

REHAU SPECIFICATION

RAUTITAN Water (AU)

General-

The system shall have a minimum Design Life of 50 years for hot water at 70°C & 1.0 MPa operating pressure for an applied safety factor of 1.5. Pipes shall achieve a pressure class of PN20 according to AS 2492. The required degree of crosslinking at the point of extrusion shall be greater than 70%, in accordance with AS 2492. This specification requires PEX to be designated as PE-Xa and be manufactured by the high-pressure peroxide method. The pipes shall also be homogeneous across its wall thickness to reduce the chance of stress concentration during bending and reducing the chance of pipe kinks. Pipe in contact with the water shall be uncoloured virgin material only.

System Components-

Non-threaded fittings and sleeves size 16mm and 20mm shall be lead free polymer (PVDF). Polymer fittings shall have "Lead-Free" certification.

All other fittings shall be DZR brass to AS 2345 with maximum 2.8% lead. 100% of all Brass fittings shall have a permitted dezincification depth of no greater than 100µm and in addition, shall be marked with visual indicator (yellow dot) to confirm a manufacturer pressure test was conducted on the individual fitting and it passed.

Pipe and fittings shall be Watermark certified and mechanically jointed using sliding compression sleeve technology only. No O-rings or detachable joints are permitted in concealed locations.

Manufacturer Quality Assurance Obligations-

Manufacturer shall provide:

- A minimum 25 years warranty against manufacturing faults including 10 years warranty that includes cover for consequential damages.
- Confirmation of undisrupted product traceability from the raw material suppliers to the finished product, for pipes and fittings.
- Proof of Annual Process Verification Tests for pipes and fittings, conducted by a NATA or ISO 17025 accredited 3rd party lab.

Installation Quality Measures-

In order to reduce the likelihood of system components being installed incorrectly and to subsequently reduce the risk of a leak and/or safety incident:

- Contractors are to be manufacturer trained and certified, with documented competency based training including provision of training records/certificate and refresher training courses at intervals of 2 years.
- All Pipe, fittings and installation tools shall be brand-matched, or otherwise manufacturer approved
- On request, the manufacturer shall conduct sample inspections of the installation quality and general compliance with the manufacturer's written installation and commissioning instructions. The Inspection shall be carried out by trained employees of the manufacturing company, with experience in the manufacturer's recommended installation and commissioning instructions and practices. A letter from the manufacturer shall be provided for every inspection conducted summarising conformance to the above requirements and outlining any recommendations **Note:** *The Contractor remains*

responsible for compliance with the contract and with regulatory and standards requirements.