

TPA Rapid Screed

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PRODUCT DESCRIPTION

TPA Rapid Screed is a pre-blended, rapid set, engineered screed mixture for the installation of cementitious screeds and tile beds. The rapid cure allows floor coverings such as tiles, vinyl, and carpet, to be installed faster than traditional sand/cement screeds.

TPA Rapid Screed is suitable for internal and external floor applications, including internal wet areas, balconies, terraces, and decks in both bonded and un-bonded screed applications.

ADVANTAGES

- Premixed, single component system, just add clean water on site.
- Quick setting allowing installation of ceramic tiles after 4 hours.
- Quick and easy to apply – provides a simple solution to the installer.
- Available in 20kg bags allowing ease of transport to site.
- Suitable for thick and thin bed application- eliminating the need of multiple products.

RECOMMENDATIONS

- Suitable for use under ceramic tiles, natural stone and terrazzo after 4 hours cure.
- Suitable for use under WPA water based waterproofing membrane systems after 24 hours cure, prior to fixing of relevant and compatible floor coverings.
- Suitable for use under resilient and textile floor coverings after 24 hours cure.
- Suitable for use under timber and parquet floors after 48 hours cure.
- Suitable for use as a screed under most under floor heating systems.
- Contact TPA Technical Services for more detailed information.

Special notes for use over the following:

On wooden, rubber, or metal substrates, **TPA Rapid Screed** should be applied as an unbonded screed, with a minimum bed thickness of 40mm and it must be reinforced with an appropriate wire mesh.

Contact Bayset Technical Services for information on using **TPA Rapid Screed** over other surfaces not mentioned in this technical data sheet.

DIRECTIONS FOR USE

Read and understand the Safety Data Sheet before using this product.

SURFACE PREPARATION

All substrates must be structurally sound, clean, dry, free of dust, dirt, wax, curing compound, paint, adhesive, latex, gypsum, grease, oil, loose particles and any other contamination that may act as bond breaker. Concrete must be free from laitance, efflorescence and not be subject to hydrostatic pressure.

Moisture levels in the background substrate are important within the framework of the total flooring system being installed. In the information below, detailed data is supplied in relation to moisture levels in the **TPA Rapid Screed**, prior to installation of the different floor coverings over it.

Concrete substrates must be sufficiently cured for a minimum of 28 days, or such that when tested in accordance with test method A3.1.2 "Relative humidity in situ probe test" per ASTM F2170 in AS1884:2021 shall exhibit a relative humidity not exceeding 75%.

Cementitious substrates, such as concrete, must not be subject to shrinkage after the installation of **TPA Rapid Screed**.

Ensure fiber cement sheeting including lightweight structural flooring has been correctly installed according to relevant standards and manufacturer's recommendations.

MIXING

Machine Mixing:

Place the **TPA Rapid Screed** into the mixer, then add 1.6 liters of clean water per 20kg bag of **TPA Rapid Screed**. Mix thoroughly for 3-5 minutes.

Drill Mixing:

Place 1.6 liters of clean water into a clean container and slowly add 20kg of **TPA Rapid Screed** while slowly mixing with a low-speed mixer. Mix thoroughly to a smooth, homogeneous consistency.

Hand Mixing:

Place the **TPA Rapid Screed** onto a clean solid surface or into a wheelbarrow, then add 1.6 liters of clean water per 20kg bag of **TPA Rapid Screed**. Mix with a shovel until a uniform consistency is achieved.

Applying the Screed:

Place the mixed product onto the area to be screeded and screed to the desired thickness and plane using an appropriate straight-edge. Apply the desired surface finish using a wooden or polyurethane float.

Bonded Screeds:

Apply TPA Rapid Tile Adhesive with a suitable 6mm notched trowel on to the substrate. Place the mixed **TPA Rapid Screed** onto the bond coat of TPA Rapid Adhesive while it is still wet. Apply the finish as described previously. (It is imperative that bonded screeds are installed wet on wet).

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Note: **TPA Rapid Screed** should be carefully applied at a minimum thickness of between 10-70mm. (Concrete substrates only).

Un-bonded Screeds:

Apply the mixed **TPA Rapid Screed** onto a polyethylene film or waterproofing membrane, etc. and finish as described previously.

Note: **TPA Rapid Screed** should be carefully applied at a minimum thickness of between 40-70mm.

Discard any material that has exceeded the pot life or working time.

TEMPERATURE CONSIDERATIONS

The interaction between cement and water is temperature sensitive. The set time is delayed at low temperatures and is accelerated at high temperatures. To avoid significant change in setting times, the recommended product, water, ambient and substrate temperature ranges are:

Product

Keep out of direct heat or cold. Try and ensure product is between 15-25°C.

Water

Try and ensure mix water is between 15-25°C.

Ambient

Do not apply at a temperature less than 5°C or above 35°C.

INSTALLING WATERPROOFING MEMBRANES, CERAMIC TILES, RESILIENT FLOORS, TIMBER, AND TEXTILE COVERINGS

Installation of floor coverings should take place after the appropriate cure time – refer to the Technical Data Sheet for the relevant adhesive system. In determining when the laid **TPA Rapid Screed** is suitable for the installation of different flooring materials, the following guidance is presented based on Australian Standards. Take note to the requirement for residual moisture levels in both the screed and background substrate.

WATERPROOFING MEMBRANES

TPA Rapid Screed is only suitable for application over and under water based and cementitious membranes. As a guide, application of **TPA Rapid Screed** over a membrane should take place when the membrane has fully dried (refer to manufacturer's instructions). For application of a waterproofing membrane over **TPA Rapid Screed**, we recommend allowing it to cure for 24 hours, ideally, when the screed has reached < 2% moisture. Ambient temperatures can change this timeframe.

CERAMIC TILES

Installation should be in accordance with AS3958.1: 2007 Ceramic Tiles Part1-Guide to the Installation of Ceramic Tiles.

MOVEMENT JOINTS

It is essential that movement joints are carried through from the background substrate, right through to the face of the tile covering. Refer to AS 3958.1 - 2007 for guidance on design and construction of movement joints.

RESILIENT FLOOR COVERINGS

Installation should be in accordance with AS 1884:2012 Floor Coverings Resilient Sheet and Tile – Installation Practices (Covers products like linoleum, vinyl).

TEXTILE FLOOR COVERINGS

Installation should be in accordance with AS 2455.1:2007 Textile Floor Coverings – Installation and Practice (Covers products like carpets).

PERFORMANCE DATA AND CHARACTERISTICS

- Appearance Grey Powder
- Water Ratio 1.6 litres per 20kg
- Bulk Density 1850 kg/m³ (1.85 kg/L)
- Application Temperature 5°C to 35°C
- Work Time approx. 20-30 minutes

Setting Time:

- Initial Set approx. 40 minutes
- Final Set approx. 60 minutes
- Walkability 4 hours

Compressive Strength:

4 hours.....	6.5 MPa
8 hours	10.3 MPa
24 hours	21.1 MPa
7 days.....	24.1 MPa
28 days	36.5 MPa

Flexural Strength:

24 hours.....	3.8 MPa
7 days	4.6 MPa
28 days	4.9 MPa

Application Thickness:

Bonded Screed	Min 10mm
.....	Max 70mm
Un-bonded Screed	Min 40mm
.....	Max 70mm

Time before installation:

Ceramic & Natural Stone	4 hours
Waterproofing Membranes	24 hours
Resilient & Textile Flooring.....	24 hours
Timber & Parquetry	48 hours

PACKAGING

TPA Screed is available in 20kg bags.

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CONSUMPTION

Approximately 2kg per M² per mm of screed thickness.
One 20kg of **TPA Rapid Screed** will cover approximately 1M² at a thickness of 10mm. Actual surface texture may affect the overall coverage.

IMPORTANT NOTES

- Always read the entire Product Technical Data sheet and Safety Data Sheet (SDS) before using.
- Contact the Bayset Technical Department for advice before work starts if substrates are unusual or non-traditional or if there is any uncertainty regarding suitability or preparation.

STORAGE AND SHELF LIFE

Stored in original, unopened packaging, in cool, dry conditions, **TPA Rapid Screed** will keep for 6-12 months. Storing in areas of high humidity or excess moisture may affect the contents and shorten shelf-life.

CLEANING

Clean all tools and equipment with water before the screed dries. When hardened the product may require mechanical or chemical removal. Chemical removal is best done using a proprietary concrete cleaner (usually acid based) – follow safety instructions for the product.

PRECAUTIONS

Complete details on each of the products mentioned are available on the product Safety Data Sheets. To ensure no harm is caused to persons using TPA products, it is recommended that all concerned read the appropriate Safety Data Sheets. Visit www.tpa-us.com.au for copies.

For emergency information contact the Poisons Information Centre, phone 131 126 or the Emergency Response Service, phone 1800 033 111.

WARRANTY CONDITIONS

Bayset Pty Ltd trading as Tiling Products Australia (Bayset) offers a limited warranty in respect of this product, subject to certain terms and conditions set out in the warranty documentation which has been made available at www.bayset.com.au. Please contact Bayset directly to obtain a copy of the warranty documentation relevant to this product.

DISCLAIMER

The technical information and application advice given in this Technical Data Sheet is based on the present state of Bayset Pty Ltd's best scientific and practical knowledge and is intended to give a fair description of the product and its capabilities. As the information contained herein is of a general nature, no assumption can be made as to a

product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness, either expressed or implied, is given other than those required by law. In practice, the substrate and environmental conditions vary widely, making it essential for the user to determine the product's suitability for a particular application and that the product is not used beyond its physical limitations. The user is responsible for checking the suitability of products for their intended use.

***NOTE**

Field service where provided does not constitute supervisory responsibility. Suggestions made by Tiling Products Australia either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Tiling Products Australia, are responsible for carrying out procedures appropriate to a specific application.

DOCUMENT CONTROL	
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This is a CONTROLLED document under TPA's Quality System.