

## A NEW METHOD OF APPLICATION FOR A TIME PROVEN INTERGRAL WATERPROOFING SYSTEM

A revolutionary new application process for crystalline technology. Easy to apply



Sprays on the surface without changing the surface profile



Self-healing waterproofing which is chemical resistant. Environmentally friendly



# concrete solutions



## Crystalline technology is an exact science because it is a chemical reaction.

### *Environmental Friendly Products*

Concrete is the world's most used building material. Building foundations, buildings, water and wastewater treatment facilities, roads, bridges, airport landing surfaces, and dams are just a few of structures made from concrete. Concrete is economical to use. It has the ability to be molded or cast into almost any desired shape and has a relatively long life and low maintenance costs. Concrete, however, is porous (full of voids) and has permeability, which means that water can penetrate and flow through porous material. Despite its apparent density, concrete can leak and deteriorate when in contact with water; especially with water that contains dissolved aggressive chemicals such as carbon dioxide, carbon monoxide, chlorides, and sulfates.

**Crystalline Technology** is one of the most efficient and economical ways to protect concrete from the ingress of water and damaging chemicals.

It works by filling and plugging the pores, capillaries, and micro-cracks with non-soluble, highly chemical resistant, needle-like crystal formations. Crystal formations prevent the penetration of water and harmful chemicals and become a permanent waterproofing barrier for the life of the concrete.

**THE EXACT SCIENCE OF CHEMISTRY** can accurately and practically predict the formation of these crystals.

- » Crystals form as the result of a chemical reaction
- » Crystals are compounds
- » Compounds form when two or more kinds of atoms combine in definite proportions by mass (weight). This is called "Law of Definite Composition".
- » The smallest unit of a compound is a molecule.
- » The molecule has a definite and unique shape that is determined by how the atoms bond or combine with each other.
- » The properties of a compound are distinct and are different from the properties of the individual elements that are combined in its makeup.
- » "The Law of Conservation of Matter" is when ordinary chemical reactions occur the mass of reactants equals the mass of the products.

### **THE BOTTOM LINE**

- » The formation of crystals (compounds), such as occurs in crystalline technology, is dictated by "The Laws of Chemistry" and the atomic nature of matter.

- » Elements and compounds are discrete, particular, and specific in how they bond (react chemically) and what end products they will form.
- » The molecular chemistry and physics by which elements combine into compounds is exact, predictable, and scientifically documented.

### **BENEFITS OF INTEGRAL WATERPROOFING USING CRYSTALLINE TECHNOLOGY**

- » Penetrates into concrete substrate filling cracks and capillary tracts
- » Self-healing
- » Breathable
- » Hydrophilic & resists hydrostatic pressures
- » Permanent waterproofing & chemical resistance
- » Becomes part of the concrete, cannot come apart, tear or puncture
- » Cost effective & easy to apply
- » Can be applied from positive or negative side
- » Will not sustain mold or mildew due to its high pH
- » Increases compressive strength of concrete (crystals reinforce capillary system)
- » Wide range of protection (chlorides, sulfates & nitrates), freeze/thaw cycles, corrosion of steel, sea water & carbonates



## Non-membrane, Breathable Concrete Surface

Foxfire's time proven systems protect any concrete surface without changing the surface profile

### UNIQUE PROPERTIES OF FOXFIRE'S P-1007 AND PL-1007

- » Will not change surface profile
- » Pre-mixed, ready for use
- » No additional hydration required after application
- » Separate products for porous & dense surfaces
- » Blocks out wind-driven rain up to 90 mph (when used in conjunction with 5000 WB Water Repellent)
- » Naturally mold & mildew resistant

### REQUIREMENTS FOR A SUCCESSFUL APPLICATION OF FOXFIRE P-1007 OR PL-1007

- » Clean, penetrable concrete surface, free of dirt, dust, grease, oil or any form of membrane
- » Concrete needs to be at a pH of 10 or higher
- » Foxfire Catalyst can be used to raise the pH
- » Minimum of two (2) applications of Foxfire P-1007 or PL-1007



**Foxfire Enterprises Inc.**

**CONCRETE  
WATERPROOFING  
SYSTEMS**

173 Willow Lane  
West, Tx 76691  
254.829.1943  
[www.foxfireusa.net](http://www.foxfireusa.net)