# Rehau Hot and Cold Water System

Product Technical Statement: 102352



Hot and cold water reticulation, compression sleeve joint with PEXa pipe View miproducts listing



# Level of assurance needed to demonstrate NZ Building Code Compliance

Supporting documentation should include self-assessment and technical information by manufacturer





Rehau confirms that this minimum level of assurance has been met or exceeded by the following:

BRANZ Appraisal 434 (2016)



The following information has been provided by Rehau demonstrating how this product complies with the <u>Building Product Information Requirements</u>.

#### **Technical Statement**

#### **Product Class**

CLASS 1

#### **Product Description**

The RAUTITAN system is used to transport potable water in a wide range of domestic and commercial applications. The system comprises of pipes, fittings, sleeves and other tools/accessories.

The pipes are made of cross-linked polyethylene (PE-Xa), the fittings are made of brass or PPSU and the sleeves are made of brass or PVDF.

The system is available in a range of sizes from 16-63 mm. The pipes are available in straight lengths or coils, ranging from 5 m to 100 m.

The system components (pipe, sleeve and fitting) are combined using compression sleeve technology.

#### Scope of use

Durability RAUTITAN system is suitable for drinking water qualities within the limitations of the Drinking-water standards for New Zealand. In many cases it will also be resistant to aggressive drinking water as well as many standard chemical additives used in a hydronic heating systems. In locations with highly corrosive water composition, e.g. in volcanic areas, installations using bore/well water etc., the suitability of RAUTITAN pipe system must be checked with REHAU. Pipe used for hot and cold water delivery, if used under a continuous working pressure and temperature of 1 MPa at 70°C throughout its serviceable life, should provide a durable life of up to 50 years.

REHAU RAUTITAN piping systems can be used as piping components for water supply as per the scope of the NZ Building Code as an acceptable Solution (G12/AS1) and as a Verification Method (G12/VM1) as piping for hydronic heating systems including in-floor systems.

#### New Zealand Building Code (NZBC)

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

- Clause B2 Durability: Performance B2.3.1, B2.3.1(a)
- Clause F2 Hazardous building materials: Performance F2.3.1
- Clause G10 Piped services: Performance G10.3.1
- Clause G12 Water supplies: Performance G12.3.2, G12.3.3, G12.3.4, G12.3.7
- Clause H1 Energy efficiency: Performance H1.3.3

#### Notes

- G10.3.1(a)
- G12.3.2(c)
- G12.3.7(a) and (b)

#### Evidence

The product meets the requirements set out in the following documents, or relevant parts of cited standards within the documents:

REHAU PE-Xa pipes comply with AS/NZS 2492 for crosslinked polyethylene (PE-Xa) pipe for pressure application, and certified under WaterMark LN1413

RAUTITAN fittings comply with AS/NZS 2537 for mechanical jointing fittings for use with crosslinked polyethylene (PE-Xa) pipes for pressure applications, and certified under WaterMark LN1412.





## masterspec partner



# Rehau Hot and Cold Water System

Product Technical Statement: 102352



RAUTITAN system complies with ISO 15875 plastic piping systems for hot and cold water installations - crosslinked polyethylene (PE-X)

#### **Supporting Evidence**

The product has and can make available the following additional evidence to support the above statements:



BRANZ Appraisal 434 (2016)

#### **Product Criteria**

#### **Design requirements**

RAUTITAN system shall only be used to transport water that meets the drinking water guidelines of New Zealand.

RAUTITAN system shall only be operated within the operating parameters described in the RAUTITAN Technical Information.

#### Installation requirements

During construction, maintenance or repair work in close proximity care must be taken not to expose RAUTITAN pipe systems to a naked flame (soldering), flood lights or other localised heat sources, as this can result in permanent damage or a significant reduction in performance life.

Piping close to devices with high temperature emissions must be insulated sufficiently and permanently protected against inadmissible heating. Adhere to the maximum allowable operation parameters (e.g. operating temperature, pressure and duration).

RAUTITAN water systems are indoor systems, which must not be installed externally, except for the below installations:

- · In-ground installation after water meter
- · Short pipe length after connection to water meter before going below the ground
- · Connection to an externally located water heater

For each of the excepted external installation, adequate protection from UV, mechanical and chemical damage, and contamination is required.

#### Maintenance requirements

Dezincification resistant brass and PPSU fittings should be used with RAUTITAN pipes for both hot and cold systems to provide a durable life of 15 years minimum.

## **Company Product Information**

#### Environmental

A Life Cycle Assessment for RAUTITAN system (Environmental Product Declaration) is available on our website.

#### Videos

Install Video

Rehau Tensile Test (PX Fitting joint integrity)

Flow Test

Burst Pressure test

## **Building Product Information Requirements**

### Manufacturer

Legal Trading Name:

Rehau Ltd

Business Email:

andrew.whisker@rehau.com

Company Website:

www.rehau.com

Contact Number/s:

+64 09 -2722264

#### **Product Identifier**

REHAU RAUTITAN WATER

#### Warnings

This product has no warnings associated with it.

# Rehau Hot and Cold Water System Product Technical Statement: 102352





Date last validated: 01 December 2023



Date last updated: 01 December 2023

Disclaimer: The Product Technical Statement (PTS) template is copyright to Construction Information Limited. However the content of this PTS is the responsibility of the product manufacturer/supplier. Refer to the miproducts Terms and Conditions