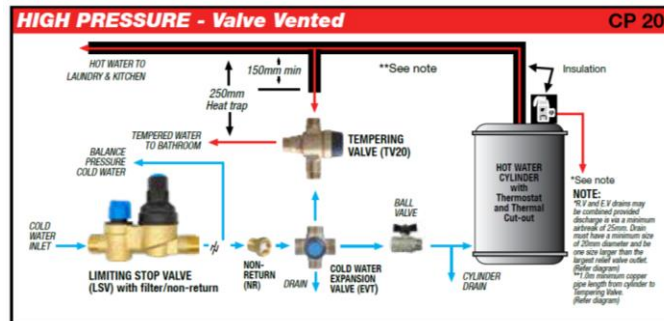


Training Update June 2020

Hot water cylinder isolation

Hot water cylinders are often installed with several valves in close proximity to the cylinder. A typical schematic of the valves is shown in our brochure and on valve packaging. A ball valve is commonly fitted to the inlet of the cylinder to provide isolation for servicing.



Occasionally plumbing inspectors suggest that the ball valve should not be there because clause 6.6.6 of G12 states “there shall be no valve or restriction between the relief valve and the storage water heater.”

The important differentiation here is that the cold water expansion valve is an energy saving device as detailed in NZS 4305 (energy efficiency – domestic type hot water systems), not a relief valve so clause 6.6.6 does not apply. In a mains pressure installation, the **Temperature and Pressure Relief** valve is the relief valve and in the case of low pressure valve vented systems, the **Relief Valve** performs this function.

Plumbers that have been installing hot water cylinders for some time will recall that in the past, cold water expansion valves were not fitted and installations were still safe, albeit not so thermally efficient. This demonstrates that it is perfectly safe to fit a shut off between the expansion control device and the hot water cylinder.