SECTION 03240
FIBROUS REINFORCING

PART 1   GENERAL

1.01   SECTION INCLUDES
   A.   Fibrous concrete reinforcement for shrinkage control.

1.02   UNIT PRICES
   A.   No payment will be made for fibrous reinforcing under this Section. Include payment in unit price for concrete.

1.03   SUBMITTALS
   A.   Submittals shall conform to requirements of all provisions and sections of these specifications.
   B.   Submit manufacturer's product data indicating proposed fibrous concrete reinforcement materials for approval. Include documentation of performance history, compliance with applicable building codes, and ASTM C1116 Type III 4.1.3.
   C.   Submit manufacturer's batching and mixing instructions; and recommended quantity, in pounds of fiber per cubic yard, to be added to each type and strength of concrete.
   D.   Submit test data for design mixes in accordance with requirements of Sections 02521. Include results of tests accomplished in accordance with ASTM C94 and ASTM C1116 Type III 4.1.3; and ASTM C1116 (reference ASTM C1018) Performance Level I, outlined in Section 21 Note 7.

PART 2   PRODUCTS

2.01   FIBROUS CONCRETE REINFORCEMENT
   A.   Supply 100 percent virgin polypropylene fibrillated fibers specifically manufactured for use as concrete reinforcement. Materials shall not contain reprocessed olefin.
   B.   Provide fibrous concrete reinforcement materials to produce requirements for each type and strength of concrete designated. Minimum fiber reinforcement content shall be 1.5 pounds per cubic yard of concrete.
   C.   Physical characteristics:
1. Specific gravity 0.91
2. Tensile strength 80 - 110 ksi.
3. Fiber lengths Graded per manufacturer's recommendation.

PART 3 EXECUTION

3.01 MIXING
A. Add fibrous concrete reinforcement to concrete materials at the time concrete is batched. Amounts shall conform to approved Submittals for each type of concrete required.
B. Mix batched concrete in accordance with fibrous concrete reinforcement manufacturer's instructions and recommendations. Attain uniform and complete distribution of fiber reinforcement.

3.02 PLACING AND FINISHING
A. Place and finish concrete materials in accordance with requirements of Sections 02521. Finish to minimize protruding fibers.

3.03 FIELD QUALITY CONTROL
A. Provide services of a qualified technical representative to instruct concrete supplier in proper batching and mixing of materials to be provided.
B. Submit certificates prepared by concrete supplier indicating amount of approved fibrous concrete reinforcement material added to each batch of concrete delivered to project site.

END OF SECTION