# NBSIR 73-278 (4 Volumes) Model Documents for the Evaluation, Approval, and Inspection of Manufactured Buildings

VOLUME I - TEXT AND APPENDIXES

CES Project Office of Building Standards and Codes Services Center for Building Technology, IAT National Bureau of Standards Washington, D. C. 20234

September 1973

Preliminary Report



U.S. DEPARTMENT OF COMMERCE NATIONAL BUREAU OF STANDARDS

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# MODEL DOCUMENTS FOR THE EVALUATION, APPROVAL, AND INSPECTION OF MANUFACTURED BUILDINGS

VOLUME I - TEXT AND APPENDIXES

R. D. Dikkers, H. R. Trechsel, P. W. Cooke, H. K. Tejuja, L. P. Zelenka

CES Project Office of Building Standards and Codes Services Center for Building Technology, IAT National Bureau of Standards Washington, D. C. 20234

September 1973

**Preliminary Report** 

This is a preliminary report issued with the express intent to solicit comments and suggestions. Accordingly, results and conclusions contained herein are not necessarily those that will be included in the final report.

U. S. DEPARTMENT OF COMMERCE, Frederick B. Dent, Secretary NATIONAL BUREAU OF STANDARDS, Richard W. Roberts, Director

#### PREFACE

In response to requests from the Executive Office of the President and the National Conference of States on Building Codes and Standards (NCSBCS), the National Bureau of Standards has undertaken specific research programs to remove or reduce barriers created by the building regulatory process, so as to improve productivity and innovation in building construction. One of these programs is to establish a Coordinated Evaluation System (CES) by developing, in conjunction with the state governments, model informational documentation for use in the building regulatory process.

This four-volume report outlines the results of an initial study of documentation needs, sample forms and checklists pertaining to manufactured buildings and components. It is a preliminary report issued with the expressed intent to solicit comments and suggestions so that more comprehensive and more generally applicable model documentation can be developed.

A first draft of this report was reviewed during a 2 1/2 day meeting in April, 1973, by a group of consultants composed of representatives of state and local building officials, design professionals, third party evaluation and inspection agencies, and industrialized building manufacturers. The review meeting was organized and chaired by Mr. John Dunlap, Consulting Engineer of Sacramento, California. The other consultants were:

> Joseph Bartell, City of St. Petersburg Jack Bono, Underwriters Laboratories, Inc. Kern E. Church, State of North Carolina Jasper Hawkins, Hawkins and Lindsey, Architects James M. Hicks, State of California Glendon R. Mayo, Consulting Engineer J. Dillard Powell, Continental Homes Ed Starostovic, Product Fabrication Service Joseph Stein, City of New York Steve Wilson, National Homes Corporation

The comments of the consultants were most helpful in developing the model documents contained in this report, and their valuable assistance is greatly appreciated and herewith acknowledged.

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#### MODEL DOCUMENTS FOR THE EVALUATION, APPROVAL, AND INSPECTION OF MANUFACTURED BUILDINGS

R. D. Dikkers, H. R. Trechsel, P. W. Cooke, H. K. Tejuja, L. P. Zelenka

To assist the states in developing their building regulatory activities and functions, the Coordinated Evaluation System (CES) Project has defined and developed model informational documentation pertaining to the functional areas of data submission, evaluation, approval, compliance assurance, installation data, and owner information.

This is a preliminary report which gives the results of the investigation to date, and presents discussions of informational needs and sample model documents pertaining to manufactured buildings and building components. The model documentation is based on the Model Rules and Regulations for manufactured buildings developed by a Department of Commerce sponsored working task group, and the results of a comprehensive state-of-the-art study of most of the existing state building regulatory programs. The documentation presented in this report covers all functional areas except owner information which is not usually subject to regulation and will be covered by a separate report. Emphasis was placed on developing documentation applicable primarily to one and two family detached dwellings.

Based on the comments received on this preliminary report, the documentation presented herein will be revised and a final report issued.

Key words: Building codes; certification; compliance assurance; evaluation; industrialized building; inspection; model documents; NCSBCS; standards; state regulation.

The conventional method of regulating building construction consists of determining code compliance prior to the start of construction by an evaluation of plans and specifications, and by periodic on-site inspections during construction. The on-site inspections are scheduled so that all major code related construction features can be viewed to determine their compliance with applicable codes and with the approved plans and specifications. For example, electrical wiring and conduits are inspected prior to wall finishing operations which would enclose such wiring and prevent its full inspection. In most states, both evaluation or plan review and inspections are performed by local enforcement agencies using locally adopted codes. Although not without problems, this building regulatory system has been found adequate for conventional onsite construction. However, this regulatory system has been proven to be a detriment to manufactured buildings because: (1) both the differences in building codes from one locality to another, and the requirement for local inspections in each municipality restrict the marketing areas for such buildings, thus preventing the manufacturers from taking full advantage of modern mass-production techniques; (2) in case of "closed construction" (i.e., buildings or components manufactured in an off-site plant in such a manner that concealed parts or processes of manufacture can not be inspected at the building site without disassembly, damage, or destruction), the requirement for inspection by local inspectors is impractical; (3) some local building codes are outdated and restrict the use of modern materials and construction methods particularly well suited to in-plant fabrication.

Over the past few years, efforts have been undertaken to alleviate the restrictions placed on manufactured buildings by the multiplicity of building codes and by the unsuitable regulatory processes used. The efforts by various organizations to develop model codes<sup>1</sup> and performance standards, and the recent trend towards state building codes are designed to reduce the number of codes to a manageable level, and to provide for the introduction and acceptance of novel materials and construction methods.

In recognition of the needs of the industry, many states have recently adopted legislation which provides for state-wide regulation of manufactured buildings and mobile homes [1].<sup>2</sup> Although the various programs established by the states vary in many details, most programs require that manufactured buildings: (1) meet one of the model building codes, and that mobile homes meet the American National Standard Institute (ANSI) Standard All9.1 [2]; (2) provide for some form of pre-evaluation ("plan review"); (3) provide for in-plant inspections at the state level; and (4) further require that local jurisdictions must accept state labeled or certified manufactured building or mobile home units. The right to regulate zoning and similar aspects is reserved to the local jurisdiction. Local agencies are generally also required to inspect on-site installation of the units.

<sup>&</sup>lt;sup>1</sup>Uniform Building Code (International Conference of Building Officials), Basic Building Code (Building Officials and Code Administrators' International), Southern Standard Building Code (Southern Building Code Congress).

<sup>&</sup>lt;sup>2</sup>Figures in brackets indicate the literature references at the end of this volume.

for most state programs for manufactured buildings and mobile homes are based on one of the nationally recognized model codes or standards, such states have provided a regulatory climate conducive to the continued industrialization of the building construction process within the limits of their territory. However, the full production and marketing potential of manufactured building and mobile home industries can not be realized unless some form of reciprocal regulation and acceptance of units among states is developed.

To provide a basis of such reciprocity, efforts by both the Council of American Building Officials and the Model Codes Standardization Council are under way to reduce unwarranted differences between the model codes. Department of Commerce (DOC) Special Working Groups consisting of representatives from industry and local, state, and federal agencies have developed "Model Acts" and "Model Rules and Regulations" pertaining to manufactured building and mobile home regulatory activities for the voluntary adoption by the states [3-5]. The model manufactured building legislation provides for:

- The establishment of a State Building Code Council to adopt and revise rules and regulations, and to adopt the standards and codes which are to form the technical basis for the regulatory activity.

- The preemption of local building codes whenever it has been certified that a manufacturer has met all state requirements (reserved to local regulation are zoning and land-use related items, as well as the inspection of all on-site work such as utility connections and foundation work).

- The approval, by the state administrative agency, of building systems and of compliance assurance programs (assuring that the units produced conform to the approved building system and to the Act and the Rules and Regulations).

- The certification of manufactured buildings and building components produced according to an approved building system and under an approved compliance assurance program.

- The granting of reciprocity to other states having substantially the same code, evaluation, and inspection requirements for approval and certification.

- The option for the state administrative agency to delegate evaluation, testing, and inspection functions to approved agencies which meet specified standards for independence of judgment, demonstrated reliability, and organizational and technical capabilities.

Although the adoption by the states of the Model Act and Model Rules and Regulations would provide a basis for reciprocity among the states, two additional elements in the regulatory field are necessary to establish full reciprocity: (1) a method or means of evaluating the qualifications of those state or private agencies which are responsible for evaluating and approving building systems and compliance assurance programs and inspecting manufactured buildings; and (2) a set of model informational documents for use by the states, to aid the establishment of a coordinated and uniform evaluation, approval and inspection system, and to provide the necessary and valid approval record for interstate reciprocity in the acceptance and regulation of manufactured buildings.

Recognizing the need for the above elements, the National Conference of States on Building Codes and Standards (NCSBCS), an organization of representative state building officials appointed by the Governors of their respective states, requested the National Bureau of Standards in 1970 to develop criteria and methodology for the evaluation and accreditation of laboratories and other organizations active in the evaluation and certification process, and in 1971 to develop a program that would provide the necessary documentation to serve as a base for an interstate evaluation system.

In response to these NCSBCS requests and with program support from the Executive Office of the President, the National Bureau of Standards developed and initiated two research projects, the Laboratory Evaluation and Accreditation Program (LEAP) and the Coordinated Evaluation System (CES) Project. LEAP project is concerned with the development of criteria necessary for judging the capabilities of institutions (public or private) to perform functions of engineering analysis or evaluation, testing, and compliance assurance (inspection) for manufactured buildings. LEAP is also directing its attention to the methodology for examining such institutions for their capabilities. The CES project is concerned with the documentation to be used by state and other agencies regulating manufactured building construction.

#### 2. COORDINATED EVALUATION SYSTEM (CES) PROJECT

The CES project was established in the Fall of 1971 with an objective to develop model informational documentation that will assist state building regulatory agencies in establishing a coordinated and uniform evaluation, approval, inspection, and certification system for manufactured buildings and building components. The CES project goals, tasks and methods used are discussed in greater detail in the NBS Technical Note 775 "Coordinated Evaluation System (CES) Project - Model Documentation for Building Regulation" [1].

In addition to developing the model documents, and as a necessary first step in their preparation, the CES project staff also studied the present state-of-the-art in the area of building regulatory activities, particularly as it pertains to state programs and to manufactured buildings and mobile homes. The results of this state-ofthe-art study will be given in separate publications.

Although not a part of the state regulatory system, the area of "owner information" was identified by Project CES as requiring special attention. The results of a preliminary study of model informational documents relating to owner needs have been completed and will be reported separately.

This preliminary report discusses the major informational documents developed by the CES project staff, and contains sample model forms and model checklists for use in state regulatory programs for manufactured buildings and building components. It is hoped that these discussions and model documents will be useful to all those involved in the regulatory process: (1) to the responsible state building official by providing him with suggested administrative procedures, model forms, and checklists; (2) to the

local building inspector by defining his responsibility and indicating the meaning and value of labels, data plates, and approval documents; (3) to the evaluation and inspection agencies by giving sample checklists; (4) to the producer by giving him in advance a clear understanding of the regulatory process and of the administrative requirements he must meet; (5) to the owner by assuring that the manufactured building he acquires meets or exceeds the applicable codes and standards; and finally (6) to the general public by providing an efficient regulatory system designed to permit and even stimulate the use of productive and economical manufacturing processes, efficient materials, modern marketing techniques and distribution methods in the building and housing construction industry.

### 3. SCOPE OF CES MODEL INFORMATIONAL DOCUMENTATION

The CES model documents cover the entire state regulatory process of manufactured buildings and building components from the initiation of action by the manufacturer to the occupancy of the building, including:

- Preparation and submission of documents by the manufacturer for the purpose of obtaining approval of building systems and compliance assurance programs;

- Preliminary review to determine suitability for evaluation of the submission by the state administrative agency (or such other agency having been delegated the responsibility for the evaluation of building systems and compliance assurance programs);

- Evaluation of the submitted building system and compliance assurance program for the determination of compliance with all applicable codes, acts, and rules and regulations;

- Approval (or disapproval) of the building system and compliance assurance program;

- Certification of manufactured buildings or components which have been manufactured according to an approved building system and an approved compliance assurance program;

- Local enforcement. Although not a part of the state regulatory activity, a short discussion of the local building regulatory functions was included in the CES model informational documentation since the local enforcement agency may be required to accept state certified manufactured buildings and components, and may be required to inspect and approve the on-site installation of the units.

Within the above scope, the following guidelines were used in the development of the CES documentation.

(1) The term "documentation" or "documents" as used in this report means not only the various forms, checklists, labels, and data plates used in the regulatory process, but also necessary commentary and administrative procedures.

(2) The documents are based on the regulatory process as contained in general terms in the Model Rules and Regulations and as described in Section 4 of this report.

(3) Where the Model Rules and Regulations appear to be open to different interpretations, the literal interpretation was used. Where necessary, a short commentary

was added to indicate the different interpretations and their possible influence on the documentation.

(4) Where the Model Rules and Regulations appear to be in conflict with some of the existing state regulatory programs, the requirements of the Model Rules and Regulations were followed. Where appropriate, such conflicts are discussed in the description of the regulatory process and in the commentary to the documents affected.

(5) Available time did not permit the considerations of all occupancies and type of constructions. So as to be applicable in their present form to a majority of currently produced manufactured buildings, emphasis was placed on the requirements for one and two family housing and on conventional (but in-plant fabricated) wood construction.

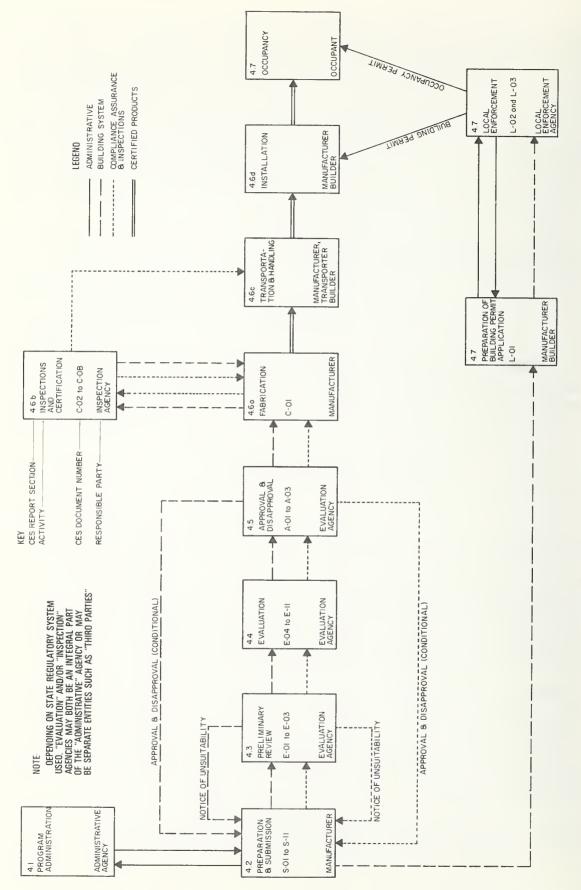
(6) The general technical bases used for the development of the various checklists were the One and Two Family Dwelling Code [6] and the National Electrical Code [7].

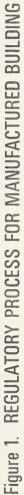
Because of the above considerations, the CES documentation is prepared to serve as a guide in developing the states' own forms, checklists, and administrative requirements. However, to promote a uniform approach that will aid in the interstate acceptance of manufactured buildings and components, it is suggested that the general format and content of the CES documentation be followed as closely as possible, and that only those changes and modifications be made which are in fact needed to adapt the documents to the requirements of any particular state's established administrative procedures, rules and regulations, mode of operation, and adopted relevant building and other codes.

# 4. REGULATORY PROCESS FOR MANUFACTURED BUILDINGS AND BUILDING COMPONENTS 4.1. Program Administration

Figure 1 shows the basic regulatory process for manufactured buildings as required by or implied in the Model Rules and Regulations, and identifies the major activities involved in this process: program administration, preparation and submission, preliminary review, evaluation, approval, fabrication and inspection, certification, transportation and handling, installation and occupancy. To preserve clarity and general application, the figure does not indicate every possible detail, or define every single document that may be involved in the process. Details are given in the process description below and under the discussion of the documents included in Section 5 of this report. It is recognized that some existing state programs differ to greater or lesser degree from the process indicated, that the Model Rules and Regulations themselves appear to permit alternate steps in the regulatory process and in particular allow varying degrees of delegation of specific functions. However, to provide a common ground for the suggested CES documentation, the process as shown in this section was chosen as the basis for all the documents. Where they are appropriate, alternate regulatory processes are briefly discussed in the commentary to the various documents in Section 5.

Throughout this report, the definitions of various terms, agencies, documents and processes as given in the Model Act and the Model Rules and Regulations are used





(see Appendixes A and B). Although defined in the Act and the Rules and Regulations, the following three terms relating to specific agencies and to the delegation of specified regulatory functions do appear to require additional comments.

Administrative Agency means the state agency which is charged with the administration of the Act and the Rules and Regulations. The Model Rules and Regulations provide the option for the Administrative Agency to delegate the function of evaluation to an approved Evaluation Agency, and the function of inspection to an approved Inspection Agency. Accordingly, when the term Administrative Agency is used in this report, this agency may or may not in fact perform all of the regulatory functions of evaluation, approval, inspection, and certification.

Also, both the <u>Evaluation Agency</u> and the <u>Inspection Agency</u> may be a part of the Administrative Agency, may be approved third party agencies, or may be agencies of another state where reciprocity is granted to such other state. It should be understood that the option to delegate pertains to the state agency only, and not to the manufacturer. Accordingly, where the process indicates, for example, that the manufacturer must submit his application for approval of a building system to the Administrative or Evaluation Agency, it is not implied that the manufacturer may submit the application to either agency according to his choice, but rather that he must submit his application to that agency which, in the particular state has been designated to receive the application.

#### a. Initiation of Action

The activity with respect to obtaining approval to produce units under the provisions of the Act is usually initiated by an inquiry from the prospective manufacturer to the Administrative Agency. In response, the Administrative Agency provides the manufacturer with the information giving the requirements pertaining to (1) the regulatory procedures; (2) the documents delineating the construction and the data substantiating its adequacy; and (3) the inspection and control procedures applicable to the fabrication activities. The requirements are contained in the Rules and Regulations and details, clarifications, and commentary are often given in so-called informational bulletins supplementing the Rules and Regulations. Several of the documents and procedures discussed in this report have been developed for use in the preparation of such bulletins.

#### 4.2. Preparation and Submission

The manufacturer is responsible for the preparation of the documents depicting the proposed construction, i.e. plans and specifications, and the data substantiating its adequacy, such as calculations and test results [Part IV, Section 2(A)(1)].<sup>3</sup> These documents and data are defined by the regulations as the "building system" [Part I(F)]. He is also required to establish a compliance assurance program to

<sup>&</sup>lt;sup>3</sup>Unless otherwise noted, references to "Parts and Sections" pertain to the parts and sections in the Rules and Regulations (Appendix B).

ensure that all activities from the fabrication to the installation of the proposed construction conform with the regulations, and prepare a compliance assurance manual documenting this program [Part V, Section 2].

When completed, the manufacturer transmits the documentation to the Evaluation Agency for review, evaluation, and approval. The submission may consist of: (1) a building system; (2) a building system and a compliance assurance program; and (3) a compliance assurance program covering a previously approved building system.

#### a. Building Systems

The building system submittal consists of the application form, plans, specifications, calculations, and test reports describing the proposed construction in sufficient detail to permit the determination of code compliance. CES Documents No. S-O1 to S-07 apply to the submission of building systems, and detail the submission requirements where a basically complete manufactured building is being submitted. In the case of a building component, only those items should be submitted which are germane to this component and its compliance with the applicable code provisions. CES Document No. S-08 gives, in matrix form, guidance for the selection of items which should be submitted for a component. In addition to the documentation, the submission also is to include the fee deposit as specified in Part IV, Section 6 of the Rules and Regulations.

Although in this report the term "building system" is used in the singular form, it must be pointed out that a building system may include several so-called models or variations. See also Section 5.2 for additional discussion on this matter.

#### b. Compliance Assurance Program

The compliance assurance program submittal consists of the application form and a compliance assurance manual. This manual identifies and lists all those procedures which the manufacturer and the Inspection Agency propose to implement to assure that the finished manufactured product conforms to the approved building system, the Rules and Regulations, and the applicable codes. The approval of a compliance assurance program is valid only for use with the building system on which it is based. The details of the compliance assurance program are discussed in Section 5.2 of this report and the CES Document No. S-09 applies to the preparation and submission of compliance assurance programs and manuals.

#### c. Modifications and Variations

Any modification to a previously approved building system or compliance assurance program and any variation of certified units require approval by the Administrative or Evaluation Agency [Part IV, Section 2(A)(7) and (B)(6), and Section 3(D)].

(1) <u>Modifications</u>. Minor modifications to building systems or compliance assurance programs may be submitted for approval using an application form such as shown in CES Document No. S-10 "Application for Approval of Minor Modification to an Approved Building System or Compliance Assurance Program". Such submittals should be accompanied by revised or new drawings, specification sheets, and appropriate compliance assurance manual sheets indicating clearly the revisions for which approval is sought.

If the modification is of such magnitude or extent as to materially affect the major features of the previously approved building system or compliance assurance manual, the Administrative or Evaluation Agency may request the resubmittal of the entire system or manual for approval as a new application.

(2) <u>Variations</u>. If a manufactured building or building component is to be altered after certification but prior to the issuance of a building permit, approval of such variation must be obtained from the Administrative or Evaluation Agency. Submittal of a request for such approval should consist of CES Document No. S-11 "Application for Approval of Variation to a Certified Manufactured Building or Component" and of appropriate plans and specifications clearly identifying the variation(s) for which approval is sought.

#### 4.3. Preliminary Review

The Administrative Agency records the receipt of and identifies the submittal on the Processing Record (CES Document No. E-Ol). Each submittal is given a number (in sequence of receipt) and this number is recorded both on the Processing Record and on the Application Form. A receipt should be given the applicant confirming that the application and deposit have been received and giving the processing number. If the Application Form (CES Document No. S-Ol) is printed on a multicopy form, a signed or stamped copy of this form could be used as this receipt.

The Evaluation Agency reviews the application for suitability for processing [Part IV, Section 2(A)(2) and (B)(2)]. This review includes the determination that the building system meets the definition of Manufactured Building [Part I(P)] or Building Component [Part I(E)] and falls under the scope of the Act, and that the submittal meets the administrative requirements of the regulations and is complete enough to begin evaluation. CES Document No. E-O2 can be used as a checklist for this preliminary review.

If the submittal is suitable for processing, the Evaluation Agency initiates the detailed evaluation activity. In either event, the disposition of the submittal following the initial review is recorded on the Processing Record (CES Document No. E-Ol). If the submittal is determined to be unsuitable for processing it is returned to the manufacturer with the Transmittal of Submittal Unsuitable for Processing Form (CES Document No. E-O3), which states the basis for this action. If the unsuitability is due to a minor deficiency, such as the missing of a required single detail or item, the applicant should be given an opportunity to correct such deficiency before any formal action is taken.

Building system submittals and compliance assurance submittals found suitable for processing are reviewed by the Evaluation Agency for compliance with the requirements of the Regulations [Part III and Part V, Section 1 and 2]. The discussions and interpretations of these requirements contained in Section 5.4 of this report and the Evaluation Checklists (CES Documents No. E-04 to E-08 and E-10) have been developed to aid in these activities. Where documentation for certified or tested products are part of a building system, CES Document No. E-09 will be helpful in evaluating such documentation.

As part of the evaluation of compliance assurance programs, Part IV, Section 4(A) of the Rules and Regulations requires that the Evaluation Agency inspect the manufacturing facility in which the buildings or components are to be manufactured. The Manufacturing Facility Evaluation Report (CES Document No. E-11) is designed to serve as a reporting form for this activity.

Following the completion of the evaluation, the disposition of the submitted documents is recorded on the Processing Record (CES Document No. E-Ol).

4.5. Approval and Disapproval a. Notice of Completed Evaluation

As soon as possible after completion of the evaluation, the Administrative or Evaluation Agency should notify the manufacturer of the results of the evaluation. The Notice of Completed Evaluation also should contain the amount of the fee, if any, due to the agency, or any refund due to the manufacturer in case the total fees are less than the deposit collected. If the Agency's action is to disapprove the application, the Notice of Completed Evaluation should contain the reasons for such action, and all submitted documents should be returned to the manufacturer. CES Document No. A-Ol suggests the format and contents of the Notice of Completed Evaluation.

Although the Model Rules and Regulations, in Part IV, Section 2(A)(4) require the above described course of action for disapprovals, it should be noted that a complete resubmission is costly and time-consuming, both to the manufacturer and the Evaluation Agency. Accordingly, where an application is to be disapproved because of a minor, or isolated item of non-conformance, or because of missing information, it is desirable that the applicant be notified of the impending disapproval to give him an opportunity to make the necessary corrections, or to supply the needed additional information without requiring a complete resubmission.

#### b. Stamp of Approval

Building systems and/or compliance assurance programs which have been evaluated and are found to comply with the applicable codes and all requirements of the Rules and Regulations will be approved [Part IV, Section 2] by the Evaluation Agency. Such approval for a building system will be evidenced by placing a stamp of approval on each sheet of the building system [Part IV, Section 2(A)(5)]. Approval for a compliance assurance program will be evidenced by placing a stamp of approval on each sheet of the compliance assurance manual [Part IV, Section 2(B)(5)]. CES Document No. A-02 gives the format of stamps that may be used for this purpose.

#### c. Building Systems Approval Report

In addition to sending to the applicant a Notice of Completed Evaluation and to placing the approval stamp on the approved building system, the Evaluation Agency also is required to prepare and transmit to the applicant a Building System Approval Report [Part IV, Section 2(A)(6)]. CES Document No. A-03 was developed as a model for such reports. It will be noted that the recommended content is similar to that used in the application form. Accordingly, it may be possible to use the application form filled out by the applicant and counter-signed by the approving authority as the approval document. However, such a combination document would have to incorporate all items shown on both CES Documents No. S-Ol and A-O3.

It should be noted that approval of a building system is not to be considered an approval to fabricate and certify manufactured buildings, and/or building components. Fabrication and certification should only start after both a building system and a concurrent compliance assurance program have been approved. In this sense, the "building system's approval" can be considered a "conditional approval".

Following the transmittal of the approved documents, the Processing Record (CES Document No. E-O1) is completed and filed with the Evaluation Agency's copies of the approved documents and the Building System Approval Report.

#### 4.6. Fabrication, Inspection, Certification, Handling, and Installation

A manufacturer, having secured approvals for both the building system and the compliance assurance program can now begin the fabrication of manufactured buildings or components which will qualify for certification if they are: (1) manufactured according to the approved building system, (2) fabricated under the concurrent approved compliance assurance program, and (3) manufactured in the fabricating facility inspected in connection with the compliance assurance evaluation. Neither the approved building system or compliance assurance program may be altered or modified in any way without obtaining prior approval of such changes.

#### a. Fabrication

Fabrication of manufactured buildings and/or components should follow the process described or implied by the approved compliance assurance program. Although it is not the intent of the Act or the Rules and Regulations to regulate the methods or processes of fabrication, the methods or processes used may influence the required inspections and other aspects of compliance assurance (C.A.). Accordingly, any deviation from the manufacturing process described or implied in the C.A. program should be reported by the manufacturer to the Inspection Agency, together with a request for approval of a change in the C.A. program if required, or a justification why the fabrication process or method change does not require a modification of the program.

Part IV, Section 3(A) of the Rules and Regulations requires that the manufacturer provide certain information directly or by reference on a "Manufacturer's Data Plate". CES Document No. C-Ol discusses the content and format of such plates for both complete manufactured buildings and components.

#### b. Inspection and Certification

The compliance assurance program details the necessary inspections in the plant. CES Document No. C-O2 was developed as a suggested checklist for such inspections for a complete manufactured building. For components, only those inspections germane to the component are required, and the inspection checklist should be modified accordingly. Inspections should be reported on a form similar to CES Document No. C-O3. If the inspection indicates deficiencies either a "Noncompliance Tag" (CES Document No. C-O4), a "Prohibited Sales Notice" (CES Document No. C-O5), or a "Notification of Suspended Activity" (CES Document No. C-O6) will be issued by the Inspection Agency. If no deficiencies are found, or if the deficiencies have been corrected, the completed manufactured unit is certified by the attachment of a "Label" (CES Document No. C-O7) signifying that the unit was manufactured according to an approved building system and under an approved compliance assurance program. The use of each individual label is recorded on the "Label Control Record" (CES Document No. C-O8).

#### c. Transportation and Handling

Although the activities of the manufacturer (and applicant for the building system) may end at the factory gate, the regulatory process is concerned with the code compliance of the unit as installed on the site. Because faulty methods of transportation and handling between factory and site may adversely affect the code implied performance of the unit in service, Part V, Section 2(D), requires that the compliance assurance program contain instructions for the proper handling of the units, such as the identification of proper locations of lifting and supporting points for manufactured modules, panels, and components. Also, according to Part IV, Section 4, the Inspection Agency is responsible for follow-up inspections during handling, storage, and transportation between the factory and erection site. Deficiencies noted during such inspections are to be reported to the Administrative Agency on CES Document No. C-03 (Inspection Report). In addition, and as warranted, a Noncompliance Tag (CES Document No. C-04) or a Prohibited Sales Notice (CES Document No. C-05) should be attached to any units found to be deficient.

### d. Installation

In Part V, Section 2(E), it is required that the compliance assurance program contain the procedures for installation, field erection, and finishing work, including utility connections, and appropriate on-site inspection criteria and test descriptions. Although in some existing state programs the Inspection Agency is required to

perform on-site inspections to verify the compliance of installed units with the approved building system and with all other state requirements, on-site inspections are generally performed only by the local enforcement agency which is responsible for the inspection and enforcement of site related and local requirements, such as zoning, foundations, and utility connections. If deficiencies related to the compliance with state requirements are found during on-site inspections (either by the local enforcement agency or by the Inspection Agency), the Administrative Agency should be informed of such violations. CES Document No. L-02 (Manufactured Building Violation Report) should be used for such notification. In addition, deficient units should be identified by attaching a Noncompliance Tag (CES Document No. C-04) or Prohibited Sales Notice (CES Document No. C-05) as appropriate. For deficient units which are not brought into compliance within a reasonable time, or which are found to be so damaged as to be irreparable, the Administrative Agency can order the removal of the label and the disposal of the unit [Part IV, Section 4(C)(1)].

#### 4.7. Local Enforcement Activities

Prior to the installation of certified manufactured building units, the manufacturer, developer, or owner must apply for a building permit from the local authority having jurisdiction over the proposed erection site. The Rules and Regulations require that local enforcement agencies must issue such building permits prior to the unit's installation and may not withhold permits for buildings containing certified building units or components which in all other respects comply with all applicable codes [Part IV, Section 5(A)]. Although figure 1 indicates the issuance of the building permit related to the installation activity, this does not imply that the submission of a building permit application and the issuance of the building permit can not, or should not, precede the activities of fabrication and transportation.

Municipalities may use either separate building permit applications for the structural, electrical, plumbing, heating, ventilating or air conditioning, or a single form containing all elements. In either case, these forms can generally be adapted to applications for certified manufactured buildings or building components. CES Document No. L-Ol is one example of a suggested local Building Permit Application form currently being used by various state and city agencies. The building permit applications are prepared by the builder (or his agent); such builder may be the manufacturer or a developer who obtains the manufactured units from the producer.

After receipt of the Building Permit Application and its evaluation, the local enforcement agency issues to the builder or owner a building permit which authorizes the builder to commence the on-site work and the installation of manufactured buildings or components. After completion of the on-site work, and the satisfactory completion of all inspections, a certificate of occupancy (CES Document No. L-03) is issued by the local enforcement agency. Local usage differs on whether a separate application for the certificate of occupancy is required or whether the satisfactory completion of the final inspection is followed automatically by the issuance of the certificate of occupancy. Building permit and certificate of occupancy are discussed in Section 5.7. Most existing state programs for the regulation of manufactured buildings and components provide for acceptance of units which have been certified in another state without passing through the full submission, evaluation, and inspection process. However, few, if any, of these provisions are currently implemented.

Part VII, Section 2, "Procedures for Reciprocally Certifying Manufactured Buildings or Building Components" requires that a manufacturer from a state to which reciprocity has been extended shall submit evidence that his building system and compliance assurance program have been properly approved in his state. Both CES Documents No. S-Ol (application form) and A-O3 (approval report) were developed to provide this evidence for obtaining reciprocal approval.

If reciprocity has not been extended to the other state, a full application must be made. If both states have the same or similar application and submission requirements, such application in the second state is greatly facilitated for the manufacturer. If both states use the same or similar evaluation procedures and checklists, the evaluation is greatly facilitated for the Administrative Agency. Accordingly, the use of the uniform CES model documentation can be a significant element in promoting interstate acceptance of certified manufactured buildings and building components.

# MODEL INFORMATIONAL DOCUMENTS 5.1. Use of Documents

Because of the limitations imposed on the CES documentation by the guidelines given in Section 3 of this report, the following factors must be considered when adopting and adapting the documents to a specific state regulatory program:

(1) The Rules and Regulations of the state must be reviewed, any variations with the Model Rules and Regulations noted, and all applicable documents modified as necessary. Similarly, the state's regulatory process and operating procedures need to be compared with those given in Section 4 of this report;

(2) The specific codes used in the state must be compared with the One and Two Family Dwelling Code and all checklists modified and expanded as necessary;

(3) If the state program applies to occupancies other than one and two family dwellings, appropriate modifications and additions need to be made to checklists and forms.

(4) As mentioned in Section 3, the CES documents were developed primarily as guidelines and "benchmarks". As long as the general objectives are satisfied, the details of the documents may be varied to suit the individual state's program, its code, and its level of enforcement.

#### 5.2. Submission

Submission as used herein means the transmittal of documents from the manufacturer to the Administrative or Evaluation Agency for the purpose of obtaining

approval for a building system or compliance assurance program. The documents involved in the submission are the plans, specifications, calculations, etc., depicting the manufactured building or building components, and the compliance assurance manual describing in detail the manufacturer's provision for assuring that the final product corresponds in all details to the building system and to all other requirements of the Act and of the Rules and Regulations. In addition to the building system as defined in the Rules and Regulations, and the compliance assurance manual, the manufacturer also should submit a building systems and compliance assurance approval form (CES Document No. S-01). The purpose of the CES Documents No. S-02 through S-09 is to provide the manufacturer with the detailed requirements so as to permit him to prepare a complete submission without the need for costly and time consuming resubmittals. Also included in this section is a guide to be used in the determination of submission requirements for manufactured building components where not all the information required for manufactured buildings is applicable (CES Document No. S-08).

In general, the submission requirements given below are based on the requirements as stated in Part V of the Rules and Regulations.

### a. Building Systems

As defined in the Act and the Rules and Regulations, the building system means the plans, specifications, and documentation for a system of manufactured buildings or for a type or a system of building components. The documents in this section discuss and define both the format and the content of the various items to be submitted when applying for building system approval:

CES Document No. S-01	Application for Building System and Compliance
	Assurance Program Approval (Volume II, page 1)
CES Document No. S-02	General Submission Requirements (Volume II, page 5)
CES Document No. S-03	Architectural Submission (including fire protection,
	health and safety) (Volume II, page 9)
CES Document No. S-04	Structural Submission (Volume II, page 13)
CES Document No. S-05	Mechanical Submission (Volume II, page 19)
CES Document No. S-06	Plumbing Submission (Volume II, page 21)
CES Document No. S-07	Electrical Submission (Volume II, page 23)
CES Document No. S-08	Submission Requirements for Manufactured Building
	Components (Volume II, page 27)

The submission requirements are based on the general description of items to be submitted as given in Part V, Section 1 of the Rules and Regulations.

It should be understood that the submission requirements for any particular system should be sufficiently complete to permit a full evaluation of its code compliance, while being concise and free of extraneous information so that the evaluation can be handled efficiently. Accordingly, and as indicated in paragraph (B) of Part V, Section 1, the submission of a particular building system may need to include items other than those listed below, particularly in the case of innovative

systems, while not all the information required by the listings should be included indiscriminately. In case of uncertainty of whether a particular item needs to be submitted, the Administrative or Evaluation Agency, whose judgment in these matters is governing, should be requested for a ruling.

In addition to serving for evaluation purposes, the documents submitted, after approval, also must serve as the principal source of information needed by the inspectors in determining the adequacy and conformance of the unit constructed. It is important that this latter purpose also be considered in the preparation of the submission, both with respect to content and format. Thus, it is necessary that the building systems documentation be closely coordinated with the compliance assurance manual.

Two additional comments applying to all building system submission documents must be made at this point:

(1) Systems Approach. For manufacturers who fabricate a number of similar units, such as units with similar floor plans but with different width, or units with identical floor plans but with different roof configurations or different fenestrations, the requirements for building systems do provide for the submission of documents depicting a range of differing units under a single submission. An effort was made to recognize this "systems submission" but it is difficult to foresee all possible systems combinations that can be submitted. Accordingly, nothing stated in the CES Documents No. S-02 to S-08 is to be construed as limiting submissions based on the systems approach.

(2) <u>Alternate Submission Documents</u>. The CES submission document requirements are based on conventional documentation consisting of plans, specifications, etc. This approach should not prevent the use of novel types of documentation, such as printouts of computer programs and similar methods, for the submission of building systems, particularly of structural calculations and loading tables.

#### b. Submission Requirements for Manufactured Building Components

CES Documents No. S-03 through S-07 give the detailed submission requirements for manufactured buildings in regard to architectural (fire, health and safety), structural, mechanical, plumbing, and electrical disciplines. In general, these requirements also apply to manufactured building components. However, it is recognized that in the case of components some of the listed requirements are not relevant and can not be submitted. It is the purpose of CES Document No. S-08 to provide a guide, or quick reference, to the manufacturer as to what items he needs to submit.

The guide is given in the form of a matrix and shows on one hand various building parts and equipment that may be a part of the component, and on the other hand the information that should be submitted. Those intercepts that are relevant are marked with either a solid dot or a circle. Those marked with a solid dot indicate requirements which apply in all cases and for all building types or construction methods; those marked with a circle indicate requirements which may apply depending on building type, code used, occupancy, type of construction, and material.

As an illustration for the use of the matrix, the following list of requirements would apply to a manufactured component which consists of a load-bearing exterior wall panel containing electrical conduit, cables, and an outlet box.

For the panel itself, the following items should be submitted:

- (1) Dimension
- (2) Location(s) (in building)
- (3) Plans
- (4) Cross sections
- (5) Elevations
- (6) Details
- (7) Structural calculations and diagrams
- (8) Bearing values
- (9) Loading schedules
- (10) Installation and connection instructions

Depending on the materials used, type of occupancy and construction method, the following additional items may need to be submitted:

- (11) Weight
- (12) Heat loss calculations
- (13) Fire separation ratings
- (14) Fire resistance ratings
- (15) Fire stopping
- (16) Test reports, listing or labeling
- (17) Structural support provision

For the electrical services (conduit, cable, and outlet box), the following items should be submitted:

- (1) Locations
- (2) Plans
- (3) Line diagrams
- (4) Capacities
- (5) Provisions for grounding
- (6) Test reports, listing or labelings
- (7) Structural support provisions

In addition, the following items may need to be provided, depending on construction type, occupancy, and materials used:

- (8) Isometrics
- (9) Clearance from combustible materials
- (10) Safety provisions (operating safety)
- (11) Installation and connection instructions

The specific information to be provided for each of the items listed above is discussed in the submission requirements, CES Documents No. S-03 through S-07 and these should be consulted by the manufacturer in preparing his submission.

#### c. Compliance Assurance Program

Building system compliance with appropriate codes and standards and with other regulatory criteria does not preclude the possibility of improper materials or workmanship, damage or other shortcomings or deviations resulting from the continuous process of in-plant fabrication, transportation or installation of mass produced units of construction. For these reasons, as well as to provide for preemption of multiple in-plant inspections by various local jurisdictions during the fabrication process, the Model Manufactured Building Act and the Model Rules and Regulations for the Act recognize that the most viable approach to assuring on-going compliance and confidence in unit certifications is through the submission of a manufacturer developed compliance assurance program which is monitored during implementation by an Inspection Agency.

The compliance assurance program requirements to implement the Model Manufactured Building Act and the Model Rules and Regulations for the Act apply directly to all manufacturers requesting approval for production and certification. The specific requirements for the compliance assurance program, which should be documented and submitted in the form of a compliance assurance manual, are enumerated in Part V, Section II of the Model Rules and Regulations and are further interpreted in this section of the report. These same requirements should also extend to and be applicable to any associate or subsystem contractors of the manufacturer or other major suppliers of closed construction components.

It should be noted that while the submission requirements given for the building system (CES Documents No. S-02 through S-08) discuss the format and content of the submission, but not the technical requirements for what constitutes "acceptable" or "conforming" construction, some of the submission requirements for the compliance assurance program do in fact spell out what constitutes an acceptable compliance assurance program. The reason for this difference is given in the fact that the building system is always evaluated for its conformance to a specific code (building, mechanical, plumbing, and/or electrical), but that no code or standard exists at this time to prescribe what an acceptable compliance assurance program is.

The compliance assurance program requirements also apply to Inspection Agencies, whether state or independent third party, and defines their duties and responsibilities in the process of inspecting, monitoring and labeling of manufactured buildings and building components to the extent that the Administrative Agency has delegated any of its inherent duties in accordance with Part IV, Section 4 ("Inspections") of the Model Rules and Regulations.

The Model Rules and Regulations require the establishment, implementation and maintenance of a viable compliance assurance program to continuously assure manufacturer compliance and creditable Inspection Agency certification of the officially approved building system. The compliance assurance program as well as the specific procedures for its implementation relative to controlling the construction compliance of production units of a specific building system type are the individual responsibility of the manufacturer. If the Administrative Agency delegates its inspection responsibilities, the contractual relationship between the manufacturer and an accredited independent Inspection Agency should not diminish the manufacturer's compliance assurance responsibility.

The joint compliance assurance program of the manufacturer and the Inspection Agency, including administrative procedures, inspection checklists, code compliance workmanship standards, inspection forms, records and labels, should be documented in the form of a compliance assurance manual and submitted to the Administrative Agency for evaluation and approval, or disapproval.

To be effective, the compliance assurance program should be planned and developed in conjunction with the manufacturer's other administrative and technical functions and with the guidance of the Inspection Agency. The program should also give consideration to the rate of production, building system design characteristics, materials of construction, sequence of operations, innovative manufacturing techniques and site installation processes. The program should assure that the required level of code compliance performance is implemented and maintained throughout all areas of plant and site operations that affect regulatory aspects of the construction.

CES Document No. S-09 further defines each of the compliance assurance program submission requirements taken from the Model Rules and Regulations (i.e., Part V, Section II). Each requirement is listed separately within the document and an "Administrative Interpretation" made of what type of response should be contained in the compliance assurance manual submittal. Further clarification of each requirement is offered in a "comments" section. The compliance assurance manual submittal should specifically respond to each enumerated requirement or should provide written justification to omit or alter any particular compliance assurance program requirement which may not apply to a manufacturer's system or mode of operation.

In addition to responding to the above regulatory requirements, the manual should contain certain administrative information as requested under "General Requirements" (Volume II, page 30).

# d. Modification of Approved Systems and Variation of Certified Units

In Part IV, Section 2(A)(7) it is stated that no building system, or amendment thereto which has been approved, shall be modified in any way without prior authorization by the Administrative or Evaluation Agency. In Section 3(D) it is stated that certified and labeled units shall not be varied prior to the issuance of a certificate of occupancy without the approval of the Agency. The former of these requirements relates to changes or alterations in the building system prior to the fabrication of units, the latter applies to physical changes or alterations of finished, constructed, and certified manufactured buildings and components. Similarly, approval must also be sought for any changes in an approved compliance assurance manual as discussed in CES Document No. S-09.

All applications for approval either of modifications of an approved building system or compliance assurance manual, or of a variation of certified units should be submitted on the appropriate forms and should include all drawings, specifications, or other building system items necessary to clearly and fully show, and identify, any and all proposed modifications or variations.

The method of approval for modifications of approved building systems depends on whether the modification is classified as major or minor. If it is a major change, a complete new application should be submitted; if it is a minor change, an application for modification of approved building system should be submitted. A dimensional change which does not change the system or configuration and which could be incorporated in the originally submitted plans by the Administrative Agency is an example of what constitutes a minor revision, and original records, approval report, etc., would be amended by the Administrative Agency, this being more economical than keeping several sets of records for similar systems with only minor differences between them.

Modifications of a floor plan or of a construction system, including electrical, mechanical, or plumbing systems constitute a major revision and would be treated as a new submission. It would be required to be resubmitted and to pass through the entire process of evaluation and approval.

Since both complete resubmittals and submittals for minor modifications are time consuming and costly to the manufacturer as well as to the Administrative Agency, the manufacturer should be provided with the flexibility of submitting drawings depicting elements of construction on a system basis, under one plan approval application, e.g. depict variations in floor plans that provide the manufacturer a substantial amount of flexibility. The flexibility can be provided by the manufacturer through the use of drawings that make extensive use of dimensions and sizes expressed as variables, with tables and schedules containing values for these variables for different configurations or conditions.

CES Document No. S-10, Application for Approval of Minor Modification to an Approved Building System and/or Compliance Assurance Program (Volume II, page 63)

was developed as an example of a form on which to make application for modification approval. In Part IV, Section 2(A)(7) it is required that approval for modifications needs to be confirmed in writing. Accordingly, the document was designed so that a properly signed and stamped copy of the application form could be used for such written approval.

CES Document No. S-ll, Application for Approval of Variation to a Certified Manufactured Building or Component, Volume II, page 65, was developed as an example of a form on which to make application for a variation approval. Similar to modifications, approval of variations can be confirmed by returning to the applicant a signed and stamped copy of the application form. The purpose of the preliminary review is to determine that the application for building system or compliance assurance manual approval is suitable for evaluation [Part IV, Section 2(A)(2) and (B)(2)]. It is not the intent of the preliminary review to determine code compliance of the system or program. A properly performed and relatively detailed preliminary review will prevent unsuitable applications from entering the evaluation process and will thus improve the efficiency of the agency or agencies responsible for the regulatory activity.

The following documents are suggested to aid in the preliminary review process: CES Document No. E-O1 Processing Record (Volume III, page 1) CES Document No. E-O2 Preliminary Review Checklist (Volume III, page 3) CES Document No. E-O3 Submittal Unsuitable for Processing (Volume III, page 7)

CES Document No. E-Ol, Processing Record, was prepared to aid the Evaluation Agency in the administrative record-keeping associated with the evaluation and approval (or disapproval) process. The Processing Record is intended to also serve as a routing slip to travel through the entire process with the submission documents. Filed after completion of the approval process, it constitutes, together with the application form and the filled out review and evaluation checklists, a complete and comprehensive record of the evaluation activity associated with the particular application, including the computation of evaluation fees based on time (man-hours) and other (travel, etc.) costs.

CES Document No. E-02, Preliminary Review Checklist, contains all those items which should be considered in determining whether a submission is suitable for evaluation or not. It is recognized that not all items indicated on the checklist may be needed for proper evaluation in every single application (particularly in the case of building components). However, it is believed that such unnecessary items will be self-evident and can be noted as "not applicable" (N.A.) in the remarks column.

CES Document No. E-03, Submittal Unsuitable for Processing, is used for notifying the manufacturer that a preliminary review has indicated that his submission is unsuitable for processing. In addition to the notice, the submitted documents are returned, together with an indication of the reasons for such action [Part IV, Section 2(A)(2) and (B)(2)]. Although the Rules and Regulations require this formal response, the Administrative or Evaluation Agency to whom the application is made should recognize that the return of the submission documents to the manufacturer, and their possible resubmittal, is costly and time consuming, both to the agency and the manufacturer. Accordingly, it is suggested that where the "Unsuitability for Processing" is due to a minor omission the manufacturer be given an opportunity to provide the necessary additional information or to make such correction necessary to provide a submission suitable for processing before a formal notice of unsuitability is issued.

### 5.4. Evaluation

Evaluation as used herein is the process of reviewing the submitted building system and/or compliance assurance program documentation to determine the compliance of the system and program with all codes and other applicable requirements. Therefore, the evaluation is the central activity in the approval process; that is, no matter how well the rest of the manufactured building regulatory program is administered, how well the preliminary review is conducted, or how well the approval documents are prepared, such approval is meaningful only if the evaluation is conducted effectively. The efficiency of the program administration and the completeness and clarity of the submission documents both affect the evaluation effectiveness.

The most important factor in determining the effectiveness of the evaluation program is the quality of the individual evaluator, both with regard to his technical competency and his reliability. It is not within the scope of Project CES to discuss either of these two factors, except to emphasize that the technical competency referred to is not the same as that required primarily by a designing engineer or architect for whom the creative application of technical knowledge is of utmost importance. The required competency of the evaluator includes a thorough understanding of the codes and the meaning and intent of the various code provisions. A detailed analysis of qualification requirements for evaluating personnel is being conducted by NBS Project LEAP.

Although the personnel qualifications must be considered as the single most important element in the effectiveness of the evaluation process, for a given level of personnel qualifications this effectiveness also depends on the aids provided to the evaluators, such as checklists, instructions, reference books, and forms. Such aids can significantly improve the efficiency of the operation, giving the evaluator more time for the study of the critical or unusual provisions of a building system or compliance assurance manual, thus reducing the cost of the regulatory program. In addition, the aids used in a specific program are important to any person who has the responsibility of evaluating the effectiveness of such a program, particularly when one state is considering the granting of reciprocity to another state. The quality of the aids used in the evaluation process of a particular state program directly affects the credibility that can be placed in the program, and if several states use the same, or similar aids, a good basis exists for the mutual acceptance of approved and certified manufactured buildings or components. Accordingly, superior aids, or evaluation documents, not only serve to improve the evaluation function, but also directly affect and improve the reciprocity among the states, thus serving the industry by allowing marketing areas which are regional or national in scale rather than restricted to the territory of a single state.

In addition to the above broad significance of the evaluation documents, these also can be of importance in the transmittal of the reasons for disapproval of an application. A copy of the filled out evaluation checklists can serve this purpose.

It is required that the Administrative or Evaluation Agency determine whether a submitted building system meets the codes, standards, and specifications adopted by the state, and conforms to the requirements of the Act and the Rules and Regulations. The determination that the building system meets the requirements of the Act and the Rules and Regulations is considered during the preliminary review. This section on Evaluation discusses the determination of compliance with the applicable building, mechanical, plumbing, and electrical codes.

As an aid to the evaluator, various model code groups have developed checklists based on their codes. For states having adopted one of these model codes, such lists could be used in the evaluation of building systems. In the interest of reciprocity, however, it would be desirable for the states to use uniform lists independent of the codes used. Accordingly, Project CES has developed lists giving the code requirements in general terms. These lists are applicable to any one or all of the following codes:

> Uniform Building Code, ICBO Uniform Mechanical Code, ICBO, IAPMO Uniform Plumbing Code, IAPMO Basic Building Code, BOCA Basic Plumbing Code, BOCA Basic Mechanical Code, BOCA Southern Standard Building Code, SBCC Southern Standard Mechanical Code, SBCC Southern Standard Plumbing Code, SBCC Southern Standard Gas Code, SBCC National Electrical Code, N. Fi. P.A. One and Two Family Dwelling Code, BOCA, Am. Ins. Assn, SBCC, ICBO

In addition to checklists, the various code groups have developed manuals and similar publications useful to the evaluator. The following books and manuals are a few examples of publications which provide the evaluator and inspector with useful background information:

"Plan Review Manual" [8]

This manual (1971) was developed as an aid to those engaged in the review of plans for code compliance. It is divided into two sections: (a) structural, (b) non-structural. The Uniform Building Code (Vol. I-1970) has been used as reference throughout the text. However, the principles discussed could be extrapolated and applied to users of any of the model codes.

#### "Uniform Plumbing Code Interpretations Manual" [9]

This book includes two sections: (1) an interpretations manual; and (2) an inspectors' manual. Part I is especially useful to the evaluator utilizing the Uniform Plumbing Code (UPC), as there are many UPC Code requirements that can be met in different ways and still comply. The manual would aid the evaluator in accepting alternatives if submitted by the manufacturer for approval. The inspectors' manual is designed to aid in uniform application of plumbing code provisions and procedures. It is composed of selected items from IAPMO's in-service training files, pertinent to Uniform Plumbing Code administration, which have found practical acceptance in local use.

- "<u>A Training Manual in Field Inspection of Buildings and Structures</u>" [10] This is a useful book for the inspector who wants to achieve skill in inspection techniques. It also serves as a teaching syllabus for inspector training courses.
- "<u>NFPA Handbook of the National Electrical Code</u>" [11] Based on the National Electrical Code, this book is a useful aid to the evaluator as well as the designer. It includes comments, diagrams and illustrations which facilitate understanding of the code rules.

### "Electrical Code Diagrams" [12]

These are useful books in understanding the National Electrical Code, and the diagrams should be helpful to the designer, evaluator and the electrical inspector.

## "Practical Electrical Wiring" [13]

Based on the National Electrical Code, this is a very useful book for the electrical inspector who wants to learn the trade as well as for the inspector already engaged in electrical inspection. The scope of the book has been limited to wiring of structures of limited size and at ordinary voltages, under 600 volts.

(1) Use of CES Evaluation Checklists. The checklists CES Documents No. E-04 to E-08 can be used for the following purposes: (a) to assure that the evaluator considers all relevant code related items; (b) to provide a permanent record of the evaluation; (c) to serve as a means of transmitting a list of deficiencies to the manufacturer in conjunction with a "Notice of Completed Evaluation", CES Document No. A-01; and (d) as a basis from which a more detailed checklist can be developed if the Administrative Agency considers such a detailed checklist is necessary.

(2) <u>Content and Format of CES Evaluation Checklists</u>. The content of the checklists is based on the general requirements for evaluation of the code related items for detached one and two family dwellings, as given in the major model codes. The lists do not contain specific requirements such as numerical values or material specifications. The checklists do give the appropriate chapter and section numbers of the "One and Two Family Dwelling Code" ("One and Two Family Electrical Code" in CES Document No. E-08). Space is provided for inserting the appropriate section numbers of the code in effect in a specific jurisdiction. In addition, space is provided on the checklists for recording compliance or noncompliance as appropriate, and for remarks for identifying any specific deficiency.

The One and Two Family Dwelling Code is based on the model codes, setting forth minimum requirements for detached one and two family dwellings not more than three stories in height, and covers all important items of the other codes. The One and Two Family Electrical Code (NFPA No. 70A-1972) is based on the National Electrical Code (NFPA No. 70). Only those wiring methods and materials most commonly encountered in the construction of new one and two family dwellings are included in this electrical code (NFPA No. 70A), and only current ratings up to and including 225 amperes and voltages up to and including 600 volts are included in this code.

(3) <u>Document Identification</u>. The evaluation checklists are divided into the following documents:

С	ES	Document	No.	E-04	Architectural (Volume III, page 9)
С	ES	Document	No.	E-05	Structural (Volume III, page 17)
С	ES	Document	No.	E-06	Mechanical (Volume III, page 21)
С	ES	Document	No.	E-07	Plumbing (Volume III, page 25)
С	ES	Document	No.	E-08	Electrical (Volume III, page 27)

Since the code provisions do not clearly distinguish between structural features on the one hand, and architectural, fire, and health and safety on the other hand, the classification of items into CES Documents No. E-04 and E-05 is in some instances rather arbitrary. Accordingly, the two checklists should be used together and not used independently from each other.

(4) <u>Certification and Testing of Building Products</u>. Various code provisions require that building elements, equipment, and equipment parts be "certified" or be tested. Accordingly, the evaluator may be called upon to determine whether a particular "certification" or label meets the requirements of such code provisions, and whether a particular test performed reliably demonstrates the performance of a product. As an aid in this determination, CES Document No. E-09 discusses both certification procedures and test reports (Volume III, page 31).

#### b. Compliance Assurance Program

Part IV, Section 2(B) of the Model Rules and Regulations provides for the separate submittal, evaluation and approval of a manufacturer's compliance assurance program that meets the requirements set forth in Part V, Section 2. The latter submittal requirements have been further clarified and expanded in the administrative interpretations outlined in CES Document No. S-09 of this report. CES Document No. E-10 "Evaluation Checklist - Compliance Assurance Manual", Volume III, page 33, has also been developed to set forth the major areas to check during the evaluation of a manufacturer's submitted compliance assurance manual. The evaluation checklist should be considered as an aid to the evaluator to preclude overlooking any major area of compliance activity. It can not be stressed strongly enough, however, that the evaluation of the compliance assurance manual describing a manufacturer's compliance assurance program should be reviewed and thoroughly evaluated in consort with the technical review and evaluation of the manufacturer's building system.

There should be a complete and open understanding of the design features and applicable code limitations of the manufacturer's building system as well as an appreciation for critical fabrication processes that may be single failure points and affect life safety as latent failures in the installed system. For these reasons, the evaluation of the compliance assurance manual is as significant and possibly more important than the evaluation of the building system. If possible, and if personnel are properly trained and qualified, the review and evaluation of these two separate submittals (e.g., building system and compliance assurance manual) should be conducted by the same individuals.

It should be pointed out that the "Evaluation Checklist - Compliance Assurance Manual" (e.g., CES Document No. E-10) is not necessarily a comprehensive listing of all compliance assurance inspection activities and completion should not be considered as a complete approval evaluation. As indicated above, the critical design factors of the building system and their inspectability for code compliance during the production sequence should be strictly considered during the evaluation process.

Submitted compliance assurance manuals should address all applicable compliance assurance functions and should reflect a composite of both manufacturer controls and Inspection Agency verification procedures as required by the regulations. For clarification, it should be pointed out that the compliance assurance program is concerned strictly with all of the regulatory code compliance aspects of the construction and not directly with other attributes of manufactured building quality control, such as appearance, finish and other cosmetic factors. These factors, however, may be indicators of how conscientious manufacturers are about code compliance of the construction.

The "Evaluation Checklist - Compliance Assurance Manual" should be filled out for each manual reviewed with any questionable areas noted on the forms or in the manual itself. Questionable areas in the submitted manual can be clarified during the on-site facility evaluation of the manufacturer's plant, which is also a key part of the evaluation process. Manuals which do not provide sufficient detail to assure construction compliance should be disapproved.

As part of the evaluation process, Part IV, Section 4(A) requires that the manufacturing facility be evaluated. CES Document No. E-11, Manufacturing Facility Evaluation Report, Volume III, page 43, was developed to aid in this evaluation and to report the evaluation results.

#### 5.5. Approval and Disapproval

Approval of a building system or compliance assurance program application is signified by appropriately stamping each sheet of the building system or compliance assurance manual and by preparation of a building system approval report. If an application is disapproved, a notice is sent to the manufacturer and the documents submitted are returned unmarked.

It is recognized that a mechanism should exist for the Evaluation Agency to notify the manufacturer of minor deficiencies and to allow the manufacturer to make necessary corrections without the need for a complete resubmission. The determination whether a deficiency is minor is solely the responsibility of the Evaluation Agency and it should be understood that, outside of the appeals procedures regulated in Part VIII, Sections 1 through 4, the conduct of the above suggested meetings and the permission to correct submission documents after initial submission is strictly at the discretion of the Evaluation or Administrative Agency, although such agency should take into consideration that a requirement for full resubmission may constitute a hardship on the manufacturer.

The following model documents relating to approval and disapproval activities have been developed:

CES	Document	No.	A-01	Notice	of	Comple	ted	Evalu	lation	(Volume	III,	page 4	49)	
CES	Document	No.	A-02	Stamps	of	Approva	al (	Volun	ne III,	page 5	1)			
CES	Document	No.	A-03	Buildir	ng S	System .	Appr	oval	Report	(Volume	e III.	page	55)	

#### 5.6. Fabrication, Inspection and Certification

In-plant fabrication, inspection and unit certification are the culmination of all the prior administrative aspects of the regulatory process. Being the ongoing operational phase of the program, continued attention should be given these functions by all parties concerned to assure that compliance to an approved building system through a recognized compliance assurance program is in fact maintained.

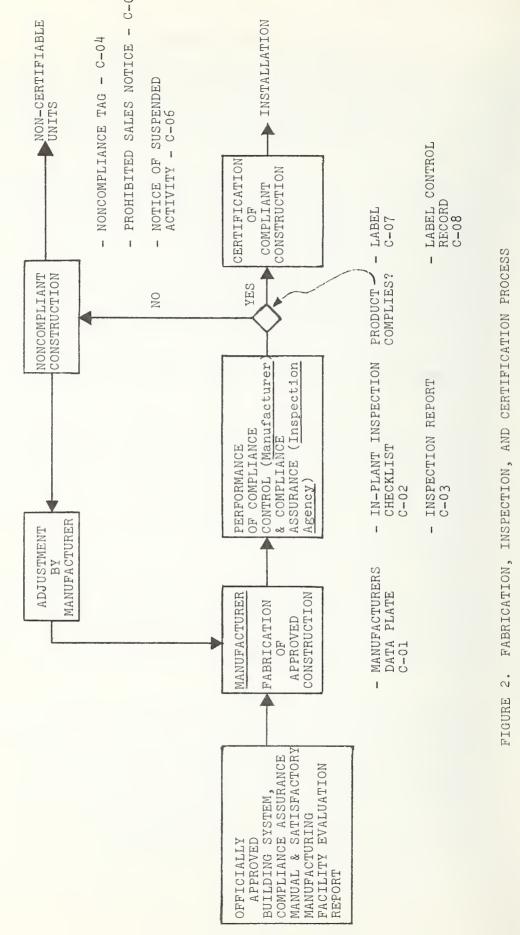
Figure 2 illustrates the concept for the fabrication, compliance assurance and certification aspects of the regulatory process and identifies the applicable CES documents suggested for these functions. These CES documents are described in the following sections of the report.

The fabrication, inspection and certification functions are primarily the operational responsibility of the manufacturer and the Inspection Agency who each in their own way determine the effectiveness and credibility of the overall regulatory program. A viable compliance assurance program conscientiously implemented by the manufacturer should require a lesser degree of monitoring by the regulatory agencies and the Inspection Agency. Conversely, a manufacturer's inadequate compliance control activity may require almost full-time in-plant monitoring by the Inspection Agency.

Manufacturers should encourage early reporting of code noncompliances. The resultant effects of such noncompliances can be estimated using appropriate records to emphasize the cost of repairs or rework at a later date, such as in recalls after field installation. Aside from the regulatory implications, it is usually found that the costs of noncompliances in terms of extended time schedules and potential latent defects, are higher than the costs of planned preventive actions by means of a viable compliance assurance program.

Manufacturers should also recognize that the compliance assurance program should be responsive to changing needs. Accordingly, the manufacturer should provide for the continual acquisition of current data on the compliance status of production units and the condition of the compliance assurance program through his own management efforts and those independent assessments of the Evaluation Agency or Inspection Agency.

The following documents relat	te to fabrication, inspection, and certification:
CES Document No. C-01	Manufacturer's Data Plate (Volume IV, page 1)
CES Document No. C-02	In-Plant Inspection Checklist (Volume IV, page 5)
CES Document No. C-03	Inspection Report (Volume IV, page 75)
CES Document No. C-04	Noncompliance Tag (Volume IV, page 77)
CES Document No. C-05	Prohibited Sales Notice (Volume IV, page 79)
CES Document No. C-06	Notice of Suspended Activities (Volume IV, page 81)
CES Document No. C-07	Label (Volume IV, page 83)
CES Document No. C-08	Label Control Record (Volume IV, page 85)



#### 5.7. Local Enforcement Agency Activities

Local enforcement agency activities in regard to certified manufactured buildings and building components are given in Part IV, Section 5 of the Rules and Regulations. In general, these activities are: (1) issuance of building permits; (2) on-site inspections during construction; (3) issuance of certificates of occupancy; and, (4) reporting violations, if any, to the Administrative Agency. Applications for building permits, building permits, certificates of occupancy, and the reporting of violations by the local enforcement agency are discussed in the following sections.

#### a. Building Permit Application

According to Part IV, Section 5(A) of the Rules and Regulations, a manufacturer or builder applying for a local building permit may have to furnish the following information in addition to any other local requirements:

(1) A statement that work to be performed under such permit is to include the installation of a certified manufactured building or building component in accordance with the provisions of the Act;

(2) A true copy of the approved building system (where one has not previously been furnished); and,

(3) A copy of the Building System Approval Report (where one has not previously been furnished).

Presently there are several model building permit application forms which are widely used by both state and city building regulatory agencies. These model forms have been developed by the U. S. Department of Commerce, Bureau of the Census; International Conference of Building Officials (ICBO) [14]; and Building Officials and Code Administrators International (BOCA) [15].

<u>Bureau of the Census Form</u>. This building permit application form was developed by the Bureau of the Census with the hope that widespread adoption of the form would make possible compilation of comparable information concerning new construction in local areas, in states, and in the nation. This one-page form along with notes on its use is incorporated into this report as CES Document No. L-Ol (Volume IV, page 87). Since this form does not specifically provide for entries as to whether or not the proposed work includes the installation of a certified manufactured building or building components, it is necessary that such additional information be attached to this building permit application form.

<u>ICBO Form</u>. The ICBO suggested building permit application form serves a threefold purpose; that is, an application for a permit; and when properly completed and validated, a building permit; and after validation an inspection record [14]. The application form is in five parts; one copy for the inspector, the second for the applicant, third for a temporary file, fourth for the Auditor, and the fifth for the Tax Assessor. The form provides space for the applicant to briefly describe the proposed work, and accordingly such space could be used to indicate that the

application involves the installation of certified manufactured buildings or components. ICBO has also developed similar model application forms for plumbing, electrical and mechanical permits to accompany the building construction permit.

BOCA Form. The BOCA model form consists of four pages and is designated as an Application for Plan Examination and Building Permit [15]. The format and content of the first page is similar to the Bureau of the Census form; the second page provides space for department notes and data; the third page relates to plan review records and additional permits required; and the fourth page provides space for zoning plan examiner reviews and site or plot plan drawings by the applicant.

#### b. Building Permit

Local enforcement agencies are required to issue building permits for certified manufactured buildings prior to installation and for buildings containing certified building components which in all other respects comply with all applicable building codes [Part IV, Section 5(A)].

As indicated in the previous section, some building permit application forms (e.g., ICBO) are also used as building permits after they are properly completed and validated. BOCA has developed a model six-part multi-purpose building permit form [15]. One part or copy of this form is for office file use, one copy is for field inspection use, one is for certificate of occupancy, one is for owner or applicant, one is for assessors use, and one copy is a job card for posting on-site by the general contractor. The copy used as the certificate of occupancy is not issued until the final inspections have been completed.

c. Local Enforcement Agency Violation Report

Part IV, Section 5(C) requires that the local enforcement agency inspect all manufactured buildings or building components to determine that the unit as delivered and installed meets the conditions of the building systems approval report and/or the manufacturer's data plate, and Paragraph (F) of the same section requires that the local enforcement agency report to the Administrative Agency any deficiencies or violations found in the conduct of these local inspections.

When a local enforcement agency reports such violations as required, it should use a form similar to the example given in CES Document No. L-O2 (Volume IV, page 89). A similar form can be used by Inspection Agencies in states which require that such agencies perform on-site installation inspections.

#### d. Certificates of Occupancy

After certified manufactured buildings or buildings containing certified building components which otherwise comply with all applicable building codes have been properly installed and inspected in accordance with the Act and Rules and Regulations, the local enforcement agencies are required to issue Certificates of Occupancy [Part IV, Section 5(E)]. ICBO has developed a model Certificate of Occupancy and as discussed previously, BOCA has prepared a multi-purpose Building Permit form which can also be utilized as a Certificate of Occupancy. CES Document No. L-03, Volume IV, page 91, was developed as a sample Certificate of Occupancy form which includes the necessary information and wording so as to apply to manufactured buildings as well as to conventionally on-site constructed buildings.

#### a. Introduction

As was mentioned in Section 1, the creation of state wide marketing areas is one of the aims of state regulatory programs for manufactured buildings and components. In order to create even larger marketing areas and to eliminate the duplication of efforts and costs, it is desirable that conditions be developed which permit approved building systems and manufactured buildings and components certified in one state to be accepted in another state without requiring a full re-evaluation, approval, and certification in that state.

Interstate acceptance can be based on reciprocity; that is, the mutual acceptance of systems and units by two or more states from each other; or it can be a one-way acceptance by one state of units produced in one or more other states, without these other states reciprocating. Further, the acceptance can be full, that is, without additional requirements being imposed, or limited, that is, under the condition that certain additional requirements be met. Finally, such acceptance could also be limited in the sense that acceptance could be for the building systems approval only, and not for inspection and certification, or vice-versa.

The preconditions for either reciprocity or for one-sided acceptance are basically similar, although they do differ in the degree of their importance. The processes or procedures to be used to grant reciprocity or unilateral acceptance may differ substantially since the two or more states involved may use regulatory systems based on (1) third-party evaluation and certification; (2) state operations only; or (3) a combination of the two systems. The following paragraphs discuss the preconditions for interstate acceptance and the regulatory processes related to such acceptance.

b. Prerequisite for Interstate Acceptance

Part VII, Sections 1 through 3 of the Rules and Regulations provide a mechanism for acceptance of manufactured buildings and components certified by another state. Basically two factors affect such acceptance:

- The codes and standards (technical requirements) under which the units were certified, and

- The effectiveness of the enforcement process.

Where two state programs require compliance with the same codes, there are no differences in the technical requirements and a basis for reciprocal acceptance of certified units exists. Where two state programs require compliance with differing codes, or with the same but substantially amended codes, the differences in technical requirements could be so substantial as to eliminate any basis for reciprocity. Fortunately, the differences in the technical requirements of the various codes used by most states are usually not substantial, and except for individual requirements (such as for snow and wind loads), such differences as do exist need not prevent acceptance of certified units. Some specific additional information may need to be provided to permit the accepting state to determine that the unit complies fully with its own codes. Many existing state programs recognize this fact by stating that reciprocity shall be granted if it is determined that the other state "satisfactorily" enforces compliance to codes and standards which "meet the objectives" of its own act and rules and regulations.

The effectiveness of the enforcement process is more apt to differ from one state to another, and is also more difficult to define and evaluate than are the technical requirements. The effectiveness depends on such factors as the qualifications and reliability of the enforcement personnel, management capabilities of the various agencies involved in the regulatory process, and the resources available for the regulatory activity. The development of criteria for the evaluation of the effectiveness of agencies is the objective of NBS Project LEAP (see previous discussion in Section 1). Most existing state programs provide for the acceptance of certified manufactured buildings from a state that has a level of enforcement which is either "similar", "substantial", or "satisfactory", and do not require that the level of enforcement in the other state be "identical" to its own.

Although not identified above as one of the major two factors affecting interstate acceptance of certified units, the documentation used by the states also can have a direct influence on reciprocity. Where such documentation differs substantially, it will be difficult for another state to determine both the compliance of a specific building system to technical requirements and the effectiveness of the enforcement program. Conversely, the use of uniform documentation, particularly uniform checklists, enables the state not only to determine the technical criteria, but also, at least to some degree, the effectiveness of the other state's enforcement activity.

By providing such uniform documentation, Project CES hopes to encourage the interstate acceptance of manufactured buildings and components, and to aid in establishing regional and national marketing areas so that the full potential of industrialized building sector can be realized.

#### c. Process of Interstate Acceptance

The CES state-of-art study indicates that the majority of states with implemented state manufactured building regulatory programs have some form of statutory or administrative provisions for accepting units approved and certified by other states without re-evaluation and re-inspection. However, such provisions, while incorporated in the adopted legislation and/or in the rules and regulations governing the programs, do not seem to have been implemented. Of the 15 states that reported to have provisions for interstate acceptance (out of a total of 26 studied in mid-1972), only a few states reported to actually have accepted out-of-state units. Although this situation seems to have been changed somewhat in the recent months, insufficient experience with the various processes is available to permit their evaluation at this time. Four different thoughts and principles on interstate acceptance have been proposed by various officials and others engaged in the manufactured building regulatory system:

(1) Where two or more states use the "third-party system", and such states approve the same third-party organizations, reciprocity for accepting in one state units certified by another state is claimed to be almost automatic. However, it has been pointed out that although the third party may be the same private company operating in two or more states, the effectiveness of the organizations in the various states still may differ.

(2) At least in some states legal aspects seem to dictate that the reciprocity be based on the acceptance of another state's program, and not on the certification of units by a private organization operating in the other state.

(3) A system of national or regional monitoring agencies or teams has been proposed. Such an agency, or agencies would evaluate both private and government organizations engaged in the evaluation and certification of manufactured buildings and building components. Based on the findings of such an agency or agencies, interstate acceptance could be extended to states using either third party or state agency regulatory systems, and the common use of third parties would not be required.

(4) One state (Maryland) has a unique system: reciprocity can be granted to other states, but with the provision that each plant from which units are to be shipped to Maryland employ a Maryland certified inspector (this same provision also applies to plants located within the State of Maryland). Thus, the State of Maryland, while accepting the other state's evaluation and certification, does keep some direct control over the manufacturer's operation.

It appears that all of the four proposals and procedures outlined above have some validity. Certainly the use of common third parties by various states does simplify interstate acceptance, although it may not make such acceptance automatic or almost automatic. The legal aspects must be considered and satisfied. The existence of regional or national monitoring agencies could be valuable to states considering the acceptance of out-of-state units. Finally, the maintenance of some form of control even over out-of-state manufacturers through state certified inspectors may satisfy the legal requirements, while at the same time complementing the other state's or the monitoring agency's program. Accordingly, it is suggested that in any process to be used for implementing regional or national areas for interstate acceptance of certified manufactured buildings and building components, the above principles be considered.

#### d. Model Documents

Because of the lack of uniformity in the regulatory process of interstate acceptance of manufactured building, CES Project has not developed specific documents for the associated interstate communication and information exchange. However, in the development of all CES documents the needs of such communication and information exchange were considered, so that the various forms and checklists will assist both the manufacturer and the regulatory agencies in the application, evaluation, approval, inspection, and certification of units produced for interstate commerce.

The manufacturer and the agencies, for example, would benefit from a uniform system of submission requirements as proposed in CES Documents No. S-02 through S-11, eliminating the need to prepare separate sets of submission documents for each state in which approval for a building system is sought.

Also, the Building System Approval Report (CES Document No. A-03) was developed so that it contains all information required to obtain in one state approval for a building system that has been previously approved in another state, provided that the state in which approval was first obtained is requiring compliance to the same or similar codes and standards, and has at least equal or similar effectiveness of enforcement as the state to whom the new application for approval is made. The manufacturer seeking approval in the second state need submit only a copy of the approval report issued and signed by the first state.

In a case where the second state does not accept the approval of the first state, because it either uses substantially different codes and standards or the second state does not consider the first state's enforcement activity to be at least equal or similar to its own, the application for approval of a building system which was previously approved in the first state could be accompanied by a copy of the various evaluation checklists (CES Document Nos. E-04 through E-08 and E-10) used by the first state. Thus, the Evaluation Agency of the second state could determine the compliance of the submitted building system to its own codes, rules, and regulations, without the necessity of a complete and exhaustive new review and evaluation.

Finally, in the area of certification, the availability of approved inspection checklists (CES Document No. C-O2) also will permit the second state to determine whether or not the inspection activity in the first state meets its own set of criteria, without the necessity of a new exhaustive review of the entire compliance assurance program.

In addition to these examples of situations in which the CES Documentation would promote interstate acceptance of manufactured building systems, manufactured buildings, and components, CES Document No. E-ll (Manufacturing Facility Evaluation Report) could be used in the monitoring of Evaluation and Inspection Agencies by regional teams as briefly discussed under (3) on the previous page, and could thus be instrumental in establishing the regional monitoring team approach to reciprocity among the states.

#### 6. SUMMARY

This preliminary CES Project report presents model documentation for consideration and implementation in state regulatory programs for manufactured buildings and building components. This documentation covers the regulatory activity from the submission of a building system application through evaluation, approval, to inspection and certification or labeling of manufactured buildings and components. Local building and occupancy permit documentation is also included.

The presented model documentation provides suggested forms, checklists and commentary based on requirements of a state regulatory system as implied by the Model Act and Model Rules and Regulations developed by a special working task group under the sponsorship of the Department of Commerce. Although the Model Legislation applies to all occupancies, the model documentation presented herein is primarily directed towards one and two family detached wood frame (factory-built) dwelling construction.

Another important purpose of this report is to stimulate interest, contribution, and discussion on the subject of documentation used in state building activities. Based on comments and suggestions received, this preliminary report will be revised to improve and finalize the model documents presented herein.

It is hoped that the eventual adoption of the model documentation, in whole or in part, by the regulatory bodies of the various states or even several states within a particular geographic region of the country will further promote interstate acceptance of manufactured buildings and building components. The orderly growth of this segment of the building industry all but requires that any obstacles in the building regulatory process be overcome and the attendant documentation requirements become somewhat standardized. It is with these goals in mind that the ultimate in a viable coordinated evaluation system can be attained.

- Dikkers, Robert D., Coordinated Evaluation System (CES) Project, Nat. Bur. Stand. (U.S.), Tech. Note 775, 12 pages (May 1973).
- [2] The American National Standards Institute (ANSI), Standard for Mobile Homes, Body and Frame Design and Construction Requirements and the Installation of Plumbing, Heating and Electrical Systems, American National Standard All9.1-1973, The National Fire Protection Association (NFPA) No. 501B-1972 (1972).
- [3] Model Manufactured Building Act (Revised), Final Draft, Department of Commerce (DOC) Special Working Group I, October 27, 1972 (1972).
- [4] Model Mobile Home Act, Final Draft, Department of Commerce (DOC) Special Working Group II, February 8-9, 1973 (1973).
- [5] Model Rules and Regulations for the Manufactured Building Act, Final Draft, Department of Commerce (DOC) Special Working Group I, October 27, 1972 (1972).
- [6] One and Two Family Dwelling Code (under the Nationally Recognized Model Codes) 1971 Edition, copyrighted (1971) by A. Ins. A., BOCA, ICBO and SECC.
- [7] National Electrical Code, 1971 Edition, National Fire Protection Association (NFPA), No. 70-1971; American National Standards Institute (ANSI) Standard C1-1971 (Rev. of C1-1968), copyrighted (1971) and published by NFPA, Boston, Massachusetts.
- [8] Plan Review Manual, published by International Conference of Building Officials, Pasadena, California (1971).
- [9] Uniform Plumbing Code Interpretations Manual, published by International Association of Plumbing and Mechanical Officials, Los Angeles, California (1971).
- [10] A Training Manual in Field Inspection of Buildings and Structures, published by International Conference of Building Officials, Pasadena, California (1968).
- [11] Watt, John H., NFPA Handbook of the National Electrical Code, 3rd Edition, published by McGraw Hill Book Co. (1972).
- [12] Segall, B. Z., Electrical Code Diagrams, Vols. I and II, 4th Edition, published by Peerless Publishing Co., New Orleans, Louisiana (1969).

- [13] Richter, H. P., Practical Electrical Wiring, 9th Edition, published by McGraw Hill Book Co. (1972).
- [14] Manual of Forms for Building Department Administration, published by International Conference of Building Officials, Pasadena, California (1969).
- [15] Recommended Construction Permit and Inspection Procedures, published by Building Officials & Code Administrators International, Inc., Chicago, Illinois (1971).

#### APPENDIXES

A - Model Manufactured Building Act (Page 45)

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B - Model Rules and Regulations for the Manufactured Building Act (Page 59)

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# REVISED MODEL MANUFACTURED BUILDING ACT

# JOINT DRAFT OF THE:

NATIONAL CONFERENCE OF STATES ON BUILDING CODES AND STANDARDS NATIONAL ASSOCIATION OF BUILDING MANUFACTURERS BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL, INC. INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS SOUTHERN BUILDING CODE CONGRESS U.S. DEPARTMENT OF COMMERCE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

> The original Act was approved by the above named organizations. This revision has been developed as a consensus document but has not received their final approval.

> > DRAFT: 08/14/72

REVISED: 10/27/72

#### Section 1. SHORT\_TITLE

This Act shall be known as and may be cited as the "Manufactured Building Act."

#### Section 2. LEGISLATIVE FINDINGS AND INTENT

(Each State should write its own legislative findings to meet the individual conditions. The following are suggested possibilities.)

There exist in this State conditions which create a shortage of decent, safe and sanitary housing and buildings, such as schools, hospitals and other public facilities, at prices which residents and political subdivisions of this State can afford. This shortage contributes to an increase in community tension, crime and blight, and constitutes a menace to the health, safety and welfare of the residents of this State. Increasing the available supply of such housing and other buildings at prices which residents and political subdivisions of this State can afford, will alleviate community tension and blight, reduce crime, increase the building inventory subject to property taxes, increase employment, attract new industries and materially improve the health, safety and welfare of the residents of this State.

[The production and utilization of manufactured buildings and the use of new and improved technologies, techniques and materials will increase the available supply of housing and other buildings at prices which most residents and political subdivisions of this State can afford.

[Uniformity of building codes governing manufactured buildings and building components, and uniformity in procedures for enforcing such codes throughout the nation and the State are matters of nationwide and statewide interest and concern in that such uniformity would increase the efficiency of the manufactured building industry and further assure the safety of its products.

[The production and utilization of manufactured buildings and building components and the use of new technologies, techniques and materials are enhanced by the utilization and application of uniform building codes and uniform procedures for enforcing building codes within this State, and would be further enhanced by widespread reliance upon uniform and reasonable material specifications and the use of performance standards.

[Manufactured buildings and building components, because of the manner of their construction, assembly and use, like other finished products with concealed vital parts, may present hazards to health and safety, unless properly manufactured. Also, manufactured buildings and building components may contain hazardous defects not readily ascertainable when inspected by purchasers or by local enforcement agencies. The legislature intends, by this Act, to provide protection to the public against such possible hazards.

[The legislature intends, by this Act, to create conditions in this State which will facilitate the production and use of manufactured buildings and building components and the use of new technologies, techniques and materials consistent with the requirements of health, safety and welfare.]

#### Section 3. DEFINITIONS

(a) Wherever used or referred to in this Act, the terms defined herein have the meanings assigned to them unless a different meaning is clearly indicated by the context.

(b) <u>ADMINISTRATIVE AGENCY</u>. "Administrative Agency" means (name of , which is charged with the administration of this Act.

agency)

(c) APPROVED. "Approved" means approved by the [Administrative Agency].

(d) <u>BUILDING COMPONENT</u>. "Building Component" means any subsystem, subassembly 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.

(e) <u>BUILDING SYSTEM.</u> "Building System" means plans, specifications and documentation for a system of manufactured building 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 system.

(f) <u>CLOSED CONSTRUCTION</u>. "Closed Construction" means 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.

(g) <u>COMPLIANCE ASSURANCE PROGRAM</u>. "Compliance Assurance Program" means the system, documentation and methods for assuring that manufactured buildings and building components including their manufacture, storage, transportation, assembly, handling and installation, conform with the Act and the rules and regulations promulgated pursuant hereto.

(h) <u>EVALUATION AGENCY</u>. "Evaluation Agency" means an approved person or organization, private or public, including a governmental agency,

determined by the [Administrative Agency] to be qualified by reason of facilities, personnel, experience, and demonstrated reliability and independence of judgment, to investigate, evaluate and approve manufactured buildings or building components, building systems or compliance assurance programs, and to issue labels.

(i) <u>INDEPENDENCE OF JUDGMENT</u>. "Independence of Judgment" means 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 and building components, in any manner which is likely to affect capacity to render reports and findings objectively and without bias.

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(j) <u>INSPECTION AGENCY</u>. "Inspection Agency" means an approved person or organization, private or public, including a governmental agency, determined by the [Administrative Agency] to be qualified by reason of facilities, personnel, experience, and demonstrated reliability and independence of judgment, to conduct or supervise compliance assurance programs, to certify manufactured buildings and building components and to issue and attach labels.

(k) <u>INSTALLATION</u>. 'Installation' means the process of affixing, or assembling and affixing, manufactured buildings or building components on the building site, or to an existing building.

(1) <u>LABEL</u>. "Label" means an approved device or seal evidencing certification in accordance with this Act and the rules and regulations promulgated pursuant hereto.

(m) <u>LOCAL ENFORCEMENT AGENCY</u>. "Local Enforcement Agency" means 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 or demolition of buildings.

(n) LOCAL GOVERNMENT. "Local Government" means 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 or demolition of buildings.

(o) <u>MANUFACTURED BUILDING.</u> "Manufactured Building'means any building which is of closed construction and which is made or assembled in manufacturing facilities, on or off the building site, for installation, or assembly and installation, on the building site. "Manufactured Building" also means any building of open construction for which certification under this Act is sought by the manufacturer and which is made or assembled in manufacturing facilities away from the building site for installation, or assembly and installation, on the building site. "Manufactured Building" does not mean "mobile home."

(p) MOBILE HOME. "Mobile Home" means a factory-assembled, movable dwelling, designed and constructed to be towed on its own chassis comprised of frame and wheels to be used without a permanent foundation, and distinguishable from other types of dwellings in that the standards to which it is built include provisions for its mobility on that chassis.

(q) <u>OPEN CONSTRUCTION</u>. "Open Construction" means 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.

### Section 4. [BUILDING CODE COUNCIL]

(a) A [Building Code Council or such other name as may be designated for this function, hereinafter called the "Council"] is hereby created. The [Council] shall consist of eleven qualified persons: the [chief executive officer of the Administrative Agency], a representative of the general public, and one person from each of the following fields: architecture, structural engineering, mechanical engineering, electrical engineering, law, contracting, construction trades, building manufacturing, and building code enforcement. [If a Building Code Council has been created pursuant to the (name of State)[Model] Mobile Home Act or the (name of State) [Model] Building Code Agency Act, that Council, with the addition of one member representing building manufacturers to be appointed by the Governor for an initial term of four years, shall constitute the Council authorized to be established hereunder and shall perform all the functions of the Council under this Act.]

(b) Members of the [Council] shall be appointed by the Governor for four-year terms of office and shall serve until qualified successors are appointed, except that the Governor shall, for the first appointments to the [Council], appoint three members for terms of four years, three members for terms of three years and three members for terms of two years, and two members for terms of one year. Three or more consecutive failures by a member to attend meetings of the [Council] without reasonable cause shall constitute cause for removal of the member from the [Council] by the Governor, or by the chairman with concurrence by a majority of the [Council]. The Governor shall appoint a new member whenever a vacancy occurs. When a vacancy occurs, a majority of the remaining members of the [Council] may appoint an interim member to fill the vacancy for the remainder of the term or until such time as the Governor appoints a member to fill the vacancy.

(d) The [Council] shall meet at the request of the [chief executive officer of the Administrative Agency] or at the written request of three or more members of the [Council]; provided, however, that the [Council] shall meet not less than times per year.

(e) The [Council] shall establish rules and regulations and bylaws for its internal operation.

#### Section 5. RULES AND REGULATIONS

(a) The [Administrative Agency] shall propose rules and regulations and amendments thereto. The [Council] shall adopt rules and regulations prior to their promulgation pursuant to this Act. After adoption by the [Council], the [Administrative Agency] shall promulgate, administer and enforce the rules and regulations.

(b) The rules and regulations shall establish standards, specifications and requirements for manufactured buildings and building components; they shall also establish requirements for submission of building systems and compliance assurance programs. To the extent practicable, the standards, specifications and requirements shall be set forth in terms of performance objectives so as to facilitate the use of new technology, techniques and materials. Preference shall be given to performance standards reasonably consistent with those of other States.

(c) The [Administrative Agency] shall consider and may propose and the [Council] shall consider and may adopt all or any portion of the codes, standards and requirements promulgated by such organizations as the Building Officials and Code Administrators International, Inc., International Conference of Building Officials, Southern Building Code Congress, Council of American Building Officials and other nationally recognized organizations, including governmental agencies, which apply or could be applied to manufactured buildings and building components. The [Administrative Agency] shall endeavor to maintain the rules and regulations current with the state of the art, especially with respect to performance standards including standards of neighboring jurisdictions.

(d) In adopting all or any portion of such codes, standards and requirements, no changes or modifications shall be made therein without express findings setting forth reasonable cause for the changes or modifications. Any changes or modifications adopted by the [Council] shall be submitted, with the reasons therefor, for consideration by the appropriate organization for amendment of the code, standard or requirement.

(e) The [Council] shall provide for public hearings prior to adopting any rules and regulations or amendments thereto, which hearings shall follow adequate public notice.

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(f) The [chief executive officer of the Administrative Agency] shall establish a position of [Building Official], shall establish minimum qualifications for the position, and shall appoint a qualified person to fill the position. The [Building Official] shall assist the [chief executive officer] in the administration of and shall enforce all provisions of this Act and the rules and regulations promulgated pursuant hereto.

(g) Except as provided by or pursuant to this Act, land use zone requirements, performance-based fire zone requirements, building set-back requirements, side and rear yard requirements, property line requirements, and on-site development, construction and inspection, are hereby specifically and entirely reserved to local government.

#### Section 6. APPROVAL

(a) The [Administrative Agency] shall evaluate building systems and approve those which it determines to be in compliance with this Act and the rules and regulations promulgated pursuant hereto. The [Administrative Agency] may utilize the results of approved tests to determine whether a building system meets the requirements of this Act and the rules and regulations, if that determination cannot be made from evaluation of plans, specifications and documentation alone.

(b) The [Administrative Agency] shall evaluate manufacturers' compliance assurance programs and approve those which it determines to be in compliance with this Act and the rules and regulations promulgated purusant hereto.

(c) A building system, a compliance assurance program, or an amendment thereof, which has been approved, shall not be varied in any way without authorization by the [Administrative Agency] in accordance with the rules and regulations promulgated pursuant hereto.

(d) The [Administrative Agency] may delegate to evaluation agencies or authorize them to perform the evaluation and approval of building systems or compliance assurance programs or the issuance of labels.

(e) The [Administrative Agency] may suspend or revoke, or cause to be suspended or revoked, the approval of any building system or any compliance assurance program whenever the approval was issued in error, or was issued on the basis of incorrect information, or was issued in violation of this Act or of any rule or regulation promulgated pursuant hereto. If the [Administrative Agency] determines that buildings or building components manufactured pursuant to an approved building system do not comply with this Act or the rules and regulations promulgated pursuant hereto and the manufacturer fails to comply with a corrective order, the [Administrative Agency] may suspend or revoke, or cause to be suspended or revoked, the approval of the manufacturer's compliance assurance program. Notice of suspension or revocation of an approval shall be in writing with the reasons for suspension or revocation set forth therein. Appeals from suspensions or revocations shall receive timely review, pursuant to Section 13 hereof.

#### Section 7. CERTIFICATION

(a) Manufactured buildings or building components shall be certified by the [Administrative Agency] as complying with this Act and the rules and regulations promulgated pursuant hereto if they have been manufactured in accordance with an approved building system and if they have been inspected in accordance with an approved compliance assurance program. Certification shall be evidenced by the attachment to each manufactured building or building component (or group of components) of a label issued by the [Administrative Agency]. Certified manufactured buildings or building components shall not be varied in any way prior to the issuance of [occupancy permits, certificates of occupancy, or whatever similar device is used] without resubmission for approval of the variation and of the unit which includes the variation.

(b) The [Administrative Agency] may delegate to inspection agencies or authorize them to perform all or part of the inspection and certification of manufactured buildings or building components including either or both the issuance and the attachment of labels thereto.

Notwithstanding the provisions of any other law, manufactured (c) buildings and building components certified pursuant hereto shall be deemed to comply with the requirements of all laws, ordinances and regulations of the State or of local governments which govern the matters within the scope of the approval and certification applicable to manufactured buildings or building components, including those bearing upon technologies, techniques and materials, or the safety of buildings or building components. Local enforcement agencies shall issue building permits for certified manufactured buildings prior to installation, and shall issue [certificates of occupancy] for certified manufactured buildings after they have been installed and inspected pursuant to Section 11 of this Act; provided that any manufactured building or building component found not to comply with this Act shall be brought into compliance with this Act before such [certificate of occupancy] shall be issued.

(d) The [Administrative Agency] shall suspend or revoke, or cause to be suspended or revoked, the certification of any manufactured building or building component which the [Administrative Agency] finds not to comply with this Act or the rules and regulations promulgated pursuant hereto, or which has been manufactured pursuant to a building system or compliance assurance program as to which approval has been suspended or revoked. Labels of certification shall be removed from any such manufactured building or building component until such time as it is brought into compliance with this Act and the rules and regulations promulgated pursuant hereto. Notice

of such suspension or revocation of certification shall be in writing with the reasons for such suspension or revocation set forth therein. Appeals from suspensions or revocations shall receive timely review, pursuant to Section 13 hereof.

#### Section 8. LIMITATION ON USE

No manufactured buildings or building components shall be sold for, delivered to, or installed on building sites located in any jurisdiction of this State which lacks a building code unless such buildings or building components have been certified pursuant to this Act, except that any on-site inspection required pursuant to this Act shall not apply. In jurisdictions with local building codes, the manufacturer shall be permitted, in lieu of obtaining approval and certification by the [Administrative Agency], to apply for approval in accordance with the local building code of general applicability, and in that event shall comply with such code.

#### Section 9. EXCEPTION FOR SPECIAL ENVIRONMENTAL CONDITIONS

(a) If special environmental conditions such as snow, wind loads, seismic conditions, temperature, humidity and soil conditions requiring special or different building standards exist in parts of the State, the [Administrative Agency] shall limit approval of a building system to the remainder of the State if such building system does not meet the special or different conditions. Any limitations on approval for special environmental conditions shall be clearly indicated on each manufactured building or building component (or group of components). If a manufactured building or building component is to be varied from the approved building system to meet the special environmental conditions, an amended building system shall be submitted for approval.

(b) In jurisdictions having building codes, the local government shall prescribe requirements for special environmental conditions requiring special or different building standards for those parts of the site development, foundation and other work reserved to local enforcement agencies. Such requirements shall be based on express findings setting forth reasonable cause therefor, and shall be subject to the [local appeals procedure].

(c) The local enforcement agency may propose special local environmental requirements for adoption pursuant to Section 5 of this Act, and unless the [Council] disapproves such proposal within 60 days of the date of its submission, or at the next meeting of the [Council], whichever is sooner, the proposal shall be deemed adopted.

### Section 10. RECIPROCITY

(a) If the [Administrative Agency] finds that the standards for the manufacture and inspection of manufactured buildings or building components prescribed by statute or rules and regulations of another State, or other

governmental agency, meet the objectives of this Act and the rules and regulations promulgated pursuant hereto, and are enforced satisfactorily by such other State, or other governmental agency, or by their agents, the [Administrative Agency] shall accept manufactured buildings or building components which have been certified by such other State or governmental agency, and assure that the appropriate label is attached thereto. The standards of another State shall not be deemed to be satisfactorily enforced unless such other State provides for notification to the [Administrative Agency] of suspensions or revocations of approvals issued by that other State, in a manner satisfactory to the [Administrative Agency].

(b) The [Administrative Agency] shall suspend or revoke, or cause to be suspended or revoked, its acceptance or certification or both of certified manufactured buildings or building components if it determines that the standards for the manufacture and inspection of such manufactured buildings or building components of another State or other governmental agency do not meet the objectives of this Act and the rules and regulations promulgated pursuant hereto, or that the standards are not being enforced to the satisfaction of the [Administrative Agency]. Notice of the suspension or revocation shallbe in writing with the reasons for the suspension or shall receive timely review, pursuant to Section 13 hereof.

(c) If another State or governmental agency, or its agent, suspends or revokes its approval or certification, the acceptance or certification or both granted under this Section shall be suspended or revoked accordingly.

(d) In order to encourage reciprocity, the [Administrative Agency] and the [Council] shall cooperate with similar authorities in other jurisdictions, with national standards organizations and with model code procedures for testing, evaluating, approving and inspecting manufactured buildings or building components, and otherwise encouraging their production and acceptance.

#### Section 11. INSPECTION

(a) Any person or firm manufacturing buildings or building components, and desiring certification, shall agree in writing that the [Administrative Agency] has the right to conduct unannounced inspections at any reasonable time.

(1) The [Administrative Agency] shall periodically make, or cause to be made, inspections of the entire process of manufacture and certification of buildings and building components produced under approved building systems and of buildings and building components already certified, in order to verify the reliability of each compliance assurance program and of each approved inspection agency. (2) In addition to other on-site inspection provided for in subsection (d) of this Section, the [Administrative Agency] shall inspect, or cause to be inspected, certified manufactured buildings or building components which it determines to have been sufficiently damaged after certification to warrant such inspection, and to take such action with regard to such buildings or building components as is authorized under Section 7(d) hereof, or as is otherwise necessary to eliminate dangerous conditions.

(3) No inspection entailing disassembly, damage to or destruction of certified manufactured buildings or building components shall be conducted except to implement Sections 7(d) or 11(a)(1) and (2) hereof.

(b) The [Administrative Agency] shall authorize inspectors to travel within or without the State for any purpose directly related to the enforcement of this Act.

(c) The [Administrative Agency] may delegate to inspection agencies or authorize them to perform all or part of its inspection functions under this Section.

In jurisdictions having building codes, local enforcement agencies (d) shall inspect all manufactured buildings or building components upon, or promptly after, installation at the building site to determine whether all applicable instructions or conditions have been followed. This may include tests for tightness of plumbing and mechanical systems, for malfunctions in the electrical system, and a visual inspection for obvious violations of the rules and regulations promulgated pursuant hereto. Destructive disassembly of certified buildings or building components shall not be performed in order to conduct such tests or inspections, nor shall standards more stringent than those promulgated pursuant hereto be imposed. Nondestructive disassembly may be performed only in accordance with the rules and regulations promulgated pursuant hereto. Local enforcement agencies shall cause the disposition of noncomplying manufactured buildings and building components in accordance with applicable law and with the rules and regulations promulgated pursuant hereto.

(e) In jurisdictions having building codes, local enforcement agencies shall inspect site preparation work, including foundations, for compliance with applicable law.

#### Section 12. FEES

(a) The [Administrative Agency] shall establish a schedule of fees in connection with the administration and enforcement of this Act and publish such schedule of fees in the rules and regulations promulgated pursuant hereto. The amount of the fees shall be based on the cost of

performing functions undertaken pursuant to this Act for which fees are charged. The effects of the fees upon the cost of buildings to residents and political subdivisions of this State, shall be considered by the [Administrative Agency] in setting and approving its own fees as well as the fees charged by evaluation and inspection a<sub>c</sub>encies under contract to 'it.

(b) Fees charged by local enforcement agencies for activities conducted under this Act or rules and regulations promulgated pursuant hereto shall be consistent with fees charged by them for other types of buildings regulated by local government.

#### Section 13. APPEALS

The [Council] shall promptly hear and decide appeals brought by any person or party in an individual capacity, or on behalf of a class of persons or parties, affected by any rule, regulation or decision pursuant to this Act. Final decisions by the [Council] shall be reviewable on appeal (or on successive appeals) in the [courtsof competent jurisdiction].

#### Section 14. INJUNCTIVE RELIEF

The [Administrative Agency] may obtain injunctive relief from any court of competent jurisdiction to enjoin the sale, delivery or installation of manufactured buildings or building components, or of buildings utilizing such components, for which certification is required under this Act, upon an affidavit of the [Administrative Agency] specifying the manner in which such manufactured buildings or building components do not conform to the requirements of this Act or the rules and regulations promulgated pursuant hereto.

#### Section 15. STATUTORY CIVIL ACTION

Notwithstanding any other remedies which may be available, any person or party, in an individual capacity or on behalf of a class of persons or parties, damaged as a result of a violation of this Act or the rules and regulations promulgated pursuant hereto, shall have a cause of action in any court of competent jurisdiction against the person or party to whom the label of certification has been issued with respect to the pertinent manufactured buildings or building components, or, if they are not certified, against the manufacturer of the pertinent manufactured buildingsor building components. Any award may include damages and the cost of litigation, including reasonable attorneys' fees. [The cause of action created by this Section shall be subject to the same limitations period as applies under applicable law in this State for causes of action of similar nature.]

#### Section 16. CRIMINAL PENALTIES

[(a) Any person who violates any provision of this Act, or of the rules and regulations promulgated pursuant hereto, is guilty of a misdemearor, and upon conviction for each offense shall be fined not more than \_\_\_\_\_ dollars (\$\_\_\_\_\_), or shall be imprisoned for not more than \_\_\_\_\_, or both.

[(b) Any person who counterfeits or alters one or more labels, or who makes fradulent or misrepresentative use of one or more labels, or any person who knowingly makes use of one or more counterfeit or altered labels, is guilty of a felony, and upon conviction for each offense shall be fined not less than \_\_\_\_\_ thousand dollars (\$\_\_\_\_), nor more than \_\_\_\_\_\_ thousand dollars (\$\_\_\_\_), or shall be imprisoned for not more than \_\_\_\_\_ years, or both.

#### Section 17. SEVERABILITY

[Insert usual State severability clause here.]

# Section 18. EFFECTIVE DATE

[Insert effective date.]

# MODEL RULES AND REGULATIONS FOR THE MANUFACTURED BUILDING ACT

NATIONAL CONFERENCE OF STATES ON BUILDING CODES AND STANDARDS NATIONAL ASSOCIATION OF BUILDING MANUFACTURERS BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL, INC. INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS SOUTHERN BUILDING CODE CONGRESS U.S. DEPARTMENT OF COMMERCE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

> "This document has not undergone legal review, not has it been approved by any of the parties participating in the drafting of it."

> > DRAFT: 10/27/72

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# MODEL

# RULES AND REGULATIONS FOR THE MANUFACTURED BUILDING ACT

#### FOREWARD

Objective. The objective of the Model Act and these Model Rules and Regulations is to create intra-state and inter-state conditions which will facilitate the production and utilization of manufactured buildings and building components while assuring code compliance of such construction, use of new technology, techniques and materials, and uniform practices for institutional accreditation and building system certification practices.

<u>Purpose</u>. The purpose of this model document is to provide rules and regulations pursuant to Section 5 of the Model Manufactured Building Act. After adoption by the Building Code Council, it is the responsibility of the Administrative Agency to promulgate, administer and enforce these rules and regulations.

<u>Research and Standards Development</u>. Since these rules and regulations have been developed during a period in which new concepts and rapid changes are being introduced in state regulatory programs pertaining to manufactured buildings, it is important that the Administrative Agency endeavor to maintain the rules and regulations current with the state-of-the-art. At the present time related research programs are being conducted by various state and federal agencies and other institutions pertaining to the evaluation and regulation of manufactured buildings. When new national consensus standards are developed from the results of these research programs, the Administrative Agency should recommend such standards for adoption and revise the related sections of these rules and regulations.

Evaluation and Inspection Agencies. These rules and regulations were developed to have sufficient flexibility to allow a state the maximum of administrative latitude in the structuring of its evaluation and inspection programs. At the time of the development of this document, the state-of-the-art in the inspection and evaluation areas has involved two systems--the use of independent third party agencies, and the development of state-based programs utilizing state governmental personnel. As written, these rules and regulations are applicable to either system. It is recommended that, in the consideration of these Rules and Regulations, that serious consideration be given to the use of independent third party agencies to fulfill the evaluation and inspection functions under the control of the Administrative Agency.

# PART I: DEFINITIONS

Wherever used or referred to in these rules and regulations, the terms defined herein shall have the meanings assigned to them unless a different meaning is clearly indicated by the context.

(A) <u>Act</u> "Act" means the Manufactured Building Act [cite appropriate statutory reference].

(B) Administrative Agency. "Administrative Agency" means (name of agency) which

is charged with the administration of the Act and these rules and regulations.

(C) Approved. "Approved" means approved by the [Administrative Agency].

(D) <u>Building Code Council</u>. "Building Code Council" means the Building Code Council established pursuant to Section 4 of the Act.

(E) <u>Building Component</u>. "Building Component" means any subsystem, subassembly, 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.

(F) <u>Building System</u>. "Building System" means 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 system.

(G) <u>Closed Construction</u>. "Closed Construction" means 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 site without disassembly, damage, or destruction.

(H) <u>Compliance Assurance Program</u>. "Compliance Assurance Program" means the system, documentation and methods of assuring that manufactured buildings and building components, including their manufacture, storage, transportation, assembly, handling and installation, conform with the Act and these rules and regulations.

(I) Evaluation Agency. "Evaluation Agency" means an approved person or organization, private or public, including a governmental agency, determined by the [Administrative Agency] to be qualified by reason of facilities, personnel, experience, and demonstrated reliability and independence of judgment, to investigate, evaluate and approve manufactured buildings or building components or building systems or compliance assurance programs and to issue labels.

(J) <u>Independence of Judgment</u>. "Independence of Judgment" means 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 and building components, in any manner which is likely to affect capacity to render reports and findings objectively and without bias. (K) Inspection Agency. "Inspection Agency" means an approved person or organization, private or public, including a governmental agency, determined by the [Administrative Agency] to be qualified by reason of facilities, personnel, experience, and demonstrated reliability and independence of judgment, to conduct or supervise compliance assurance programs, to certify manufactured buildings and building components, and to issue and attach labels.

(L) <u>Installation</u>. "Installation" means the process of affixing, or assembling and affixing, manufactured buildings or building components on the building site, or to an existing building.

(M) <u>Label</u>. "Label" means an approved device or seal evidencing certification in accordance with the Act and these rules and regulations.

(N) Local Enforcement Agency. "Local Enforcement Agency" means 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 or demolition of buildings.

(0) Local Government. "Local Government" means any county, city, municipal corporation, village, town, or other political subdivision of this State with authority to establish standards and requirements applicable to the construction, alteration, repair or demolition of buildings.

(P) <u>Manufactured Building</u>. "Manufactured Building" means any building which is of closed construction and which is made or assembled in manufacturing facilities, on or off the building site, for installation, or assembly and installation, on the building site. Manufactured building also means any building of open construction for which certification under the Act is sought by the manufacturer and which is made or assembled in manufacturing facilities away from the building site, for installation, on the building site.

(Q) <u>Open Construction</u>. "Open Construction" means 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.

## PART II: SCOPE

#### SECTION 1: APPLICABILITY

These rules and regulations govern the design, manufacture, handling, storage, transportation and installation of manufactured buildings and building components intended for installation in this State or in any other State or local governmental jurisdiction in which such buildings or building components and the labels thereon are accepted.

(A) Manufactured buildings or building components may be sold for, delivered to or installed on building sites located in any jurisdiction of this State which has a local building code if: (1) such buildings or building components have been approved and certified pursuant to the Act and these rules and regulations; or, (2) at the option of the manufacturer, if such buildings or building components have been approved by the appropriate local enforcement agency pursuant to the local building code of general applicability. (B) No manufactured buildings or building components shall be sold for, delivered to or installed on building sites located in any jurisdiction of this State which lacks a building code unless such manufactured buildings or building components have been certified pursuant to the Act and these rules and regulations, except that no on-site inspection (provided for in Section 5 of Part IV hereof) shall be required.

#### SECTION 2: PRE-EMPTION

Manufactured buildings and building components certified pursuant to these rules and regulations shall be deemed to comply with the requirements of all laws, ordinances, rules and regulations which govern the matters within the scope of the approval and certification, regardless of the provisions of any other such law, ordinance, rule or regulation.

#### SECTION 3: APPLICABILITY OF LOCAL LAW

(A) Except as provided by or pursuant to the Act and these rules and regulations, land use zone requirements, performance-based fire zone requirements, building set-back requirements, side and rear yard requirements, property line requirements, and on-site development, construction and inspection are specifically and entirely reserved to the local government.

(B) In areas of the State where special environmental conditions exist which require special or different building standards, pursuant to Part III, Section 1 hereof, local government shall prescribe such standards for those parts of the site development, foundation and other work, for which responsibility is vested in local government pursuant to Part II, Section 3(A) hereof; provided that such standards may not be more stringent than those imposed on other types of buildings in the area.

### PART III: STANDARDS

#### SECTION 1: STANDARDS, SPECIFICATIONS AND REQUIREMENTS ADOPTED

#### Building systems shall comply with

[The actual'standards to be used are to be inserted here. To the extent practicable, the standards and requirements established shall be set forth in terms of performance objectives, so as to facilitate the use of new technology, techniques and materials. In establishing such standards, specifications and requirements, the following nationally recognized codes and standards, for example, shall be considered and may be adopted:

UNIFORM BUILDING CODE, ICBO, 5930 Workman Mill Road, Whittier, California 90601 UNIFORM MECHANICAL CODE, ICBO, IAMPO UNIFORM PLUMBING CODE, IAMPO, 5032 Alhambra Avenue, Los Angeles, California 90032 BASIC BUILDING CODE, BCCA, 1313 E. 60th Street, Chicago, Illinois 60637 BASIC PLUMBING CODE, BOCA BASIC MECHANICAL CODE, BOCA SOUTHERN STANDARD BUILDING CODE, SBCC, 1116 Brown-Marx Building, Birmingham, Alabama 35203 SOUTHERN STANDARD PLUMBING CODE, SBCC SOUTHERN STANDARD PLUMBING CODE, SBCC NATIONAL ELECTRICAL CODE, N.Fi.P.A., 60 Batterymarch Street, Boston, Massachusetts ONE AND TWO FAMILY DWELLING CODE, BOCA, American Insurance Association, SBCC, ICBO.] Any amendments in the adopted codes and standards shall be submitted, with the reasons therefor, for consideration by the appropriate organization for amendment of the code or standard.

The provisions of these rules and regulations are not intended to prevent the use of any technology, techniques or materials not specifically prescribed by the codes, standards, specifications and requirements, provided any such alternate has been approved. The [Administrative Agency] may approve any such alternate provided it finds that the proposed design is satisfactory, and that the material, method, or work offered, is, for the purpose intended, consistent with the adopted codes and standards including quality, strength, effectiveness, fire resistance, durability and safety. The [Administrative Agency] shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding the use of any such alternate.

(A) The [Administrative Agency] shall maintain appropriate information, indicating those areas of the State which it has established as having special environmental conditions such as snow, wind loads, seismic conditions, temperature, humidity and soil conditions requiring special or different building standards. Such information shall be available for public inspection. [Local jurisdictions may submit such information.]

#### SECTION 2: AMENDMENTS

The [Administrative Agency] may propose amendments of these rules and regulations, including adopted codes, standards, specifications and requirements to the Building Code Council. Each such amendment shall include a proposed date for the amendment to take effect. All public hearings concerning adoption, promulgation, or amendment to these rules and regulations shall be held pursuant to [insert appropriate legal criterion].

(A) Consistent with Part IV, Section 2(A)(8) hereof, the [Administrative Agency] shall notify all manufacturers with approved building systems, local governmental jurisdictions and other concerned persons of all amendments, and each manufacturer shall have no more than 180 days or such additional time as the [Administrative Agency] shall deem reasonable following the sending of such notification to submit to the [Administrative Agency] and comply with such modifications of its building systems as may be required to comply with such changes. All manufactured buildings or building components manufactured (i) prior to the effective date of such changes or (ii) during the 180 day period following the sending of notice to the manufacturer, or (iii) in the case of any manufacturer who submits his modifications to the [Administrative Agency] as required but receives no affirmative or negative response from the [Administrative Agency] with respect thereto, following such 180 day period, may be certified if they conform to the unamended, approved building system. Where imminent danger to life safety is involved, the [Administrative Agency] may require that immediate effect be given to amendments to the codes, standards, specifications and requirements adopted herein. For purposes of this Section, a manufactured building or building component is deemed to be manufactured at such time as the label is attached to it in accordance with the approved compliance assurance program.

(B) A local enforcement agency may propose to the [Administrative Agency] that a finding be made that known special environmental conditions such as snow, wind loads, seismic conditions, temperature, humidity and soil conditions exist in the area over which the local enforcement agency has jurisdiction, and that the appropriate maps and information be amended, if necessary, in accordance with such findings. Unless the Building Code Council disapproves such findings within sixty days of the date of its submission, or at the next meeting of the Council, whichever is sooner, the proposal shall be deemed adopted and the appropriate maps and information shall be amended accordingly.

# PART IV: ADMINISTRATION AND ENFORCEMENT

SECTION 1: ENFORCEMENT RESPONSIBILITY

The [Administrative Agency] shall administer and enforce all provisions of these rules and regulations. The [Administrative Agency] shall have the responsibility for evaluating and approving building systems, and inspecting and certifying manufactured buildings and building components for compliance with these rules and 'regulations. The [Administrative Agency] shall accept manufactured buildings, building systems and compliance assurance programs labeled and certified by approved evaluation and inspection agencies.

#### SECTION 2: APPROVALS OF BUILDING SYSTEMS AND COMPLIANCE ASSURANCE PROGRAMS

The [Administrative Agency] shall approve building systems which comply with the codes, standards, specifications and requirements adopted in Section 1 of Part III and with the other requirements of the Act and these rules and regulations and shall approve compliance assurance programs which comply with the requirements of the Act and these rules and regulations.

#### (A) Building Systems

(1) In order to obtain approval for manufactured buildings or building components, a manufacturer shall submit a building system for evaluation by the [Administrative Agency] or an evaluation agency in accordance with the requirements of Part V hereof.

(2) Prior to a full evaluation, the [Administrative Agency] or evaluation agency shall determine that building systems submitted to it are suitable for processing. In the event that the application is found to be unsuitable for processing, the applicant shall be notified in writing of such unsuitability and the basis thereof within thirty (30) days of the date the application is received by the [Administrative Agency] or evaluation agency. In such event, all but \$25.00 of the fee will be returned and the findings of unsuitability will be without prejudice. Any subsequent submission shall be treated as a new application.

(3) The [Administrative Agency] or evaluation agency may require tests to determine whether a building system meets the codes, standards, and requirements of the Act and these rules and regulations, if that determination cannot be made from evaluation of plans, specifications and documentation alone. The procedures used shall be reviewed and evaluated by the [Administrative Agency] or an evaluation agency.

(4) In the event a building system is disapproved, the [Administrative Agency] or an evaluation agency shall notify the applicant with a written explanation of the reasons for such disapproval attached thereto. (5) Approval of building systems shall be evidenced by the stamp of approval of the [Administrative Agency], or that of an evaluation agency, on each sheet of the building system, or by other effective means of identification. Each sheet shall be serially numbered and shall indicate effective dates of revision. One copy of all approved plans, specifications and documentation shall be returned to the applicant.

(6) The [Administrative Agency] or an evaluation agency shall prepare and issue to the applicant a building system approval report signed by the drafter and by the person in charge of the evaluation, which shall be numbered and which shall contain a summary description of the building system and all of the conditions of its use including installation instructions.

(7) A building system, or any amendment thereto which has been approved, shall not be varied in any way without prior authorization by the [Administrative Agency] or evaluation agency. All approved changes shall be made a part of the written record of the approval. Such authorization shall be in writing or be confirmed in writing within ten days of any oral authorization.

(8) No changes in the codes, standards, specifications and requirements shall apply retroactively. The [Administrative Agency] shall notify all manufacturers with approved building systems and evaluation agencies of all such changes, and each manufacturer shall have no more than 180 days following the sending of such notification, or such additional time as the [Administrative Agency] shall deem reasonable, to submit to the [Administrative Agency] or the evaluation agency and comply with the necessary amendments to its already approved building system(s).

(9) Amendments to building systems may be proposed by submitting to the [Administrative Agency] or an evaluation agency for approval, appropriate plans, specifications, or documentation showing the effect of the proposed amendment on each building system.

(10) The [Administrative Agency] or an evaluation agency may suspend or revoke the approval of any building system whenever the approval was issued in error, was issued on the basis of incorrect information, or was issued in violation of these rules and regulations or is later found to be in violation of these rules and regulations. Notice of such suspension or revocation of the approval shall be in writing with the reasons for such suspension or revocation set forth therein. Appeals from suspensions or revocations shall receive timely review.

#### (B) Compliance Assurance Programs

(1) A manufacturer shall obtain approval for a compliance assurance program for his building system. Buildings or building components shall be manufactured in accordance with an approved program in order to be certified. Compliance assurance programs shall be submitted to the [Administrative Agency] or evaluation agency for approval in accordance with the requirements of Part V hereof.

(2) Prior to full evaluation, the [Administrative Agency] or an evaluation agency shall determine that the application for approval submitted to it is suitable for processing. In the event that the application is found to be unsuitable for processing, the applicant shall be notified in writing of such unsuitability and the basis thereof within thirty (30) days of the date the application is received by the [Administrative Agency] or an evaluation agency. In such event, all but \$25.00 of the fee shall be returned and the findings of unsuitability shall be without prejudice. Any subsequent submission shall be treated as a new application.

(3) Compliance assurance programs submitted for approval shall be evaluated for compliance with the Act and these rules and regulations.

(4) If a compliance assurance program is disapproved, the [Administrative Agency] or an evaluation agency shall notify the applicant with a written explanation of the reasons for disapproval attached thereto.

(5) Approval of compliance assurance programs shall be evidenced by the stamp of approval of the [Administrative Agency] or an evaluation agency on each sheet, or by other effective means of identification. One copy of the approved application and documentation shall be returned to the applicant.

(6) .A compliance assurance program or any amendment thereto which has been approved shall not be varied in any way without prior authorization by the [Administrative Agency] or an evaluation agency. All approved amendments shall be made a part of the written record of the approval.

(7) The [Administrative Agency] or an evaluation agency may suspend or revoke or cause to be suspended or revoked, its approval of any compliance assurance program whenever the approval was issued in error, or was issued on the basis of incorrect information or was issued in violation of any of these rules and regulations. If the [Administrative Agency] or evaluation agency determines that manufactured buildings or building components manufactured pursuant to an approved building system do not comply with the Act or these rules and regulations and the manufacturer fails to comply with a corrective order, the [Administrative Agency] or an evaluation agency may suspend or revoke, or cause to be suspended or revoked, the approval of the manufacturer's compliance assurance program. Notice to the manufacturer and the inspection agency of suspension or revocation of approval shall be in writing with the reasons for suspension or revocation set forth therein. Appeals from suspensions or revocations shall receive timely review.

#### SECTION 3: CERTIFICATION

Manufactured buildings and building components, accepted by the [Administrative Agency] or an inspection agency as having been manufactured according to an approved building system and an approved compliance assurance program, shall be certified by the [Administrative Agency] or inspection agency as complying with the requirements of the Act and these rules and regulations. Certification shall be evidenced by the attachment of a label to each certified manufactured build-ing or building component (or group of components).

The [Administrative Agency] may delegate to inspection agencies all or part of the inspection of, and either or both the issuance and attachment of labels to, manufactured buildings or building components.

#### (A) Manufacturer's Data Plate

The following information shall be placed directly or by reference on one or more permanent manufacturer's data plates in the vicinity of the electrical distribution panel, or in some other designated location, acceptable to the [Administrative Agency], on the manufactured building or building component where it will be readily accessible for inspection:

- Manufacturer's name and address;
- (2) Serial number of the unit;
- (3) Label serial number;
- (4) Name and date of applicable nationally recognized codes complied with;
- (5) Model designation and name of manufacturer of major factory-installed appliances;

and, if required by the adopted code, standard, specification or requirement:

- (6) Identification of permissible type of gas for appliances and
- directions for water and drain connection;
- (7) Snow, wind, seismic and other live loads;
- (8) Electrical ratings instructions and warnings on voltage;
- (9) Special conditions or limitations on use of the unit, including unsuitability for areas in which specified environmental conditions prevail.
- (10) Methods of assembly or joining multiple units
- (11) Type of construction, including fire rating, occupancy class, interior finish flame spread class, and toxicity class;
- (12) Building height and story limitation;
- (13) Floor area;
- (14) Minimum side yard requirements for fire rating.

If, in the opinion of the [Administrative Agency], the shape or size of a building component is such that this information cannot be attached to it permanently, the information may be placed in a manual crated with the component or on a tag attached to the crate in which the component is shipped, if the information is not such that the future occupant of the building should know it. If the occupant will need to know the information, it shall be contained in a manual which shall be presented to the occupant upon transfer of possession. If life safety is involved, the item in question shall be plainly labeled.

#### (B) Labels

Each manufactured building or building component (or group of components), which is certified pursuant to the Act and these rules and regulations, shall have permanently attached thereto, in a visible location as shown on the approved building system, an approved label which cannot be removed therefrom without destroying such label.

#### (1) Contents

An approved label shall bear the following information:

- (a) "This label certifies that this building [or building component] has been manufactured in accordance with an approved building system and compliance assurance program approved by (name of evaluation agency) and inspected by (name of inspection agency) under the auspices and
- approval of (name of State)."
- (b) Label serial number;
- (c) Building system approval number;
- (d) Manufacturer's serial number;
- (e) The words "See data plate located on \_\_\_\_\_";
- (f) The name of the agency issuing the label.

At the discretion of the [Administrative Agency], labels and data plates may be limited in size and content for components whose shape or size does not permit the full information to be placed thereon.

#### (2) Issuance

The approved label shall be issued by the [Administrative Agency] or its agents in accordance with the following:

- (a) If the [Administrative Agency] delegates the issuance of labels to an evaluation or inspection agency, the agency shall be required to obtain approval from the [Administrative Agency] for the manner in which they are handled;
- (b) Labels must be serially numbered;
- (c) A manufacturer's compliance assurance program, submitted in accordance with Part V, Section 2 hereof, shall include requirements for issuance, possession of, attachment of and accounting for all labels to assure that labels are attached only to buildings or building components manufactured pursuant to an approved building system and inspected pursuant to an approved compliance assurance program;
- (d) If the [Administrative Agency] or an inspection agency determines that the manufacturer's record of compliance is such that the [Administrative Agency] or inspection agency need not maintain an inspector in a given plant at all times, the [Administrative Agency] or inspection agency may entrust labels to the custody of one or more employees of the manufacturer, who shall be charged with controlling the use of such labels. Such employees shall not be given custody of more labels than are necessary to accommodate the manufacturer's anticipated production for one month. If the conditions of custody are violated, the [Administrative Agency] or an inspection agency shall immediately regain posession of all labels that have not been applied to the manufactured buildings or building components and shall take such further action with respect to buildings or components already labeled, and with respect to future labeling, as it may deem necessary to assure compliance with the Act and these rules and regulations.

#### (3) <u>Records</u>

Permanent records shall be kept of the handling of all labels, indicating at least how many labels have been applied to buildings or building components (or groups of components), which labels have been applied to which buildings or building components, the disposition of any damaged or rejected labels, and the location and custody of all unused labels. Such records shall be maintained by the manufacturer or by the inspection agency. A copy of such records covering attachment of each label shall be sent to the [Administrative Agency] upon request.

#### (4) Attachment

The [Administrative Agency] or an inspection agency shall attach labels to buildings or building components manufactured in accordance with an approved building system, and meeting the requirements of an approved compliance assurance program.

(a) Manufacturers may attach labels to manufactured buildings and building components manufactured in accordance with an approved compliance assurance program, if custody of the labels has been entrusted to them in accordance with subsection B(2)(d) of this Section.

#### (C) Suspension and Revocation

The [Administrative Agency], an evaluation agency, or an inspection agency may suspend or revoke, or cause to be suspended or revoked, the certification of any manufactured building or building component which the [Administrative Agency] or an inspection agency finds not to comply with the Act or these rules and regulations, or which has been manufactured pursuant to a building system or a compliance assurance program as to which approval has been suspended or revoked, or which has not been manufactured in accordance with the approved compliance assurance program. The [Administrative Agency], an evaluation agency, or an inspection agency shall remove or cause to be removed, labels from any such manufactured building or building component until it is brought into compliance with the Act and these rules and regulations. Notice of suspension or revocation of certification shall be in writing with the reasons for suspension or revocation clearly set forth therein. Appeals from such suspensions or revocations shall receive timely review.

(1) Upon suspension or revocation by the [Administrative Agency], an evaluation agency, or an inspection agency of the approval of any building system or compliance assurance program, no further labels shall be attached to any manufactured building or building component manufactured pursuant to the building system or compliance assurance program with respect to which the approval was suspended or revoked. Upon termination of such suspension or revocation, labels may again be attached to the manufactured building or building component manufactured after the date approval is reinstated. Should any building or building component have been manufactured during the period of suspension or revocation, it shall not be labeled unless the [Administrative Agency], evaluation agency or inspection agency has inspected such building or building component and is satisfied that all requirements for certification have been met.

(2) The manufacturer shall return all labels allocated for a manufactured building or building component to the issuing agency no later than thirty (30) days from the effective date of any suspension or revocation of the approval by the [Administrative Agency], evaluation agency or inspection agency, of the building system or compliance assurance program pursuant to which the manufactured building or building component is being manufactured. The manufacturer shall also return to the issuing agency all labels which it determines for any reason are no longer needed.

#### (D) Variations of Certified Units

Manufactured buildings or building components certified and labeled pursuant to the Act and these rules and regulations shall not be varied in any way prior to the issuance of a [certificate of occupancy] without resubmission to the [Administrative Agency] or an evaluation agency for approval of the variation and of the unit which includes the variation. The [Administrative Agency] or an inspection agency shall inspect the building or building component wherever it is located and such inspection may include such tests or destructive or nondestructive disassembly as the [Administrative Agency] or an inspection agency deems necessary to assure compliance with the Act and these rules and regulations. Local enforcement agencies may be designated as inspection agencies for such purposes.

#### SECTION 4: INSPECTIONS BY [ADMINISTRATIVE ACENCY] OR ITS AGENTS

The [Administrative Agency] shall make, or cause to be made, such inspections of the entire process of manufacturing, certifying, handling, storing and transporting of manufactured buildings and building components produced pursuant to approved building systems as it deems necessary.

(A) As part of the process of evaluating building systems and compliance assurance programs, the [Administrative Agency] or an evaluation agency shall inspect the manufacturing facilities in which the buildings or building components are to be manufactured.

(B) The [Administrative Agency] or an inspection agency, shall make such inspections as may be required by an approved compliance assurance program, or as may be deemed necessary by the [Administrative Agency].

(C) Prior to the issuance of a [certificate of occupancy], the [Administrative Agency] or an inspection agency shall inspect, or cause to be inspected, certified manufactured buildings or building components which it determines to have been sufficiently damaged after certification to warrant such inspection and to take such action with regard to such buildings or building components as is authorized under Section 3(C) of Part IV hereof, or as is otherwise necessary to eliminate dangerous conditions.

(1) The [Administrative Agency] shall require manufactured buildings or building components which are so damaged as no longer to comply with the Act and these rules and regulations to be brought into compliance promptly. If such buildings or building components are not brought into compliance with the Act and these rules and regulations within a reasonable time, or if they are so damaged that they cannot be brought into compliance, the [Administrative Agency] shall order that the labels be removed from such buildings or building components. Irreparably damaged buildings or building components shall be disposed of in accordance with applicable law.

(D) The [Administrative Agency] shall examine each approved inspection agency, at any reasonable time, and without prior announcement, in order to monitor the reliability of each agency and of its monitoring of each compliance assurance program. Each such examination shall investigate the adequacy of all procedures used by the agency in monitoring compliance assurance programs including inspection, tests, production methods, process controls, operator performance, materials receipt, storage and handling, workmanship standards, records and all other activities which implement the compliance assurance program in the manufacturing facility during transport, on-site, and at critical subcontractors' facilities. The results of such examinations shall be kept on file at the offices of the [Administrative Agency]. Copies of such reports shall be sent to the inspection agency. Inspection agencies shall be specifically notified of any deficiencies and of the manner in and time by which such deficiencies must be eliminated. If deemed necessary by the [Administrative Agency], an agency's approval may be suspended or revoked as provided in Part VI, Section 3 hereof.

(1) Such examinations shall also be conducted before approving an inspection agency.

(E) The [Administrative Agency] shall examine each approved evaluation agency, at any reasonable time, and without prior announcement, in order to monitor the reliability of each agency. Each such examination shall investigate the adequacy of all evaluative procedures including engineering evaluation of plans, specifications and test results, testing, and analysis of compliance assurance programs. The results of such examination shall be kept on file at the offices of the [Administrative Agency]. Copies of such reports shall be sent to the evaluation agency. Agencies shall be specifically notified of any deficiencies and of the manner in and time by which such deficiencies must be eliminated. If deemed necessary by the [Administrative Agency], approval of an evaluation agency may be suspended or revoked as provided in Part VI, Section 3 hereof.

(1) Such examinations shall also be conducted before approving an evaluation agency.

(F) No inspection entailing disassembly, damage to or destruction of certified manufactured buildings or building components shall be conducted except to implement Sections 7(d) or 11(a)(1) and (2) of the Act or Section 4(A) of Part IV hereof.

#### SECTION 5: LOCAL ENFORCEMENT AGENCY PROCEDURES AND INSPECTIONS

(A) Local enforcement agencies shall issue building permits for certified manufactured buildings prior to installation, and shall not withhold issuance of building permits for buildings containing certified building components which in all other respects comply with all applicable building codes, provided that any manufactured building or building component found by the [Administrative Agency] not to comply with the Act or these rules and regulations shall be brought into compliance before such permit shall be issued. An application to a local enforcement agency for a building permit shall, when requested, in addition to any other requirements, contain:

(1) A statement that the work to be performed under such permit is to include the installation of a certified manufactured building or building component in accordance with the provisions of the Act; the statement to be signed by the applicant or his agent, with the appropriate address;

(2) A true copy of the approved building system with respect to which the manufactured building or building component was manufactured or is to be manufactured, where one has not previously been furnished to that local enforcement agency; and

(3) A copy of the Building System Approval Report, where it has not previously been furnished to that local enforcement agency.

(B) Local enforcement agencies shall inspect site preparation work including foundations, not within the scope of the approval and certification, and the structural, mechanical, plumbing and electrical connections among units, for compliance with applicable law.

(C) Local enforcement agencies shall inspect all manufactured buildings or building components upon, or promptly after, installation at the building site to determine whether all instructions in the Building System Approval Report or conditions listed on the manufacturer's data plate have been followed. This may include tests for tightness of plumbing and mechanical systems, and for malfunctions in the electrical system, and a visual inspection for obvious nonconformity with the approved building system.

(1) Destructive disassembly of certified buildings and building components shall not be performed in order to conduct such tests or inspections, nor shall there be imposed standards or test criteria different from those adopted by the [Administrative Agency] or specified in the Building System Approval Report.

(2) Non-destructive disassembly may be performed only to the extent of opening access panels and cover plates.

(D) Local enforcement agencies shall cause the disposition of noncomplying manufactured buildings and building components after consultation with the [Administrative Agency] and reasonable notice to the manufacturer or owner thereof, as the case may be, of the proposed disposition.

(E) Local enforcement agencies shall issue [certificates of occupancy] for certified manufactured buildings, and for buildings containing certified building components which otherwise comply with all applicable building codes, after they have been installed and inspected pursuant to the Act and these rules and regulations, provided that any manufactured building or building component found not to comply with the Building System Approval Report shall be brought into compliance before such [certificate of occupancy] shall be issued.

(F) When the local enforcement agency is making an inspection and finds violations, it shall report the details of the violations in writing to the [Administrative Agency]. Where violations are hazardous to occupants, a [certificate of occupancy] shall not be issued and the building shall not be occupied before such hazards are corrected. If the violations are not hazardous, a provisional [certificate of occupancy] may be issued.

#### SECTION 6: FEES

(A) A deposit of \_\_\_\_\_\_\_ shall be required upon application to the [Administrative Agency] to perform any of these functions.

(B) Fees charged by the [Administrative Agency] for functions performed by it shall be:

\$\_\_\_\_\_ per manhour of evaluation time; \$\_\_\_\_\_ per manhour of inspection time; and \$\_\_\_\_\_ per mile of travel plus related expenses.

#### SECTION 7: NOTIFICATION OF CHANGES IN NAME, ADDRESS, OWNERSHIP OR LOCATION

(A) Manufacturers shall notify the [Administrative Agency] in writing within ten (10) days of any of the following occurrences:

- (1) The corporate name is changed;
- (2) The main address of the company is changed;
- (3) There is a change in 25% or more of the ownership interest of the company within a twelve month period;
  - (4) The location of any manufacturing facility is changed;
  - (5) A new manufacturing facility is established; or
  - (6) There are changes in principal officers of the firm.

(B) Evaluation agencies and inspection agencies shall notify the [Administrative Agency] in writing within ten (10) days of any of the following occurrences:

- (1) The company name is changed;
- .(2) The main address of the company is changed;
- (3) There is a change in 25% or more of the ownership interest or control of the company within a twelve month period;
- (4) The location of any testing facility is changed;
- (5) A new testing facility is established; or
- (6) There are changes in principal officers and key supervisory and responsible personnel of the firm.

#### SECTION 8: PROPRIETARY INFORMATION

All information relating to building systems and compliance assurance programs which the manufacturer or other party considers proprietary shall be so designated by him at the time of its submission, and shall be so held by the [Administrative Agency] and by the inspection, evaluation and local enforcement agencies, except as the [Administrative Agency] determines in each case, that disclosure is necessary to carry out the purposes of the Act.

# PART V: REQUIREMENTS FOR SUBMISSION OF BUILDING SYSTEMS AND COMPLIANCE ASSURANCE PLOGRAMS

Building systems shall meet the requirements set forth below to be evaluated for compliance with the standards, specifications and requirements adopted by the Building Code Council.

#### (A) General Requirements

(1) Building systems, including all plans, specifications and other documentation, shall be submitted in \_\_\_\_\_ copies.

(2) Building systems shall be submitted in the form prescribed by the [Administrative Agency] or [in Appendix \_\_\_\_\_ hereto] and shall be accompanied by all required fees.

(3) All documents submitted with the application shall be identified to indicate the manufacturer's name, office address and the address of the manufacturing facility.

(4) Manufacturers shall submit plans showing all elements relating to specific systems on properly identifiable sheets.

(5) Each building system application shall bear the signature and seal of an approved registered architect or professional engineer certifying that the building system complies with the codes and standards promulgated herein [if required by State law].

(6) All work to be performed on-site, including connection of all systems, equipment and appliances, shall be identified and distinguished from work to be performed in the manufacturing facility. (7) A 3" x 4" blank rectangular space shall be provided on all sheets of plans near the title box for the [Administrative Agency's] stamp of approval.

(8) Grade, quality and identification of all materials shall be specified.

(9) Design calculations and test reports shall be submitted when required.

(10) Drawings shall be drawn to scale.

(11) Drawings shall indicate the location of the approved label and data plate.

(12) Drawings shall be dated and identified. The number of sheets in each set shall be indicated.

#### (B) Required Construction Details

Building systems for manufactured buildings shall provide or show, but not be limited to, the details listed below including the method of their testing or evaluation, or both. These requirements shall apply to the building systems for building components only to the extent deemed necessary by the [Administrative Agency] or by an evaluation agency to permit a proper evaluation of the building component.

#### (1) General

- (a) Details and methods of installation of manufactured buildings or building components on foundations and/or to each other.
- (b) All exterior elevations.
- (c) Cross sections as necessary to identify major building components.
- (d) Details of flashing, such as at openings and at penetrations through roofs and subcomponent connections. Indicate flashing material and gauge to be used.
- (e) Attic access and attic ventilation.
- (f) Exterior wall, roof and soffit material as well as finish.
- (g) Interior wall and ceiling finish material.
- (h) Fire separation walls.
- (i) Sizes, locations and types of doors and windows.
- (i) Recommended foundation plans, vents and underfloor access.

#### (2) Building Classification

- (a) Occupancy or use.
  - (b) Area, height, and number of stories.
  - (c) Type of construction.
  - (d) Fire resistance ratings.

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#### (3) Space and Fire Safety

- (a) Detail of fire resistance rated assemblies for all stairway enclosures, doors, walls, floors, ceilings, partitions, columns, roof and shaft enclosures.
- (b) Details as to width of all aisles, exits, corridors, passageways and stairway enclosures.
- (c) Toxicity and flame spread classification of finished materials.

#### (4) Structural Detail Requirements

- (a) Engineer's calculations of structural members, where appropriate.
- (b) Design soil bearing value.
  - (c) Structural and framing details of all floors, roof and walls.
  - (d) Details and stress diagrams of roof trusses.
  - (e) Details of reinforcing steel.
  - (f) Complete loading schedule.
  - (g) Column loads and column schedule.
  - (h) Lintel schedule.
  - (i) Size, spacing and details of all structural elements.
  - (j) Grade or quality of all structural elements (lumber, steel, etc.)
  - (k) Elevation of structural elements, walls or sections thereof, providing resistance to vertical loads or lateral forces.
  - (1) Complete details of all structural connections.
- (5) Mechanical Detail Requirements
  - (a) Location of all equipment and appliances. Indicate equipment and appliances listed or labeled by approved agencies.
  - (b) Heat loss calculations, where appropriate.
  - (c) Manufacturer's name, make, model, number, BTU, and input rating of all equipment and appliances, as appropriate, or the equal thereof.
  - (d) Duct and register locations, sizes, and materials.
  - (e) .Clearances from combustible material or surfaces for all ducts, flues, and chimneys.
  - (f) Method of providing required combustion air and return air.

- (g) Location of flues, vents and chimneys and clearances from air intakes and other vents and flues.
- (h) Details regarding dampers in ducts penetrating fire separations.
- (i) Complete drawings of fire sprinkler systems, standpipe system or fire alarm system, if required.
- (j) Detail of elevator or escalator system, including method of emergency operation.

#### (6) Plumbing Detail Requirements

- (a) Plan or schematic drawing of the plumbing layout including but not limited to, size of piping, fitting, traps and vents, cleanouts and valves, gas, water, and drainage system.
- (b) Plumbing materials, and location of all equipment and appliances to be used. Indicate fixture unit capacity of system(s) and the make, model and rating/capacity of equipment and appliances. Indicate equipment and appliances listed or labeled by approved agencies.
- (c) Make and model of safety controls (such as for water heaters), their location, and whether listed or labeled by approved agencies.
- (d) How piping is to be supported and intervals of support.
- (e) Location of vents above roofs and required clearances, including but not limited to clearances from air intakes, other vents and flues.
- (f) Methods of testing.

#### (7) Electrical Detail Requirements

- (a) Plan of service equipment, including service entrance, conductors, service raceway and clearances above ground and above structures.
- (b) Method and detail for grounding service equipment.
- (c) Single line diagram of the entire electrical installation.
- (d) Load calculations for service and feeders.
- (e) Sizes of all feeders and branch circuits.
- (f) Size, rating and location of main disconnect/overcurrent protective devices.
- (g) Method of interconnection between manufactured buildings or building components and location of connections.
- (h) Location of all outlets and junction boxes.
- (i) Method of mounting fixtures and wiring installations.

#### SECTION 2: COMPLIANCE ASSURANCE PROGRAMS

Compliance assurance programs shall be approved if they meet the requirements set forth in this Section. It is the manufacturer's responsibility to execute every aspect of this program. The manufacturer shall continue to be responsible for all corrective actions required, and if the [Administrative Agency] delegates its inspection duties, the contractual relationship between the manufacturer and the inspection agency shall not diminish such responsibility. The manufacturer shall cooperate with the inspection agency by providing the inspection agency with all necessary reports, information, documents, records, facilities, equipment, samples and other assistance for assuring compliance.

The manufacturer's compliance assurance program shall be submitted in the form of a compliance assurance manual which shall contain complete documentation of all the compliance assurance activities of both the manufacturer and the inspection agency. The manual shall be comprehensively indexed, and shall treat the material listed here in detail.

(A) Organization Requirements

(1) A procedure for periodic revision of the manual.

(2) An organizational structure for implementing and maintaining the compliance assurance program and its functional relationship to other elements of the organization structure of the manufacturer, which structure shall provide for independence from the production department .

(a) Company officers and employees in charge of the compliance assurance program must be identified, and their training and qualifications specified.

(3) A uniform system of audit (in-depth analysis of program effectiveness and means to identify deficiencies) to monitor program performance periodically.

(4) Complete and reliable records of manufacturing and site operations, if any (suitable means of storage, preservation and accessibility of copies of forms to be utilized shall be included.)

(5) A system to control changes in production or inspection procedures.

(6) A system to assure that working drawings and specifications, working instructions and standards, procurement documents, etc., conform to the approved building system.

(7) A serial numbering system for buildings or building components.

(8) The method of safekeeping, handling and attaching labels and identification of those employees responsible therefor.

#### (B) Materials Control

(1) Procedures to assure effective control over procurement sources to ensure that materials, supplies and other items used in production and site operations, if any, conform to the approved plans, specifications and quality requirements. (2) Procedures for inspection of materials, supplies and other items at the point of receipt.

(3) Method of protection of materials, supplies and other items against deterioration prior to their incorporation in the certified buildings or building component.

(4) Provision for disposal of rejected materials, supplies and other items.

(C) Production Control

(1) Procedures for timely remedial and preventive measures to assure product quality.

(2) Provision, maintenance and use of testing and inspection equipment to assure compliance with the approved building system.

(3) Provision for frequency of sampling inspections.

(4) Provision of necessary authority to reject defective work and carry out compliance assurance functions, notwithstanding any conflict with production department goals and needs.

(5) A schematic of the manufacturing operation showing the location of inspection stations, and "hold" points for mandatory inspection characteristics.

(6) Inspection and test procedures, including accept/reject criteria and mandatory inspection characteristics.

(7) Standards of workmanship.

(8) Provision for disposal of rejects.

#### (D) Finished Product Control

(1) Procedure for final inspection of all manufactured buildings or building components before shipment to the site or storage point, including identification and labeling.

(2) Procedures for handling and storing all finished manufactured buildings or building components, both at the manufacturing plant or other storage point and after delivery to the building site.

(3) Procedures for packing, packaging and shipping operations and related inspections.

(4) Procedures for transportation, including all measures to protect against damage while in transit, and setting forth the modes of transportation to be utilized and the carrying equipment and procedures.

#### (E) Installation Control

(1) Installation procedures including component placement, equipment and procedures, field erection and finishing work, utility connection instructions and all appropriate on-site inspection criteria and test descriptions.

(2) Organizational provisions for field repair and disposal of rejects.

#### (F) Permission for Inspection

The manufacturer shall provide the [Administrative Agency] with written permission, signed and notarized, for the [Administrative Agency] to inspect his manufacturing facilities, his products, and building sites under his control at any reasonable time without prior announcement.

#### (G) Inspections by the [Administrative Agency]

The Compliance Assurance Manual shall contain detailed plans for inspections by the [Administrative Agency] or inspection agency.

## PART VI: APPROVAL OF INSPECTION AND

### **EVALUATION AGENCIES**

SECTION 1: REQUIREMENTS FOR SUBMISSION

An inspection or evaluation agency seeking approval shall submit an application to the [Administrative Agency] which shall include the items listed in this Section.

(A) The original Articles of Incorporation of the agency and all subsequent amendments thereto, as filed in the State of incorporation.

(B) The bylaws of the organization, if any.

(C) The names, addresses and business affiliations of all members of the Board of Directors and of top management personnel.

(D) Stock owned in amounts over \$5,000 reflecting the financial interests of the agency's Board of Directors and top management personnel (if requested by the [Administrative Agency]).

(E) Certification by the agency that:

(1) Its board of directors, as a body, and its technical personnel, as individuals, can exercise independence of judgment; and,

(2) Its activities pursuant hereto will result in no financial benefit to the agency via stock ownership, or other financial interests in any producer, supplier or vendor of products involved, other than through standard published fees for services rendered.

(F) Names, years of experience, State in which professionally registered and other qualifications of the directors of inspection or evaluation programs.

(G) Names and years of experience of employees practicing in the following disciplines: architecture, structural engineering, mechanical engineering, electrical engineering, fire protection and other branches of engineering; the States in which each is registered and the services each performs.

(H) An organization chart showing management and supervisory persons including the number of graduate engineers and architects, and the names of all

consulting engineers or architects, designating which are full-time and which are part-time engineers.

(I) Number and location of factory inspectors, supervisors, and other technicians, including evaluators of factory inspectors and the qualifications of each specialized group, including records of work experience, licenses held and other pertinent qualifications; descriptions of the type of work each group and each technician is expected to perform, and the qualifications of each group and each technician to perform the work assigned.

(J) An outline of the training program, if any, of the agency to assure that all inspectors, evaluators and other technicians are properly trained to do each job assigned to them.

(K) An outline of the general procedures for supervision of inspectors and evaluators, including checking and evaluation of their work.

(L) All engineers, technicians and other personnel who will perform services for the organization but who are not employees of the organization, and the supervisory and other relationships which each will have to the agency.

(M) Type of products, components, equipment, structures and other items which the organization has evaluated, tested, or inspected, and the number of years of experience the organization has had with each, and the type of codes, standards, specifications and requirements with respect to which the organization has had experience in providing evaluation, inspection or testing services, and the number of years of experience with each.

(N) Description of the record-keeping system the agency proposes to use with particular regard to availability of records to the [Administrative Agency] and the capacity to render reports to the [Administrative Agency].

(0) Description of the frequency with which the agency is capable of performing inspections or evaluations.

(P) List of the States in which the agency is now approved to inspect or evaluate manufactured buildings or building components, and a further listing of those States in which the agency intends to seek such approval within the next two (2) years.

(Q) Certification that the agency is able to evaluate building systems for compliance with the codes, standards, specifications and requirements adopted herein, or manufactured buildings or building components for compliance with approved building systems.

#### SECTION 2: PROCEDURES FOR APPROVING AND DELEGATING

(A) The [Administrative Agency] may approve inspection or evaluation agencies which meet the requirements of Section 1 of this Part and which the [Administrative Agency] finds otherwise qualified to perform the functions proposed to be delegated to them.

(B) Prior to a full evaluation of an application for approval, the [Administrative Agency] shall determine whether such application is suitable forprocessing. In the event the application is found to be unsuitable for

processing, the applicant shall be notified in writing of such unsuitability and the basis thereof within thirty (30) days of the date the application is received by the [Administrative Agency]. In such event, all but \$25.00 of the fee will be returned, and the findings of unsuitability shall be without prejudice. Any subsequent submission shall be treated as a new application.

(C) In the event an inspection or evaluation agency is not approved, the [Administrative Agency] shall return one complete application to the applicant with a written explanation of the reasons for such disapproval attached thereto.

(D) Approval of inspection or evaluation agencies shall be evidenced by a letter to the applicant indicating such approval and stating specifically the functions which the applicant has been approved to perform. Such approval shall not constitute the actual delegation of such functions.

#### SECTION 3: SUSPENSION AND REVOCATION

#### (A) Grounds

The [Administrative Agency] may suspend or revoke its approval of any evaluation agency or inspection agency if the approval was issued in error, was issued on the basis of incorrect information, or was issued in violation of the Act or these rules and regulations, or if the agency violates the Act or these rules and regulations, if examination pursuant to Part IV, Sections 4 (D) and (E) hereof disclose that the agency has failed to perform properly, or for such other cause as may be deemed sufficient by the [Administrative Agency] to warrant such action. Appeals from suspensions or revocations shall receive timely review.

#### (B) Procedures in Event of Suspension or Revocation

#### (1) General

If the [Administrative Agency] suspends or revokes the approval of an evaluation or inspection agency, the evaluation or inspection agency shall be given notice in writing of the suspension or revocation with the reasons therefor set forth therein. Manufacturers being evaluated or inspected by such agencies, and all local enforcement agencies within this State shall also be notified in writing of such suspensions or revocations. Such notices shall contain instructions to the manufacturer and to the local enforcement agency as to manufactured buildings or building components previously certified by an agency whose approval has been suspended or revoked.

#### (2) Records

An evaluation or inspection agency whose approval has been suspended or revoked shall within (90) days of the suspension or revocation deliver to the custody of the [Administrative Agency] the originals of all records required by the Act and these rules and regulations to be made of, or in the course of, the agency's operations pursuant to the Act and these rules and regulations.

#### (3) Labels

An evaluation or inspection agency for which approval has been suspended or

revoked shall, within ninety (90) days of the suspension or revocation, deliver to the custody of the [Administrative Agency] all labels in the agency's possession, under its control, or for which it is responsible pursuant to the Act and these rules and regulations.

# PART VII: RECIPROCITY

If the [Administrative Agency] finds that the standards for the manufacture and inspection of manufactured buildings or building components prescribed by statute or rules and regulations of another State, or other governmental agency, meet the objectives of the Act and these rules and regulations, and are enforced satisfactorily by such other State, or other governmental agency, or by their agents, the [Administrative Agency] shall accept manufactured buildings or building components which have been certified by such other State or governmental agency, and shall assure that the appropriate label is attached thereto. The standards of another State or governmental agency shall not be deemed to be adequately enforced unless such other State or governmental agency provides for notification to the [Administrative Agency] of suspensions or revocations of approvals issued by that other State or governmental agency in a manner satisfactory to the [Administrative Agency], and so notifies the [Administrative Agency].

SECTION 1: PROCEDURES FOR GRANTING OR REFUSING RECIPROCITY TO ANOTHER JURISDICTION

(A) The [Administrative Agency] may evaluate the statute, rules and regulations of another State or governmental agency at any time.

(B) If the [Administrative Agency] finds that the standards prescribed by the statute or rules and regulations of another state or other governmental agency meet the objectives of this Act, and that these rules and regulations are satisfactorily enforced, it shall extend reciprocity to that jurisdiction by:

(1) Giving notice to any requesting manufacturer;

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- (2) Giving notice to the [Administrative Agency] of the other jurisdiction;
- (3) Publishing a notice of the grant of reciprocity in ;
- (4) Giving notice to all local enforcement agencies in this State.

(C) If the standards of the other state or governmental agency do not meet the objectives of this Act, or are inadequately enforced, or both, reciprocity shall not be extended. In that event, the Agency shall notify any requesting manufacturer and the [Administrative Agency] of the other state of the refusal and the reasons therefor.

#### SECTION 2: PROCEDURES FOR RECIPROCALLY CERTIFYI'G MANUFACTURED BUILDINGS OR BUILDING COMPONENTS

A manufacturer from a jurisdiction to which reciprocity has been extended shall submit to the [Administrative Agency] evidence that his building system and compliance assurance program have been approved by such state or governmental agency. The [Administrative Agency] shall verify the approval and shall notify the manufacturer in writing of such verification and that properly labeled buildings or building components of his manufacture will be accepted.

#### SECTION 3: SUSPENSION AND REVOCATION

The [Administrative Agency] shall suspend or revoke, or cause to be suspended or revoked, its acceptance or certification or both of such reciprocally certified manufactured building or building component if it determines that the standards for the manufacture and inspection of such manufactured buildings or building components of such other State or other governmental agency do not meet the objectives of the Act and these rules and regulations, or that such standards are not being enforced to the satisfaction of the [Administrative Agency]. If such other State or governmental agency or its agents should suspend or revoke its approval and certification, the acceptance or certification or both granted under this Part shall be revoked or suspended accordingly. Notice to the manufacturer and to the [Administrative Agency] of such other State of such suspension or revocation shall be in writing with the reasons for such suspension or revocation set forth therein. Appeals from such suspensions or revocations shall receive timely review.

## PART VIII: APPEALS

#### SECTION 1: APPLICA.IONS FOR APPEAL

#### (A) Who May File

Any person or party in an individual capacity or on behalf of a class of persons or parties affected by any rule or regulation or by any decision of or action by any evaluation agency, inspection agency or the [Administrative Agency] may file an application for appeal.

#### (B) Time of Filing

An application for appeal shall be filed within ninety (90) days after the date of the promulgation of the rule or regulation, or the date of the decision or action from which the appeal is being taken.

#### (C) Filing

An application may be filed either personally or by mail at the principal office of the Building Code Council.

#### (D) Form of Application

The application need not follow any prescribed form, but shall be in writing and shall contain sufficient information, as set forth in subsection (E) hereof, to apprise the Council of the rule and regulation appealed from, or of the facts and circumstances surrounding the decision or action appealed from and giving the grounds upon which the appeal is based.

#### (E) Contents of Application to Building Code Council

The application shall include, where applicable, the following documentation:

- A copy of the rule, regulation, initial determination, decision, direction, ruling or order which is the subject of the appeal;
- (2) A copy of the building system, compliance assurance program or other document involved;
- (3) A description of the manufactured building or building component affected;
- (4) A statement of the relief sought by the appellant;
- (5) In the event of an appeal from an action or decision of an inspection or evaluation agency, the application shall contain a statement of the prior decision or other action of the [Administrative Agency] on such appeal.

#### SECTION 2: HEARINGS AND HEARING NOTICES

The Building Code Council shall promptly hear all appeals. Except in unusual circumstances, a hearing on an appeal shall be held no sooner than ten (10) days after the mailing by the Building Code Council of a notice of such hearing to all interested parties. Such notice shall state the legal authority for, and the nature of the hearing, and the time, date and place thereof.

SECTION 3: CONDUCT OF HEARINGS

All hearings shall comply with this section.

(A) Appearances. Any interested person may appear and be heard.

(B) <u>Adjournment</u>. The Building Code Council may, on its own motion, or on the motion of any person, adjourn a hearing to such time and place as the Building Code Council may determine.

(C) <u>Quorum</u>. At least three members of the Building Code Council shall be present at all times during a hearing.

(D) Witnesses. A person may produce such witnesses as he deems appropriate.

(E) Evidence. The Building Code Council shall not be bound by common law or statutory rules of evidence in the conduct of the hearing. The Building Code Council shall consider in evidence any testimony, documents or other materials submitted by the appellant or the appellee including the results of formal or informal appeals before national codes and standards organizations or national codes and standards appeals organizations.

(F) <u>Procedures</u>. All parties shall be afforded an opportunity to state their positions, either by the testimony of witnesses or by a formal or informal statement by themselves, their attorneys, or any other persons. At the conclusion of the parties' statements, the Building Code Council may question the appellant or appellee or any witness and any other party who so desires shall be heard. (G) Official Reporter All hearings shall be reported by an official reporter. The official transcript shall be open for inspection at the offices of the Building Code Council. Copies of transcripts shall be available from the official reporter on payment of the charges therefor.

#### SECTION 4: DECISIONS

All final decisions f the Building Code Council shall be in writing, shall be rendered within thirty days of the close of the hearings and shall state the reasons therefor. One copy of the final decision shall immediately be transmitted by mail to the appellant and one copy to the appellee. Final decisions shall be permanently filed in the office of the Building Code Council. .

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16. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)

To assist the states in developing their building regulatory activities and functions, the Coordinated Evaluation System (CES) Project has defined and developed model informational documentation pertaining to the functional areas of data submission, evaluation, approval, compliance assurance, installation data, and owner information.

This is a preliminary report which gives the results of the investigation to date, and presents discussions of informational needs and sample model documents pertaining to manufactured buildings and building components. The model documentation is based on the Model Rules and Regulations for manufactured buildings developed by a Department of Commerce sponsored working task group, and the results of a comprehensive state-of-the-art study of most of the existing state building regulatory programs. The documentation presented in this report covers all functional areas except owner information which is not usually subject to regulation and will be covered by a separate report. Emphasis was placed on developing documentation applicable primarily to one and two family detached dwellings.

Based on the comments received on this preliminary report, the documentation presented herein will be revised and a final report issued.

17. KEY WORDS (Alphabetical order, separated by semicolons) Buildin assurance; evaluation; industrialized building; NCSBCS; standards; state regulation.	-	
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