

# TECHNICAL INFORMATION

## TOPFLOW SCREED A THERMIO

The guaranteed ultra-efficient screed for underfloor heating

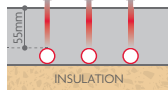
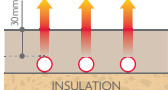
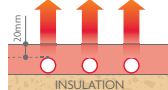

### PRODUCT DESCRIPTION

Thermio+, anhydrite environmental screed solution, has been developed to further improve underfloor heating systems by creating the first screed specifically designed to complement both water underfloor heating and cooling systems.

### BENEFITS

Topflow Screed A Thermio+ is the only screed with a guaranteed thermal performance. This technology coupled with an underfloor heating or cooling system guarantees pipe encapsulation and an emitter which will give;

- Performance – up to 30% increase in 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
- Programme efficiency – 20 day reduction in drying times when compared to conventional flowing screeds
- All the normal benefits of Topflow Screed A products
- 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

	COMFORT	EFFICIENCY	THERMAL GUARANTEE
<p><b>Traditional cement</b></p>  <p>LOW CONDUCTIVITY STANDARD THICKNESS</p>	★	★	–
<p><b>ECO<sup>®</sup></b></p>  <p>GOOD CONDUCTIVITY REDUCED THICKNESS</p>	★★★	★★★	–
<p><b>THERMIO<sup>+</sup></b></p>  <p>HIGH CONDUCTIVITY GUARANTEED THIN SCREED SOLUTION</p>	★★★★★	★★★★★	

### THERMAL PERFORMANCE

- High and guaranteed thermal performance both in heating or cooling modes
- Low inertia (nominal thickness 20mm cover to pipes)
- Red colouration – the guarantee of the right product

**THERMIO<sup>+</sup>**  
TECHNOLOGY

## OUTSTANDING PERFORMANCE

Topflow Screed A Thermio+ is extremely beneficial for your water underfloor heating systems

- Enables a much faster rise in temperature thanks to its high thermal diffusivity (up to 80% more than a cement screed), providing quicker response to thermostat changes.
- Greatly improved comfort as the floor emits the heat in a more efficient and homogeneous way thanks to the exceptional thermal emission value – up to 30% more, maximising your underfloor heating performance
- Allows your boiler or heat pump to work with greater efficiency therefore creating considerable savings on your heating bill of up to 8%

## CHARACTERISTICS

Mechanical strength: C30 F8

Thermal conductivity (nominal value) :  $\lambda=2,5$  W/m.K

Thermal emission coefficient : KH =7,42 W/m .K

Diffusivity:  $D=1,0.10^{-6}$  m<sup>2</sup>/s

Wet density: 2200kg/m<sup>3</sup>

Dry density: 2000kg/m<sup>3</sup>

Nominal thickness above the pipe: 20mm

Minimum thickness by substrate:

- Unbonded: 30mm
- Floating - residential:35mm
- Floating - commercial:40mm

1. Independent 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

## ENVIRONMENTAL

Topflow Screed A Thermio+ is produced using Gylvon binder, which is manufactured from an industrial by-product.

Topflow Screed A – average 36% recycled content.

THERMIO+ IS A TECHNOLOGY PATENTED  
BY GYVLON



## INSTALLATION

Flow: 250 (250mm (20mm)

Joints: 300m

Productivity: up to 200m<sup>2</sup> /hour or 1500m<sup>3</sup> /day

Thermal diffusivity (D) : ability of a material to transmit more or less quickly a temperature change  
Thermal emission value (KH): capacity of a water heating system to give back heat circulating through pipes  
Thermal conductivity ( $\lambda$ ) : property of a material to conduct heat. Higher conductivity equals quicker reaction

## DELIVERY

Topflow Screed A Thermio+ is supplied via Tarmac's network of screed plants.

## HEALTH AND SAFETY

Some of the components of this product may be hazardous during mixing and application. Please consult the relevant Health and Safety datasheets, available from Tarmac on request and provided with each delivery.



For more details contact  
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