

# Stream PE100 Pressure Pipe

## BPIR Declaration

---

### Designated building product: Class 1

---

### Declaration

UPG Pipe Systems has provided this declaration to satisfy the provisions of Schedule 1(d) of the Building (Building Product Information Requirements) Regulations 2022.

---

### Product/system

<b>Name</b>	Stream PE100 Pressure Pipe
<b>Line</b>	
<b>Identifier</b>	Codes containing the below identifiers, codes additionally include size and finish identifying elements. <i>1401, 1601</i>

---

### Description

Our Stream PE100 Pressure range offers a complete piping system manufactured from PE100 (polyethylene material also known as HDPE) for civil & infrastructure, mining, mechanical services, and industrial piping installations. Stream PE100 offers all the benefits that come with using polyethylene.

---

### Scope of use

The Stream PE100 range is particularly suited to chilled water and glycol applications, being crack resistant down to -30° C, and is the ideal system for large diameter pressure & non-pressure mains and water treatment & wastewater treatment plant installations. Extremely high resistance to seismic stresses, as proved during the Christchurch earthquakes, has made PE100 a leading choice for chilled water and condenser water systems in commercial HVAC installations.

---

## Conditions of use

Design & Installation: Stream pipe should be designed and installed in accordance with the following Standards.

- Buried Structural Design: AS/NZS 2566 Part 1 and supplement 1. “Buried Flexible Pipelines - Structural Design”
- Detailed Installation and Site Pressure Testing: AS/NZS 2566 Part 2 “Installation” AS/NZS 2033 Installation of polyethylene pipe systems

Jointing:

- Butt Fusion. The pipe ends are heated to melting point, then brought together in a Buttfusion machine to form a homogeneous weld. The resulting joint is end load resistant and should perform under pressure similarly to the unwelded pipe.
- Electrofusion fittings. These employ an electrical heating coil, incorporated inside a moulded socket. When energised from an electrofusion control box, the coil melts the adjacent material, causing the pipe and socket to fuse together.
- Butt Fusion / Flange combination.
- UPG recommends the use of fittings complying with AS/NZS 4129 - Fittings for polyethylene (PE) pipes for pressure applications. Fusion Welding Procedure: Refer to the PIPA Guidelines for butt fusion and electrofusion welding procedures - [www.pipa.com.au](http://www.pipa.com.au). Tensile testing of fusion welds to be in accordance with ISO/DIS 13953.

---

## Relevant building code clauses

**B2 Durability – B2.3.1 (a)**

**F2 Hazardous building materials – F2.3.1**

**G10 Piped services – G10.3.1**

**G12 Water Supplies – G12.3.2, G12.3.7**

**H1 Energy efficiency – H1.3.3**

---

## Supporting documentation

For further information supporting Stream PE100 Pressure Pipe claims refer to our website.

---

## Contact details

Manufacture location	New Zealand
Legal and trading name of manufacturer	RX Plastics Ltd
Manufacturer address for service	19 Maronan Road Ashburton 7778
Manufacturer website	<a href="https://rxp.co.nz/">https://rxp.co.nz/</a>
Manufacturer email	customerservice@rxplastics.co.nz
Manufacturer phone number	03 307 9081
Manufacturer NZBN	9429031867276

---

## Responsible person

As the responsible person as set out in Regulation 3, I confirm that the information supplied in this declaration is based on information supplied to the company as well as the company's own processes and is therefore to the best of my knowledge, correct.

I can also confirm that Stream PE100 Pressure Pipe is not subject to a warning on ban under [s26 of the Building Act](#).

Signed for and on behalf of **UPG Pipe Systems**:

*James Bolland*

James Bolland  
Purchasing Manager  
December 2023

---

**UPG PIPE SYSTEMS**  
17 Raiha Street Porirua 5022 New Zealand  
042384452 | [upg.nz](http://upg.nz)

# Appendix

---

## Building code performance clauses

### B2 Durability

#### B2.3.1

*Building elements* must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:

- (a) the life of the building, being not less than 50 years, if: those building elements (including floors, walls, and fixings) provide structural stability to the building, or those building elements are difficult to access or replace, or failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building

### F2 Hazardous building materials

#### F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the *construction* of *buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.

### G10 Piped services

#### G10.3.1

Piping systems shall be constructed to avoid the likelihood of:

- a. significant leakage or damage during normal or reasonably foreseeable abnormal conditions,
- b. detrimental contamination of the contents by other substances,
- c. adverse interaction between services, or between piping and electrical systems, and
- d. people having contact with pipes which could cause them harm.

### G12 Water Supplies

#### G12.3.2

A potable *water supply system* must be—

- a. protected from contamination; and
- b. installed in a manner that avoids the likelihood of contamination within the system and the water main; and
- c. installed using components that will not contaminate the water.

#### G12.3.7

*Water supply systems* must be installed in a manner that

- a. pipes water to *sanitary fixtures* and *sanitary appliances* at flow rates that are *adequate* for the correct functioning of those *fixtures* and *appliances* under normal conditions; and
- b. avoids the likelihood of leakage; and
- c. allows reasonable access to components likely to need maintenance; and
- d. allows the system and any backflow prevention devices to be isolated for testing and maintenance.

## H1 Energy efficiency

### H1.3.3

Account must be taken of physical conditions likely to affect energy performance of buildings, including

- a. the thermal mass of *building elements*; and
- b. the building orientation and shape; and
- c. the airtightness of the building envelope; and
- d. the heat gains from services, processes and occupants; and
- e. the local climate; and
- f. heat gains from solar radiation.