

Stonewool Insulation for Thermal, Acoustic and Fire Safety Applications in Buildings



ROCKINSUL RB SLABS

www.rockwoolindia.com



ROCKWOOL (INDIA) LTD.

Your Thermal & Acoustic Insulation Partner

MANUFACTURED
UNDER LICENSE OF
ISOVER
SAINT-GOBAIN

Rockinsul RB Slabs

- ROCKINSUL RB Slabs are semi-rigid and rigid boards manufactured from stable stone fibres bonded with a minimum quantity of thermosetting resin binder.
- ROCKINSUL RB Slabs are capable of with standing extreme temperatures up to 750 °C and are light weight, strong, resilient, easy to handle, and easy to cut to suit intricate shapes.

Standard Dimensions

Thickness(mm)	Width (mm)	Length(m)
25 to 125	600	1.0 to 1.2

Standard Density

Density(kg/m ³)	Thickness(mm)
48	50 - 200
64	40 - 150
80	40 - 125
96	25 - 100
120	25 - 100
144	25 - 100
160	25 - 75
200	25 - 50

Non-standard sizes may be available on requ

Facing Types

ROCKINSUL RB Slabs for building applications are unfaced, or with a facing of glass reinforced aluminium foil / Kraft paper laminate (FSK), ALG and Black Glass Tissue (BGT).



PERFORMANCE

Working Temperature

Fibre : Up to 750 °C
Facing : 100 °C

At temperatures in excess of 230 °C a limited migration of binder may occur in the insulation in contact with the hot face. This does not impair the insulation performance.

Thermal Performance (K Value)

The thermal conductivity of ROCKINSUL RB Slabs as per ASTM C177, 518, IS 3346 is displayed in the tables below:

Mean Temperature	Thermal Conductivity in W/m.K for the following densities in kg/m ³							
°C	48	64	80	100	120	144	160	200
25	0.036	0.035	0.035	0.034	0.034	0.034	0.036	0.037
35	0.038	0.036	0.037	0.036	0.036	0.036	0.037	0.038

Thermal Performance (R Value)

Thickness (mm)	Thermal Resistance (m ² .K/W) at 25 °C Mean Temp. for the following densities in kg/m ³							
	48	64	80	100	120	144	160	200
25	0.694	0.714	0.714	0.735	0.735	0.735	0.694	0.676
50	1.389	1.429	1.429	1.471	1.471	1.471	1.389	1.351
75	2.083	2.143	2.143	2.206	2.206	2.206	2.083	-
100	2.778	2.857	2.857	2.941	2.941	2.941	-	-
125	3.472	3.571	3.571	3.676	3.676	3.676	-	-
150	4.167	4.286	4.286	-	-	-	-	-
200	5.555	-	-	-	-	-	-	-

These are typical values subject to normal manufacturing and testing variances.

Acoustic Performance

ROCKINSUL RB Slabs achieve excellent acoustic performances (sound absorption coefficients, sound insulation, and impact sound isolation) when tested in accordance to various relevant ASTM standards.

ROCKINSUL RB Slabs achieve Noise Reduction Coefficient (NRC) values up to 1.05, when tested in accordance to ASTM C423.

Fire Safety Performance

Unfaced ROCKINSUL RB Slabs are non-combustible when tested in accordance with IS 3144, BS 476 (part 4), ISO 1182 and ASTM E136 and are classified as Class A1, in accordance with European norms.

Unfaced, FSK and ALG-faced ROCKINSUL RB Slabs have the following fire safety rating achievements:

1. Class 1 surface spread of flame in accordance to BS 476 (part 7)
2. Class 0 in accordance to the BS 476 (part 6 & 7) and to British Building Regulations.
3. Surface burning characteristics in accordance to ASTM E84 / UL 723
 - a. Fire Spread Index : Less than 25
 - b. Smoke Developed Index: Less than 50

Moisture Absorption Performance

ROCKINSUL RB Slabs absorb less than 1% by volume when tested in accordance with BS 2972, ASTM C1104 / 1104 M, and do not absorb moisture from ambient air or from water by capillary action. Only water under pressure can enter into stonewool insulation products; however, it quickly dries out due to the open cell structure of ROCKINSUL RB Slabs.

When tested in accordance to ASTM E96, FSK-faced RB Slabs achieve water vapour permeability of ≤ 0.02 perm, AIG-faced RB Slabs achieve zero water vapour permeability.

Applications

- ROCKINSUL RB Slabs are used for thermal and acoustic insulation for internal partitions and in between floor joints in public buildings like hotels, hospitals, schools and offices where fire safety is a primary concern.
- ROCKINSUL RB Slabs are also used for thermal and acoustic insulation for exterior walls, and walls of stair cases and elevator shafts.



Installation Procedures

Before installing ROCKINSUL RB Slabs, make sure to clear away any dust or grease and dry the surface. ROCKINSUL RB Slabs are pre-cut in required dimensions and placed over the surface to be insulated. Care should be taken to ensure that the joints fit properly and no gaps are left at the joints. Depending on the surface and equipment, pins or spacers should be used to fix the Slabs in place.



Handling & Storage

Stonewool being light in weight, is easy to handle. Products are to be stored in a well-lit, dry and protected area. They are to be kept in the original packaging, at elevated positions above the ground or on a slab, and away from the walls, in order to avoid any penetration of moisture and dust or foreign contamination. If stored outside and in an open area, packages should be protected with a polyethylene film, canvas or other similar type of covering.

ROCKINSUL

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