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Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format as described in *The Project Resource Manual—CSI Manual of Practice*. The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” when editing this section.

Section numbers are from *MasterFormat* 1995 Edition, with numbers from *MasterFormat* 2004 Edition in parentheses. Delete version not required.

SECTION 03240 (03 24 00)

FIBROUS REINFORCING

Specifier Notes: This section covers Honeywell Caprolan-RC® fibrous reinforcing for concrete. Consult Sweeney Materials for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fibrous reinforcing for concrete.

1.2 RELATED SECTIONS

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

- A. Section 02750 (32 13 00) - Rigid Paving.
- B. Section 03300 (03 30 00) - Cast-in-Place Concrete.
- C. Section 03370 (03 37 13) - Shotcrete.

- D. Section 03400 (03 40 00) - Precast Concrete.

1.3 REFERENCES

Specifier Notes: List standards referenced in this section, complete with designations and titles. This article does not require compliance with standards, but is merely a listing of those used.

- A. ASTM C 94 - Standard Specification for Ready-Mixed Concrete.
- B. ASTM C 1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- C. National Evaluation Service (NES) Report NER-433.

1.4 SUBMITTALS

- A. Comply with Section 01330 (01 33 00) - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including dosage rate and mixing instructions.

Specifier Notes: Delete samples if not required.

- C. Samples: Submit manufacturer's sample of fibers.
- D. Quality Assurance: Submit NES Report NER-433.
- E. Certification: Submit manufacturer's certification that fibers comply with specified requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver fibers in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name, manufacturer, and weight of fibers.
- B. Storage:
 - 1. Store fibers in clean, dry area indoors in accordance with manufacturer's instructions.
 - 2. Keep bags sealed until ready for use.
- C. Handling: Protect fibers during handling to prevent contamination.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Honeywell, 4401 St. Andrews Road, Columbia, South Carolina 29210. Phone (803) 750-4562. E-mail caprolan-rc@honeywell.com.
- B. Substitutions: Not permitted.

2.2 FIBROUS REINFORCING

- A. Fibrous Reinforcing: Honeywell Caprolan-RC fibers used as secondary reinforcement of concrete.
 - 1. Material: Alkali-resistant, hydrophilic, 100 percent virgin, nylon 6.
 - 2. Conformance: ASTM C 1116.
 - 3. Approval: NES Report NER-433.
 - 4. Fiber Length: 3/4 inch.
 - 5. Fiber Diameter: 30 microns.
 - 6. Fibers per Pound: 33,000,000.
 - 7. Specific Gravity: 1.14.
 - 8. Melting Point: 428 degrees F (220 degrees C).
 - 9. Water Absorption: 4.5 percent.
 - 10. Fiber Ends: Cut ends of fibers to ensure there are no split ends, fused ends, fused logs, or fused daises.

PART 3 EXECUTION

3.1 MIXING

- A. Add fibers to concrete mixture in accordance with manufacturer’s instructions and ASTM C 94.
- B. Add fibers directly into concrete mixer and mix to obtain uniform fiber distribution throughout concrete.

Specifier Notes: Specify dosage rate of fibers. Consult Sweeney Materials for more information.

- C. Dosage Rate: Add fibers at dosage rate of [1.0 pounds minimum] [8.0 pounds maximum] per cubic yard of concrete.

Specifier Notes: Specify Section 02750 (32 13 00) when fibers will be added to concrete pavement. Specify Section 03300 (03 30 00) when fibers will be added to cast-in-place concrete. Specify Section 03370 (03 37 13) when fibers will be added to shotcrete. Specify Section 03400 (03 40 00) when fibers will be added to precast concrete.

- D. Concrete shall be as specified in Section [02750 (32 13 00)] [03300 (03 30 00)] [03370 (03 37 13)] [03400 (03 40 00)].

END OF SECTION