# AT 700 - FIRE RESISTANT COATING

# NANO-CERAMIC COATING

# APPLICATION INSTRUCTIONS

## 1. PRODUCT DESCRIPTION

AT 700 is a VOC compliant, non-toxic elastomeric coating that provides a unique combination of fire resistance and durability. Once cured, AT 700 is very resistant to flame spread and is self-extinguishing under most conditions. AT 700 is extremely durable with excellent anti-abrasion properties. It also has high chemical & UV resistance. Once cured, it is virtually waterproof. AT 700 FR material has excellent adhesion properties to most materials such as metals, fiberglass-composite surfaces, wood and most plastics.

## 2. SURFACE PREPARATION

- Surfaces should be dry and free from grease, dirt or rust.
- Light sanding could aid in increased adhesion in most cases.
- Note: applying over foam, cork, vinyl, or rubber mats is not recommended.

# 3. APPLICATION

- As with any new material, always test application and finished properties on a low value test article or panel before working on valuable surfaces.
- Easy application by spray, brush or roller.
- Maximum performance is achieved at a thickness of 40-50 mils. Thinner application should be tested to ensure that desired performance is achieved.
- Best results will come from applying several coats of 10-12 mils each vs. 1 or 2 very thick coats.
- Note: applying a second or third coat over a partially cured previous coating may cause blisters, delamination or failure of the coating as a result of expansion of entrapped moisture or other vapors within the coating layers.
- Apply coating at 60°F to 110°F
- **Brush:** use a 4" wide nylon bristle brush. Keep a lot of coating on the brush. Use short strokes to apply a thick 10-12 mils per coat. Resist using a "back and forth" brushing motion, as this will tend to thin out the coating thickness.
- Spray:
  - Pressure pot system. Example set up: Binks 2001 spray gun with a large orifice (tip of 565, air nozzle of 66SD, a fluid nozzle of 66SS or a gel tip). Use about 30-35 psi at the pressure pot. Hold the gun tip approximately 14" from the surface, as this should allow for a 10-12 mils coating thickness to be applied per coat.
  - <u>Using an airless system.</u> Example set up: Graco sprayer with a tip size of 0.040 (#WPR340) using approximately 3000 psi. Remove all filters to allow for easier product flow. Try to obtain 10-12 mils per coat.

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- **Roller application:** use a short/medium nap roller. Use minimal down pressure to achieve the 10-12 mils thickness. Back brushing with a fine bristle brush may be needed to lay down any stippling left behind by the roller, if this is not desired.
- Clean up any excess with water while the coating is still wet.

## 7. DRYING & CURING TIMES

Solids	73%
Drying Time	Dry to the touch will be approximately 30 minutes to one hour at ambient temperature at room temperature. Drying time can be reduced by use of warm airflow (110°F/43°C maximum). Using space heater or similar equipment tends to raise the relative humidity, which will tend to increase the drying time. Colder air or surface temperatures will also increase dry time
Curing Time	$24 - 48$ hours total. The water dissipates from the applied coating during the first hour allowing the material to become dry to the touch. At this point the internal chemistry starts a reaction the initiates the $2^{nd}$ curing step over the next 24 to 48 hours.

### 8. COVERAGE RATE

• Approximately 30 square feet per gallon at 40 mils (0.75 square meters per liter at 1 mm).

### 9. STORAGE STABILITY & SHELF LIFE

The shelf life is one year when stored in the original, unopened container. Store containers in a well-ventilated and covered area away from extreme heat and moisture. Do not allow product to freeze. Contact your ALPHATEK representative if you have any questions about the products or its uses.

### 10. SAFETY

Refer to the Safety Data Sheet for this product prior to use.