

E Z S



## ABOUT US

The company EZS d.o.o. has a 40-year tradition of producing rock wool insulation ropes used mostly as fire and thermal protection of pipelines, expansion joints, stokeholds, new buildings, reconstruction, chimney coils ... and also in shipbuilding.

The need to substitute harmful materials (such as asbestos) with harmless materials (such as rock wool) has caused the further development and expansion of our product range. The company has thus complemented its product range by producing seals used in foundries and dilatation elements, used in the construction business.

## VISION

The vision of our company is to follow the new guidelines in the field of insulation and develop innovative solutions to meet customers' needs. Our wish is to stay the most trustful partner to all of our existing and potential customers.

In response to global market needs for new and innovative insulation products and the demand for higher efficiency in production, we are constantly improving our technical and logistic processes.

All of our products meet demanding standards for quality, as well as the strictest standards for health and the environment. All of the materials used in our products are health- and environmentally-friendly.

Our network of company partners goes not only beyond the borders of our country but also crosses European borders. Our products are also used in demanding markets, such as Asia.

## ABOUT ROCK WOOL

Rock wool is a natural insulation material, obtained by melting mineral stones at high temperature. At this technical procedure stones melt into thin threads, which then slump together and bind into a bigger mass. This output material has excellent thermal insulation characteristics and is very flexible for further product formulation of different shapes and usage purposes.

## ROCK WOOL CHARACTERISTICS:

FEATURES	
BURN-RETARDANT, FIRE PROTECTION	THE MELTING POINT OF ROCK WOOL IS OVER <b>1000 °C (1832 °F)</b> , THEREFORE IT ENSURES AN EXCELLENT FIRE PROTECTION
SOUND PROTECTION	ROCK WOOL INSULATION IS AN EXCELLENT FILTER OF SOUND FLOW
THERMAL PROTECTION	MAINTAINS THE SAME TEMPERATURE IN PLACE, NOT DEPENDING ON THE SEASONS TIME AND WEATHER CONDITIONS
VAPOUR PERMEABILITY	VAPOUR PERMEABILITY HELPS TO NEUTRALIZE THE HUMIDITY IN CONSTRUCTION
HEALTH FRIENDLY	BECAUSE IT IS A NATURAL PRODUCT, ROCK WOOL IS COMPLETELY HARMLESS TO HEALTH
ENVIRONMENTALLY FRIENDLY	ROCK WOOL IS MADE OF NATURAL STONES, WHICH ARE COMPLETELY ENVIRONMENTALLY HARMLESS
FLEXIBILITY	ROCK WOOL'S FLEXIBILITY ENABLES EASY INSTALLATION
HIGH TEMPERATURE STABILITY	DESPITE EXTERNAL INFLUENCES, ROCK WOOL ALWAYS KEEPS ITS FORM

## HEALTH AND ENVIRONMENTALLY-FRIENDLY

Health and environmental concerns are increasingly important issues of today. Modern trends not only tend to reduce energy consumption and to decrease environment strain, but also require the use of appropriate and environmentally-friendly materials and technologies which take into consideration more rational and environmentally harmless and expedient solutions.

The label "environmentally-friendly material" is used for all products that guarantee the lowest environment and health risks through the whole cycle from production till elimination. Rock wool fully complies with such standards.

The basic raw materials in the production of rock wool are diabaz and amphibolite stones. Rock wool is therefore a natural material that

has no proven adverse effects on human health. The installation of rock wool products enables healthy and comfortable living; its features include improving microclimate and ensuring excellent thermal, sound and fire protection. Nowadays many allergens cause allergic respiratory reactions, as well as skin and eye irritations; tests have shown that rock wool has no harmful influence on people when directly or indirectly in contact with insulation.

The use of rock wool as insulating material helps to protect the limited resources of energy and reduces air pollution and CO<sub>2</sub> emissions, since the use of rock wool can save far more energy than that used in its production. Protecting the environment is also reflected in a closed ecological cycle – rock wool can be recycled and reused in the production process.



## PRODUCTS Insu-Rope

We produce Insu-Rope rock wool insulation ropes with different diameters and for different purposes (construction expansion joints, new constructions, reconstructions, chimney coils,...). Insulation ropes are flexible enough to enable easy installation in less accessible parts of constructions.

The basic advantage of Insu-Rope products is a highly dense shield system (with synthetic or glass thread), which guarantees excellent stability of insulation ropes and easy installation practically anywhere.

We can offer insulation ropes with different diameters. One of the competitive advantages is **standard production of insulation ropes with diameters, larger than 60 mm** (see table below). The flexibility of our production enables us to **adjust to customers' needs for non-standard products**.

Insu-Ropes are appropriate for installation in any environment, ensuring excellent alignment with any sort of construction material.

Our products are packed in PE bags or cardboard, we stack them on pallets (pallet dimen-



sions are: length 1100 mm x width 1100 mm x height 2000 mm), which also ensures easy transport also to remote destinations. In order to meet our customers' needs we offer various packing types.

PRODUCT	DIAMETER (in mm)	PERFORMANCE	PURPOSE
Insu-Rope ROCK WOOL INSULATION ROPES	12	STANDARD	CONSTRUCTION EXPANSION JOINTS, NEW CONSTRUCTIONS, RECONSTRUCTIONS/ RENOVATIONS, CHIMNEY COILS, ...
	20		
	30		
	40		
	50		
	60		
	80		
	100		
	120		
150			
170			

### Insu-Rope ROCK WOOL INSULATION ROPES

FIRE PROTECTION	WORKING TEMPERATURE	< 750 °C/ 1382 °F
	MELTING POINT	> 1000 °C/ 1832 °F
	RANGE OF BURN-RETARDANT	AI
	DEMANDS FOR FIRE SAFETY	EXTRAORDINARY HIGH
LOWER THERMAL LOSSES	THERMIC CONDUCTANCE	0,035 W/mK - 0,040 W/mK
SOUND PROTECTION		MEETS HIGH REQUIREMENTS



## CONSTRUCTION EXPANSION JOINTS FILLER (FIRE BARRIER, THERMAL INSULATION)

For fire and thermal protection of construction expansion joints we use Insu-Ropes of different diameters. In case of fire this insulation solution slows down the spread of fire, fume and toxic gases, and consequentially provides more time to evacuate people. Rock wool insulation ropes also contribute to maintain appropriate microclimate in buildings; its vapour permeability protects buildings from humidity.

Construction expansion joints are present practically in every construction where there is a need to connect various parts and ensure appropriate seismic building dynamics.

For extra protection of the outer part of Insu-

Ropes we recommend installing additional insulation foils (to guarantee protection from water).

Insu-Rope ROCK WOOL INSULATION ROPES	
BURN-RETARDANT, FIRE PROTECTION (> 1000 °C/1832 °F)	✓
SOUND PROTECTION	✓
THERMAL PROTECTION	✓
VAPOUR PERMEABILITY	✓
HEALTH CARE	✓
ENVIRONMENT CARE	✓
FLEXIBILITY	✓
HIGH TEMPERATURE STABILITY	✓

CONSTRUCTION	APPLICATION			
	SIDE WALLS	CEILING	FLOOR	INTERMEDIATE CONNECTIONS (SIDE WALL - CEILING, SIDE WALL - FLOOR)
HOSPITALS	✓	✓	✓	✓
SCHOOLS	✓	✓	✓	✓
INDUSTRIAL BUILDINGS	✓	✓	✓	✓
SHOPPING CENTRES	✓	✓	✓	✓
RAILWAY STATIONS	✓	✓	✓	✓
RESIDENTIAL FACILITIES	✓	✓	✓	✓
BUS STATIONS	✓	✓	✓	✓
GARAGES	✓	✓	✓	✓
SPORT FACILITIES	✓	✓	✓	✓
BUSINESS FACILITIES	✓	✓	✓	✓
AIRPORT FACILITIES	✓	✓	✓	✓
HOTELS	✓	✓	✓	✓
OTHER	✓	✓	✓	✓



## NEW CONSTRUCTION INSULATION

Every new construction needs appropriate insulation planning in accordance with regulations for an environment that is not only healthy and safe but also offers fire and thermal protection.

In the construction of industrial facilities fire safety is of utmost importance, especially in industries which are most exposed to the highest risk of fire (refineries, chemical industries, gas pipelines, foundries, shipbuilding yards, ...). The high melting point of rock wool (over 1000 °C/ 1832 °F) enables high quality insulation also in the most exposed parts of constructions. Business facilities are environments, where people spend most of their time, therefore it is most important to establish conditions which are health-friendly and energy efficient.

Insu-Ropes are completely natural, harmless to people's health and the environment and **most efficient insulation material**.

Insu-Rope ROCK WOOL INSULATION ROPES	
BURN-RETARDANT, FIRE PROTECTION (> 1000 °C/1832 °F)	✓
SOUND PROTECTION	✓
THERMAL PROTECTION	✓
VAPOUR PERMEABILITY	✓
HEALTH CARE	✓
ENVIRONMENT CARE	✓
FLEXIBILITY	✓
HIGH TEMPERATURE STABILITY	✓

Insu-Rope ROCK WOOL INSULATION ROPES	NEW CONSTRUCTION TYPE		
	INDUSTRIAL FACILITIES	BUSINESS FACILITIES	RESIDENTIAL FACILITIES
FIRE PROTECTION	✓	✓	✓
THERMAL PROTECTION	✓	✓	✓
SOUND PROTECTION	✓	✓	✓
VAPOUR PERMEABILITY	✓	✓	✓
ENVIRONMENTAL CARE	✓	✓	✓
HEALTH CARE	✓	✓	✓
EASY INSTALLATION	✓	✓	✓



## RECONSTRUCTION / RENOVATION INSULATION

Construction plans for older buildings did not take into consideration strict regulations for fire protection, thermal efficiency, and healthy, harmless environment. Insu-Ropes of different diameters are appropriate to use in all reconstructions of industrial, business and residential facilities.

The flexibility of rock wool insulation ropes enables efficient installation and a wide spectrum of usage in the most critical and difficult to access parts of buildings.

Rock wool **does not contain asbestos or any other ingredients which are harmful to health or the environment**.

Insu-Rope ROCK WOOL INSULATION ROPES	
BURN-RETARDANT, FIRE PROTECTION (> 1000 °C/1832 °F)	✓
SOUND PROTECTION	✓
THERMAL PROTECTION	✓
VAPOUR PERMEABILITY	✓
HEALTH CARE	✓
ENVIRONMENT CARE	✓
FLEXIBILITY	✓
HIGH TEMPERATURE STABILITY	✓

Insu-Rope ROCK WOOL INSULATION ROPES	RECONSTRUCTION TYPE		
	INDUSTRIAL FACILITIES	BUSINESS FACILITIES	RESIDENTIAL FACILITIES
FIRE PROTECTION	✓	✓	✓
THERMAL PROTECTION	✓	✓	✓
SOUND PROTECTION	✓	✓	✓
VAPOUR PERMEABILITY	✓	✓	✓
ENVIRONMENTAL CARE	✓	✓	✓
HEALTH CARE	✓	✓	✓
EASY INSTALLATION	✓	✓	✓

## RELATIONSHIP WITH INSULATION PLANNERS AND USERS

For the most effective construction and reconstruction the key lies in a well-thought planning of thermal insulation and fire protection, which is the most important contribution for the future. The responsibility for the future of healthy living is in the hands of every individual.

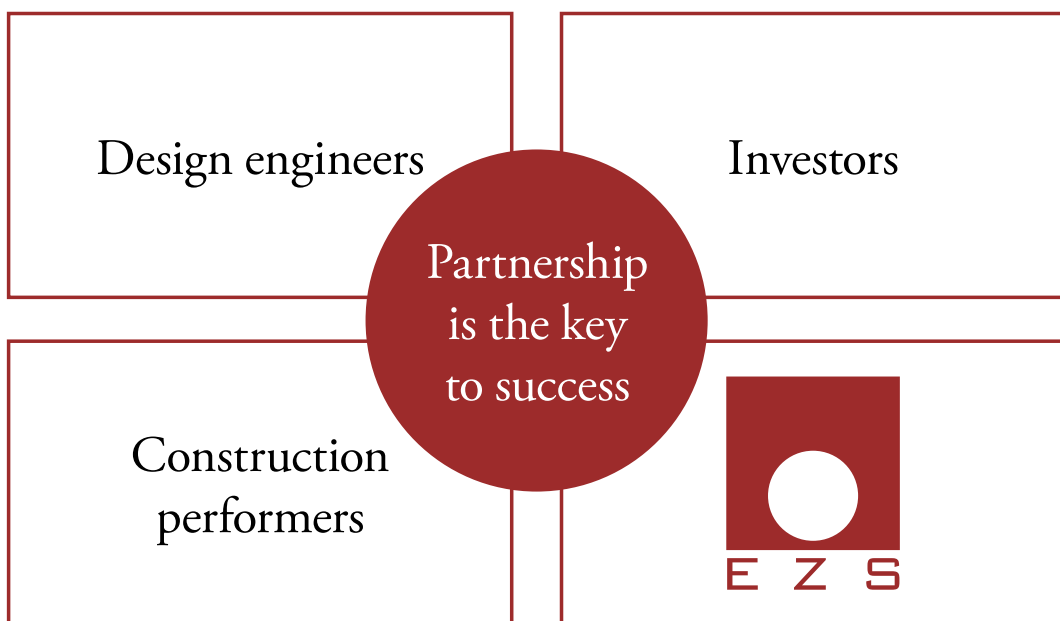
When developing construction investments design engineers include the best insulating materials, providing the highest-quality fire protection without excessive heat loss.

Construction experts ensure quality execution in all construction phases and the installation of the best insulation materials which fulfil the highest requests of the investor.

For the investor, the biggest success is the quality of the construction and a completed project of well-insulated buildings.

Only a complete approach in all construction phases can ensure the fulfilment of strict environmental, health and thermal efficiency regulations.

EVERY FACILITY IS A PLACE WHERE PEOPLE SPEND TIME.  
AT ANY TIME BONDS BETWEEN PEOPLE BECOME DEEPER AND CREATE TRUST.  
TRUST IS THE KEY TO SUCCESS.  
WE BUILD TRUST BETWEEN PEOPLE.



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