

## SECTION 02245

### LOW DENSITY CONCRETE BACKFILL (FLOWABLE FILL)

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section Includes: Low density concrete backfill.

##### 1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM):
  - 1. C 150 - Specification for Portland Cement.

##### 1.03 SYSTEM DESCRIPTION

- A. Performance Requirements
  - 1. Low Density Concrete Backfill:
    - a. Dry in-place density of not less than 30 pounds per cubic foot and not more than 36 pounds per cubic foot.
    - b. 28 day compressive strength shall be between 100 psi and 150 psi. (1 bag mix)

##### 1.04 SUBMITTALS

- A. Proposed mix design.

#### PART 2 PRODUCTS

##### 2.01 MANUFACTURERS

- A. Pregenerated foam: One of the following or equal:
  - 1. Mearl Corporation, Roselle Park, N.J., Mearl Geofom Liquid.

##### 2.02 MATERIALS

- A. Low Density Concrete Backfill Components:
  - 1. Type II low alkali Portland cement.
  - 2. Water.
  - 3. Aggregate: Pregenerated foam, vermiculite, or other low weight aggregate material which will conform to the strength and density requirements specified herein.

PART 3 EXECUTION

3.01 INSTALLATION

A. General

1. Low density concrete (flowable fill) may only be used for backfill when approved by the City Engineer.
2. Install low density concrete backfill as a nonstructural backfill material as indicated on the submitted Drawings.
3. Place low density concrete backfill in a manner so that minimal consolidation of the material occurs during and after placement.
  - a. Monitor wet density of the placed low density concrete backfill, and submit data on a daily basis.
  - b. At no time shall wet density exceed 48 pounds per cubic foot.

- B. Metal plates shall be placed over trench for 48 hours to protect concrete.

END OF SECTION