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High-performance clay modules for climate control in buildings

ArgillaTherm

The company ArgillaTherm was founded as a joint venture by several medium-sized industrial companies, private investors and the German state of Lower Saxony. With the help of a dedicated team of civil engineers and physicists, environmentally friendly and energy-efficient climate control systems and products have been developed in cooperation with the Bauhaus University Weimar and the InnovationCampus SNIC.

Innovative high-performance clay modules

ArgillaTherm's high-performance clay modules are the core element of the system and are responsible

for its extreme sorption capacity due to their composition of swelling clay minerals. The system can absorb more than 100g of moisture per m² within 12 hours, rising to more than 200g after 24 hours and ultimately to more than 500g per m² surface area. This quantity has been measured and certified by the MFPA Materials Research and Testing Institute at the Bauhaus Universität Weimar.

The modules are manufactured in a dry pressing process in two fully automated production lines. The high degree of automation, production speed and reduced drying times helps to ensure affordable product prices (69.50€/m² net).



Argillatherm high-performance clay modules



wSYSTEM for use with water-carrying pipes



eSYSTEM for the insertion of electrical resistance cables

wSYSTEM or eSYSTEM

These Europe-wide patented, high-performance clay modules are produced in two different versions: the wSYSTEM with a matrix of grooves to facilitate the insertion of water-carrying pipes and the eSYSTEM with a matrix of grooves for the insertion of electrical resistance heating cables.

Argillatherm has established various cooperations with leading manufacturers of specialised component products in order to be able to offer customers complete system packages for start-to-finish installations.

The finished systems have been tested according to all common heating/cooling test procedures and certified accordingly, including DIN EN 1264, DIN EN 14037 and DIN EN 14240.

Easy installation and numerous built examples

The installation of the open modular systems is very straightforward. The modules are mounted in rows and can be cut to size as needed. Once the room surface has been covered, water-carrying pipes or heating cables are inserted into the continuous matrix of grooves. No couplings are needed, facilitating swift installation. Finally, a coat of clay plaster is applied to the modules and finished with a clay paint. A certified lightweight metal suspension system is also available for use in commercial construction.

Argillatherm's clay climate control systems have already been installed in numerous single and multi-family homes as well as hotels, hospitals, offices and public buildings.

For further information, visit: www.argillatherm.de.

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