



# Composel AQUASHELL RS

LIQUID APPLIED

RAPID SETTING  
ELASTOMERIC WATERPROOF  
& CRACK ISOLATION MEMBRANE

CREATES 100% WATERPROOF MEMBRANE COATING & CRACK ISOLATION  
UP TO 1/8 OF AN INCH FOR THIN-SET TILE INSTALLATIONS

## ◆ PROPERTIES

- Fastest drying formula, cures in 2 - 4 hours (at 70°, 50% R.H.) and allows for flood test in 4 - 6 hours.
- Exceeds ANSI 118.10 & High Performance ANSI 118.12 for waterproofing and crack isolation.
- No Reinforcing Fabric Required
- Can be easily applied with trowel, airless sprayer, paint brush or roller.
- Interior and exterior
- Adheres to all common surfaces including concrete, cement backer board, plastic, metal, hardwood, brick, exterior grade plywood (interior only).
- Low VOC

## ◆ DESCRIPTION

Composel AquaShell RS is a fast drying, thin, load bearing liquid applied membrane composed of a modified elastomeric copolymer. With excellent elongation properties and high strength, AquaShell RS Creates 100% waterproof membrane coating and crack isolation up to 1/8 of an inch for high quality thin-set tile installations. The membrane is installed in a liquid state and can be applied to practically any form or irregular shape (i.e. base flashings, protrusions, walls, etc.).



Available in 1 gallon, 3 1/2 gallon pails.

## ◆ INSTALLATION

### SURFACE PREPARATION

All surfaces must be between 40° F (4° C) to 95° F (35° C) and structurally sound (deflection not to exceed 1/360 of the span), dry, clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminants which inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108.01 "General Requirements: Subsurfaces and Preparation by Other Trades." All substrates should be plumb and true, surface deviation should not exceed 1/4" in 10'. If product has separated or thickened hard, product should be mixed with a slow mixing drill, not incorporating air. Some separation may occur upon standing, which has no reflection upon the quality of the product.

### REINFORCEMENT

AquaShell RS has been formulated to perform as a waterproof and crack isolation membrane without reinforcing fabric. As a waterproof membrane, manufacturer recommends the use of Composel 8" reinforcing fabric to ensure maximum protection at joints, cracks, protrusions, dissimilar materials, and drains.

## ◆ PREPARATION

**JOINTS, CRACKS & PROTRUSIONS** Pre fill all substrate cracks, cold and control joints with latex modified thin set or polyurethane caulk. Fill all voids with latex modified thin set to within a minimum of 1/8". Apply a liberal coat of AquaShell RS liquid around joints, crack and protrusions. Embed Composeal 8" reinforcing fabric into the wet AquaShell RS, cover with a second coat of AquaShell RS, "sandwiching" the reinforcing fabric. Apply an additional application to prevent pinholes.

**DRAINS** Should be of the clamping ring-type with weep holes for thin set application. Drain should be even, level, plumb and fully supported, without movement. Fill all voids with latex modified thin set to within a minimum of 1/8" from the drain. Apply a liberal coat of AquaShell RS liquid around and over the bottom drain clamping ring. Embed Composeal 8" reinforcing fabric into the wet AquaShell RS, cover with a second coat of AquaShell RS, "sandwiching" the reinforcing fabric. Apply an additional application to prevent pinholes. After drying, set the upper clamping ring onto the AquaShell RS membrane with a continuous bead of polyurethane caulk or similar material. A toilet flange can be treated in the same manner. Can also be used with reinforcing fabric to bond to the flange of the Composela linear drains.

**CEMENT SUBSTRATES** All concrete substrates should be cured a minimum of 28 days. Smooth steel troweled floors to a fine broom finish.

**CEMENT BACKER BOARD** Follow cement board manufacturer's instructions. Tape and fill joints per manufacturer's directions and "Preparation" section of this data sheet.

**PLYWOOD AND OSB SUBSTRATES** All plywood installations should be interior areas only and protected from exposure to moisture. Skim coat plywood surfaces with latex modified thin set before membrane application.

◆ **MEMBRANE APPLICATION** Allow any recently prepared areas to dry. Apply a liberal coat of AquaShell RS membrane at a rate of 50 sf per gallon. Periodically, check the film thickness with a wet film thickness gauge, first wet coat should be applied 30 mils wet thickness. Apply Composeal 8" reinforcing fabric into the wet AquaShell RS, After the AquaShell RS turns a darker green, cover with a second coat of AquaShell RS at 30 mils wet thickness, "sandwiching" the reinforcing fabric. Total AquaShell RS membrane thickness after drying should be 40 mils.

**MOVEMENT (EXPANSION) JOINTS** Designed to experience movement, should be provided to comply with TCA method EJ 171. For waterproofing of movement (expansion) joints, the membrane must not be applied unsupported to bridge across expansion joints. The joint must be cleaned to remove an loose debris and an opened or closed – cell backer rod is installed to the joint to the proper depth as specified by designer. 100% Silicon or polyurethane caulk pressed into the joint, coating the sides and leaving the joint flush with the surface. After the sealant is dry, the AquaShell RS membrane is applied following the "Membrane Application" instructions above. Then ceramic or stone tiles are installed over the membrane, leaving a gap over the joint as specified by the designer. After the tile is set, the joint must be filled as specified by the designer.

**CERAMIC OR STONE APPLICATION** Ceramic or stone tile can be installed immediately after the AquaShell RS membrane has dried to the touch. Comopitite recommends a quality thin set latex portland cement. Follow the directions on thin set container for proper application.

◆ **CURING** Flood Testing can usually be done at a minimum of 4 hours at 70° F (21° C) and 50% R.H.. Provide adequate protection for AquaShell RS membrane, even if covered with a ceramic or stone tile application, against exposure to rain, or inclement weather for a minimum of 24 hours at 70° F (21° C) and 50% R.H.

◆ **CLEANING** Clean tools, hands and equipment with warm soapy water before the material has dried. Material that has dried is difficult to remove, remove while fresh.

◆ **COVERAGE** (Approximate) 50 square feet per gallon

◆ **LIMITATIONS** Do not use AquaShell RS membrane below 40° F (4° C); do not allow membrane or substrate to be below 40° F (4° C) for the first 72 hours after application. Cool and wet weather may delay the set times of the AquaShell RS membrane. Do not apply over surfaces subject to hydrostatic pressure. Do not use as a primary roofing membrane. Do not leave AquaShell RS membrane unprotected or exposed to weather for more then 30 days. Do not use membrane as an adhesive or wearing surface, membrane must be covered with ceramic or stone tile. Maximum amount of moisture in the concrete substrate using a calcium chloride test should not exceed 5 lbs/1,000 ft².