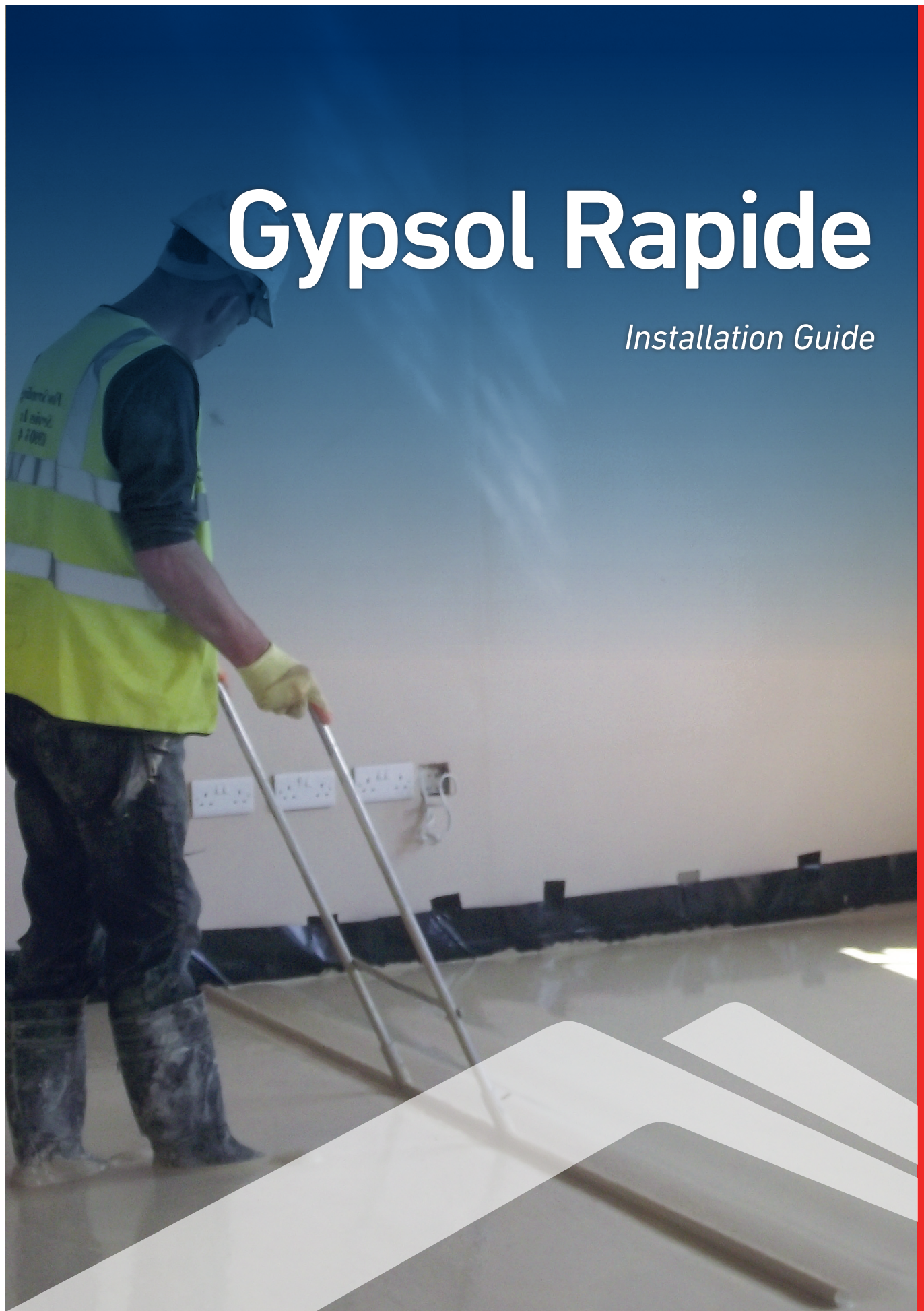


Gypsol Rapide

Installation Guide



Gypsol Rapide

Installation Guide

This installation guide offers best practice in order to achieve the best results with Gypsol Rapide screed. In the event of a highly specialised or novel application consult your local Gypsol Technical and Specification Manager.

Gypsol Rapide screed should only be installed by suitably trained and qualified installers who hold a certificate of attendance for the Gypsol Rapide training course.

Note: the training course is to introduce installers to the technical requirements and limitations of the product.

Gypsol Rapide screed is only available from plants carrying Gypsol Anhydrite screed binders and Gypsol Rapide additive. Ideally, the closest available plant to the job site should be selected for supply. Information on the closest plant to your job site can be found on our Gypsol App available for both Apple and Android.

For best results Gypsol Rapide screed should be placed and finished within 2 hours of batching. Gypsol Rapide screed additive carries an integral yellow colourant to identify it as the correct screed. The additive is added by the ready-mix producer at point of manufacture. It is not currently available as a site-added material. Gypsol Rapide is available in all Gypsol screed formats.

Pre Installation

The building envelope should be weather tight with all external windows and doors in place or openings fully secured against the ingress of water. Ingress of external water, e.g. rain, can extend the drying time of the screed.

The area to be screeded should be fully prepared with an operation Damp Proof Membrane (DPM) between the screed and the subfloor. This would normally be in the form of a 1200-gauge polythene membrane over the top of any concrete. This applies to all ground

floor substrates as well as concrete and beam and block separating floors. Where timber is used as the subfloor in separating floors a 500-gauge membrane is enough.

Appropriate compressible edge strips should be placed in the normal manner in accordance with the Gypsol Design Guide data sheet available on our website or on request from your Gypsol Technical representative.

Preformed movement joints may be placed in accordance with the relevant British Standard and maximum bay sizes and configurations should be observed in line with our Gypsol Design data sheet.

Typically, maximum bay sizes are:

1. For heated screeds 20m max length and maximum aspect ratio 6:1
2. For unheated screeds 40m max length with maximum aspect ratio 8:1
3. Consideration should be given to additional joints in areas of high thermal gain and at restraint points.

Any thermal or resilient insulation used should be dry and covered with a minimum 500-gauge slip membrane with all joints overlapped by a minimum of 100mm and taped. If an edging strip with an integrated polythene skirt is used taping at the edges is optional. Care should be taken to avoid the screed leaking into the subfloor during installation.

Installation

The highest point of the work area should be determined. This should allow for the minimum depth of screed for the application in question measured against a given datum. In all cases the screed should be kept as thin as possible within defined limits appropriate to the application. Typically, the maximum depth should be approximately 50mm, but deeper sections may be applied in the knowledge that the drying rate may be affected. The minimum depths are in most cases:

1. TS-15: 15mm depth and unbonded over a DPM

2. TS-20: 20mm depth and unbonded over a DPM
3. HTC Screed: Minimum 20mm cover to underfloor heating pipes
4. Other screeds:
 - a. 25mm bonded over a suitable DPM (usually liquid applied membrane)
 - b. 30mm unbonded over a DPM
 - c. 35mm floating for Domestic applications
 - d. 40mm floating for Commercial application
 - e. 25mm cover to underfloor heating pipes

As Gypsol Rapide can set more quickly than non Rapide screeds it is important to carry out a site survey to ascertain the average depth. This allows the installer to calculate an accurate volume in order that part loads can be ordered early in the process thus avoiding excessively long delivery times.

Once the installer is happy the work area is prepared correctly delivery of the screed can begin.

When the screed mixer arrives on site the screed should be thoroughly mixed and tested to ascertain its flow characteristics. The flow for installation should be between 230mm and 250mm tested on a dry flow board using a standard flow ring. The flow should not exceed 250mm. Additional water should be avoided and, in any case, should only be added to the screed under strict guidance from the manufacturer or Gypsol Technical representative. Volumetric mixers can supply Gypsol Rapide but present some technical challenges in terms of flow testing which often has to be done during the first part of the pour rather than before commencement. This should be taken into account at the ordering stage and technical guidance is offered on request.

Note: the flow for Gypsol Rapide screeds is different to and lower than that allowed for non Rapide screeds.

At the same time as flow testing the colour of the screed should be checked to ensure the yellow colourant is present in order to identify it as the correct screed. The effectiveness of the colorant is affected by the colour of the aggregate used in production of the screed but should always be visible.

Once the screed has been tested and determined to be correct, pumping into place can begin in the normal manner. Any priming water should be collected at the discharge end of the pump hose and this should be discarded.

Gypsol Rapide screed will probably appear stickier than non Rapide formats. It is likely to "gellify" and set more quickly than non Rapide screed. This means that in larger areas dappling should begin as soon as possible after placement. Best practice when laying Gypsol Rapide in multiple small rooms dictates that as soon as a room is poured to the desired level the screed in that room should be dappled. When pouring large areas dappling and pouring are likely to be carried out in close proximity to each other. Enough screed installation staff are required to achieve this. For best results the screed is best placed and finished within 2 hours of batching.

Post installation

Once the screed is poured and finished throughout the work area, the area should be sealed to prevent access to foot traffic for a period of 24 to 48 hours. After 48 hours the screed should be well ventilated by opening windows and doors as much as possible. Note that trickle vents in window frames are unlikely to provide enough ventilation.

The anticipated drying time for 50mm of Gypsol Rapide screed correctly placed and in good drying conditions is 14 days from installation. Optimum drying conditions include warm dry air at or above 20°C and low relative humidity at or below 60%. As with all screeds and concretes the drying rate is affected by site conditions and depth. Increased relative humidity impedes drying so it is important moisture evaporating from the screed is removed from the air above it. Good ventilation and/or extraction is therefore important. There is no requirement to force dry Gypsol Rapide screeds using underfloor heating although as with all screeds it is important this is commissioned prior to applying bonded floor coverings. No sanding of the screed is required during this period.

(continued from page 3)

Note: Floor fans, extractors and dehumidifiers may be used after 72 hours if site conditions dictate.

Care should be taken to protect the screed from ingress of external moisture due to site traffic, weather and follow-on trades until final floor coverings are complete.

As Gypsol Rapide is a fast-drying option consideration should be given to placing the screed later in the build programme in order to avoid contamination by site traffic and follow-on trades as much as possible.

Moisture testing may be carried out by the floor finishing contractor using a flooring hygrometer or Carbide Bomb tester in accordance with the relevant British Standard and industry trade guides prior to preparation for and application of final floor coverings. Wherever possible final floor coverings such as tiles should be adhered using Gypsum-based tile adhesives and any smoothing compounds should also be formulated using Gypsum. Other adhesives will generally be identical to those used on concretes and cement-based screeds. Loose laid floor coverings such as floating laminates and uncoupling systems can be used on Gypsol Rapide screeds as per manufacturers' instructions.



Disclaimer : Without Prejudice. No liability either directly or indirectly from any source can be accepted by LKAB Minerals Ltd or its subsidiary companies or representatives for costs outside of its direct control. Failure to adhere to the above guidelines will impede the performance of Gypsol Rapide screed. Technical advice is offered in good faith and is correct at time of going to press. Periodic updates to these guidelines may be issued at any time without notice and at the discretion of LKAB Minerals Ltd. Our terms and conditions remain in force at all times.

Gypsol Rapide Installation Guide 02-01 EN, 19-06