**What is a Evaporation Retardant**

A long chain organic material such as cetyl alcohol which, when spread on a water film on the surface of concrete, retards the evaporation of bleed water.

**Monomolecular**

composed of single molecules; specifically, films that are one molecule thick; denotes a thickness equal to one molecule, for example, certain chemical compounds develop a "monomolecular film" over bleeding water at the surface of freshly placed concrete or mortar as a means of reducing the rate of evaporation."

*ACI Cement & Concrete terminology [CCT]*

**What Evaporation Retardants are not:**

Concrete surface retarders are not to be used in the final finishing operations

**When to use an evaporation retardant:**

- When it is windy or breezy
- When the humidity is low
- When in direct sunlight
- When using a low w/cm concrete
- When placing dry-shake hardeners
- When placing concrete with silica fume/micro silica

**ASTM Standards:**

Currently there are not any.

**ACI Recommendations:**

- ACI 308 Guide to Curing Concrete:
  - Chapter 1.4.2.2.3 Initial curing
  - Chapter 1.4.2.2.5 Intermediate curing
- ACI 302 Guide for Concrete Floor and Slab Construction: Chapter 5.10

**DAYTON SUPERIOR EVAPORATION RETARDANTS:**

**AquaFilm Concentrate J74 concentrate**

- Diluted with potable water at a 9 to 1 ratio, V.O.C. compliant and contains a blue fugitive dye for ease of visual inspection during application.

**AquaFilm™ J74RTU**

- A ready to use V.O.C. compliant and contains a yellow fugitive dye for ease of visual inspection during application.