Solar Water Heating

Reliance Worldwide Ltd

Safety Devices

Valve vented (unvented) systems shall have in addition to Paragraph 6.3.3 the following safety devices:

a) Combined temperature/pressure relief valve for systems with a working pressure greater than 120kPa,
b) Combined temperature/pressure relief valve pr a pressure relief valve for systems with a working pressure less than 120kPa,
c) An energy cut-off for each heating unit on gas and electric systems, and
d) Valves complying with Table 6.

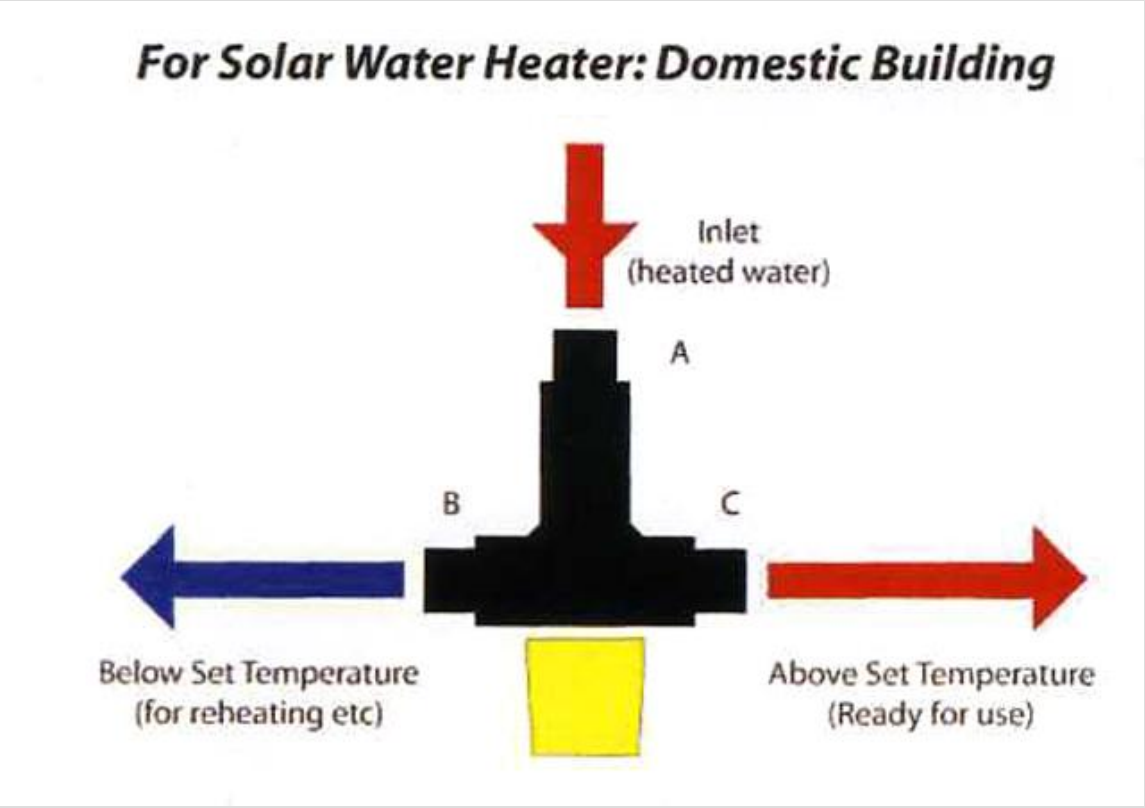
Relationship of Boiling Temperature to Gauge pressure

BOILING TEMP C°	GAUGE PRESSURE (kPa)
99.6	0.0
120.2	100
149.0	360
170.0	840
205.0	1630
233.0	2850
260.0	4660

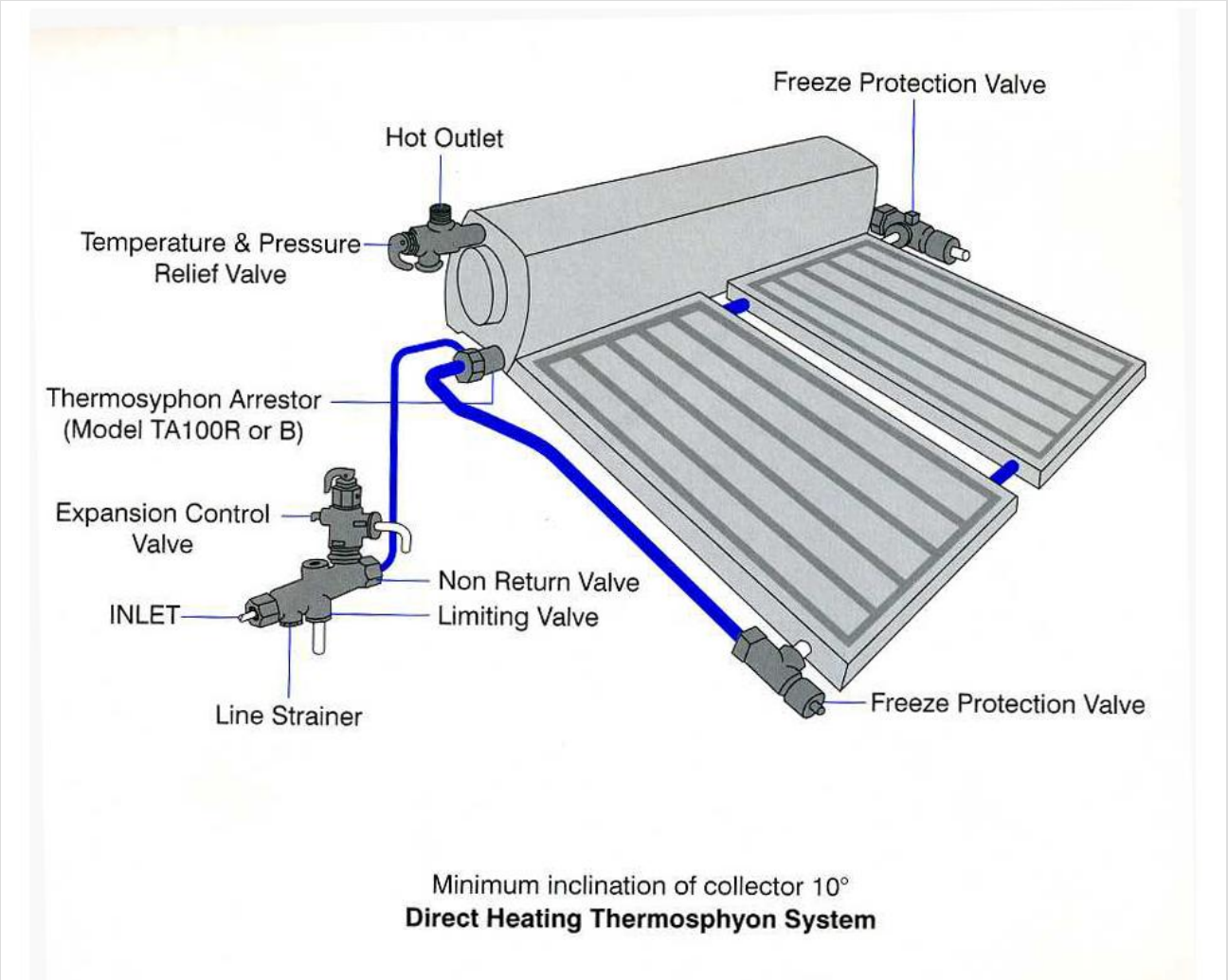
Relieve valve drains shall

a) Be of copper pipe,
b) Have no restrictions or valves,
c) Have a continuous fall from the relief valve to the outlet,
d) Discharge in a visible position which does not present a hazard or damage to other *building elements* (except when in used in association with the *free outlet storage water heaters*),
e) Have a minimum *diameter* of the same size as the valve outlet,
f) Have the number of changes in direction plus the length of the relief drain (in metres) not exceeding 12,

COMMENT:
For example: 7 metres of pipe allows the total number of bends to be 5.


For Solar Water Heater: Domestic Building
Inlet
(heated water)
A
B
C
Below Set Temperature
(for reheating etc)
Above Set Temperature
(Ready for use)

Thermosyphon (Direct)



Minimum inclination of collector 10°

Direct Heating Thermosphyon System