



# ALABAMA DEPARTMENT OF TRANSPORTATION

1409 Coliseum Boulevard, Montgomery, Alabama 36130-3050



September 12, 2006

Bob Riley  
Governor

Joe McInnes  
Transportation Director

## **TECHNICAL ADVISORY 2-06**

To: All Division Engineers

From: Larry Lockett  
Materials and Tests Engineer

Re: Inspection Guidelines for Testing Total Air Content of Freshly Mixed Concrete

The Bureau of Materials and Tests is currently working on the revision of the specification requirements regarding total air content of freshly mixed concrete. It is important that ALDOT inspectors as well as the consultants hired by the Department to inspect concrete operations enforce the Department's specifications. Until such revision is final the following guidelines must be followed during the testing of freshly mixed concrete for total air content.

- All Type B pressure meters used for testing total air content of freshly mixed concrete must be calibrated at the beginning of the job. The calibration of these Type B pressure meters must be verified at least twice a week and anytime a questionable result is obtained.
- The range of total air content for concrete mixes used in bridge substructures and superstructures will be 2.5 percent to 6.0 percent. The target total air content will be 4.5 percent. The changes will be effective with the August letting.
- A load of concrete with total air content below 2.5 percent will not be rejected until a second test is run on the same load to confirm the low result. Prior to running the second test the air meter calibration must be verified. Concrete with total air content above 6.0 percent will be rejected.
- The field inspector will record the result and notify the contractor and the concrete supplier of the test result obtained. The field inspector will not suggest nor give any opinion as of the method to correct the low or high total air content. The correction of the total air content shall be the sole responsibility of the concrete supplier.
- The Concrete Section of the Bureau of Materials and Tests will stock Type B Pressure Meters and Calibration Vessels. Upon written request these devices will be transferred and charged to the requesting Division office.

In closing, it is requested that this information be made available to the personnel that will enforce these specifications and to emphasize its importance.

LL/sr/mas

cc: Mr. Mike Harper  
Mr. Terry McDuffie  
Division Construction Engineers  
Division Materials Engineers  
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