MAXBRIC / Specification

Project specifications must take into account specific requirements for the project and local construction practices. All the information contained in this specification is offered as guidance for proper construction of masonry assemblies and is intended to comply with appropriate industry standards and practices.

SECTION 042223.31 CUSTOM ARCHITECTURAL CONCRETE UNIT MASONRY (CMU)
PART 1 - GENERAL

1.01. SUMMARY

A. Section Includes:
   1. Custom architectural concrete masonry units (CMU)

1.02. REFERENCES

A. American Concrete Institute (ACI):
   2. ACI 530-99 - Building Code Requirements for Masonry Structures.

B. American Society for Testing and Materials (ASTM):
   1. ASTM C 90 - Specification for Load-bearing Concrete Masonry Units.
   2. ASTM C 140 - Methods of Sampling and Testing Concrete Masonry Units.

1.03. SUBMITTALS

A. Section 01330 - Submittal Requirements: Procedures for submittals.

1.04. QUALITY ASSURANCE

A. Construction: Construct masonry in accordance with requirements of ACI 530 and 530.1.

B. Special Inspection and Testing: Provide inspection and testing in accordance with the Building Code and as noted on Drawings and will be performed under provisions of Section 014516.

C. Mock-up: Construct a masonry wall panel to represent the exterior masonry wall.
   1. Construct wall at least 4-feet long by 4-feet high.
   2. Locate where directed by Architect/Owner's Representative.
   3. Include reinforcing and minimum of one control joint and one outside corner.
   4. Include joint profile and mortar color.
   5. Erect entire mock-up with methods representative of daily construction and in-progress cleaning practices.
   6. Clean one-half of mockup to represent final clean down using methods and materials in accordance with the cleaning requirements herein and leave remainder without final cleaning for comparison purposes.
   7. Receive acceptance of mock-up by Architect/Owner's Representative before proceeding with masonry installation.
   8. When accepted, mock-up will be used as standard of quality for masonry Work.
   9. Leave field sample in place until project completion.
   10. Mock-up may not remain as part of the Work.
   11. Provide on-site inspection by a representative of mock-up construction and cleaning and submit manufacturer's letter of approval of the work procedures and the completed mock-up.
1.05. DELIVERY STORAGE AND HANDLING

A. Damaged Components:
   1. Do not use damaged masonry units
   2. Do not use damaged components of structure
   3. Do not use damaged packaged materials.
   4. Do not use masonry units that are contaminated.

B. Storage:
   1. Store different aggregates separately.
   2. Protect reinforcement, ties, and metal accessories from permanent distortions.
   3. Store reinforcement, ties, and metal accessories off the ground.

C. Cleaning Reinforcement: Before being placed, remove loose rust, ice, and other deleterious coatings from reinforcement.

PART 2 - PRODUCTS

2.01. MAXBRIC™ and MAXBLOC™ (CONCRETE MASONRY UNITS)

A. Integrally Pigmented Load-bearing Units: ASTM C 90.
   1. Stretcher unit dimensions:
      a. Nominal 4 inch high. (MAXBRIC™)
      b. Nominal 8 inch high. (MAXBLOC™)
      c. Nominal 16 inch long.
      d. Minimum Face Shell Thickness
         • 4 inch unit smooth face – 1”
         • 4 inch unit split-face – 1”
         • 8 inch unit smooth face – 1 1/4”
         • 8 inch unit split-face – 1 1/4”
         • 10 inch unit smooth face – 1 1/4”
         • 10 inch unit split-face – 1 1/4”
         • 12 inch unit smooth face – 1 1/4”
         • 12 inch unit split-face – 1 1/4”
   2. Normal weight
   3. Integral Granufin color pigments.
      a. Blended colors produced using MAXBRIC (CMU) integrated color blending system only. No applied finishes will be acceptable.
   4. Integral polymer water repellent.
      a. Manufacturers: KreteControl 230 Lee Building Products
         Substitutions not permitted.
   5. Manufacturers and Suppliers:
      a. MAXBRIC™ (CMU) by Lee Building Products / Manufacturers
         i. Lee Building Products, Louisville, KY. 502-245-3135.
         ii. Lee Building Products, Elizabethtown, KY. 270-765-4044.
         iii. Lee Building Products, Hopkinsville, KY. 270-886-6696.
         iv. Lee Building Products, Bowling Green, KY, 270-781-9813.
         v. Lee Building Products, Owensboro, KY. 270-683-6206.
         ix. Lee Building Products, Murfreesboro, TN. 615-893-7146.
         x. Lee Building Products, Nashville, TN. 615-244-4497.
         xi. Lee Building Products, Glasgow, KY. 270 659-2770
         xii. Lee Building Products, Somerset, KY. 606 451-8898
6. Colors: Selected from but not limited to the following options:
   a. Standard Colors – refer to manufacturer’s options
   b. Premier Colors – refer to manufacturer’s options
   c. Premier Hybrid Colors – refer to manufacturer’s options
   d. Premier Plus Colors – refer to manufacturer’s options

B. Basis of Design - Color to be________________________

7. Texture:
   a. Velour Series with a minimum fineness modulus of 3.35 t0 3.49
   b. Split Series

B. Unit Design: Modular two or three-core units sized as indicated and scheduled. Provide special units for bond beams, control and expansion joints, and lintels.
   1. Provide units as required for indicated construction including solid cap units.
   2. Provide units with exposed faces, which are uniform in appearance.

3.14. CLEANING

A. In-Progress Cleaning: Clean unit masonry as Work progresses by dry brushing to remove mortar fins and smears before toothing joints as described in Article 3.04.B.3.

B. Final Cleaning:
   1. After mortar has set, reached initial curing; within 7 days of completion of work for custom masonry units, clean exposed masonry as follows:
      - Remove large mortar particles by hand with wooden paddles and non-metallic scrape hoes or chisels.
      - Cut out any defective mortar joints and holes and re-point with mortar.
      - Protect non-masonry surfaces from contact with cleaning solution by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
      - ALWAYS PERFORM CLEANING PROCEDURE ON AN INCONSPICUOUS TEST SECTION OF THE BUILDING BEFORE FINAL CLEANDOWN FOR APPROVAL BY ARCHITECT AND/OR OWNER.
   2. Clean custom CMU with proprietary masonry cleaner.
      a. Materials:
         i. Prosoco – Sure Clean Custom Masonry Cleaner
   3. Do not use high pressure cleaning methods.
   4. Cleaned surfaces shall appear as represented by mockup wall panel.
      a. Do not exceed nozzle pressure of 500 psi.
      b. Use water flow of at least 4 gallons per minute.
      c. Use at least 40 degree fan tip nozzle.
      d. Keep nozzle at least 18-inches from face of the CMU. Cleaned surfaces shall appear as represented by mockup wall panel.