

NOTES ON INSTALLATIONS

Pipe insulation Thermo-teK PS PRO ALU



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i NOTE

Before starting installation, ensure that all adhesive surfaces are dry and free from dust, grease and dirt.

Beware on pipe section dimensions to choose
 $OD_{pipe} \leq \text{bore size of pipe section.}$

GENERAL MOUNTING INSTRUCTIONS

To facilitate the opening the PS Pro ALU pipe section for installation on the pipe they are provided with a slight slit (1) on the side opposite to the longitudinal opening. This makes it much easier to push the shell over the pipe which is to be insulated.

Before the longitudinal seam can be closed with the self-adhesive overlap, the protective strip (2) must be removed. The strip can also be removed in sections. Before the self-adhesive coatings are pressed together, the halves of the pipe section must be precisely aligned.

Firm pressure on the self-adhesive coating must be ensured over the entire length of the longitudinal seam.

The butt joints at the ends of the pipe sections must be sealed with self-adhesive aluminium tape.

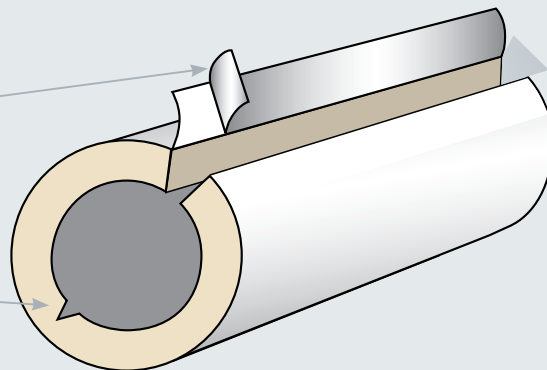


1

PIPE SECTION WITH PROTECTION AND SELF-ADHESIVE TAPE

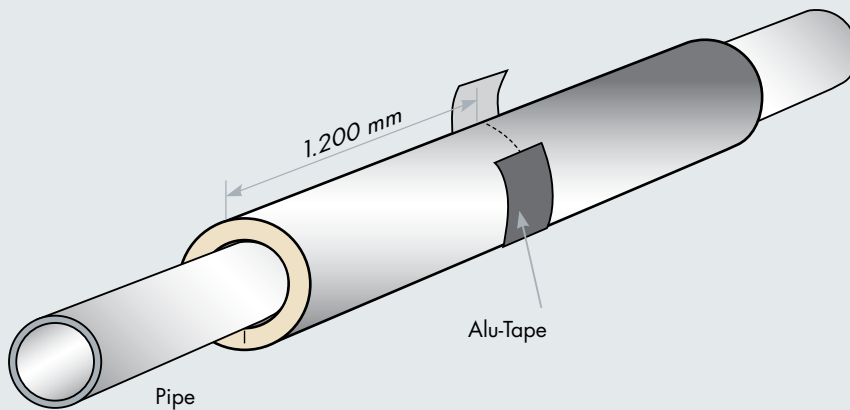
2) Retear protective film on self adhesive tape

1) Slit



2

INSTALLATION ON THE PIPE





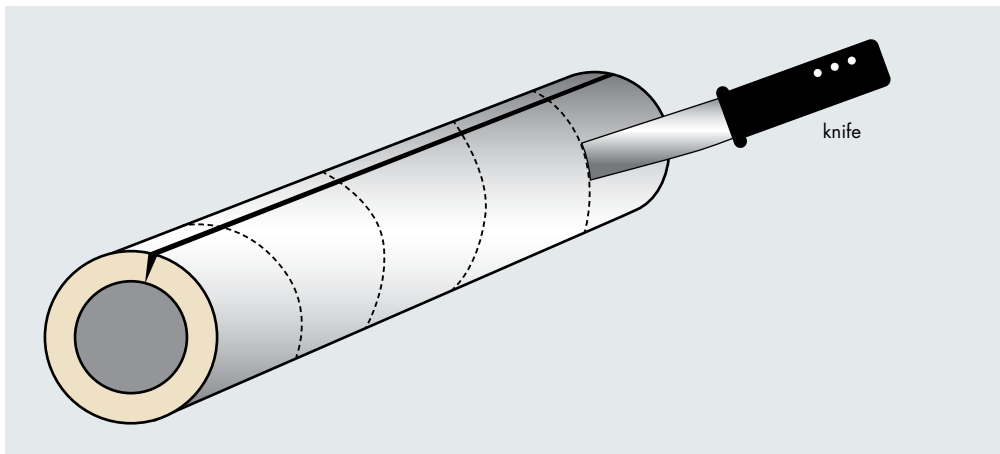
CUTTING ANGLED PIECES

Please note the following information for the insulation of curved sections:

- Cutting of the pipe section according to the angle of the curved section.
- The number of cut sections results from the size of the pipe section and the angle of the curve.
- After cladding the curved section with the pipe section elements, these must also be stabilised with suitable steel bands or binding wires.
- In order to securely insulate any gaps which occur, these must be plugged e.g. with loose wool.
- All butt joints and open areas of Mineral Wool must be sealed with self-adhesive aluminium tape.

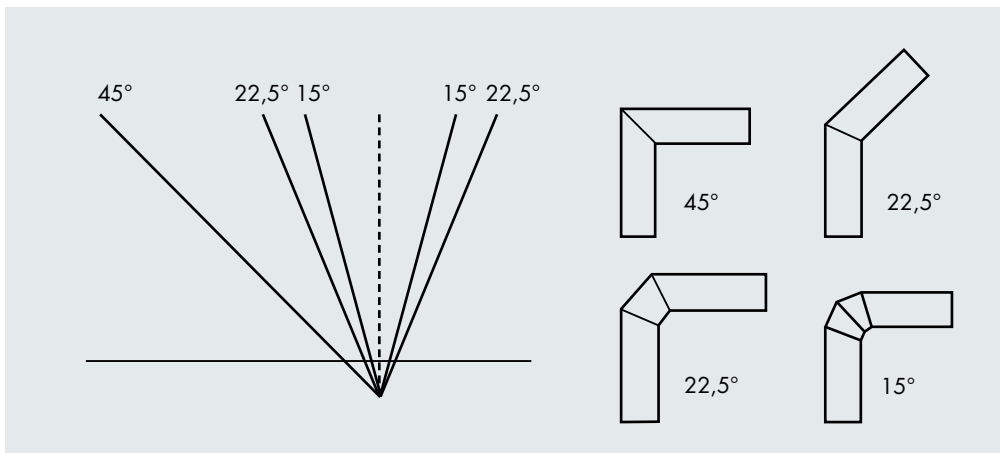
3

**CUTTING THE PIPE
SECTION INTO
INDIVIDUAL ELEMENTS**



4

CUTTING ANGLE



ADDITIONAL HINTS

The initial adhesion may be reduced if the ambient temperature at the time of processing is less than 10°C. In this case, especially careful work is required, whereby the necessary pressure to achieve a permanent bond must be increased and must be ensured by the installer.

Various national processing standards or directives (DIN 4140) specify that the pipe shells must be additionally secured with binding wire.

For pipes which carry cold media the longitudinal seam must be sealed with aluminium tape.



PS PRO ALU PRODUCT FEATURES

- Length: 1.200 mm
- Thermal conductivity (according to EnEV) of 0.035 W/mK at an average temperature of 40°C and insulation thickness \leq 30 mm
- Fire protection class A2 or A2L according to DIN EN 13501-1



Knauf Insulation Mineral Wool products made with **ECOSE®** Technology benefit from a no added formaldehyde binder made from rapidly renewable bio-based materials instead of petroleum-based chemicals. Due to this technology, handling with the product is much more comfortable which brings the installers an over-average installation friendliness (smooth yet still flexible and firm touch and feel). All common technical features are on competitive level or better. Handling, mounting and fixing are in line with known market standards.

Recommended dimensions of the minimum insulation thickness for pipe section PS Pro ALU:

| DN | Outer tube diameter* | | Inner tube diameter* | | Recommendation | |
|-----|----------------------|------------------|----------------------|------------------|------------------|------------------|
| | CU ¹⁾ | FE ²⁾ | CU ¹⁾ | FE ²⁾ | CU ¹⁾ | FE ²⁾ |
| | 15,0 | | 13,0 | | 15 x 20 | |
| 15 | 18,0 | 21,3 | 16,0 | 16,1 | 18 x 20 | 22 x 20 |
| 20 | 22,0 | 26,9 | 19,0 | 21,7 | 22 x 20 | 28 x 30 |
| 25 | 28,0 | 33,7 | 25,0 | 27,3 | 28 x 30 | 35 x 30 |
| 32 | 35,0 | 42,4 | 32,0 | 36,0 | 35 x 30 | 42 x 40 |
| 40 | 42,0 | 48,3 | 39,0 | 41,9 | 42 x 40 | 48 x 50 |
| 50 | 54,0 | 60,3 | 50,0 | 53,1 | 54 x 60 | 60 x 60 |
| | 64,0 | | 60,0 | | 64 x 70 | |
| 65 | 76,0 | 76,1 | 72,1 | 68,9 | 76 x 80 | 76 x 80 |
| 80 | 89,0 | 88,9 | 84,9 | 80,9 | 89 x 100 | 89 x 100 |
| 100 | 108,8 | 114,3 | 103,0 | 105,3 | 108 x 105 | 114 x 105 |

* All dimensions in mm, 1) CU: Cooper pipe – (DIN EN 1057), 2) FE: Iron pipe – (DIN EN 2440)

FOR A BETTER WORLD

Our vision is to lead the change in smarter insulation solutions for a better world.

CONTACTS

Knauf Insulation d.o.o.

Varaždinska 140
42220 Novi Marof
Tel. +385 42 401 300
ts@knaufinsulation.com
www.knaufinsulation-ts.com

COMPANY PROFILE

Knauf Insulation is one of the most respected names in the insulation industry worldwide with over 40 years of experience and still growing fast to nearly 6.000 employees in more than 40 countries and 29 manufacturing sites. Being part of the family-owned Knauf group, Knauf Insulation Technical Solutions provides solutions for customers' requirements in industry, marine applications, heating, ventilation and air conditioning. A profound market understanding and insulation know-how enables us to provide a broad range of products to meet your specific needs.



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A GREEN HEART

LIVING WITH A GREEN HEART

The "Living with a Green Heart" initiative promotes a comprehensive approach to sustainable development with **emphasis on societal and social sustainable development**, placing an informed individual at the forefront of sustainable transformation of society.

FOR FURTHER INFORMATION VISIT
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