



## The Euclid Chemical Company

19218 Redwood Road ♦ Cleveland, Ohio 44110  
Toll-free: [800] 321-7628 ♦ Fax: [216] 531-9596

An **FPM** Company

[www.euclidchemical.com](http://www.euclidchemical.com)

ISO 9001 Certified

American Made. American Owned.

## SECTION 03240 FIBER REINFORCING

### Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) Format, including MasterFormat, SectionFormat, and PageFormat, contained in the CSI Manual of Practice.

The section must be carefully reviewed and edited by the Engineer to meet the requirements of the project and local building code. Coordinate this section with the concrete section.

This section covers EuclidChemical Company Fibers for use as secondary reinforcement in concrete. ConsultThe Euclid Chemical Company for assistance in editing this section for the specific application.

Delete All "Specifier Notes" when editing this section

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Fibers for use as secondary reinforcement in 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 the fibers.

- A. Section 03300 - Cast-in-Place Concrete.
- B. Section 03370 - Specially Placed Concrete: Shotcrete.
- C. Section 03400 - 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 - Ready-Mixed Concrete.
- B. ASTM C 1116 - Fiber-Reinforced Concrete and Shotcrete.

#### 1.4 SUBMITTALS

- A. Comply with Section 01330 - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data.



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- C. Test Reports: Submit recent manufacturer's test reports from testing performed by an independent accredited laboratory indicating compliance of fibers with specified requirements.
- D. Manufacturer's Quality Assurance: Submit manufacturer's certification that fibers comply with ASTM C 1116, Type III and other specified requirements and are suitable for intended application.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver fibers in manufacturer's original unopened containers and packaging, with labels clearly identifying:
  - 1. Material name.
  - 2. Manufacturer.
  - 3. Weight of material.
- B. Storage:
  - 1. Store fibers in a clean dry area in accordance with manufacturer's instructions.
  - 2. Keep containers sealed until ready for use.
- C. Handling: Protect fibers during handling, batching, and mixing to prevent contamination.

## PART 2 PRODUCTS

### 2.1 MANUFACTURER

- A. Euclid Chemical Company• 19218 Redwood Road• Cleveland, OH 44110  
Toll Free (800) 321-7628 Phone (216) 531-9222. Fax (216) 531-9596.  
Web Site [www.euclidchemical.com](http://www.euclidchemical.com).

### 2.2 FIBERS

Specifier Notes: Specify one of the following eight Euclid Chemical Company Fibers and delete the others. Consult Euclid Chemical for assistance in determining the required fibers for the specific application.

- A. Fibers as Secondary Reinforcement in Concrete: \_\_\_\_\_ .

[Eucon Fibrillated Polypropylene Fibers]  
[Eucon Multi-Plus Enhanced Multifilament Polypropylene Fibers]  
[Eucon Monofil Polypropylene Fibers]  
[Eucon Multi-Plus Enhanced Nylon Reinforcing Fibers]  
[Eucon Super Nylon 6 Fibers]  
[Eucon Anti-Fungal / Anti-Microbial Monofil Fibers]  
[Eucon Super Cast Polypropylene Fibers]  
[Eucon Super 76 Crack Reducer Fibers]

- 1. Material: 100 percent virgin material manufactured for use as secondary reinforcement in concrete. Alkali-resistant, noncorrosive, and nonabsorptive.
- 2. Compliance: ASTM C 1116, Type III.



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3. Physical Test Results: At recommended dosage rates, results from appropriate ASTM tests shall not be less than control.
4. Plastic Shrinkage Reduction: Greater than 40 percent of control.

Specifier Notes: Consult The Euclid Chemical Company for assistance in determining the required fiber length.

5. Fiber Length: In accordance with manufacturer's instructions.

Specifier Notes: Indicate the concrete to contain fibers. Edit the following as required for the project.

- B. Use fibers [in all concrete] [as alternative to welded wire fabric in plain concrete slabs-on-grade when used for secondary reinforcement] [ \_\_\_\_\_ ].

### 2.3 MIX DESIGN

Specifier Notes: Specify Section 03300 for cast-in-place concrete, Section 03370 for shotcrete, or Section 03400 for precast concrete.

- A. Concrete Mix Design: As specified in Section [03300] [03370] [03400].
- B. Concrete Materials: Evaluate concrete mix design with fibers mixed with concrete materials representative of those proposed for use.
- C. Compatibility of Materials: Verify compatibility of fibers with other materials in concrete mix.

## PART 3 EXECUTION

### 3.1 BATCHING AND MIXING

- A. Add fibers to concrete at dosage rate in accordance with manufacturer's instructions and as determined by concrete mix design.
- B. Batch and mix fibers in accordance with manufacturer's instructions and ASTM C 94.

Specifier Notes: Specify the method of adding the fibers to the concrete mix.

- C. Add fibers to concrete [during batching procedure at concrete batch plant] [directly into truck mixer after batching procedure].
- D. Mix concrete with fibers at mixing speed for a minimum of 5 minutes or 70 revolutions.

Specifier Notes: Specify Section 03300 for cast-in-place concrete, Section 03370 for shotcrete, or Section 03400 for precast concrete.

- E. Measuring, Batching, Mixing, and Delivering Concrete: As specified in Section [03300] [03370] [03400].



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**3.2 PLACING, FINISHING, AND CURING**

A. Placing, Finishing, and Curing Concrete: As specified in Section [03300] [03370] [03400].

**3.3 FIELD QUALITY CONTROL**

A. Inspection and Testing of Concrete: As specified in Section [03300] [03370] [03400].

B. Manufacturer's Field Services: Manufacturer's representative shall provide technical assistance as required.

**END OF SECTION**