## Technical Information Sheet - SATURATION



## Saturation Procedures for Utelite Lightweight Aggregate used in <u>Pumpable Structural Lightweight Concrete</u>

## Procedure #1:

Presoaking of lightweight aggregates by the concrete producer is necessary and typically achieved by sprinkling. For Concrete to be pumped, the minimum time recommended for saturation is 3 days (72 hrs.) of uninterrupted sprinkling. The amount of water absorbed usually decreases sharply after the first 24 hours. To be effective, the sprinkling of the aggregate piles should be consistent. The more consistent the moisture content of the aggregate being batched, the more consistent the control of the slump will be. The aggregate storage has to be closely monitored so that unsaturated aggregate never finds its way into the mix. Separate aggregate piles, possibly as many as 3, should be provided, allowing storage and soaking of newly delivered aggregate without interrupting a continuous supply of soaked aggregate. On a rotating basis, aggregate is taken from only one pile while a second pile is being soaked and a third is receiving newly delivered material.

## **Procedure #2:**

The aggregate may also be stored in a shallow pit, approximately two feet deep, and filled with water from constant sprinkling. The material should be turned over frequently by a front-end loader or similar equipment, so that there is submersion of the pile portion that is being sprinkled. Simply submerging the aggregate without turning it over is not recommended. Submerged, the air in the aggregate is trapped and saturation is less effective.

These descriptions of handling aggregates and soaking with sprinklers are consistent with the manner in which materials are handled with successful results.

UTElize it!



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