

Training Update December 2020

Low pressure mistake

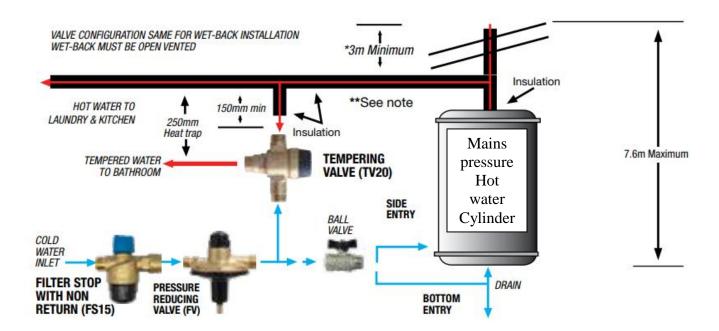
Can low pressure valves be fitted to a mains pressure cylinder?

The answer is yes but you have to be careful and think about what you are doing so I thought it was worthwhile discussing.

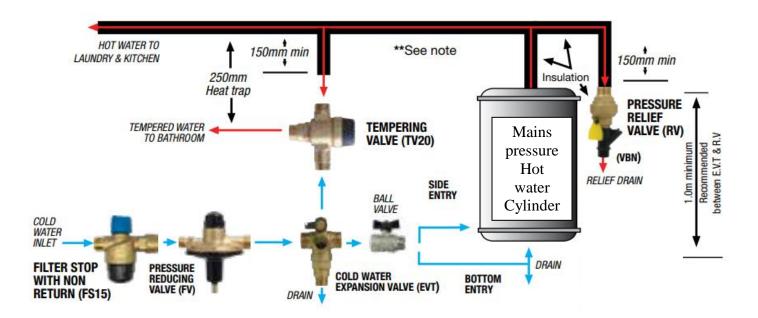
Standard low pressure cylinders are made of copper and are relatively fragile when it comes to either pressure or vacuum. Rheem do make a vitreous enamel steel cylinder for low pressure used in Kainga Ora housing but this is not so widely available.

You can fit low pressure valves to a mains pressure cylinder or the special Rheem steel low pressure cylinder but if you do it is important that you do one of the following:

1. Have an open vented system, the feed valve will be protected from over pressure by the vent pipe



2. Use the correct cold water expansion valve and relief valve



More often than you would think, we have found plumbers installing a mains pressure cylinder fed from a feed valve and just using the TPR valve supplied with the cylinder for a relief valve.

The problem with that is that the first time the cylinder heats up, the water expands and this causes an increase in pressure. If you expect a TPR valve to provide the relief you will be disappointed. The increase in pressure is huge and the result looks like this. The feed valve will be blown to bits and there will most likely be a flood.

