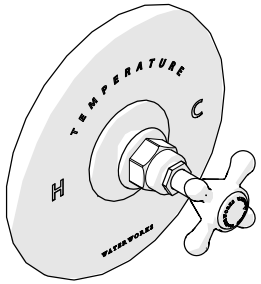
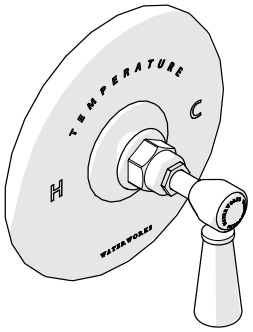
INSTALLATION GUIDELINES
THERMOSTATIC CONTROL VALVE TRIM

WATERWORKS

HIGHGATE THERMOSTATIC CONTROL VALVE TRIM WITH HANDLE



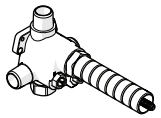


STYLES		
HGTHAE	HGTH01 **[SHOWN]**	HGTH10 **[SHOWN]**

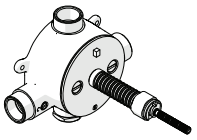
REQUIRED PLUMBING DETAILS:

- Depending on the number of end fittings in the shower system and how many are able to operate **SIMULTANEOUSLY**, the shower system will require either:

A. The Universal 1/2" Thermostatic Valve (**STYLE No. GUTH60**) for a **MAXIMUM** of 2 fittings flowing simultaneously or,

	STYLE	PAGES
	GUTH60	2 - 6

B. The Universal 3/4" Thermostatic Valve (**STYLE No. GUTH38**) for 3+ fittings flowing simultaneously.

	STYLE	PAGES
	GUTH38	7 - 10

VALVE FUNCTION:

- **THERMOSTATIC VALVES** only mix hot and cold water and do not have volume or shut-off capabilities.
- **VOLUME CONTROL VALVES** control on/off/volume and must be installed for each fitting that will have water flowing to it or a **DIVERTER VALVE** for multiple fittings.

IMPORTANT:

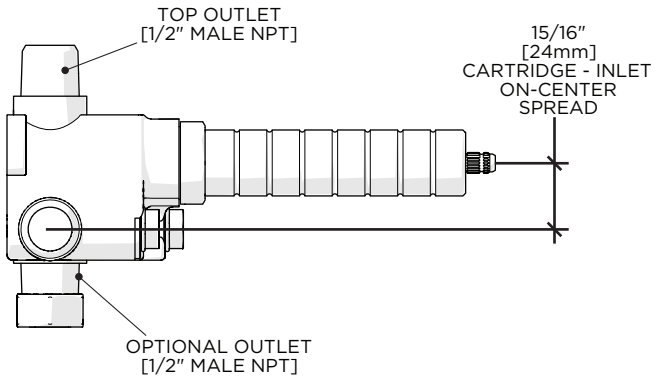
- **ALL VALVES AND TRIMS SOLD SEPARATELY.**
- To ensure this product is installed properly, you must read and follow these guidelines.
- The owner/user of this product must keep this information for future reference.
- This product must be installed by a professional licensed contractor and must be on-site prior to rough-in. This allows the installer to visualize the installation.
- Refer to the Installation Guidelines provided with the VALVE for complete rough-in installation details and related information.
- 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.
- **WARNING:** The **THERMOSTATIC VALVES** (GUTH60/GUTH38) feature anti-scald protection. The risk of scalding exists until the installer has properly calibrated/adjusted the temperature setting during final TRIM installation.
- This product is sold partially assembled but shown fully disassembled for illustrative and service purposes only. Inspect this product to ensure you have all the parts required for proper installation.
- Use only a strap wrench or protected/smooth-jaw wrench on any finished surface.
- The use of certain plumber's putty may stain stone or tile surfaces.
- 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.

INSTALLATION GUIDELINES

WATERWORKS

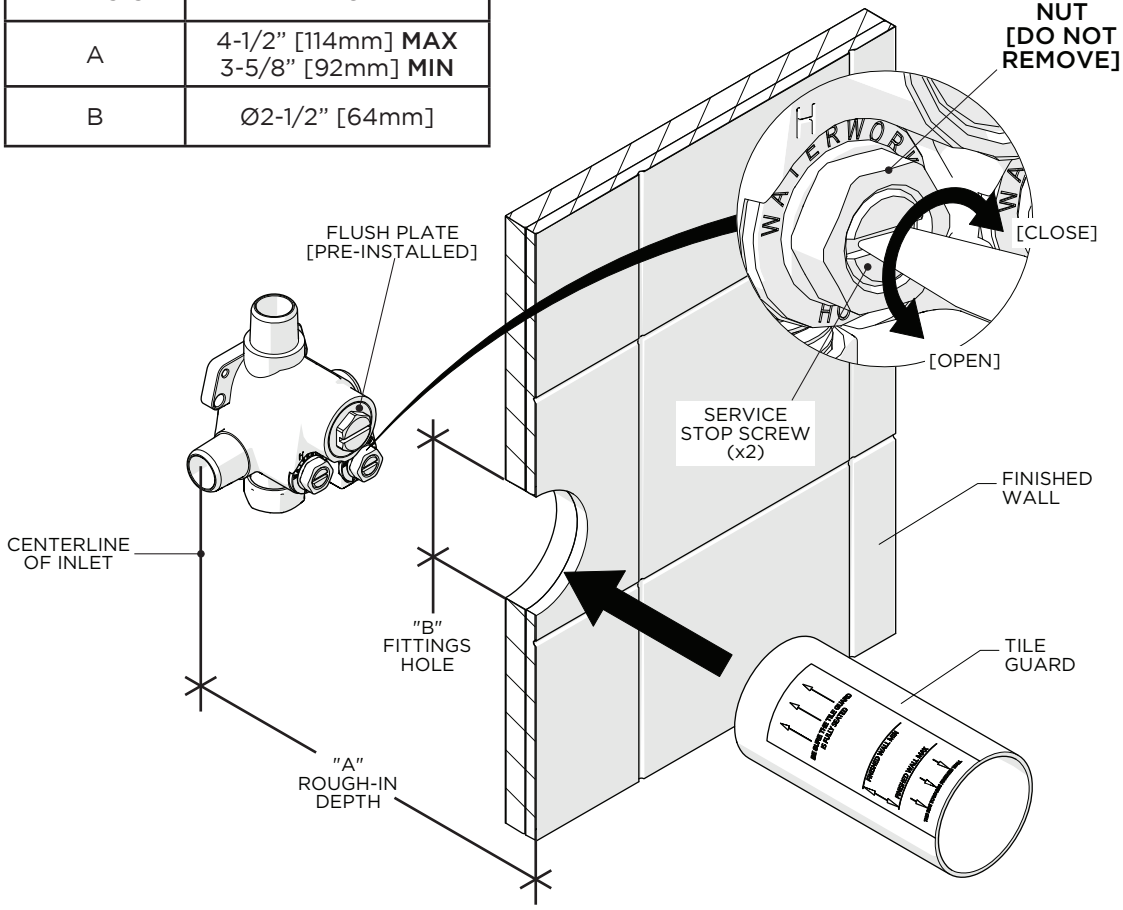
THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH60**

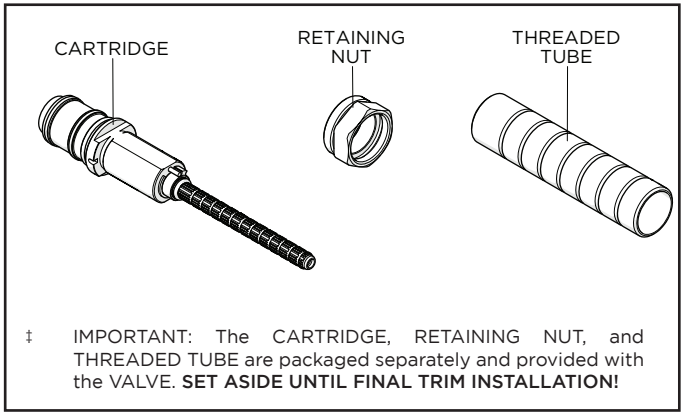
ROUGH-IN AND VALVE PREPARATION:



- **CAUTION:** The rough-in depth is measured from the centerline of the inlets to the surface of the finished wall. If the VALVE is roughed-in too shallow, the TRIM cannot be installed correctly.
- The VALVE is shipped with a pre-installed FLUSH PLATE and is ready for flushing the supply lines.
- **CAUTION:** 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.
- Remove and discard the TILE GUARD only when the finished wall surface (TILE or SLAB) is completed and the TRIM is ready for installation.

DIMENSION	VALUE
A	4-1/2" [114mm] **MAX** 3-5/8" [92mm] **MIN**
B	Ø2-1/2" [64mm]



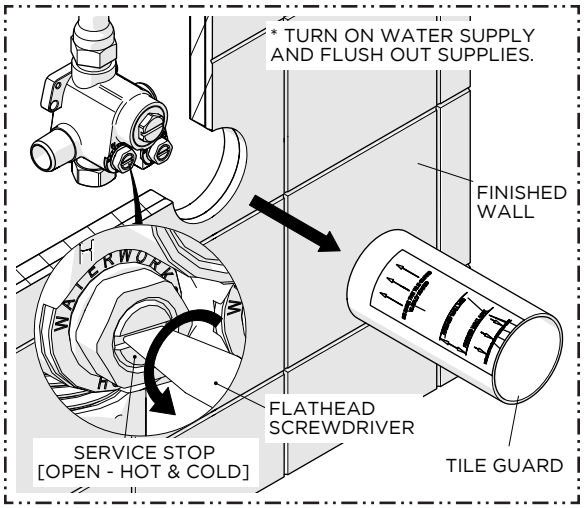


‡ IMPORTANT: The CARTRIDGE, RETAINING NUT, and THREADED TUBE are packaged separately and provided with the VALVE. **SET ASIDE UNTIL FINAL TRIM INSTALLATION!**

INSTALLATION GUIDELINES

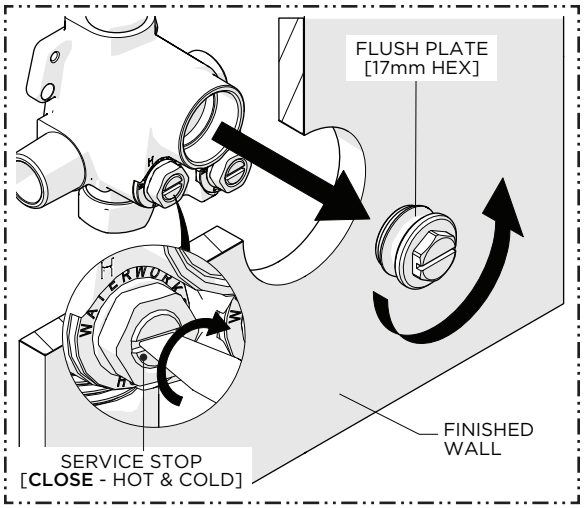
THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH60**

WATERWORKS



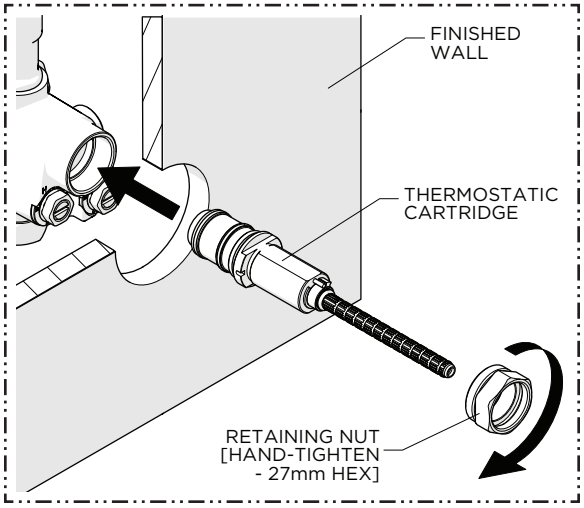
1. Turn on the water supplies then remove the TILE GUARD from the VALVE and **OPEN** the SERVICE STOPS (hot & cold) to flush out the lines.

CAUTION: FAILURE TO FLUSH THE SUPPLY LINES WILL PERMANENTLY DAMAGE THE CARTRIDGE AND VOID THE WARRANTY! REPEAT THE FLUSHING PROCESS AS NEEDED BEFORE FINAL TRIM INSTALLATION.

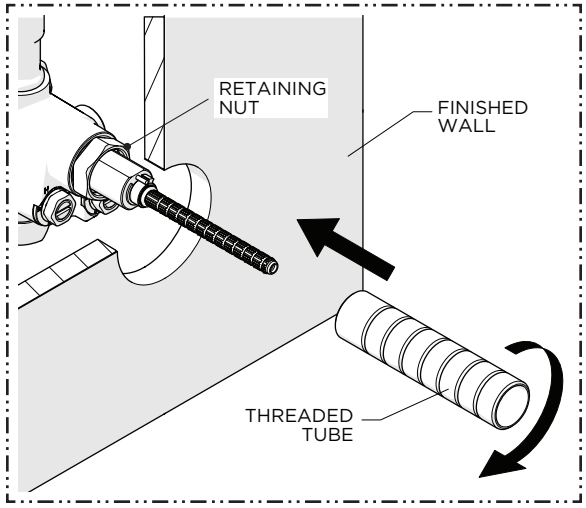


2. After the lines have been fully flushed, CLOSE the SERVICE STOPS (hot & cold) then unthread and remove the FLUSH PLATE.

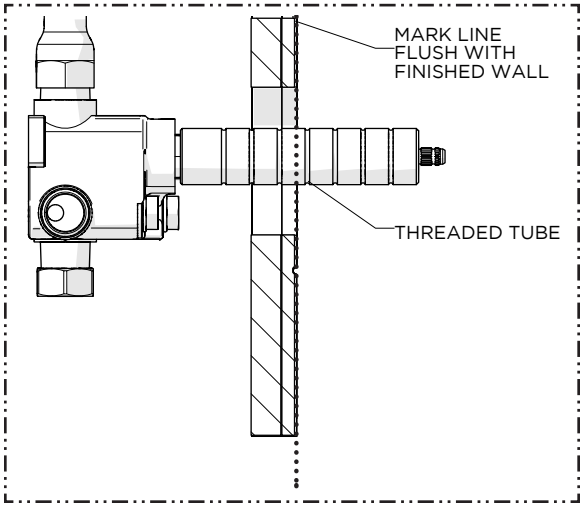
   NOTE: DO **NOT** discard the FLUSH PLATE.



3. Insert the THERMOSTATIC CARTRIDGE into the VALVE BODY then thread and **hand-tighten** the RETAINING NUT into the VALVE BODY.

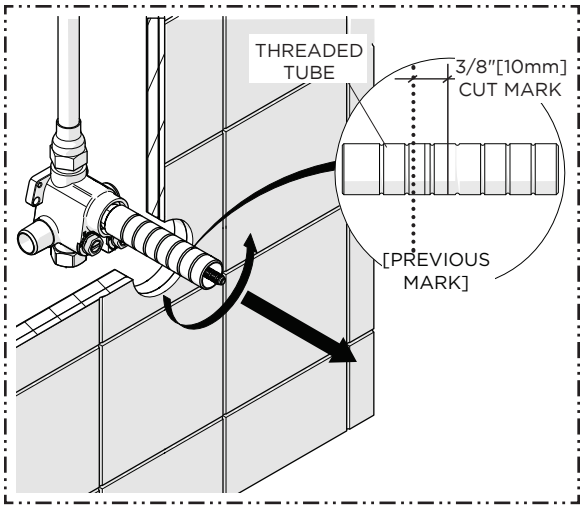


4. Thread the THREADED TUBE into the RETAINING NUT until snug.

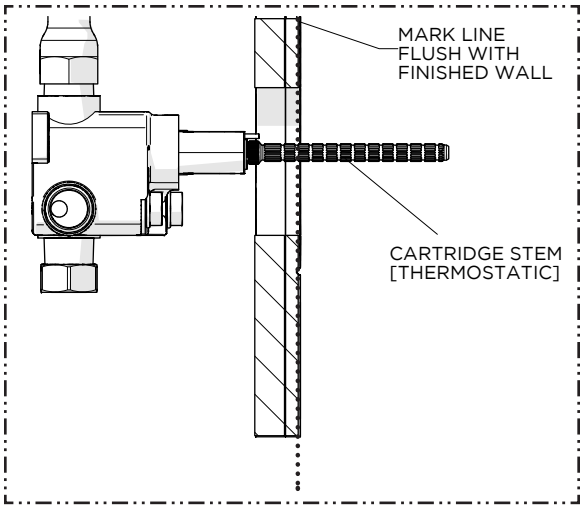


5. Mark the THREADED TUBE where it protrudes past the finished wall.

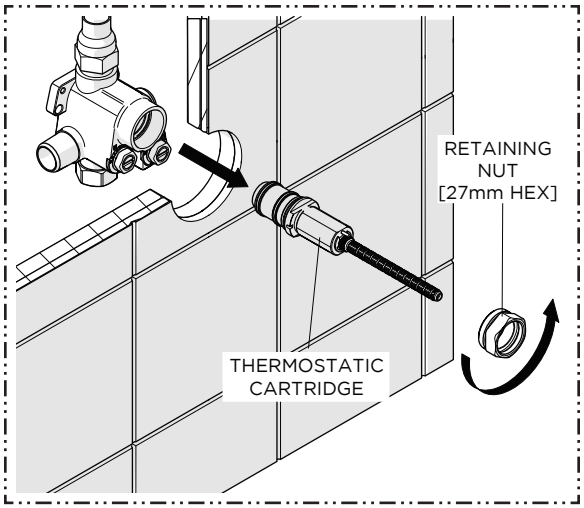
   NOTE: A straight edge (not supplied) can be used to mark the TUBE.



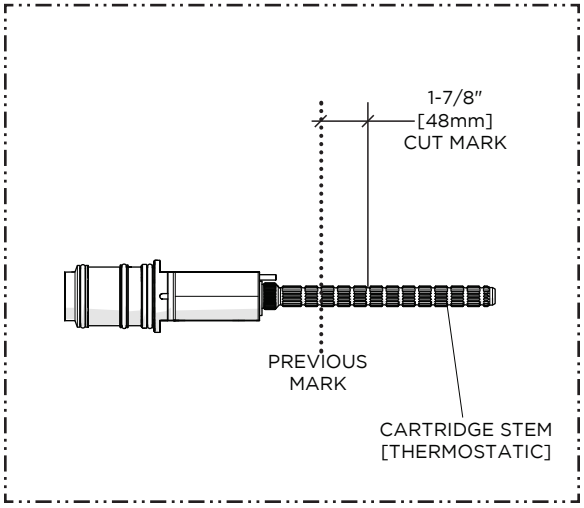
6. Remove the THREADED TUBE then cut it 3/8" [10mm] **in front** of the previous mark so the TUBE will protrude 3/8" [10mm] from the finished wall surface.



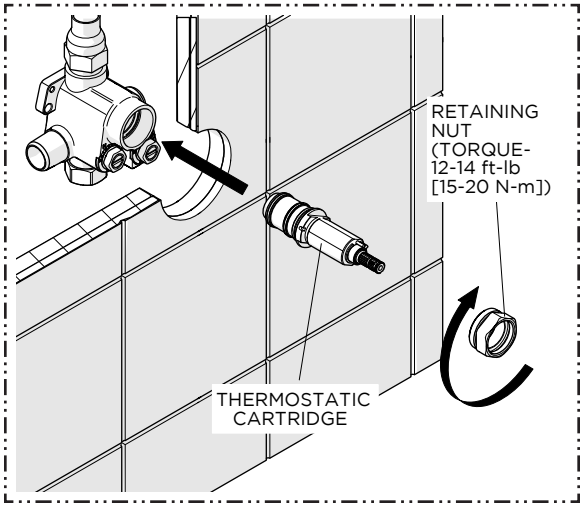
7. Mark the CARTRIDGE STEM where it protrudes past the finished wall.



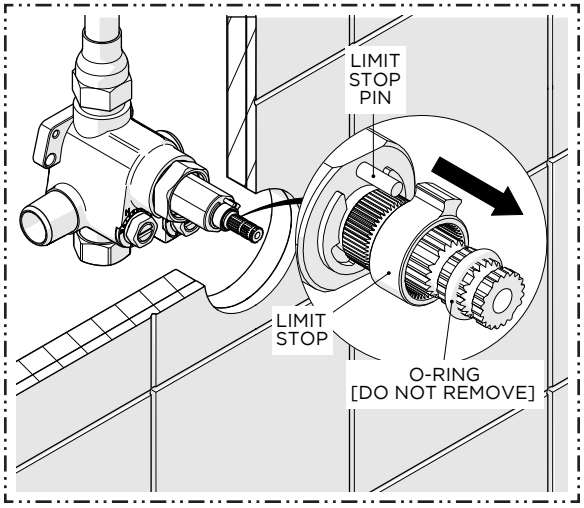
8. Unthread the RETAINING NUT and remove the CARTRIDGE.



9. Carefully cut the CARTRIDGE STEM 1-7/8" [48mm] **in front** of the previous mark so the STEM will protrude 1-7/8" [48mm] from the finished wall surface.



10. Insert the CARTRIDGE back into the VALVE BODY then thread and securely tighten the RETAINING NUT to the specified torque settings shown.

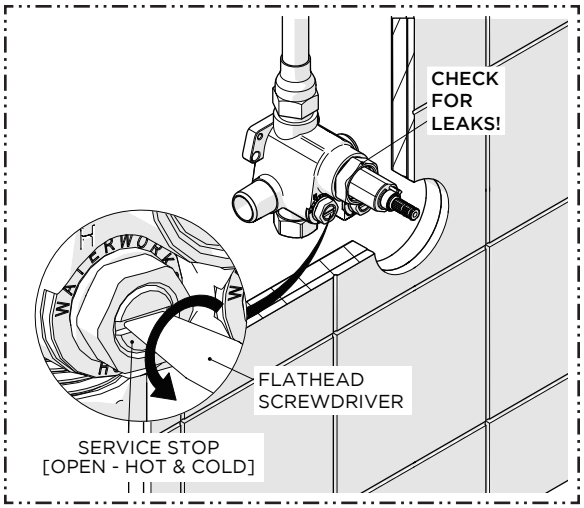


11. Slide the O-RING and LIMIT STOP on the THERMOSTATIC CARTRIDGE up the STEM.

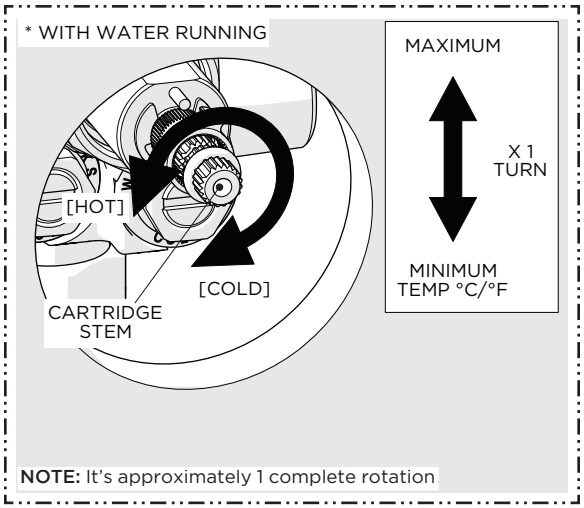
    NOTE: Do **NOT** remove or damage the O-RING.

INSTALLATION GUIDELINES

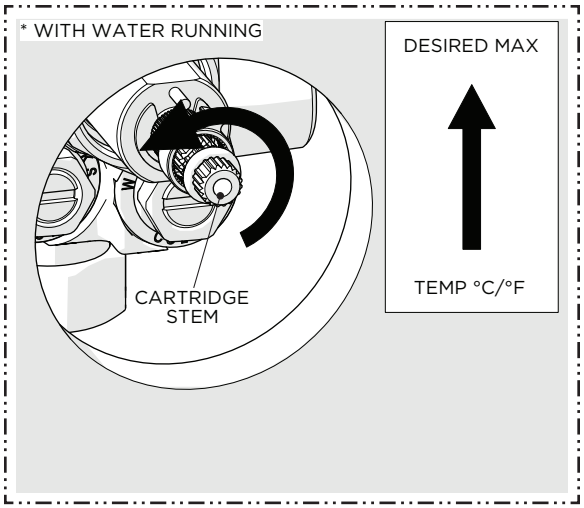
THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH60**



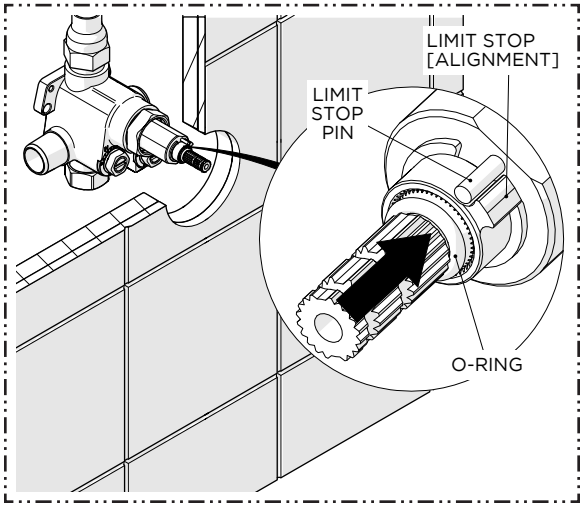
12. Open the SERVICE STOPS (hot & cold) and check for leaks.



13. Open a **DIVERTER** or **VOLUME CONTROL VALVE** then slowly rotate the CARTRIDGE STEM clockwise to attain full cold then counter-clockwise to attain full hot. Verify that a full range of temperatures exists.

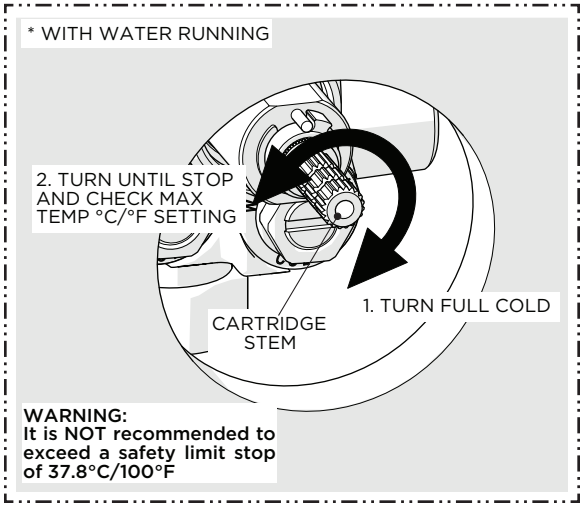


14. With water running, rotate the CARTRIDGE STEM to adjust the temperature to the **maximum** desired bathing temperature, verified with a thermometer, then turn the water off and make sure **NOT** to change this setting.



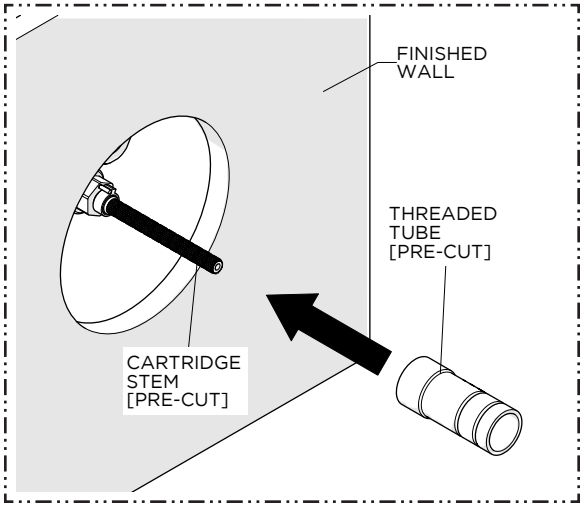
15. Slide the LIMIT STOP and O-RING back down the STEM making sure to properly align the LIMIT STOP with the LIMIT STOP PIN.

    NOTE: The O-RING will prevent the LIMIT STOP from sliding off the STEM.



16. Turn the CARTRIDGE STEM clockwise to full cold then counter-clockwise until it stops and verify the **maximum** desired bathing temperature set in the previous step.
    WARNING: It is **NOT** recommended to exceed a safety limit stop of 37.8°C/100°F.

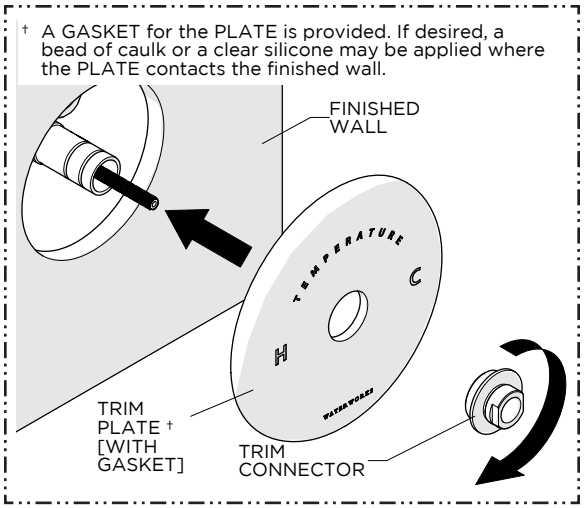
➢ **IF THE MAXIMUM BATHING TEMPERATURE IS NOT CORRECT, REPEAT THE CALIBRATION PROCEDURES.**



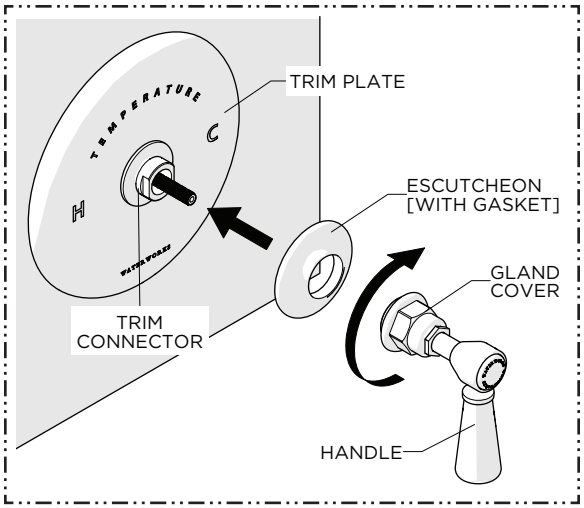
17. Thread the THREADED TUBE back onto the CARTRIDGE until snug.

INSTALLATION GUIDELINES

THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH60**



18. Firmly hold the TRIM PLATE against the finished wall then thread and securely tighten the TRIM CONNECTOR onto the THREADED TUBE.



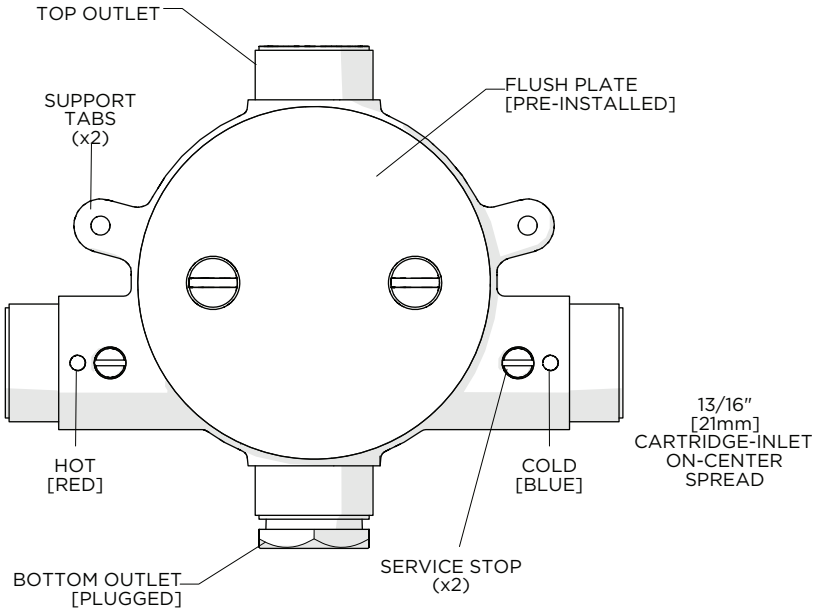
19. Using the GASKET provided, slide the ESCUTCHEON over the TRIM CONNECTOR then thread and securely tighten the GLAND COVER onto the TRIM CONNECTOR.

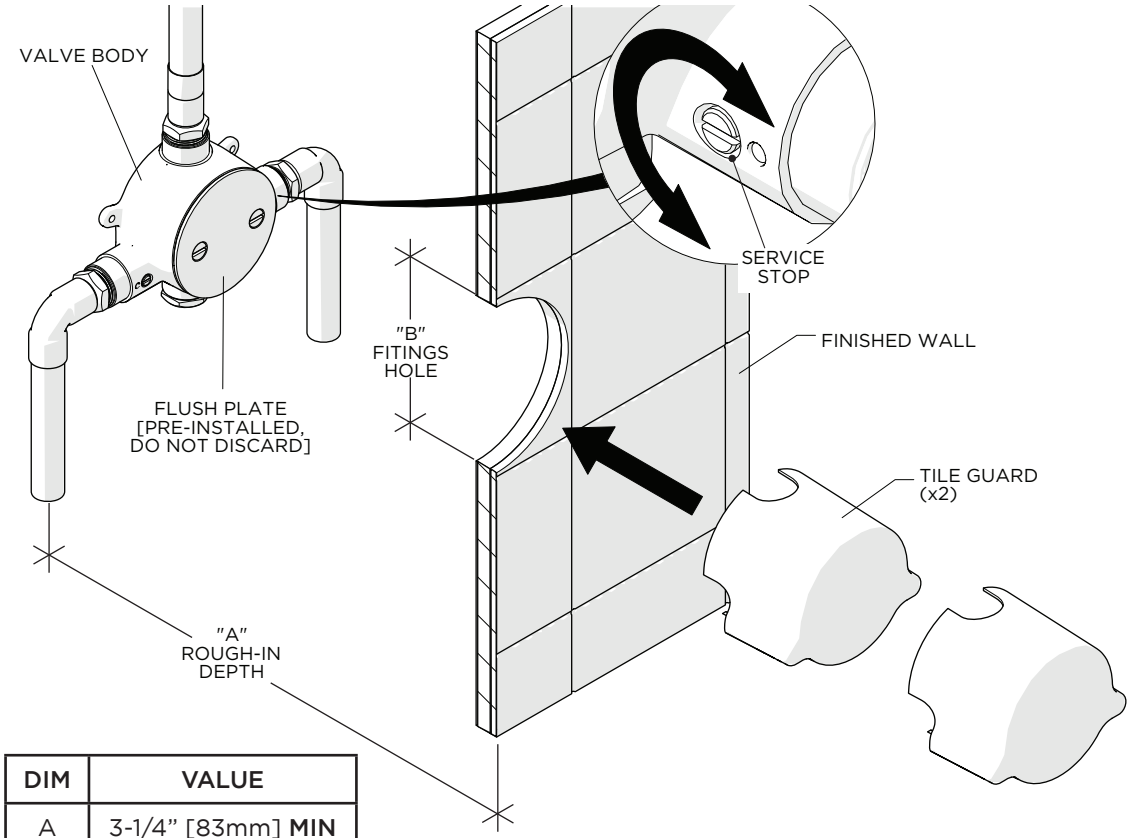
INSTALLATION GUIDELINES

WATERWORKS

THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH38**

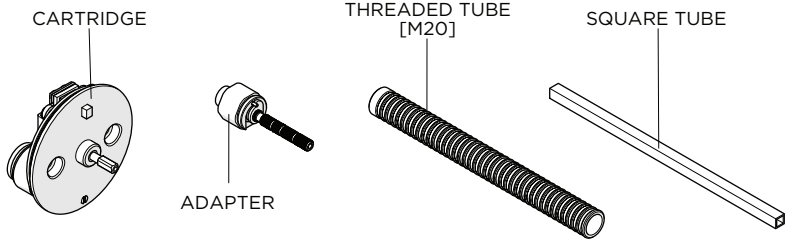
ROUGH-IN AND VALVE PREPARATION:





- **CAUTION:** The rough-in depth is measured from the centerline of the inlets to the surface of the finished wall. If the VALVE is roughed-in too shallow, the TRIM cannot be installed correctly.
- The VALVE is shipped with a pre-installed FLUSH PLATE and is ready for flushing the supply lines.
- **CAUTION:** 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.
- Remove and discard the TILE GUARDS only when the finished wall surface (TILE or SLAB) is completed and the TRIM is ready for installation.

DIM	VALUE
A	3-1/4" [83mm] **MIN**
B	Ø5-1/4" [133mm]

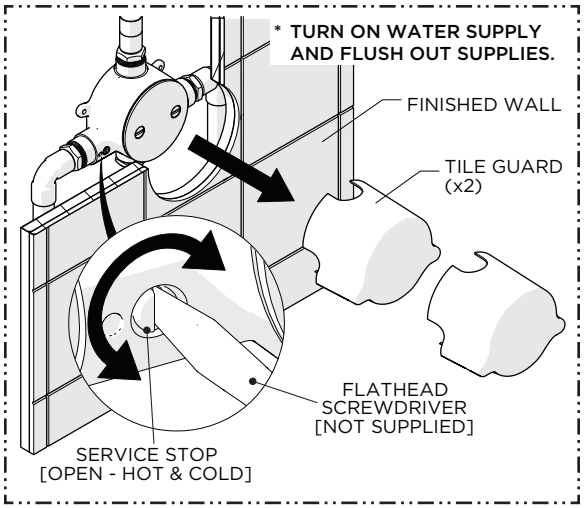


‡ IMPORTANT: The CARTRIDGE, ADAPTER, and TUBES are packaged separately and provided with the VALVE. **SET ASIDE UNTIL FINAL TRIM INSTALLATION!**

INSTALLATION GUIDELINES

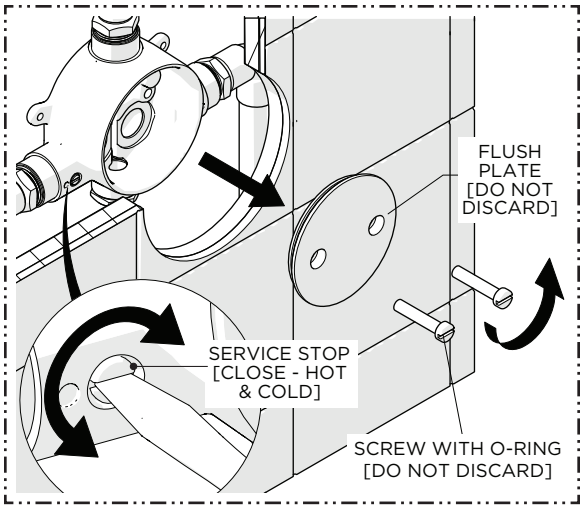
THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH38**

WATERWORKS

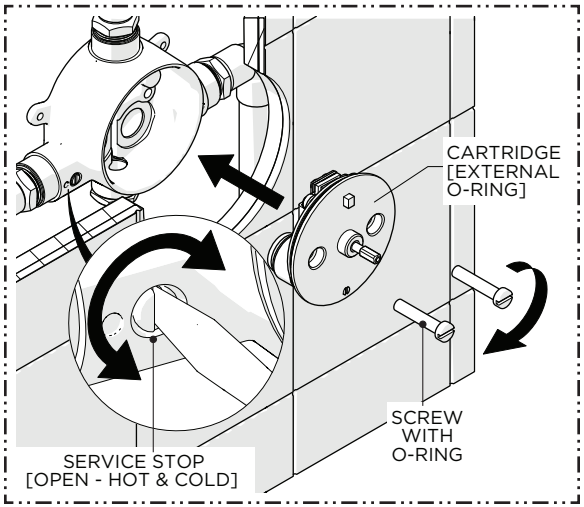


1. Remove the TILE GUARDS from the VALVE and **OPEN** the hot and cold SERVICE STOPS then turn on the water supplies to flush out the lines to prevent clogging of the FILTER SCREENS.

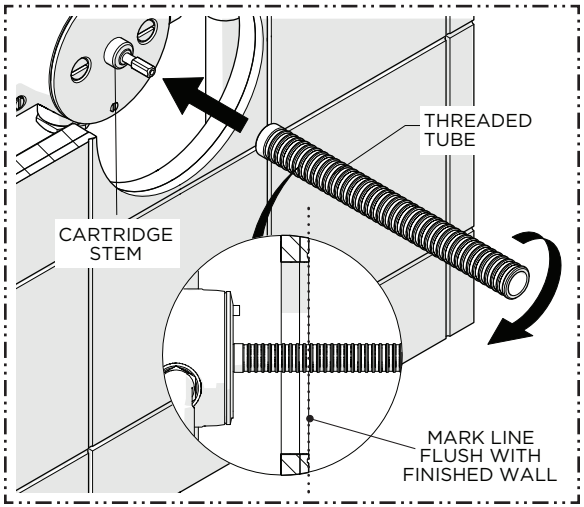
CAUTION: FAILURE TO FLUSH THE SUPPLY LINES WILL PERMANENTLY DAMAGE THE CARTRIDGE AND VOID THE WARRANTY! REPEAT THE FLUSHING PROCESS AS NEEDED BEFORE FINAL TRIM INSTALLATION.



2. After the lines have been fully flushed, **CLOSE** the hot and cold SERVICE STOPS then unthread the SCREWS and remove the FLUSH PLATE.

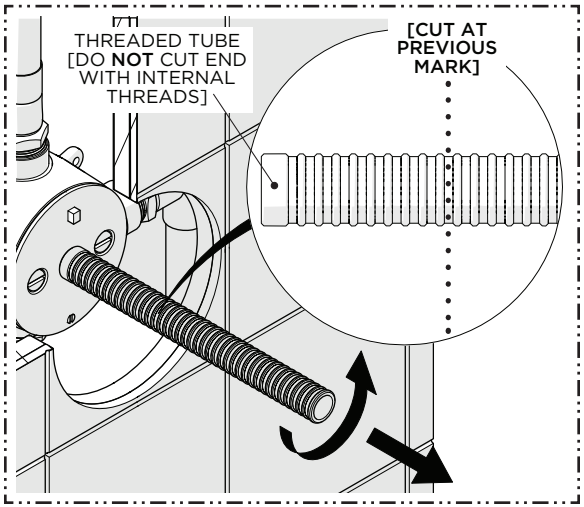


3. Insert the CARTRIDGE into the VALVE BODY then thread and securely tighten the SCREWS, re-open the SERVICE STOPS, and check for leaks.



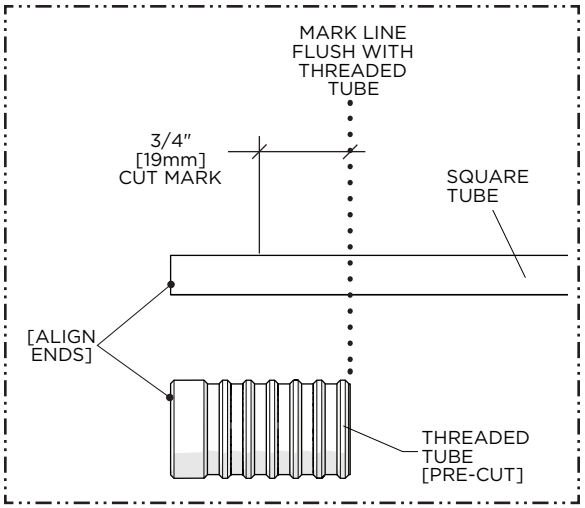
4. Fully thread the THREADED TUBE onto the CARTRIDGE STEM and mark the TUBE where it protrudes past the finished wall.

   NOTE: A straight edge (not supplied) can be used to mark the TUBE.

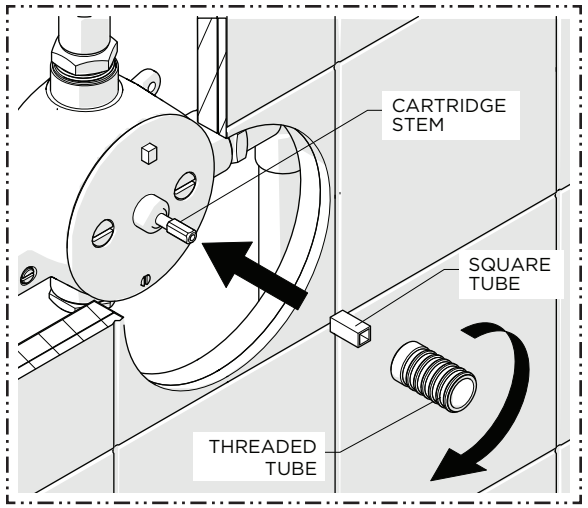


5. Remove the THREADED TUBE then cut it at the previous mark.

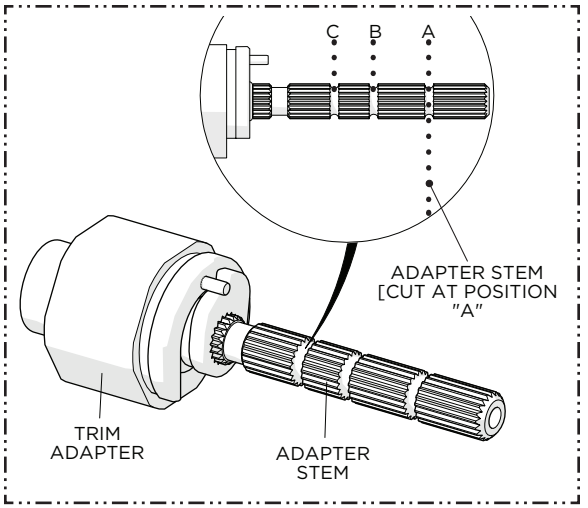
   CAUTION: Do **NOT** cut the end with the internal threads.



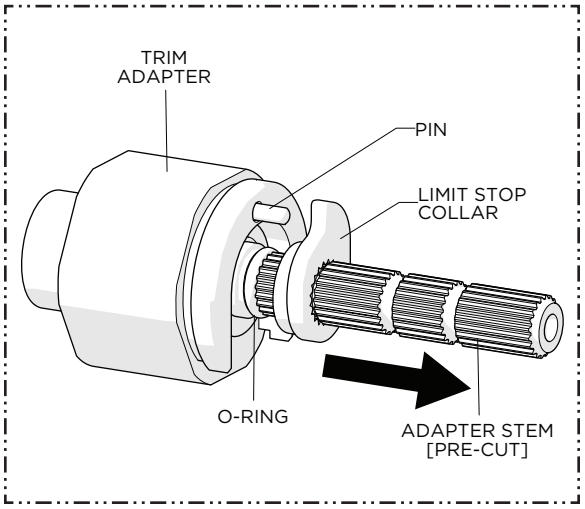
6. Align the pre-cut THREADED TUBE with the SQUARE TUBE then mark and cut the SQUARE TUBE 3/4" [19mm] **shorter than** the THREADED TUBE.



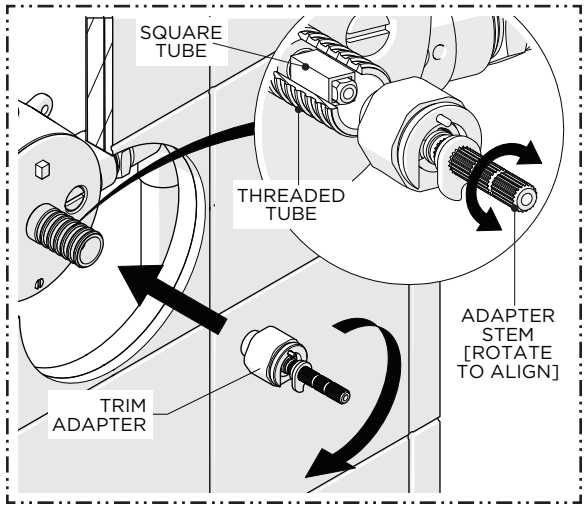
7. Slide the SQUARE TUBE onto the CARTRIDGE STEM then thread the THREADED TUBE onto the STEM until snug.



8. Before installing the TRIM ADAPTER, cut the ADAPTER STEM at position **"A"** as shown.

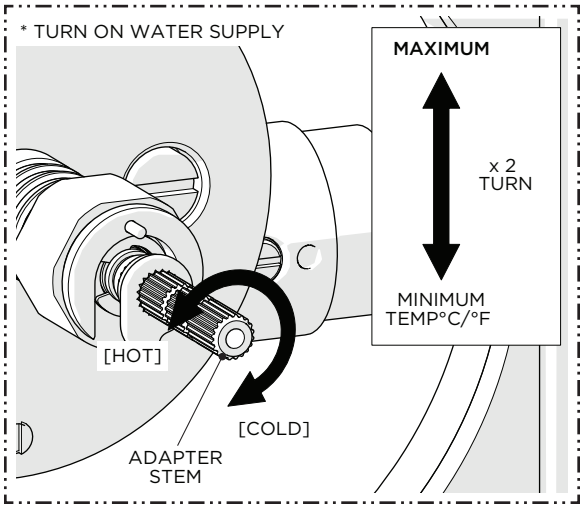


9. After cutting the ADAPTER STEM, pull the LIMIT STOP COLLAR up the STEM so it no longer contacts the PIN. The COLLAR must be unseated to allow the TRIM ADAPTER to thread properly onto the THREADED TUBE.



10. Thread the TRIM ADAPTER onto the THREADED TUBE until snug.

    NOTE: ROTATING THE ADAPTER STEM WILL HELP PROPERLY ALIGN IT WITH THE SQUARE TUBE.



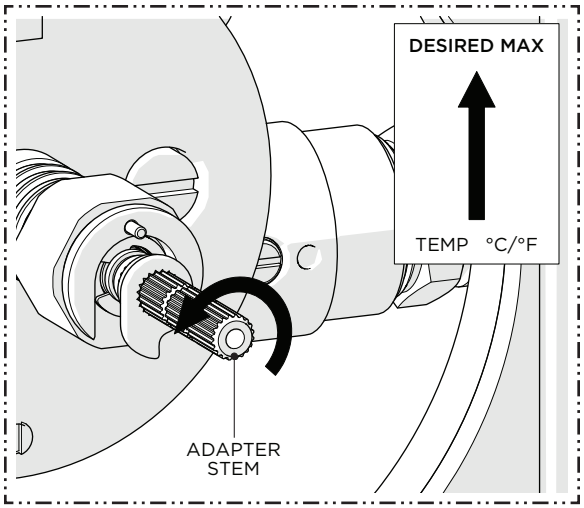
11. Open a **DIVERTER** or **VOLUME CONTROL VALVE** then slowly rotate the ADAPTER STEM clockwise to attain full cold then rotate it counterclockwise to attain full hot. Verify that a full range of temperatures exists.

    NOTE: It's approximately 2 complete rotations.

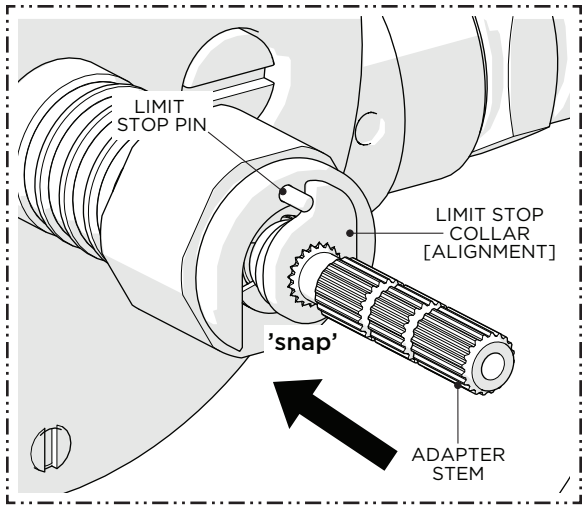
INSTALLATION GUIDELINES

THERMOSTATIC CONTROL VALVE TRIM WITH **GUTH38**

WATERWORKS

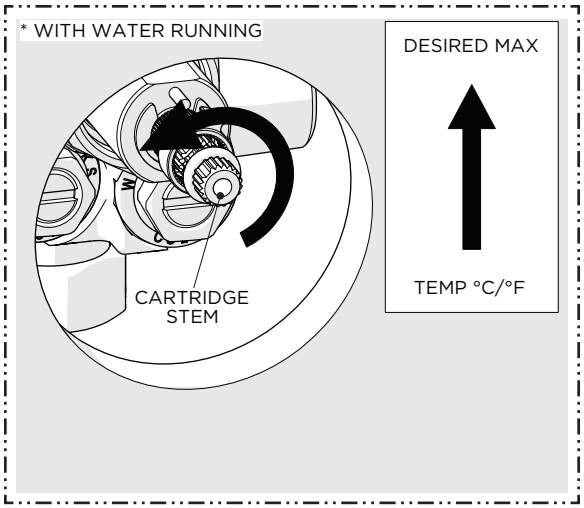


12. With water running, rotate the ADAPTER STEM to adjust the temperature to the **maximum** desired bathing temperature, verified with a thermometer, then turn the water off and make sure **NOT** to change this setting.



13. Slide the LIMIT STOP COLLAR back down the ADAPTER STEM making sure to properly align it with the LIMIT STOP PIN and **press down firmly**.

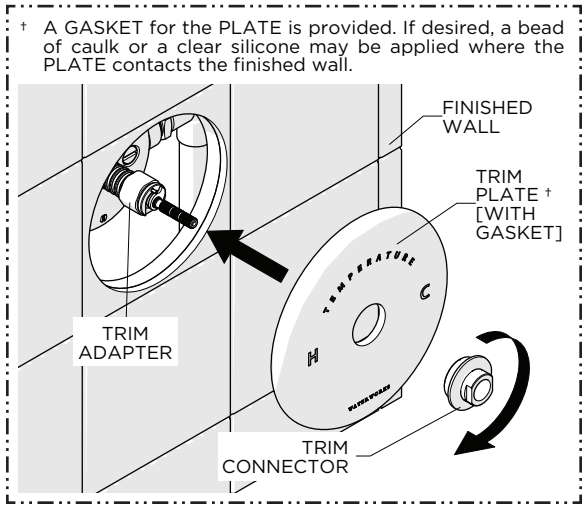
    NOTE: Pressing down firmly on the COLLAR will ensure the O-RING is fully seated in its groove which will keep the COLLAR securely in place.



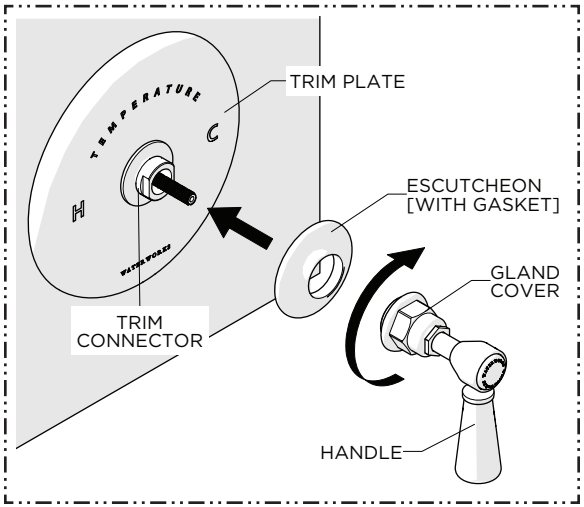
14. Turn the ADAPTER STEM clockwise to full cold then counterclockwise until snug and verify the **maximum** desired bathing temperature set in the previous step.

    WARNING: It is NOT recommended to exceed a safety limit stop of 37.8°C/100°F.

CAUTION: IF THE MAXIMUM BATHING TEMPERATURE IS NOT CORRECT OR NEEDS TO BE ADJUSTED, SLIGHTLY PULL THE LIMIT STOP COLLAR FORWARD SO IT DOES NOT HIT THE PIN AND REPEAT STEPS 11 THROUGH 14 TO RE-CALIBRATE THE TEMPERATURE SETTING.



15. Firmly hold the TRIM PLATE against the finished wall then thread and securely tighten the TRIM CONNECTOR onto the TRIM ADAPTER.



16. Using the GASKET provided, slide the ESCUTCHEON over the TRIM CONNECTOR then thread and securely tighten the GLAND COVER onto the TRIM CONNECTOR.