

SUDAS Revision Submittal Form

Status Date: As of 5/17/2019 **Topic:** Cementitious mortar liner with epoxy seal
Manual: Specifications **Manual Location:** Section 6020, 2.03

Requested Revision:

2.03 CENTRIFUGALLY CAST CEMENTITIOUS MORTAR LINER WITH EPOXY SEAL

A. Cementitious Lining:

1. Use a high-strength, high-build, corrosion-resistant mortar, based on Portland cement fortified with micro silica. Mixed mortar is to have a paste-like consistency that may be sprayed, cast, pumped, or gravity-flowed into any area 1/2 inch and larger.
2. Comply with the following table for physical properties.

Table 6020.02: Physical Properties

Property	Value
Unit Weight	125 102-130 pcf
Set Time at 70° F ASTM C 403 Initial Set / Final Set	240 minutes / 440 480 minutes
Modulus of Elasticity ASTM C 469 24 hours / 28 days	180,000 psi min / 1,150,000 psi min
Flexural Strength ASTM C 293 24 hours / 28 days	650 psi min / 800 psi min
Compressive Strength ASTM C 109 24 hours / 28 days	3,000 psi / 10,000 psi
Tensile Strength ASTM C 307	600 psi
Shear Bond ASTM C 882	>1,000 psi
Shrinkage ASTM C 157	None
Chloride Permeability ASTM C 1202	<550 Coulombs

3. Use a lining containing a liquid admixture for the prevention of micro-biologically induced corrosion.

B. Corrosion-Resistant Epoxy Lining:

1. Use a two-component 100% solids epoxy formulated for use in sewer systems.
2. Comply with the following table for physical properties.

Table 6020.03: Physical Properties

Property	Value
Dry Time	4-6 hours at 75° F; 50% Relative Humidity
Compressive Strength ASTM D 695	16,800 15,000 psi min.
Flexural Strength ASTM D 790	13,900 11,000 psi min.
Tensile Strength ASTM D 638	12,400 4500 psi min.
Hardness ASTM D 2240	68-72 90 Shore D
Heat Distortion ASTM D 648	220°F
Ultimate Elongation ASTM D 638	4.5 3.5 - 5.5%
Adhesive Shear ASTM C 882 Adhesion ASTM D 7234	1,000 psi Substrate Failure

C. Casting: Provide new casting. Comply with Section 6010, 2.10.

Reason for Revision: Developed ranges as opposed to a single value to allow for more products.

Comments: Products meeting the above specifications:

- Epoxytec CPP Sprayable
- PARSONPOXY SEL-80HB
- Sauereisen SewerGard 210XHB
- Raven 405
- DURA-PLATE 6100
- Permaform COR+GARD

District: 1 2 3 4 5 6

Comments: None.

Action: Deferred Not Approved Approved

Final District Action Summary: All 6 districts approved.

Board of Directors Action: Approved.