FAQ's - Frequently Asked Questions

How does CONSEAL™ seal concrete?

Sodium silicate products have been used to seal concrete for years. The sodium silicate constituent in CONSEAL reacts with the calcium hydroxide present in all concrete, a result of the hydration (curing) process. The result of this chemical reaction is calcium silicate hydrate, which fills the small pores and hairline cracks to permanently seal the concrete internally.

Why does CONSEAL™ work better than other so called penetrating sealers?

The secret to effectively sealing concrete with any silicate based material is to get the silicate to access as much of the free lime and alkali present within all concrete. CONSEAL™ contains a proprietary blend of 16 different enzymes and surfactants, which act as a catalyst to facilitate truly deep penetration of the material. Tests conducted have shown CONSEAL ™ to penetrate as deep as 8 inches.

Will your product have any effect on the design properties that the Engineer or Architect has stipulated for this floor?

Yes, absolutely. As you may know, calcium hydroxide is a by-product of the concrete curing process and serves no useful purpose in the cured concrete. When the silicate constituent of the CONSEAL™ reacts with the calcium hydroxide, it forms calcium silicate hydrate which is the same material that gives the concrete matrix its strength.

How is CONSEAL™ applied?

For large areas, low pressure airless spray equipment is very effective.

For medium sized jobs, a simple hand pumped garden type sprayer can be used.

For very small jobs you can use a spray bottle.

Due to the low viscosity of the material, we do not recommend applying with a brush or roller.

How long do I have to wait before I can walk on the concrete slab after CONSEAL™ has been applied?

You can work on the slab immediately after the second application of water. This creates minimal downtime on your job.

Are there any temperature minimums or maximums for the concrete?

Yes. CONSEAL™ should be applied to clean, damp concrete at temperatures ranging from above freezing (40 degrees recommended) up to a maximum of about 100 degrees for a minimum 24 hour period. If the concrete is exposed to freezing temperatures within the 72 hour period after the CONSEAL™ application, the material will crystallize within the concrete, but after it thaws, the chemical reaction will continue where it left off when it froze. Concrete that is hot to the palm of the hand should first be cooled with fresh water and the concrete should be allowed to dry to at least a damp condition before applying CONSEAL™. This will prevent the water vehicle of the material from evaporating before it can penetrate into the concrete.

Are there any minimums for the ambient air?

The air temperature should not drop below freezing for at least 72 hours during and after the application of the CONSEAL™. The misting water should be kept from freezing.

Does the water that is sprayed on have a temperature requirement?

Normal tap water can be used to mist the floor before applying CONSEAL™ and to mist the floor after the application. Chlorinated water has no adverse effect on the chemical reaction.

Is CONSEAL™ compatible with all of the floor mastics for both carpet and Armstrong™ VCT? Yes, CONSEAL™ is compatible with all types of mastics and adhesives.

How soon after the concrete is poured/finished may your product be applied?

CONSEAL™ can be applied immediately after the finishing operations have been completed.

After applying your product, and spraying it with more water, how soon can people walk on it? Floors can be walked on immediately after (and even during) the application of CONSEAL™. One precaution however, is that the CONSEAL™ will dry out any leather goods.

What effect does temperature play with respect to how well the CONSEAL™ will work?

As sealing concrete with CONSEAL™ is a chemical reaction, one could expect that this process would be retarded by cold and freezing temperatures. Although the reaction may take somewhat longer in cold temperatures, the resultant seal will be every bit as effective as when the material is applied during average temperatures.

Will the product work faster or create a dryer slab if the temperature is above a certain threshold?

"Room temperature" would be ideal and the product will work a little faster under these conditions; but no, the concrete will not be dryer. The CONSEAL™ has a voracious affinity for the calcium hydroxide and will find it regardless of the temperature; aside from freezing, as we explained above.

Is it okay for your product to be stored in freezing temperatures?

Although we don't recommend it and we advise against storing CONSEAL™ in freezing temperatures, if the material does freeze, its potency will not be affected. Simply allow the material to thaw and agitate to ensure that the contents achieve a homogenous mix.

If any of your product is accidentally sprayed on adjacent surfaces/materials what if any is the negative effect?

I realize that it is probably advantageous to apply your material prior to other construction items being installed, but this may not always be possible.

1. Concrete Masonry Units (concrete block)

No problem

2. Brick or Stone

Possibly a white deposit will occur if the material is allowed to dry. While the material is still wet, simply rinse with fresh water.

3. **Gypsum Board**

Slight overspray will not affect the gyp board; however, if a significant amount of material is sprayed on the board, a white deposit will occur. Allow the material to dry and brush the "powder" off.

4. Aluminum Store Front or Aluminum Break Metal

Yes, CONSEAL™ will etch aluminum and glass. Shield or mask these surfaces to protect them from any overspray. If some material does get onto the aluminum or glass, wash the surface immediately with a wet rag to remove.

5. Sealants or Caulking

No adverse reactions between any caulking or sealants are known.

6. Brass Floor Drains

Since brass is a relatively soft metal, like aluminum, CONSEAL™ will likely tarnish brass surfaces.

7.

How is CONSEAL™ packaged?

CONSEAL™ is packaged in 5 gallon pails and 55 gallon drums. One gallon covers about 150sf.

"CONSEAL" and "WET" are trademarks of Waterproofing Engineering Technologies. Copyright 1989. All rights reserved. Printed in U.S.A.