

SiSALATION®

Reflective Foil Roof **INSULATION**

RESIDENTIAL



COMMERCIAL

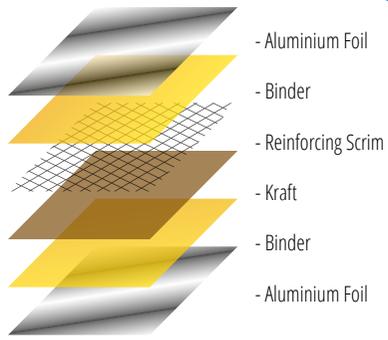


INDUSTRIAL



PRODUCTS

405 RESIDENTIAL



Sisalation® 405 is a light grammage, double sided reflective foil laminate incorporating layers of aluminium foil, high strength kraft paper and reinforcing scrim bonded together with a binder.

Category: double sided reinforced membrane.

Classification A. Tested in accordance with SANS 1381-4:2013.

Application: Ideally suited for homes and townhouses.

Size: Length: 40m | Width: 1.25m | Area: 50m².

R-Value: 1.30 for under Tile or Sheeting, with a ceiling for *downwards* heat-flow when used with minimum 15mm airspace. | 0.73 for under Tile or Sheeting, with a ceiling for *upwards* heat-flow when used with minimum 15mm airspace.

Fire Rating: B/B1/2/H. Tested in accordance with SANS428 protocol.

Nominal Weight & Thickness: 162.5 grams per m² / 270 microns

FR405 FIRE RETARDANT: LIGHT INDUSTRIAL



Sisalation® FR405 is an economical, durable, double sided reflective foil laminate incorporating advanced fire retardant properties.

Category: double sided reinforced membrane.

Classification A. Tested in accordance with SANS 1381-4:2013.

Application: Ideally suited for offices, mini factories, clinics and schools.

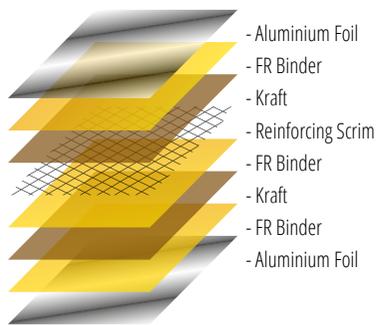
Roll Size: Length: 40m | Width: 1.25m | Area: 50m².

R-Value: 1.38 for under Tile or Sheeting without a ceiling for *downwards* heat-flow when used with minimum 20mm airspace. | 0.67 for under Tile or Sheeting without a ceiling for *upwards* heat-flow when used with minimum 20mm airspace.

Fire Rating: B/B1/2/H&V-SP&USP. Tested in accordance with SANS 428 protocol (with or without a sprinkler system) for horizontal and vertical applications.

Nominal Weight & Thickness: 183.5 grams per m² / 315 microns

FR430 FIRE RETARDANT: HEAVY INDUSTRIAL



Sisalation® FR430 is a heavy duty, double sided reflective foil laminate incorporating advanced fire retardant properties.

Category: double sided reinforced membrane.

Classification A. Tested in accordance with SANS 1381-4:2013.

Application: Ideally suited for industrial and commercial buildings.

Roll Size: Length: 40m | Width: 1.25m | Area: 50m².

R-Value: 1.38 for under Sheeting without a ceiling for *downwards* heat-flow when used with minimum 20mm airspace. | 0.67 for under Sheeting without a ceiling for *upwards* heat-flow when used with minimum 20mm airspace.

Fire Rating: B/B1/2/H&V-SP&USP. Tested in accordance with SANS 428 protocol (with or without a sprinkler system) for horizontal & vertical applications as per SANS10177 Part 11 Large Scale Test.

Nominal Weight & Thickness: 251 grams per m² / 330 microns

PRODUCT FUNCTION

Sisalation®, when used in conjunction with an airspace, is a highly effective thermal insulating membrane due to the high reflectivity and low emissive properties of the aluminium foil surfaces.

This combination makes Sisalation an excellent barrier to heat flow via radiation.

When installed in industrial buildings as an exposed roof lining, the reflectivity of the foil will enhance the lighting of the building considerably.

PRODUCT DURABILITY

Resistance of Acids and Alkalis

Sisalation® must not be used in contact with wet concrete or exposed continuously to a corrosive environment.

Resistance to Copper

Sisalation® must not come into contact with copper surfaces due to electrolytic action.

Permanence

Excellent in normal building application, however not for direct outdoor exposure and should be covered with roofing material as soon as possible after installation. Should unusual conditions exist, the suitability of the material should be established by contacting a technical representative of the company.

PRODUCT COMPLIANCE

Sisalation® has been specifically reformulated to fully comply with SANS10400 Part T and the SANS428 protocol which regulates the fire performance properties of insulation products as specified for their specific markets. These standards incorporate all the factors pertaining to fire-hazard or fire-risk assessment of the materials or assemblies under actual fire conditions.

FIRE TESTING

- Sisalation® 405 is fully compliant with SANS 428 protocol and is tested in accordance with SANS 10177 Part 5 & 10.
- Sisalation® FR405 and FR430 are fully compliant with SANS 428 protocol and are tested in accordance with SANS 10177 Part 11.
- Sisalation® will satisfy most insurance underwriters.

Typical Examples of the Thermal Resistance Values achieved of Double Sided Reflective Foil Insulation when tested with different air spaces

Description Thermal Performance of system	Temperature range: 36 °C/10 °C (mean 23 °C)		
	(Rsys) m ² .K/W	(Rsys) m ² .K/W	(Rsys) m ² .K/W
Horizontal Installation Air gaps system: above/below	0/80 (mm)	20/80 (mm)	40/60 (mm)
Double Sided Reflective Foil	Heat flow direction: Downwards		
	1.276	1.385	1.433
	Heat flow direction: Upwards		
	0.396	0.595	0.571

Referral: TIPSASA Technical Code 2017

PRODUCT WARNING

- All information used in this publication is correct at time of going to print and is based on our experience and given in good faith.
- Afripack Coatings reserves the right to change product specifications without notification.
- The quality of Sisalation® products is in accordance with SANS 10400 Building Standards on condition that the product has been correctly installed as per the manufacturer's instructions and not damaged by after trades or roof deterioration, water leaks, exposure to acids, alkali's and the like.

THE BENEFITS OF SISALATION®



Temperature Control: Sisalation® has proved effective and beneficial in building in the comfort factor, keeping the home and workplace cooler in summer and warmer in winter.



Thermal Resistance: R-Values ($m^2.K/W$) or thermal resistance is determined by the overall roofing or wall system design. (Visit the Sisalation® website for typical applications, calculations and advice.)



Dustproofs: Keeping the building as dust free as possible can be an important factor in reducing allergens in the air we breathe, thus reducing allergy and asthma symptoms.



Vapour Barrier: Sisalation® can contain condensation to force it to develop outside of the ceiling area so that it can be shed below the roof.



Fire: All Sisalation® products have been tested by Firelab. They have the following fire performance classifications for vertical and horizontal applications: Sisalation® 405: B/B1/2/H
Sisalation® FR405: B/B1/2/H&V-SP&USP – with and without sprinklers
Sisalation® FR430: B/B1/2/H&V-SP&USP – with and without sprinklers.



Economical: Easy to install Sisalation® is maintenance free and long-lasting. Used as an exposed roof lining, lighting is greatly improved due to the foil's high reflectivity.



Energy Efficient: Sisalation® is totally compliant with the requirements for thermal insulation products as specified by the Energy Efficiency Standards, SANS 10400 XA.



Environmentally-friendly: The use of Sisalation® will impact positively on the environment. It helps reduce energy usage in buildings and the consumption of natural resources.



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