

2022



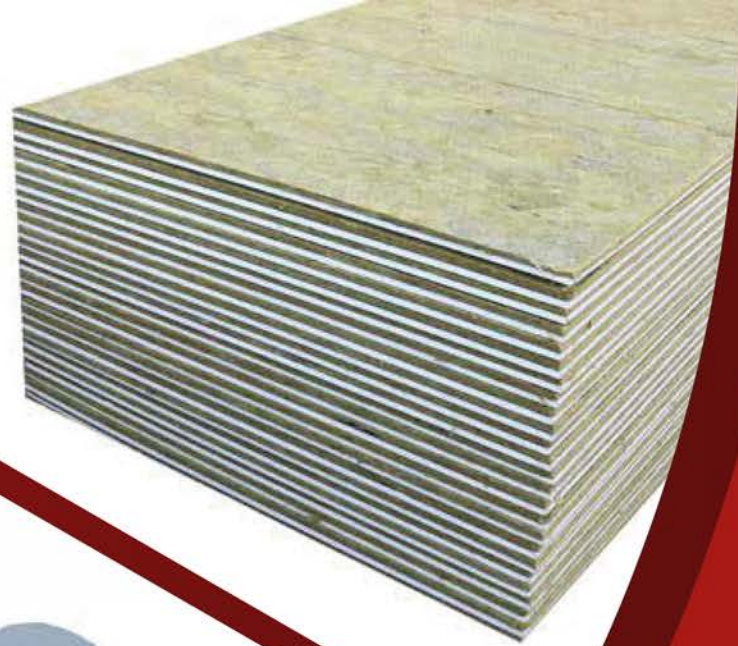
WARM
INTERNATIONAL

WARM WOOL
ROCK WOOL PIPE INSULATION

PRODUCT CATALOGUE



WARM
INTERNATIONAL
WARM WOOL



- Prefabricated Stonewool Pipe
- Lamella Blanket
- Kalibel[®]

From Basalt to Prefabricated Stone Wool Pipe...

Volcanic basalt stone; It is melted at 1500 degrees and transforms into stonewool form with the polymerization process.

BASALT



1

1500°



2



3

4

5



POLYMERIZATION



**TRANSFORMATION
OF FIBER INTO PIPE FORM**



STORAGE

STONEWOOL

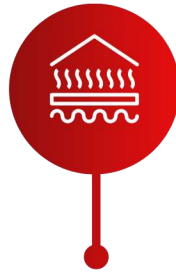
WHAT THE FEATURES ARE ?

Stone wool; It is formed as a result of volcanic formations. It is created by melting inorganic raw materials such as basalt, 97% of which is found in nature, at 1500 degrees and turning them into fiber.

Stone wool is the product that provides insulation and consists of small air sacs formed in microscopic and homogeneous sizes which cannot be seen by naked eye.

WHERE TO USE?

stonewool materials are insulation materials that are produced at high temperatures and have heat resistance. stonewool is generally used in exteriors of buildings, jacketing and insulation processes. Thanks to its high heat resistance, it is resistant to risks such as fire. It can be used in areas such as acoustic rooms, studios, radios, televisions, theaters and movie theaters, as it provides not only thermal insulation but also sound insulation. Thanks to all these advantageous properties, it is a preferred material in many buildings. In places with very high temperatures, the coating process is made with stonewool, which provides insulation with heat resistance. Against melting and ignition conditions, stonewool material is also used in the construction of household appliances, sea vehicles and steel door production, apart from the construction sectors.



SOUND INSULATION

Sound insulation; It is measured with values indicating decibels and frequencies. However, these values are measured in detail, that is, according to the structure of all applied materials and environment. The details and shape of application are critical. However, contrary to popular belief, many insulation materials do not provide sound insulation. For example, all polystyrene groups or smear-based thin products should not be expected to absorb sound. Mineral based products are used here. Especially Rockwool is the most effective product both in sheet form and in tubular use such as in installations.



THERMAL INSULATION

Limitation by reducing heat transfer between surfaces such as in buildings or installations is called thermal insulation. There are two important points at the level of thermal insulation. First; lambda, the heat permeability coefficient, the second is the thickness of the product used. The unit of lambda is W/mK . The closer the Lambda value is to 0, the better the insulation is. According to general acceptance, in order for a product to be considered as an insulation material, it must have a value less than $0.05 W / mK$. Lambdas of conventional insulation materials are close to each other. Therefore, it is the thickness of the product that determines the effectiveness of the thermal insulation. Stone wool prefabricated pipe is the product that can withstand high temperatures as in the installations and at the same time make the ideal insulation.



FIRE INSULATION

Fire insulation has a vital importance in buildings and installations. For the safety of life and property, fire-resistant products should be used. In order for a product to be fire resistant; It must have an A1 class certificate or be produced using raw materials with A1 class certificate, such as Izowool products. In addition to not burning the material during fire, it is also important that it does not drip and does not emit toxic gas when it sees high temperature.




VAPOR PERMEABILITY

Mold and moisture are the main factors that wear out structures and installations. Moreover, the bacterial growth they create together with it affects human health. Condensation is the main cause of moisture and mold growth and it occurs on surfaces where hot and cold meet, and naturally, this point is also the insulation materials. If the insulation materials or the layers above them do not consist of vapor permeability, they cannot absorb the moisture. On the contrary, vapor permeability is not desired in installations in order to prevent corrosion according to the application places. For this reason, Aluminum Foil coating can also be applied to the pipes produced by Izowool.

PREFABRICATED STONE WOOL PIPE TECHNICAL DATA SHEET

DESCRIPTION:

Prefabricated rockwool pipes are insulated materials that are produced with or without coating in order to perform heat insulation of pipes which provide transfer or high temperature fluids and to eliminate noise and vibration.

PROPERTIES	SYMBOL	VALUE	UNIT	STANDART
Density		70-100	kg/m ³	TS EN 14303
Pipe External Diameter		15-500	mm	TS EN 13467
Lenght	L	1000-2000	mm	TS EN 822
Insulation Thickness		15-100	mm	TS EN 823
Max. Service Temperature		650	°C	EN 14707
Thermal Conductivity	λ 40°C	0,038	W/mK	TS EN 12667
Thermal Conduvtivity at Different Medium Temperature	10°C 20°C 40°C 60°C 80°C	0,034 0,036 0,038 0,041 0,043	W/mK	EN13787
Melting Point		1000	°C	
Fire Behaviour		A1		TS EN 13501
Water Absorption		1	kg/m ²	TS EN 13472
Packaging		Polybag		



PREFABRICATED STONE WOOL PIPE



APPLICATION AREAS

stonewool Prefabricated Pipe is selected according to the nominal diameter of the line to be applied. It is placed by opening from the cutting area. The application should be completed so that there is no gap in the joints. Uncoated pipes are coated with bitumen emulsion or bituminous covers, galvanized or aluminum jacket. The joints of the coatings are fixed by gluing, clamping, riveting or screwing. Adhesive tape and vapor barrier foil coating on the overlap margin on aluminum foil coated pipes used in the insulation of cold lines makes installation very easy. In this application, the joints of the two pipes should be closed with self-adhesive aluminum foil tapes of 7.5 cm width, thus preventing the passage of steam completely. If two layers are applied in the assembly of the pipes, the joints care should be taken to ensure that the final layer joint is at the bottom of the pipe.



LAMELLA PIPE

It is used for the insulation of large diameter pipes or inclined areas. Apart from ease of use; Foil application cannot be applied to Rockwool mattresses with Rabtiz wire. For this reason, it is an alternative product in applications where vapor permeability is not desired but will operate at high temperatures.



LAMELLA BLANKET

It is used for insulation between two walls in chimney production. Owing to the converted fiber, while the chimneys with increased strength serve for a long time, they do not transfer the high heat to be passed through to critical areas.

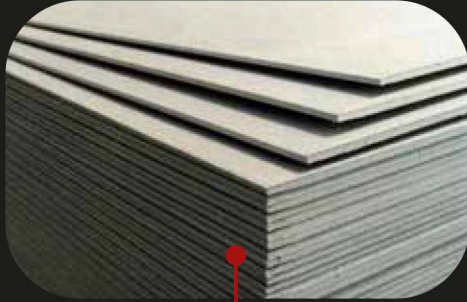


KALIBEL®

Kalibel is created by bonding gypsum panel and stonewool to make them composite. In addition to thermal insulation, it is primarily used in applications of internal insulation applications of buildings where sound insulation is required. It is fixed after applying adhesive plaster mortar on the wall. In order for Warm Kalibel to serve for many years, the quality of the products used in its production is not compromised.



FIBERCEMENT



STONEWOOL



1

2

WARMWALL

WarmWall is a composite product that offers heat and sound insulation as well as fire resistant and impact resistance. It is necessary to use stonewool, adhesive and fiber cement that can support each other in its production. In addition, critical production processes such as dosing are decisive in the performance of the final product.



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