

PURTOP 1000

Building Product Information Requirements Compliance Statement

Date: 16/11/2023 (version 1)

Product Name: **PURTOP 1000**

Product Identifier: **PURTOP 1000**

Product Line

A two component, solvent free, pure polyurea membrane applied by spray using a high pressure, bi mixer pump to form waterproof coatings on bridge decks, roofs, decks, and hydraulic works in general.

Product Description

PURTOP 1000 is a spray applied polyurea membrane used to waterproof structures. Due to its high tear strength and exceptional flexibility and superior resistance to chemicals, it is suitable for waterproofing both new and existing structures, for example:

- waterproofing bridge and viaduct decks
- waterproofing flat and inverted roofs – with topcoat finish
- waterproofing decks and balcony's
- waterproofing sheet metal roofs
- waterproofing of water storage, and hydraulic structures
- waterproofing of concrete water tanks for drinking water

PURTOP 1000 has excellent bond strength and once reticulated, it forms a continuous strong, flexible membrane.

PURTOP 1000 is supplied in metal drums.

- Part A: 220kg drum
- Part B: 225kg drum
- Colour: light grey

MBP (NZ) Ltd.

Exclusive distributor of Mapei products in New Zealand
88 Carbine Road, Mt Wellington, Auckland 1060, New Zealand
T. +64 99211994 | F. +64 99211993 | www.mbpltd.co.nz

WE SUPPLY THE FOLLOWING MAPEI GROUP BRANDS AND SYSTEMS:



There are several ancillary products in the Purtop 1000 system including:

- Planiseal MR- vapor barrier primer for concrete
- Primer SN - 2-part resin primer for concrete or timber
- Primer EP Rust Stop - 2-part epoxy primer for rusted metal surfaces
- Mapedeck Primer 200 - 2 component polyurethane primer for metal substrates.
- Primer PU60 - one component primer for bonding Purtop after 24hours break between layers.
- Mapecoat PU 20 N - 2 component aliphatic polyurethane topcoat finish

For a complete range of suitable primers please refer to PURTOP 1000 technical references:

- PURTOP 1000 – Technical datasheet (2126-52023 gb)

Or request support at

www.mapei.com/nz/en/technical-and-commercial-support

Relevant Building Code Clauses

PURTOP 1000 complies with the following clauses of the New Zealand Building Code:

B2 Durability - PURTOP 1000 meets this requirement. Normal Care and maintenance is required.

E2 External Moisture - PURTOP 1000 meets this requirement. Purtop 1000 is tested to BS EN 1504 -2:2004.

F2 Hazardous building Materials - PURTOP 400 M is hazardous during application . Therefore, during application, safety measures detailed in the products SDS should be followed including the wearing of appropriate Personal Protective Equipment. Application of the PURTOP 400M is to be contained to a cordoned area, with only trained applicators with the correct PPE to be present. Once the product is cured and hardened, it is not hazardous and does not give rise to harmful gases or substances when exposed.

Contributions to Compliance

BS EN 1504 - 9 Products and systems for the protection and repair of concrete structures.

BS EN 1504-2 Waterproof Coatings: in compliance with PI, MR, PR, RC, IR principles for concrete protection

DM 174/04 & AS/NZS 4020:2018 – potable water certified.

CEN/TS 14416 / EN 13948 – resistant to plant root penetration

Scope and Design Requirements

PURTOP 1000 is used to form waterproofing coatings on new and existing commercial, residential and infrastructure projects as follows;

New – roofing & balconies

Within the scope limitations of NZBC Acceptable solution E2/AS1 regarding building height and floor plan area when subject to specific structural design, with substrates of plywood or suspended concrete slab, with minimum falls of

- plywood roofs of 1:30
- concrete substrates of 1:60
- plywood decks of 1:40

Concrete substrate construction engineering design must comply with NZS 3101

- Flat roofs or pitched roofs and decks constructed to drain water to gutters and drainage outlets complying with the NZBC.
- No steps within the deck level, no integral roof gardens and no down pipes directly discharging to the deck.
- PURTOP 1000 must be continuously protected on balconies and decks by a pedestal protection system.

Existing roof areas

PURTOP 1000 can be applied to existing roof areas with substrates of

- Concrete, or cementitious screeds
- Existing bitumen membranes
- Metal roofing
- Plywood & OSB panels.
- Other substrates – seek technical assistance from MBP(NZ)ltd.

Typical areas where PURTOP 1000 can be installed are.

- on roofs, balconies, and decks in residential construction
- on concrete parking structures in commercial construction
- on roading applications / bridge decks in infrastructure projects
- on potable water collection and water storage tanks
- on water features and concrete swimming pools
- on general hydraulic structures.

It is important to check the substrate to ensure it is suitable for the waterproofing system. The compressive strength of concrete must be at least 25 MPa and the substrate must be prepared correctly (ref: "Preparation of the Substrate" in Purtop 1000 technical datasheet 2126-5-2023 gb).

Repairs to the substrate must be conducted with the most suitable MAPEI selected product according to the thickness to be repaired, the time available and the operating conditions onsite.

The level of the humidity in the concrete substrate must not exceed 4%. A suitable vapour barrier primer may be required e.g. Planiseal MR. For guidance please consult the MBP (Z) Ltd Sales Team at www.mapei.com/nz/en/technical-and-commercial-support

PURTOP 1000 must be applied in layers at least 2mm thick and its short reaction time means it may also be applied on vertical surfaces. PURTOP 1000 gradually turns yellow if exposed to UV light. If the membrane is exposed to UV light apply Mapecoat PU 20 N, a two-component aliphatic polyurethane, applied by spray or roller coat to ensure durability.

Design Recommendations

Do not apply **PURTOP 1000**

- onto substrates polluted with oil, grease, or debris in general
- on substrates which have not been cleaned and primed correctly
- on substrates with rising damp.

Conditions and Limitations of Use

Installation of the membrane must strictly be completed by trained applicators approved by MBP (NZ) Ltd.

Application of the PURTOP 1000 is to be contained in a cordoned area, with only trained applicators with the correct PPE to be present. Installation of substrates must always be carried out in accordance with the PURTOP 1000 technical literature and under supervision of a Licensed Building Practitioner (LBP) with the relevant license class.

Supporting Documentation

The following additional documentation supports the above statements:

Purtop 1000 - datasheet (2126-5-2023 gb)

<https://www.mapei.com/nz/en/products-and-solutions/products/detail/purtop-1000>

Purtop 1000 - Care and Maintenance (Maintenance) 2021

<https://www.mapei.com/nz/en/products-and-solutions/products/detail/purtop-1000>

For further information supporting PURTOP 1000 claims refer to our website.

Contact Details

Importer NZ Address for Service

MBP (NZ) Ltd

88 Carbine Road

Auckland 1060

Tel 09 921 1994

www.mbpltd.co.nz

enquiries@mbpltd.co.nz

Importer NZBN: 8080877

Manufacture location

Mapei SpA

Via Cafiero, 22, 20158

Milano, Italy

Tel +39 023 76731

mapei@mapei.it

www.mapei.it

Warnings and Bans

PURTOP 1000 is not subject to a warning or ban under section 26 of the Building Act 2004.

Version History

Version number	Written by	Reviewed by	Date issued	Changes from previous version
V1 16/11/2023	JP	PT	23/11/2023	New document