

## CELLUBOR ROCKWOOL

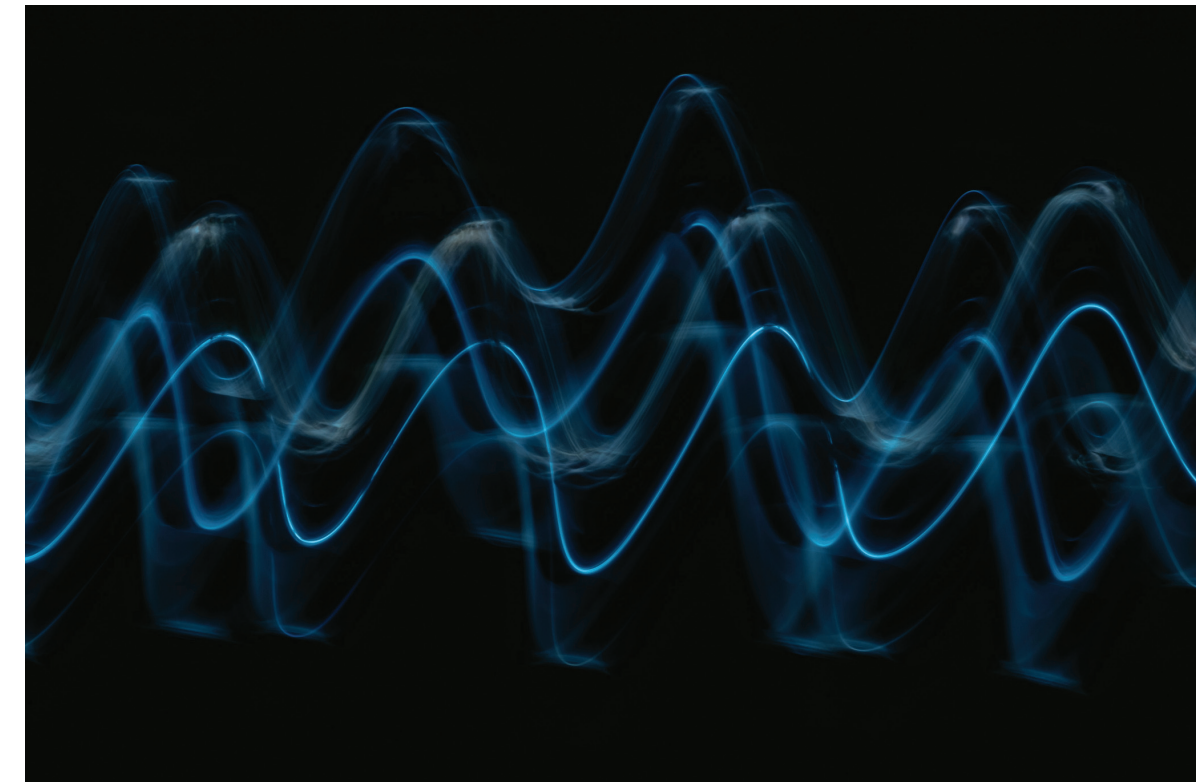
### Description :

CelluBOR Rockwool is formed as a result of basalt stone, which is a volcanic rock, by melting it at 1350°C-1400°C and turning it into fiber. Basalt, which is turned into fiber, can be produced in the form of mattresses, plates, pipes by pressing in various sizes. CelluBOR Rockwool provides fire safety along with heat insulation, sound insulation and acoustic arrangement in the buildings where it is applied.



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CelluBOR Rockwool



## CELLUBOR ACOUSTIC

The use of acoustic material has increased dramatically in recent years due to advances in technology and public concern about noise and pollution. Acoustic material is a high quality sound absorbing material as it is made entirely from natural materials. Therefore, the performance of the product remains constant throughout its lifetime. When an acoustic material is exposed to incident sound waves, the air molecules on the surface of the material and in the pores of the material are forced to vibrate and lose some of their original energy. This loss occurs because some of the energy is converted to heat due to thermal and viscous losses of the air molecules at the walls of the internal pores and tunnels in the material. At low frequencies these changes are isothermal, while at high frequencies they are adiabatic. Acoustic material is made from cellulose. Cellulose can be easily recycled and is a renewable resource, so it is environmentally friendly and harmless to humans due to its natural metrics. Cellulose-based materials, such as recycled newspapers, papers, etc., are commonly used to acoustically insulate ceilings, walls and difficult spaces in construction, reducing noise pollution.

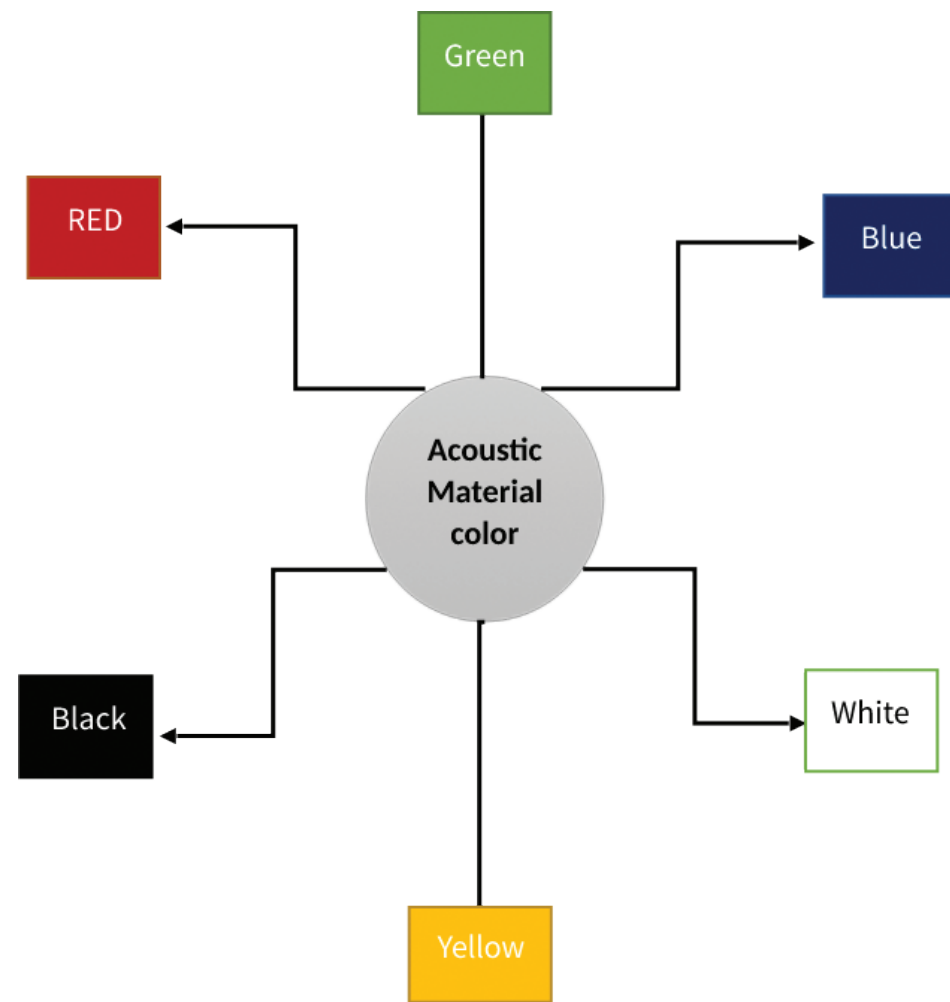


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CelluBOR Acoustic

## Material Specifications

Based on colour, acoustic material can be divided into six types:



Based on the colors in the background of the building and the personal opinion of the client, any of these six colors can be chosen. The only differences are in the colors and the materials, which are all the same and made of high quality material that is completely environmentally friendly due to its natural ingredients. Acoustic materials have special properties that can have different absorption coefficients depending on their thickness. Accordingly, the following diagrams show the absorption coefficient of the material at a thickness of 25, 50, 75 and 100.



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## Thermal Insulation :

Since the thermal conductivity declared value of stone wool (10° C) is lower than  $0.035 \leq \lambda \leq 0.040$  W/mK, it provides thermal insulation up to 90%.

## Fire Insulation :

CelluBOR Rockwool, usage temperature is between -50/+750°C. According to TS EN 13501-1, it is in the A1 class, which is non-combustible materials.

## Sound Insulation :

CelluBOR Rockwool, which is one of the insulation materials that absorbs sound best, is used especially in acoustic arrangements. It provides sound insulation between 40-90% according to EN ISO standards.

## Moisture and Moisture Insulation:

Since CelluBOR Rockwool does not corrode and rust, it is durable for many years, does not rot, mold or deteriorate. Water vapor diffusion resistance is  $\mu=1$ , which is the same value as air.

## Application :

CelluBOR Rockwool is suitable for general application in residential, commercial and industrial buildings. It can be manufactured in a wide variety of thickness and densities to suit most of the requirements.

## Product Types

Blanket, Roof Insulation, EIFS, Partition walls

## Material

Basalt, Volcanic Stone

## Feature

Easy installation  
Cost saving

## Performance

Good Hand-ability and Good Recovery.  
Economical in use

Specification	Properties
Nominal Density	40 - 150 kg/m <sup>3</sup>
Thermal Conductivity 20°C λ Values	0,035 - 0,040 W/mK
Fire Performance	Non-combustible
Water Absorption	Less than 1kg/m <sup>2</sup>
Sizes	600mm X 1200mm
Thickness	25mm - 150mm



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