

## **PRODUCT SPECIFICATION**

The main constituent of Easy Screed, self-levelling floor screed, is a binder agent, which is made from turf/peat.

This product was created during an initiative in the early 1980's to clean up the environment, by the German electric industry, which generated 50% of Germany's electricity from turf/peat, called brown coal by the Germans.

By taking the ash from the power stations and processing it, they created a binder product called alpha hemihydrate calcium sulphate.

This product has been on the market for over 20 years in Germany and has only been marketed outside Germany within the last 5 years including the UK and Ireland where it has revolutionised the floor screeding section of the construction industry.

The fact that a team can lay up to 600m<sup>2</sup> a day of this self levelling product is a new phenomenon for the construction sector.

Easy Screed is a flowing floor screed. It is ready to use and presents advantages over traditional screeds. It is far less labour intensive and up to ten times the area may be laid with one gang of men as compared with alternative semi-dry screeds. In contrast to many traditional screeds, shrinkage and curling is most unlikely to occur. Any that does will be minimal. It may be laid at a lesser thickness than conventional semi-dry screeds. It has a smooth finish

### **STANDARD**

Easy Screed complies with the requirements of European Standard prEN CCCC-2, Screed material and floor screeds, Part 2: screed material properties and requirements (draft).

All constituent materials comply with their relevant British and/or European Standards.

### **COMPOSITION**

Easy Screed is composed of binder and selected aggregates.



## **PERFORMANCE CHARACTERISTICS**

### **STRENGTH**

The Code of Practice for flooring, BS 8203, defined the durability and strength of a screed in terms of its resistance to a heavy impact weight, the BRE impact test.

Easy Screed provides excellent resistance to impact and readily surpasses the requirements of the most exhaustive BRE test, that for category A floors.

The resistance to impact of installed Easy Screed also easily exceeds that of alternative traditional systems, due to its void free, fully compacted structure, optimum aggregate binder ration and full hydration. Its flowing characteristics mean that voids and poor compaction are problems of the past and the material needs no further compaction as it is flows, void free, from the placing point.

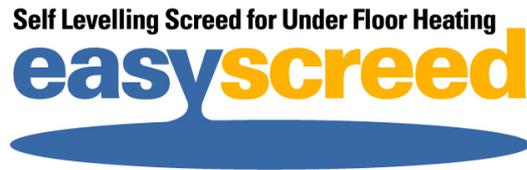
The material is used to comply with the requirements of the Code of Practice for flooring BS 8204: Part 1 and with categories A, B and C of BS 8203: 1986

### **TECHNICAL PROPERTIES**

Flow (DIN 1060 test)	240 – 260 mm
Plastic density	2060 – 2130 kg/cubic metre
BRE impact test	Less than 2 mm
Flexural strength	4 – 6 N/square mm
Dry shrinkage	Less than 0.02%
Time to light foot trafficking	1 day / 24 hours
*Dry time	1 day / mm
Fire rating	Non combustible
Thermal expansion coefficient	0.01 mm/mK
pH	11 - 12
Setting time	Not less than 6 hours

Note that the above values are typical

\*For normal thickness and at ambient temperature 20°C, 60% relative humidity



## **WORKING PROPERTIES**

Easy Screed is very easy to place and finish using traditional flowing screed techniques. It contains specially formulated admixtures to aid flowing and finishing properties. It needs no compaction.

It is preferable during construction to ensure a steady supply throughout the placement, with no break in continuity in excess of about one hour.

## **HARDENING AND DRYING**

Easy Screed may be lightly trafficked after 1 day, depending on drying conditions.

## **CURING**

Care should be taken to avoid excessive water loss in the first 24 hours.

If windows or external doors are not installed, temporary provision must be made with polythene or similar. Direct sun must also be avoided during early life.

## **STRENGTH DEVELOPMENT**

Approximately 50% of 28 day value is achieved after only 48 hours.

## **ABRASION AND IMPACT**

The material has good resistance to abrasion and impact, when compared with traditional cement sand screeds. However, screeds should not be treated as wearing surfaces and care should be taken to protect against excessive impact.

## **INDENTATION RESISTANCE**

Easy Screed readily complies with Building Research Establishment Screed Test and indentation requirements of BS 8203.

## **SHRINKAGE**

Easy Screed has virtually no drying shrinkage. Movement joints are rarely necessary, however large the floor, so long as extremes of aspect ratio of greater than about 6 to 1 are not present.

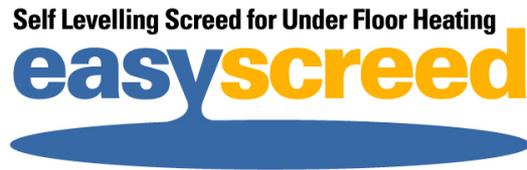
This lack of shrinkage means that differential shrinkage leading to lifting and curling is absent.

## **FIRE PROTECTION**

Easy Screed is non-combustible as defined by BS 476: Parts 4 and 8.

## **EFFECTS OF FROST**

It is recommended that suitable precautions be taken against frost during cold weather conditions before the final strength is achieved.



## **DURABILITY**

Easy Screed in common with other screeds, it is not a wearing course and requires covering with a suitable surface finish.

It should not be used in areas where it will be continuously wet, or regularly wetted. This means that it is not recommended for use in communal baths or showers, changing/washing areas of sports centres, abattoirs, external yards or similar.

## **APPLICATIONS**

### **USES**

Easy Screed is suitable for most situations where a conventional unbonded, floating or headed Portland cement screed could be used.

Although bonded systems have been used it is recommended that the system be treated as debonded and ducts, services etc. are sealed against fluid loss in the flowing system.

Because of its high flexural strength and lack of voids, floating screeds may generally be laid down to a thickness of 35mm, less than the normal value in industrial use for conventional cement sand screeds of 75 mm.

As the system is laid on a debonding membrane of plastic or paper, no cleaning or surface preparation as e.g. scabbling, bush hammering need to be carried out on the substrate.

The thickness of application should be as shown in Table 2 below:

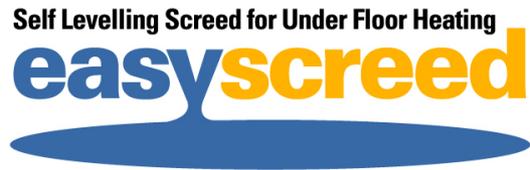
**TABLE 2**

Application Thickness for Easy Screed

<b>Type of Construction</b>	<b>Minimum Application Thickness (mm)</b>
Unbonded	30
Floating	35

Only personnel trained in the application of flowing screed shall be used.

The material should be pump placed onto a prepared membrane, with 10 mm compressible plastic strips on all perimeter edges. The membrane may be plastic with taped joints. Care must be taken to seal all ducts, voids or similar



## **LEVELS**

Laser or similar levels shall be pre-marked or pre-placed and the material filled to the datum and then progressively place to level across the room. No curing membrane is needed.

Any unglazed or missing windows or doors should be temporarily blocked using polythene or similar to avoid excessive drying for first 24 hours. After 48 hours dehumidifiers may be used to "force dry" the material.

Under floor heating may be used 7 days after placing the screed, slowly and intermittently to start with.

The material should be floating using approved flowing screed techniques.

## **YIELD**

Table 3 below shows yield per cubic metre for typical application thickness.

**TABLE 3**

Thickness (mm)	Area/cubic metres (metres squared)
30	33
35	29
40	25
45	22

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