Procedures for Modular Dwelling Manufacturers

Scope and Authority

Wisconsin has a uniform approval program for 1-2 family residential modular buildings. The program is administered by the Department of Safety and Professional Services- Industry Services Division. With certain limitations, the approval program may also be applied to multi-family (three or more units per building) residential modular buildings. Non-residential modular buildings are not covered by this program and must comply with other Wisconsin code requirements for commercial buildings and possibly varying local requirements.

The program is intended to apply to modular “closed panel” structures, which would be difficult to inspect after leaving the plant. However, the program may also be used for open panel structures. After compliance with Wisconsin codes has been verified through plan review and inspection, a Wisconsin Insignia (label) may be affixed to the building. Modular buildings bearing the Wisconsin Insignia are deemed to comply with the Wisconsin codes and are entitled to be installed anywhere in Wisconsin where the installation site complies with the other provisions of the code. On-site work is subject to approval and inspection by the local inspector.

The program requirements are based on a national model developed by the National Institute of Standards and Technology, “Model Documents for Evaluation, Approval and Inspection of Manufactured Buildings, July, 1976”. Program procedures are detailed in State Statutes Chapter 101, Subchapter III and Wisconsin Administrative Code SPS 320, Subchapter V for one-two family dwellings.

Applicable Codes

The following codes are applicable to the construction of manufactured residential dwelling units in Wisconsin:

- SPS 320-325 Uniform Dwelling Code (UDC), (construction standard for 1-2 family dwelling units, applies uniformly statewide)

- SPS 381-387 Wisconsin Uniform Plumbing Code, (standards for all plumbing)

- SPS 305 Wisconsin Credentials Code, (requirements for obtaining Wisconsin certified inspector credentials)

- SPS 316 Wisconsin Electrical Code-Volume II, (includes Wisconsin adopted modifications to the National Electric Code)

- NFPA 70 National Electric Code

- National Institute of Standards and Technology, Model Documents for the Evaluation, Approval and Inspection of Manufactured Buildings (adopted by reference in the
Wisconsin Uniform Dwelling Code provides guidelines for developing and implementing a compliance assurance program, obtaining this code is optional.

Codes are available on the Department of Safety and Professional Services website at https://dsps.wi.gov Official Code documents may be purchased by calling Wisconsin Document Sales at 1-800-362-7253.

General Program Requirements
The manufacturer is required to contract with an independent third party inspection/evaluation agency. The Inspection/evaluation agency must have personnel that hold Wisconsin certifications issued by this department to perform plan evaluation and inspection that are appropriate for the work they are evaluating or inspecting. Separate certification credentials are issued for UDC Construction Inspector, UDC Electrical inspector, UDC HVAC inspector and UDC Plumbing inspector. If multi-family units are being constructed, the inspector must also be certified for Wisconsin Commercial Inspector and Commercial Electrical Inspector. The requirements for becoming a certified inspector are detailed in Chapter SPS 305.

The manufacturer, working with the inspection/evaluation agency, is required to create and implement a functional compliance assurance program that has been approved by this department. The enclosed “Compliance Assurance Manual Submittal Checklist” provides a summary of the information the manual is required to provide. Additional information is available in the “Model Documents for the Evaluation, Approval and Inspection of Manufactured Buildings”.

After the compliance assurance program has been approved by this department, the inspection/evaluation agency is responsible for review and approval of drawings, specifications, calculations, etc.; performing in-plant inspections and monitoring the manufacturer’s compliance assurance program for effectiveness.

Plant audits to monitor the effectiveness of the compliance assurance program will be conducted periodically by this department for a fee to maintain the approval.

Inspections
In-plant Inspections- The manufacturer and the inspection agency must inspect each unit produced. The manufacturer is required to inspect all aspects of construction of every unit produced. The inspection/evaluation agency is required to inspect all aspects of construction (i.e. the entire production line) and must inspect each unit at least once while it is in production. An increased frequency of inspections by the inspection/evaluation agency is required at the start of construction until the manufacturer has a proven history of producing Wisconsin code compliant units. The frequency of inspection may also be required to be increased when determined necessary by the inspection/evaluation agency or this department. Inspections and required documentation must be performed in accordance the approved compliance assurance manual.

On-Site inspections-On-site work is under the jurisdiction of the local inspector. Local permits and fees may be required.

Insignias
Approved manufacturers may purchase Wisconsin insignias from Document Sales for $25.00 each. One insignia is required per dwelling unit, regardless of the number of sections. Authorization for purchasing insignias will be provided with the notification of the manufacturer’s approval.
Other Requirements
All plumbing must be done under the supervision of a Wisconsin licensed Master Plumber by appropriately licensed personnel. Manufacturers that do not have Wisconsin licensed plumbers must obtain a Plumbing Product Approval for prefabricated plumbing systems from this department. A separate application submittal and fees are required. See the department’s website for the Plumbing Standard or Product Review Application, form SBD-7966 at https://dsps.wi.gov/Documents/Programs/Plumbing/SBD7966.pdf.

On-site construction work must be done by a contractor possessing a Wisconsin Dwelling Contractor Financial Responsibility certification if they are the party taking out any locally required construction permits. On-site plumbing must be installed by Wisconsin licensed plumbers.

The compliance assurance manual and the building system documentation are required to be kept current with actual practices and materials used in the construction by both the manufacturer and the inspection/evaluation agency. All revisions to the compliance assurance program must be approved by the inspection/evaluation agency and this department. Revisions to the building system or variations from the approved building system must be approved by the inspection/evaluation agency.

Submission Requirements
Documents required for the purpose of obtaining approval from this department are:

- Completed Wisconsin Modular Dwelling Program Application, form 2000IS. Wisconsin Inspector certifications held by inspection/evaluation agency personnel or plant personnel must be listed. The application form is available on the department’s website at https://dsps.wi.gov/Programs/UDC

- Compliance Assurance Manual- Submit three copies to this department for review. Each page of the compliance assurance manual must be stamped approved and dated by the Inspection Agency prior to submittal to this department. The fee for department review of the compliance assurance manual is $80.00/hour. An invoice for the review fees will be sent after the compliance assurance manual has been reviewed.

- Building System- Submit one copy of the building system to this department after it has been approved by the inspection/evaluation agency. The building system submittal shall consist of the plans, specifications, calculations and test reports describing the proposed construction in sufficient detail to permit the determination of code compliance. The building system may be submitted after the compliance assurance manual has been approved, however, it must be submitted prior to the start of any construction.

Submission of the compliance assurance manual and building system shall be mailed to:
DSPS – Jack Wotruba
2331 San Luis Pl.
Green Bay, WI 54304

Plumbing submittals and fees for modular dwellings (plan review or product review) shall be mailed to:
DSPS – Bruce Meiners
3824 Creekside Dr.
Holman, WI 54636
Compliance Assurance Manual Submittal Checklist

This checklist is intended to serve as a guide to the manufacturer and inspection/evaluation agency in preparing the Compliance Assurance Manual for submittal and approval to participate in the Wisconsin Modular Dwelling Program. The titles and numbers listed below are from the National Institute of standards and Technology “Model Documents for Evaluation, Approval and Inspection of Manufactured Buildings, July 1976 as adopted SPS320.24. The following format is not mandatory, however, all of the information listed must be included in the manual. Following this format will ensure that the manual contains all required information and reduce the review time.

General Requirements
- Name & Address of Inspection Agency
- Inspection Agency approval
- Properly indexed
- Plant name & location
- Forms - copies of all inspection forms, records, checklists, labels, stamps, etc.
- Description of building system
- Copy of agreement between manufacturer and inspection agency or signed statement that such an agreement is in force and includes a statement of no conflict of interest

Revision of Manual- Part V, Section 2 (A)(1)
- Procedure for revising manual
- Changes coordinated with and approved by Inspection Agency
- Submission to this department within 10 days
- Formal review of manual every 3 months

Organization Structure- Part V, Section 2(A)(2)
- Identify organizational elements responsible for compliance assurance (Organizational chart)
- Compliance assurance functions independent from production
- Statement of the responsibility and authority of C.A. personnel
- Inspection Agency / compliance assurance relationship

Training & Qualifications- Part V, Section 2(A)(2)(a)
- Identify person(s) responsible for directing the compliance assurance program
- Qualification & training requirements for compliance assurance personnel.
- Job description of C.A. personnel
- Resumes for C.A. personnel
- Training programs by manufacturer or inspection agency, if any

Uniform System of Audits- Part V, Section 2(A)(3)
- Audit criteria or checklist for manufacturer
- Audit criteria or checklist for Inspection Agency
- Submit audit findings to this department
- Frequency of audits
Compliance Records- Part V, Section 2(A)(2)
- Personnel responsible for keeping records
- Record of inspections performed
- Record of test results
- Data plate
- Minor modifications approvals
- Dates of production
- Complaint information

Control of Changes- Part V, Section 2(A)(5)
- Procedure for control of changes to building system or compliance documentation (i.e. checklists etc.)
- Personnel responsibility for informing personnel of changes

Control of Working Drawings- Part V, Section 2(A)(6)
- Use of working drawings
- Review for compliance
- Approved by Inspection Agency
- Procedure to modify plans
- Removal of obsolete plans
- Responsibility or method for communication of changes

Serial Number System- Part V, Section 2(A)(7)
- Number assignment
- When assigned
- Where located on unit

Control of Labels- Part V, Section 2(B)(8)
- Personnel who will have responsibility for release and control of labels
- Assigning labels to units
- Verification of records for unit
- Handling of damaged or misused labels

Control of Procurement- Part V, Section 2(B)(1)
- System of selecting materials
- Evidence of compliance (i.e. grade stamps, listings etc.)
- Review for compliance with approved building system

Receiving Inspection- Part V, Section 2(B)(2)
- Method of evaluating materials & supplies upon receipt
- Accept/ reject criteria

Protection of Materials- Part V, Section 2(B)(3)
- Protection from weather
- Protection from physical damage
- Protection from adverse conditions

Disposition of Rejected Materials- Part V, Section 2(B)(4)
- Method of identification and handling of rejected materials
- Procedure for repair or rework
Corrective Action - Part V, Section 2(C)(1)
- Identification of noncompliant items
- Method of correction of noncompliant items
- Identify cause of noncompliance

Testing and Inspection Equipment - Part V, Section 2(C)(2)
- Test equipment used
- Test procedures
- Calibration and test of equipment

Frequency of Inspection - Part V, Section 2(C)(3)
- All aspects of construction of every unit inspected by in-plant inspector
- All aspects of construction inspected by Inspection Agency
  Every unit inspected at least once by Inspection Agency
- Adjusting frequency of inspections by Inspection Agency
- Criteria for determining adjusting the frequency of inspections

Authority for Compliance Assurance - Part V, Section 2(C)(4)
- Authority of in-plant inspector
- Authority of Inspection Agency
- Provision to inspect all dwellings prior to defective and subsequent to last unit inspected by Inspection Agency

Production Flow Diagrams - Part V, Section 2(C)(5)
- Material flow chart
- Plant Layout
- Inspection and test done at each station
- Mandatory inspection locations
- Storage locations

Inspection Checklists - Part V, Section 2(C)(6)
- Includes all aspects of construction
- Use of checklist on production line
- Objective of checklist

Code Compliance Workmanship Standards - Part V, Section 2(C)(7)
- Use of manufacturer’s instructions and listing requirements
- Reference to applicable Wisconsin codes.

Disposition of Noncompliant Construction - Part V, Section 2(C)(8)
- Method of identification of noncompliant item (red tag, etc)
- Removal of identification after correction
- Recording of noncompliance
- Checking of prior and subsequent units

Final Inspection and Certification Part V, Section 2(D)(1)
- Procedures for final inspection
- Proper unit identification and records
- Label control records
- Correct information check
Handling and Storage- Part V, Section 2(D)(2)
- Method of handling units
- Protection from elements in storage
- Inspection of stored units

Packing and Shipping- Part V, Section 2(D)(3)
- Protection against damage
- Pre-transit inspection

Transportation- Part V, Section 2(D)(4)
- Method of transportation
- Pre-transit inspection

Installation Control- Part V, Section 2(D)(5)
- Information to be provided to local inspector
- Foundation and structure requirements described
- Utilities
- Testing

Field Repairs- Part V, Section 2(D)(6)
- Method of determining responsibility
- Correction of noncompliance when work is result of work by manufacturer
- Reporting of noncompliance relating to inadequate plant inspection
- Provision to inspect other units suspected of noncompliant items
- Withdrawal of labels from units not in compliance

Permission for Inspection- Part V, Section 2(D)(7)
- Signed and notarized permission for this department to audit records and inspect