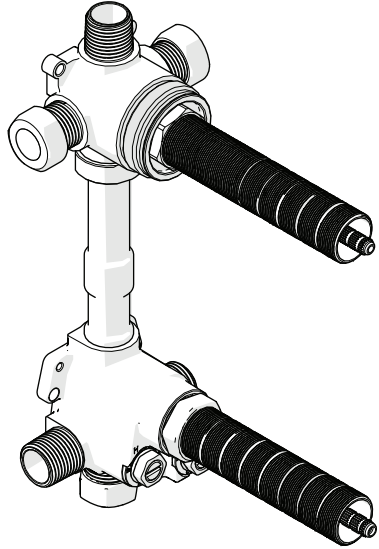


WATERWORKS

INSTALLATION GUIDELINES

STYLE NO. GUTH71, GU71TH†



REQUIRED PLUMBING DETAILS:

- For use with SHOWER HEADS rated at 1.3gpm [4.9L/min] or higher.
- This VALVE **CANNOT** be used with a **DIVERTING** TUB SPOUT.

IMPORTANT:

- To ensure this VALVE is installed properly, you must read and follow these guidelines.
- The owner/user of this VALVE must keep this information for future reference.
- This VALVE and associated TRIM (SOLD SEPARATELY) must be installed by a professional licensed contractor and must be onsite prior to rough-in. This allows the installer to visualize the installation.
- **CAUTION:** The VALVE rough-in depth is measured from the center of the inlets to the surface of the finished wall.
- This VALVE is sold partially assembled but shown fully disassembled for illustrative and service purposes only. Inspect the VALVE to ensure you have all the parts required for proper installation.
- This VALVE features anti-scald protection. The risk of scalding exists until the installer has properly calibrated/adjusted the temperature setting during final TRIM installation.

STYLE No. GUTH71, GU71TH

Universal 1/2" Thermostatic Valve with Integrated Volume Control Valve

- Be sure your installation conforms to all federal, state, and local codes. In the State of Massachusetts, all installations must comply with the rules and regulations set forth within 248 CMR.
- Supply fittings are designed in accordance with pressure and temperature ratings specified in ASME A112.18.1/B125.
- If this VALVE will remain unused for an extended period of time (over 3 months), then the water to the VALVE should be shut off (via service stops or system control valve) and the diverter or wall valve(s) should be opened to allow the water in the THERMOSTATIC VALVE to evaporate. This is to keep the CARTRIDGE from being exposed to stagnant or hard water, which can cause the VALVE to malfunction.
- If further assistance is required, please contact Product Support at 1-800-927-2120 Monday through Friday, 8am - 6pm EST.
- Refer to the separate Service Parts Documents for available replacement parts.

TECHNICAL DETAILS:

DETAIL	SPECIFICATION
INLET/OUTLET CONNECTIONS	1/2" MALE NPT †
UNRESTRICTED MAX FLOW RATE @ 45 PSI [3 bar]	5gpm [18.9L/min]
WATER PRESSURE MAXIMUM	85psi [6.0 bar]
WATER PRESSURE MINIMUM	20psi [1.5 bar]
WATER PRESSURE RECOMMENDED	45psi [3.0 bar]

† Style No. **GU71TH** is provided with 4 **BSPP** ADAPTERS. ADAPTERS are packaged separately and assembly is required. Replacement ADAPTERS can be ordered separately:

- Universal 1/2" NPT Female x 1/2" Male BSPP Adapter

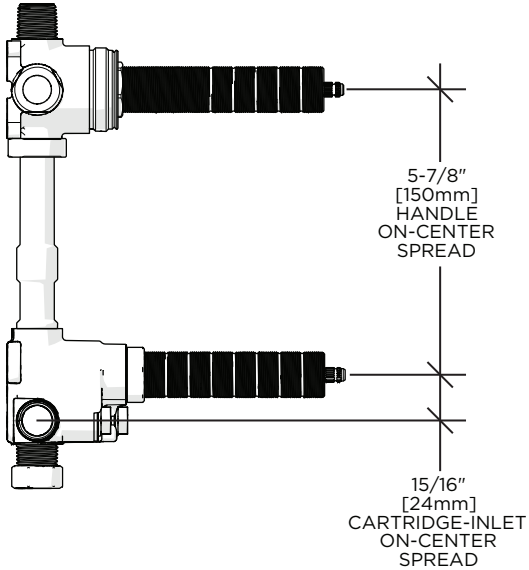
Style No. UNUK03
Item No. 45-49169-39868

WATERWORKS INSTALLATION GUIDELINES

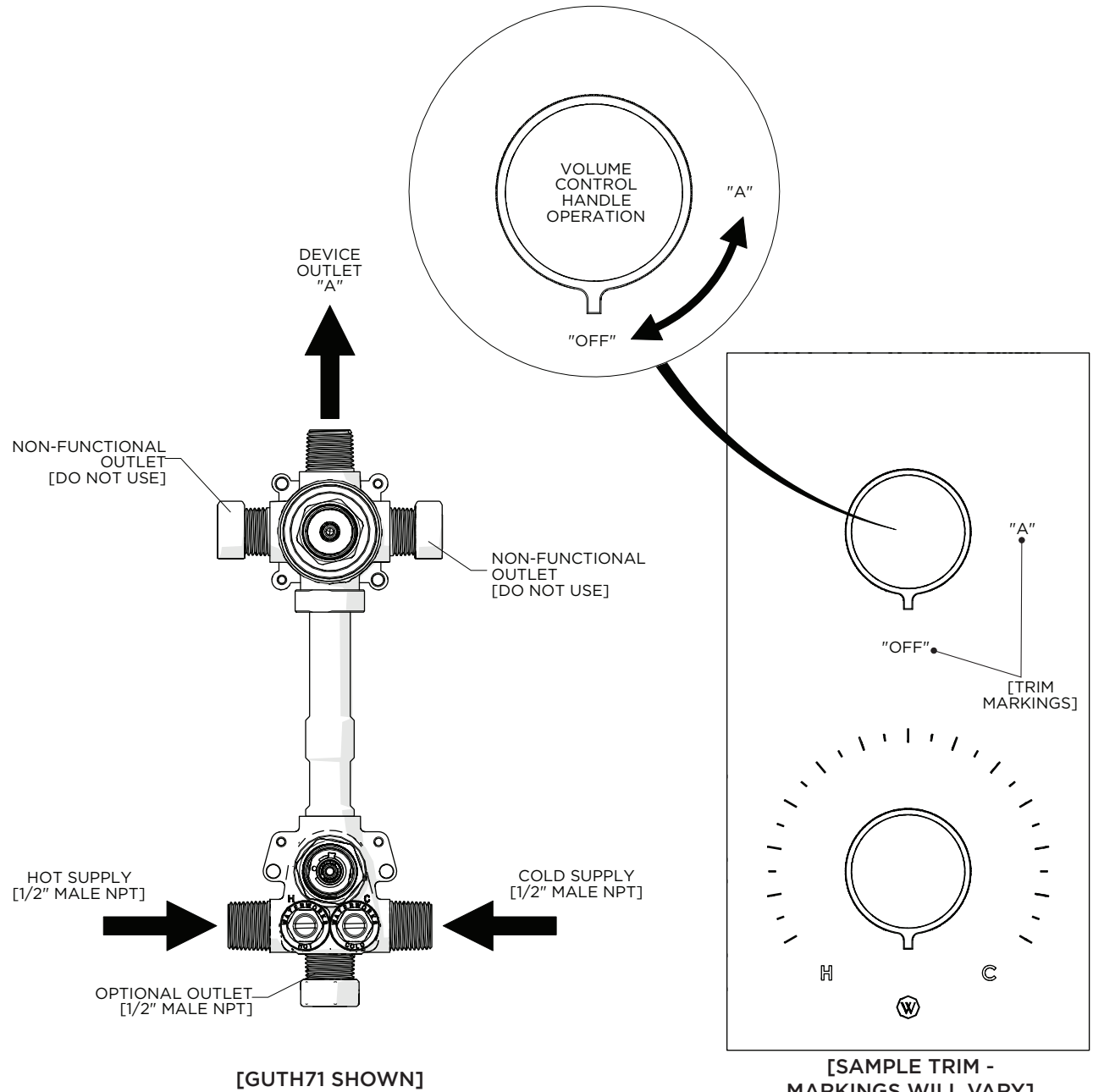


STYLE No. GUTH71, GU71TH
Universal 1/2" Thermostatic Valve with
Integrated Volume Control Valve

VALVE FUNCTION AND HANDLE OPERATION:



- The THERMOSTATIC VALVE only mixes hot and cold water, it does not have an on/off/volume control function. Mixed water flows out at a fixed volume to the INTEGRATED VOLUME CONTROL VALVE which has 2 positions.
 - 1 ON position that can direct water flow to a **MAXIMUM** of 1 device.
 - 1 OFF position.
 - The INTEGRATED VOLUME CONTROL VALVE incorporates tactile feedback at each position.
- The THERMOSTATIC VALVE has an optional bottom outlet port that can be used to supply water to 1 additional fitting which will require a separate WALL VALVE and TRIM (valves and trims sold separately).



WATERWORKS

INSTALLATION GUIDELINES



STYLE No. GUTH71, GU71TH
 Universal 1/2" Thermostatic Valve with
 Integrated Volume Control Valve

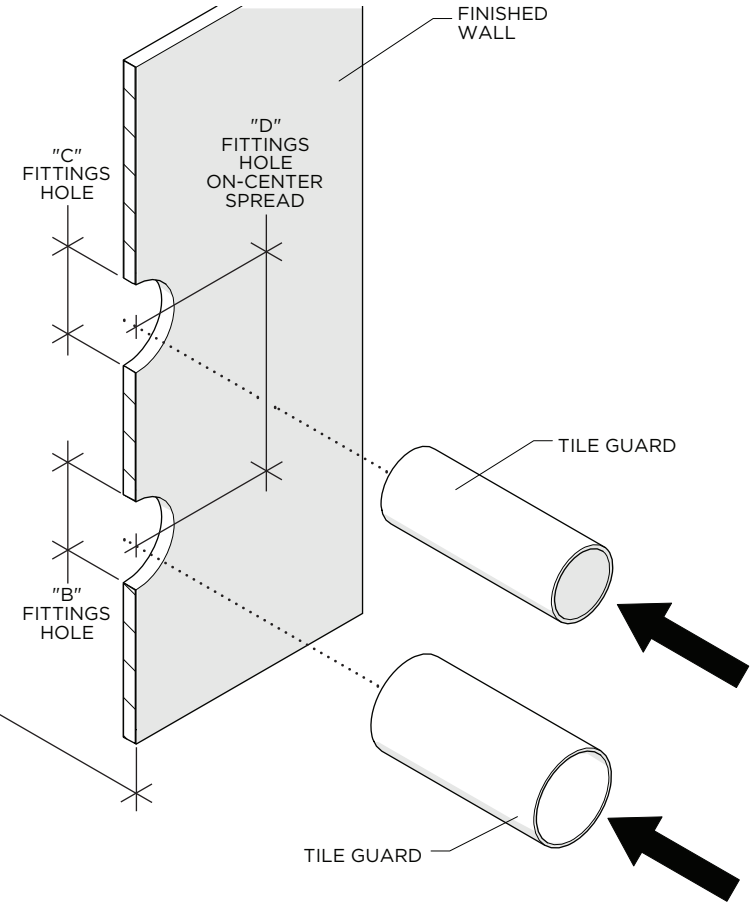
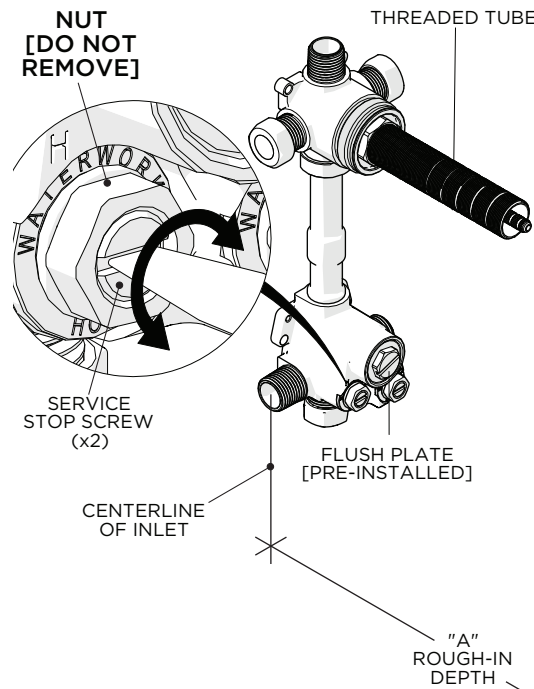
ROUGH-IN AND VALVE PREPARATION:

IMPORTANT:

- The rough-in depth is measured from the centerline of the inlets to the surface of the finished wall.
- Refer to the Installation Guidelines of the specific TRIM being used for related information.

CAUTION:

- DO NOT APPLY DIRECT HEAT TO THE VALVE. Pre-solder any connections to prevent damage to the SERVICE STOP SEALS, THERMOSTATIC CARTRIDGE, and other internal components.
- This VALVE is shipped with a pre-installed FLUSH PLATE and is ready for flushing the lines.
- Before installing the THERMOSTATIC CARTRIDGE, the supply lines MUST BE flushed out to prevent clogging of the FILTER SCREENS.
- Failure to flush the lines will permanently damage the CARTRIDGE and **VOID** the warranty. Repeat the flushing process as needed prior to final TRIM installation.
- This VALVE includes integrated SERVICE STOPS. Make sure the TILE GUARDS are in place prior to finished wall installation to ensure future access for servicing.



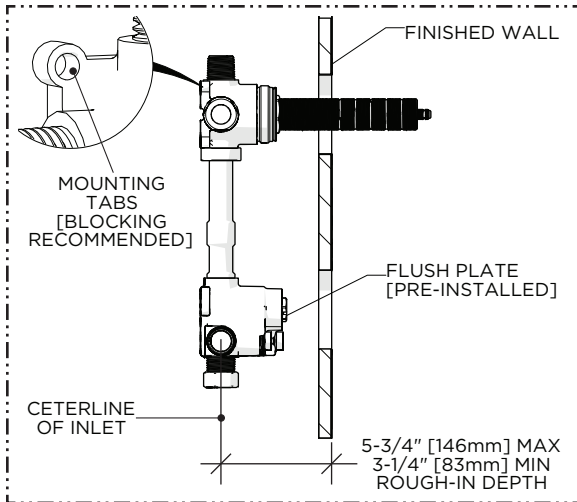
DIM	VALUE
A	5-3/4" [146mm] MAXIMUM 3-1/4" [83mm] MINIMUM
B	Ø2-1/2" [64mm]
C	Ø2" [51mm]
D	6-5/16" [160mm] [NOT ADJUSTABLE]

‡ IMPORTANT: The THERMOSTATIC CARTRIDGE, RETAINING NUT, and THREADED TUBE are packaged separately and provided with the VALVE. **SET ASIDE UNTIL FINAL TRIM INSTALLATION!**

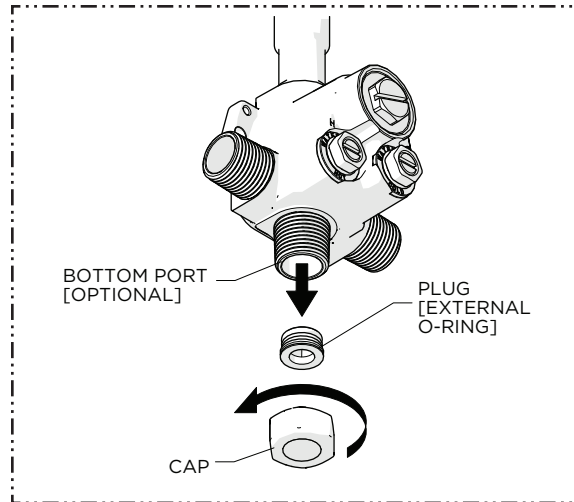
WATERWORKS INSTALLATION GUIDELINES



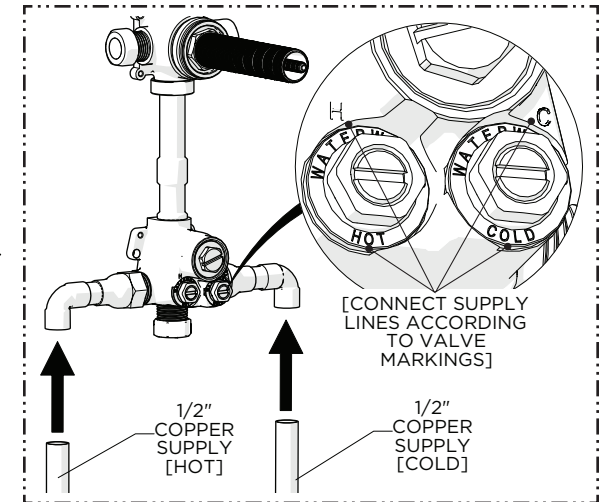
STYLE No. GUTH71, GU71TH
Universal 1/2" Thermostatic Valve with
Integrated Volume Control Valve



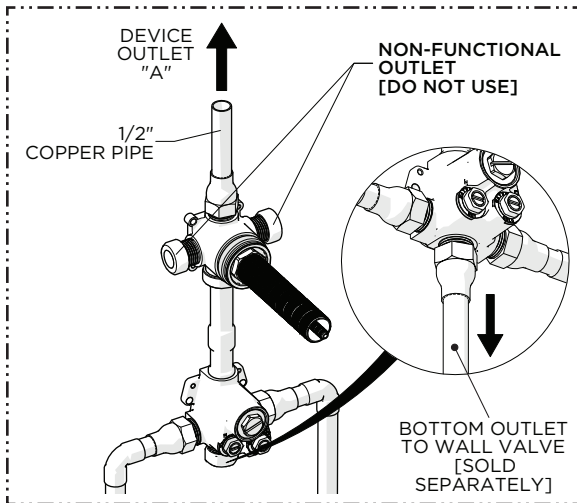
1. The rough-in depth is measured from the centerline of the inlets to the surface of the finished wall and must be between 5-3/4" [146mm] **MAXIMUM** and 3-1/4" [83mm] **MINIMUM**.



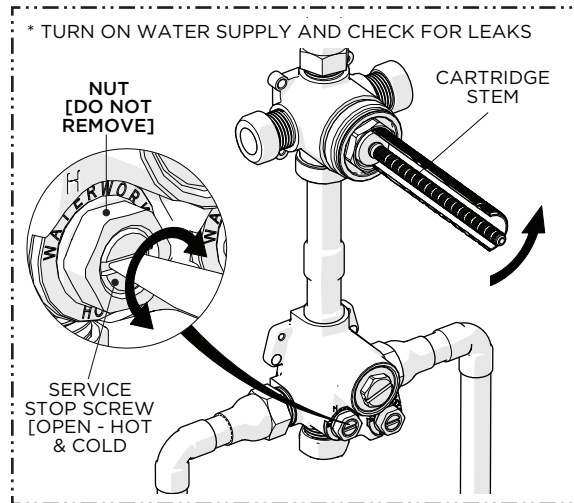
2. **OPTIONAL BOTTOM PORT**
 - 2a. If port **WILL BE** used to supply water to an additional fitting, remove the pre-installed CAP and PLUG or,
 - 2b. If port **WILL NOT BE** used, make sure the CAP is securely tightened.



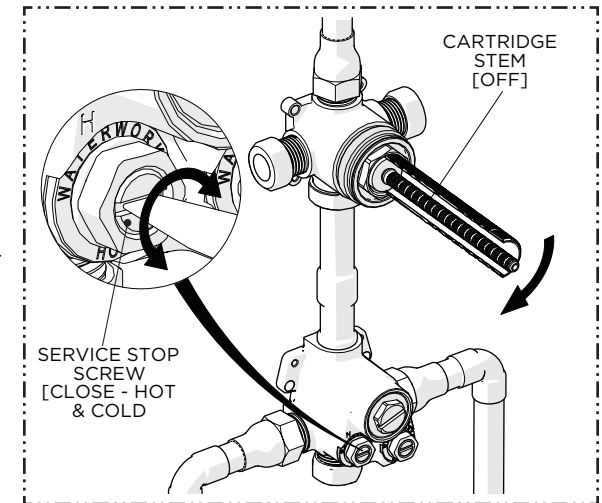
3. Run 1/2" copper supply lines to the proper height and depth of the VALVE INLETS making sure they are piped according to the VALVE markings and all piping and fittings are properly secured.
NOTE: Style No. GU71TH is provided with 4 BSPP ADAPTERS.



4. Run 1/2" copper lines from the VOLUME CONTROL VALVE outlet, and bottom outlet if used, to the desired end fittings (sold separately) making sure to secure all piping and fittings.
NOTE: The bottom port requires that a separate wall valve (sold separately) be installed.



5. Turn on the water supplies then open the hot and cold SERVICE STOPS and operate the CARTRIDGE STEM to flush out the lines and check for leaks.
CAUTION: FAILURE TO FLUSH THE SUPPLY LINES WILL PERMANENTLY DAMAGE THE CARTRIDGE AND VOID THE WARRANTY!

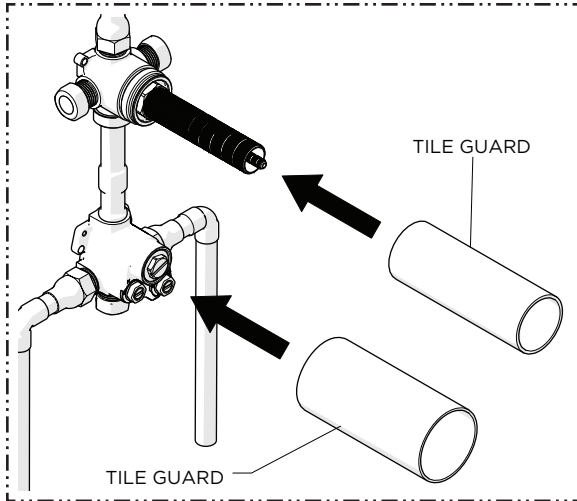


6. After the supply lines have been fully flushed, turn off the water and close both SERVICE STOPS.
NOTE: OPEN the VOLUME CONTROL VALVE to allow water to evaporate and prevent damage if the VALVE will remain unused for an extended period of time.

WATERWORKS INSTALLATION GUIDELINES

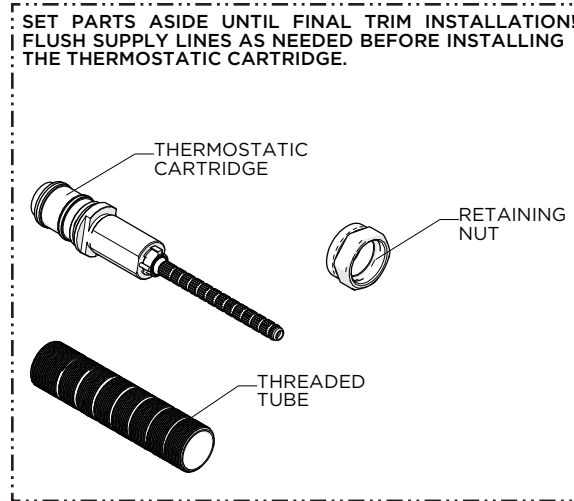
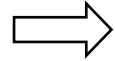


STYLE No. GUTH71, GU71TH
Universal 1/2" Thermostatic Valve with
Integrated Volume Control Valve



7. Firmly push both TILE GUARDS onto the VALVE and do **NOT** remove until construction is completed.

NOTE: This will ensure the exact opening to allow access to the SERVICE STOPS is created. Access is required for future servicing.



IMPORTANT

8. SET ASIDE THE THERMOSTATIC CARTRIDGE, RETAINING NUT, AND THREADED TUBE UNTIL FINAL TRIM INSTALLATION MAKING SURE TO REPEAT THE FLUSHING PROCESS AS NEEDED BEFORE INSTALLING THE CARTRIDGE.