

# TFA X3

## **PRODUCT DESCRIPTION:**

TFA X3 Timber Flooring Adhesive is a single-part, permanently flexible Isocyanate free SMP Timber Flooring Adhesive.

# **FEATURES & BENEFITS:**

- Non Flammable.
- · Green Star Compliant
- Isocvanate free.
- 90% RH Resistant Formulation

- Vapour Barrier
- Noise Reducer
- Low VOC
- Easy to Apply

# **FOR BONDING:**

TFA X3 SMP Timber Flooring Adhesive is recommended for bonding, Solid Timber Flooring and Engineered Timber Flooring to Concrete and Timber Substrates.

TFA X3 SMP Timber Flooring Adhesive can also be applied onto concrete substrates with underfloor heating.

# **SURFACE PREPARATION:**

Subfloors must be dry, sound, smooth, clean and in accordance with the relevant Floorcoverings Australian Standards.

Subfloors must also be free of wax, grease, oil, polishes, old adhesive, curing compounds, high levels of moisture (> 90% RH) and any other surface contaminants that may affect adhesion. If mechanical preparation is required prepare the floor using recommended preparation methods such as shot blasting, scarifying, diamond grinding, to provide a roughened, clean, sound, solid and open porous surface. The minimum subfloor temperature before commencing installation should be 10°C. Do not use solvents, or acid etching to clean the subfloor.

It is recommended that highly absorbent concrete subfloors be primed with RLA PU 95 Vapour Barrier prior to the application of adhesive.

**For use as a Standard Adhesive:** All concrete subfloors must be tested for moisture content. Relative humidity readings should be determined as per ASTM F2170. Ensure the relative humidity (RH) is below 85% (tested as per ASTM F2170 insitu probe method).

If the RH of the sub-floor is above 85% we recommended the use of a Two Part Epoxy Moisture Barrier.

Please refer to application instructions below.





For use as an adhesive, vapour barrier and membrane system (3 in 1): this product can be used onto concrete substrates up to 90% RH as a vapour barrier.

If the RH of the sub-floor is above 90% RH we recommended the use of a Two Part Epoxy Moisture Barrier. Contact MJS for suitable product recommendation.

The minimum subfloor temperature before commencing surface preparation and adhesive application is 10°C.

Please refer to application instructions below.

Indentations and uneven concrete subfloors should be treated levelling compounds and be in accordance with manufacturer's recommendations.

Where temperatures are less than 10°C or greater than 30°C are encountered, contact our technical staff for advice.

## **MOISTURE PROTECTION**

Concrete slabs can be a source of excess moisture.

To prevent moisture migration, apply Two coats Two Part Epoxy Moisture Barrier ensuring the second coat is applied perpendicular to the direction of application of the first coat.

Application of TFA X3 onto Moisture Barrier, ensure the adhesive is applied onto the Moisture Barrier within 4 days after the application of Moisture Barrier has taken place and cured.

Ensure the Barrier is clean and free from dirt, dust and any other contaminant that may affect adhesion.

Please contact MJS for further information and suitable product recommendation.

#### **TIMBER SUBSTRATES:**

Timber flooring must be solid, sound, clean and free from wax, oil, free from gaps, Securely Fixed and in accordance with the Timber Flooring Manufactures Instructions and relevant Australian Standards.

Timber Flooring and Particle Board may be coated with a resin waterproof protective layer.

This layer can act as a bond breaker and can affect adhesion to applied finishes. It should be removed by sanding the subfloor before application of timber flooring.

It is recommended for the Installation of timber flooring onto timber substrates, Timber Flooring is nailed/secretly fixed in combination with application of adhesive.





## **Timber Substrate - Continue**

Please ensure adequate cross-flow ventilation and that the minimum height clearance between earth and the timber flooring is in accordance with the relevant Australian Standards. Failure to have adequate ventilation can result in moisture build up under the subfloor and can compromise the installation of underlayments and floorcoverings.

### **VAPOUR BARRIER & MEMBRANE SYSTEM**

When applying this adhesive onto concrete substrates up to 90% RH as a vapour barrier, ensure TFA X3 adhesive is applied with a 6mm x6mm V notched trowel and 100% transfer of adhesive film is achieved

If the RH of the sub-floor is above 90% we recommended the use of a Two Part Epoxy Moisture Barrier.

# **VAPOUR BARRIER PERFORMANCE**

In order for the adhesive to function properly for Vapour Barrier performance.

It is essential the trowelled adhesive is flattened out when the timber is pressed into the adhesive to ensure a homogenous adhesive film forms as a barrier between the subfloor and the timber floorcovering.

It is essential 100% (Transfer) contact between the substrate and timber flooring is required. Apply adhesive evenly with a 6 mm V notched trowel.

Water Vapour Transmission (g/m2-d).

5.15





# **Noise Reducer Acoustic Performance**

When 100% transfer of adhesive film is achieved, TFA X3 provides a noise reducer barrier over substrates. Application of adhesive with a 6mm V notched trowel.

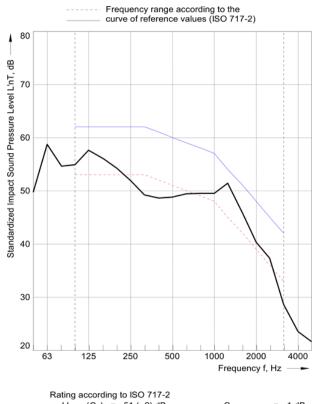
It is essential the trowelled adhesive is flattened out when the timber is pressed into the adhesive to ensure a homogenous adhesive

film forms as a barrier between the subfloor and the timber floorcovering.

It is essential 100% Transfer contact between the substrate and timber flooring is required.

Subfloor	Floorcovering	Ceiling	Result
Concrete 200mm	Engineered 14mm	13mm suspended plasterboard – no insulation in ceiling cavity	L'nT,w 51 DB

Frequency	L'nT			
f	1/3 Octave			
Hz	dB			
50	47.3			
63	55.9			
80	54.9			
100	55.8			
125	56.0			
160	55.8			
200	53.0			
250	51.3			
315	49.5			
400	48.5			
500	48.6			
630	48.5			
800	49.6			
1000	51.1			
1250	54.7			
1600	51.5			
2000	51.1			
2500	55.2			
3150	53.7			
4000	51.4			
5000	49.0			



 $L'_{nT,w}(C_i) = 51 (-2) dB$ 

 $C_{i,50-2500} = -1 dB$ 





## **APPLICATION**

# STANDARD ADHESIVE ONLY APPLICATION METHOD

Apply adhesive evenly with a 4-5mm V notched trowel - please refer to the timber manufacturer's instructions for specific trowel size at a rate of approx. 1 - 1.2 m2 per litre.

Install the timber flooring into the Wet Film of adhesive with adequate downward pressure to ensure transfer occurs between the adhesive film and the timber flooring. Ensure 100% transfer is achieved between the substrate and timber flooring, ensure full contact with the adhesive is maintained until full cure is achieved.

For best results timber flooring should be installed within 20 minutes of the adhesives application. Please note: The Timber may require mechanical fixing or weighting down as the adhesive initially cures

# **NOISE REDUCER & VAPOUR BARRIER PERFORMANCE**

Apply adhesive evenly with a 6 mm V notched trowel – achieving 0.5- 0.8 m2 per litre/ 5- 8 sq per 10lt (15kg Pail)

Install the timber flooring into the Wet Film of adhesive with adequate downward pressure to ensure transfer occurs between the adhesive film and the timber flooring.

In order for the adhesive to function properly for Vapour Barrier performance.

Ensure 100% transfer is achieved between the substrate and timber flooring, ensure full contact with the adhesive is maintained until full cure is achieved, this will enable the vapour barrier to form when fully cured. The timber may require weighting down as the adhesive initially cures. For best results timber flooring should be installed within 20 minutes of the adhesives application.

# **TIMBER FLOORING SUBSTRATES**

Apply adhesive evenly with a 4-5mm V notched trowel - please refer to the timber manufacturer's instructions for specific trowel size at a rate of approx. 1-1.2 m2 per litre.

Install the timber flooring into the Wet Film of adhesive with adequate downward pressure to ensure transfer occurs between the adhesive film and the timber flooring. A minimum of 100% (Transfer) contact between the substrate and timber flooring is required and maintain full contact with adhesive until full cure is achieved.

Do not allow heavy traffic for 24 hours. Sanding can commence 3 to 7 days after the completion of the entire installation. Please note: Sanding times may vary due to climatic conditions please check with the manufacture.





# **CURE TIME:**

Cure times can vary substantially and are dependent on weather conditions such as temperature and humidity. Typically, SMP will form a firm skin in two hours and cure in approximately 24 hours. Hotter and more humid conditions will increase the rate of cure and decrease the skin time, whereas colder climates and lower humidity will decrease cure times and increase skin times.

## **CLEAN UP:**

Clean tools and equipment immediately after use with a suitable solvent such as white spirits.

# **COVERAGE:**

4-5mm V notched trowel notched trowel will achieve approximately 1-1.5 square metres per litre. 6 mm V notched trowel will achieve approximately 0.5- 0.8 square metres per litre.

### **CONTAINER SIZES**

10 litre / 15kg containers

### **SHELF LIFE / STORAGE:**

12 months when stored in original unopened packaging To be stored in a dry area off the ground.

## **SAFETY & HANDLING**

A Safety Data Sheet is available on request.

Product is classified as NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.





#### **PRECAUTIONS:**

- Please ensure the flooring is placed into the wet film of adhesive and apply sufficient pressure to ensure transfer occurs between the adhesive film and floorcovering.
- A minimum of 100% (Transfer) contact between the substrate and the back of each individual piece of timber is required and maintain full contact with adhesive until full cure is achieved after a minimum of 24 hours (mechanical fixing or weighing down is recommended)
- VAPOUR BARRIER and NOISE REDUCER PERFORMANCE Apply adhesive evenly with a 6 mm V notched trowel, ensure the timber flooring is placed into the WET film of adhesive.
- Application of TFA X3 directly onto Moisture barrier ensure the adhesive is applied onto the Moisture Barrier within 4 days after the application of Moisture Barrier has taken place and cured.
- Do not walk on laid matting during the first four hours after installation. Avoid air entrapment
  when making the bond or filling joints. For application details of timber flooring systems,
  contact the timber flooring manufacturer. Care should be taken to prevent any reaction or
  damage pre finished timber coatings.
- Do not use adhesive in excessive hot or cold conditions i.e. below 10°C or above 30°C.
- This adhesive will not stand up to hydrostatic pressure or capillary action.
- Ensure your trowel is notched to the manufacturer's recommendations at all times.
- Timber flooring systems must be acclimatised, refer to the timber flooring manufacturers recommendations, prior to the use of this adhesive.
- If in doubt regarding suitability of adhesive, always contact the manufacturer.
- Always follow manufacturer's instructions.
- Do not apply over acrylic or PVA primers/sealers.
- Not recommended to be used in totally confined spaces as requires atmospheric moisture to cure properly.
- Do not expose to water or alcohol based cleaners before full cure.
- Must be fully cured before sanding, allow a minimum of 72 hours.
- Compatibility tests must be first carried out. Due to many forms of timber flooring available today, preliminary adhesion testing should be undertaken by the installer to confirm adhesion.
   Contact MJS for assistance if required.
- Do not apply over dense burnished concrete surfaces without abrading first to obtain a mechanical key for the adhesive to bond to.

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