

## DATA SHEET

# SISALATION® 450 & 450 PERFORATED

## Flame Retardant/Heavy Weight/Reinforced Double Sided Aluminium Foil

### Product Description

SISALATION® 450 consists of two layers of an aluminium foil/polymeric adhesive/high density kraft paper laminate bonded together with a flame retardant adhesive, and reinforced with glass fibres, arranged in a grid approximately 7 mm x 7 mm. The product retains a flammability index less than 5, when tested in accordance with AS 1530 Pt. 2, 1993 and BS476 part 6 and 7 with Class O rating. SISALATION® 450 is scuff resistant on both faces.

### Product Function Insulation

SISALATION® 450 when used in conjunction with an air space is an effective thermal insulating material because of the high reflectivity and low emissivity of its aluminium foil surfaces. This combination makes an excellent barrier to heat flow by radiation and convection.

SISALATION® 450 is used for insulating roofs, walls, and floors of houses, industrial, commercial and institutional buildings. The number of layers is determined by the degree of thermal insulation required in the structure.

### Sarking

SISALATION® 450 makes an ideal sarking and sheathing material where additional weather protection is required. The aluminium foils and polymeric adhesive prevents the ingress of liquid water and provide a high degree of resistance to the passage of water vapour.

### Water Vapour Barriers

SISALATION® 450 has a water permeance of less than 1.0ng/Ns. Sheets of the material can be sealed together with pressure sensitive foil tapes to form an effective water vapour barrier for prevention of condensation in buildings and bulk insulation.

SISALATION® 450 PERFORATED form is used for internal duct lining and other sound dampening and acoustic applications.

### Factory Lighting Improvement

SISALATION® 450 has a high light reflectivity. When installed in industrial buildings as an exposed internal roof lining, the reflectivity of the ceiling is increased by up to 40%, this results in improved lighting and provides more even light distribution.

### APPLICATIONS

For Use Under Metal Deck and Fibrous Cement Roofing  
For thermal insulation benefits, refer to U. Value calculations for various roof structures for rafter spacings up to 1.2m apart. If the rafter spacing exceeds 1.2m, Super SISALATION® 480 is the recommended product.

### SISALATION®

SISALATION® 450 provides support for glasswool insulation, reduces the moisture permeability to less than 1 ng/Ns and at the same time adds significantly to the insulation value. The additional insulation benefit can be up to 80% dependent upon the roof structure and the number of layers of SISALATION® 450.

### SISALATION® 450 Under Tile Roof

When used under tile roof with a maximum of 100mm overlap, this product will perform extremely well as a sarking and insulation membrane. The insulation value under tile roof can be as high as 60% dependent upon the roof structure.

### Resistance to Acids and Alkalis:

Poor. Must not be used in contact with wet concrete or exposed continuously to corrosive environment. Adhesive used to laminate product to glasswool must be pH neutral.

### Durability:

Excellent in normal building applications but outer roof and wall materials should be installed without delay. If unusual conditions exist, the suitability of the material should be established by contacting a representative of the Company.

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### SISALATION<sup>®</sup> 450 & 450 PERFORATED

#### Roll Size:

1250mm x 60m

Other roll sizes can be made available on request.

#### Physical Properties

Tensile Strength (ASTM D828)

Longitudinal Direction..... 13.0 kN/m

Transverse Direction ..... 9.4 kN/m

Bursting Force

(AS2001 2.19-1988).....175N

Water Vapour Permeance

(ASTM E96 Procedure E)

Uncreased..... Less than 1 ng/Ns

Creased (ASTM D1027) ..... Less than 2 ng/Ns

Nominal Manufactured Grammage..... 342 gsm

Edge Tear (T.A.A.P.I. T470 OM-89)

M.D. .... 100 N

L.D. .... 100 N

Reflectivity of Foil Surface ..... 0.95

Emissivity of Foil Surface ..... 0.05

All figures are averages only, not guaranteed minimums.

Testing conditions: 20°C, 65% R.H.

#### Fire Rating

(a) Flammability Test AS 1530 Part 2, 1973

Spread Factor ..... 0

Spread Factor ..... 0

Heat Factor ..... 1

Flammability Index ..... Less than 5

(b) Early Fire Hazard Properties AS 1530 Part 3, 1982

Ignitibility Index ..... 0

Spread of flame Index ..... 0

Heat Factor ..... 0

Smoke developed Index ..... 0

(c) Fire Propagation test BS 476 Part 6, 1989

Index of Performance (I) ..... 3.2 ..... <12

Sub-Index (iI) ..... 1.1 ..... <6

(d) Large Scale Surface Spread of Flame Test BS 476 Part 7, 1997 ..... Class One

(e) **Approved CLASS "O" Rating in accordance with Fire Code. Tests conducted 11/2/2006.**

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