

Iowa Department of Transportation

Office of Materials

Reissued October 18, 2005 Supersedes October 3, 2000 Matls. IM 448

# **CLAY & CONCRETE DRAIN TILE**

## GENERAL

Concrete and clay drain tile shall meet the requirements of AASHTO M178 (ASTM C412) and M179 (ASTM C4), respectively. Acceptance will be on the basis of certification of compliance from approved plants or distributors subject to periodic inspections and the testing of random monitoring samples. Approval may be withdrawn on the basis of unsatisfactory inspections or deficient test results on monitoring samples.

### PLANT APPROVAL

Plant approval will be recommended by the District Materials Engineer responsible for inspection of the plant. Approval may be based on a historical record of inspection and testing, or on a series of quality tests of present production and an evaluation of present quality control procedures. The District Materials Engineer will be responsible for designing and performing a monitoring inspection and testing program for each plant. Deficient test results on any monitor samples will be considered cause for removing a plant from the approved list. Reinstatement on the approved list will be based on the submittal of evidence that adequate corrective quality control procedures have been implemented and verified by a series of random samples. Approved plants are listed in Appendix A.

### CERTIFICATION

The manufacturing plant or supplier shall furnish with each shipment a certified bill of materials or invoice which identifies the project number, contractor, and number of pieces of each class and size. The certification of compliance shall be stated as follows:

The materials itemized in this shipment are certified to be in compliance with AASHTO (appropriate specification).

Authorized Signature and Date

One copy of the above document for the Project Engineer shall accompany each shipment, and two additional copies shall be forwarded to the Office of Materials in Ames, Iowa, for distribution.

### ACCEPTANCE

Each shipment should be inspected for damage due to handling and shipment. Sound tile may be approved for incorporation into a project upon receipt of a properly certified bill of materials or invoice.