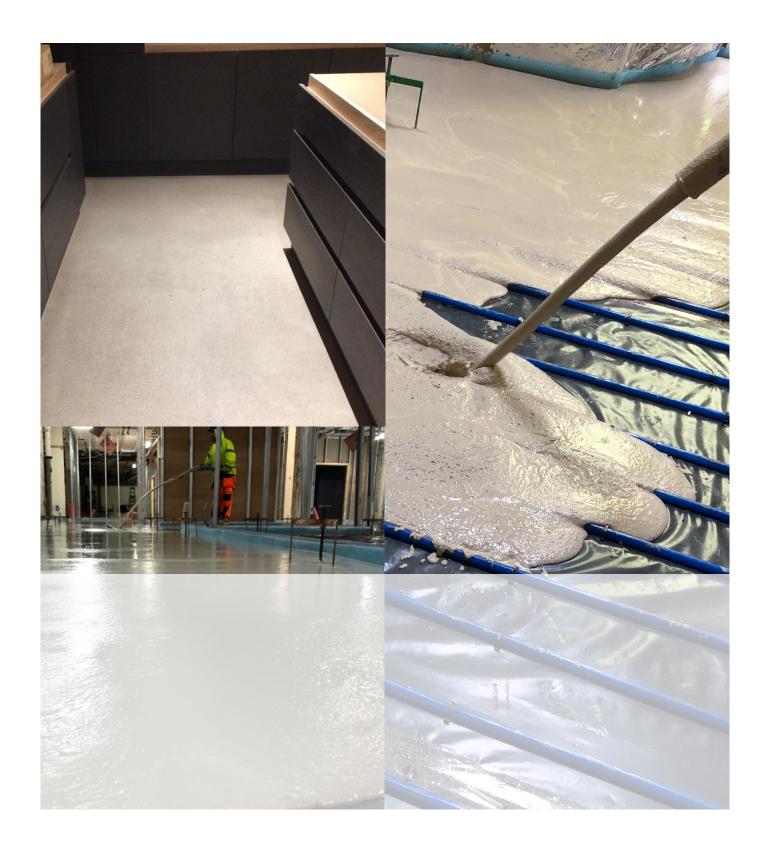




Environmentally friendly Anhydrite flowing floor screeds

# **Gypsol Screeds**



# Gypsol; environmentally friendly flowing screeds

LKAB Minerals manufacture high quality and performance anhydrite binder, which is used in a range of **Gypsol** screeds, suitable for use in any project from small new builds and renovations to large scale constructions. Gypsol screeds can be used in all build types including traditional construction, timber frame, modular, lightweight steel and concrete.



### About LKAB Minerals

LKAB Minerals is an international industrial minerals group with a leading position in a number of product applications. LKAB Minerals was founded in 1989 and is part of the Swedish state owned mining company LKAB, a leading producer of upgraded iron ore.

In 2018, LKAB Minerals acquired the Gypsol brand, forming part of their civil engineering and construction portfolio.

### Gypsol Product Range

LKAB Minerals range of screeds include:



Gypsol Classic

Gypsol HTC

Gypsol Rapide

Gypsol Rustique

Gypsol TS-15

Gypsol TS-20

Gypsol XS

Gypsol Modular

Gypsol Summit

Gypsol TimBRE

Gypsol Diamond

Gypsol Sureflo



### About this brochure

This brochure is interactive. Where you see this symbol, click it to return to the contents page (above).

### About Gypsol binder

Gypsol is a high performance anhydrite screed binder produced from a by-product of industry.

The range of Gypsol screeds offer a wide variety of benefits.

Gypsol screeds are available in twelve formats, ensuring that the right product is available for every application. Gypsol screeds are available nationally from over 90 locations through a comprehensive network of distributors and trained installers.

Gypsol screeds are self-curing and require no artificial curing membrane after installation. The dimensional stability of Gypsol, whether heated or unheated, significantly reduces the risk of cracking without the need for reinforcement. Additionally, Gypsol screeds can be placed in much larger bay sizes when compared to cement based materials.



### Environmental data

Gypsol binder is produced from a by-product. Unlike the manufacture of Portland cement, Gypsol requires very little energy with no elevated temperature processing. This means a carbon footprint for Gypsol binder of just 26.26kg/tonne of material, compared with that for cement of around 900kg/tonne. For any project, a reduction of 94% of the  $\rm CO_2$  emissions attributed directly to your screed can easily be achieved. Further  $\rm CO_2$  savings can be achieved by ensuring your specification is correctly calculated.

Recycled Content	Binder 98%
	screed up to 40%
Carbon Emissions	Binder 10 to 30 kg/tonne
	Mortar 30 to 50 kg/tonne
VOC	Virtually Zero
Recyclability	100%

### Benefits of Gypsol screeds



### Proven project base

LKAB Minerals offer a range of case studies and project examples for many of the Gypsol products. Speak to your local representative or visit the website for further information.



### Health and Safety

Amongst other benefits, the materials used in Gypsol Screeds and the nature of the installation when compared to other screeding systems, mean that installers benefit from reduced wear and tear on joints and muscles, no issues with cement based skin conditions and much reduced manual handling.



### Technical Support

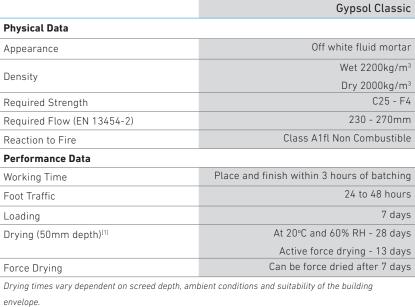
Unrivalled in-house technical expertise and dedicated laboratory ensures that LKAB Minerals can provide ongoing assistance and on-site practical support at all stages. At LKAB Minerals, we encourage discussion between designers, engineers, ready-mix suppliers and ourselves.

# **Gypsol Classic**

Gypsol Classic is our most commonly used screed. It is a general-purpose screed, providing a multi-purpose solution for almost any application.

### About Gypsol Classic

Gypsol Classic is a general purpose screed designed to offer a smooth flat and level surface for use in the vast majority of interior non wearing applications where a subsequent floor covering is to be used. Gypsol Classic screed is perfectly suited to use in floating, bonded or unbonded construction and can easily incorporate electric or warm water underfloor heating systems.



<sup>[1]</sup> Independently tested and verified by Action Dry Ltd. Full report available upon request.

Minimum	Depth	requireme	nt
Dandad			

Bonded	25mm <sup>[2]</sup>
Unbonded	30mm
Floating	35mm Domestic
	40mm Commercial
Acoustic	80kg/m² @ 40mm
Cover to conduits	25mm

Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.V

### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m <sup>2</sup>

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m²





# **Gypsol HTC**

Gypsol HTC is a screed specifically designed for use with underfloor heating and cooling systems, making it suitable for both warm water and electric underfloor heating.

### About Gypsol HTC

Gypsol HTC is designed for use with both conventional heat sources and renewable technologies. It is not pipe specific and is suitable for use with any underfloor heating system and in any type of construction, subject to suitable engineering. It is suitable for use over timber floors, Lewis decking, and more traditional concrete and masonry systems.

Gypsol HTC is specially formulated to allow thinner depths than our conventional Gypsol screeds allowing just 20mm cover to heating conduits. Gypsol HTC is suitable for all types of floor covering including not only traditional tiles, carpets, vinyl and wood floors but also with suitably formulated floor sealers such as clear epoxy coatings. Coupled with Gypsol HTC's unrivalled and independently tested thermal conducitivity, this offers the ultimate in underfloor heating efficiency and comfort.



Physical Data Appearance	Off white fluid mortar		
Appearance	Off white fluid mortar		
Deneity	Wet 2200kg/m³		
Density	Dry 2000kg/m <sup>3</sup>		
Required Strength	C25 - F4		
	Minimum binder content 800kg/m³		
Required Flow (EN 13454-2)	230 - 270mm		
Reaction to Fire	Class A1fl Non Combustible		
Performance Data			
Working Time	Place and finish within 3 hours of batching		
Foot Traffic	24 to 48 hours		
Loading	5-7 days		
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days		
	Active force drying - 13 days		
Force Drying	Can be force dried after 7 days		
Drying times vary dependent on screed depth, amb envelope.	bient conditions and suitability of the building		

[1] Independently tested and verified by Action Dry Ltd. Full report available upon request.

Minimum Depth requirements	
Bonded	25mm <sup>[2]</sup>
Unbonded	30mm
Floating	35mm Domestic
	40mm Commercial
Acoustic	80kg/m² @ 40mm
Cover to conduits	20mm

<sup>[2]</sup> Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.

Bav	sizes	and	ioint	reau	irements
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Heated		
Maximum Length	20m	
Maximum Aspect Ratio	6:1	
Maximum Bay Size	300m²	
Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.		

Unheated	
Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bav Size	1000m <sup>2</sup>



# **Gypsol Rapide**

Gypsol Rapide is a unique, faster drying screed, providing a drying time of just 14 days.

### About Gypsol Rapide

Gypsol Rapide offers all of the benefits of an Anhydrite floor screed, plus the added advantage of an unrivalled and independently varified drying time of just 14 days. This allows the user to install floor coverings in significantly less time than for competing screed systems.

Gypsol Rapide also benefits from no requirement to remove laitance to help promote drying. As with ALL screeds some light mechanical abrasion may be necessary in order to properly prepare the surface to receive primers and adhesives in order to meet the requirements of the standards governing floor coverings.

Gypsol Rapide can be used with or without underfloor heating. When used in conjunction with any type of underfloor heating it creates a high performance, highly efficient and environmentally-friendly heating system.



	Gypsol Rapide
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200kg/m³
	Dry 2000kg/m <sup>3</sup>
Minimum Strength	C25 - F5 <sup>[1]</sup>
Required Flow (EN 13454-2)	230mm - 250mm
Reaction to fire	Class A1fl Non Combustible

[1] Stronger mix designs may be available on request to allow for alternative applications.

### **Performance Data**

Working Time	Place and finish within 2.5 hours of batching [2]
Foot Traffic	24 to 48 hours
Loading	7 days
Drying (@20°C / 60% RH) <sup>[1]</sup>	14 days (in ideal conditions) [3]
Force Drying	Can be force dried in 7 days

<sup>[2]</sup> Ensure account is taken of travel time from plant to site

### Minimum Depth requirements

Bonded	15mm <sup>[4]</sup>
Unbonded	15mm
Floating	35 mm Domestic
	40mm Commercial
Cover to conduits	20mm

[4] Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.

### Bay sizes and joint requirements

### Heated

Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m <sup>2</sup>

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m²



<sup>&</sup>lt;sup>[3]</sup> Tests are based on 50mm depth of screed and indicate that it can take as little as 14 days to achieve 75% surface RH measured using calibrated hygrometer to B58204:7:2003. A Carbide Bomb test may be used and must measure below 0.5% b/w. Moisture tests should always be carried out prior to application of finished for covering. Note that drying rates are affected by site conditions, screed depth and added water whether pre or post installation.

# **Gypsol Rustique**

Gypsol Rustique is a fast track flooring solution for rustic or architectural looks.

### About Gypsol Rustique

Gypsol Rustique screed has been developed to offer the unique benefits of a durable, stain resistant wearing surface when combined with easy to apply, colourless sealers from a range of manufacturers. Once the screed is installed by a trained screed installer the selected sealer is simply applied to the screed surface by a suitably qualified applicator. Gypsol Rustique screed offers a bespoke and variable surface finish expected from a rustic or industrial look

Time from initial installation of the Gypsol Rustique screed to completion of the finished floor can be less than one month. It is perfect for use with or without underfloor heating and can be used for all domestic and commercial interior applications where light commercial and heavy foot traffic is likely.

Gypsol Rustique Screed has been uniquely developed and rigorously tested for use in conjunction with a range of finishing primers and sealers. These products are simple to use, colourless two part sealers, which can be applied by any suitably skilled installer directly to the surface of the screed.

Gypsol Rustique screed system is simple to use and remarkably fast to complete. The screed can then be sanded to taste dependent on the aesthetic requirements of the client and a seal coat is then applied. There are no special hardeners, sealers or polishes required and minimal maintenance.



Aesthetic floor finish

Gypsol Rapide provides a Aesthetic	ally rustic	
floor finish once sealed and polishe	ed.	

	Gypsol Rustique
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200 kg/m³
	Dry 2000 kg/m³
Minimum Strength	C30 - F5 <sup>[1]</sup>
	Minimum binder content 800kg/m³
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible

[1] Stronger mix designs may be available on request to allow for alternative applications

Performance Data	
Working Time	Place and finish within 2 hours of batching
Foot Traffic	24 to 48 hours
Loading	7 days
Drying (@20°C / 60% RH) <sup>[1]</sup>	In excess of 1mm per day
Force Drying	Can be force dried after 7 days

### **Minimum Depth requirements**

Bonded	25mm <sup>[2]</sup>
Unbonded	30mm
Floating	35 mm Domestic
	40mm Commercial
Cover to conduits	20mm

<sup>[2]</sup> Prepare the substrate in accordance with BS8204.7:2003 using a gritted two coat epoxy resin DPM or similar.

### Bay sizes and joint requirements

Heated	
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Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m²



## **Gypsol TS-15**

Gypsol TS-15 is a unique screed, designed to be placed at a depth of just 15mm.

### About Gypsol TS-15

Gypsol TS-15 is a specially formumated screed, designed to offer a strong and durable ultra-thin topping to a solid interior substrate; for example, in situ concrete or beam and block or precast concrete planks.

Due to its ultra-thin depth, just 15mm minimum, TS-15 can be dried quickly allowing rapid return to service and application of finished floor coverings.

Gypsol TS-15 is perfectly suited to flooring applications where height is extremely restricted and offers a lightweight cost effective alternative to smoothing compounds. It can be installed extremely quickly to at least 2000m² per day. This represents a significant saving in time when compared to bagged, site mixed smoothing compounds and levelling screeds.

Gypsol TS-15 screed is designed to be laid to a minimum of 15mm depth and can be used either bonded directly to a solid substrate prepared in accordance with BS 8204:7:2003 or un-bonded on a polythene membrane.

	Gypsol IS-15
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200 kg/m³
	Dry 2000 kg/m³
Minimum Strength	C35 - F6
Required Flow (EN 13454-2)	230mm - 250mm
Reaction to fire	Class A1fl Non Combustible

# Working Time Place and finish within 2 hours of batching Finish within 1 hour of placing Foot Traffic Loading Drying (@20°C / 60% RH) In excess of 1mm/day Force Drying Minimum depth (bonded or unbonded) Place and finish within 2 hours of batching Finish within 1 hour of placing Einish within 1 hour of placing Finish within 2 hours of batching Finish within 1 hour of placing Cat to 48 hours Can be force dried after 7 days Finish within 1 hour of placing Finish within 1 hour of placing Finish within 1 hour of placing Cat to 48 hours Loading Finish within 2 hours of batching Finish within 2 hours of placing Finish within 2 hours of placing Finish within 1 hour of placing Cat to 48 hours I but a supplied of the finish within 2 hours of placing Finish within 1 hour of placing Finish within 1 hour of placing Finish within 2 hours of placing Finish within 2 hours of placing Finish within 1 hour of placing Finish within 2 hours of placing Finish within 1 hour of placing Finish within 2 hours of plac

Gypsol TS15 may be laid un-bonded over a suitable minimum 500 gauge polythene membrane.

Gypsol TS15 has been independently tested for its suitability to be laid un-bonded at 15mm by Aston Services Ltd.

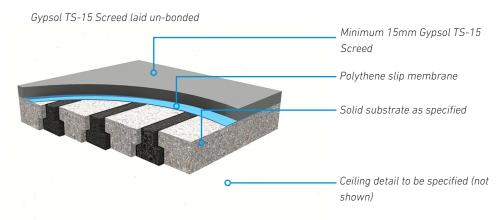
For Bonded screed, prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.

### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	8:1
Maximum Bay Size	500m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

### Typical Application Schematic





# Gypsol TS-20

Gypsol TS-20 is a unique screed, designed to be placed at a depth of just 20mm.

### About Gypsol TS-20

Gypsol TS-20 is a specially formulated screed, designed to offer a strong and durable thin topping to a solid interior substrate; for example, in situ concrete or beam and block or precast concrete planks.

Due to its thin depth, just 20mm minimum, TS-20 can be dried quickly allowing rapid return to service and application of finished floor coverings.

Gypsol TS-20 is perfectly suited to flooring applications where height is extremely restricted and offers a lightweight cost effective alternative to smoothing compounds. It can be installed extremely quickly to at least 2000m² per day. This represents a significant saving in time when compared to bagged, site mixed smoothing compounds and levelling screeds.

Gypsol TS-20 screed is designed to be laid to a minimum of 20mm depth and can be used either bonded directly to a solid substrate prepared in accordance with BS 8204:7:2003 or un-bonded on a polythene membrane.

	Gypsol TS-20
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200kg/m³
	Dry 2000kg/m³
Minimum Strength	C30 - F5
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible
D	

Performance Data	
Working Time	Place and finish within 2 hours of batching
	Finish within 1 hour of placing
Foot Traffic	24 to 48 hours
Loading	5 to 7 days
Drying (@20°C / 60% RH)	In excess of 1mm/day
Force Drying	Can be force dried after 7 days
Minimum depth	20mm

Gypsol TS 20 has been independently tested for suitability to be laid un-bonded at 20mm depth by Aston Services Ltd. For Bonded screed, prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.

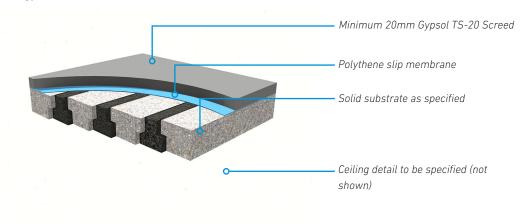
### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	8:1
Maximum Bay Size	500m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

### Typical Application Schematic

Gypsol TS-20 Screed laid un-bonded





# Gypsol XS

Gypsol XS is an enhanced strength Screed, offering a minimum strength of CA-C30-F6.

### About Gypsol XS

Gypsol XS is an enhanced strength flowing screed, produced using special additives to ensure a minimum strength of CA-C30-F6. It is suitable for use in both residential and commercial properties, including apartments, schools, prisons, hospitals and single dwellings where higher loadings and more durable screeded floors are required. In common with all Gypsol screeds, Gypsol XS screed also improves the environmental characteristics of the floor.

Gypsol XS is suitable for the encapsulation of underfloor heating systems, either electric or warm water



	Gypsol XS
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200kg/m³
	Dry 2000kg/m³
Minimum Strength	C30 - F6
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible

Performance Data	
Working Time	Place and finish within 3 hours of batching
Foot Traffic	24 to 48 hours
Loading	5 - 7 days
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days [1]
	Active force drying - 13 days [1]
Force Drying	Can be force dried after 7 days

Drying times vary dependent on screed depth, ambient conditions and suitability of the building envelope.

### Minimum Depth requirements

Bonded	25mm <sup>[2]</sup>
Unbonded	30mm
Floating	35 mm Domestic
	40mm Commercial
Cover to conduits	20mm

<sup>&</sup>lt;sup>[2]</sup> Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.

### Bay sizes and joint requirements

н	Pa	tρ	d

Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m²



 $<sup>^{\</sup>rm [1]}$  Independently tested and verified by Action Dry Ltd. Full report available upon request.

# Gypsol Modular

About Gypsol Modular

Gypsol Modular is designed specifically for use in Modular construction systems and screed is suitable for the encapsulation of an underfloor heating system, either electric or warm water. Gypsol Modular screed provides a concrete feel to a timber or light weight steel floor.

Gypsol Modular can be used for both on and offsite construction processes. and can be placed over light weight steel decking or on to timber. Off site screeded modular units may be lifted using suitable lifting equipment after just 72 hours.





Gypsol Modular is suitable for use in both residential and commercial properties, including apartments, schools, prison units, hospitals and single dwellings where light weight and durable modular floors are required.

	Gypsol Modular
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200 kg/m³
	Dry 2000 kg/m³
Minimum Strength	C30 - F6
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible
Performance Data	
Working Time	Place and finish within 3 hours of batching
Foot Traffic	24 to 48 hours
Loading	5 - 7 days
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days
	Active force drying - 13 days
Force Drying	Can be force dried after 7 days
Drying times vary dependent on screed depth, a	mbient conditions and suitability of the building
envelope.	

Minimum	Denth	requirements

Bonded	25mm <sup>[2]</sup>
Unbonded	30mm
Floating	35mm Domestic
	40mm Commercial
Acoustic	80kg/m² @ 40mm
Cover to conduits	25mm
<sup>[2]</sup> Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar.	

<sup>[1]</sup> Independently tested and verified by Action Dry Ltd. Full report available upon request.

### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Un	hea	ted
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Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m²



# **Gypsol Summit**

Gypsol Summit is designed specifically for use in high rise applications where the screed needs to be pumped to ten stories and above without the danger of segregation.

### About Gypsol Summit

Gypsol Summit is suitable for most construction types including steel frame, concrete frame, lightweight steel and traditional masonry construction. It is suitable for residential and commercial properties, and where required can be used to improve the acoustic performance of the floor to meet or exceed Part E of building regulations.

Gypsol Modular can be pumped above 10 stories with ease using a suitable pumping system. A standard screed pump is unlikely to be suitable for very high levels and account should be taken of the hydrostatic head pressures when selecting suitable pipe work.

	Gypsol Summit
Physical Data	оуров одини
Appearance	Off white fluid mortar
	Wet 2200kg/m³
Density	Dry 2000kg/m <sup>3</sup>
Required Strength	C25 - F4
,	Minimum binder content 800kg/m³
Minimum Strength (28 days)	C25 - F4
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible
Performance Data	
Working Time	Place and finish within 3 hours of batching
Foot Traffic	24 to 48 hours
Loading	5 - 7 days
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days
	Active force drying - 13 days
Force Drying	Can be force dried after 7 days

Drying times vary dependent on screed depth, ambient conditions and suitability of the building envelope.

[1] Independently tested and verified by Action Dry Ltd. Full report available upon request.

### **Minimum Depth requirements**

Bonded	25mm <sup>[2]</sup>
Unbonded	30mm
Floating	35mm Domestic
	40mm Commercial
Acoustic	80 kg @ 40mm
Cover to conduits	25mm

 $^{[2]}$  Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar terms of the substrate in accordance with the substrate in the subst

### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m <sup>2</sup>





# **Gypsol TimBRE**

Gypsol TimBRE is designed specifically for use in acoustic and non acoustic flooring systems which use timber joists as their primary supporting structure. Gypsol TimBRE is independently tested by Testconsult Ltd.

### About Gypsol TimBRE

Gypsol TimBRE screed is suitable for the encapsulation of an underfloor heating system, either electric or warm water. Gypsol TimBRE is suited to both residential and commercial properties, and will help to improve the acoustic performance of the floor to meet or exceed Part E of the building regulations. Gypsol TimBRE screed also improves the environmental, fire resistance and durability characteristics and gives a concrete feel to a timber supported floor.

Where Gypsol TimBRE screed is designed to be used in conjunction with a compressible or an acoustic resilient insulation, an acoustician should be consulted to approve the design prior to installation where acoustic performance is required. Gypsol TimBRE is approved for use in the SoundBar® system by Metsä Wood.

It is essential that the timber supporting structure is suitably engineered to accommodate the increased loading associated with the screed.

	Gypsol TimBRE
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200kg/m <sup>3</sup>
	Dry 2000kg/m <sup>3</sup>
Minimum Strength (28 days) kN/m²	C35 - F6
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible

Performance Data	
Working Time	Place and finish within 3 hours of batching
Foot Traffic	24 to 48 hours
Loading	5 - 7 days
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days
	Active force drying - 13 days
Force Drying	Can be force dried after 7 days

Drying times vary dependent on screed depth, ambient conditions and suitability of the building envelope.

<sup>[1]</sup> Independently tested and verified by Action Dry Ltd. Full report available upon request.

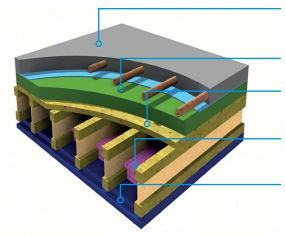
### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m <sup>2</sup>

 $Movement\ joints\ should\ be\ placed\ at\ Door\ Thresholds,\ between\ independently\ controlled\ heating\ zones\ and\ where\ heated\ and\ unheated\ screeds\ meet.$ 

Unheated	
Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m²

### Typical Application Schematic



Gypsol TimBRE screed with optional Underfloor heating

Insulation (acoustic or thermal as required) with minimum 500 gauge Slip Membrane

Minimum 22mm OSB deck over Minimum 220mm engineered joist

Optional resilient insulation dependent on acoustic requirements

Ceiling detail in line with specification



# **Gypsol Diamond**

Gypsol Diamond is a unique flooring screed solution, offering the beauty and durability of a polished "concrete style" floor.

### About Gypsol Diamond

Gypsol Diamond is a unique and innovative "micro concrete", incorporating specially selected fine aggregates and high quality anhydrite binder to replace more traditional Portland cement.

It has been designed for use with Polish flooring systems, offering the performance and functionality of a high quality Gypsol product, whilst offering the beauty and durability of a polished concrete style floor. Gypsol Diamond is perfectly suited to the encapsulation of underfloor heating systems. And as no subsequent floor coverings are required, the time from installation to finished floor may be significantly reduced compared to more traditional flooring systems.

### Please Note

The polishing contractor should use suitable hardeners and sealers. The Client should ensure suitability of Gypsol Diamond in terms of slip, abrasion and stain resistance for the specific application. LKAB do not offer any warranty for the polishing process. This must be sourced from the polishing contractor directly as required.



	Gypsol Diamond
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200kg/m³
	Dry 2000kg/m <sup>3</sup>
Minimum Strength	C25 - F4
	Minimum binder content 800kg/m³
Required Flow (EN 13454-2)	230mm - 270mm
Reaction to fire	Class A1fl Non Combustible
Performance Data	
Working Time	Place and finish within 3 hours of batching
Foot Traffic	24 to 48 hours
Loading	5 - 7 days
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days
	Active force drying - 13 days
Force Drying	Can be force dried after 7 days

<sup>[1]</sup> Independently tested and verified by Action Dry Ltd. Full report available upon request.

Drying times vary dependent on screed depth, ambient conditions and suitability of the building

Minimum	Depth	requirements	5
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envelope.

25mm <sup>[2]</sup>
30mm
35mm Domestic
40mm Commercial
80 kg @ 40mm
25mm

<sup>[2]</sup> Prepare the substrate in accordance with BS8204:7:2003 using a gritted two coat epoxy resin DPM or similar

### Bay sizes and joint requirements

Heated	
Maximum Length	20m
Maximum Aspect Ratio	6:1
Maximum Bay Size	300m²

Movement joints should be placed at Door Thresholds, between independently controlled heating zones and where heated and unheated screeds meet.

Unheated	
Maximum Bay Length	40m
Maximum Aspect Ratio	8:1
Maximum Bay Size	1000m <sup>2</sup>



<0.02%

# Gypsol SureFlo

Gypsol Sureflo is a bagged pre-blended Gypsol product designed to provide a complete solution to smaller building and renovation projects.

### About Gypsol SureFlo

When added to the requisite amount of water, Gypsol SureFlo produces a flowing screed that requires minimal dappling for a smooth and level surface. Gypsol Sureflo is designed with a combination of high quality Gypsol binder and specially selected aggregates to provide a complete solution.

Gypsol SureFlo can be used to prepare a wide variety of sub-floors to receive tile, carpet, resilient flooring, wood flooring, as well as many other surface finishes.

### Instructions for use

- Place 4 litres of clean potable water per bag of Gypsol Sureflo into a suitable mixing bucket.
- 2. Carefully pour the sureflo powder into the water
- Using a suitable paddle mixer thoroughly mix the screed to a homogenous mixture free from lumps.
- 4. Pour the screed onto the floor in the location where it is to be used.
- Once the required depth of screed is acheived the screed should be dappled and finisehd in the normal manner (see Gypsol Installation Guide).

	Gypsol SureFlo
Physical Data	
Appearance	Off white fluid mortar
Density	Wet 2200kg/m³
	Dry 2000kg/m <sup>3</sup>
Minimum Strength (28 days)	Flexural >5 N/mm²
	Compressive >30 N/mm <sup>2</sup>
Required Flow (EN 13454-2)	250mm +/- 20mm
Reaction to fire	Class A1fl Non Combustible
Performance Data	
Setting Time	Initial > 240 minutes
Light Foot Traffic	24 to 48 hours @ 20°C
Drying (50mm depth) <sup>[1]</sup>	At 20°C and 60% RH - 28 days
	Active force drying - 13 days

Drying times vary dependent on screed depth, ambient conditions and suitability of the building envelope.

### **Approximate Coverage**

Drying Shrinkage

Area	Depth (No. of 25kg bags required)		
	30mm	35mm	40mm
5m²	12	14	16
10m²	23	27	31
15m²	35	40	46
20m²	46	54	61





<sup>[1]</sup> Independently tested and verified by Action Dry Ltd. Full report available upon request.



### Gypsol Product Brochure 11-02 EN, 21-01