

ABSTRACT

Iowa has been using low slump concrete for repair and resurfacing of deteriorated bridge decks on a routine basis since the mid 1960's. More than 150 bridges have been resurfaced by this method with good results.

A study was initiated in 1973 to evaluate 15 bridges resurfaced with low slump concrete, and one bridge resurfaced with latex modified concrete. The evaluation includes an assessment of concrete physical properties, chloride penetration rates, concrete consolidation, and riding qualities of the finished bridge deck.

Results indicate that the overall properties of these two types of concrete are quite similar and have resulted in a contractor option concerning which system shall be used on bridge deck repair/resurfacing projects.