mach 3

Fast drying, strength-enhancing liquid screed additive

Standard, Heavy Duty & Ultra Heavy Duty

Main features

- Drying time of only 7 days
- Extremely high early & final compressive and flexural strength up to C60-F8
- No curing under polyethylen (PE) needed
- BRE category A screed
- Suitable for inside, outside & permanently wet areas
- No fibre or steel reinforcement needed

About this product

mach 3 is a high-performance liquid additive engineered for the production of semi-dry cementitious screeds. Its effect extremely reduces drying time while significantly enhancing the compressive and flexural strength of the screed. Thanks to its integrated processing aid, **mach 3** ensures excellent workability, making mixing, pumping, spreading, levelling and smoothing noticeably easier and more efficient.

The result: faster construction progress, superior quality, and maximum reliability on site.

Curing	
Drying time	7 days
Strength classification	C30-F5 (STD), C40-F6 (HD), C60-F8 (UHD)
BRE category	A
Foot traffic	after 24 hours
Normal site traffic	after 72 hours
Commissioning UFH	after 24 hours
UFH commissioning cycle	6 days
Working time	90 minutes

*Typical properties achieved under construction site conditions at 5-30°C and 40-60% relative humidity with screed thickness of ≤ 60 mm without underfloor heating and ≤ 70 mm screed thickness with underfloor heating.

Screed admixture classifications and recommended use

Screed category	Standard (STD)	Heavy Duty (HD)	Ultra Heavy Duty (UHD)
Strength classification	> C30-F5	> C40-F6	> C60-F8
BRE category	A	A	A
Sand category	BS EN 13139 Cat. 1	BS EN 13139 Cat. 1	BS EN 13139 Cat. 1*
Cement category	CEM I/II 32.5 N/R	CEM I/II 42.5 N/R	CEM I 52.5 N
Recommended use	Residential	Commercial	Industrial

*Replace 30% of fine aggregate with 5–8 mm coarse aggregate in accordance with BS EN 12620.

Screed admixture designs (per screed pump)

Screed category	Standard (STD)	Heavy Duty (HD)	Ultra Heavy Duty (UHD)
Sand	310 kg	310 kg	310 kg
Cement	50 kg	62.5 kg	75 kg
Dosage mach 3	300 ml	300 ml	400 ml
W/C ratio	0.5 - 0.7	0.5 - 0.7	0.5 - 0.7

Screed admixture designs (per cubic metre)

Screed category	Standard (STD)	Heavy Duty (HD)	Ultra Heavy Duty (UHD)
Sand	1,550 kg	1,550 kg	1,550 kg
Cement	250 kg	312.5 kg	375 kg
Dosage mach 3	1,500 ml	1,500 ml	2,000 ml
W/C ratio	0.5 - 0.7	0.5 - 0.7	0.5 - 0.7

Basic material, standards and testing regulations

- CEM I or CEM II (A-L, A-LL, B-L, B-LL) following BS EN 197-1
- Aggregates following BS EN 13139
- Preliminary testing and suitability verification required prior to each use

Minimum screed thickness (at 2 kN/m² surface load)			
Screed category	**Standard (STD)**	**Heavy Duty (HD)**	**Ultra Heavy Duty (UHD)**
Bonded	25 mm	25 mm	25 mm
Unbonded	35 mm	35 mm	30 mm
Floating			
Underfloor heating*			

*Pipe coverage in mm
**Further information regarding min. screed thickness at different surface loads are available upon request or can be downloaded on our website.

Underfloor heating commissioning cycle					
Day*	1	2-5	6	7	8
Temperature	25°C	45°C	35°C	25°C	Moisture test

*The underfloor heating commissioning cycle may begin 24 hours after the screed has been laid.

Mixing instructions

1. Fill the screed machine about half full with sand and the total amount of cement.
2. Add mach 3 to the first mixing water (usually 5-10 litres) and then fill the machine completely.
3. In the meantime, gradually add the required amount of water until a semi-dry consistency is achieved.
4. Mix at least 2 minutes.

Construction site conditions

- The screed must be protected from drying out too quickly due to draughts, direct sunlight and low humidity.
- The screed must be protected from frost and water during the entire drying time.
- At temperatures below + 5°C, the setting process of the binder (cement) is delayed or completely interrupted.

Residual moisture test

- Before laying the floor covering, the residual moisture content of the screed must be measured by the floor layer.
- BS 8203 recommends a maximum relative humidity of 75% before laying floor coverings.

Safety and certificates

- CE certification
- Always observe general work hygiene when using our products.
- Further information on handling mach 3 can be found in our safety data sheets.

Technical data

- Form: liquid
- Colour: orange
- Density: 1.04 ± 0.02 kg/dm³
- Supply form: 10 litres, 20 litres, 1,000 kg
- Storage: store protected from frost, heat and direct sunlight
- Shelf life: at least 12 months (in sealed containers)

Comments

The raw materials we use as well as the products we manufacture are subject to comprehensive internal quality control procedures and are regularly inspected. When using this product, no additives from other manufacturers may be mixed in or applied.
Before application, it must be ensured that both our products and the selected method are suitable for the specific site conditions. The quality of the screed is significantly influenced by the properties of the sand and cement, the correct mixing ratio, and proper installation in accordance with approved screed technology.
As we have no control over actual site conditions or the execution of the work, no liability claims can be derived from the information contained in this data sheet. Upon publication of this edition, all previous versions shall become invalid.

For advice or further information, please contact our technical team.

As of 20 February 2026