



Polibrid Coatings, Inc.

6700 FM 802 – Brownsville, TX 78521 – USA Tel. (956) 831-7818 Fax (956) 831-7810 www.polibrid.com E-mail – techsupp@polibrid.com

PTB-0301

## POLIBRID 705 BONDED GEOMEMBRANE LININGS ANOTHER POLIBRID INNOVATION!

An innovative technique developed by Polibrid and Carboline over the last five years has gained wide acceptance as an integral part of a **Polibrid 705** lining application to concrete surfaces.

This advanced system, called a **Bonded Geomembrane**,

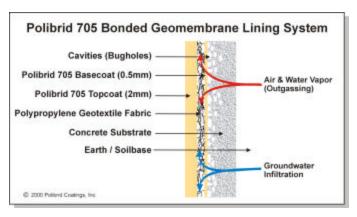
basically consists of geotextile fabric panels embedded between two layers of the Polibrid 705 coating. Pre-cut, heat-set, nonwoven, 100% polypropylene fabric panels are pressed onto a

Coat	Material	Product	DFT
1	Basecoat	Polibrid 705	20 mils (0.5 mm)
-	Geotextile	Carthage Mills FX 80-HS	-
2	Topcoat	Polibrid 705	80 mils (2 mm)
Total System (Exclusive of Geotextile Fabric)			<u>100 mils (2.5 mm)</u>

still-fluid Polibrid 705 "basecoat" then the fabric is "topcoat ed" as usual. It is especially suitable for vertical, poured-in-place concrete surfaces (walls). The table above describes a bonded geomembrane lining system for new or existing concrete, with or without exposed aggregate.

## SYSTEM FEATURES

• The embedded geotextile **bridges 100% of cavities** in concrete and eliminates resurfacing altogether.



- The embedded geotextile **eliminates pinholes** produced by the outgassing of concrete during application. It acts as a filter, dissipating air or water vapor throughout the entire surface area of the embedded fabric. There is no way for air to blow through the coating when applied as a topcoat onto the geotextile fabric.
- The embedded geotextile, once in service, **dissipates hydrostatic pressure** against the lining from groundwater infiltrations. Excessive hydrostatic conditions can exert concentrated pressure to certain sections of the applied lining only. Dissipating these loads for the lifetime of the lining is a major improvement.

• The embedded geotextile **greatly improves the tear strength** of a Polibrid 705 lining. We routinely recommend the use of six-inch wide strips of this material as a reinforcement/bond-breaker over expansion joints. The non-woven, random fiber attributes of the geotextile fabric prevents stresses placed on any part of the fabric from affecting any other part. Under most conditions, the topcoat of a bonded geomembrane lining is under no stress whatsoever and won't be affected by normal surface shrink age cracks, most dynamic cracks and, of course, the designed movement of expansion joints in concrete.

• What may not be obvious to those that have not actually seen this system being installed, is the **dramatic reduction in the time needed to install a monolithic lining** on vertical concrete surfaces. We've seen it installed up to four times faster than a direct to concrete application!

<u>This system is recommended for vertical surfaces</u> (walls)... usually the toughest part of a concrete structure to deal with. Though not impossible, the relatively fast setup times of Polibrid 705 can make it impractical to install a bonded geomembrane system on floors or ceilings. This simple innovation, however, can mean substantial savings in application costs and produces major benefits to the lining system overall!

## CONTACT YOUR LOCAL POLIBRID SALES REPRESENTATIVE FOR MORE INFORMATION!