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.

06000. WOOD

Since the University has used very little wood in the past, most guidelines have been adequate; however some of the problem areas, primarily in roof and attic spaces, are noted below.

1. Truss bearing shall be noted in the construction documents and checked for adequacy and tolerances in the field. Also, refer to the NC Construction Manual, Design Criteria and Policies Section, for truss design requirements.

2. Wood roofs shall be designed such that adequate capacity exists for the future installation of slate shingles.

3. Plywood shall be correctly specified for its application and inspected during construction for conformance to specifications.

4. Nailing shall be carefully specified, especially for plywood sheathing. This includes nail size and spacing. Field-verify size and spacing of nails being used. It is noted that some gun nails are smaller in diameter than the corresponding common nail. Also, verify that the fastener specification is compatible with recommendations of the American Plywood Association.

5. Nails that miss the structural support are to be removed (i.e. nails that go through plywood sheathing and miss the rafter).

6. Attic ventilation shall be such that good air flow is obtained for the entire cross section and is adequate by the code (as a minimum). It is desirable to have more than minimum ventilation when a dark roof is used. Mechanical ventilation may be required in borderline cases.

7. Fire retardant roof framing or sheathing is not to be used.

8. For millwork or areas exposed to view, it is recommended to use wood with a moisture content of 19% or below to control shrinkage. The design shall take shrinkage into account if wood is allowed with a moisture content greater than 19%.

9. The design shall not allow timber to be exposed to weather or moisture such as direct contact with masonry or concrete. There shall be an air gap or metal separation from moisture where concrete or masonry attach to wood. Any wood in direct contact with concrete or masonry shall be treated to provide decay resistance as per the NC Construction Manual, Design Criteria and Policies Section, and any other code requirements.
10. Wood structures that are under construction shall be properly braced to prevent collapse or overturning. Trusses are noted in particular. The designer shall verify that the design has adequate blocking or bracing for the completed structure.

11. Wood that must be on the site prior to use shall be stored away from moisture and soil contact. This wood (especially wood flooring) shall be acclimated to the final environment for at least one week (or as required for the specific application) prior to installation such that the moisture content stabilizes to what it will be in the final environment. Millwork and wood doors shall not be delivered to the job site until needed and the building is sufficiently dried in and heated.

12. For wood with preservative or fire retardant treatment, the designer shall verify that the size and material type of each fastener shall be resistant to corrosion from the chemical preservative.

13. Do not use exposed, chromate copper arsenate (CCA) pressure treated wood.