



# Hot & Cold Water Pipe and Fitting System

Marley New Zealand supplies the SecuraOne® Hot & Cold potable water pipe and fitting system using a single range of fittings for both Polybutene (PB) and PEX-b pipes.

SecuraOne® meets the incoming Lead Free regulations due to be released in September 2025.

## Product Intended Use

The SecuraOne® system is designed to distribute Hot and Cold Potable Water within a residential or commercial building.

### System Features

- › One range of fittings that connect with either SecuraOne PB or SecuraOne PEX-b pipes.
- › One set of tools for SecuraOne PB-1 and SecuraOne PE-X.
- › One of the most extensive size ranges for residential fittings on the market with fittings from 12mm to 32mm to cover all applications.
- › Lead Free dezincification resistant brass bodies.
- › PE-X pipe is a PE-100 material providing a higher pressure rating equivalent to many SDR7.4 rated pipe.
- › Extended barb lengths for improved support and jointing.
- › Retainer rings with four pipe insertion windows to easily identify if pipes have been fully inserted before crimping.
- › Annealed copper crimp rings with positive lock to ensure rings stay securely attached to fittings.
- › Pipe grip to ensure pipes stay fully inserted while crimping.
- › LDPE components (end caps, retaining rings and pipe clips) are fully recyclable.
- › Colour coded recyclable end caps to quickly identify fitting size.
- › Packaging made from recycled plastic and is fully recyclable.

## Material Specifications

### Pipe PB

- › Lyondell Basell Akoalit PB 4267

### Pipe PE-X

- › Cross linked Polyethylene PE-Xb PE-100

### Fittings

- › Fitting Body – CW511I DZR Brass
- › Crimp Ring – Annealed Copper
- › Retaining Ring – LDPE
- › End Cap – LDPE
- › Sealing Olive – Polybutene

## Product Codes

### SecuraOne® Pipe

CODE	DESCRIPTION
S1PB125S	SECURAONE PB 12MM – 5M STRAIGHT
S1PB1225C	SECURAONE PB 12MM – 25M COIL
S1PB1250C	SECURAONE PB 12MM – 50M COIL
S1PB12100C	SECURAONE PB 12MM – 100M COIL
S1PB165S	SECURAONE PB 16MM – 5M STRAIGHT
S1PB1625C	SECURAONE PB 16MM – 25M COIL
S1PB1650C	SECURAONE PB 16MM – 50M COIL
S1PB205S	SECURAONE PB 20MM – 5M STRAIGHT
S1PB2025C	SECURAONE PB 20MM – 25M COIL
S1PB2050C	SECURAONE PB 20MM – 50M COIL
S1PB255S	SECURAONE PB 25MM – 5M STRAIGHT
S1PB2550C	SECURAONE PB 25MM – 50M COIL
S1PB325S	SECURAONE PB 32MM – 5M STRAIGHT
S1PEX165S	SECURAONE PEX 16MM – 5M STRAIGHT
S1PEX1650C	SECURAONE PEX 16MM – 50M COIL

CODE	DESCRIPTION
S1PEX205S	SECURAONE PEX 20MM – 5M STRAIGHT
S1PEX2050C	SECURAONE PEX 20MM – 50M COIL
S1PEX255S	SECURAONE PEX 25MM – 5M STRAIGHT
S1PEX2550C	SECURAONE PEX 25MM – 50M COIL
S1PEX325S	SECURAONE PEX 32MM – 5M STRAIGHT
S1PEX16R5S	SECURAONE PEX 16MM RED – 5M STRAIGHT
S1PEX16R50C	SECURAONE PEX 16MM RED – 50M COIL
S1PEX20R5S	SECURAONE PEX 20MM RED – 5M STRAIGHT
S1PEX20R50C	SECURAONE PEX 20MM RED – 50M COIL
S1PEX16B5S	SECURAONE PEX 16MM BLUE – 5M STRAIGHT
S1PEX16B50C	SECURAONE PEX 16MM BLUE – 50M COIL
S1PEX20B5S	SECURAONE PEX 20MM BLUE – 5M STRAIGHT

CODE	DESCRIPTION
SIPEX20B50C	SECURAONE PEX 20MM BLUE – 50M COIL
SIPEX16L5S	SECURAONE PEX 16MM LILAC – 5M STRAIGHT
SIPEX16L50C	SECURAONE PEX 16MM LILAC – 50M COIL
SIPEX20L5S	SECURAONE PEX 20MM LILAC – 5M STRAIGHT
SIPEX20L50C	SECURAONE PEX 20MM LILAC – 50M COIL
SIPEX16G5S	SECURAONE PEX 16MM GREEN – 5M STRAIGHT
SIPEX16G50C	SECURAONE PEX 16MM GREEN – 50M COIL
SIPEX20G5S	SECURAONE PEX 20MM GREEN – 5M STRAIGHT
SIPEX20G50C	SECURAONE PEX 20MM GREEN – 50M COIL

### SecuraOne® Fittings

CODE	DESCRIPTION
S1C12	SECURAONE COUPLING 12MM
S1C16	SECURAONE COUPLING 16MM
S1C20	SECURAONE COUPLING 20MM
S1C25	SECURAONE COUPLING 25MM
S1C32	SECURAONE COUPLING 32MM
S1C1612	SECURAONE REDUCING COUPLING 16MM X 12MM
S1C2016	SECURAONE REDUCING COUPLING 20MM X 16MM
S1C2520	SECURAONE REDUCING COUPLING 25MM X 20MM
S1C3220	SECURAONE REDUCING COUPLING 32MM X 20MM
S1C3225	SECURAONE REDUCING COUPLING 32MM X 25MM
S1C1615PB	SECURAONE TRANSITION COUPLING 16MM X 15MM PB
S1C2020PB	SECURAONE TRANSITION COUPLING 20MM X 20MM PB
S1MA1215	SECURAONE MALE ADAPTOR 12MM X ½" BSP
S1MA1615	SECURAONE MALE ADAPTOR 16MM X ½" BSP
S1MA1620	SECURAONE MALE ADAPTOR 16MM X ¾" BSP
S1MA2020	SECURAONE MALE ADAPTOR 20MM X ¾" BSP
S1MA2525	SECURAONE MALE ADAPTOR 25MM X 1" BSP
S1MA3225	SECURAONE MALE ADAPTOR 32MM X 1" BSP
S1MA3232	SECURAONE MALE ADAPTOR 32MM X 1.1/4" BSP
S1LMA1615	SECURAONE LUGGED MALE ADAPTOR 16MM X ½" BSP
S1FA1615	SECURAONE FEMALE ADAPTOR 16MM X ½" BSP
S1FA2020	SECURAONE FEMALE ADAPTOR 20MM X ¾" BSP
S1T12	SECURAONE TEE 12MM
S1T16	SECURAONE TEE 16MM
S1T20	SECURAONE TEE 20MM
S1T25	SECURAONE TEE 25MM

CODE	DESCRIPTION
S1T32	SECURAONE TEE 32MM
S1T121216	SECURAONE REDUCING TEE 12MM X 12MM X 16MM
S1T161612	SECURAONE REDUCING TEE 16MM X 16MM X 12MM
S1T161620	SECURAONE REDUCING TEE 16MM X 16MM X 20MM
S1T201616	SECURAONE REDUCING TEE 20MM X 16MM X 16MM
S1T201620	SECURAONE REDUCING TEE 20MM X 16MM X 20MM
S1T202012	SECURAONE REDUCING TEE 20MM X 20MM X 12MM
S1T202016	SECURAONE REDUCING TEE 20MM X 20MM X 16MM
S1T252516	SECURAONE REDUCING TEE 25MM X 25MM X 16MM
S1T252520	SECURAONE REDUCING TEE 25MM X 25MM X 20MM
S1T323220	SECURAONE REDUCING TEE 32MM X 32MM X 20MM
S1T323225	SECURAONE REDUCING TEE 32MM X 32MM X 25MM
S1LT16	SECURAONE LUGGED TEE 16MM X 16MM X ½" BSP
S1XTA16	SECURAONE CROX TEE ADAPTOR 15MM COPPER X 16MM
S1E12	SECURAONE ELBOW 12MM
S1E16	SECURAONE ELBOW 16MM
S1E20	SECURAONE ELBOW 20MM
S1E25	SECURAONE ELBOW 25MM
S1E32	SECURAONE ELBOW 32MM
S1E1645	SECURAONE ELBOW 16MM X 45 DEG
S1E2045	SECURAONE ELBOW 20MM X 45 DEG
S1E2545	SECURAONE ELBOW 25MM X 45 DEG
S1E3245	SECURAONE ELBOW 32MM X 45 DEG
S1ME1615	SECURAONE MALE ELBOW 16MM X ½" BSP
S1ME2020	SECURAONE MALE ELBOW 20MM X ¾" BSP
S1W1215	SECURAONE FEMALE WINGBACK 12MM X ½" BSP

CODE	DESCRIPTION
SIW1615	SECURAONE FEMALE WINGBACK 16MM X 1/2" BSP
SIW1620	SECURAONE FEMALE WINGBACK 16MM X 3/4" BSP
SIW2015	SECURAONE FEMALE WINGBACK 20MM X 1/2" BSP
SIW2020	SECURAONE FEMALE WINGBACK 20MM X 3/4" BSP
SIW2525	SECURAONE FEMALE WINGBACK 25MM X 1" BSP
SIDW1615	SECURAONE DOUBLE FIX FEMALE WINGBACK 16MM X 1/2" BSP
SIDW2020	SECURAONE DOUBLE FIX FEMALE WINGBACK 20MM X 3/4" BSP
SIDMW2020-200	SECURAONE DOUBLE FIX MALE WINGBACK 20MM X 3/4" BSP – 200MM
SIMW1215-100	SECURAONE MALE WINGBACK 12MM X 1/2" BSP – 100MM
SIMW1616-65	SECURAONE MALE WINGBACK 16MM X 1/2" BSP – 65MM
SIMW1615-100	SECURAONE MALE WINGBACK 16MM X 1/2" BSP – 100MM
SIMW2020-100	SECURAONE MALE WINGBACK 20MM X 3/4" BSP – 100MM
SIDMW1615-100	SECURAONE DOUBLE FIX MALE WINGBACK 16MM X 1/2" BSP – 100MM
SIDMW1615-200	SECURAONE DOUBLE FIX MALE WINGBACK 16MM X 1/2" BSP – 200MM
SIDMW2020-100	SECURAONE DOUBLE FIX MALE WINGBACK 20MM X 1/2" BSP – 100MM
S1SC1215	SECURAONE SWIVEL CONNECTOR 12MM X 1/2" BSP
S1SC1615	SECURAONE SWIVEL CONNECTOR 16MM X 1/2" BSP

### SecuraOne® Tools

CODE	DESCRIPTION
S1CCT12	SECURAONE COMPACT CRIMP TOOL 12MM
S1CCT16	SECURAONE COMPACT CRIMP TOOL 16MM
S1CCT20	SECURAONE COMPACT CRIMP TOOL 20MM
S1DCT25	SECURAONE CRIMP TOOL 25MM
S1DCT32	SECURAONE CRIMP TOOL 32MM
S1CT16	SECURAONE ALBA CRIMP TOOL 16MM
S1CT20	SECURAONE ALBA CRIMP TOOL 20MM
S1PT01	SECURAONE BATTERY CRIMP TOOL: 3 JAWS-CHARGER-BATTERY
S1PTJ16	SECURAONE BATTERY CRIMP TOOL: JAW 16MM
S1PTJ20	SECURAONE BATTERY CRIMP TOOL: JAW 20MM
S1PTJ25	SECURAONE BATTERY CRIMP TOOL: JAW 25MM
S1PTJ32	SECURAONE BATTERY CRIMP TOOL: JAW 32MM
P-1N026	SECURAONE CRIMP GAUGE TOOL 12, 16 & 20MM

S1SC1620	SECURAONE SWIVEL CONNECTOR 16MM X 3/4" BSP
S1SC2015	SECURAONE SWIVEL CONNECTOR 20MM X 1/2" BSP
S1SC2020	SECURAONE SWIVEL CONNECTOR 20MM X 3/4" BSP
CODE	DESCRIPTION
S1SC2520	SECURAONE SWIVEL CONNECTOR 25MM X 3/4" BSP
S1SC2525	SECURAONE SWIVEL CONNECTOR 25MM X 1" BSP
S1SC3232	SECURAONE SWIVEL CONNECTOR 32MM X 1.1/4" BSP
S1SE1215	SECURAONE SWIVEL ELBOW 12MM X 1/2" BSP
S1SE1615	SECURAONE SWIVEL ELBOW 16MM X 1/2" BSP
S1SE1620	SECURAONE SWIVEL ELBOW 16MM X 3/4" BSP
S1SE2015	SECURAONE SWIVEL ELBOW 20MM X 1/2" BSP
S1SE2020	SECURAONE SWIVEL ELBOW 20MM X 3/4" BSP
S1SE2525	SECURAONE SWIVEL ELBOW 25MM X 1" BSP
S1HP1615	SECURAONE HOSE PLATE 16MM X 1/2" BSP
S1HP2020	SECURAONE HOSE PLATE 20MM X 3/4" BSP
S1EP12	SECURAONE END PLUG 12MM
S1EP16	SECURAONE END PLUG 16MM
S1EP20	SECURAONE END PLUG 20MM
S1EP25	SECURAONE END PLUG 25MM
S1EP32	SECURAONE END PLUG 32MM
S1BT16	SECURAONE BRAZING TAIL 16MM X 1/2" Cu
S1BT20	SECURAONE BRAZING TAIL 20MM X 3/4" Cu
S1TT15PB16	SECURAONE TRANSITION TEE 15MM PB X 16MM

## Relevant New Zealand Building Code Clauses

The SecuraOne® System when used, installed, and maintained in accordance with the installation requirements detailed within the SecuraOne® Technical Installation Manual and Technical Design Manual will meet or contribute to meeting the following NZBC clauses:

- › NZBC B2: Durability – SecuraOne® pipe and fittings will meet and exceed the 50-year durability requirement of B2.
- › NZBC G12/AS1: As a fully certified system, SecuraOne® meets all the certification tests required by WaterMark, StandardsMark and SMark and will therefore meet the requirements of G12/AS1 as a potable Hot and Cold-water system.
- › NZBC H1 Energy Efficiency – SecuraOne® pipe meets the volume requirements of NZS 4305.

SecuraOne® fittings are manufactured and tested at audited manufacturing sites with secondary quality controls carried out by staff at the Marley warehouse including full dimensional and visual checking, in conjunction with dezincification and chemical composition testing at an independent IANZ accredited laboratory.

## Manufacturing Standards

### Fittings

- › AS 5082.2-2007 – Polybutylene plumbing pipe systems – Metric Series mechanical jointing systems.
- › AS/NZS 2537:2011 – Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) for pressure applications.
- › AS/NZS 2642.3:2008 – Mechanical jointing fittings for use with polybutylene (PB) pipes for hot and cold-water applications.

### Polybutylene Pipes (PB)

- › AS 5082.1-2007 - Polybutylene plumbing pipe systems – Metric polybutylene (PB) pipes for hot and cold-water applications.
- › AS/NZS2642.1 – Polybutylene plumbing pipe systems - Polybutylene (PB) pipes for hot and cold-water applications.

### Crosslinked Polyethylene Pipes (PE-X)

- › AS 2492:2007 Cross-linked polyethylene (PE-X) pipes for pressure applications.

AS/NZS 4020:2018 – Testing of products for use in contact with drinking water.

## Certifications

### Licence Numbers

Polybutene – S Mark 2976

PE-Xb – WMK26695

Fittings – SMK1190

## Limitations on use

SecuraOne® is primarily a potable Hot and Cold Water piping system, using the system for any other purpose cannot be covered by the SecuraOne® Warranty. For chemicals other than potable water check the SecuraOne® Chemical Resistance Chart for known compatibility. Use of SecuraOne® for any other purpose other than potable water is at the installers risk.

## Design & Installation

SecuraOne® is a simple crimp system that is fast and easy to install however, there are critical steps that need to be taken to ensure that the installation has been carried out correctly.

- › Only use Marley supplied materials and tools
- › Check for damage to the pipe prior to installation
- › Confirm the pipe path is away from heat sources such as flues and light fittings
- › Confirm the flow rates to the fixtures meet the requirements of G12/AS1
- › When pulling pipe through tight areas make sure the pipe does not scrape on sharp edges or become kinked, any damaged or kinked areas must be cut out of the installation
- › When passing pipe through timber framework the requirements of AS/NZS 3500.1 call for the annular space between the timber and the pipe to have a collar or neutral cure silicone applied
- › PB and PE-Xb are not UV resistant and must be safeguarded away from direct sunlight
- › Use the gauge tool regularly throughout the installation to ensure the copper crimp rings are compliant. If a copper crimp ring does not gauge it is advised that the fitting should be replaced rather than re-crimped. The tool should be checked and calibrated before any further fittings are crimped
- › A Hydrostatic Pressure test as per AS/NZS 3500.1 must be carried out on the installation to 1500kPa for a minimum of 30 minutes
- › Installations must be carried out by a licensed/registered plumber
- › If SecuraOne® is to be used for anything other than potable consult the known chemical resistance charts on the Marley website for suitability. Using SecuraOne® for any purpose other than as a potable Hot & Cold water system is at the installers risk

**For further design and installation details refer to the SecuraOne® Technical Installation and Design Manuals.**

## Maintenance

Due to the method of installation the SecuraOne® system is mostly inaccessible, (inside wall cavities or in roof spaces) and therefore maintenance of the system is typically not feasible or required.

Occasionally an extension to the system may be required which requires upon completion a Hydrostatic Pressure Test of the newly installed section.

AS/NZS 3500.1, the pressure test must be carried out on the new section of the installation only.

Marley has a full Non-Conformance system for defects and/or installation issues, for details contact the local Marley Territory Manager or Marley at the below address.

## Manufacturer/Distributor

### Marley New Zealand Limited

- › 32 Mahia Road, Manurewa, Auckland 2102, New Zealand
- › 0800 627 539
- › [info@marley.co.nz](mailto:info@marley.co.nz)
- › [www.marley.co.nz](http://www.marley.co.nz)
- › NZBN: 9429038863431

For information regarding manufacturers details contact Marley NZ.

## Warnings and/or Bans

SecuraOne® is not subject to any warnings and/or bans that Marley are aware of relating to the installation and or use of the pipe and fittings under the brand name SecuraOne® in relation to S26 of the Building Act.