

**INSTALLATION INSTRUCTIONS FOR SPRAYING HIGH PURITY  
INTERNATIONAL TECHNICAL CERAMICS (ITC 296A) ENERGY SAVING  
TOP COAT**

**SCOPE**

This Engineering Standard provides the mixing and installation instructions for the International Technical Ceramics (ITC) high purity topcoat spraying procedure.

**STORAGE**

ITC products must be stored on pallets or shelves and be kept between 40<sup>0</sup> F and 90<sup>0</sup> F (5<sup>0</sup> C and 30<sup>0</sup> 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. 30 gallon or larger rubber container to mix the ITC material.
2. ½” drill motor or larger with long mixing attachment.
3. Rubber gloves
4. Graco Tex Spray RTX 1500 spray gun or equivalent.
5. Clean rags.

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

**MIXING**

To mix, simply add ½ container of water to one full container of ITC 296A. Use only clean potable water with temperatures between 40<sup>0</sup> F and 85<sup>0</sup> F (5<sup>0</sup> C and 30<sup>0</sup> C). Mixing time needs to be sufficient to produce a uniform sprayable consistency. Do not add additional water. During application, additional mixing may be required to prevent settling.

## **CAUTION**

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. ITC 296A high purity top coat can be used as a final coat over ITC 100HT or ITC 213. ITC 296A should not be used as a stand alone coating.
2. Remove all dust from previously ITC coated and dried surfaces.
3. Prepare the ITC 296A for spraying per the mixing instructions by adding ½” container of water to one full container of ITC 296A.
4. Spray entire surface with ITC 296A 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 1/16” to 1/8” thick. The distance of the spray nozzle to the surface should be approximately 16”.
5. DO NOT OVER SPRAY. Too thick of an application will cause material to fail prematurely.
6. Allow to dry overnight.

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. The first firing should be started with low heat at first for approximately six hours. Do not exceed 600<sup>0</sup>F.

**\*\*** After the spraying process is complete, the operation of any enclosed furnaces MUST BE REPROGRAMED to prevent over firing the furnace.**\*\***