1. **SCOPE**

1.1. **Description of Test**

This method describes the procedure for determining the moisture content of aggregate by oven drying.

2. **APPARATUS AND MATERIALS**

2.1. **Equipment Required**

Balance - .1 g accuracy.

Stove - capable of 50°C to 150°C.

Containers - suitable metal containers for drying samples.

Trowel, spatula and brush.

3. **PROCEDURE**

3.1. **Sample Preparation**

Select sample in accordance with STP 105.

Weigh and number the container for testing and identification purposes. Place the sample in the container, weigh, and record as "wet aggregate and tare."

3.2. **Test Procedure**

Dry the sample in an oven at 110°C for at least four hours or until the dry sample is at a constant weight. Remove the sample from the oven, let cool, weigh and record as "dry aggregate and tare."

Drying moistures on the burners of the stove is an acceptable alternate method provided care is taken to ensure the fine particles of the sample are neither burnt or lost. Gentle stirring with a trowel or spatula will prevent burning of the fine particles.
4. RESULTS AND CALCULATIONS

4.1. Calculations

Calculate the moisture content in the manner shown by the following example:

\[
\begin{align*}
\text{Weight of wet aggregate and tare} & \quad 652.3 \text{ g} \\
\text{Weight of dry aggregate and tare} & \quad 614.3 \text{ g} \\
\text{Weight of water} & \quad 38.0 \text{ g} \\
\text{Weight of tare} & \quad 141.4 \text{ g} \\
\text{Weight of dry aggregate} & \quad 472.9 \text{ g} \\
\text{Moisture content} & \quad 8.0 \\
\end{align*}
\]

4.2. Reporting Results

Report percent moisture on MR 83 or as required.

5. ADDED INFORMATION

5.1. General

Test samples must be prepared as quickly as possible to minimize moisture loss due to evaporation.

The sample shall be representative of the material both as to gradation and as to moisture content. Unless otherwise specified the sample for moisture content will weigh not less than the following:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>% Passing</th>
<th>Min. Sample Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mm</td>
<td>100.0</td>
<td>100 g</td>
</tr>
<tr>
<td>18 mm</td>
<td>100.0</td>
<td>500 g</td>
</tr>
<tr>
<td>80 mm</td>
<td>100.0</td>
<td>1500 g</td>
</tr>
</tbody>
</table>
New _ Revision X_ Date of Previous Document 82-04-01

Effective Date: _- -_

Description of Revision (Reason for Revision):

_- Format of test procedure updated._

Review/Implementation Process:

_Lab Supervisors’ Committee_

Other Manuals/Policies Affected:

_Nil_

Follow Up/Training Required:

_Nil_

Comments/Concerns/Implications (Budget/Environment/Stakeholders):

Prepared and Recommended by _D. MacLeod__________ 93-05-17_

Materials Standards Engineer Date

Approval Recommended by _R.A. Widger__________  _- -_

Senior Materials Engineer Date

Approval Recommended by _A.R. Gerbrandt__________  _- -_

Dir., Technical Standards & Policies Br. Date

Approved by _D.G. Metz__________  _- -_

Assistant Deputy Minister, Infrastructure Date

Electronic File Updated _- -_

Update Mailed _- -_