

NON WOVENS

Brochure of

Insulators

Logrotex
NON WOVSNS

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LOGROTEX INSULATORS

At Logrotex we are pioneers in manufacturing natural insulation for the construction trade. The Isolgreen® product range is based on natural fibres. With a multitude of applications for façades and outer walls, wooden floors, partition walls or roofs. Thanks to its multiple applications Isolgreen® provides a solution for all requirements, whether acoustic or thermal insulation.

Isolgreen® is an alternative to conventional insulation systems that have been used in construction. For thermal and acoustic insulation, we offer a wide range of products based on natural fibres such as sheep's wool, coconut wool, sisal wool, hemp, flax or cotton.

All our products are natural and the manufacturing process is environmentally friendly. It confers energy saving for sustainable development in a fashion that guarantees an optimum level of customer satisfaction thanks to the quality of our products and services.

APPLICATIONS



On façades and outer walls

Fitting panels between the different construction items employed.



Wooden façades

Fitted between framework.



On partition walls

Fitting between partition walls, between double prefabricated sheet partitions, plasterboard partition walls, fitted over framework with the panel fitted in the intrados. Also applicable to partition walls with metal inner frames.

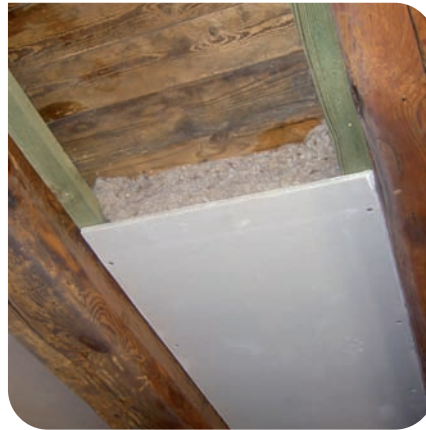
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The versatility of Isolgreen® means it can be fitted anywhere in a building that requires insulation.



On parquet flooring

Fitted panels under floating parquet flooring. It can also be used as insulation under the first floors.



Roofs

Between partition walls or false ceilings in industrial buildings, where the insulation is supported by the false ceiling, under the flooring. For decorative false ceilings, it reduces reverberation in the room. A profile structure is required for false ceilings.



Products

1.

Natural Range

- Isolgreen® Wool
- Isolgreen® Wool Felt
- Isolgreen® Hemp
- Isolgreen® Jute
- Isolgreen® Cotton
- Isolgreen® Flax
- Isolgreen® Sico

2.

Multicolour Range

- Isolgreen® Logromousse
- Isolgreen® CO-FR
- Isolgreen® Cellulose

3.

Synthetic Range

- Isolgreen® Synthetic



1.

ISOLGREEN® NATURAL

The wide variety of natural fibres we work with at Logrotex, permits a wide range of products that are both versatile and which adapt to customers' tastes.

Some of the fibres we work with are listed as follows:

- Sheep's wool
- Hemp
- Jute
- Cotton
- Sisal
- Coco
- Flax

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ISOLGREEN® WOOL

ISOLGREEN® WOOL is a product made from sheep's wool and polyester.

Our wool is previously treated conferring it fireproof, anti-mites and fungicide properties.

The presence of polyester makes ISOLGREEN® WOOL more resistant.

It is treated with products that do not irritate the skin, smooth to touch and which do not require any kind of special protection for use.

ISOLGREEN® WOOL is both practical and flexible, reinforcing all types of household insulation.

It is basically a "natural air-conditioning" which can absorb up to 33% of its weight in moisture, and return it to the atmosphere when the air is drier. Therefore it is considered to be excellent humidity regulator.

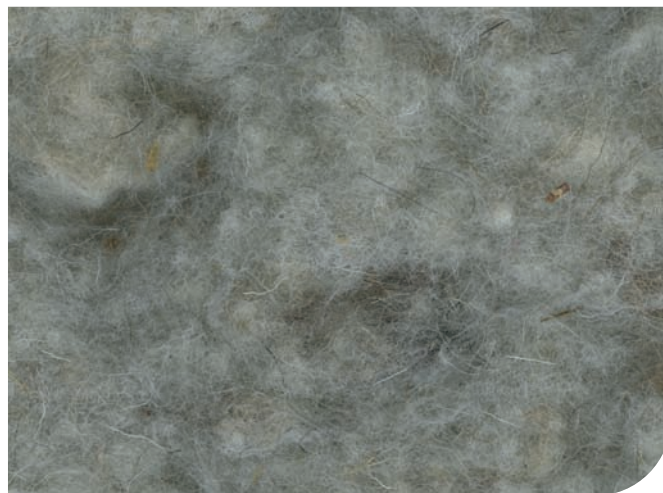
It protects against heat and cold, acting as a damper for major temperature changes.

Our natural wools have thermal conductivity values of 0.040 W/m·K

ISOLGREEN® WOOL characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	up to 250
Density (kg/m ³)	13,5 / 15 / 20 / 30
Packaging	plastic coated rolls or palletised sheets sheets: 1,20 x 0,60 / 1,35 x 0,60
Length (m)	from 5 to 10
Width (m)	up to 2,40

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ISOLGREEN® WOOL FELT

Our felts are made from 100% sheep's wool.

Our wool is previously treated conferring fireproof, anti-mite and fungicide properties.

The range of wool felt is highly functional, with good insulation properties making it efficient for installation as a building insulation product.

It is a natural product that is both innocuous and pleasant to the touch, which does not require any additional type of protection for handling and installation.

It absorbent capacity, even up to 30% of its weight in water and then to return this to the atmosphere when it is drier, makes it a thermal regulator and enhances environmental comfort.

Our insulating felts are effective, natural solutions to reduce noise levels caused by contact between beams and subsoil.

The impact of walking or vibrations, for example, are absorbed by the thickness of the wool felt under the flooring, thus effectively reducing the noise level.

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ISOLGREEN® WOOL FELT characteristics

Weight (G/m ²)	from 150 to 2.000
Thickness (mm)	up to 10
Density (kg/m ³)	up to 100
Packaging	plastic coated rolls
Length (m)	from 5 to 100
Width (m)	up to 2,40

ISOLGREEN® HEMP

ISOLGREEN® HEMP is a product made from hemp and polyester. With no additional treatment it is a non-irritant, recyclable and is mechanically resistant. It is naturally resistant to insects and rodents.

ISOLGREEN® HEMP is practical and flexible, reinforcing all types of insulation in buildings. It is an excellent thermal and acoustic insulator, as well as regulating humidity levels. It is the ideal insulation material for:

- Insulating cavity walls
- Insulating slabs for façades and roofs
- Acoustic ceilings

ISOLGREEN® HEMP characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	up to 250
Density (kg/m ³)	25 / 30
Packaging	plastic coated rolls or palletised sheets sheets: 1,20 x 0,60
Length(m)	from 7 to 10
Width (m)	up to 2,40

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ISOLGREEN® JUTE

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This is a natural insulator made from jute fibres and polyester. Jute fibre, in addition to having ecological value, also confers resistance and durability to the product. Its lignin contents make it ideal for reinforcing, because of its hardness whether dry or wet.

Because it is biodegradable, it is a material that does not leave any hazardous waste behind throughout its entire life cycle.

ISOLGREEN® JUTE characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	up to 250
Density (kg/m ³)	25 / 30
Packaging	plastic coated rolls or palletised sheets sheets: 1,20 x 0,60
Length (m)	from 7 to 10
Width (m)	up to 2,40

ISOLGREEN® COTTON

The cellulose comprising cotton fibres confer this product unique durability, resistance and absorption properties.

It is smooth and warm to the touch and acquires enhanced elasticity and resistance to crushing after it has been thermo-shaped.

ISOLGREEN® COTTON is a non woven made of virgin or recycled cotton to insulate ceilings, walls, etc., facilitating breathability and providing a feeling of freshness.

It is manufactured as a natural insulator or pre-treated, conferring fireproof properties for more specific needs.

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ISOLGREEN® COTTON characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	up to 200
Density (kg/m ³)	20 / 25 / 30
Packaging	plastic coated rolls or palletised sheets sheets: 1,20 x 0,60 / 1,35 x 0,60
Length (m)	from 5 to 10
Width (m)	up to 2,40

ISOLGREEN® FLAX

ISOLGREEN® FLAX is a product made from flax and polyester. Without any additional treatment it is recyclable and has good mechanical resistance properties. It is naturally resistant to attacks by insects and rodents.

ISOLGREEN® FLAX is practical and flexible, reinforcing all types of insulation in buildings. It acts as a natural humidity regulator. It has excellent thermal and acoustic insulating properties. It is ideal for insulating:

- Cavities between partition walls
- Slabs for façades and roofs
- Acoustic ceiling
- Insulation of roofs, outer walls and partition walls

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ISOLGREEN® FLAX characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	up to 250
Density (kg/m ³)	25 / 30
Packaging	plastic coated rolls or palletised sheets sheets: 1,20 x 0,60
Length (m)	from 7 to 10
Width (m)	up to 2,40

ISOLGREEN® SICO

ISOLGREEN® SICO is a composite insulator made from sisal, coconut wool and polyester. The coconut and sisal fibres belong to the family of hard fibres, with sisal being the strongest and woodiest of the agave family. Its principal components and cellulose and lignin, which confer high rigidity and hardness properties.

The combination of sisal and coconut fibres makes our product highly resistant and rigid, and the polyester content confers extra consistency to SICO.

The normal moisture content of the fibre is between 10% and 12%.

It is an odourless material, which is perfectly resistant to humidity and because of the woody fibres it is not attacked by insects. It does not rot which allows water vapour to diffuse across its surface. It reduces the noise transmission by percussion and through the air.

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2.

ISOLGREEN® MULTICOLOUR

A range of multicolour felt manufactured from different materials for diverse applications. Based on recycled products these insulators maintain their excellent thermal and acoustic absorbing properties.

ISOLGREEN® LOGROMOUSSE

Insulating felt made from recycled synthetic fibres, with thermo-set finishes. Fragmented foam is added during manufacture from recycled materials conferring enhanced elasticity and firmness to the material, whilst increasing its ability to absorb sound waves and heat.

This is a multicolour product with unalterable and non-deformable relief. We also have a range of felts made from recycled mattresses, capable of recovering its shape whilst being elastic and resistant for use as a damper.

Environmental impact: It does not contain any harmful products for the environment.



Environment
ally friendly



Humidity
regulator



Non-allergic



Acoustic
insulator

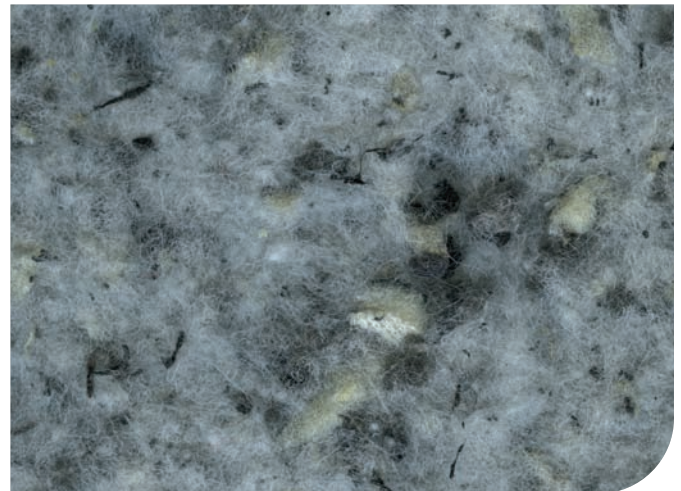
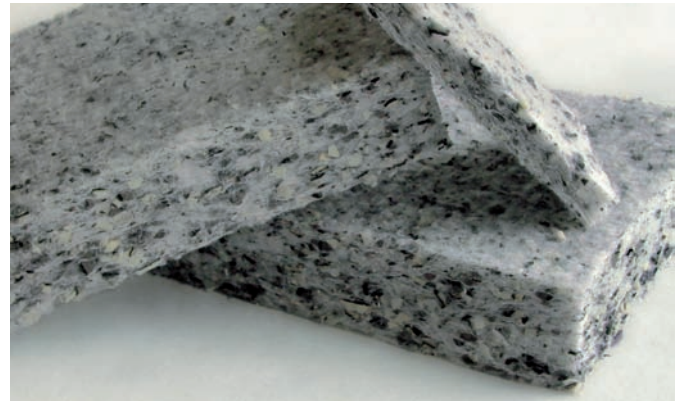


Thermal
insulator

ISOLGREEN® LOGROMOUSSE characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	up to 250
Density (kg/m ³)	25 / 30
Packaging	plastic coated rolls or palletised sheets Made to measure sheets
Length (m)	up to 50
Width (m)	up to 2,40

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ISOLGREEN® CO-FR

Insulators made from top quality synthetic, artificial and cotton fibres, with a thermo-set finish. Thanks to the technical fibres used, it has flame retardant properties, which makes it a flame retardant panel.

This is a multicolour panel with unalterable and non-deformable relief, whilst being flexible.

Environmental impact: It does not contain any harmful products for the environment.



Environment
ally friendly



Humidity
regulator



Non-allergic

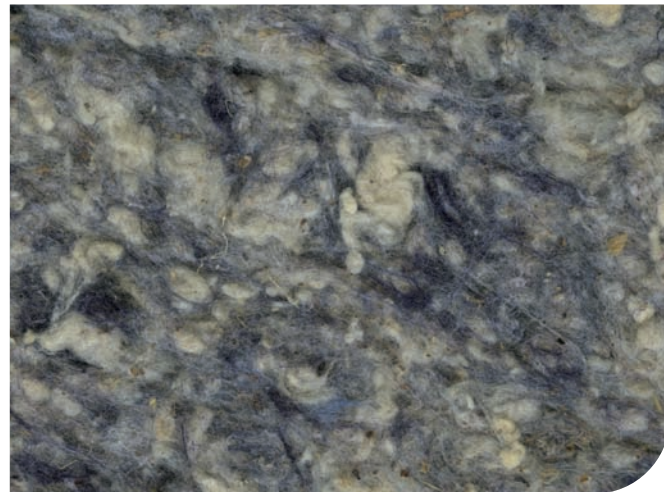


Fire-resistant

ISOLGREEN® CO-FR characteristics

Weight (g/m ²)	from 300 to 5.000
Thickness (mm)	from 8 to 50
Density (kg/m ³)	25 / 30
Packaging	plastic coated rolls or palletised sheets Made to measure sheets
Length (m)	up to 50
Width (m)	up to 2,40

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ISOLGREEN® CELLULOSE

ISOLGREEN® CELLULOSE is manufactured from recycled newspapers (unsold), clean and selected. The selection process is carried out by local recycling companies and the paper is then stabilised by adding co-adjuvants to improve its resistance to insects and to confer fireproof and anti-fungal properties. Its thermal properties and manufacturing procedure make **ISOLGREEN® CELLULOSE** an insulator with an unbeatable technological /ecological ratio and value for money.

The cellulose permits absorption of up to 17% of humidity without it losing its insulating properties. Because moisture is absorbed by the insulator rather than the wooden structure, it is an excellent protection system for use with wood, even wood that is not treated against moisture.

ISOLGREEN® CELLULOSE characteristics

Weight (g/m ²)	from 450 to 4.000
Thickness (mm)	from 15 to 80
Density (kg/m ³)	30 / 50
Packaging	sheets: 1,20 x 0,60

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Its thermal and soundproofing properties, its permeability to air and reaction to moisture mean it can compete with vegetable insulators such as flax, hemp and wood fibre, at a much cheaper price.

Environmental impact: It does not contain any harmful products for the environment.



Environment
ally friendly



Humidity
regulator



Non-allergic



Acoustic
insulator



Thermal
insulator



Fireproof



3.

ISOLGREEN® SYNTHETIC

Our synthetic products provide excellent performance as insulators or filling.



ISOLGREEN® SYNTHETIC

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We manufacture virgin or recycled polyester fibre articles.

ISOLGREEN® SYNTHETIC characteristics

Weight (g/m ²)	from 300 to 2.500
Thickness (mm)	from 5 to 50
Density (kg/m ³)	25 / 30
Packaging	plastic coated rolls or palletised sheets Made to measure sheets
Length (m)	up to 50
Width (m)	up to 2,40

ISOLGREEN® Logrotex Comparison Chart

						Applications	Thermal insulation properties		Sound insulation properties					Other technical characteristics			
Origin	Insulator	Packaging	Walls	Flooring	Roof	Lambda (W/m·K)	Thickness for R= 5 (cm)	Absorption coefficient at 400Hz	Absorption coefficient at 800Hz	Absorption coefficient at 1500Hz	Average absorption coefficient	Air flow resistivity (Rayle/m)	Density (Kg/m³)	Hygroscopic capacity	Water vapour resistance (μ)	Fire classification	
Vegetable fibers	Hemp 40/30	Rolls	●	●	●	0,04	19 a 21	0,58	0,77	0,68	0,7	25.296,7	20	medium	1 to 2	F	
		Sheets	●	●	●												
	Cotton	Rolls	●	●	●	0,037	19					25-30	medium	1 to 2	E		
		Sheets	●	●	●												
Animal fibers	Wool 60/13	Rolls	●	●	●	0,04	20	0.53	0.73	0.63	0.63	9.136,6	13,5	high	1 to 2	E	
		Sheets	●	●	●												
	Wool 100/13	Rolls	●	●	●	0,04	20	0.85	0.93	0.83	0.81		13,5	high	1 to 2	E	
		Sheets	●	●	●												
	Wool 100/20	Rolls	●	●	●	0,04	20	0.95	0.99	0.79	0.81	13.608,0	20	high	1 to 2	E	
		Sheets	●	●	●												
	Wool 140/13	Rolls	●	●	●	0,04	20	0.78	0.98	0.78	0.84	8.572,5	13,5	high	1 to 2	E	
		Sheets	●	●	●												

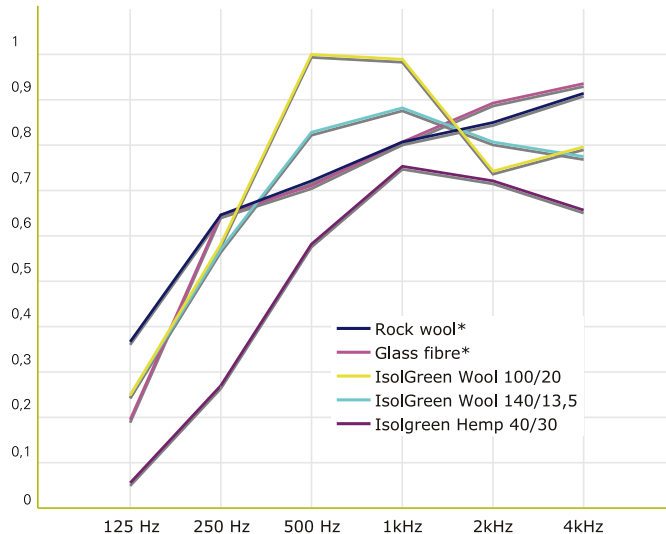
Graphical comparison of the different Isolgreen®

The Kundt Tube simulation tests to calculate insulation of a sandwich wall comprising 15 mm plasterboard + absorbent material (Isolgreen) in 70 mm profiles of + 15 mm plasterboard show similar insulation performance to that of other material types.

ACOUSTIC ABSORPTION

Sound absorption coefficient vs. commercial insulators

According to the acoustic absorption measurements, carried out at independent centres, our products report similar levels to those of rock wool, particularly in thicknesses of 140 and 100 mm. Absorption of frequencies between 200 and 400 Hz is somewhat higher than rock wool, due to the higher thickness of our materials. In the case of higher densities, our products achieve better absorption values.



* Data obtained from independent studies



PACKAGING



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