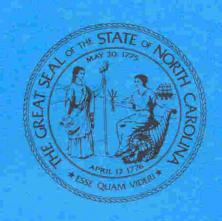
### NORTH CAROLINA STATE BUILDING CODE

**VOLUME VIII - MODULAR CONSTRUCTION REGULATIONS** 

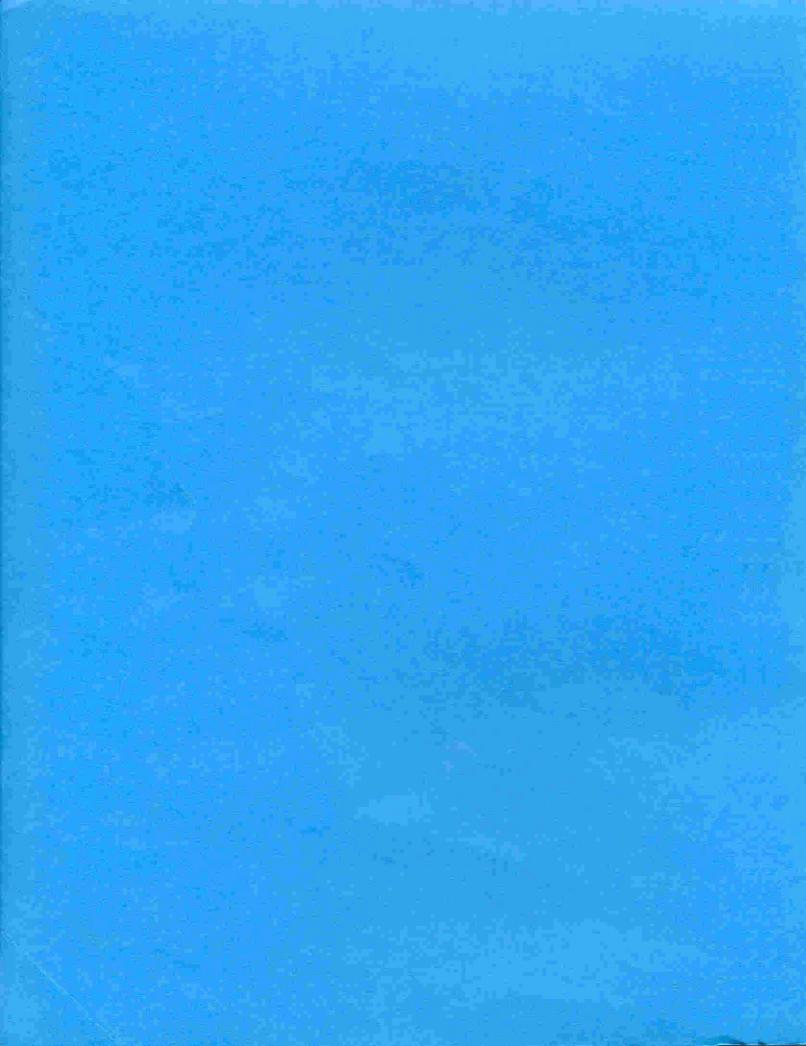


### 1994 Edition

Adopted June 9, 1992
by the North Carolina State
Building Code Council
in Accordance with Act of the
General Assembly of 1957
Chapter 1138

Published by
THE NORTH CAROLINA STATE BUILDING CODE COUNCIL

Staff and Offices Located at
THE NORTH CAROLINA DEPARTMENT OF INSURANCE
ENGINEERING DIVISION
P.O. Box 26387
Raleigh, North Carolina 27611
919-733-3901



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#### FOREWORD

These regulations and procedures have been developed for the purpose of uniform application of the North Carolina State Building Code by all approved labeling agencies involved as third party inspection agencies approving the manufacture of "modular buildings".

The procedures in these regulations are to inform approved labeling agencies of what is required by the State of North Carolina as approved labeling agencies and apprise manufacturers of information needed in their preparation of submittals to labeling agencies.

Modern construction techniques are daily changing what and how America builds. Factory built components, manufactured units, and/or complete manufactured buildings are finished products ready to be marketed. Since local inspection officials normally inspect structures as they are being built, it has been recognized that it is impractical to disassemble manufactured units at the installation site to inspect all elements for Code compliance. The 1969 North Carolina General Assembly realized this and authorized the North Carolina State Building Code Council to address this issue. The Building Code Council, in conjunction with the Commissioner of Insurance, jointly published the 1972 edition of Regulation for Mobile Homes and Modular Housing. The regulations and procedures that follow in this 1994 Edition address only modular construction.

These procedures should provide a better understanding and enforcement of the requirements of the law designed to protect the public health and safety of the citizens of North Carolina.

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September 14, 1993

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LEE HAUSER, P.E.

Deputy Commissioner and Secretary to Council

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### NORTH CAROLINA STATE BUILDING CODE PUBLICATIONS

Available from:

North Carolina Department of Insurance
Code Council Section
P.O. Box 26387

Raleigh, North Carolina 27611
(919-733-3901)

Volume I -- GENERAL CONSTRUCTION CODE

Volume I-A -- ADMINISTRATION & ENFORCEMENT REQUIREMENTS

Volume I-C -- ACCESSIBILITY CODE

Volume II -- PLUMBING CODE

Volume III -- MECHANICAL CODE

Volume IV -- ELECTRICAL CODE

Volume V -- FIRE PREVENTION CODE

Volume VI -- GAS CODE

Volume VII -- RESIDENTIAL CODE

Volume VIII -- MODULAR CONSTRUCTION REGULATIONS

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#### ARTICLE I ADMINISTRATIVE PROCEDURES

#### Section 101: BUILDING CODE COUNCIL

#### 101.1. ADOPTION OF STANDARDS FOR ALL BUILDINGS

The North Carolina Building Code Council has authority to adopt State mandatory standards for all buildings including manufactured buildings. The Council has adopted a statewide building code applicable to dwellings and other buildings including manufactured buildings. (Copies available from Engineering Division, P.O. Box 26387, Raleigh, NC 27611.)

#### 101.2. ADOPTS PROCEDURAL SUBMISSION RULES FOR AGENCIES

The Council, consisting of highly qualified professional and technical members appointed by the Governor, develops and approves procedural rules and regulations for agencies to follow in making a submission to the Council for approval as a certifying agency. (See G.S. 143-146(c)) Agencies to make submissions to the Council for approval as certifying agencies to the Engineering Division, P.O. Box 26387, Raleigh, NC 27611.

#### 101.3. ADOPTS PROCEDURES FOR AGENCIES TO FOLLOW

The Council develops and approves methods and procedures for the approved certifying agency to follow in the evaluation, testing and inspection of modular construction. (See G.S. 143-146(d)) These methods and procedures are a part of these regulations. The agencies must follow the methods and procedures as approved by the Council in order to continue to be approved. (See G.S. 143-147)

#### 101.4. DISAPPROVES AGENCIES

The Council has the authority to revoke the approval of a certifying agency when it finds that the agency is not following its rules or that it has authorized labels to be issued on units not in compliance with the N. C. State Building Code. (See G.S. 143-147(b))

#### Section 102: COMMISSIONER OF INSURANCE

#### 102.1. SUPERVISION

The Commissioner of Insurance shall have general supervision, through the Engineering Division of the Department of Insurance, of the administration and enforcement of all sections of the North Carolina State Building Code, in cooperation with local inspectors appointed by cities and counties. (Authority: G.S. 143-139(b), 153A-350 to 153A-375, 160A-411 to 160A-438)

#### 102.2. ENFORCEMENT WITH LOCAL OFFICIALS

The Commissioner of Insurance administers the enforcement directly with the Engineering Division through the cooperation of local inspectors and inspection departments appointed by the city and county commissioners throughout the State.

#### 102.3. MONITORS APPROVED INDEPENDENT AGENCIES

The Engineering Division under the direction of the Commissioner of Insurance, serves as staff to the State Building Code Council and monitors the approved certification agencies' work to assure that all approved certifying agencies follow the "Rules and Regulations" and "Methods and Procedures" adopted by the Building Code Council to the end that the Code is uniformly enforced by the approved certifying agencies on all manufacturers, regardless of plant location to protect the health and safety of the citizens of North Carolina who live in and pay for modular construction bearing an approved label. Such monitoring may include a complete review of the certification reports and inspection manuals. State inspections of certified plants will be performed on a random basis at the State's discretion. (See G.S. 143-147 and 143-152)

#### Section 103: CERTIFYING AGENCIES

#### 103.1. GENERAL

- 103.1.1. Because of the manner of their construction, assembly and use and that of their systems, components and appliances (including heating, plumbing and electrical systems) like other finished products having concealed vital parts may present hazards to the health, life and safety of persons and to the safety of property unless properly manufactured. It is the policy and purpose of this State to provide protection to the public against possible hazards, and for that purpose to forbid the manufacture and sale of modular units which are not so constructed as to provide reasonable safety and protection to their owners and users.
- 103.1.2. The Council is authorized to promulgate reasonable rules and regulations governing the procedure to be followed by a person or inspection agency seeking to obtain an approval pursuant to the provisions of this G.S. 143-139.1, which shall provide opportunity for hearing before the Council on such application.
- 103.1.3. In order to insure the highest degree of quality control in the manufacture of modular construction, the Council is further authorized and empowered to make and promulgate reasonable rules and regulations governing the initial and follow-up manufacturing inspection practices and procedures to be performed by any person or agency granted an approval to issue a label of compliance pursuant to this Article. In order to assure uniformity in standards and enforcement, such rules and regulations may also provide that any such approved agency and its operations may be inspected from time to time by any other person or licensee designated by the Council who shall report the results of such examination to the Council. In such case the reasonable expense incurred by the examiner in making such inspection shall be borne by the license whose operations were examined. (1969,c.961,s.3; 1971,c.1172,s.2)
- 103.1.4. Approval of persons, independent agency, or inspection departments.
  - (1) Any qualified person or independent agency may make application to the Council for approval to issue certification labels. Any inspection department may make application to the Council for approval for issuing certificates of compliance. The Council after notice and hearing, if satisfied that such person, agency, or inspection department meets the qualifications prescribed in this Article, shall cause an approval to be issued which shall be valid for a consecutive period of 12 months and may be renewed for like consecutive periods<sup>1</sup>.
  - (2) Any such approval issued to a person or agency, other than an inspection department, may be suspended or revoked after notice and hearing if such person:
    - (a) Is either insolvent, not competent, not independent, or untrustworthy;
    - (b) Has made false statements in his application to the Council for approval;
    - (c) Fails or neglects to perform evaluations, testing, or manufacturing inspections in accordance with its proposed plans and procedures submitted to the Council or fails to comply with any applicable rules and regulations promulgated by the Council pursuant to G.S. 143-146(d);
    - (d) Has repeatedly, specifically or by implication authorized the attachment of its label to modular construction and such did not meet the standards and rules and regulations provided by this Article at the time said labels were attached.
  - (3) Any such approval issued to an inspection department may be suspended or revoked after notice and hearing if such department:
    - (a) Is not competent;
    - (b) Has issued a certificate of compliance on modular construction when such was not opened for inspection so that the entire structural, electrical, heating, plumbing, and air-conditioning systems could be closely observed and inspected;
    - (c) Has issued a certificate of compliance on modular construction and such did not at the time of inspection meet the standards and rules and regulations provided by this Article. (1969,c.961,s.4;1971,c.1172,s.3)

<sup>1 1996/1997</sup> Revision

- 103.2. The certifying agencies must follow the "Methods and Procedures" adopted by the Council.
- 103.3. The certifying agencies are required to have professional and technical full time employees who have qualifications meeting the requirements of the Procedural Rules adopted by the Building Code Council and maintain professional competence during the time they are approved.
- 103.4. The certifying agencies must be "independent" and without influence from any manufacturers or producers of modular construction or products used in the manufacture thereof, to the end that their judgment of the manufacturers' compliance with the Code will be unbiased.
- 103.5. The engineers of the certifying agencies who are qualified to interpret the structural, mechanical and electrical requirements of the Code must make an evaluation of the manufacturers' plans, specifications and calculations submitted to them and perform factory tests and inspection of prototypes the manufacturer wishes to be labeled.
- 103.6. Based on the above, the certifying agency will give the manufacturer, in writing, a complete deviation report outlining item by item the changes the manufacturer must make in order to meet the Code and be ready for certification by the agency.
- 103.7. The certifying agency will confirm that the results of the evaluation, tests and factory inspection of prototypes meet the Code and that the changes listed in the deviations have been made.
- 103.8. The engineers of the certifying agency then write a complete certification report, signed by engineers qualified to interpret the structural, mechanical and electrical requirements of the Code, outlining exactly how the manufacturer is complying with the Code. Alternate materials and methods of construction which have been evaluated, tested and approved by the certifying agency's engineers for that specific manufacturing plant, shall be identified and indexed.
- 103.9. The engineers of the certifying agency then either write the certification report as an inspection manual or prepare a separate inspection manual which the manufacturer and certifying agency's inspector can use to check whether the manufacturer is complying with the plans, specifications and alternate materials and methods of construction approved and included in the certification report so that units which do comply can be labeled.
- 103.10. The certifying agency provides label control which requires the certifying agency's inspector to control the release of labels only on those units he has made (on a rotating basis) a complete structural, plumbing, heating or electrical inspection on each unit. An inspection of the stock of equipment and materials used in the manufacture of modular construction is required each time an in-plant inspection is conducted or a minimum of one time each month which ever is greater. The in-plant inspection reports shall identify each unit and indicate which type of inspection was conducted on that unit.
- 103.11. When the manufacturer proposes changes which are not included in the inspection manual, they must be approved by qualified engineers of the certifying agency and incorporated in the inspection manual so that the manufacturer and inspector will know what is approved and units with these changes can be inspected and labeled if approved.
- 103.12. The certifying agency shall not allow labels to be affixed on units which according to his inspection do not comply with the Code and shall remove labels on units which do not comply with the Code and may have been labeled by mistake.
- 103.13. The certifying agency shall require the manufacturer to rectify deviations found in the field when called to their attention and shall revalidate the label with a reinspection. State and local inspectors shall be notified how the deviations have been rectified.

#### Section 104: CITY AND COUNTY COMMISSIONERS

- \*104.1. Responsible for providing for the implementation of the building, plumbing, heating and electrical codes for all buildings and structures, including modular construction by appointing inspectors to enforce the codes to protect the citizens within their jurisdiction, in accordance with G.S. 153A-351 & 160A-411.
- \*104.2. Adopt local ordinances on administrative procedures and permit fees to enforce the codes.

\*104.3. Adopt zoning ordinances regulating locations where buildings may be placed.

\*For information only - regulated by General Statutes and is not under the jurisdiction of the N. C. Building Code Council.

### Section 105: CITY AND COUNTY INSPECTORS AND INSPECTION DEPARTMENTS

#### \*105.1. ERECTION OF UNITS

Enforce local ordinances and zoning ordinances which have been adopted by the city and county commissioners.

#### \*105.2. AUTHORIZED INSPECTIONS ON UNLABELED UNITS

Perform inspection as required locally on unlabeled units. The inspection certificate issues to the power company for unlabeled units must include the following words on the inspection certificate: "modular construction home has been inspected in accordance with the North Carolina State Building Code."

#### \*105.3. AUTHORIZED INSPECTIONS ON LABELED UNITS

The inspection certificate issued to the power company must include the words Modular Construction Not Inspected by local inspection department, however, was inspected and labeled by (Name and Label Number) of certifying agency approved by the State Building Code Council. Local inspectors are authorized by law to only inspect the following for compliance with the North Carolina State Building Code and the installation instructions of labeled modular construction:

- A. Water, sewer, gas and electrical utility connections. (Note: Frequently the utility connections are made on the inside of the manufactured buildings, and an inspection of the utility connection would include inspection of such inside connections.)
- B. Foundations and tie down requirements.
- C. Structural, plumbing, heating and electrical connections between two or more units.
- D.Inspection of unit at the written request of the owner.
- E. Alterations and additions made after the unit was labeled at the point of manufacture which are found while making one of the above authorized inspections.

#### 105.4. REPORTS ON INSPECTIONS OF LABELED UNITS

If the inspector is making an authorized inspection of Labeled Units and finds obvious Code violations, he should report the details of the violation, in writing, immediately to the Engineering Division of the Department of Insurance with the following information:

- A. Details of violations of the Code which are minor and would not present immediate hazards but may cause trouble to the owner with the statement that power has not been withheld from being furnished to the unit because of these violations.
- B. Details of violations of the Code which may be hazards of serious proportion with the statement that such violations may be so hazardous to the occupants that power could not be authorized to be cut on before such serious hazards are corrected.
- C. Manufacturer's name.
- D. Labeling agency's name and label number.
- F. Address of the location of the unit.
- F. Name and address of the owner of the unit.

#### \*105.5. RECORDS OF INSPECTIONS

Keep a record of inspection certificates, copies of certificate of origin and titles and other information pertaining thereto as required by N. C. General Statutes.

#### 105.6. LABEL OF COMPLIANCE

The local inspection departments which desire to issue the "Certificate of Compliance" in lieu of the Label of Compliance issued by the certifying agency approved and licensed by the Building Code Council, must make application to the State Building Code Council under the same qualifying rules applying to such approved and licensed certifying agency. In order for local inspectors to qualify to issue the "Certificate of Compliance" they must be certified by the N. C. Code Officials Qualification Board to make the evaluation, tests and inspections including the structural, plumbing, heating and electrical requirements and the inspections must be made before the modular construction is finished and is sufficiently open to make such inspection.

\*For information only - regulated by General Statutes and is not under the jurisdiction of the N. C. Building Code Council.

#### Section 106: ELECTRICAL UTILITIES

#### \*106.1. UNITS MANUFACTURED WITH LABEL OF COMPLIANCE

The local inspection department shall issue a certificate to the power company certifying that the unit bears a label of an agency approved by the Building Code Council. Upon the issuance of such certificate, the power company may provide electrical service to the unit. (See G.S. 143-150)

#### \*106.2. UNITS MANUFACTURED WITHOUT A LABEL OF COMPLIANCE

The local inspection department shall issue a certificate of compliance to the power company certifying that the unit was manufactured without a label of compliance and has been inspected for compliance with the N. C. State Building Code. Upon the issuance of such certificate, the power company may provide electrical service to the unit. (See G.S. 143-149 and 143-150)

\*For information only - regulated by General Statutes and is not under the jurisdiction of the N. C. Building Code Council.

#### Section 107: MODULAR MANUFACTURERS

#### 107.1 APPROVAL

All modular manufacturers operating within or shipping units into the state of North Carolina must be approved by the Department of Insurance in accordance with the State of North Carolina Regulations for Modular Construction.

#### 107.2 REGISTRATION

- 107.2.1. All modular manufacturers must register with the Department of Insurance and pay the required registration fee prior to receiving approval. Registration forms are available from the Department of Insurance.
- 107.2.2. All approved modular manufacturers must renew their registration each year with the Department of Insurance and pay the required registration renewal fee. Registration renewal forms nd fees must be received prior to January 1 of each year. Late renewals will be subject to an dditional late renewal fee. Registration renewal forms are available from the Department of Insurance.
- 07.2.3. Manufacturers failing to renew their registration by July 1 of the registration period will utomatically be disapproved.

#### ARTICLE II

Section 201: MODULAR CONSTRUCTION

#### 201.1. GENERAL

The requirements of the N. C. State Building Code including Volume I - General Construction, Volume 1-C, Accessibility Code, Volume II - Plumbing, Volume III - Mechanical, Volume IV - Electrical and Volume VI - Gas shall apply to all buildings of modular construction with the exception of mobile homes and detached one and two family dwellings. Title VI of the Mobile Home Construction and Safety Standards of the Housing and Community Development Act of 1974, requires all mobile homes constructed after April 15, 1976, to comply with Mobile Home and Construction Safety Standards issued by HUD. Detached one and two family dwellings of modular construction shall comply with the Volume VII, Residential; Volume II - Plumbing; Volume III - Mechanical; Volume IV - Electrical and Volume VI - Gas.

#### 201.2. DEFINITIONS

BUILDING SYSTEM - Plans, specifications and documentation for a system of manufactured buildings or for a type or a system of building components, which may include structural, electrical, mechanical, plumbing, and fire protection systems and other systems affecting health and safety, including variations which are submitted as part of the building systems.

CERTIFYING AGENCY - An approved organization, private or public, including a governmental agency, determined by the N. C. Building Code Council to be qualified by reason of facilities, personnel, experience and demonstrated reliability and independence of judgment, to investigate, evaluate and approve building systems and conduct or supervise compliance assurance programs and to issue labels. COMMERCIAL MODULAR BUILDING - A manufactured building designed to be used as a multi-family dwelling unit (3 or more families) or as a commercial structure which has been constructed and labeled indicating compliance with the North Carolina State Building Code.

COMPLIANCE ASSURANCE PROGRAM - The system, documentation and methods for assuring that manufactured buildings and building components including their manufacture, storage, transportation, assembly, handling and installation conform with N. C. State Building Code and the rules and regulations promulgated pursuant thereto.

CONSTRUCTION, CLOSED - Any building, building component, assembly or system manufactured in such a manner that all concealed parts or processes of manufacture cannot be inspected before installation at the building site without disassembly, damage or destruction.

CONSTRUCTION, OPEN - Any building, building component, assembly, or system manufactured in such a manner that all portions can be readily inspected at the building site without disassembly, damage or destruction.

DWELLING - A building occupied exclusively for residential purposes and having (1) one dwelling unit; or (2) two dwelling units; or (3) one dwelling unit with not more than five boarders or roomers served with meals or sleeping accommodations or both.

INDEPENDENCE OF JUDGMENT - Not being affiliated with or influenced or controlled by building manufacturers or by producers, suppliers or vendors of products or equipment used in manufactured buildings, prefabricated construction and building components which might affect capacity to render reports and findings objectively and without bias.

INSTALLATION - The process of affixing, or assembling and affixing modular construction or modular components on the building site, or to an existing building.

LABEL - An approved device or seal evidencing certification in accordance with the N. C. State Building Code and the rules and regulations promulgated pursuant thereto.

LOCAL ENFORCEMENT AGENCY - The agency or agencies of local government with authority to make inspections of buildings and to enforce the laws, ordinances and regulations enacted by the State and by the local government which establish standards and requirements applicable to the construction, alteration, repair, occupancy or demolition of buildings.

LOCAL GOVERNMENT - Any county, city, municipal corporation, town or other political subdivision of this State with authority to establish standards and requirements applicable to the construction, alteration, repair, occupancy or demolition of buildings.

MANUFACTURED BUILDING - A structure consisting of one or more transportable sections built and labeled within a manufacturing plant facility in accordance with the appropriate State or Federal Construction Code which governs the structure's intended usage when erected on a building site.

MANUFACTURED HOME(Mobile Home) - A manufactured building designed to be used as a single family dwelling unit which has been constructed and labeled indicating compliance with the HUD administered National Manufactured Housing Construction and Safety Standards Act of 1974.

MODULAR BUILDING - A manufactured building constructed in accordance with the North Carolina State Building Code.

MODULAR COMPONENT - Any sub-system, sub-assembly, or other system designed for use in or as part of a structure, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety and is usually of "closed construction".

MODULAR CONSTRUCTION - includes, but is not limited to:

Manufactured Building(s)
Prefabricated Construction
Manufactured Unit(s)
Modular Dwelling(s)
Modular Component(s)

MODULAR HOME - A manufactured building designed to be used as a one or two family dwelling unit which has been constructed and labeled indicating compliance with the North Carolina State Building Code, Volume VII - Residential.

PREFABRICATED CONSTRUCTION - Construction of prefabricated units of "open construction" which are fabricated prior to erection or installation in a building or structure and may be shipped to their final on site location either as individual prefabricated units or prefabricated subassemblies.

PREFABRICATED SUBASSEMBLY - A built up combination of more than one structural element designed and fabricated as an assembled section of the building or structure which is of "open construction" and is to be incorporated into the structure by field erection of two or more such assemblies.

PREFABRICATED UNIT - An individual element of the building or structure of "open construction" such as a beam, girder, plank, strut, column or truss the integrated parts of which are prefabricated prior to incorporation into the structure, including the necessary means for erection and connection at the site.

TEMPORARY CONSTRUCTION BUILDING - Any building or portion of a building used as a temporary field office for the coordination of a nearby construction project by the general contractor and/or subcontractors. No portion of a temporary construction building may be used as an accessory occupancy (such as a sales office) into which the general public would be allowed access.

#### Section 202: DESIGN LOADS

All design loads shall be in accordance with the design requirements as indicated in the applicable Building Code.

#### Section 203: STRUCTURAL DESIGN

#### 203.1 DESIGN STANDARDS

Structural design shall be in accordance with the requirements of the N. C. State Building Code in conformance with "accepted engineering design standards" approved by the Building Code Council. Any deviations from "accepted engineering design standards" must be approved by the Building Code Council and published as amendments to "acceptable engineering design standards" for all designers to use.

#### 203.2 DESIGN STANDARD ALTERNATE

Where the size and spacing of framing members on materials are in conflict with, or not covered by this Code, they will be acceptable if the assembly meets the load requirements of this Code, provided they conform to the requirements as set forth for tests under Section 204. A structural analysis by a Registered Architect or Registered Professional Engineer, registered in North Carolina, may be required.

#### Section 204: TESTS

#### 204.1 TEST STANDARDS

All tests when used as an alternate to design, shall be performed by an independent testing laboratory or licensed architect or registered professional engineer in accordance with "nationally recognized testing standards" as approved by the Building Code Council.

204.2 APPROVAL OF TESTS FOR MODULAR CONSTRUCTION OF CONSTRUCTION"

All tests performed for manufactured buildings of "closed construction" must be witnessed by a "certifying agency" approved by the Building Code Council. Modular construction or modular components labeled by an agency approved by the Building Code Council must have "test frequency" and "monitoring inspection frequency" approved by the Council if the tests are to substitute for the engineering design.

204.3 APPROVAL OF TESTS FOR MODULAR CONSTRUCTION OF "OPEN CONSTRUCTION" 204.3.1 Every manufacturer of prefabricated construction shall file with the Certifying Agency, duplicate copies of a certificate from a recognized testing laboratory, which states that tests have been made on this particular type of prefabricated construction and showing the live, dead and wind

load capacities in pounds per square foot, uniformly distributed, together with a detailed physical

description of the panels tested.

204.3.2 Panels and other elements for load shall sustain, without failure, for a period of twenty-four (24) hours, a superimposed load equal to two (2) times the live load. Recovery within twenty-four (24) hours, after removal of the full test load, shall be not less than seventy-five (75) percent of the observed deflection. The measured deflection of any panel or element under full live load shall be not over one three hundred and sixtieth (1/360) of clear span.

Exception: The measured deflection of any wall or roof panel or element under full live load shall be not over one two hundred and fortieth (1/240) of clear span, providing they are not plastered.

Such load tests of construction are not intended to be used as a method for determination of acceptable allowable working stresses of a material as an alternate to the established standard method of determining such stresses.

#### Section 205: DESIGN APPROVALS AND INSPECTIONS

#### 205.1 MODULAR BUILDING CONSTRUCTION:

- 205.1.1 "Closed Construction" According to G.S. 143-139.1 manufacturers may have their designs of "building systems" evaluated and approved by an agency approved by the Building Code Council without further inspections except as may be required for the enforcement of the N. C. State Building Code relative to the connection of units and components and enforcement of local ordinances governing zoning, utility connections and foundations. Manufactured buildings of "closed construction" which do not have a label of an agency approved by the Building Code Council are subject to inspection by local authorities, and manufacturers may have to ship units so they are open enough so local inspection may be made in order to obtain local approval.
- 205.1.2 "Open Construction" -- "Prefabricated construction" and "manufactured buildings of open construction" are not required to be labeled by an agency approved by the N. C. Building Code Council but they must be sufficiently open for inspection because they are subject to inspection in the same manner as on-site built construction.

#### Section 206: ERECTION AND INSTALLATION

#### 206.1 HANDLING LOADS

All modular buildings and modular components shall be designed in such a manner to allow loading, transportation, unloading and assembly without over-stressing any portion of the component or unit.

#### 206.2 ASSEMBLY PROCEDURES

During the progress of installation, caution shall be taken to be sure that temporary bracing, or other supports are provided to avoid collapse or partial collapse.

#### 206.3 MANUFACTURED BUILDING

- 206.3.1 "Closed Construction" Modular buildings and components which bear the label of an agency approved by the Building Code Council are only subject to inspection by local authorities to the extent if the unit as erected complies with the Code. Such inspections limited to inspection to determine "damage in transit" or "alterations and additions" made to the unit after they were inspected and labeled plus inspections to determine compliance with connection between units, zoning, utility connections and foundations.
- 206.3.2 "Open Construction"modular buildings of "open construction" and prefabricated construction shall be subject to the same erection and installation requirements as other buildings required by this Code.

#### 206.4 SET-UP LICENSING REQUIREMENTS

In accordance with General Statutes G.S. 87-1 and G.S. 143-139.1 any person, firm or corporation that undertakes to erect a modular building must have either a valid North Carolina General Contractors License or provide a \$5,000 surety bond for each modular building to be erected. (See Appendix C)

#### ARTICLE III

Section 301: PROCEDURAL RULES FOR APPROVAL OF CERTIFYING AGENCIES
The following procedural rules shall apply when any agency makes application to the Building Code
Council requesting approval under the provisions of G.S. 143-147:

#### RULE 1 - APPLICATION SUBMITTAL

- A. Agency requesting the Building Code Council approval must submit the required application to the Modular Construction Section of the Engineering Division for review and comments. Staff shall review the application to insure that it is in the proper format and to insure that all of the required information and supporting documentation has been provided.
- B. The application submittal shall include information indicating compliance with each of the rules set out below. Data submitted shall indicate the specific rule number and subsection to which it pertains. Where data pertains to more than one rule or subsection, such material shall be marked with the rule and subsection number at each specific place which is intended to pertain to such rule and subsection.
- C. The submission of false information or refusal to comply with these rules (after being notified of noncompliance in writing) shall be sufficient cause to revoke any approval given.

#### RULE 2 - AGENCY MUST BE INDEPENDENT AND NOT HAVE A CONFLICT OF INTEREST

The certifying agency, under the provision of G.S. 143-147, shall not be affiliated with nor influenced or controlled by producers, suppliers, or vendors of products in any manner which might affect its capacity to render reports of findings objectively and without bias. An independent certifying agency is judged to be free of such affiliation, influence, and control if it complies with all of the following:

- A. Has no managerial affiliation with producers, suppliers or vendors, and is not engaged in the sale or promotion of any product or material.
- B. The results of its work accrue no financial benefits to the agency via stock ownership, and the like, of any producers, suppliers, or vendors of the products involved.
- C. Its directors and other management personnel, in such capacities, receive no stock option, nor other financial benefit from any producer, supplier, or vendor of the product involved.
- D. Has sufficient breadth of interest or activity that the loss or award of a specific contract to determine compliance of a producer's, supplier's, or vendor's product with the State of North Carolina Building Code would not be a determinative factor in its financial well being.
- E. The employment security status of its personnel is free of influence or control of producers, suppliers, or vendors.

### RULE 3 - THE CERTIFYING AGENCIES MUST POSSESS THE NECESSARY QUALIFICATIONS AND BE UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER OR ARCHITECT

The following information is required in evaluating qualifications:

- A. List the names of Registered Engineers and Registered Architects on your staff and the following additional information:
  - The names of Registered Engineers practicing Structural, Mechanical, Electrical and Fire Protection Engineering and their years of experience who will be involved in the evaluation, testing and follow-up inspection service.
    - 2. List the names of graduate engineers on your staff.
    - 3. List the names of Architects and Engineers registered in North Carolina.
- B. List the names of technicians and qualifications for each specialty type with description of the type of work you propose them to perform. Give the basis upon which you determine qualifications of each type of technician and the specific job which he is to perform.
- C. Give a general outline of the training programs you have for making sure all inspectors and other technicians are properly trained to do each specific job assigned to them.

- D. List the names and qualifications of individuals serving on advisory panels which assist your agency in making its policies in conformance with the public interest in the field of public health and safety.
- E. List the types of products which you provide follow-up inspection service with labels to comply with safety standards and list the states you provide these services in. List such standards for each product.
- F. List the names of employees currently and proposed to be located in North Carolina.
- G. List the names of products, equipment, structures and other items used in the construction industry you have had experience with in furnishing evaluation, testing and follow-up inspection service. Give the number of years of experience your agency has had with each.
- H. All third party plan reviewers and in-plant inspectors must be properly certified in the appropriate areas by either the North Carolina Code Officials Qualification Board or by one of the Code Official Certification Programs given by SBCCI, BOCA, or ICBO.
- RULE 4 ALL AGENCIES MUST CERTIFY AS TO CONFORMANCE WITH VOLUME VII RESIDENTIAL AND VOLUMES IV OF THE N. C. STATE BUILDING CODE FOR MODULAR DETACHED ONE AND TWO FAMILY DWELLINGS AND VOLUMES I, VOLUME I-C, II, III, IV, AND VI OF THE N. C. STATE BUILDING CODE FOR OTHER BUILDINGS OF MODULAR CONSTRUCTION

The agency must give the following information pertaining to its procedures for compliance with the above standard:

- A. Description of the evaluations to be made.
- B. The types of follow-up inspections to be made in the factory must be described in detail.
- C. The tests proposed to be made by the agency and those required of the manufacturer must be described in detail together with description of equipment to be used for such tests.

# RULE 5 - THE CERTIFYING AGENCY MUST ESTABLISH QUALITY CONTROL PROCEDURES IN THE MANUFACTURING PLANT TO INSURE EACH UNIT LABELED IS IN COMPLIANCE The agency must submit details of how it proposes to do the following:

- A. All designs must be evaluated with proper coordination so that in-plant inspectors will know exactly what has been evaluated.
- B. The agency shall establish full time or 100% inspection by its personnel in the plant until it is satisfied that the quality control procedures of the manufacturer are satisfactory.
- C. The approved agency must insure that the manufacturer's Quality Assurance Program is operating properly and that all modular units are constructed in compliance with the Code and the approved documents. The approved agency shall inspect each modular unit 100% until such time as it is satisfied that the manufacturer's Quality Assurance Program is functioning properly. At such time the agency may decrease its inspection frequency to a level where it is monitoring the manufacturer's Quality Assurance Program. The minimum acceptable inspection level by an approve agency is such that each modular unit shall be inspected by a qualified employee of the agency at some point during its manufacturing process. Each modular unit need not be inspected in its entirety but a complete inspection shall be conducted on all work completed on the modular unit at the time of the inspection. The agency in-plant inspection reports shall indicate the station in which a modular unit is inspected and shall also indicate all violations found and all major items inspected.
- D. All construction materials and equipment in stock which is proposed to be used by the manufacturer in the construction of labeled modular units shall be inspected each time an in-plant inspection is conducted.

### RULE 6 - THE AGENCY SHALL PROVIDE THE FOLLOWING TO INDICATE COMPLIANCE WITH THE N. C. STATE BUILDING CODE

#### A. Data Plates

- 1. One data plate shall be attached within each family dwelling unit of a one or two family dwelling structure.
- 2. One data plate shall be attached within each family dwelling unit of a multi-family structure.
- 3. For buildings or portions of buildings occupied by other than residential occupancies, one data plate shall be attached to each modular section.
- 4. Each data plate shall contain the following:
  - a. Manufacturer's name and address
  - b. Certifying agency's name
  - c. Building occupancy classification
- d. Model name or number
  - e. Building serial number
- f. Design loads
  - g. Factory installed equipment
    - h. Code certification list each volume

#### B. North Carolina Validating Stamp

- 1. One validating stamp shall be attached within each family dwelling unit of a one or two family dwelling structure.
- 2. One validating stamp shall be attached within each family dwelling unit of a multi-family structure.
- 3. For buildings or portions of buildings occupied by other than residential occupancies, one validating stamp shall be attached to each modular section.
- One validating stamp shall be attached to each panelized modular component.

#### C. Agency Certifying Labels:

- An agency certification label shall be affixed to each modular unit and to each modular component if separate.
- 2. Each certifying label must have an individual serial number.
- D. Give procedure for accounting for each data plate, each N. C. State Validating Stamp, and each agency certification label.

# RULE 7 - THE AGENCY MUST ESTABLISH A PROCEDURE FOR WITHDRAWING AGENCY CERTIFYING LABELS AND N. C. VALIDATION STAMPS ON UNITS OR COMPONENTS THAT DO NOT COMPLY WITH PROCEDURES FOR MAKING FIELD CORRECTIONS ON UNITS FOUND TO BE IN NONCOMPLIANCE

The following information shall be provided:

- A. State the procedure to be used for withdrawing labels from units found not to comply with standards.
- B. When units are found in noncompliance, give the procedure proposed to be used to insure quality control procedures will be brought back up to an acceptable level.
- C. Give follow-up procedures to be used when a unit in the field is found that does not comply with the standard.
- D. Give procedure for local inspectors and/or staff of the State Building Code Council to follow in notifying the labeling agency when a nonconforming unit is found. Outline the procedure to be used by your agency to have necessary changes made.

#### RULE 8 - THE CERTIFYING AGENCY SHOULD HAVE BROAD ACCEPTANCE OF ITS WORK BY GOVERNMENTAL JURISDICTIONS IN THE FIELD OF PUBLIC HEALTH AND SAFETY AND BE CAPABLE OF INTERSTATE ACCEPTANCE

The following information is required to evaluate broad acceptance:

- A. List the state governmental jurisdictions which have approved your evaluation, testing, inspection and label service to preempt local inspection on modular construction.
- B. List the governmental jurisdictions which have approved your evaluation, testing, inspection and label service and the types and names of products so approved to comply with safety standards. List such standards for each product.
- C. List the location of main office and location of branch offices and total number of employees in each.

#### RULE 9 - INFORMATION REQUIRED TO BE SUBMITTED BEFORE OPERATIONS OF AGENCY CAN BE CHECKED AND COMPLIANCE WITH "METHODS AND PROCEDURES" REQUIRED BEFORE AN AGENCY CAN BE AUTHORIZED TO ISSUE LABELS

Before the agency is authorized to issue labels to preempt local inspection, the Council and Engineering Division staff must be assured that the agency is complying with the "Methods and Procedures" adopted by the Council. The following information must be submitted:

- Names and addresses of plants which are authorized to use agencies' label with authorization from these manufacturers for the administrative authority to inspect each plant at any reasonable hour to assure that the agency is requiring the manufacturer to comply.
- B. Copies of certification reports and other records prepared in accordance with the "Methods and Procedures" on each plant.
- C. Additional information required to be furnished in the "Methods and Procedures."

#### RULE 10 - REQUEST FOR BUILDING CODE COUNCIL APPROVAL

- A. Upon notification of staff that the application is in order, the agency shall request approval from the Building Code Council at one of its normally scheduled meetings. The request for approval and the agency's application shall be submitted in accordance with the same requirements are indicated in Section 5.5 of Volume I-A, Administration and Enforcement Requirements.
- B. The request for agency approval may be brought before the Building Code Council with or without a recommendation for approval by the Modular Construction Staff.

#### RULE 11 - FEES FOR "NORTH CAROLINA VALIDATION STAMP" AND APPLICATION OF OTHER MONITORING FEES TO MONITOR NORTH CAROLINA APPROVED AGENCIES

- A. Fees for "North Carolina Validation Stamp" Which are Secured from North Carolina Approved Agency -"North Carolina Validation Stamps" will be issued to each North Carolina approved certifying agency based on their requested needs. An approved performance bond sufficient to cover the cost of stamps issued and not paid for must be posted with the State Department of Insurance. The fee for each North Carolina Validating Stamp used to label panelized modular components is \$1.00. The fee for all other North Carolina Validating Stamps is \$60.00. Manufacturers must obtain Validating Stamps from the approved certifying agency.
- B. Collection of Fees for "North Carolina Stamp" and Reports Required Fees for stamps must be collected from the manufacturer by the North Carolina certifying agency. Monthly reports are required from each certifying agency and must include the following for each separate manufacturer:
  - 1. manufacturer's name and address

  - approved model name or number
     building occupancy classification
  - 4. completion date
  - 5. destination
  - 6. serial numbers

- 7. third party label numbers
- 8. N. C. Validating Stamp numbers
- C. Annual Renewal Fee for North Carolina Approved Inspection Agency The annual license fee and annual renewal license fee for each approved agency is \$200.00 per year.
- D. Fees for Review of Application of Agency to Qualify as a North Carolina Approved Inspection Agency A fee of \$500.00 will be charged for the first review of information submitted for compliance with the procedures rules for approval of agencies to label modular construction. If the initial information is not complete or does not comply with these rules, a fee of \$250.00 will be charged for each additional review.
- E. Fees for Review of Certification Reports A fee of \$1,000.00 will be charged for the first review of each initial certification report submitted for compliance with methods and procedures required of approved agencies. A fee of \$500.00 will be charged for each additional review of the initial certification reports.
- F. Fees for State Inspection of Manufacturer's Plants A fee covering expenses incurred during the certification inspections of a manufacturing plant shall be charged to the manufacturer. A fee shall not be charged for expenses incurred during monitoring inspections of a manufacturing plant.
- G. Fees for State Field Inspections of Modular Units A fee covering expenses incurred during field inspections of modular units shall be charged to the manufacturer.
- H. Fees for Modular Manufacturers
  - 1. Manufacturer registration fee \$100.00
  - 2. Manufacturer registration renewal fee \$100.00 per year
  - 3. Manufacturer late registration renewal fee \$25.00

### ARTICLE IV

#### Section 401: METHODS AND PROCEDURES REQUIRED OF AGENCIES

#### A. APPROVAL OF PLANS AND SPECIFICATIONS BY AGENCY'S COMPETENT ENGINEERS

- 1. Preliminary Information Obtain from the manufacturer (for each plant proposed to furnish labeled units) for preliminary review the following information:
  - a. Complete construction drawings showing structural details and layouts of frames, floors, walls and roofs, including lumber sizes and species, fasteners, details of openings, door location, etc., for each model or width or length proposed to be labeled.
  - Structural Analysis with Structural Calculations used by manufacturers' engineer to support engineering design of frames, floors, walls, roofs and their connections to meet the Code.
  - c. Heat Loss Calculations.
  - d. Floor plans showing the branch circuit layout, type of wiring material used, and location and rating of branch circuit protective equipment and main disconnect.
    - e. Diagrams of the fuel system, potable water system and drain, waste and vent system. The diagrams shall include details of the kind and thickness of materials used.
    - f. Electrical load calculations, branch circuits required, calculations and a table of branch circuit protection provided.
    - g. Details of special built-in anchoring and/or fasteners for one unit or more to each other, foundations, etc.
    - h. List of major fixed and portable appliances furnished. Include manufacturer's name, model or catalog designation and rating.
- 2. Confirm Information Qualified agency engineers must review and confirm that plans, specifications and other information from manufacturer will provide units which meet the Code and confirm the correctness of all calculations. The agency must not utilize any deviations from accepted engineering practice standards for design calculations and no deviations from ASTM test standards or procedures until the State Building Code Council has approved such deviations and incorporated them in the Methods and Procedures for use of all approved labeling agencies for all manufacturers.

#### B. PLANT INSPECTION BY ENGINEERS OF AGENCY

- 1. Advise Manufacturer of Tests and Equipment Needed Contact manufacturer, discuss arrangements for engineering visit, advise him of required tests and equipment for conducting them.
- 2. Engineering Visit Engineering visit to plant to conduct tests, compare actual construction with drawings, examine and record all details of equipment, materials and fabrication, and acquaint the manufacturer with required inspection routine and workmanship levels.
- 3. Written Report on Deviations Qualified engineers must prepare a progress report based on plans, specifications, etc., and engineering visit, list all deviations from the Code for each plant and send to the manufacturer and Department of Insurance. The deviation reports issued to a specific manufacturer at a specific plant location must be complete for that plant detailing all deviations for the plant to comply with before the agency could offer label service. The deviation reports submitted must be complete and list all deviations so that when the manufacturer makes all changes listed in the report, he will be ready for inspection by the engineers and preparation of the final certification report.
- 4. Resolve Deviations qualified engineers will consider alternatives submitted by the manufacturer in order to resolve all deviations, including a follow-up visit to the plant.

- C. CERTIFICATION REPORT (INCLUDING MANUFACTURER'S CHANGES) SHALL BE WRITTEN, DATED, NC REGISTRATION SEAL AFFIXED AND SIGNED BY ENGINEERS IN RESPONSIBLE CHARGE OF CERTIFICATION (FULL-TIME PROFESSIONAL EMPLOYEES LICENSED TO PRACTICE IN NORTH CAROLINA)
- 1. Final Certification Report and Inspection Manual Qualified engineers must prepare and sign final report when all details are in conformity with the N. C. State Building Code. Qualified engineers must prepare final certification report which is a detailed inspection manual (follow-up service procedure on each plant proposed to furnish labeled units), with a copy for the manufacturer and a copy for the local agency inspector. The manual contains descriptions of the unit including permissible alternative constructions and equipment, a list of test equipment, and manufacturing tests required, illustrations and required markings. Alternate materials and methods of construction shall be identified and indexed.
- 2. Certification document must be complete The Certification document must be written in a manner that qualified engineers of the certifying agency sign the certification report which certifies a specific plant is complying with the requirements of the Code. Each method of compliance by the manufacturer must be fully described in the certification report so that the manufacturer, agency inspector and the Engineering Division Staff or Building Code Council members could take a copy of the final certification report and determine by specifications outlined, described and certified to in the report whether the specific manufacturing plant is complying with the Code.

#### D. INITIAL AND FOLLOW-UP INSPECTION ON ALL UNITS

- 1. Initial Production Line Check by Agency Inspector The agency inspector makes his initial visit, examines units on the production line which the manufacturer intends to label, using the inspection manual (prepared by agency engineers for the plant to be inspected) and then releases the first lot of labels for units which comply. The certifying agency shall require the manufacture to mark (with identification as spelled out in the inspection manual) the units intended to be labeled at the first production station so that the inspector may easily identify such units at any stage in the production process.
- 2. Inspector Controls Release of Labels only to Units which Comply The inspector determines the number of units and/or components for which he will be requested to release labels. The production inspector can then, in consultation with his supervising inspector, schedule his visits so that each unit and/or component will be seen by him at some phase of its production. Each unit and/or component need not be inspected in its entirety, but a complete inspection on the structural, plumbing, heating or electrical facilities must be made on each unit, with the four types of inspections to be made on a rotating basis. The in-plant inspection report shall identify the unit and indicate which type of inspection was conducted on that unit.
- 3. Inspector Removes Labels on Units and/or Components Which Do Not Comply. The label is removed from each unit and/or component which is found to be in conflict with the inspection manual, and a variation notice is filed with the manufacturer and the certifying agency's director of the program.

## E. ENGINEERING DIVISION OF THE INSURANCE DEPARTMENT TO BE KEPT INFORMED The Labeling agency must submit copies of certification reports to the Engineering Division and a monthly report required by Article III (Rule 11) of these regulations.

#### F. AGENCY MUST FURNISH INFORMATION FOR STATE MONITORING

Each agency must secure an agreement from each manufacturing plant proposing to manufacture units for North Carolina on the following:

- 1. The manufacturer agrees that N. C. administrative authority has the right to inspect the plant at any reasonable time.
- 2. The manufacturer agrees that the agency shall furnish copies of all its records to the administrative agency on the plant when requested by the State.
- 3. The manufacturer agrees to submit label control sheets to the State when requested.

#### ARTICLE V

#### Section 501. STATE MONITORING

- A. VERIFICATION THAT THE APPROVED AGENCY HAS CORRECTLY EVALUATED THE MANUFACTURER'S PLANS AND SPECIFICATIONS IN ACCORDANCE WITH THE COUNCIL'S "METHODS AND PROCEDURES"
- 1. Agencies Issuing Labels Indicating Compliance with Codes. Procedural rules require applicants to list names and address of manufacturing plants which are authorized to use their label, and also requires the submission of Certification Reports issued by the agency on such plants. Copies of Certification Reports will be picked at random for checking by State engineers to determine if the agency has correctly evaluated the manufacturers plans and specifications in accordance with the Council's "Methods and Procedures" for compliance with the Code.
- 2. Agencies Not Issuing Labels Indicating Compliance with Code. If the agency is not issuing labels to any plant indicating compliance with the Code, and the agency is qualified as being capable of performing such functions under the Procedural Rules, the agency may be approved as being capable but would not be authorized to issue labels for North Carolina until after the agency has demonstrated that Certification Reports can be prepared in accordance with "Methods and Procedures" and their inspection system requires the manufacturer to actually comply. Copies of Certification Reports will be reviewed on a plant by plant basis initially.

### B. STATE AGENCY PERSONNEL'S IN-PLANT INSPECTION TO VERIFY AGENCY REQUIRES UNITS PRODUCED TO COMPLY WITH THE CODE

- Agencies Issuing Labels Indicating Compliance with Code. After the State engineering staff is satisfied that the agency has evaluated the plans and specifications correctly (based on random selected Certification Reports) and the approved agency's Certification Reports certify that the plant production is in compliance with the Code, an engineer/inspector team will inspect plants to determine if the plant production is in compliance with the agency's Certification Reports and the Code.
- 2. Agencies Not Issuing Labels Indicating Compliance with Code. After the State engineering staff is satisfied that the agency has evaluated the plans and specifications correctly and the approved agency's Certification Reports certify that the plant production is in compliance with the Code, an engineer/inspector team will inspect the plant (on a plant by plant basis initially) to determine if the plant production is in compliance with the agency's Certification Report and the Code.

# C. RESULT OF STATE EVALUATION OF CERTIFICATION REPORTS AND STATE IN-PLANT INSPECTION DETERMINE FREQUENCY OF STATE MONITORING AND STATUS OF AGENCY'S STATE APPROVAL

- 1. Agencies Issuing Labels Indicating Compliance with Code. The initial check of Certification Reports and in-plant inspection for agencies which are issuing labels will be made before the agency will be authorized to issue labels which will preempt local inspection of units in North Carolina. After the agency has been approved and licensed to issue labels to preempt local inspection, sufficient monitoring of the Certification Reports and in-plant inspection by State agency personnel will be made to assure continued compliance.
- 2. Agencies Not Issuing Labels Indicating Compliance with Code.

The initial review of Certification Reports and in-plant inspection will be made before the agency will be authorized to issue labels to preempt local inspection. After the agency is authorized to issue labels which will preempt local inspection, the State agency may keep the agency on a plant by plant basis until it is assured that the agency is requiring compliance. Thereafter, the results of the monitoring inspection will determine the frequency of future monitoring.

#### ARTICLE VI

Section 601: PROJECT DESIGN

601.1. NORTH CAROLINA REGISTERED ARCHITECT OR PROFESSIONAL ENGINEER SEALS SHALL BE AFFIXED TO ALL PROJECT DRAWINGS AND SPECIFICATIONS IF REQUIRED BY NORTH CAROLINA GENERAL STATUTES

The architect and/or engineer shall be responsible for the total coordination of the entire project, including but not limited to: modular units, fastenings, anchors, foundations, utilities, site work, etc. (complete project).

601.2. ALL ON-SITE PROJECT DESIGN DRAWINGS AND SPECIFICATIONS ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION AND TO ALL LOCAL INSPECTION FEES AND PERMITS

#### ARTICLE VII

Section 701: MODULAR CONSTRUCTION REGULATED

- 701.1. All modular buildings, except temporary construction buildings, manufactured after January 1, 1990, which are erected on building sites within the State of North Carolina shall be labeled with a North Carolina Validating Stamp in accordance with the North Carolina Modular Construction Regulations. All modular buildings which were manufactured before this date that are not labeled with a North Carolina Validating Stamp are subject to local inspection requirements.
- 701.2. See the HUD issued Mobile Home and Construction Safety Standards for regulations governing all HUD labeled manufactured homes.
- 701.3. For Temporary Construction Building requirements see Section 702."

Section 702: TEMPORARY CONSTRUCTION BUILDINGS

- 702.1. All Temporary Construction Buildings as defined in Section 201 are exempt from the requirements of the North Carolina State Building Code except as indicated in this section.
- 702.2. Temporary Construction Buildings shall be inspected in accordance with the following requirements:
  - The electrical supply system to the unit shall be inspected for compliance with the State Electrical Code.

#### ARTICLE VIII

Section 801: CODE VIOLATIONS

- 801.1. All Code violations found on modular construction shall be reported to the Engineering Division of the Department of Insurance
- 801.1.1. Provide the following information:
  - a) Owner name, address, phone number
  - b) Manufacturer
  - c) Third party inspection agency
  - d) Modular identification number
  - e) Code violation(s)
  - f) Corrective action taken

### ARTICLE IX INTERSTATE RECIPROCITY

#### Section 901: RECIPROCITY AGREEMENTS

- 901.1 The Building Code Council may enter into agreements with other States or group of States for reciprocal approval of modular buildings when the Building Code Council determines that the requirements of G.S.143-139.1 are met.
- 901.2 The Department of Insurance reserves the right to inspect and to determine Code compliance of all units to be sold or installed in North Carolina which have been inspected under a reciprocal agreement with another State or group of States.
- 901.3 The Department of Insurance reserves the right to conduct unannounced monitoring inspections during normal working hours of all manufacturing plant facilities which are approved under an interstate reciprocity agreement.
- 901.4 The Department of Insurance reserves the right to reject, for just cause, the approval of any manufacturer which was approved through an interstate reciprocity agreement.
- 901.5 If another State or group of States suspends or revokes its approval or certification of an approved manufacturer, then that manufacturer's North Carolina acceptance under the interstate reciprocity agreement shall also be suspended or revoked until such time as the manufacturer is reapproved.

#### Section 902: CONSTRUCTION EQUIVALENCE AND ACCEPTANCE

All modular buildings and components constructed in accordance with the rules and regulations of an interstate reciprocity program shall be deemed to be equivalent to modular buildings and components constructed in accordance with the State of North Carolina Regulations for Modular Construction and shall be accepted equally by the local building officials.

#### Section 903: THIRD PARTY INSPECTION AGENCIES

Only North Carolina approved third party inspection agencies are authorized to certify and label modular units approved under any interstate reciprocity program entered into by the State of North Carolina.

#### Section 904: APPROVED MODULAR MANUFACTURERS

#### 904.1: GENERAL

- 904.1.1 All modular manufacturers must register with and be approved by the Department of Insurance prior to shipping units within the State of North Carolina.
- 904.1.2 The North Carolina Department of Insurance reserves the right to reject or suspend, for just cause, the approval of any modular manufacturer. If a manufacturer's approval is rejected or suspended, the manufacturer must be notified in writing the reasons for such action. The manufacturer may appeal such rejection or suspension in accordance with the normal appeal procedures as indicated in the North Carolina State Building Code.

#### 904.2: NORTH CAROLINA MANUFACTURERS

Only North Carolina Manufacturers which are approved by the Department of Insurance to ship units within the State of North Carolina may participate in an interstate reciprocity program.

#### 904.3: OUT-OF-STATE MANUFACTURERS

Only manufacturing plant facilities which are located within the borders of the approving member State of a reciprocity agreement may participate in an interstate reciprocity program.

#### Section 905: LABELING REQUIREMENTS

- 905.1 All modular buildings which have been inspected and approved under a reciprocal agreement with another State or group of States shall bear approval labels or seals as required per the interstate reciprocity agreement. Modular units labeled in accordance with an approved interstate reciprocity agreement shall be deemed equivalent to units labeled with a North Carolina Validating Stamp in accordance with the North Carolina Modular Construction Program and shall be accepted equally as such by the local Building Official.
- 905.2 The labeling requirements of each interstate reciprocity program entered into by the State of North Carolina shall be as indicated in Appendix B.
- 905.3 All labels required for approval under an interstate reciprocity agreement shall be requested directly by the third party inspection agency from the State of Manufacture. If labels from the State of Installation are necessary, the State of Manufacture will request that those required labels be released upon approval of the modular unit.

#### Section 906: INTERSTATE RECIPROCITY FEES

- 906.1 A separate check for the State of Manufacture's and the State of Installation's approval and labeling fees shall be submitted by the third party inspection agency along with the submittal of approved modular units plans and specifications.
- 906.2 The total of the North Carolina labeling fees for modular units labeled under an interstate reciprocity program shall be equal to the total of the labeling fee normally charged in Section 301, Rule 11 of these regulations.

#### Section 907: LOCAL INSPECTIONS AND FEES

All modular units approved under an interstate reciprocity program shall be accepted by the local building official without further inspection or payment of fees except as may be required for the permitting of all site related construction including but not limited to foundations, modular unit set-up, interconnections between modular units and for the enforcement of all local ordinances.

#### Section 908: PLAN SUBMITTAL

- 908.1 All plan submittals and required fees shall be submitted to the State of Manufacture by the third party inspection agency following their approval.
- 908.2 All plans shall be reviewed and approved based upon compliance with the construction requirements as required by the Modular Construction Program of the approving State of Manufacture with the following exceptions:
- 908.2.1 Construction requirements which are regional in nature such as wind loads, snow loads, earthquake loads, thermal efficiency, and handicapped accessibility, shall be as required by the State of Installation. In the absence of such requirements being provided by the State of Installation then the necessary requirements shall be as determined by the approving State of Manufacture.
- 908.3 All questions regarding Code interpretations shall be resolved in accordance with the normal procedures as established by the Code writing authority of the State of Manufacture.

#### Section 909: CODE VIOLATIONS AND COMPLAINTS

909.1 The State of Installation shall investigate all building code complaints and shall report its findings to the State of Manufacture.

909.2 The State of Installation shall arbitrate all complaints and, where justified, require corrective action. The investigation of complaints shall be based upon the State of Manufacture's approved plans and specifications.

#### Section 910: MONTHLY REPORTS

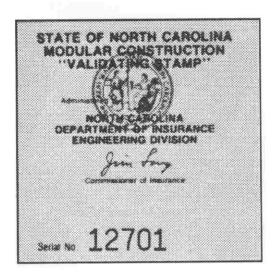
The third party inspection agency shall submit a monthly interstate reciprocity report to the State of Manufacture and the State of Installation providing information regarding each modular unit manufactured during the month under an interstate reciprocity program.

#### Section 911: INTERSTATE RECIPROCITY REPRESENTATIVES

The Building Code Council shall designate a representative and an alternate who is knowledgeable of industrialized modular building programs to attend interstate reciprocity meetings and to act on behalf of the State of North Carolina.

#### APPENDIX A

### NORTH CAROLINA VALIDATION STAMP



(Red North Carolina State Seal on Reflective Silver Background)
Size approximately 2.5" x 2.5"

### APPENDIX B

#### INTERSTATE RECIPROCITY LABELING REQUIREMENTS

(NO INTERSTATE RECIPROCITY AGREEMENTS CURRENTLY IN EFFECT)

### APPENDIX C

MODULAR CONSTRUCTION SET-UP BOND

NORTH CAROLINA MODULAR BUILDING SET-UP CONTRACTOR LICENSE BOND

(copy on next page)

### NORTH CAROLINA MODULAR BUILDING SET-UP CONTRACTOR LICENSE BOND

		*	
WE,		as	principal, located
	and		(surety) of
0.1	(address) a	corporation incorporated	under the laws of the
are Indebted and bound to the five thousand (\$5,000) dollars for with the regulations of the North Carand void; otherwise, it shall be in full it is expressly provided that:  1. This bond is executed building.  2. This bond is in full force North Carolina labeled more Street City  3. This bond will remain modular building.  4. The bond must remain	and duly licensed to transact a surety  (cit lich payment we bind ourselves and our legal re OBLIGATION IS SUCH, that whereas the principal secribed herein; principal and all his agents and employees shall solina State Building Code governing installation of force and effect.  by the said principal and surety to enable the principal and effect as to the above State Building Code dular building at the following address:	business in the State of ty or county inspection depresentatives jointly and sell-has entered into a contract set-up and install said mode of modular buildings, then to ncipal to set-up one North e obligations of the principal rolina issuance of the certificate	North Carolina as surety lepartment) in the sum of severally. In the sum of severally, at for the set-up and ular building in compliance this obligation shall be null carolina labeled modular all for the set-up of one of compliance for the section dept.)
5. The owner of the modu	ar building described in paragraph 2, who sustain	(city or county inspi	ection dept.).
surety shall not be liable f the bond.  In Witness Whereof, the a	and agreed that this bond shall be open to succe or successive claims in excess of the bond amount bove bounden parties have executed this instru- the name and corporate seal of each corporate sentative, pursuant to authority of its governing	unt, regardless of the numb	per of claims made against
		Signature of Principal	
		Title	
	Surety by		
		(signature)	
		(printed name)	
	Title		
	Address		**
		N.C. Resident Agent	
Power of Attorney Attached	·	Address	

#### APPENDIX D

#### RELATED PUBLICATIONS, DOCUMENTS AND GENERAL STATUTES

**GENERAL:** The following by reference are part of regulations as if bound herein:

- 1. North Carolina State Building Code, Volume IA Administration & Enforcement Requirements; Volume I General Construction; Volume IC Accessibility Code; Volume II Plumbing; Volume III Mechanical; Volume IV Electrical; Volume V Fire Prevention; Volume VI Gas; Volume VII Residential. (The use of the word "Code" in these regulations shall mean any or all of these referenced volumes.)
- 2. North Carolina General Statutes, with specific reference to: (a) Chapter 143 State Departments, Institutions and Commissions.
  - G.S. 143-139.1. Certification of manufactured buildings, structures or components by recognized independent testing laboratory. - The State Building Code may provide, in circumstances deemed appropriate by the Building Code Council, for testing, evaluation, inspection, and certification of buildings. structures or components manufactured off the site on which they are to be erected, by a recognized independent testing laboratory having follow-up inspection services approved by Building Code Council. Approval of such buildings, structures or components shall be evidenced by labels or seals acceptable to the Council. All building units, structures or components bearing such labels or seals shall be deemed to meet the requirements of the State Building Code and this Article without further inspection or payment of fees. except as may be required for the enforcement of the Code relative to the connection of units and components and enforcement of local ordinances governing zoning, utility connections, and foundations permits. The Building Code Council shall adopt and may amend from time to time such reasonable and appropriate rules and regulations as it deems necessary for approval of agencies offering such testing, evaluation, inspections, and certification services and for overseeing their operations. Such rules and regulations shall include provisions to insure that such agencies are independent and free of any potential conflicts of interest which might influence their judgment in exercising their functions under the Code. Such rules and regulations may include a schedule of reasonable fees to cover administrative expenses in approving and overseeing operations of such agencies and may require the posting of a bond or other security satisfactory to the Council guaranteeing faithful performance of duties under the Code.

The Building Code Council may also adopt rules to insure that any person that is not licensed, in accordance with G.S. 87-1, and that undertakes to erect a North Carolina labeled manufactured modular building, meets the manufacturer's installation instructions and applicable provisions of the State Building Code. Any such person, before securing a permit to erect a modular building, shall provide the code enforcement official proof that he has in force for each modular building to be erected a \$5,000 surety bond insuring compliance with the regulations of the State Building Code governing installation of modular buildings. (1971, c. 1099.)

3. North Carolina General Statutes as they relate to license requirements for architects, engineers and contractors.



