



Why Gyvlon?

| | GYVLON SCREED | Sand Cement SCREED |
|---|---|--|
| Productivity | Up to 1500 m ² per day | Up to 150 m ² per day |
| How quickly can you walk on the floor? | Within 1 to 2 days Self curing | 7 days Requires covering to cure |
| Joints | Maximum 1000m ² bay size* Maximum 40m bay length* Maximum 8-1 aspect ratio* | Maximum 36m ² bay size Maximum 6m bay length Maximum 2-1 aspect ratio |
| Performance | Greater compressive strength Greater flexural strength Nominal shrinkage Will not curl | Compressive and flexural strength Dependent on compaction Shrinks Curls |
| Surface Finish | Achieves SR2 under BS 8204 | Dependant on contractor |
| Floating Construction | No reinforcement required 40mm minimum - Commercial applications. 35mm minimum - Domestic applications. | D49 or fibre reinforcement required 75mm minimum – Commercial applications 65mm minimum – Residential applications |
| Typical Drying Times | 40 days at 40mm Can be force dried after 7 days | 65 days at 65mm Cannot be force dried Should be cured for one week |
| Unbonded Floor Construction | 1200 gauge polythene laid directly to substrate No reinforcement 30mm minimum thickness | 1200 gauge polythene laid directly to substrate D49 or fibre reinforcement required 50mm minimum thickness |
| Installation | Produced to BS EN 13454 Designed to BS8204:7 Self compacting | Often mixed on site by hand Inconsistent quality Requires extensive compaction |
| Environmental Credentials | 1 tonne of binder = 980kg Recycled material Screed average 36% recycled | 1 tonne of cement = 1500kg Raw material Screed average 0% recycled |
| Health & Safety | Ergonomically friendly No cement burns | Very labour intensive High cement contents |
| Underfloor Heating | 2.2W/mK** thermal conductivity Reduced cover to heating pipes | 1.1W/mK** thermal conductivity |
| Savings | Gyvlon offers Environmental, Time and Cost Benefits | |

* Bay sizes stated are for non-heated screeds, please refer to 'Bay size/Joints Document'

** W/mK Quantity of heat transferred through a set thickness over a set period of time



Gyvlon Benefits

Gyvlon's range of screeds are manufactured from our recycled calcium sulphate binder (a by-product of the production of Hydrofluoric acid), selected aggregates and additives to produce a free flowing self compacting screed manufactured to BSEN 13813:2002.

Gyvlon screeds are designed to provide a level surface in both commercial and domestic buildings prior to the application of floor finishes. It can be used as a bonded, unbonded or floating construction, it is particularly suited to use with underfloor heating.

Gyvlon is available in various mix designs and used as part of many building systems to offer specific solutions, for further advice on our screeds and building systems please speak to the Specification Team.

Liquid Screed

Gyvlon, due to its fluid nature is up to ten times quicker to install than sand cement screeds. Gyvlon greatly reduces the amount of manual labour required allowing up to 1500m² to be installed in one day.

Following installation, Gyvlon cures quickly giving sufficient strength to allow foot traffic after 24-48 hours, the floor can then be loaded after 7 days. Gyvlon forms a self curing membrane removing the need for polythene sheeting, eliminating curling and reducing shrinkage.

Gyvlon is liquid in application and self compacting this results in a SR2 surface finish (BS8204) which can greatly eliminate the need for smoothing compounds prior to the application of some floor finishes.

The self compacting nature coupled with the gypsum crystallisation process provides excellent compressive and flexural strength even at reduced screed thickness.

Thickness (Minimum)

| | | |
|-----------------------------|---|---|
| Bonded | – | 25mm |
| Unbonded | – | 30mm |
| Floating Residential | – | 35mm |
| Floating Commercial | – | 40mm |
| Underfloor heating | – | Minimum 25mm Nominal 30mm Cover to pipe work |

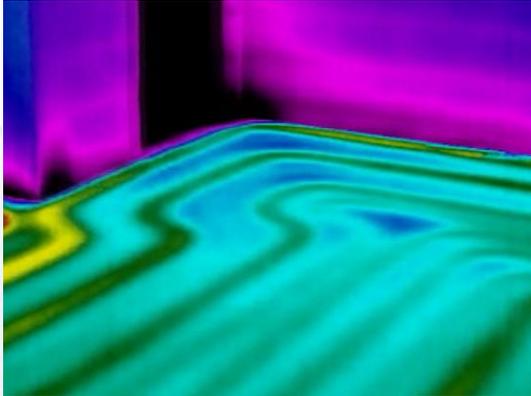
NB. Where floor zones are in excess of these thicknesses, we recommend additional insulation is used and the screed reduced to the depths above



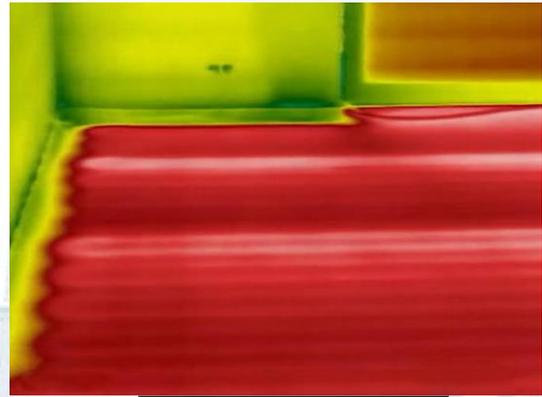
Gyvlon Benefits

Underfloor Heating

Gyvlon is ideally suited to underfloor heating as it achieves full encapsulation of the heating conduit eliminating entrapped air and honeycombing, this provides a superior heat transfer between pipe and screed. This combined with Gyvlon's higher thermal conductivity (2.2W/mk) and minimal pipe covering results in a greatly improved reaction time and reduced flow temperatures.



75mm Sand Cement



50mm Gyvlon Screed

Drying Times / Force Drying

Following installation, Gyvlon dries at a rate of 1mm per day up to 40mm and 0.5mm per day thereafter, as Gyvlon can be installed thinner than sand cement this can allow for reduced drying times.

The drying rate per day can be increased by good site management and use of force drying, refer to 'Floor covering preparation and Drying'

Joints and Bay Sizes

Gyvlon has a smaller shrinkage profile than is associated with sand cement screeds, allowing for a reduction in expansion joints, this creates fewer weak points in the screed finish. Reducing the number of expansion joints having to be reflected in the floor finish will provide a more aesthetically pleasing appearance. Refer to 'Joints and Bay sizes' for more information.

Protein Free

Unlike sand cement screeds Gyvlon is 100% protein free, making it ideal for application in medical or other areas of hygienic importance as it cannot harbour bacteria.

Availability and Delivery

Gyvlon screeds are produced and manufactured to BSEN13813:2002 at readymix plants and delivered in truck mixers or by Transmix/Brematt mobile mixing vehicle.

Gyvlon is also available for smaller areas as a pre-blended bagged material.