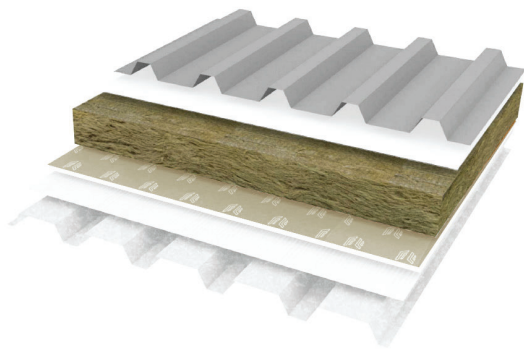


RL STONEWOOL

For Ultratherm MSR Roof Systems

RL Stonewool is a high density insulation that can be used in RoofLogic metal roof systems.



DESCRIPTION

RL Stonewool is manufactured from a volcanic rock, to which selected recycled materials are added. The material is melted and spun into wool, which is then bonded using a small amount of binder.

Because RL Stonewool's insulating qualities rely purely on entrapped air, not environmentally harmful blowing agents, it does not contain gases with harmful ozone depleting or global warming potential. Furthermore its thermal performance remains constant, without altering or subsiding over time. Being made from rock, RL Stonewool products are dimensionally stable under a wide range of temperatures, RL Stonewool is non-combustible with a melting point in excess of 1000°C.

BENEFITS

- In Ultratherm MSR roof systems, RL Stonewool enhances acoustic performance (100 mm Stonewool in Ultratherm MSR system has a STC/Rw of 32)
- Classified as Euroclass A1, RL Stonewool slabs are non-combustible.
- RL Stonewool slabs are odourless, rot-proof, and resistant to vermin, mould, and bacteria.
- RL Stonewool slabs are non-wicking when tested to BC 2972:1989 Section 12. When exposed to 90% relative

humidity at 200°C, RL Stonewool will absorb less than 0.004% moisture.

- The vapour resistivity of RL Stonewool is negligible and usually considered to be the same as that of air (typically 5.9 MNs/gm). RL Stonewool products can therefore be used to reduce the risk of condensation and allow natural drying out of the construction due to their ability to 'breathe'.
- RL Stonewool presents no known threat to the environment
- RL Stonewool is compatible with most materials used in commercial and industrial building applications.

MATERIAL AND FINISH

RL Stonewool is offered in various densities to match the required compressive strength for different applications. For Ultratherm MSR roof systems, two options are available:

- 30kPa: Standard option for most Ultratherm MSR installations.
- 50kPa: Recommended for systems incorporating TopDeck S, (Standing Seam profiles)

The densities vary between 100-180kg/m³ depending on product thickness. Contact RoofLogic for specific densities and weights.

Various panel sizes are available.

THERMAL PROPERTIES

Thickness (mm)	50	60	70	80	90	100	120	140	160	180	200
R-Value- 30 kPa	R 1.4	R 1.7	R 1.9	R 2.2	R 2.5	R 2.9	R 3.3	R 3.9	R 4.4	R 5.0	R 5.6
Climate Zone							Zone 1	Zone 1	Zone 2	Zone 3	Zone 4
R-Value- 50 kPa (For TopDeck S application)	R 1.4	R 1.6	R 1.9	R 2.2	R 2.4	R 2.7	R 3.2	R 3.8	R 4.3	R 4.9	R 5.4
Climate Zone								Zone 1	Zone 2	Zone 2	Zone 4

For Thermal Performance to meet Climate Zones 5 & 6 requirements, please contact RoofLogic for options.

TECHNICAL PROPERTIES

Property	30kPa	50kPa
Compression strength at 10% deformation, kPa, not less than	30kPa	50 kPa
Point load, N,	450N	800N
Flammability grade	Non-flammable	
Reaction to fire	Euroclass A1 EN 13501-1	
λ at 10°C,	0.036 W/mK	0.037 W/mK
Vapour permeability, μ ,	>1	
Humidity by weight, %, no more than	0.5%	
Water absorption by volume, %, no more than	1.5%	
Content of organic substances, %, no more than	4.5%	
Density	100-150 kg/m ³	110-180 kg/m ³
	Density is correlated with compressive strength and is dependent on the thickness of the product	
Length	1000 - 1200 mm	
Width	500 - 600 mm	
Thickness (with increments of 10 mm),	50 – 200 mmm	

INSTALLATION

RL Stonewool slabs are easy to handle, install and cut to size. RL Stonewool slabs are supplied in polythene packs which are designed for short term protection only. For longer term protection on site, product should be stored indoors, or under cover off the ground.

The RL Stonewool must remain dry during both site storage and installation. Install only as much RL Stonewool that can be covered by final roof system in the same day.