














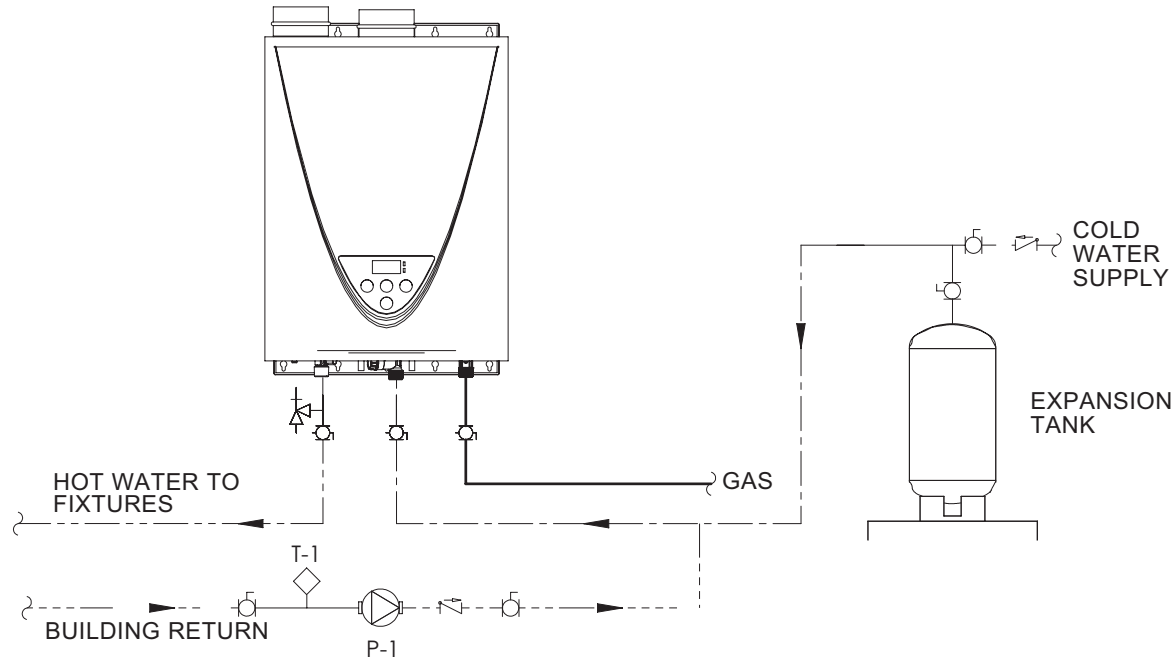
**SCT-199 - ONE WATER HEATER, DIRECT PLUMBING WITH RECIRCULATION**

**LEGEND**

	TEMPERATURE & PRESSURE RELIEF VALVE		FULL PORT BALL VALVE		COLD
	PRESSURE RELIEF VALVE		TEMPERATURE GAGE		HOT
	CIRCULATING PUMP		CHECK VALVE		BUILDING RETURN
	TEMPERATURE CONTROL PROBE		WATER FLOW SWITCH		GAS
	DRAIN				

**WARNING:** THIS DRAWING SHOWS SUGGESTED PIPING CONFIGURATION AND OTHER DEVICES; CHECK WITH LOCAL CODES AND ORDINANCES FOR ADDITIONAL REQUIREMENTS.

DRAWING SHOWS INDOOR UNITS. OUTDOOR UNITS ARE PIPED IN THE SAME MANNER.



**NOTES:**

1. Building recirculation pump, P-1, to be sized, installed, and controlled by installer. The recirculation pump should provide no less than 2 gpm per activated heater and no more than 4 gpm per activated heater. Refer to the heater's specification sheet for pressure drop information.
2. Return pump, P-1, should be controlled by an aquastat, T-1, having an adjustable differential. Minimum differential should be 15 F.
3. Installation of a device to minimize scale deposits, such as the Product Preservers®, water softener, etc. should be considered. Refer to the heater's installation manual for additional information and/or consult with a local water quality expert.
4. Gas supply line shall be sized per the heater's installation manual and the current edition of ANSI Z223.1/NFPA 54.
5. Automatic air vent should be installed at the highest point in the system for all installations using a circulation pump.