

TECHNICAL DATASHEET

ASCOSCREED™

Specially Formulated High Strength, Shrinkage Controlled Cement Binder For All Types Of Floor Screed



NON-SHRINK



SHOCK AND IMPACT RESISTANCE



WATER LOCKING



PRODUCT DESCRIPTION

ASCOSCREED is a concentrated cement binder renowned for its non-shrink, rapid setting, effortless spreading and exceptional strength properties. When combined with sand and water in the correct proportions, **ASCOSCREED** forms a mortar bed and floor underlayment leveling screed that is free from shrinkage and can be effortlessly poured or pumped. This binder serves as the foundation for high-performance screed, preparing the surface for the installation of various types of tiles or stone flooring.

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KEY FEATURES

- Easy application
- Compatible with all tile-setting mortars, adhesive and floor coverings
- Improved compressive strength
- Applicable for wet areas
- Shock and impact resistant
- Self-curing
- Non-shrink
- Water locking

TECHNICAL INFORMATION

APPLICATION PROPERTIES

PROPERTY: TEST METHOD	TYPICAL VALUES
Appearance	Grey Powder
Bulk density	1150 ± 100 kg/m ³
Water demand @ 27 ± 2°C ambient & water temperature	13 ± 1% (by weight)
Mixing time @ 27 ± 2°C	5 - 10 minutes
Pot life @ 27 ± 2°C	≥ 4 hours
Workability @ 27 ± 2°C	50 ± 10 minutes
Initial setting time @ 27 ± 2°C	4 – 5 hours
Final setting time @ 27 ± 2°C	5 – 6 hours
Light foot traffic @ 27 ± 2°C	24 hours
Waiting time for installation @ 27 ± 2°C	24 hours for tile installation
Application temperature	+5°C to +40°C
Service temperature	-30°C to +90°C
Moisture residual @ 4 days	< 4%
Compressive strength When mixed with sand: (Powder : Sand)	Heavy duty screed (1 : 4) ≥ 28 N/mm ² Medium duty screed (1 : 6) ≥ 20 N/mm ² Light duty screed (1 : 8) ≥ 15 N/mm ²

Pull off strength	1 day: 0.71 N/mm ² 7 days: 1.23 N/mm ²
Flexural strength When mixed with sand: (Powder : Sand)	Heavy duty screed (1 : 4) ≥ 4 N/mm ² Medium duty screed (1 : 6) ≥ 2.5 N/mm ² Light duty screed (1 : 8) ≥ 2 N/mm ²
Bond strength	≥ 1.50 N/mm ²
Taber Abrasion @ 28 days @ 1000 cycles	2.5 mm
Final bed thickness	10 - 80 mm

APPLICATION COMPATIBILITY

AREAS OF APPLICATION

Swimming pool, bathroom floors, residential floors, commercial/warehouse flooring as a protection layer, industrial flooring, tennis court and gymnasium flooring.

SUITABLE SUBSTRATE

Old & new concrete, cement mortar bed, cement terrazzo, existing tiles, wooden floor and ceramic tiles.

APPLICATION METHOD

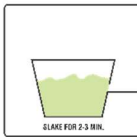
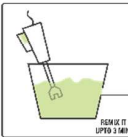
SUBSTRATE PREPARATION

- All surfaces must be between 5°C and 40°C and clean, dry and free from any contaminants such as dust, oil, wax, grease, curing agents or other substances that may affect adhesion performance.
- If it is a large area the surface should be treated by mechanical grinding or shot blasting. Building debris such as off-cuts, sawdust, nails, screws, plaster, wood, etc. must be thoroughly cleaned with the help of a steel wire brush, vacuum cleaner and/or damp sponge.
- Installation may be made on a damp surface (SSD).
- The final texture of the application area should be gripping and open-textured.

PRIMING

- For **regular substrate**, normal concrete/screed & particularly porous concrete/screed require priming with **ASCOBOND** or **ASCOBOND AR** : OPC/ PPC : water in a mixing ratio of 1:1:0.5 followed by a coat of undiluted **ASCOBOND** or **ASCOBOND AR**.
- For **non-absorbing glossy substrate**: Apply a single coat of **ASCOPRIME GT** by using a brush or roller. Allow it to dry completely. Apply the primer evenly and allow sufficient coverage on the substrate to give a light green film once dry. The dried primer film should not be opaque or transparent. Before applying screed, leave it to dry, suitable for walking. **ASCOPRIME GT** can also be used for regular substrate.

MIXING

- Pour a 25 kg bag of **ASCOSCREED** with the desired quantity of sand according to the application of the screed or the mix required.
- The quality of sand should be graded, silt-free and dried. The screed is a blend of **ASCOSCREED**, sand/crushed sand and water.
- Add $13 \pm 1\%$ of water by weight of total dry mix to achieve the desired semi-dry consistency. 
- Larger quantities of **ASCOSCREED**, can be prepared in suitable mixers.
- The use of a mixing paddle with a 10 mm chuck, ensures thorough mixing with maximum sheer yet minimum air entrapment and heat built-up. 
- For improved efficiency and continuous production, it is recommended to use at least two mixing buckets. For larger jobs, the use of a mechanical mixer/pump unit is recommended.

APPLICATION

- Using a spirit level and screed bar/plain rafter/straight edge, mark the required thickness of the screed on the walls.
- Pour or pump the blended product onto the floor surface to form a bed thickness of 10 – 80 mm as marked.
- Use a trowel to spread the screed mix evenly, then use a screed bar/plain rafter/straight edge to level it, then tamp down the screed to eliminate air pockets and ensure proper compaction. Finally, check the levels with a spirit level and make any necessary adjustments.
- Protect the screed from drafts for the first 6 hours after application. Subsequently, ensure adequate ventilation in the room to facilitate the drying of the screed.
- Full coverings can be installed after 24 – 48 hours, depending on the thickness of **ASCOSCREED** applied.
- On large surfaces follow all the movement joints present in the substrate and form control joints for every 10 m² approx.
- Application procedure for floating substrate. The homogeneously mixed mixture is evenly applied in the required thickness to the pre-made guide strips, and after sufficient compaction, the surface is smoothed with a hand trowel or even mechanically. Conventional concrete reinforcement or steel mesh reinforcement can be used with **ASCOSCREED**.

POST APPLICATION PROCEDURE

- Clean the mixer, working tools and hands with water while the product is still fresh.

CURING

- Extreme hot weather conditions or external applications need curing for a minimum of 3 days with at least 3

times per day water sprinkling depending on site condition.

- Internal application under a fully covered area does not require water curing specially for very humid weather.
- To avoid water curing for external or extreme weather, a suitable curing compound range, such as **ASCOCURE AR 100** can be applied immediately after the trowel finish.

CAUTION

- Substrate temperatures should be above 5°C and rising.
- **ASCOSCREED** is affected by extremes of temperature and consideration should be given to hot weather conditions as the **ASCOSCREED** will set fast and have shorter open time, in cold conditions the mortar will set slower and require extended time before traffic. Do not use below 5°C and above 40°C.
- Avoid application if the work area may be subject to the onset of rain or moving water.
- Movement and expansion joints should be provided as in conventional screeds.
- Additional coating protection should be applied if the product is exposed to chemicals.
- Materials not used within the specified time should be discarded.

PACKAGING

- 25 kg



COVERAGE

- Yield = approx. 25 to 28 litres for 50 kg for all mix.

Ratio (ASCOSCREED : Sand)	Bed thickness	ASCOSCREED	Sand (≤ 5 mm)	Coverage
1 : 4	40 mm	25 kg	100 kg	22 - 23 ft ²
1 : 6	40 mm	25 kg	150 kg	31 - 32 ft ²
1 : 8	40 mm	25 kg	200 kg	37 - 38 ft ²

SHELF LIFE

- **ASCOSCREED**, when unopened, can be stored above the floor in a cool dry place for a duration of up to 9 months.



HEALTH & SAFETY GUIDELINES

- Take preventive measures to keep children away from this product.
- This product includes cement, which becomes alkaline when moistened and could potentially irritate the skin.
- Utilize goggles, gloves, and protective cream to safeguard against contact.
- Minimize prolonged skin exposure and refrain from inhaling the dust. If contact occurs, rinse the affected area with warm water and soap.
- In case, of eye contact, thoroughly wash the eyes and seek medical advice.
- For additional details, please consult the Material Safety Data Sheet.



TOOLS & ACCESSORIES

SCREEDING TOOLS



BUCKET



PLAIN TROWEL



FINISHING TROWEL



WIRE BRUSH



MIXER



BRUSH



RAFFTER



NOTCHED TROWEL



SPIRIT LEVEL

DISCLAIMER:

This technical data sheet supersedes all previous versions from the immediate effect. The company guarantees its products against any manufacturing defects. The user should determine the product's usability for its intended use. Since the company has no control over site conditions and the installation procedures, the company would not be responsible under any circumstances for any loss, damage or liability from incorrect usage. For the products on which the company is offering a warranty, please refer to the warranty document to know the entire terms and conditions. The same can be availed on request or from the company website. All orders are accepted subject to our prevailing terms of sales and delivery. While the technical details & recommendations contained in this document and the related details given by the representatives of the company correspond to the best of our knowledge & experience, all the above information must in any case be considered as merely indicative and subject to confirmation. Our company maintains an active research and development policy, allowing us to continuously enhance our products. As a result, we reserve the right to revise this information at any time without prior notice. For optimal results, we recommend this product be installed by a qualified professional. By using this product, users acknowledge and agree to the terms and conditions outlined in this disclaimer.