

## Solite® Specification

Lightweight aggregate shall be Solite® or an approved equal manufactured by the rotary kiln method and meeting all the requirements of a recently (2 years) ASTM C -330 certification.

No by-products, slags, cinders or pumice are permitted. The lightweight aggregate shall have a proven record of durability and be non-corrosive with the following properties:

- A. Gradation: Unless otherwise specified the lightweight aggregate shall be a free draining coarse aggregate meeting the gradation requirements of ASTM C-330 table I. Normally  $\frac{3}{4}$ " to #4 or  $\frac{3}{8}$ " to #8 standard gradations shall be specified. Special gradations shall be specified by the engineer as required.
- B. Density: The lightweight aggregate bulk loose unit weight will vary depending on gradation selected but should be in the range of 45 pcf to 50 pcf oven dry for standard gradations.
- C. Toughness. The maximum Los Angeles Abrasion loss when tested in accordance with ASTM C -131(B grading) shall be 30%.
- D. Absorption: The maximum absorption of the lightweight aggregate shall be 18% and the minimum shall be 10% when tested in accordance with ASTM C 127 (24 hours).
- E. pH: The pH of the lightweight aggregate shall be between 6.5 and 9.0
- F. Soundness: The soundness loss shall be a maximum of 3% when using the Magnesium Sulfate method as outlined in ASTM C 88
- G. Unit Weight: The unit weight of concrete made using Solite® aggregates shall be determined at equilibrium as outlined in ASTM 567.