

**Dear Industrialized Building Commission Manufacturer,**

The following information has been selected to assist you in determining compliance with the Uniform Administrative Procedures adopted July, 2007 and Minnesota Statutes 326B.194 Interstate Compact on Industrialized/Modular Buildings.

The purpose of the Model Rules and Regulation for Industrialized/Modular Buildings is to provide model rules and regulations for the State of Minnesota to adopt and to effectively implement the Interstate Compact on Industrialized/ Modular Buildings. The purpose of adoption of these model rules and regulations by the State of Minnesota is to create uniformity in the compliance requirements of individual states; promote the use of new technologies, techniques and materials; and increase the availability of safe, decent, and affordable housing and other buildings.

**2015 Minnesota State Building Code Chapter 1361 Industrialized/ Modular Buildings**

Minnesota Chapter 1361.0100 The Purpose of this chapter is to govern the construction of Industrialized/modular buildings and building components and provide for their certification and labeling pursuant to the Minnesota Statutes, section 326B.194.

Minnesota Chapter 1361.0300 Incorporation of the Model Rules and Regulations for Industrialized/ Modular Buildings

Minnesota Chapter 1361.0400 Certification of Industrialized/modular buildings and components sold, offered for sale, or installed in the state must bear an Industrialized Buildings Commission (IBC) seal and data plate evidencing the manufacturer's certification of code compliance. That certification is conclusive on all agencies, instrumentalities, and municipalities of the state.

Minnesota Chapter 1361.0500 Installation of Industrialized/modular buildings or building components must be installed in compliance with the **Minnesota State Building Code**.

Industrialized/Modular Buildings MS. 326B.106. All industrial/Modular manufactured homes are subject to statutory warranties as defined in MS. Chapters 327A.01-327.07.

**Model Rules and Regulations for Industrialized / Modular Buildings**

The Model Rules and Regulations govern design, manufacture, handling, storage, delivery, and installation of industrial/ modular buildings and building components intended for installation in a participating state. Industrialized/modular buildings and building components certified pursuant to these Model Rules and Regulations may be sold for, delivered to, or installed on building sites located in any such participating state.

**Responsibilities of the Manufacturer**

General Responsibilities: It is the manufacturer's responsibility to obtain approval for its compliance assurance documents and to execute every aspect of its compliance assurance program. The manufacturer shall continue to be responsible for all corrective actions required, and the contractual relationship between the manufacturer and the designated inspection agency shall not diminish such responsibility. The manufacturer shall cooperate with the

designated agencies by providing such agencies with all the necessary reports, information, documents, records, facilities, equipment, samples, and other assistance for assuring compliance.

### Compliance Assurance Documents

Compliance Assurance Documents means “approved” Building System Documents, and “approved” Compliance Assurance Manual, and “approved” On-site Installation instructions.

### Building System Documents

“Building System” means the method of constructing a type of industrialized/modular building or building component described by plans, specifications, and other documentation which together establish a set of limits meeting the building codes, standards, and other requirements of these regulations for that type of industrial/modular building or building component, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety.

### Compliance Assurance Program Manual

Compliance Assurance Program means the policies and procedures which assure that industrial/modular buildings and building components, including their manufacture, storage, delivery, assembly, handling, and installation conform with these Model Rules and Regulations and Uniform Administrative Procedures.

### On-Site Installation Instructions

The on-site installation instructions consist of specific installation procedures provided by the manufacturer, which specify the materials and procedures required to install the building in conformance with the code standards. Specific installation procedures by the manufacture shall include connection details, structural connections, required mechanical and/or utility systems and any special conditions affecting other structural elements. Installation means the process of affixing, or assembling and affixing, industrial/modular buildings or building components on the building site.

### Alternates

The provisions of the Model Rules and Regulations are not intended to prevent use of any technologies, techniques, or materials not specifically prescribed by the codes, standards, specifications, and requirements, provided any such alternate has been approved. In order to obtain approval for such alternate, an application shall be filed in writing with the Construction Codes and Licensing Division (CCLD). The application shall contain the current requirements of the codes, standards, or specifications from which an alternate is sought and a statement of how the alternate to these requirements would adequately protect the health, safety, and welfare of the occupants and the general public. The CCLD may approve any such alternate provided it determines that the proposed design is satisfactory, and that the material, method, or work-offered is, for the purposes intended, consistent with adopted codes and standards, including quality, strength, effectiveness, fire resistance, durability, and suitability. The CCLD shall require that sufficient evidence or proof be submitted to substantiate any claim that may be made regarding the use of any such alternate. The CCLD shall notify the applicant of the determination. If the application is denied, the notification shall state reasons therefore.

### **Approvals of Building Systems and Compliance Assurance Programs**

The CCLD shall approve buildings, building components, or building systems with comply with the codes, standards, specifications and requirements adopted in Part III section 1 and with the other requirements of the Uniform Administrative Procedures, and shall approve compliance assurance programs which comply with the Uniform Administrative Procedures.

### Building Systems

- 1) In order to obtain approval for industrial/modular buildings and building components, a manufacturer shall submit a building systems manual for evaluation in accordance with the requirements of the Model Rules and Regulations.
- 2) A complete evaluation shall be performed and an evaluation report on the complete building system, as submitted, shall be issued.
- 3) In the event that the building system is found to be unsuitable for evaluation, the applicant shall be notified in writing of such unsuitability and the bases there of within 15 calendar days of the date the building system was

received. Subsequent submissions shall be treated as a new application.

- 4) In the event that the building system is found to be suitable for evaluation, a complete evaluation shall be performed within 30 calendar days of the date of the building system was received. Upon completion, the applicant shall be notified in writing of the results.
- 5) The CCLD may accept and may require tests to determine a building system meets the requirements of the Uniform Administrative Procedures.
- 6) Approval of building system shall be evidenced by the approval stamp and date from the CCLD on each sheet of the building system, or by another effective means of identification. A clear space must be provided on all sheets of plans near the, title box for the stamp(s) of approval. One copy of all approved plans, specifications, documentation and a building system letter of approval shall be returned to the applicant.
- 7) An approved building system shall not be varied from without prior authorization by the CCLD. All approved changes shall be made a part of the written record of approval. Such authorization shall be in writing or be confirmed in writing within ten (10) calendar days or any oral authorization. Except as provided for under Part IV, Section 4(A), no revisions to the codes shall apply retroactively. The CCLD shall notify all manufactures with the approved buildings systems and evaluation agencies of record of all such changes. Each manufacture shall have 180 days following the sending of such notification, or such additional time as the State of Minnesota shall deem reasonable, to submit appropriate design changes to the CCLD in order to implement the code changes in its already approved building system(s).
- 8) Amendments to the building systems may be proposed by submitting appropriate plans, specifications, or documentation to the CCLD for approval. Only the CCLD that approved the original building systems shall be authorized to approve amendments thereto.
- 9) Prior to full evaluation, the CCLD shall determine that the application for approval submitted to is suitable for processing. In the event that an application is found to be unsuitable for processing the applicant shall be notified of such unsuitability and the basis thereof either verbally or in writing within three (3) working days the application is received by the CCLD.
- 10) In the event that the application is found to be suitable for processing, the application shall receive complete evaluation within ten (10) working days of the date the application received by the CCLD. Upon completion, the applicant shall be notified verbally within three (3) working days and in writing within five (5) working days of the evaluation.
- 11) The CCLD may suspend or revoke the approval of any building system whenever the approval was in error, was issued on the basis of incorrect information, or was issued in violation of these Uniform Administrative Procedures or is later found to be in violation of these Uniform Administrative Procedures. Notice of such suspension or revocation of the approval shall be in writing with reasons for such suspension or revocation set fourth therein. If the building system is disapproved, the CCLD shall notify the applicant with a written explanation attached thereto of the reasons.

#### Compliance Assurance Program

- 1) A manufacture shall obtain approval for a compliance assurance program for its building system. Industrialized buildings or building components shall be manufactured in accordance with the approved program in order to be certified. A compliance assurance program shall be submitted to the CCLD for approval in accordance with the requirements of the Model Rules and Regulations.
- 2) Prior to the evaluation of a compliance assurance program, the CCLD shall determine if the application for approval submitted to its is suitable for processing. In the event that an application is found to be unsuitable for processing, the applicant shall be notified in writing of such unsuitability and the basis thereof within fifteen (15) calendar days of the date the application is received by the CCLD. Any subsequent submission shall be treated as a new application. In the event that the application is found suitable for processing, the application shall receive complete evaluation within thirty (30) calendar days of the date the application received by the CCLD. Upon completion, the application shall be notified in writing of the results of the evaluation.
- 3) A compliance assurance program submitted for approval shall be evaluated for compliance with these Uniform Administrative Procedures. If a compliance assurance program is disapproved, the CCLD shall notify the applicant with the written explanation attached thereto of the reasons for disapproval.
- 4) Approval of a compliance assurance program shall be evidenced by the stamp of approval of the CCLD on each of the program documents, or by other effective means of identification. One copy of the approved application and documentation shall be returned to the applicant.
- 5) A compliance assurance program or any amendment thereto which has been approved shall not be varied in any way without prior authorization by the CCLD. Only the CCLD that approved the original compliance assurance program shall be authorized to approve any amendments thereto. Such Authorization shall be in writing or be confirmed in writing within ten (10) calendar days of any oral authorization.
- 6) The CCLD may suspend or revoke, or cause to be suspended or revoked, its program whenever the approval was issued in error, or was issued in violation of any of the Uniform Administrative Procedures. If the CCLD determines that industrialized/modular buildings or building components manufactured pursuant to an approved

building system do not comply with these Uniform Administrative Procedures and the manufacturer fails to comply with a corrective order, the CCLD may suspend or revoke, the approval of the manufacturer and the compliance assurance program. Notice to the manufacturer and the inspection agency of suspension or revocation of approval shall be in writing with reasons the suspension or revocation set forth therein. The commission, at its discretion may waive specific compliance assurance program and other related requirements at the request of the manufacturer, each industrialized building or building component manufactured under the waiver shall be completely inspected through all phases of construction by a qualified organization accepted by the commission.

### **Design Program by the Manufacturer (Alternate Method)**

The purpose of the design program shall be to allow qualified manufacturers to modify CCLD approved building system within the limits defined in this Section and to incorporate the modifications into production without the prior approval of the CCLD.

The complexity of the plans a manufacturer is permitted to approve shall be determined by the following:

- 1) Manufacturers that wish to establish a design program that will enable them to modify existing or to create new one and two family detached dwelling unit plans shall employ or engage no less than one (1) designer or design reviewer with one and two family (level I) plans examiner certification.
- 2) Manufacturers that wish to establish a design program that will enable them to modify or create new plans shall employ or engage designer(s) or design reviewer(s) with the following certifications: Building Unlimited (level II) Plans Examiner, Fire Prevention Unlimited (level II) Plans Examiner, Electrical Unlimited (Level II) Plans Examiner, and Mechanical Unlimited (Level II) Plans Examiner: or registration as a Professional Engineer or Architect.

### **Manufactures Responsibilities**

As a prerequisite to obtaining certification for its design program, a manufacturer shall submit the following information to the CCLD for review and approval

- 1) A list of the names and the certification number(s) of the design personnel.
- 2) A procedure document for control that will identify the current design documents, including the name of the designers or the name of the design reviewer document identification number, the latest approval of the previous medication, if applicable.
- 3) The certification process for the manufacturer's design program shall not begin until after the CCLD has determined that the manufacturer has adequate personnel and procedures for document control. During the certification process, the manufacturer shall submit all plans approved by its design programs shall ensure that the following requirements are met.
  - a) Each document shall include the name and signature of the person(s) that performed the review, the date the document was approved, and a detailed description of the change, if applicable.
  - b) All structural calculations shall be stamped sealed by a registered engineer or architect.
  - c) If applicable, each floor plan shall have a specific schematic of the plumbing, gas piping, and/or mechanical system.
  - d) All modifications shall be documented and approved by the manufacturer's design program before being incorporated into production.
  - e) The manufacturer shall forward copies to the CCLD within five (5) calendar days of approval.
  - f) Approved modified design documents shall be readily available to the inspection agency and compliance assurance personnel during the production unit.
  - g) Obsolete documents shall be promptly removed from all points of issue or use.
  - h) The manufacturer shall be responsible for correcting in a timely manner any violation in the modified design documents located by the CCLD.
  - i) In addition to correcting violations in the modified design documents, the manufacturer shall correct the resultant violations in buildings and components produced in accordance with those nonconforming design documents, as may be required under Part IV, section 4(C).

### **Manufactures Data Plate**

- 1) A data plate shall be provided for each industrialized/modular building and building component (or group of components). The data plate shall be permanently attached in the vicinity of the certification label(s). The manufacturer may elect to attach a data plate in the vicinity of each certification label.
- 2) Data plate (s) shall be readily accessible for inspection and shall not be placed on a readily removable feature.

- 3) If the opinion of the inspection agency the shape and size of a building component is such that this information cannot be attached to it permanently, the information may be placed in a manual created with the component or on a tag attached to the crate in which the component is shipped, if the information is not such that future occupants of the building should know it. If the occupants need to know the information, it shall be contained in a manual and presented to the occupants upon transfer of possession. If life safety is involved, the item in question shall be plainly be plainly labeled.

#### Local Enforcement Agency Procedures and Inspections

Local enforcement agencies shall issue building permits for certified industrialized/modular buildings prior to installation, and shall not withhold issuance of a building permit for buildings containing certified building components when in all other respects comply with the codes.

The local enforcement agency shall inspect work performed on site, including foundations and the structural, mechanical, plumbing, and electrical connections, for compliance with the Uniform Administrative Procedures.

The local enforcement agency shall inspect all industrialized/modular buildings or building components upon, or promptly after, installation at the building site to determine whether all site work is in accordance with the plans filed with the permit application, the installation instructions, and the conditions listed on the Manufacturers Data Plate. The local enforcement agency shall issue certificates of occupancy for certified industrialized/modular buildings and for buildings containing certified building components which otherwise comply with all applicable codes. After installation and inspection pursuant to the Uniform Administrative Procedures, any industrialized/modular building or building component found not to comply with the plans filed with the permit; shall be brought into compliance before such certificate of occupancy shall be issued.

#### Code Reference Information

2007 Minnesota State Building Code with state amendments. [www.doli.state.mn.us](http://www.doli.state.mn.us) Industrialized Building Commission. (IBC). [www.interstateibc.org](http://www.interstateibc.org) Minnesota Statutes, laws, rules. (MS) [www.leg.state.mn.us](http://www.leg.state.mn.us)

### **APPLICATION OF BUILDING SYSTEMS DOCUMENTS**

Part V Section 1 of the *Model Rules and Regulations* addresses the minimum documents required for a Building Systems. Part V: Section 1(B) states -Only the minimum documentation necessary to demonstrate each alternative possible within the system shall be required.- The intent of this paper is to discuss the application of Building Systems Documents as applied to one and two family housing. A typical Building Systems will contain subsystems such as ranch, cape and two story. For discussion purposes, this paper will address the application of a ranch subsystem within the Building Systems Documents. This application does NOT address all of the options. It is only intended to illustrate the application of options within the approved Building Systems.

#### **PLAN DEVELOPMENT**

Specific floor plans are developed by the manufacturer using the minimum documentation that has been approved by an evaluation agency. A typical ranch subsystem may only contain one floor plan. This floor plan would identify basics such as light and vent per room and window and door sizes. This plan would also identify the width and length parameters. Structural and architectural options would be included as part of the Building Systems Documents. Many of the structural options would be specific to the subsystem due to changes in loading due to truss conditions and one story versus two story conditions. Some typical options are identified below:

- A. Window and door schedules;
- B. Header designs to support optional windows and doors and various roof load snow load conditions;
- C. Mate line girder designs addressing optional clear spans and snow loads;
- D. Exterior and mate line column and stud charts based on wall heights;
- E. Optional stair configurations.

The ranch floor plan may be configured as a raised ranch, an •L• ranch, or a •T• ranch as long as the modules remain within the parameters of the approved systems. The specific floor plan may be constructed at a lesser width than identified by the Building Systems. For example, a 27 foot wide ranch may be constructed to the more restrictive 28 foot wide structural designs. The specific floor plan developed by the manufacturer must fall within the limitations of the options approved under the systems. This specific floor plan would not require additional evaluation agency approval.

Location of electrical outlets and smoke detectors would be shown on the floor plan or a separate identical plan. Actual location of these items would change for each floor plan developed by the manufacturer. In all cases, the actual locations must conform to applicable building and electrical codes. The actual location of the electrical devices would not require additional evaluation agency approval.

## **BATH AND KITCHEN OPTIONS**

Optional bath and kitchen configurations for each floor plan are not required but may be part of the subsystem (e.g., ranch, cape, two story) or part of the Building Systems Documents applicable to all subsystems. They may identify clearances as required and also the typical location of electrical outlets including those requiring GFCI protection. Typical configurations might identify the following:

- A. Island kitchen;
- B. •U• kitchen;
- C. •L• kitchen;
- D. Half and full baths.

Specific plumbing schematics for each plan are not required.

## **MANUFACTURER AND INSPECTION AGENCY RESPONSIBILITIES**

The manufacturer's compliance assurance program and the inspection agency provide oversight of the engineering department's ability to develop specific plans from the Building Systems Documents.

The manufacturer's design person responsible for the Building Systems Documents should be identified by title in the Compliance Assurance Program.

## **SUMMARY**

The application of the Building Systems Documents is designed to provide the manufacturer with the flexibility to customize the product without delays in the approval process. In all cases, the manufacturer must stay within the parameters approved within the Building Systems Documents. Currently, any changes to the Building Systems Documents must be approved by the evaluation agency. It should be noted that Part IV, Section 3 of the *Uniform Administrative Procedures* does provide a method for the manufacturer to modify the systems without the prior approval of the evaluation agency.