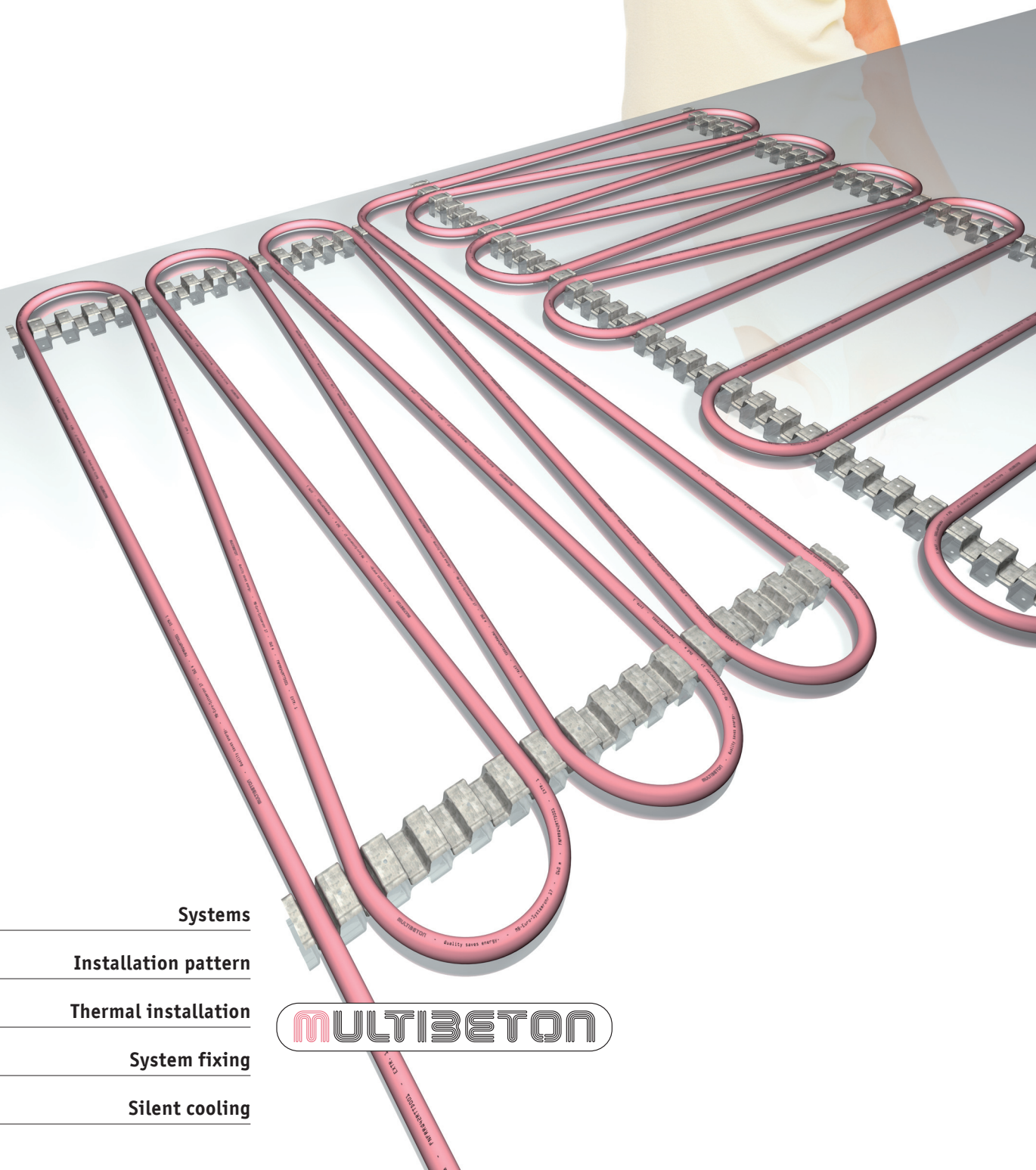


The Technology

MULTIBETON

Surface Heating
and Cooling

Quality ist the best guarantee.



Systems

Installation pattern

Thermal installation

System fixing

Silent cooling

MULTIBETON

The technology

“MULTIBETON surface heating and surface cooling”

Systems

MULTIBETON develops and produces energy-efficient heating and cooling systems for a vast variety of applications. Planning the floor construction includes the criteria for thermal and sound insulation along with structural requirements. Planning the floor construction must comply with the relevant laws, regulations, directives and standards.

Installation pattern

The MULTIBETON modulation process is a concept which determines installing the MULTIBETON system pipes on floor, wall and ceiling. Simply put, more pipes are always installed where there is a greater incidence of cold. This is e.g. near windows and exterior walls. The middle of the room and interior walls require less system pipes. This ensures rooms are not overheated, the floor stays comfortable and luke-warm. In practice, this gives you a virtually consistent room temperature which is regulated according to the Kollmar diagram.

People perceive this room climate as very comfortable and it is also beneficial to the health. Condensation, thus mold on walls and ceilings is often caused by a misconception of energy savings and room ventilation. With the MULTIBETON underfloor heating, this can be ruled out under normal operating conditions, as the underfloor heating provides cosy, consistent comfort and the control unit is therefore less likely to be set incorrectly.

Thermal installation

The MULTIBETON system pipes are only laid in a warm and water-bearing condition using a special developed process technology. In this way, MULTIBETON system pipes are inserted free of tension and twisting. This gentle process maximizes the service life of the MULTIBETON system pipes extremely. This procedure is only used by MULTIBETON.

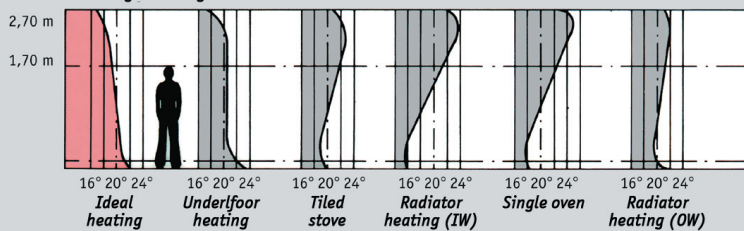
System fixing

MULTIBETON steel clip rails were developed to fix MULTIBETON system pipes to the floor. It further reinforces the screed, expands similar to the screed, and fixes the system pipes gently.

Silent cooling

The MULTIBETON underfloor heating system with the special MULTIBETON installation process is also excellent as a system for “silent cooling” through the floor. This system is low priced, as it only requires adding a reciprocator chiller with control unit or reversible heat pump. Like the tried and tested MULTIBETON underfloor heating, MULTIBETON underfloor cooling has the highest output, in this case cooling capacity, around windows and exterior walls, thus counteracting the greatest incidence of heat.

Temperature profiles according to Dr. Ing. A. Kollmar



MULTIBETON modulation process

