Fire-Rated Concrete Masonry Units (CMU)  
Normal Weight or Light Weight Architectural Specification

GENERAL
Comply with the referenced standards and other requirements indicated below for each form of concrete masonry unit required. Normal Weight or Light Weight Fire-Rated concrete masonry units shall be as manufactured by:

The Westbrook Concrete Block Co., Inc. – P.O. Box 700 – Westbrook, CT 06498.

PERFORMANCE
Fire Resistance Define required hourly ratings as 2, 3, or 4 hours under the provisions of Underwriters Laboratories. All fire-rated concrete masonry units shall be manufactured in compliance with the appropriate UL design number.

For all fire rated assemblies provide concrete masonry units conforming to Underwriters Laboratories Inc. UL 618 and design numbers: U901, U904, U906, U910, U912, U913 and U914.

Concrete Block: Provide units complying with characteristics indicated for Grade, Type, face size and exposed face. Provide Normal Weight Units with a density of 125 pcf or more or Light Weight Units with a density of no more than 90 pcf.


Normal Weight Units: Normal Weight aggregate shall be in compliance with A.S.T.M. C-33 with a gradation of No. 5 to 0, in combination with pea stone no greater than $\frac{3}{4}$”.

Lightweight Units: Lightweight aggregate shall be 100% expanded shale produced by the rotary kiln process complying with A.S.T.M. C-331 with a gradation of No. 4 to 0, Table 1 of A.S.T.M. C-331, aggregate as manufactured by the Norlite Corporation. Dry net weight of less than 90 pcf, blended with normal weight aggregate conforming to A.S.T.M. C-33.

DIMENSIONS
Size: Manufacturer’s standard units as follows: 16” 18” or long x 8” High (15 5/8” x 7 5/8” actual) x thickness as indicated.

APPEARANCE
All units shall be sound and free of cracks or other defects that would interfere with the proper placement of the unit or would significantly impair the strength or permanence of the construction. Minor crack incidental to the usual method of manufacture or minor chipping resulting from customary methods of handling in shipment and delivery are not grounds for rejection. Five percent of a shipment containing chips not larger than 1 inch in any dimension, or cracks not wider than 0.02 in. and not longer than 25% of the normal height of the unit is permitted.
ADDITIONAL OPTIONS

A. Scored Units - Units shall contain one vertical square edged score \( \frac{3}{8} \)" x \( \frac{3}{8} \)" located in the center of the exposed face.

B. Units shall have ____ vertical scores, each square edged \( \frac{3}{8} \)" x \( \frac{3}{8} \)" at equal spacing across the exposed face.

C. Where a fire resistance rating is required provide units conforming to the appropriate Underwriters Laboratories Design Number.

D. Insulation: Inserts shall be installed in the cores of the blocks at the block manufacturer’s plant. The inserts shall be Icon® or Korfil® as manufactured by Concrete Block Insulation Systems, Inc. (CBIS)

E. Units shall be manufactured with an integral water repellent system by a qualified block producer.

F. Provide bullnose units at all corners and door and window jambs, and window sills. Available in 4", 6", 8", 10", and 12" wall widths.