

**ITEM 08554.30 M - GEOFIBER REINFORCED CONTROL LOW STRENGTH MATERIAL (CLSM)**

**DESCRIPTION**

Provide and place geofiber reinforced CLSM material at the locations and within the limits shown on the plans.

**MATERIALS**

**A. GEOFIBERS**

Provide certified tested fibrillated polypropylene geofiber strands. Acceptance will be based on meeting the following material properties:

<b>Property</b>	<b>Test Method</b>	<b>Requirement</b>
Polypropylene	ASTM D4101 Group 1/ Class 1/ Grade 2	99.4 %
Fiber Length	Measured	25 mm
Specific Gravity	ASTM D792	0.91 gr/cm <sup>3</sup>
Carbon black Content	ASTM D1603	0.6 %
Tensile Strength	ASTM D2256	311 MPa
Tensile Elongation	ASTM D2256	15 %
Young's Modulus	ASTM D2101	4,827 MPa

**B. CONTROLLED LOW STRENGTH MATERIAL**

Provide CLSM material meeting the requirements of Section 204 Controlled Low Strength Material. In addition to those requirements found in Section 204, the following material requirements shall be met:

-Certify that the Geofiber Reinforced CLSM will have a 28 day compressive strength between 1035 kPa and 1379 kPa and provide this certification to the Engineer.

-Cast three (3) cylindrical specimens for each batch of CLSM and for each subsequent mixture of CLSM/ Geofiber in accordance with §204-2.01 Tests and Control Methods.

**CONSTRUCTION DETAILS**

**A. GENERAL**

Store and protect geofibers prior to installation in accordance with the manufacturer's recommendations. For installation assistance and guidance at the start of construction, provide on-site representatives from the geofiber supplier for a minimum of three days.

**B. GEOFIBER REINFORCED CLSM MATERIAL PLACEMENT**

Prepare the area for the placement of the geofiber reinforced CLSM to the limits and depths as shown on the plans.

**1. The Geofiber - CLSM Ratio;**

8kg geofibers per cubic meter of CLSM (0.5lb geofibers per cubic foot of CLSM)

**2. PRE-MIX APPLICATION :**

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Provide a mixer capable of mixing and sufficiently supplying the required geofiber-CLSM ratio to the satisfaction of the Engineer. Mix and place the material into the limits and depths as shown on the plans.

**METHOD OF MEASUREMENT**

The quantity to be paid for under this item is calculated by the number of cubic meters of geofiber reinforced CLSM material computed in its final position, placed as required by the plans and specifications within the payment lines shown on the plans, except where revised payment lines are established by the Engineer prior to performing the work.

**BASIS OF PAYMENT**

The unit price bid for this item includes the cost of furnishing all labor, equipment and materials including site preparation, geofibers, CLSM, and on-site supplier representation necessary to satisfactorily complete the work as shown on the plans.