

TECHNITHERM®

CAVITY WALL STABILISATION AND INSULATION SYSTEM

Product Description

TECHNITHERM® is a totally CFC & HCFC FREE two component, 1:1 mix ratio rigid polyurethane foam which complies with the requirements of BS 7457:1994 for the stabilisation and thermal insulation of masonry cavity walls and holds an Agrément Board Certificate No: 97/3426. It is required that **TECHNITHERM®** is installed in accordance with BS 7456:1991 Code of Practice by BBA approved installers trained by Isothane Ltd technical staff.

Uses

TECHNITHERM® is used for the stabilisation of masonry cavity walls by strongly adhering the inner and outer leaves together and as such is a convenient and cost effective alternative to metal cavity tie replacement. In addition, as a consequence of the excellent thermal insulation properties of the foam, “**U**” values of **0.33 Wm²K** are achieved in a 65mm cavity of standard construction, and **0.22 Wm²K** in a 100mm cavity of standard construction. Even better values can be realised through choice of special blockwork, etc.

Equipment

TECHNITHERM® can be processed through any suitable mobile high pressure plural component polyurethane foam dispensing equipment. (e.g. Gusmer, Glas-Craft, Graco).

Reactivity Profile

Laboratory test results (typical) at 20°C:-

Cream time	13 - 18 seconds
Rise time	155 ± 15 seconds
Free rise density	32 ± 1 kg/m ³



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Certificate No. FM 21549



Certificate No. EMS 68443

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Storage, Handling and Personal Protection

The recommendations in our Safety Data Sheet for this product must be followed at all times. More general information is included in our publication "A Guide to the Safe Handling of Polyurethane Chemicals" and in the following Technical Data Sheets which are available on request:-

- Fire safety when Storing, Handling and Installing Polyurethane Foam.
- Decontamination of Isocyanates using Isothane Decontaminant.

Physical Properties

<u>Property</u>	<u>Value</u>	<u>Method</u>
* Thermal conductivity, aged, <80mm thick	0.028 W / mK	BS EN ISO 13165
* Thermal conductivity, aged, 80-120mm thick	0.026 W / mK	BS EN ISO 13165
* Thermal conductivity, aged, >120mm thick	0.025 W / mK	BS EN ISO 13165
Compressive strength - normal to major plane: (50mm cavity)	210 kPa	BS4370:Pt1
Shear strength - parallel to major plane: (50mm cavity)	241 kPa	BS4370:Pt2
Dimensional stability linear change at: 24hrs @ -15°C	- 0.2 / 0 / 0.2% (L / W / T)	BS4370:Pt1
24hrs @ +70°C	0.3 / 0.4 / 0.1% (L / W / T)	BS4370:Pt2
Water Vapour Permeability parallel to foam thickness	5.9ng / (pa.sm) max	BS4370:Pt2
Closed Cell Content	90%	BS4370:Pt2
* Burning Characteristics	Less than 40mm	BS4735
* Tensile Adhesion to Masonry: Aerated Concrete	51 kPa	
Brick	155 kPa	BS4757
Breeze Block	166 kPa	
Appearance	Uniform, fine cell structure	BS4757
Density	42 Kg / m ³	BS4757

* Tests carried out independently by UKAS Approved Laboratories.

This information is of a general nature and is supplied without recommendation or guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Liability for loss or damage through use cannot be accepted except for death or injury caused by negligence on the part of Isothane Ltd. Whilst these specifications are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are applied. Users must, by comprehensive testing, ensure suitability of product for own use. Without control or supervision of the preparation for and application of Isothane products, general guarantees cannot be offered.



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Technitherm® System Components:-

Resin SG @ 20°C	1.15
Resin Viscosity @ 20°C	400cps
Iso SG @ 20°C	1.24
Iso Viscosity @ 20°C	350cps
Ozone Depletion Potential (ODP)	ZERO
Shelf Life	12 months



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