



Delta Polymers, Inc. – 130 South 2<sup>nd</sup> St. – Bay Shore, NY 11706 – (631) 254-6240 – (631) 595-2537 (fax)

## **POLYGARD 159FR - APPLICATION INSTRUCTIONS**

### **SURFACE PREPARATION - CONCRETE**

Concrete should be structurally sound, free of dust, dirt, loose paint. Concrete should be shot blasted, or scarified for the best result.

New concrete can be acid etched with a 25% Muriatic acid followed by a three time cleaning with fresh water. Wait for the floor to dry before you apply the Liquid Epoxy.

All hair-line cracks, holes, broken surfaces should be repaired and patched with Epoxy Compound (*Polybond 364* or *PolyKrete Gel*). All the patches should be dry and sanded before you apply the liquid epoxy.

### **SURFACE PREPARATION - WOOD**

Wood should be strong. There can be no flex in the floor. Put enough screws into floor (every linear foot should be screwed down). Patch all the seams with Epoxy Compound. Preferably use Fiberglass tape (4" width) on all the seams. That will make the seams strong and help prevent cracking at the seams. Put the epoxy gel on the seams with putty spatula. Lay down the fiberglass. Press it down. Apply Epoxy Compound on the top and feather it out with the spatula. Let it cure. Sand it. Clean it and apply the liquid epoxy.

### **MIXING RATIO**

For your convenience the Mixing ratio is **1 Part Base to 1 Part Hardener** by volume.

### **MIXING**

1. Use a drill with jiffy mixer at slow speed (200 RPM). **Mix thoroughly scraping sides and bottom.**
2. Or Mix by hand with a mixing paint stick or spatula. **Mix thoroughly scraping sides and bottom.**

The time to mix with drill or by hand should not be more than 3 Minutes.

Mix only enough material that you can handle.

2 Gallon Kit	(2 gallon Base : 1 gallon Hardener)	Coverage approximately 300 ft <sup>2</sup> .
10 Gallon Kit	(5 gallons Base : 5 gallons Hardener)	Coverage approximately 1000 ft <sup>2</sup> .

### **Once the Epoxy is mixed, do not leave it in the Container.**

Immediately pour it on the floor against the farthest wall from the door or exit, in the form of long lines. Spread the epoxy with a roller or squeegee at the rate of 100 sq. ft. per gallon.

**Polygard 159 FR** is a self-leveling material. You will see that in few minutes, the roller marks or squeegee lines will self-level and you will see a smooth surface. If the areas are big, we recommend that you use golf shoes with spikes so that you can walk into the wet floor. Be very careful. Wet epoxy is **SLIPPERY** and you should not fall into the wet epoxy. These floors should be applied or installed by professionals who have the experience.

### **STEP BY STEP APPLICATION**

--Step #1. Take **Polygard 159FR**, and mix **1 part base to 1 part hardener** by volume. **Mix thoroughly.** Apply at the rate of 80-100 sq. ft. per gallon. Broadcast Gem Stone quartz at the rate of approximately 1 pound per sq. ft. Cover epoxy completely with sand until you cannot see any wet spots. Let cure overnight.

For a Mortar Mix – Add two parts sand to the 2 part total epoxy mix (as mixed above—1 to 1). Mix thoroughly. Pour mixture on the floor. Trowel the mixture at a rate of 1/16<sup>th</sup> or 1/8<sup>th</sup>, depending on final thickness required. Broadcast Gem Stone quartz until you cannot see any wet epoxy. Let cure overnight.

--Step #2. Using clean tools, pick up all the loose sand. Apply **Polygard 159FR** at the rate of 80-100 sq. ft. per gallon. Broadcast quartz and cover epoxy completely with sand until you cannot see any wet spots. Let cure overnight.

--Step #3. Using clean tools, pick up all the loose sand. Lightly sand the floor. Vacuum the floor.

--Step #4. Mix **Polygard 159FR** at **1 part base to 1 part hardener by volume.** **Mix thoroughly.** Apply at the rate of 100 sq. ft. per gallon. This will give you a non-skid floor. For a smooth surface, apply an additional coat of **Polygard 159FR.**

**\*\*\*IMPROPER MIXING WILL LEAVE SOFT &/OR TACKY SPOTS ON THE FLOOR\*\*\***

You may apply the (optional) final coat of *Polythane 1005* (see below) at the rate of 200-300 sq. ft. per gallon. Final thickness of the floor will be 1/8" thick. By repeating the above process it can be built up to 1/4" thick.

**POLYTHANE- 1005**

A two-component aliphatic, polyester modified polyurethane, which is highly chemical and abrasion resistant. It is also highly UV stable. Clear and Custom made colors are available. Apply at the rate of 200-300 sq. ft. per gallon. Mix two parts Base to one part Hardener by Volume. Mix thoroughly. This has a working time or pot life of 2 hours. Material is Flammable. **Keep it away from children.** Use proper ventilation and wear proper mask for Hazardous Fumes.

**RECOMMENDED CLEANING EQUIPMENT**

1. Pressure Spray Washer
2. Industrial detergent
3. Power scrubber
4. Wire brush
5. Squeegee
6. Wet/dry Vacuum cleaner

**RECOMMENDED CLEANING PROCEDURE**

1. Sweep clean the surface.
2. Mix the Industrial detergent according to the instructions.
3. Spread the detergent solution on the floor. Let it sit for ten minutes. Scrub the floor. Rinse well.
4. Vacuum all the excess water. Squeegee the whole area.
5. Let it dry completely.

**MAINTENANCE**

For smooth finish Epoxy Floors, if excessive wear occurs, re-glazing should be done periodically.