

# ITC 213 Ceramic Coating for Metals Mixing and installation Instructions for Metal Surface Coating Procedure

### **STORAGE**

ITC products must be stored on pallets or shelves and be kept between 40° F and 90° F (5° C and 30° C). Warm storage is recommended in extreme cold conditions. All excess mixed material can be stored in the original airtight ITC containers and re-shelved. The containers must be sealed tightly to prevent material from hardening. Label all premixed material so that additional water is not added and remixed.

#### **EQUIPMENT**

The following is a list of equipment that is required for the veneering process:

- 1. 1 gallon or larger bucket/rubber container to mix the ITC material.
- 2. ½" drill motor or larger with long mixing attachment.
- Rubber gloves
- 4. Clean rags or paintbrush (spray guns can be used for applications on large surfaces)
- 5. Eye protection

Note: Most equipment can be purchased at any home improvement store.

## **MIXING**

To mix, simply add 1/3 container of water to one full container of ITC 213. Use only clean potable water with temperatures between 40<sub>0</sub> F and 85<sub>0</sub> F (5<sub>0</sub> C and 30<sub>0</sub> C). Mixing time needs to be sufficient to produce a uniform consistency. Do not add additional water. During application, additional mixing may be required to prevent settling.

#### **WARNING**

The following will adversely affect the properties of ITC products:

- Excessive water
- Dirty mixing equipment
- Cement contamination
- Dirty and/or hot water
- Admixtures
- Dirty spraying equipment

## **INSTALLATION**

- 1. Metal surfaces should be thoroughly degreased and cleaned using a dilute Clorox bleach and water solution. Very smooth surfaces should be scratched up using a grinder.
- 2. For optimum adhesion the metal surface should be heated to around 100° F allowing the pores to of the metal to expand and accept the ITC 213.
- Prepare the ITC 213 for application per the mixing instructions by adding 1/3" container of water to one full container of ITC 213.
- 4. Using a clean rag or sponge, dip it into the coating and vigorously rub the coating onto the surface applying and even thin coating approximately 1/32" to 1/16" thick. For large surfaces, spray entire surface with ITC 213 using a minimum of 80 psi of air pressure. DO NOT RUSH and do not leave any areas uncoated. The thickness of the sprayed coating should be approximately 1/32" to 1/16" thick. The distance of the spray nozzle to the surface should be approximately 16".
- DO NOT OVER SPRAY. Too thick of an application will cause material to fail prematurely. Any over sprayed material that begins to run must be wiped off immediately.
- 6. Allow to dry overnight.
- 7. Before any ITC topcoat can be applied (ITC 100HT or ITC 296A), ITC 213 must be fired and baked onto the metal substrate to a minimum of 250° F.

NOTE: Do not use excessive heat to dry the coating during the first 24 hours after installation. Either use fans to move the air or simply leave it to dry overnight.