## TABLE 2105.2.2.1.2 COMPRESSIVE STRENGTH OF CONCRETE MASONRY

NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS (psi)		NET AREA COMPRESSIVE
Type M or S mortar	Type N mortar	STRENGTH OF MASONRY (psi) <sup>a</sup>
1,250	1,300	1,000
1,900	2,150	1,500
2,800	3,050	2,000
3,750	4,050	2,500
4,800	5,250	3,000

For SI: 1 inch = 25.4 mm, 1 pound per square inch = 0.00689 MPa.

**2105.2.2.1.3 AAC masonry.** The compressive strength of AAC masonry shall be based on the strength of the AAC masonry unit only and the following shall be met:

- 1. Units conform to ASTM C 1386.
- 2. Thickness of bed joints does not exceed  $\frac{1}{8}$  inch (3.2 mm).
- 3. For grouted masonry, the grout meets one of the following requirements:
- 3.1. Grout conforms to Article 2.2 of TMS 602/ACI 530.1/ASCE 6.
- 3.2. Minimum grout compressive strength equals or exceeds  $f'_{AAC}$  but not less than 2,000 psi (13.79 MPa). The compressive strength of grout shall be determined in accordance with ASTM C 1019.

## 2105.2.2.2 Prism test method.

**2105.2.2.1 General.** The compressive strength of clay and concrete masonry shall be determined by the prism test method:

- 1. Where specified in the *construction documents*.
- 2. Where masonry does not meet the requirements for application of the unit strength method in Section 2105.2.2.1.

**2105.2.2.2.2 Number of prisms per test.** A prism test shall consist of three prisms constructed and tested in accordance with ASTM C 1314.

**2105.3 Testing prisms from constructed masonry.** When *approved* by the *building official*, acceptance of masonry that does not meet the requirements of Section 2105.2.2.1 or 2105.2.2.2 shall be permitted to be based on tests of prisms cut from the masonry construction in accordance with Sections 2105.3.1, 2105.3.2 and 2105.3.3.

**2105.3.1 Prism sampling and removal.** A set of three masonry prisms that are at least 28 days old shall be saw cut from the masonry for each 5,000 square feet (465 m<sup>2</sup>) of the wall area that is in question but not less than one set of three masonry prisms for the project. The length, width and height dimensions of the prisms shall comply with the requirements of ASTM C 1314. Transporting, preparation and testing of prisms shall be in accordance with ASTM C 1314.

a. For units less than 4 inches in height, 85 percent of the values listed.