

PE-HD heat exchanging system
for controlled heat balance in dwelling houses



„Top climate“
regardless of season

HEKATHERM-EWT-R: (coiled product)

PE-HD twin wall pipe DN 200 and selected components for air intake, air distribution and condensed water discharge in heat exchanging systems using geothermal energy

HEKATHERM-EWT-S: (bars)

NEW

For large-scale units we offer pipes and accessories in a size range between DN 200 and DN 600, tailored to the specific project.

For further information please visit our website at www.hegler.de.

HEGLER

Corrugated and Twin
Wall Pipes of Plastics



HEKATHERM Heat Exchanging

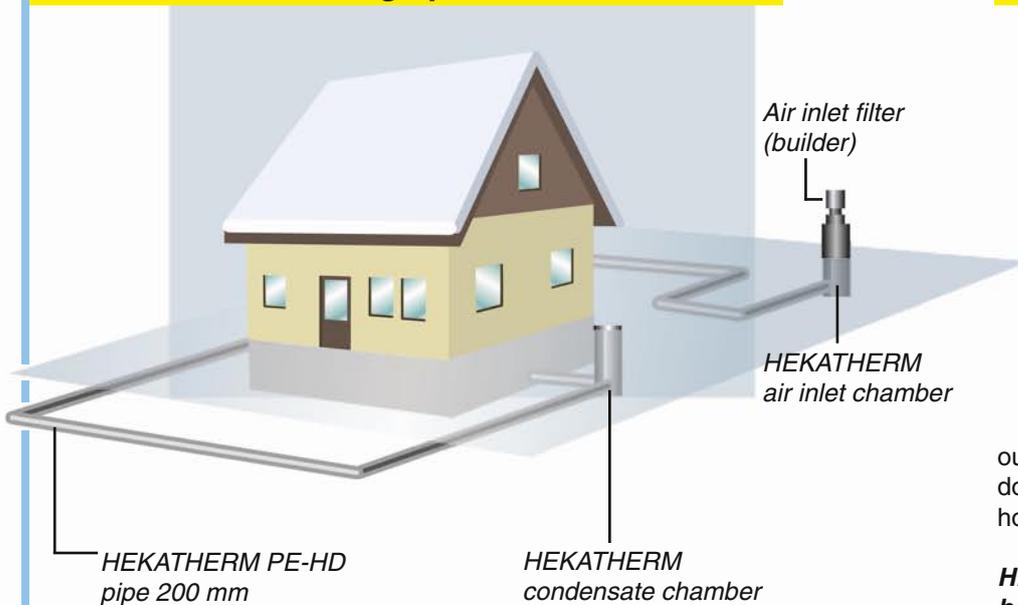
Summer: Cooling down of outside air



HEKATHERM Heat Exchanging System

- Made from emission-free polyethylene
- Closed system with no need for pipe connecting elements
- Extensive range of accessories
- Versatile use of individual components

Winter: Warming up of outside air



outside air, which has been cooled down in a heat exchanger, into the housing space.

HEKATHERM heat exchanging system

For small dwelling units in one or two-family houses, the necessary energy can be supplied in a 200 mm HEKATHERM twin wall pipe of 50 m in length. Various chamber systems and an extensive range of accessories are available to form, with the flexible pipe, an assembly tailored to the requirements of the very project. For the layout, HEGLER's recommendations should be followed.

The pipe should be laid in a depth of 1.5 m at a distance of 1 m from the outside wall, i.e. it can be laid in the outermost part of the excavation.

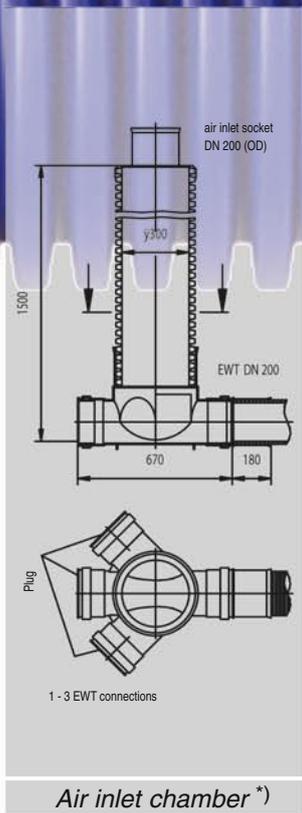
Low-energy/passive house

Great importance being attached to the heat balance of dwelling houses in view of environment protection and saving of running expenses, the outer skins of low-energy/passive houses are planned and built in a heat-insulating design. Keeping heat inside also means that the house is impervious to air as well however. Therefore, forced ventilation is required to replace the air inside the house via crossflow heat exchangers, without carrying off heat together with the air.

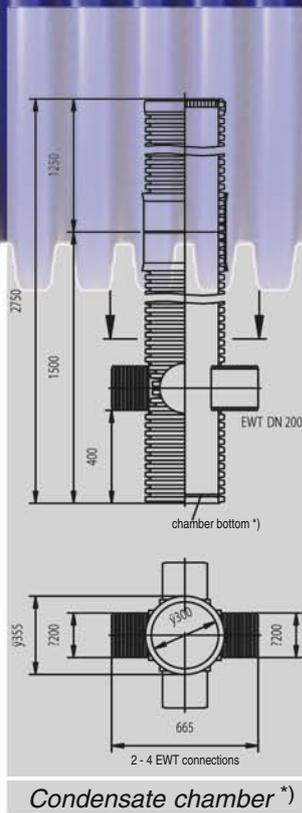
The degree of energy saving with this concept is even increased with the fresh air being pre-heated in a heat exchanger before led into the building. Depending on the degree of heat insulation and the difference between interior and ambient temperatures, fossile fuel requirements can be reduced considerably in this way.

During the warm season, the system works the other way round: Heat is carried off the house by leading

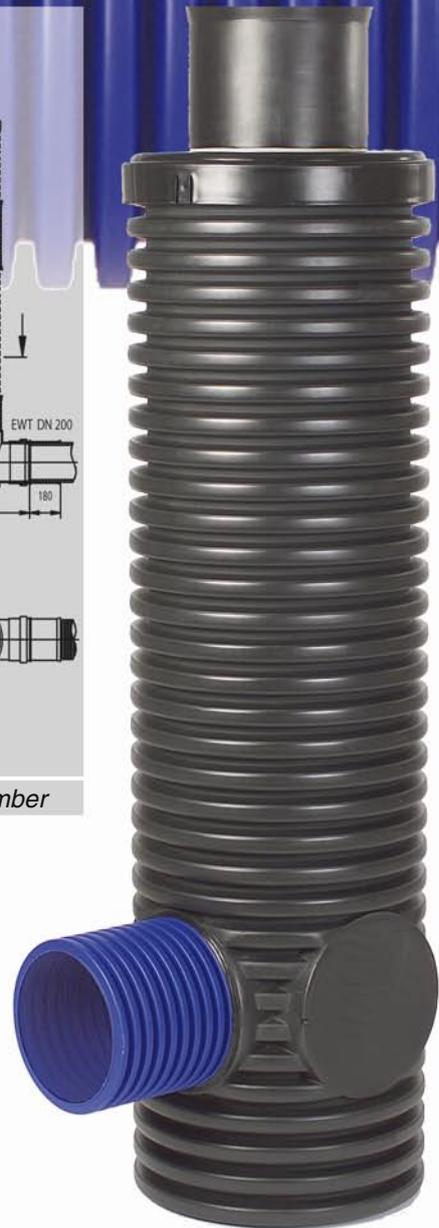
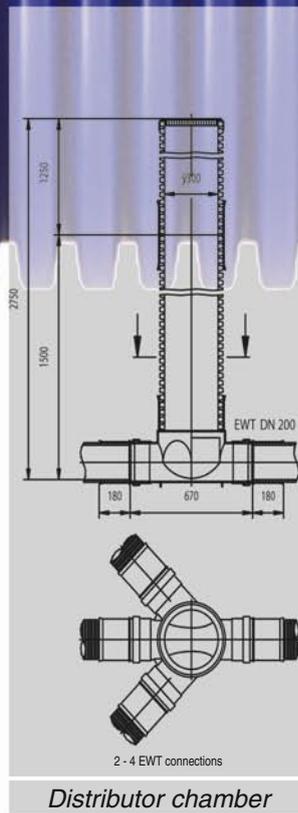
System: a Sound Concept



*) impermeable or perforated bottom on request



*) impermeable or perforated bottom, as desired



HEKATHERM heat exchanging pipe

HEKATHERM heat exchanging pipes should be bedded in soil of good heat conductivity. The ideal embedding would be impervious and waterlogged soils which do not come up to the static requirements though. An economic alternative is a non-cohesive backfill material of a very fine fraction which also holds water well.

The pipe line should be installed in one piece, that means without a joint, in a gradient of $\geq 2\%$ towards the low point of the system.

Bends should be performed generously in order to keep flow resistance low; the minimum bending radius is 0.75 m.

HEKATHERM pipes are made from polyethylene of adequate heat conductivity. They are of structured-wall design with a profiled outside wall and a smooth inside beneficial in terms of hydraulics. Facilities of this kind being sensitive from the physiological point of view, all components are exclusively processed from PE materials approved for use in food industry.

Mechanical strength and quality of all components are subject to constant control. If natural ground water has to be taken into account, special solutions can be elaborated before the project is started.

HEKATHERM Heat Exchanging System

Important

- If possible, HEKATHERM-pipes should be transported and stored on site in the original stillages. They should always be stored on an even and smooth surface.
- For installation the recommendations of the manufacturer should be followed. Layout plan and HEGLER's recommendations are to be brought into line with the local circumstances.
- Joints should be made using the recommended lubricant and a profiled seal.
- For embedding DIN EN 1610 should be followed. It is recommended to use sand 0/4 for the embedding.
- Chambers shall be surrounded by a layer of suitable backfill material which is to be compacted in layers.

The information given in this brochure is the most up-to-date available and is intended to provide information on our products and their possible applications. It is not a guarantee of certain features or of their suitability for certain specific applications. Our guarantee applies to compliance with our specifications, within the scope of our General Terms and Conditions. The schematic drawings (pipe/accessories) are indicative only. They are not binding as to product geometry.

Subject to changes.

HEKATHERM-EWT-R Pipe System (coiled product)

Product	Item No.
HEKATHERM heat exchanging pipe DN 200 (roll length 50 m)	7530020
Coupling DN 200	7531620
Profiled seal DN 200	7531720
Wall entrance DN 200 ^{*)}	7531500
Plug DN 200	7531820
Adaptor HEKATHERM DN 200 to coupling solid-wall pipe (DIN 19534)	7531502

^{*)} not in applications with natural ground water

HEKATHERM S 300 Chamber System

Product	Item No.
HEKATHERM air inlet chamber (high point) with 1 outlet ^{*)} , impermeable bottom	7531111
HEKATHERM air inlet chamber (low point) with 1 outlet ^{*)} , impermeable bottom - trap	7531121
HEKATHERM air inlet chamber (low point) with 1 outlet ^{*)} , perforated bottom - percolation	7531131
HEKATHERM condensate chamber (low point) with 2 outlets ^{*)} , impermeable bottom - trap	7531142
HEKATHERM condensate chamber (low point) with 2 outlets ^{*)} , perforated bottom - percolation	7531152
HEKATHERM distributor chamber with 2 outlets ^{*)} , impermeable bottom	7531162
HEKATHERM chamber raising piece incl. coupling and seal effective length: 123 cm	7531092
Chamber cover, plastics, with safety lock	7531091
Coupling DN 300	7531095
Profiled seal DN 300	7531090
Plug DN 200 (plug for solid-wall pipe DIN 19534)	7531096

^{*)} on request available with additional outlets DN 200

HEKATHERM-EWT-S Pipe System (bars) **NEW**

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