

**8.23.16**

## **Tech Tip Tuesday**

### **Bubbles**

Bubbles or craters from bubbles can appear in the surface of a coating as small as the size of a pinhead or as large as 1" in diameter; that appear randomly throughout the coated floor area or in honeycomb clusters. In most cases, the bubbles are caused by one of the following forms of air entrapment.

1. **OUTGASSING:** Bubbles may appear in the coating surface after a coating is applied over a porous concrete surface. This condition is created when the coating begins to exotherm during curing. As the coating increases in temperature, cooler entrapped air in the substrate expands and rises into the coating, creating bubbles.
2. **AIR FLOW ACROSS THE COATING:** Excessive air movement from open doorways, from HVAC units, fans etc..
3. **ELEVATED TEMPERATURES:** When air, surface, and/or material temperatures are elevated (extremely high) during the installation process (and prior to initial cure) the material may cure too quickly (skimming over) and entrapping air below the surface.
4. **IMPROPER MIXING:** When components are mixed too aggressively (such as by using a drill with a speed of over 600 RPM), unwanted air can be forced into the liquids as they are being mixed.
5. **MOISTURE VAPOR:** 'Bubbles' or blisters that appear on the surface of a cured coating can also be caused by MVT [moisture vapor transmission] or "hydrostatic pressure" passing through the pores of the substrate and into the coating.
6. **APPLICATION TECHNIQUE:** It is extremely important to utilize the proper installation techniques and purchase the correct application tools when applying a floor or wall coating system.