

CHANGE TYPE: Modification

CHANGE SUMMARY: Lower flow shower heads need to be compatible with the shower control (mixing valve).

2021 CODE: 412.3 Individual shower valves. Individual shower and tub-shower combination valves shall be balanced-pressure, thermostatic or combination balanced-pressure/thermostatic valves that conform to the requirements of ASSE 1016/ASME A112.1016/CSA B125.16 or ASME A112.18.1/CSA B125.1. Such valves shall be installed at the point of use. Shower control valves shall be rated for the flow rate of the installed shower head. Shower and tub-shower combination valves required by this section shall be equipped with a means to limit the maximum setting of the valve to 120°F (49°C), which shall be field adjusted in accordance with the manufacturer's instructions to provide water at a temperature not to exceed 120°F (49°C). In-line thermostatic valves shall not be utilized for compliance with this section.

412.4 Multiple (gang) showers. Multiple (gang) showers supplied with a single, tempered water supply pipe shall have the water supply for such showers controlled by an approved automatic temperature control mixing valve that conforms to ASSE 1069 or CSA B125.3, or each shower head shall be individually controlled by a balanced-pressure, thermostatic or combination balanced-pressure/thermostatic valve that conforms to ASSE 1016/ASME A112.1016/CSA B125.16 or ASME A112.18.1/CSA B125.1 and is installed at the point of use. Where a showerhead is individually controlled, shower control valves shall be rated for the flow rate of the installed shower head. Such valves shall be equipped with a means to limit the maximum setting of the valve to 120°F (49°C), which shall be field adjusted in accordance with the manufacturer's instructions to provide water at a temperature not to exceed 120°F (49°C). Access shall be provided to an ASSE 1069 or CSA B125.3 valve.

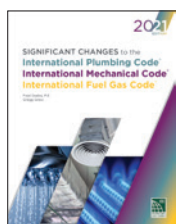
CHANGE SIGNIFICANCE: The code requires a shower head flow rate be limited to 2.5 gpm. Shower controls (mixing valves) complying with the requirements of the product standards in the code are designed to safely operate at that flow. However, there are many different types of shower heads available in the market that have lower flow rates. These lower flows might not provide enough motive power within a mixing valve to allow for the valve to self-adjust to prevent temperature shock to the user when a supply pressure or temperature change occurs. Not all shower controls (mixing valves) are designed (and tested) to accommodate lower (less than 2.5 gpm) flows.

412.3 Shower Control Valves to be Rated for the Installed Shower Head



Shower valve rated for lower flow shower head

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This excerpt is taken from *Significant Changes to the International Plumbing/Mechanical/Fuel Gas Codes, 2021 Edition*.

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