

Engineering Brief # 10

Date: January 13, 1976

In Reply Refer To: AAS-580

Subject: Engineering Brief No. 10, Asbestos-Cement
Storm Drain Pipe

From: Chief, Airports Engineering Division, AAS-500
To: All Regions

Attn: Chiefs, Airports Divisions

Engineering Brief No. 10, Asbestos-Cement Storm Drain Pipe, presents the ASTM and AASHTO specifications which should be used for storm drain pipe instead of Federal Specification 55-P-331 (see Division IV, Drainage, 701-2.9 of Advisory Circular 150/5370-10). This information is being sent in the form of an Engineering Brief to expedite use of the alternate specification. This revision will be included in future rewrite of Division IV.

ORIGINAL SIGNED BY:
LEONARD E. MUDD

Enclosure

ENGINEERING BRIEF NO. 10

ASBESTOS-CEMENT STORM DRAIN PIPE

Background. Information contained in Advisory Circular 150/5370-10, Standards for Specifying Construction of Airports, Division IV, Drainage, 701-2. 9, Asbestos-Cement Sewer Pipe may be causing undue expense in Airport drainage construction. This item cites Federal Specification 55-P-331 for conformance. This Federal Specification is intended for use in sanitary sewer applications, (see paragraph 6.1 enclosure 1). Due to the corrosive nature of sanitary sewer wastes the requirements are more stringent than storm sewer pipe requirements.

Recommendation. We suggest that designers be encouraged to specify either AASHTO M-217 or ASTM C-663 when providing for asbestos-cement storm drain pipe. Copies of both specifications are attached as enclosures.

ORIGINAL SIGNED BY:
JOHN L. RICE

Civil Engineer

Enclosures
SS-P-331D

NOTES

6.1 Intended use.

Pipes covered by this specification are intended for conveying sanitary sewage in gravity flow sewage systems. Type I pipe is intended for use where moderately aggressive water or soil of moderate sulfate content, or both, are expected to come in contact with the pipe. Type II pipe is intended for use where highly aggressive water or water and Boil of high sulfate content are expected to come into contact with the pipe, 3@@n this pipe is to be used in areas having warm climates which tend to promote generation of hydrogen sulfide in sewage, such generation should be controlled in the design of the sewage system. In cases where the generation of hydrogen sulfide cannot be controlled by design, the use of asbestos-cement pipe with lining conforming to ASTM C541 should be considered. When this pipe is to be used in sewage systems servicing industries producing acid wastes, such waste should receive an adequate degree of neutralization or dilution prior to discharge into the sewage system by means of an appropriately designed facility. Type III pipe is intended for use where contact with aggressive waters and sulfates are not expected,.

6.2 Ordering data.

Purchasers should select to, preferred options permitted herein and include the following information in the procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type, class, and size of pipe required (see 1.2.1).
- (c) Time frame required for submission or first produced item(s) and number or items to be furnished (see 3. 2).
- (d) When short lengths or sewer pipe are required and length(s) required (see 3.4.1).
- (e) When couplings are to be furnished separately (see 3.5.1).
- (f) When fittings are required (see 3.5.2).
- (g) Whether non-oil resistant or oil resistant sealing rings are required (see 3.6)
- (h) Level of packing required (see 5.1).

6.3 The requirements of this specification are similar to ASTM C428, asbestos-cement nonpressure sewer pipe, and ASTM C644, asbestos-cement nonpressure small diameter sewer pipe.

6.4 Classification changes.

Classification changes between this and the previous issue of this specification are:

Class 6000 and class 7000 - added.

Sizes 4, 5, 27, 33, 39, and 42 inch diameter - added.