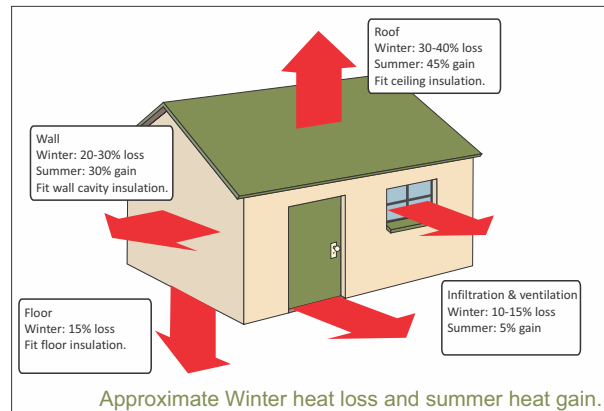


## Where am I losing and gaining heat in my home?



Collectively the roof, walls (plus windows and doors) and the floor are known as the thermal envelope.

Reducing the transfer of heat from inside your home, through the thermal envelope, to the external environment will subsequently reduce your heating bills in winter.

In summer the reverse happens: keeping the sun's heat from penetrating inside the house (reducing heat gains), reduces cooling costs.

### How does insulation work and how does it save energy?

Insulation keeps your home warmer in winter and helps keep it cooler in summer. It is similar to a flask which keeps drinks hot or cold by providing an insulating layer between the drink and the outside air.

This means that in winter, the heat stays inside a home and in the summer it stays outside!

A cold home in winter will need extra heating. Likewise, a sweltering home in summer will mean you're far more likely to use the air conditioner. Regardless of how efficient your heating or cooling system is, having to use it more often will result in higher energy consumption. Good insulation is designed to regulate the temperature in your home, reducing your need for artificial heating and cooling.

## Benefits of Insulation

### Improved comfort

- Adding insulation to your home is a great way to increase the comfort of your living environment.
- Insulation will regulate the temperature in your home, creating a much more comfortable living environment, especially in places of extreme weather.
- Sound transmission is reduced, protecting your home from unwanted exterior noise and reducing the impact of noise from within your home on your neighbours.
- Insulating your home also creates a moisture barrier, keeping unwanted moisture out of your house, eliminating mould problems, creating healthier living conditions.

### Energy Saving

- With added insulation your home is much more energy efficient.
- Your home will be warmer in Winter and cooler in Summer.
- Energy used to heat and cool your home will therefore be reduced, saving on heating and cooling bills!

### Green Living

- With an insulated home you will be using less energy for heating and cooling your home. This will reduce your carbon footprint, and also reduce the amount of chemicals released into the environment from air conditioning units and gas and wood burning heating systems.



## Product Features

- All Insulation products are eco-friendly, do not harm the environment and contribute towards green living practices.
- Floor and cavity wall insulation is made from recycled polystyrene (EPS).
- All Insulation products can be recycled.
- Durable and maintenance free.
- Lightweight, reducing material use and transport costs.
- Floor insulation products act as an effective decoupler from the substrate. This means cracks in concrete slabs will not follow through to your floors.
- Soundproofing and weight saving properties make our insulation products especially suited for multi level buildings.
- Thermal testing has proven that floor insulation products installed under heating systems are more effective than R1 under the concrete slab as specified by SANS 201:2011.

## Warranty

- All products are locally manufactured at facilities that are ISO 9001 compliant
- All products carry a 7 year product warranty and accreditation certificates are issued with GreenRscreeed, GreenRroof and GreenRwall installations.
- Your sales consultant will advise you on the best product to suit your requirements.

## Contact

Call centre: 0800 11 22 15  
Email: [hello@4seasonsinsulation.co.za](mailto:hello@4seasonsinsulation.co.za)  
Website: [www.fourseasonsinsulation.co.za](http://www.fourseasonsinsulation.co.za)

Manufactured by:  
Siyanoqoba Insulation (Pty) Ltd.  
222 Van Dyk Road  
Boksburg East  
South Africa



# Eco-Friendly Insulation



## Green All-Round Insulation for

- Floors
- Wall cavities
- Screed
- Roof Slabs



Product Range:

## GreenRscreed

Lightweight insulating floor screed



**Description:**

GreenRscreed is a lightweight insulating floor screed.

GreenRscreed aggregate, made from recycled polystyrene (EPS) treated with a polymer additive, is mixed into the screed as a sand replacement to achieve high thermal insulation properties. This results in a lightweight insulating finishing screed, making it especially suitable for new builds.

**Type:**

Thermal/Acoustic

**Application:**

- Floors in new builds and additions.
- Installed under floor heating systems to reduce downward heat loss, improving efficiency and reducing energy consumption.

**Technical specifications:**

Screed Density	Thermal Cond.	*Comp. Strength	R Value (m <sup>2</sup> K/W) against screed thickness in mm								
			30	40	50	70	80	90	100	110	
kg/m <sup>3</sup>	W/m.K	MPa	0.46	0.62	0.77	1.08	1.23	1.38	1.54	1.69	
210	0.066	0.70	0.45	0.60	0.75	1.04	1.19	1.34	1.49	1.64	
260	0.068	0.84	0.38	0.50	0.63	0.88	1.00	1.13	1.25	1.38	
310	0.081	1.49	0.29	0.39	0.49	0.68	0.78	0.87	0.97	1.07	
360	0.104	1.70									

\*MPa = 100 000 kg/m<sup>2</sup>

## KlimaBoard

Floor insulation boards



**Description:**

KlimaBoard is a lightweight, reinforced insulation board made from expanded polystyrene (EPS).

Reinforced with fibreglass mesh and a cement compound on both sides improves compressive strength and allows for effective application onto substrates.

Available: 7mm, 12mm, 27mm EPS.

**Type:**

Thermal/Acoustic

**Application:**

- Floors in new builds and renovation projects.
- Typically used under floor heating systems to reduce downward heat loss, improving and reducing energy consumption.

**Technical specifications:**

Product	Material	R value (m <sup>2</sup> K/W)	Compressive strength (kPa)
KlimaBoard 7mm	EPS 40	±0.16	>250
KlimaBoard 12mm	EPS 40	±0.32	>250
KlimaBoard 27mm	EPS 40	±0.80	>250

## GreenRwall

Wall cavity insulation



**Description:**

GreenRwall is a cavity wall insulation.

GreenRwall mix, made from recycled polystyrene (EPS) treated with a polymer additive, is pumped into the wall cavity, resulting in a 100% airtight cavity, leaving no issues for damp.

GreenRwall can be mixed to achieve different R value requirements as seen in the table below.

**Type:**

Thermal/Acoustic

**Application:**

- 20 - 80mm wall cavities: new builds & existing buildings.
- Heat loss and gain through walls is reduced.
- Condensation on outer leaf cannot penetrate to the inner leaf of the wall, eliminating damp problems.

**Technical specifications:**

Cavity gap in mm	R value (m <sup>2</sup> K/W) against Cavity Gap in mm						
	30	35	40	45	50	55	60
R value	0.97	1.13	1.29	1.45	1.61	1.77	1.94

## GreenRoof

Roof slab insulation



**Description:**

GreenRoof is a lightweight insulating roof screed, especially suitable for flat roof slab structures.

GreenRoof aggregate, made from recycled polystyrene (EPS) treated with a polymer additive, is mixed into the screed as a sand replacement to achieve high thermal insulation properties.

**Type:**

Thermal/Acoustic

**Application:**

- Installed directly on top of the flat roof slab structure
- Suitable for new builds and existing buildings.
- Reduces heat loss and gains through roof, reducing heating and cooling needs of interiors.

**Technical specifications:**

Screed Density	Thermal Cond.	*Comp. Strength	R Value (m <sup>2</sup> K/W) against screed thickness in mm								
			30	40	50	70	80	90	100	110	
kg/m <sup>3</sup>	W/m.K	MPa	0.46	0.62	0.77	1.08	1.23	1.38	1.54	1.69	
210	0.066	0.70	0.45	0.60	0.75	1.04	1.19	1.34	1.49	1.64	
260	0.068	0.84	0.38	0.50	0.63	0.88	1.00	1.13	1.25	1.38	
310	0.081	1.49	0.29	0.39	0.49	0.68	0.78	0.87	0.97	1.07	
360	0.104	1.70									

\*MPa = 100 000 kg/m<sup>2</sup>

**Contact a sales consultant for advice - 0800 11 22 15**