

## Rock Air™



### General Product Information

ROCKWOOL stone wool products are made of basalt, a volcanic stone, which is the world's most abundant natural resource.

ROCKWOOL stone wool products are non-combustible with a melting point more than 1000°C. They are particularly suitable for thermal insulation, fire protection and sound reduction or absorption.

ROCKWOOL stone wool is inorganic and contains no nutritious substance. Therefore it will not be attacked by microorganisms. Stone wool will not rot and does not attract vermin.

No CFCs, HFCs, HCFCs, or asbestos are used in the manufacture of ROCKWOOL stone wool products.

### Introduction

ROCKWOOL Rock Air series is designed for single skin roof and ceiling applications for both residential and light industry buildings or warehouses. It is also available with an aluminum foil facing to suit the requirements of all types of roof, linkway or related applications in commercial and industrial building.

Rock Air series is non-combustible, meaning it is able to slow down the spread of fire, thereby buying precious time for occupants to escape during a fire incident.

The thermal capabilities of Rock Air RL protects occupants from the heat of the outside weather, at the same time reducing the use of air conditioning for cooling.

Its excellent acoustic performance creates a comfortable and stress-free environment whether at home or at work, higher productivity, as well as better health and well-being in general.



### Passive fire protection

#### Do you have a “non-combustible” insulation?

ROCKWOOL insulation can withstand temperature of above 1000°C, acting as a passive protection to slow down the spread of fire, does not contribute to significant quantities of toxic smoke and therefore buy time for people to get out and fire-fighters to do their job.



**Before fire spreads**  
**Before toxic smoke reaches occupants**  
**People and fire fighters to get out**

#### Active fire protection

- Smoke detector
- Fire extinguishers
- Sprinkle system

### Consistent energy saving

#### Are you having a reliable insulation?

ROCKWOOL products keep hot and cool air where they're needed most. Our products derive their thermal properties from tiny pockets of air trapped within the physical structure of the stone wool.

These air pockets allow the insulation to keep hot air out in hot climates and to retain the warm air in cold climates. This means energy used in buildings for heating, cooling, and ventilation can be significantly reduced.



- Flexible material at the same time maintain shape and density
- Perform in hot and cold climate or wet and dry weather
- Performing at peak throughout lifetime

### A place you can call home

#### Do you always feel stressed and unable to concentrate?

Slamming doors, the rain drumming on your roof, heels tap tapping on the floor. These are just a few examples of impact noise sources. ROCKWOOL stone wool can help reduce the transmission of impact sound. Highly efficient sound absorber by nature, it both reduces noise and echoes in buildings, making your home a place of rest and relaxation.



- Increasing productivity and lowering stress levels
- Improves speech intelligibility
- Ensures a peaceful environment



ROCKWOOL insulation is heat-resistant above

# 1000°C



#### Fire-resilience

Withstand temperatures above 1000°C



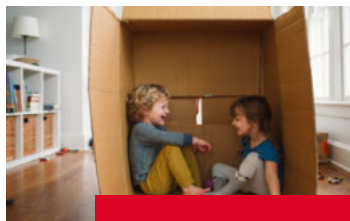
# 66%

of energy consumption in buildings are used for heating, cooling, and ventilation



#### Thermal properties

Saving energy by maintaining optimum indoor temperature and climate



# 50%

of the population are regularly exposed to traffic noise at a level harmful to health



#### Acoustic capabilities

Block, absorb or enhance sounds

### Water Repellent

ROCKWOOL Rock Air is both water repellent and moisture resistant (tested under EN 1609). The product repels water even when exposed to temporary splashing of rain water at construction site and is still able to maintain its shape over the long term, thereby delivering maximum fire, thermal and noise protection.

Moisture and nutrients are necessary conditions for fungal growth. As the product is made up of over 95% inorganic fibers, there is little nutrient source to allow fungal growth. Hence, it does not cause corrosion of the metal studs nor promote fungi growth within the wall cavity.



### Product Range and Packaging

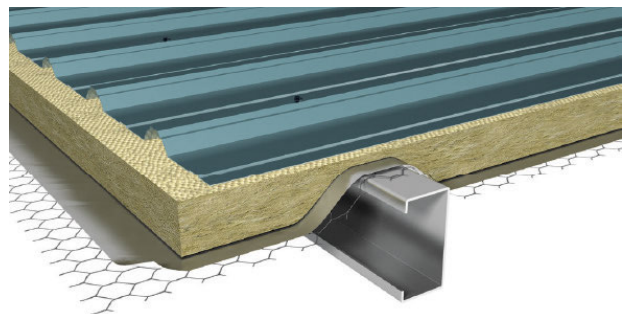
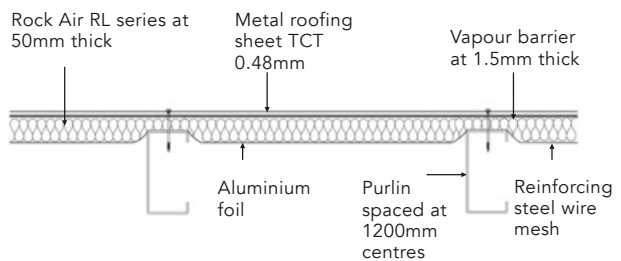
Rock Air product comes in form of blankets to suit many different types of roofing, walk ways and ceiling designs and installation needs.

Rock Air is produced in compressed roll and shrink wrapped in polyethylene sheets. It gives you significant reduction in size compared to folded blankets, thereby further reducing your warehousing cost and allowing for ease of transportation.



### Applications

Metal roofing systems are generally categorized as single skin metal roof or double skin metal roof. In single skin roof system, insulation is installed below the metal cladding sheet held by reinforcing steel wire mesh and aluminum foil rolled over purlins. This roofing system is an economically sound option for most industrial buildings. Rock Air RL series is the ideal non-combustible light weight thermal insulation solution for single skin roofing.



### Single Skin Roof System

### Standards

Rock Air series is designed to meet the requirements of the Malaysian Standard, MS1525 (Code of Practice on Energy Efficiency and Use of Renewable Energy for Non-Residential Buildings) and Singapore's BCA Green Mark for Residential and Non-Residential Buildings (version 4.0).

**Technical Parameters**

Product Name	Rock Air RL	Standard
Sound Absorption Coefficient $\alpha_w$	0.80	EN ISO 354 / ASTM C423-01)
Thermal Conductivity 20°C $\lambda$ Value (W/mk)	0.0370	ASTM C518
Water Absorption (partial immersion (kg/m <sup>2</sup> ))	0.1	EN1609.97
Water Vapor Absorption	Less than 0.02% of Vol.	ASTM C1104/C1104M
Fire Performance Non Combustibility	A1 Fire Classification, Non-combustible	EN 13501-1
Melting Point	>1000°C	ASTM E794
Form Factor	Blanket	
Thickness (mm)	50	
Width x Length (mm)	1200 x 5000	
Recommended for these common applications	Roofs, canopies, linkways, HVAC, walls	



Disclaimer: The information contained in this data sheet is believed to be correct at the date of publication. ROCKWOOL does not accept responsibility for the consequences of using Rock Air in applications different from those described above.

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