

FLEXALEN IN ANTARCTICA

Blowing hot in extreme cold



Pre-insulated Flexalen pipes



Certificates



GOALS

The Italian National Research Council (C.N.R.) had planned to build a research base in the Antarctica. The extreme temperatures meant it would be an enormous challenge to deliver the hot water reliably, and efficiently. In November 2005, Thermaflex Austria, together with Thermaflex Italy, equipped the Antarctic research base with an efficient, reliable and sustainable hot water supply. The pipes (Flexalen 600 and Flexalen 1000+), and all necessary tools and accessories for electrofusion welding were shipped from the Ancona Harbour in Italy, directly to Antarctica.

The project aimed to secure a full-proof solution for the research center's underground hot water. The extreme temperatures in the Antarctica posed a great challenge to do achieve this without the possibility of frozen, cracked pipes. Additionally, they were looking for an easy installation in the difficult, and permanently frozen ground conditions that could secure a sustainable, and headache-free supply.

PROJECT PROCESS

The National Research Council (CNR), a public organisation, is to carry out, promote, transfer and improve research activities in the field of 'scientific advancement'. It also looks at how this knowledge can be applied for technological, economic, and social development.

RESULTS

In total, 460 meters of Flexalen 600 and 390 meters of Flexalen 1000+ were installed to connect the power plant and the house. Before they decided to use Flexalen pipes, they had the pipes tested by the C.N.R. (National Research Council) in a climatic chamber at -80°C. This conclusively demonstrated they were fit for purpose.

PROJECT INFORMATION

- 📍 Antarctica
- Year of the Project: 2008
- 460 m Flexalen 600
- 390 m Flexalen 1000+
- -80°C tested

APPLICATIONS

- Heating Networks

🌐 www.thermaflex.com

✉️ international@thermaflex.com

