409.7

Shutoff Valve Support for Tubing Systems

CHANGE TYPE: Addition

CHANGE SUMMARY: New text addresses shutoff valve support for tubing systems.

2018 CODE: **409.7 Shutoff valves in tubing systems.** Shutoff valves installed in tubing systems shall be rigidly and securely supported independently of the tubing.

CHANGE SIGNIFICANCE: Shutoff valves at appliances such as furnaces, water heaters and boilers are typically supported by rigid steel piping, where CSST or other tubing connects to the shutoff valve inlet, and the valve is supported on its outlet side by rigid piping. However, if a shutoff valve, such as a concealed T-handle keyed valve for a fireplace, is installed in a run of CSST or other tubing material, the torque applied to the valve rotating member will transfer to the tubing, causing stress and possible tubing failure. This new code requirement is consistent with the manufacturer's installation instructions for CSST. The method of support could be a bracket made for the purpose or it could be accomplished with securely anchored rigid steel pipe nipples on the inlet and outlet sides of the valve. The intent is to prevent movement and stressing of the tubing.

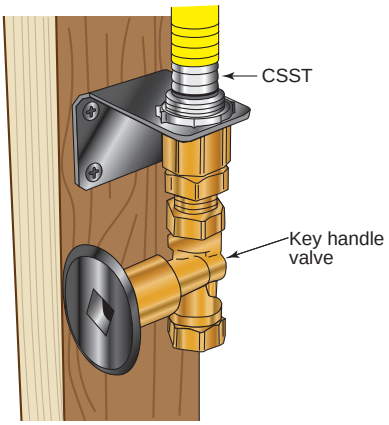

Photo courtesy of OmegaFlex

Key handle valve with support independent of gas tubing

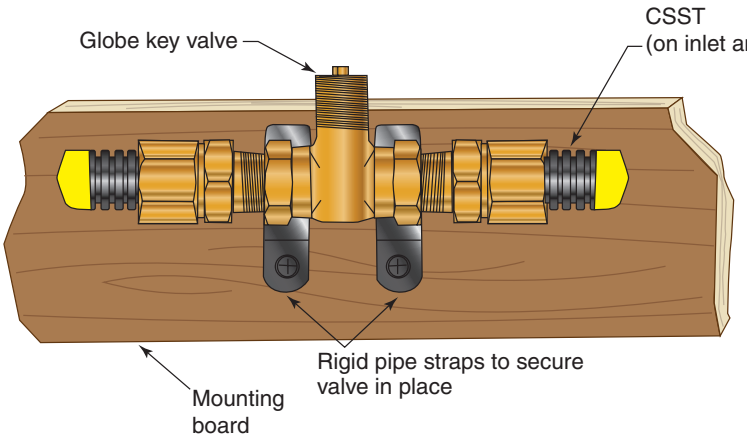

Photo courtesy of OmegaFlex

Shutoff valves require support independent of gas tubing.