1714 – CEMENTITIOUS GROUT

SECTION 1714

CEMENTITIOUS GROUT

1714.1 DESCRIPTION
This specification covers cementitious grouts used to bond anchor bolts and reinforcing steel to hardened concrete. This includes self-contained grouts, which are cementitious materials encapsulated in a water permeable layer.

1714.2 REQUIREMENTS
a. Provide material that complies with ASTM C 1107 or Corps of Engineers CRD-C 621.

b. For self-contained grouts, provide material complying with TABLE 1714-1:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soaking Time</td>
<td></td>
<td>1 to 3 min.</td>
</tr>
<tr>
<td>Initial Set Time, min.</td>
<td>ASTM C 1102</td>
<td>20 min.</td>
</tr>
<tr>
<td>Compressive Strength 28-day min.</td>
<td>ASTM C 39</td>
<td>4,000 psi</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>ASTM C 1090</td>
<td>0.00%</td>
</tr>
<tr>
<td>Expansion</td>
<td>ASTM C 1090</td>
<td>1.5%</td>
</tr>
<tr>
<td>Pull Out Strength</td>
<td>ASTM E 488</td>
<td>9,000 lbf</td>
</tr>
<tr>
<td>Freeze-Thaw, min.</td>
<td>ASTM C 666, 300 cycles</td>
<td>95%</td>
</tr>
</tbody>
</table>

1714.3 TEST METHODS
Test as specified in subsection 1714.2.

1714.4 PREQUALIFICATION
a. Manufacturers interested in prequalifying material under subsection 1714.2a. must submit the following to the Bureau of Materials and Research:
   (1) A complete description, literature, and set of instructions and recommendations,
   (2) A copy of test results performed in accordance with ASTM C 1107 or CRD-C 621,
   (3) Certificate stating results comply with ASTM C 1107 or CRD-C 621, and
   (4) Material Safety Data Sheets (MSDS).

b. Manufacturers interested in prequalifying material under subsection 1714.2b. must submit the following to the Bureau of Materials and Research:
   (1) A complete description, literature, and set of instructions and recommendations,
   (2) A copy of test results performed as outlined in subsection 1714.2b.,
   (3) Certificate stating results comply with the values outlined in subsection 1714.2b., and
   (4) Material Safety Data Sheets (MSDS).

c. The Bureau of Materials and Research will maintain a list of qualified materials. Products will remain on the list as long as field performance is satisfactory.

1714.5 BASIS OF ACCEPTANCE
Prequalification as specified in subsection 1714.4.
Receipt and approval of a Type C certification as specified in DIVISION 2600.
Visual inspection by the Field Engineer.