

GENERAL:

Design Considerations

CMU preferred for all interior public and student areas. CMU to be considered a finish material as well as a structural material and shall be detailed/specified as such. Brick/CMU cavity wall construction to be coated on CMU cavity side with waterproof asphaltic coating without exception.

DP shall require mock-up panel for both CMU and brick. DP shall inspect pallets of CMU upon delivery and reject all pallets that do not meet approved surface finish or contain large number of CMU with corner/edge chips or hairline cracks.

Recess caulked control joints to minimize vandalism.

Prefer running bond for both CMU and brick. Stack bond/grooved block can be used for decorative panels only with approval of DCPS.

Certification of concrete masonry units for compressive strength and weight is required. Block sample to verify acceptable surface finish.

NOTE: The maximum use of CMU construction relating to interior wall applications for DCPS projects is the # 1 maintenance requirement on all projects. Maintenance does not consider this to be on the table for value engineering (VE), recommend other aesthetically oriented VE options.

Concrete Masonry Units

Concrete Masonry Units: Required strength shall be specified by design professional. When lightweight classification is used it shall be specified at 90 to 104 pounds per cubic foot minimum to maximize surface smoothness for this classification.

Interior: Concrete block units shall be used wherever feasible for interior wall finish. All units shall comply with all structural codes and shall be properly protected at the job site to insure placing in the wall without excessive moisture content.

Corners: Consideration shall be given for all exposed external concrete block corners, which extend to the floor (or to top of base) to be bull nosed. Rub out all casting irregularities (so as to result in smooth transitions from flat face to rounded corner) before any finish treatment is applied.

Mortar: Type "S" generally, type "M" for foundations. Pigmented mortars are discouraged for new construction but may be used when necessary to match existing construction.

Joint reinforcement, ties & anchoring devices: Use only galvanized wire type devices. Where flexible ties are required use two piece units or double eye type for brick.

Concealed flashing materials: Use thru-wall flashing below caps, above doors and windows, below windows and at base of wall as well as any breaks in vertical cavities. Prefer heavy gauge glass fiber felt or neoprene, lapped and sealed at all joints. **Wicks:** Treated rope type cut flush. Install no more than 32" o.c. above all thru-wall flashing and must be above grade. Open vertical joint weeps are not acceptable.

Brick:

Specify only regionally manufactured brick. Prefer nominal 4" x 2-2/3" x 8" modular units. Jumbo or other special sizes are to be used only to match existing.

- a. Avoid engineered special shapes.
- b. Prefer colors with long run history--will increase potential of matching later construction.

END OF SECTION 04200