

with CLIMAFLEX® made of NMC Naturefoam® unite against climate change

The first flexible pipe insulation made of renewable raw materials

nmc-naturefoam.com



The international climate protection policy

195 countries reached an agreement on a worldwide compulsory climate protection treaty in Paris on December 2015.

Global warming is to be kept well below $2\,^{\circ}\text{C}$ in order to counteract dangerous climate change. Everyone is called upon to redouble their efforts and to take action to minimise CO_2 emissions.

NMC offers thereby a solution with NMC Naturefoam®.

Climaflex® made of NMC Naturefoam®: The new reference in climate protection

NMC, the leading international player in the development, production and marketing of synthetic foams, has developed a foam based on renewable raw materials. This innovation significantly improves the climate and energy performance of NMC products and helps towards protecting the climate and resources. As a family company, NMC stands for quality and climate protection.



Plant-based raw materials make the difference

The new NMC Naturefoam® is made mainly from polyethylene manufactured from sugar cane. Sugar cane grows back every year, absorbing CO_2 as it grows and thereby saving finite resources such as oil. NMC Naturefoam® is available for the NMC quality brands CLIMAFLEX® and EXZENTROFLEX®.

The manufacturing process for NMC Naturefoam®



Growing sugar cane

In order to capitalise on the benefits of renewable raw materials over oil in terms of climate and resources, much attention is being paid to growing plants with the lowest possible environmental burdens.

Brazil has 330 million hectares of farmland. Only 1.4% of this area is being used to produce ethanol from sugar cane. The use of agricultural areas is being reviewed and supervised by the legislators. 90% of the sugar cane plantations are in the southern central part of the country, 2,500 km from the Amazon rainforest, and social responsibility is being applied during cultivation. The bulk of the water for watering the sugar cane comes from rainwater.



Pipe insulation made of NMC Naturefoam®offers double the contribution to climate protection

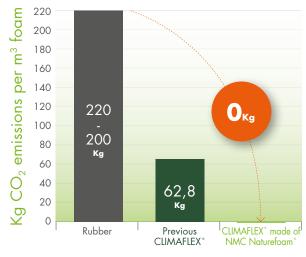
Technical pipe insulation products carrying the proven NMC quality brands CLIMAFLEX® and EXZENTROFLEX® are improved by the use of at least 50% renewable materials. Recycled manufacturing scrap and additives to improve insulation values and fire protection complete the composition.



First environmental product declaration (EPD) for CLIMAFLEX® made of NMC Naturefoam® shows impressing results

The EPD for the CLIMAFLEX® range made of NMC Naturefoam® certified by the IBU [Institute for Construction and Environment] proves that the $\rm CO_2$ emission

in the entire production process, from cradle to the factory gate, could be reduced to zero. This is clearly better than initially estimated. In the production of the previous CLIMAFLEX® formulation, these emissions amounted to 62,8 kg CO₂ per m³ of foam, whereas in common rubber insulation they even come to between 200-220 kg per m³ of foam.



Top-class product properties

CLIMAFLEX® and EXZENTROFLEX® from NMC Naturefoam® have the same technical properties as the previous CLIMAFLEX® in terms of:

- Insulation values
- Fire performance
- Simple installation by craftsman
- Longevity



The renewable material component is monitored and certified by an external institute.



 $\label{eq:climaflex} \begin{array}{l} \textbf{CLIMAFLEX}^{\circledast} \colon \text{high-quality and flexible pipe insulation;} \\ \text{Insulation thicknesses 9 \& 13 mm,} \\ \text{fire protection class B}_{L}\text{s1d0,} \\ \text{Insulation thicknesses 20 \& 25 mm, Euroclass C}_{L}\text{s1d0} \\ \end{array}$



 $\begin{array}{ll} \textbf{CLIMAFLEX}^{\circledast} \ \ \textbf{XT: the self-adhesive variant for} \\ \text{simple processing;} \\ \text{Insulation thicknesses 9 \& 13 mm, Euroclass B}_{\text{L}} \text{s1dO} \\ \end{array}$



CLIMAFLEX® STABIL: pipe insulation with a robust protective coating, likewise on the basis of NMC Naturefoam® polyethylene; Insulation thicknesses 4, 9, 13, 20 & 25 mm, Euroclass E



EXZENTROFLEX® COMPACT: excentric insulation with a robust protective coating for the lowest installation height and even tighter pipe laying; Insulation thicknesses 9, 25, 38 & 46 mm, Euroclass E

Climate protection as a major driver in renovation and construction

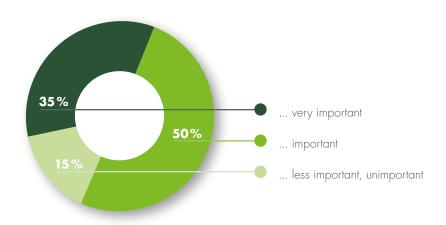
Politicians and consumers are demanding more and sustainability in all areas of life, including in the construction industry. Consistent environmentally conscious construction and restoration thus means using materials which

- generate fewer greenhouse gases,
- contain a high percentage of renewable raw materials,
- are manufactured by means of environmentally sensitive production processes.

CLIMAFLEX® made of NMC Naturefoam® meets these demands.

Sustainable construction more and more important for the consumer

The use of verifiably ecological building materials in house construction is...



Sustainability at NMC

One of NMC's stated aims is social, sustainable and ecologically responsible behaviour. For the sake of clients, staff, shareholders and future generations, corporate social responsibility is inseparably tied to environmental protection and sustainability.

NMC's climate change mitigation pledge

- Commitment as part of the chemical industry's 'Responsible Care' scheme
- Electricity based 100% on renewable energy sources
- In-house 250 kW photovoltaic array
- Energy efficiency improved by 21 % (at the site in Eynatten, Belgium)
- CO₂ emissions reduced by 25 % (at the site in Eynatten, Belgium)

Climate protection is a constant process, which is why NMC is permanently committed to implementing further measures to ensure a better future. Pursuant to our aim of continuously improving energy efficiency, and driving down CO_2 emissions even further, our products and production routes are constantly being optimised.



