

ULTRA SCREED – TDS

Product Name:

Ultra Screed

Product description:

Ultra Screed: It is made up of high quality additives and superior polymer. To produce a rapid useable and fast ready to receive floor covering screed such as:

- Un-bonded / bonded / floating
- Separation layer
- Insulation layer
- Heated screed

Advantages:

- To produce rapid usable sand cement screeds, on insulating layer, separating membrane and as a bonded screed.
- For bonded screed, tiles like ceramic can be laid after 24 hours.
- After 7 days dry, it is ready to receive tiles, natural stone and concrete slabs as well as elastic and textile floor coverings and parquet for un-bonded or floated screed.
- Foot traffic after 8 hours.
- For interior and exterior use.
- Working time 60 minutes.
- Constant consistency even with longer mixing times and long conveying routes.
- Easier spreading and working of the screed. Longer smoothing and floating time.
- Fulfil the requirements according to BS EN 13813 and DIN 18560.
- No water curing is required but protection with PE-foil sheet recommended.

Surface Preparations:

The concrete surface must be hard, sound and free of dust and the barrier materials such as paint, lime coatings, plaster, curing agents, laitance, adhesive residues, etc., that will inhibit adhesion to the substrate. The substrate strength of the concrete must be sufficient to support the screed. Use a suitable degreaser to remove polish, wax, grease, oil and similar contaminating substances prior to mechanical preparation. Concrete surface must be mechanically prepared, either by scabbling, grinding or contained shot blasting equipment or similar, and be vacuumed clean prior to slurry application.

Priming:

For bonded screeds use Ultra Prime 11 primer/bonding agent to be mixed with 1:1 ratio, then has to be applied to the substrate.

Mixing:

Mix the following ingredients using a suitable mixer.

Add 25kg of Ultra Screed + 125kg of screed silica sand 0 - 8 mm + 6 - 11.25 litres of water (depending on the moisture of the sand).

Note: For alternative sand: cement mix ratio, please contact ULTRA GREEN - Central Technical Services Department. Experience has shown that sand complying with the following grading table provides a workable screeding mortar with good compactability

Sieve size	Proportion by dry (BS 410) mass passing nominal mesh size.
10.00 mm	100%
5.00 mm	90% - 100%
2.36 mm	65% - 97%
1.18 mm	40% - 90%
600 µm	24% - 75%
300 µm	8% - 40%
150 µm	0% - 10%
75 µm	0% - 3%

Important Note:

It is important not to overfill the mixer above the recommended volume. As rule of thumb that the mixing drum should only be filled up to ¾ of the volume. Should the drum be filled over this ratio the mixing ratio is not suitable. Do not add any additives as compound oils etc and do not mix with other cement.

Applications:

Pour the mixed screed mortar onto the prepared wet slurry. Spread the screed mortar using a steel flat trowel. The working time of the Ultra screed is approx. 1 hour including mixing, application, levelling and smoothing must succeed each other at a brisk pace. The areas should only be of such a size that they can be completed within this working time. Higher temperatures shorten and lower ones lengthen working and hardening time. Day and expansion joints must be provided and implemented as in conventional screeds. Must not be worked at temperatures below +5°C

Application on a Floor Heating System:

When using ULTRA SCREED on a hot water floor heating system the waiting time until further floor coverings can be installed can be reduced. Five days after application warm-up heating begins at a flow temperature of + 25°C which must be maintained for 3 days. Then the



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maximum flow temperature is set and maintained for a further 4 days. In so doing draughts must be avoided. Surface temperatures of the heated screeds should not sink below +15°C when laying floor coverings.

Floor coverings:

Ultra Screed can be walked on after 8 hours, For bonded screed, tiles like ceramic can be laid after 24 hours, for un-bonded or floated screed after 7 days dry ready to receive tiles, natural stone and concrete slabs as well as elastic and textile floor coverings and parquet. These properties can be achieved if the mixing ratio sand/ Ultra Screed and the water Ultra Screed value of 0.45 are followed. During installation the temperature should be > +10°C and the relative humidity is < 70%. To check whether the surface is ready to receive floor coverings which is normally the case after 7 days one has to carry out moisture tests.

Screed Thickness:

For un-bonded screeds minimum thickness of screed should be 55 mm and for bonded screeds it should be 15 mm.

Panel size:

Un-bonded screed should not be more than 60m². Maximum thickness for un-bonded screed is 75 mm and no limitation for bonded screed.

Technical data:

WHEN ULTRA SCREED USED WITH SAND (1:5)

Ultra Screed	:	@27±1°C
Fresh Mortar	:	2.300 kg/L
Working Time	:	45min @ 26°C
Powder	:	25 kg
Sand	:	125 kg
Water	:	11.6 kg
Screed - compression testing		
1 day	:	14.48 N/mm ²
7 days	:	40.24 N/mm ²
28 days	:	42.50 N/mm ²
Screed - flexural testing		
28 days	:	3.42 N/mm ²
BRE screed test		
14 days	:	0.27mm
Pull-of adhesion testing		
14 days	:	1.46 Mpa

Coverage:

When 25 kg of Ultra Screed mixed with 125 kg of sand recommended by ULTRA GREEN with 11.6 litres of water will cover 4m² at 20mm thick.

WHEN ULTRA SCREED USED WITH SAND (1:6)

Ultra screed	:	@27±1°C
Fresh Mortar	:	2.270 kg/L
Working Time	:	45min@ 26°C
Powder	:	25 kg
Sand	:	150 kg
Water	:	13.25 kg
Screed - compression testing		
1 day	:	12.20 N/mm ²
7 days	:	31.20 N/mm ²
28 days	:	44.30 N/mm ²
Screed - flexural testing		
28 days	:	2.90 N/mm ²
BRE screed test		
14 days	:	0.21 mm
Pull-of adhesion testing		
14 days	:	1.23 Mpa

Coverage:

When 25 kg of Ultra Screed mixed with 150 kg of sand recommended by ULTRA GREEN with 13.25 litres of water will cover 4.5m² at 20mm thick

WHEN ULTRA SCREED USED WITH SAND (1:8)

Ultra Screed	:	@27±1°C
Fresh Mortar	:	2.298kg/L
Working Time	:	60min@ 26°C
Powder	:	25 kg
Sand	:	200 kg
Water	:	16.75 kg
Screed - compression testing		
1 day	:	8.18 N/mm ²
7 days	:	21.20 N/mm ²
28 days	:	26.92 N/mm ²
Screed - flexural testing		
28 days	:	2.90 N/mm ²
Screed test		
14 days	:	0.51 mm
Pull-of adhesion testing		
14 days	:	1.40 Mpa

Coverage:

When 25 kg of Ultra Screed mixed with 200 kg of sand recommended by ULTRA GREEN with 16.75 litres of water will cover 5.5m² at 20mm thick.

VOC Content: 3.53 g/L

Note: The above mentioned technical data are based on typical / specific sand sources **Pack Size:** 25kg

Storage and shelf life:

Ultra Screed must be stored in unopened packaging, clear of the ground in cool dry



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conditions and be protected from excessive draught. If stored correctly, as detailed above, the shelf life of this product is 12 months from the date shown on the packaging.

Disposal/Spillage:

Spillage of any of the component products should be absorbed onto sand or other inert materials and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations. For further information please refer to the Material Safety Data Sheet.

Note: The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products. However, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

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