

Acoustiflor



Monoflex



Ultrathane



Substrates

Concrete
Cement screed
Structural timber
Compressed
cement sheeting

Soundproofing and anti-fracture membrane

Description

Acoustiflor is a two-pack flexible, seamless, self-levelling, noise reduction, floor underlay and 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

- Exceeds the acoustic requirements of the Building Code of Australia
- Seamless membrane that will not disbond or become drummy
- Quick to lay. Apply up to 300m² in a day (mat systems only do 30m² in a day)
- Does not cause grout cracking
- Water resistant
- Soundproofs floors from impact noise within the impact room
- Levels the floor - helps eliminate wavy floors and tile lipping
- 3mm anti-fracture/crack bridging membrane

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.

Coverage (Approximate)

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

Performance Data

Acoustiflor will suppress or reduce noise from the impact room to the room below giving an average result of: L'nT,w of 40-50 (5 star rating), FIIC of 45-55 (exceeds Acoustic Requirement of BCA). L'nT,w (measured in decibels) FIIC (Field Impact Isolation Class).

For Higher Acoustic Performance

Use 3-4mm of **Acoustibond** over the 6mm of **Acoustiflor**.

Precautions

Do not alter mix ratio in any way, (mixing extra powder or water) as this will substantially reduce 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% moisture content before fixing timber.

Do not apply in temperatures below 10°C.

Specification

The acoustic tiling system will be a two-pack flexible underlay and flexible adhesive such as **Acoustiflor** and **Monoflex** or **Acoustibond** 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 AS ISO 13007.1 and has a minimum shear bond strength of 1.90MPa such as **Monoflex** manufactured by **Construction Chemicals** and shall be applied in accordance with the manufacturer's instructions.

Impact noise test results				
Noise Reduction	FIIC	172mm concrete slab 100mm suspended ceiling 10mm plasterboard	Decibels (dB) L'nT,w	Noise Reduction
	37	Bare Floor	69dB	Changes in sound level 3dB=Clearly noticeable 10dB=Half as loud
15	52	6mm Acoustiflor , 3mm Monoflex	57dB	12dB
18	55	6mm Acoustiflor , 3mm Acoustibond	55dB	14dB
17	54	6mm Acoustiflor , 2mm Ultrathane	55dB	14dB

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, strength, use of suspended ceilings, density of tile/stone, and installation details). An accurate test is recommended for specific site performance figures.

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 manufacturer's instructions.

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**.

Application Equipment

1. Two 60 litre large plastic (rubbish) mixing bins
2. **Dribond** 6mm pegged application trowel
3. Slow speed drill and mixing paddle (120mm)
4. Three workers - two mixing and one spreading
5. If mixing inside, control dust by attaching a large funnel or mixing bucket to a vacuum cleaner hose
6. Broom or roller to apply primer

Priming

With a broom or roller 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 powder to the liquid mixing continuously for 2-3 minutes to a lump-free, uniform mix. Let stand for a minute and remix for another 2 minutes to obtain a free-flowing mixture. Acoustiflor will not flow and level if undermixed.

It is advisable to place the mixture within 5-10 minutes to obtain best results from the self-levelling properties. Two 60 litre mixing bins are required for fast, continuous application, one bin mixing while the other is pouring.

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. The tape will prevent sound transfer through to the wall. Apply at doorways to stop the flow of product to areas not requiring sound proofing.

Pour the mixture onto the floor and spread using a 6mm **Dribond** pegged trowel to achieve a minimum thickness of 6mm over the entire floor.

Screed the mixture with the acoustic trowel into the corners and against the walls. Pull the trowel towards you to achieve the required thickness. This must be done quickly before the self-levelling properties disappear.

Join the successive mixes quickly to join sections before they skin. Do not disturb any skinned product. Use a spiked roller (applied with spiked shoes) to minimise air bubbles and join marks between mixes.

Anti-fracture/Crack Bridging Membrane

Apply at 3mm thickness.

Waterproofing

Areas requiring waterproofing must be waterproofed after installing the **Acoustiflor**. This can be done using **Liquid Flash 2**. 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.

Cures to 5% moisture content @ 23°C 50% relative humidity 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 strong solvent.

Curing

Acoustiflor will take approximately 48 hours to cure. The best application method is to apply on a Friday and allow **Acoustiflor** to cure over the weekend. Ventilate the area by opening doors and windows (50mm-100mm) to allow a slow, steady flow of air to flow over the surface. Lack of air flow will delay the cure and too much air flow could cause the surface to crack. 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 Safety Data Sheet. Refer; www.constructionchemicals.com.au

Shelf Life

1 year powder / 2 years liquid.



www.constructionchemicals.com.au

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