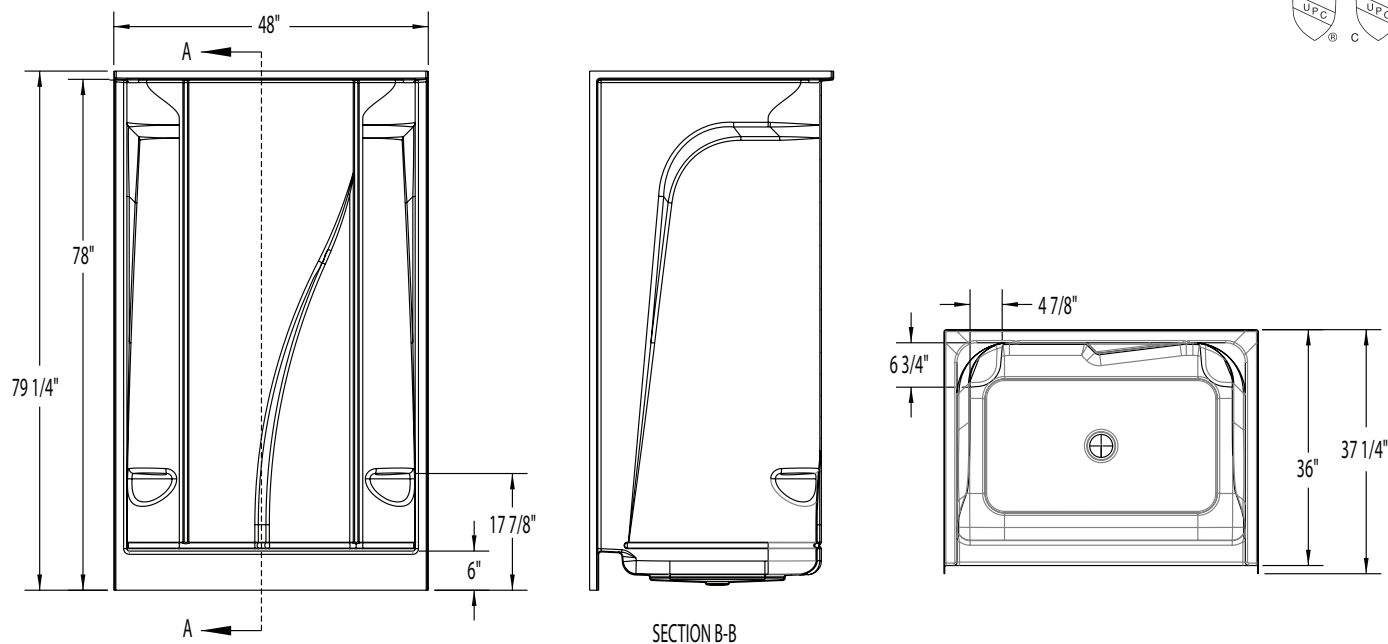
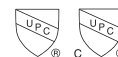
COLOR & TRIM OPTIONS

Stock	Premium
Almond	Black
Bone	Cashmere
Linen/Biscuit	Mexican Sand
Sterling Silver	Red
White	Sandbar



CAE148

48 x 36 x 78 (1220 x 915 x 1980)
inches (mm)



FEATURES lbs (kg) Dimensional Tolerance $\pm 3/8"$. Dimensions needed for site preparation should be measured from the unit. Aquatic assumes no responsibility for preparatory work.

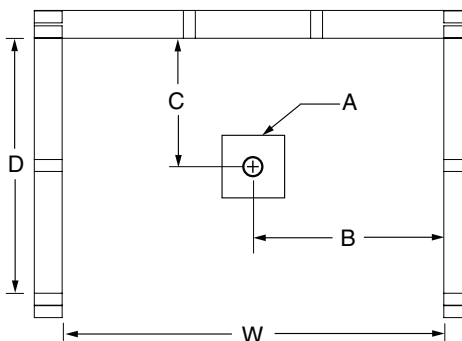
Type and Model #	Material	Wall Finish	Pieces	Drain	Seats	Lights	Pkg. Wt.
Shower #CAE1480	Acrylic	Smooth Wall	1	Center	No seat	-	145 (66)
→ Shower #CAE148L/R	Acrylic	Smooth Wall	1	Center	1 seat (LH or RH)	-	154 (70)

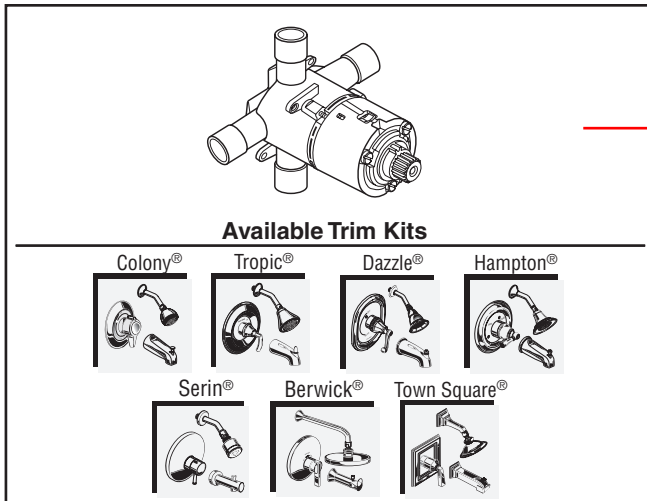
DIMENSIONS

Specifications	inches (mm)
Width: Overall / Net	48 (1220)
Depth: Overall / Net	37 1/4 (945) / 36 (915)
Height: Overall / Net	79 1/4 (2015) / 78 (1980)
Enclosure Opening	44 (1120)
Skirt Height	6 (150)
Drain Rough-In (from Back Wall)	17 3/4 (450)
Drain Rough-In (from Side Wall)	24 (610)
Drain: Diameter / Clearance	3 1/4 (85) / 3/4 (20)

FRAMING DIMENSIONS inches (mm)

Type	D Depth	W Width	H Height	A Box-Out	B	C
Alcove	36 (915)	48 1/8 (1220)	-	6 x 6 (150 x 150)	24 (610)	17 3/4 (450)





R110 Valve Body Shown

GENERAL DESCRIPTION:

Cast brass body, washerless ceramic disc valve cartridge with back-to-back capability and hot limit safety stop. Cycles from "off" to "cold" to "hot". Pressure balancing cartridge maintains constant output temperature in response to changes in relative hot and cold supply pressure. One-half inch inlets and outlets (choice of direct sweat, threaded, or PEX). Available with screwdriver stops. Rough-in plaster guard designed for use as thin-wall mounting adaptor. Valve body will accept a variety of decorative Bath/Shower trims.

PRODUCT FEATURES:

Cast Brass Valve Body: Durable - Quality that will last a lifetime. Ideal material for prolonged contact with water.

Ceramic Disc Valve Cartridge: Assures a lifetime of drip-free performance. Allows easy fine tuning of temperature (125° handle rotation from off to hot).

Pressure Balancing Valve Cartridge: Maintains constant output temperature in response to changes in hot and cold supply pressure. Diaphragm system engineered to eliminate cross flow. Avoids failure due to mineral deposits - ideal for use in hard water

Back-to-Back Capability: Hot and cold can be reversed quickly and easily.

Adjustable Hot Limit Safety Stop: Limits the amount of hot water allowed to mix with cold. Reduces the risk of accidental scalding.

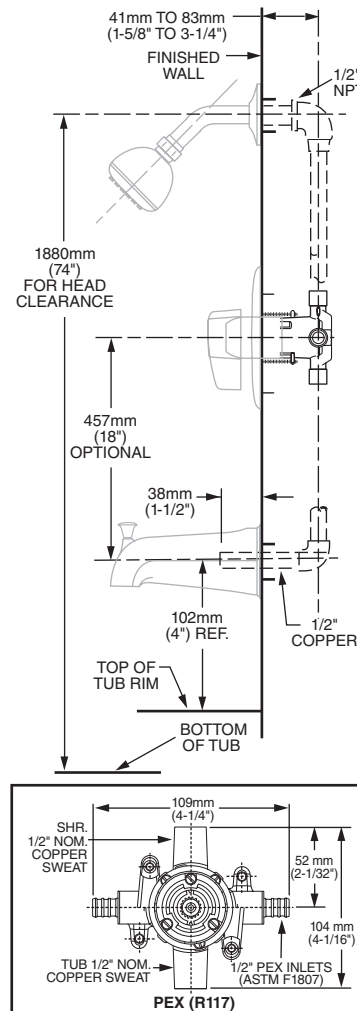
Exclusive Plaster Guard: Plaster guard is designed to protect valve during installation and serve as a mounting plate for thin-wall installations. 2 piece design allows valve to be tested prior to trim installation.

Wide Rough-in Range: From 1-5/8" to 3-1/4".

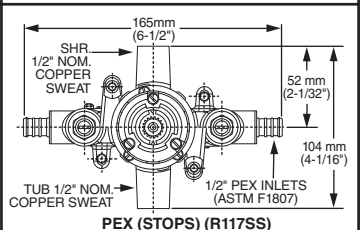
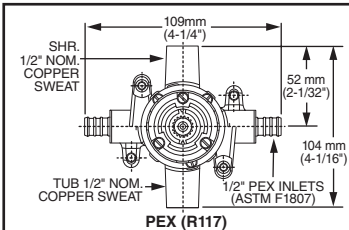
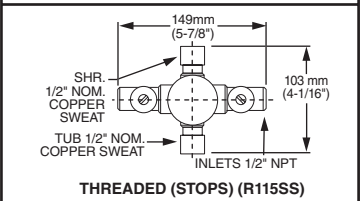
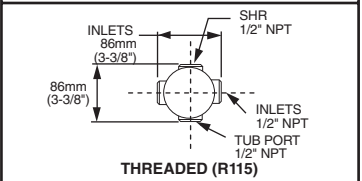
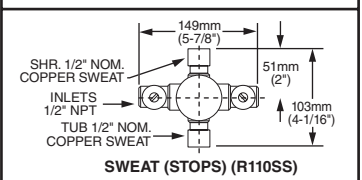
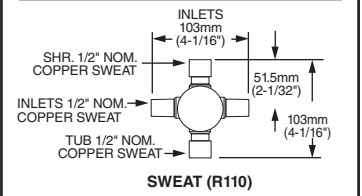
MODEL NUMBER:

- R110 Pressure Balance Rough Valve Body only
Direct sweat inlets/outlets. LESS trim.
- R110SS Pressure Balance Rough Valve Body only with Screwdriver stops
Direct sweat inlets/outlets. Screwdriver stops. LESS trim.
- R115 Pressure Balance Rough Valve Body only
Female thread inlets/outlets. LESS trim.
- R115SS Pressure Balance Rough Valve Body only with Screwdriver stops
Female thread inlets/outlets. Screwdriver stops. LESS trim.
- R117 Pressure Balance Rough Valve Body only
PEX inlets/Direct sweat outlets. LESS trim.
- R117SS Pressure Balance Rough Valve Body only with Screwdriver stops
PEX inlets/Direct sweat outlets. Screwdriver stops. LESS trim.

See reverse for available trim kits.



VALVE BODY OPTIONS



SUGGESTED SPECIFICATION:

Bath/shower fitting shall feature a cast brass body. Shall feature ceramic disc valve cartridge which is capable of back-to-back installation. Fitting shall be equipped with pressure balancing cartridge engineered to eliminate cross flow and avoid failure due to mineral deposits. Shall also feature hot limit safety stop. Fitting shall be: Rough Valve Body - American Standard Model # R11____, Trim Kit - American Standard Model # _____.

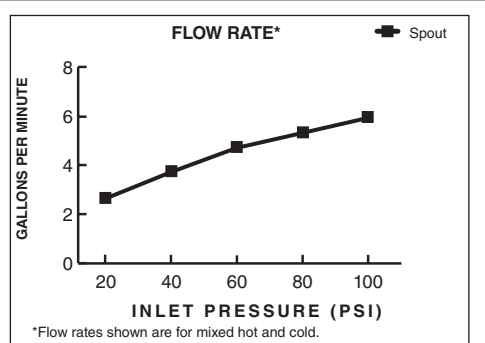
UPGRADABLE PRESSURE BALANCE BATH/SHOWER FITTING TEMPERATURE CONTROL VALVE

Valve + Trim: Trim Kit & Valve Body Packaged Separately

To order: Specify valve body *and* trim kit desired

Example: R110 - Direct Sweat Valve Body

T215.710 - Hampton Bath/Shower Trim Kit (Porcelain Lever Handle)



CODES AND STANDARDS

These products meet or exceed the following codes and standards:

ASSE 1016
ASME A112.18.1
CSA B 125

• Showerhead with 2.5gpm/9.5L.min. flow restrictor.

VALVES						
	R110	R110SS	R115	R115SS	R117	R117SS
	Direct Sweat Inlets/Outlets	Direct Sweat Inlets/Outlets w/ Screwdriver Stops	Female Thread Inlets/Outlets	Female Thread Inlets/Outlets w/ Screwdriver Stops	PEX Inlets/Direct Sweat Outlets	PEX Inlets/Direct Sweat Outlets w/ Screwdriver Stops

TRIM KITS	Colony®*	Tropic®	Dazzle®	Hampton®**	Town Square®	Serin®	Berwick®
	B/S	T375.XXX	T038.502	T028.502	T215.7XX	T555.502	T064.502
Shower	T372.XXX	T038.501	T028.501	T212.7XX	T555.501	T064.501	T430.501
Valve	T371.XXX	T038.500	T028.500	T211.7XX	T555.500	T064.500	T430.500
	Colony® with FloWise®					Serin® with FloWise®	Berwick® with FloWise®
B/S	T375.X28					T064.508	T430.508
Shower	T372.X28					T064.507	T430.507

NOTES:

* COLONY with 2.5 showerhead with FloWise® showerhead

	Lever Handle 120		Metal Lever Handle 240		Lever Handle 128		Metal Lever Handle 248
--	---------------------	--	---------------------------	--	---------------------	--	---------------------------

** HAMPTON available with choice of two handles.
to order: specify the three digit handle number
ex) T211.710 (valve only trim kit w/ porcelain lever handle)

	Porcelain Lever 710		Metal Lever 730
--	------------------------	--	--------------------



T430.508 Bath/Shower Trim Shown

GENERAL DESCRIPTION:**TRIM KIT**

FloWise water saving 3-function showerhead offers up to 40% water savings at maximum 2.0gpm/7.6L/min. flow rate. Metal slip-on diverter spout. Available with metal lever handle.

ROUGH VALVE BODY

Cast brass body, washerless ceramic disc valve cartridge with back to back capability, and hot limit safety stop. Cycles from "off" to "cold" to "hot" Pressure balancing cartridge maintains constant output temperature in response to changes in relative hot and cold supply pressure. 1/2" inlets and outlets (choice of direct sweat, threaded, or PEX). Available with screwdriver stops. Rough-in plaster guard designed for use as thin-wall mounting adaptor.

**SUGGESTED SPECIFICATION:**

Bath/shower fitting shall feature water saving 3-function showerhead with Max. 2.0gpm/7.6L/min. flow rate. Shall feature a cast brass body. Shall feature ceramic disc valve cartridge which is capable of back-to-back installation. Fitting shall be equipped with pressure balancing cartridge engineered to eliminate cross flow and avoid failure due to mineral deposits. Shall also feature hot limit safety stop. Fitting shall be: Rough Valve Body - American Standard Model # R11____, Trim Kit - American Standard Model # T430.50____.

MODEL NUMBER:**TRIM KITS:**

- T430.508 Berwick BATH/SHOWER Trim Kit
Lever Handle. FloWise® Showerhead. LESS Valve Body.
- T430.507 Berwick SHOWER ONLY Trim Kit
Lever Handle. FloWise Showerhead. LESS Valve Body.

ROUGH VALVES:

- R110 Pressure Balance Rough Valve Body only
Direct sweat inlets/outlets. LESS trim.
- R110SS Pressure Balance Rough Valve Body only
with Screwdriver stops
Direct sweat inlets/outlets. Screwdriver stops. LESS trim.
- R115 Pressure Balance Rough Valve Body only
Female thread inlets/outlets. LESS trim.
- R115SS Pressure Balance Rough Valve Body only
with Screwdriver stops
Female thread inlets/outlets. Screwdriver stops. LESS trim.
- R117 Pressure Balance Rough Valve Body only
PEX inlets/Direct sweat outlets. LESS trim.
- R117SS Pressure Balance Rough Valve Body only
with Screwdriver stops
PEX inlets/Direct sweat outlets. Screwdriver stops. LESS trim.

PRODUCT FEATURES:

FloWise Water Saving 3-Function Showerhead: Saves up to 40% in water usage. Max. 2.0gpm/7.6L/min. flow rate.

Cast Brass Valve Body: Durable - Quality that will last a lifetime. Ideal material for prolonged contact with water.

Ceramic Disc Valve Cartridge: Assures a lifetime of drip-free performance. Allows easy fine tuning of temperature (125° handle rotation from off to hot).

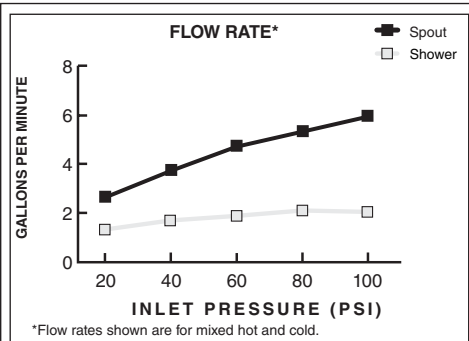
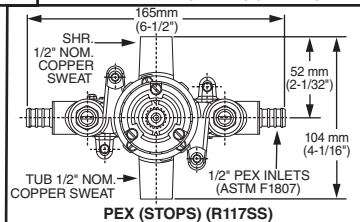
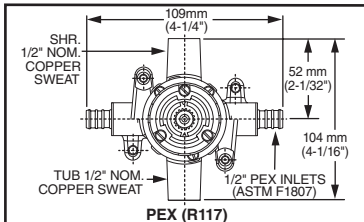
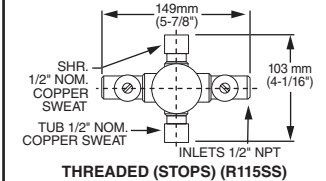
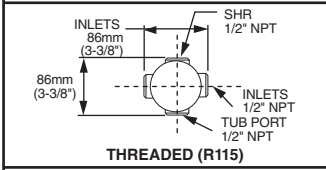
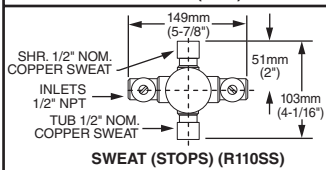
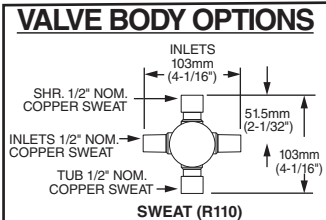
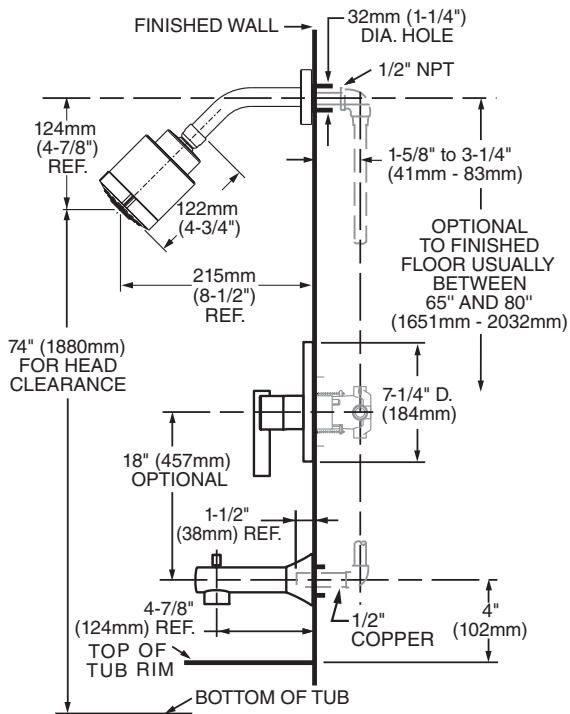
Pressure Balancing Valve Cartridge: Maintains constant output temperature in response to changes in hot and cold supply pressure. Diaphragm system engineered to eliminate cross flow. Avoids failure due to mineral deposits - ideal for use in hard water.

Back-to-Back Capability: Hot and cold can be reversed quickly and easily.

Adjustable Hot Limit Safety Stop: Limits the amount of hot water allowed to mix with cold. Reduces the risk of accidental scalding.

Exclusive Plaster Guard: Plaster guard is designed to protect valve during installation and serve as a mounting plate for thin-wall installations. 2 piece design allows valve to be tested prior to trim installation.

Wide Rough-in Range: From 1-5/8" to 3-1/4".



CODES AND STANDARDS

These products meet or exceed the following codes and standards:

- ANSI A 117.1
- ASSE 1016
- ASME A112.18.1
- CSA B 125



Meets the American Disabilities Act Guidelines and **ANSI A117.1** Requirements for the physically challenged.

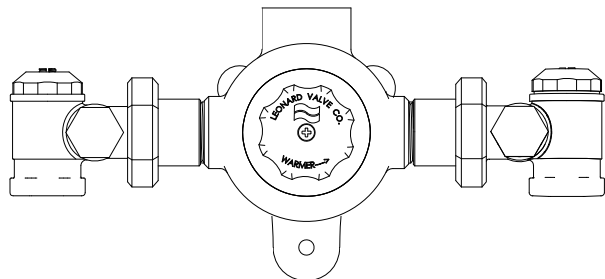
TRIM KITS *	Product Number	Description	Finish Options	
			Polished Chrome	PVD Satin Nickel
			002	295
T430.508	Bath/Shower Trim Kit. Lever Handle. FloWise Showerhead. LESS Valve Body.			
T430.507	Shower Only Trim Kit. Lever Handle. FloWise Showerhead. LESS Valve Body.		>	

ROUGH VALVE BODIES	Product Number	Description
	R110	Rough Valve Body less trim. Direct Sweat inlets/outlets.
	R110SS	Rough Valve Body less trim. Direct Sweat inlets/outlets with Screwdriver Stops.
	R115	Rough Valve Body less trim. Female Thread inlets/outlets.
	R115SS	Rough Valve Body less trim. Female Thread inlets/outlets with Screwdriver Stops.
	R117	Rough Valve Body less trim. PEX inlets/ Direct Sweat outlets.
	R117SS	Rough Valve Body less trim. PEX inlets/ Direct Sweat outlets with Screwdriver Stops.

* TRIM & ROUGH MUST BE ORDERED SEPARATELY.

HIGH LOW THERMOSTATIC MIXING VALVES

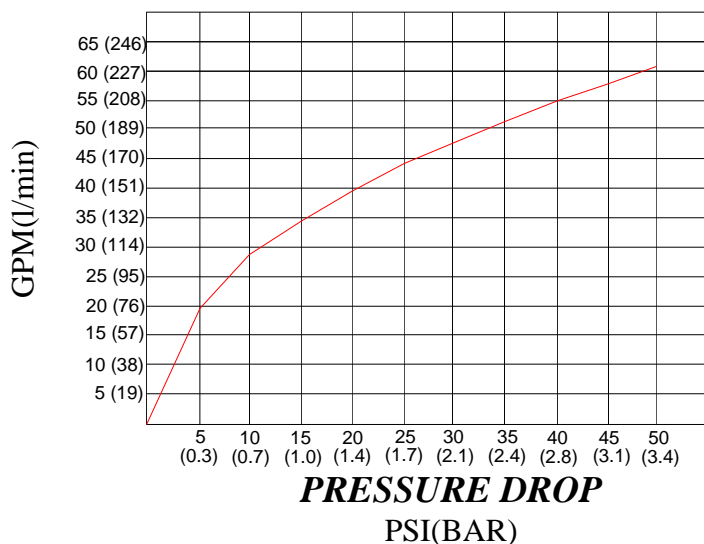
XL-82-_____
1-61 GPM (3.8-231 l/min)



- High Low Thermostatic Water Mixing Valve with 1 GPM (3.8 l/min) minimum flow capacity
- 1" inlets, 1-1/4" outlet (25mm x 32 mm)
- Integral combination checkstops with strainers and wall support
- 125 PSI (8.6 BAR) maximum operating pressure
- Copper encapsulated thermostatic assembly with Teflon coated shuttle
- Locking temperature regulating handle set for 120°F(49°C)*
- Top or bottom supply connections
- Internal parts of bronze, brass, and stainless steel
- Rough Bronze Finish

PRESSURE DROP											
MIN+ FLOW	5	10	15	20	25	30	35	40	45	50	PSI
	0.3	0.7	1	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
1	19	28	34	39	43	48	51	55	58	61	GPM
3.8	72	106	129	148	163	182	193	208	219	231	l/min

FLOW RATE



ASSE 1017 certified



Valve is CUPC certified



OPTIONS

___ SUFFIX **CP** Chrome plated finish

___ SUFFIX **LWS** Less wall support

→ SUFFIX **BDT** Ball valve with dial thermometer

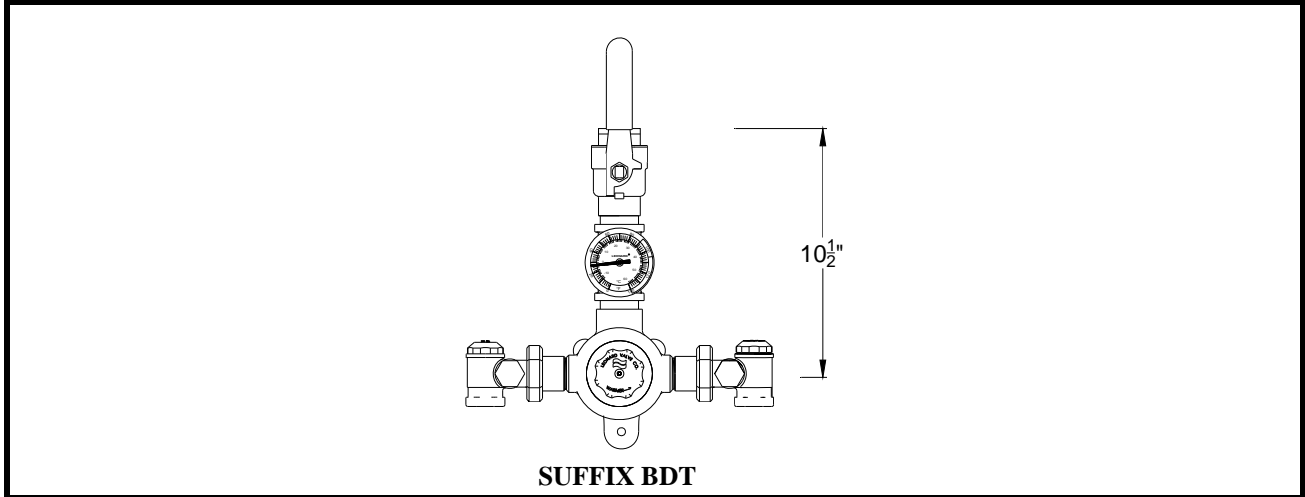
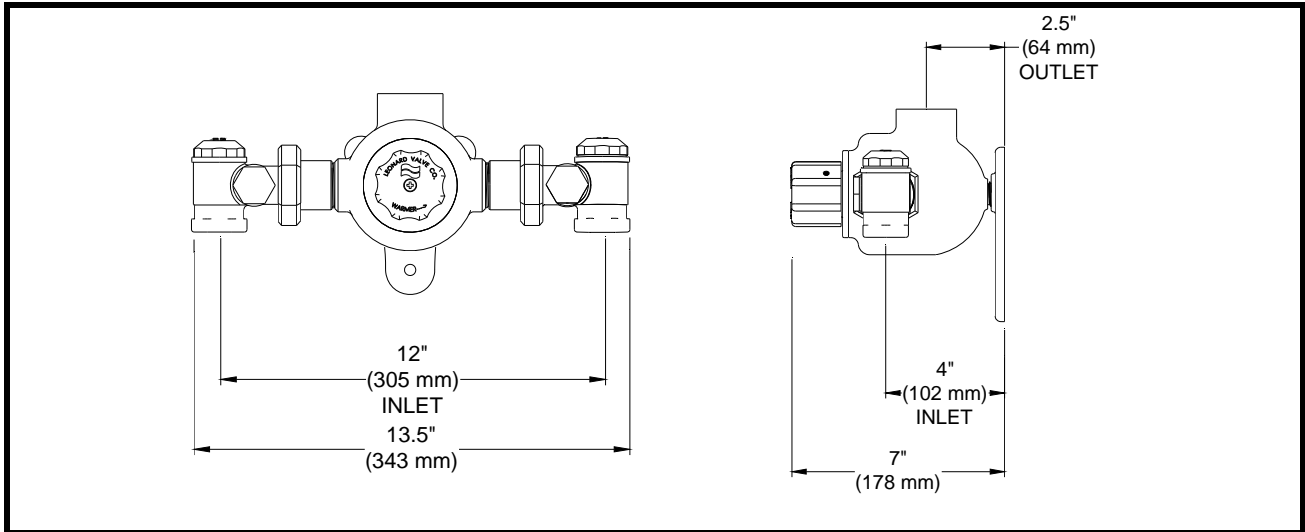
___ SUFFIX **IT** Inlet thermometers

+NOTE: The valve will maintain temperature with 0.5GPM flow from the domestic hot water loop when properly installed near the hot water source with a continuously operating recirculation pump.

*NOTE: A locking temperature regulator set for 120°F (49°C), is simply a mechanical setting to prevent unauthorized temperature set point changes. If incoming water is hotter than 150°F (65.5°C), the temperature of the factory test, the valve may deliver in excess of 120°F. MUST BE RESET BY THE INSTALLER

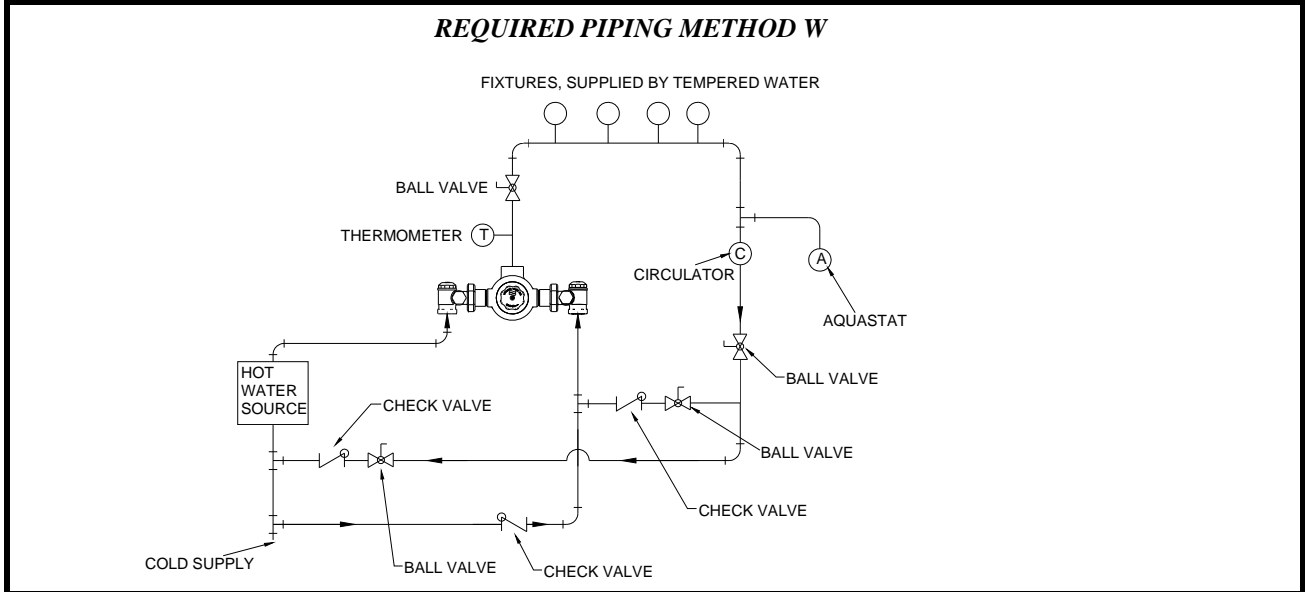
NOTE: Leonard Valve Company reserves the right of product or design modification without notice or obligation

TMV-1



SUFFIX BDT

REQUIRED PIPING METHOD W



CAUTION! All thermostatic water mixing valves have limitations. They will NOT provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart and DO NOT OVERSIZE. Minimum flow must be no less than as indicated.



1360 Elmwood Avenue, Cranston, RI 02910 USA
 Phone: 401.461.1200 Fax: 401.941.5310
 Email: info@leonardvalve.com
 Web Site: <http://www.leonardvalve.com>

UR-1

American Standard

Style That Works Better

 BARRIER FREE

WASHBROOK® FloWise® 0.125 GPF ULTRA HIGH EFFICIENCY URINAL SYSTEM MANUAL FLUSH VALVE

WASHBROOK® FloWise® 0.125 GPF ULTRA HIGH EFFICIENCY URINAL SYSTEM

➔ **6590.503** 0.125 gpf Exposed Top Spud Urinal and Manual Piston-Type Urinal Flush Valve

URINAL:

- Vitreous china
- Ultra High Efficiency, Low Consumption. Operates in the range of 0.125 gpf to 1.0 gpf (0.5 Lpf to 3.8 Lpf)
- Flushing rim
- Elongated 14" rim from finished wall
- Washout flush action
- Extended sides for privacy
- 3/4" inlet spud
- Outlet connection threaded 2" inside (NPTF)
- Strainer included
- Meets ASME flush requirements at 0.125 gpf
- Model 6590.001 top spud

MANUAL FLUSH VALVE:

- Self-cleaning brass piston with integral wiper spring prevents clogging and reduces maintenance
- Piston operation delivers superior flush accuracy and repeatability
- Piston valve remains closed and does not need to be reset after loss of water pressure
- Non-hold open handle
- Positive seal ensures leak-free performance
- No external volume adjustment
- Durable chrome-plated cast brass construction is ideal for commercial applications
- Chloramine-resistant EPDM seals
- Adjustable tailpiece for rough-in flexibility
- Can be installed left or right hand
- Model 6045.013 for 3/4" top spud urinals, 0.125 gpf

Includes:

- 2 Wall hangers
- 3/4" I.P.S. angle stop with back-flow protection and vandal-resistant cap
- Sweat solder kit including cover tube and wall flange
- High back pressure vacuum breaker with down tube
- Spud coupling and flange for 3/4" top spud

To Be Specified:

Color: White



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.

- When installed so top of rim is 387mm (15-1/4") from finished floor.



SEE REVERSE FOR ROUGHING-IN DIMENSIONS

Operating Pressure:

Overall Range: 20-125 psi**

Recommended: 20 psi (flowing)-80 psi (static)

** Water pressure over 80 psi is not recommended for most plumbing fixtures.

Flow Requirement:

8gpm (30.3 L/min.)

Nominal Fixture Dimensions:

360 x 480 x 664mm (14-1/8" x 18-7/8" x 26-1/8")

Fixture Compliance Certifications -

Meets or Exceeds the Following Specifications:

- ASME A112.19.2-2008/CSA B45.1-08 for Vitreous China Fixtures

Valve Listings:

- ASSE 1037
- ANSI/ASSE A112.19.2
- ADA Compliant



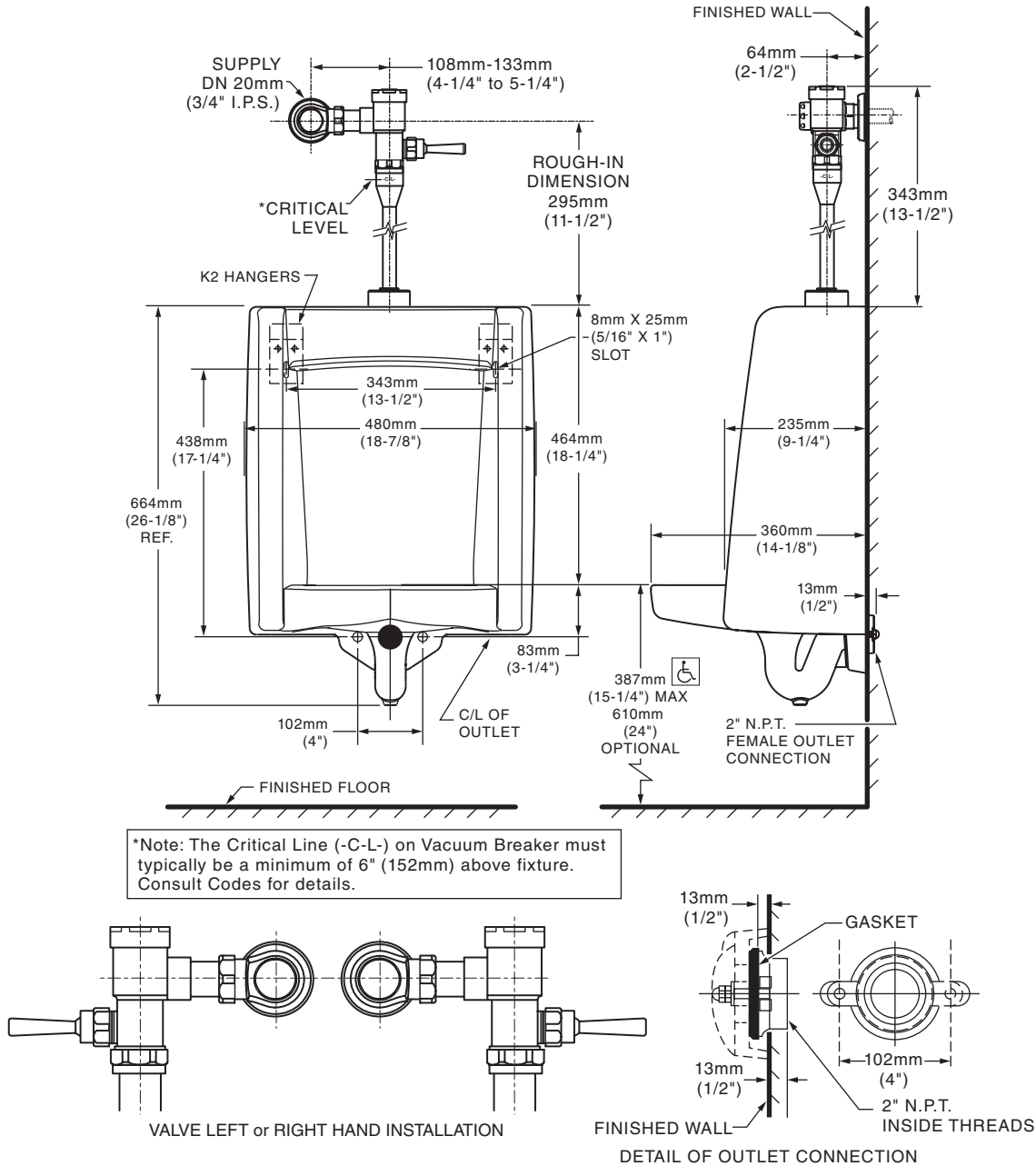
UR-1

American Standard

Style That Works Better

BARRIER FREE

WASHBROOK® FloWise® 0.125 GPF ULTRA HIGH EFFICIENCY URINAL SYSTEM MANUAL FLUSH VALVE



NOTES:
PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

UR-1



JAY R. SMITH MFG. CO.
 DIVISION OF SMITH INDUSTRIES, INC.
 POST OFFICE BOX 3237
 MONTGOMERY, ALABAMA 36109-0237 (USA)
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com

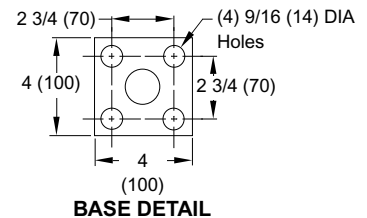
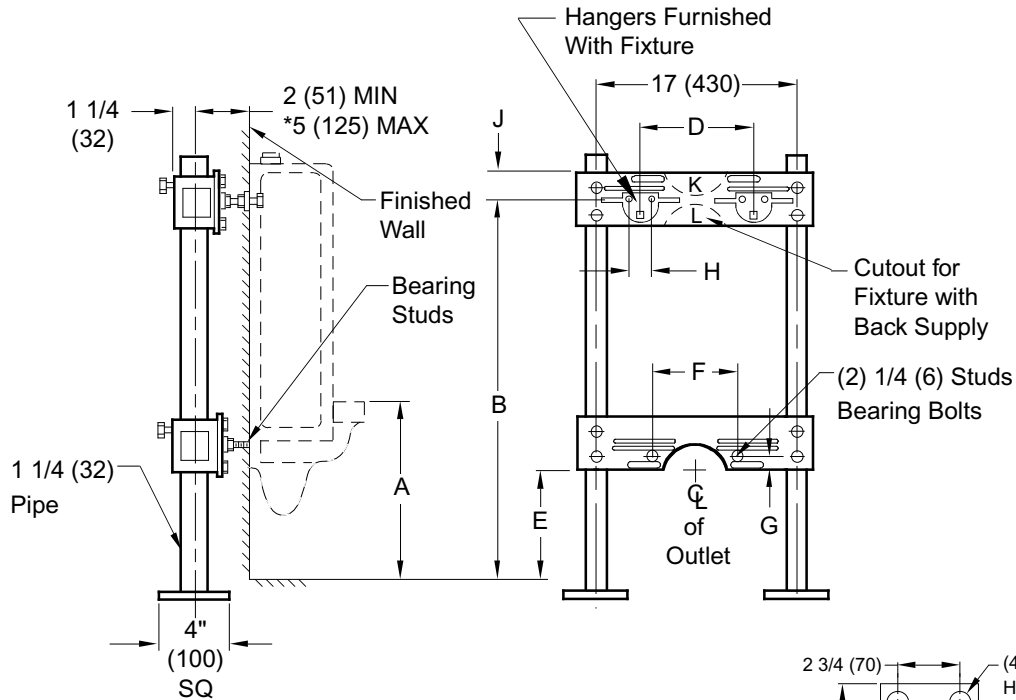


MEMBER OF:

LOCATION

URINAL SUPPORTS FOR OFF-THE-FLOOR URINALS

WITH PLATE FOR BLOWOUT AND WASHOUT URINALS WITH WALL HANGERS



NOTE: Dimensions shown in parentheses are in millimeters.

*This dimension can be increased when fixture support is to be installed behind the wall (specify when required and wall thickness).

ROUGH-IN TABLE

FIXTURE MFG.	NAME	NUMBER	A	B	D	E	F	G	H	J	K	L
Am. Std.	Washbrook	6501.010	24 (610)	39 (990)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	2 (51)	X	-
Am. Std.	Washbrook	6506.011	24 (610)	39 (990)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	2 (51)	X	-
Am. Std.	Lynbrook	6538.010	24 (610)	40 (1015)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	1 (25)	X	-
Am. Std.	Lynbrook	6531.019	24 (610)	40 (1015)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	1 (25)	X	-
Am. Std.	Trimbrook	6560.015	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	X	-
Am. Std.	Trimbrook	6560.023	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	X	-
Am. Std.	Trimbrook	6565.014	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	X	-
Am. Std.	Trimbrook	6565.022	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	X	-
Eljer	Correcto	161-1030, 45 161-1060, 75	24 (610)	39 3/8 (1000)	12 (305)	21 (535)	5 1/4 (135)	1 (25)	1 (25)	1 (25)	X	
Eljer	Terminal	161-1100, 3	25 1/2 (650)	33 7/8 (860)	9 1/2 (240)	23 1/4 (590)	6 (150)	2 (51)	1 (25)	1 (25)	X	-
Eljer	Dover	161-1160, 75	24 (610)	32 3/8 (822)	6 (150)	17 (430)	6 (150)	1 (25)	1 (25)	1 (25)	X	-
Kohler	Stanwell	K-4970-T, R	24 (610)	40 (1015)	12 (305)	22 (560)	5 3/8 (137)	1 (25)	1 (25)	1 (25)	X	-
Kohler	Bardon	K-4980-T, R	24 (610)	40 1/2 (1030)	12 (305)	21 (535)	8 1/4 (210)	1 (25)	1 (25)	1 (25)	X	-
Kohler	Derry	K-5007-T, R	24 (610)	29 1/2 (750)	6 (150)	22 (560)	6 (150)	1 (25)	1 (25)	1 (25)	-	X
Kohler	Dexter	K-5014-T, R	24 (610)	32 1/8 (816)	6 1/2 (165)	17 5/8 (448)	8 (205)	1 (25)	1 (25)	1 (25)	X	-

E 7-17-02
 D 3-21-95
 C 7-28-93
 B 11-17-88

Changed Table
 Added Metric
 Submittal Update
 Change Table

RN
 EMB
 EMB
 EMB

MB
 BS
 BS
 BS

WEIGHT
 POUNDS

VOLUME
 CUBIC FEET

FIGURE NUMBER

0637

REV.	DATE	DESCRIPTION	BY	CKD. BY
------	------	-------------	----	---------

DRAWING NUMBER
S0637

SIZE
A

SCALE:
NONE

DATE:
1-10-74

APPROVED BY:
BS

CHECKED BY:
CR

DRAWN BY:
BDS

0637

FIGURE
NUMBER

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA



JAY R. SMITH MFG. CO.
 DIVISION OF SMITH INDUSTRIES, INC.
 POST OFFICE BOX 3237
 MONTGOMERY, ALABAMA 36109-0237 (USA)
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com

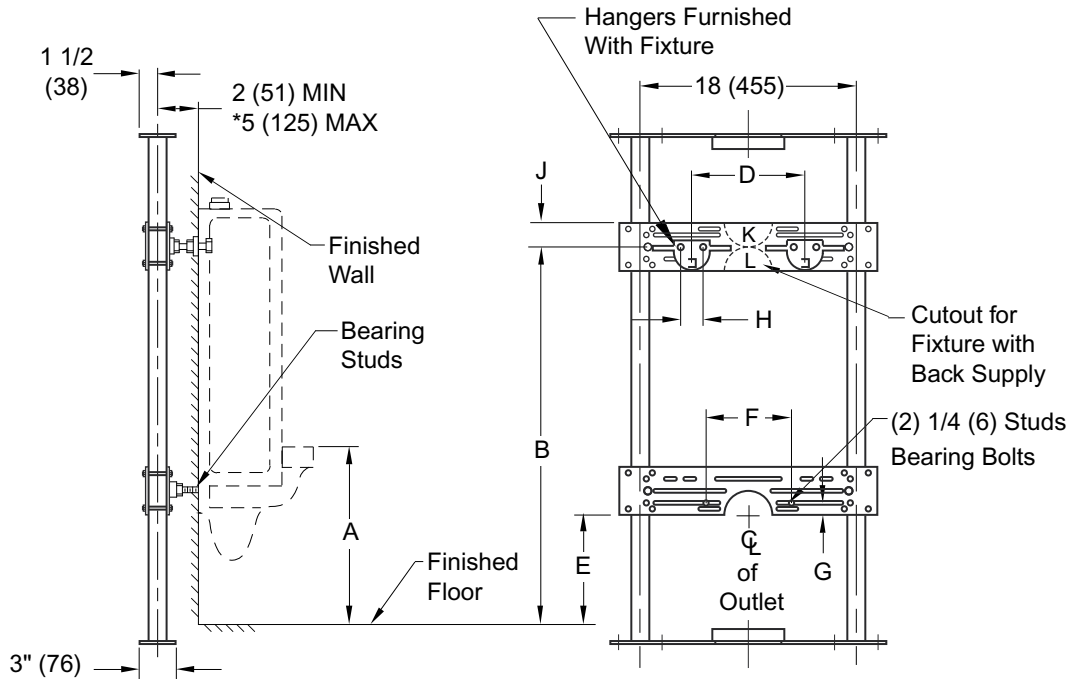


MEMBER OF:

LOCATION

LABOR SAVER URINAL SUPPORTS FOR OFF-THE-FLOOR URINALS

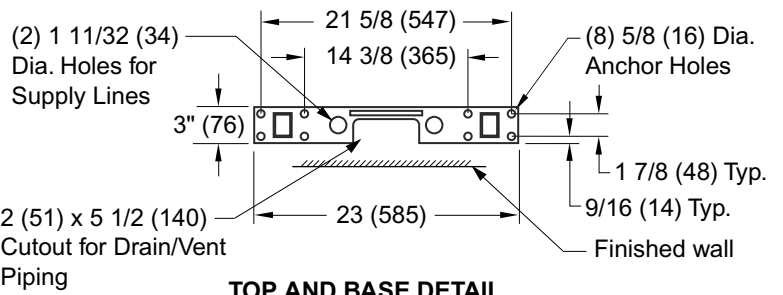
WITH PLATE FOR BLOWOUT AND WASHOUT URINALS WITH WALL HANGERS



NOTE: *This dimension can be increased when fixture support is to be installed behind the wall (specify when required and wall thickness).

NOTE: Dimensions shown in parentheses are in millimeters.

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.



ROUGH-IN TABLE

FIXTURE MFG.		NAME		NUMBER		SIZE		CUTOUT FOR INLET	
A	B	D	E	F	G	H	J	K	L

D	5-9-03	Removed "C" in Table	RN	AM
C	11/06/02	Changed per George Flegel	JJ	AM
B	7/10/02	Revised "E" Dim. & Chart Size	RN	AM
A	12/19/01	Changed Hole Size in Base	JJ	AM
REV.	DATE	DESCRIPTION	BY	CKD. BY

WEIGHT POUNDS	VOLUME CUBIC FEET

FIGURE NUMBER
0617

DRAWING NUMBER
S0617

SIZE
A

SCALE:
NONE

DATE:
03/27/01

APPROVED BY:
AM

CHECKED BY:
CR

DRAWN BY:
JJ

FIGURE NUMBER
0617

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

CHAMPION® 4 RIGHT HEIGHT™ ELONGATED TOILET

- 2002.014
 - Vitreous china
 - EverClean® surface inhibits the growth of stain- and odor-causing bacteria, mold, and mildew on the surface
 - Low-consumption (6.0 Lpf/1.6 gpf)
 - Features **Champion® 4 Flushing System** performance platform
 - 4" non-adjustable, piston action Accelerator™ flush valve
 - 16-1/2" rim height for accessible applications
 - Elongated siphon action jetted bowl
 - 2-3/8" fully-glazed trapway
 - Speed Connect® tank/bowl coupling system
 - Chrome-plated trip lever
 - Sweeping pier on bowl
 - 100% factory flush tested
 - 2 bolt caps
 - 10 year warranty



3225.016 Bowl

4266.014 Tank

Nominal Dimensions:

772 x 464 x 825mm (30-3/8" x 18-1/4" x 32-1/2")

Fixture only, seat and supply by others

Alternate Tank Configurations Available:

- 4266.504 Tank complete with Aquaguard Liner
- 4266.604 Tank complete with tank cover locking device
- 4266.704 Tank complete with Aquaguard Liner and tank cover locking device
- 4266.804 Tank complete with trip lever located on right side
- 4266.904 Tank complete with tank cover locking device and trip lever located on right side
- 4266.954 Tank complete with Aquaguard Liner, tank cover locking device, and trip lever on right side

Compliance Certifications - Meets or Exceeds the Following Specifications:

- ASME A112.19.2M for Vitreous China Fixtures - includes Flush Performance, Ball Pass Diameter, Trap Seal Depth and all Dimensions
- Los Angeles Department of Water and Power Supplementary Purchase Specification for Non-Adjustability - July, 2003 revision

SEE REVERSE FOR ADDITIONAL ROUGHING-IN
DIMENSIONS

CHAMPION® 4
Flushing System

To Be Specified:

- Color:
 - White Bone Silver Linen Black
- Design Matched Seat: #5280.016
- Alternate Seats:
 - Champion® Slow Close Elongated #5325.010
 - Rise & Shine Elongated #5324.019
 - Rise & Shine Elongated-Open Front #5325.024
 - EverClean® Elongated Seat with Slow Close Snap-Off Hinges #5321.110
- Supply with stop:

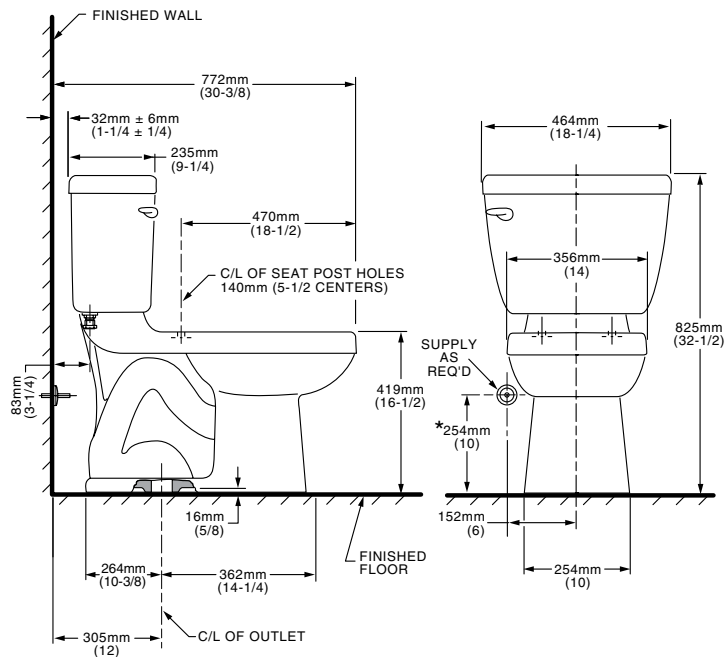
NOTES:

THIS TOILET IS DESIGNED TO ROUGH-IN AT A MINIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO C/L OF OUTLET. SUPPLY NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY.
* DIMENSION SHOWN FOR LOCATION OF SUPPLY IS SUGGESTED.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES.



CHAMPION® 4

Flushing System

NOTES:

THIS TOILET IS DESIGNED TO ROUGH-IN AT A MINIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO C/L OF OUTLET. SUPPLY NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY.

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IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES.

EVERCLEAN® TOILET SEATS WITH SLOW-CLOSE AND SNAP-OFF HINGES

- 5321.110** Elongated toilet seat
- 5320.110** Round Front toilet seat

- Solid plastic seat with cover
- EverClean® silver-based surface permanently inhibits the growth of stain and odor causing bacteria, mold and mildew on the surface. EverClean® surface does not protect against disease causing bacteria
- Attractive design coordinates with popular bathroom decors
- Plastic slow-close snap-off hinge
- Convenient slow-close feature prevents seat from slamming
- Unique easy snap-off feature allows for quick removal and replacement of seat and cover without any tools for easy cleaning of toilet
- Fits any standard elongated or round front toilet
- Seat complete with bolts, nuts and washers



SHOWN: CONVENIENT SLOW-CLOSE FEATURE



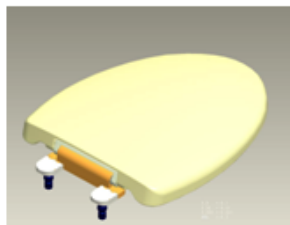
AVAILABLE REPLACEMENT PARTS

- **760087-0070A** Toilet Seat Bolt Kit (complete with bolts, nuts and washers)

To Be Specified

Color:

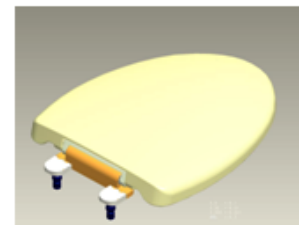
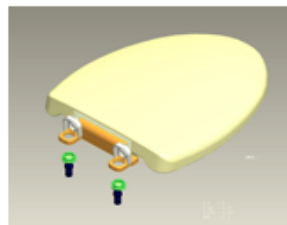
White Bone Silver Linen Black



Mounts like any toilet seat—no need to find “correct” bolt spacing before installing seat



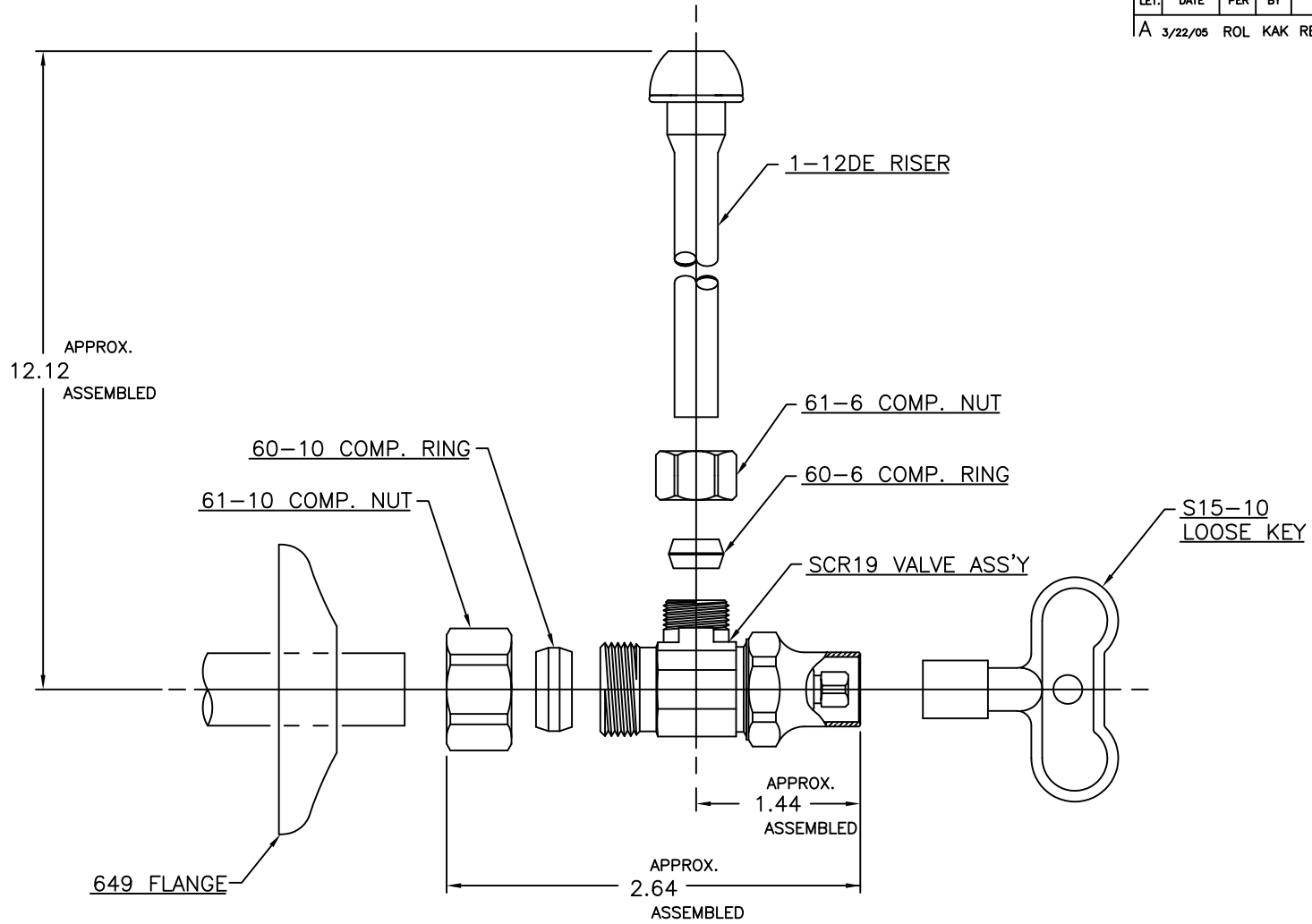
With bolt cap covers lifted up, seat easily “snapoff” and snaps back on with little effort



With bolt cap covers in place, seat cannot be removed

WC-1

LET.	DATE	PER	BY	CHANGE
A	3/22/05	ROL	KAK	RELEASE



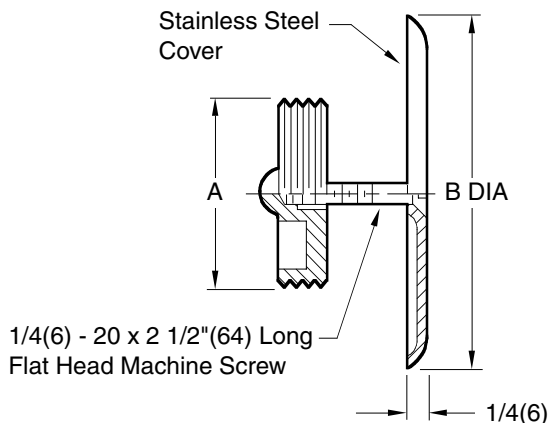
<p>BrassCraft A Masco Company NOVI, MICHIGAN</p>	DESCRIPTION 1/2 NOM COMP X 3/8 OD COMP W/RISER & LOOSE KEY (SUBMITTAL)		DRAWING NO.		
	DRAWN KLIMKIE 03/22/2005	DATE: 03/22/2005	MATERIAL →	ITEM DESCRIPTION	
	CHK'D. Pernak 03/22/2005	DATE: 03/22/2005	VOLUME	ITEM ID	
	APP'D.	DATE:	DATE:	SCR1912DE C	
ALL GDT PER ANSI STD Y14.5M CLASSIFICATION OF QUALITY LEVELS		NOTE: UNLESS OTHERWISE SPECIFIED TWO PLACE DECIMALS +/- .010 THREE PLACE DECIMALS +/- .005 ANGULARITY +/- 1°	UNITS INCH	SCALE: (UNLESS NOTED) FULL	REV. A
This drawing and all data contained herein is the confidential and exclusive property of BrassCraft Manufacturing, and shall not be disclosed to others without the written consent of BrassCraft. This drawing must be returned to BrassCraft if requested.		KPC (KEY PRODUCT CHARACTERISTICS)	STPC (STANDARD PRODUCT CHARACTERISTICS)	PRODUCT MARKINGS	

E	SMITH® JAY R. SMITH MFG. CO.® DIVISION OF SMITH INDUSTRIES, INC. POST OFFICE BOX 3237 MONTGOMERY, ALABAMA 36109-0237 (USA) TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com	LOCATION
----------	---	---------------------

CLEANOUT PLUGS AND COVERS

TAPER THREAD PLUG WITH ROUND COVER

FUNCTION: Used in Female Pipe Size openings in Drainage piping where a cleanout is required. Countersunk plugs have slot sized to receive 1/2"(13) thick steel bar stock. Face-of-wall cover is desirable on finished walls.



1/4(6) - 20 x 2 1/2"(64) Long
Flat Head Machine Screw

COUNTERSUNK PLUG

- Fig. 4470T LESS COVER AND SCREW
- Fig. 4472T WITH COVER AND SCREW

A SIZE	B DIA
0150(40), 02(50), 0250(65)	4 1/4(110)
03(80), 0350(90), 04(100)	5 1/2(140)
05(125)	7(180)
06(150)	9 1/4(235)
08(200), 10(250)	11 1/4(285)

NOTE: Dimensions shown in parentheses are in millimeters.

REGULARLY FURNISHED:

Cast Bronze Taper Thread Plug with Stainless Steel Round Cover and Screw as indicated by Figure Number.

VARIATIONS:

- Longer Screw (Specify Length)
- "T" Handle Plug -TP
Plug tapped 1/4"(6) - 20 Thread
- Vandal Proof Screw -U

OPTIONAL MATERIALS:

- Polished Bronze Cover -PB
- Prime Coated Steel Cover -PC
- Stainless Steel Plug
(See Fig. 9775)

DRAWING NUMBER **S4470**
 SIZE **A**
 SCALE: **NONE**
 DATE: **2-16-70**
 APPROVED BY: **JM**
 CHECKED BY: **BH**
 DRAWN BY: **RK**
4470, 4472
 FIGURE NUMBER

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

E D C B	1-11-96 7-27-94 6-15-94 7-30-93	Added Millimeters Submittal Update Chg'd Title Redrawn, Chg Var & update form	EMB EMB EMB TWK	BS BS BS BS	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER 4470, 4472
REV.	DATE	DESCRIPTION	BY	CKD. BY			

WATER HAMMER ARRESTERS

650 & 660 series

Hydra-Rester™ & Mini-Rester™

SPECIFICATION

Sioux Chief 650/660 Series piston-type water hammer arresters shall be required in piping systems. Water hammer arresters shall have sufficient volume of air to dissipate the calculated kinetic energy generated in the piping system. Arresters shall be effective when installed at any angle. Arresters shall be approved for installation with no access panel required. Water hammer arresters shall be ANSI/ASSE 1010 2004 certified. Arresters shall be sized and placed per manufacturer's instructions.

MATERIALS

- arrester body*: type L copper tube
- piston*: poly piston with two EPDM o-rings
- male thread fitting*: brass MIP thread
- piston lubrication*: Dow-Corning, 111 FDA approved silicone compound

WORKING LIMITS*

- max working temperature*: 250°F
- max working pressure*: 350 PSIG
- burst tested*: to 2,900 PSIG

* PEX and CPVC connection specifications are limited to those called out in their respective ASTM Standards for Fittings (CPVC D2846, PEX F1807).

INSTALLATION

- angle*: May be installed at any angle
- access panels*: No access panels required

SIZING & PLACEMENT

Refer to instructions on product package or in catalog.

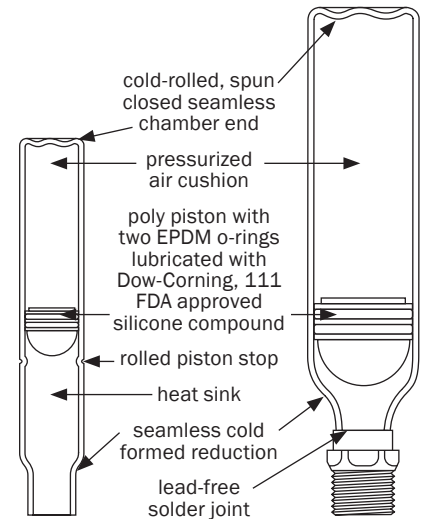
CERTIFICATIONS/APPROVALS

- 650 series*: Certified by ASSE to the ANSI/ASSE 1010 standard
- 660 series*: Certified by ASSE to the ANSI/ASSE 1010 standard

DIMENSIONS

Arrester size	AA	A	B	C	D	E	F
Overall height							
male sweat	3 ³ / ₈ "	6 ¹ / ₂ "	10"	12 ¹ / ₂ "	11"	13 ¹ / ₂ "	16"
male thread	3 ³ / ₈ "	8 ¹ / ₄ "	8 ³ / ₄ "	11"	10 ¹ / ₈ "	12 ⁵ / ₈ "	15 ¹ / ₈ "
CPVC	4 ¹ / ₄ "	7 ¹ / ₂ "	9 ¹ / ₂ "	12"	—	—	—
PEX crimp	4 ¹ / ₄ "	6 ¹ / ₂ "	8 ³ / ₄ "	11"	—	—	—
Chamber width	7 ⁸ / ₈ "	1 ³ / ₈ "	1 ³ / ₈ "	1 ³ / ₈ "	2 ¹ / ₈ "	2 ¹ / ₈ "	2 ¹ / ₈ "
Connection size	1/2"	1/2"	3/4"	1"	1"	1"	1"
Volume (cu. in.)	1.4	5	7	11	20	29	36
Fixture units	1-4	4-11	12-32	33-60	61-113	114-154	155-330

Item # Submitted _____
Job Name _____
Location _____
Engineer _____
Contractor _____
PO# _____ TAG _____



- | | | |
|--|--|--|
| <input type="checkbox"/> 660-2B AA size, MIP | <input type="checkbox"/> 653-B B size, MIP | <input type="checkbox"/> 655-D D size, MIP |
| <input type="checkbox"/> 660-SB AA size, sweat | <input type="checkbox"/> 653-BS B size, sweat | <input type="checkbox"/> 655-DS D size, sweat |
| <input type="checkbox"/> 660-V82B AA size, male CPVC | <input type="checkbox"/> 653-BC B size, CPVC socket | <input type="checkbox"/> 656-E E size, MIP |
| <input type="checkbox"/> 660-X2B AA size, PEX crimp | <input type="checkbox"/> 653-BX B size, PEX crimp | <input type="checkbox"/> 656-ES E size, sweat |
| <input checked="" type="checkbox"/> 652-A A size, MIP | <input type="checkbox"/> 654-C C size, MIP | <input type="checkbox"/> 657-F F size, MIP |
| <input type="checkbox"/> 652-AS A size, sweat | <input type="checkbox"/> 654-CS C size, sweat | <input type="checkbox"/> 657-FS F size, sweat |
| <input type="checkbox"/> 652-AC A size, CPVC socket | <input type="checkbox"/> 654-CC C size, CPVC socket | |
| <input type="checkbox"/> 652-AX A size, PEX crimp | <input type="checkbox"/> 654-CX C size, PEX crimp | |

980-WS909AGVCP

Ball Valves

Product Type

Deck Mounted Single Ball Valves Turret with Single Ball Valve

Features & Specifications

- Single Ball Valves
- Full Flow Nozzle
- May Be Used with Most Laboratory Gases
- All Threaded Connections Factory Assembled
- 909 Valve is Certified for Gas Service per ANSI Z21.15b-2006/CSA 9.1b-2006 by the Canadian Standards Association

Performance Specification

- Rated Operating Pressure: 0-0.5 PSI

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

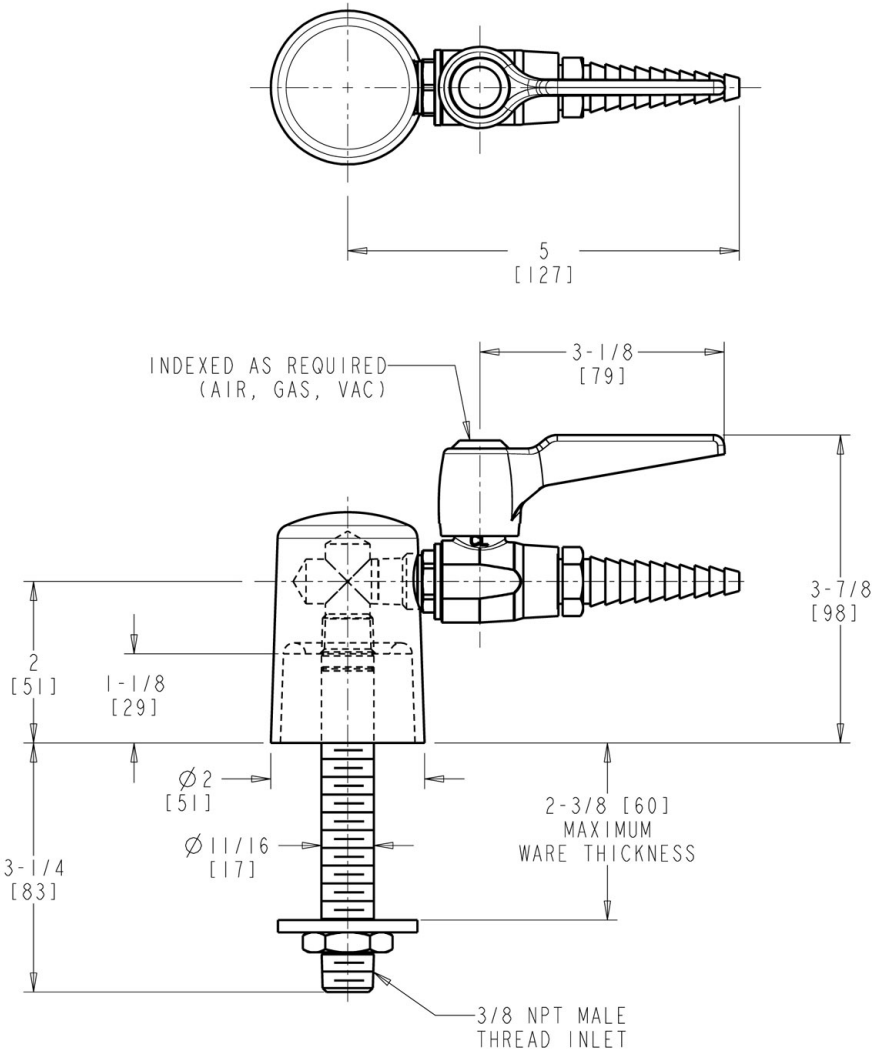
Date _____



Ball Valves

Architect/Engineer Specification

Chicago Faucets No. 980-WS909AGVCP, Deck Mounted Single Ball Valves Turret with Single Ball Valve, polished chrome plated solid brass construction Full Flow Laboratory Serrated Nozzle. May Be Used with Most Laboratory Gases. All Threaded Connections Factory Assembled. 909 Valve is Certified for Gas Service per ANSI Z21.15b-2006/CSA 9.1b-2006 by the Canadian Standards Association. Mounting hardware included.



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

Chicago Faucets, member of the Geberit Group, is the leading brand of commercial faucets and fittings in the United States, offering a complete range of products for schools, laboratories, hospitals, office buildings, food service, airports and sport facilities. Call 1.800.TECTRUE or 1.847.803.5000 Option 1 for installation or other technical assistance.



2100 South Clearwater Drive
Des Plaines, IL
P: 847/803-5000
F: 847/803-5454
Technical: 800/TEC-TRUE
www.chicagofaucets.com

980-WS909AGVCP

Ball Valves

Product Type

Deck Mounted Single Ball Valves Turret with Single Ball Valve

Features & Specifications

- Single Ball Valves
- Full Flow Nozzle
- May Be Used with Most Laboratory Gases
- All Threaded Connections Factory Assembled
- 909 Valve is Certified for Gas Service per ANSI Z21.15b-2006/CSA 9.1b-2006 by the Canadian Standards Association

Performance Specification

- Rated Operating Pressure: 0-0.5 PSI

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

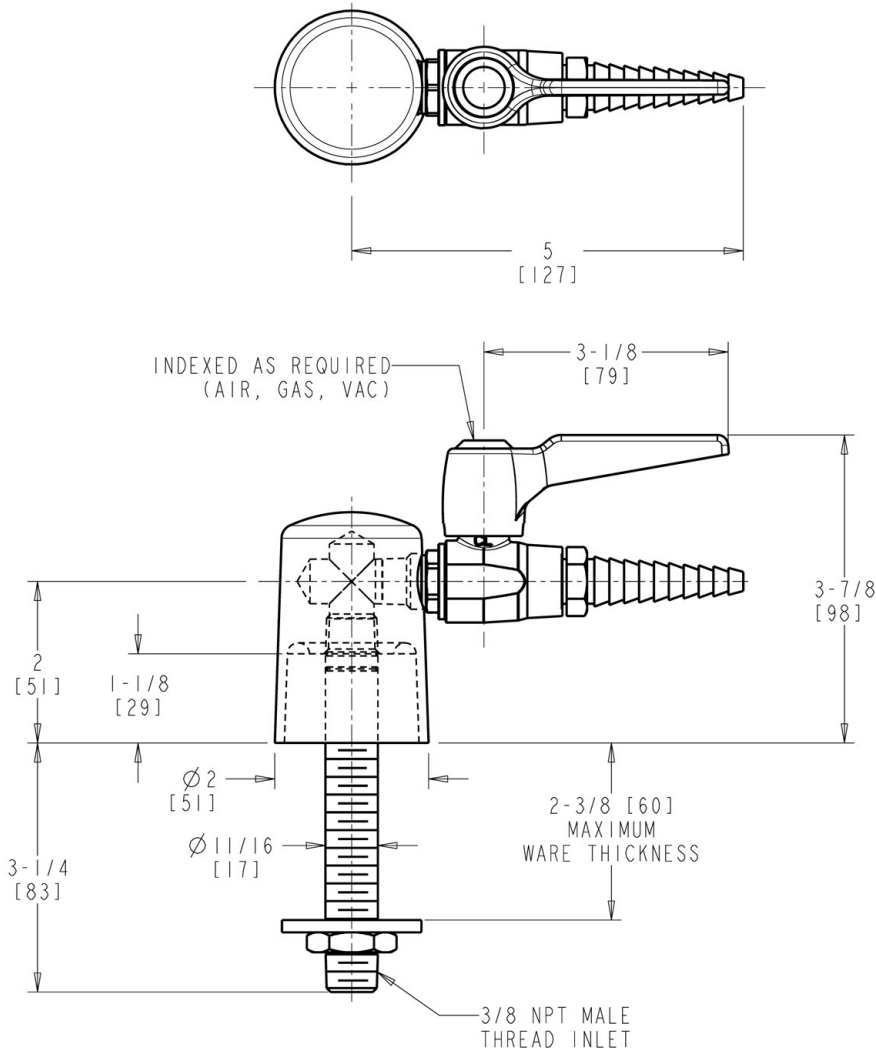
Date _____



Ball Valves

Architect/Engineer Specification

Chicago Faucets No. 980-WS909AGVCP, Deck Mounted Single Ball Valves Turret with Single Ball Valve, polished chrome plated solid brass construction Full Flow Laboratory Serrated Nozzle. May Be Used with Most Laboratory Gases. All Threaded Connections Factory Assembled. 909 Valve is Certified for Gas Service per ANSI Z21.15b-2006/CSA 9.1b-2006 by the Canadian Standards Association. Mounting hardware included.



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

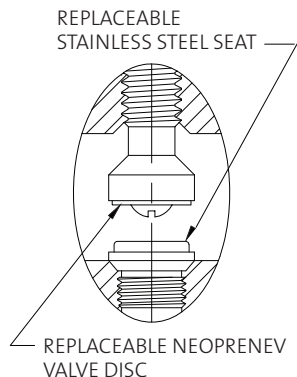
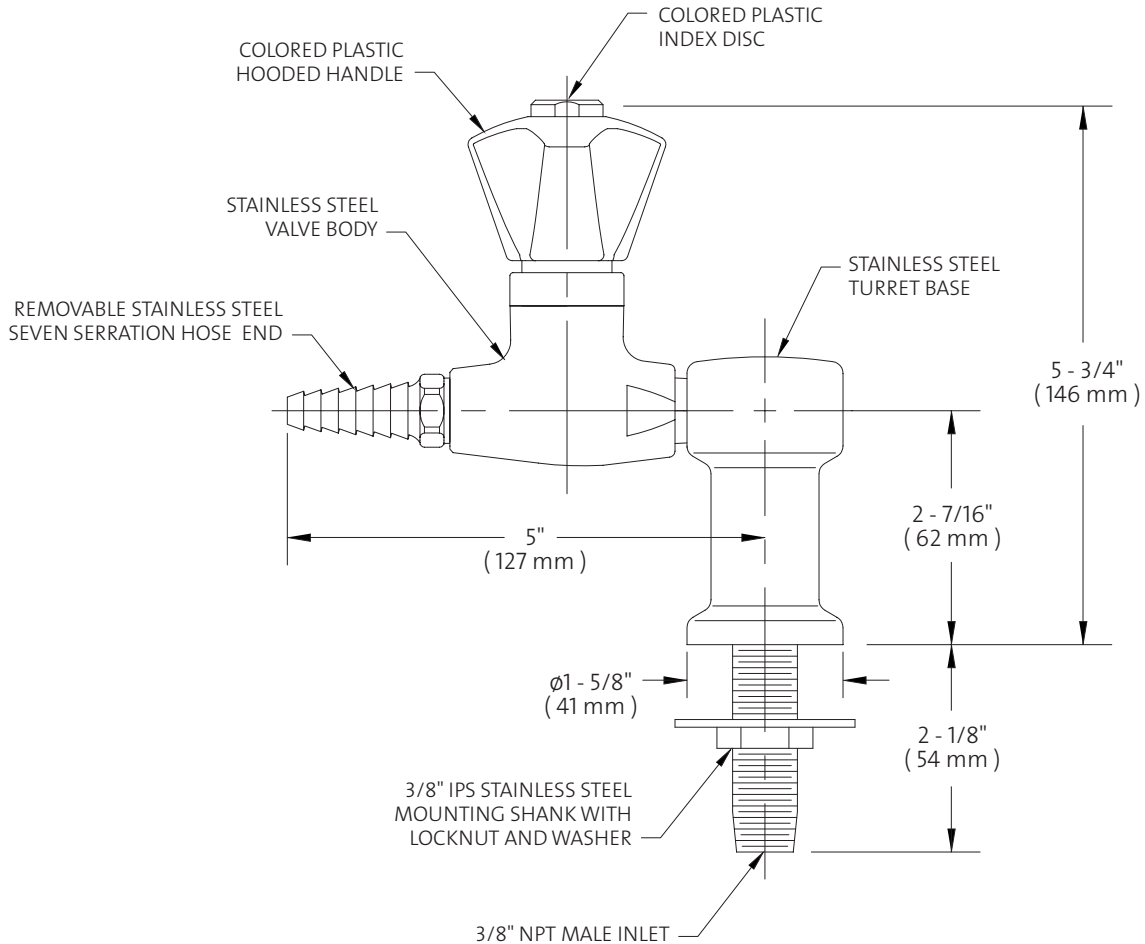
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Technical: 800/TEC-TRUE
www.chicagofaucets.com



CT62800-6231WSA Pure Water Valve, Stainless Steel, Deck Mounted



NOTES:

1. VALVE BODY AND COMPONENT ARE TYPE 316 STAINLESS STEEL.
2. FIXTURE IS FACTORY ASSEMBLED AND TESTED AT 80 PSI. MAXIMUM WORKING PRESSURE IS 80 PSI.

Measurements may vary ± 1/4".

© 2008 / WaterSaver Faucet Co.

FORCE™ 90 WH-1 90% EFFICIENT

Power Vent Commercial Gas Water Heaters

The 50-gallon, 76,000 BTU Force 90 light-duty commercial gas water heater is equipped with a fully submerged, spiral-shaped condensing heat exchanger. This design provides a much greater heat transfer surface than a standard straight flue tube, resulting in 90% thermal efficiency and higher hot water output than comparable 80% efficient water heaters. With 22" diameter, the 50-gallon Force 90 can be installed in less space than a 75-gallon unit and delivers greater recovery and lower operating costs.



Series 100

Power Vent Design for Installation Versatility

- Modular blower, with 120 volt, 60Hz electrical system (5 amps or less), 6-foot cord with standard 3-prong connector
- Can be vented vertically thru-the-roof or horizontally thru-the-wall
- Combined horizontal and vertical vent runs terminating through outside wall, using PVC, CPVC or ABS pipe as follows:
 - 2" pipe allows vent runs up to 45 equivalent feet
 - 3" pipe allows vent runs up to 128 equivalent feet
- Supplied with PVC pipe and elbows to connect heat exchanger outlet to blower, including condensate elbow and drain
- PVC Vent Attenuation Assembly (VAA) supplied to help ensure extra-quiet operation

Side-Mounted Taps for Recirculating Systems

- Hot and cold "side taps" allow Force 90 to be used for "combination" systems for water heating plus space heating, radiant floor heating or other applications requiring a recirculating hot water loop
- Plugs for recirculating taps are factory installed

Intelli-Vent® Gas Control with Silicon Nitride Hot Surface Ignitor

- Premium-grade hot surface ignitor eliminates standing pilot
- Electronic circuitry provides superior system diagnostic capabilities plus extremely precise temperature control
- 180°F maximum temperature setting

Glasslined Tank with Two Magnesium Anode Rods

- Provides superior protection against corrosion
- Glass lining protects all "water side" tank surfaces plus inside of internal heat exchanger exposed to condensate

Low NOx Green Choice® Burner

- Reduces NOx emissions up to 33% and meets low NOx emission requirements of less than 40 ng/j

PEXAN™ Diffuser Dip Tube

- Helps reduce lime and sediment buildup, maximize hot water output
- PEXAN cross-link polymer withstands long-term exposure to temperatures up to 400°F

CSA Certified and ASME Rated T&P Relief Valve

Maximum Hydrostatic Working Pressure: 150 psi Compliance

- Design-certified by UL (Underwriters Laboratories) according to ANSI Z21.10.3-CSA4.3 standards governing storage-type water heaters
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1

Three-Year Limited Tank Warranty

- Consult written warranty shipped with water heater or contact State for complete warranty information

* Intelli-Vent is a registered trademark of the Emerson Electric Company

For more information on State® contact:
 State Water Heaters
 500 Tennessee Waltz Parkway, Ashland City, TN 37015
 800.365.0024 Toll-free USA
 www.statewaterheaters.com

SOLID.STATE.



WH-1

FORCE™ 90 90% EFFICIENT

Power Vent Commercial Gas Water Heaters

SPECIFICATIONS

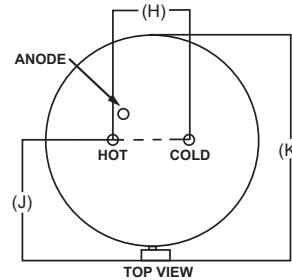
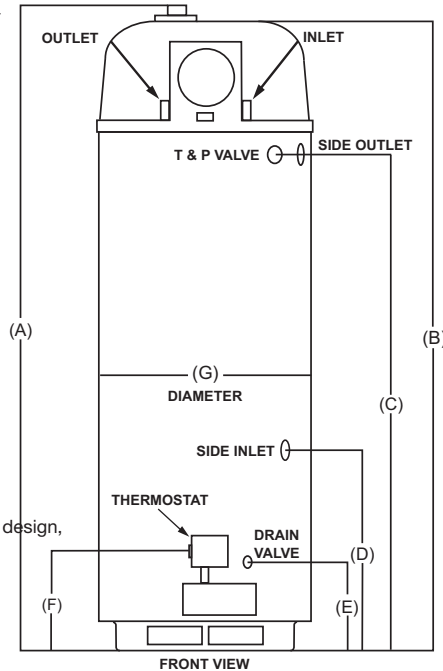
MODEL NUMBER	BTU INPUT PER HOUR	TANK SIZE GALLONS	RECOVERY – GALLONS PER HOUR AT DEGREE RISE			SHIPPING WEIGHT LBS.
			40°F	100°F	140°F	
			22°C	56°C	78°C	
SHE50 76NE	76,000	50	206	83	59	210

All models—Maximum Supply Pressure: 14 inches w.c. (3.48 kPa)
 Minimum Supply Pressure Natural Gas: 5.0 inches w.c. (1.24 kPa); Minimum Pressure must be maintained under both load and no-load (static and dynamic) conditions
 Not available in Propane gas

DIMENSIONS

SHE50 76NE	A	B	C	D	E	F	G	H	J	K
INCHES	70-5/8	68-1/4	52	21	9-1/8	12	22	8	15-3/4	27

Top inlet and outlet: 3/4" male NPT
 Side inlet and outlet: 3/4" female NPT
 Gas inlet: 1/2" NPT



* INSTALL IN ACCORDANCE WITH LOCAL CODES

Water heater(s) shall be of power vent design,

SUGGESTED SPECIFICATION

Natural gas water heater(s) shall be State Force 90 model SHE50 76NE, with 90% thermal efficiency, a storage capacity of 50 gallons, an input rating of 76,000 BTUs per hour, a recovery rating of 83 gallons per hour at 100°F rise and a maximum hydrostatic working pressure of 150 psi. This water heater is not available in Propane. Water heater(s) shall be of power vent design, using 2" or 3" PVC pipe for horizontal and/or vertical vent runs. Water heater(s) shall have: 1: Glasslined steel tank construction and a spiral-shaped heat exchanger placed entirely inside the tank, which shall be glasslined on the flue gas side to protect against acidic condensate. 2: An Intelli-Vent™ gas control system with silicon nitride hot surface ignitor. 3: A 3-year limited warranty against tank leaks. Water heater(s) shall meet the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1 and be design-certified by UL (Underwriters Laboratories) according to ANSI Z21.10.3-CSA 4.3 standards governing storage tank water heaters.

For complete information on limited warranties, consult written warranty, or contact the State Customer Care Center, 1-800-365-0024.

State Industries, Inc. reserves the right to make product changes or improvements without prior notice.

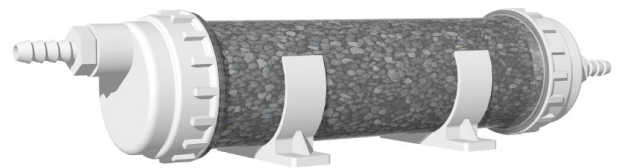
For more information on State® contact:
 State Water Heaters
 500 Tennessee Waltz Parkway, Ashland City, TN 37015
 800.365.0024 Toll-free USA
 www.statewaterheaters.com

SOLID.STATE.



**MODEL NC-1 'NeutraPal' CONDENSATE NEUTRALIZATION KIT**

The 'NeutraPal' is ideal for neutralizing condensate from condensing boilers and furnaces operating on natural gas or propane.



The condensate is acidic and has the potential to harm the environment and the sewer system. The NeutraPal will raise the pH of the condensate to a more neutral level before it is discharged to drain.

**FEATURES and BENEFITS**

- **1.6 Gal/hr (6.05l/hr)**
- *NeutraPal prevents acidic condensate from corroding drains and sewer systems*
- *Neutralized condensate is more environmentally friendly*
- *Fast and easy installation*
- *Helps maintain a neutral environment for bacteria in septic systems*
- *Low profile design for appliances with a near floor condensate drain*
- *All corrosion resistant materials*
- *Suitable for use on all types of Natural Gas and Propane appliances*
- *Includes initial charge of LipHter neutralizing agent*
- *Can be mounted in horizontal or vertical position (see installation instructions)*

* Check with the appliance manufacturer for condensate flowrate. As a guideline 400,000 BTU/hr at 93% efficiency will produce approximately 1.6 Gal/hr.



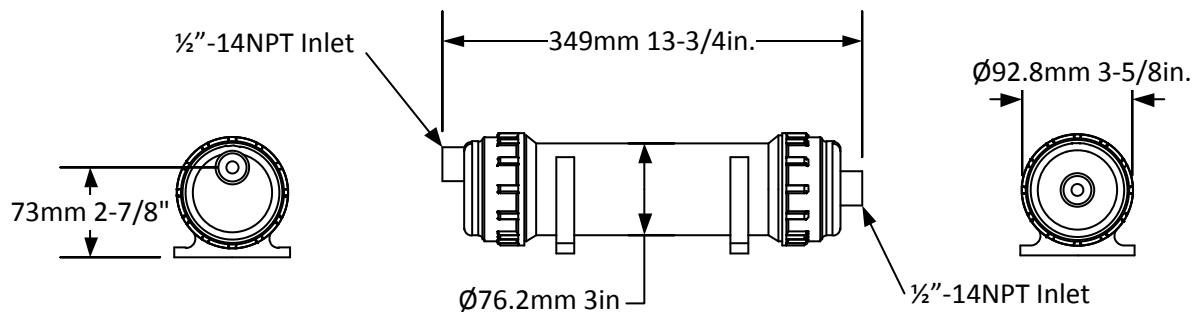
INDUSTRIES LIMITED

**NC-1 NEUTRALIZATION CAPSULE
TECHNICAL INFORMATION**

WEIGHT - 2 kg, 4.4 lbs.

SPECIFICATION

The condensate neutralization capsule shall be AXIOM INDUSTRIES LTD. model NC-1. System shall include 1 litre (0.26 U.S. gallon) capsule made from of corrosion resistant materials with two 3” fill/access openings, 3” inlet and outlet screen, ½”-14NPT threaded inlet, ½”-14NPT threaded outlet, three ½” NPT to ½” hose barb fittings, ½” barbed Y fitting, six hose clamps, 10 ft of 1/2” ID vinyl tubing, two base/wall mounting clamps.



ACCESSORIES

NM-1 – Replacement LipHter neutralization media



Project _____

Location _____

Consultant _____

Contractor _____

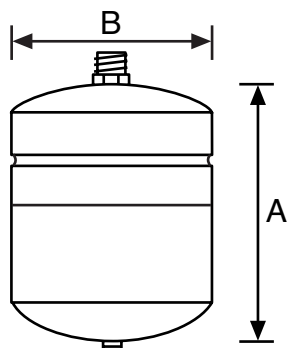
Unit Tag _____

Sales Agent _____



THERM-X-TROL®

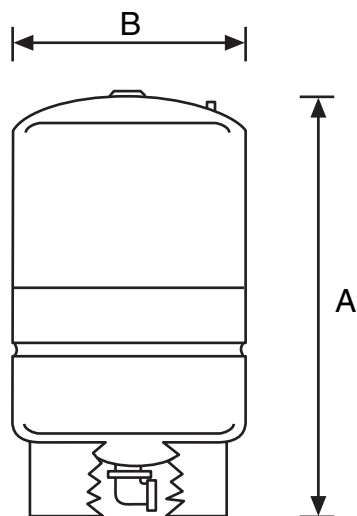
Thermal Expansion Absorbers, ST-Series (Non-ASME) 150 PSIG Working Pressure



In-Line Models

Model No.	Tank Vol.		Max. Accept. Factor	A Height		B Diameter		Sys. Conn. NPTM	Ship Wt.	
	Lit.	Gal.		cm	ins.	cm	ins.		kg	lbs.
ST-5	8	2.0	0.45	321	12 ⁵ / ₈	203	8	3/4	2.3	5
ST-8	12.1	3.2	0.59	381	15	229	9	3/4	3.2	7
ST-12	17	4.4	0.73	381	15	279	11	3/4	4.0	9

ST-5, ST-8, ST-12



Stand Models

Model No.	Tank Vol.		Max. Accept. Factor	A Height		B Diameter		Sys. Conn. NPTF	Ship Wt.	
	Lit.	Gal.		cm	ins.	cm	ins.		kg	lbs.
ST-25V	39	10.3	1.00	489	19 ¹ / ₄	391	15 ³ / ₈	3/4	10.4	23
ST-30V	53	14.0	0.81	605	23 ⁷ / ₈	391	15 ³ / ₈	3/4	11.3	23
ST-42V	76	20.0	0.57	802	31 ⁵ / ₈	391	15 ³ / ₈	3/4	15.0	33
ST-60V	129	34.0	1.00	913	29 ³ / ₈	559	22	1 ¹ / ₄	27.7	61
ST-80V	167	44.0	0.77	913	36	559	22	1 ¹ / ₄	31.3	69
ST-180V	235	62.0	0.55	1186	46 ³ / ₄	559	22	1 ¹ / ₄	41.7	92
ST-200V	306	81.0	0.41	1432	56 ³ / ₈	559	22	1 ¹ / ₄	47.0	103
ST-210V	326	86.0	0.54	1199	47 ¹ / ₄	660	26	1 ¹ / ₄	55.8	123

Maximum Operating Conditions

Operating Temperature	200°F (93°C)
Working Pressure	150 PSIG (10.5 bar)

Specifications

Description	Standard Construction
Standard Factory Pre-charge	40 PSIG (2.8 bar)
System Connection	Stainless Steel
Diaphragm	Butyl
Liner Material	Polypropylene

All dimensions and weights are approximate.
Complies with Low Lead Plumbing Law

ST-25V through ST-210V



Job Name _____
 Location _____

 Engineer _____

Contractor _____
 Contractor P.O. No. _____
 Sales Representative _____
 Model No. Ordered _____

RCP-1



WILO Z-15 Submittal

Z-15 BN5, Z-15 BS5, Z-15 BS7

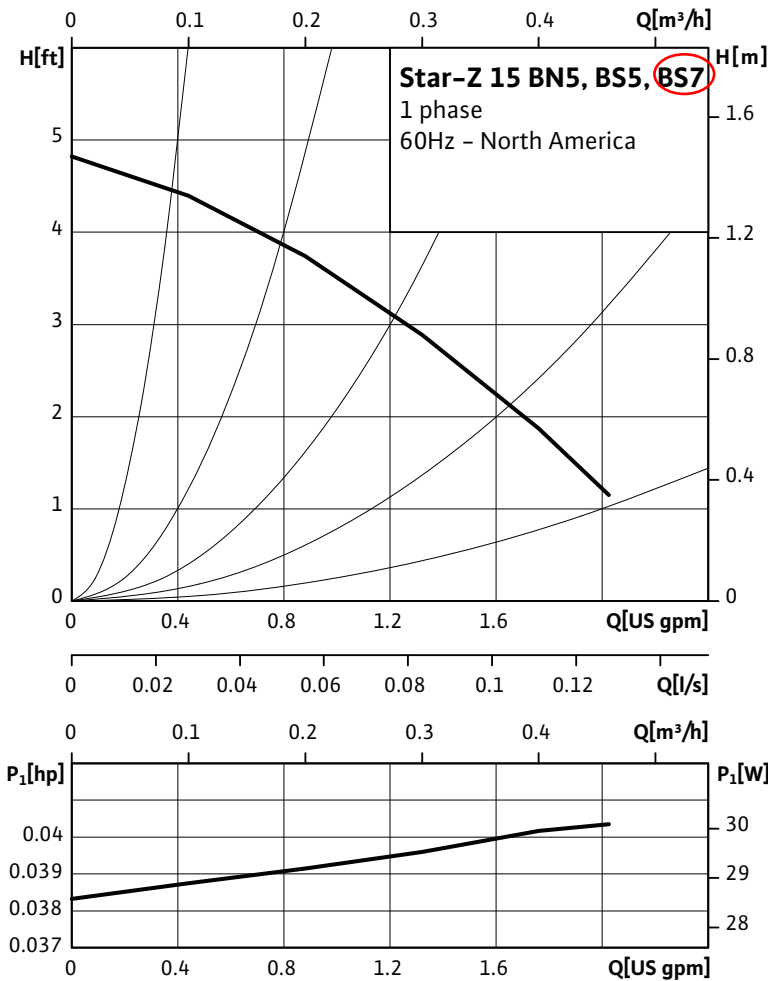


Pumpen Intelligenz.

Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	Head	Hp	Phase	Volt	RPM
				1/20	1	115	3100

$\Delta p-v$ (variable)



Applications

- Max Temp: 68°F to 150°F (20°C to 65°C)
- Max Ambient Temp: 105°F (40°C)
- Max Working Press: 145 PSI (10 Bar)
- Fluids: Domestic Hot Water
Heating Water
Water/Glycol up to 50%

Materials of Construction

- Impeller: Plastic PPE (Noryl)
- Shaft: Stainless Steel (X90 CrMo18)
- Volute: Ecobross
- Bearing: Epoxy-impregnated Carbon



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Bay 7-2915 10th Ave. NE
Calgary, Alberta T2A 5L4
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RCP-1



WILO Z-15 Submittal

Z-15 BN5, Z-15 BS5, Z-15 BS7



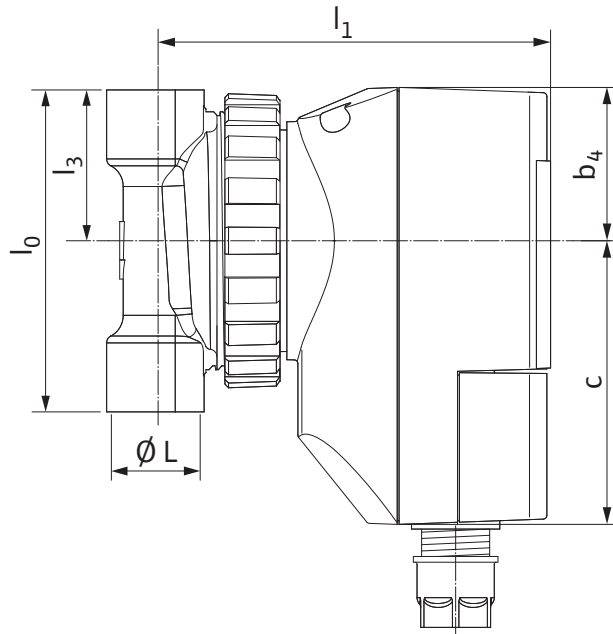
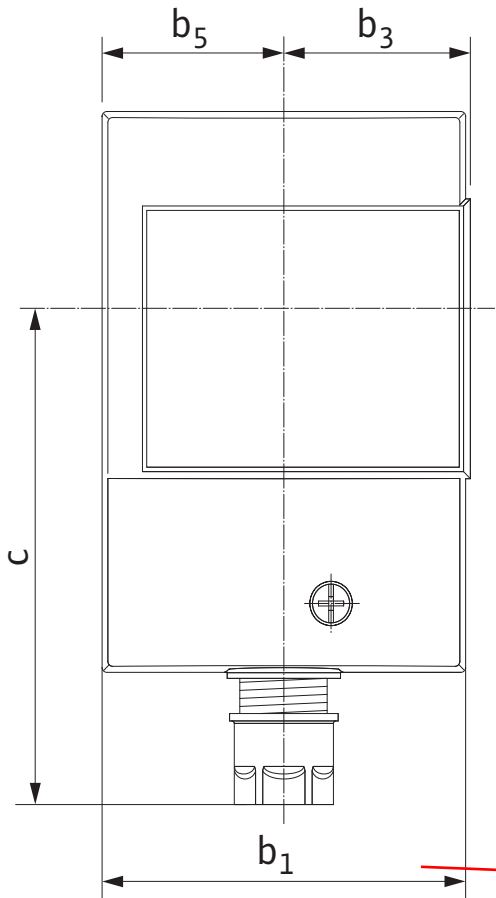
Pumpen Intelligenz.

Dimensions, weights

	Pipe Connection		Pump Dimensions							
	Ø L		l ₀		l ₁		l ₃		b ₁	
	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]
Z-15 BN5	½ FNPT	15	3⅞	79	4 ³ / ₁₆	107	1 ⁷ / ₁₆	37	3 ¹ / ₁₆	77
Z-15 BS5	½ SWT	16	3⅞	79	4 ³ / ₁₆	107	1 ⁷ / ₁₆	37	3 ¹ / ₁₆	77
Z-15 BS7	¾ SWT	22	3⅞	79	4 ³ / ₁₆	107	1 ⁷ / ₁₆	37	3 ¹ / ₁₆	77

Dimensions, weights (continued)

	Pump Dimensions										Weight Approx. net	
	b ₃		b ₄		b ₅		c		d		[lbs]	[kg]
	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]		
Z-15 BN5	1 ⁹ / ₁₆	40	1 ⁹ / ₁₆	40	1½	39	2 ¹⁵ / ₁₆	74	4	101	4.10	1.86
Z-15 BS5	1 ⁹ / ₁₆	40	1 ⁹ / ₁₆	40	1½	39	2 ¹⁵ / ₁₆	74	4	101	4.03	1.83
Z-15 BS7	1 ⁹ / ₁₆	40	1 ⁹ / ₁₆	40	1½	39	2 ¹⁵ / ₁₆	74	4	101	4.14	1.88



Motor Data					
	Speed	Power Consumption		Current 1~115V	Motor Protection
	[rpm]	[hp]	[W]	[A]	
Z-15 BN5	3100	0.043	32	0.77	integrated
Z-15 BS5	3100	0.043	32	0.77	integrated
Z-15 BS7	3100	0.043	32	0.77	integrated

Note: Included with the pump is a three-pronged 115V line cord. The terminal box should not be opened for electrical connection.

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Fax: (403) 277-9456

www.WILO-CDN.com

RCP-1

WILO Z-15

Domestic Hot Water Re-Circulation

The Wilo Z-15 is the pump of choice for instant hot water! Primarily used in secondary hot water systems, the Z-15 uses an NSF/ANSI 61 approved, lead-free bronze volute. With an optional timer, and magnetic drive design, your energy savings are maximized. Using the Jet Connect fitting package included with the circulator, installation is a breeze no matter what type of pipe connection you need!

Practical? We call it *Pumpen Intelligenz*.

WILO Z-15

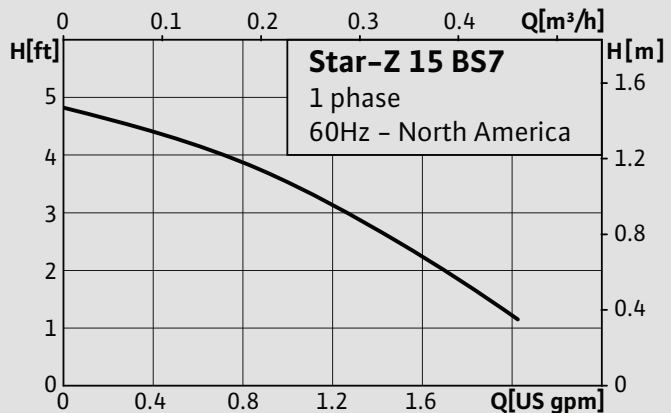


NSF/ANSI 61



Wilo Z-15
DHW Re-Circulation Pump

- Compact Design
- NSF/ANSI 61 approved, lead-free bronze volute
- 115v power cord included
- Magnetic drive design
- Jet Connect fitting pack included
- Optional digital timer available
- Conserves energy and water
- Safe and quick installation



Includes Jet Connect Fitting Pack



- Two (2) 1/2" SW x FNPT
- Two (2) 3/4" SW x FNPT
- Two (2) 3/4" SW x 1/2" SW Reducing Bushings
- Two (2) 3/4" Street Hub Copper Unions

Never miss your connection again! with



Optional Digital Timer Available!



timer sold separately

- Weekly digital timer
- Large LCD display
- Conserve energy



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Melrose Park, IL
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Email: info@wilo-usa.com



Pumpen Intelligenz.