# **INSTALLATION GUIDE**

### FOR 550 & 552 SERIES ANTI-SIPHON FROST-FREE SILLCOCKS

## **BEFORE YOU BEGIN**

Read this entire set of instructions and prepare for each step. If you are not able to perform all of the steps, Legend Valve recommends that you contact a professional, qualified plumbing contractor to complete the installation. Failure to follow all of the steps may result in damage to the sillcock and extensive property damage, which a warranty may not cover, expressed, or implied. This notice and the following instructions apply to the T-550, T-550P, P-550, TM-550P, TM-550P, TM-550P, TM-550P, TM-552P.

### **DESCRIPTION**

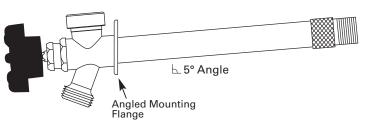
The 550 and 552 series sillcocks are certified to ASSE 1019 Type A. In accordance with sections 1.2.3 and 1.2.4 of this standard, the sillcock's operating pressure shall not exceed 125 psi, and the operating temperature range is 33 degrees F to 140 degrees F. **SEE INSTALLATION DIAGRAM.** 

**IMPORTANT!** "Frostfree" sillcocks resist freezing only when the inlet connection is located and exposed within a heated space! Seasonally-heated or non-heated installations (e.g., vacation homes, commercial buildings, garages, crawlspace, or wing-wall cavities) require an accessible stop-and-waste valve to allow winterization, as specified in the **IRC Code section P2903.10**.

#### INSTALLATION

- 1. Select the correct length\*\* sillcock, and confirm at least two inches of the inlet connection are exposed in the heated space. Note the placement of the label attached to the inlet connection, which illustrates how much of the sillcock's inlet must extend into the heated space. For tool accessibility, the knurled segment should extend well beyond the inner wall face. DO NOT insulate over the inlet connection! Doing so will insulate it from the surrounding heat **see installation diagram (fig. 1).** Confirm that the sillcock's inlet connection type is compatible with the building's pipe or tubing water supply system.
- \*\*NOTE: We recommend not installing the 4" or 6" nominal-length sillcock in geographic regions subject to freezing temperatures.
- **2.** Bore a 1" diameter hole through the foundation wall or the floor joist band pitched upward at a **5° angle**. Protect the inlet of the sillcock from debris entry by placing a piece of tape over the inlet port. Insert the sillcock from the outside.
- **3.** Position the sillcock with the outside hose bibb spout pointing down. Note that the inlet connection is marked with the words "**TOP**" and "**DOWN**" which indicates spout position. From the inlet side, make sure the description installation "**DOWN**" mark faces downward toward the floor or ground.
- **4. IMPORTANT!** Seal all air gaps between the back of the mounting flange, the exterior wall, and drilled hole. The sillcock's mounting flange must fit flush against the exterior wall. If necessary, place the rubber sill wedge behind the mounting flange, notch-side-down, before securing the mounting flange to the wall. The mounting flange is angled to assure complete drainage. A flush fit is critical to correct frost-resistant performance; poor drainage could result in trapped water and subsequent freezing damage.
- **5.** Secure the mounting flange to the exterior wall with two #8 or #10 exterior grade wood screws of appropriate length. Use the correct type of masonry hardware when attaching to brick or cement.
- **6.** Connect the sillcock's inlet to the water supply system. The sillcock is available in sizes 1/2" and 3/4" MNPT x Sweat, 3/4" MNPT x 1/2" FNPT, 1/2" PEX (F1807 & 1960), 1/2" Press-to-Connect, and 1/2" CPVC solvent weld inlet connections.

#### FIGURE 1



**7.** Remove the previously applied tape from the sillcock's inlet connection and install it by following the industry standard per connection type.

**Sweat/Solder.** When soldering, ensure the sillcock is in the full-open position by turning the handwheel counter-clockwise. Direct the flame away from the knurled area of the inlet connection. DO NOT OVERHEAT!

**MNPT/FNPT.** For threaded end pipe connections, use Teflon\* tape or thread paste. For stability, attach the wrench to the knurled portion of the inlet connection before tightening the fitting or nipple.

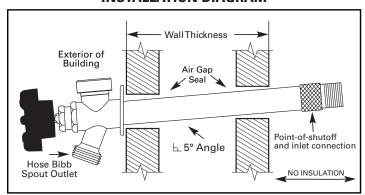
**Crimp/Cinch PEX.** For F1807 PEX connections, follow the crimping tool manufacturer's instructions. The sillcock's PEX connection is manufactured in compliance with ASTM F1807 and designed for PEX tubing that complies with ASTM F876 and F877.

**Cold Expansion PEX.** For F1960 PEX connections, follow the tubing and tool manufacturer's instructions. The sillcock's PEX connection is manufactured in compliance with ASTM F1960 and designed for PEX or PE-RT, which comply with ASTM F876 & 877 (PEX) or ASTM F2769 (PE-RT).

**Press.** For Press-to-Connect connections: use only 1/2" K, L, or M hard-drawn copper. Cut, deburr, and fully insert the copper tube into the end of the sillcock. Press the connection following the tool manufacturer's instructions.

**CPVC.** For CPVC solvent-weld connections should be installed following the solvent cement manufacturer's requirements for the sillcock.

#### INSTALLATION DIAGRAM



CAUTION! The sillcock's frost-free features work by shutting off the water in the heated interior of the building and draining the water downstream of the shutoff, where no heat is present. If the building is or will be unheated for any period of time, all water lines must be drained as no heat would be present at the inlet connection of the sillcock. Failure to allow proper drainage due to improper installation pitch, or a hose left attached to the hose bibb outlet in freezing temperatures, may result in damage.

For complete maintenance and operation instructions, please see the reverse side of this page.



#### MAINTENANCE

- Always remove any attached hose in freezing temperatures to ensure complete drainage.
- The sillcock's freeze-resistant design permits water shutoff inside a heated building. However, as specified in the Residential Plumbing Code Section P2903.10, an additional waste-equipped valve may be required:

**IRC P2903.10 Hose Bibb.** Hose bibbs subject to freezing, including "frost-proof" type, shall be equipped with an accessible stop-and-waste-type valve inside the building so they may be controlled and/or drained during cold periods.

Legend recommends the addition of a stop-and-waste-type valve (stop-type or ball-type) upstream of the sillcock in seasonally heated or non-heated installations such as vacation homes, commercial buildings, garages, crawlspaces, or wing-wall cavities. The valve should be installed in an accessible location where the drained water will not damage the surrounding area.

- Avoid painting over the handle, body, or vacuum breaker assembly.
- Do not remove the top-mounted vacuum breaker cap. The cap diverts water downward as the vacuum breaker internal piston operates. The vacuum breaker's
  normal function allows some water to escape before the piston closes completely! However, a continuous stream of water flowing from the bottom of the
  cap indicates a fouled or failed vacuum breaker assembly.
- Intermittent leakage from behind the handwheel is normal under certain operating conditions. When a hose nozzle is attached to the end of a garden hose
  attached to the sillcock's outlet, excess backpressure may result. Backpressure is relieved through a small vent hole immediately behind the handwheel. A
  continuous stream of water flowing from behind the handwheel indicates a failed stem packing or vent.

## **OPERATION GUIDELINES**

- Avoid imparting body stresses by not hanging a coiled hose or not stepping onto the installed sillcock.
- Avoid using hose bibb accessories such as hose manifolds, hose y-splitters, or sprinkler timers, which may cause the sillcock to malfunction.
   The 550 and 552 series sillcocks are designed and certified in accordance with ASSE Standard 1019 Section 1.2.1 for non-continuous pressure service: not more than twelve (12) hours of continuous water pressure. Outlet-mounted devices may cause sudden or continuous damaging backpressures.
- While the sillcock's body and handle are resistant to most household chemicals, avoid exposure to harsh chemicals, such as acids, paint thinners, or bleach. Cover
  or wrap the sillcock when using a pressure washer, chemical siding wash, or brick cleaning formulas.
- Do not force the handle open or closed. The handle will operate in a smooth multi-turn or 1/4-turn motion, depending on your model. If it does not, check for obstructions (debris, rocks, etc.) behind the handle. If, after checking the handle, it still does not operate smoothly, contact a licensed contractor.
- Annually, check the screws that attach the sill flange to the sill. Make sure the screws still hold the sillcock firmly without allowing movement.
- Do not attempt to disassemble or service the sillcock. A qualified licensed contractor should be contacted if a malfunction or failure occurs.



For a complete list of replacement parts and a components diagram, please visit us at: www.legendvalve.com

\*Teflon is a registered trademark of the Dupont company.

