



**THERMIO<sup>®</sup>+**  
TECHNOLOGY



## THE GUARANTEED ULTRA-EFFICIENT SCREED FOR UNDERFLOOR HEATING

Gyvlon<sup>®</sup> 'Environmental Screed Solutions' have developed the THERMIO<sup>®</sup>+ technology to further improve underfloor heating systems by creating a screed that is specifically designed to complement both water underfloor heating & cooling systems.

Gyvlon THERMIO<sup>®</sup>+ is the only screed with a guaranteed thermal performance.

### WHAT DOES THERMIO<sup>®</sup>+ OFFER?

THERMIO<sup>®</sup>+ technology coupled with an underfloor heating or cooling system **guarantees** a pipe encapsulation and an **emitter** which will give:

- + performance:** up to **30%** increase of the thermal value coefficient for maximised performance of the underfloor heating system.
- + comfort:** up to **80%** thermal diffusivity for a much faster ramp-up in temperature, greatly improving immediate and long term comfort.
- + savings:** up to **8%** savings on heating bills

### ALL THE NORMAL BENEFITS OF GYVLON<sup>®</sup> PRODUCTS

THERMIO<sup>®</sup>+ has **all the benefits** that you have come to expect from Gyvlon screeds:

- **Very high fluidity** for fast installation
- **Minimum SR2** surface finish
- **Greatly reduced cracking** and no curling
- **Maximum bay size 300m<sup>2</sup>**
- **No reinforcement**
- **No need for a curing membrane**
- **Typically 36% recycled content**

#### OUR TECHNICAL +

- ➔ **High and guaranteed thermal performance**  
*both in heating or cooling modes*
- ➔ **Low inertia**  
*(Nominal thickness at 20mm only above pipes)*
- ➔ **Red colouration**  
*the guarantee of the right product*



GYVLON THERMIO<sup>®</sup>+ IS THE ONLY SCREED WITH A GUARANTEED THERMAL PERFORMANCE.

#### GYVLON<sup>®</sup> RANGE

THERMIO<sup>®</sup>+

XTR<sup>®</sup>

STEELDECK<sup>®</sup>

SKY<sup>®</sup>

SOUNDBAR<sup>®</sup>

ECO<sup>®</sup>

**GYVLON**  
environmental screed solutions

# THE GUARANTEED ULTRA-EFFICIENT SCREED FOR UNDERFLOOR HEATING



THERMIO<sup>+</sup>, is an accumulation of benefits for your water underfloor heating systems :

THERMIO<sup>+</sup> screed enables a **much faster rise in temperature** thanks to its high thermal diffusivity (up to +80% compare to a cement screed), providing quicker response to thermostat changes.

Greatly improved comfort, the floor emits the heat in a more efficient and homogeneous way thanks to the exceptional thermal emission value of THERMIO<sup>+</sup> (up to +30%<sup>1</sup>). **Maximising your underfloor heating performance.**

The high efficiency of THERMIO<sup>+</sup> allows your boiler or heat pump to work with a better efficiency, and to make **considerable savings on your heating bill** (up to 8%<sup>1</sup> saving).

	Traditional cement	ECO <sup>®</sup> TECHNOLOGY	THERMIO <sup>+</sup> TECHNOLOGY
	LOW CONDUCTIVITY NOMINAL THICKNESS	GOOD CONDUCTIVITY REDUCED THICKNESS	HIGH CONDUCTIVITY GUARANTEED THIN SCREED SOLUTION
COMFORT	★	★★★	★★★★★
EFFICIENCY	★	★★★	★★★★★
THERMAL GUARANTY	-	-	

Tested extensively in Europe with manufacturers such as : Acome, Comap, Efex, PBtub, Rehau, Roth, Uponor, Velta, Wavin

## OUTSTANDING PERFORMANCE

TECHNICAL CHARACTERISTICS		
Mechanical strength	C30 F8	
Thermal conductivity (nominal value) <sup>2</sup>	$\lambda=2,5W/m.K$	
Thermal emission coefficient <sup>3</sup>	$K_H \geq 7,42W/m^2.K$	
Diffusivity	$D=1,0.10^{-6} m^2/s$	
Wet Density	2 200kg/m <sup>3</sup>	
Dry Density	2 000kg/m <sup>3</sup>	
Nominal thickness above the pipe	20mm	
Minimum thickness by substrate	Unbonded	30mm
	Floating Residential	35mm
	Commercial	40mm

1. Independant study by Cardonnel
2. According Avis Technique / DTA CSTB N° 13/12-1184, with a minimum of 2.3W/m.K guaranteed for thermal calculations in whole UK
3. Calculation according to EN1264. Minimum value stated at the present document edition

INSTALLATION BENEFITS	
Flow	250mm (± 20mm)
Joints	300m <sup>2</sup>
Productivity	up to 200m <sup>2</sup> / hour or 1 500m <sup>2</sup> / day

THERMIO<sup>+</sup> is a technology patented by Gyvlon<sup>®</sup>

**Thermal diffusivity (D):** ability of a material to transmit more or less quickly a temperature change

**Thermal emission value (K<sub>H</sub>):** capacity of a water heating system to give back heat circulating through pipes

**Thermal conductivity (λ):** property of a material to conduct heat . Higher conductivity equals quicker reaction



[www.gyvlon.co.uk](http://www.gyvlon.co.uk)

