



# TERRAWOOL

## Products Catalogue 2021

- Rainclad
- Dimclad
- Rainclad Plus 140
- Flexi Frame
- TW50/60/80/100/140

Acoustic and Thermal  
Insulation

01 Description & Advantages

02 Performance

03

External Insulation  
Rainclad  
Rainclad Plus 140  
Dimclad

09  
WALLCLAD

11

Thermal & Acoustic  
Insulation  
Flexi Frame  
TW50-140

17 Sustainability & Health and Safety

“Where power of natural stone meets comfort”

## Description



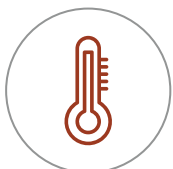
All Terrawool insulation boards have achieved a Euroclass rating of A1 for non-combustibility. Terrawool stone wool slabs are premium insulation boards composed of mineral wool, which is made up of thousands of fibres. Terrawool is made from volcanic basalt rock. Simplified recreation starts with reheated and melted volcanic rock within a large furnace up to 1,500°C (2,700°F). The liquid rock is channeled into a chamber where it's spun into fibrous strands. Balance density systems are highly engineered throughout design, accommodating slight imperfections on substructures, while allowing robust fixing. The breathable open-cell structure of Terrawool stone wool slabs allows water vapour to pass through, while factory-applied water repellent fibres on Rain Clad prevent water transmission through the insulation layer.

Terrawool insulation goes extra lengths to offer complete assurance against the threat of fire. With its ability to withstand temperatures of up to 1,000°C (1,800°F), the Terrawool insulation contains and prevents the spread of fire. At the same time, the stone wool will not produce any toxic smoke or emissions. Terrawool insulation is the superior choice for all construction needs, especially high-rise structures. In addition to fire resistance it offers high thermal insulation as well as optimum acoustic performance. The open porous structure of Terrawool insulation absorbs and reduces the impact of sound, while providing high thermal performance.



## Advantages

- Non-combustible Euroclass A1 rating
- Suitable for buildings over 18 m
- High thermal and acoustic performance
- The breathable open-cell structure of Terrawool insulation boards allows water vapour to pass through
- Maximum versatility that allows you to create the façade you desire
- Factory-applied water-repellent fibres on Rainclad work to prevent water ingress during construction
- Specifically designed balance density of Terrawool insulation boards reduces the number of fixing
- Can easily be fitted around the brackets and provides a continuous thermal performance with the help of random fibre orientation
- TW Series provide excellent sound insulation for your acoustic needs



Energy Saving



Fire Resistance



Acoustic Comfort



Sustainable Materials



Durability

# Performance



Terrawool insulation products provide outstanding thermal protection, as well as many added benefits:



## Acoustic performance

Terrawool insulation achieves optimum acoustic performance.



## Fire

Terrawool slabs have been classified Euroclass A1 fire resistance to EN ISO – 13501-1.



## Wind resistance

Terrawool has passed extensive wind loading fatigue tests.



## Water resistance

Terrawool Rain Clad is specifically designed for use in external insulation systems, due to its water-repelling agent content.



## Condensation control

Terrawool insulation slabs are vapour-permeable. They allow moisture vapour to pass through the construction and reduce the risk of condensation.



## Sustainable Materials

Terrawool slabs are natural and widely recyclable.



## Durability

The properties and benefits of Terrawool insulation slabs will remain effective for the lifetime of the building.

# Application Areas

---



Terrawool range of insulation boards are designed for use in all construction applications. Products in this section are specially manufactured for rainscreen cladding and non-ventilated cladding applications.

## Terrawool Rainclad / Plus Ventilated

---

High performance A1 non-combustible thermal and acoustic insulation for rainscreen cladding applications.

With factory-applied water repelling agent, Rainclad also prevents water ingress during construction whilst exposed.

## Terrawool Rainclad Plus 140

---

High performance high density A1 non-combustible thermal and acoustic insulation for non-ventilated cladding applications.

Rainclad Plus 140 is specially designed for non-ventilated cladding applications such as external render applications and solid brick slip applications.

## Terrawool Dimclad

---

High performance A1 non-combustible thermal and acoustic insulation with black tissue facing for all open-joint cladding systems and shadow gaps at any height. Eliminating the need to fix an additional layer that increases system weak points and additional labour costs.

Dimclad provides extra wind protection and UV stability for optimal efficiency on high-rise buildings.



# Terrawool Rainclad

---

## High Performance A1 non-combustible thermal and acoustic insulation for rainscreen cladding application

Rainclad is a non-combustible cladding insulation designed and developed by our highly experienced engineers for optimum performance in both ventilated, non-ventilated cladding systems and sealed systems such as curtain walling. Whatever your external wall insulation requirements are Rainclad is the answer.

With the factory-applied water repelling agent, Rainclad prevents the water ingress during construction. Rainclad is an A1 rated non-combustible product suitable for use on any type of building including the ones over 18m. It also gives a significant acoustic performance to your project. Rainclad insulation boards are made of stone wool fibres with special water repelling agent, which enhances the breathability of the walls and subsequently limits condensation.

The density of Rainclad is 60 kg/m<sup>3</sup> and it has a 0,035 W/mK thermal conductivity level.

# Terrawool Rainclad Plus

---

## All benefits of Rainclad with the freedom to create whats best for your design

Rainclad Plus offers you a customised density option and can be manufactured on bespoke bases according to the project requirements. Rainclad Plus is the right solution if you are looking for more dense or less dense cladding insulation to achieve the needed thermal and acoustic requirements. Truly offering you freedom and flexibility in your design. Please contact our support team for bespoke solutions.



## Technical Information Table

TERRAWOOL INSULATION SLAB											
Material Properties	Symbol	Unit	Description							Tolerance	Standart
Material	-	-	Mineral Wool							-	EN 13162
Type Of Material	-	-	Insulation Slab							-	-
Density	$\rho$	Kg/m <sup>3</sup>	60							+/-%3	-
Width	b	mm	600							+/-%1,5	EN 822
Length	l	mm	1200							+/-%2	EN 822
Thickness	d	mm	30	50	60	80	90	100	120	T3	EN 823
			140	150	160	180	200	220	240		
Thermal Resistance	RD	m <sup>2</sup> K/W	0,86	1,43	1,71	2,29	2,57	2,86	3,43	-	EN 12667/ 12939
			4,00	4,29	4,57	5,14	5,71	6,29	6,89		
Fire Class Reaction	-	-	A1							-	EN 13501-1
Square Deviation	Sb	mm/m	max 5							-	EN 824
Surface Smoothness	Smax	mm	max 6							-	EN 825
Dimensional Stability	$\Delta\epsilon_d$	%	max 1							-	EN 1604
Thermal Conductivity Valued Declared 10°C	$\lambda_D$	W/mK	0,035							-	EN 12667/ 12939
Covering	-	-	Uncoated							-	-
Moisture Diffusion Resistance	$\mu$	-	1							-	EN 12086: 2002
Vertical Faces Traction	$\delta_{mt}$	kPa	not required							-	EN 1607
Compressive Strength	$\delta_{10}$	kPa	not required							-	EN 826
Dip Portion, Long-term Water Absorption	W <sub>lp</sub>	Kg/m <sup>2</sup>	≤ 3							-	EN 12087
Dip Portion, Short-term Water Absorption	W <sub>p</sub>	Kg/m <sup>2</sup>	≤ 1							-	EN 1609
Material Packing	-	-	PE FILM							-	-

# Dimclad

High-performance, A1 non-combustible thermal and acoustic insulation with black tissue facing for open-joint cladding systems and shadow gaps at any height.

Dimclad cladding insulation has been specifically engineered to promote fire safety and overall high performance. Along with being compatible with a number of different cladding attachment systems, Dimclad provides extra wind protection for optimal efficiency on high-rise buildings.

For open-joint cladding systems, Dimclad is the perfect solution due to its black mineral fibre facing. This feature is engineered to deliver UV stability in the long term-increasing its thermal performance.

In the event of being directly exposed to fire, Dimclad's non-combustible features reduce the risk of emitting toxic gasses and spreading flames, therefore protecting the building. The factory-applied water repelling agent promotes Dimclad for use in construction during rainy weather, thus preventing water ingress and avoiding delays. Dimclad's moisture resistance helps maintain an adequate insulating value for an extended period of time.

The density of Dimclad is 60 kg/m<sup>3</sup> and it has a 0.039 W/mK thermal conductivity level.



**Black Tissue Facing**





## Technical Information Table

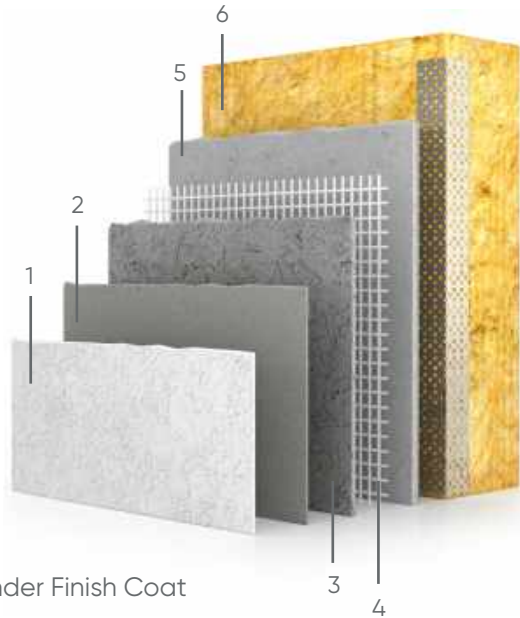
TERRAWOOL INSULATION SLAB									
Material Properties	Symbol	Unit	Description					Tolerance	Standart
Material	-	-	Mineral Wool					-	EN 13162
Type Of Material	-	-	Insulation Slab					-	-
Density	$\rho$	Kg/m <sup>3</sup>	60					+/-%3	-
Width	b	mm	600					+/-%1,5	EN 822
Length	l	mm	1200					+/-%2	EN 822
Thickness	d	mm	50	60	80	100	120	T3	EN 823
Thermal Resistance	RD	m <sup>2</sup> K/W	1,28	1,54	2,05	2,56	3,07	-	EN 12667/ 12939
Fire Class Reaction	-	-	A1					-	EN 13501-1
Square Deviation	Sb	mm/m	max 5					-	EN 824
Surface Smoothness	Smax	mm	max 6					-	EN 825
Dimensional Stability	$\Delta E_d$	%	max 1					-	EN 1604
Thermal Conductivity Valued Declared 10°C	$\lambda_D$	W/mK	0,039					-	EN 12667/ 12939
Covering	-	-	Coated					-	-
Moisture Diffusion Resistance	$\mu$	-	1					-	EN 12086: 2002
Vertical Faces Traction	$\delta_{mt}$	kPa	not required					-	EN 1607
Compressive Strength	$\delta_{10}$	kPa	not required					-	EN 826
Dip Portion, Long-term Water Absorption	W <sub>lp</sub>	Kg/m <sup>2</sup>	≤ 3					-	EN 12087
Dip Portion, Short-term Water Absorption	W <sub>p</sub>	Kg/m <sup>2</sup>	≤ 1					-	EN 1609
Material Packing	-	-	PE FILM					-	-

# RAINCLAD Plus 140

High performance, high density, A1 non-combustible thermal and acoustic insulation with water-repellent.

Rainclad Plus 140 is specially designed for non-ventilated cladding systems such as exterior wall rendering and Brick Slip Cladding systems such as WALLCLAD to achieve an A1 Fire Rated cladding with high thermal and acoustic insulation.

Rainclad Plus has been specifically engineered to promote flexibility in your designs. It is suitable to use on existing buildings, new build projects and re-cladding for non-combustible thermal and acoustic insulation purposes.



- 1- Render Finish Coat
- 2- Render Primer (Optional)
- 3- Render Base Coat
- 4- Reinforcement Mesh
- 5- Render Base Coat
- 6- Rainclad Plus 140 Stone Wool Insulation Board

## Fire Resistance

Non-combustible/Euroclass A1 fire resistance

## Water Resistance

Factory-applied water repelling agent prevents water ingress during construction

## Condensation Control

Controls condensation due to the vapour permeable feature

## Wind Resistance

Rainclad has passed extensive wind loading fatigue tests.

## Insulation Properties

Provides excellent thermal and acoustic insulation performance



WALLCLAD is a unique stone wool brick cladding system that enables you to use real clay brick slips to create an insulated brick facade with A1 Fire Rating. It is an alternative solution for external brick cladding, which is easy to apply and has many advantages over similar systems on the market.

WALLCLAD is stone wool based solid wall insulation which can be fitted to almost any type of substrate such as masonry block work, concrete, timber frame and steel frame. It is suitable for buildings up to 18m height and combines chemical and mechanical fixings for added strength and durability.

WALLCLAD is a user friendly system with less but durable components, thus enhancing thermal efficiency massively. It provides high protection of the building's structure by keeping your building warm and dry throughout the winter and summer.



Wallclad is suitable for any metric natural clay brick slips. For our full product range please visit [www.terra bricks.co.uk](http://www.terra bricks.co.uk)

### Terra Tracking Board

Lightweight galvanised metal sheet suitable to use with any metric brick slips

### SIKAFLEX<sup>®</sup>-545

## RAINCLAD PLUS 140

High performance A1 Fire Rated, natural, non-combustible dense stone wool insulation

- Non-combustible, A1 Fire Rated non-ventilated cladding system
- Suitable for new builds, existing buildings and re-cladding
- WALLCLAD can be used on substrates such as brickwork, dense/light block, timber frame and SFS
- Terra tracking board is lightweight for easy installation and can be used with any metric brick slips.
- Eliminates wet trades by using MS Polymer based adhesive
- Thermal efficiency reduces energy consumption and improves comfort

Full technical installation guide and training are available upon request.

## Technical Information Table

TERRAWOOL INSULATION SLAB									
Material Properties	Symbol	Unit	Description					Tolerance	Standart
Material	-	-	Mineral Wool					-	EN 13162
Type Of Material	-	-	Insulation Slab					-	-
Density	$\rho$	Kg/m <sup>3</sup>	140					+/-%3	-
Width	b	mm	600					+/-%1,5	EN 822
Length	l	mm	1200					+/-%2	EN 822
Thickness	d	mm	50	60	70	80	100	T3	EN 823
			110	120	130	140	150		
Thermal Resistance	RD	m <sup>2</sup> K/W	1,37	1,65	1,92	2,20	2,75	-	EN 12667/ 12939
			3,02	3,30	3,57	3,85	4,12		
Fire Class Reaction	-	-	A1					-	EN 13501-1
Square Deviation	Sb	mm/m	max 5					-	EN 824
Surface Smoothness	Smax	mm	max 6					-	EN 825
Dimensional Stability	$\Delta E_d$	%	max 1					-	EN 1604
Thermal Conductivity Valued Declared 10°C	$\lambda_D$	W/mK	0,0364					-	EN 12667/ 12939
Covering	-	-	Uncoated					-	-
Moisture Diffusion Resistance	$\mu$	-	1					-	EN 12086: 2002
Vertical Faces Traction	$\delta_{mt}$	kPa	10					-	EN 1607
Compressive Strength	$\delta_{10}$	kPa	min 50					-	EN 826
Dip Portion, Long-term Water Absorption	W <sub>lp</sub>	Kg/m <sup>2</sup>	≤ 3					-	EN 12087
Dip Portion, Short-term Water Absorption	W <sub>p</sub>	Kg/m <sup>2</sup>	≤ 1					-	EN 1609
Material Packing	-	-	PE FILM					-	-



## Thermal & Sound Insulation

---

Terrawool insulation boards achieve high acoustic performance due to their dense fibre orientation.

Stonewool is considered to be the most effective material for noise reduction from adjacent floors and other rooms within the same dwelling.

Terrawool sound insulation is used to build quiet, peaceful, and calming spaces in both residential and commercial environments. Because of its density, non-directional fibre alignment, and free porous structure, it catches and stops sound waves from flowing through. Terrawool insulation absorbs sound waves and removes vibration along with being non-combustible, and a temperature tolerance of up to 1,000°C.

## Terrawool Flexi Frame

---

Terrawool Flexi Frame is specially designed for a variety of applications such as lofts, roofs and SFS systems and inner face of external walls.

## Terrawool TW50/60/80/100/140

---

Terrawool TW consists of stone wool insulation boards which can be applied to all types of construction project to achieve a high fire rate as well as thermal and acoustic performance.



# Terrawool Flexi Frame

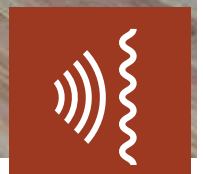
Terrawool Flexi Frame is specially designed for a variety of applications such as lofts, roofs, SFS systems and inner face of external walls.

Terrawool Flexi Frame is made from stone wool, which gives a perfect fire rate as well as thermal and acoustic insulation. It is a non-combustible product and can be used in new build and refurbishment projects. It is easy to apply and suitable for a variety of loft and roof insulations as well as inner face of the external walls. Terrawool Flexi Frame is available in a wide range of densities and thicknesses that gives a thermal resistance (RD) rate between 0.086 and 4.57 m<sup>2</sup> K/W.

Flexi Frame can be applied to any kind of frame structure such as timber frame and aluminium studs. It allows you to have a proper acoustic and thermal insulation.

The shrinking from the timber frames or aluminium studs will not effect installation therefore you can easily place the slabs in position and it will fit the space perfectly.

For optimum effectiveness Flexi Frame has a wide range of density options from 40 kg/m<sup>3</sup> to 80 kg/m<sup>3</sup> and thickness options from 30mm to 160mm.



## Technical Information Table

TERRAWOOL INSULATION SLAB														
Material Properties	Symbol	Unit	Description										Tolerance	Standart
Material	-	-	Mineral Wool										-	EN 13162
Type of Material	-	-	Insulation Slab										-	-
Density	$\rho$	Kg/m <sup>3</sup>	40-80										+/-%3	-
Width	b	mm	600										+/-%1,5	EN 822
Length	l	mm	1200										+/-%2	EN 822
Thickness	d	mm	30	40	50	60	80	100	120	140	160	T3	EN 823	
Density	$\rho$	Kg/m <sup>3</sup>	40	40	50	50	60	60	80	80	80	-	-	
Thermal Resistance (Density 40-80)	RD	m <sup>2</sup> K/W	0,86	1,14	1,43	1,71	2,29	2,86	3,43	4	4,57	-	-	
Fire Class Reaction	-	-	A1										-	EN 13501-1
Square Deviation	Sb	mm/m	max 5										-	EN 824
Surface Smoothness	Smax	mm	max 6										-	EN 825
Dimensional Stability	$\Delta\epsilon_d$	%	max 1										-	EN 1604
Thermal Conductivity Valued Declared 10°C	$\lambda_D$	W/mK	0,035										-	EN 12667/12939
Covering	-	-	Uncoated										-	-
Moisture Diffusion Resistance	$\mu$	-	1										-	EN 12086:2002
Vertical Faces Traction	$\delta_{mt}$	kPa	--/min15										-	EN 1607
Compressive Strength	$\delta_{10}$	kPa	--/min15										-	EN 826
Dip Portion, Long-term Water Absorption	Wlp	Kg/m <sup>2</sup>	$\leq 3$										-	EN 12087
Dip Portion, Short-Term Water Absorption	Wp	Kg/m <sup>2</sup>	$\leq 1$										-	EN 1609
Material Packing	-	-	PE FILM										-	-

## Terrawool TW50/60/80/100/140

Terrawool TW consists of stone wool insulation boards which can be applied to all types of construction projects to achieve a high thermal and acoustic performance as well as A1 fire rate.

TW series are suitable for all type of building projects' floors, internal partition walls and separating wall applications. With a significant thermal and acoustic performance, the heat and cold loose through the walls and floors are limited.

TW has a wide range of products and allows you to find the right solution for your project while achieving your targeted RD Values.

Terrawool TW range has a variety of thicknesses and densities from 50kg/m<sup>3</sup> to 140kg/m<sup>3</sup>. TW insulation boards can be produced without covering, with covering of foil, white and black tissues. For facing alternatives please contact our support team.





## Technical Information Table

TERRAWOOL INSULATION SLAB											
Material Properties	Symbol	Unit	Description							Tolerance	Standart
Material	-	-	Mineral Wool							-	EN 13162
Type of Material	-	-	Insulation Slab							-	-
Density	$\rho$	Kg/m <sup>3</sup>	50-140							+/-%3	-
Width	b	mm	600							+/-%1,5	EN 822
Length	l	mm	1200							+/-%2	EN 822
Thickness	d	mm	30	40	50	60	80	100	120	T3	EN 823
Thermal Resistance (Density 60-80)	RD	m <sup>2</sup> K/W	0,86	1,14	1,43	1,71	2,29	2,86	3,43	-	EN 12667/12939
Thermal Resistance (Density 100-150)	RD	m <sup>2</sup> K/W	0,81	1,08	1,35	1,62	2,16	2,70	3,24	-	EN 1266712939
Square Deviation	Sb	mm/m	max 5							-	EN 824
Surface Smoothness	Smax	mm	max 6							-	EN 825
Dimensional Stability	$\Delta\epsilon d$	%	max 1							-	EN 1604
Thermal Conductivity Valued Declared 10°C	$\lambda_D$	W/mK	0,0365							-	EN 12667/12939
Covering	-	-	Uncoated							-	-
Fire Class Reaction	-	-	A1							-	EN 13501-1
Moisture Diffusion Resistance	$\mu$	-	1							-	EN 12086:2002
Vertical Faces Traction	$\delta_{mt}$	kPa	--/min15							-	EN 1607
Compressive Strength	$\delta_{10}$	kPa	--/min15							-	EN 826
Dip Portion, Long-term Water Absorption	Wlp	Kg/m <sup>2</sup>	≤ 3							-	EN 12087
Dip Portion, Short-Term Water Absorption	Wp	Kg/m <sup>2</sup>	≤ 1							-	EN 1609
Material Packing	-	-	PE FILM							-	-

## Work on site

---

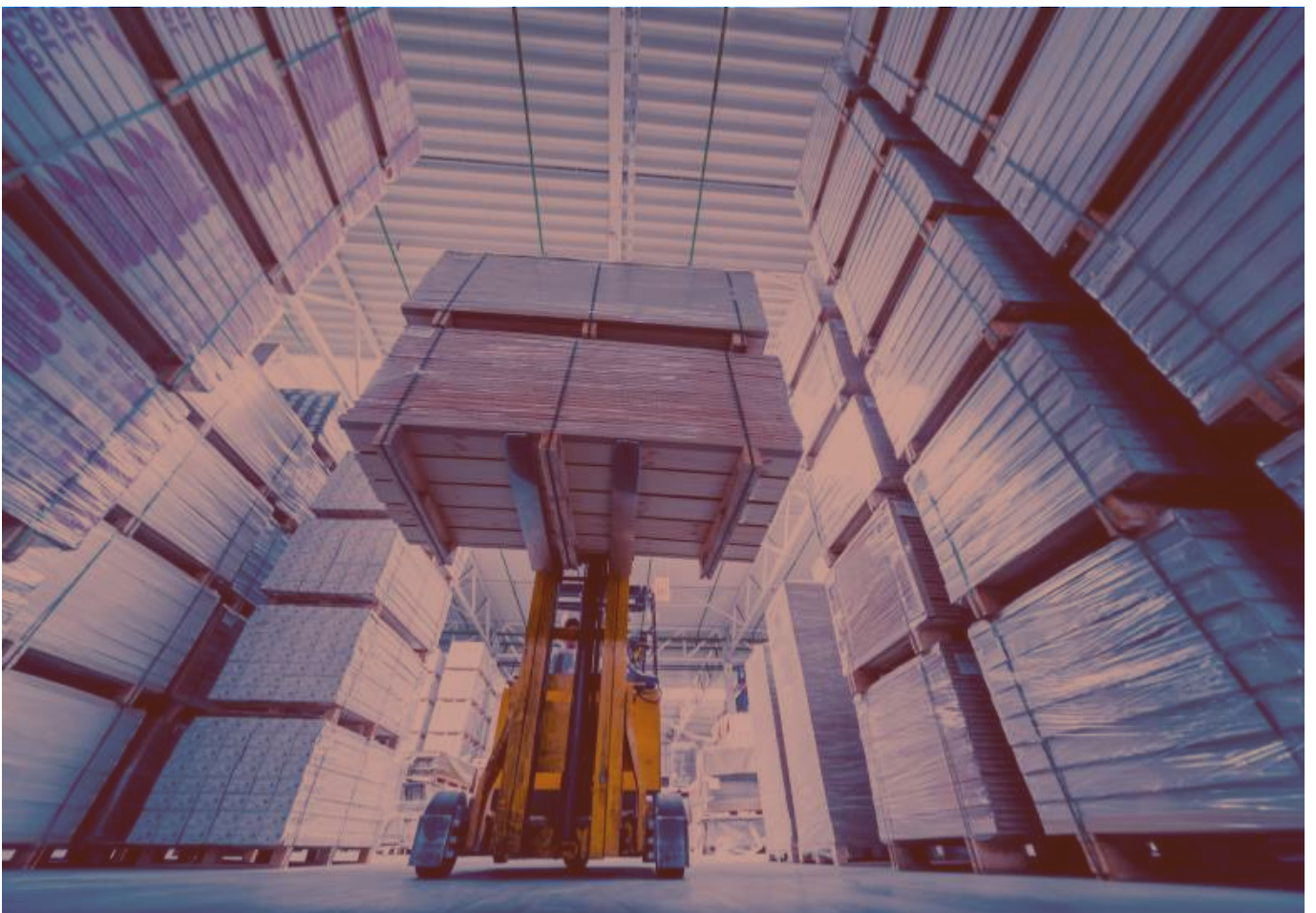
Terrawool insulation slabs are light and easy to cut to any shape with a sharp knife. Slabs are supplied in waterproof packaging on pallets that are shrink wrapped for outside storage.

Once installed, the slabs can be left unprotected for an extended period of time, prior to fixing your chosen exterior facade.

## Reminders on Loading, Offloading, Transport and Storage

---

- All work should be carried out in dry weather
- The slabs should be covered even for short distances
- The slabs should be stored in the original packaging and should not be used if the packaging is damaged
- The slabs should not be stepped on
- The textured side of the slabs should be facing outward
- Slab packs should never be pulled on the ground
- Slabs should only be carried by minimum of 2 people
- Slabs should be stored on a flat and non-slip surface



## Sustainability

---

Terrawool stands by sustainable production by using nature's existing resources efficiently. Being made of natural material, Terrawool promotes protecting the environment by saving energy. With the use of stone wool the energy is used effectively and the carbon emissions are reduced. Terrawool continues to develop and innovate products that improve the efficient use of natural resources.

Terrawool is always motivated to be one step ahead in protecting the environment by using more efficiently, what nature has given us.



## Environment

---

Being made of natural raw materials, Terrawool is an environmentally friendly product. Our slabs are ecological and don't allow growth of bacteria and other microorganisms. Terrawool reduces the fuel costs and energy in use, provides sound insulation and fire resistance.

Terrawool slabs are widely recyclable. Due to its dimensional stability, it is not affected by temperature changes that may occur during the year.

## Health and Safety

---

Terrawool Rain Clad stone wool is not classified carcinogenic according to current UK and Republic of Ireland health and safety regulations and EU Directive 97/69/EEC and EC.

To guide the preparation of the risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH), a Material Safety Data Sheet can be downloaded from [terrawool.co.uk](http://terrawool.co.uk).

### DISCLAIMER

The information given in this brochure is believed to be accurate at the time of publication, therefore **Terra Building Materials LTD.** does not accept legal responsibility for the contents of this catalogue. Unless otherwise specifically stated, product specifications mentioned in this brochure were current at the time of writing and are subject to change without notice by the manufacturers or distributors. **Terra Building Materials LTD.** does not accept legal responsibility for consequences of applying the product different than described within this brochure. Any dissemination, distribution, copying or use of this catalogue is strictly prohibited. All rights reserved in this catalogue cannot be replicated or used without **Terra Building Materials LTD.**'s consent. Before you print think about the **ENVIRONMENT.**



**TERRA BUILDING MATERIALS LTD.**

**Head Office:**

3 Bedlam Mews,  
London, SE11 6DF  
+44(0)20 3961 3000  
info@terra wool.co.uk  
www.terra wool.co.uk

**Boutique Showroom:**

4 Bedlam Mews,  
London, SE11 6DF

**Showroom:**

Unit 1, Mirravale Trading Estate,  
Selinas Lane  
Dagenham, RM8 1YY

**Member of KNT Group**