



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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POLICY FOR ADDING AIR-ENTRAINING AGENT
IN READY-MIX CONCRETE AT THE JOB SITE

When the air content of portland cement concrete measured at the discharge within the times of Table 1000-2 of the Standard Specifications is below the specified level by more than the allowable tolerance, the manufacturer may use additional air-entraining admixture to bring the concrete to within specification limits if the following conditions are met:

1. The admixture is the same brand and type as that originally introduced at the concrete plant unless otherwise permitted by the Engineer.
2. The admixture, if liquid, is measured into a bucket containing 1 gallon of water. The admixture, if prepackaged powder, is added according to the manufacturer's recommendation.
3. The admixture, if liquid, is thoroughly mixed with the water and the mixture is then directed to the front of the drum (end nearest the truck cab) while the drum is momentarily stopped.
4. The maximum allowable water-cementitious material ratio of the concrete is not exceeded with the addition of the water-admixture solution.
5. The concrete is then mixed a minimum of 30 revolutions at mixing speed.
6. A record is kept by project personnel of the brand, type, and quantity of admixture and the quantity of water added. This information must be recorded and clearly noted on the sample card and the batch ticket.

This policy shall apply only to trucks already on the jobsite and enroute. Concrete plant personnel shall adjust admixture proportions in subsequent loads at the plant so that the air content meets specifications.

Air-entraining agent may be added twice per truck on the job site as long as the total time allowed by the specification between batching and placement has not elapsed. If, after the second addition the concrete fails to meet air content and/or slump specifications, the concrete shall be rejected.

The intent of this policy is to allow for small adjustments at the start-up of batching operations. It does not relieve the producer from the responsibility of producing good quality concrete on a consistent basis. If a producer is routinely using these procedures to furnish concrete, he will be removed from the Department's Approved List until such time as he can demonstrate the ability to consistently produce good quality concrete.