



MODIFIER 300

PRODUCT SPECIFICATION SHEET

Flex-c-ment™ Modifier 300 is an internal polymeric additive for concrete mixes giving unique flexural as well as bonding qualities to concrete and cement mixes

Manufactured and Distributed by:

Consolidated Aggregates LLC, 1205-B Palestine Road, Picayune, Mississippi 39466

COMPOSITION

Flex-c-ment™ Modifier 300 is a water-based, ethylene-vinyl, acetate copolymer, acrylic modifier to be mixed within the composition of concrete and cement mixes to achieve unique and high quality flexural and bond strength capabilities, as well as user friendliness and workability. Flex-c-ment™ Modifier 300 also creates lasting strength and insulation qualities within concrete and cement mixes.

USES

Flex-c-ment™ Modifier 300 should be added to cement-based mixes of concrete, mortars, plasters, and stuccos to: increase their bond strength; improve workability, adhesion, and chemical resistance properties; and freeze thaw flexibility. Flex-c-ment™ Modifier 300 is a mixing additive within concrete and cement mixes for exterior, interior, above grade, and below grade applications. Flex-c-ment™ Modifier 300 greatly reduces cracking and/or crazing permitting applications at any thickness from featheredge to deep fill.

CAUTIONS

Do not use or apply to frozen or frost covered surfaces. Do not apply when ambient air or surface temperature is below freezing or expected to fall below 40F within a forty-eight hour period. Keep Flex-c-ment™ Modifier in a temperature controlled atmosphere to keep from freezing. Wear rubber gloves when using or applying Flex-c-ment™ Modifier 300. Flex-c-ment™ Modifier 300 may cause eye irritation in an unventilated area. Use with adequate ventilation. Wash with soap and water for clean up.

PHYSICAL PROPERTIES

When mixed with Flex-C-Ment Overlay mix the properties are as follows:

1. **Compressive Strength:** ASTM C 39 4,000 psi
2. **Flexural Strength:** ASTM C 78 515 psi
3. **Adhesion:** MIL-D-3134 Para. 3.7.14 (Shear from steel plate after 96 hours) ... 320 psi
4. **Water Absorption:** ASTM C 624 4.2%
5. **Indentation Characteristics:** (Steadily Applied Load) MIL-D-3134, Para. 4.7.4.2.1 (2000 lbs. on 1" steel ram imposed for 30 minutes) 1.1%
6. **Indentation Characteristics:** (Impacted Load) MIL-D-3134, Para 4.7.3 (2 lb. Steel ball dropped from 8-foot height) 0.008" indent. No loosening or cracking.
7. **Tensile Strength:** ASTM C190 620 psi
8. **Resistance to Elevated Temperatures:** MIL-D-3134, Para. 4.7.5.1.... No flow or Slip
9. **Flammability:** ASTM E162 Flame Spread Index. 0.47. Smoke Deposited. Less than 0.1 mg. ASTM 84. Flame Spread Rate - 0, Smoke Density Factor - 3, Fuel Contribution Rate - 0
10. **Abrasion Resistance:** ASTM C 779 032 in"
11. **Coefficient of Thermal Expansion:** ASTM C531 6.8 E-04
12. **Electrical Conductivity:** Dielectric
13. **Slip Resistance:** (Coefficient of Sliding Friction) On smooth, non-textured finish with no sealer: Dry Leather 0.43, Dry Rubber 0.59, Wet Leather 0.68, Wet Rubber 0.70 Slip Resistance is more related to the type of finish and sealers used, rather than the Flex-c-ment™ Overlay Mix itself.
14. **Freezing and Thawing:** ASTM C 666/C 666M-03 (Standard Test Method for Resistance of Concrete to Freezing and Thawing, Procedure A - Freezing and Thawing in Water) The relative dynamic modulus indicates that Flex-c-ment™ Overlay Mix is freeze-thaw durable after 300 cycles.

BENEFITS:

- *Unique flexural qualities
- *Warranted bond ability
- *Increases bond strength
- *Improved workability
- *High chemical resistance capabilities
- *Reduces cracking potential
- *Moisture tolerant and breathable
- *No volatile organic compound emission
- *Contributes to USGBC credits under LEED rating system
- *Abrasion and wear resistant

OTHER PROPERTIES ARE AS FOLLOWS

Overlay Grey Mix	Measured -1	2	3	Mean Value
Consistency flow table test(in)	8.81	8.70	8.75	8.75
Bending Strength psi	800 psi	840 psi	820 psi	820 psi
Overlay White Mix	Measured-1	2	3	Mean Value
Consistency-flow table test(in)	7.20	7.12	7.18	7.16
Bending Strength psi	1075 psi	1030 psi	1050 psi	1055 psi

CLEANABILITY

In general, the more aggressive the finished surface the greater the coefficient of friction and corresponding skid resistance, the more difficult to clean. The smoother the finished texture the easier the surface is to clean, but there is a loss of skid resistant properties. Cleaning and disinfecting compounds and cleaning techniques can affect the color, gloss, texture and performance of the system. As a precautionary step, Flex-c-ment™ recommends that the end-user test their cleaning and disinfecting compounds on a non-conspicuous area before use. Clean up with water before allowing to dry. Sodium Chloride can be sprinkled on the Flex-c-ment™ Modifier 300 which may coagulate the latex and facilitate cleaning with water. Place coagulated waste in a closed container. Wear protective equipment during cleanup.

COVERAGE

Flex-c-ment™ Modifier 300/5 gallon pail to be used to mix with 12-60 lb bags of Flex-c-ment™ Overlay Mix.

SHELF LIFE

If properly stored, the expected shelf life can exceed 6 months. However, it is recommended that Flex-C-Ment Acid Stain be used as soon as possible after delivery. Rotate stock to use oldest inventory first. Store under roof and keep dry.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN Flex-c-ment™ - Consolidated Aggregates, LLC . INVOICE ARE MET.

Flex-c-ment™ warrants to the purchaser of its products that such products are free from manufacturing defect. Flex-c-ment™ does not warrant or guarantee the workmanship performed by any person or firm installing its products. Flex-c-ments™ obligation under this warranty is limited solely to the original purchaser and solely to replacement in kind of any Flex-c-ment™ product which may prove defective in manufacture within three years from date of installation, provided said product was stored correctly and installed within the product's shelf life, by the original purchaser and upon examination, by Flex-c-ment™, shall be deemed defective.

IN NO EVENT SHALL Flex-c-ment™ BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON Flex-c-ments™ PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF A Flex-c-ment™ PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF Flex-c-ment™ PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION, ABUSE OR MISUSE. Flex-c-ment™ MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIALS NOT SUPPLIED BY Flex-c-ment™, WHICH ARE USED IN CONNECTION WITH ITS PRODUCTS. THE TERM "ORIGINAL PURCHASER" IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM Flex-c-ment™ PRODUCTS CORP. SOLD ITS PRODUCT OR PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST Flex-c-ment™ SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.