

## CLASS 1

## Technical Data Sheet / BPIR

#### **Product name:**

# **Duratherm Blue**

### **Product Line:**

Substrate / Foundation Insulation

## Product description and its intended use:

Duratherm Blue has an XPS Foam board to the product's core and is coated with fibreglass mesh and a plastered coating. XPS provides optimum insulation for high and low temperatures and reduces energy consumption. XPS has high compressive strength, low water absorption and outstanding thermal insulation.

As a slab edge insulation solution, it is used as an overlay to a masonry foundation. It can be installed using PSL AAC Adhesive applied to the foundation wall with a notched trowel before pressing the board onto the foundation.

The exterior of the perimeter insulation should also be protected from impact damage and moisture accumulation with additional layers of plaster (including Hydroplast)

Insulating the perimeter will give a relative improvement to the thermal performance of the floor slab.

Combining this with Underslab insulation (such as 50mm EPS) will yield even larger increases.

#### Expectation:

- Excellent thermal performance
- High compressive strength
- Highly resistant to water absorption
- Lightweight and easy to install
- Tough and durable, not easily damaged
- Dimensionally stable

## **Product identifier:**

The product name with the production date is printed on the finished bucket.

## Place of Manufacture:

China

## **Legal and Trading Information:**

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Legal and trading name of

the importer(s): Rockcote Resene Limited T/A Resene Construction Systems

Address of the Manufacturer: 32-50 Vogel Street, Naenae, Lower Hutt

Website Address: <a href="https://reseneconstruction.co.nz">https://reseneconstruction.co.nz</a>
Email Address: <a href="https://reseneconstruction.co.nz">help@reseneconstruction.co.nz</a>

Phone Number: <u>0800 507040</u> NZBN: <u>9429034745786</u>

This product is not subject to a warning or ban under s26 of the Building Act.

## **Relevant Building Code clauses:**

- Clause B1 Structure Performance B1.3.1, B1.3.2 and B1.3.4
- Clause B2 Durability Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2
- Clause E2 External Moisture Performance E2.3.2
- Clause F2 Hazardous Building Materials Performance F2.3.1

## How the building product is expected to contribute to compliance:

This product is used and has been tested as part of a wider system.

B1 - This product has a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during construction or alteration and throughout its life. This product has a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout its life and during construction or alteration when the building is in use. This product has made allowance for the requirements of this functional requirement.

B2 - When installed in accordance with the system specifications and drawings, it will meet this performance requirement. Based on material properties and history of use, this product has been assessed to have a durability of at least 15 years when installed as part of a system. This product must be installed in accordance with the relevant specifications outlined in the design section of this document.

E2 - When installed in accordance with the system specifications and drawings, it will meet this performance requirement.

F2 - This product is safe when handled in accordance with its Technical and Safety DataSheet. Dust resulting from sanding and mixing compounds may be a respiratory irritant, and the use of suitable respiratory protection is required. This product meets the requirements set out in F2 and will not present a health hazard to people once installed.

## Limitations on the use of the building product:

Resene Construction Systems recommends that this product be applied by a licensed tradesperson who has extensive experience in applying these products for similar applications to your particular project. The success of each project requires the tradesperson to have a thorough technical knowledge of appropriate building design, substrate conditions and client expectations to determine if this product fits the purpose expected for your project.

It should be noted that Resene Construction Systems products do not satisfy code requirements on their own but deliver code-compliant performance when used as part of a Resene

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Construction System's system and installed in accordance with the specific specifications.

To be used as an overlay to foundations. Duratherm Blue should not be left exposed to prolonged sunlight as this will result in surface degradation. Duratherm Blue is easy to handle and install. Ensure the board product is not stored close to open flames or other ignition sources and avoid volatile organic compounds and chemicals such as solvents.

## Design requirements that would support the use of the building product:

Specific applications, design and installation instructions are available for each system on our website. This outlines where this product should be installed as part of the wider system.

Material: 100% BASF fresh material

In core xps board density: 32-35KG/m3

Moisture/Water absorption: <0.5%

Sizes: 2200mmx600mmx10mm

2200mmx297mmx33mm 2200mmx377mmx33mm 1.0m2K/W (ASTM C518)

Thermal Resistance: 1.0m2K/W (ASTM C518)
Thermal Conductivity: 0.0303 W/mK (Average 23°)

Compressive Strength: 288KPa

Moisture Permeability: 1.8 Ng/(msPa) (23°, RH50%)

Water Absorption: 0.6% (96 hours)

Dimension Stability (L,W,T): 1.5% (70°, 48hours)

#### **Installation requirements:**

Ensure the surface is clean, sound, dry and free from dust, dirt, grease, mould and lichen.

Install the board horizontally over the top of a wet applied plaster that has had a notched trowel run through it.

Ensure the board returns up behind any claddings where possible and without blocking of any cavity closers.

## Maintenance, Environmental and Safety Requirements:

Wash equipment and spills as soon as possible with water.

Ensure washing water does not enter waterways. Wet waste should be disposed of in empty bags and, once dry, disposed of in trade waste. The powder is irritating, and appropriate PPE dust masks are advised when handling. The wet compound is alkaline, and prolonged skin contact should be avoided. Wear rubber gloves, dust masks and safety glasses when handling products.

Material Safety Data Sheets are available upon request or access directly from

https://reseneconstruction.co.nz/technical-library/safety-data-sheets/

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