warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WARMWALL

WALL+CEILING HEATING

WarmWall is **the vertical and overhead application** of Warmset's patented multilayer laminated ribbon technology. Developed from the same advanced system used for underfloor heating, it can be i**nstalled on walls as well as ceilings**, offering maximum design flexibility in projects where floor installation is not possible or where radiant heat from above is preferred.

The **heating ribbon is laminated in multiple protective layers** and fixed onto a fiberglass mesh, supplied in ready-to-install mats. The mesh allows perfect embedding into tile adhesive or mortar, ensuring **structural stability,** optimal heat transmission and prevention of cracking over time.
For wall and ceiling applications, the recommended **power is typically 250/300 W/m²**. Warmset systems can also be supplied in low voltage versions such as 24V or 48V, in addition to standard voltages including 120V, 230V, 240V and 380V. In **shower or high-humidity areas**, the application of a waterproof resin layer above the heating element is mandatory to prevent any water infiltration into the electrical resistance.

For drywall installations, Warmset offers the **WarmDrywall version.** This variant is laminated onto an aluminum film and equipped with lateral adhesive flaps, allowing secure fixing directly onto metal studs or onto plasterboard surfaces depending on the specific construction method.

All systems are **fully customizable in size, power and voltage** to meet project-specific requirements. The technology is also available in the Gold version, featuring an external polyimide layer that enhances thermal performance, durability and chemical resistance.
UL-certified versions can be supplied upon request for markets requiring additional compliance.

10 YEARS WARRANTY

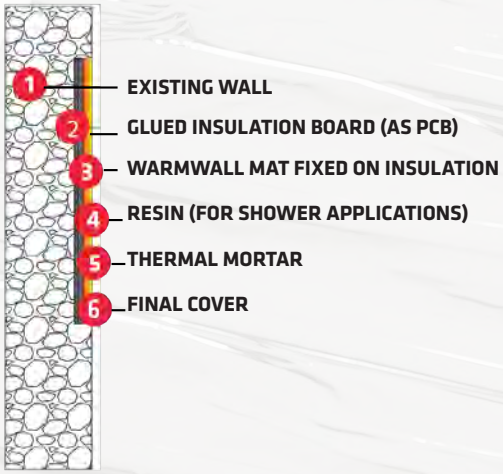
IPX7

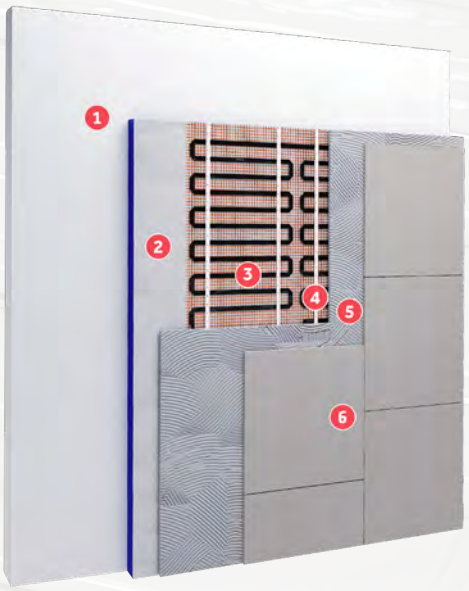
warmset
LAMINATED HEATING TECHNOLOGY

TYPE OF WALL INSTALLATION

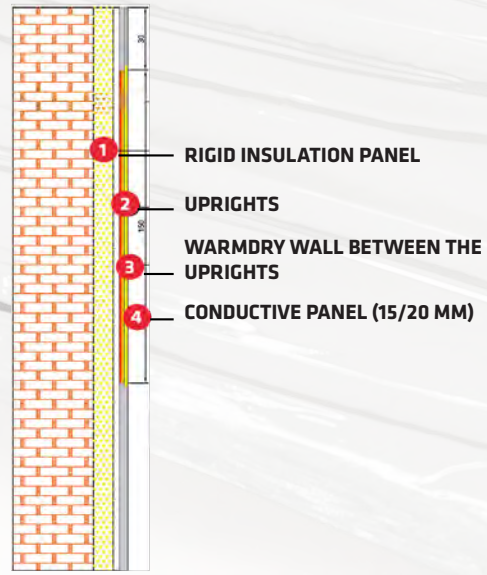
WARMWALL

REINFORCED CONCRETE - MORTAR





PLASTERBOARD PANEL



warmset
LAMINATED HEATING TECHNOLOGY

CONTROL

The heating element must **always be connected to an external control device.** Direct and uncontrolled connection to the power supply is not permitted. Temperature management can be achieved in two alternative ways, depending on the type of installation and system configuration.

The first option consists of a **dedicated room thermostat** with dual temperature sensing. The heating element is supplied through a protected line from the electrical panel, equipped with a dedicated circuit breaker and residual current protection. The **thermostat** must monitor both the **ambient temperature and a secondary probe installed close to the heating element.** The ambient sensor regulates comfort according to the selected set point, while the secondary probe continuously controls the temperature near the heating ribbon. This dual reading **prevents excessive surface temperatures** on walls or ceilings, avoiding localized overheating and ensuring safe and reliable operation.

The second option consists of a **surface thermoregulator**. In this configuration, the control device manages the heating element exclusively based on the surface temperature. A **probe positioned close to the heating ribbon** continuously measures the temperature of the wall or ceiling surface and modulates the switching cycles in order to reach and maintain the selected set point. The regulation is therefore focused on controlling the surface temperature directly.