

WALLS, PARTITIONS

Exterior Walls: Exterior wall construction for standard campus buildings shall consist of a structural steel frame with masonry infill. The standard masonry infill shall consist of nominal 8" CMU and nominal 4" face brick, incorporating cavity wall construction details. Additional insulation and/or interior finishes may be added based on design requirements.

Masonry Design: Masonry design and construction shall conform with all applicable code requirements, including the applicable standards adopted by the building codes. (Ref. ACI 530 Standards and Brick Institute of America technical notes.)

Flashings Design: Flashing shall be designed to assure that the flashing life is compatible with the masonry life. Flashings shall be designed and installed in accordance with the manufacturers' recommendations and the applicable sections of *Sheet Metal and Air Conditioner Contractors National Association (SMACNA) Architectural Sheet Metal Manual*, *Brick Institute of America (BIA) Technical Notes*, *Portland Cement Association (PCA) Concrete Masonry Manual*, and *Indiana Limestone Handbook*.

Flashing Materials: Rigid metal flashings with ¾" exposed drip are preferred. Stainless steel is the preferred metal. Copper, galvanized steel, and pre-finished steel are acceptable if budget restraints preclude the use of stainless steel. Because of the potential staining associated with the use of copper, its use must be approved by the UNL Manager of A&E Services. All metal flashings shall be designed to preclude electrolytic deterioration resulting from the contact of dissimilar metals. Laminated copper equal to AFCO* Copper Fabric (5 oz. per sq. ft. minimum) or H & B* C-Fab Flashing (5 oz. per sq. ft. minimum) may be used for concealed through-wall flashings that are not exposed. Concealed through-wall flashings, if used, must be specified to extend beyond the masonry face and shall not be cut flush with the masonry face until inspected and approved by NU. EPDM flashing may be used under metal parapet caps, providing it has continuous structural support. PVC flashings are prohibited. Cleaning Masonry: Acid and other harsh chemical cleaners are prohibited.

Cavity Wall Design: Cavity walls shall have CMU back-up walls, with 2" minimum clear cavity spaces. Specifications shall require the contractors to provide clean cavity spaces, back striking of mortar seepage and mortar net drainage system. An engineered galvanized metal stud wall with water resistant sheathing and building wrap system may be used instead of the CMU backup, if specifically approved by the NU. The use of brick veneer with steel studs requires an approved project variance. If a variance is approved to allow brick veneer, then the AE shall calculate the location of the dew point within the wall, and verify that the dew point falls within the cavity or brick veneer.

Brick Veneer/Shelf Angle: The installation of brick veneer facing over metal-stud backup, supported on shelf angles, should be detailed in accordance with UNL Standard Detail SD4-01. Important features of this detail include:

- (1) A stainless steel pan sitting between the first brick and the shelf angle in a dry joint.
- (2) Use screen weep vents to prevent insect penetration at the bottoms of walls and relief angles. Use rope weeps at lintels and other intermediate locations in the wall.

Lipped stretcher bricks resting on the shelf angle shall not be permitted. The use of flexible thru-wall flashing material has also been found to be unsatisfactory and should not be permitted.

EIFS: Exterior insulated finish systems (e.g. "Drivit" and other imitation stucco systems) are not allowed.

R-Value: All exterior envelope assemblies shall comply with the requirements of ASHRAE 90.1 and the Nebraska Energy Code. The decision to follow the prescriptive method or the energy model method of compliance shall be consistent with other sections of these *Standards*. However, regardless of which method is chosen for ASHRAE compliance, and what other energy

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performance criteria are achieved in other assemblies and systems, the minimum R value for any exterior wall assembly shall be 13. Every building should be evaluated and carefully optimized.

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Folding Partition Walls: Folding partition walls shall be avoided. Even the highest quality folding partitions require a tremendous amount of maintenance and provide little acoustical