DIVISION: 09 00 00—FINISHES
Section: 09 30 00—Tiling

REPORT HOLDER:
CUSTOM BUILDING PRODUCTS, INC.
www.custombuildingproducts.com

EVALUATION SUBJECT:
REDGARD® WATERPROOFING AND CRACK PREVENTION MEMBRANE, C-CURE PRO-RED WATERPROOFING MEMBRANE 963, CBP 232 WATERPROOFING AND ANTI-FRACTURE MEMBRANE AND JAMO® WATERPROOFING MEMBRANE

1.0 EVALUATION SCOPE

Compliance with the following codes:

Property evaluated:
Water resistance

2.0 USES

RedGard® Waterproofing and Crack Prevention Membrane, C-Cure Pro-Red Waterproofing Membrane 963, CBP 232 Waterproofing and Anti-Fracture Membrane and Jamo® Waterproofing Membrane are used on concrete floors, as a barrier to liquid water migration, in bonded, thin-set installations of ceramic tile and dimensional stone under the IBC and IRC. The membranes are also used as a shower sub-pan lining material in accordance with the IPC.

3.0 DESCRIPTION

3.1 General:
RedGard® Waterproofing and Crack Prevention Membrane, C-Cure Pro-Red Waterproofing Membrane 963, CBP 232 Waterproofing and Anti-Fracture Membrane and Jamo® Waterproofing Membrane are liquid-applied, elastomeric waterproofing materials that cure to form a monolithic membrane.

3.2 Materials:
3.2.1 Membrane: RedGard®, C-Cure Pro-Red, CBP 232 and Jamo® waterproofing membranes are ready-to-use liquids. RedGard® is available in 1-gallon (3.78 L) and 3.5-gallon (13.2 L) pails. C-Cure Red is available in 2-gallon (7.56 L) and 5-gallon (18.9 L) pails. CBP 232 Waterproofing Membrane is available in 1-gallon (3.78 L), 3.5-gallon (13.2 L) and 5-gallon (18.9 L) pails. Jamo® Waterproofing Membrane is available in 1-gallon (3.78 L) and 5-gallon (18.9 L) pails. Shelf life is one year from date of manufacture when the material is stored indoors at room temperature and when the pail is unopened. The liquid material must not be allowed to freeze.

3.2.2 Fiberglass Mesh: The reinforcing mesh is an alkali-resistant fiberglass fabric that is provided in 2-inch-wide-by-50’, 100- and 300-foot-long (51 mm by 15.2, 30.5 and 91.4 m) or 6-inch-wide-by-50-yard-long (152 mm by 45.7 m) rolls for use as reinforcement in corners, change of plane, around drains and over minor substrate cracks.

4.0 INSTALLATION

Installation of RedGard® Waterproofing and Crack Prevention Membrane, C-Cure Pro-Red Waterproofing Membrane 963, CBP 232 Waterproofing and Anti-Fracture Membrane and Jamo® Waterproofing Membrane must comply with this report and the manufacturer’s published installation instructions. The manufacturer’s published installation instructions shall be available at the jobsite at all times during installation.

4.1 Surface Preparation:
All exterior and wet areas must be sloped for drainage, with all surfaces structurally sound, clean, dry and free from contaminants that would diminish the bond. Newly prepared concrete shall be cured a minimum of 28 days, and surfaces shall be troweled smooth then textured to a fine broom finish. All existing surfaces shall be flat or leveled when necessary and all defects repaired. All cracks in concrete up to 1/8 inch wide (3.2 mm) shall be prefilled with the liquid membrane and cured prior to application. The material shall extend beyond both sides of the crack a minimum of the diagonal measurement of the tile or stone. Cracks that are wider than 1/8 inch (3.2 mm) must be treated as expansion joints in accordance with Section 4.3.

4.2 Membrane Application:
All porous surfaces must be dampened, and a 3/16-inch-wide (19.1 mm), rough-textured synthetic roller, or a 1/4-inch-by-3/16-inch (6.4 mm by 4.8 mm) V-notch trowel, must be used to apply the membrane. On corners where floors and walls meet, a maximum precoating of 90 mils [0.090 inch (2.3 mm)] of wet-film thickness is required that will extend up the walls to 6 inches (152 mm) on either side. As an option, a 6-inch-wide (152 mm) section of
fiberglass mesh, as described in Section 3.2.2., may be embedded into the membrane at corners or where floors and walls meet. In lieu of the roller or trowel, an airless sprayer may be used. The sprayer must be operated between 1900 and 2300 psi (13.10 and 15.33 MPa) to produce a flow rate of 1.0 to 1.5 gallons (3.78 to 5.68 liter) per minute; the sprayer must have a tip orifice size of 0.025 to 0.029 inch (0.63 to 0.73 mm). A continuous film with overlapping spray must be applied. No seams are permitted. The membrane appears pink when wet and dark red when dry. After the first coat has turned red, with no blushing or light pink showing (approximately 11/2 to 2 hours), the film must be visually inspected for integrity, and all voids or pinholes must be filled with additional material. A second coat must be applied at right angles to the first. The film thickness must also be checked periodically with a wet-film gauge. The combined first and second coatings must be a minimum of 50 mils 0.050 inch (1.27 mm) thick when wet and 25 mils [0.025 inch (0.64 mm)] thick when dry. A minimum of sixty minutes of curing time is required after application.

4.3 Application over Expansion Joints:
The membrane must not be used to bridge expansion joints. When applied over expansion joints, the joint must be cleaned, and an opened or closed-cell backer rod is installed to proper depth as specified by the designer. A sealant must be compressed into the joint, coating the sides and leaving the joint flush with the surface. After the sealant is dry, bond breaker tape specified by the manufacturer must be placed over the joint. Two coats of membrane must be applied at a minimum of 25 mils [0.025 inch (0.64 mm)] wet-film thickness per coat over the joint and substrate following the instructions in Section 4.2 of this report. The tiles or stones are then applied over the membrane, leaving a gap over the joint as specified by the designer. After the work is set, the joint must be filled as specified by the designer.

4.4 Method of Repair:
The membrane in the area requiring repair must be removed and the area cleaned, allowing for a minimum 2-inch (51 mm) overlap. Two coats of membrane must be applied as described in Section 4.2 of this report.

5.0 CONDITIONS OF USE
The RedGard® Waterproofing and Crack Prevention Membrane, C-Cure Pro-Red Waterproofing Membrane 963, CBP 232 Waterproofing and Anti-Fracture Membrane and Jamo® Waterproofing Membrane described in this report comply with, or are suitable alternatives to what is specified in, those code and/or the applicable code. In the event of a conflict between the installation instructions and this report, this report governs.

5.1 Application must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the installation instructions and this report, this report governs.

5.2 Application is limited to ceramic tile and dimension stone installations on floors and for use as shower sub-pans or linings.

5.3 The membrane must not be used to bridge substrate expansion joints.

5.4 The membrane recognized in this report is manufactured by Custom Building Products in Grand Prairie, Texas and Bell, California under a quality control program with annual inspection by ICC-ES.

6.0 EVIDENCE SUBMITTED


7.0 IDENTIFICATION

Containers of the RedGard® Waterproofing and Crack Prevention Membrane, C-Cure Pro-Red Waterproofing Membrane 963, CBP 232 Waterproofing and Anti-Fracture Membrane and Jamo® Waterproofing Membrane described in this report are identified by a label bearing the manufacturer's name (Custom Building Products) and address, the product name, the date of manufacture and the evaluation report number (ESR-1413).

7.1 The report holder’s contact information is the following:

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