

Composeal Products and tools described in black text are for use on all Composeal GOLD installations, those described in blue text must be used for waterproof applications.

## INSTALLATION PRODUCTS

# INSTALLATION TOOLS



### COMPOSEAL GOLD MEMBRANE

The standard of excellence in Crack Isolation Waterproof Membranes. GOLD is available in standard 5 foot wide, 450 sq. ft. rolls.



Composeal GOLD.





# PRE-FORMED GOLD CORNERS

For installations requiring waterproofing, GOLD Corners are available for inside or outside configurations.

### NOTCHED TROWEL

A notched trowel will be required to spread the bonding material you choose. When using a slurry coat of latex fortified thinset mortar, use a 3/16" V notch.

laying out and cutting your installation of





Composeal GOLD must be *fully* embedded into the bonding material. The 100 lb. roller applies pressure and removes trapped air when slowly and evenly worked across freshly installed Composeal GOLD.





# COMPOSEAL FLEXIBLE PVC CEMENT

Composeal's solvent cement for flexible PVC makes a strong chemical, waterproof weld between sheets of GOLD. For welding GOLD seams and GOLD corners.

### HAND ROLLERS

Used to fully imbed GOLD into the bonding material on vertical applications or areas too hard to reach with the 100 lb. roller, and to ensure welding of seams and corners when using Flexible PVC Cement.



### **COMPOTITE ELASTISEAL**

A high tack, fast curing sealant used to obtain a "gasket type" seal around corners, drains, pipes, conduits, fixtures, flashings and penetrations. A 100% solid silicone, mildew/mold resistant can also be used.

### **CAULKING GUN**

If Compotite Elasti-Seal or a 100% solid silicone mildew resistant sealant is to be used, a good quality heavy duty caulking gun will be required for application.



# GENERAL INFORMATION

# **BEFORE YOU BEGIN**



COMPOSEAL GOLD is a quality, bondable 40 mil PVC and polyester Crack Isolation Waterproof Membrane for thin-set tile and stone installations.

GOLD is bonded directly to the clean, dry substrate of concrete, "mud" beds, cement backer boards or other stable approved backing, and the tile or stone is thinset directly to the GOLD. This powerful protection adds less than 1/8" to 1/4" to the overall thickness of the finished installation. (Plywood must first be isolated by mortar fill or cement backer board before using GOLD and setting tile above it if moisture absorption by plywood is expected.)

GOLD is intended for use as a Crack Isolation membrane to prevent cracks in the substrate from "telegraphing" through to the finish surface\*. Composeal GOLD can easily be installed to provide a completely waterproof thin-set tile installation.

GOLD may be used in interior or exterior areas, but is not intended for use as a single-ply roof membrane over occupied space. GOLD is not intended for use in bridging over expansion joints of any kind but can be carried through such joints (see Composeal GOLD Sweets brochure and Data Sheet 92-1).

# \* Most substrate cracks can be neutralized by GOLD.

Structural cracks or cracks resulting from building settlement or movement are by definition dynamic and may move more than GOLD (or any other material) can compensate for. Inspect the crack thoroughly to determine its nature. The following are among the warning signs of structural cracking: 1) Crack varies in width. 2) Crack is higher on one side than on the other side. 3) Slabs adjacent to the crack are not level with each other. If any above condition is present, causes of the problem should be determined and corrected. No tile installation can hold together deficient structures, or compensate for flawed designs.



Carefully lay out installation to minimize cuts and seams. Chalkline sheet locations



Pre-cut GOLD to fit layout. For waterproofing, pre-cut flashing pieces save time in tight space

**Determine your needs.** Do you want crack isolation only, or do you require waterproofing as well? For crack isolation only, follow all instructions printed in black. For waterproof installations, you must also follow the instructions printed in blue.

Check the substrate for bondability. All surfaces must be structurally sound, clean, dry and capable of supporting the weight of a tile installation. Concrete surfaces <u>must</u> be checked for bondability. Apply a single drop of water to the concrete surface. If it soaks in immediately, the slab is bondable. If residual curing compounds, sealers, grease or other bond breakers are present, the drop will remain beaded on the slab for a minute or more. It is a standard industry practice that all such bond-breaking agents must be removed before a thinset installation is attempted. If surface is rough or uneven, patch or level first with a quality cement based patching compound. Correct all substrate deficiencies before installing GOLD. Check substrate for proper drainage and slope to drain, if applicable. Any existing flashings must be inspected and found to be properly designed and installed before GOLD is installed.

Consider your layout. It is best to carefully plan your installation to minimize traffic over freshly installed GOLD. Careful planning will also minimize cuts and seaming, saving time and money.

Select your bonding material. When selecting which Latex modified thin set to use for installing GOLD, check with manufacturer for instructions and proper use of their products. It is important that no foot traffic be allowed on freshly installed GOLD until mortar is fully cured (4-48 hrs.), otherwise de-bonding, depressions in the bond coat, loose spots or bubbles may occur. "Fast setting" Latex products may allow for quicker return of foot traffic. Check with thin set manufacturer to ensure compatibility of their products with Composeal GOLD.

Locate the proper tools. If you can't locate the tools shown on the other side of this page, contact your Composeal distributor for help.

Understand these instructions. Be sure you are comfortable with all installation procedures and techniques before you begin your project.

Technical support, full specifications and Material Safety Data Sheets for individual products may be obtained from Compotite Corporation at 800-221-1056.



Use Latex Thin Set for bonding, mix per manufacturer's instructions. Set tile after full mortar cure



Place GOLD into bonding material. Allow 2" overlap to all adjacent sheets and flashings

Lay out your installation (Fig. 1). Prepare a rough sketch of your installation showing direction and lengths of GOLD required. Locate walls, angles, protrusions, location of expansion joints, etc. Be sure to allow for 2" overlap at all seam locations, 4-6" for upturn at walls when waterproofing. Use chalk to outline sheet locations on the substrate. It is usually best to pre-cut sheets needed prior to installation (Fig. 2).

"Flash" GOLD at walls and edges. For waterproof installations, GOLD should be turned up wall at least to flood point, or to height of base tile. GOLD sheets may be cut oversize to allow for upturns at walls, and creased for a tight fit at floor/wall juncture. Be sure to crease material so the "curl" of the material pushes back to the wall or floor. For tight spaces, or where a lot of flashing is required, pre-flashing will save installation time. Flashing pieces and pre-formed corners should be lapped in direction of water flow to drain.

Bonding GOLD to substrate. Use Acrylic Modified Thin Set meeting ANSI A118.4 to bond GOLD to substrate. Mix thin set in a "slurry" consistency, then apply to substrate with a 3/16" V-notch trowel (Fig. 3). Place GOLD sheets while slurry is still wet (do not allow thin set to skin over). Make certain slurry is "wetting out" the GOLD by occasionally pulling up a freshly installed sheet to confirm thin set transfer and 100% coverage.

Placing GOLD into bonding material (Fig. 4). When placing GOLD, try to stay off previously installed GOLD, and be sure to allow for 2" overlap at all seam locations.

Rolling to embed GOLD (Fig. 5). Use a 100 lb. roller immediately after the GOLD sheets are placed into the thin set, as needed to completely embed the membrane. Apply pressure and roll from center of sheet to outer edges to remove all air pockets, then forward and back across the GOLD to ensure proper bedding. Use hand rollers for seams, vertical and hard to reach areas. When using roller, if excessive amounts of thin set squeeze out at seams, adjust the amount of pressure during rolling or the consistency of the bonding mortar.

Welding seams and corners (Fig. 6). Seaming is required for all installations. Pre-formed corners are required in waterproof installations. Sheets of GOLD must always be welded using Composeal Flexible PVC Cement. Welding can be done as sheets of GOLD are laid (advised when bonding with thin-set), or after all sheets have been installed. Dispense PVC Cement out of can using dauber in cap, or decant into a larger container and apply cement with a 1" wide brush. Apply PVC Cement liberally to both sides of the seam, working well into the scrim fabric. Sometimes a second application is required if cement has totally absorbed into scrim. ALLOW CEMENT TO AIR 1-2 MINUTES UNTIL TACKY, then join seams and roll with hand roller. GOLD pre-formed corners are to be welded the same way. Flood testing may be conducted 4 hours after seaming.

Sealing at flashings, penetrations and drains (Fig. 7). All gs and penetrations of pipes, conduits, fixtures, etc. must be sealed using Compotite Elastiseal or 100% silicone mildew resistant sealant. Apply a liberal amount of sealant to both the penetrating object, and to the GOLD membrane to assure continuous contact. At drains, the GOLD membrane should be sealed to drain body both above and below the membrane. FOR SHOWER DRAINS, CODE REQUIRES a two-piece clamping ring type drain with weep holes, set in mortar. GOLD membrane is installed over the lower flange, and drain opening is cut out to inside diameter of drain. Bolt holes are punched with nails, and a bead of Elastiseal or silicone is applied under GOLD membrane before top half of drain is bolted on securely and a flood test is done.

**Installing Tile or Stone.** Install tile in accordance with ANSI A108 standards. Use Acrylic Modified Thin Set meeting ANSI A118.4 to bond tile to GOLD. 100% coverage of bond coat to GOLD is required for highest performance levels. It is important that no foot traffic be allowed on freshly installed GOLD until mortar is fully cured (4-48 hrs.), otherwise de-bonding, loose spots or bubbles may occur. Fast setting mortar products allow for quicker return of foot traffic (4 hours).



Fully embed GOLD into bonding material and remove air pockets using rollers



Weld all seams and corners using Composeal Solvent Cement for flexible PVC



When waterproofing, use Elastiseal or silicone to bond GOLD to flashings, protrusions, drains