Armafix X pipe support from Armacell: fast and simple system solution for pipes in heating and plumbing applications

New insulated clamp rounds off the SH/Armaflex range

Münster, 22 July 2014. – Armacell has added a new insulated clamp to its SH/Armaflex family: the Armafix X pipe support provides an efficient insulation solution for mounting heating and plumbing pipes. To prevent energy losses, not only the pipes, but also fittings and pipe clamps must be correctly insulated. By isolating the pipe and bracket from each other Armafix X prevents thermal bridges. The lightweight insulated clamp can be installed quickly, simply and neatly. Compared to insulating pipe brackets after they have been fitted, using the new Armafix X pipe support saves both time and money.

Avoid energy losses due to thermal bridging

Whereas pipes are now insulated as a matter of course in new buildings, this is generally still not the case for pipe brackets. If these remain uninsulated or are incorrectly insulated, high energy losses occur due to thermal bridging. As three-dimensional heat flow calculations carried out by the German Passive House Institute have shown, an uninsulated pipe clamp on a pipe with an outer diameter of 26.9 mm and an insulation thickness of around 27 mm results in a ‘thermal bridging loss coefficient’ of 0.06 W/K. For a continuously operated circulation pipe with a temperature of 60 °C located outside the thermal envelope, this uninsulated pipe bracket alone leads to additional costs of 2.60 euros per year. Although energy losses can be reduced by over 50 % by insulating the existing clamp, it is much faster and more efficient to install pre-fabricated, insulated clamps.

Simple, cost-effective system solution

To allow energy-efficient insulation of pipe brackets, Armacell has added a new system solution for standard heating and plumbing applications to its SH/Armaflex range. The Armafix X pipe support can be installed quickly, easily and neatly. When using standard clamps it is necessary to insulate the pipe up to the clamp, glue the ends of the insulation material to the pipe and then apply Armaflex to the supporting device. In contrast, the one-piece Armafix X pipe support is simply snapped around the pipe, closed by pressing the self-adhesive strips firmly together and then slid into the metal

clamp. Finally, the butt ends of the pipe support just need to be glued to the elastomeric tube material. The advantages of the new product lie not only in the speed of assembly: thanks to the self-adhesive closure Armafix X can be installed practically with a single hand movement. A further benefit is increased reliability, because the same insulation materials are installed and glued to each other on the entire pipework.

Reliable protection against condensation and energy losses

In plumbing applications, pipe brackets for cold water pipes can be the starting point for condensation processes and are a potential weak point in the insulation system. If the pipe is not thermally isolated from the bracket, thermal bridges occur and condensation can form. As a result, energy losses increase and the risk of corrosion and expensive secondary damage rises. To prevent thermal bridges, direct contact between the pipe and its bracket should be avoided.

Armafix X for long-term reliability of the insulation system

Using the Armafix X pipe support ensures the integrity and reliability of the insulation system in the critical spots around pipe brackets. The pipe support consists of a flexible elastomeric foam with a fastening made of robust plastic parts. The closed-cell elastomeric insulation material which has a high resistance to water vapour transmission and low thermal conductivity protects the pipe against condensation and energy losses. The plastic elements ensure that the flexible insulation material is not compressed by the weight of the pipe, which could compromise its original insulation properties. This is a frequent cause of condensation processes when unsuitable products are used.

Armafix X is suitable for pipes with operating temperatures ranging from 0 to +110 °C and is available in the insulation thicknesses 13, 19 and 25 mm for pipe diameters of 10 to 89 mm. For more demanding applications, for example in refrigeration and air-conditioning applications or when insulating installations with operating temperatures below zero, Armacell recommends using the Armafix AF pipe support.

Armacell is a manufacturer of engineered foams and the world leader in the market for flexible technical insulation materials. In the financial year 2013, the company generated an annual turnover of 500 million euros. The group employs around 2,500 people and has 20 factories in 13 countries. It is headquartered in Münster, Germany. ARMAFLEX is the leading brand in the field of flexible technical insulation. The company also produces thermoplastic insulation materials, covering systems, fire protection and noise control solutions as well as special foams for a multitude of industrial applications. Over the last two years, Armacell has developed new insulation systems for the oil and gas market, core foams for composite materials, and low-smoke products that are setting new standards in the industry. Further information on the company can be found at www.armacell.com.

***Captions**:*

(1) Fast, simple and reliable: energy-efficient insulation of the pipe bracket with the Armafix X pipe support (Illustration: Armacell)

(2) Depending on the pipe diameter, the heat loss from an uninsulated pipe bracket (see left) can be equivalent to that of up to 1 metre of uninsulated pipe (Illustration: Armacell)