



SPECIFICATIONS

MEARLCRETE™

Low Density Cellular Concrete (LDCC)

1. GENERAL

1.1. DESCRIPTION

- 1.1.1. This work shall consist of batching, mixing, and placing Mearlcrete LDCC of the appropriate type as indicated on the plans or as directed by the engineer
- 1.1.2. The certified LDCC applicator shall furnish labor, materials, equipment, and supervision for the installation of LDCC in accordance with the drawings and specifications.

1.2. QUALITY ASSURANCE

- 1.2.1. Use skilled labor that is thoroughly trained, experienced, and familiar with the specified requirements and the methods for proper performance of this work.
- 1.2.2. The approved subcontractor, supplier, and producer of the LDCC shall be approved in writing by CELLULAR CONCRETE SOLUTIONS.
- 1.2.3. The specialized batching, mixing, and placing equipment shall be approved for the purpose by CELLULAR CONCRETE SOLUTIONS.

1.3. SUBMITTALS

- 1.3.1. The prime contractor shall list the product and qualified producer of the LDCC and shall not employ any product or producer without the prior approval of the engineer.
- 1.3.2. Product data: within 30 (option 15) calendar days after award of the contract, the prime contractor shall submit for approval by the engineer:
 - A. Manufacturer's specifications, catalog cut, and other engineering data need to demonstrate to the issuing authority compliance with the specified requirements.
 - B. Written approval of the approved subcontractor and the approved equipment by CELLULAR CONCRETE SOLUTIONS.

2. PRODUCTS

2.1. MATERIALS

- 2.1.1. Mearlcrete liquid foam concentrate shall be supplied by CELLULAR CONCRETE SOLUTIONS, Allentown, PA.
- 2.1.2. Mearlcrete liquid foam concentrate shall comply with the standard specifications of ASTM C 869 when tested in accordance with ASTM C 796.
- 2.1.3. Portland cement shall comply with ASTM C 150, Type I, II, or III.
- 2.1.4. Mixing water shall be potable and free from deleterious amounts of acids, alkali, salts, oils, and organic materials that would adversely affect the setting or strength of the Mearlcrete.
- 2.1.5. Admixtures for reducing water, accelerating set, etc., may be used when specifically approved by CELLULAR CONCRETE SOLUTIONS and in accordance with its recommendations.

- 2.1.6. Other additives such as fly ash may be used when specifically approved by CELLULAR CONCRETE SOLUTIONS.

2.2. MIX DESIGN

- 2.2.1. Mix design shall be in accordance CELLULAR CONCRETE SOLUTIONS recommendations for a cast density at point of placement of _____ pcf with a compressive strength of _____psi at 28 days.

3. EXECUTION

3.1. MIXING AND CONVEYING

- 3.1.1. Examine the areas and conditions under which work of this section will be preformed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until satisfactory conditions are established.
- 3.1.2. Using only the approved job site proportioning, mixing, and placing equipment approved by CELLULAR CONCRETE SOLUTIONS, mix the materials according to the mix design and convey promptly to the location of final placement.
- 3.1.3. Avoid excessive handling of the LDCC.
- 3.1.4. The area shall not have any standing water in it prior to placement of LDCC.

3.2. WEATHER CONDITION

- 3.2.1. Avoid freezing before initial set of LDCC.
- 3.2.2. Do not place at temperatures lower than 32 degrees Fahrenheit or when freezing conditions are expected in less than 24 hours.
- 3.2.3. If these conditions cannot be met, consult Cellular Concrete Solutions and determine precautions necessary to assure installation on an acceptable LDCC.

4. TESTING

4.1. WET DENSITY

- 4.1.1. During placement of the initial batches, check the density and adjust the mix as required to obtain the specified cast density at the point of placement.
- 4.1.2. At hourly intervals during placing, monitor the density and adjust as necessary to maintain the specified cast density.
- 4.1.3. Four (4) test specimens shall be taken at the point of placement for each 100 cubic yards of LDCC. Specimens shall be prepared, handled, cured, and tested for compressive strength in accordance with ASTM C 495.

5. MEASUREMENT AND PAYMENT

5.1. MEASUREMENT

- 5.1.1. Lightweight Low Density Cellular Concrete shall be measured on a cubic yard basis.