HEATILE® EASY

**TECHNICAL DATA SHEET HYDRONIC SYSTEM WITH RADIANT PANELS**

**WITH INTEGRATED FINISH**

**TENDER SPECIFICATIONS**

Hydronic system for dry radiant systems made with radiant panels in composite material. The modules have dimensions of 59x59 cm with a thickness of 1.3 cm, (excluding finishing coating) composed of a structural panel with a steel surface, a copper circuit coil with brass quick couplings, hydraulic joints with multiple o-rings and a patented mechanical quick coupling / uncoupling system.

Thermal insulation is provided by a layer of polyurethane density 150 Kg / m3, 1.2 cm thick (0.5 cm near the pipes) and a 40 Kg / m3 thick neoprene compensation soundproof mat 0.02 cm thick with fractionation joints in neoprene on each side of the module (every 59 cm).

**PRODUCT DESCRIPTION**

The radiant module is extremely thin (1.3 cm), light and floats directly on the screed or on the existing floor.

The radiant module weighs only 12.5 kg / m2 to which must be added the weight of the aesthetic coating which for the standard finishes is 7.7 kg / tile.

The system combines extreme ease and speed of installation with exceptional thermal performance. The elimination of the diffusion screed typical of traditional systems and the materials with high thermal conduction make Heatile® EASY unique from the point of view of thermal inertia which can be considered non-existent.

Heatile® EASY is able to withstand operating temperatures up to 80 ° C at a maximum permissible pressure of 8 bar and high surface mechanical loads, which makes it extremely versatile, both in the recovery of old buildings and in new constructions.

Particularly suitable for temporary installations such as events, fairs, dehors.

6.12 m2 (corresponding to about 17 modules) is the indicative maximum surface of each single circuit. Heatile EASY is connected to the manifold through special modules that can be cut to size up to a minimum of 11 cm with copper pipe connection at 1.2 cm or alternatively 59x59 cm modules with ½ inch threaded connection. These modules can be supplied with connections located below the module (floor side) or alternatively with connections located above the module (floor side).

The configuration of the circuits of the systems is carried out with modules capable of coupling together in all directions (with curved, straight modules, etc.) thus allowing the creation of very complex circuits to meet the heating needs of any environment.

The system requires a relatively level smooth load-bearing subfloor (discrepancies tolerated within 1.5 mm per linear meter), such as dry or granular screeds with wood fiber panels, leveled concrete screeds or existing floors.

Any additional layers of insulation and measures for noise abatement can be made under the HEATILE system.

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| GENERAL DATA RADIANT MODULE | | |
| Operating liquid |  | Acqua |
| Total thickness | mm | 13 |
| Standard veneer thickness (with glue) | mm | 11 |
| Actual module size | mm | 591 x 591 |
| Effective module surface | m2 | 0.35 |

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| TECHNICAL DATA RADIANT MODULE | | |
| Thickness of the steel radiant plate | mm | 1 |
| Insulation thickness (1) | mm | 11 |
| Copper pipe thickness | mm | 0,8 |
| Copper oval pipe section | mm | 7 x 18 |
| Density (polyurethane) | Kg/m3 | 150 |
| Resistance to vapor diffusion | μ | ∞ |
| Bottom side thermal insulation | W/mK | 0.022 |
| Maximum allowable pressure | bar | 8 |
| Operating temperature | °C | +5 / +80 |
| Coefficient of thermal expansion of steel | mm/m/ °C | 1,2 x 10-5 |
| Fibrogesso thermal expansion coefficient | %/K | 0.001 |
| Thermal conductivity of steel | W/mK | 60 |
| O’rings |  | EPDM perossidico 70 CG |

*( 1 ) al di sotto del condotto di circuito 5 mm*

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| HEATING THERMAL EMISSION DATA (with 1 cm stoneware coating) | | | | |
| Thermal emission in heating  (Ambient temperature 20 ° C) | 107 W/m2  (Tm35/Tr28 °C) | 156 W/m2  (Tm40/Tr33 °C) | 205 W/m2  (Tm45/Tr38 °C) | 302 W/m2  (Tm55/Tr48 °C) |

*(Tm= Temperatura mandata; Tr= Temperatura ritorno)*

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| THERMAL EMISSION DATA cooling (with 1 cm stoneware coating) | | |
| Thermal emission in cooling  (ambient temperature 25 ° C) | 52 W/m2  (Tm18/Tr21 °C) | 91 W/m2  (Tm14/Tr17 °C) |

*(Tm= Temperatura mandata; Tr= Temperatura ritorno)*

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| COMPENSATION MODULE TECHNICAL DATA | | |
| Module size | mm | 591 x 591 |
| Thickness of the compensation module | mm | 13 |
| Standard veneer thickness  (including glue) | mm | 11 |
| Density  (polyurethane) | Kg/m3 | 150 |
| Bottom side thermal insulation | W/mK | 0.022 |
| Insulation thickness | mm | 12 |