**REHAU SPECIFICATION**

REHAU PINC™ System (NZ)

**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 and shall be Watermark certified, Cross-linked Polyethylene type a (PE-Xa) SDR 7.4 only, with a minimum degree of crosslinking of 70%, homogeneous across the wall thickness of the pipe 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.

**PINC™ Fittings-**

Non-threaded PINC™ fitting bodies in contact with drinking water shall be lead free, temperature and chemical resistant engineered polymer. All other PINC™ fitting bodies in contact with drinking water shall be DZR brass to AS 2345 with maximum 2.8% lead. Brass fittings shall have a permitted dezincification depth of no greater than 100μm. PINC™ fittings shall be Watermark certified to AS/NZS 2537.2 and must create a permanent joint via tool-free push fit technology after cutting the pipe square. Completion of pipe insertion shall be confirmed via the audible ‘click’ sound and sighting the pink guide ring visual indicator through the transparent Glass Fibre Reinforced Polymer (GFRP) clear housing. The pipe shall not be removable after jointing. For increased strength and stability the inner collet shall be engineered thermoplastic material, the end caps shall be GFRP and the grab ring shall be stainless steel. All fittings shall be supplied in individual packaging for protection from dirt and debris and for hygiene purposes prior to installation.

**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 pipe cutters 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.*