Technical Data Sheet

Bostik Ultraset SF

Description

One part solvent free polyurethane elastomeric adhesive formulated to adhere most types of wood, parquet, solid strip, engineered, bamboo and sheet timber flooring systems to flat concrete and timber subfloors, or over existing floors.

Classifications/Standards

Meets requirements EN 14293:2006
"Adhesives for bonding parquet to subfloor"

Features

- Solvent free formulation.
- Zero VOC
- Non flammable
- No mixing, ready to use.
- One component.
- Easy to spread.
- Will not re-emulsify when in contact with moisture.
- Tested to ASTM C794 for peel adhesion to various species of Australian Hardwood.
- Remains Flexible
- Excellent bond strength.
- Recommended adhesive by major timber manufacturers.
- Excellent acoustic properties.
- Australian made.

Recommended Uses

- Adhering parquet, solid strip softwood and hardwood flooring, engineered flooring and bamboo flooring to concrete or timber subfloors.
- Adhering recommended acoustic underlays as an intermediate layer between subfloor and flooring system.

Application Instructions (Direct Stick to Concrete subfloor)

Surface Preparation

- All surfaces must be clean, dry, and free of voids, curing compounds, loose materials, oil, grease and curing compounds or similar that can affect adhesion.
- The subfloor should be flat to 3mm over 3m. That is no gap more than 3mm beneath the straight edge when placed on the slab. If exceeding this, level the area with **Bostik UL-200** (Refer to current **Bostik UL-200** Technical Data Sheet for detailed application instructions).

- All surfaces must be structurally sound before application.
- Where previous adhesives (PVA or bituminous adhesives) or contamination (waxes, coatings etc) is suspected or in evidence, thorough removal of all such contamination must be carried out. Concrete slabs should be built in accordance with Residential Footings and Slabs Code AS2870.

Ultraseal Vapour Barrier

- Designed to prevent moisture migration through the slab to levels that will not cause swelling or cupping of the Timber flooring.
- As a preventative measure, it is recommended that all ground floor slabs and all new or green slabs (less than four months old) be coated with **Ultraseal Vapour Barrier** as moisture levels within the slab can vary over time. (Refer to current **Ultraseal Vapour Barrier** Tech Data Sheet for detailed application instructions).
- Always carry out moisture tests to determine suitability.
- For ground floor slabs only one coat of Ultraseal Vapour Barrier is normally required. However a second coat will be needed if the concrete is very porous, or the coating becomes patchy, uneven or contains pinholes.
- Ensure that a wet film thickness of > 300 µm is achieved.
- Ultraseal Vapour Barrier can be applied to a new or green concrete when the moisture content of the slab is less then 5.5% (moisture meter) and the surface stable and dry to touch. The time to achieve this is normally at least 28 days.
- Concrete subfloors are considered to be dry enough for Timber Flooring when the Water Vapour Transmission Rate (WVTR) does not exceed 15g/m^2/ 24 hours (calcium chloride method)

Bostik UL-200 / Ultra NP Primer

If the concrete subfloor is uneven and requires levelling prior to the application of timber flooring, Bostik recommends the use of **Bostik UL-200/ Ultra NP Primer** to be applied after **Bostik Ultraseal Vapour Barrier**. (Refer to current Tech Data Sheet for detailed application instructions).

Mixing

No mixing is required, simply use directly from pail or sausage.

Application

Application - Full Trowel Method
Full trowel bed installations are the preferred method for direct stick over standard concrete slabs or slabs incorporating radiant heating and for all acoustic underlayment options.
Full trowel bed is also necessary where specified by the flooring product manufacturer or industry recommendations in ATFA publications.

- Apply a single application of Ultraset SF using a 3-4mm"V" notch / or similar square notch trowel (refer to trowel selector chart for optimum trowel size. Depending on selected flooring type and dimensions and condition of slab, a larger notch size trowel may be recommended).
- Evenly spread the Ultraset SF with the trowel and set flooring material with enough pressure to ensure full contact between the Ultraset SF and the timber until full cure of the Ultraset SF is achieved,(minimum 24 hours but under low humidity and temperatures it may take longer.)

- For solid strip flooring, the preferred method to maintain pressure is to weight the floor, but as per ATFA guidelines*, the floor can be temporarily nailed, or permanently nailed to the sub floor.

Coverage

Although coverage will depend on substrate conditions and"V" notch or square notch trowel size (refer to trowel selector chart for optimum trowel size) a coverage of approximately. 1.1 to 1.3 square meters per liter is required.

Full coverage and floor pressure must be maintained to achieve a minimum of 80% bond area contact of Ultraset SF between the subfloor and flooring.

Application - Bead Method (not recommended for direct stick applications)

If relying on mechanical fixing and use of beads of adhesive in applications to plywood, particleboard, joists or battens then this should be in accordance with timber floor manufacturer recommendations or industry recommendations in ATFA publications*

Important Notes:

- **Bostik Ultraset SF** should not be applied over any acrylic primer or sealer
- Do not apply Ultraset SF on a dense burnished concrete surface without prior abrading or sanding back the surface to obtain mechanical key. Refer to a Bostik Technical Representative.
- If **Bostik Ultraset SF** is to be used in conjunction with **Bostik UL-200** then ensure that none of the **Bostik UL-Primer** is left exposed. **Bostik Ultraset SF** will not adhere to the **Bostik UL-Primer**, whenever the primer is applied the **Bostik UL-200** must be applied over or the excess primer removed prior to the installation of **Bostik Ultraset SF**.
- Requires atmospheric moisture to cure properly. In low humidity conditions below 40% refer to a Bostik Technical Representative. It should not be used in totally confined or air free spaces.
- Timber flooring may need to be acclimatised to the relevant environment to prevent excessive expansion/shrinkage causing failure of the floor system. Additional expansion allowance may also need to be provided. (Refer to timber manufacturers' or ATFA installation procedures as applicable).
- **Bostik Ultraset SF** is not a waterproofing membrane and should not be used for waterproofing a subfloor.
- **Bostik Ultraset SF** should not be installed on wet, contaminated or friable surfaces
- **Bostik Ultraset SF** should not be exposed to water and alcohol based cleaners before it has completely cured.
- **Bostik Ultraset SF** must be fully cured prior to sanding. Allow a minimum of 24 hours. Variations in temperature and humidity affect curing rates. Note also that industry recommendations indicate that it can be beneficial for a floor to be left for a period of 3 to 14 days prior to sanding.
- **Bostik Ultraset SF** is suitable for installation with recommended acoustic underlays.
- Bamboo flooring can be very sensitive to the effects of moisture vapour, therefore two coats of **Ultraseal Vapour Barrier** are recommended in all applications.

Clean-Up

Cleaning solvents such as mineral spirits, Shellite, or paint thinners or Bostik Handi-Clean towels can be used to remove excess. This should be done immediately for optimum results. Care should be taken to prevent any reaction or damage to prefinished timber coatings.

*As per ATFA publication 'Timber Flooring' 2009, 'Engineered Flooring Industry Standard' 2012; 'Bamboo Flooring Industry Standard' 2012

Bostik Co-Operative Test Program

Bostik offer a service in which a program has been established to eliminate potential field problems by pretesting Bostik adhesives with samples of building materials to which the

adhesive will be applied. This service is available on large projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information.

Properties

Colour/s:	Brown	**Cure System**	Moisture Cure Polyurethane
Appearance:	Smooth Paste-holds peaks	**Cure Rate**	1.5 – 2.5mm / 24 hours
Specific Gravity:	1.31 Approx	**Hardness- Shore A**	Shore A Approx 52
Flammability:	Non Flammable (contains no solvent)	**Tensile Strength in Shear (2mm) Timber to Timber –BS EN 14293**	1.4N/mm^2
Walk on Time	8- 10 hours- light traffic	**Elongation**	600%
Tack Free Time	Approx 4 Hrs @ 23°C 50% RH	**Full Cure (1mm film)**	Approx 24 hrs. Depending on temperature & relative humidity. Curing time extended in low humidity.

Storage & Shelf Life

Store in original sealed container, under cover and in dry conditions.
Bostik Ultraset SF has a shelf life of 12 months in the original unopened containers, if stored between 5°C and 30°C.

Safety Precautions

SEE THE MATERIALS SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.
EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)
MSDS can be downloaded from www.bostik.com.au

VOC

0 g/ltr (refer to voccertificates.australia@bostik.com)

Product Details

Item Number	Item Name	Colour	Size
376752	Ultraset SF Pail	Brown	16kg
262463	Ultraset SF Sausage	Brown	600ml
311960	Ultraset SF Cartridge	Brown	300ml

Bostik Ultraset SF

The information in this Technical Data Sheet is intended for the assistance of purchasers and is of a general nature. It reflects the extent of our knowledge and experience of our products and is based on tests which we believe to be reliable. However, no guarantee of accuracy can be given due to the wide range of surfaces, environmental and field conditions and variations encountered in raw materials, manufacturing equipment and methods at the place where the work is performed. Some of these will be beyond our knowledge or control. We recommend purchasers carry out their own tests to determine the suitability of the product for their particular purposes. Bostik Australia Pty Ltd limits its liability to replacement of the products or refund of the purchase price, but this limitation does not affect consumers' rights which cannot by law be excluded.

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Quality endorsed ISO9001 (Thomastown site)
TS16949 (Automotive).

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