

DIVISION 04 – MASONRY

04 0100 – MAINTENANCE OF MASONRY

- A. There are many historic masonry buildings throughout the campus. Renovations and additions to these buildings shall be designed and constructed in a manner appropriate to the historic construction.
- B. Restoration of historic masonry shall be designed and performed by knowledgeable and qualified individuals.
- C. Restoration of historic masonry shall be performed using the U.S. Department of Interiors, National Park Service, Preservation Assistance Division, and Technical notes and guidelines.

04 2000 - UNIT MASONRY

- A. Masonry mortars should provide sufficient bond strengths and water resistance in applicable locations. The correct type of masonry mortar shall be used which best matches the requirement of the application.
- B. Horizontal expansion joints shall be installed in a masonry veneer wall at each steel support angle. Joints shall be filled with compressible material and sealant at each angle.
- C. Specify limits and conditions for laying or erecting in both hot and cold weather.
- D. At exterior masonry cavity walls, provide through wall flashing with weeps approximately eight inches above finish grade. Prefer weeps at maximum 16" o.c.
- E. Use only Portland cement/lime mortars for exterior conditions. Prefer type N.
- F. Mortar shall be specified without color additive unless prior agreement with Facilities Management. Use of colored mortar will be considered only for special conditions.
- G. All masonry expansion and control joints shall be clearly specified, detailed, and locations indicated on drawings.
- H. Specify load bearing CMU, ASTM C90.
- I. Lightweight aggregate CMU may be used only for special conditions approved in advance by Facilities Management.
- J. Provide for solid units and brick sizes when needed by conditions. Use bull nosed units for all outside corners where exposed in interior finished work.
- K. The use of concrete block for interior walls, partitions and exterior backup is recommended in many types of areas where aesthetic values are not of prime importance.
- L. For any CMU to be used as an exposed surface (split face, ground face, etc.), provide for a construction sample panel not less than 4 ft. high by 6 ft. wide to be erected and maintained for approval by the Architect and UND PM.
- M. Epoxy painted CMU is often a satisfactory material for toilet rooms, laboratories, etc. because the low maintenance factory finish.

- N. If the surface of the CMU will be painted and exposed, a block filler / surfacer shall be used.
- O. Painting of new concrete must have 90 day curetime.

04 2001 – MASONRY VENEER

- A. Specify brick by description of type and size. If specified by cash allowance or unit price, the Architect's selected samples shall be reviewed with the Building Committee and Design Review Board prior to bid.
- B. Provide for a construction sample panel, with back up material, not less than 4' high and 6' wide, to be erected and maintained on site for approval of brick by the Architect and UND PM before final order is placed for the brick for the Project. Sample panel is to remain in place for the duration of the project.

04 2123 - STRUCTURAL CLAY TILE MASONRY

- A. Structural clay tile can be considered for interior walls and partitions as a possible alternate for concrete block. It may be used for either bearing or non-bearing situations.
- B. Glazed structural clay tile is often a satisfactory material for restroom areas and laboratories because the low maintenance factory finish. No additional finish is necessary and it is easily maintained and cleaned.
- C. Special details and shapes as needed at corners where chipping of tile will occur.

04 2300 – GLASS UNIT MASONRY

- A. Glass block is not considered a desirable material, although there may be some conditions where it is acceptable. Review with the Building Committee and Facilities Management before using and specifying this material.

04 4301 –STONE MASONRY VENEER

- A. Stone types have been used historically throughout the campus and are encouraged as a design feature. Stone shall match the color and texture of that used in existing buildings on campus. Similar or matching stone may still be available from the original local quarries. Review availability with UND PM.
- B. Provide samples for approval by UND PM.
- C. Non-staining mortar shall be specified.
- D. Stone sills shall be specified with lugs, adequate wash, and drip to minimize staining of surface below.
- E. Granite provides a more weather-resistant and wear-resistant surface than most other materials. It shall be considered in the design of base courses and thresholds.
- F. Provide shop drawings.
- G. Sandstone paving is used campus wide in specific types of paths. Review the Campus Landscape Map with UND PM.