



MECHANICAL CONCRETE ANCHORS

GENERAL

Concrete anchors shall meet the requirements of applicable Iowa Department of Transportation Specifications and design guides. Users shall follow manufacturers' recommendations for allowable loads used. Allowable loads shall not exceed $\frac{1}{4}$ of ultimate loads.

ACCEPTANCE

Acceptance of concrete anchors shall be on the basis of certification from an approved manufacturer and approved brand names. Approval of concrete anchors shall be based on tension (pull-out) and shear tests in accordance with ASTM E488. Tests shall be performed by an independent certified laboratory.

When galvanized anchors are specified, zinc coating shall be applied by either hot-dipped galvanizing to meet the requirements of ASTM A153, Class C, or mechanically-galvanized to meet the requirements of ASTM B695, Class 50 Type 1, or electrodeposited to meet the requirements of ASTM B 633, Type I, with minimum thickness of 5 μ m.

Approved manufacturers and approved brand names are listed in [Appendix A](#). Allowable loads for each approved brand name can be found from manufacturers' literatures or their websites.