



INSTALLATION, OPERATIONS & MAINTENANCE MANUAL

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

Secur-Care® - Ligature Resistant LR1677 Series

MODEL# LR1677-1-L-04-M
LEFT HAND CORNER
CONFIGURATION
(SHOWN)

Secur-Care® LR1677 Series

Ligature Resistant Corner Lavatory
with D-Shaped Bowl - ADA 2010
Compliant



**TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER:
1.800.591.9360**

Technical Assistance E-mail: Fieldservice@acorneng.com



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.

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.

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 all threaded waste and supply connections to reduce the possibility of leaks.

Please refer to the Link or QR code provided.

For Cleaning & Care Guide:

<https://www.acorneng.com/uploads/fileLibrary/9900-008-001.pdf>



Drawing #: 9000-M00-001

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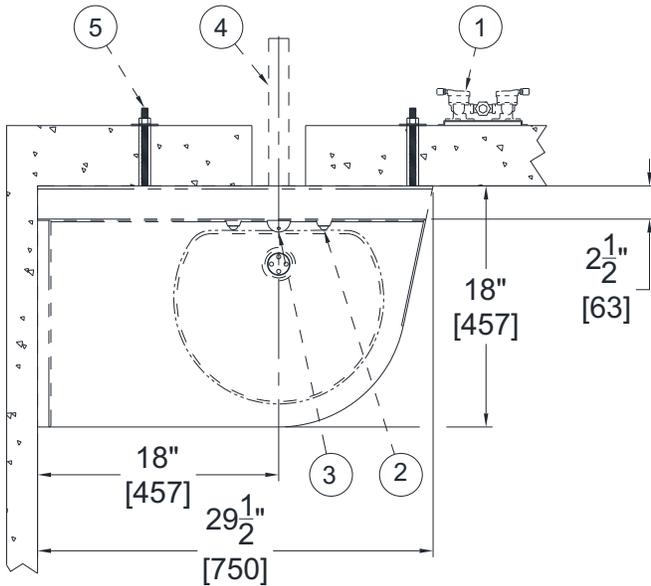
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DIMENSIONAL DATA

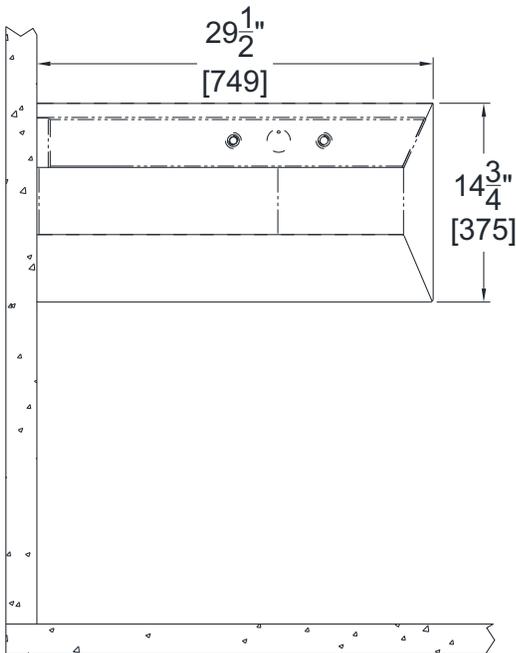
TOP VIEW



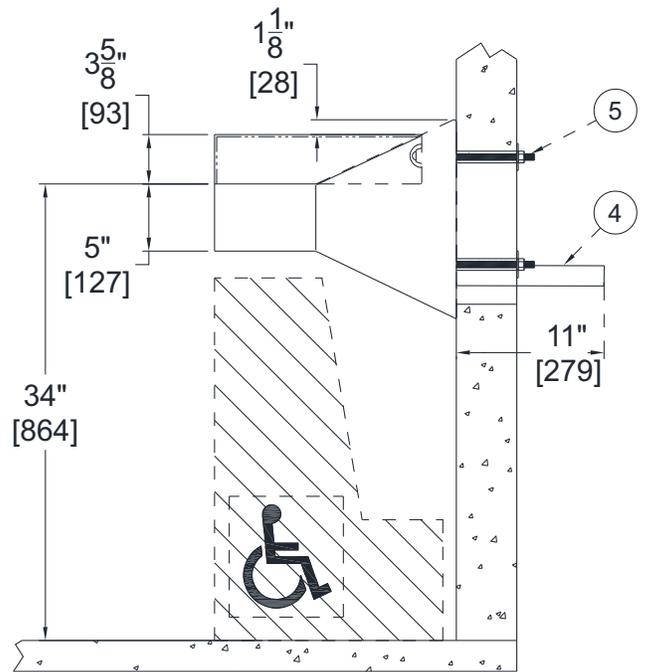
NOTES:

1. Optional -04 Air Control Valve
2. Hemispherical Pushbutton Provided STD
3. Hemispherical Bubbler Provided STD
4. Lavy Elbow Waste Outlet with Plain End STD
5. 1/2" Wall Mounting Hardware

FRONT VIEW



SIDE VIEW



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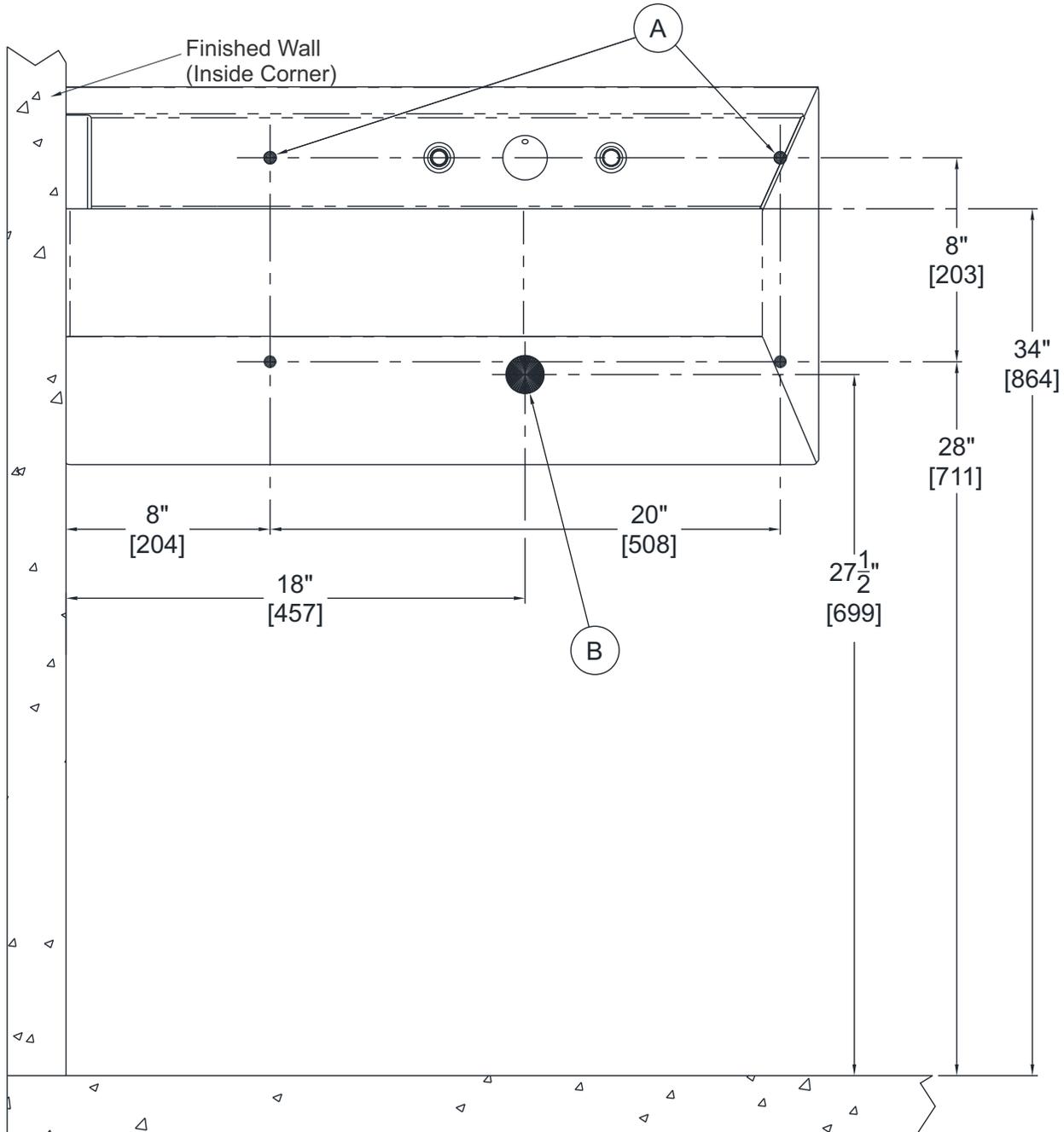
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ROUGH- IN DIMENSIONS

FRONT VIEW FROM FIXTURE SIDE MODEL
LR1677-1-L-LEFT HAND CORNER SHOWN
(LR1677-1-R RIGHT HAND CORNER OPPOSITE)

- [A] 1/2" Diameter Mounting Holes for Anchoring
- [B] 1-1/2" O.D. Plain End Elbow Waste Outlet



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FIXTURE ANCHORING

1. Prior to installation of the fixture, mount Pushbuttons [E] and Bubbler [F] to the Backsplash.
2. Thread 1/2" x 13 Unc Studs into Anchor Tappings on rear of fixture.
3. Align Studs with thru anchoring Wall Openings.
4. From Chase side tighten Washers and Nuts provided on exposed studs

[A] Fixture Anchor Tapping

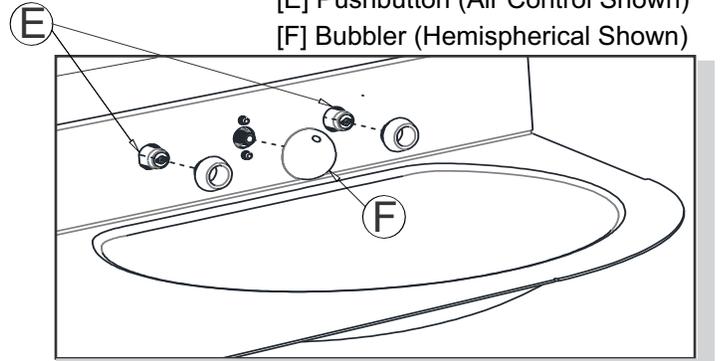
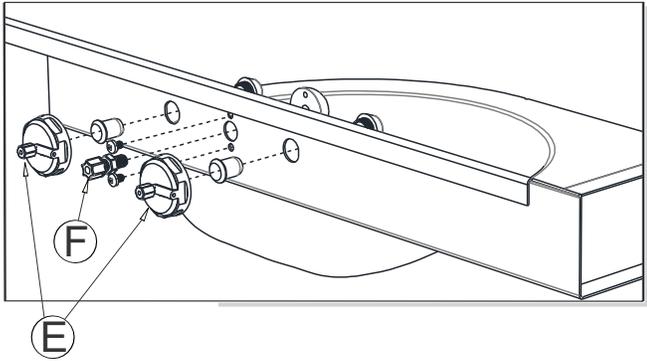
[B] 1/2" X 13 UNC Studs

[C] Washers

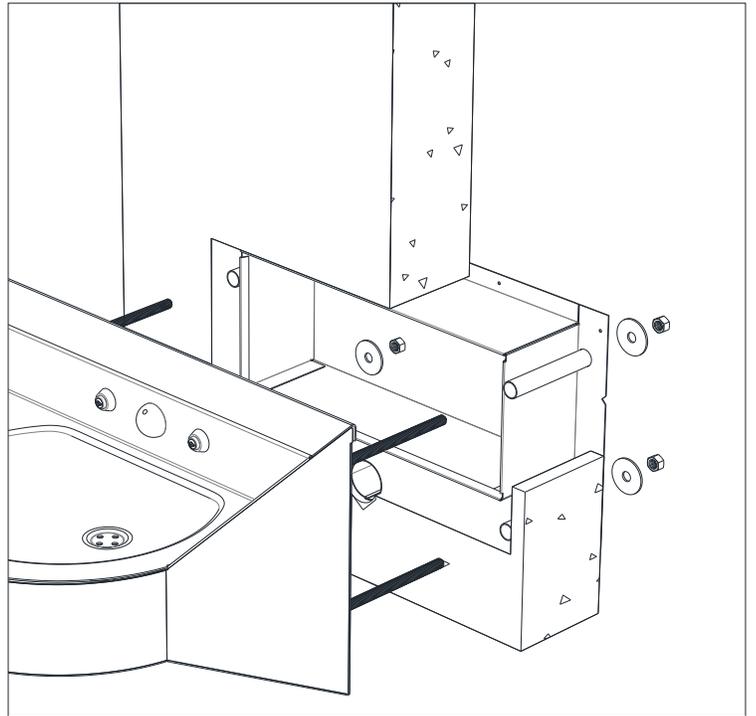
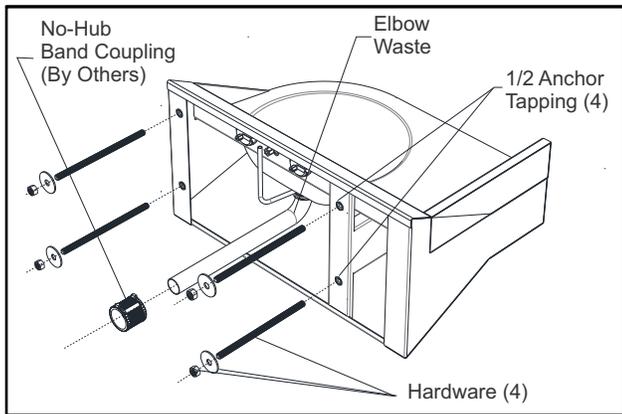
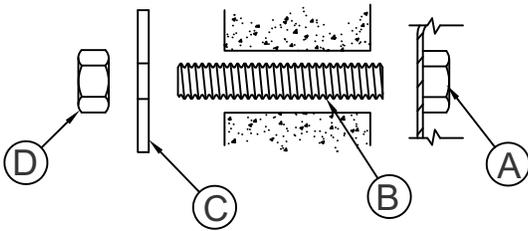
[D] Nuts

[E] Pushbutton (Air Control Shown)

[F] Bubbler (Hemispherical Shown)



MOUNTING DETAIL



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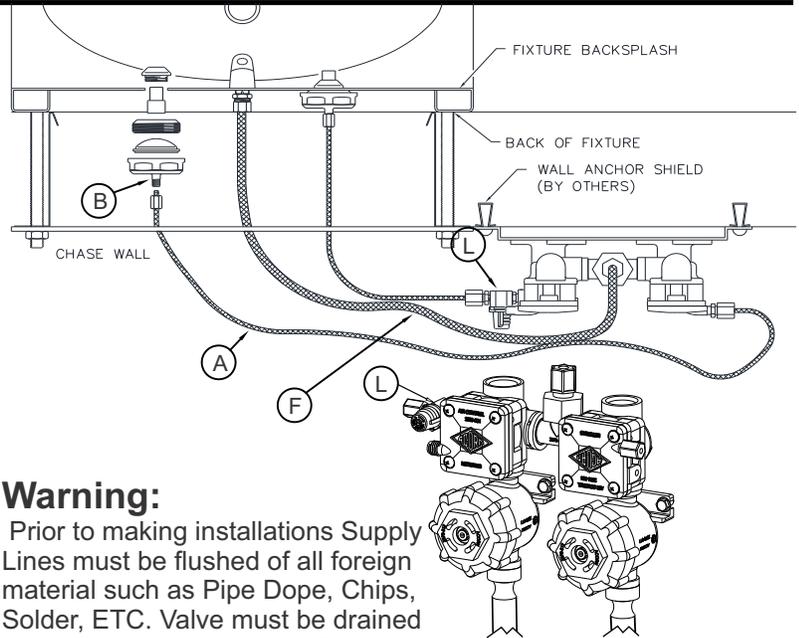
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VALVE INSTALLATION

INSTRUCTIONS:

1. Mount Fixture Anchoring in accordance with instructions.
2. Connect 1/8" O.D. Air Line [A] to Pushbutton [B] see detail "A".
*Non-Metering: Connect Air Line [A] to Air Port [D], see detail "B". Hand tighten Ferrule Nut [E] provided.
*Metering: Connect Air Line [A] to Valve Timer Assembly [C]. Hand Tighten Ferrule Nut [E] provided.
3. Connect 1/4" O.D. Polyethylene Water Lines [F] to Valve Assembly Elbow [G] See details "C", and "D". Hand tighten Ferrule Nut [H] provided.
4. After thoroughly flushing Supply Lines make up connections to Valve Assembly Inlet(s) 1/2" NPTE or 1/2" NPS FLEX Hose as required.



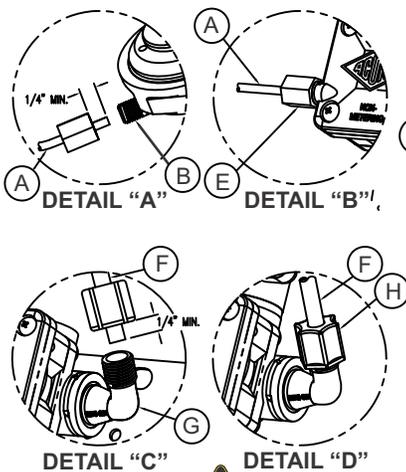
Warning:

Prior to making installations Supply Lines must be flushed of all foreign material such as Pipe Dope, Chips, Solder, ETC. Valve must be drained prior to being subjected to Freezing Temperatures.

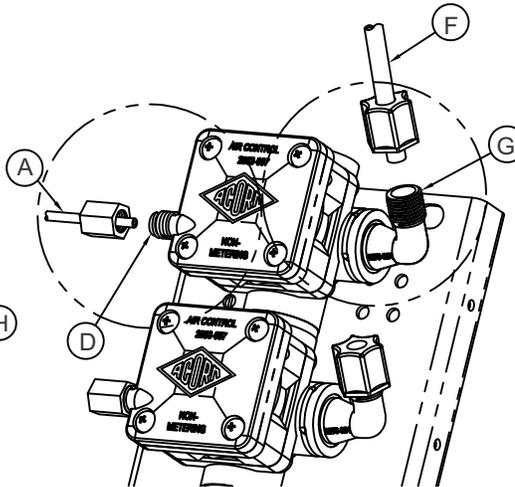
Note:

- All Tubing should be cut square and be free of Burrs or deformities to ensure a water tight connection.
- Extend Tubing at least 1/4" beyond Ferrule Nut before inserting Tubing into connection opening before tightening
- Tubing should be free of Kinks for proper operation.
- Maximum recommended working water pressure is 100 PSI; Maximum Water Temperature is 130°F; Maximum Outlet Temperature is recommended at 105°F.

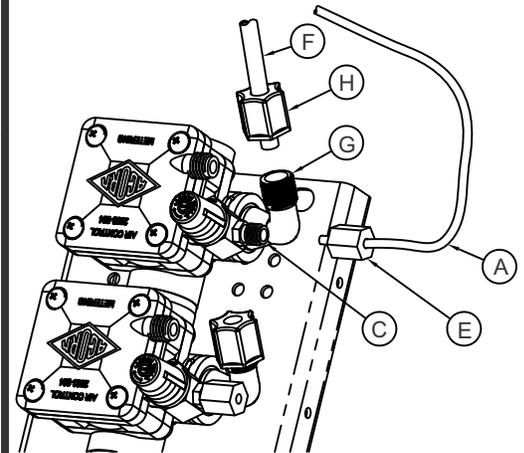
SIDE OUTLET SHOWN



NON-METERING DIRECT ACTING

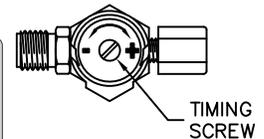


METERING



IMPORTANT

Timing Is adjustable from 5 - 60 Seconds and is accomplished by rotating Timing Screw. Turning the Screw Clockwise increases while Counterclockwise decreases.



Drawing #: 9000-M00-001



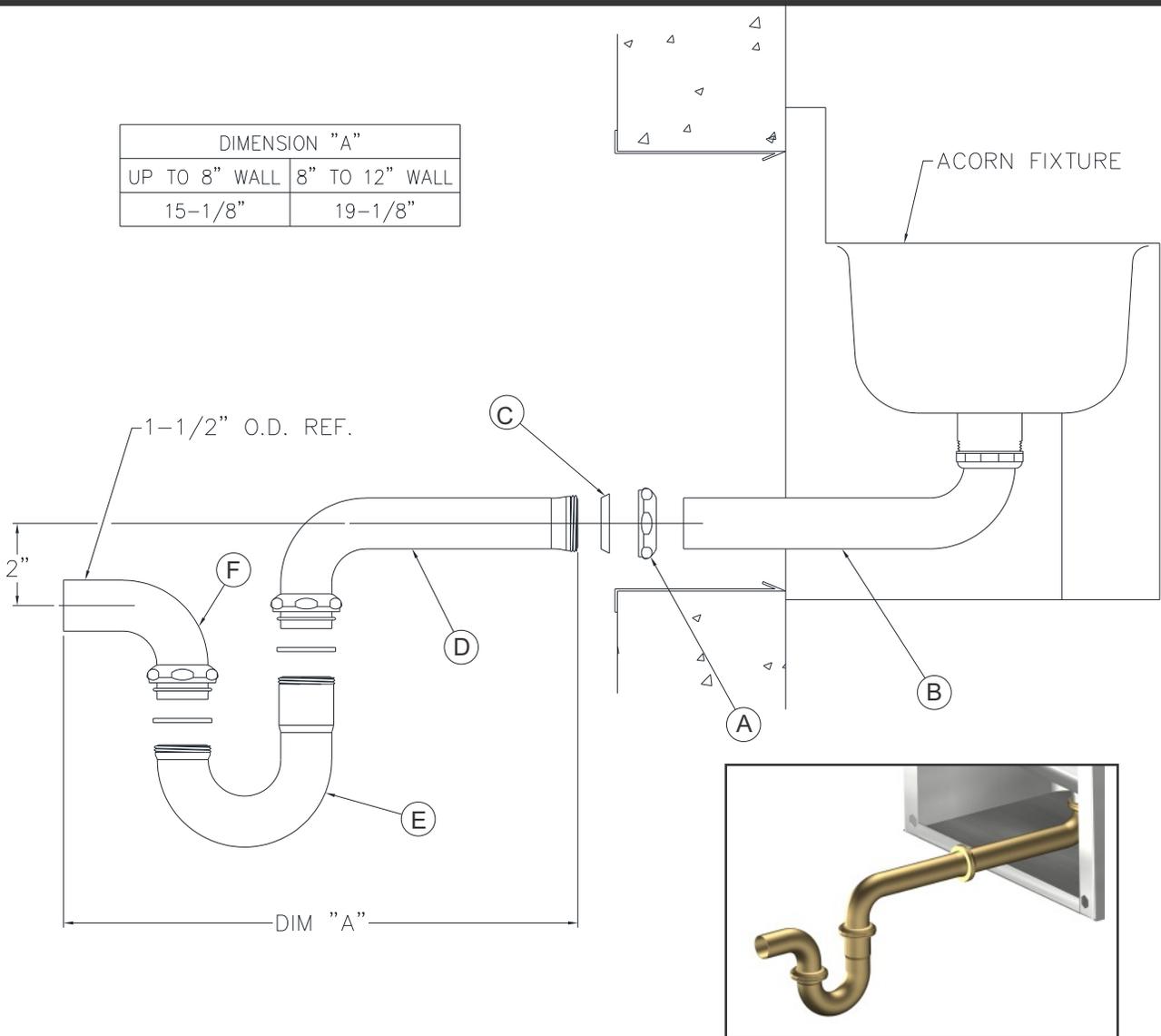
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OPTIONAL -LW1 Thru-Wall Connection with P-Trap

Installation Instructions

1. After installing Acorn Unit on finished wall, slip Compression Nut [A] over 1-1/2" O.D. Plain End Waste [B]. Using Compression Gasket [C], and Nut [A] make up compression connection with Slip Joint Elbow [D].
2. Remove Tubular P-Trap [E] connects so Slip Joint Elbow [D] and Plain End Elbow [F] with compression connections as shown.

NOTE: Tubular P-Trap is removable in order to allow for waste cleanout.

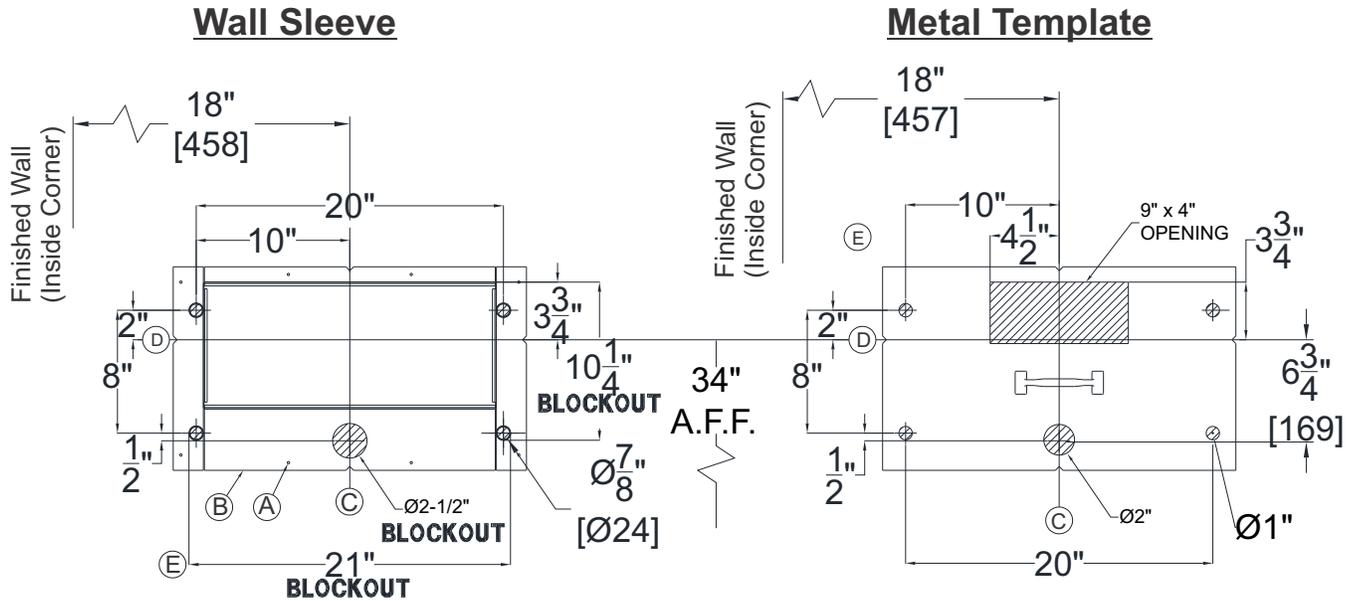


Part #: 9000-M00-001



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Optional Wall Sleeve(-SW)



Both Views are from cell Side

 Shaded areas are required Wall Openings

WALL SLEEVE

Sleeves are intended for use with Block (CMU) or Poured Wall type only. Sleeves are installed in forms (using nail holes [A] provided) or grouted into block walls, becoming a permanent part of the wall.

1. Installed sleeve with flange [B] on chase side of wall.
2. Locate top and bottom notches at vertical centerline [C] of plumbing fixture.
3. Locate side notches [D] at dimensions shown, measured from the finished floor on cell (fixture) side. This will locate deck height.

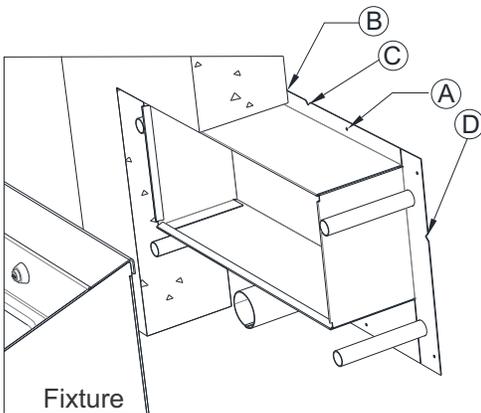
Note:

1. For poured wall construction, temporary bracing should be installed within sleeve opening to prevent deformation to sleeve which may occur during pour. Do not pour concrete directly on top of wall sleeve.
2. When sleeves are not available blockout for sleeve opening in wall per dimensions shown [E].

METAL TEMPLATE

Templates are used to layout required wall openings for subsequent flame cutting or core drilling.

- A. Strike a horizontal chalk line [4] on wall at dimension shown, measured from the finished floor on cell (fixture) side. This will locate centerline for horizontal notches on template.
- B. Strike a vertical chalk line [3] on the wall to indicate centerline of fixture. This will locate centerline for vertical notches on template.
- C. Place template against wall. Locate notches along chalk lines, mark wall for required openings.



Wall Sleeve (-SW)

Part #: 9000-M00-001

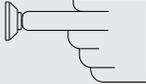


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TROUBLE SHOOTING FOR OPTIONAL PUSHBUTTON OPERATED VALVES

Normal Valve Function: Hand pushbutton operated valve has an adjustable flow time from 5 to 60 seconds.	
CONDITION: WATER DOES NOT FLOW  	
Probable Cause	Solution
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 	
Probable Cause	Solution
Servomotor diaphragm offset hole is blocked.	Remove blockage.
Servomotor seat is damage	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 	
Probable Cause	Solution
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  	
Probable Cause	Solution
Air leaks from 1/8" O.D. tubing or fittings.	Replace damaged tubing or fitting.
Pushbutton air diaphragm leaks.	Replace pushbutton air diaphragm.

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