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Energy-storage concrete

THERMAL COMPONENT ACTIVATION

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Modern architecture, climatic influences and increased demands on comfort set high standards on the innovative building technology of today.

These days, everyone is talking about surface heating and cooling systems since they are known for providing a high level of comfort and low flow temperatures, therefore increasing energy efficiency. It is important, however, that the complete system is balanced and installation is quick and easy.

The construction of ceiling surfaces of exposed concrete quality can be done without difficulty and allows planners to choose freely from a wide range of modern design options.

A forward-thinking heating and cooling system which fulfils these high standards is thermal component activation. The principle of thermal component activation is based on the use of concrete storage masses. The storage behaviour of massive concrete parts is supported by cold or hot water flowing through pipes. RAUTHERM S pipes made of PE-Xa combined with the proven compression sleeve connection system guarantee permanent leaktight connection without O-rings.

This creates an “infinite” storage system. Underscored by its economic efficiency, thermal component activation is the hot topic in air conditioning technology.

This planning guide perfectly supports the skilful planning and execution of modern component activation. This means that future applications can go beyond residential buildings to include industrial and office buildings.

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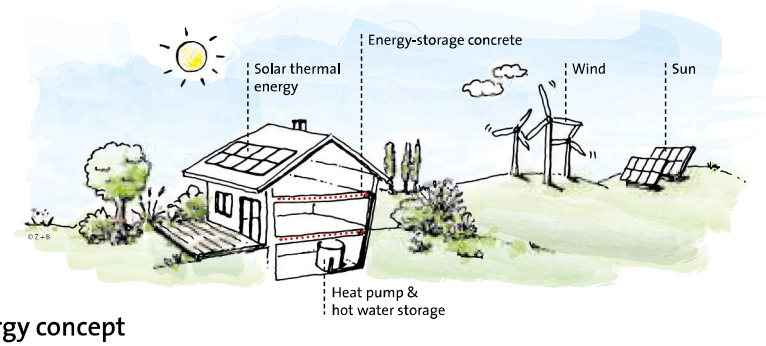

Application examples of thermal component activation: Assembly of pipelines, pressure test and placing of concrete for the ceiling.
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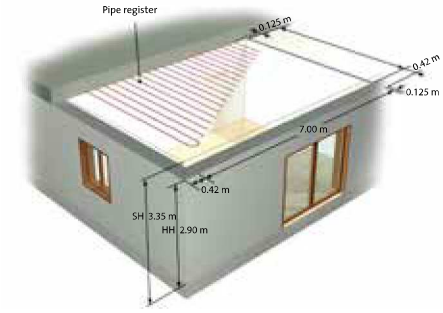

3D representation of the model room © Z + B

Rendering of the calculation example
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