



Stone mineral wool pipe insulation



DESCRIPTION

ISOL Shell is a pipe insulation made of stone mineral wool. The longitudinal distribution of the fibers in the mineral wool ensures stability and strength of the product, as well as optimal insulation performance.

ISOL Shell is available in versions with and without reinforced aluminum foil.

The aluminum foil has a self-adhesive strip longwise, ensuring firm attachment of the individual segments of the insulation. Depending on the diameter and thickness, the pipe insulation consists of 1 to 4 longitudinal segments¹.

Low chloride ion content (< CL10) reduces the risk of corrosion of insulated components.

The operating temperature of the product is 0 °C - 450 °C while the melting temperature of the stone wool is >1000 °C.

APPLICATION

ISOL Shell is used as thermal, fire, noise and anti-condensation² insulation of pipes.

It is widely applicable in heating, plumbing, industrial, air conditioning and other installations.

ADVANTAGES

- Excellent thermal insulating characteristics
- Fire resistance
- Easy and quick installation
- Prevents formation of condensation³
- Long service life
- Water-repellent product
- Reduces noise and vibrations of insulated installations
- Hardness and strength, dimensional stability.
- Low chloride ion content (< Cl10)
- Recyclable

TECHNICAL PARAMETERS

| Parameter | Value | Standard |
|--|---|-------------|
| Declared thermal conductivity λ_D , °C | W/m.K: | EN ISO 8497 |
| 10° C | 0.034 | |
| 50° C | 0.037 | |
| 100° C | 0.044 | |
| 150° C | 0.053 | |
| 250° C | 0.058 | |
| 400° C | 0.081 | |
| 500° C | 0.090 | |
| Reaction to fire | A1, incombustible (without ALU foil) A2L-s1, incombustible (with ALU foil) | EN 13501-1 |
| Operating temperature | 0° C - 450° C | EN 14707 |
| Short-term water absorption | ≤ 1 kg/m ² | EN 13472 |
| Content of chloride ions | < 10 ppm (10 mg/1 kg) | EN 13468 |
| Facing | with and without ALU foil | |
| Dimensions | | |
| Thickness | 20 mm ÷ 100 mm | EN 13467 |
| Inner diameter | ø18 mm ÷ ø356 mm | |
| Length | 1000 mm ± 1 % | |

1- The number of segments can be seen in the table with dimensions. 2- Insulation with ALU foil. 3- In the case of the ALU foil version.

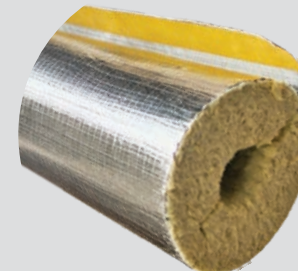
ISOL Shell - pipe sections with and without ALU facing

| Inner diameter Inch | Inner diameter mm | 20mm | | | | 30mm | | | | 40mm | | | | 50mm | | | | 60mm | | | | 80mm | | | | 100mm | | | | | | | | | | | | |
|------------------------|----------------------|---------------------|----------|--------|---------------|--------------|---------------------|----------|--------|---------------|--------------|---------------------|----------|--------|---------------|--------------|---------------------|----------|--------|---------------|--------------|---------------------|----------|--------|---------------|--------------|---------------------|----------|--------|---------------|--------------|---------------------|--------------|-----------|--------------|-------|--|--|
| | | Box dimensions | Segments | Lm/box | Weight kg/box | | Box dimensions | Segments | Lm/box | Weight kg/box | | Box dimensions | Segments | Lm/box | Weight kg/box | | Box dimensions | Segments | Lm/box | Weight kg/box | | Box dimensions | Segments | Lm/box | Weight kg/box | | Box dimensions | Segments | Lm/box | Weight kg/box | | | | | | | | |
| | | | | | With foil | Without foil | | | | With foil | Without foil | | | | With foil | Without foil | | | | With foil | Without foil | | | | With foil | Without foil | | | | With foil | Without foil | With foil | Without foil | With foil | Without foil | | | |
| | 15 | 1013 x 600 x 250 mm | 1 | 45 | 8.87 | 7.91 | 1013 x 600 x 250 mm | 1 | 28 | 10.27 | 9.50 | 1013 x 600 x 250 mm | 1 | 17 | 9.97 | 9.39 | 1013 x 600 x 250 mm | 1 | 10 | 8.57 | 8.16 | 1013 x 600 x 250 mm | 1 | 16 | 18.83 | 18.09 | 1013 x 600 x 250 mm | | | | | 1013 x 600 x 250 mm | | | | | | |
| 3/8 | 18 | | 1 | 45 | 9.59 | 8.59 | | 1 | 24 | 9.37 | 8.68 | | 1 | 17 | 10.50 | 9.91 | | 1 | 10 | 8.95 | 8.54 | | 1 | 16 | 19.57 | 18.81 | | | | | | | | | | | | |
| 1/2 | 22 | | 1 | 36 | 8.25 | 7.42 | | 1 | 21 | 8.69 | 8.07 | | 1 | 14 | 9.08 | 8.58 | | 1 | 10 | 9.34 | 8.92 | | 1 | 15 | 19.04 | 18.31 | | 1 | 9 | 18.81 | 18.27 | | | | | | | |
| 3/4 | 28 | | 1 | 32 | 8.36 | 7.56 | | 1 | 18 | 8.30 | 7.73 | | 1 | 11 | 7.82 | 7.41 | | 1 | 9 | 9.10 | 8.70 | | 1 | 14 | 19.06 | 18.36 | | 1 | 8 | 17.70 | 17.20 | | | | | | | |
| 1 | 35 | | 1 | 24 | 7.04 | 6.39 | | 1 | 17 | 8.64 | 8.07 | | 1 | 10 | 7.73 | 7.34 | | 1 | 8 | 8.71 | 8.34 | | 1 | 12 | 17.44 | 16.82 | | 1 | 8 | 18.68 | 18.17 | | | | | | | |
| 1 1/4 | 42 | | 1 | 21 | 7.17 | 6.54 | | 1 | 12 | 6.94 | 6.51 | | 1 | 10 | 8.66 | 8.24 | | 1 | 7 | 8.43 | 8.09 | | 1 | 10 | 15.92 | 15.37 | | 1 | 6 | 15.11 | 14.71 | | | | | | | |
| 1 1/2 | 48 | | 1 | 18 | 6.72 | 6.15 | | 1 | 11 | 6.88 | 6.47 | | 1 | 8 | 7.43 | 7.07 | | 1 | 6 | 7.69 | 7.39 | | 1 | 10 | 16.85 | 16.28 | | 1 | 6 | 15.87 | 15.43 | | | | | | | |
| | 54 | | 1 | 17 | 6.89 | 6.32 | | 1 | 10 | 6.73 | 6.33 | | 1 | 8 | 7.92 | 7.56 | | 1 | 4 | 5.43 | 5.22 | | 1 | 9 | 15.99 | 15.46 | | 1 | 6 | 16.61 | 16.16 | | | | | | | |
| 2 | 60 | | 1 | 15 | 6.56 | 6.03 | | 1 | 10 | 7.20 | 6.78 | | 1 | 8 | 8.42 | 8.04 | | 1 | 4 | 5.74 | 5.53 | | 1 | 9 | 16.82 | 16.28 | | 2 | 5 | 14.45 | 14.07 | | | | | | | |
| | 64 | | 1 | 15 | 6.88 | 6.33 | | 1 | 10 | 7.51 | 7.08 | | 1 | 7 | 7.66 | 7.31 | | 1 | 4 | 5.95 | 5.73 | | 1 | 9 | 17.38 | 16.82 | | 2 | 5 | 14.86 | 14.47 | | | | | | | |
| 2 1/2 | 76 | 1010 x 600 x 500 mm | 1 | 20 | 10.45 | 9.65 | 1010 x 600 x 500 mm | 1 | 16 | 13.53 | 12.78 | 1010 x 600 x 500 mm | 1 | 12 | 14.62 | 13.99 | 1010 x 600 x 500 mm | 1 | 9 | 14.78 | 14.24 | 1010 x 600 x 500 mm | 1 | 8 | 16.92 | 16.40 | 1010 x 600 x 500 mm | 2 | 5 | 16.09 | 15.67 | 1010 x 600 x 500 mm | 2 | 4 | 18.06 | 17.68 | | |
| 3 | 89 | | 1 | 16 | 9.47 | 8.76 | | 1 | 12 | 11.37 | 10.76 | | 1 | 10 | 13.53 | 12.96 | | 1 | 8 | 14.47 | 13.97 | | 1 | 8 | 18.55 | 17.97 | | 2 | 5 | 17.41 | 16.98 | | 2 | 3 | 14.54 | 14.24 | | |
| 3 1/4 | 108 | | 1 | 12 | 8.32 | 7.72 | | 1 | 10 | 10.97 | 10.40 | | 1 | 8 | 12.40 | 11.90 | | 2 | 7 1/2 | 15.43 | 14.88 | | 2 | 5 | 13.06 | 12.66 | | 2 | 4 | 15.48 | 15.11 | | 2 | 3 | 15.99 | 15.67 | | |
| 4 | 114 | | | | | | | 1 | 9 | 10.29 | 9.77 | | 1 | 7 | 11.29 | 10.83 | | 2 | 6 | 16.01 | 15.45 | | 2 | 5 | 13.52 | 13.11 | | 2 | 4 | 15.97 | 15.59 | | 2 | 3 | 16.45 | 16.13 | | |
| | 120 | | | | | | | 1 | 9 | 10.72 | 10.17 | | 1 | 7 | 11.72 | 11.25 | | 2 | 6 | 13.27 | 12.81 | | 2 | 5 | 13.98 | 13.56 | | 2 | 3 1/2 | 14.40 | 14.07 | | 2 | 3 | 16.90 | 16.58 | | |
| | 127 | | | | | | | 1 | 8 | 9.97 | 9.47 | | 1 | 7 | 12.26 | 11.75 | | 2 | 6 | 13.81 | 13.34 | | 2 | 5 | 14.52 | 14.09 | | 2 | 3 1/2 | 14.90 | 14.56 | | 2 | 3 | 17.44 | 17.11 | | |
| | 133 | | | | | | | 1 | 8 | 10.34 | 9.83 | | 2 | 7 | 12.69 | 12.17 | | 2 | 6 | 14.28 | 13.79 | | 2 | 5 | 14.98 | 14.54 | | 2 | 3 | 13.14 | 12.84 | | 2 | 3 | 17.90 | 17.56 | | |
| 5 | 140 | | | | | | | 1 | 6 | 8.09 | 7.69 | | 2 | 6 1/2 | 12.26 | 11.76 | | 2 | 6 | 14.82 | 14.32 | | 2 | 4 1/2 | 13.97 | 13.56 | | 2 | 3 | 13.57 | 13.26 | | 2 | 2 1/2 | 15.36 | 15.07 | | |
| | 159 | | | | | | | 2 | 7 | 10.51 | 9.97 | | 2 | 6 | 12.50 | 12.00 | | 2 | 5 | 13.57 | 13.13 | | 2 | 4 | 13.59 | 13.20 | | 2 | 3 | 14.73 | 14.41 | | 3 | 2 2/3 | 17.70 | 17.37 | | |
| 6 | 168 | | | | | | | 2 | 7 | 11.00 | 10.44 | | 2 | 6 | 13.06 | 12.54 | | 2 | 5 | 14.15 | 13.69 | | 2 | 4 | 14.14 | 13.75 | | 2 | 3 | 15.30 | 14.95 | | 3 | 2 | 13.72 | 13.46 | | |
| | 191 | | | | | 2 | 6 | 10.51 | 9.99 | 2 | 4 1/2 | 10.86 | 10.44 | 2 | 4 | 12.51 | 12.11 | 3 | 4 | 15.57 | 15.13 | 3 | 2 2/3 | 14.87 | 14.54 | 3 | 2 | 14.89 | 14.62 | | | | | | | | | |
| | 200 | | | | | 2 | 5 | 9.11 | 8.67 | 2 | 4 | 10.03 | 9.65 | 3 | 4 2/3 | 15.16 | 14.65 | 3 | 3 1/3 | 13.42 | 13.05 | 3 | 2 2/3 | 15.36 | 15.02 | 3 | 2 | 15.35 | 15.07 | | | | | | | | | |
| 8 | 219 | | | | | 2 | 5 | 9.86 | 9.38 | 2 | 4 | 10.82 | 10.41 | 3 | 4 | 13.96 | 13.51 | 3 | 3 1/3 | 14.40 | 14.00 | 3 | 2 2/3 | 16.39 | 16.04 | 3 | 2 | 16.31 | 16.03 | | | | | | | | | |
| | 250 | | | | | 3 | 5 2/3 | 12.58 | 11.96 | 3 | 5 | 15.15 | 14.57 | 3 | 4 | 15.56 | 15.07 | 3 | 3 1/3 | 15.99 | 15.56 | 3 | 2 1/3 | 15.78 | 15.45 | 3 | 1 1/3 | 11.90 | 11.69 | | | | | | | | | |
| 10 | 273 | | | | | 3 | 5 2/3 | 13.60 | 12.92 | 3 | 5 | 16.34 | 15.73 | 4 | 4 | 16.74 | 16.23 | 4 | 3 | 15.48 | 15.06 | 4 | 2 | 14.49 | 14.19 | 4 | 1 3/4 | 16.68 | 16.40 | | | | | | | | | |
| | 300 | | | | | 3 | 4 2/3 | 12.80 | 11.62 | 3 | 3 1/3 | 11.81 | 11.38 | 4 | 3 3/4 | 17.02 | 16.49 | 4 | 3 | 16.72 | 16.28 | 4 | 2 | 15.59 | 15.27 | 4 | 1 1/4 | 12.78 | 12.56 | | | | | | | | | |
| | 324 | | | | | 3 | 4 1/3 | 12.13 | 11.57 | 3 | 3 1/3 | 12.66 | 12.18 | 4 | 3 3/4 | 18.17 | 17.62 | 4 | 3 | 17.83 | 17.36 | 4 | 2 | 16.57 | 16.24 | 4 | 1 1/4 | 13.54 | 13.31 | | | | | | | | | |
| | 350 | | | | | 3 | 4 | 12.00 | 11.45 | 3 | 3 | 12.21 | 11.76 | 4 | 3 1/4 | 16.84 | 16.33 | 4 | 2 1/4 | 14.27 | 13.90 | 4 | 1 1/2 | 13.23 | 12.96 | 4 | 1 | 11.49 | 11.30 | | | | | | | | | |

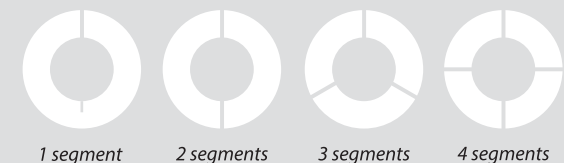
Option for non standart diameters and thicknesses production upon request.
All products have CE marking acc.to EN 14303

• PACKAGING

ISOL Shell is packed in cartons with dimensions:
1010x600x500mm and 1013x600x250mm
Pallet with dimensions 1000x1200x2000-2400mm



Type and number of segments depending on dimensions





**chemical
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insulation solutions

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The company is
ISO 9001
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ISO 45001 certified.