Supaflo TS-20

technical datasheet

High quality thin screed for bonded and unbonded applications

Supaflo TS-20 is a thin section screed based on an anhydrite binder. It is formulated to provide a strong and durable, thin topping to solid internal substrates such as, in situ concrete slabs, beam and block sub floors and precast concrete planks. When tested for in situ crushing resistance to BS8204:1:2003 Supaflo TS-20 achieved Category A. Supaflo TS-20 can be installed to a minimum thickness of 20mm which improves drying times compared to traditional screeds and enables the finished flooring to be installed sooner.

Supaflo TS-20 is ideally suited to projects where available height and or permitted loading are extremely restricted." For example, a situation that might previously have used smoothing compounds to provide a suitable surface on to which the final flooring is applied.

If used as an alternative to a smoothing compound some post installation treatment may be required before the final flooring is applied, such as light sanding. Supaflo TS-20 cannot be finished to a feather edge.

Supaflo TS-20 is designed to be installed as either a bonded or unbonded screed. For bonded applications the subfloor should be appropriately treated, this may include mechanical abrasion e.g. Shot blasting, and the complete removal of arising detritus (preferably using a vacuum cleaner) and the application of an organic polymer bonding agent (epoxy resin or polymer dispersion) prior to installation. For unbonded applications Supaflo TS-20 should be installed on unfolded polythene sheeting of ideally 500 gauge (approximately 110µm thick). Thick folded sheeting has the potential to induce cracks in the screed.

Supaflo | TS-20

Application

Refurbishment of uneven floors.

Remediation or correction of out of level concrete slabs.

As a levelling screed over floors with restricted ceiling heights.

Overlay for poorly installed / levelled screeds.

As an alternative to light weight screeds, where loading is restricted.

As an overlay to an electric underfloor heating system.

Site work

Supaflo TS-20 is delivered to site ready mixed, once tested and if required, the flow adjusted. It should then be pumped directly to the point of use. There is no requirement for on site mixing; only placing.

A typical, well maintained, rotor stator pumps can deliver the product 150m horizontal and 60m vertical and discharge a 5m^3 load in approximately 30 minutes.

Supaflo TS-20 is finished using lightweight dapple bars (15 to 30mm Ø).

Supaflo TS-20 should only be used if the building envelope is complete; doors and windows should be in place and must be closed for the first 24 to 48 hours after installation to prevent drafts blowing across the surface of the screed.

Bay sizes should be restricted to 750m^2 for areas of approximately equal dimension. For long thin sections the maximum recommended aspect ratio is 1:5.

Performance

Working time	Batched, transported, placed and finished within 3 hours
Foot Traffic	24 to 48 hours
Loading	5 to 7 days
Drying time	Approximately 1mm per day, (can be forced dried after 7 days)
Thickness (min)	20mm minimum at any point

Technical*

Appearance	Off white fluid mortar	
Density	Plastic	2150 - 2250kg/m^3
	Dry	1950 - 2050kg/m^3
Strength (28 day)	CA C30 – F5	
Flow	230 to 270mm	
(BS8204:7 Annex A, Truncated cone)		
Reaction to fire	Class A1$_{fl}$ non combustible	

Environmental*

Recycled content	Binder	98%
	Mortar	up to 40%
Carbon emissions	Binder	10 to 20kg per tonne
	Mortar	20 to 40kg per m^3
VOC	Virtually zero	
Recyclability	100%	

*Figures provided by LKAB Minerals

This product range can be found in the following resources and supported with an approved CPD presentation:

NBS Plus | NBS National BIM Library | riba product selector | RIBA CPD Providers Network