Concrete Floor Care

Swish HOWTO

Most of us look at concrete floors as a permanent part of the building that needs little attention, except cleaning. While it may be permanent, it usually needs more than just cleaning. Below are some of the benefits of seal coating and keeping your concrete floor in good repair.

WHY SHOULD YOU SEAL COAT A CONCRETE FLOOR:

Concrete floors may look like they are solid and in good shape. In most cases, every time your lift truck, hand trucks and people just walking will create dust from the floor. Just look around your building. Where is all the dust coming from? Most likely, the concrete floor. Concrete (even good concrete) will almost always create dust with traffic, including when a hardener has been added. This dust can be harmful to today's computerized equipment and may aggravate health conditions of your employees. In addition, this dust is settling on your finished goods. The more you sweep the floor, the more you stir up the dust. To get rid of this dust, the floor should be seal coated.

IS IT BETTER TO COAT WITH A COLOR OR CLEAR:

Color coatings on the floor look great and add brightness to the room if done in a light color. If you scratch the floor, it may be hard to match the color. Coatings are colored using computerized equipment, but even so, color may vary from batch to batch. In addition, adding color to any coating or sealer will make the finished surface a little softer than that of the clear. Clear coatings have a slightly harder surface and a tendency to bond better than the color coatings. They can be touched up easily as you do not have to worry about color match. Clear tends to magnify any imperfections in the concrete.

BENEFITS OF SEAL COATING A CONCRETE FLOOR:

- PROVIDES a cleaner, healthier, more pleasant place for your employees to work in.
- MAKES SPILLS easier to clean up.
- HELPS KEEP HARMFUL CHEMICALS from eating away at the concrete surface.
- CUTS DOWN on the amount of lighting needed in the plant.
- CREATES a POSITIVE IMPRESSION for customers who tour or visit your plant before ordering.
- HELPS KEEP your finished goods cleaner prior to shipping.
- PROTECTS YOUR CONCRETE from wear making it last longer.

THE DIFFERENCE IN FLOOR COATINGS:

CLEAR SILICONE SEALERS:

Clear silicone sealers will help keep the dust down, and are inexpensive. The problem with this type sealer is they do not last very long under heavy industrial traffic. They provide very little if any wear protection to the concrete surface. They are primarily made to protect from water damage. In most cases, you will need to apply this type of sealer about 2 times per year.

CONCRETE FLOOR STAINS:

These are similar in principle to wood stains. Has little or no wear resistance and less chemical resistance. It may look good when applied, but has little surface wear ability.

LATEX FLOOR PAINT:

Latex floor paint is not a good product for high traffic or constantly wet areas. This has little wear resistance and no chemical resistance.

ENAMEL FLOOR PAINT:

This type floor paint does have a little more wear ability than the above products. Even so, in most industrial cases, you may need to paint the floor at least once or twice per year to keep it looking good. Has very little chemical resistance.

LATEX AND ACRYLIC FLOOR SEALERS:

Again this type of floor sealer will keep the dust down, and are inexpensive. The problem with this type sealer falls along the same lines as the Clear Silicone type. They look nice in most cases, but provide little wear protection to the surface of the concrete and will have to be re-applied on a regular basis once or twice per year. They have little or no chemical resistance.

EPOXY ESTER FLOOR SEALER:

The term "Sealer" is used loosely here. Epoxy esters are usually one part epoxy mixes (or little more than an epoxy paint). These sealers do have better wear ability than the above products. They are usually applied at about 2 or 3 mils thickness. In addition, they do provide some chemical resistance to some chemicals. To keep this type looking good, it should be re-coated approximately ever year or two with moderate to heavy traffic. One hazard to this type of sealer is that it is almost always extremely flammable when wet.

URETHANE FLOOR SEALER (Solvent Based):

Urethane floor sealers come in all shapes and forms, so it's buyer beware. You will find urethane floor sealers from about 12% solids up to about 40% solids. Of course, the higher the solid content, the better the wear ability and chemical resistance. The 40% solids is usually applied at a 2 mil thickness. The finish is usually a semi-gloss or high gloss. They look great and usually will last 2 to 3 years between coating when you use the 40% solid type. Again, this product is almost extremely flammable when wet.

URETHANE FLOOR SEALER (Water Based):

Looks great, but the wear ability and chemical resistance is not as good as the solvent -based sealer. The same holds true with the solid content. Usually will need recoating in about one year with moderate traffic to maintain finish.

EPOXY FLOOR SEALER:

Epoxy floor sealer is a true two-part epoxy, usually cut back with various forms of solvent. Solid content may vary by manufacturer. This type of sealer has better chemical resistance than the urethane sealer. Wear ability is about the same as the solvent based urethane.

URETHANE FLOOR COATINGS (Solvent Based):

This type of coating will vary in solid content from about 65% to 100% solids. Of course the higher the solid content, the better the wear ability. In addition to better wear ability and chemical resistance, they usually have very little odor and are low in VOC's, and considered flammable. The 100% solid contend coating is usually applied at a rate of about 5 or 6 mils. Life expectancy on a moderate traffic area could be around 4 or 5 years.

URETHANE FLOOR COATINGS (Water Based):

Again these are low in VOC's and odor. Wear ability is about half of that of the solvent based. Low chemical resistance. Flammable while wet.

EPOXY FLOOR COATINGS (Solvent Based):

These coatings usually vary in content from about 65% to 100% solid content. The 100% solid content is usually applied at approximately 8 mil. thickness. This type coating is highly resistant to abrasion, heavy traffic and most chemicals. In most cases this is the product you should use for a long lasting, good looking durable floor. This type of coating is usually non flammable and has very low VOC's and odor.

EPOXY FLOOR COATINGS (Water Based):

Content range the same as solvent based. Has good wear ability, but lower in chemical resistance than the solvent based. Flammable while wet.