

## ***Application Guide: MARBLE, CERAMIC & NATURAL STONE & WOODS WITH NO RETAINED OILS and Other Hard Substrates***

### Supplies Needed:

1. Xylexin XL Series Part A and B (fast dry activator)
2. Xylexin Defoamer when called for. Typically not used with Satin or Matte finishes.
3. Product Thinner when needed. (PPG Amercoat 911 Thinner is the recommended thinner for thinning Xylexin products. Thinning is generally not necessary).
4. Defoamer when called for at a ratio of 8 ounces per gallon kit of Xylexin.
5. Lacquer thinner for cleanup
6. Paint can opener
7. Stir sticks
8. Measuring cups
9. Mixing bucket or pitcher, OR quart or 8 ounce cups
10. Paint filters (fine mesh)
11. Roller frames
12. 3/8" nap roller covers (non-shed, shed resistant)
13. 4" foam roller
14. Sanders (Ridged 6" random orbital) or variable speed grinders and Vacuum's
15. 60 grit and 150 grit sand paper, or 60 grit metal edge grinding wheels
16. Tack rags
17. Microfiber rags
18. Painters rags for clean up

### First Coat

1. Make sure surface is free from any moisture and grease
2. Sand or grind stone surface with a 60 to 80 grit sand paper, sand until the whole surface is dull
3. Double wipe surface with a damp lacquer thinner rag

4. Wipe off surface with a tack rag
5. Stir Part A until all flattening paste is dissolved. (There is no flattening paste in the Gloss).
6. Mix product 4 parts A to 1 part B, stir, add Defoamer, when used, and filter into paint tray.
7. Apply coating with 3/8" nap roller to the surface, and a 4" foam roller for the sides
  - a. Roll in a uniform manner, checking for holidays (do not put any pressure on roller when applying)
  - b. Apply 3 to 5 mils wet film thickness
8. Let product cure for 24 hrs before 2<sup>nd</sup> coat

### Second Coat

1. Sand surface with 150 to 220 grit sand paper
2. Double wipe surface with a damp lacquer thinner rag. (Make sure to wipe entire surface to remove oil residue from Defoamer if Defoamer was used.)
3. Wipe off surface with a tack rag
4. Mix product 4 parts A to 1 part B, stir, add Defoamer if used, and filter
5. Apply coating with 3/8" nap roller and a 4" foam roller for the sides

### **General Application**

#### Preparation:

Coating performance is proportional to the degree of surface prep. Marble or other surfaces must be in sound condition and free of all loose coatings, oil, water and other contaminants. Marble must be abraded before application of coating, diamond grinding (with 120 grit pads min.) and sanding (60 to 80 grit screens) are the recommended methods for stone and equivalent hard surfaces.

It is very important that a suitable moisture barrier is in place for shower and bath and exterior tile applications. If no moisture barrier is in place, seasonal variations in ground moisture can cause excessive hydrostatic pressure for exterior applications, and moisture can be trapped behind stone or marble in shower and bath applications. A typical moisture reading device can be used to ensure no moisture is present. Use ASTM 4263 plastic sheet method to check moisture content (place a 3mil sheet of plastic on surface and duct tape down for a 24 hour period, if the stone has darkened or the plastic has moisture on it, the surface is not ready to coat).

When coating over old coatings, make sure there are no loose, scaly, cracked, or chipped areas. Apply a test patch 1 week prior to the project to test adhesion to other coatings. If there is any question as to the old coating, remove it and treat like bare marble and natural stone.

Timing is very important to the success of application. For exterior applications check weather forecasts for a min of 3 days prior and 3 days following the coating application. Surface temp must be above 50 degrees F. for coating. Excess temp and humidity will speed cure time and thinners may be needed to proceed.

When acid etching has been applied, make sure to properly neutralize the substrate before application.

Patching must be done prior to application. Typical knife grade acrylics and polyesters are commonly used. Make sure all loose grout areas are removed and redone and completely dry before application.

Wash and wipe with lacquer thinner just prior to coating for specific applications. And make sure surface is free from dust, dirt, oil, and any other contaminates.

#### Mixing:

Xylexin is a 2 component coating. Standard Xylexin products are mixed at a 4:1 ratio, 4 parts A to 1 part B for a total of 5 parts. Determine how many ounces are to be catalyzed and divide by 5 parts. Four parts for Part A and one Part for Part B Activator. All single gallon kits are pre measured. Make sure part A and B are thoroughly mixed. Please refer to mixing charts for smaller amounts. Always mix part A and B together before adding any thinner, Defoamer or other additives. Allow product to sweat for 5 min before use. Xylexin **MUST** be mixed extremely accurately to ensure proper product performance; there is no room for error. Part B is not a hardener and will not make the product cure faster. Do not mix more material than can be applied in the standard working time (see pot life data). Material that has begun to set cannot be used and must be discarded. Most often, no thinner or reduction is necessary.

#### Application Equipment:

The following is a guide. Adjustments in application equipment or technique may be necessary to accommodate varying field conditions.

**Sprayers:** Xylexin can be sprayed through most all conventional airless, HVLP, cup gun, pressure pots, electrostatic, and air assisted airless spray guns. Some garden sprayers will also work. Equipment should be primed and cleaned with xylene or lacquer thinner. For large flat areas power roller attachments for airless sprayers work very well. Use appropriate masking with filters, etc. **DO NOT BREATHE AIR PARTICLES OF XYLEXIN!!**

Rollers: 3/16" to 1" nap roller covers will work with Xylexin depending on the desired finish. Rollers should be high grade shed resistant.

Brushes: Chinese bristle oil and stain brushes work best with Xylexin although any brush can be used.

## Coating Procedure:

Again this is a guide. Each application will have unique solution characteristics.

1<sup>st</sup> coat: Make sure area is prepped properly and product is mixed correctly for use. Typical paint trays and buckets can be used for application. Adhesion is critical on the 1<sup>st</sup> coat. Typical pot life of Xylexin products is 2 hours (make sure to mix up only the amount that can be applied). It is recommended to cut the product 10 – 20% using PPG Amercoat 911 thinner or Xylene (field conditions may increase or decrease these recommended amounts), this will ensure proper viscosity to penetrate the surface and create a tight molecular bond. If adding anti-slip aggregate broadcast during first coat and backroll, if necessary use spiked shoes to walk on coated areas. Depending on products used, dry time will be 4 to 8 hrs, it is recommended to wait a minimum of 12 hours for 2<sup>nd</sup> coating, 24 hours is preferred.

2<sup>nd</sup> coat: Before application, 1<sup>st</sup> coat should be sanded lightly with an 80 to 220 grit paper or screen depending on surface, and wiped clean with a damp lacquer thinner rag. Surface should be wiped with a tac rag when possible to remove any lint or dust. Again the final finish will be only as good as the prep. The second coat should be cut 0 - 10% using PPG Amercoat 911 thinner or Xylene, Thinning this coat would be for flow of the product or for higher temperatures. Make sure to carefully apply final coat, going back and touching up any holidays will result in a build of sheen. It is recommended to backroll in an opposite direction to prevent this.

Defoamer: When coating over a coat of Xylexin that used Defoamer the surface MUST be sanded and wiped with lacquer thinner (or a like product) thoroughly.

Brush & Roll: When brushing and rolling it is best to cut in first and then roll, roll product in an even and uniform manor from one side to another or to a joint or seam to avoid lap marks (any surface area that is over coated will build sheen). While material is being rolled out an applicator wearing spiked shoes should backroll and crossroll to prevent holidays, finish by uniformly tipping off the surface by rolling the full length of the surface in one direction. Keep a wet edge at all times. Wet film thickness should be between 5 and 8 mils for EXS-10 pigmented coatings and between 3 and 6 mils for XL 90 and XL 30 clear coats. Adding Defoamer to final clear coats at a ratio of 16 parts of base to 1 part (8 ounces per gallon) will relax the product and give a superior finish with no surface tension or fish eyeing.

**Spraying:** Spraying should follow the same guidelines as rolling as far as mil thickness and coverage. When applicable, backroll to ensure coverage and uniformity.

Xylexin can be used to create a multiple of faux finishes from granite and marble looks to stained looks used to change the stones color.

Xylexin when applied enhances and sometimes darkens or deepens the color of the stone, marble, and grout. Grout can be irregular and stained and can be covered with Xylexin solid color pigmented coats to make uniform.

Buffing:

Xylexin, when cured (at least 7 days, preferably 2 to 4 weeks), is hard enough to be buffed with diamond polishing equipment and or automotive buffing compounds. For floor applications high speed buffers with a white pad will work well to remove dust. For table and counter applications hand held variable speed buffers with a lamb's wool pads and buffing compound work well.