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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)

SYNTHETIC FIBER REINFORCEMENT

Specifier Notes: This section covers Propex Concrete Systems Fibermesh® 300 polypropylene fibers for use as concrete secondary reinforcement. Consult Propex Concrete Systems for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Polypropylene fibers used as concrete secondary reinforcement.

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 03210 (03 21 00) - Reinforcing Steel.

- C. Section 03300 (03 30 00) - Cast-in-Place Concrete.
- D. Section 03370 (03 37 13) - Shotcrete.
- E. Section 03500 (03 50 00) - Cementitious Decks and Toppings.

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. Southwest Certification Services (SWCS), Omega Point Laboratories No. 8662-1.
- D. UL Report File No. R8534-11.

1.4 SUBMITTALS

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

Specifier Notes: Delete submitting samples if not required.

- C. Samples: Submit manufacturer's sample of synthetic fiber reinforcement.
- D. Manufacturer's Certification:
 - 1. Submit manufacturer's certification that synthetic fiber reinforcement complies with specified requirements.
 - 2. Submit evidence of manufacturer's ISO 9001:2000 certification.
 - 3. Submit evidence of satisfactory performance history of synthetic fiber reinforcement.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
 - 1. Synthetic fiber reinforcement manufactured in ISO 9001:2000 certified facility.
 - 2. Minimum 10-year satisfactory performance history of specified synthetic fiber reinforcement.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver synthetic fiber reinforcement in manufacturer's original, unopened, undamaged containers and packaging, with labels clearly identifying product name, unique identification number, code approvals, directions for use, manufacturer, and weight of fibers.
- B. Storage:

1. Store synthetic fiber reinforcement in clean, dry area indoors in accordance with manufacturer's instructions.
2. Keep packaging sealed until ready for use.

C. Handling: Protect synthetic fiber reinforcement during handling to prevent contamination.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Propex Concrete Systems Corp., 6025 Lee Highway, Ste 425, PO Box 22788, Chattanooga, Tennessee 37422. Toll Free (800) 621-1273. Phone (423) 892-8080. Fax (423) 892-0157. Website www.fibermesh.com. E-mail fibermesh@propexinc.com.

2.2 SYNTHETIC FIBER REINFORCEMENT

- A. Synthetic Fiber Reinforcement: Fibermesh 300.
1. Material: 100 percent virgin homopolymer polypropylene fibrillated fibers, containing no reprocessed olefin materials.
 2. Conformance: ASTM C 1116, Type III.
 3. Fire Classifications:
 - a. UL Report File No. R8534-11.
 - b. Southwest Certification Services (SWCS), Omega Point Laboratories No. 8662-1.

Specifier Notes: Specify graded or single-cut lengths.

4. Fiber Length: [Graded] [Single-cut lengths].
5. Alkali Resistance: Alkali proof.
6. Absorption: Nil.
7. Specific Gravity: 0.91.
8. Melt Point: 324 degrees F (162 degrees C).

PART 3 EXECUTION

3.1 MIXING

- A. Add synthetic fiber reinforcement to concrete mixture in accordance with manufacturer's instructions.
- B. Add synthetic fiber reinforcement into concrete mixer before, during, or after batching other concrete materials.

Specifier Notes: Consult Propex Concrete Systems for recommendations regarding increased application rates for specialty performance.

- C. Application Rate: Add synthetic fiber reinforcement at minimum application rate of 1.5 pounds per cubic yard (0.9 kg/m³) of concrete.

- D. Mix synthetic fiber reinforcement in concrete mixer in accordance with mixing time and speed of ASTM C 94 to ensure uniform distribution and random orientation of fibers throughout concrete.

Specifier Notes: Insert section number of the section specifying the concrete.

- E. Concrete shall be as specified in Section _____ .

3.2 PLACING AND FINISHING

Specifier Notes: Insert section number of the section specifying the concrete.

- A. Placing and finishing concrete shall be as specified in Section _____ .

END OF SECTION