Technical Memo - Tips for utilizing CEMENT HYDRATION CATALYST.

1. Determine pounds of cement per cubic yard of concrete. NOTE: one (1) sack = 94 pounds.

2. Determine how much CEMENT HYDRATION CATALYST volume per cubic yard should be used at the rate of 10 fluid ounces per 100 pounds of cement (one fluid ounce per 10 pounds), using the amount of cement determined in step one.

3. Prior to batching concrete, pour the predetermined volume of CEMENT HYDRATION CATALYST into rinsed clean transit mixer truck, pull truck under plant for loading. With mixer turning in its mixing mode, load approximately 90% of the total mix water volume to be used before loading any cement or aggregate, then load cement and aggregates in any order, plus the remainder of calculated mix water volume.

4. There must be at least 110 revolutions on the transit mixer before concrete is placed.

NOTE: Use the following procedure to properly predetermine volume of mix water needed since CEMENT HYDRATION CATALYST automatically increases mix's cementitious material content, using the already-included cement, causing mix water requirements to differ from normal.

A. Multiply pounds of cement, as determined in step one, times 0.06 in order to get the approximate cementitious material increase in equivalent pounds of cement. Add the increased amount to the original pounds of cement, determined in step one, getting a new total pounds of cement per cubic yard, to be used for mix water volume calculation purposes.

EXAMPLE: Using 5 sacks per cubic yard: 5 sacks x 94 lbs. = 470 pounds.

Pounds of cement, 470 x 0.06 = 28 lbs equivalent increase plus 470 lbs. cement actual = 498 total lbs of cement, including cementitious material increase equivalent, generated by utilizing CEMENT HYDRATION CATALYST.

To calculate the amount of mix water needed, in this example, multiply 0.50 x 498 lbs cement, to get the total pounds of water needed per cubic yard (0.50 x 498 = 249 lbs).

Convert lbs of water to gallons per cubic yard by dividing 8.33 into the 249 lbs total (249 divided by 8.33 = 29.9 gallons).

This example should yield a tight slump concrete mix, however, slump can be increased, as desired, using plain water prior to placement.

NOTE: Aggregate moisture correction, if any, should be made by the batching plant following water volume calculation.