



Shrinkage

Plastic State	ASTM C-827	In plastic state, the grout must not shrink (0) and the grout must not expand by more than 2%.
Hardened State	ASTM C157	0.20% Maximum

Consistency

Plastic State	ASTM C-109	110 ± 5%
High Flow State	IM 375	20 ± 5 seconds

**CERTIFICATION**

The manufacturer shall file a certification with the Office of Materials at the beginning of each calendar year stating that the material supplied during that year is identical with the formulation previously tested and approved by the Office of Materials.

**MONITOR SAMPLING & TESTING**

The Office of Materials may sample and test hydraulic cement grouts to verify their capability of meeting the approval requirements.