



# THERMIO<sup>®</sup> TECHNOLOGY



## THE GUARANTEED ULTRA-EFFICIENT SCREED FOR UNDERFLOOR HEATING

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

Gyvlon<sup>®</sup> Screed 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** pipe encapsulation and an **emitter** which will give:

- + performance:** up to **30%**<sup>3</sup> 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%**<sup>1</sup> savings on heating bills

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

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

- **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**

#### MAIN FEATURES

- ➔ **High and guaranteed thermal performance**  
*both in heating or cooling modes*
- ➔ **Low inertia**  
*(Nominal thickness at 20mm only above pipes)*
- ➔ **Red colouration**  
*to ensure correct product selection*

**EPD<sup>®</sup> LOW CARBON SOLUTION**  
**<90% REDUCTION**



The ultra-thin readymix flowing subbase leveller



The thin and lightweight flowing screed solution



The guaranteed ultra-efficient screed for underfloor heating



The strongest screed for the most demanding situations

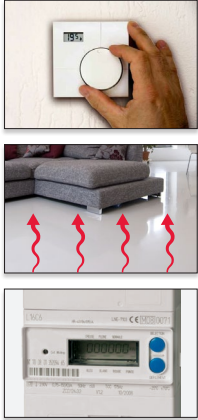


The Gyvlon<sup>®</sup> screed version with faster drying (FD) and early to cover (E2C<sup>®</sup>)



Anhydritec's versatile Gyvlon<sup>®</sup> screed

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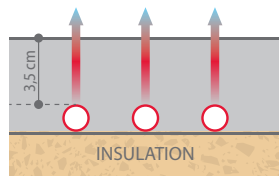
**THERMIO+ is an accumulation of benefits** for your water underfloor heating systems :

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.

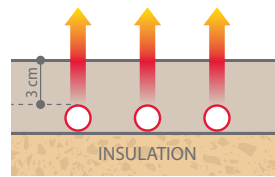
Greatly improved comfort, the floor emits the heat in a more efficient and homogeneous way thanks to the exceptional thermal emission value of THERMIO+ (up to +30%<sup>3</sup>). **Maximising your underfloor heating performance.**

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%<sup>1</sup> saving).

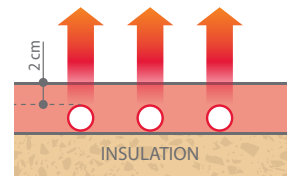
## Traditional cement



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) <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. Evaluation made by independent thermal engineering company (Cardonnel)
2. According to BBA, with a minimum of 2.3 W/m.k guaranteed thermal performance for approved concrete plants across the UK
3. Calculation according to EN1264. Minimum value stated at the present document edition

## INSTALLATION BENEFITS

Flow	250mm (± 10mm)
Joints	300m <sup>2</sup>
Productivity	up to 200m <sup>2</sup> / hour or 1 500m <sup>2</sup> / day

**THERMIO+ is a technology patented by ANHYDRITEC®**

**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) [www.anhydritec.com](http://www.anhydritec.com)

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