

# ACRYTILE FLEX C1ES2

Highly flexible vibration absorbing one part tile adhesive.

## Description

Acrytile FLEX is a highly flexible, one part, rubber modified cement based ceramic tile adhesive formulated for adhering most types of tiles over substrates prone to movement and vibration including timber flooring. Acrytile FLEX incorporates anti-fracture technology which ensures your tiles will remain fixed in the most demanding situations.

Acrytile FLEX provides exceptional workability and performance and surpasses the requirements of AS 4992.1-2006 for classification as a C1ES2 adhesive. Acrytile FLEX can be used to adhere both wall and floor tiles and is suitable for interior and covered exterior applications.

## Key Features

- > Highly flexible
- > Absorbs vibration
- > Extended open time
- > Use on timber flooring
- > Excellent adhesion
- > Low odour

## Recommended Applications

Suitable for adhering most types of tiles including ceramic, mosaic, vitrified, porcelain, terracotta, quarry and natural stones with the exception of moisture sensitive varieties including, but not limited to, green marble. Use over concrete, cement render & screeds, brickwork and block work, fibre cement sheeting, plasterboard, approved waterproofing membranes, existing tiles and timber sheet/flooring. Check colour of adhesive for suitability when adhering translucent tiles. Not suitable for exterior applications unless covered.

## Surface Preparation

Surface preparation should be carried out as per AS 3958.1-2007. All surfaces to be adhered to must be clean, dry and free from any impurities, laitance or contaminants which may adversely inhibit adhesion.

**Concrete Surfaces:** Concrete surfaces should have a wood float finish and be allowed to cure for a minimum of 28 days prior to tiling. The surface should be true and level with adequate fall to drains where required. Remove any concrete sealers or curing compounds from the surface. Steel trowel finished concrete should be mechanically abraded to remove any laitance and provide an adequate key.

**Cement Renders & Screeds:** Render should consist of one part cement to four parts sand. Leave render and cement screeds with a wood float finish and allow to cure for a minimum of 1 day prior to tiling. Render should not be less than 5 mm in thickness unless polymer modified. Check with render manufacturer for suitability.

**Porous Substrata:** Porous surfaces must be treated with one coat of Acrytile PRIMER prior to the commencement of tiling. Non-porous substrata should not be primed.

**Plasterboard & Fibre-Cement Sheet:** All plasterboard and fibre cement sheet substrata must be fixed in accordance AS 3958.1-2007. Plasterboard jointing compound must be primed with Acrytile PRIMER prior to the application of adhesive

**Existing Tiles:** Existing ceramic tiles must be securely fixed. At least 80% of the tile surface must be mechanically abraded to provide an adequate key for the adhesive.

**Internal Timber Flooring:** Timber panels should be internal particleboard, MDF, plywood or tongue & groove sheeting. Thickness should be no less than 19 mm with joist centres not exceeding 450 mm. FLEX is not suitable for use on un-bonded or oil-rich timbers such as cedar and cypress pine.



Flooring should be in sound condition with adequate underfloor ventilation. Ensure flooring is not subject to abnormal deflection. Humidity levels beneath the flooring should remain constant throughout the life of the system to reduce any movement and warping of the tiling system. Under side of timber sheeting must not come in to contact with water at any stage throughout its life. Ensure sheeting is within the AS2796 requirement for moisture content and that it has acclimatised in-situ for not less than 60 days prior to tiling.

New and old timber flooring should be sanded with 40 grit sand paper to remove any coatings or contaminants and provide a suitable key for the adhesive. Vacuum all dust and residue. All joints between timber sheeting subject to expected movement of up to 1.5 mm should be taped with a suitable bond-breaker tape i.e. PVC ducting tape prior to application of primer and adhesive. Strip flooring should be fibre cement sheeted. Apply a priming slurry coat consisting of 1 part ACRYTILE XTRA to 2 parts Acrytile CEMFIX 30 or TRADE. Apply generously to the surface with a soft broom or brush and allow to dry prior to application of adhesive.

### **Movement Joints**

Provide movement joints where required in accordance with AS 3958.1-2007 section 5.4.5.

### **Preparation Of Adhesive**

Acrytile FLEX will require approximately 5 litres of water per 15 kg of adhesive powder. Add measured amount of water to a clean mixing vessel and slowly add the adhesive powder whilst stirring. Continue to add powder until a thick, creamy, lump-free paste has been achieved. Allow the freshly prepared mix to stand for 5 minutes to ensure polymer activation and thorough wetting has occurred then briefly re-stir prior to use. Do not re-mix the adhesive once it has started to set as this will reduce the adhesive bond strength. Adhesive should not slump when combed out using the appropriate size notched trowel.

### **Application**

All tiling work must be carried out in strict accordance with AS 3958.1-2007. Ensure the back of the tiles to be adhered are free from dust or any materials which may inhibit adhesion. Adhesive should be spread using the appropriate size notched trowel. For wall tiles up to 150 mm x 150 mm use a 6 mm notched trowel. For wall and floor tiles larger than 150 mm x 150 mm use a 10 mm or 12 mm notched trowel. Spread no more than 1 square metre of adhesive at a time and do not lay tiles if adhesive has skinned. Finished bed thickness should be a minimum of 2 mm for wall tiles and 4 mm for floor tiles. Ensure all tiles are fully supported by adhesive and that no voids are present. Remove a tile from time to time to ensure complete coverage. Clean away any excess adhesive from the joints and face of the tiles whilst the adhesive is still wet. Allow to dry undisturbed for 24 hours prior to foot traffic and grouting.

### **Grouting**

Prior to grouting, the tiled surface should meet the requirements of AS 3958.1-2007 clause 5.4.6. Grout after 24 hours as per AS 3958.1-2007 clause 5.7. Joint widths should be between 1.5 mm - 5 mm for wall tiles and 3 mm - 10 mm for floor tiles. Check grout for suitability.

### **Coverage**

15 kg of powder will cover approximately 9.5 m<sup>2</sup> with a 6 mm notched trowel and approximately 4 m<sup>2</sup> with a 12 mm notched trowel.

### **Open Time**

Approximately 30 minutes in 22°C at 50% relative humidity. Open time will be effected by ambient temperature. Always check for skinning on the adhesive surface prior to the application of tiles.

### **Pot Life & Set Time**

Approximately 2 hours at 22°C at 50% relative humidity. Final set will be achieved at 24 hours at 22°C with 50% relative humidity.

### **Clean Up**

Remove excess adhesive from tile face and tools using a damp cloth whilst material is still wet. Wash all tools in warm soapy water immediately after use.

## Packaging

Acrytile FLEX is supplied in 15 kg plastic lined multi-walled paper sacks.

## Safety

Acrytile FLEX is manufactured using portland cement which contains respirable crystalline silica as an impurity. Always use dust masks, skin and eye protection whilst handling and mixing this product. Refer to MSDS for further information. The contents of this bag are heavy. Refer to latest occupational health and safety practices when handling to minimise the risk of injury.

## Shelf Life

This product can be stored unopened above floor level in a cool dry place for up to 12 months.

**Table 1. Technical Data**

PROPERTY	RESULT
<i>Tensile strength 28 days standard conditions</i>	<i>1.7 Mpa</i>
<i>Tensile strength 7 days standard conditions &amp; 21 days immersion</i>	<i>0.78 Mpa</i>
<i>Tensile strength 14 days standard &amp; 14 days at 70°C</i>	<i>1.96 Mpa</i>
<i>Tensile strength freeze/thaw</i>	<i>0.7 Mpa</i>
<i>Deformability</i>	<i>20 mm</i>
<i>Tensile strength 28 days after 30 open time</i>	<i>1.7 Mpa</i>
<i>Classification according to AS4992.1-2006</i>	<i>C1ES2</i>

## Product Limitations

- > Not suitable for exterior use
- > Not suitable for use with moisture sensitive stone or tiles including green marble.
- > Suitable for use only in temperatures ranging between 5 - 30°C. Open time can be greatly reduced in warmer weather. Ensure adhesive has not skinned prior to application of tiles.
- > Do not use in hot, windy conditions where adhesive skinning may occur prematurely.
- > Do not apply over waterproofing membranes or primers unless approved by MAC.
- > Not suitable for use in swimming pools or constant water immersion. Always provide adequate drainage to eliminate ponding.

## Guarantee

When surface preparation has been carried out in accordance with AS 3958.1-2007 Section 4, tiles are installed according to AS 3958.1-2007, and this literature has been understood and followed accordingly, Acrytile FLEX carries a guarantee against product failure.

The Guarantee is valid for a 10 year period from the time of application and is limited to the cost of replacement and associated labour of any material proven and acknowledged by us to be faulty.

---

**IMPORTANT NOTE:**

Melbourne Acrylic Coatings Victoria Pty Ltd, its staff and distributors will not accept responsibility for any failure caused as a result of factors beyond our control including but not limited to onsite handling, preparation or application of this product. Application of this product should only be performed by qualified trades people trained in the use of this type of product. Information supplied in this publication is based on our testing and experience and is given in good faith. Suitability of this product should be independently determined prior to use. Warranty is limited to the replacement of any materials proven to be faulty. MAC will not warrant job defects caused as a result of but not limited to, structural movement or entrapped moisture.

[WWW.MELBACRYLIC.COM.AU](http://WWW.MELBACRYLIC.COM.AU)

