



THERMIO[®]+
TECHNOLOGY



THE GUARANTEED ULTRA-EFFICIENT SCREED FOR UNDERFLOOR HEATING

Gyvlon[®] 'Environmental Screed Solutions' have developed the THERMIO[®]+ 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[®]+ is the only screed with a guaranteed thermal performance.

WHAT DOES THERMIO[®]+ OFFER?

THERMIO[®]+ technology coupled with an underfloor heating or cooling system **guarantees** pipe encapsulation and an **emitter** which will give:

- + performance:** up to **30%** increase of the thermal emission value 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[®] PRODUCTS

THERMIO[®]+ 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 300m²**
- **No reinforcement**
- **No need for a curing membrane**
- **Typically 36% recycled content**

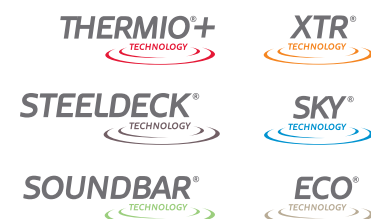
OUR TECHNICAL +

- ➔ **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[®]+ IS THE ONLY SCREED WITH A GUARANTEED THERMAL PERFORMANCE.

GYVLON[®] RANGE



GYVLON
environmental screed solutions

THE GUARANTEED ULTRA-EFFICIENT SCREED FOR UNDERFLOOR HEATING



THERMIO⁺, is an accumulation of benefits for your water underfloor heating systems :

THERMIO⁺ 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⁺ (up to +30%¹). **Maximising your underfloor heating performance.**



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

	Traditional cement	ECO [®] TECHNOLOGY	THERMIO ⁺ TECHNOLOGY
	LOW CONDUCTIVITY STANDARD THICKNESS	GOOD CONDUCTIVITY REDUCED THICKNESS	HIGH CONDUCTIVITY GUARANTEED THIN SCREED SOLUTION
COMFORT	★	★★★	★★★★★
EFFICIENCY	★	★★★	★★★★★
THERMAL GUARANTEE	-	-	

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

1. Independant study by Cardonnel
2. According to 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 ²
Productivity	up to 200m ² / hour or 1 500m ² / day

THERMIO⁺ is a technology patented by Gyvlon[®]

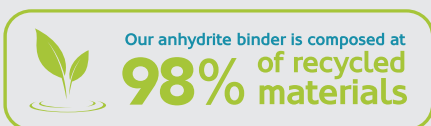
Thermal diffusivity (D): ability of a material to transmit more or less quickly a temperature change

Thermal emission value (K_H): 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



The information in this document does not dispense with the realisation of a thermal study. Non-contractual document. Unauthorized reproduction prohibited - Gyvlon - 01/2014.



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