

# CHEMICAL ETCHING APPLICATION FOR CONCRETE

**Laitance** is the weak, chaulky, powdery layer of cement dust, limestone and sand fines that appear on the surface of concrete when it is newly placed. The life of any coating is dependent on adhesion to sound concrete. If a coating is applied to the loose weak layer of laitance, then impact from furniture, shovels etc. can cause the laitance layer to delaminate, along with the coating. Etching the surface removes this layer of laitance, as well as neutralizing the PH of the concrete to ensure strong adhesion and a long-lasting coating.

#### **WARNING:**

The etching solution (once mixed) will be a strongly acidic mixture and proper protective equipment, such as safety glasses, goggles, and chemical resistant gloves, should be used throughout the etching process.

# **DIRECTIONS**

# Step 1:

Mix the granular contents of 1 package of **Liquid Rubber Concrete Etch** (500G) to 3 L / 0.79 Gal. of clean warm water in a plastic pail or chemical resistant garden sprayer for bleach. Stir the mixture until the powder is completely dissolved.

## Step 2:

Wet the surface of the concrete by pressure washing and remove any standing water from the surface. Pressure washing also helps to ensure that the surface is clean prior to etching.

## Step 3:

Apply the etching solution to the concrete while the surface is still damp using a garden sprayer suitable for bleach or by dipping a stiff bristle broom into the solution and scrub the surface vigorously for 1-2 minutes. The surface should foam up slightly.

### Step 4:

Leave the solution on the surface for 20-30 minutes, scrubbing occasionally. Do not let the surface dry during this time, apply more etching solution if needed.

# Step 5:

Rinse the surface well by pressure washing and allow the concrete to completely dry, this should take around 48 hrs. (depending on temperature and humidity)

#### Note:

Etched surface should feel like 150 medium grit sandpaper. This process may need to be repeated for exceptionally smooth or power troweled concrete.