# ULTIMATE INFORMATION

# TOPFLOW SCREED A THERMIO+

The guaranteed ultra-efficient screed for underfloor heating

#### PRODUCT DESCRIPTION

Thermio+, a Gyvlon 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 300m2
  - No reinforcement
  - No need for a curing membrane
  - Typically 36% recycled content

	COMFORT	EFFICIENCY	THERMAL GUARANTEE
INSULATION LOW CONDUCTIVITY STANDARD THICKNESS	*	*	-
INSULATION GOOD CONDUCTIVITY REDUCED THICKNESS	***	***	-
THERMIO'+  INSULATION  HIGH CONDUCTIVITY GUARANTEED  THIN SCREED SOLUTION	****	****	

# 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



## **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%<sup>1</sup> 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%<sup>1</sup>

#### **CHARACTERISTICS**

Mechanical strength: C30 F8

Thermal conductivity (nominal value)<sup>2</sup>:  $\lambda$ =2,5 W/m.K Thermal emission coefficient<sup>3</sup>: K<sub>H</sub>=7,42 W/m<sup>2</sup>.K

Diffusivity: D=1,0.10<sup>-6</sup> 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: 35mmFloating - 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 Gyvlon binder, which is manufactured from an industrial by-product.

Topflow Screed A – average 36% recycled content

Recyclability – 100% recyclable

VOC content - VOC free



THERMIO+ IS A TECHNOLOGY PATENTED BY GYVLON®

#### **INSTALLATION**

Flow: 250 (250mm (±20mm)

Joints: 300m<sup>2</sup>

Productivity: up to 200m<sup>2</sup>/hour or 1500m<sup>2</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 Lafarge 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 Lafarge Tarmac on request and provided with each delivery.





