

STEELOX Piping System



CERTIFICATE NO: CMNZ70131

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1 CERTIFICATE HOLDER DETAILS

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2 PRODUCT CERTIFICATION BODY

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The complaints process for this certificate can be found here:

www.bureauveritas.com.au/your-feedback

DESCRIPTION OF BUILDING METHOD OR PRODUCT

Name of the product or method in New Zealand, including any brand names used. Description of what it is and the components that make up any system and its physical attributes including the materials and make-up of the product, where applicable.

Matters that should be taken into account in the use or application of the building method or product can be found in item 6. Conditions and Limitations of Use

The STEELOX piping system consists of a multilayered pipe which has a stainless steel interior and PE-RT plastic exterior, and a range of STEELOX fittings. It is manufactured in the following dimensions (d): 16, 20, 25 mm. The exterior is marked with a green stripe for identification. The STEELOX piping system is designed for installation in concealed spaces and may be installed under concrete slab on ground. The STEELOX piping system includes options with factory applied insulation (4, 9 and 13 mm) and jacket.

The building method's or building product's catalogue or model identification number or numbers or other unique identifiers that might be used to identify the building product or building method

INTENDED USE OF BUILDING METHOD OR PRODUCT

Intended use of the building method or product as described in the product manual and other instructional materials. A statement of the function or purpose of the building method or product.

The STEELOX piping system is used for the distribution of potable water, heating water and chilled water up to 70°C and 10 bar (1 MPa) pressure.

NEW ZEALAND BUILDING CODE PROVISIONS

The performance clauses of the New Zealand Building Code that are relevant to the intended use and with which the building method or product complies or contributes to (where used as part of a system e.g. Clause B2 – DURABILITY Performance B2.3.1

How the building method or product complies or contributes can be found in item 9. Basis for Certification. Any qualifications on the extent of that compliance can be found in item 6. Conditions and limitations of use.

B2 Durability: B2.3.1(a), B2.3.2

F2 Hazardous building materials: F2.3.1

G10 Piped services: G10.3.1 (contributes to) G10.3.3 (contributes to), G10.3.4 (contributes to),

G12 Water supplies: G12.3.2 (c) (contributes to), G12.3.7 (a, b) (contributes to)

H1 Energy efficiency: H1.3.4(b) (STEELOX SMX133 only)



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B U R E A U VERITAS

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6 CONDITIONS AND LIMITATIONS OF USE

The building method or product's use is to be in accordance with the installation instructions and requirements against which the building method or product was assessed.

Conditions or limitations of conformity for the performance requirements the building method or product is compliant with, including any requirements for people with the qualifications and skills to install or use the building method or product, any known or demonstrated situations where the building method or product should not be used. A statement as to whether there are any matters that should be taken into account in the use or application of the building method and, if so, what those matters are.

NOTE: Together, items 3,4,5 and 6 define scope of use

- 1. The STEELOX piping system is certified for the distribution of potable water, heating water and chilled water up to 70 °C and 10 bar (1 MPa) pressure.
- 2. The STEELOX piping system shall be installed in accordance with the Ke Kelit STEELOX Technical Handbook, 2020.
- 3. The STEELOX piping system shall be installed by suitably qualified persons trained and approved by Ke Kelit (NZ) Ltd.

7 HEALTH AND SAFETY INFORMATION

Health, safety, and well-being declarations associated with installation, maintenance, and use of the building method or product, and their specific editions and dates necessary to ensure the performance requirements of clauses F1 to F9 of the Building Code can be met.

The compliance with any manufacturer's installation instructions, maintenance, OH & S statements, MSDS's and other Health and Safety declarations will provide the necessary Health and Safety Information pertaining to the product.

8 SIGNATURES

Name and Signature of the Product Certification Body's (PCB) authorised representative and, where different, the person assigned by the PCB to make the certification decision



Product Certification Manager

For and on behalf of

Mund-

Bureau Veritas Australia Pty Ltd







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BASIS FOR CERTIFICATION

How the performance requirements in the Building Code were met for each of the provisions. Where used as part of a system, the specific contribution to compliance

B2 Durability - By analysis and comparison with Verification Method B2/VM1

F2 Hazardous building materials - By comparison with the performance requirements of Building Code clause F2.3.1

G10 Piped services - By testing and comparison with Verification Method G10/VM1

G12 Water supplies - By testing and comparison with Acceptable Solution G12/AS1

H1 Energy efficiency - By analysis and comparison with Acceptable Solutions H1/AS1 and H1/AS2

10 SUPPORTING DOCUMENTATION FOR CERTIFICATION

Reference to any acceptable solutions, verification methods, New Zealand Standards, or other compliance pathways referenced against each individual performance requirement the building method or product is compliant with, and their specific version and data.

- 1. Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B2 Durability Second edition (Amendment 12), 28 November 2019
- 2. Acceptable Solutions and Verification Methods For New Zealand Building Code Clauses G10 Piped Services, First edition (Amendment 8), 1 January 2017
- 3. Acceptable Solutions and Verification Methods Acceptable Solutions and Verification Methods For New Zealand Building Code Clause G12 Water Supplies Third edition (Amendment 12), 27 June 2019
- 4. H1 Energy Efficiency, Acceptable Solution H1/AS1, Energy efficiency for all housing, and buildings up to 300 m², Fifth edition (Amendment 1), 4 August 2022
- 5. H1 Energy Efficiency, Acceptable Solution H1/AS2, Energy efficiency for buildings greater than 300 m², First edition (Amendment 1), 4 August 2022
- 6. IMA Dresden Test Report No. V037/22, 3 March 2022
- 7. Eurofins Analytical Report No. AAW47013 DN16 Steelox Pipe (SMX) and DN16 Steelox Fitting (SMX), 8 March 2022
- 8. ÖNORM B 5175:2020 Multi-layer composite piping systems made of plastics with a metallic inner layer for hot and cold water installation inside buildings Requirements for pipes, fittings and the system
- 9. Eurofins Certificate of Analysis, AS/NZS 4020:2018 Compliance Testing, Analytical Report: AAW47013, 8 March 2022
- 10. DIN Certco Registration 10R001, 21 December 2020
- 11. KE KELIT STEELOX Technical Handbook, 2020







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SUPPORTING INFORMATION

1 SUPPORTING INFORMATION ABOUT DESCRIPTION (OPTIONAL)

Any supporting information for section 3

The STEELOX piping system includes the following components:

STEELOX pipe

- STEELOX multilayer composite pipe (SMX100 and SMX110)
- STEELOX Plus pipe SMX134 with factory-applied 4 mm closed-cell soft foam insulation and jacket made of viscoplastic PE film (blue)
- STEELOX Plus pipe SMX130 with factory-applied 9mm closed-cell soft foam insulation (red) and jacket made of viscoplastic PE film (red)
- STEELOX Plus pipe SMX133 with factory-applied 13mm closed-cell soft foam insulation and jacket made of viscoplastic PE film (orange)
- STEELOX Pro pipe SMX140 with factory-applied sleeve consisting of corrugated, water impermeable PE-HD sleeve tube (blue)

STEELOX fittings (d16-25 mm)

- SMX410 STEELOX coupling
- SMX420 STEELOX 90° elbow
- SMX420Z STEELOX 90° zeta elbow
- SMX440 STEELOX tee
- SMX440Z STEELOX zeta tee
- SMX447 STEELOX tee with female thread branch
- SMX450 STEELOX adapter with male thread
- SMX455 STEELOX union with female thread
- SMX457 STEELOX adapter with female thread
- SMX460 STEELOX 90° adapter elbow with male thread
- SMX467 STEELOX 90° adapter elbow with female thread
- SMX477 STEELOX double U wall plate with female thread
- SMX480 STEELOX 90° wall plate with female thread
- SMX480Z STEELOX zeta 90° wall plate with female thread
- SMX485 STEELOX connecting set
- SMX485Z STEELOX Zeta connecting set
- SMX485SB STEELOX connecting set with siphon elbow
- SMX485SZ STEELOX Zeta connecting set with siphon elbow
- SMX489 STEELOX STEELFIX adapter







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12 SUPPORTING INFORMATION ABOUT INTENDED USE (OPTIONAL)

Any supporting information for section 4

N/A

13 SUPPORTING INFORMATION ABOUT CONDITIONS AND LIMITATIONS OF USE (OPTIONAL)

Any supporting information for section 6

N/A

