

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
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Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 4/1/2023
Return Request: 4/10/2023
Project: New Dormitories – Bldg. 6
Supplier: Little Rock Winnelson
Manufacturer: Various
Submittal: Commercial Lavatories
Submittal Number: 22 42 16.13-01
Drawing # and Installation: Plumbing Drawings

ARCHITECT

Stocks Mann Architects
401 W. Capitol, Suite 402
Little Rock, AR 72201
501-370-9207

ENGINEER

Bernhard TME
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Little Rock, AR 72202
501-666-6776

GENERAL CONTRACTOR

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10623 Maumelle Blvd.
N. Little Rock, AR 72113
501-225-6699

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

*Per PR-02

CSUSA PROJECT NO.

22-102

jon@comfortar.com

ALESSI KEYES CONSTRUCTION
REVIEWED FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
Charley Dawson 4/10/2023

L-1 LAVATORY

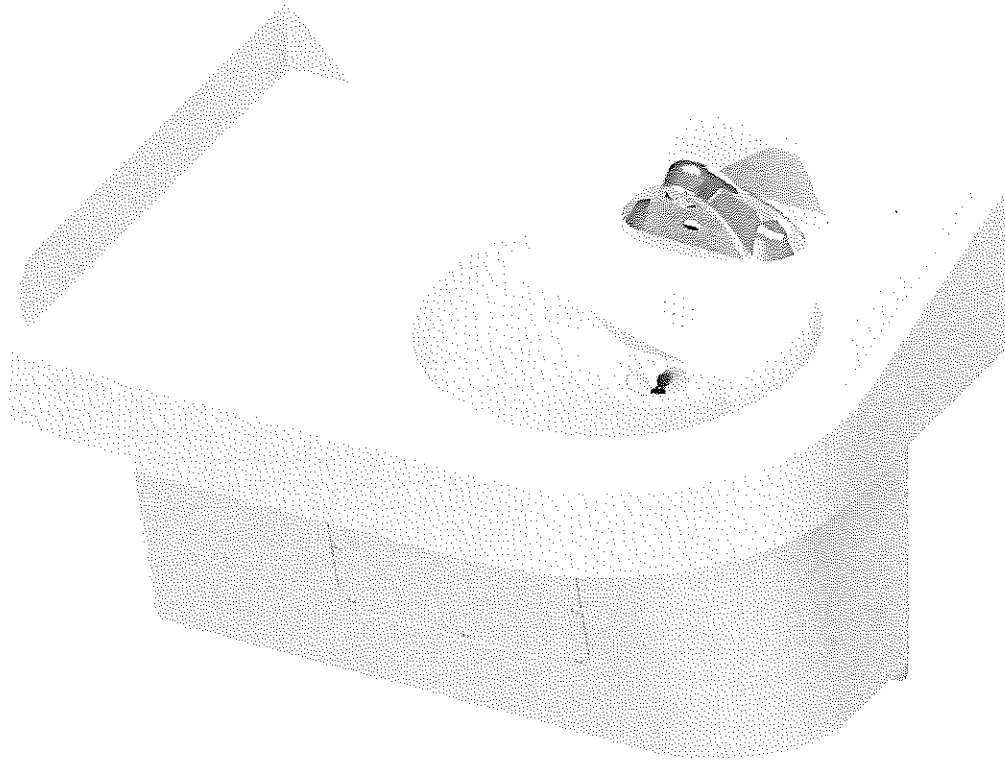
L-1 LAVATORY



Whitehall Manufacturing®
Manufacturer of Healthcare and Rehabilitation Products since 1946

Ligature Resistant Corterra™ Corner Basin ADA Compliant

Model WH3776



• Patented D840,523

WH3776L-WH3374L

INSTALLATION, OPERATIONS AND MAINTENANCE MANUAL



IMPORTANT

Important: Some options may slightly alter installation. To ensure proper installation review the Manual thoroughly and verify rough-ins before beginning any work. File this Manual with the owner or maintenance personnel upon completion of installation.

Industry standard wall backing, for wall hung fixtures, is required. Installer provided wall anchors and wall anchoring hardware must be appropriate for wall construction.

ANSI, UFAS or ADA compliance is subject to the interpretation and requirements of the local code authority and is the responsibility of the installer for verification.

Single Temp Valve Assembly: Recommended working water pressure is 30 PSI (2.07 bars) minimum to 100 PSI (6.89 bars) maximum. Maximum temperature is 130°F (54.4°C). Maximum outlet temperature recommended is 105°F (40.6°C). Valve assembly must be drained prior to being subjected to freezing temperatures. A checkstop is provided with this valve assembly.

T/P Mixing Valve Assembly: Recommended working water pressure is 30 PSI (2.07 bars) minimum to 100 PSI (6.89 bars) maximum. Maximum hot water temperature is 180°F (82°C). Temperature adjustment range is 85°F-115°F (29°C-46°C). Minimum hot water supply temperature must be 5°F (3°C) above desired set temperature. Valve assembly must be drained prior to being subjected to freezing temperatures. The valve assembly has checks integral to the inlets however, angle stops are to be provided by the installer.

Prior to installation, supply lines must be flushed of all foreign material such as pipe dope, chips, or solder. Debris or foreign material in water supply may damage valve.

Teflon tape is recommended on threaded connections where applicable to reduce the possibility of leaks.

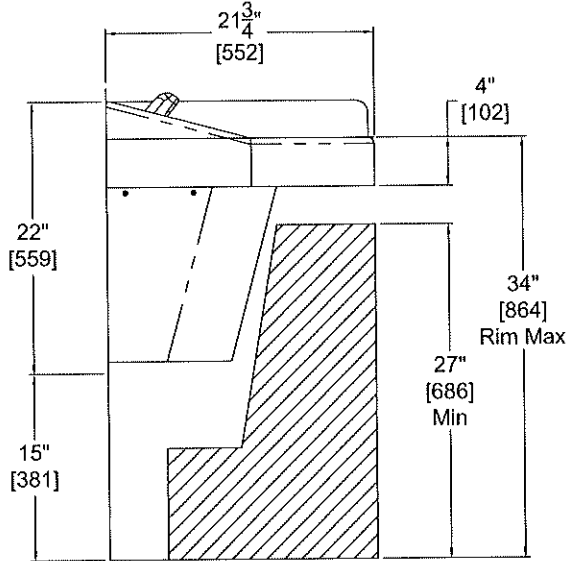
Provide 110-120 VAC/60Hz/3A (MAX) electrical receptacle for factory supplied 120VAC/9VDC, 100mA plug-in transformer.

NOTE: Receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per N.E.C. (National Electrical Code).

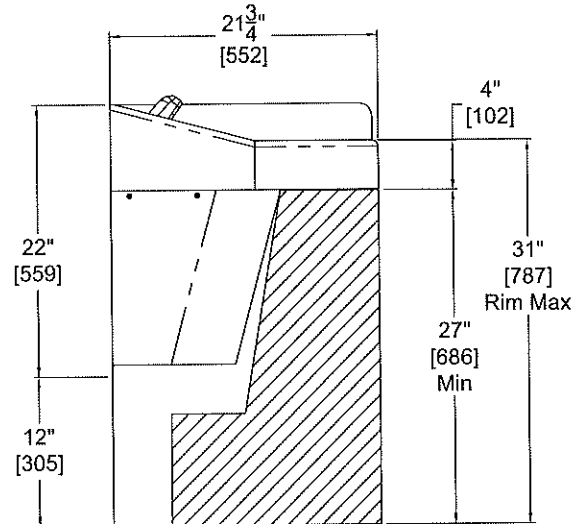
Upon receiving, verify count and inspect packaging for obvious signs of damage or missing containers. If there are any issues upon receiving make note on bill of lading and report to carrier and manufacturer promptly. Remove fixture assemblies from packaging and ensure all parts are present before beginning installation. Do not discard packaging until all parts have been accounted for. Refer to Acorn terms, conditions of sales and warranty for more information.



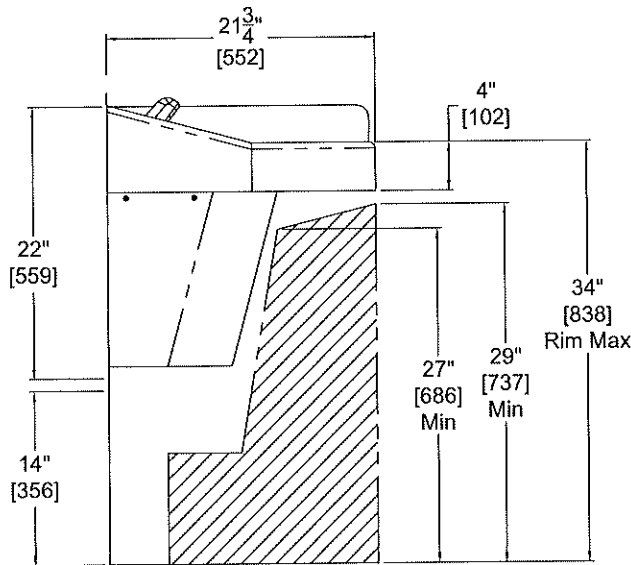
ACCESSIBILITY OVERVIEW



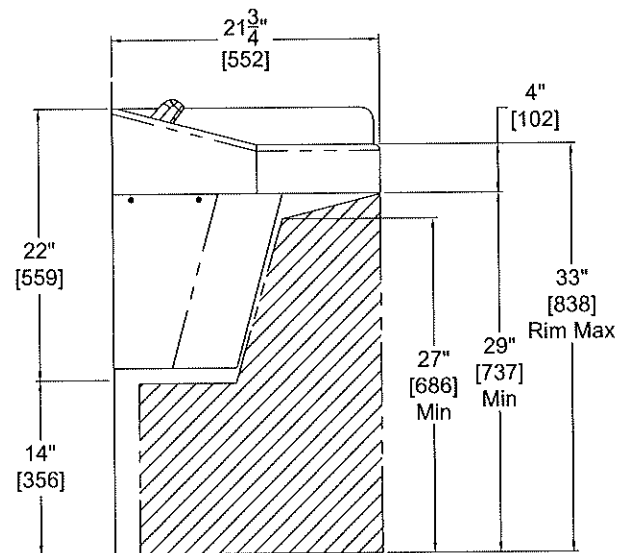
**ADA
Adult**



**ADA ages
6 thru 12**



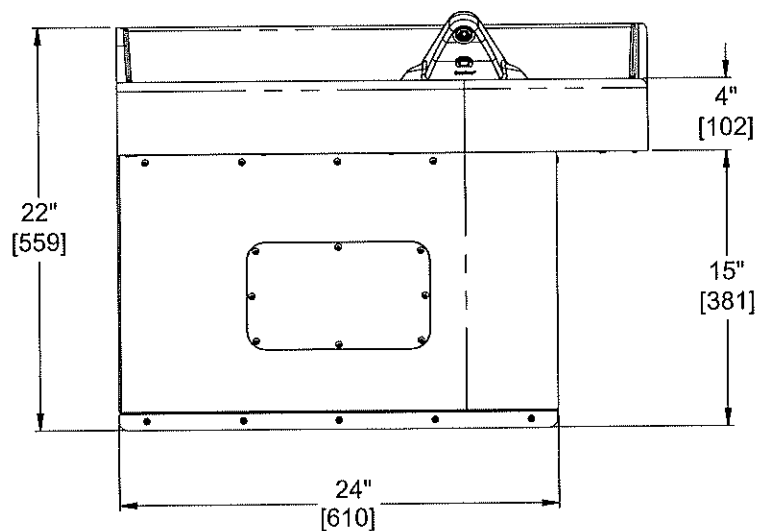
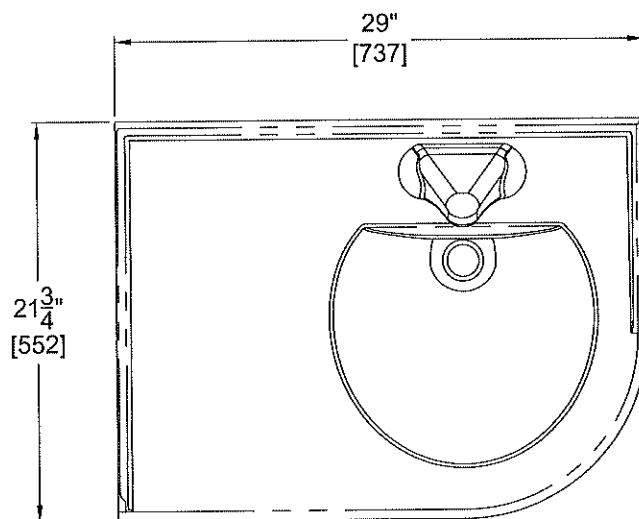
**CBC
(California Building Code)**



**OBC
(Ontario Building Code)**



DIMENSIONAL DATA (Left Corner Shown)





Instructions for Operation and Care of Best-Care WH3776

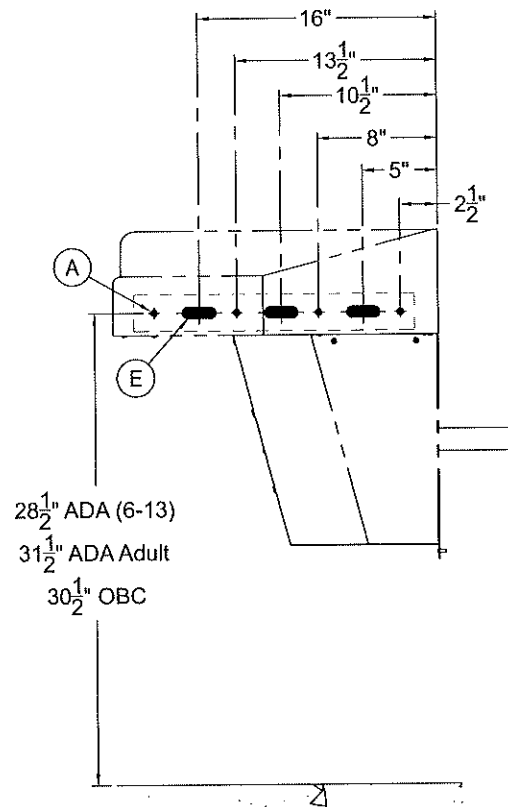
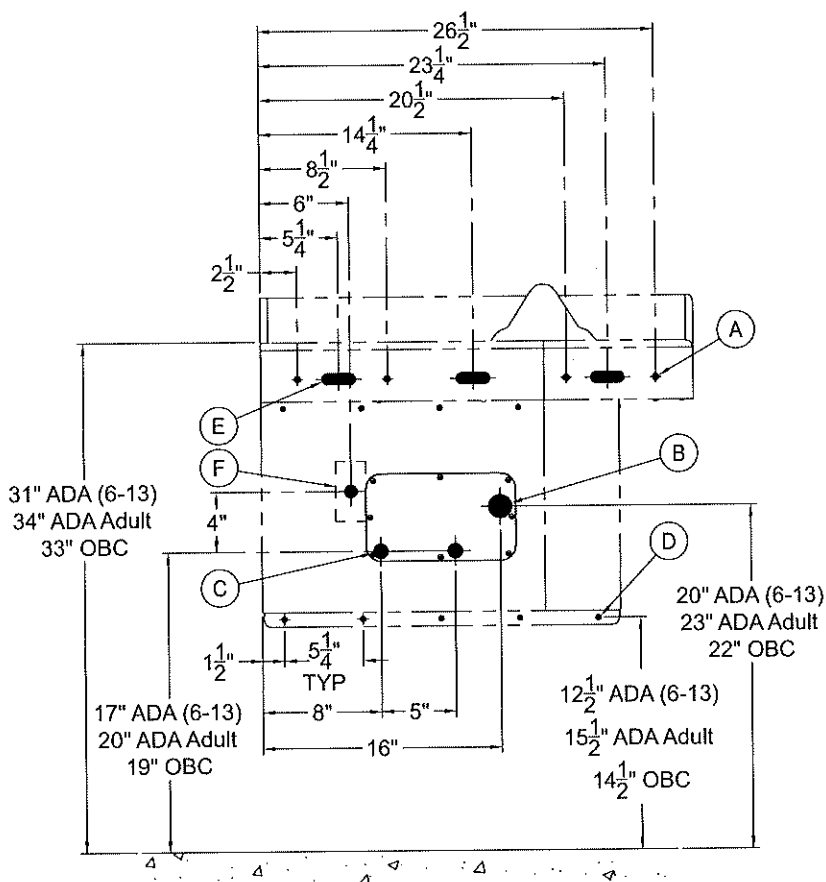
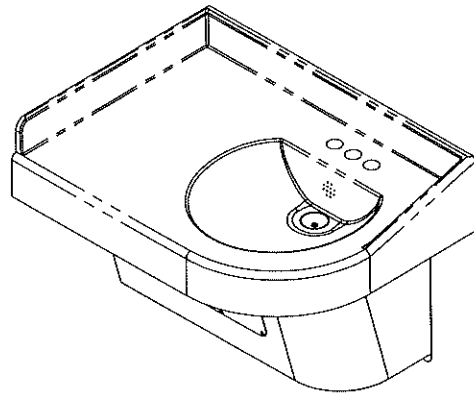
Required Items for Installation - Not Supplied

- ✂ Chalk Line
- ✂ Hammer
- ✂ Carpenters Level
- ✂ 1/2" NPS Outlet Angle Stops
- ✂ 1/2" NPS Flexible Supply Hose (For -MXTP Valves Only)
- ✂ 7/16" Hex Wrench
- ✂ Plumbers Putty
- ✂ Teflon Tape
- ✂ Fixture Wall Anchors and Anchoring Hardware (and Appropriate Tools) - For 3/8" (9 Places) & 1/4" Punching (3 Places)
- ✂ Driver For 1/4" Shank Bit - For Center Reject Bit
- ✂ 1/4" Slotted Tip Screwdriver For Metering Adjustment

ROUGH-IN DIMENSIONS (Left Corner)



NOTE: Fixture Weight is approx. 170 lbs.
For Compatible In-Wall Support Carriers refer to J.R. Smith Model # 0816-M31



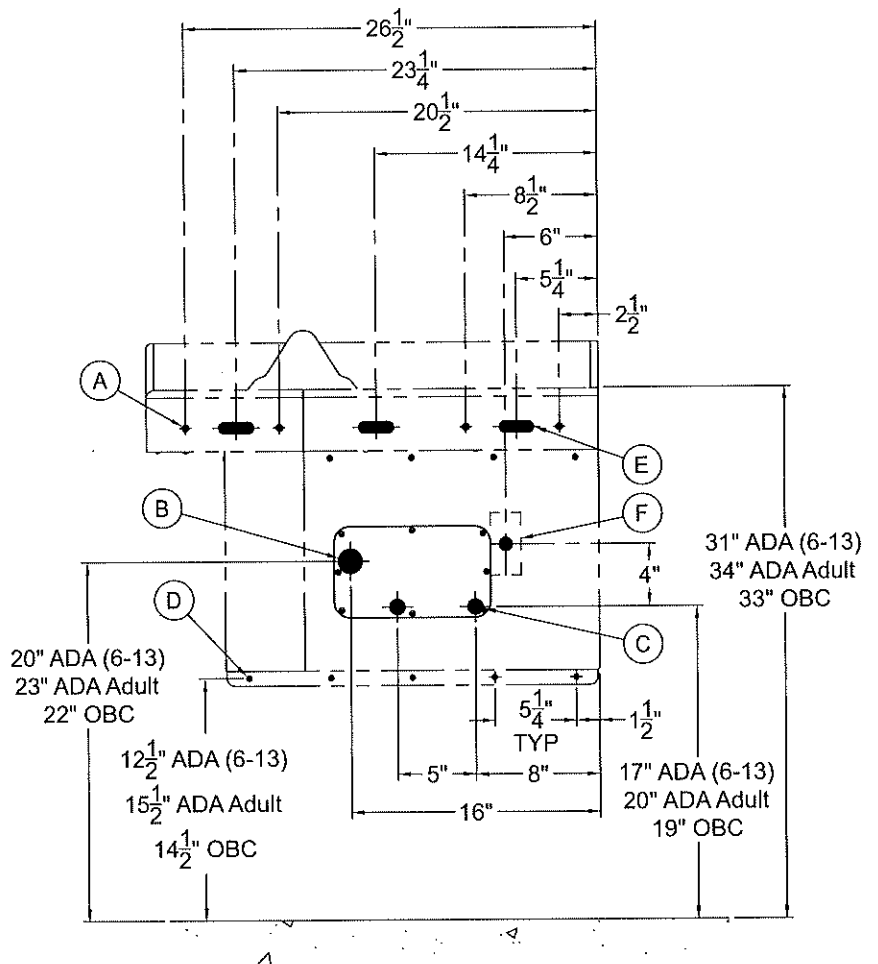
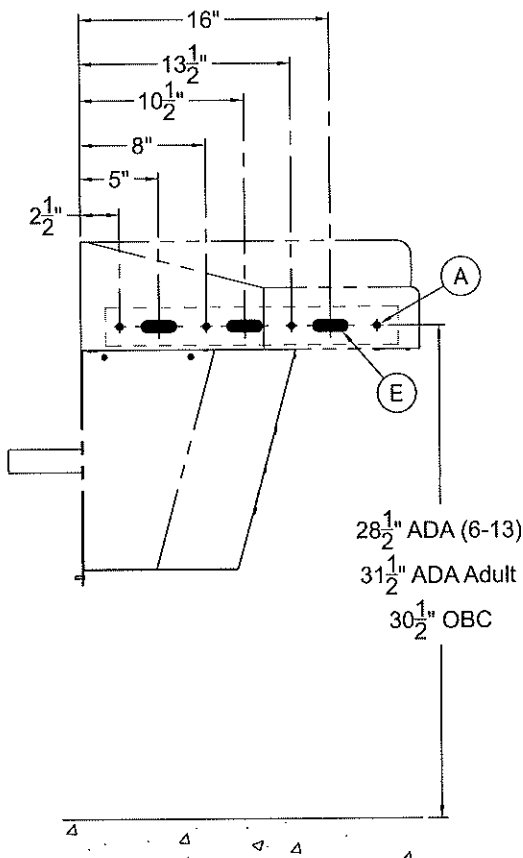
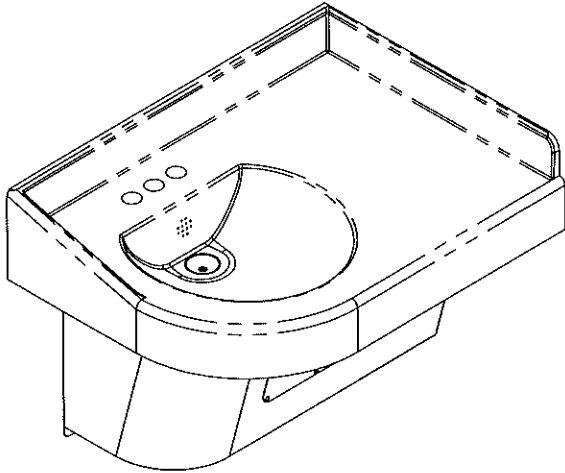
- (A) (8) 7/16" Diameter Mountings Holes provided. Fasteners and Wall Anchors are provided by others. Installer is to use Industry Standards of Best Practice to suit wall type and construction, weight of fixture and application.
- (B) 1-1/2" O.D. Tube Lavy Waste Outlet For Compression Joint.
- (C) 1/2" NPS Hot & Cold Angle Stops (By Others).
- (D) (5) Ø1/4" Mounting holes.
- (E) (6) Ø3/4" x 2-1/4" Slots for optional 5/8" x 6" Long UNC Carrier Support Studs.
- (F) For Optional Electronic Faucet Provide 120VAC, 60HZ, 3A (MAX) GFCI Protected, Electrical Receptacle.



ROUGH-IN DIMENSIONS (Right Corner)



NOTE: Fixture Weight is approx. 170 lbs.
For Compatible In-Wall Support Carriers
refer to J.R. Smith Model # 0816-M31



- (A) (8) 7/16" Diameter Mountings Holes provided. Fasteners and Wall Anchors are provided by others. Installer is to use Industry Standards of Best Practice to suit wall type and construction, weight of fixture and application.
- (B) 1-1/2" O.D. Tube Lavy Waste Outlet For Compression Joint.
- (C) 1/2" NPS Hot & Cold Angle Stops (By Others).
- (D) (5) Ø1/4" Mounting holes.
- (E) (6) Ø3/4" x 2-1/4" Slots for optional 5/8" x 6" Long UNC Carrier Support Studs.
- (F) For Optional Electronic Faucet Provide 120VAC, 60HZ, 3A (MAX) GFCI Protected, Electrical Receptacle.

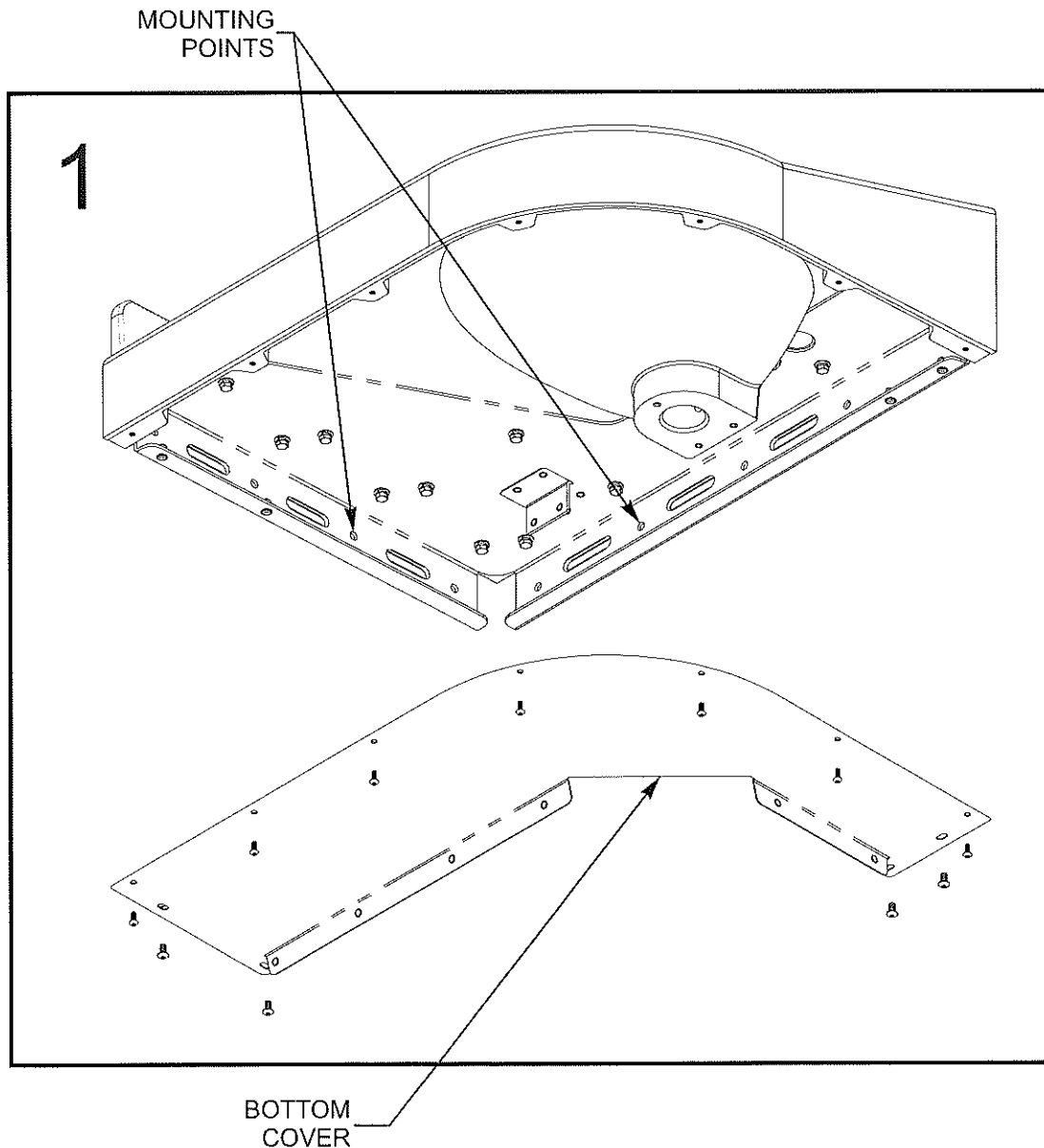


FIXTURE ANCHORING

- 1 Disassemble Bottom Cover from Deck Assembly by removing #10-32 x 1/2" (Qty. 7) and 1/4-20 x 1/2" (Qty. 4) Hex Button Head Center Reject Screw. Locate and anchor the basin to the finished wall using mounting hardware by others, refer to dimensional data for rough-in information. Assemble waste assembly and make appropriate connections. Test for leaks for usage.



HINT: It may be advantageous to install Faucet prior to wall mounting.

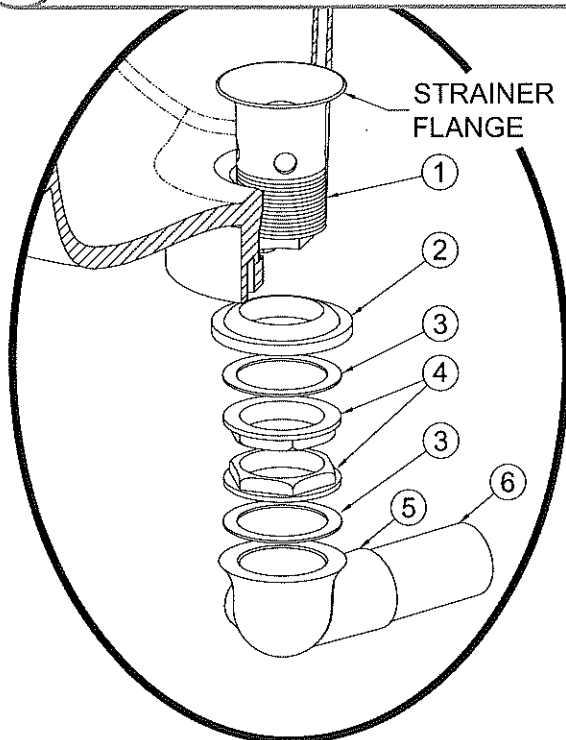




WASTE ASSEMBLY



HINT: Teflon tape is recommended on all Threaded Waste and Supply Connections.

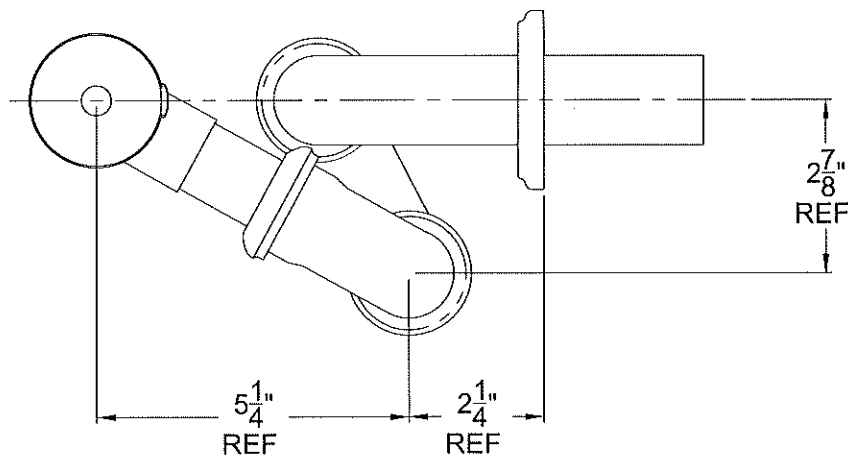


2 Install Strainer to Basin using plumbers putty on underside of grid strainer flange. From beneath Basin, assemble Gasket, Washer and Jam Nut as shown to Strainer and tighten securely. Add Close Elbow to Strainer Assembly as indicated.

- ① Strainer w/ 1-1/2"-16 UNE Threads
- ② Rubber Gasket
- ③ Flat Fiber Washer
- ④ 1-1/2" -16 UNI Rough Chrome Brass Jam Nut
- ⑤ 1-1/2"-16 x 1-1/4" UNI Close Ell with 3/8" NPT Clean-Out Plug
- ⑥ Waste Outlet Connection



NOTE: Waste Assembly may require field cutting and fitting by the installer.



3 Assemble waste piping using teflon tape on all threaded connections and make up waste connections to 1-1/2" P-trap.

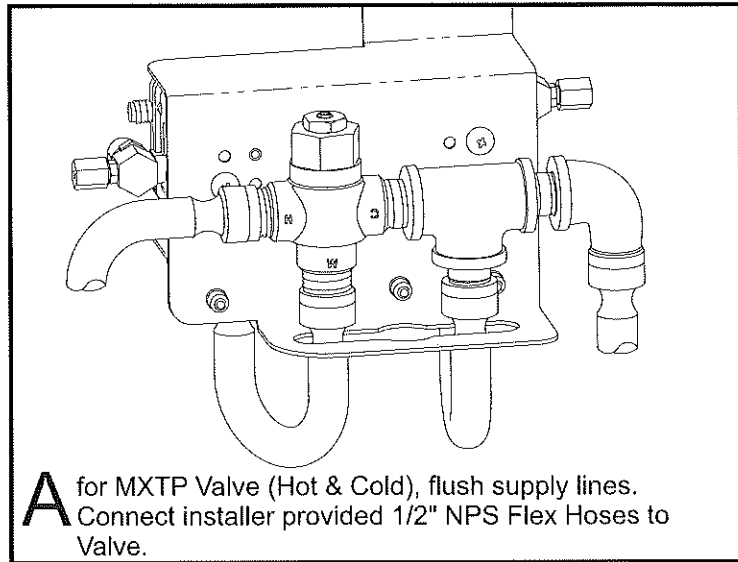


VALVE INSTALLATION

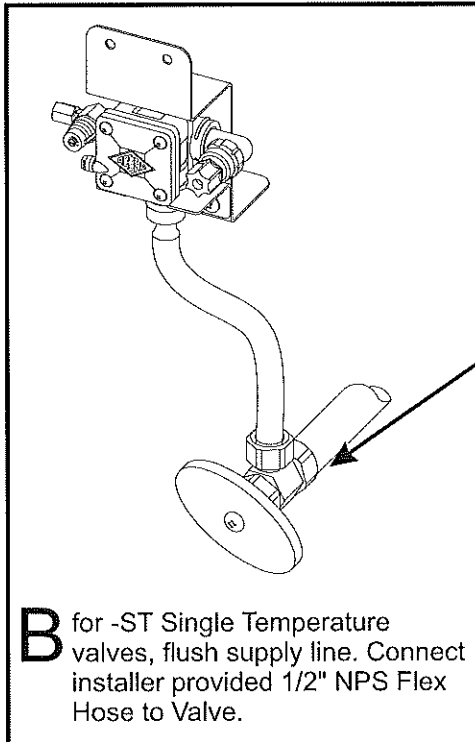
! IMPORTANT

Before making up the supply connections, the supply lines must be flushed of all foreign material such as pipe dope, pipe chips, solder, sand, etc.

DUAL TEMP. WITH -MXTP VALVE



-03-M SINGLE TEMPERATURE METERING VALVE



Supply Shut-Off Valve shown is provided by others.



VALVE INSTALLATION & ADJUSTMENT

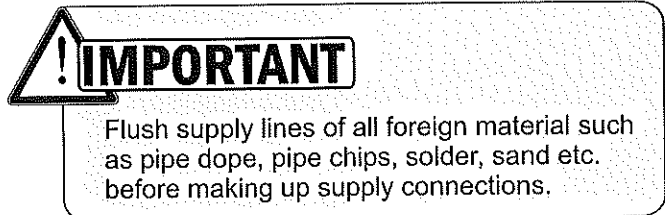
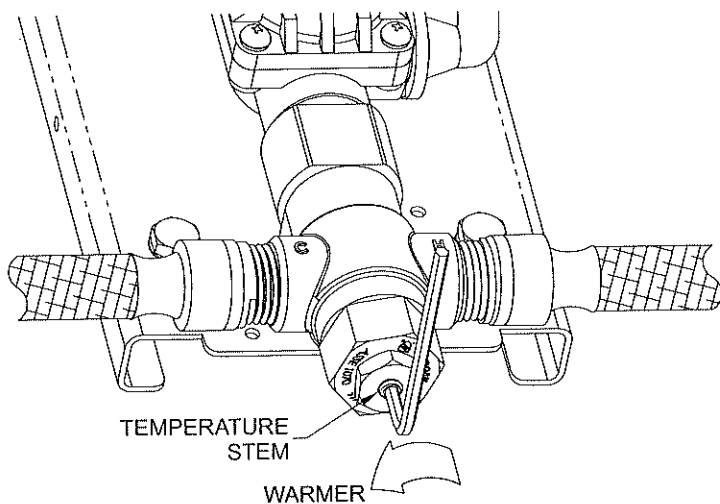
Valve Assembly Installation:

NOTE: Installation should be in accordance with accepted plumbing practices.

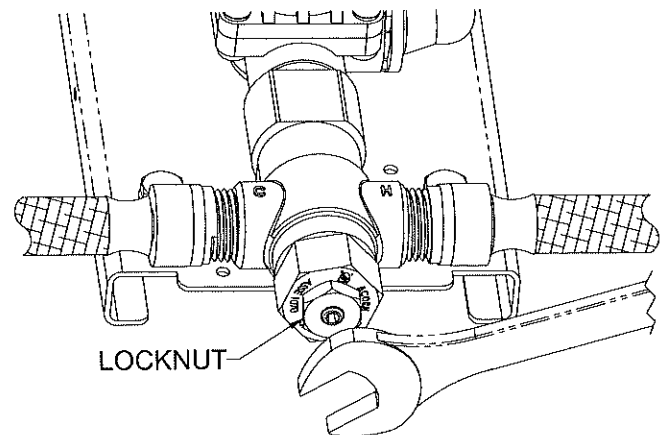
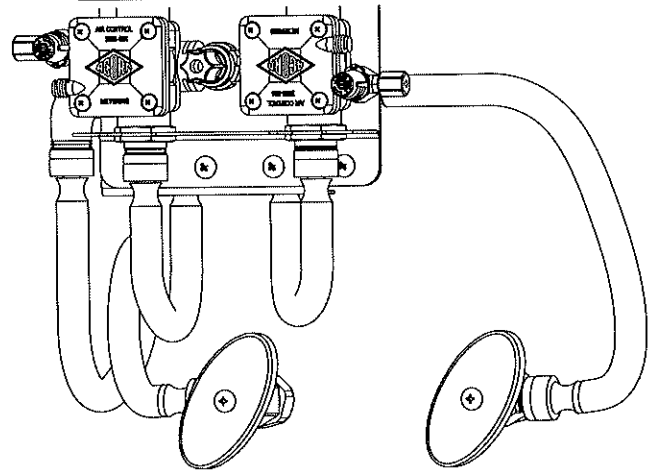
- 1) Locate suitable place for mounting the Valve Assembly. Valve Assembly should be accessible for service and adjustment and as close to the point-of-use as possible. Wall Anchors and Anchoring Hardware are by others.
- 2) Connect hot and cold water to Supply Valve using 1/2" NPT connections.
- 3) Connect outlet of Tempering Valve to Spout(s) using 1/4" O.D. Tube connections provided.
- 4) Turn on hot and cold water supplies. If any leaks are observed, hand-tighten connections as necessary to stop leaks before proceeding.
- 5) Turn on fixture and allow water to flow for 2 minutes. Measure water temperature at outlet. If water is not at desired temperature, adjust as necessary.



HINT: Angle Stops are recommended and is the responsibility of the installer.



Flush supply lines of all foreign material such as pipe dope, pipe chips, solder, sand etc. before making up supply connections.



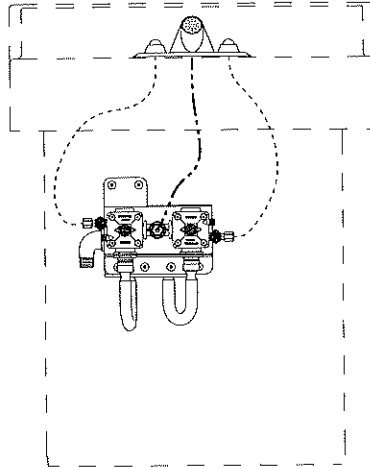
Temperature Adjustment:

NOTE: Factory set temperature is 105° F

- 1) Loosen Locknut.
- 2) Turn on fixture and run water for at least 2 minutes. Allow supply temperature to stabilize.
- 3) Turn temperature stem counter-clockwise for hotter or clockwise for colder outlet temperature.
- 4) Tighten Locknut to prevent accidental or unauthorized temperature adjustment.
- 5) Re-check outlet temperature.

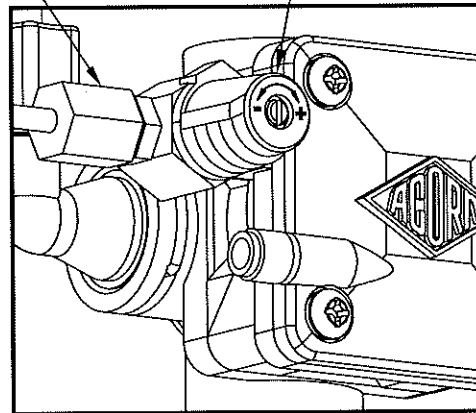


VALVE CONNECTIONS



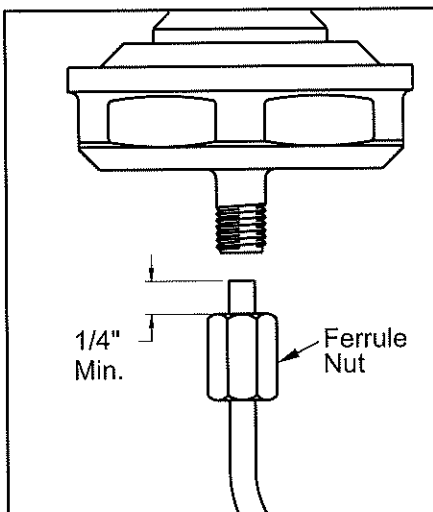
----- 1/8" O.D. AIR TUBING
 ————— 1/4" O.D. WATER TUBING

Ferrule Nut
 Timing Screw
 To adjust timing, turn Timing Screw



! IMPORTANT

Leave a minimum 1/4" of Polyethylene Tubing through the Ferrule Nut on the Pushbutton Assembly. This is necessary to ensure proper tubing connection.



Turn Timing Screw clockwise to increase timing.

! IMPORTANT

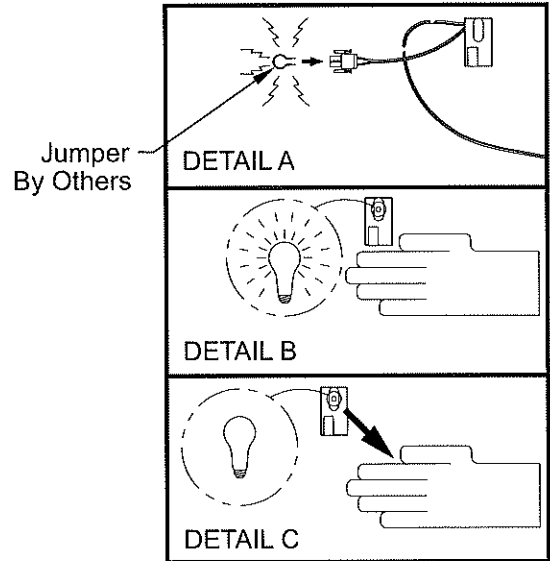
Do not over-tighten ferrule nuts.



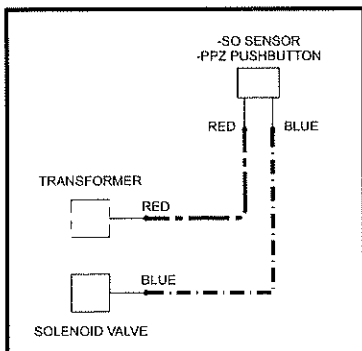
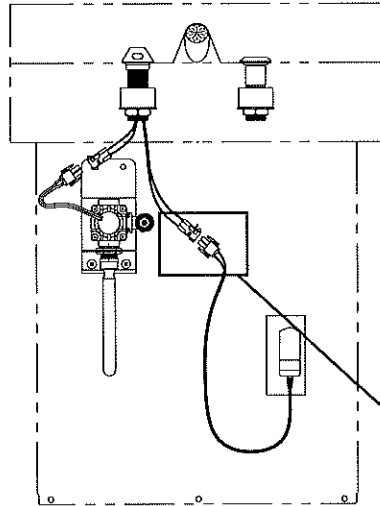
SENSOR OPERATION & CONNECTIONS

-SO Sensor Operation Range Adjustment

1. Make sure Power Supply is disconnected from Sensor and make short circuit on red wires. See DETAIL A.
2. Connect Power Supply to Sensor. Red light should be flashing.
3. Move hand in front of sensor to distance of 2" to 4" within 5 seconds and wait until red light flashes quickly.
4. Move hand to desired sensing distance. See DETAIL B.
5. Hold hand at desired sensing distance until red light stops flashing and Solenoid activates. See DETAIL C.

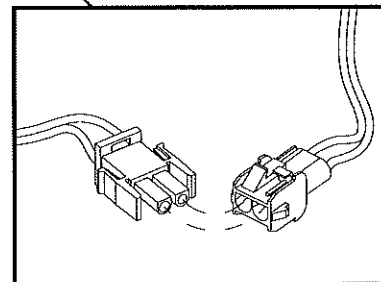


-SO Sensor Operation or -PPZ Programmable Piezo Pushbutton



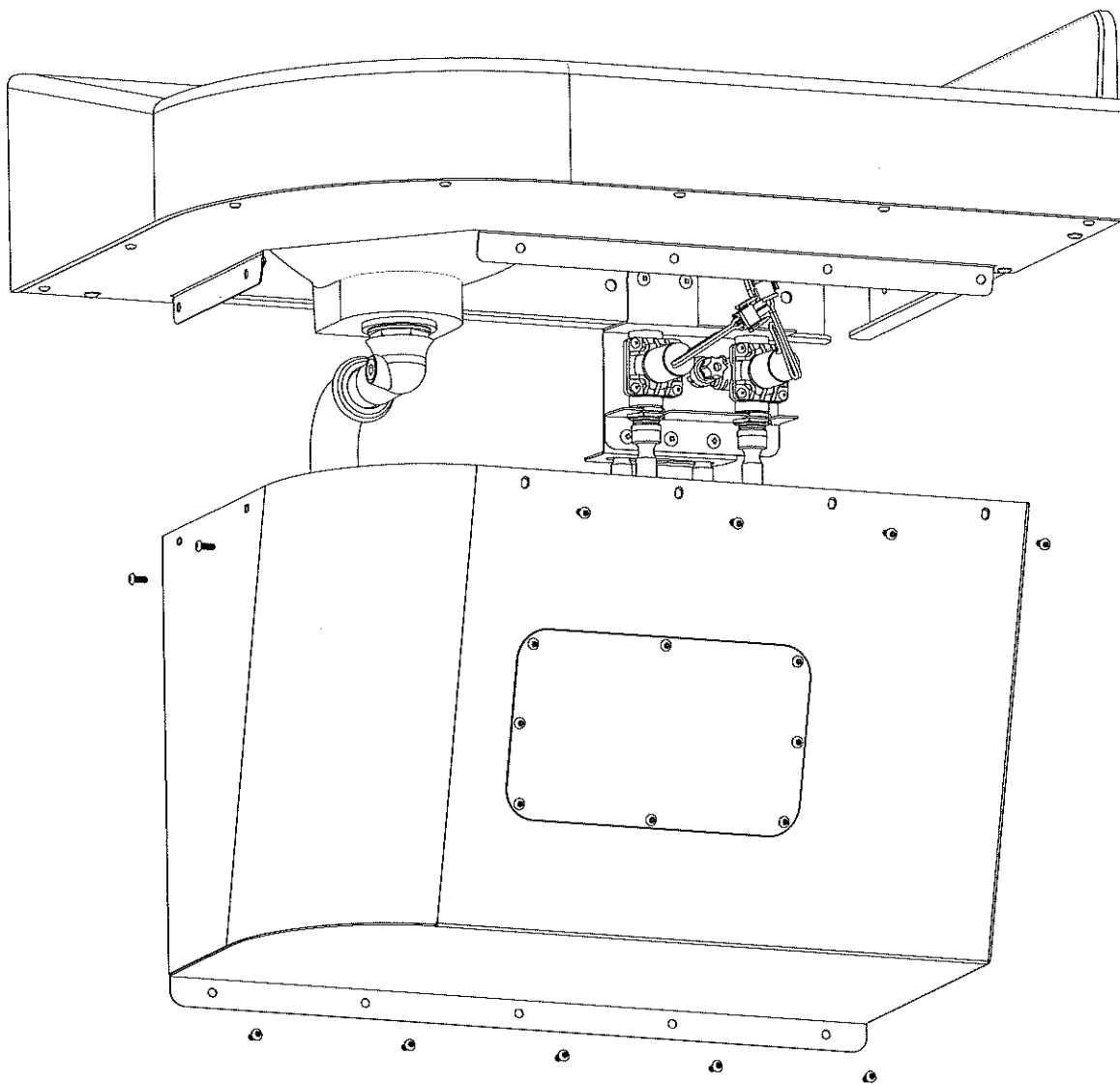
! IMPORTANT

Transformer must be plugged into a GFI protected circuit. Fixture must be earth grounded per N.E.C. or applicable codes.





P-TRAP COVER INSTALLATION



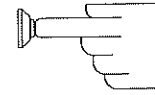
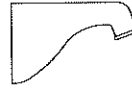
Install P-Trap Cover using #10-32 UNF x 1/2" Center Reject Hex Head Screws provided.
Secure bottom of P-Trap Cover to wall with Anchoring Hardware (by others).



TROUBLESHOOTING FOR OPTIONAL PUSHBUTTON OPERATED VALVES

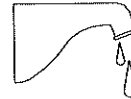
Normal Valve Function: Pushbutton Operated Valve has an adjustable flow time from 5 to 60 seconds.

CONDITION: WATER DOES NOT FLOW



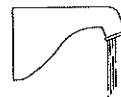
<i>Probable Cause</i>	<i>Solution</i>
Water main closed	Open water main
Checkstops closed	Open checkstops
Debris or scale in Checkstop Strainer	Remove Checkstop Strainer and clean
Air leaks from 1/8" O.D. Tubing or Fittings	Replace damaged Tubing or Fitting
Pushbutton Air Diaphragm leaks	Replace Pushbutton Air Diaphragm
Servomotor Diaphragm center hole is blocked	Remove blockage
Servomotor Upper Diaphragm is damaged	Replace Servomotor Upper Diaphragm
Low or no water pressure at supplies	Increase water pressure to 30 PSI minimum

CONDITION: WATER DRIPS, WON'T SHUT OFF



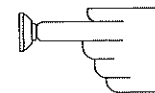
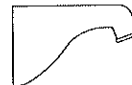
<i>Probable Cause</i>	<i>Solution</i>
Servomotor Diaphragm offset hole is blocked	Remove blockage
Servomotor Seat is damaged	Replace Servomotor seat
Servomotor Plate or Diaphragm is obstructed	Remove cause of obstruction
Servomotor Timer Assembly is damaged	Replace Servomotor Timer assembly

CONDITION: REDUCED WATER FLOW



<i>Probable Cause</i>	<i>Solution</i>
Valve Riser Tubing is crimped	Straighten Valve Riser Tubing
Debris or scale in Checkstop Strainer	Remove Checkstop Strainer and clean
Blockage in Valve Flow Control	Remove blockage
Low water pressure at supplies	Increase water pressure to 30 PSI minimum
Lime deposits in hot water pipes	Remove lime deposits with appropriate cleaning solution

CONDITION: PREMATURE WATER SHUT OFF



<i>Probable Cause</i>	<i>Solution</i>
Air leaks from 1/8" O.D. Tubing or Fittings	Replace damaged Tubing or Fitting
Pushbutton Air Diaphragm leaks	Replace Pushbutton Air Diaphragm



CARE, CLEANING, AND REPAIR OF CORTERRA SOLID SURFACE

Acorn's Corterra densified solid surface material is composed of recycled Solid Surface Polymer Resin, Aluminum Trihydrate and Fillers. It is resistant to stains, impact and burns and complies with ANSI Z124.3. It is attractive, durable and easy to maintain.

Routine Cleaning

Corterra should be kept clean at all times. If maintained, Corterra surfaces will retain their new, clean appearance indefinitely. Wash with a non-abrasive all purpose cleaner and water, then rinse. Wipe dry. (Never use cleaners with strong chemicals such as toilet bowl cleaners, rust removers, ceramic cook top cleaners, laquer thinners or oven cleaners). To remove persistent stains use a Scotch Brite pad and an abrasive cleaner or a solution of household bleach and water (1 part water to 1 part bleach).

Repairing Surface Damage

Surface damage, such as minor chips, scratches, burn marks and graffiti can be repaired with a fine grit abrasive cleanser, such as a Scotch-Brite pad or fine grit sandpaper. For more serious physical damage caused by vandals, an Acorn Solid Surface Repair Kit is available. Contact the factory for details. Refer to drawing #9927-160-002.

CARE AND CLEANING OF ENVIRO GLAZE/ POWDER COATING

Recommended Cleaning Materials:

- Sponge - natural or artificial
- Nylon or other soft-bristle brush
- Microfiber Cloth

Recommended Cleaning Solutions:

- Hand dishwashing liquid / soft water solution
- Mild soap / soft water solution
- Soft-Scrub®
- Comet Soft Cleanser®
- Clorox®
- Scrubbing Bubbles® Gel

Normal Cleaning:

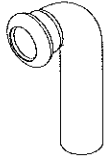
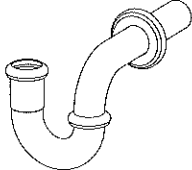
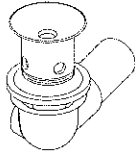


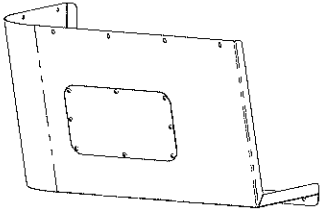
For everyday cleaning, use a sponge or cotton cloth soaked in mild soap and wipe-down surface. In industrial or marine locations, close attention should be paid to regular care due to harsher atmosphere.

To remove dirt and debris:

Fixture should be periodically washed with a diluted solution of a mild non-abrasive detergent (e.g. Dawn®) in cold or ambient temperature water using a soft non-abrasive cloth or chamois.

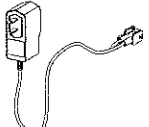
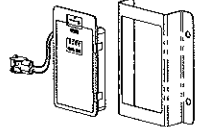
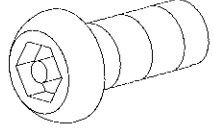
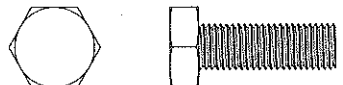

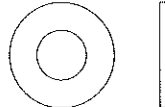


COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
COMBINED WASTE ASSEMBLY		
1-1/4" OD Waste Bend Connection	4970-180-001	
1-1/2" OD Tubular P-Trap	4953-001-000	
Ligature Resistant Elbow Strainer	4926-080-000	
1-1/2" Nylon Compression Washer	0431-125-000	
1-1/2" IPS x 1-1/2" Slip Nut	4970-059-000	
ENCLOSURES		
P-Trap Cover	Left BU5CRN42-002 Right BU5CRN40-002 (Shown)	



COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
ELECTRONIC HARDWARE		
9VDC Plug-In Transformer	0710-735-001	
9 VDC Battery-Pak Assy (6 AA Batteries Not Included) Battery-Pak Mounting Bracket	0710-358-001 6155-013-199	
ASSEMBLY HARDWARE		
#10-32 x 1/2" S/S Hex C/R Button Head Screw, White	0112-044-000	
1/4"-20 UNC x 3/4" Hex Head Cap Screw	0206-008-000	
1/4" Lock Washer	0337-050-000	
1/4" Flat Washer	0331-005-000	



Certain optional Best-Care® Faucet Parts are included for reference. When specified, refer to selected Faucet Model for additional details.

COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
VALVE		
-WH3376L Optional -03-M Single Temp, Metering Valve Assembly	2590-900-001	
-WH3376L-MXTP Optional -03-M-MXTP, Single Temp, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant	2590-901-001	
-WH3377L Optional -04-M Hot & Cold, Metering Valve Assembly	2590-910-001	
-WH3377L-MXTP Optional -04-M-MXTP, Hot & Cold, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant	2590-911-001	



COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
VALVE		
<p>-WH3377L-PPZ -WH3377L-WSF-SO -WH3375L-WSF-SO</p> <p>Optional Electronic Metering Valve Assembly, Single Temperature</p>	2590-905-001	
<p>-WH3377L-PPZ-MXTP -WH3377L-WSF-SO-MXTP -WH3375L-SO-MXTP</p> <p>Optional Electronic Metering Valve Assembly, Single Temp, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant</p>	2590-906-001	
<p>-WH3377L-PPZ</p> <p>Optional Electronic Metering Valve Assembly, Hot and Cold</p>	2590-915-001	
<p>-WH3377L-PPZ-MXTP</p> <p>Optional Electronic Metering Valve Assembly, Hot and Cold, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant</p>	2590-916-001	

L-2 LAVATORY



T&S BRASS AND BRONZE WORKS, INC.
 2 Saddleback Cove / P.O. Box 1088
 Travelers Rest, SC 29690

Model No.
B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

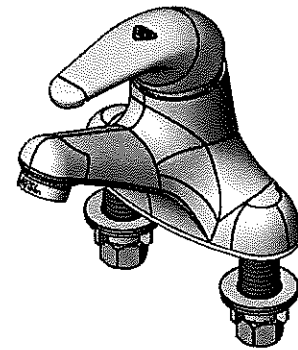
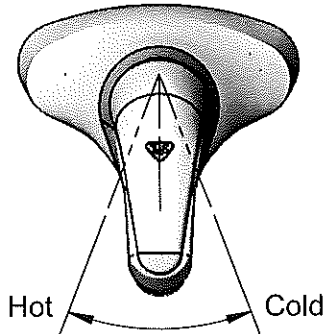
Job Name _____ Date _____

Model Specified _____ Quantity _____

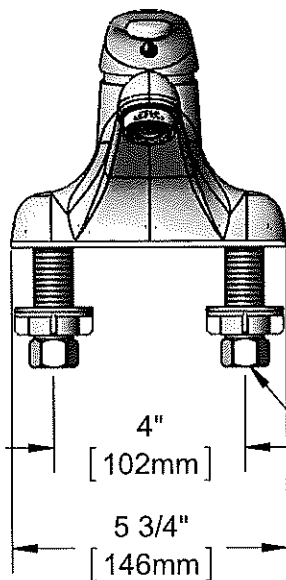
Customer/Wholesaler _____

Contractor _____

Architect/Engineer _____



B-0199-09-N05
 0.5 GPM Vandal Resistant
 Non-Aerated Spray Device



4 13/16"
 [122mm]
 "OFF"

2 1/4"
 [57mm]

5 15/16"
 [150mm]
 "Full ON"

Mounting
 Surface

1 3/8"
 [35mm]
 Maximum
 Thickness

1/2" NPSM Male Inlets
 w/ Coupling Nuts

4"
 [102mm]

5 3/4"
 [146mm]

4 3/8"
 [112mm]

Rough-In Requirement:
 (2) ϕ 1" [25mm] Mounting Holes

Product Specifications:
 4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature
 Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:
 ASME A112.18.1 / CSA B125.1
 NSF 61 - Section 9
 NSF 372 (Low Lead Content)
 ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

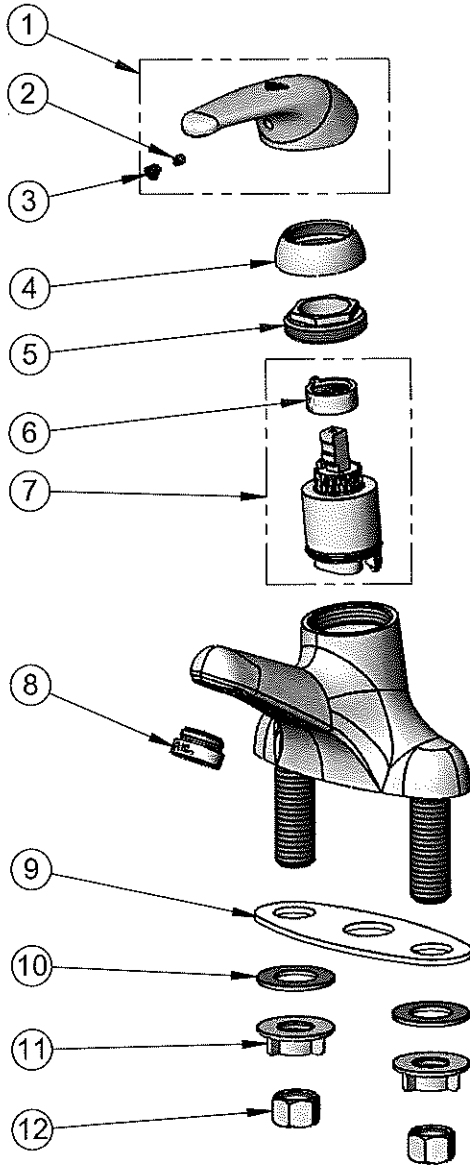
Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	013113-45	Single Lever Short Handle
2	016675-45	Set Screw
3	014173-45	Index, Temperature
4	016661-45	Trim Ring
5	016663-45	Locking Nut
6	015400-45	Temperature Limit Stop
7	013111-45	Ceramic Cartridge w/ Temperature Limit Stop
8	B-0199-09-N05	0.5 GPM VR Spray Device, 15/16-27 Male w/ Key
9	014167-45	Deck Gasket
10	000999-45	Brass Lock Washer
11	016673-45	Shank Nut
12	000958-20	Coupling Nut



015425-45
Vandal Resistant Key

Product Specifications:

4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.
 2 Saddleback Cove / P.O. Box 1088
 Travelers Rest, SC 29690

Model No.
B-0890-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

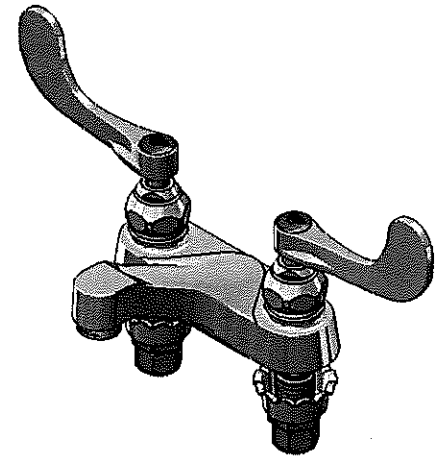
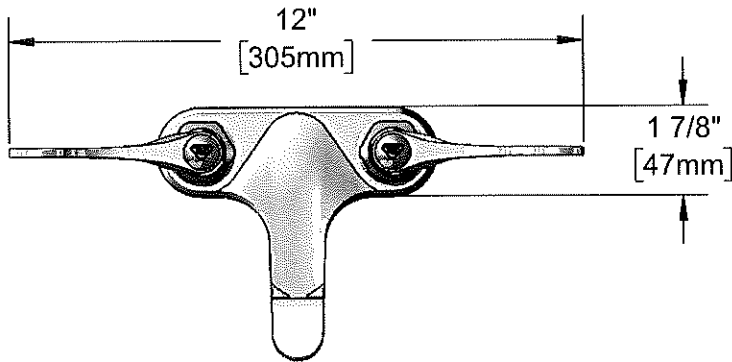
Job Name _____ Date _____

Model Specified _____ Quantity _____

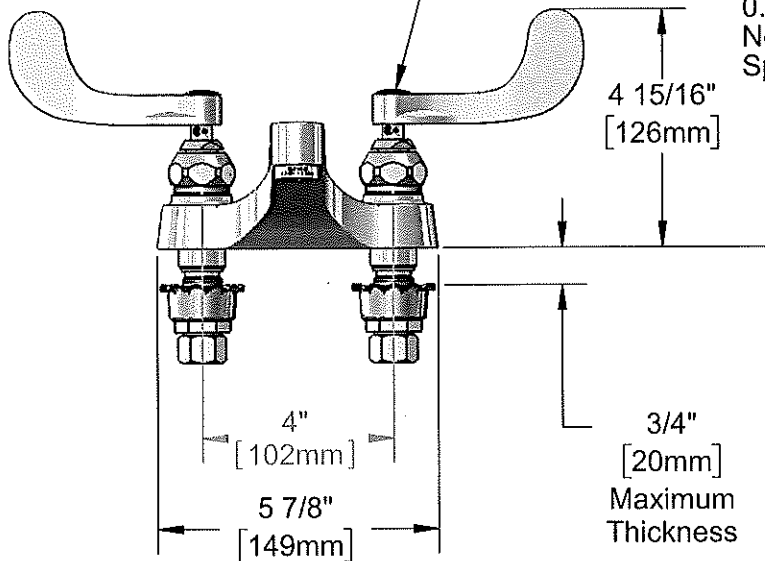
Customer/Wholesaler _____

Contractor _____

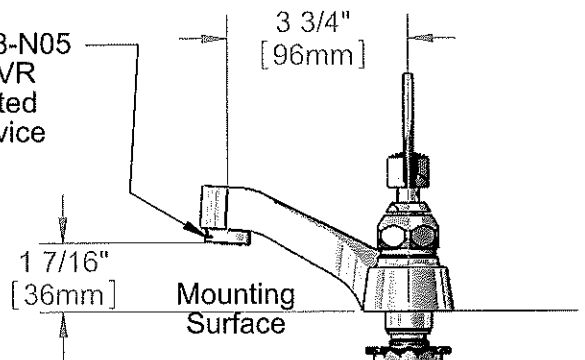
Architect/Engineer _____



Quarter-Turn Eterna Cartridges
 w/ Spring Checks &
 4" Wrist Action Handles w/
 VR Screws & Color Coded Indexes



B-0199-08-N05
 0.5 GPM VR
 Non-Aerated
 Spray Device



1/2" NPSM
 Male Inlets w/
 Coupling Nuts

Rough-In Requirement:
 (2) ϕ 1 1/8" [29mm] Mounting Holes

Product Specifications:
 4" Centerset Deck Mount Faucet, Quarter-Turn Eterna Cartridges w/ Spring Checks, 4" Wrist Action Handles w/ Vandal Resistant Screws, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets w/ Coupling Nuts

Product Compliance:
 ASME A112.18.1 / CSA B125.1
 NSF 61 - Section 9
 NSF 372 (Low Lead Content)
 ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

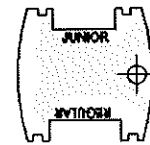
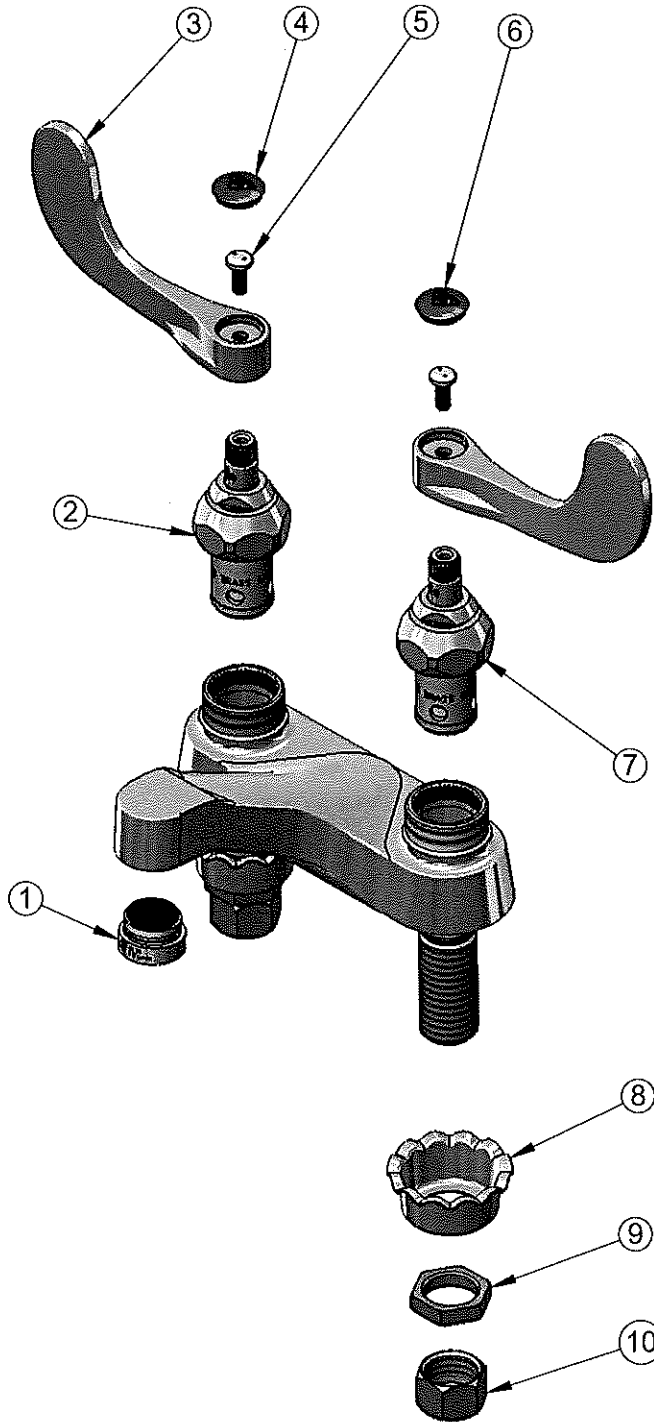
Model No.

B-0890-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	B-0199-08-N05	0.5 GPM VR Spray Device, 13/16-27 Male
2	012443-40NS	Quarter-Turn Eterna Cartridge w/ Spring Check, RTC
3	B-WH4-NS	Wrist Action Handle (New Style)
4	001193-19NS	Red Button Index, Press-in
5	VRS-2	VR Wrist Action Handle Screw (2) w/ Spanner Bit
6	018506-19NS	Blue Button Index, Press-in
7	012442-40NS	Quarter-Turn Eterna Cartridge w/ Spring Check, LTC
8	001000-45	Rosette Washer
9	002954-45	Shank Lock Nut
10	000958-20	Coupling Nut



015425-45
Vandal Resistant
Key



014075-45
Vandal Resistant
#10 Spanner Bit

Product Specifications:

4" Centerset Deck Mount Faucet, Quarter-Turn Eterna Cartridges w/ Spring Checks, 4" Wrist Action Handles w/ Vandal Resistant Screws, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets w/ Coupling Nuts

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



Division of
Acorn Engineering Company



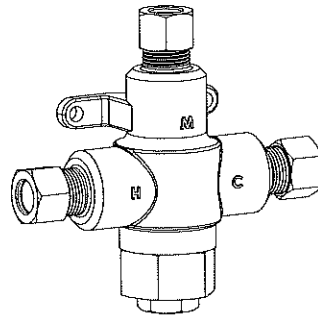
A MEMBER OF
MORRIS GROUP
 HEALTHCARE

Model WHST70

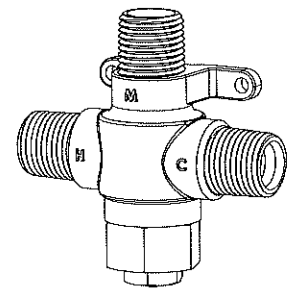
*Lead-Free Lavatory Tempering Valve
 With Integral Mounting Feet*

APPLICATION:

The Acorn WHST70 is an ASSE 1070 certified, lead-free thermostatic tempering valve that protects against dangerously hot water in any commercial sink or lavatory application. This valve can be used with any type of faucet for maximum flexibility and can accommodate a single lavatory or up to 8 hand washing stations having a 0.5 gpm flow rate.



WHST70-38



WHST70-12



Patent #9,989,017

FEATURES:

- ◆ Lead-Free certified DZR brass body with corrosion resistant and lead free internal components.
- Valve body available in rough brass or rough chrome plated.
- Integral and cartridge-style checks with accessible screens to prevent backflow and to filter debris from entering the valve.
- Temperature adjustment is made using an Allen wrench. A locknut on the bonnet prevents unauthorized or accidental temperature adjustment.
- Commercial quality paraffin actuator provides repeatable, reliable performance.
- Factory set to 105°F (41°C) and field adjustable.
- Integral mounting Feet

SPECIFICATIONS:

Valve Specifications:

Maximum Operating Pressure: 125 PSI (861 kPa)
 Flow Rate @ 45 psi (310 kPa) differential:
 WHST70-12: 4.5 GPM (17 LPM)
 WHST70-38: 4.0 GPM (15 LPM)
 Certified Minimum Flow Rate*: 0.25 GPM (1.0 LPM)
 Maximum Hot Water Temp: 180°F (82°C)
 Minimum Hot Water Supply Temp**: 5°F (3°C)
 Above Set Point
 Temperature Range*: 85°F-115°F (29°C-46°C)
 Connections 1/2" NPT or 3/8" Compression

WHST70-12

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	0.7	1.5 (5.7)	2.1 (8)	2.6 (9.8)	3 (11.4)	3.7 (14)	4.5 (17)	5.2 (19.7)

WHST70-38

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	0.6	1.3 (5)	1.9 (7.1)	2.3 (8.7)	2.7 (10)	3.3 (12.4)	4 (15)	4.6 (17.5)

* In accordance with ASSE 1070 as certified by IAPMO

** Under Normal Operating Conditions

◆ The wetted surface of these valves contacted by consumable water contains less than 0.25% of lead by weight in conformance with national lead free law.

GUIDE SPECIFICATION:

The lavatory tempering valve shall be IAPMO lab certified per ASSE 1070 at 0.25 GPM (1.0 LPM) and CSA standards and shall have a solid brass body with corrosion resistant internal components. It shall include integral checks with screens to prevent backflow and to filter debris from entering the valve. Temperature adjustment shall be made using an allen wrench and a locknut on the bonnet to prevent unauthorized or accidental temperature adjustment. Valve shall provide 4.0 GPM (15 LPM) with 3/8" compression connection and 4.5 GPM (17 LPM) capacity with the 1/2" NPT connection at 45 psi (310 kPa) differential. Temperature range shall be 85°F-115° F (29°C-46° C). Valve shall be Whitehall model WHST70.

Please visit www.whitehallmfg.com for most current specifications.

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Complies with the following standards:



Federal Public Law 111-380 (No Lead)



ASSE 1016
CSA B125.16

Complies with the following standards:



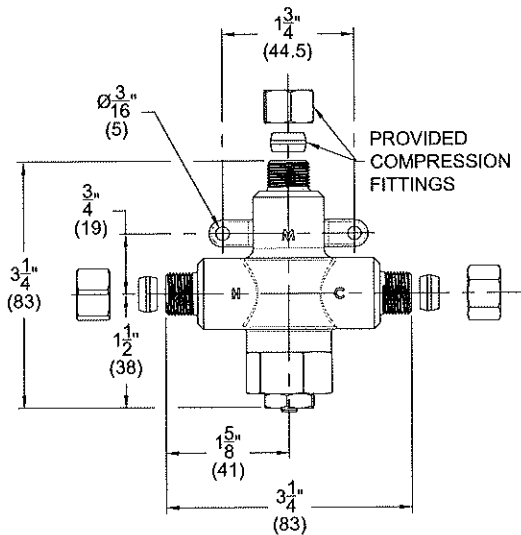
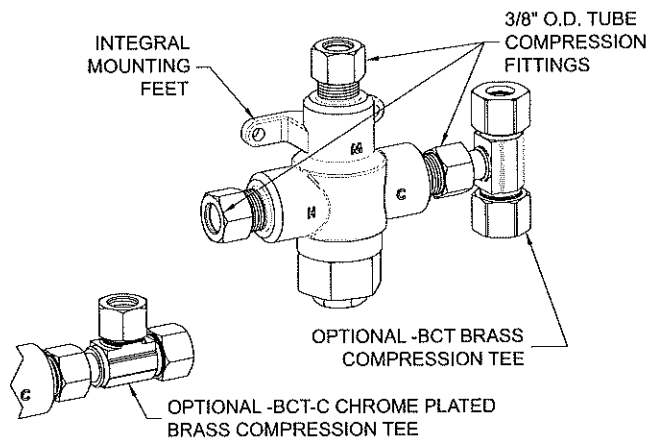
UL 1951
CSA C22.2 Nos. 14 & 68



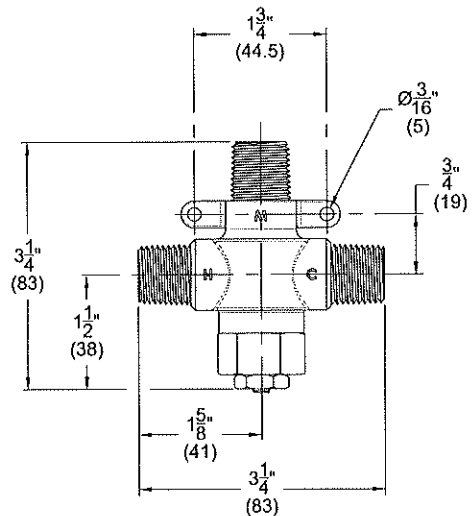
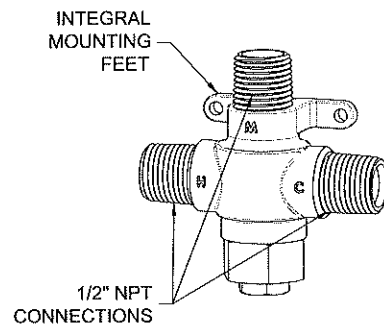
VALVE SELECTION:

- WHST70-12 Brass Valve Body With 1/2" NPT Connections
- WHST70-38 Brass Valve Body With 3/8" Compression Connections

TECHNICAL DIMENSIONS:



WHST70-38



WHST70-12

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SELECTION SUMMARY & APPROVAL FOR MANUFACTURING

Model Number & Options _____ Quantity _____
 Company _____ Date _____
 Contact _____ Title _____
 Approval for Manufacturing/Signature _____

All dimensions are nominal and subject to manufacturer's change without notice. Whitehall assumes no responsibility for use of void or suspended data © Whitehall Manufacturing, Member of Morris Group International. Please visit www.whitehallmfg.com for most current specifications.

L-2 LAVATORY



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

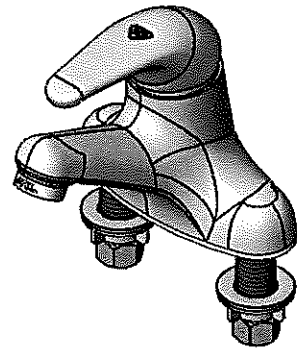
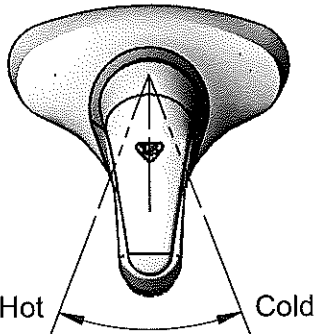
Job Name _____ Date _____

Model Specified _____ Quantity _____

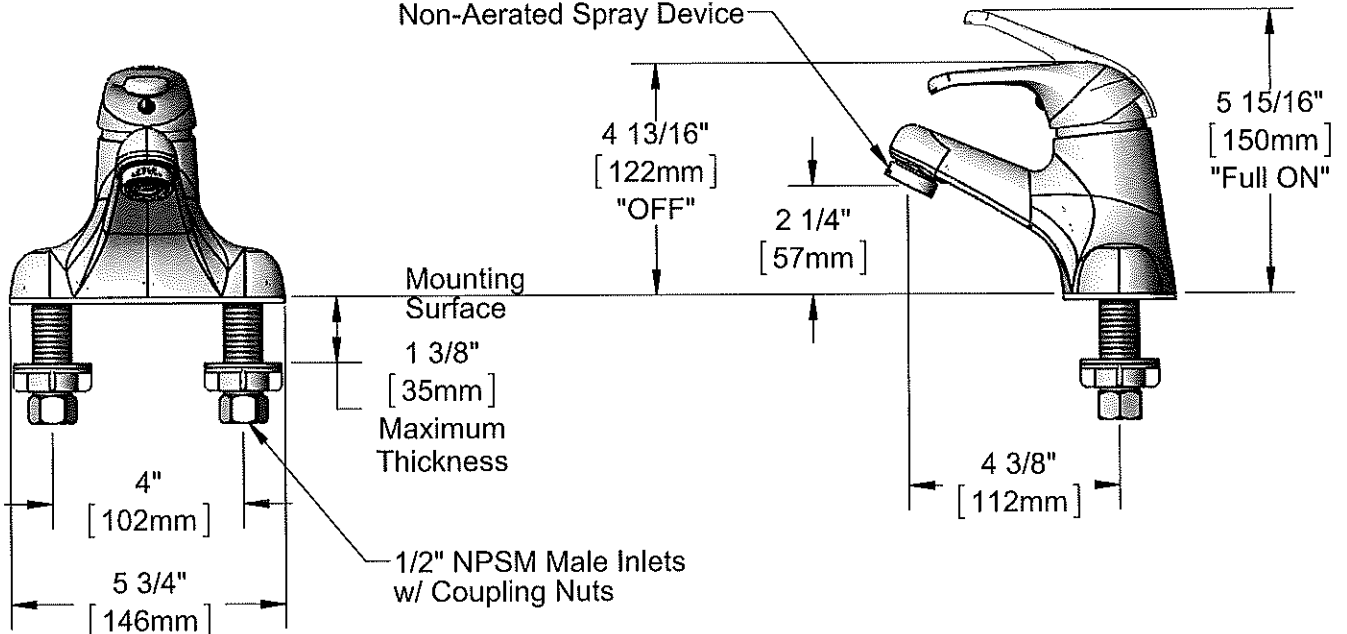
Customer/Wholesaler _____

Contractor _____

Architect/Engineer _____



B-0199-09-N05
0.5 GPM Vandal Resistant
Non-Aerated Spray Device



Rough-In Requirement:
(2) ϕ 1" [25mm] Mounting Holes

Product Specifications:
4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:
ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

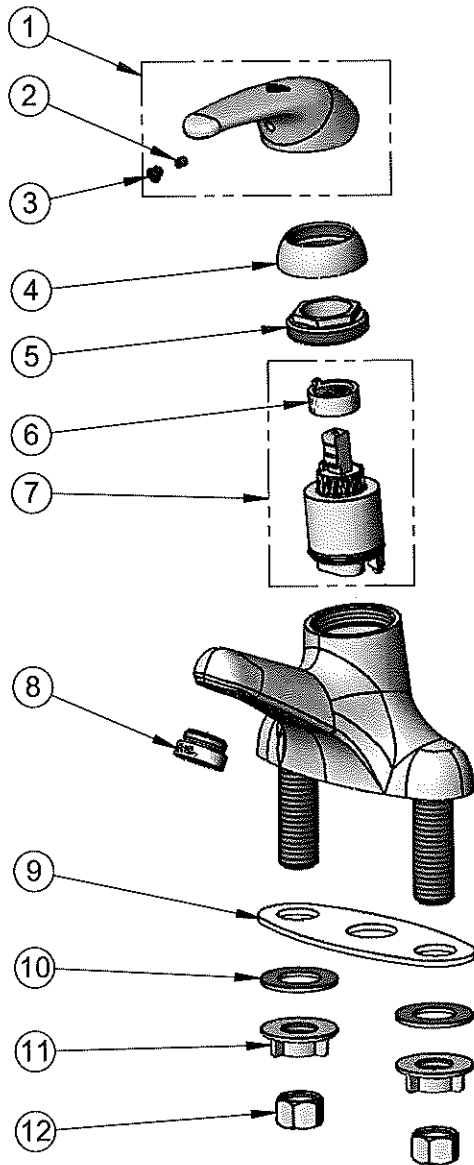
Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	013113-45	Single Lever Short Handle
2	016675-45	Set Screw
3	014173-45	Index, Temperature
4	016661-45	Trim Ring
5	016663-45	Locking Nut
6	015400-45	Temperature Limit Stop
7	013111-45	Ceramic Cartridge w/ Temperature Limit Stop
8	B-0199-09-N05	0.5 GPM VR Spray Device, 15/16-27 Male w/ Key
9	014167-45	Deck Gasket
10	000999-45	Brass Lock Washer
11	016673-45	Shank Nut
12	000958-20	Coupling Nut



015425-45
Vandal Resistant Key

Product Specifications:

4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

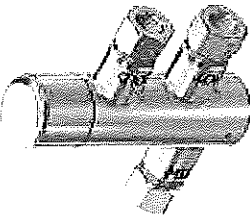
Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



EN FR ES

Heatguard 135 LF Series Installation Instructions Mode d'installation Instrucciones de instalación



Thermostatic Mixing Valve
Robinet mitigeur thermostatique
Válvula mezcladora termostática

105-49 Rev B

MIXING VALVE SPECIFICATIONS

Supply set outlet temperature:	105-110°F (40-43°C)
Variable outlet temperature range:	95-120°F (35-49°C)
Temperature, hot supply:	170-180°F (69-82°C)
Temperature, cold supply:	39-50°F (4-10°C)
Minimum supply pressure:	200 psi (13.8 bar)
Rated supply pressure variation:	±20%
Outlet temperature differential:	5°F (2.8°C)
Flow rate @ 20 psi pressure loss:	2.5 gal/min (9.5 l/min)
Flow rate, minimum:	0.25 gal/min (1.0 l/min)

NOTE: Maximum permitted variation in either supply pressure in order to control the outlet temperature to within ±5°F. Excessive changes in supply pressures may cause changes in outlet temperature.

WARNING / SERVICING THE MIXING VALVE
 Note that this thermostatic mixing valve is a SAFETY VALVE. We recommend that a valve be checked at least once per year to ensure its continued function. For installations with poor or unknown water quality, or other adverse supply conditions, it may be necessary to check the valve at more frequent intervals. The temperature should be checked at the same outlet as was used for commissioning in the first instance. If the temperature is more than 5°F from the commissioning temperature, refer to fault finding guide below. There may be some variation in the temperature of the water from the thermostatic mixing valve due to seasonal temperature variations in the cold water supply. The check valve can be easily accessed for cleaning.

EN

IMPORTANT

Failure to comply with all aspects of these instructions may result in unsafe performance. All installations must comply with relevant State and Local Authority requirements.

Non return valves:
 Non return valves and strainers are integrated in the cold and hot water inlets of the valve. For correct and safe system function, ensure that the strainer is clean of debris and functioning correctly.
Flush the piping and tank thoroughly before installing the Heatguard:
 It is critical that all debris is flushed from the pipework prior to installing the valve. Not flushing the system properly is the most common cause of system difficulties.

Delivery Temperature:
 The temperature of the hot water supplying the mixing valve should be at least 27°F higher than the maximum required valve setting. Every valve is factory set between 105°F and 110°F outlet temperature.*

Check:
 Measure and note all site parameters (pressure, temperature, etc.) and check against the specifications of the chosen valve. If the site conditions are outside those specified for the valve then they must be rectified prior to installing the valve.

Valve MUST NOT be subjected to heat during installation as this may damage the valve internals.
 Valve MUST NOT be fitted on steam-supplied systems, but to water systems only.
 Valve MUST NOT be frozen. If the valve is installed in a situation where freezing is a possibility, then suitable insulation must be fitted to prevent damage to the valve.

DO NOT use excess thread sealant (in liquid, tape or other form) as this may cause the valve to fail.
 *NOTE: To ensure delivery of the correct mixed water temperature at the outlet the installer must adjust and verify the temperature at the outlet by carefully following instructions on the following page.

FR

IMPORTANT

Toute omission de se conformer à ces directives en entier est susceptible de poser des risques. Toutes les installations doivent être réalisées conformément aux exigences en vigueur dans la province ou la région de l'installation.

Clapets de non-retour:
 Les clapets antiretour et les crèpines sont intégrés aux arrivées d'eau chaude et d'eau froide de la vanne. Pour bénéficier d'un système sûr et fonctionnel, assurez-vous que la crépine n'est pas obstruée et qu'elle fonctionne correctement.

Vider complètement la tuyauterie et les chauffe-eau avant d'installer le Heatguard:
 Il est ESSENTIEL que toutes les saletés soient purgées de la tuyauterie avant de procéder à l'installation du mitigeur thermostatique. Pour le plumbier, les difficultés de fonctionnement du système s'expliquent par une vidange du circuit mal exécutée.

Température de l'eau distribuée:
 La température de l'eau chaude alimentant le mitigeur thermostatique doit être supérieure d'au moins 15 °C au réglage maximal du mitigeur. Chaque mitigeur est réglé en usine pour que la température de l'eau distribuée soit entre 40,6 °C et 43 °C, alors que la température de l'eau chaude à l'entrée du mitigeur soit à 66 °C.*

Passe à vérifier:
 Mesurez et prenez en note tous les paramètres du lieu d'installation : la pression, la température, etc. Comparez les données aux caractéristiques du mitigeur thermostatique choisi. Si les paramètres du lieu d'installation ne se conforment pas aux caractéristiques du mitigeur thermostatique, il faut alors procéder aux rectifications du lieu avant d'installer le mitigeur.

Le mitigeur thermostatique NE DOIT PAS être exposé à la chaleur durant l'installation, car cela pourrait endommager ses composants internes. Le mitigeur thermostatique NE DOIT PAS être couplé aux installations à vapeur, mais installations contenant uniquement de l'eau. Le mitigeur thermostatique NE DOIT PAS être exposé au gel. Si le mitigeur thermostatique doit être installé dans un lieu sujet au gel, il faut alors employer un matériau isolant adéquat afin de protéger celui-ci. N'UTILISEZ PAS une quantité excessive de matériel d'étanchéité pour joints filetés, qu'il se présente sous forme liquide, de ruban ou sous toute autre forme, car ce matériel pourrait nuire au fonctionnement du mitigeur thermostatique.

*NOTE: Pour que l'eau mitigée soit à la température souhaitée à l'arrivée, l'installateur doit régler et vérifier la température de l'eau chaude au robinet de sortie. L'installateur doit régler et vérifier la température de l'eau chaude au robinet de sortie. L'installateur doit régler et vérifier la température de l'eau chaude au robinet de sortie.

ES

IMPORTANTE

No cumplir con todos aspectos de las instrucciones puede resultar en una ejecución insegura. Todas las instalaciones deben cumplir con las recomendaciones relevantes del estado, provincial y local.

Válvulas de Retención:
 Los filtros y las válvulas anti retorno se encuentran en las entradas de agua fría y caliente de la válvula. Para garantizar el funcionamiento correcto y seguro del sistema, asegúrese de que el filtro no contenga residuos y funcione correctamente.

Vacíe el tubería y el tanque precisamente antes de la instalación de Heatguard:
 Es fundamental que la tubería esté libre de todos los escombros antes de instalar la válvula. No vaciar el sistema precisamente es la mayor causa de las dificultades de sistema.

Distribución de Temperatura
 La temperatura de agua caliente suministrando la válvula mezcladora debe ser al menos de 27 °F más alta que el máximo requerido de la configuración de la válvula. Todas las válvulas están configuradas por la fábrica entre 105 °F y 110 °F de temperatura de salida, con 150 °F de temperatura de agua caliente de entrada.

Revisión:
 Mida y note todos los parámetros del ambiente (presión, temperatura, etcétera) y compare con las características técnicas de la válvula elegida. Si las condiciones de ambiente exceden las características técnicas de la válvula ellos tienen que ser rectificadas antes de la instalación de la válvula.

Válvula No Debe ser expuesta al calor durante la instalación ya que el calor podría dañar el interior de la válvula.
 Válvula No Debe ser instalada al sistema suministrado por vapor sino solamente al sistema de agua.

Válvula No debe ser congelada. Si la válvula está instalada donde haya posibilidad de congelación, un aislamiento debe ser apropiado para prevenir daño a la válvula. No use exceso de sellador de rosas (en líquido, cinta u otra forma) como esto podría llevar la válvula a fracasar.
 *NOTE: Para asegurar la distribución deseada de temperatura del agua para el desague, el instalador debe ajustar y verificar la temperatura al desague siguiendo instrucciones con cuidado en la página siguiente.

ES

ESPECIFICACIONES DE VÁLVULA MEZCLADORA

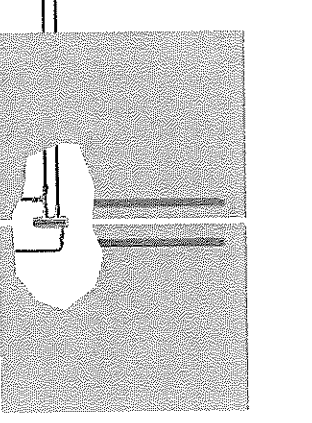
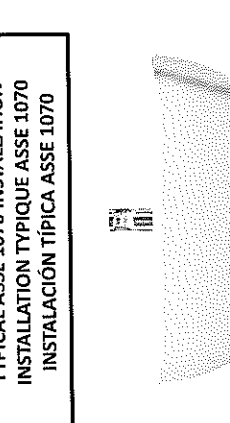
Presión máxima de temperatura de salida:	105 - 110°F (40 - 43°C)
Rango de ajuste de la temperatura de salida:	95-120°F (35-49°C)
Temperatura, suministro de agua caliente:	170 - 180°F (69 - 82°C)
Temperatura, suministro de agua fría:	39 - 50°F (4 - 10°C)
Presión mínima de suministro:	200 psi (13.8 bar)
Permisible variación de presión de suministro:	±20%
Flujo de agua @ 20 psi pérdida de presión:	2.5 gal/min (9.5 l/min)
Flujo de agua, mínimo:	0.25 gal/min (1.0 l/min)

NOTA: Máxima variación permitida de ambos suministros de presión para controlar la temperatura de desague dentro ±5 °F. Cambios excesivos de presión de

COMPROBACION/MANTENIMIENTO DE LA VÁLVULA MEZCLADORA
 Note que la válvula mezcladora termostática es una válvula de seguridad. Nosotras recomendamos que la válvula sea comprobada anualmente para asegurar una funcionalidad continua. Para instalaciones en sistema de agua de pobre calidad o desconocida cualidad de agua o ambientes adversos, puede ser necesario comprobar la válvula más frecuentemente. La temperatura debe ser comprobada al mismo desague usado al inicio de la instalación. Si la temperatura varía más que 5 °F que la temperatura inicial, consulte la guía de fallos abajo. Hay posibilidad de variación de la temperatura del agua de la válvula mezcladora termostática bajo la influencia de la variación de la temperatura temporal en el suministro de agua fría. La válvula de control se puede alcanzar cómodamente para limpiar.
 Si el suministro de agua sea de calidad pobre o desconocida, un filtro debe ser instalado a la entrada del sistema para que la entrada de agua fría e ambos el estificador de agua y a la válvula mezcladora sean protegidos de suciedad y escombros.

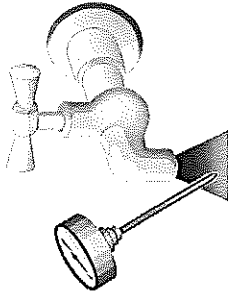
FR

INSTALLATION TYPIQUE ASSE 1070



Prior to setting the valve it is necessary for the hot water source to be switched on and delivering hot water at the design temperature. / Avant de régler la température du mitigeur thermostatique, il faut établir l'alimentation en eau chaude et que celle-ci s'écoule à la température normale. / Antes de configurar la válvula la válvula es necesario que la fuente de agua caliente sea activada distribuyendo el agua caliente a la temperatura deseada

1

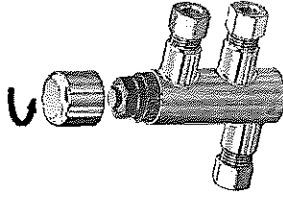


Using a thermometer, test the mixed water temperature at the nearest outlet being supplied by the valve. This should be opened to allow a minimum flow rate of 1.5 gpm (6 L/min). Allow the water to run for at least one minute to ensure the mixed water temperature has settled.

Utilisant un thermomètre, vérifiez la température de l'eau mélangée au point de sortie le plus près de votre robinetterie alimentée par le mitigeur. L'appareil de robinetterie doit être ouvert de sorte que l'eau s'écoule au débit d'au moins 6 l/min. (1,5 gal./min.). Laissez l'eau s'écouler pendant au moins une minute afin que la température de l'eau mélangée se stabilise.

Usando un termómetro, examine la temperatura del agua mixta al desagüe más cercano suministrado por la válvula. Esto debe ser abierto para permitir el mínimo caudal de 1,5 gpm (6 l/min). Permita el agua a correr por lo menos de un minuto para asegurar que la temperatura del agua mixta se ha reposado

2



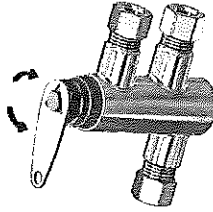
To access the temperature adjustment mechanism, unscrew the cap.

Pour accéder au mécanisme d'ajustement de la température, dévissez le bouchon.

Para acceder al mecanismo de ajuste de la temperatura, afloje la tapa.

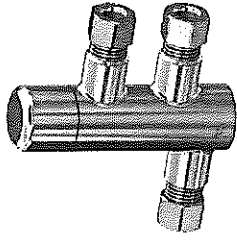
3

Turn anti-clockwise to increase the temperature
Tourner dans le sens contraire des aiguilles d'une montre pour augmenter la température
Gire en sentido anti horario para aumentar la temperatura



Turn clockwise to reduce the temperature
Tourner dans le sens inverse des aiguilles d'une montre pour réduire la température
Gire en sentido horario para reducir la temperatura

4



Replace the cap to deter tampering.

Remettez le capuchon pour éviter les manipulations non souhaitées.

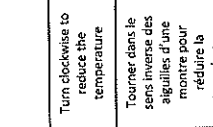
Cambie el mando para disuadir a manipulación.

FAULT / SYMPTOM	CAUSE	RECTIFICATION
The desired mixed water temperature cannot be obtained or valve is difficult to operate.	- Hot and cold supplies are blocked. - Hot and cold supplies are not within specified limits. - Hot and cold supplies are not connected to the correct connections. - Clean Strainers are blocked. - Clean Strainers are not in correct specification (recommended supply variation +/- 20%)	- Ensure hot/cold temperatures are within the specified limits. - Affix the valve with Hot/Cold supplies fitted to the correct connections. - Clean Strainers are blocked. - Clean Strainers are not in correct specification (recommended supply variation +/- 20%)
Hot water flow from the valve is not changing when the temperature is adjusted.	- Hot and cold supplies are not within specified limits. - Hot and cold supplies are not connected to the correct connections. - Hot and cold supplies are not in correct specification (recommended supply variation +/- 20%)	- Adjust the temperature as required. - Affix the valve with Hot/Cold supplies fitted to the correct connections. - Check non-return valve is not fouled. Clean if necessary.
No flow from the valve	- Hot or cold water supply valve. - Strainer are blocked.	- Open hot/cold water supply valve and check the strainer are unblocked.
Flow rate reduced or changing.	- Strainers are blocked. - Fluctuating supply pressures.	- Clean Strainers. - Install pressure regulating valves. - Contact customer service at Reliance Worldwide Corporation
Mixed water temperature is not changing when the temperature adjuster is turned.	- Non-return valves fouled.	- Clean non return ensuring debris is removed.
Hot water flows into the cold water system or vice versa.	- Non-return water valve(s) fouled.	- Reduce water valve(s) flow achieved by fitting a pressure regulating valve(s). - Check valve specification and ensure the appropriate valve is used for required flow.

Leave a copy of these instructions with the client for future reference. Recommended to the client that the valve is checked annually to ensure its continued function.

5

Turn anti-clockwise to increase the temperature
Tourner dans le sens contraire des aiguilles d'une montre pour augmenter la température
Gire en sentido anti horario para aumentar la temperatura



Turn clockwise to reduce the temperature
Tourner dans le sens inverse des aiguilles d'une montre pour réduire la température
Gire en sentido horario para reducir la temperatura

To adjust the mixed outlet temperature of the valve, turn the spindle using the adjustment tool – clockwise to reduce the temperature, counter clockwise to increase the temperature - until the desired set point is reached.

Pour régler la température de l'eau à la sortie du mitigeur thermostatique, il faut tourner la tige en utilisant l'outil de réglage - en sens horaire pour abaisser la température ou dans le sens antihoraire pour augmenter la température.

Para ajustar la temperatura mixta de la salida de la válvula, gire el eje usando la herramienta de ajuste – en sentido horario para reducir la temperatura, en sentido anti horario para aumentar la temperatura – hasta que se obtiene el punto de ajuste deseado.

SYMPTOME	CAUSE	RECTIFICATION
1) L'eau mélangée n'est pas à la température souhaitée ou il est difficile de régler le mitigeur thermostatique.	- Les températures de l'eau chaude et froide dépassent les limites recommandées. - Les conduits d'alimentation en eau chaude et en eau froide sont inversés. - Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Vérifier les températures de l'eau chaude et froide recommandées. - Rétablir le mitigeur thermostatique en veillant à ce que les conduits d'alimentation en eau chaude et en eau froide soient inversés. - Nettoyer les filtres. - Installer des tampons de filtration de précision pour une alimentation conforme aux spécifications.
2) La température de l'eau mélangée ne change pas, quel que soit le réglage de la température.	- Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Nettoyer les filtres. - Installer des tampons de filtration de précision.
3) L'eau mélangée ne change pas de température quand on tourne le bouton de réglage du mitigeur thermostatique.	- Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Nettoyer les filtres. - Installer des tampons de filtration de précision.
4) L'eau chaude ou froide ne change pas de température quand on tourne le bouton de réglage du mitigeur thermostatique.	- Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Nettoyer les filtres. - Installer des tampons de filtration de précision.
5) Le débit diminue ou change.	- Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Nettoyer les filtres. - Installer des tampons de filtration de précision.
6) La température de l'eau mélangée ne change pas quand on tourne le bouton de réglage du mitigeur thermostatique.	- Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Nettoyer les filtres. - Installer des tampons de filtration de précision.
7) L'eau chaude s'écoule dans le système d'eau froide ou vice versa.	- Les filtres sont obstrués. - Les filtres ne sont pas de la bonne spécification (variation recommandée +/- 20 %)	- Nettoyer les filtres. - Installer des tampons de filtration de précision.

Leave a copy of these instructions with the client for future information. Recommended to the client that the valve is checked annually to ensure its continued function.

FRACASO/SINTOMA	CAUSA	RECTIFICACION
1) La temperatura mixta es diferente a la deseada o no puede ser regulada correctamente con el botón de ajuste de la válvula.	- Temperaturas de entrada no calientes o demasiado altas. - Los suministros de agua caliente y fría están invertidos. - Coladores están bloqueados. - Coladores no están en especificación (variación +/- 20%)	- Asegure que las temperaturas de entrada sean correctas con los límites recomendados de la válvula. - Repare los ajustes de las válvulas con los suministros de agua fría y caliente. - Limpie los coladores. - Coloque válvulas reguladoras de presión con especificaciones +/- 20% de variación.
2) La temperatura mixta es la misma o cambia con el tiempo.	- Coladores están bloqueados. - Presión de suministro fluctuante.	- Limpie los coladores. - Instale válvulas reguladoras de presión a ambos suministros de agua fría y caliente.
3) Agua completamente caliente o completamente fría core del accesorio de desague.	- Válvula está configurada de forma incorrecta. - Los suministros de agua caliente y fría son invertidos. - El agua fría/caliente ha cambiado de lugar.	- Ajuste la temperatura mixta como se requiere. - Restablezca los ajustes de la válvula con los suministros de agua fría y caliente. - Verifique la válvula de retención está instalada y limpie si es necesario.
4) No hay flujo de temperatura de agua caliente o fría.	- Filtro de agua obstruido. - Coladores están bloqueados. - Presión de suministro fluctuante.	- Limpie los coladores. - Restablezca la válvula de retención de agua fría y caliente. - Verifique la temperatura mixta como se requiere.
5) Caudal reducido o fluctuante.	- Filtro de agua obstruido. - Coladores están bloqueados. - Presión de suministro fluctuante.	- Limpie los coladores. - Restablezca la válvula de retención de agua fría y caliente. - Verifique la temperatura mixta como se requiere.
6) La temperatura de agua mixta no cambia cuando se gira el botón de ajuste de la válvula.	- Filtro de agua obstruido. - Coladores están bloqueados. - Presión de suministro fluctuante.	- Limpie los coladores. - Restablezca la válvula de retención de agua fría y caliente. - Verifique la temperatura mixta como se requiere.
7) Agua caliente corre al sistema de agua fría o viceversa.	- Filtro de agua obstruido. - Coladores están bloqueados. - Presión de suministro fluctuante.	- Limpie los coladores. - Restablezca la válvula de retención de agua fría y caliente. - Verifique la temperatura mixta como se requiere.
8) Válvula es ruidosa.	- Filtro de agua obstruido. - Coladores están bloqueados. - Presión de suministro fluctuante.	- Limpie los coladores. - Restablezca la válvula de retención de agua fría y caliente. - Verifique la temperatura mixta como se requiere.

Leave a copy of these instructions with the client for future reference. Recommended to the client that the valve is checked annually to ensure its continued function.



Reliance Worldwide Corporation
2300 DeFoor Hills Rd NW
Atlanta, GA 30318
Customer Service : 1-877-700-4242
Fax: 1-877-700-4280
E-mail: sales@cashacme.com

Reliance Worldwide Corporation (Canada) Inc.
74 Alex Avenue
Vaughan, Ontario
L4L 5M1, Canada
Customer Service: 1-888-820-0120
Fax: 1-905-265-2775
E-mail: canadales@rwc.com

For warranty information, please visit:
Pour de l'information au sujet de la garantie, allez à:
Información sobre la garantía, visite las páginas:

www.cashacme.com
www.cashacme.ca

L-3 LAVATORY



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

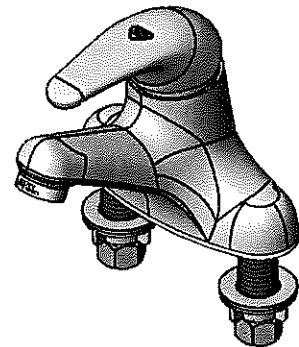
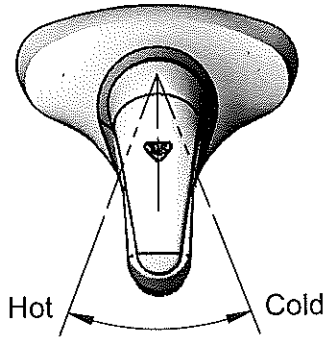
Job Name _____ Date _____

Model Specified _____ Quantity _____

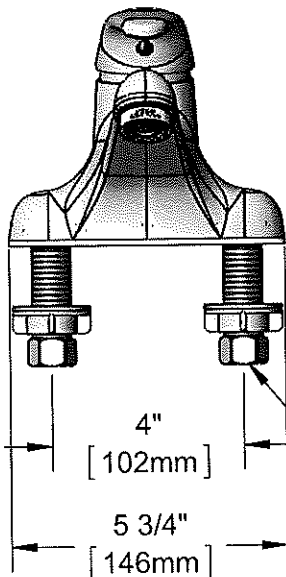
Customer/Wholesaler _____

Contractor _____

Architect/Engineer _____



B-0199-09-N05
0.5 GPM Vandal Resistant
Non-Aerated Spray Device



Mounting
Surface

1 3/8"
[35mm]
Maximum
Thickness

1/2" NPSM Male Inlets
w/ Coupling Nuts

4 13/16"
[122mm]
"OFF"

2 1/4"
[57mm]

5 15/16"
[150mm]
"Full ON"

4 3/8"
[112mm]

Rough-In Requirement:
(2) ϕ 1" [25mm] Mounting Holes

Product Specifications:
4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature
Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:
ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

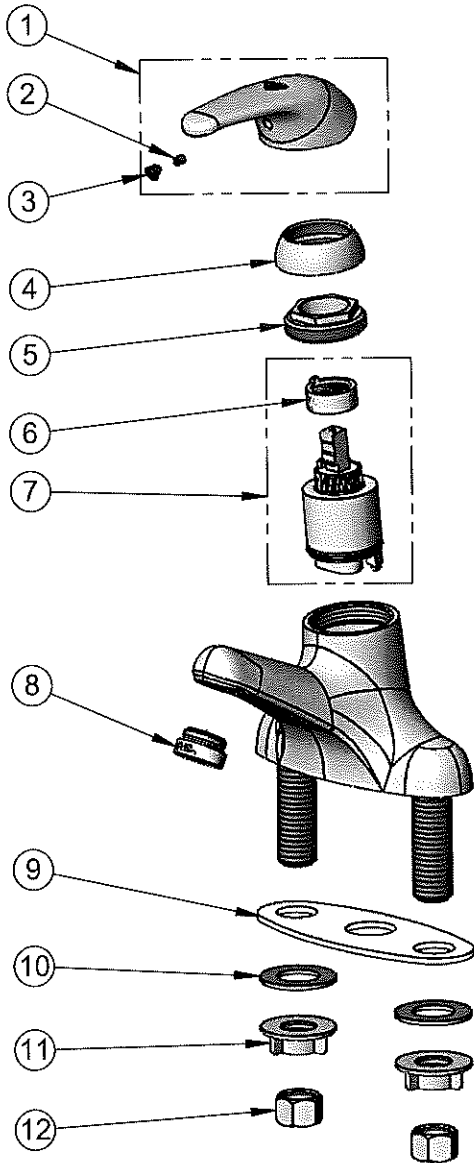
Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	013113-45	Single Lever Short Handle
2	016675-45	Set Screw
3	014173-45	Index, Temperature
4	016661-45	Trim Ring
5	016663-45	Locking Nut
6	015400-45	Temperature Limit Stop
7	013111-45	Ceramic Cartridge w/ Temperature Limit Stop
8	B-0199-09-N05	0.5 GPM VR Spray Device, 15/16-27 Male w/ Key
9	014167-45	Deck Gasket
10	000999-45	Brass Lock Washer
11	016673-45	Shank Nut
12	000958-20	Coupling Nut



015425-45
Vandal Resistant Key

Product Specifications:

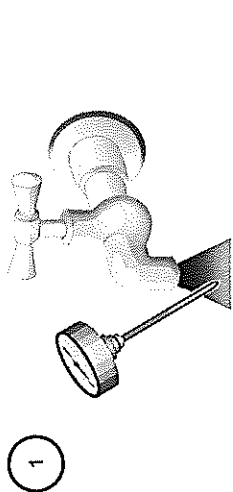
4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)

MIXING VALVE TEMPERATURE ADJUSTMENT / RÉGULATION DE LA TEMPÉRATURE / AJUSTE DE TEMPERATURA DE LA VÁLVULA MEZCLADORA

Prior to setting the valve it is necessary for the hot water source to be switched on and delivering hot water at the design temperature. / Avant de régler la température du mélangeur thermostatique, il faut d'abord l'alimentation en eau chaude et que celle-ci délivre à la température normale. / Antes de configurar la válvula de temperatura se activará desbloqueando el agua caliente a la temperatura diseñada.

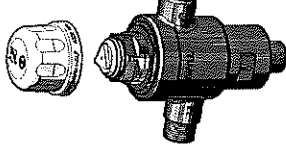


1

Using a thermometer, test the mixed water temperature at the nearest outlet being supplied by the valve. This should be open to a minimum flow rate of 1.5 gpm (0.4 L/min). Allow the water to run for at least one minute to ensure the mixed water temperature has stabilised.

Utilisant un thermomètre, vérifiez la température de l'eau mélangée au point de sortie le plus près de votre installation. L'appareil de robinetterie doit être ouvert de sorte que l'eau s'écoule pendant au moins une minute afin que la température de l'eau mélangée se stabilise.

Usando un termómetro, examine la temperatura de agua mezclada en el desagüe más cercano suministrado por la válvula. Esto debe estar abierto a un caudal mínimo de 1.5 galones por minuto (0.4 litros por minuto) durante un minuto para asegurar que la temperatura del agua mezclada se ha estabilizado.

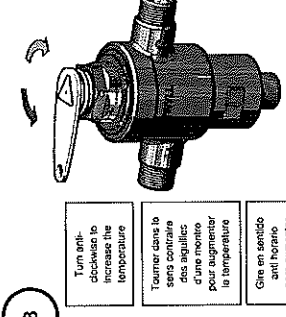


2

To access the temperature adjustment mechanism, lift the knob off the valve body, using a flat head screwdriver in the slot if needed.

Pour accéder au mécanisme de réglage de la température, relevez le capuchon du mélangeur, en utilisant une clé dans la fente si besoin.

Para usar el mecanismo de ajuste de la temperatura, levante el mando de la válvula, usando un destornillador en la muesca si es necesario.



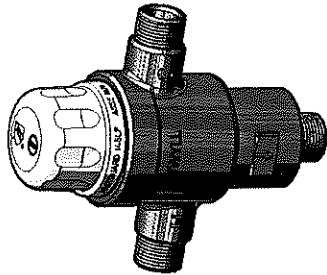
3

Turn anti-clockwise to increase the temperature
 Tourner dans le sens contraire des aiguilles d'une montre pour augmenter la température
 Gire en sentido horario para aumentar la temperatura

To adjust the mixed water temperature of the valve, turn the spindle using the adjustment tool - clockwise to reduce the temperature, counter clockwise to increase the temperature - until the desired set point is reached.

Pour régler la température de l'eau à la sortie du mélangeur thermostatique, il faut tourner la lige en sens horaire pour réduire la température, en sens horaire pour augmenter la température.

Para ajustar la temperatura mixta de la salida de la válvula, gire el eje usando el herramienta de ajuste - en sentido horario para reducir la temperatura, en sentido anti horario para aumentar la temperatura - hasta que se obtiene el punto de ajuste deseado.



4

Turn clockwise to reduce the temperature
 Tourner dans le sens horaire des aiguilles d'une montre pour réduire la température
 Gire en sentido horario para reducir la temperatura

Replace the knob by the lever lamping.
 Remettez le capuchon pour éviter les manipulations non souhaitées.
 Cambio el mando para desactivar la manipulación.

WARRANTY
 The Cash Acme Heigrauld 110-D is guaranteed free from manufacturing defects for a period of 12 months, subject to the conditions outlined below.

Cash Acme Valve Warranty
 Subject to the warranty conditions and exclusions set out below, Cash Acme valves are warranted to be free from defects in material and/or workmanship for a period of 12 months, commencing from the date of installation. This warranty does not cover any consequential damage or loss of any kind, including but not limited to, loss of water supply or other services. The benefit of this warranty will be available to all other states and territories, with the purchaser may have under the relevant laws of each State or Province.

Conditions:
 1. The valve must have been installed by a licensed and registered plumber in accordance with the applicable plumbing codes and regulations of the State/Province in which the valve is installed.
 2. The valve must be installed in accordance with the manufacturer's instructions and local requirements in the State/Province in which the valve is installed.
 3. The valve must be installed in accordance with the manufacturer's instructions and local requirements in the State/Province in which the valve is installed.
 4. The valve must be installed in accordance with the manufacturer's instructions and local requirements in the State/Province in which the valve is installed.

Exclusions:
 1. Damage to the valve caused by misuse, abuse, neglect, or failure to maintain the valve in accordance with the manufacturer's instructions.
 2. Damage to the valve caused by fire, flood, lightning, or other natural disasters.
 3. Damage to the valve caused by any other cause beyond the control of Cash Acme.
 4. The valve is not covered by this warranty if it is installed in a location where it is not intended to be used.
 5. The valve is not covered by this warranty if it is installed in a location where it is not intended to be used.
 6. The valve is not covered by this warranty if it is installed in a location where it is not intended to be used.
 7. The valve is not covered by this warranty if it is installed in a location where it is not intended to be used.
 8. The valve is not covered by this warranty if it is installed in a location where it is not intended to be used.
 9. The valve is not covered by this warranty if it is installed in a location where it is not intended to be used.
 10. It is noted that the valve has been designed with a life expectancy of 10 years.

Note: Goods returned without a Cash Acme Goods Authorization will not be repaired. Please contact Cash Acme prior to returning goods.

Installed by / Installé par / Instalado por: _____
 Date / Date / Fecha: _____
 Pressure at the valve / Pression au mitigeur thermostatique / Presión a la válvula: _____ PSI / kPa
 Mix temperature / Température de l'eau mélangée / Temperatura mixta: _____ °F / °C

GARANTIE
 Le mitigeur thermostatique Heigrauld 110-D de l'entreprise Cash Acme est garanti contre tout défaut de fabrication pour une période de douze (12) mois, sous réserve des conditions énoncées ci-dessous.

GARANTIE DU MITIGEUR THERMOSTATIQUE PAR CASH ACME
 Sous réserve des conditions et des exclusions énoncées ci-dessous, les mitigeurs thermostatiques de Cash Acme sont garantis contre tout défaut de matériel et de fabrication pour une période de douze (12) mois à compter de la date d'installation. Cette garantie ne couvre aucun dommage ou perte de quelque nature que ce soit, y compris, mais sans s'y limiter, la perte de l'alimentation en eau chaude ou d'autres services. Le bénéfice de cette garantie sera disponible pour tous les autres États et provinces, à condition que l'acheteur ait souscrit les lois applicables de chaque État ou province.

Conditions de la garantie:
 1. Le mitigeur thermostatique doit être installé par un plombier titulaire d'une licence, de plus, l'installation doit être réalisée conformément aux directives énoncées dans le manuel d'utilisation de Cash Acme, conformément aux exigences de la réglementation en vigueur et aux exigences locales de la State/Province dans laquelle le mitigeur est installé.
 2. Si le mitigeur thermostatique n'est pas installé conformément aux instructions de Cash Acme, la garantie sera annulée.
 3. Si le mitigeur thermostatique n'est pas installé conformément aux instructions de Cash Acme, la garantie sera annulée.
 4. Si le mitigeur thermostatique n'est pas installé conformément aux instructions de Cash Acme, la garantie sera annulée.

Exclusions:
 1. Les dommages causés par l'utilisation abusive, le mauvais usage, le négligence, le manque d'entretien ou le non-respect des instructions de l'utilisateur.
 2. Les dommages causés par l'incendie, l'inondation, la foudre, les événements météorologiques extrêmes ou autres catastrophes naturelles.
 3. Les dommages causés par tout autre événement au-delà du contrôle de Cash Acme.
 4. Le mitigeur thermostatique n'est pas couvert par cette garantie s'il est installé dans un endroit où il n'est pas destiné à être utilisé.
 5. Le mitigeur thermostatique n'est pas couvert par cette garantie s'il est installé dans un endroit où il n'est pas destiné à être utilisé.
 6. Le mitigeur thermostatique n'est pas couvert par cette garantie s'il est installé dans un endroit où il n'est pas destiné à être utilisé.
 7. Le mitigeur thermostatique n'est pas couvert par cette garantie s'il est installé dans un endroit où il n'est pas destiné à être utilisé.
 8. Le mitigeur thermostatique n'est pas couvert par cette garantie s'il est installé dans un endroit où il n'est pas destiné à être utilisé.
 9. Il est noté que la durée de vie prévue de la vanne est de 10 ans.

Note: Les produits retournés sans une autorisation de retour de Cash Acme ne seront pas réparés. Avant de retourner un produit, contactez nous avant de retourner le produit.

GARANTIA
 El Heigrauld 110-D de Cash Acme tiene garantía gratuita un defecto de fabricación por 12 meses, sujeto a las condiciones mencionadas por debajo.

Cash Acme garantía de Válvula
 Sujeto a las condiciones de garantía y exclusiones establecidas abajo, Cash Acme válvulas son garantizadas contra todo defecto de material o de fabricación, por un periodo de doce (12) meses, a partir de la fecha de instalación. Esta garantía no cubre ningún daño o pérdida de cualquier naturaleza, incluyendo, pero no limitado a, la pérdida de suministro de agua caliente o de otros servicios. El beneficio de esta garantía está disponible para todos los estados y territorios que el comprador puede estar sujeto de las leyes de cada estado o provincia.

Condiciones de garantía y exclusiones:
 1. La válvula debe ser instalada por un plomero licenciado y registrado de acuerdo con las instrucciones de instalación de Cash Acme y todas las regulaciones locales de la State/Province en la que se instala.
 2. Si la válvula no se instala de acuerdo con las instrucciones de Cash Acme, la garantía será anulada.
 3. Si la válvula no se instala de acuerdo con las instrucciones de Cash Acme, la garantía será anulada.
 4. Si la válvula no se instala de acuerdo con las instrucciones de Cash Acme, la garantía será anulada.

Exclusiones:
 1. Daños a la válvula causados por mal uso, abuso, negligencia, falta de mantenimiento o no seguir las instrucciones de usuario.
 2. Daños a la válvula causados por incendio, inundación, rayos, eventos meteorológicos extremos u otros desastres naturales.
 3. Daños a la válvula causados por cualquier otro evento fuera del control de Cash Acme.
 4. La válvula no está cubierta por esta garantía si se instala en un lugar donde no está destinada a ser utilizada.
 5. La válvula no está cubierta por esta garantía si se instala en un lugar donde no está destinada a ser utilizada.
 6. La válvula no está cubierta por esta garantía si se instala en un lugar donde no está destinada a ser utilizada.
 7. La válvula no está cubierta por esta garantía si se instala en un lugar donde no está destinada a ser utilizada.
 8. La válvula no está cubierta por esta garantía si se instala en un lugar donde no está destinada a ser utilizada.
 9. Se debe tener en cuenta que la vida útil prevista de la válvula es de 10 años.

Note: Productos devueltos sin una autorización de Cash Acme no serán reparados. Por favor póngase en contacto con Cash Acme antes de devolver el producto.

Transmittal

PROJECT: New Dormitories - Phase 2, Bldg. 6
Booneville Human Development Center
Booneville, Arkansas

SMA PROJECT NO: 2002B

DATE: January 25, 2023

TO: Alessi Keyes Construction
10623 Maumelle Blvd.
North Little Rock, AR 72113

If enclosures are not as noted, please
inform us immediately.

If checked below, please:

ATTN: Charley Dawson

Acknowledge receipt of enclosures.

Return enclosures to us.

WE TRANSMIT:

Herewith

Under separate cover

VIA:

Courier

Mail

E-mail

Overnight delivery

Fax

Other

FOR YOUR:

Approval/Action

Information

Use as requested

Review & comment

Use

Other

THE FOLLOWING:

Drawings

Specifications

Digital Files - PDF

Submittals

Proposal Request

Digital Files - Other

Change Order

Samples

Other

COPIES	DATE	REV. NO.	DESCRIPTION	ACTION CODE
1	1/23/2023		Commercial Lavatories	B

ACTION A. No action required

C. For signature and return to this office

E. See REMARKS below

CODE B. Action indicated on item transmitted

D. For signature and forwarding as noted below under REMARKS

REMARKS

Fixture L-1: change **VALVE SELECTION** to **WH3377L**

COPIES TO:

(with enclosures)

Rex Morris, Morris AE

By: Trey Tassin



SUBMITTAL SHEET

Alessi Keyes Construction Co.
AKC-505 - Booneville HDC New Dorm

Project: AKC-505
Booneville HDC New Dorm

Spec Section Num: 22 42 16
Submittal: 22.16
Revision: 0
Package: Plumbing
Date: 1/19/2023 UTC

Submittal Title: Commercial Lavatories
Submittal Detail:
Response Due By: 2/15/2023 UTC

Contractor:
Charley Dawson
Alessi-Keyes Construction Co.

Contractor's Stamp

Architect:
Trey Tassin
Stocks-Mann Architects

Architect's Stamp

Response:
Comment:

Submittal Comment Sheet

To: Randy Stocks, Stocks-Mann Architects
From: Rob Adams, BTME
Date: April 25, 2023
Project: Booneville HDC New Dorm (Bldg #6)
Project # 01-20-0003
Ref: 22 42 16.13-01 Commercial Lavatories PR-02 Faucet Submittal (#22.16B)
Submitted By: Alessi Keyes Construction

APPROVED	<input type="checkbox"/>
REJECTED	<input type="checkbox"/>
REVISE AND RESUBMIT	<input type="checkbox"/>
REFER TO SUBMITTAL COMMENT SHEET	<input checked="" type="checkbox"/>

This review performed by Bernhard TME, LLC, is only for general conformance with the design concept of the project and general compliance with the information provided in the Contract Documents. Corrections or comments made on the submittal and/or shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans, specifications, and other contract documents. Approval of a specific item shall not indicate an approval of an assembly of which the item is a component. Contractor is responsible for the following: all quantities; configuration of components; dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences, and procedures of construction; coordination of the work with that of all other trades, and, for performing all work in a safe and satisfactory manner.

Bernhard TME
Engineering

DATE: 04/25/23 BY: R. Adams

Below find our response for the submittal received on Monday April 10, 2023.

1. L-1

APPROVED

- End of Submittal Comments -

THIS REVIEW PERFORMED BY BERNHARD TME, LLC, IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS. CORRECTIONS OR COMMENTS MADE ON THE SUBMITTAL AND/OR SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS. APPROVAL OF A SPECIFIC ITEM SHALL NOT INDICATE AN APPROVAL OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING: ALL QUANTITIES; CONFIGURATION OF COMPONENTS; DIMENSIONS TO BE CONFIRMED AND CORRELATED AT THE JOBSITE; INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESS OR TO THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION; COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES; AND, FOR PERFORMING ALL WORK IN A SAFE AND SATISFACTORY MANNER.

L-1 LAVATORY
WHITEHALL WH3776L/R CORNER BASIN
T&S B-0890-VRS-B-0199-08-F12 FAUCET
WHST70-12 TEMPERING VALVE
Z8802LK SUPPLY AND STOPS
Z8700PC 1-1/4" CAST BRASS P-TRAP
ZURN Z1224-5 LAVATORY CARRIER



Whitehall Manufacturing®
 Manufacturer of Healthcare and Rehabilitation Products since 1946

BestCare®
 Patients, Not Prisoners®

**Healthcare and Ligature
 Resistant Products**

Division of
 Acorn Engineering Company®

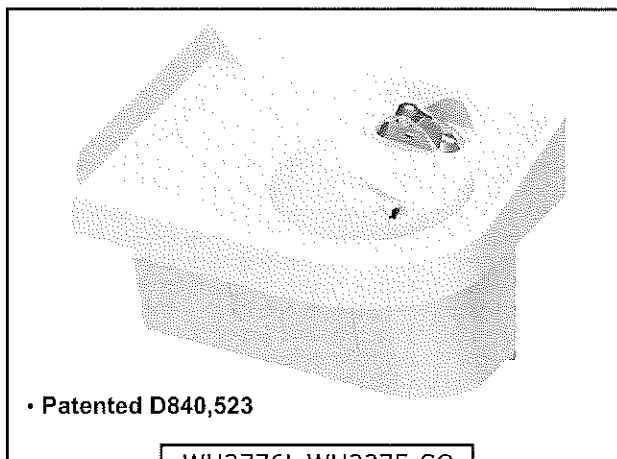


A MEMBER OF



Whitehall Ligature Resistant Corterra® Corner Basin ADA Compliant

Model WH3776L
 WH3776R



• Patented D840,523

WH3776L-WH3375-SO

Fixture May Show Some Available Options

Ligature Resistant Corterra® Corner Basin is engineered to combine the look and feel of commercial grade designer basins and countertops with durability and economy in mind. Each standard height Washbasin complies with ANSI, UFAS, and ADA requirements. Compliance is subject to the interpretation and requirements of the local code authority.

Countertop and Basin color furnished is Blanco Matte (White). Basin includes ligature resistant side splashes, overflow, grid strainer, waste piping and 1-1/2" P-Trap.

Optional Ligature Resistant Faucet (WH3375-SO shown) is available. See Individual BestCare Specification Sheets for 4" Centerset Faucet.

Optional Mixing Valve WHST70-12 delivers tempered water flow by compensating for pressure and temperature fluctuations and is ASSE 1070 compliant. Valve is to be field set to 105° Fahrenheit and includes strainers and integral checks. Operating range is 30 PSI to 100 PSI.

Enclosure conceals P-trap and optional valve assembly and is fabricated from 18 gage, type 304 stainless steel includes an access panel and is powder coated white.

GUIDE SPECIFICATION

Ligature Resistant Corterra® Washbasin. Unit with 34" standard rim height to conform with ANSI, UFAS and ADA Accessibility Standards. Provide integral "D" Shaped basin with an integral, rear overflow. Basin, countertop, backsplash and sidesplash to be constructed of Corterra® solid surface polymer resin and is Greenguard Gold listed. P-Trap enclosure to be constructed of heavy gage, type 304 stainless steel and powder coated white.

Please visit www.whitehallmfg.com for most current specifications.



Whitehall Mfg. • P.O. Box 3527 • City of Industry, CA 91744 • (800) 782-7706 • (626) 968-6681 • Fax (626) 855-4862

WH3776

Revised: 07/15/2022



MODEL NUMBER AND OPTIONS SELECTION:

BASE MODEL NUMBER

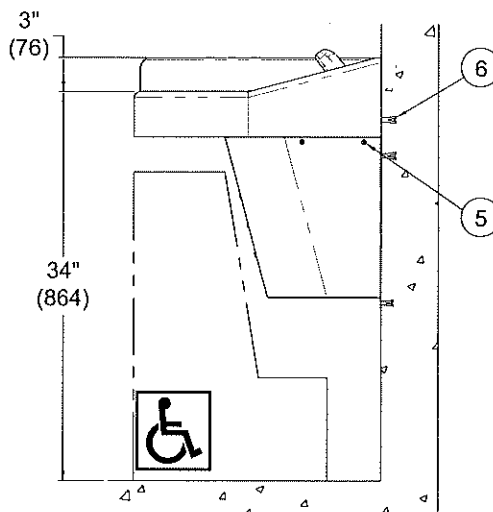
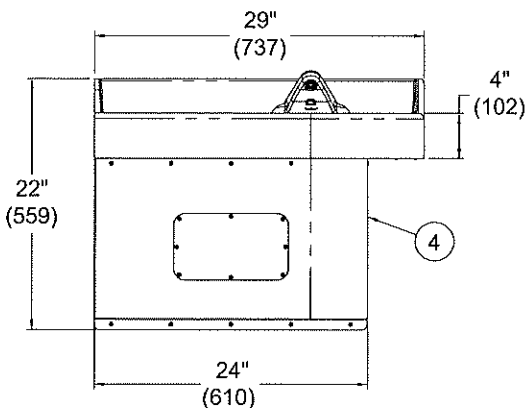
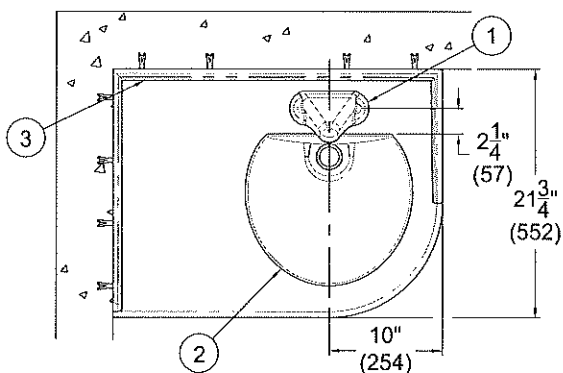
- WH3776L Ligature Resistant Corterra® Corner Basin, Left Corner
- WH3776R Ligature Resistant Corterra® Corner Basin, Right Corner

VALVE SELECTION

See Individual BestCare Specification Sheets for 4" Centerset Faucet

PRODUCT OPTIONS

- MC Mounting Carrier
- WHST70-12 Tempering Valve With Integral Mounting Feet Brass Body With 1/2" NPT Connections
- OCC Optional Corterra® Color - Specify _____
 (Refer to <https://www.whitehallmfg.com/product.aspx?ProductId=982> for available colors)



- NOTES:**
1. Ligature Resistant Sensor Activated Faucet (Optional)
 2. D-Shaped Bowl
 3. Back/Side Splash
 4. Ligature Resistant Bottom Enclosure With Access Panel
 5. Tamper Resistant Screws
 6. Wall Anchoring Hardware (By Others)

MODEL# WH3776L-WH3375-SO

DISCLAIMER:

This product is designed to decrease the probability that it may be utilized as an apparatus for ligature. It is not a replacement for professionals who are trained in the proper evaluation, management and supervision of persons at risk of suicide.

⚠ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SELECTION SUMMARY & APPROVAL FOR MANUFACTURING

Model Number & Options _____ Quantity _____
 Company _____ Date _____
 Contact _____ Title _____
 Approval for Manufacturing/Signature _____

All dimensions are nominal and subject to manufacturer's change without notice. Whitehall assumes no responsibility for use of void or superseded data. © Whitehall Manufacturing, Member of Morris Group International. Please visit www.whitehallmfg.com for most current specifications.



Division of
Acorn Engineering Company



A MEMBER OF

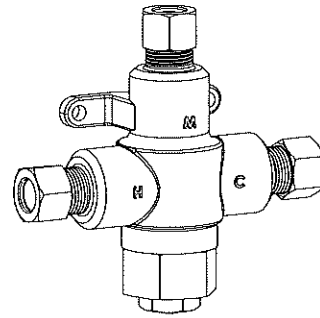


Model WHST70

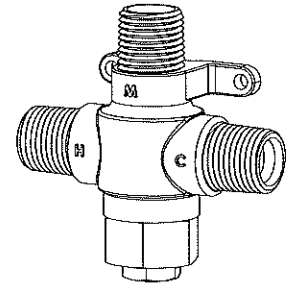
*Lead-Free Lavatory Tempering Valve
With Integral Mounting Feet*

APPLICATION:

The Acorn WHST70 is an ASSE 1070 certified, lead-free thermostatic tempering valve that protects against dangerously hot water in any commercial sink or lavatory application. This valve can be used with any type of faucet for maximum flexibility and can accommodate a single lavatory or up to 8 hand washing stations having a 0.5 gpm flow rate.



WHST70-38



WHST70-12



Patent #9,989,017

FEATURES:

- ◆ Lead-Free certified DZR brass body with corrosion resistant and lead free internal components.
- Valve body available in rough brass or rough chrome plated.
- Integral and cartridge-style checks with accessible screens to prevent backflow and to filter debris from entering the valve.
- Temperature adjustment is made using an Allen wrench. A locknut on the bonnet prevents unauthorized or accidental temperature adjustment.
- Commercial quality paraffin actuator provides repeatable, reliable performance.
- Factory set to 105°F (41°C) and field adjustable.
- Integral mounting Feet

SPECIFICATIONS:

Valve Specifications:

- Maximum Operating Pressure: 125 PSI (861 kPa)
- Flow Rate @ 45 psi (310 kPa) differential:
- WHST70-12: 4.5 GPM (17 LPM)
- WHST70-38: 4.0 GPM (15 LPM)
- Certified Minimum Flow Rate*: 0.25 GPM (1.0 LPM)
- Maximum Hot Water Temp: 180°F (82°C)
- Minimum Hot Water Supply Temp**: 5°F (3°C)
Above Set Point
- Temperature Range*: 85°F-115°F (29°C-46°C)
- Connections 1/2" NPT or 3/8" Compression

WHST70-12

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	0.7	1.5 (5.7)	2.1 (8)	2.6 (9.8)	3 (11.4)	3.7 (14)	4.5 (17)	5.2 (19.7)

WHST70-38

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	0.6	1.3 (5)	1.9 (7.1)	2.3 (8.7)	2.7 (10)	3.3 (12.4)	4 (15)	4.6 (17.5)

* In accordance with ASSE 1070 as certified by IAPMO
** Under Normal Operating Conditions

◆ The wetted surface of these valves contacted by consumable water contains less than 0.25% of lead by weight in conformance with national lead free law.

GUIDE SPECIFICATION:

The lavatory tempering valve shall be IAPMO lab certified per ASSE 1070 at 0.25 GPM (1.0 LPM) and CSA standards and shall have a solid brass body with corrosion resistant internal components. It shall include integral checks with screens to prevent backflow and to filter debris from entering the valve. Temperature adjustment shall be made using an allen wrench and a locknut on the bonnet to prevent unauthorized or accidental temperature adjustment. Valve shall provide 4.0 GPM (15 LPM) with 3/8" compression connection and 4.5 GPM (17 LPM) capacity with the 1/2" NPT connection at 45 psi (310 kPa) differential. Temperature range shall be 85°F-115°F (29°C-46°C). Valve shall be Whitehall model WHST70.

Please visit www.whitehallmfg.com
for most current specifications.

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Complies with the following standards:



Federal Public Law 111-350 (No Lead)



ASSE 1016
CSA B125.16



Complies with the following standards:



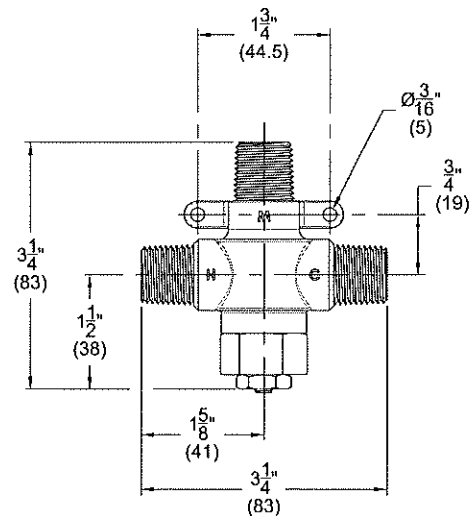
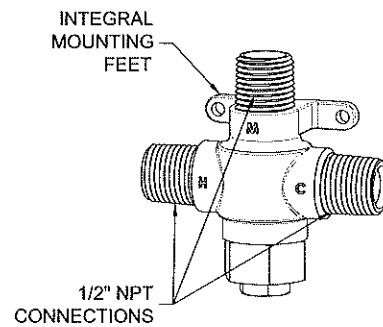
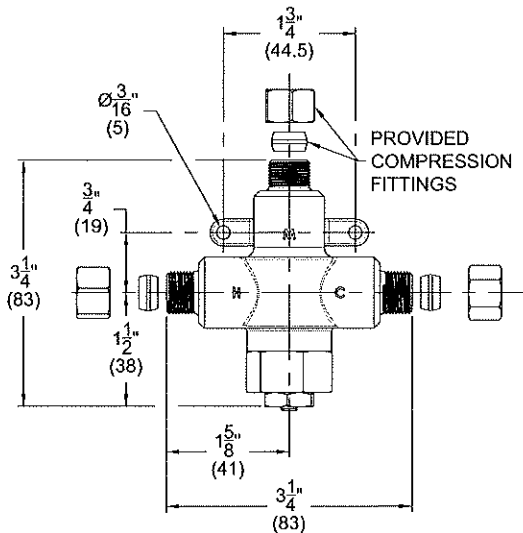
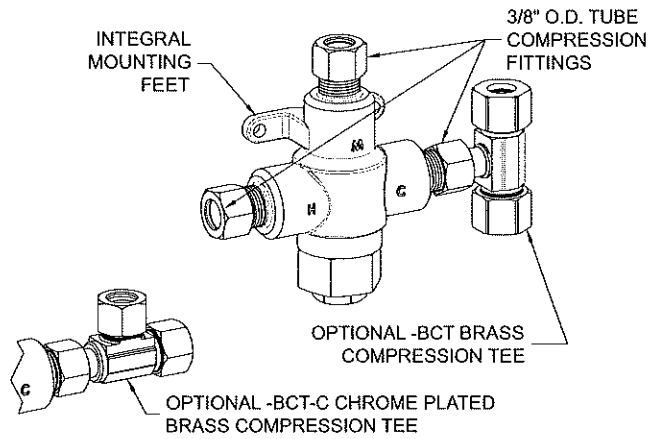
UL 1951
CSA C22.2 Nos. 14 & 68



VALVE SELECTION:

- WHST70-12 Brass Valve Body With 1/2" NPT Connections
- WHST70-38 Brass Valve Body With 3/8" Compression Connections

TECHNICAL DIMENSIONS:



⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SELECTION SUMMARY & APPROVAL FOR MANUFACTURING

Model Number & Options _____ Quantity _____

Company _____ Date _____

Contact _____ Title _____

Approval for Manufacturing/Signature _____

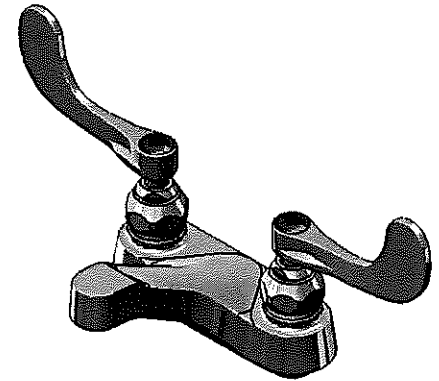
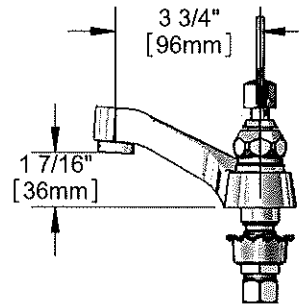
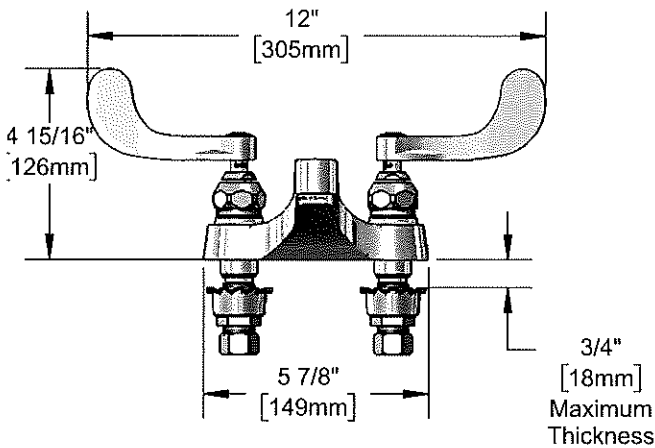
All dimensions are nominal and subject to manufacturer's change without notice. Whitehall assumes no responsibility for use of void or suspended data © Whitehall Manufacturing, Member of Morris Group International. Please visit www.whitehallmfg.com for most current specifications.



Architect/Engineering Specifications:

4" centerset deck mount mixing faucet with polished chrome plated brass body and integral spout, 2.2 GPM vandal resistant aerator, compression cartridges with spring checks, 4" wrist action handles, vandal resistant screws and 1/2" NPSM male inlets. Certified to ASME A112.18.1/CSA B125.1, NSF 61-Section 9 and NSF 372. Meets ADA ANSI/ICC A117.1 requirements.

Job Name _____
 Model Specified _____ Quantity _____
 Variations Specified _____
 Date _____



Features & Benefits:

- 4" centerset deck mount mixing faucet w/ polished chrome plated brass body and integral spout
- 2.2 GPM vandal resistant aerator, Series 8 (B-0199-08)
- Quarter-turn Eterna compression cartridges w/ spring checks to prevent cross flow of water
- 4" wrist action handles w/ color coded indexes
- Vandal resistant screws
- 1/2" NPSM male inlets w/ coupling nuts
- Material: Polished chrome plated brass body & spout and chrome plated metal handles

Product Compliance:

- ASME A112.18.1 / CSA B125.1
- NSF 61 - Section 9
- NSF 372 (Low Lead Content)
- ANSI A117.1 (ADA)



Warranty: One Year (Limited)

Performance Data:

- Pressure: 20 - 125 psi
- Temperature: 40°F - 140°F
- Flow Rate: 2.2 GPM @ 60 psi



Optional Outlets (Series 3 / VR Series 8)

GPM	Aerated	Non-Aerated (Laminar)	VR Aerated	VR Non-Aerated (VR Laminar)
0.35	N/A	<input type="checkbox"/> B-0199-03-N035	N/A	<input type="checkbox"/> B-0199-08-N035
0.5	N/A	<input type="checkbox"/> B-0199-03-N05	N/A	<input type="checkbox"/> B-0199-08-N05
1.0	N/A	N/A	N/A	<input type="checkbox"/> B-0199-08-LF10
1.2	<input type="checkbox"/> B-0199-03-F12	N/A	<input checked="" type="checkbox"/> B-0199-08-F12	N/A
1.5	<input type="checkbox"/> B-0199-03-WS	N/A	<input type="checkbox"/> B-0199-08-WS	<input type="checkbox"/> B-0199-08-LF15
2.2	<input type="checkbox"/> B-0199-03	<input type="checkbox"/> B-0199-26	Standard	<input type="checkbox"/> B-0199-28

Optional Handles

- 4" Wrist Action (Standard)
- Lever
- 4-Arm

Optional Cartridges

- Quarter Turn Cerama w/ Check Valve
- Quarter Turn Eterna w/ Spring Check (Standard)
- Push Button Metering
- Pivot Action Metering
- Wrist Action Metering



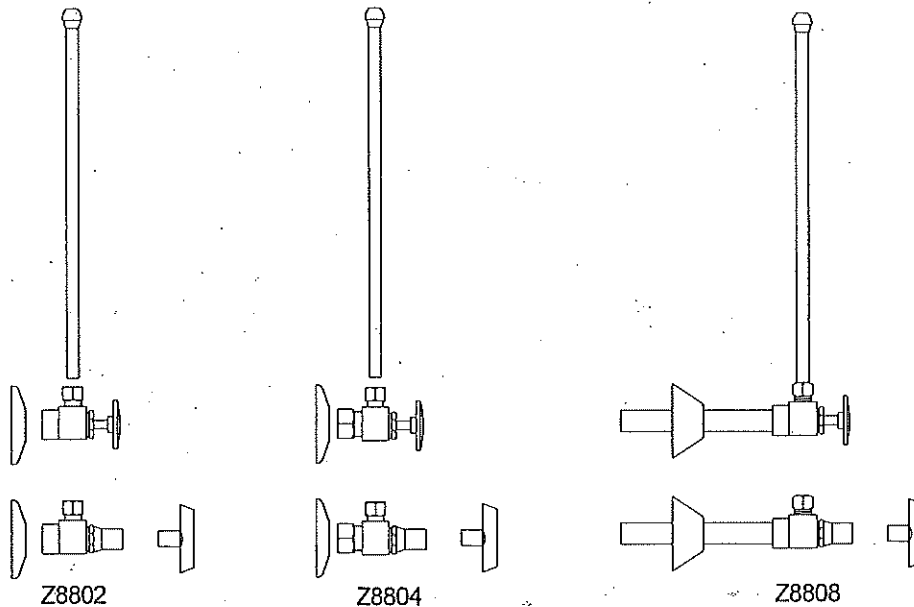


STANDARD STOP WITH FLEXIBLE LAVATORY SUPPLY

Z8802-XL-LR-PC TO Z8808-XL-LRLK-PC TAG

Engineering Specification: Zurn Z8802-XL-LR-PC TO Z8808-XL-LRLK-PC Two Zurn chrome plated, solid brass angle stops with round wheel handles or loose key as specified, two 12"[305mm] flexible chrome plated copper lavatory risers complete with two chrome plated steel flanges. Z8808-XL-LR-PC and Z8808-XL-LRLK-PC include 5"[127mm] chrome plated copper extension tubes and deep bell steel flanges.

Zurn Lead Compliant* "XL" products are a line of durable, high quality brass faucets and fixtures that are designed and manufactured to comply with state laws and local codes that mandate lead content levels: Zurn "XL" products are manufactured with *not more than 0.25% lead content when used with respect to wetted surfaces of pipes and pipe fittings, plumbing fitting and fixtures: California Health & Safety Code § 116875; Vermont 9 VCA § 2470h.



PRODUCT NUMBER	CONNECTIONS	EXT.	MASTER CARTON	WEIGHT CARTON	
				LR	LRLK
Z8802-XL-LR-PC	1/2 [13] IPS x 3/8 [10] OD	-	25	24	
Z8802-XL-LRLK-PC	1/2 [13] IPS x 3/8 [10] OD	-	25		25
Z8804-XL-LR-PC	1/2 [13] NOM x 3/8 [10] OD	-	25	24	
Z8804-XL-LRLK-PC	1/2 [13] NOM x 3/8 [10] OD	-	25		25
Z8808-XL-LR-PC	1/2 [13] SWT x 3/8 [10] OD	5	25	28	
Z8808-XL-LRLK-PC	1/2 [13] SWT x 3/8 [10] OD	5	25		33

SUFFIXES

- ___ - A Single supply option
- ___ - C1 Standard Line Lock Shield Cap
- ___ - CE Chrome Plated, Cast Brass, Flange with setscrew
- ___ - D Chrome Plated Steel, Deep Bell Flange (Bell Type)
- ___ - WD Wrought Brass, Deep Flange, (Bell Type)
- ___ - XP Cross Handle
- ___ - 15 15[381] Supply Tube
- ___ - 20 20[508] Supply Tube
- ___ - 30 30[762] Supply Tube
- ___ - 36 36[914] Supply Tube

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

ZURN INDUSTRIES, LLC ♦ COMMERCIAL BRASS OPERATION ♦ 2640 SOUTH WORK STREET ♦ FALCONER NY 14733

Phone: 1-800-997-3876 ♦ Fax: 1-919-775-3541 ♦ www.zurn.com

In Canada: ZURN INDUSTRIES LIMITED ♦ 3544 Nashua Drive ♦ Mississauga, Ontario L4V1L2 ♦ Phone: 905/405-8272 Fax: 905/405-1292

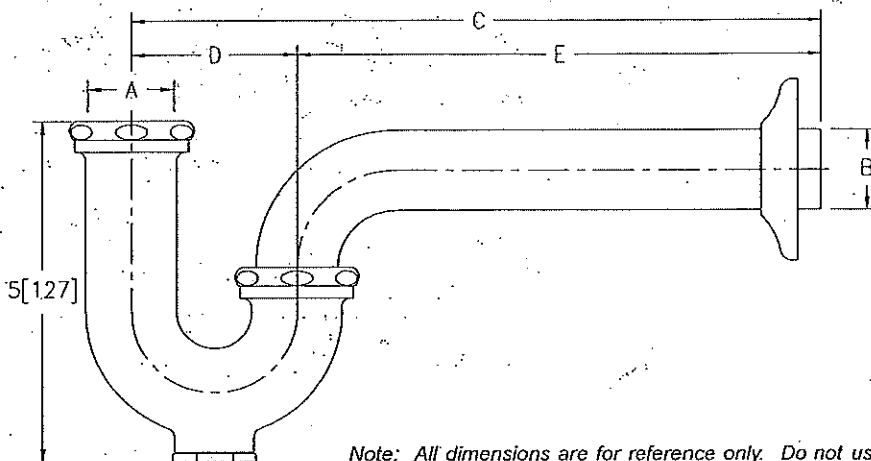


SEMI-CAST P-TRAPS WITH WALL BEND

Z8700-PC TO Z8708-PC

TAG

Engineering Specification: Zurn Z8700-PC to Z8708-PC. —Chrome-plated cast brass (copper alloy) body P-trap with cleanout, tubular brass wall bend as specified, die-cast nuts, and shallow escutcheon with compression inlet.



PRODUCT NUMBER	A INLET in[mm]	B OUTLET in[mm]	GAUGE	DIMENSIONS			MASTER CARTON	WEIGHT CARTON [lbs]
				C in[mm]	D in[mm]	E in[mm]		
Z8700-PC	1 1/4[32]	1 1/4[32]	17	10[254]	2 1/2[64]	7 1/2[191]	12	24
Z8700-8-PC	1 1/4[32]	1 1/4[32]	17	11[279]	2 1/2[64]	8 1/2[216]	12	24
Z8700-15-PC	1 1/4[32]	1 1/4[32]	17	15[381]	2 1/2[64]	12 1/2[318]	18	40
Z8701-PC	1 1/4[32]	1 1/2[38]	17	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8701-9-PC	1 1/4[32]	1 1/2[38]	17	12[305]	3[76]	9[229]	12	24
Z8701-15-PC	1 1/4[32]	1 1/2[38]	17	15[381]	3[76]	12[305]	18	42
Z8702-PC*	1 1/2[38]	1 1/2[38]	17	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8702-9-PC*	1 1/2[38]	1 1/2[38]	17	12[305]	3[76]	9[229]	12	24
Z8702-15-PC*	1 1/2[38]	1 1/2[38]	17	15[381]	3[76]	12[305]	18	42
Z8703B-PC**	1 1/2[38]	2[51]	17	12 1/2[318]	3 1/2[89]	9[229]	6	18
Z8704B-PC**	2[51]	2[51]	17	12 1/2[318]	3 1/2[89]	9[229]	6	18
Z8706-PC	1 1/4[32]	1 1/4[32]	20	10[254]	2 1/2[64]	7 1/2[191]	12	24
Z8707-PC	1 1/4[32]	1 1/2[38]	20	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8708-PC*	1 1/2[38]	1 1/2[38]	20	10 1/2[267]	3[76]	7 1/2[191]	12	24

OPTIONAL ACCESSORIES

Suffix	Description
-B	Brass Nuts
-BX	Box Escutcheon
-CE	Cast Brass Escutcheon with Setscrew
-D	Deep Escutcheon (Note = not available for Z8703B-PC and Z8704B-PC)
-J	Metal to Metal Ground Joint Connection
-WC	Waste Connections - Compression
-15	15[381] C Dim. 1 1/4[32] and 1 1/2[38] Only
-18	18[457] C Dim. 1 1/4[32] and 1 1/2[38] Only

* COMES WITH OPTIONAL 1-1/2" x 1-1/4" REDUCTION POLY-WASHER FOR INLET

** SHIPPED WITH BRASS NUTS UNLESS OTHERWISE SPECIFIED

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Z1224-5 RIGID SYSTEM FOR WHITEHALL CO. CORNER LAVATORIES

DIMENSIONAL DATA (INCHES [MM]) SUBJECT TO MANUFACTURING TOLERANCES AND CHANGES WITHOUT NOTICE

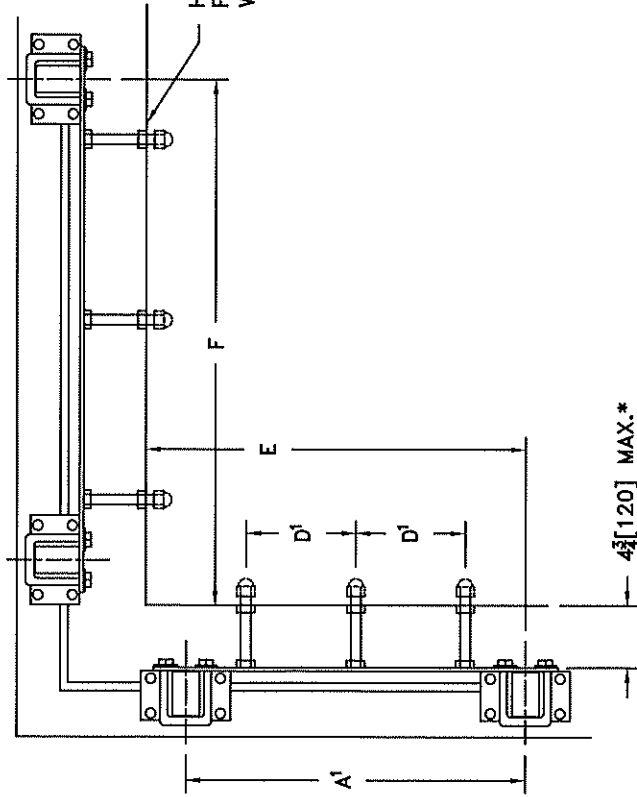
WHITEHALL CO. REFERENCE		ZURN REFERENCE									
NAME	CATALOG NO.	SIZE	A	A'	B	C	D	D'	E	F	H
CORNER LAVATORY	WH3776L	29 X 21 1/4 [737 X 552]	24 [610]	17 [432]	32 3/4 [832]	34 [864]	9 [229]	5 1/2 [140]	19 [483]	26 1/4 [667]	42 [1067]

HANGER PLATES:
 (1) TOP PLATE P.N. 323110-001
 (1) TOP PLATE P.N. 323110-002

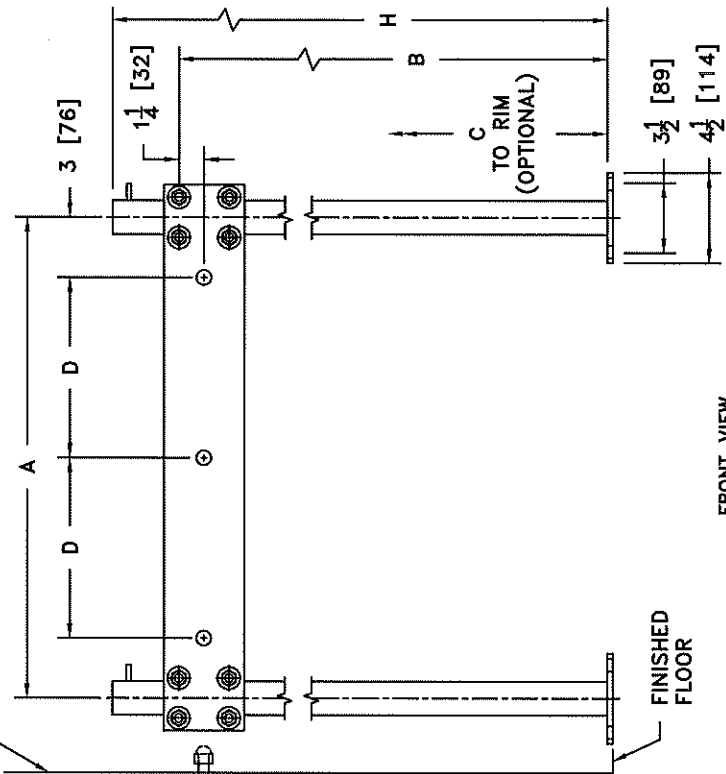
UPRIGHTS:
 (4) 42-UPRIGHT P.N. 56289-028

SPECIAL HARDWARE:
 (2) BAG #49 66955-049
 (6) 5/8" STUDS 14861-073
 (18) 5/8" WASHERS 14858-006
 (24) 5/8" NUTS 14850-008

TOP VIEW



FRONT VIEW



*WITH STANDARD STUD LENGTH OF 6 [152]
 -SL (SPECIFY WALL THICKNESS FOR LONGER STUDS)

ENGINEERING SPECIFICATION: AS SHOWN; "DURA-COATED" STEEL STANCHIONS WITH WELDED FEET, ADJUSTABLE SUPPORT PLATES, AND MOUNTING BOLTS AND TRIM.

DATE: 04/22/20	PRODUCT NUMBER Z1224-5
REV. A	DRAWING NUMBER 323111
C.N. NO. 142612	

Submittal Comment Sheet

To: Randy Stocks, Stocks-Mann Architects
From: Rob Adams, BTME
Date: January 23, 2023
Project: Booneville HDC Building #6
Project #: 01-20-0003
Ref: 22 4216.13-1 Commercial Lavatories Submittal
Submitted By: Alessi Keyes Construction

APPROVED	<input type="checkbox"/>
REJECTED	<input type="checkbox"/>
REVISE AND RESUBMIT	<input type="checkbox"/>
REFER TO SUBMITTAL COMMENT SHEET	<input checked="" type="checkbox"/>

This review performed by Bernhard TME, LLC, is only for general conformance with the design concept of the project and general compliance with the information provided in the Contract Documents. Corrections or comments made on the submittal and/or shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans, specifications, and other contract documents. Approval of a specific item shall not indicate an approval of an assembly of which the item is a component. Contractor is responsible for the following: all quantities; configuration of components; dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences, and procedures of construction; coordination of the work with that of all other trades; and, for performing all work in a safe and satisfactory manner.

Bernhard TME
Engineering

DATE: 01/23/23 BY: R. Adams

Below find our response for the submittal received on Wednesday January 18, 2023.

- | | | | |
|----|-----|--|--------------------------------|
| 1. | L-1 | WI I3377 Ligature Resistant faucet with Hot and Cold buttons. | REVISE AND RESUBMIT |
| | a. | | |
| 2. | L-2 | | APPROVED |
| 3. | L-3 | | APPROVED |

- End of Submittal Comments -

THIS REVIEW PERFORMED BY BERNHARD TME, LLC, IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS. CORRECTIONS OR COMMENTS MADE ON THE SUBMITTAL AND/OR SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS. APPROVAL OF A SPECIFIC ITEM SHALL NOT INDICATE AN APPROVAL OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING: ALL QUANTITIES; CONFIGURATION OF COMPONENTS; DIMENSIONS TO BE CONFIRMED AND CORRELATED AT THE JOBSITE; INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESS OR TO THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION; COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES; AND, FOR PERFORMING ALL WORK IN A SAFE AND SATISFACTORY MANNER.

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 12/1/2022
Return Request: 12/11/2022
Project: New Dormitories – Bldg. 6
Supplier: Little Rock Winnelson
Manufacturer: Various
Submittal: Commercial Lavatories
Submittal Number: 22 42 16.13-01
Drawing # and Installation: Plumbing Drawings

ARCHITECT

Stocks Mann Architects
401 W. Capitol, Suite 402
Little Rock, AR 72201
501-370-9207

ENGINEER

Bernhard TME
1 Allied Drive #2600, Building 2
Little Rock, AR 72202
501-666-6776

GENERAL CONTRACTOR

Alessi Keyes Construction
10623 Maumelle Blvd.
N. Little Rock, AR 72113
501-225-6699

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

CSUSA PROJECT NO.

22-102

jon@comfortar.com

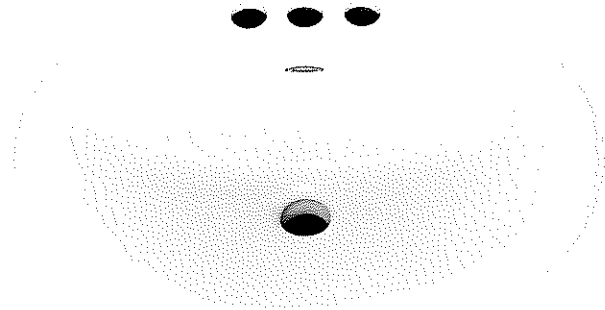
ALESSI KEYES CONSTRUCTION
REVIEWED FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
Charley Dawson 1/19/2023

L-2 LAVATORY
AM. STANDARD 0476.028 OVAL LAVATORY
T&S B-2711-VF05 FAUCET
Z8746PC 1-1/4" OFFSET GRID DRAIN
Z8802LK SUPPLY AND STOP
Z8700PC 1-1/4" CAST BRASS P-TRAP
CASH ACME 24525 THERMOSTATIC MIXING VA;LVE

Aqualyn® Countertop Sink

- Made from vitreous china
- Self-rimming with cutout template supplied
- Front overflow
- Faucet ledge

- 0475.020** Faucet holes on 8" (203mm) centers (illustrated)
- 0475.920** Faucet holes on 8" (203mm) centers
 - Less overflow
- 0476.028** Faucet holes on 4" (102mm) centers
- 0476.037** Faucet holes on 4" (102mm) centers
 - Extra right-hand hole
- 0475.035** Faucet holes on 4" (102mm) centers
 - Extra left-hand hole
- 0476.928** Faucet holes on 4" (102mm) centers
 - Less overflow
- 0475.047** Center hole only



SEE REVERSE FOR ADDITIONAL ROUGHING-IN DIMENSIONS

Nominal Dimensions:

518 x 441mm
(20-3/8" x 17-3/8")

Bowl sizes:

406mm (16") wide
254mm (10") front to back
143mm (5-5/8") deep

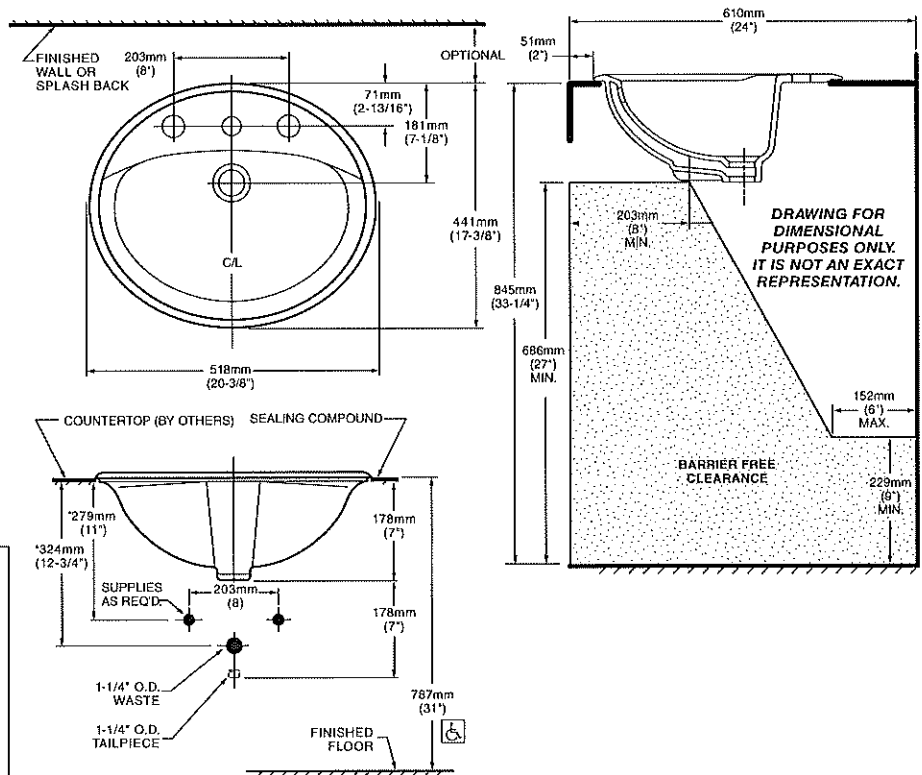
Compliance Certifications - Meets or Exceeds the Following Specifications:

- ASME A112.19.2M for Vitreous China Fixtures

To Be Specified:

- Color: White Bone Linen
- Faucet*:
- Faucet Finish:
- Supplies:
- 1-1/4" Trap:

* See faucet section for additional models available



NOTES:

* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED. FOR COUNTERTOP CUTOUT AND INSTALLATION INSTRUCTIONS USE TEMPLATE SUPPLIED WITH SINK. FITTINGS NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY. SEALING COMPOUND SUPPLIED BY OTHERS.

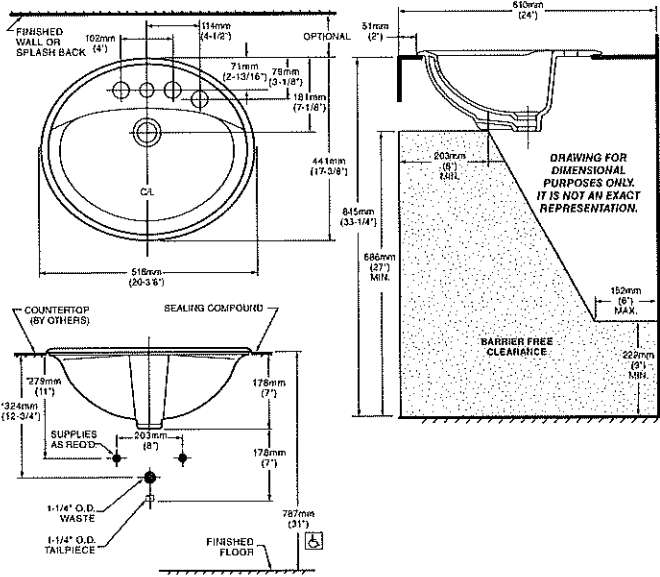
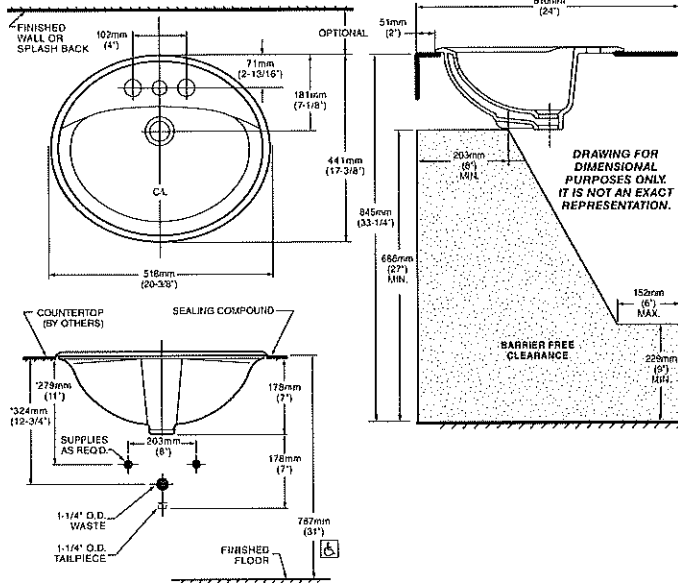
IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

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

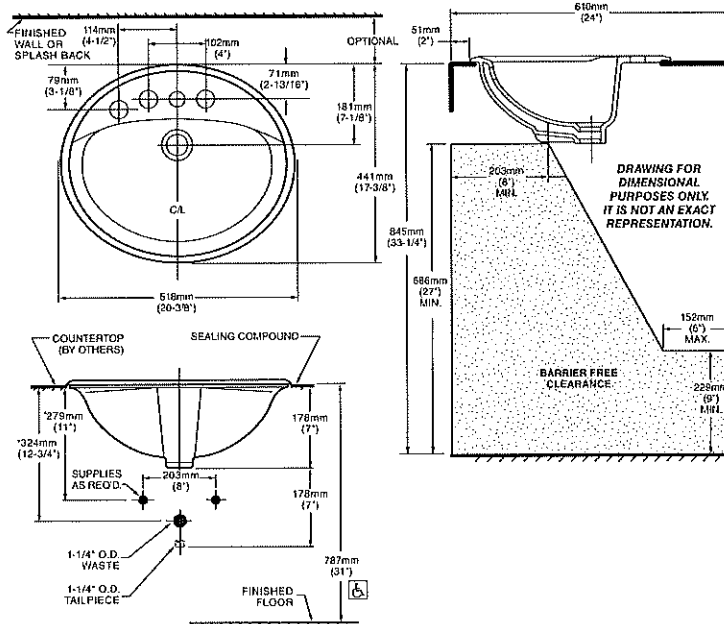
Install lavatory 864mm (34") from finished floor. Lavatory installed 51mm (2") minimum from front edge of countertop provides 686mm (27") knee clearance area.

0476.028 Faucet holes on 4" (102mm) centers

0476.037 Faucet holes on 4" (102mm) centers
• Extra right-hand hole



0475.035 Faucet holes on 4" (102mm) centers
• Extra left-hand hole



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES. Install lavatory 864mm (34") from finished floor. Lavatory installed 51mm (2") minimum from front edge of countertop provides 686mm (27") knee clearance area.

NOTES:
* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED. FOR COUNTERTOP CUTOUT AND INSTALLATION INSTRUCTIONS USE TEMPLATE SUPPLIED WITH SINK. FITTINGS NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY. SEALING COMPOUND SUPPLIED 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.



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

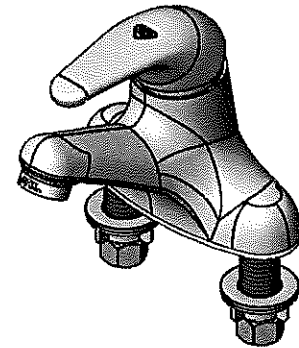
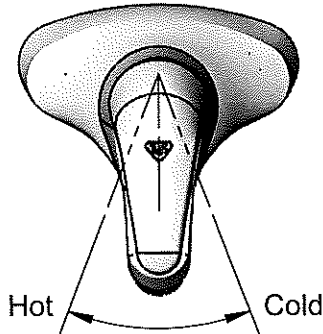
Job Name _____ Date _____

Model Specified _____ Quantity _____

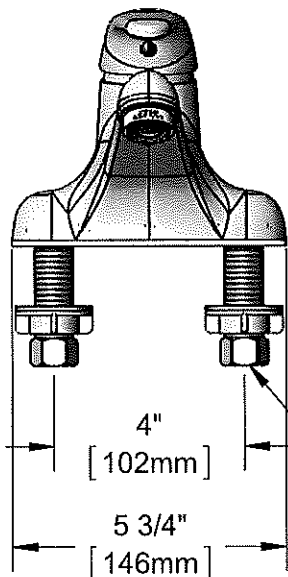
Customer/Wholesaler _____

Contractor _____

Architect/Engineer _____



B-0199-09-N05
0.5 GPM Vandal Resistant
Non-Aerated Spray Device



4 13/16"
[122mm]
"OFF"

2 1/4"
[57mm]

5 15/16"
[150mm]
"Full ON"

Mounting
Surface

1 3/8"
[35mm]
Maximum
Thickness

4"
[102mm]

5 3/4"
[146mm]

1/2" NPSM Male Inlets
w/ Coupling Nuts

4 3/8"
[112mm]

Rough-In Requirement:
(2) ϕ 1" [25mm] Mounting Holes

Product Specifications:
4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature
Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:
ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

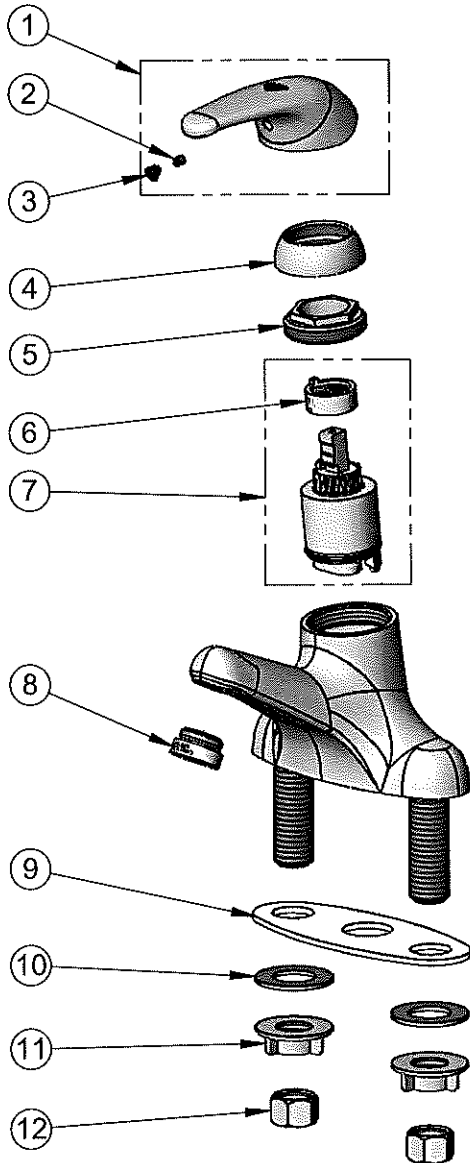
Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	013113-45	Single Lever Short Handle
2	016675-45	Set Screw
3	014173-45	Index, Temperature
4	016661-45	Trim Ring
5	016663-45	Locking Nut
6	015400-45	Temperature Limit Stop
7	013111-45	Ceramic Cartridge w/ Temperature Limit Stop
8	B-0199-09-N05	0.5 GPM VR Spray Device, 15/16-27 Male w/ Key
9	014167-45	Deck Gasket
10	000999-45	Brass Lock Washer
11	016673-45	Shank Nut
12	000958-20	Coupling Nut



015425-45
Vandal Resistant Key

Product Specifications:

4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



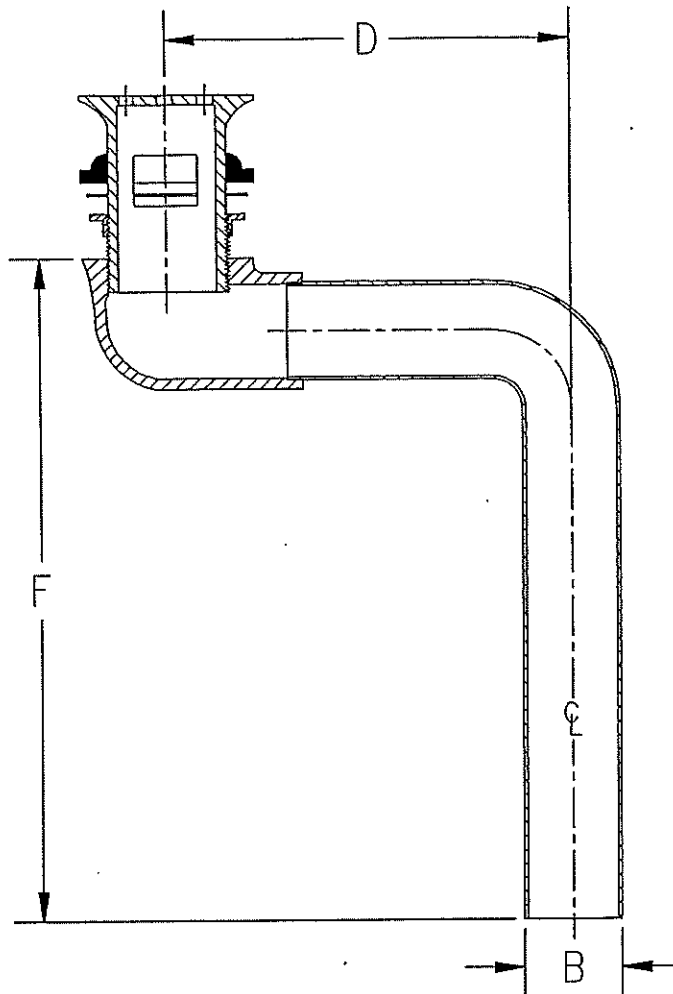
OFFSET LAVATORY STRAINERS ADA COMPLIANT

Z8746-PC

TAG _____



Engineering Specification: Zum Z8746-PC – Chrome plated cast brass open grid drain strainer, and chrome plated cast brass elbow. Furnished with 1-1/4[32] 17 gauge, chrome plated tubular brass offset tailpiece for sink depth to 2-1/2[57].



Note: All dimensions are for reference only. Do not use for pre-plumbing

PRODUCT NUMBER	B OUTLET	DIMENSIONS		MASTER CARTON	WEIGHT CARTON
		D	F		
Z8746-PC	1-1/4[32]	5-1/8[130]	8-3/4[222]	24	40

OPTIONAL ACCESSORIES

Suffix	Description
___-NOF	No Overflow

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Rev. E
Dwg. No. 60961

Date: 8/12/10

C.N. No. 126768
Product No. Z8746-PC

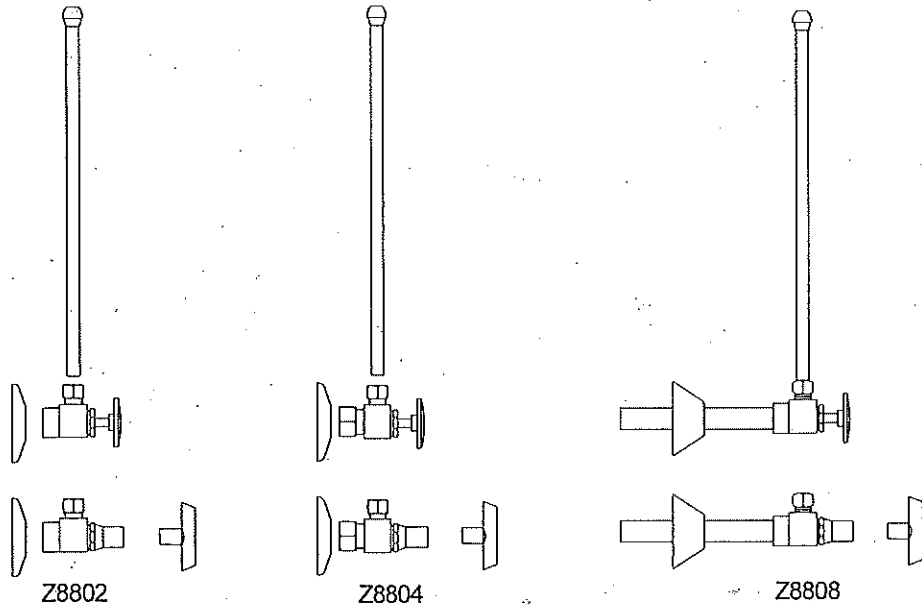


STANDARD STOP WITH FLEXIBLE LAVATORY SUPPLY

Z8802-XL-LR-PC TO Z8808-XL-LRLK-PC TAG

Engineering Specification: Zurn Z8802-XL-LR-PC TO Z8808-XL-LRLK-PC Two Zurn chrome plated, solid brass angle stops with round wheel handles or loose key as specified, two 12"[305mm] flexible chrome plated copper lavatory risers complete with two chrome plated steel flanges. Z8808-XL-LR-PC and Z8808-XL-LRLK-PC include 5"[127mm] chrome plated copper extension tubes and deep bell steel flanges.

Zurn Lead Compliant* "XL" products are a line of durable, high quality brass faucets and fixtures that are designed and manufactured to comply with state laws and local codes that mandate lead content levels: Zurn "XL" products are manufactured with *not more than 0.25% lead content when used with respect to wetted surfaces of pipes and pipe fittings, plumbing fitting and fixtures: California Health & Safety Code § 116875; Vermont 9 VCA § 2470h.



PRODUCT NUMBER	CONNECTIONS	EXT.	MASTER CARTON	WEIGHT CARTON	
				LR	LRLK
Z8802-XL-LR-PC	1/2 [13] IPS x 3/8 [10] OD	-	25	24	
Z8802-XL-LRLK-PC	1/2 [13] IPS x 3/8 [10] OD	-	25		25
Z8804-XL-LR-PC	1/2 [13] NOM x 3/8 [10] OD	-	25	24	
Z8804-XL-LRLK-PC	1/2 [13] NOM x 3/8 [10] OD	-	25		25
Z8808-XL-LR-PC	1/2 [13] SWT x 3/8 [10] OD	5	25	28	
Z8808-XL-LRLK-PC	1/2 [13] SWT x 3/8 [10] OD	5	25		33

SUFFIXES

- ___ - A Single supply option
- ___ - C1 Standard Line Lock Shield Cap
- ___ - CE Chrome Plated, Cast Brass, Flange with setscrew
- ___ - D Chrome Plated Steel, Deep Bell Flange (Bell Type)
- ___ - WD Wrought Brass, Deep Flange, (Bell Type)
- ___ - XP Cross Handle
- ___ - 15 15[381] Supply Tube
- ___ - 20 20[508] Supply Tube
- ___ - 30 30[762] Supply Tube
- ___ - 36 36[914] Supply Tube

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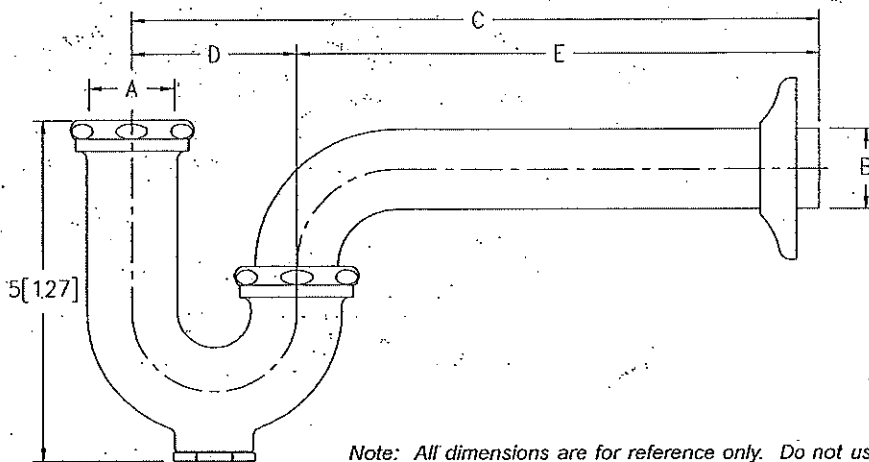


SEMI-CAST P-TRAPS WITH WALL BEND

Z8700-PC TO Z8708-PC

TAG

Engineering Specification: Zurn Z8700-PC to Z8708-PC. - Chrome-plated cast brass (copper alloy) body P-trap with cleanout, tubular brass wall bend as specified, die-cast nuts, and shallow escutcheon with compression inlet.



Note: All dimensions are for reference only. Do not use for pre-plumbing.

PRODUCT NUMBER	A INLET in[mm]	B OUTLET in[mm]	GAUGE	DIMENSIONS			MASTER CARTON	WEIGHT CARTON [lbs]
				C in[mm]	D in[mm]	E in[mm]		
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Z8706-PC	1 1/4[32]	1 1/4[32]	20	10[254]	2 1/2[64]	7 1/2[191]	12	24
Z8707-PC	1 1/4[32]	1 1/2[38]	20	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8708-PC*	1 1/2[38]	1 1/2[38]	20	10 1/2[267]	3[76]	7 1/2[191]	12	24

OPTIONAL ACCESSORIES

Suffix	Description
-B	Brass Nuts
-BX	Box Escutcheon
-CE	Cast Brass Escutcheon with Setscrew
-D	Deep Escutcheon (Note = not available for Z8703B-PC and Z8704B-PC)
-J	Metal to Metal Ground Joint Connection
-WC	Waste Connections - Compression
-15	15[381] C Dim. 1 1/4[32] and 1 1/2[38] Only
-18	18[457] C Dim. 1 1/4[32] and 1 1/2[38] Only

* COMES WITH OPTIONAL 1-1/2" x 1-1/4" REDUCTION POLY-WASHER FOR INLET

** SHIPPED WITH BRASS NUTS UNLESS OTHERWISE SPECIFIED

ZURN INDUSTRIES, LLC • COMMERCIAL BRASS OPERATION • 2640 SOUTH WORK STREET • FALCONER NY 14733

Phone: 1-800-997-3876 • Fax: 1-919-775-3541 • www.zurn.com

In Canada: ZURN INDUSTRIES LIMITED • 3544 Nashua Drive • Mississauga, Ontario L4V1L2 • Phone: 905/405-8272 Fax: 905/405-1292



Heatguard® 145 Series—Lead Free

DESCRIPTION

The **Heatguard® 145** is a compact Thermostatic Mixing Valve that mixes hot water with cold to deliver tempered water at a constant temperature.

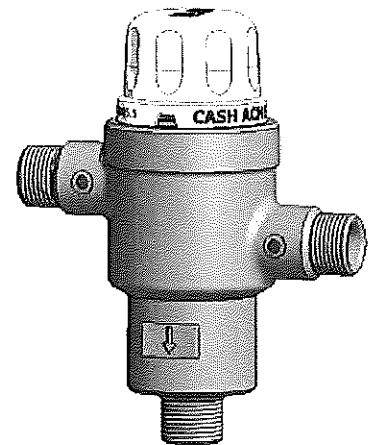
The **Heatguard® 145** is specifically intended for use in conjunction with individual faucets and electronic sensor faucets.

The **Heatguard® 145** is a compact, high specification product incorporating the latest in Thermostatic Technology. It features a robust design based on the expertise gained from years of experience in the design and manufacture of safety valves. Every valve is tested for performance on an automated testing station during the assembly process. The valve is third-party listed for individual point-of-use applications.

The **Heatguard® 145** features a rapid response thermostatic element for superior control. The thermostatic element senses the outlet water temperature and reacts to maintain a constant delivery temperature even under changing flows or variations in supply temperatures or pressures. It provides stable operation at flow rates as low as 0.34 gpm (1.3 l/min). The valve also reduces the outlet flow to a trickle in the event of a cold water supply failure.

The **Heatguard® 145** features a snap-on cover over a spindle mechanism that requires a special tool to adjust the temperature. The special tool is provided with each valve.

The **Heatguard® 145** has inlet connections to suit a 3/8" flexible hose connector or a compression connection to 3/8" OD tube. Also available with cold water bypass and elbow insert fittings. Supplied standard with integral check valves on both inlets to prevent cross-flow.



HEATGUARD®
THERMOSTATIC MIXING VALVES

FEATURES AND BENEFITS

Compact design:

Easily fits under or behind a single basin.

Accurate temperature control with flows as low as 0.34 gpm (1.3 l/min):

Increased user comfort and convenience, (especially with sensor faucets).

Robust, low complexity construction:

Superior reliability, improved user safety.

Total flow shut-off if cold supply fails:

Greater end user safety.

Listed by IAPMO, CSA, and ASSE:

Inspector friendly, peace of mind!

Use with SharkBite®:

Easily connect to the riser with SharkBite® 1/4" fittings and stops.

SPECIFICATION

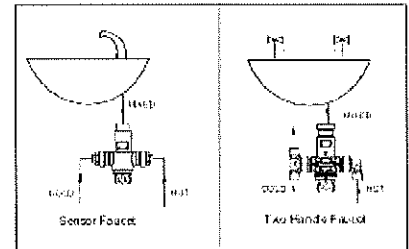
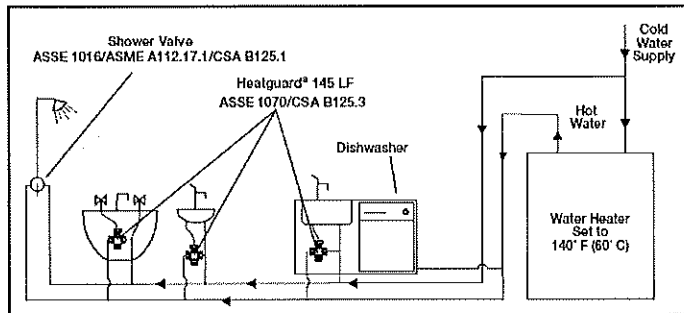
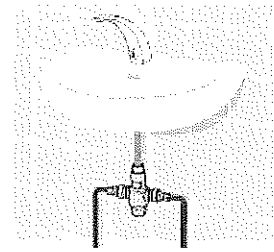
A Temperature Actuated Mixing Valve shall be installed at single point-of-use fixture to deliver hot water at a controlled temperature. The valve shall be certified to ASSE 1070 and CSA B 125.3 standards and third party listed. The temperature actuated mixing valve shall control the delivered water temperature via a regulating piston made from engineered polymer. The valve should have check valves at both inlets to prevent cross flow from hot to cold. The adjusting mechanism shall be protected by a snap-on cover. The valve shall be a Cash Acme **Heatguard® 145 LF**.



Heatguard® 145 Series—Lead Free

TYPICAL INSTALLATION

The Heatguard® 145 is a high performance thermostatic mixing valve designed to deliver mixed water to a single outlet. It can also be used to supply sensor faucets or two handle manual faucets.



SPECIFICATION DATA

Performance:

Adj. outlet temperature range	95 – 118°F (35 – 48°C)
Factory set temperature range	104 – 110°F (40 – 43.3°C)
Temp. hot supply	120 – 194°F (48.9 – 90°C)
Temp. cold supply	39 – 85°F (3.9 – 30°C)
Maximum pressure	230 psi (1600 kPa)
Flow rate, minimum	0.34 gpm (1.3 l/min)
Flow rate, maximum @ 45 PSI	5.8 gpm (22 l/min)

Materials:

Body	Bronze
Springs	Stainless Steel
Internal cap	Brass
Piston	Engineered Polymer
Guide tube	Noryl GFN2)

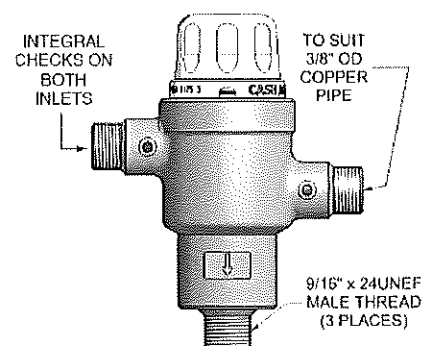
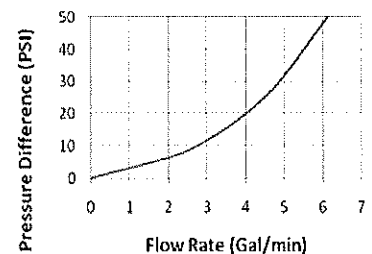
AVAILABLE CONNECTIONS

Compression	Suitable for 3/8" OD tube Also available with cold water bypass and elbow insert fittings.
-------------	---

CERTIFICATIONS

The Cash Acme Heatguard® 145 LF is certified to ASSE 1070, CSA B125.3, NSF 372, and listed by ASSE, CSA, and IAPMO for use in accordance with U.S. and Canadian plumbing codes.

Flow Curve



L-3 LAVATORY
AM. STANDARD 0355.012 WALL HUNG LAVATORY
T&S B-2711-VF05 FAUCET
Z8743PC 1-1/4" GRID DRAIN
Z8802LK SUPPLY AND STOP
Z8700PC 1-1/4" CAST BRASS P-TRAP
CASH ACME 25687 THERMOSTATIC MIXING VALVE
ZURN Z1231 LAVATORY CARRIER

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
- Compliant with Texas Accessibility Standard (TAS) for children age group 13 and up

Faucet holes on 203 mm (8") centers:

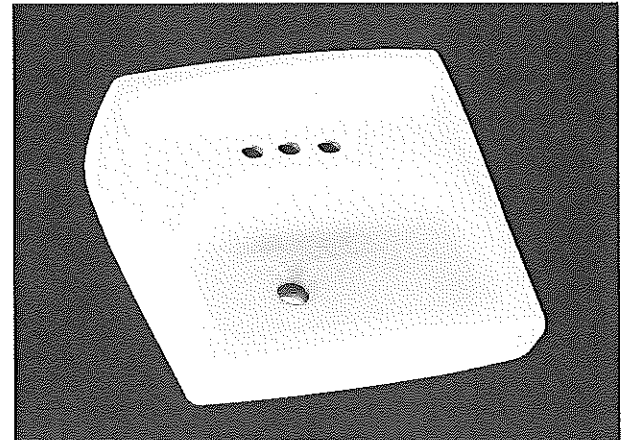
- 0356.028** For exposed bracket support (by others)
- 0356.015** For wall hanger (included) or concealed arms support (by others)
- 0356.915** For wall hanger (included) or concealed arms support (by others) less overflow
- 0356.037** For wall hanger (included) or concealed arms support (by others) with extra 35 mm (1-3/8") hole for soap/lotion dispenser (by others) on right-hand side

Faucet holes on 102 mm (4") centers:

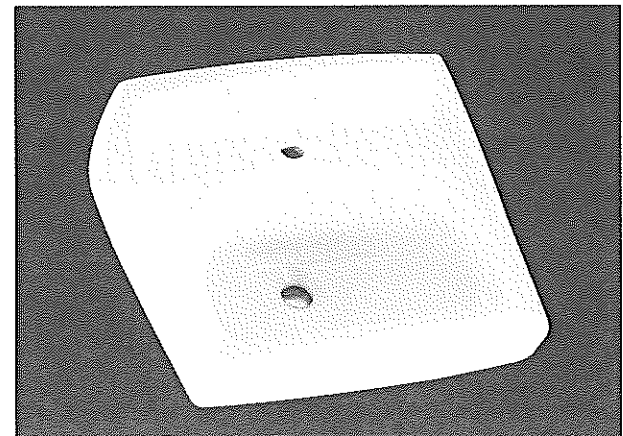
- 0355.027** For exposed bracket support (by others)
- 0355.012** For wall hanger (included) or concealed arms support (by others)
- 0355.912** For wall hanger (included) or concealed arms support (by others) less overflow
- 0355.056** For wall hanger (included) or concealed arms support (by others) with extra 35 mm (1-3/8") hole for soap/lotion dispenser (by others) on left-hand side
- 0355.034** For wall hanger (included) or concealed arms support (by others) with extra 35 mm (1-3/8") hole for soap/lotion dispenser (by others) on right-hand side
- 0355.041** With two holes spaced 343 mm (13-1/2") in back splash for 10 mm (3/8") bolts (by others)

Single center faucet hole:

- 0356.041** For exposed bracket support (by others)
- 0356.421** For wall hanger (included) or concealed arms support (by others)
- 0356.921** For wall hanger (included) or concealed arms support (by others) less overflow
- 0356.439** For wall hanger (included) or concealed arms support (by others) with single faucet hole on right
- 0356.066** For exposed bracket support (by others) with single faucet hole on right
- 0356.115** For wall hanger (included) or concealed arms support (by others) with extra 35 mm (1-3/8") hole for soap/lotion dispenser (by others) on left-hand side
- 0356.137** For wall hanger (included) or concealed arms support (by others) with extra 35 mm (1-3/8") hole for soap/lotion dispenser (by others) on right-hand side



0355.012



0356.041

SEE FOLLOWING PAGES FOR ROUGHING-IN DIMENSIONS

Compliance Certifications - Meets or Exceeds the Following Specifications:

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

Nominal Dimensions:

540 x 464 mm
 (21-1/4" x 18-1/4")

Bowl sizes:

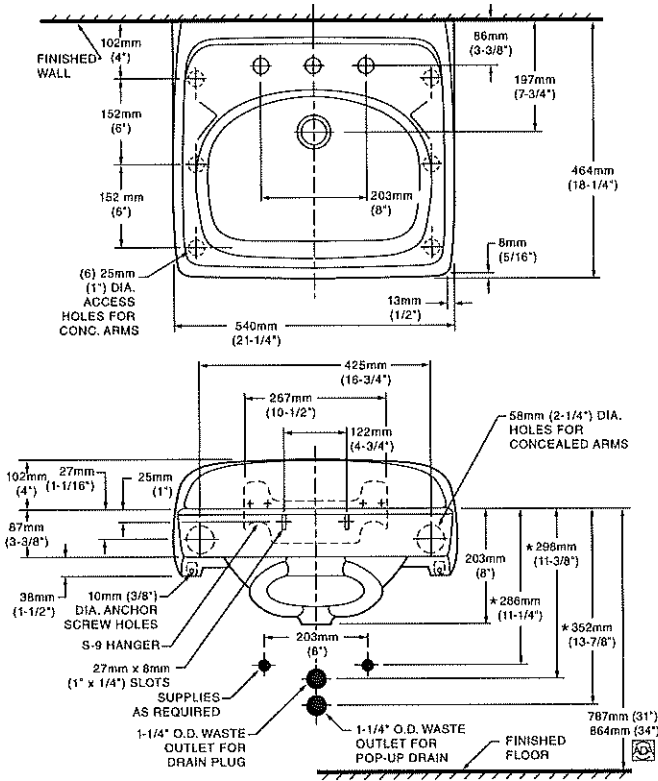
379 mm (14-7/8") wide
 254 mm (10") front to back
 165 mm (6-1/2") deep

To Be Specified:

- Color: White
- Faucet:
- Faucet Finish:
- Supplies:
- 1-1/4" Trap:
- Bracket Support (by others):
- Concealed Arms Support (by others):

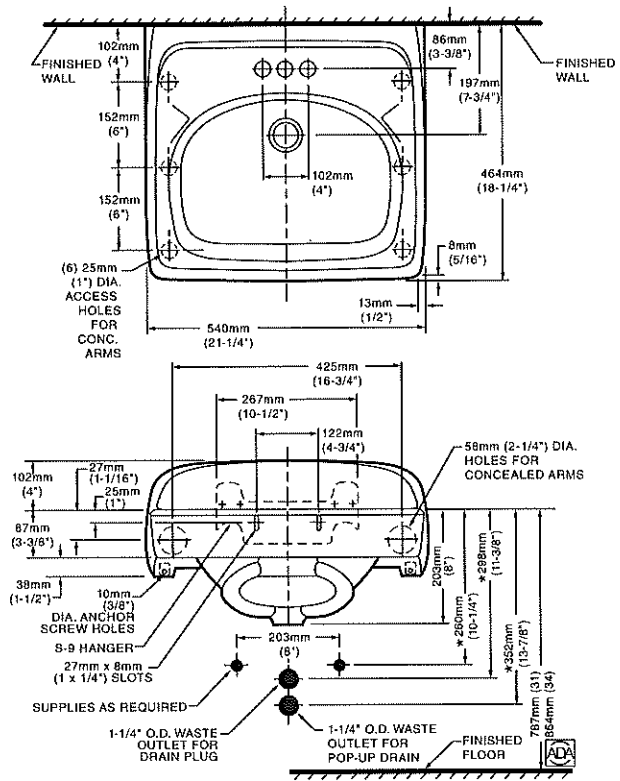
8" CENTER CONFIGURATIONS

All Wall Hanger (included) or Concealed Arm Configurations

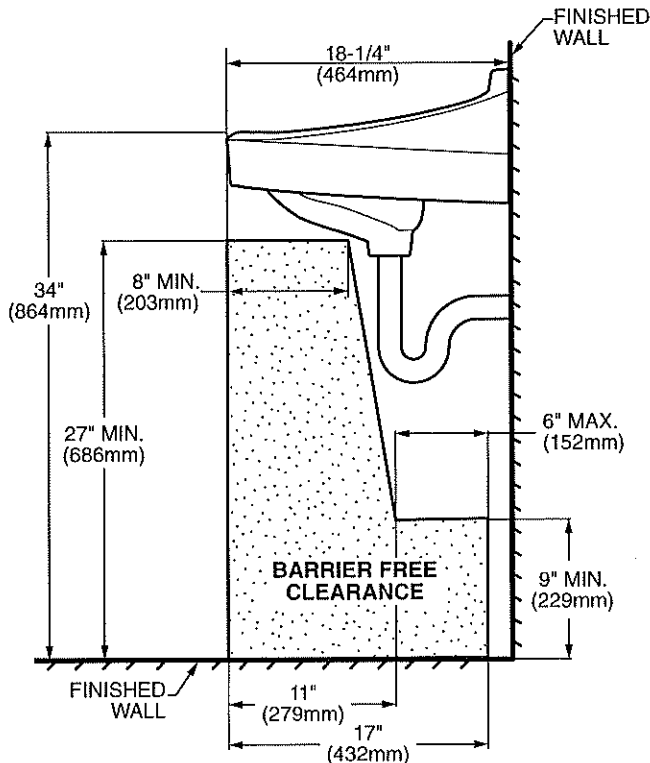


4" CENTER CONFIGURATIONS

All Wall Hanger (included) or Concealed Arm Configurations



SIDE VIEW - ALL CONFIGURATIONS



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.



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.



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

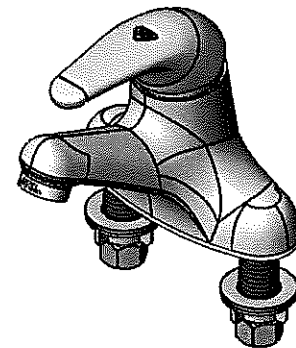
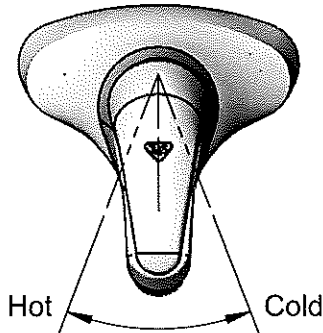
Job Name _____ Date _____

Model Specified _____ Quantity _____

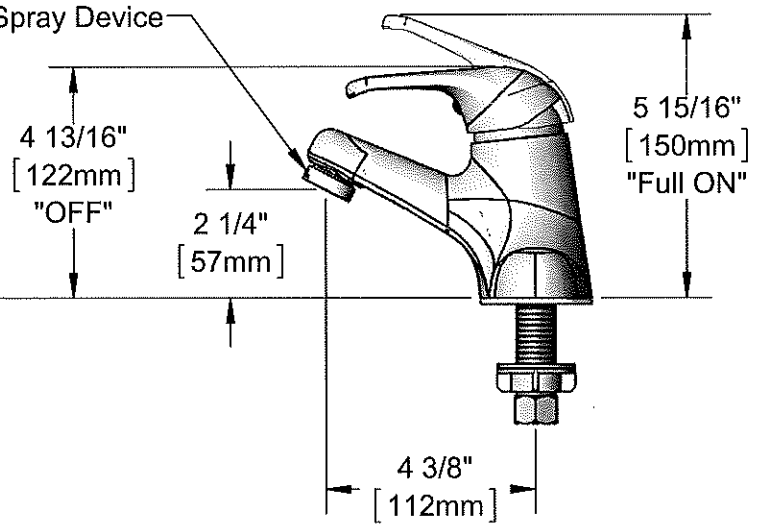
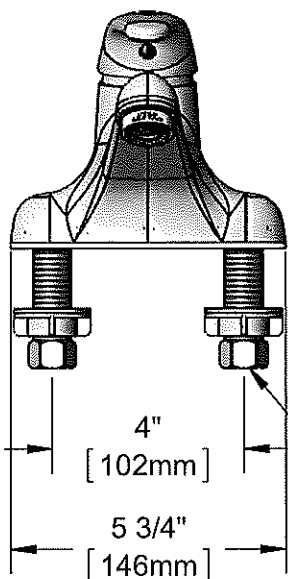
Customer/Wholesaler _____

Contractor _____

Architect/Engineer _____



B-0199-09-N05
0.5 GPM Vandal Resistant
Non-Aerated Spray Device



Mounting Surface
1 3/8" [35mm]
Maximum Thickness

1/2" NPSM Male Inlets
w/ Coupling Nuts

Rough-In Requirement:
(2) ϕ 1" [25mm] Mounting Holes

Product Specifications:
4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:
ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)



T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

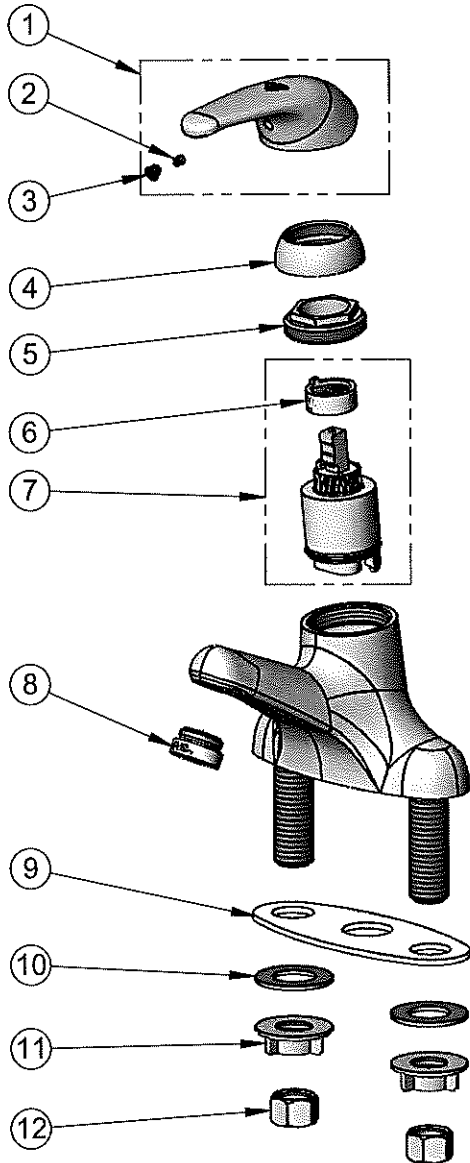
Model No.

B-2711-VF05

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	013113-45	Single Lever Short Handle
2	016675-45	Set Screw
3	014173-45	Index, Temperature
4	016661-45	Trim Ring
5	016663-45	Locking Nut
6	015400-45	Temperature Limit Stop
7	013111-45	Ceramic Cartridge w/ Temperature Limit Stop
8	B-0199-09-N05	0.5 GPM VR Spray Device, 15/16-27 Male w/ Key
9	014167-45	Deck Gasket
10	000999-45	Brass Lock Washer
11	016673-45	Shank Nut
12	000958-20	Coupling Nut



015425-45
Vandal Resistant Key

Product Specifications:

4" Deck Mount Single Lever Faucet, Ceramic Cartridge, Temperature Limit Stop, 0.5 GPM VR Non-Aerated Spray Device & 1/2" NPSM Male Inlets

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
ANSI A117.1 (ADA)

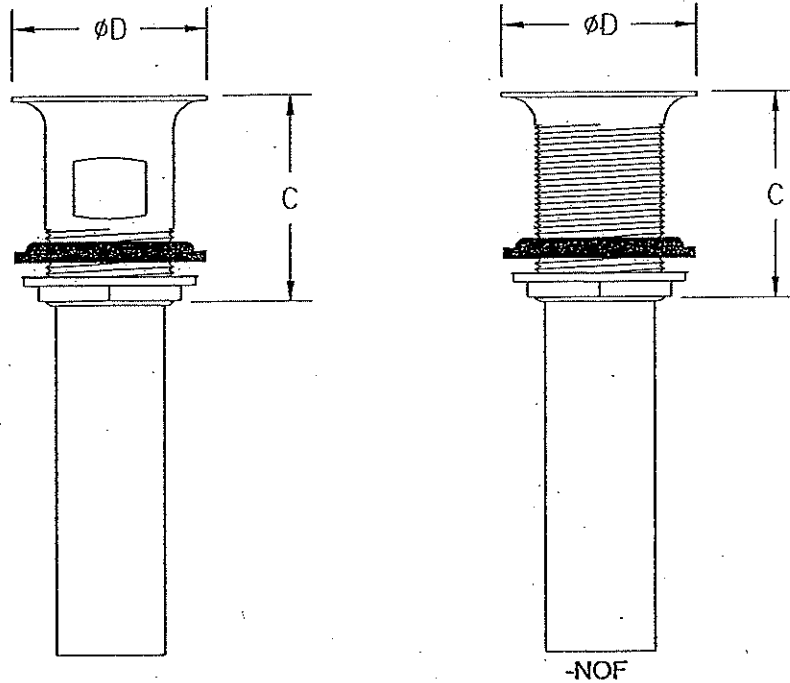


SOLID TOP, OPEN-GRID P.O. PLUGS

Z8743-PC

TAG _____

Engineering Specification: Zum Z8743-PC – Chrome plated cast brass solid top, open grid, P.O. plug. Furnished with 5" [127mm] long, chrome plated brass 17 gauge tailpiece and chrome plated cast brass locknut for sink depth up to 2 1/4" [57mm]. 6", 8", and 12" tailpieces available.



Note: All dimensions are for reference only. Do not use for pre-plumbing

PRODUCT NUMBER	TAILPIECE in[mm]	DIMENSIONS		MASTER CARTON	WEIGHT CARTON
		Cin[mm]	ØDin[mm]		
Z8743-PC	1 1/4[32]	2 9/16[65]	2 1/4[57]	50	50
Z8743-1-PC	1 1/2[38]	2 9/16[65]	2 1/4[57]	30	30

OPTIONAL ACCESSORIES

Suffix	Description
-NOF	No Overflow
-6	w/6" [152mm] Tailpiece
-8	w/8" [203mm] Tailpiece
-12	w/12" [305mm] Tailpiece

ZURN INDUSTRIES, LLC ♦ COMMERCIAL BRASS OPERATION ♦ 2640 SOUTH WORK STREET ♦ FALCONER NY 14733
 Phone: 1-716-665-1132 ♦ Fax: 1-716-665-1135 ♦ World Wide Web: www.zurn.com
 In Canada: ZURN INDUSTRIES LIMITED ♦ 3544 Nashua Drive ♦ Mississauga, Ontario L4V1L2 ♦ Phone: 905/405-8272 Fax: 905/405-1292

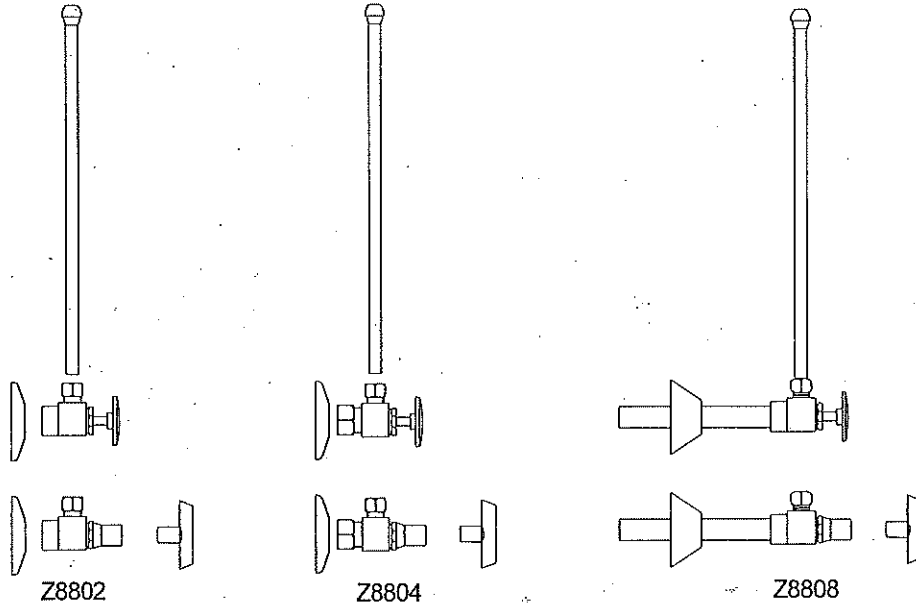


STANDARD STOP WITH FLEXIBLE LAVATORY SUPPLY

Z8802-XL-LR-PC TO Z8808-XL-LRLK-PC TAG

Engineering Specification: Zurn Z8802-XL-LR-PC TO Z8808-XL-LRLK-PC Two Zurn chrome plated, solid brass angle stops with round wheel handles or loose key as specified, two 12"[305mm] flexible chrome plated copper lavatory risers complete with two chrome plated steel flanges. Z8808-XL-LR-PC and Z8808-XL-LRLK-PC include 5"[127mm] chrome plated copper extension tubes and deep bell steel flanges.

Zurn Lead Compliant* "XL" products are a line of durable, high quality brass faucets and fixtures that are designed and manufactured to comply with state laws and local codes that mandate lead content levels. Zurn "XL" products are manufactured with *not more than 0.25% lead content when used with respect to wetted surfaces of pipes and pipe fittings, plumbing fitting and fixtures: California Health & Safety Code § 116875; Vermont 9 VCA § 2470h.



PRODUCT NUMBER	CONNECTIONS	EXT.	MASTER CARTON	WEIGHT CARTON	
				LR	LRLK
Z8802-XL-LR-PC	1/2 [13] IPS x 3/8 [10] OD	-	25	24	
Z8802-XL-LRLK-PC	1/2 [13] IPS x 3/8 [10] OD	-	25		25
Z8804-XL-LR-PC	1/2 [13] NOM x 3/8 [10] OD	-	25	24	
Z8804-XL-LRLK-PC	1/2 [13] NOM x 3/8 [10] OD	-	25		25
Z8808-XL-LR-PC	1/2 [13] SWT x 3/8 [10] OD	5	25	28	
Z8808-XL-LRLK-PC	1/2 [13] SWT x 3/8 [10] OD	5	25		33

SUFFIXES

- ___ - A Single supply option
- ___ - C1 Standard Line Lock Shield Cap
- ___ - CE Chrome Plated, Cast Brass, Flange with setscrew
- ___ - D Chrome Plated Steel, Deep Bell Flange (Bell Type)
- ___ - WD Wrought Brass, Deep Flange, (Bell Type)
- ___ - XP Cross Handle
- ___ - 15 15[381] Supply Tube
- ___ - 20 20[508] Supply Tube
- ___ - 30 30[762] Supply Tube
- ___ - 36 36[914] Supply Tube

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

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Phone: 1-800-997-3876 ♦ Fax: 1-919-775-3541 ♦ www.zurn.com

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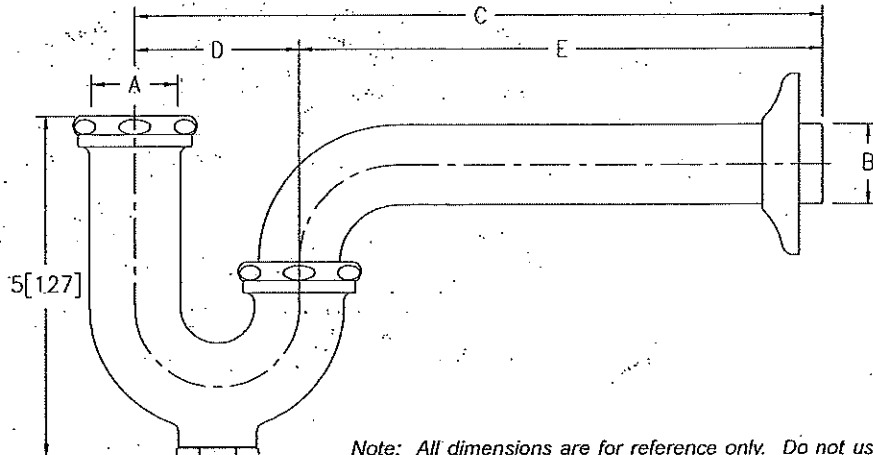


SEMI-CAST P-TRAPS WITH WALL BEND

Z8700-PC TO Z8708-PC

TAG

Engineering Specification: Zurn Z8700-PC to Z8708-PC. – Chrome-plated cast brass (copper alloy) body P-trap with cleanout, tubular brass wall bend as specified, die-cast nuts, and shallow escutcheon with compression inlet.



Note: All dimensions are for reference only. Do not use for pre-plumbing.

PRODUCT NUMBER	A INLET in[mm]	B OUTLET in[mm]	GAUGE	DIMENSIONS			MASTER CARTON	WEIGHT CARTON [lbs]
				C in[mm]	D in[mm]	E in[mm]		
Z8700-PC	1 1/4[32]	1 1/4[32]	17	10[254]	2 1/2[64]	7 1/2[191]	12	24
Z8700-8-PC	1 1/4[32]	1 1/4[32]	17	11[279]	2 1/2[64]	8 1/2[216]	12	24
Z8700-15-PC	1 1/4[32]	1 1/4[32]	17	15[381]	2 1/2[64]	12 1/2[318]	18	40
Z8701-PC	1 1/4[32]	1 1/2[38]	17	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8701-9-PC	1 1/4[32]	1 1/2[38]	17	12[305]	3[76]	9[229]	12	24
Z8701-15-PC	1 1/4[32]	1 1/2[38]	17	15[381]	3[76]	12[305]	18	42
Z8702-PC*	1 1/2[38]	1 1/2[38]	17	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8702-9-PC*	1 1/2[38]	1 1/2[38]	17	12[305]	3[76]	9[229]	12	24
Z8702-15-PC*	1 1/2[38]	1 1/2[38]	17	15[381]	3[76]	12[305]	18	42
Z8703B-PC**	1 1/2[38]	2[51]	17	12 1/2[318]	3 1/2[89]	9[229]	6	18
Z8704B-PC**	2[51]	2[51]	17	12 1/2[318]	3 1/2[89]	9[229]	6	18
Z8706-PC	1 1/4[32]	1 1/4[32]	20	10[254]	2 1/2[64]	7 1/2[191]	12	24
Z8707-PC	1 1/4[32]	1 1/2[38]	20	10 1/2[267]	3[76]	7 1/2[191]	12	24
Z8708-PC*	1 1/2[38]	1 1/2[38]	20	10 1/2[267]	3[76]	7 1/2[191]	12	24

OPTIONAL ACCESSORIES

Suffix	Description
-B	Brass Nuts
-BX	Box Escutcheon
-CE	Cast Brass Escutcheon with Setscrew
-D	Deep Escutcheon (Note = not available for Z8703B-PC and Z8704B-PC)
-J	Metal to Metal Ground Joint Connection
-WC	Waste Connections - Compression
-15	15[381] C Dim. 1 1/4[32] and 1 1/2[38] Only
-18	18[457] C Dim. 1 1/4[32] and 1 1/2[38] Only

* COMES WITH OPTIONAL 1-1/2" x 1-1/4" REDUCTION POLY-WASHER FOR INLET

** SHIPPED WITH BRASS NUTS UNLESS OTHERWISE SPECIFIED

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Heatguard® 135 Series—Lead Free

DESCRIPTION

The Heatguard® 135 is a compact Thermostatic Mixing Valve that mixes hot water with cold to deliver tempered water at a constant temperature.

The Heatguard® 135 is specifically intended for use in conjunction with individual faucets and electronic sensor faucets.

The Heatguard® 135 is a compact, high specification product incorporating the latest in Thermostatic Technology. It features a robust design based on the expertise gained from years of experience in the design and manufacture of safety valves. Every valve is tested for performance on an automated testing station during the assembly process. The valve is third-party listed for individual point-of-use applications.

The Heatguard® 135 features a rapid response thermostatic element for superior control. The thermostatic element senses the outlet water temperature and reacts to maintain a constant delivery temperature even under changing flows or variations in supply temperatures or pressures. It provides stable operation at flow rates as low as 0.25 gpm (1.0 l/min). The valve also reduces the outlet flow to a trickle in the event of a cold water supply failure.

The Heatguard® 135 features a threaded cover over a spindle mechanism that requires a special tool to adjust the temperature. The special tool is provided with each valve.

The Heatguard® 135 has inlet connections to suit a 3/8" flexible hose connector or a compression connection to 3/8" OD tube. Also available with cold water bypass and elbow insert fittings. Supplied standard with integral check valves on both inlets to prevent cross-flow.

FEATURES AND BENEFITS

Compact design and included mounting bracket:

Easily fits under or behind a single basin. Mounting bracket provides for a clean and secure installation.

Accurate temperature control with flows as low as 0.25 gpm (1.0 l/min):

Increased user comfort and convenience, (especially with sensor faucets).

Serviceable inlet strainer screens included:

Keeps debris from damaging check valves and other internal components.

Robust, low complexity construction and total flow shut-off if cold supply fails:

Superior reliability and greater end user safety.

Listed by IAPMO, CSA, and ASSE:

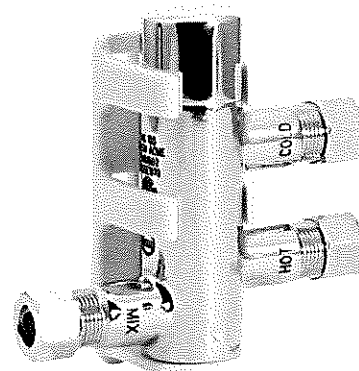
Inspector friendly, peace of mind!

Use with SharkBite®:

Easily connect to the riser with SharkBite® 1/4" fittings and stops.

SPECIFICATION

A Temperature Actuated Mixing Valve shall be installed at single point-of-use fixture to deliver hot water at a controlled temperature. The valve shall be certified to ASSE 1070 and CSA B 125.3 standards and third party listed. The temperature actuated mixing valve shall control the delivered water temperature via a regulating piston made from engineered polymer. The valve should have check valves at both inlets to prevent cross flow from hot to cold. The adjusting mechanism shall be protected by a threaded cover. The valve shall be a Cash Acme Heatguard® 135.



25686



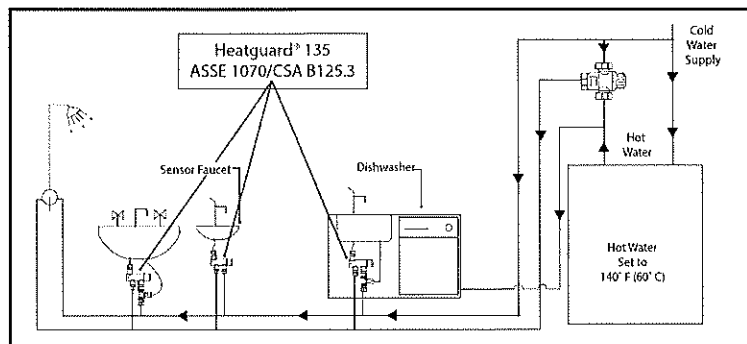
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Heatguard® 135 Series—Lead Free

TYPICAL INSTALLATION

The Heatguard® 135 is a high performance thermostatic mixing valve designed to deliver mixed water to a single outlet. It can also be used to supply sensor faucets or two handle manual faucets.



SPECIFICATION DATA

Adj. outlet temperature range	100 – 120°F (38 – 49°C)
Factory set temperature range	105 – 110°F (40 – 43.3°C)
Temp. hot supply	120 – 180°F (49 – 82°C)
Temp. cold supply	39 – 80°F (4 – 27°C)
Maximum pressure	230 psi (1600 kPa)
Flow rate, minimum	0.25 gpm (1.0 l/min)
Flow rate, maximum @ 45 PSI	2.5 gpm (9.5 l/min)

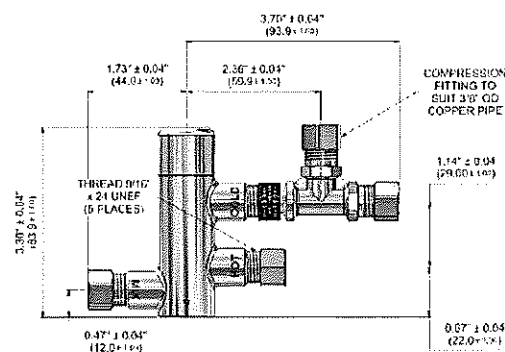
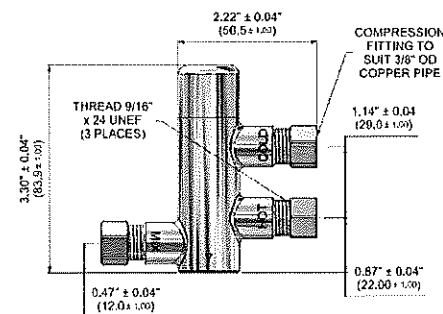
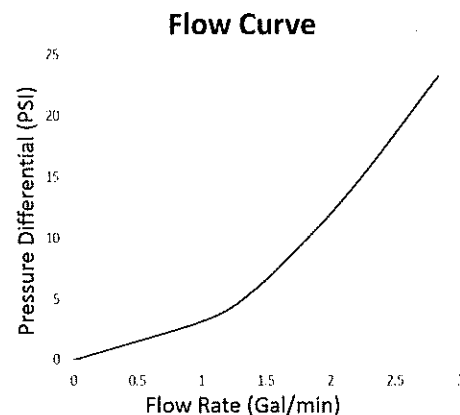
Body	DZR Brass
Springs	Stainless Steel
Internal cap	Brass
Piston	Engineered Polymer
Inlet Strainer Screens	Stainless Steel

AVAILABLE CONNECTIONS

Compression	Suitable for 3/8" OD tube.
	Also available with cold water bypass tee.

CERTIFICATIONS

The Cash Acme Heatguard® 135 LF is certified to ASSE 1070, CSA B125.3, NSF 372, NSF/ANSI 61 and listed by ASSE, CSA, and IAPMO for use in accordance with U.S. and Canadian plumbing codes.*

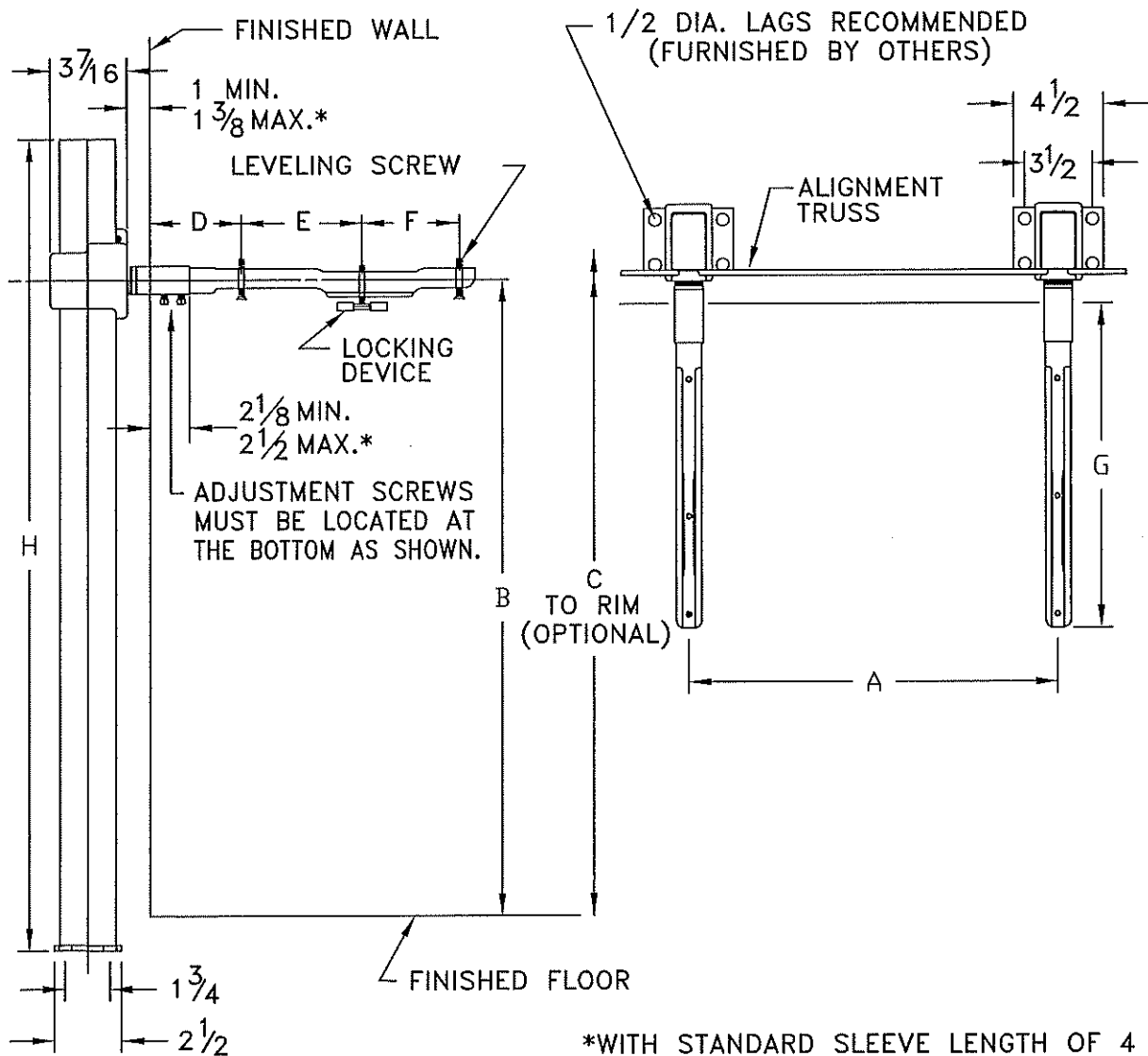




Z1231 RIGID SYSTEM FOR AMERICAN STANDARD CO. LAVATORIES

DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES

AMERICAN STANDARD CO. REF.			ZURN REFERENCE							
NAME	CATALOG NO.	SIZE	A	B	C	D	E	F	G	H
LUCERNE	0355.012, .034	20 1/2 X 18 1/4	16 3/4	29 3/4	31	4	6	6	16 1/2	36
LUCERNE	0356.015, .421, .439	20 1/2 X 18 1/4	16 3/4	29 3/4	31	4	6	6	16 1/2	36



*WITH STANDARD SLEEVE LENGTH OF 4

ENGINEERING SPECIFICATION:
 AS SHOWN; "DURA-COATED" STEEL STANCHIONS WITH WELDED FEET, STEEL SLEEVES, CAST IRON HEADERS AND ARMS, ALIGNMENT TRUSS, AND MOUNTING BOLTS AND TRIM.

DATE: 2/10/05
 REV. F
 C.N. NO. 92944

PRODUCT NUMBER Z1231
DRAWING NUMBER PAGE 3 OF 3 54511