a.b.e.® Construction Chemicals

abe.®proof thermo-shield

INSULATING AND WATERPROOFING COATING (IMPROVED FORMULATION)

DESCRIPTION

abe.®proof thermo-shield , is a single component cost effective heat shielding waterproof coating.

USES

- **abe.®proof thermo-shield** uses advanced insulation technology to reduce the interior temperature of buildings. **abe.®proof thermo-shield** is especially formulated with fine spherical particles that minimise surface temperature on roofs & walls by reflecting a large percentage of the radiant heat energy before it penetrates the building. This lowers interior temperature and reduces energy cost for cooling the building.
- **abe.®proof thermo-shield** is a high solids PU Coating which exhibits excellent UV resistance and elongation.
- **abe.®proof thermo-shield** is ideal for roofs and walls in both commercial, industrial and residential buildings.
- **abe.®proof thermo-shield** can be applied to substrates such as concrete, mortar, aluminium, steel, fibre cement, brick, wood.

FEATURES & BENEFITS

- Easy to apply non-toxic & environmentally friendly.
- Reduces radiant heat in structure by a minimum of 30% (colour dependant).
- Inherent anti- fungal properties.
- Excellent U V resistance & stretch.
- Low VOC emissions.
- Combined waterproofing and insulating in one product.

SURFACE PREPARATION

All surfaces must be free of grease, oil and dust. Very smooth surfaces should be roughened for better adhesion.

Loose rust, moss, lichens, crumbling cement, deteriorated fibre cement and degraded bituminous substances must be removed either mechanically or chemically.

Surface faults such as blisters, holes and cracks should be cleaned out, and then repaired with a flexible sealer. Small hairline cracks can be painted with **abe.®proof thermo-shield** brushed in, allow to dry, then repeat until filled or at least sealed.

Rusty metal should be cleaned by blasting or other means to suitable standard then primed with a Rust Converter. Other metals should be suitably primed or treated e.g. for new galvanising, degrease, etch or roughen surface before coating.

BONDING / PRIMING

Adhesion to porous & friable substrates can be improved by priming with **abe.®proof acrylic primer.** This is recommended to consolidate the potentially weak surface. Sealing with **abe.®proof acrylic primer** greatly reduces this type of potential failure.

MIXING

Stir well before use.

APPLICATION

abe.®proof thermo-shield may be applied direct to all common building substrates, i.e. concrete, mortar, aluminium, steel, cement sheet, painted surfaces and brick. Some priming may be required, depending on the surface condition. (Please consult **a.b.e.®** technical department for further advice).

Apply two or more coats to obtain recommended total thickness by brush, roller, spread bar or airless spray gun. The ideal application temperature is between 10 – 30°C and relative humidity 30 – 80%. In rapid drying conditions, mask large areas into smaller zones to help obtain even application and appearance.

Rinse brushes, etc. ,frequently in water to prevent drying/ clogging. Keep containers closed to minimise skin formation.

In fast drying conditions, adhesion to unsealed absorbent or porous surfaces is significantly improved by **abe.®proof acrylic primer**.

COVERAGE

Flat Roofs: 1.1m²/ litre @0.5 dry film thickness.
Pitched Roof: 1.5m² / litre @ 0.37mm dry film thickness.
Walls (smooth): 2.2m² / litre @ 250mm dry film thickness.

a.b.e.® is an ISO 9001:2008 registered company
PO Box 5100, Boksburg North, 1461, South Africa
Website: www.abe.co.za | Tel: +27(0) 11 306 9000
Durban | Johannesburg | Cape Town | Port Elizabeth | East London | Bloemfontein | George

a.b.e.® is a Chryso Group Company

CHRYSO
CHEMICAL SOLUTIONS FOR THE CONSTRUCTION MATERIALS INDUSTRY

DATE UPDATED: 05/06/14

MODEL SPECIFICATION

A coloured heat shielding water based coating.

The coating system will be **abe.®proof thermo-shield**, a single pack; elastic heat shielding coating applied in accordance with the recommendations of **a.b.e.® Construction Chemicals**. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

TYPICAL PERFORMANCE PROPERTIES	
Elongation at Break	260 %
Tensile Strength	3.80 Mpa
Adhesion Strength	1.36N/mm2
Crack Bridging	
Method A	No crack within 2mm
Method B	No crack after 10 cycles
Hardness Shore A	65
Water Penetration	No water penetration
UV Exposure 2000 hrs	No disintegration, cracks, blisters, peeling or swelling
Thermal Conductivity	0.09 W/m°K
Emitance,	0.89*
Specifications are subject to change	

**Average laboratory values provided as a general guide only.*

COLOUR	TOTAL SOLAR REFLECTANCE %
Brick Red	30.2
Grey	47.4
White	83.6

Test method to test for Total Solar Reflectance Values : C 1549 & E903-96

Specifications are subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

PACKAGING

5 litre and 20 litre pail

CLEANING OF EQUIPMENT

Clean all brushes, rollers, trays, buckets & surrounding areas with clean water before the product sets.

Once setting has occurred, **abe® super brush cleaner** may be used.

PROTECTION / MAINTENACE ON COMPLETION

abe.®proof thermo-shield has a 5 year product performance warranty to perform to specification for a period of 5 years from completion of the application. To extend the product warranty by an additional 5 years a maintenance coat of **abe.®proof thermo-shield** needs to applied to the original coating. Proof of purchase is required to be forwarded to **a.b.e.® Construction Chemicals** to extend the 5 warranty.

NOTE:
Do not apply **abe.®proof thermo-shield** if rain is imminent.

HANDLING & STORAGE

abe.®proof thermo-shield has shelf life of at least 12 months when in original unopened container and stored in a cool dry place.

HEALTH & SAFETY

The use of gloves and eye protection is advised. Always ventilate the working area well during application and drying. Avoid flames in vicinity. If material is splashed into the eye wash with copious amounts of water and seek medical attention.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot –because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied-accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

a.b.e.® Construction Chemicals has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.

a.b.e.® is an ISO 9001:2008 registered company
PO Box 5100, Boksburg North, 1461, South Africa
Website: www.abe.co.za | Tel: +27(0) 11 306 9000
Durban | Johannesburg | Cape Town | Port Elizabeth | East London | Bloemfontein | George

DATE UPDATED: 05/06/14