

TECHNICAL SPECIFICATIONS
FOR
CONCRETE MASONRY UNITS

1. Description of Work

The work specified under this section consists of all concrete block and brick work.

2. Mortar

(a) All mortar materials shall be delivered, stored, and handled to prevent damage, deterioration, or contamination. All mortar materials shall be stored under cover in a dry place and in the original packaging.

(b) Materials

- 1) Water shall be clean and free of deleterious materials.
- 2) Portland Cement: AASHTO M85, Type I
- 3) Hydrated lime: ASTM C 206
- 4) Sand: AASHTO M45

(c) Proportioning

Mortar shall be composed of one part Portland Cement and two parts sand. Hydrated lime, in an amount not to exceed ten percent, may be added to Portland Cement. Water shall be added to the mixture in such quantity as to form a stiff paste.

(d) Mortar shall be power mixed until the entire batch is homogeneous and the proper consistency.

(e) Retempering of mortar which has begun to set will not be permitted.

3. Concrete Masonry Units

Concrete masonry units shall conform to TDOTSS, January 1, 2021, Subsection 912.04 and all Supplemental Specifications thereto pertaining issued prior to the advertisement for this contract.

4. Building Brick

Building brick shall conform to TDOTSS, January 1, 2021, Subsection 912.01 and all Supplemental Specifications thereto pertaining issued prior to advertisement for this contract.

5. Sewer Brick

Sewer brick shall conform to TDOTSS, January 1, 2021, Subsection 912.02 and all Supplemental Specifications thereto pertaining issued prior to advertisement for this contract.

6. Reinforcement

Reinforcing shall be placed as shown on the Plans or as directed by the Engineer.

7. Execution

- (a) No masonry shall be laid in freezing weather unless heating of materials and protection of the masonry from cold are provided for.
- (b) All masonry shall be laid true to dimensions, plumb, square, in bond, and properly anchored. Joints of uniform thickness.
- (c) Work to be built into the masonry shall be built in as the masonry work progresses. All spaces about built in work shall be solidly filled with masonry.
- (d) Blocks shall be cut accurately to fit around pipe, openings, etc., with all voids slushed full.
- (e) All joints shall be tooled with a convex tool, slightly larger than the joint width.

8. Method of Measurement

Concrete masonry units (block and/or brick) shall be measured by the square foot of wall in place unless otherwise specified in the Contract Documents or Plans.

9. Basis of Payment

- (a) Accepted quantities of concrete masonry units will be paid for at the Contract Unit Price per square foot for Concrete Masonry Units, which price shall be full compensation for all labor and materials necessary to complete the construction as shown in the plans and including masonry units, mortar, waterproofing, and expansion material.
- (b) Payment will be made under the following bid item as set forth in the Bid Schedule:
 - Concrete Masonry Units (Blocks)
 - Concrete Masonry Units (Bricks)