

These guidelines are updated periodically. Users of the guidelines are encouraged to check this site as needed to be sure of having the most current edition. Comments and suggestions concerning improvements to this section of the guidelines may be submitted to: djfried2@uncg.edu.

04200. UNIT MASONRY

Updated: December 23, 2014

1. The basis of design for brick and mortar will be made by the University and designer during the design phase based on the building and location. This is due to the University's long review and approval process for brick and mortar selections. The designer should include this scope of work in their design contract. **Preference shall be given to masonry that is manufactured regionally.**
2. The designer should include in the specifications the construction of up to 6 masonry sample panels (48" x 48") for selection of brick and 6 mortar sample panels (48" x 48") for selection of mortar color. Brick sample panels should be erected immediately after the Notice to Proceed in order to accommodate the sometimes lengthy approval process and not delay the contractor. **SAMPLE PANELS SHOULD CURE FOR AT LEAST 10 DAYS PRIOR TO REVIEW BY UNCG AND THE DESIGNER.**
3. The specifications should require construction of an exterior wall mockup panel. This panel should be a minimum of 4'-0" high by 5'-4" wide and provide all materials and finishes to be included in the exterior wall construction including interior and exterior wythes of masonry with required air space, reinforcements, brick ties, flashing, weeps, mortar netting, any precast banding or accents, special brick shapes or coursing, partial window frame installation, etc. using approved masonry materials and mortar. **THE MOCKUP SHOULD CURE FOR AT LEAST 10 DAYS PRIOR TO REVIEW BY UNCG AND THE DESIGNER.** The mockup will be used as the standard for judging workmanship. The contractor shall maintain the mockup in an undisturbed condition throughout construction. The contractor will be responsible for demolition and removal of the mockup at the end of construction, but only after the designer has approved removal.
4. In general, standard running bond coursing should be used for new masonry work unless required to match adjacent building brick coursing for existing buildings. Tooled concave or vee mortar joints are preferred over raked or flush joints unless required to match existing buildings. Special shapes shall be inspected by the designer for uniformity of size and color against the approved sample panel prior to installation.
5. The designer should note in the specifications that masonry walls or columns shall be adequately braced during construction.
6. The designer's construction documents should provide detail drawings and instructions to the contractor showing installation of all materials used in masonry wall construction.

Examples of details include structural connections, placement of reinforcement, ties and anchors, through-wall penetrations, installation of flashing, forming of end dams and corners, installation of termination bars, drip edges and expansion joints.

7. Weeps should be provided in head joints in exterior wythes of first course of masonry immediately above embedded flashing at a maximum of 24 inches on center. Provide cellular plastic weep vents, full height and width of head joints. Provide free-draining mortar netting designed to prevent mortar blockage of weeps and prevent bridging within the wall cavity.
8. Through wall flashing shall be pre-formed 22 gauge stainless steel. Bottom edge of flashing shall be hemmed and bent to form a drip edge. Flashing to have welded pre-formed corner (inside and outside) and end dams. Joints in long runs of flashing to be lapped 6" sealed between with silicone sealant, and lapped with a 6" wide strip of peel & stick centered over top exposed edge of the lap.
9. The designer shall indicate an adequate number of expansion and control joints both vertically and horizontally to avoid cracking and control movement in masonry construction.
10. On free-standing exterior masonry screen walls and retaining walls with brick caps, (not precast concrete or metal copings), use an integral polymeric admixture in mortar (at cap joints only) equal to "Krete Gard" mortar mix by Krete Industries, Inc.
11. Updated: July 24, 2013
The work of this section shall be bid and performed by a firm who is certified as a "North Carolina Masonry Contractors Association Certified Masonry Contractor" or installed under the direct supervision of individuals designated by the North Carolina Masonry Contractors Association Masonry Certification Program as a "CMP-Certified Masonry Professional" or "CME-Certified Masonry Executive" as described in the most current version or the NCMCA's "Guide to Masonry Contractor Certification." (North Carolina Masonry Contractors Association, PO Box 3463, Hickory, NC 28603-3463, 828-324-1564, information @ncmca.com)