

Packaging



Mixing



Application



Uses



Substrates

- Concrete
- Cement Screed
- Structural Timber
- Compressed Cement Sheeting

Flexible noise reducing / anti-fracture membrane

Description

Acoustiflor is a two-pack flexible, seamless, self-levelling, noise reduction, floor underlay anti-fracture membrane designed and tested to ASTM E1007/E989 & ISO 717-2 for impact sound reduction when installing ceramic tiles or timber flooring.

Features

Advantages over mat systems:

- Does not disbond off the substrate (disbonded floors can sound drummy).
- Does not cause grout cracking.
- Levels the floor - eliminates wavy floors and tile lipping.
- Reduces impact sound by up to 15 points (guide only).

Uses

Can be installed internally over suitable flooring substrates, such as concrete and cement screeds, structural timber and compressed cement sheets for inter-apartment noise reduction.

Performance Data

Acoustiflor will suppress or reduce noise up to 15 decibel points from the impact room to room below giving an average result of

L_nT_w of 40-50 (5star rating), FIIC of 45-55 (exceeds Acoustic Requirement of BCA 2007). L_nT_w (measured in decibels) FIIC (Field Impact isolation class)

Precautions

Do not alter mix ratio in any way, (mixing extra powder of water) as this will substantially reduces its acoustic properties. Do not use on floors subject to rising damp. When fixing timber floors allow the **Acoustiflor** to dry to a less than 5.5% moisture content before fixing timber.

Coverage

(Approximate) 20 litres of liquid mixed with 20kg of powder covers 7m² at 5mm thick using a 6mm **Dribond** pegged trowel.

Specification

The acoustic tiling system will be a two pack flexible underlay and flexible adhesive such as **Acoustiflor** and **Monoflex** adhesive that is tested to ASTM E1007/E989 and has an acoustic value of FIIC in excess of 50 on concrete floors.

For Ceramic Tiles

Adhesive that conforms to AS4992 and has a minimum shear bond strength of 1.33Mpa such as **Monoflex** manufactured by Construction Chemicals and shall be applied in accordance with the manufacturers instructions.

For Timber Floors - Direct stick

A one part moisture curing solvent free polyurethane adhesive such as **Ultrathane** manufactured by Construction Chemicals and shall be applied in accordance with the manufacturers instructions.

IMPACT NOISE TEST RESULTS

Noise Reduction	FIIC	200mm concrete slab with 13mm suspended ceiling with 150mm ceiling cavity (with no insulation)	L _n T _w Decibels (dB)	Noise Reduction
	43	Bare Floor	56dB	Changes in sound level 3db=Clearly noticeable 10dB=Half as loud
18	61	5 mm Acoustiflor , 3 mm Monoflex 300mm x 300mm Ceramic Tiles	44dB	12dB
19	62	5 mm Acoustiflor , 1.5 mm Ultrathane 15mm Bamboo timber flooring	42dB	14dB

FIIC (Field Impact Isolation Class) The higher the number the better the result							L _n T _w (Measured in decibels) The lower the rating the better the result						
FIIC	40	45	50	55	60	Star rating	2	3	4	5	6		
Performance	Not acceptable	Poor	Acceptable	Good	Excellent	Performance (dB)	65	55	50	45	40		

Acoustiflor exceeds the acoustic requirements of the Building Code of Australia. The FIIC and L_nT_w rating vary depending on the building construction (i.e. concrete thickness, strenght, use of suspended ceilings, density of tile/stone, and installation details). An accurate test is recommended for specific site performance figures.

Surface Preparation

All surfaces must be structurally sound firm and free from oil, grease, laitance, dust and other contaminants. New concrete floors must be at least 28 days old. Floors out of level >3mm in 2 metre length must be levelled with **Level Floor** prior to applying **Acoustiflor**.

Priming

Prime porous substrate with **Kemcrete** diluted 50/50 with water to ensure optimal adhesion.

Mixing

Mix ratio 20 litres of liquid with 20kg of powder in a 60 litre mixing bucket. Stir liquid thoroughly then slowly add the powder to the liquid (never liquid to powder), stirring continuously to avoid lumps and achieve a uniformly wet mixture. Do not mix more than can be used in 5 minutes. It is advisable to mix and place the mixture within 1 minute to obtain best results from the self-levelling properties.

Application

Sound absorption tape - Place the 12mm x 6mm closed cell polyethylene sound absorption tape around the perimeter of the floor to a height equal to the underlay, adhesive and flooring, to prevent sound transfer through the wall.

Pour the mixture onto the floor and spread using a 6mm **Dribond** pegged trowel to achieve a minimum thickness of 5 mm over the entire floor. Ensure there are no gaps left, as this will reduce the noise reduction.

Do not over-trowel. Allow to cure for a minimum of 48 hours (23°C 50% relative humidity) after completing the application. Curing will be longer in colder, more humid conditions. Floor laying may commence after curing.

Waterproofing

Areas requiring waterproofing must be waterproofed after installing the **Acoustiflor**. This can be done using **Liquid Flash 2 Pack**. Refer to technical sheets and application instructions.

Fix Timber Floors >12mm thick with **Ultrathane** after checking the moisture content of the **Acoustiflor** is beneath the minimum requirements of ASDR99463 Sept. 1999. Cures to 5% moisture content @ 23°C 50% RH in 48 hours. Colder or more humid conditions will take longer.

Fix Tiles/Stone with **Monoflex** to a 3mm thickness and grout with **Kemgrout** mixed with **Primebond**.

Clean Up

Uncured **Acoustiflor** may be removed from tools and equipment with water. Once cured, the material can be removed with any other strong solvent.

Curing

To ensure proper curing open windows to get good flow of air over the surface. Cover glass areas that allow direct sunlight to shine on the surface.

Safety Precautions

Powder is non-toxic but contains cement which contains silica. Wear gloves and appropriate respirator. Further information for this product is contained in the Material Safety Data Sheet. Refer; www.constructionchemicals.com.au

Shelf Life

1 year Powder/2years liquid.



www.constructionchemicals.com.au

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