Specifications

Part 1:

General

Division I Requirements, Drawings, General Conditions, Supplementary General Conditions, and Special Conditions apply to this section. Deviations from the plans and specifications shall not be made without the written approval of the architect and/or engineer.

Description of Work

The extent of each type of masonry work is indicated on the drawings and schedule. Types of masonry work required include:

- Concrete Unit Masonry
- Brick Masonry
- Architectural Units

Related Work

Install work furnished under other sections, which must be built into unit masonry work, including, but not limited to:

- Masonry Accessories
- Water Repellents
- Flashing
- Insulation
- Structural Steel
- Concrete
- Caulking and Sealants

Quality Assurance

Certifications of compliance with all applicable ASTM standards shall be submitted on all products specified herein.

<u>Fire Performance:</u> Wherein indicated, provide those materials which meet or exceed the assemblies, equivalent thickness, as outlined in the ACI-216.1 Masonry Standard

Obtain mortar ingredients of uniform color and quality for exposed masonry units. Make certain to document that mortar complies with ASTM C 270 for field preparation.

Sample Panels:

- Construct an approximate 6 feet long by 4 feet high mock-up panel for representation of completed masonry, joint tooling, design details, cleaning, and workmanship
- Panel to be field erected and not part of the wall system.
- Inspection to verify selections made for

color and texture characteristics under sample submittals of masonry units and mortar for work quality, appearance, construction, and workmanship.

Submittals

<u>Product Data:</u> Submission of manufacturer's product data for each product of each masonry type, accessory, and other manufacturer products.

<u>Test Reports:</u> Third party reports for masonry certifying compliance under the testing methodology ASTM C-140.

Samples:

- Unit masonry samples for each type of exposed masonry units including a full range of colors and textures available to be completed in the project.
- Color mortar samples for masonry units showing the full extent of colors available and expected to be completed in the project.

Product Handling & Storage

Materials of this section shall be protected to maintain quality and physical requirements. Delivery of materials to project shall be undamaged. Storage and handling of materials to prevent their deterioration and/or damage due to environmental and physical causes. The handling of units in a careful manner to avoid breakage and damage to finished faces. Store mortars and other cementitious materials off the ground and under cover in a dry location. Protect masonry accessories and other materials from corrosion and the accumulation of dirt.

Part 2 Products:

Concrete Masonry Units

All masonry units shall meet or exceed standards and other requirements indicated herein.

Provide special shapes and sizes where required for bond beams, sash, control joints, and lintels.

All load bearing concrete masonry units shall conform to ASTM C-90. All units shall meet a minimum of 2500 psi, as manufactured by Midwest Products Group. Size of masonry units shall be selected from Size and Shapes Catalog with nominal dimensions of 16" or 18" long and 8" high (15 %" or 17 %" x 7 %") in various widths.

Midwest Products Group Units

Color and aggregate shall comply with ASTM C-33 and C-331.

When specified, units shall be manufactured with BASF Rheopel for water repellency.

All Midwest Products Group units shall be sound and free of all cracks or other defects that would interfere with the placing of the units or impair the strength of performance of the construction in compliance with standard ASTM C-90, Section F.

Part 3:

Execution

Protect work during construction, covering walls with waterproof materials at the end of each workday to prevent water from entering the unfinished structure. Protect the incomplete structure from staining from grout, mortar, or soils. Remove any grout, mortar, or soil immediately after contact with finished wall. Protect sills, ledges, and projection from mortar droppings.

Cleaning & Sealing

ACMU's must be cleaned properly including mortar droppings, mortar splatters and efflorescence. Improper cleaning materials and/or methods can also harm water repellency.

- Apply cleaner with a pump-up type sprayer with a PSI less than 50PSI
- Do not use water pressure over 400 PSI, at 4-6 gallons per minute delivered through a 14-40 degree tip.
- Midwest Products Group recommends "Prosoco Custom Masonry Cleaner" to clean ACMU's. Sample Panel must be cleaned and approved prop to cleaning building.
- 4. Consistent application of water and cleaner on the wall system will ensure consistent color after completion of cleaning inconsistent application will cause color variation. Work from the bottom of the wall to the top. Keep cleaned area wet while cleaning overhead.

Water Repellency

Midwest Products Group recommends that all exterior walls be treated with a sealer to provide the highest level of water repellency.