



ECB® Classic Crack Isolation Membrane

Technical Specification Sheet

TILE SETTING MATERIALS & ACCESSORIES

Specifier Note: This Product Specification specifies environmentally responsible material choices including recycling and reusable options and generally available disposal options.

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

Crack Isolation Self-Adhesive Membrane Systems and accessories, including waterproofing and acoustics.

B. Australian Standards:

1. AS1884 (2012) - Concrete floor finishing
2. AS3958.1; (2007) - Expansion or control joints and components
3. AS2358 & AS3958.1 (2007) - Tile or stone materials
4. Tile Adhesives Testing: AS4992.1&2 (2003)
5. AS4654.1 (2012) - Waterproofing Membranes: Approved Materials
6. AS4654.2 (2012) - Waterproofing Membranes: External above ground use
7. AS4858 (2008) - Wet Area Membranes

1.02 REFERENCES

A. Australian Standards Installation

Specifications:

1. AS 3958.1 (2007) - Guide to the Installation of Ceramic Tiles

B. Australian Standards Materials

Specifications:

1. AS 3740 (2010) - Wet Areas in Residential Buildings
2. AS 2358 (2007) - Adhesives for Ceramic Tiles
3. AS4654.1&2 (2012) - Waterproofing membranes for external above ground use NATA

C. Testing of Materials to BCA Australian

Standards & ASTM:

1. A118.12 (2008) - Testing of Crack Isolation Membranes – minimum requirements
2. AS 4992.1 (2003) - Tile Adhesive Test Standards
3. AS/NZ 4858 (2002) - Wet Area Membranes

4. ISO 717.2 (2004) - Acoustics – IIC (52 or less) to BCA (Lnw + C1 – 62 or less)

5. AS4654.1&2 (2012) - NATA Tested - ESPRC No.014/17 Waterproofing Membranes for external above ground use

6. Intertek Certified Clean Air Gold (No VOC's) #10448686GRR-001a

7. ASTM D257 - Electrical Resistivity to 500V – electric shock protection

D. Approved Adhesive Manufacturers:

Bostik, Mapei, RLA Polymers and PCI Australia. Contact the Adhesive Manufacturer to receive specified bonding adhesive and surface preparation products for the appropriate tile finish to ensure a permanent bond will be achieved between the membrane system and the tiled flooring finish.

1.03 SYSTEM DESCRIPTION

Provide ECB® Anti-Fracture/Crack Isolation Sheet Membrane with lateral protection to 10mm per lineal metre. With the adoption and utilization of 'soft joints' (BCA Standard of grids 4.5m x 4.5m – 20.25m²) a visually seamless flooring finish is guaranteed* to be crack-free for the life of the original floor (*when used in full floor coverage).

Performance Requirements:

- Eliminates structural defects that have the potential to impact on the structural flooring finish
- Life Time protection against concrete shrinkage cracking due to evaporation of moisture from the substrate
- Ability for Tile-on-Tile to eliminate costly demolition of pull-up and re-screeding
- Crack Isolation lateral protection to **10mm** per lineal metre with waterproofing and acoustic properties
- Electrical shock protection to 500V
- Eliminates Efflorescence and protects substrate from concrete cancer
- Life-Time Anti-Fracture Performance Warranty
- Immediate Tile-over after installation
- Maintain application flexibility, i.e., can be applied even in low temperatures

- No cutting of tiles at construction/control/saw cut joints
- Soft Joints to BCA Standard of grids 4.5m x 4.5m – 20.25m²
- No VOC's – Clean Air Gold Certification

Substrates must be primed with Crack Isolation Pty Ltd approved primer/activator before permanently bonding the ECB® Membrane System to suitable substrates. Regular bond tests must be conducted every 120-240m² to ensure substrates comply with AS1884 (2002) and permanent chemical bonding is achieved. Documentation and photos of bond testing must be kept by the contractor for the duration of the product warranty period.

Use C-I Primer to bond the ECB® membrane to the substrate and then use thin-set approved tile adhesives as specified and recommended by major tile adhesive manufacturers to AS3958.1 (2007) and immediately bond the hard surface flooring finish to the ECB® membrane directly following installation.

Note: Different flooring finishes require specialized setting adhesives. Contact Adhesive Manufacturer to determine correctly specified tile setting adhesive system.

1.04 SUBMITTALS

- A. **General:** Submit listed submittals in accordance with Conditions of the Architectural and Building/Construction Contract.
- B. **Product Data:** Submit manufacturer's Product Data Sheets for specified products.
- C. **Installation Instructions:** Submit manufacturer's Installation Instructions document for specified products
- D. **Samples:** Submit verification samples and approvals for tile adhesive manufacturer's recommendations for specific hard surface flooring finishes.
- E. **Quality Assurance Submittals:** Submit Manufacturer's Bond Test Procedural document
- F. **Closeout Submittals:** Submit Manufacturer's standard Warranty document executed by authorized company official.

1.05 QUALITY ASSURANCE

- A. **Installer Qualifications:** A certified contractor trained and accredited by Crack Isolation should perform the work of this section.
- B. **Pre-Installation Meetings:** Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements.
- C. **Bond Test:** A Bond Test must be performed in accordance to manufacturer's methods to ensure

permanent chemical bonding of the membrane to the substrate is achieved.

1.06 DELIVERY, STORAGE & HANDLING

- A. **General:** Comply with product performance requirements with regard to application.
- B. **Ordering:** Comply with manufacturer's ordering instructions and lead time (8-10 weeks) requirements to avoid construction delays.
- C. **Delivery:** Deliver, store and handle materials in accordance with manufacturer's written instructions.
- D. **Storage:** Store materials standing up-right & protected from exposure to direct sunlight and harmful weather conditions and at a temperature range between 18-25°C as recommended by manufacturer.

1.07 PROTECTION OF MEMBRANE

No solvents to be used on any of the Crack Isolation Sheet Membrane as this will cause product damage and void all warranties.

On installed membrane note the following:

1. The membrane must be protected with minimum 19mm mdf/plywood or heavy sheeting and tiled over immediately thereafter. The membrane is not a trafficable surface, i.e., no pedestrian or vehicular traffic to traverse over the membrane before curing and installing of hard surface flooring finish, otherwise warranty will be voided.
2. Leave a minimum of a 100mm overlap to continue a new section of membrane at a later date. Protect the exposed section of membrane by applying H.D. removable Duct tape along all joints and protect the ECBTM membrane with Coreflute laid over all the edges

1.08 PREPARATION OF SITE CONDITIONS

- A. Substrate must be clean, dust-free and dry and the ambient room temperature between 18-25°C when applying primer and membrane.
- B. Concrete sub-floors must be structurally sound, free of concrete curing compounds, clean, level, free of holes, protrusions, a moisture content within Australian Standards, free of sealers, or any material that would interfere with a good bond or act as a bond breaker. Grind down bumps and raised surface abrasions.
- C. Wood/Timber/Plywood to be installed according to manufacturer's recommendations. Sub-floors must consist of joist spacing no more than 450mm on-center, and a sub-floor consisting of a minimum of 19mm thick.
- D. Existing floors made up of ceramic, terrazzo, marble, vinyl and painted floors must be structurally sound and a bond test must be performed.

E. Deflection of substrate must not exceed 1mm/720mm on live or dead loads with a maximum variation of 6mm/3300mm.
F. Dry slab/sub-strata must be dry to 70% relative humidity or 5.5% moisture content in accordance to AS1884 (2002) Australian Standard.

1.09 WARRANTY

A. Limited Lifetime Product Warranty applies to installation of ECB® membrane when installed in accordance with manufacturer's installation instructions by a Crack Isolation Pty Ltd accredited installer.

B. Manufacturer's warranty: Submit manufacturer's standard warranty document executed by authorized company official.

PART 2 - PRODUCTS

2.01 CRACK ISOLATION MEMBRANE SYSTEM AND ACCESSORIES

A. **Manufacturer:** National Applied Construction Products, Inc.

B. **Australian Distributor:** Crack Isolation Pty Ltd, PO Box 2335 Moorabbin, Vic. 3189 Tel: 03 9822 6154

C. **Membrane System:** ECB® is a self-adhering, pressure sensitive, elastomeric, crack bridging/isolation sheet membrane

1. Membrane: 1.0mm thick load bearing membrane, capable of withstanding 10mm horizontal/lateral structural crack or joint movement.
2. Waterproofing, self-adhering, pressure sensitive formulation
3. Roll Size & Weight: 914mm x 15.24m @ 23.5kg
4. Full Floor Coverage in butt joint application.

D. **C-I Primer** for interior/exterior/wet area applications

E. **Seam Tape:** Double-stick elastomeric seam tape, 150mm x 15 mtrs. For use in joining and seaming applications for waterproofing.

PART 3 - REMOVAL OF EXISTING MATERIALS

Adhesive residue from carpet, vinyl tile, linoleum and elastomeric membrane systems must be ground off or shot blasted leaving minimal residue. After installation of a new substrate screed a Bond Test must be conducted in various locations (approximately every 120-240m²) to ensure permanent bonding of the Crack Isolation Membrane System to the substrate is achieved.

PART 4 - HARD SURFACE FLOORING FINISHES

4.01 MOISTURE SENSITIVE STONE FLOORING FINISHES

A. If flooring finish is susceptible to cupping or curling a scratch coat of the specified, tested and approved adhesive 24 hours prior to installation of tiles may be required by the adhesive manufacturer. Consult the tile adhesive manufacturer/supplier for recommendations and warranties.

B. Grouting material must be fit for purpose and suitable for use with moisture sensitive flooring finishes.

PART 5 - EXECUTION

5.01 MANUFACTURER'S INSTRUCTIONS

Compliance: Comply with manufacturer's written data, including Crack Isolation technical data and installation instructions.

5.02 ACCEPTABLE INSTALLERS

Installer Qualifications: A contractor fully trained and accredited by Crack Isolation Pty Ltd in all commercial installation procedures must perform the work of this section.

5.03 EXAMINATION

Site Verifications of Conditions: Verify substrate conditions are acceptable for product installation in accordance with manufacturer's instructions.

1. Verify substrate pre conditions of the installation area meet requirements.
2. Verify surfaces are ready to receive work and comply to applicable Australian Standards & Crack Isolation Pty Ltd/NAC Products Installation Methods.
3. Confirm location of construction, control and saw cut joints required and details provided on the drawings.

5.04 PREPARATION

1. Keep area well-ventilated when applying the C-I Primer for Interior/Exterior/wet area.
2. Wear safety glasses, protective gloves and suitable PPE clothing when handling the primers and accessory products.
3. Refer to the material safety data sheet for further details.

5.05 FIELD QUALITY CONTROL

Field Evaluations are performed by accredited installer upon request.

5.06 CLEANING

ECB® Membrane can be washed, swept/brushed or vacuum prior to installation of the hard surface flooring finish if needed.



Crack Isolation Pty Ltd
www.crackisolation.com.au