**CURECRETE DISTRIBUTION, INC.**
**Technical Services**
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# THE ASHFORD FORMULA & LIGHTWEIGHT CONCRETE

Many hospitals use sub-floors between the main levels of the building to give maintenance crews and service personnel a safe place to walk and work without disturbing patients. These weight-bearing floors, known as interstitial floors*, are often topped with low density, lightweight concrete, also known as cellular concrete.

The Ashford Formula has been used before to treat these surfaces. However, some guidelines should be kept in mind. For one thing, the pores in lightweight concrete are so large and so numerous that they prevent a good seal. Therefore, The Ashford Formula will not cause a cellular floor to become impermeable.

The Ashford Formula will, however, do an excellent job of hardening cellular concrete, rendering the surface more resistant to wear and abrasion from foot traffic. The Ashford Formula will also minimize dusting, although it will not eliminate it altogether.

Applying The Ashford Formula to low-density concrete also requires some special precautions. Because of the high porosity of lightweight concrete, the coverage rate of The Ashford Formula is far lower than normal. For reference, here are the application instructions for interstitial work:

1. Spray, roll, or brush The Ashford Formula on the surface at a rate of 200 square feet per gallon. Broom the surface if necessary to prevent the formation of puddles. Allow the surface to dry a minimum of two hours.

2. Spray, brush, or roll The Ashford Formula a second time at a rate of 200 square feet per gallon. Prevent the formation of puddles by brooming. Allow for drying, and prevent all traffic from the surface until dry.

Note that two gallons for every 200 square feet equals a coverage rate of only 100 square feet per gallon, one half the normal rate. Highly porous concrete will easily absorb this amount of material.

The timing of the application is also critical. Lightweight concrete needs a good cure before The Ashford Formula is applied. When this type of concrete is new, it will have a noticeable green tinge. When it takes on a gray color, it is ready to be hardened with The Ashford Formula. This normally takes about ten days.

* **NOTE:** ***The above guidelines apply to all lightweight concrete, not just interstitial floors in hospitals.***