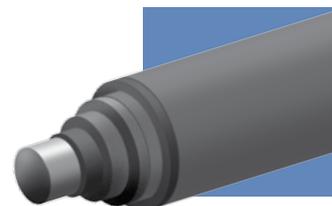




K-FLEX K-FONIK INDUSTRIAL



Sound & Thermal Insulation design compliant with ISO 15665



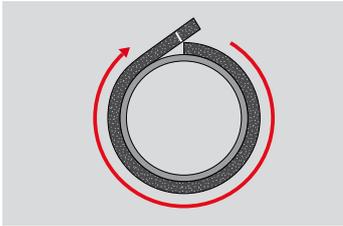
L'ISOLANTE K-FLEX
A NEW GENERATION OF INSULATION MATERIALS

www.kflexenergy.com

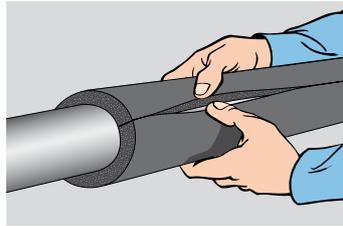
Flexible Elastomeric Foam Layer

INSULATING PIPING WITH K-FLEX SHEETS

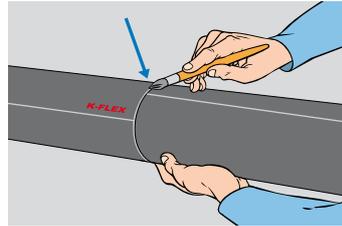
> FIRST LAYER



Wrap a strip of K-FLEX of the same thickness as that to be used around the pipe to be insulated and measure the exact length required.

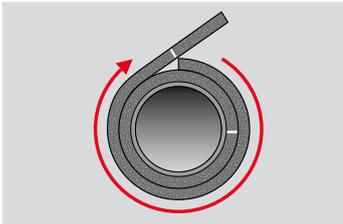


Wrap the insulation sheet around the pipe and press the glued edges together starting at the ends, then the center and then working along the rest of the length.

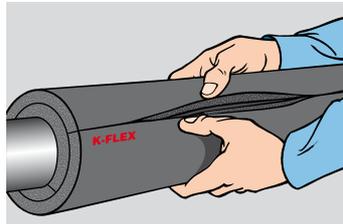


Glue the insulating sheeting to the subsequent sections along the length of the pipe.

> OTHER LAYERS



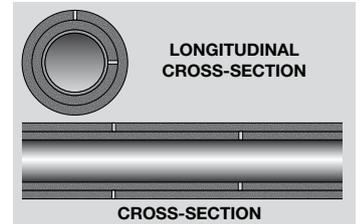
Measure the overall diameter with the first sheet in place.



Wrap the insulation sheet around the tubing, ensuring that the seam does not overlap that of the underlying insulation.



Adjacent sections of insulation should be glued at their respective ends.



When installing the second layer, make sure that the seams do not overlap those underneath (see diagram). This ensures that, when the plant is operational, maximum insulating properties are maintained as the materials expand or contract.



NB:

- > Recommended glue: K-FLEX K-414 or K-FLEX K-420, over 100°C use K-FLEX K-425 HT for high temperature
- > No Overlap
- > Adjacent sections of insulation should be glued at their respective ends.
- > Thoroughly degrease the surface to be insulated with the producer's specified thinners



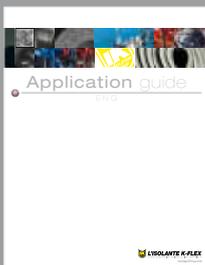
Flexible Elastomeric Foam Layer

ELBOWS and "T" PIECES



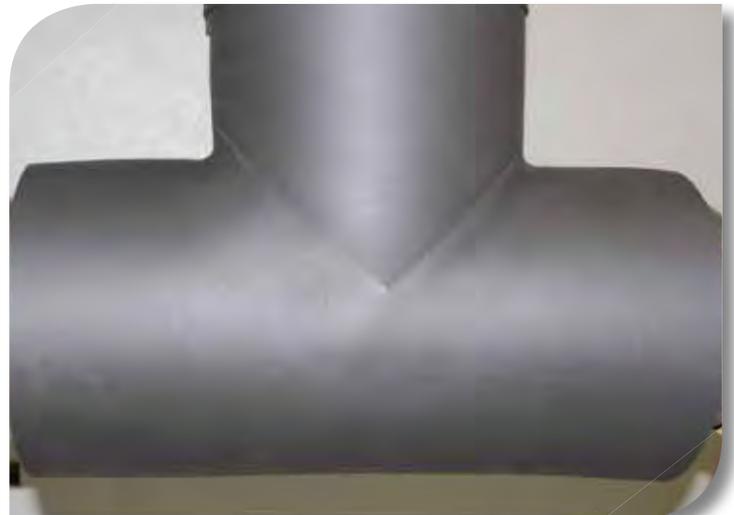
SPECIAL PARTS

For all layers of insulation, the FITTINGS (VALVES, FLANGES etc) must be sized, shaped and assembled, glued together, as indicated in the installation manual.



REFERENCE

FEF (pipes, elbows, "T" Fittings, Valves, Flanges) should always be installed according to the **K-Flex Application Manual** more information at www.kflex.com



K-FLEX K-FONIK OPEN CELL 240

ABSORPTION and DISSIPATION LAYER

Installation: K-FLEX K-FONIK OPEN CELL 240



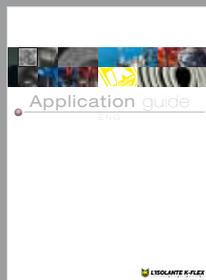
When installing **K-FLEX K-FONIK OPEN CELL 240** please use the same process as for FEF closed cell sheets. The instructions in the **K-FLEX INSTALLATION MANUAL** should therefore be referred to for each stage of the installation, including sizing, cutting and gluing of both the straight sections and any special items such as elbows, fittings, valves, flanges, etc.

NB:

- Recommended glue: K-FLEX K-414 or K-FLEX K-420, over 100°C use K-FLEX K-425 HT for high temperature
- No Overlap
- Adjacent sections of insulation should be glued at their respective ends.

REFERENCE

K-FLEX OPEN CELL 240 (pipes, elbows, "T" Fittings, Valves, Flanges) should always be installed according to the **K-Flex Application Manual** more information at www.kflex.com

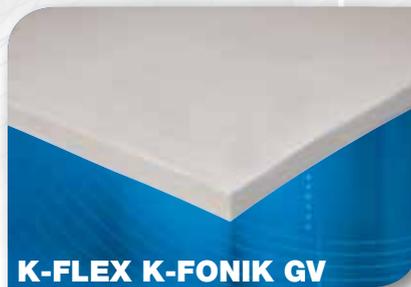




K-FLEX K-FONIK **GK** or **GV** (mass barrier)



MASS BARRIER



HIGH-DENSITY ELASTOMERIC ACOUSTIC INSULATING PANEL, AVAILABLE PRE-CUT TO SIZE FOR OEM AND **INDUSTRIAL APPLICATIONS.**

K-FLEX K-FONIK GK is a viscoelastic acoustic insulation product made with partially reticulated polymers. Its special sound insulation characteristics make this an excellent product for traditional applications in the construction sector, eg. acoustic insulation of brick walls and plasterboards and for O. E. M. application.

K-FLEX K-FONIK GV is a viscoelastic acoustic insulation product made with partially reticulated polymers and fire-proof mineral fillers. Its special sound insulation characteristics make this product an excellent solution for the shipbuilding and railway sectors.

N.B.:

To install the acoustic material where required, please use the correct procedure as follows:

1. The acoustic barrier shall be secured tightly around the whole of the insulated equipment using stainless steel bands, 20 mm wide x 0.50 mm thick secured with a suitable buckle type fixing. Each one metre length of installation requires a minimum of 3 steel bands.
2. All fabricated items shall, where applicable, have a minimum 50 mm overlap on all seams and joints. Before securing the stainless steel bands, it is important to apply K-FLEX K-420 or K-FLEX K-414 adhesive with a brush onto both surfaces of the overlap area.

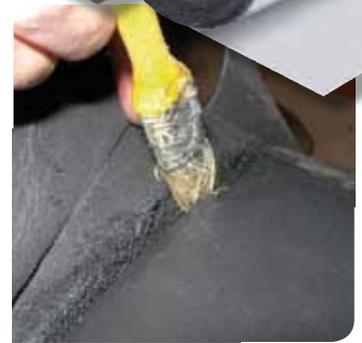
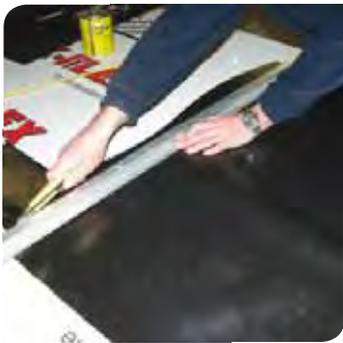


Example of multilayer installation: configuration for purely illustrative purpose



K-FLEX IN CLAD JACKETING

FLEXIBLE POLYMERIC COVERING OF 1 MM IN THICKNESS. K-FLEX IN CLAD GIVES LONG LASTING PROTECTION AGAINST AGGRESSIVE MARINE ENVIRONMENTS AND IS UV AND VAPOUR RESISTANT.



1. PREPARATION OF IN CLAD JACKETING

> From a roll of K-FLEX IN CLAD, cut a sheet with the same width as the circumference of the insulated tube, adding an excess of roughly 50 mm for the longitudinal overlap.

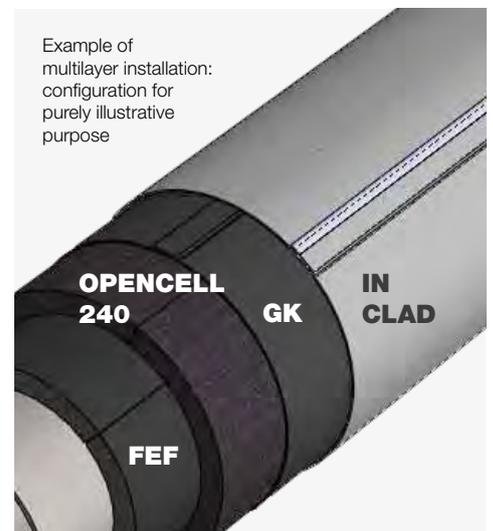
2. INSTALLATION

- > Apply a layer of K-FLEX K-420 glue along the section of the tube to be covered with K-FLEX IN CLAD.
 - > Position the K-FLEX IN CLAD on the area where the glue has been applied and from that point wrap the K-FLEX IN CLAD sheet around the whole section.
 - > Securely press down the K-FLEX IN CLAD covering along the whole circumference, in order to obtain a tightly fitting cover.
 - > With a brush, apply K-FLEX K-420 adhesive on both ends in order to obtain a perfect seal against water between the covering and the insulation material. NB: Take care to stagger the edges of the insulation and the the edges of K-FLEX IN CLAD to avoid continuity with the underlying. Each sheet of K-FLEX IN CLAD should be positioned in such a way as to overlap the next sheet by at least 50 mm.
- Use K-FLEX K-420 on both the longitudinal and transverse overlaps.

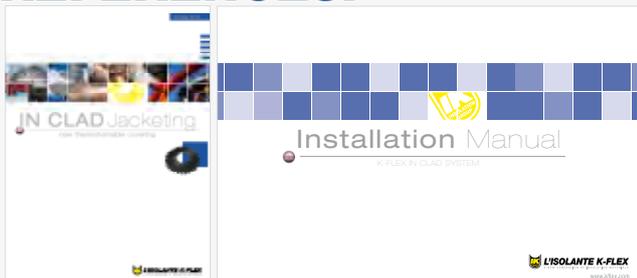
3. APPLYING MARINE SEALANT

> Apply a 10 mm width and 4 mm thick layer of marine sealant K-FLEX K-Mastic 55 on both sides of all the joints. edge.

Example of multilayer installation: configuration for purely illustrative purpose



REFERENCES!



IN CLAD Jacketing should always be installed according to the **K-FLEX IN CLAD Application Manual** or **K-FLEX IN CLAD JACKETING Application Manual** more information at www.kflex.com



PIPE SUPPORTS AND ACOUSTIC/THERMAL BRIDGES



PIPE SUPPORTS AND STEEL INSTALLATIONS

1. WHERE THERE ARE SPACE RESTRICTIONS AND IT IS NOT POSSIBLE TO FULLY INSULATE PIPE SUPPORTS AND STEEL INSTALLATIONS TO THE CORRECT SPECIFIED THICKNESS, THE INSULATION LAYER MUST BE TRIMMED CLOSELY AROUND THE STEEL SUPPORT LEAVING NO GAPS.
2. ALL CUT-AWAY AREAS MUST BE SEALED WITH THE APPROPRIATE K-FLEX ADHESIVE AND K-MASTIC TO PROTECT THEM FROM THE ENVIRONMENT AND MAINTAIN MAXIMUM INSULATION.



3. ALL STEEL WORK CONNECTED DIRECTLY TO THE MAIN INSTALLATION MUST BE INSULATED TO THE SAME THICKNESS AND COMBINATION OF INSULATION MATERIALS SO AS TO AVOID ACOUSTIC BRIDGING AND MAINTAIN OPTIMUM PERFORMANCE.

