## Acousti©©RKTM CRC950

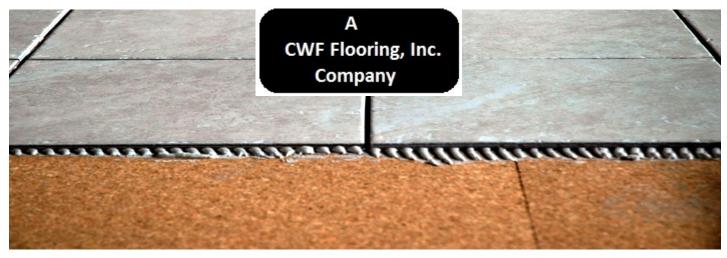
High Performance Composite Sheet Sound Control Underlayment

### For Ceramic Tile, Hardwood & Other Hard Surface Flooring Applications



## **Multi-Material Construction = Improved IIC Performance**

Cork & Recycled Rubber Combined in a 9.5mm (3/8") Composite Sheet Designed for Optimal Impact Noise Attenuation Performance Superior Bonding & Working Characteristics vs. Competitive Systems Sound Control, Crack Suppression & Thermal Benefits in One Product



# Acousti©©RKTM CRC950

### High Performance Composite Sheet Sound Control Underlayment

AcoustiCORK™CRC950 utilizes Multi-Material composite technology to create a product with several resonance frequencies. This results in superior IIC (Impact Isolation Class) performance than can be achieved with a single homogeneous layer of a similar thickness. The 100% Cork top layer provides the optimal bonding surface for the mortars and adhesives used for finished flooring products, while the Cork and Recycled Rubber granule blend layer provides improved resilience and impact sound attenuation. The composite construction provides the structural integrity required for direct bond ceramic tile installations. Only 9.5mm (3/8") thick, it provides the performance required to meet or exceed most building code, developer or condominium associations requirements, even when there is no sound rated ceiling assembly present, without creating excessive thickness and/or transition issues. It is compatible with virtually all types of hard surface finished floor materials.

#### **ACOUSTICAL LABORATORY TESTING**

AcoustiCORK™CRC950 was tested at NGC Testing Services, an independent testing laboratory accredited by NVLAP and the US Dept of Commerce, for Impact Isolation Class (IIC) in accordance with ASTM E 492-04 and ASTM E 989-89 and for Sound Transmission Class (STC) in accordance with ASTM E 90-04 and ASTM E413-04. The results of this testing are shown in the table below:

Solid Concrete Slab Thickness	Finished Floor Assembly	Sound Transmission Class	Impact Isolation Class
(With No Sound Rated Ceiling	Description (No Sound Rated	(STC) Rating for the Total	(IIC) Rating - 8" Concrete Slab
Assembly)	Ceiling Assembly)	Floor/Ceiling Assembly	Direct Bonded Ceramic Tile
8"	Direct Bonded Ceramic Tile	STC 56	IIC 52

CRC950 Cork Underlayment

#### FIELD ACOUSTICAL TESTING

AcoustiCORK™CRC950 has been tested in Field conditions in accordance with ASTM test methods E 1007 and E 989. This testing was performed by Octave Acoustique Acoustical Consultants of Saint-Laurent-de-l'Ile-d'Orleans, Quebec, Canada.

Solid Concrete Slab Thickness (With No Ceiling Assembly)	Baseline FIIC Rating of Bare Concrete Subfloor	Flooring Assembly Description	Total FIIC Rating for 8" Slab & Ceramic Tile Flooring
8"	34	Direct Bonded Ceramic Tile	FIIC 56

#### STRUCTURAL PERFORMANCE TESTING

AcoustiCORK™CRC950 has been tested for structural performance in a direct bonded ceramic tile application in accordance with ASTM C-627 (Robinson Wheel Test) and received a Residential Rating. The composition cork layer of AcoustiCORK™ CRC950 has passed the Shear Bond Testing requirements for bonding with thin-set mortars (ANSI 118.1 & .4) in accordance with ASTM C-482- Modified Bond Strength (Membrane). The testing was performed by the Tile Council of North America.

#### **ENVIRONMENTAL BENEFITS**

AcoustiCORK™CRC950 meets many of the criteria of the organizations that promote and support green building initiatives. The use of AcoustiCORK in your project can help it qualify for credit points under the LEED™Green Building Rating System in the following areas:

- MR 4.1 5% Minimum Recycled Content of total building materials (approx. 85% recycled content by weight)
- MR 6 Specifying rapidly renewable building materials for 5% of total building materials.
- MR 7 The Use of a minimum of 50% of wood-based materials certified in accordance with the Forest Stewardship Council guidelines. (FSC Certified Content AcoustiCORK Available)
- EQ 4.1 Low Emitting Materials Adhesives & Sealants (Adhesives Specified meet SCAQMD Rule 1168)
- EQ 4.4 Composite wood or agri-fiber products must contain no added urea-formaldehyde resins.

#### **INSTALLATION ADVANTAGES**

AcoustiCORK™CRC950 is thin (3/8") light in weight and easy to install, yet it provides superior impact noise attenuation when compared to other direct bond systems of similar thickness in bonded tile applications. It is compatible with virtually all types of flooring adhesives, resulting in reduced labor and material costs and a lower total installed cost than many competitive systems.



9.5mm Composite Sheet Sound Control Underlayment

The following installation instructions are a recommendation, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures, as published by the Tile Council of America and as specified in the American National Standards Institute.

#### SUBFLOOR

- All subfloor work should be in accordance with the recommended procedures as published by the Tile Council of America and the American National Standards Institute (ANSI).
- 2. Concrete subfloor should be level, properly sloped and structurally sound
- 3. Inspect concrete subfloor for any open cracks and fill with a high-grade epoxy filler.
- Remove any excess concrete lumps or residue that may interfere with the installation of the AcoustiCORK CRC950 underlayment.

#### PERIMETER ISOLATION STRIP

- Install the precut 3/4" wide, 6mm thick perimeter isolation barrier vertically around the perimeter of the entire floor including any openings or protrusions such as electrical boxes, heating ducts, cold air returns, columns or pipes in the subfloor installation. The perimeter isolation strip MUST be installed prior to AcoustiCORK CRC950 underlayment being installed.
- Remove the release liner from the self-adhesive backing and place flat against the wall, flush to the floor.
- After positioning, press the isolation barrier firmly into place at all wall and vertical partitions surrounding the perimeter using the AcoustiCORK underlayment material.
- Never mechanically fasten the isolation barrier, as this will severely diminish the acoustical performance of the entire sound rated floor system.
- After the finished floor is installed the perimeter isolation barrier should be trimmed flush with the surface of the finished floor.

## ACOUSTICORK CRC950 UNDERLAYMENT for DIRECT BONDED CERAMIC TILE FLOORS

- 1. Starting in one corner of the room, snap a chalk line 24" from the edge of the perimeter isolation barrier installed at the floor/wall junction.
- 2. Using a properly sized U or V-notched trowel (minimum 3/32") apply a 100% Polyurethane wood flooring adhesive in the area between the chalk line and

#### INSTALLATION INSTRUCTIONS Ceramic Tile - Direct Bonded on a Concrete Slab Subfloor

the wall down the entire length of the area to be covered on the subfloor.

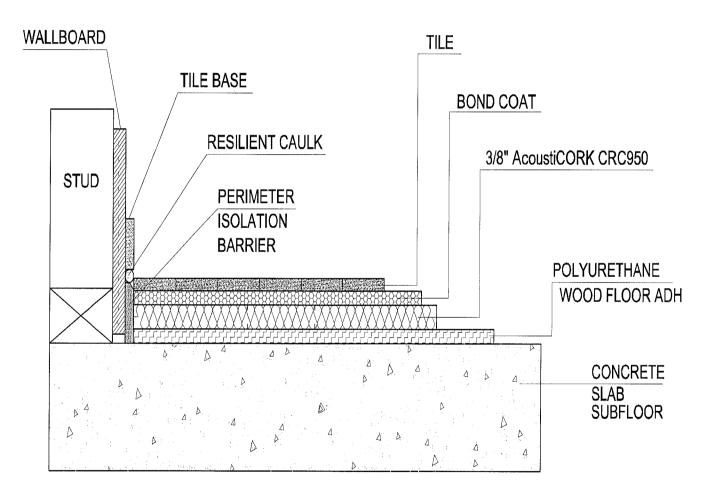
- 3. Lay the AcoustiCORK CRC950 sheets, with the Rubber/Cork (Black& Tan) side facing down toward the subfloor, into the bed of adhesive applied, butting the sheets tightly against the perimeter isolation barrier already installed. Trim the last sheet to length to fit the space available.
- 4. Snap another chalk line 24" from the edge of the previously laid sheets and repeat the process of applying the adhesive and installing the sheets, starting with a ½ sheet on alternating rows to stagger the seams. Repeat the process for the balance of the room.
- 5. Proceed to cover the entire room, making sure the sheets are tightly butted together, without gaps. Roll the floor area in both directions using a 100# roller, to endure the sheets are firmly embedded in the adhesive.

  Never mechanically fasten the sheets to the subfloor, as this will severely diminish the acoustical value of the product.
- 6. After completion, the AcoustiCORK CRC950 underlayment should cover the entire floor area without gaps and be securely bonded with the joints tightly butted.

#### **CERAMIC TILE INSTALLATION**

- Follow the tile and setting material manufacturers recommended instructions for the installation of the finished floor tile conforming to ANSI A108 1 A, B, C and A108.5, depending on the method of installation. Direct bonded applications of tile should be installed with a Latex Modified Thin-Set Mortar compliant to ANSI 118.4.
- After the tile floor is installed and grouted, visually inspect and remove, where necessary and excess mortar or grout that is in contact with any walls or protrusions in the floor. Failure to do so may greatly diminish the acoustical performance of the system.
- 3. Trim the Perimeter Isolation Barrier, previously installed, flush with the surface of the finished floor.
- 4. Prior to the installation of any base or trim, a bead of non hardening acoustical grade sealant should be installed on the top edge of the trimmed Isolation Barrier.
- 5. If a tile wall or cove base is to be installed, the space between the floor tile and the tile base should not be grouted. A non-hardening flexible color matching sealant should be used to fill this joint.
- 6 If baseboard or shoe molding detail is required, leave a minimum 1/8" gap between the finished floor and the bottom of the shoe or baseboard. This gap can be filled with a non-hardening, color matching, paintable or clear Acquistical Grade Sectors.

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