**Plastic pipes installed in association with solar water heaters**

**Plumbing Advisory Note**

Issued July 2014

**Requirements**

The *National Construction Code* Series Volume Three, Plumbing Code of Australia (PCA), Part B2.0 specifically sets out requirements for the design, construction, installation, replacement, repair, alteration and maintenance of any part of a heated water service at a property that is connected to a drinking water supply, from the point of connection to the points of discharge.

AS/NZS 3500.1.2004 specifies the ‘deemed to satisfy’ documents listed in Part B2 of the PCA on heated water installations, including solar water heaters.

Plastic pipes are **not to be installed between the isolation valve and the inlet to a water heater**, particularly for a solar hot water system, in accordance with AS/NZS 3500:2003 Part 4 Heated Water Services Clause 2.4.3 (c).

**Limitations on use of plastic pipes**

Plastic pipes:

- need to comply with the classes listed in Appendix C
  - polybutylene (PB) pipes and fittings in accordance with AS/NZS 2642.2 and AS/NZS 2642.3
  - cross-linked polyethylene (PE-X) pipes and fittings in accordance with AS 2492 and AS 2537
  - random polymer polypropylene (PP-R) pipes and fittings in accordance with DIN 8077
  - macro-composite (PE-X-A1-PE-X) or (PE-A1-PE) pipes and fittings in accordance with AS 4176
  - chlorinated polyvinyl chloride (PVC-C) fittings in accordance with ASTM D2846
- cannot be used within one metre of the outlet of a water heater, except where a water heater is fitted with a temperature control valve. In this case, plastic pipes and fittings may be used immediately downstream of the temperature control valve
- where subject to direct sunlight, shall be installed in accordance with the specific product installation standard.
- shall not be used to support isolation valves, non-return valves and equipment used to connect water heaters
- shall not be used between a solar collector and a heated water container, unless supplied by the manufacturer as an integral component of the solar water heater system
- shall not be used between an uncontrolled heat source and a heated water tank
- shall not be used for drain lines from temperature pressure relief valves.

Clause 5.9.3 (a) requires isolation valves to be positioned in a readily accessible position from the finished surface level.