

CLIMAFLEX®

Fitting instructions



we will succeed together



TABLE OF CONTENTS



CLIMAFLEX®

Introduction	4
General fitting instructions	5
CLIMAFLEX® accessories	6-7
Insulating during pipe fitting	8
Insulating after pipe fitting	10-11
Angles	12-13
Alternative solution for angles	14
Pipe elbows (commercially available pipe elbows)	15
Pipe elbows	16-17
T-shaped branches	18-19
Alternative solutions for T-shaped branches	20-22
Distributors/ Pipe ends	23
Distributors/ Pipe ends	24
Insulating support clamps	25
Taps	26
CLIMAFLEX® XT	27
Larger pipe diameters	28
Multi-layer insulation	29
CLIMAFLEX® STABIL	30
CLIMAFLEX® SYSTEM	31
Notes	32

Introduction

Insulation is no simple task: the aim is to guarantee not only real, permanent profitability, but also an optimum ratio between quality/price/insulation capacity.

The real professional today is a consultant and expert. To help the professional to carry out this task, **NMC sa** has designed a complete system of pipe shells, sheets and accessories for professional pipe insulation: CLIMAFLEX[®], CLIMAFLEX[®] XT, CLIMAFLEX[®] STABIL and CLIMAFLEX[®] SYSTEM.

This brochure has been written specially for professionals. It is designed to serve as an example of how to apply professional insulation materials.

NMC UK Ltd.

Tafarnaubach Industrial Estate
UK - NP22 3AA Tredegar, South Wales

Phone: +44 1495 71 32 66

Fax: +44 1495 71 32 77

Email: enquiries@nmc-uk.com

Homepage: www.nmc-uk.com

General fitting instructions

The fitting instructions set out describe the most common insulation jobs and how to carry them out correctly. They apply to both existing and new piping installations.

Here are some practical points:

- Tool: perfectly sharpened knife or cutter, punches corresponding to the common pipe outer diameters, mitre box with template, flat brush with short, stiff bristles, tape measure.
- Adhesive: be sure to use only NMC-FIX®. The adhesive is spread thinly on both surfaces. After insulation work, wait 36 hours before putting the heating on.
- Working temperature: in order to guarantee that the adhesive holds properly, do not work below + 5° C.
- Knives and cutters: take accurate measurement, allow 3 to 4% with CLIMAFLEX® and upset when laying, to stop the CLIMAFLEX® shrinking in length; insulate heating pipes only when they are cold; cut the CLIMAFLEX® to size using a mitre box.
- Cleanliness of materials: make sure that CLIMAFLEX® is clean both inside and outside. Rinse off any dirt sticking to the pipes, and then dry the pipes off. You can use Insul 3005 in order to clean the insulation pipe.
- Paint: CLIMAFLEX® can be painted with most of the latex and emulsion paints.

CLIMAFLEX® accessories



The fitting kit has been specially developed for the professional processing of CLIMAFLEX® and CLIMAFLEX® XT.

It contains:

- 1) 1 inch rule
- 2) Punches (Ø 12 to 60 mm)
- 3) 1 large knife
- 4) 1 set of templates for cutting elbows to the correct angle (for all Ø up to 114 mm)

- **NMC-FIX® adhesive (universal adhesive):** on the basis of polychloroprene, available in cans of 200 ml, 500 ml, 1000 ml and 2500 ml.
- **CLIMAFLEX® PVC self-adhesive tape:** 33 m roll, 30 mm wide.
- **CLIMAFLEX® clips:** as an aid to installation for pressing temporarily after sticking awkward areas such as T-shaped branches, elbows, valves, welding or soldering points. Available in bags of 100.
- **CLIMAFLEX® PE self-adhesive tape:** available in 50 mm x 3 mm x 10 m rolls. Uses: seams, screwed fittings, valves, tank outlets and all awkward areas.
- **CLIMAFLEX® fabric tape:** grey, 50 mm x 50 mm.

Insulating during pipe fitting



CLIMAFLEX® can be simply pulled over the pipe.



For elbows, simply pull the CLIMAFLEX® over the elbow (longitudinal slit on the inside of the elbow).

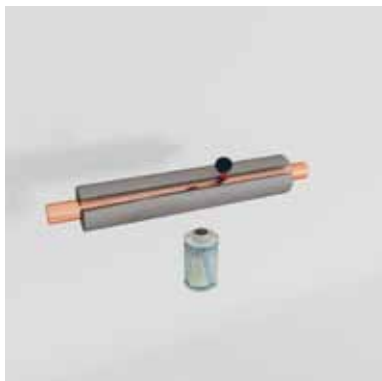


The individual CLIMAFLEX® pipe sections are stuck firmly on the cut surfaces with NMC-FIX® immediately after adjustment.

Insulating after pipe fitting



CLIMAFLEX® is pre-slit. Simply separate with the knife or thumb lengthwise ...



... fit round the pipe, spread the two surfaces of the slit with a thin coat of NMC-FIX®, and press the insulation together after allowing the regulation time for the adhesive to dry (finger test). For problem areas, such as screwed fittings, we recommend fastening with a few clips.



For larger insulation thicknesses, we recommend making an additional slit on the inside of 2/3 of the insulation thickness.



This makes the material easier to open up, glue and fit.

Angles



Cut the CLIMAFLEX® at a 45-degree angle using a mitre box ...



... stick with NMC-FIX® ...



... slit open the piece of insulation thus formed on the inside ...



... apply and stick firmly with NMC-FIX®.

Alternative solution for angles



Insulate as far as the elbow.

Make the angle (with inside diameter = outside diameter of the insulation), apply it and stick firmly.

Pipe elbows (commercially available pipe elbows)



Measure the outside diameter of the insulation required ...



... press down with the template provided in the slit area ...

Elbows



... and start to cut at the right outer point. Make counter cuts in the same position. Cut exactly the same at every further point, giving 5 segment cuts.

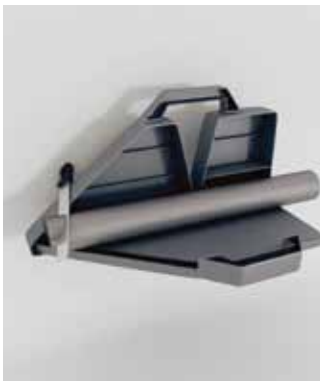


Glue on the inside ...



... slit open the piece of insulation thus formed, apply and stick firmly with NMC-FIX®.

T-shaped branches



In the case of T-shaped branches, cut a T at a 45-degree angle ...



... slit open on the
inside ...



... apply and stick firmly
with NMC-FIX®.

Alternative solution for T-shaped branches (1)



Insulate as far as the T shape. Make the T shape (with inside diameter = outside diameter of the insulation), apply it and stick firmly.

Alternative solution for T-shaped branches (2)



Punch out the T-shaped branches using the punch in the slit area ...



... slit open, apply and stick firmly with NMC-FIX®.

Alternative solution for T-shaped branches (2)



Make a saddle cut in the counterpart ...



...and stick firmly with NMC-FIX®.

Application tips for problem areas



In problem areas such as valves, T- shaped branches, screwed fittings, etc., ...



... press in CLIMAFLEX® clips as an aid to installation in the slit area.

Distributors / Pipe ends



Simply punch out the required inside diameter ...



... press onto the pipe end and glue with NMC-FIX®.

Insulating support clamps



Apply insulation on both sides as far as the clamp and wrap round with CLIMAFLEX® PE self-adhesive tape up to the insulation level.



Adjust insulation to larger dimensions and stick firmly with NMC-FIX®.

Valves



Wrap up the valve body with CLIMAFLEX® PE-self-adhesive tape up to the insulation level ...



... apply larger pipe insulation and stick firmly.

Alternative:
Use CLIMAFLEX® SYSTEM
(see page 31).

CLIMAFLEX® XT

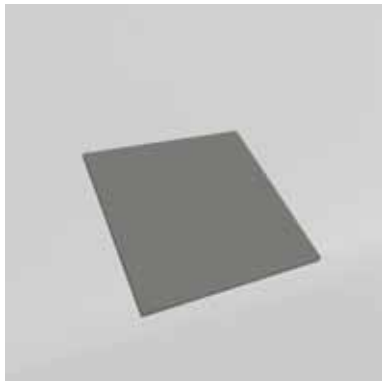


Fit CLIMAFLEX® XT round the pipe, tear off both protective sheets simultaneously and press the insulation together.

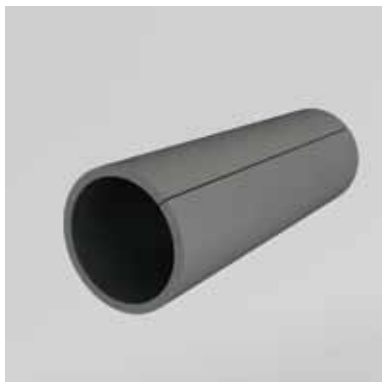


The pieces of pipe are stuck firmly after adjustment on the cut sides with NMC-FIX®.

Larger pipe diameters

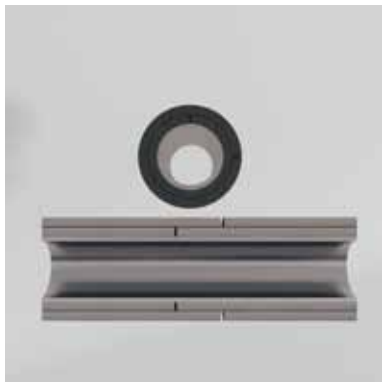


For larger pipe diameters, use CLIMAFLEX® Roll. Measure the pipe with CLIMAFLEX® sheet strips and transfer to CLIMAFLEX® sheet.



Cut to size, apply and stick firmly.

Multi-layer insulation



Where there are several layers of insulation, make sure that the adhesion seam is offset and the upper layer is stuck to the lower one at the pipe ends.

CLIMAFLEX® STABIL



The CLIMAFLEX® STABIL range includes a fitting aid which stands a few millimetres above the pipe and allows CLIMAFLEX® STABIL to be drawn over it with no problems.

CLIMAFLEX® SYSTEM



Using the compatibility list, choose the CLIMAFLEX® SYSTEM insulation cap that matches the tap. (You may need to adjust it with a cutter and punch).



Place the insulation cap round the tap and close with the spring washer. CLIMAFLEX® up to the insulation cap.



NMC UK Ltd. reserves the right to adapt the product range or its technical properties to the latest state of knowledge at any time without notice. All indications in these documents are given to the best of our knowledge. If you have any questions regarding these technical details, please contact **NMC UK Ltd.** Tafarnaubach Industrial Estate.

Printing or reproduction, even if only in part, is permitted only with our express consent.

© **NMC sa** - 2013

Responsible publisher:

NMC sa

Gert-Noël-Straße - 4731 Eynatten - Belgium



www.nmc.eu

