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Whitemud^{MK} Metakaolin for Mitigation of Alkali Silica Reaction

Whitemud^{MK} Metakaolin can be used in combination with CSA Type GU cements and Type F and C-Intermediate Fly Ash to make concrete designed to be resistant to alkali silica reaction (ASR). Specific requirements of CSA A23.1-04 or the design engineer for such concrete must also be met.

Testing in both rapid and long term tests show that a minimum of 10% Whitemud^{MK} will provide mitigation of ASR. Several test results with Whitemud^{MK} are shown below. Additional margins of safety are obtained when Whitemud^{MK} is used in ternary blends with slag and fly ash.

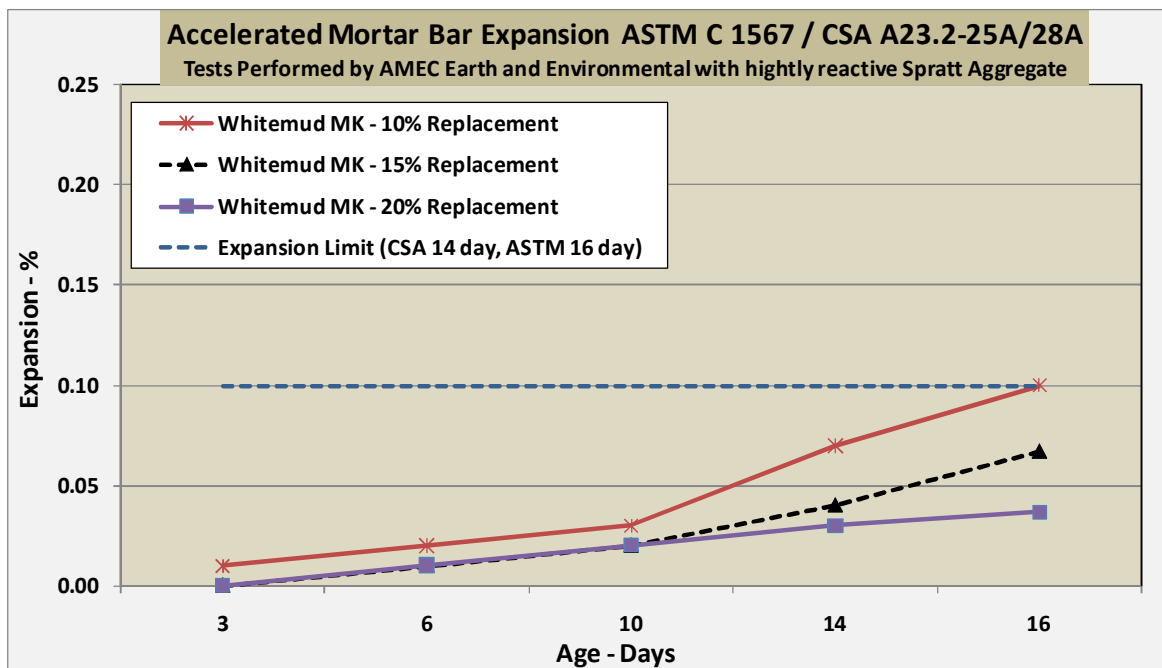


Figure 1: Rapid Mortar Bar Expansion with CSA GU Cement and Whitemud^{MK}

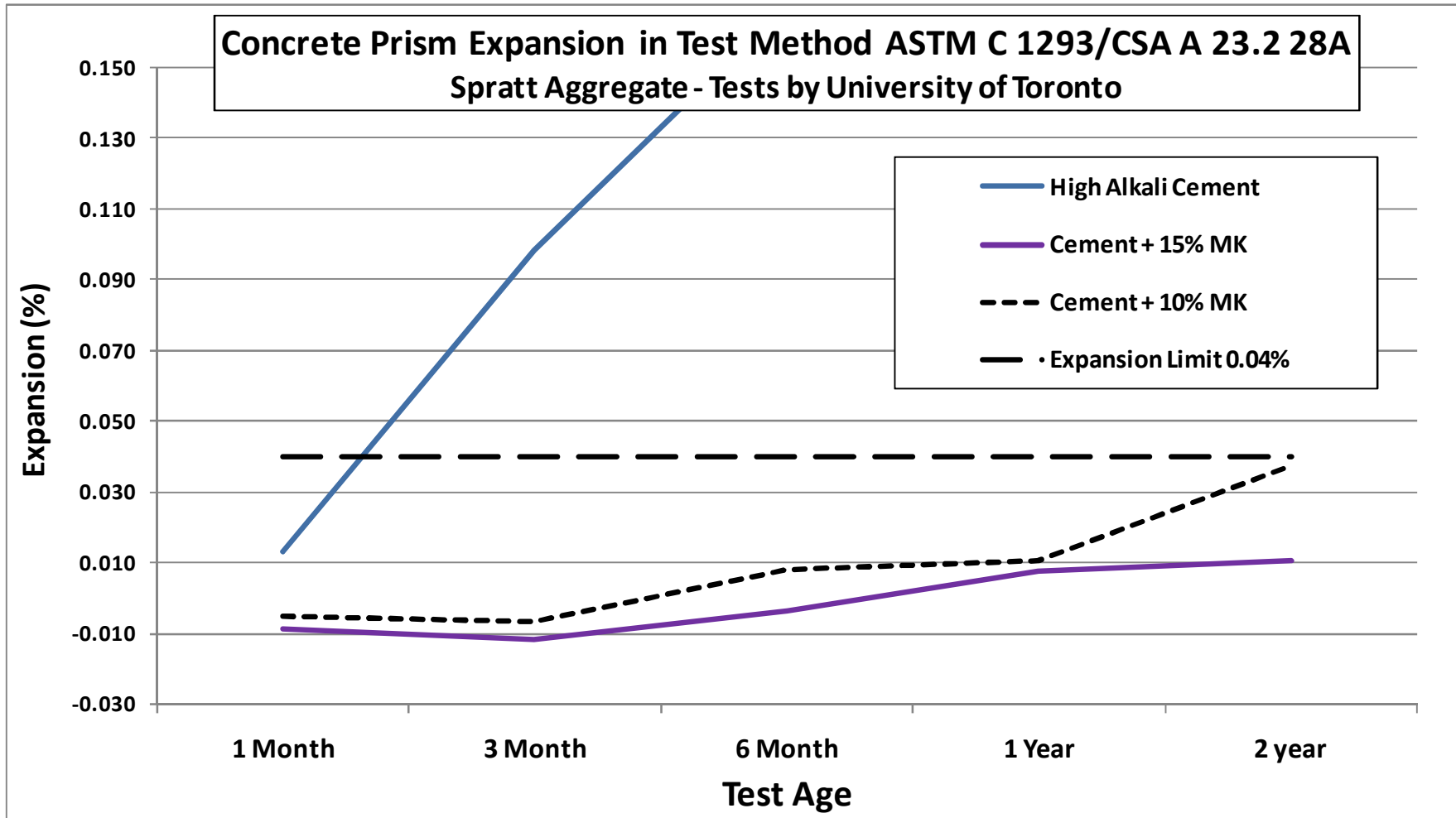


Figure 2: Concrete Prism 2 Year Expansion - CSA 23.2 28A/ ASTM C 1293