

# In what quantities is the Ashford Formula available?

In the United States, it is available in 55-gallon drums or 5-gallon pails.

#### Can the Ashford Formula be used as a curing agent?

Yes. Fifty (50) years of field experience have provided more than ample proof that the Ashford Formula produces excellent curing results in terms of ensuring full compressive design strength and minimizing, or even, eliminating surface crazing. The Ashford Formula can also be used in conjunction with other curing mechanisms, such as membrane cures or a wet cure. *Note:* The Ashford Formula is not a membrane, and therefore, does not meet the intent of the ASTM C-309 curing standards for membranes.

# Can the Ashford Formula be used in conjunction with bond-breakers on tilt-up construction?

Yes. Curecrete Distribution, Inc. has on file letters from many bond-breaker manufacturers certifying that their products will work well on Ashford Formula treated casting beds. The Ashford Formula should be applied to the floor/casting bed at time of placement. The bond-breaker can then be applied later per usual procedures. Another option is to cure the slab with a dissipating curing agent, apply the bond-breaker, lift the panels thoroughly strip and clean the floor, then apply the Ashford Formula. *Note:* Ashford Formula must be applied to clean, bare concrete so that it can penetrate. Bond breakers and/or curing agents must be thoroughly and completely removed from the floor before the Ashford Formula is applied.

#### How quickly does Ashford Formula treated concrete develop a marble-like sheen?

The marble-like sheen develops strictly as a result of traffic, use and scrubbing. The more quickly the floor is exposed to abrasion, the quicker it will develop a shine. There are several ways of imparting a sheen much earlier than it would develop on its own.

#### How quickly does Ashford Formula treated concreted develop a seal?

When the Ashford Formula is applied to concrete, the process of sealing only begins. The seal is the result of an ongoing chemical reaction that takes several months to complete. For this reason, the floor can be susceptible to some staining during the first few months. Curecrete Distribution, Inc. recommends the following guidelines:

- 1. Diaper equipment that could leak oil or other contaminants.
- 2. Clean the floor regularly with a good detergent and aggressive scrubbing equipment. As the Ashford Formula continues to react with the concrete, contaminants will be forced out and removed by the cleaning process. Water from the cleaning process will also speed up the reaction of the Ashford Formula with the concrete, accelerating the seal.
- 3. Clean up small spills immediately and spot-treat any stains with a good degreaser or oil emulsifier. As the floor matures, it will take on a more uniform appearance and any stains will become less and less noticeable. When the Ashford Formula ultimately seals the floor, the results are permanent. At this point, frequent cleaning is necessary only to maintain the appearance of the floor.

#### How quickly does the Ashford Formula harden and dustproof the concrete?

The Ashford Formula hardens and dustproofs the treated concrete surface within hours of its application.

#### What if my floor dusts or erodes after it has been treated with Ashford Formula?

When the Ashford Formula is applied to structurally sound concrete, the surface will not dust or erode. It is a chemical reaction that takes place 100% of the time. If, however, the concrete surface is not sound, then the Ashford Formula, when applied at standard coverage rates, cannot overcome the deficiencies of problem concrete. In every such case, when the concrete has been tested, the test results have shown that the concrete surface lacked structural integrity at the time the Ashford Formula was applied. The most common problems are excessive carbonation and/or poor water cement ratio. These are surface problems that have nothing to do with the integrity of the underlying substrate. In our experience, however, additional Ashford Formula can be applied to such floors with excellent remedial benefits. With some floors, the problems with the concrete may be so severe that even more Ashford may not help. If you have a floor that is abnormally soft or chalky, call your local agent for guidelines on how to use Ashford Formula as a possible remedy.

#### Is the Ashford Formula a coating?

No. The Ashford Formula is a chemically-reactive liquid hardener and densifier. It protects the surface of the concrete not by coating it, but by increasing the density and durability of the wearing surface. Once the Ashford Formula has penetrated the concrete and reacted with it, there is no Ashford left. What remains is a crystalline-densified version of the concrete that was there in the first place. There is no coating, film or membrane to scratch, wear, or peel.

#### Why do the application instructions call for removal of excess material?

A properly executed application will leave no Ashford Formula residue on top of the treated surface. Only the material that has penetrated should remain. If unreacted, unpenetrated material is left on the surface, it can create white patches if it comes in contact with water. If sufficient quantities of Ashford are left on the surface, then it can even turn white on its own, whether it comes in contact with water or not.

# Can I paint stripes on Ashford Formula treated concrete?

Certainly. There is no chemical incompatibility between Ashford-treated concrete and paints commonly used for striping. Once the Ashford Formula has penetrated and reacted with the portland cement, there really is no Ashford left. What remains is a densified version of the concrete that was there in the first place. The surface is slightly richer in silicates, but since silicates are in concrete anyway, there is no chemical reason for a paint not to bond. There can be problems with a good mechanical bond if the floor surface lacks bite or profile. This, however, is related to the floor finish, not to the presence or absence of the Ashford Formula. In such cases, the paint manufacturer's instructions for roughening the surface should be strictly followed.

# Are Ashford Formula treated floors slippery?

Not any more or less slippery than the surface to which the Ashford is applied. Co-efficient of friction test results are available upon request.

# Is the Ashford Formula USDA approved?

Yes.

# Is the Ashford Formula toxic, flammable or otherwise dangerous?

No. The Ashford Formula is an odorless and non-hazardous material. It contains no solvents or volatile organic compounds. The Ashford Formula is non-toxic, and produces no harmful fumes or vapors. The Ashford Formula is completely water-based and environmentally safe. Use of this product requires no breathing apparatus or protective clothing. For further information please refer to Curecrete's Material Safety Data Sheet.

#### Are two (2) applications of the Ashford Formula required?

No. An optional second application is sometimes used to provide an early sheen, but this is not necessary to ensure the curing, sealing, hardening, and dustproofing performance for which the Ashford Formula has come to be known.

#### How soon can I use the floor after it has been treated with the Ashford Formula?

Two to three hours.

#### What is the coverage rate of the Ashford Formula?

The coverage rate of the Ashford Formula is 200 square feet per gallon (5 square meters per liter).

#### Is the Ashford Formula available through construction supply houses?

Generally no, although exceptions have been arranged in certain instances.

#### Does the Ashford Formula require any thinners or primers?

No. The Ashford Formula is ready to use out of the container. No primers are necessary. The only requirements are that the concrete contains standard portland cement, and that the surface is bare and clean.

# If my drums of Ashford Formula have been frozen, can the material still be used?

Yes, the material should be thawed out and slightly agitated prior to use.

# What is the shelf life of the Ashford Formula? Two years.

#### Can the Ashford Formula be applied to colored concrete?

Yes. If the concrete is integrally colored, i.e. the pigment is added at the batch plant, then the concrete should be fully cured before the Ashford Formula is applied. If the concrete is stained with mineral salts, the Ashford Formula should still not be applied until the concrete has cured for 1 month.

*Note:* Mineral stains are normally applied at 21 days after concrete placement, so the Ashford Formula can be applied just over a week after the stain.

#### Where is the Ashford Formula normally used?

Warehouses, distribution facilities, aviation hangars, manufacturing plants, food processing and distribution buildings, pulp and paper mills, or other types of facilities with large exposed concrete floors.

#### Does the Ashford Formula work well in refrigerator or freezer facilities?

Yes. It has been used with excellent results for many years in such facilities. For guidelines, call Curecrete or your local agent.

#### Can the Ashford Formula be used with concrete mixes containing fly ash?

Yes, but Curecrete does not recommend using the Ashford with mixes that contain more than 15% (of total cementitious value) fly ash.

# Can the Ashford Formula be used with air-entrained concrete? Yes.

# Can the Ashford Formula be used on exterior concrete surfaces? Yes.

#### Do admixtures such as plasticizers, retarders or accelerators affect the Ashford Formula?

No, provided the admixtures are not present in quantities that exceed manufacturer's recommendations. *Note:* The accelerator calcium chloride has in recent years become less popular as an admixture. It can cause slab discoloration, increased corrosion of imbedded reinforcement, increased thermal cracking, and decreased resistance to sulfates. The problems associated with calcium chloride can occur whether the Ashford Formula is applied or not.

#### Can the Ashford Formula be used with mixes containing steel or poly fibers?

Yes. The Ashford will harden, dustproof, and densify the concrete paste surrounding the fibers, but will obviously not react with the fibers themselves. The Ashford Formula has been used successfully on many steel and poly fiber floors.

#### Who can apply the Ashford Formula?

In the United States and Canada, the Ashford Formula may be applied on new concrete by owners, contractors, or qualified applicators. If owners or their contractors apply the material, Curecrete requires that a field technician be on hand to provide assistance and ensure the application is done correctly. On existing concrete, Curecrete recommends that only qualified applicators prepare the surface and apply the material.

#### What kind of pump is recommended for applying the Ashford Formula?

Curecrete recommends any low pressure, high-volume pump. As a general guideline, this means a pump that will dispense material at 40-70 psi and roughly three to five gallons per minute. There are a number of excellent pumps on the market, most of them simple electric models with standard garden hose inputs and outputs.