Chimney Insulation
Chimney Insulation

MAIN PROPERTIES OF ROCK MINERAL WOOL PRODUCTS

- THERMAL INSULATION PROPERTIES: thermal conductivity of 0.035 – 0.040 (W/mK)
- NON-COMBUSTIBILITY: highest possible Euroclass A1 fire classification according to European standards (melting point above 1,000°C)
- SUPERB ACOUSTIC PERFORMANCE: due to the open fibrous structure rock mineral wool has the ability to absorb and reduce high levels of sound
- ENERGY SAVING MATERIAL: for reduced energy bills and CO2 emissions
- VAPOUR PERMEABILITY: due to its fibrous structure, rock mineral wool is permeable to vapour
- WATER REPELLENCE: fibres are permanently water-repellent
- HIGHLY SUSTAINABLE: non-hazardous to personal health and the environment. Rock mineral wool is free from CFCs, HCFCs and any other material with ozone depletion potential in their manufacture and content and represents no known threat to the environment
- PERMANENTLY STABLE DIMENSIONS: products do not change in length or width with fluctuations in humidity or temperature
- RESISTANCE TO MICRO-ORGANISMS: rock mineral wool is non-hygroscopic, rot proof, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria

Thermal insulation installed around chimneys prevents condensation of water vapour inside the chimney tube and provides optimum draft of fumes. This ensures optimal performance of chimney systems and efficient use of energy.

Knauf Insulation is a leading European chimney insulation producer offering a complete range of rock mineral wool products for all types of insulated chimney systems. Our advantage is to offer perfectly customized products according to customer requirements. Precise fabrication ensures perfect fit of insulation to the chimney’s tube - a key element in achieving optimal energy efficiency of the complete chimney system.

Our clients are supported in new product development with our technical and R&D teams who work closely with customer’s technical professionals.

We provide solutions for:
- Ceramic chimney systems
- Stainless steel chimney systems

KNAUF INSULATION CHM V-GROOVED BOARD (CHM CVGB)
Insulation boards for ceramic chimney systems and fireplaces

DESCRIPTION
KNAUF INSULATION CHM CVGB are boards made of rock mineral wool. Because of their specific properties, primarily excellent fire protection, they are used for thermal, fire and sound protection of ceramic chimneys. Boards can be faced with black glass veil, white glass veil or white reinforced glass veil.

The dimensions of each board are customized according to the ceramic tube’s diameter, whereas the V-grooved profile of the board allows perfect bending around the tube. Perfect fit of insulation to the ceramic tube is an important element in achieving optimal energy efficiency of the complete chimney system. The product can be delivered also as a regular board (without V-grooved profile), so it can be used for different types of converting.

PREFERENCES
- Preservation at high temperatures
- Material melting point above 1,000°C
- Excellent form stability
- V-grooved slabs – easy to mount
- Dimension tolerance according to customer specification
- High thermal insulation properties
- On-fleece branding according to customers request
- Acquired national technical approval (Zulassung Nr. Z7. 4.1746)

KNAUF INSULATION CHM C FIRE CORD PE (CHM CFCP)
Ropes for non-standard ceramic chimney systems

DESCRIPTION
KNAUF INSULATION CHM CFCP are rock mineral wool ropes reinforced with polyamide fibre thread

PREFERENCES
- Preservation at high temperatures
- Material melting point above 1,000°C
- Thermal insulation properties
- Permanent dimensional stability at all operating temperatures
- Diameter: 20 - 60 mm
KNAUF INSULATION CHM C FIRE CORD GF (CHM CFCG)  
Ropes for non-standard ceramic chimney systems

DESCRIPTION
KNAUF INSULATION CHM CFCG are rock mineral wool ropes reinforced with glass fibre thread.

PREFERENCES
- High flexibility
- Resistant to chemicals
- Preservation at high temperatures
- Material melting point above 1,000°C
- Thermal insulation properties
- Permanent dimensional stability at all operating temperatures
- Diameter: 12 - 80 mm

KNAUF INSULATION CHM C SPECIAL / CHM S SPECIAL (CHM CSP & CHM SSP)  
Converted insulation products for ceramic and stainless steel chimney systems

DESCRIPTION
KNAUF INSULATION CHM CSP & CHM SSP are specially converted rock mineral wool products that are designed and produced exactly according to customer specifications. Knauf Insulation converting process enables the production of non-standard insulation parts, which fit perfectly to the complete chimney system.

PREFERENCES
- Preservation at high temperatures
- Material melting point above 1,000°C
- Excellent form stability
- Dimension tolerance according to customer specifications
- Thermal insulation properties

KNAUF INSULATION CHM S LAMELLA MAT DIA (CHM SLMD)  
Lamella mats for stainless steel chimney systems

DESCRIPTION
KNAUF INSULATION CHM SLMD are insulation mats composed of rock mineral wool lamellas, bonded with reinforced aluminium foil. Vertically-oriented fibres are more resistant to compression loads. The products are supplied in the form of pre-cut slabs, with length equal to the chimney tube size. Product flexibility enables perfect fit to the stainless steel tube.

PREFERENCES
- Preservation at high temperatures
- Material melting point above 1,000°C
- Excellent form stability
- Easy to mount due to their flexibility
Chimney Insulation

KNAUF INSULATION CHM S WIRED MAT (CHM SWM)
Wired mats for stainless steel chimney systems

DESCRIPTION
KNAUF INSULATION CHM SWM is a mat made of rock mineral wool. The standard product is supplied with galvanized steel mesh and stitched with galvanized steel wire. The mesh makes the wired mat a firm, but flexible insulation mattress, withstanding high operating temperatures.

Mat can also be supplied with galvanized steel mesh and stainless wire (SWM SG) or stainless steel mesh and stainless wire (SWM S). It can be used for continuous operating temperatures up to 640°C (D8) or 660°C (D10), and is particularly convenient for the insulation of large diameter chimneys. It is suitable for cutting to fit over irregular shaped surfaces.

PREFERENCES
■ Preservation at high temperatures
■ Material melting point above 1,000°C
■ Thermal insulation properties
■ Easy to install
■ Easy to cut
■ Resilient, strong and flexible

KNAUF INSULATION CHM S DUCT ROLL (CHM SDR)
Mats for insulating stainless steel chimney systems

DESCRIPTION
KNAUF INSULATION CHM SDR is a high density mat made of rock mineral wool with vertically oriented fibres designed for thermal, sound and fire protection of stainless steel chimneys. The mats are faced on one side with reinforced aluminium foil which ensures protection of the outer surface and at the same time acts as a vapour barrier. The special production technology and vertical orientation of the fibres create the high mechanical strength of the mat.

PREFERENCES
■ Minimal heat loss
■ Resistance to compression loads
■ Thermal, fire and sound insulation properties
■ High flexibility ensures that mat fits to any surface
■ Preservation at high temperatures
■ Material melting point above 1,000°C

KNAUF INSULATION CHM S FLOCKS (CHM SF)
Flocks for stainless steel chimney systems

DESCRIPTION
KNAUF INSULATION CHM SF are rock mineral wool flocks made of virgin rock mineral wool. Due to their optimized properties, they are a perfect solution for thermal, sound and fire insulation of double-wall stainless steel chimneys. The higher lubricant content enables good flow of material in chimney insulation process.

PREFERENCES
■ Preservation at high temperatures
■ High thermal insulation properties
■ Material melting point above 1,000°C
■ High material flow in dry process
■ Packaging in bags

KNAUF INSULATION CHM S NEEDLED FELT (CHM SNFS)
Needled felts for stainless steel chimney systems

DESCRIPTION
KNAUF INSULATION CHM SNFS are rock mineral wool products made of long mineral wool fibres, specially needled to form a compact, dimensionally stable felt with high temperature stability. Because of the unique procedure for connecting the fibres, the felts do not contain organic binders.

PREFERENCES
■ Preservation at high temperatures
■ Supreme thermal insulation properties
■ Material melting point above 1,000°C
■ Fit to different forms
■ Facing possibilities

APPLICATION
Thermal, fire and sound protection of industrial stainless steel chimney systems

TECHNICAL PROPERTIES
■ Reaction to fire: Euroclass A1 (EN 13051)
■ Operating temperature: ≤ 300°C (D8) or ≤ 300°C (D10)
■ AS Quality: Insulation of Austenitic Steel (EN 13468)

APPLICATION
Thermal, fire and sound protection of stainless steel chimney systems

TECHNICAL PROPERTIES
■ Reaction to fire: Euroclass A1 [EN 13051]
■ Melting point: > 1,000°C (DIN 4102/F17)
■ AS Quality: Insulation of Austenitic Steel (EN 13468)

APPLICATION
Thermal, fire and sound protection of stainless steel chimney systems

TECHNICAL PROPERTIES
■ Reaction to fire: Euroclass A1 (EN 13051)
■ Melting point: > 1,000°C (DIN 4102/F17)
■ AS Quality: Insulation of Austenitic Steel (EN 13468)

APPLICATION
Thermal, fire and sound protection of industrial stainless steel chimney systems

TECHNICAL PROPERTIES
■ Reaction to fire: Euroclass A1 (EN 13051)
■ Operating temperature: ≤ 640°C (D8) or ≤ 660°C (D10)
■ AS Quality: Insulation of Austenitic Steel (EN 13468)
HEALTH AND ENVIRONMENTAL PROTECTION

The incorporation of insulation material from mineral wool makes it possible to build healthy and comfortable living spaces as its properties improve the microclimate in a room and, at the same time, ensure excellent thermal, sound and fire protection. Products are tested according to Directives 97/69/EC, for which they were granted the »Test Certificate of Bio-solubility«, demonstrating their health safety. Knauf Insulation products are also ecologically oriented, as they reduce the consumption of thermal energy sources, thereby reducing environmental pollution. It is also of great importance that the production procedure of mineral wool is carried out in a closed circuit, i.e. production process waste is recycled in briquette manufacturing and then returned back to the production line.

As part of our policy of continuous product development, we reserve the right to revise specifications without notice. The information given in the brochure is correct to the best of our knowledge. It provides general information only and users should verify whether the products described are suitable for their specific requirements.