THERMAWOOL

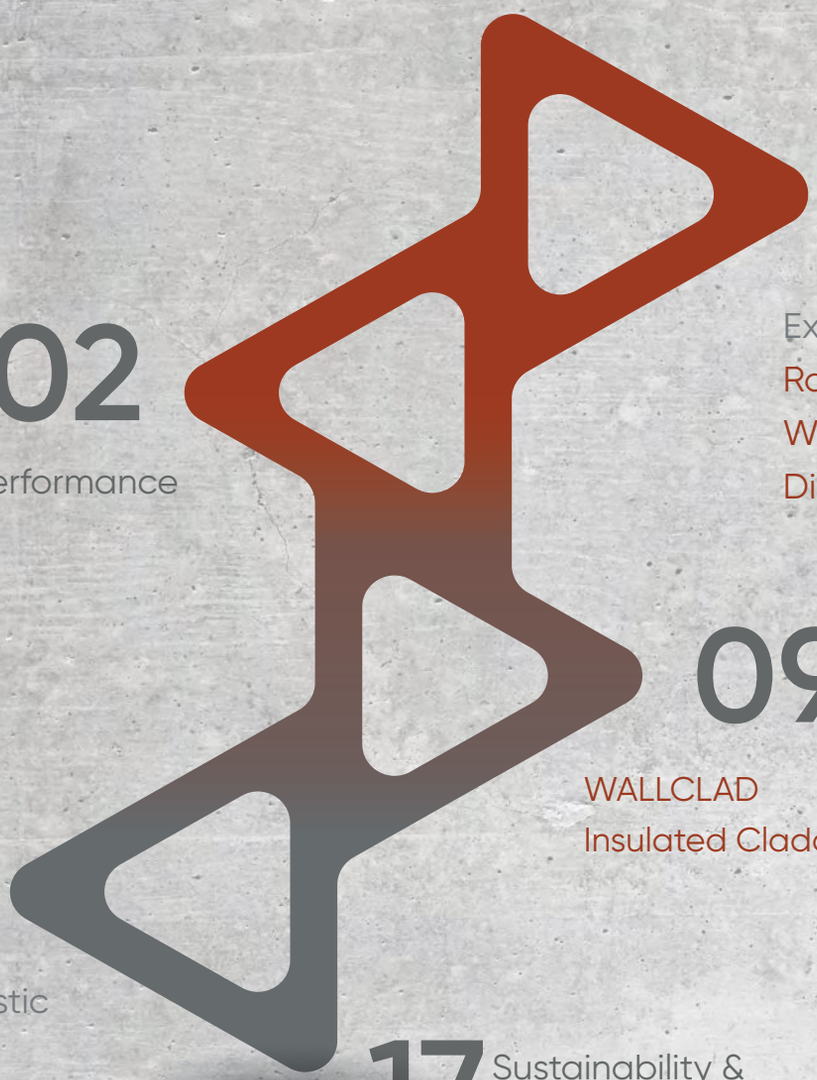
Product Catalogue

2023

- Rainclad
- Wallclad
- Frameclad
- Floorclad

Acoustic and Thermal Insulation

Content



"Where power of natural stone meets comfort"

THERMAWOOL

Description

All Thermawool insulation boards have achieved a Euroclass rating of A1 for non-combustibility. Thermawool stone wool slabs are premium insulation boards composed of mineral wool, which is made up of thousands of fibres. Thermawool 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 Thermawool 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.

Thermawool 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 Thermawool insulation contains and prevents the spread of fire. At the same time, the stone wool will not produce any toxic smoke or emissions. Thermawool 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 Thermawool 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 Thermawool 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 Thermawool 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
- Frameclad provide excellent sound insulation for your acoustic needs

Energy Saving

Fire Resistance

Acoustic Comfort

Sustainable Materials

Durability

Performance

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

Acoustic performance

Thermawool insulation achieves optimum acoustic performance.

Fire

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

Wind resistance

Thermawool has passed extensive wind loading fatigue tests.

Water resistance

Thermawool Rainclad and Wallclad is specifically designed for use in external insulation systems, due to its water-repelling agent content.

Condensation control

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

Sustainable Materials

Thermawool slabs are natural and widely recyclable.

Durability

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

Application Areas

Thermawool 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.

Rainscreen Cladding – RAINCLAD

High-performance A1 non-combustible thermal and acoustic insulation for rainscreen cladding. Factory-applied water repellent prevents ingress during construction. Available in Black Tissue to reduce system weak points and costs. UV-stable for long-term efficiency.

Rainscreen Cladding – RAINCLAD SOFFIT

Thermawool Soffit Slab is non-combustible stone wool insulation for soffits. Available with plain, foil or tissue facing, providing up to 4 hours fire protection to concrete soffits.

EWI – WALLCLAD

High-density, non-combustible thermal and acoustic insulation with water repellence. Designed for non-ventilated systems such as exterior wall rendering. Delivers A1 Fire-Rated cladding.

Floor – FLOORCLAD

Suitable for all common floor applications. Offers high compressive strength with a tissue facing, compatible with various installation methods.

Wall – FRAMECLAD

Designed for roofs, lofts, SFS systems and inner face or external walls. Stone wool boards offer high fire resistance with excellent thermal and acoustic performance.

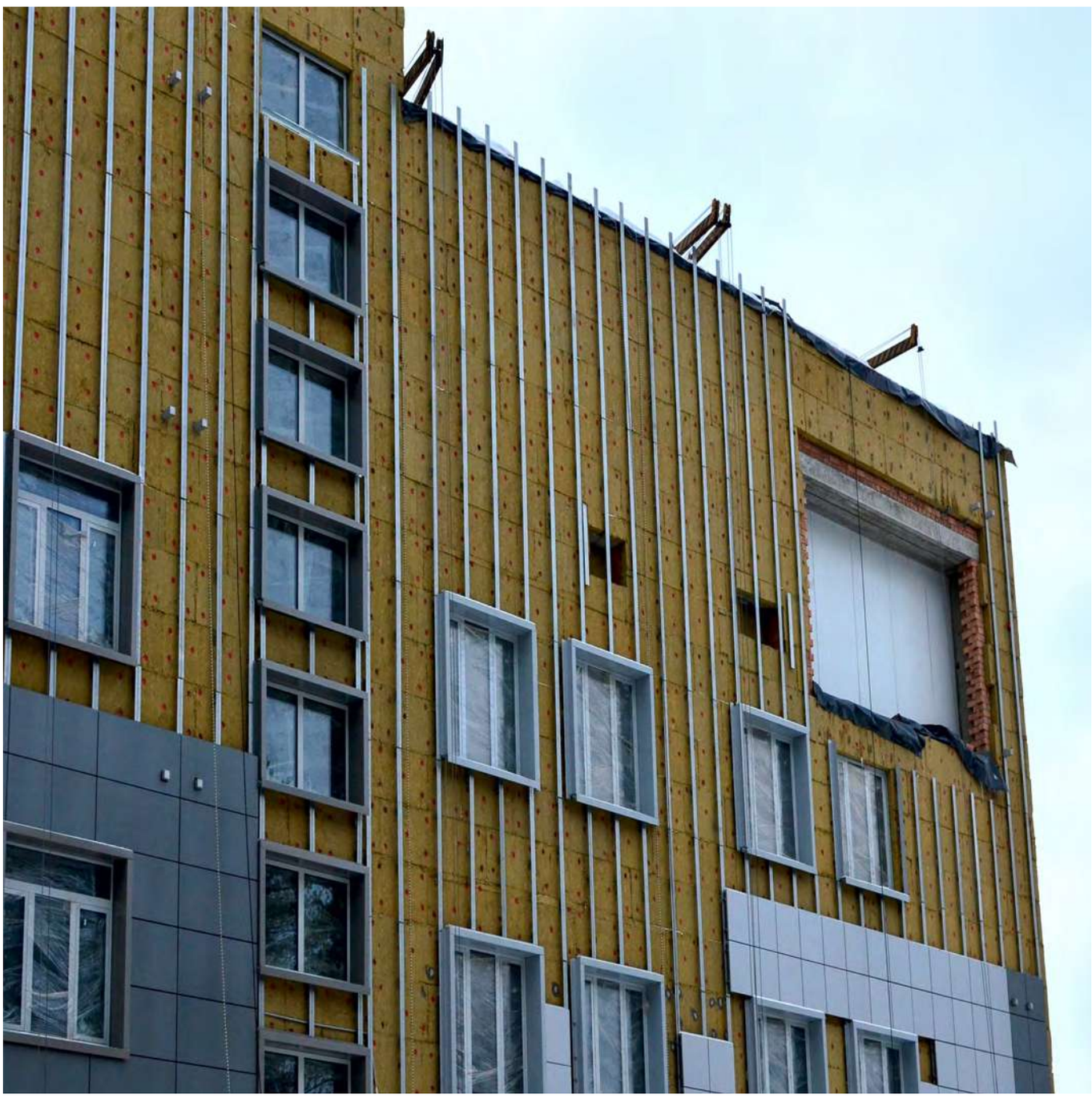
RAINCLAD

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 densitiy of Rainclad is 60 kg/m³ and it has a 0,035 W/mK thermal conductivity level.



Technical Data Sheet

CLADMATE Facade Systems	**TECHNICAL DATA SHEET** THERMAWOOL **EN 13162+A1**											
Product Name	**RAINCLAD**											
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification											
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product											
Surface Facing	Not faced											
Area of Usage	Between aluminum, PVC, granite, marble and glass facade coating systems Light weight partition walls can be used as internal insulation of exterior walls, stairs and elevator cavities.											
Product Performance	**Technical Characteristics**	**Test Method**	**Units**	**Value or Statement**								
	Thickness / d	EN ISO 29466	mm	30 - 150								
	Tolerances - T4	-3% or -3 mm; +5% or +5mm. - absolute large value in tolerance, + absolute small value in tolerance.										
	Length / l	EN ISO 29465	mm	1200								
	Tolerances ±2 %											
	Width/ b	EN ISO 29465	mm	600								
	Tolerances ±1,5 %											
	Squareness/ S_b	EN 824	mm/m	max.5								
	Flatness/ S_{max}	EN ISO 29468	mm	max.6								
	Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.035								
	Thermal Resistance / R_d	EN 12667 EN 12939	mm	30	40	50	60	70	80	100	120	140	150
			(m².K)/W	0.85	1.10	1.40	1.70	2.00	2.25	2.85	3.40	4.00	4.25
	Fire Reaction Class	EN 13501-1	Euroclass	A1								
	Short Term Water Absorption/ WS	EN ISO 29767	kg/m²	≤1								
	Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m²	≤3								
	Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)								
	Water Vapour Permeability / MU	EN 12086	μ	1								
	Air Flow Resistance/ Afr	EN 29053	-	NPD								
Storage	The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.											
	Product packages should be protected from water, moisture and sunlight in the storage area.											
	Appropriate work safety clothing and equipment must be used to protect the skin, eye and upper respiratory system during transport.											
	Product packages should be placed on at least one pallet which should not be in direct contact with the ground at storage area.											
	Products must be covered with a tarpaulin when shipped.											
	Do not leave any material on the products in such a way as to damage the package and the product.											
	Palletized products should not be stacked and stored on top of each other.											
	The opened packages must not be disposed of and must be disposed of in accordance with the regulations.											

RAINCLAD DIM

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 it's 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. Dimclads moisture resistance helps maintain an adequate insulating value for an extended period of time.

The density of Dimclad is 60 kg/m³ and it has a 0.039 W/mK thermal conductivity level.

Black Tissue Facing

Technical Data Sheet

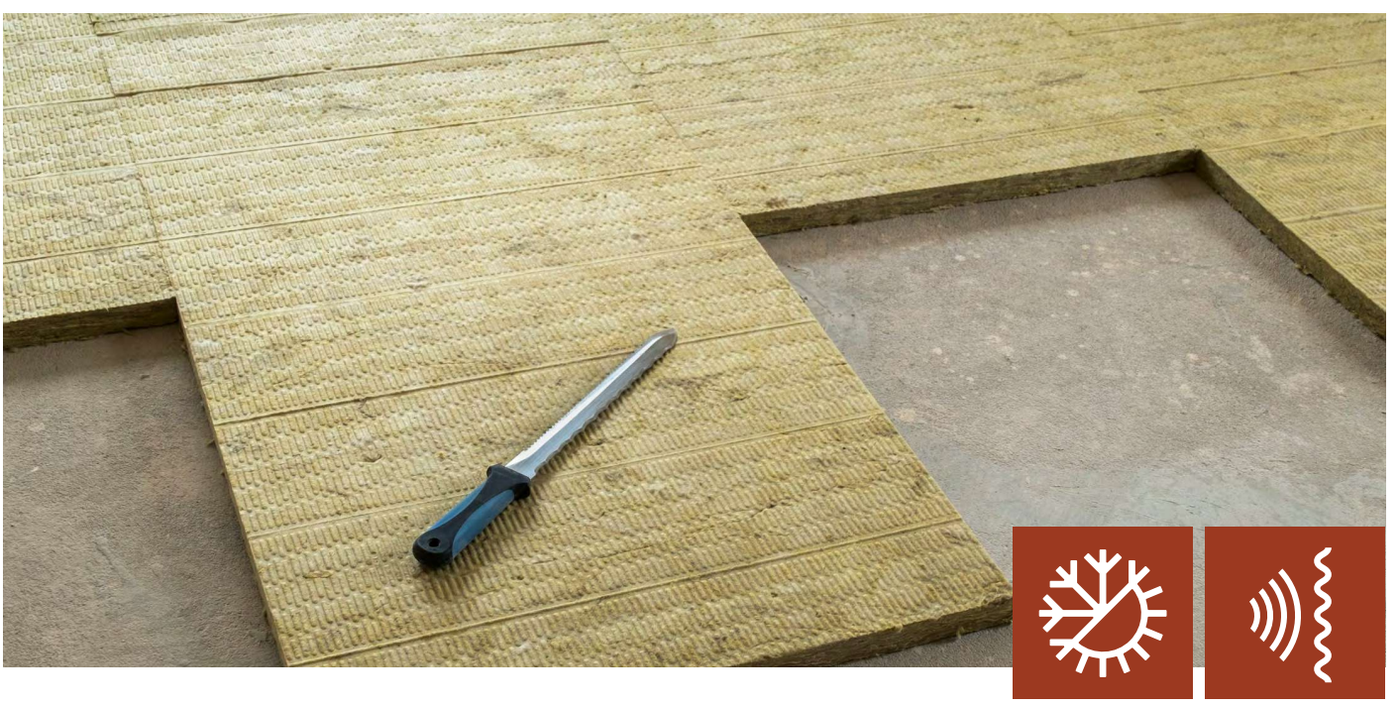
CLADMATE Facade Systems	**TECHNICAL DATA SHEET** THERMAWOOL **EN 13162+A1**			
Product Name	**RAINCLAD DIM**			
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification			
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product			
Surface Facing	Covered with black fiberglass			
Area of Usage	It can be used between aluminum, PVC, granite, marble and glass facade coating systems.			
Product Performance	**Technical Characteristics**	**Test Method**	**Units**	**Value or Statement**
	Thickness / d	EN ISO 29466	mm	30 - 200
	Tolerances - T4	'-3% or -3 mm; +5% or +5mm. - absolute large value in tolerance, + absolute small value in tolerance.		
	Length / l	EN ISO 29465	mm	1200
	Tolerances ±2 %			
	Width/ b	EN ISO 29465	mm	600
	Tolerances ±1,5 %			
	Squareness/ S_b	EN 824	mm/m	max.5
	Flatness/ S_{max}	EN ISO 29468	mm	max.6
	Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.035
	Thermal Resistance / R_d	EN 12667 EN 12939	mm	30 | 40 | 50 | 60 | 70 | 80 | 100 | 120 | 140 | 150 | 160 | 180 | 200
			(m^2.K)/W	0.85 | 1.10 | 1.40 | 1.70 | 2.00 | 2.25 | 2.85 | 3.40 | 4.00 | 4.25 | 4.55 | 5.10 | 5.70
	Fire Reaction Class	EN 13501-1	Euroclass	A1
	Short Term Water Absorption/ WS	EN ISO 29767	kg/m²	≤1
	Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m²	≤3
	Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)
	Water Vapour Permeability / MU	EN 12086	μ	1
	Air Flow Resistance/ Afr	EN 29053	-	NPD
Storage	The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.			
	Product packages should be protected from water, moisture and sunlight in the storage area.			
	Appropriate work safety clothing and equipment must be used to protect the skin, eye and upper respiratory system during transport.			
	Product packages should be placed on at least one pallet which should not be in direct contact with the ground at storage area.			
	Products must be covered with a tarpaulin when shipped.			
	Do not leave any material on the products in such a way as to damage the package and the product.			
	Palletized products should not be stacked and stored on top of each other.			
	The opened packages must not be disposed of and must be disposed of in accordance with the regulations.			

RAINCLAD SOFFIT

Thermawool Soffit Slab is manufactured using non-combustible stone wool insulation. Available with a plain, foil or tissue facing which can provide up to 4 hours fire protection to the underside of concrete soffits..

RAINCLAD SOFFIT DIM

Suitable for use on all common floor applications. Terrafloor provide high compressive strength and has a tissue facing to be compatible with a wide range of installation methods. It consists of two product families, Thermal and Acoustic Terrafloor (200).



Technical Data Sheet

CLADMATE Facade Systems	**TECHNICAL DATA SHEET** THERMAWOOL **EN 13162+A1**														
Product Name	**RAINCLAD SOFFIT**														
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification														
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product														
Surface Facing	Not faced														
Area of Usage	Between aluminum, PVC, granite, marble and glass facade coating systems Light weight partition walls can be used as internal insulation of exterior walls, stairs and elevator cavities.														
Product Performance	**Technical Characteristics**	**Test Method**	**Units**	**Value or Statement**											
	Thickness / d	EN ISO 29466	mm	30 - 200											
	Tolerances - T4	-3% or -3 mm; +5% or +5mm. - absolute large value in tolerance, + absolute small value in tolerance.													
	Length / l	EN ISO 29465	mm	1200											
	Tolerans (Tolerances) ±2 %														
	Width/ b	EN ISO 29465	mm	600											
	Tolerans (Tolerances) ±1,5 %														
	Squareness/ S_b	EN 824	mm/m	max.5											
	Flatness/ S_{max}	EN ISO 29468	mm	max.6											
	Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.035											
	Thermal Resistance / R_d	EN 12667 EN 12939	mm	30	40	50	60	70	80	100	120	140	150	160	180	200
			(m².K)/W	0.85	1.10	1.40	1.70	2.00	2.25	2.85	3.40	4.00	4.25	4.55	5.10	5.70
	Fire Reaction Class	EN 13501-1	Euroclass	A1											
	Short Term Water Absorption/ WS	EN ISO 29767	kg/m²	≤1											
	Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m²	≤3											
	Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)											
	Water Vapour Permeability / MU	EN 12086	μ	1											
	Air Flow Resistance/ Afr	EN 29053	-	NPD											
Storage	The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.														
	Product packages should be protected from water, moisture and sunlight in the storage area.														
	Appropriate work safety clothing and equipment must be used to protect the skin, eye and upper respiratory system during transport.														
	Product packages should be placed on at least one pallet which should not be in direct contact with the ground at storage area.														
	Products must be covered with a tarpaulin when shipped.														
	Do not leave any material on the products in such a way as to damage the package and the product.														
	Palletized products should not be stacked and stored on top of each other.														
	The opened packages must not be disposed of and must be disposed of in accordance with the regulations.														

RAINCLAD SOFFIT DIM

Technical Data Sheet

CLADMATE Facade Systems	**TECHNICAL DATA SHEET** THERMAWOOL **EN 13162+A1**			
Product Name	**RAINCLAD SOFFIT DIM/FOIL FACED**			
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification			
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product			
Surface Facing	Covered with aluminum foil			
Area of Usage	Between aluminum, PVC, granite, marble and glass facade coating systems Light weight partition walls can be used as internal insulation of exterior walls, stairs and elevator cavities.			
Product Performance	**Technical Characteristics**	**Test Method**	**Units**	**Value or Statement**
	Thickness / d	EN ISO 29466	mm	30 - 200
	Tolerances - T4	-3% or -3 mm; +5% or +5mm. - absolute large value in tolerance, + absolute small value in tolerance.		
	Length / l	EN ISO 29465	mm	1200
	Tolerans (Tolerances) ±2 %			
	Width/ b	EN ISO 29465	mm	600
	Tolerans (Tolerances) ±1,5 %			
	Squareness/ S_b	EN 824	mm/m	max.5
	Flatness/ S_{max}	EN ISO 29468	mm	max.6
	Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.035
	Thermal Resistance / R_d	EN 12667 EN 12939	mm	30 | 40 | 50 | 60 | 70 | 80 | 100 | 120 | 140 | 150 | 160 | 180 | 200
			(m^2.K)/W	0.85 | 1.10 | 1.40 | 1.70 | 2.00 | 2.25 | 2.85 | 3.40 | 4.00 | 4.25 | 4.55 | 5.10 | 5.70
	Fire Reaction Class	EN 13501-1	Euroclass	A1
	Short Term Water Absorption/ WS	EN ISO 29767	kg/m²	≤1
	Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m²	≤3
	Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)
	Water Vapour Permeability / MU	EN 12086	μ	1
	Air Flow Resistance/ Afr	EN 29053	-	NPD
Storage	The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.			
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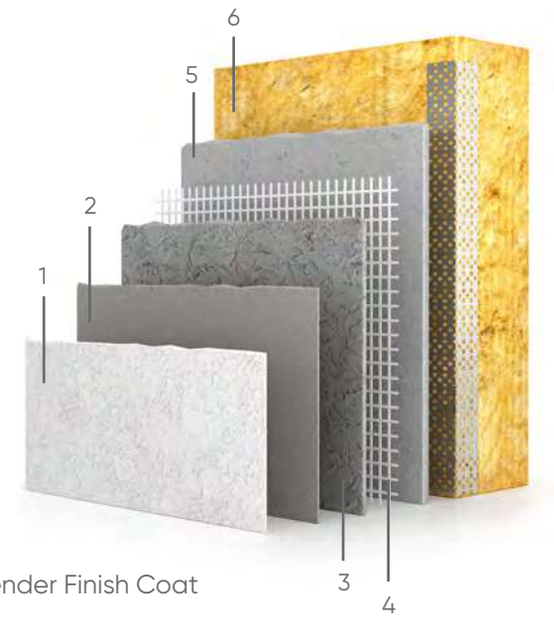
WALLCLAD

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

Wallclad is specially designed for non-ventilated cladding systems such as exterior wall rendering and WALLCLAD Insulated bonded system to achieve an A1 Fire Rated cladding with high thermal and acoustic insulation.

Wallclad has been specifically engineered to promote flexibility on your designs. It is suitable to use on existing buildings, new built 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.

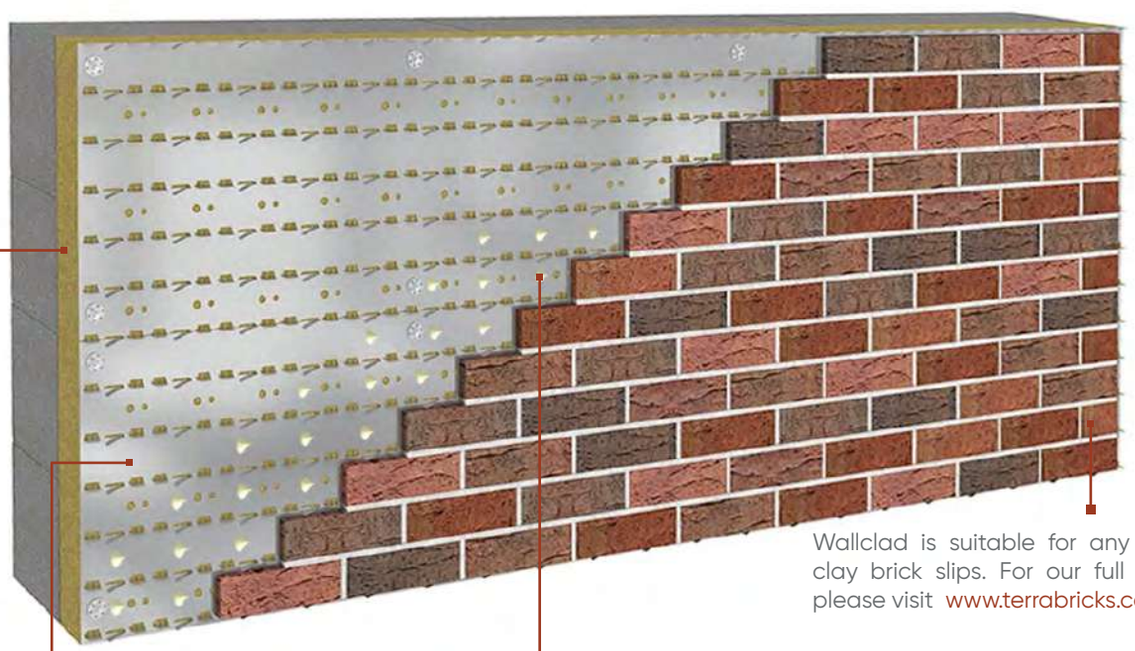
Insulation Properties
Provides excellent thermal and acoustic insulation performance

WALLCLAD Insulated Cladding Support System

WALLCLAD Insulated cladding support system 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 Plus 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 stregth 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.terrabricks.co.uk

SIKAFLEX - 545

Brickslip Metal Sheet

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

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 reduceces energy consumption and improves comfort

Full technical installation guide and training are available upon request.

Technical Data Sheet

CLADMATE Facade Systems

TECHNICAL DATA SHEET

THERMAWOOL

Product Name	**WALLCLAD**
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product
Surface Facing	
Area of Usage	Premium F series used for heat and sound insulation, and as fire coating exterior surfaces safely.

Product Performance

Technical Characteristics	Test Method	Units	Value or Statement
Tension Force Perpendicular to Surface/	EN 1607	kPa	10
Thickness / d	EN ISO 29466	mm	30 - 200
Tolerances - T5	-1% or -1 mm; +3mm. - absolute large value in tolerance.		
Length / l	EN ISO 29465	mm	1200
Tolerances ±2 %			
Width/ b	EN ISO 29465	mm	600
Tolerances ±1,5 %			
Squareness/ S_b	EN 824	mm/m	max.5
Flatness/ S_{max}	EN ISO 29468	mm	max.6
Density / D	EN ISO 29470	kg/m³	120
Tolerans (Tolerances) ±10 %			
Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.036 | 0.038
Thermal Resistance / R_d	EN 12667 EN 12939	mm	30 | 40 | 50 | 60 | 70 | 80 | 100 | 120 | 140 | 150 | 160 | 180 | 200
		(m².K)/W	0.80 | 1.10 | 1.35 | 1.65 | 1.85 | 2.15 | 2.60 | 3.15 | 3.65 | 3.90 | 4.20 | 4.70 | 5.20
Point Load	EN 12430	N	NPD | 300.00 | 500
Determination of compression behaviour	EN ISO 29469	kPa	NPD | 35 | 50
Density / D	EN ISO 29470	kg/m³	140
Tolerans (Tolerances) ±10 %			
Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.036 | 0.037 | 0.038 | 0.037
Thermal Resistance / R_d	EN 12667 EN 12939	mm	30 | 40 | 50 | 60 | 70 | 80 | 100 | 120 | 140 | 150 | 160
		(m².K)/W	0.80 | 1.10 | 1.35 | 1.60 | 1.80 | 2.10 | 2.55 | 3.05 | 3.55 | 3.80 | 4.10
Point Load	EN 12430	N	NPD | 400 | 500 | 600
Determination of compression behaviour	EN ISO 29469	kPa	NPD | 40 | 50 | 60
Fire Reaction Class	EN 13501-1	Euroclass	A1
Short Term Water Absorption/ WS	EN ISO 29767	kg/m²	≤1
Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m²	≤3
Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)
Water Vapour Permeability / MU	EN 12086	μ	1
Air Flow Resistance/ Afr	EN 29053	-	NPD

Storage

The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.
Product packages should be protected from water, moisture and sunlight in the storage area.
Appropriate work safety clothing and equipment must be used to protect the skin, eye and upper respiratory system during transport.
Product packages should be placed on at least one pallet which should not be in direct contact with the ground at storage area.
Products must be covered with a tarpaulin when shipped.
Do not leave any material on the products in such a way as to damage the package and the product.
Palletized products should not be stacked and stored on top of each other.
The opened packages must not be disposed of and must be disposed of in accordance with the regulations.

WALLCLAD 120

Technical Data Sheet

CLADMATE Facade Systems	**TECHNICAL DATA SHEET** THERMAWOOL **EN 13162+A1**														
Product Name	**WALLCLAD**														
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification														
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product														
Surface Facing	Not faced														
Area of Usage	Premium F series used for heat and sound insulation, and as fire coating exterior surfaces safely.														
Product Performance	**Technical Characteristics**	**Test Method**	**Units**	**Value or Statement**											
	Tension Force Perpendicular to Surface/	EN 1607	kPa	10											
	Thickness / d	EN ISO 29466	mm	30 - 200											
	Tolerances - T5	-1% or -1 mm; +3mm. - absolute large value in tolerance.													
	Length / l	EN ISO 29465	mm	1200											
	Tolerances ±2 %														
	Width/ b	EN ISO 29465	mm	600											
	Tolerances ±1,5 %														
	Squareness/ S_b	EN 824	mm/m	max.5											
	Flatness/ S_{max}	EN ISO 29468	mm	max.6											
	Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.036					0.037						
	Thermal Resistance / R_d	EN 12667 EN 12939	mm	40	50	60	70	80	100	120	140	150	160	180	200
			$(m^2.K)/W$	1.10	1.35	1.65	1.90	2.20	2.70	3.20	3.75	4.05	4.30	4.85	5.40
	Point Load	EN 12430	N	NPD					300						
	Determination of compression behaviour	EN ISO 29469	kPa	20	25				30						
	Fire Reaction Class	EN 13501-1	Euroclass	A1											
	Short Term Water Absorption/ WS	EN ISO 29767	kg/m^2	≤1											
	Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m^2	≤3											
	Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)											
	Water Vapour Permeability / MU	EN 12086	μ	1											
	Air Flow Resistance/ Afr	EN 29053	-	NPD											
Storage	The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.														
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	Do not leave any material on the products in such a way as to damage the package and the product.														
	Palletized products should not be stacked and stored on top of each other.														
	The opened packages must not be disposed of and must be disposed of in accordance with the regulations.														

Thermal & Sound Insulation

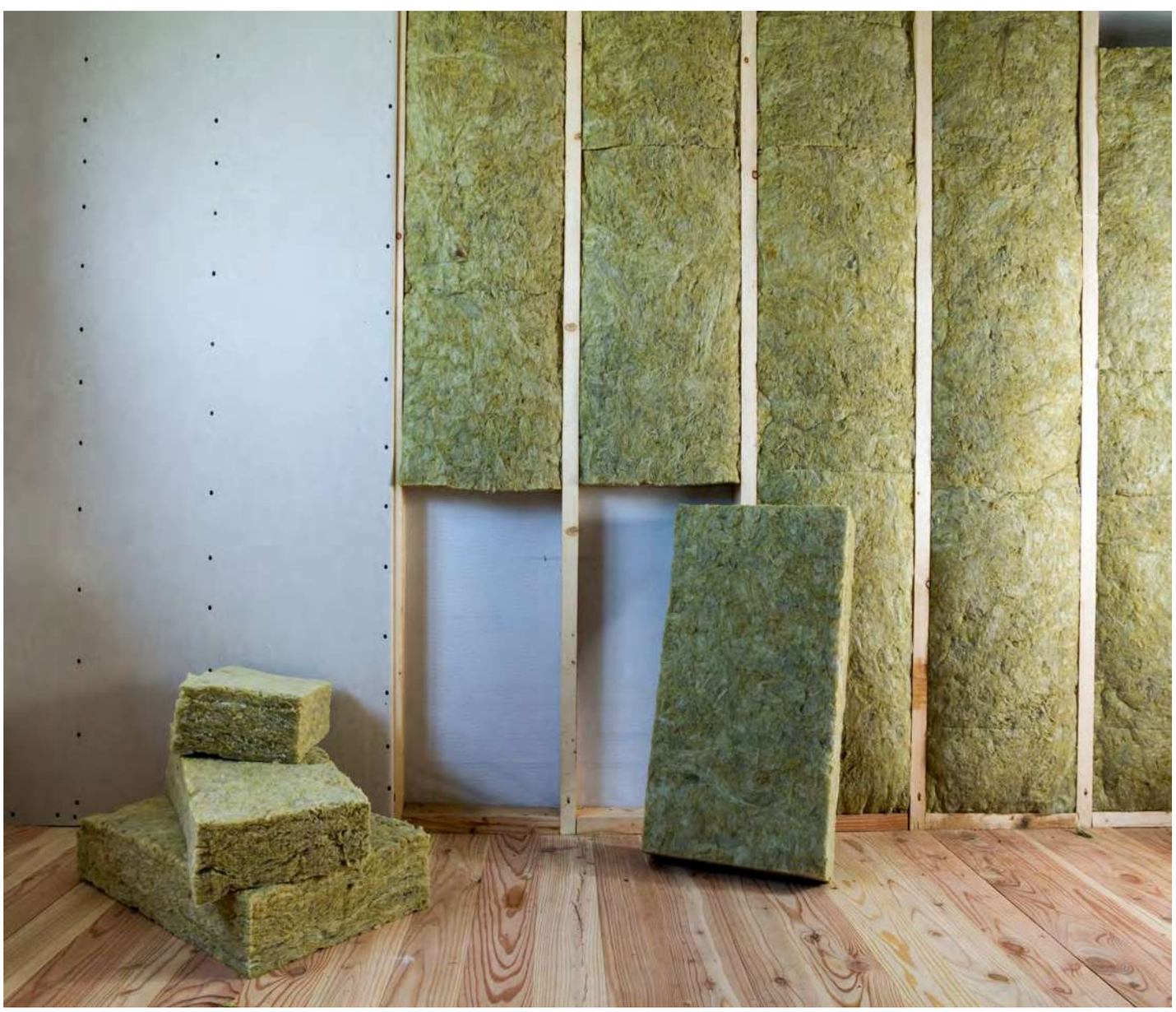
Thermawool insulation boards achieve high acoustic performance due to their dense fibre orientation.

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

Thermawool 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. Thermawool insulation absorbs sound waves and removes vibration along with being non-combustible, and a temperature tolerance of up to 1,000°C.

FRAMECLAD

Thermawool Frameclad is specially designed for a variety of applications such as lofts, roofs and SFS systems and inner face of external walls. It consists of stone wool insulation boards which can be applied to all types of construction projects to achieve a high fire rate as well as thermal and acoustic performance.



FRAMECLAD

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

It 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 easy to apply and suitable for a variety of loft and roof insulations as well as inner face of the external walls. Thermawool 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^2 K/W.

Frameclad 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 Frameclad has a range of density options from 40 kg/m^3 to 50 kg/m^3 and thickness options from 30mm to 160mm.

Technical Data Sheet

TECHNICAL DATA SHEET

CLADMATE Facade Systems

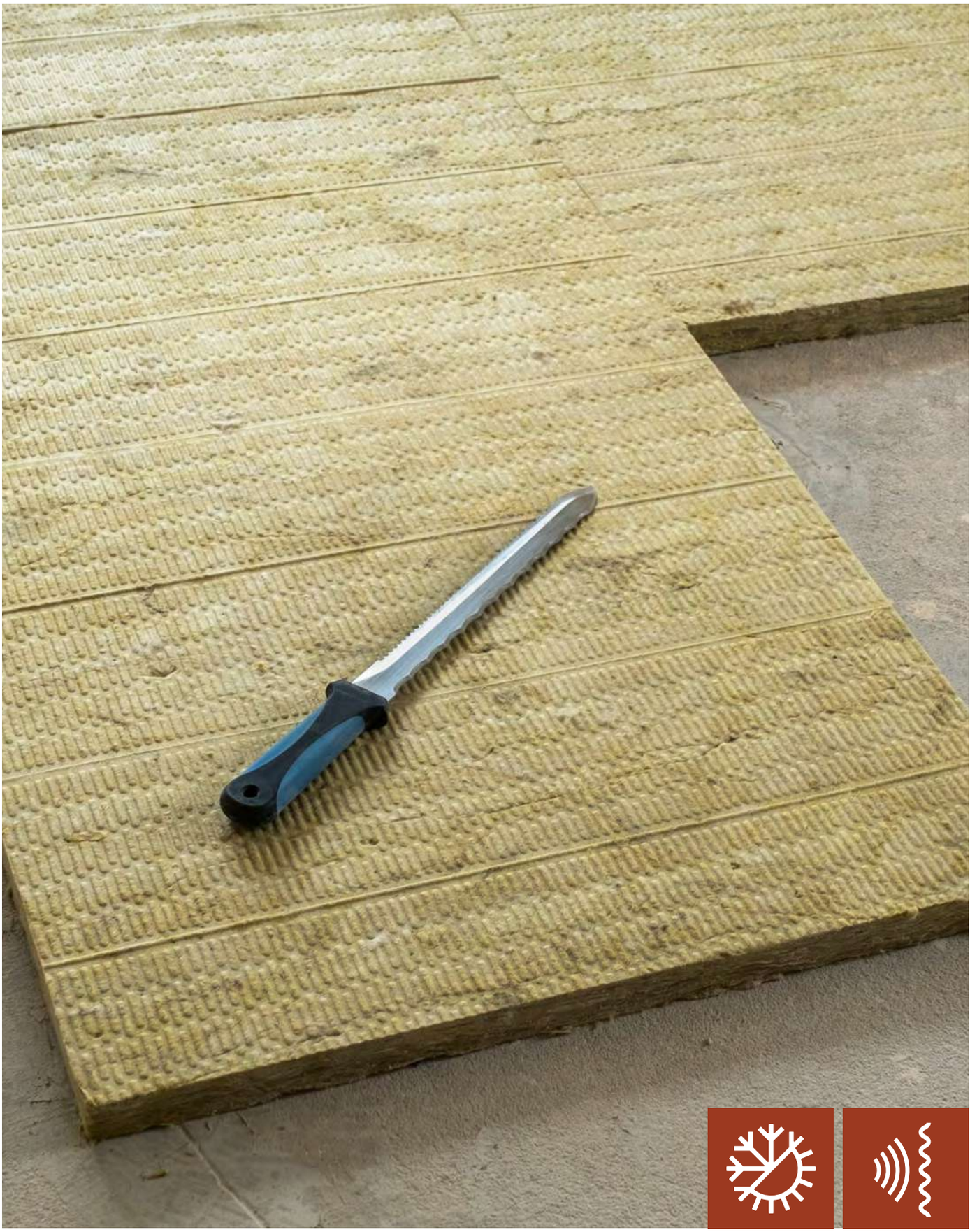
THERMAWOOL

EN 13162+A1

Product Name	**FRAMECLAD**												
Standard	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification												
Description	Mineral wool - Thermal insulation material formed by melting of basalt stone at 1350°C-1400°C into fiber - for thermal, sound and fire insulation product												
Surface Facing	Not faced												
Area of Usage	Between aluminum, PVC, granite, marble and glass facade coating systems Light weight partition walls can be used as internal insulation of exterior walls, stairs and elevator cavities.												
Product Performance	**Technical Characteristics**	**Test Method**	**Units**	**Value or Statement**									
	Thickness / d	EN ISO 29466	mm	30 - 150									
	Tolerances - T4	/-3% or -3 mm; +5% or +5mm. - absolute large value in tolerance, + absolute small value in tolerance.											
	Length / l	EN ISO 29465	mm	1200									
	Tolerances ±2 %												
	Width/ b	EN ISO 29465	mm	600									
	Tolerances ±1,5 %												
	Squareness/ S_b	EN 824	mm/m	max.5									
	Flatness/ S_{max}	EN ISO 29468	mm	max.6									
	Thermal Conductivity	EN 12667 EN 12939	W/m.K	0.035									
	Thermal Resistance / R_d	EN 12667 EN 12939	mm	30	40	50	60	70	80	100	120	140	150
			(m².K)/W	0.85	1.10	1.40	1.70	2.00	2.25	2.85	3.40	4.00	4.25
	Fire Reaction Class	EN 13501-1	Euroclass	A1									
	Short Term Water Absorption/ WS	EN ISO 29767	kg/m²	≤1									
	Long Term Water Absorption/ WL(P)	EN ISO 16535	kg/m²	≤3									
	Determination of dimensional stability under specified temperature	EN 1604	-	DS(70,-)									
	Water Vapour Permeability / MU	EN 12086	μ	1									
	Air Flow Resistance/ Afr	EN 29053	-	NPD									
Storage	The products should be stocked closed. If the storage area is open, the entire surface of the packages must be covered with cover or tarpaulin.												
	Product packages should be protected from water, moisture and sunlight in the storage area.												
	Appropriate work safety clothing and equipment must be used to protect the skin, eye and upper respiratory system during transport.												
	Product packages should be placed on at least one pallet which should not be in direct contact with the ground at storage area.												
	Products must be covered with a tarpaulin when shipped.												
	Do not leave any material on the products in such a way as to damage the package and the product.												
	Palletized products should not be stacked and stored on top of each other.												
	The opened packages must not be disposed of and must be disposed of in accordance with the regulations.												

FLOOR CLAD

Suitable for use on all common floor applications. Terrafloor provide high compressive strength and has a tissue facing to be compatible with a wide range of installation methods. It consists of two product families, Thermal and Acoustic Terrafloor (200).



FLOOR CLAD

Technical Data Sheet

Work on site

Thermawool 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

Thermawool stands by sustainable production by using natures existing resources efficiently. Being made of natural material, Thermawool promotes protecting the environment by saving energy. With the use of stone wall the energy is used effectively and the carbon emissions are reduced. Thermawool continues to develop and innovate products that improves the efficient use of natural resources.

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

Thermawool 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

Thermawool 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 Thermawool.co.uk.

THERMAWOOL

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