



CONCRETE SEALERS

GENERAL

Concrete sealers for use in protecting concrete from chloride intrusion shall meet the requirements of applicable Iowa Department of Transportation Specifications. Materials that impart a "glossy" surface texture are intended for use only on non-traffic areas, such as pier tops or abutments and are shown in Appendix A. Materials that do not affect surface texture are intended for use in the gutter lines and curbs of bridge decks and are shown in Appendix B. It is not intended that either type of concrete sealer be applied over the entire bridge deck surface.

ACCEPTANCE

Acceptance of concrete sealers for use on Department of Transportation projects will be on the basis of manufacturer and brand name approval. Approved manufacturers and brand names for the two different types of applications are listed in Appendixes A and B.

MANUFACTURER & BRAND NAME APPROVAL

To obtain approval for concrete sealers under Appendixes A and B, the manufacturer shall submit the following items to the Office of Materials in Ames, Iowa:

1. Product identification including brand name and product number
2. Complete manufacturer recommendations of usage including coverage rate
3. A current Material Safety Data Sheet (MSDS)
4. Independent test data showing the effectiveness of the sealer in preventing chloride intrusion
5. A sample consisting of at least 1 quart (0.946 liter) of sealer

The laboratory evaluation will consist of testing in accordance with AASHTO T259, "Resistance of Concrete to Chloride Ion Penetration," except a C-3 mix shall be used and the sealer will be applied to a sandblasted surface and subsequent sandblasting after sealing will not be done. The chloride content of the treated concrete at the 1/16 in. to 1/2 in. (2 mm to 13 mm) depth shall not exceed 10 percent of the control concrete at the same depth.

Approval of concrete sealers may be withdrawn because of deficient monitor test results; product changes made after original approval, or unsatisfactory field performance.

CERTIFICATION

The manufacturer shall file a certification statement 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 concrete sealers to verify compliance with specifications.