Compotite Corporation 800-221-1056

Durability of Composeal Membranes

Accelerated Aging Tests Prove Durability of Composeal PVC Membranes

Tests recently conducted on behalf of the Ceramic Tile Institute by Matrecon, Inc. reaffirm the long term durability of Composeal PVC membranes, as proven by problem-free field installations in excess of 35 million square feet since 1980.

The Accelerated Aging test (ASTM D1203-89, Method A) simulates aging conditions by measuring the amount of molecular loss (or *plasticizer migration*) from the tested material. All brands of shower pan liners use a specific type of *plasticizer* to make the membrane flexible. *Excessive* molecular loss from plasticizer migration *could* eventually cause brittleness in a membrane.

In superior formulations such as Composeal, these plasticizers are carefully balanced with powerful *bio-stabilizers* which prevent any type of biological breakdown. These test results confirm Composeal's high quality and well balanced formulation.

ASTM standards have set the allowable molecular loss at a maximum of **1.5**% for PVC or CPE waterproofing membranes. The actual results for Composeal 40 was a loss of only **.33**%! Less than one-fourth the allowable loss.

So called "plasticizer migration" has no effect on long term quality or durability of Composeal PVC Shower Pan Liners especially when they are covered with a cement mortar bed. The migration, or aging of the membrane is actually inhibited by the protective cover which traps any escaping plasticizer molecules. The tables following this bulletin show actual test results for Composeal, and for our primary competitor which utilizes far more expensive CPE materials.

Composeal products are fully tested by the Ceramic Tile Institute, and appear on their Tested Materials List. Composeal is approved by UPC-IAPMO, SBCCI and BOCA. Composeal continues to offer high quality, durable, economical waterproofing solutions to the tile and plumbing trades.

If you have any questions regarding Composeal products, or wish to obtain further information or technical assistance, please call Compotite Corporation Toll free at 800-221-1056.

Summary of Matrecon Labs Test Results
ASTM D1203-89A

Volatiles (plasticizer) Loss of Composeal 40 Mil Shower Pan Membrane (PVC) as compared to Chloralloy 240 Shower Pan Membrane (CPE). Measured in accordance with ASTM D1203-89A.

Parameter	Standard	Chloralloy 240	Composeal 40
Thickness, mm Thickness, mil Initial Weight (W1), g Final Weight (W2), g Weight Loss (W1-W2), g		1.01 39.8 2.7868 2.7795 0.0073	1.07 42.0 2.7057 2.6967 0.0090
% Weight loss [(W1-W2)/W1]x100	**<1.5**	**0.26**	**0.33**
Distortion or change in appearance		None	None

Full results of independent testing of this ASTM procedure are available through Compotite Corporation