

Technical Data Sheet / BPIR

Product name:

XTherm Gold

Product Line:

Substrate

Product description and its intended use:

XTherm Gold is a premium high-performance insulation board made of expanded rigid Polyisocyanate (PIR) closed-cell foam free of CFC or HCFC. The product is used to form a thermal envelope for buildings.

- Insulated overlay to masonry buildings
- Insulated substrate over timber/steel framed buildings
- Underfloor Insulation
- Perimeter Edge Insulation

An inert, rigid foam product does not settle or take up moisture over time, thus ensuring the Thermal performance or R-value for the life of the building. It is impervious to water-related damage and deterioration, making it the perfect material for areas that are damp on a regular basis. The product typically comes with a black glass fabric on either side of the finished product.

Product identifier:

The product is unlabelled

Place of Manufacture:

New Zealand

Legal and Trading Information:

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:	https://reseneconstruction.co.nz
Email Address:	help@reseneconstruction.co.nz
Phone Number:	0800 507040
NZBN:	9429034745786

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:

Requires over-coating with a protective coating when used as a cladding

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

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.

Typical thicknesses:	50mm
Thermal Conductivity:	0.0214 W/m.K
Thermal Resistance R-Value:	50mm - R2.3 (m ² K/W) 75mm - R3.5 (m ² K/W) 100mm - R4.7 (m ² K/W)
Board density:	38-42 kg/m ³ ± 1.5
Compressive strength:	≥0.09MPa

Shear strength:	≥0.11MPa
Water vapour transmission rate:	10-15 g/m ² .24h
Dimensional stability:	≤3% (70C/95%RH,20hrs)
	≤1% (-10C,20hrs)

Fire Performance

AS 1366.2-1992, ISO5660.1.

PIR foam is a thermosetting material. It does not melt, flow or drip when exposed to fire. It will form a strong char that helps protect the foam core and prevent flame from spreading within the panels. PIR will self-extinguish as soon as the cause of the fire is removed.

Installation requirements:

If the sheet has been left exposed to UV / sunlight for more than two weeks, dust and dirt may build up on the surface, and the surface may also discolour (yellow). If you are applying a coating to the sheet, you must first remove all surface dust, oxidisation, and other contaminants. Use a rasp or a stiff broom to prepare the sheet for subsequent coatings.

If you are applying the sheeting to a wall then a check should be made using a straight edge to ensure the wall is flat, plumb and true. Any irregularities should be taken out by straightening using a rasp.

Any loose fabric should be trimmed from the PIR to ensure that the plaster has a sound substrate to key to.

The Render coating is not designed to straighten deviations that exceed the specified Resene Construction Systems Render System thickness.

Environmental and Safety:

Ensure styrene does not enter waterways. Contain in bags to ensure loose material is not blown away. Currently, many locations around the country provide access to recycling services. Many recycling providers also offer pick-up and drop-off services to ensure you can recycle hassle-free. They are also committed to environmentally sound recycling processes and ensuring that styrenes can be recycled and reused often.

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

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