

CRD-C 94-95

CORPS OF ENGINEERS SPECIFICATION FOR SURFACE RETARDERS

1. Scope

1.1 This specification covers chemical agents proposed for use as surface-applied retarders to prolong the period of time during which air-water cutting is effective as a means for cleaning construction joints in concrete or to delay hardening of mortar in surfaces of concrete intended to have an exposed-aggregate finish.

2. Requirements

2.1 The chemical agent shall comply with the requirements of CRD-C 87 for Type B Retarding Admixtures (ASTM C 494).¹

2.2 A test panel of appropriate size for evaluating the effectiveness of the treatment made using a mixture

sufficiently similar to that on which the retarder is intended to be used, will be prepared. The retarder shall be applied in the amount proposed and at the stipulated time, the treated surface shall be cut by air-water as is intended to be used on the horizontal construction joint or otherwise washed as proposed for the exposed-aggregate finish. The adequacy of the coating will be judged by the appearance of the washed surface, taking account of the desired degree of exposure and freedom from cement-paste coatings of the exposed portions of aggregate particles. This demonstration shall be performed by and at the expense of the contractor at a time and place agreeable to the Contracting Officer.

¹ It is not known whether or not all commercial products that may be on the market at any time that meet the requirements of CRD-C 87 (ASTM C 494) for Type B will function effectively as surface retarders but it is believed that such products could exist. This is the rationale for having the requirement in 2.2.