

Product catalogue



PITCHED ROOF (Attic)

Insulation between and under rafters

Multirock Slimpack Airrock LD,
ND Slimpack (ALS)

Insulation above rafters

Hardrock Energy
Monrock MAX E

Rendered FACADES (ETICS)

Frontrock Casa
Frontrock Max PLUS
Frontrock RENO
Frontrock Max E
Frontrock

Flat ROOFS

Monrock Max E
Hardrock Energy
Durock

WOODEN FLOORS

Insulation between the beams

Multirock Slimpack
Acoustic, Acoustic Extra

PARTITION WALLS

Insulation between plasterboard

Multirock Slimpack
Acoustic, Acoustic Extra

VENTILATED FAÇADE

Ventirock DUO
Airrock HD (FB1, FW1)

FLOATING FLOORS

Dry screed

Steprock HD

Wet screed

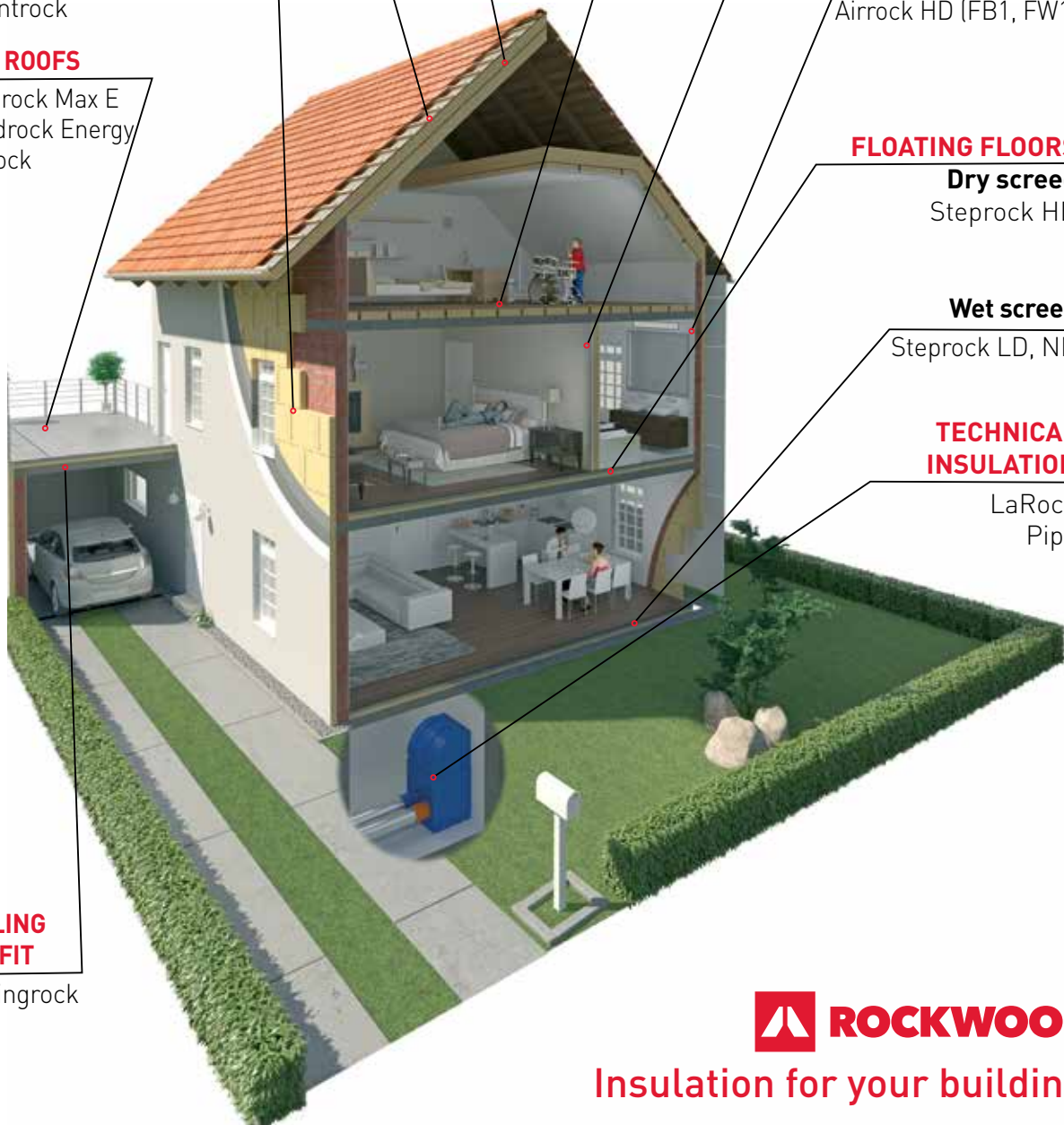
Steprock LD, ND

TECHNICAL INSULATION

LaRock
Pipo

CEILING SOFFIT

Ceilingrock



ROCKWOOL®

Insulation for your building

Why ROCKWOOL®?

In terms of fire safety, ROCKWOOL® stone wool insulation is non-combustible (reaction to fire class A1) with a melting point above 1000° C. Stone wool will not burn, or produce toxic gases or burning droplets. It will prevent the spread and propagation of fire thus gaining the necessary extra time, for evacuating the building, and for rescuing people or property.

Due to its special structure, all ROCKWOOL® insulating systems significantly reduce the noise level, both from the outside and the inside of the building.

ROCKWOOL® stone wool insulation is vapour permeable which allows water vapours to pass from the inside of the building to the outside, thus helping to prevent condensation. The walls will be dry, your home will be ventilated and the risk of undesirable mould and dampness is reduced.

The value of the thermal conductivity coefficient of stone wool is very low, and thus it ensures reduced energy losses; the heat will remain where we want it to be, that is inside our homes. Thus, we reduce the energy consumption; we lower the costs and achieve a comfortable and healthy indoor climate. A 100 m² average house without insulation, consumes per year of heating 20,000 kWh of energy or approximately 2600 m³ of natural gas as an energy source. Choosing a building with a low energy consumption or improving the energy efficiency of existing buildings allows the owners to reduce the energy consumption up to 4000 kWh or 520 m³ gas per year, and thus to control the energy costs and be less vulnerable in case of future fluctuations in energy prices.

Unique Dual Density Technology: Our stone wool insulation offers the unique dual density technology. The top layer with a thickness up to 20 mm offers an increased density with high resistance to mechanical shocks and impacts. The density of the lower layer gives it an improved thermal resistance values.



Protecting people and property in case of fire



Protection against noise



Ensures a pleasant and healthy indoor climate

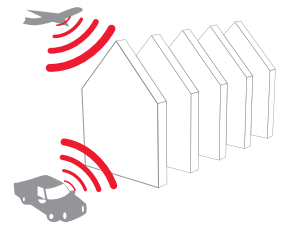


Costs up to 5 times lower for heating and cooling



Resistance to mechanical damages and durability

Noise protection



What influences the quality of our lives, is invisible and intangible, colourless, odourless and tasteless, yet it can be found all around us? What kind of pollution disrupts your sleep and your peace, causing insomnia and anxiety?

The answer is: noise.



Noise is an unpleasant sound that affects the quality of life, and repeated exposure to noise can damage our health.

ROCKWOOL® provides solutions that fulfill the requirements of new constructions and renovations.

ROCKWOOL® stone wool (Acoustic and Acoustic EXTRA)

significantly improves the sound insulation because it is made of interwoven fibers that form an open structure, ideal for noise absorption.

Air resistance AFr (kPa•s/m²)

The air resistance determines the capacity of fibrous and porous materials to dissipate the acoustic energy through friction. Air resistance increases with the density, and it depends upon the thickness of fibers and the structure of the stone wool. Low values show that the material is not an obstacle for the sound wave, while high values show that the material represents an obstacle. A higher value greater of the air resistance can be achieved by increasing the density of the stone wool product.

The air resistance of the ROCKWOOL® Acoustic stone wool is AAFr (kPa•s/m²) and of ROCKWOOL® Acoustic EXTRA is AFr = 25 kPa•s/m², which proves an excellent sound absorption.



Acoustic [🔊 🔊 🔊 🔊 🔊]

Acoustic EXTRA [🔊 🔊 🔊 🔊 🔊]



Premium slabs, made of high density stone wool, specially designed for the thermal and acoustic insulation of partition walls, suspended ceilings and acoustic systems.

Application

The acoustic insulation should be considered starting from the design phase, in order to avoid future interventions [costly and complicated] to remove the problems. The requirements for construction materials are often complex. The ROCKWOOL Group offers solutions that fulfill the requirements for constructions and renovations. In terms of sound insulation properties, the walls made of a plasterboard slab and ROCKWOOL® stone wool in the middle is the most economical and efficient solution to separate spaces, in terms of sound insulation properties.



Characteristics	Standard	Acoustic	Acoustic EXTRA
Reaction to fire	EN 13501-1	A1	A1
Airflow resistivity (AF _s)	EN 29053	≥ 12 kPa · s/m ²	≥ 25 kPa · s/m ²
Declared coefficient of thermal conductivity (λ)	EN 12667	0,035 W/mK	0,033 W/mK
Water vapor diffusion resistance factor (μ)	EN 12086	1	1
Dimensions (mm)		1200x600	1200x600
Thickness (mm)		30-120	30-250

Slimpack Technology

The new compressed packaging

Slimpack is an innovative packaging system introduced by the ROCKWOOL Group for compressing stone wool insulation. This system can reduce by up to 50% the volume of factory shipped packages.

The Slimpack technology allows loading and transportation of a quantity 2 times higher of ROCKWOOL® insulation products on the same truck, that is 352 packs or 3801.60 m² (11 pallets of 32 packs each) compared to 176 packs or 1900.80 m² (22 pallets of 8 packs each).

In addition, this technology also offers major advantages in terms of environmental protection. Regarding this issue we present below the analysis performed by AzzeroCO₂, a company specialized in Energy and Environmental Consultancy.

Example

This calculation was performed to highlight how the Slimpack system helps reduce the number of transports, with a significant economical and environmental impact.



Standard pallet
2 pallets/ 8 packs each



Slimpack Pallet 1
pallet / 32 packs each

UNIQUE ON THE MARKET!

50% more in each package.
Twice as many products in the same shipment

In addition to the traditional configuration of the pallet, there is a second configuration dedicated to "large sites" allowing additional loading of 4 packages per pallet, thus maximizing the total loading volume available. In this case, the estimated reduction of CO₂ equivalent emissions is higher than 40%.

NEW COMPRESSION TECHNOLOGY

Slimpack is an innovative packaging system introduced by ROCKWOOL for compressing Multirock C and Airrock LD stone wool.



- ✓ Reduction of logistics costs (ease of handling, transport and storage)
- ✓ Doubling the quantity transported per pallet
- ✓ Reduction of installation and handling time



Packing	Number of transports performed with a Euro5 truck	Quantity of products transported per truck	Kg of CO ₂ equivalent	Result
Traditional	2 shipments	3,04 tons	1900,80 m ²	340 kg
Slimpack	1 shipment	6,08 tons	3801,60 m ²	212 kg

Reduction by approximately 37% of CO₂ equivalent emissions

Multirock Slimpack

Airrock LD Slimpack

Airrock ND Slimpack

Acoustic Slimpack



Single density stone wool insulation with slimpack technology.

Application

The insulation slabs are designed for multiple applications. They are used for thermal insulation, sound insulation and fire protection of attics, ventilated pitched roofs, boards on wooden beams, suspended ceilings, interior walls, horizontal cassettes for facades.

These products are recommended for applications where mechanical resistances of the insulation layer is not required.



Characteristics	Standard	Multirock Slimpack	Airrock LD Slimpack	Airrock ND Slimpack	Acoustic Slimpack
Reaction to fire	EN 13501-1	A1	A1	A1	A1
Declared coefficient of thermal conductivity (λ)	EN 12667 EN 12939	0,037 W/mK	0,037 W/mK	0,035 W/mK	0,035 W/mK
Water vapor diffusion resistance factor (μ)	EN 13162	1	1	1	1
Dimensions (mm)		1200x600	1200x600	1200x600	1200x600
Thickness (mm)		40-200	40-160	40-160	40-120

Frontrock CASA Frontrock Max PLUS Frontrock RENO Frontrock Max E Frontrock



Rendered Facades with a decorative plaster (ETICS)

This technological solution consists of the installation of an external wall insulation system with a final decorative finish. The wall is both thermally insulated, fire protected and soundproofed by means of dual density stone wool slabs applied on the external surface of the wall by gluing (with mortar) and by mechanical fastening (with dowels). A chosen decorative plaster is then applied to provide durability to the final system.

Application

The slabs are specially designed for thermal insulation, acoustic protection and fire protection of facades in external insulations systems (ETICS). The slabs are mounted in direct contact with the support surface, by gluing them with adhesive and additional anchoring with dowels. The slabs should not be mounted on the foundation area or in contact with the ground. Detailed information about the installation procedure is available from partnering system provides, please contact ROCKWOOL for further information.

The slabs can also be used for restoration and improvement works, as well as light-weight coatings for facades. Only ROCKWOOL stone wool insulation for External walls, provides unique properties such as: vapour permeability, dimensional stability (preventing movements of the insulation), non combustibility and life time thermal performance.



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DUAL DENSITY

"Dual Density" rigid stone wool slabs of two integrated water repellent layers. The top layer with a thickness up to 20 mm offers an increased density with high resistance to mechanical shocks and impacts. The density of the lower layer gives it an improved heat transfer coefficient. The slabs are marked on the upper side to ensure a correct installation.

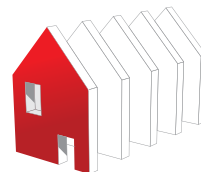
Characteristics	Standard	Frontrock CASA	Frontrock Max Plus	Frontrock RENO	Frontrock Max E	Frontrock
Reaction to fire	EN 13501-1	A1	A1	A1	A1	A1
Declared coefficient of thermal conductivity (λ)	EN 12667	0,034 W/mK	0,035 W/mK	0,036 W/mK	0,036 W/mK	0,039 W/mK
Compressive strength for a deformation of 10% (σ_{10})	EN 826	≥ 10 kPa	≥ 15 kPa	≥ 30 kPa	≥ 20 kPa	≤ 40 kPa
Point load (F_p)	EN 1607	-	200 N	500 N	250 N	-
Dimensions (mm)		1200x600	1200x600	1000x600	1000x600	1000x600
Thickness (mm)		60-280	50-180	60-200	60-200	20-50

Ventirock Duo

Airrock LD FB1/FW1

Airrock ND FB1/FW1

Airrock HD FB1/FW1



VENTILATED FAÇADES

Ventilated facades are usually built by leaving a gap for ventilation between the outer layer and the insulation layer. The structure of Ventirock Duo and Airrock FB1 is especially designed to withstand the airflow inside the ventilation space. At the same time, Ventirock Duo and Airrock FB1/FW1 may be also used for exterior walls with a metal structure. Ventirock Duo is designed with dual density technology, negating the need for a fleece

Ventirock Duo



"Dual Density" rigid stone wool slabs of two integrated water repellent layers. Due to the increased density of the upper layer (115 kg/m³) the Ventirock Duo slabs, are resistant to weathering, such as wind and rain, and therefore are not affected by the phenomenon of fiber disintegration unlike other products.



The Dual Density technology also ensures an easy and economical installation due to the increased resistance of the upper layer and the flexibility of the lower layer. The slabs are marked on the upper side to ensure correct installation is carried out.



Airrock HD FB1/FW1

Mono density water repellent stone wool slabs for thermal and acoustic insulation and fire protection in case of fire on the ventilated facade.

In order to provide an additional protection against external factors such as the abrasion caused by strong airflows, but also to improve the aesthetic appearance of the ventilated façades, the Airrock slabs are provided with a layer of fiber glass felt in black (FB1) or white (FW1).

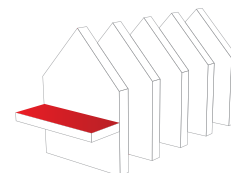


Characteristics	Standard	Ventirock Duo	Airrock LD FB1/FW1	Airrock ND FB1/FW1	Airrock HD FB1/FW1
Reaction to fire	EN 13501-1	A1	A1	A1	A1
Declared coefficient of thermal conductivity (λ)	EN 12667	0,035 W/mK	0,037 W/mK	0,035	0,035 W/mK
Water vapor diffusion resistance factor (μ)	EN 13162	1	1	1	1
Dimensions (mm)		1000x600	1000x600	1000x600	1000x600
Thickness (mm)		60-200	40-220	40-220	40-220

Steprock LD

Steprock ND

Steprock HD



FLOORS

The Steprock slabs are particularly recommended for acoustic insulation, fire protection and thermal insulation of flooring under dry or wet screed. Usually, concrete floors are naturally capable of reducing airborne sounds. However, these types of structures may not solve the problem of impact noise. To reduce the impact noise caused by steps, for example, it is necessary to resize the floors by increasing their mass, or thickness. Unfortunately, from a technical standpoint, this process is complex and difficult.

The best solution consists of inserting an „elastic“ component (between two rigid surfaces) in order to reduce the vibrations caused by impact. When choosing the “elastic” component (stone wool insulation slab), it is important to assess the dynamic rigidity coefficient, “s”, which should be as low as possible. Through the correct application of the ROCKWOOL® Steprock slabs, according to the thickness, dynamic rigidity and mass of the screed, we can reduce the impact noise level by 30 dB (A)

In order to avoid and/or reduce lateral transmissions, the floors should be separated from all lateral elements (with which the floor may be in contact), through the use of stone wool strips mounted up to the finished screed elevation level. Certain execution details which may seem unimportant may lead to serious decreases in the acoustic and thermal performances of the system.



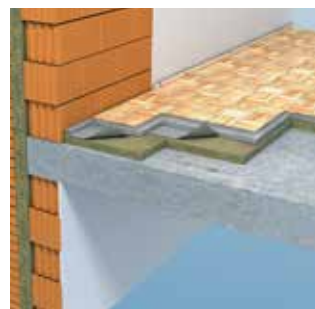
Steprock LD Application

Steprock LD stone wool insulation slabs are used for the insulation of heavy floors (under reinforced wet screeds). Recommended for the acoustic insulation against impact noise and airborne sounds of intermediate floors.



Steprock ND Application

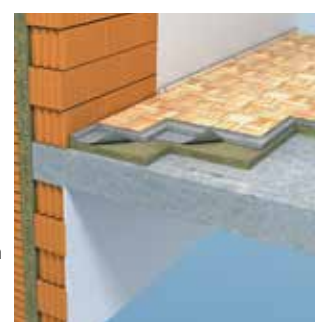
Steprock ND stone wool insulation slabs are used for the insulation of heavy floors (under reinforced wet screeds). Recommended for the acoustic insulation against impact noise and airborne sounds of intermediate floors.



Steprock HD Application

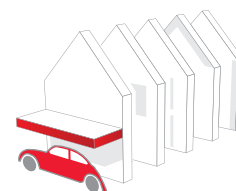
Steprock HD stone wool insulation slabs are used for the insulation of light-weight floors (under dry screeds). Recommended for the acoustic insulation against impact noise and airborne sound of intermediate floors. The maximum load of the screed should not exceed the products indicated value of compressibility.

Example CP2 ≤ 5 kPa



Characteristics	Standard	Steprock LD	Steprock ND	Steprock HD
Reaction to fire	EN 13501-1	A1	A1	A1
Declared coefficient of thermal conductivity λ	EN 12667	0,036 W/mK	0,037 W/mK	0,037 W/mK
Compressibility	ENV 1991-2-1	CP5	CP4	CP2
Water absorption coefficient - short term (W_p)	EN 1609	≤ 1	≤ 1	≤ 1
Water absorption coefficient - long term (W_p)	EN 12087	≤ 3	≤ 3	≤ 3
Dimensions (mm)		1000x600	1000x600	1000x600
Thickness (mm)		40-60	20-60	20-60

Ceilingrock



CEILING SOFFIT (CEILINGS AND GARAGES)

Semi-rigid stone wool slabs of two water-repellent integrated layers, with white fiberglass felt, on one side.

Application

Ceilingrock is used for thermal insulation and acoustic protection of internal ceiling soffits of enclosed spaces (e.g. garages, basements, etc).

The fiberglass felt in white color provides an aesthetic finish and can be painted as desired. The slabs are fastened with metal dowels. After fixing, the surface may be painted in one or more layers in a silicate-based paint or solvent-free dispersion.

The second paint layer can be applied only after the previous layer is completely dry.



Characteristics	Standard	Ceilingrock
Reaction to fire	EN 13501-1	A1
Declared coefficient of thermal conductivity λ	EN 12667, 12939	0,035 W/mK
Dimensions (mm)		1000x1200
Thickness (mm)		50-160

Monrock Max E Hardrock Energy Durock



PITCHED ROOFS THERMAL INSULATION ABOVE THE RAFTERS

The ROCKWOOL® "Dual Density" stone wool slabs are used for the thermal insulation acoustic protection and fire protection of pitched roofs above the rafters. The 20-mm top layer has an increased density with high resistance to mechanical shocks and impacts. The slabs are marked on the upper side to ensure a correct installation, with the marked side installed towards the outside.

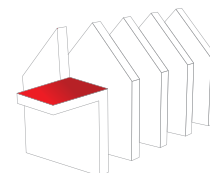
Application

The thermal insulation should be performed not only on vertical surfaces but also for pitched roofs and terrace roofs, regardless on whether the space below will be inhabited/mansard-roofed. During summer, the thermal insulation is equally necessary, considering the significant heating of the roofing elements which should be separated from the living area by means of a layer resistant to heat transfer.



Characteristics	Standard	Monrock Max E	Hardrock Energy	Durock
Reaction to fire	EN 13501-1	A1	A1	A1
Declared coefficient of thermal conductivity λ	EN 12667	0,038 W/mK	0,036 W/mK	0,040 W/mK
Point load	EN 12430	> 600 N	> 500 N	> 650 N
Dimensions (mm)		1000x600	1000x600	2000x1200
Thickness (mm)		50-200	50-1400	50-180

Monrock Max E Hardrock Energy Durock Hardrock Max

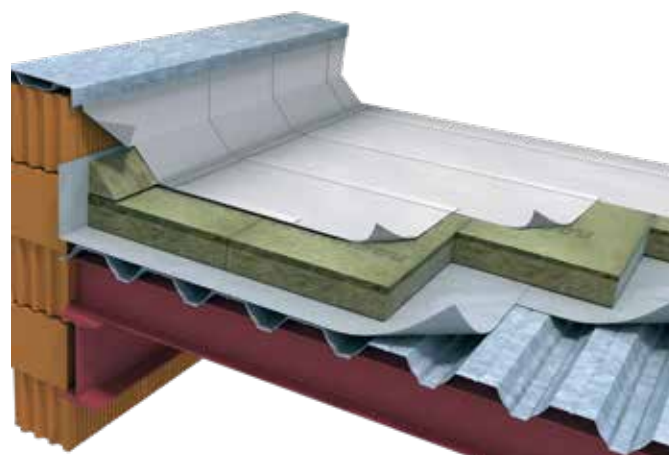


FLAT ROOFS

Dual Density Slabs

The ROCKWOOL® dual density stone wool slabs are characterized by a better resistance to the action of concentrated loads, compared to the single-density panels. When considering walkability of the roofing area, the most important factor to consider is the point load characteristics. The 20-mm top layer has an increased density with high resistance to mechanical shocks and impacts. The slabs are marked on the upper side to ensure a correct installation, with the marked side up. The ROCKWOOL® "Dual Density" stone wool slabs are used for the thermal insulation, acoustic protection and fire protection of terrace roofs.

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Application

The ROCKWOOL® Dual Density slabs are used for the thermal insulation, acoustic protection and fire protection of terrace roofs, and they can be mounted either in a single layer or in two or more layers, as there are no restrictions in this respect. They are mounted on the structure (trapezoidal metal sheet or concrete floors) with metal dowels, mechanical anchors, bitumen or polyurethane adhesive; they can be covered by gravel or tiles for non-trafficked terraces for wind protection. The Dual Density slabs offer a great advantage, that is a high resistance to point loads (Point Load) up to 800 N, and can be mounted in a single layer. In this way it is possible to substantially reduce the costs and assembly time, when compared to a two-layer system.



Characteristics	Standard	Monrock Max E	Hardrock Energy	Durock	Hardrock Max
Reaction to fire	EN 13501-1	A1	A1	A1	A1
Declared coefficient of thermal conductivity λ	EN 12667	0,038 W/mK	0,036 W/mK	0,040 W/mK	0,040 W/mK
Point load	EN 12430	≥ 600 N	≥ 500 N	≥ 650 N	800 N
Compressive strength for a deformation of 10%	EN 826	≥ 40 kPa	≥ 30 kPa	≥ 60 kPa	≥ 70 kPa
Tensile strength perpendicular to faces	EN 1607	≥ 10 kPa	≥ 10 kPa	≥ 10 kPa	≥ 10 kPa
Dimensions (mm)		1000x600 2000x1200 (GF)	1000x600 2000x1200 (GF)	2000x1200 (GF)	2000x1200 (GF)
Thickness (mm)		50-200	50-160	50-180	50-160

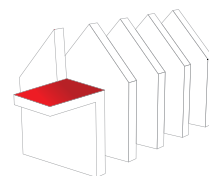
Dachrock

Roofrock 30

Roofrock 40

Roofrock 50

Roofrock 60



FLAT ROOFS

Standard Mono Density Slabs

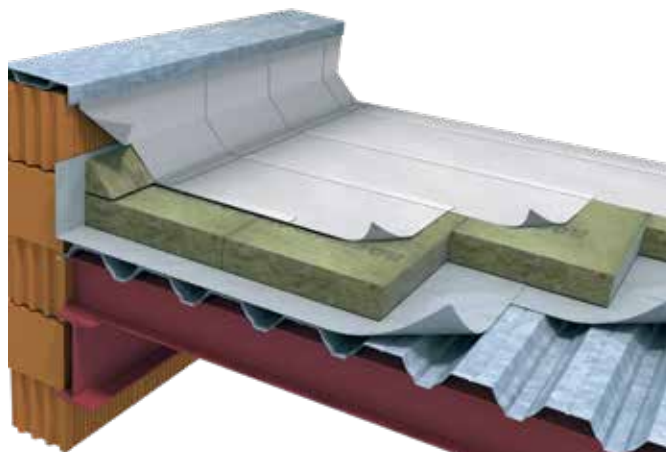
Rigid water repellent stone wool slabs, with resistance to mechanical actions, for thermal and acoustic insulation and fire protection.

Application

Excellent acoustic comfort

Noise pollution is a factor which severely affects the life quality of individuals, both at work and at home.

This is why constructors and owners prefer in particular external thermal insulation material that provides acoustic comfort. ROCKWOOL® understands this need, and supports this through the sale and production of high quality insulating materials, according to European standards. The ROCKWOOL® stone wool insulation is especially designed to provide acoustic insulation for terrace roofs, with high loading capacity.



ROCKWOOL stone wool effectively protects against fire

If you are looking for a thermal insulation product, designed for terrace roofs with a high loading capacity, that can also offer protection against fire, then ROCKWOOL stone wool is what you need. Terrace roofs can greatly contribute to the spread of flames, because fires in buildings with terrace roofs are among the most dangerous and destructive type of fires. Therefore, an effective insulation and fire protection are crucial for the resistance of roofs in case of fires. A roof which is insulated with ROCKWOOL stone wool ensures fire protection and provides sufficient time so that the persons inside can save themselves, as well as some of the property, and also for the firefighters to extinguish the fire, without the risk of the roof collapsing.

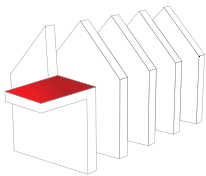
In practice, the thermal insulating products for a terrace roof works as shield against fires. Stone wool is a non-combustible material, hence the flat roof range insulation also helps architects, contractors and developers to comply with the fire standards in force.



Characteristics	Standard	Dachrock	Roofrock 30	Roofrock 40	Roofrock 50	Roofrock 60
Reaction to fire	EN 13501-1	A1	A1	A1	A1	A1
Declared coefficient of thermal conductivity λ	EN 12667	0,040 W/mK	0,039 W/mK	0,038 W/mK	0,040 W/mK	0,039 W/mK
Point load	EN 12430	600 N	300 N	400 N	500N	500 N
Compressive strength for a deformation of 10%	N 826	70 kPa	30 kPa	40 kPa	50kPa	60 kPa
Tensile strength perpendicular to faces	EN 1607	15 kPa	7,5 kPa	15 kPa	10kPa	15 kPa
Dimensions (mm)		1000x600 2000x1200	1000x600 1200x2000	1000x600 1200x2000	1000x600 1200x2000	1000x600 1200x2000
Thickness (mm)		40-160	40-160	60-200	40-160	60-200

Rockfall

Rockfall over rafter insulation



FLAT ROOFS

Rockfall elements for sloped roofs

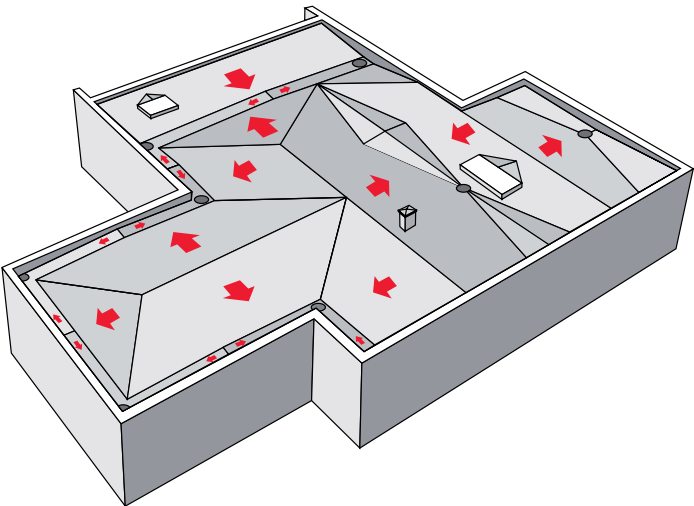
The ROCKWOOL® Rockfall special elements, cut at angles, can perfectly create slopes for any flat roof. The typical slope of Rockfall elements is 2%, and the most common size is 500x1000 mm. Also the maximum thickness is 200 mm and the minimum thickness is 20 mm. The elements are cut from Dachrock stone wool slabs.

Rockfall Application

The roofs surfaces should be built with a slope towards a line or a point, depending on their structure or applications.

The curves and eaves formed at the intersection of different plans must provide a proper slope, that is a slope towards a certain point or towards the drain holes, as required.

The angle of inclination of the roof must be designed for cases where the roof structure is subjected to maximum loads, ensuring a minimum slope of 2% for such conditions (for example, if the load created by the weight of snow and/or if the green roof (with vegetation, taking into account the load created by the moisture of the soil and the weight of the plants).



Rockfall Application

A triangle wedge that ensures the uniform passing of horizontal roof structures towards the vertical structures (for example, attic wall, chimney vents, skylights).

The standard length of wedges is of 1000 mm.



Characteristics	Standard	Rockfall	Rockfall over rafter insulation
Reaction to fire	EN 13501-1	A1	A1
Declared coefficient of thermal conductivity λ	EN 12667	0,040 W/mK	0,040 W/mK
Dimensions (mm)		500x1000x40-20 500x1000x60-40 500x1000x80-60	60x1000x100 80x1000x100



Ventilation and heat distribution systems		Pipelines
Lamella mats	<ul style="list-style-type: none"> Larock 32 ALS Larock 40 ALS 	<ul style="list-style-type: none">
Casings	Pipo ALS	<ul style="list-style-type: none">

Larock 32 ALS

Larock 40 ALS



TECHNICAL INSULATION (HVAC)

Thermal and acoustic insulation for heat distribution equipment and ventilation systems

Larock 32 ALS are water repellent stone wool mats. They are formed from slabs cut in the shape of lamellas, with mostly perpendicularly oriented fibers. The lamellas are glued onto an aluminum foil reinforced with a fiberglass grid (ALS).

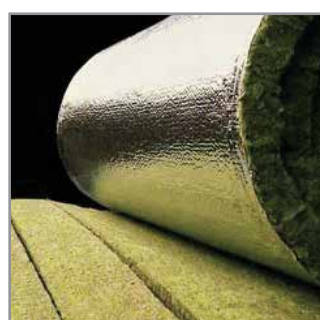
Properties of Larock 32 ALS ROCKWOOL stone wool

Larock 32 ALS ROCKWOOL stone wool is an excellent thermal and acoustic insulating product, especially designed for heat distribution and ventilation systems. Due to Larock 32 ALS properties it is recommended among specialists and constructors, because:

- It is an excellent thermal insulating product;
- It is non-combustible, at high temperatures it does not emit smoke and it prevents the spread of fire;
- Excellent thermal and acoustic qualities;
- It is waterproof on the entire sections, the water drops drain from the surface, and in the same time, it is vapor permeable, almost as much as air;
- Provides dimensional stability;
- It is harmless: offers a high biological dissolution capacity and is produced from quality stone wool raw materials.

Application

Larock 32 ALS ensures the thermal and acoustic insulation for heat distribution systems: boilers, tanks, ducts and ventilation systems, and other curved surfaces. The vertical orientation of the fibers increases the resistance of the product to loads and compression.



Characteristics		Standard	Larock 32 ALS	Larock 40 ALS
Reaction to fire		EN 13501-1	A1	A1
Ratio between the declared coefficient of thermal conductivity λ and temperature t_m	10 °C	EN 14303	0,040 W/mK	0,036 W/mK
	100 °C		0,067 W/mK	0,061 W/mK
	250 °C		0,137 W/mK	0,126 W/mK
Maximum temperature			250 °C	250 °C
Roll width (mm)			1000	1000
Thickness (mm)			20-100	20-100
Casing			aluminum foil reinforced	aluminum foil reinforced

Thermal insulation for pipes and ducts

Pipo / Pipo ALS are insulated casings of water repellent stone wool, uncoated (PIPO)/coated (PIPO ALS). They have the shape of a cylinder, cut lengthwise. For large diameters, they are made up of two half-cylinder. Pipo ALS casing are covered with aluminum foil reinforced with mineral fiber grid. The foil is fitted with adhesive tape along the entire length of the cut, overlapping the joint. In order to easy the assembly operation, the casing is creased in one or up to three points on the inside.

In accordance with European standards, it is recommended to tighten the pipe insulating casing longitudinally with aluminum strap or wire, on 2-3 places on each running meter of the casing.

Properties of ROCKWOOL Pipo ALS stone wool

The ROCKWOOL Pipo ALS stone wool is an excellent thermal and acoustic insulating product, especially designed for pipes and ducts with an operating temperature ranging from +15 to 250°C. The specific properties of the Pipo ALS stone wool are as follows:

- It is an efficient and excellent thermal insulating product;
- Non-combustible, ensures fire protection and protection against flame propagation;
- Provides excellent noise protection;
- Water repellent and offers high vapor permeability;
- Provides dimensional stability;
- Resistant to alkaline environment;
- Not harmful: it is part of the category of mineral products resistant to pests.

Application

Pipo ALS is a thermal insulation product especially designed for pipes and ducts with an operating temperature ranging from +15 to 250°C. Resistant to loads and compression



Characteristics		Standard	Pipo ALS
Reaction to fire		EN 13501-1	A1
Ratio between the declared coefficient of thermal conductivity λ and temperature t_m	10°C		0,040 W/mK
	100°C	EN 14303	0,067 W/mK
	250°C		0,137 W/mK

Pyrorock System

Techrock 80 ALS

Larock 65 ALS

ProRox WM 950 ALU



FIRE PROTECTION SYSTEMS

HVAC fire protection

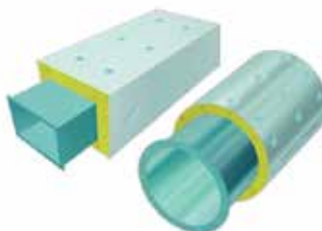
PYROROCK System

System for fire protection from the outside of ventilation ducts.
Provides a resistance to fire of 30, 45 or 60 minutes.



A. System for rectangular ducts

System composition: Techrock 80 ALS slabs, welding nails for fastening the insulation and ALS strap for closure of joints. The system ensures fire resistance on horizontal and vertical ventilation ducts: EI 30 and EI 45 (for an insulation thickness of 40 mm) or EI 60 (for an insulation thickness of 60 mm).



B. System for circular ducts

B1. System composition:

Larock 65 ALS lamella mats welding nails for fastening the insulation and ALS strap for joints closure. For horizontal ducts with an inside diameter larger than 500 mm, it is necessary to reinforce it with hexagonal wire mesh. The system ensures fire resistance for horizontal and vertical ventilation ducts: EI 30 and EI 45 (for an insulation thickness of 40 mm)

B2. System components: mats sewn on wire mesh WM 80 and welding nails. The system ensures fire resistance for horizontal and vertical ventilation ducts: EI 60 (for an insulation thickness of 60 mm) The welding nails are not provided by ROCKWOOL®. Detailed information can be found in the PYROROCK technical data sheet.



Shape the duct/ channel	Resistance to fire (min)	Position of duct/ channel	Rockwool stone wool insulation*	Thickness (mm)**	Surface treatment ***	Maximum sizes (mm)	Maximum height of the flange (mm)	Angles in galvanized steel	Exterior jacket of galvanized steel
Rectangular	EI 30 S	vertical	Techrock 80 ALS	40	no requirements	1250 x 1000	20	no requirements	no requirements
	EI 45	horizontal	Techrock 80 ALS	40	no requirements	1250 x 1000	20	no requirements	no requirements
	EI 60	vertical	Techrock 80 ALS	60	no requirements	1250 x 1000	30	no requirements	no requirements
		horizontal	Techrock 80 ALS	60	no requirements	1250 x 1000	30	no requirements	no requirements
		vertical	Larock 65 ALS	40	no requirements	Ø 1000	30	no requirements	no requirements
Circular	EI 30 S	horizontal	Larock 65 ALS	40	no requirements	sub Ø 500	30	no requirements	no requirements
	EI 45	horizontal	Larock 65 ALS	40	Wired mesh	Ø 500 - 1000	30	no requirements	no requirements
	EI 60	vertical	ProRox WM 950 ALU	60	no requirements	Ø 1000	30	no requirements	no requirements
		horizontal	ProRox WM 950 ALU	60	no requirements	Ø 1000	30	no requirements	no requirements

CONLIT Steel Protect Board ALU

CONLIT Steel Protect Board



FIRE PROTECTION SYSTEMS

CONLIT Steel Protect Board are highly compressed stone wool boards, impregnated with special resins for an easy handling and assembly. They are intended for a variety of solutions for the fire protection of steel structures, concrete structures and ventilation channels. They are also produced with aluminum foil, ALU version.

Application

The Conlit systems are used for the fire protection of load-bearing metal structures (columns, beams), reinforced concrete structures and ventilation ducts.

For fire protection systems designed for metal structures, the plate thickness is chosen according to the type and size of the profile to be protected. The CONLIT STEEL PROTECTsystem can achieve a fire resistance up to 240 minutes.

Also, for the fire protection of ventilation ducts, depending on the insulation thickness and assembly, other systems resistant to fire up to 120 minutes can also be achieved.



Characteristics	Standard	CONLIT Steel Protect Board ALU	CONLIT Steel Protect Board
Reaction to fire	SR EN 13501-1	A2	A1
Declared coefficient of thermal conductivity λ	SR EN 12667	0,040 W/mK	0,040 W/mK
Dimensions (mm)		2000x1200	2000x1200
Thickness (mm)		25-70	25-100
Casing		aluminum foil	-



Health and safety

EUCEB

ROCKWOOL Group stone wool complies with European standards according to directive 97/69/CE (achieving note Q) and it is classified as a biodegradable, non-carcinogen product. In order to guarantee the biodegradable characteristic



of their products, ROCKWOOL® voluntarily joined the EUCEB European markings (European Council for the Certification of Stone Wool products). This is a certification body that verifies whether the products are

compliant with the required parameters in order to obtain note Q. The EUCEB marking provides a continuous surveillance of production.



The entire ROCKWOOL® product range bears the CE marking. It can be found on the product batches as well as on the product pallets. The obligation to affix the CE marking is required by Directive 89/106/EEC on construction products, as defined in the harmonized standards

DECLARATION OF PERFORMANCE DoP

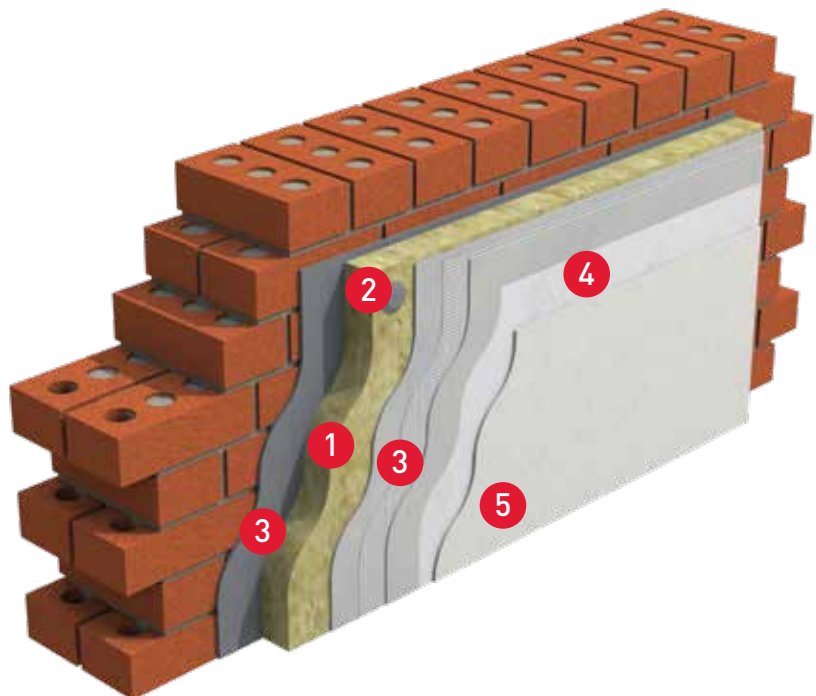
According to the (EU) Regulation no 305/2011, all ROCKWOOL® products are accompanied by a Declaration of Performance („Declaration of Performance” or DoP). This regulation entered into force on 1 July 2013 sets out the conditions for the marketing of construction products. The Declaration of Performance, DoP, represents the reference document harmonized on EU level for the marketing of construction products, which contains all the product related details, starting from the performance of essential characteristics, to other information such as the country of origin. Thus, the comparison between products of the same type from different manufacturers can be done in a uniform manner according to the parameters declared in the DoP.

ROCKWOOL® provides these Declarations of Performance ONLINE, under: <http://www.ROCKWOOL.com/dop>.

ROCKWOOL REDArt®?

REDArt® is an external insulating system which incorporates stone wool in the materials for facades. The system is installed on the existing walls of the building, in order to reduce heat loss, as well as to extend the life of the building. External insulation is one of the most effective ways to improve the energy performance of buildings.

- 1 ROCKWOOL® Stone wool
- 2 Mechanical fixing
- 3 Adhesive and Sealant ROCKWOOL® REDArt®
- 4 Primer for decorative plaster ROCKWOOL® REDArt®
- 5 Silicone-based decorative plaster ROCKWOOL® REDArt®





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ROMANIA
GREEN
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COUNCIL

ROCKWOOL Romania is **certified** by **Romania Green Building Council (ROGBC)**
as **“Approved supplier of green buildings solutions”**



www.rockwool.ro

**Legal notice**

This document provides general information about the ROCKWOOL® products available on the Romanian and Bulgarian market. This general information represents no guarantee for the technical parameters of a particular product. These parameters are available at customer's request, through our technical and sales services which can provide the appropriate information and certificates for certain products. We reject in advance any complaint that may refer to this document and the content thereof. We reserve the right to make changes in the document's content, at any time, without prior notice.

ROCKWOOL România SRL
Oca Sibiului nr. 46-48,
Sector 1 014011 Bucharest, Romania
ph: + 40 212 334 440
fax: + 40 212 334 441
www.rockwool.ro
info@rockwool.ro

ROCKWOOL Bulgaria OOD
1113 Sofia, Blvd. "Dragan Tsankov" 23A Office Building
TETRIX, Floor 1, Office 1
Sofia, Bulgaria
ph: + 359 2 943 95 60
www.rockwool.bg
info@rockwool.bg