## **Internal Concrete Sealer**

**Technical Description**: Internal Concrete Sealer (ICS) is a chemically reactive penetrating concrete sealer and stabilizer. ICS is not a surface sealant, but instead works deep within the substrate. ICS reacts upon contact with the free alkali and calcium hydroxides present in the masonry to form a silica gel on the surface of voids and particulate in the concrete. The gel is waterproof within hours, then hardens over the course of 3 to 4 weeks into crystalline glass, turning the entire depth penetrated in a solid impenetrable mass so dense that water can no longer wick into the concrete.

This internal, permanent seal and water barrier also hardens and dust-proofs the surface while increasing the compressive and flexural strength. As the gel forms it may push out contaminants such as excess alkali in new or old concrete or oil residue, animal urine, fungi, etc in older concrete. Contaminants can then be mopped or wiped up or cleaned off with Timber Pro's Clean & Brite or another concrete cleaner in conjunction with agitation with a stiff brush or pressure washer. ICS does not alter or affect the color or texture of bare concrete treated surface, and will not cause water bead-up.

- ICS permanently waterproofs and holds a hydrostatic head, retarding penetration of acids.
- ICS may be painted over, and will accept concrete topping or mastics for floor tile etc.
- ICS increases bonding of any top coating (including paint, mastics. etc.) by 300 %.
- ICS retards pitting, dusting, and rutting.
- ICS cures new concrete uniformly and resists air checking and spot drying.
- ICS permanently hardens and increases the density of concrete, reducing or eliminating wear due to abrasion, freeze-thaw, and salt attack.
- ICS enables easier removal of snow and ice.
- · Dilutant Use as supplied
- · Flammability none
- · Environmental hazards None
- Solvent for cleanup Water
- · Color None

**Uses:** For Portland cement concrete, shotcrete, standard stucco, or concrete mortar. Apply above, below, or ongrade as a slab hardener, dustproofer, and waterproofing agent. Do not use on colored or stained masonry surfaces or color may be affected.

Coverage: 150-250 sq ft per gallon per coat, depending on the age and porosity of the surface being treated.

**Application:** ICS will not penetrate through paint or sealers, so concrete must be bare of any surface treatments and clean enough to allow for unimpeded absorption. Apply 2 to 3 coats of ICS depending on age and porosity of concrete, allowing 24 hours of dry time between coats. The surface is waterproof after 24 hrs but will cure for 3 to 4 weeks. Wait until curing process is complete before painting concrete surface or top-coating with our Masonry Top Sealer for more water resistance and water bead-up on the surface.

**NOTE:** ICS will not prevent water insinuating through large cracks or fissures in the concrete but is an excellent pre-treatment prior to filling large cracks with a cementitious mortar. The cement mortar itself should then be sealed with ICS.

WARNING: ICS will etch glass, do not allow contact. If using on colored concrete, ICS could possibly flush out colorant, resulting in a blotchy and uneven appearance. Always test product in an out-of-the-way area prior to use.

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