

Industrialized Buildings Commission

◆ An Interstate Compact ◆

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www.interstateibc.org

MINUTES

Rules Development Committee
Wednesday, July 16, 2014
Herndon, Virginia

Chairman Rothman convened a meeting of the Rules Development Committee on Wednesday, July 16, 2014, at 9:00 a.m. at the Crowne Plaza Dulles Airport, 2200 Centreville Road in Herndon, Virginia. Attendance was taken as noted below:

Members Present: Barbara Bieganski, Vanguard Modular Building Systems
Denise Beer, Williams Scotsman
Donald F. Engle, NRB (USA), Inc.
Christine Kline, Mark Line Industries of Pennsylvania
Emory Rodgers, Commonwealth of Virginia
James Rothman, PFS Corporation
Norman Wang, State of Maryland

Others Present: Michael Baier, State of New Jersey
Debbie Becker, Industrialized Buildings Commission
William F. Begley, Sea Box, Inc.
Jerry Brosius, Modular Code Consultants
Andrew Carlson, Pyramid1, Inc.
Jeffrey Clouse, T. R. Arnold & Associates, Inc.
Warren Ducharme, State of Rhode Island
N. Kevin Eğilmez, Industrialized Buildings Commission
Robert Gorleski, PFS Corporation
Bruce Hagen, State of North Dakota
Tom Hardiman, Modular Building Institute
Steve Hernick, State of Minnesota
Eric Leatherby, Commonwealth of Virginia
Chuck Osterday, NTA
Dennis Quittschreiber, Dynamic Homes
Brennen Snyder, Modspace
Eric Snyder, Modspace
Randy Soper, Sea Box, Inc.
David Wyancko, Industrialized Buildings Commission

Approval of Minutes

On a motion by Barbara Bieganski, seconded by Don Engle, the Committee approved the minutes of the July 17, 2013, meeting as submitted.

Correspondence

The Secretariat noted that a list of correspondence was available.

Old Business

There were no advisory reports given.

New Business

Chairman Rothman announced that he will be resigning from the Committee following the meeting because of his upcoming retirement in early 2015. Kevin Egilmez indicated that the Commission will send out nomination forms prior to the next RDC meeting to fill the vacancy.

Chairman Rothman noted that his and three other RDC representatives' terms were due to expire. Don Engle moved to renew the three-year terms for Ed Landon, Emory Rodgers, and Denise Beer. The motion, seconded by Christine Kline, was approved unanimously.

Chairman Rothman noted that one state and two industry member positions are still vacant. Tom Hardiman said that Excel Homes expressed an interest in becoming a residential-industry member and agreed to provide candidates for other industry vacancies.

Barbara Bieganski suggested the Commission may wish to contact Kentucky regarding joining the compact. She added that Kentucky no longer accepts plumbing inspections performed by third-party certified inspectors.

The Committee discussed local amendments to North Dakota State Building Code that in some cases make it less stringent. McKenzie County amendment, for example, permits certain multifamily residential structures to be built without fire sprinklers (Attachment A). It was suggested that procedures be implemented to ensure buildings designed to comply with locally amended codes are not placed outside those jurisdiction. Kevin Egilmez recommended that a bulletin be issued to evaluation agencies specifying the type of information that must be included on data plates and making manufacturers responsible for providing copies of local amendments. The bulletin would also distinguish between local code amendments and code exemptions which do not apply to new industrialized buildings.

The Committee continued its discussion on acceptability of non-ASTM steel. Andrew Carlson informed the Committee that he obtained written opinions from New Jersey and North Dakota: Bruce Hagen with North Dakota stated that the acceptance of foreign steel would be up to the local inspector (Attachment B); Mike Baier with New Jersey indicated that based on AISC 303-05 provisions material could be acceptable if approved by the owner's designated representative for design (Attachment C). Kevin Egilmez recommended that the Committee refer the issue to the Commission so that it can be handled under the Formal Technical Opinion provisions of the UAP. Purpose of an FTO is to ensure uniform code interpretation and enforcement by participating states.

A motion was made by Jim Rothman, seconded by Emory Rodgers, and unanimously approved, for the issue to be referred to the Commission.

The Committee reviewed draft Formal Interpretation 14-XX, CA Documents per Manufacturing Facility (Attachment D). According to Kevin Egilmez, manufacturers sometimes maintain more than one compliance assurance manual for a manufacturing facility. It usually occurs when a company consolidates their manufacturing facilities or when a facility elects to contract with more one evaluation agency. Maintaining more than one manual leads to differences especially when they are approved by different evaluation agencies. The purpose of Formal Interpretation 14-XX would be to limit each manufacturing facility to one manual and, in cases where there are two evaluation agencies, to have the same manual approved by both agencies. Don Engle stated that manufacturing facilities that have two independent production lines should be allowed to maintain separate manuals. The Committee agreed that language should be added clarifying the meaning of a manufacturing facility within the context of the Formal Interpretation.

The Committee discussed Andrew Carlson's proposed procedure for approving used chassis (Attachment E). It would require a new set of prints to be provided and calculations to be based on design values for the lowest steel grade. Warren Ducharme indicated building codes already have provisions for approving used materials and recommended researching each state's amended codes. It was determined that a Formal Interpretation or Bulletin would be needed. No action was taken by the Committee.

The Committee discussed the bulletin issued on August 14, 2013 for certifying existing industrialized buildings (Attachment F) and continued its discussion on Attachment D from the 2013 RDC Minutes (Attachment G). A motion was made by Barbara Bieganski, seconded by Denise Beer, and approved unanimously, to amend item 3 by replacing "current codes" with "codes in effect at the time of the date of manufacture in the receiving state" and adding a new sentence "If the date cannot be determined, it must meet the current codes." The Committee agreed to vote on the final language by letter ballot.

On November 14, 1995, the Commission issued a white paper describing the application of building systems documents to a typical one- and two-family dwelling. The Committee discussed a new updated white paper that incorporates various guidelines and clarifications issued by the Commission (Attachment H). Kevin Egilmez suggested replacing "building systems documents" with "master approval package (MAP)" since the former is a specific term used in the Model Rules and Regulations. The term MAP would refer to a set of documents that provide manufacturers the ability to develop custom plans and incorporate optional features. A motion was made by Christine Kline, seconded by Don Engle, and approved unanimously to issue the new bulletin.

Recommendations to the Commission

Chairman Rothman communicated the following RDC recommendations and actions to the Commission:

1. Reappoint Ed Landon, Emory Rodgers, and Denise Beer.
2. Draft and issue bulletin regarding ND local amendments.
3. Revise Formal Interpretation 14-XX to clarify meaning of “manufacturing facility”.
4. Draft Formal Interpretation on “Procedures for Labeling Existing Buildings” as amended.
5. Issue the new bulletin on “Master Approval Packages” to replace “Application of Building Systems Documents” issued in 1995.

Date and Location of Next Meeting

The next RDC meeting was tentatively scheduled for July 15, 2015, the third Wednesday in July. The secretariat stated that notice would be sent out regarding the meeting’s location.

The motion to adjourn, made by Don Engle and seconded by Christine Kline, was approved and the meeting adjourned at 1:25 p.m.

Respectfully submitted,

N. Kevin Eğilmez
Secretariat Staff

Attachments

Proposed Local Building Code Policy Amendments McKenzie County

The intent of these amendments is to provide provisions for allowing the construction and occupancy of multi-family residential structures without sprinkler systems and to provide limitations on commercial structures for fire safety. Sprinkler systems are currently required by the International Building Code (IBC) and International Fire Code (IFC), specific to section 903.2.8 and in addition to North Dakota state amendments. These amendments are to be temporarily used until the concerns listed below are addressed.

Rationale

The challenges associated with the sprinkler system requirements are unique to this area and include the following:

- Lack of available water and sufficient fire flows to accommodate sprinkler systems and hydrants.
- Lack of a certified fire marshal; therefore, necessary annual fire inspections as required by the IFC are not completed.
- Lack of necessary fire-fighting equipment (ladder trucks, pump trucks, etc) owned and operated by the townships and county.

Actual functionality of fire sprinkler systems is doubtful without the required fire flows and the assurance of properly installed, maintained, inspected, and functioning systems.

The provisions of the code generally result in trade-offs when sprinkler systems are provided. The trade-offs generally involve passive fire protection elements including fire stops, draft stops, and occupancy and area separation requirements within the building.

Suggested Alternative Design Requirements (*Offsetting fire sprinkler requirements*)

1. Multi-family units with ground level egress.
 - Buildings limited to 24 units.
 - Minimum separation of 20-feet between buildings
 - Maximum height of 36-feet.
 - Unless otherwise determined by the local Fire Chief.
 - 1-hour rated walls between buildings (Must be continuous from footing to roof deck).
 - 1-hour rated walls and ceilings between units are required throughout. 5/8" Type "X" gypsum board or equal must be continuous from footing to roof deck.
 - All units must be equipped with individual smoke detectors.
 - An emergency evacuation/safety plan must be provided and posted in each unit.
 - Provide occupancy provisions prohibiting smoking indoors, the use of cooking hot plates, and open flames.
 - Each unit must have its own individual egress door at grade level.

- Individual units must be limited to 500 square feet maximum.
- Fire lanes and turn-around-spaces for fire apparatus' must be provided, marked, and maintained.
- Buildings with Group-R fire areas must provide a monitoring system installed per IBC 903.4.1.
- Alarms shall sound in all dwelling units within the building.

2. Commercial Buildings in general

- No buildings greater than two-stories
 - Buildings greater than two stories must be equipped with full fire protection and sprinklers in accordance with the IBC and the IFC. The local fire district must be supplied with proper training and equipment needed to properly protect the structure and its occupants.
- Maximum height of 54-feet.
 - Or this may be determined by the Fire Chief.
 - IBC 903.2.11.3 states that buildings 55 ft. and above require sprinkling.
- An emergency evacuation /safety plan must be provided.

ADOPTED AUGUST 13, 2013



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PYRAMID1, INC.

ENGINEERING * DESIGN * REVIEW & INSPECTION AGENCY

June 24, 2013

James Rothman, PE
RDC Chairman
Industrialized Buildings Commission
505 Huntmar Park Drive, Suite 210
Herndon, VA 20170

DRAFT

RE: Acceptance of Steel Standards

Dear Mr. Rothman:

After discussions with IBC staff, I reached out to a listed contact given at the 2013 Training Seminar with the following excerpted question (see attachment for full correspondence):

Can non-ASTM steel specifically identified by an engineer on the design drawings (examples being an EU or JIS standard) be utilized in a structural steel building and deemed to comply with the International Building Code, specifically IBC Chapter 22, Steel?

The response from Bruce Hagen from North Dakota was as follows:

At the state we have no enforcement or inspection authority. We administer the program and we are not building officials. The person you would have to check with would be the local inspector in the jurisdiction where your project is going. If there is no inspector, you could use an independent inspection service to verify code compliance.

As far as I know, if something is engineered most officials would accept that but I can't say yes or no. The code references you provided would seem to support that.

My questions for clarification is that in instances where the state does not have mechanism for code interpretation, is not the IBC Designated Agency the Authority Having Justification for plan approval for this question?

I think this item should be clarified by the RDC specifically for this question and generically for IBC Designated Agencies for future approvals.

Please contact me if you have any questions or concerns.

Sincerely,

Andrew R Carlson, CBO, MCP
Review and Inspection Services

Enclosures - Bruce Hagen Email Correspondence

ARC/arc



State of New Jersey
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TRENTON, NJ 08625-0816

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

RICHARD E. CONSTABLE, III
Commissioner

September 26, 2013

Andrew Carlson
Pyramid1, Inc.
19260 C.R. 46
P.O. Box 463
New Paris, Indiana
46553

RE: Non ASTM Steel

Dear Mr. Carlson:

I am responding to your question about the use of steel that does not meet ASTM standards referenced under the 2009 International Building Code. Specifically, you are interested in using material that is intended for the construction of steel shipping containers to be assembled to meet ISO 1496. Once assembled, the units will be used as building components.

The International Building Code (IBC) does not reference standards for the manufacture of steel directly. The IBC refers to American National Standards Institute/American Institute of Steel Construction (ANSI/AISC) 360 for the use of steel in building construction. The question is then, does ANSI /AISC 360 (Specification for Structural Steel Buildings) allow the use of steel that does not meet ASTM standards, but that meets some other standard.

While the ANSI/AISC 360 does not explicitly address the use of standards other than ASTM, it does infer that the designer can specify steel that meets other standards if the material will perform satisfactorily for the intended application. In section A4 of the standard, it states that:

"The design drawings and specifications shall meet the requirements in the Code of Standard Practice for Steel Buildings and Bridges, except for deviations specifically identified in the design drawings and/or specifications."

This section implies that the designer may use other standards that are not specifically referenced in the ANSI/AISC 360 standard. The Code of Standard Practice for Steel Buildings and Bridges (AISC 303-05) contains information in section 5.2 about the specification for stock materials that are at variance with the ASTM standards. The materials in this case are not being manufactured for a specific job, but are stock components of shipping containers. AISC 303-05 includes provisions for materials that are equivalent in quality to ASTM standards and those that meet specifications that are less rigorous than the applicable ASTM standard provided that the "Owners Designated Representative for Design" approves the material.



Carlson
Page 2 of 2

Based on this, it is our position that non ASTM steel can be used in building construction provided that the specification for the steel is in accordance with AISC 303-05. If you have additional questions, please call me at (609) 984 – 7974.

Very truly yours,

Michael Baier
Bureau of Code Services

c: Kevin Egilmez, Industrialized Buildings Commission

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FORMAL INTERPRETATION No. 14-XX

Subject: CA Documents per Manufacturing Facility
Reference: UAP, Part V, Section 2(C)
Effective Date:

DRAFT

ISSUE

Can a single manufacturing facility have more than one set of approved compliance assurance documents?

INTERPRETATION

A manufacturer must have approved compliance assurance documents (i.e., building systems documents, compliance assurance manual and on-site installation instructions) for the product(s) it proposes to manufacture at its manufacturing facility. A manufacturer may develop separate building systems documents and on-site installation instructions for different products produced at the same facility and have them approved by different evaluation agencies. However, a manufacturing facility can have only one compliance assurance manual that must be approved by all applicable evaluation agencies.

BACKGROUND

The following describe cases that illustrate the need to clarify requirements for compliance assurance documents.

1. Company A closes its own manufacturing facility and arranges to have its product manufactured at an affiliated company's facility. Both companies are under contract with the same evaluation agency. Company A wants to continue to maintain a separate building systems documents, installation instructions and a compliance assurance manual.
2. A manufacturing facility contracts with two separate evaluation agencies for different products. It maintains separate building systems documents and installation instructions for each product.
 - a. In one case, only one of the evaluation agencies approves the compliance assurance manual.
 - b. In another case, each evaluation agency approves its separate compliance assurance manual.

DISCUSSION

UAP and MRR define compliance assurance documents as the approved buildings systems documents, compliance assurance manual and on-site installation instructions. According to MRR, Part V, Section 1, building systems documents "...describe in detail the product and manufacturing processes employed to produce industrialized buildings or building components." Section 2 adds "The compliance assurance program is a system employed by the manufacturer to assure conformance with the approved building systems documents."

A compliance assurance program for a given manufacturing facility describe various methods and procedures for materials control, production control and finished product control or define processes that cannot be easily altered or be made to conform to different products. Furthermore, changing part of the program for one product has the potential to have an adverse effect on another product.



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PYRAMID1, INC.

ENGINEERING * DESIGN * REVIEW & INSPECTION AGENCY

July 9, 2014

N. Kevin Engilmez
Industrialized Buildings Commission
505 Huntmar Park Drive
Herndon, VA 20170

RE: IBC Meeting - 7/16/2014 supplied info
ModSpace, Elizabethtown, PA

Dear Mr. Egilmez:

Enclosed please find justification for allowing previously used frames to automatically be evaluated and utilized in new construction:

References

International Building Code, IBC-12
Specification for Structural Steel Buildings, AISC 360-10
14th Edition of the AISC Steel Construction Manual
AISC Rehabilitation and Retrofit Guide, AISC Steel Design
Guide 15
Uniform Administrative Procedures, July 2007

Preface

Modular building are acquired, the existing building removed, with only the frame remaining. This allows a complete assessment of the frame component by Pyramid1 to approved plans. New construction to approved plans is then done on top of the recycled frame, to create a new modular building to be inspected and labeled.

Code Citations

IBC Section 2205.1 General.

The design, fabrication and erection of structural steel for buildings and structures shall be in accordance with AISC 360. ...

**AISC Steel Construction Manual, Part 2 - General Design
Consideration, Renovation Retrofit of Existing Structures.**

*The provisions in **AISC Specification** Section B6 governs the evaluation of existing structures. Historical data on available steel grades and hot-rolled structural shapes, including dimensions and properties, is available in **AISC Design Guide 15, Rehabilitation and Retrofit Guild** (Brockenbrough, 2002) and the companion database of historical shape properties from 1873-1999 available at www.aisc.org.*

AISC Design Guide 15, Section 1.1

AISC and other specification for the design of structural steel usually refer to standards published by the American Society for Testing and Materials (ASTM). Table 1.1a presents a historical summary of the pertinent ASTM standards for structural steels for buildings over the last century, with the relevant yield points and tensile strengths specified. ...

Code Compliance

If the approximate age of the unit is known, the steel can be calculated based on the AISC specification. To make sure the worst case specification is utilized, a +/- 10 year worst-case value from AISC Design Guide 15 Table 1.1a can be utilized to ensure structural compliance.

Pyramid1 proposes to separately inspect each frame component before introduction into the manufacturing process to assess that the frame can be proven to meet new construction. Any additional repairs to the frame will be done by a certified welder with new, traceable steel members.

Requested Variance

As all of the construction above the frame is new, ModSpace asks the Commission to allow this type of structure to be automatically allowed under UAP Part IV(A)(7)(h)(i), as the frame can be assessed thru the design evaluation and inspection agency.

If you have any questions, please feel free to contact me at your convenience.

Sincerely,

Andrew Carlson, CBO, MCP
Review and Inspection Services

ARC/arc

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BULLETIN

To: All Concerned Parties
From: Industrialized Buildings Commission
Date: August 14, 2013
Subject: Labeling Existing Industrialized Buildings

On July 17, 2013, the Commission approved the following procedures related to labeling existing industrialized buildings under UAP, Part IV, Section 4(A)(7).

These procedures are effective immediately.

Industrialized Buildings Certified by Non-participating States

Designated agencies are permitted to rely on certifications issued by other states to establish compliance with applicable codes and standards under the following conditions:

- a. Copies of documents approved by the non-participating state must be submitted to the evaluation agency for review and approval. Documentation must be substantially equivalent to that required under MRR, Part V, Section 1(B).
- b. Inspection agency must examine the existing industrialized building to ensure it has not be altered and bears the certification label of the non-participating state.
- c. All subsequent alterations or modifications must be inspected by an inspection agency for compliance with applicable codes and approved designs.

Authorization to Release Labels

Inspection agencies must receive authorization from the Commission prior to releasing certification labels. The Commission will authorize the release of the labels after receiving proper payment. Labels must remain in the custody of and must be attached by the inspection agency.

Report Requirements

Inspection agencies must file a report with the Commission no later than 30 days after receiving authorization to release labels. The report must include a completed form and copies of all documents used in the process of assessing the building including, but not limited to, approved designs, inspection reports and data plates.

Inspection agency:

This form is for reporting existing industrialized buildings labeled under UAP, Pt. IV, Sec. 4(A)(7)

PART I. INDUSTRIALIZED BUILDING OWNER

Company Name:

Phone:

Mailing Address:

Contact:

Email:

PART II. INDUSTRIALIZED BUILDING LOCATION

Current Location:

Destination:

PART III. INDUSTRIALIZED BUILDING INFORMATION

Manufactured by:

Date Manufactured:

Model:

Use Group (old):

Use Group (new):

State agency that issued existing labels:

No.	Serial No.	Existing Label No.	IBC Label No.	No.	Serial No.	Existing Label No.	IBC Label No.
1.				6.			
2.				7.			
3.				8.			
4.				9.			
5.				10.			

PART IV. IBC CERTIFICATION LABEL PAYMENT

Modular/Closed Panel Labels

Qty.:

Fee: \$ 70.00

Amt.:

Component Labels

Qty.:

Fee: \$ 46.00

Amt.:

Check (payable to Industrialized Buildings Commission)

No.:

Date:

Amt.:

INSTRUCTIONS

INSPECTION AGENCY IS RESPONSIBLE FOR COMPLETING THE FORM AND FILING THE REPORT.

- A separate form must be filed for each industrialized building.
- To request and assign labels –
 1. Complete parts I, II and IV and submit a copy of the form along with check to Industrialized Buildings Commission.
 2. After receiving IBC authorization, log on to IBC website to assign labels
- Inspection agency must maintain custody of and attach all labels.
- A full report, including a completed form and copies of relevant documents, is due no later than 30 days after receiving IBC authorization.

or IBC use only -

Code:

TN:

Date:

Labels assigned:

Report Due:

PROCEDURES FOR LABELING EXISTING BUILDINGS

1. Only industrialized buildings bearing a participating-state label issued prior to the effective date of the UAP are automatically eligible for a Commission certification label.
 - a. Prior to affixing certification labels, the inspection agency is required to ensure the buildings have not been modified, altered or damaged.
 - b. Commission certification labels must be permanently attached next to the existing participating-state labels. Except for certification label numbers, information on the new and existing data plate must be identical.
 - c. Inspection agency is required to submit a completed relabeled module report form along with pictures of the existing labels, data plates, and the exterior and interior of the modules, copies of inspection reports and new data plates to the Commission. The complete report must be submitted no later than 15 days after receiving Commission authorization to release labels.
2. Industrialized buildings bearing a participating state label that are altered or modified are required to comply with additional requirements specified under (a) through (c) of this subsection.
3. Industrialized buildings bearing a non-participating state label must be proven by a designated agency to meet the destination state's current codes before being eligible to have a Commission certification label affixed.
 - a. Evaluation agencies must perform a full and complete review of the documents approved by or on behalf of the non-participating state. A deviation report must identify the differences between the applicable provisions of the non-participating and the destination state's codes. Complete documents of any modification necessary to bring the buildings into compliance with the new codes must be submitted to the evaluation agency for review and approval.
 - b. Inspection agency must perform an initial inspection to ensure the original building has not been altered or damaged. All subsequent modifications must be inspected by an inspection agency to ensure compliance with applicable codes and approved designs.
 - c. The inspection agency must inspect construction elements, methods or materials for compliance, and require removal of permanent construction where necessary, if the non-participating state approved documents do not conclusively demonstrate compliance with a provision of the destination state's code.
 - d. Designated agency shall submit a completed relabeled module report form, along with copies of all relevant documents – such as inspection reports, data plates, and approved designs – and pictures of existing labels to the Commission.
4. The Commission will authorize the release of certification labels to the custody of the inspection agency after receiving proper payment. Certification labels shall only be affixed by the inspection agency to completed, code-compliant industrialized buildings.

The following white paper incorporates the various Commission guidelines and requirements issued in the last few years on Bulletin B11.14.95 Application of Building Systems Documents.

The term "Master Approval Package" will replace "Building Systems Documents" to eliminate any confusion.

MASTER APPROVAL PACKAGE

INTRODUCTION

A Master Approval Package (MAP) is a set of documents that provides manufacturers the ability to develop custom plans within established limits and to incorporate various optional features. It eliminates or reduces the need to have each individual plan reviewed and approved by an evaluation agency.

MAPs do not relieve manufacturers from developing required construction details specified under Model Rules and Regulations Part V, Section 1(B). Additionally, they cannot be set up in a manner that permits manufacturers to perform structural calculations or design building elements without evaluation agency oversight.

DEVELOPMENT

A MAP for one- and two-family dwelling buildings may contain several subsystems for different building configurations such as ranch, cape, and two-story. The following describes a ranch subsystem to illustrate various – but not all – options that may be included in a MAP.

A typical ranch subsystem could contain a single floor plan that includes standard information such as window and door sizes, minimum light and ventilation requirements, smoke detector and electrical outlet locations, etc. Information would have to be specific where necessary. It would not be permissible to cite or reference codes or code sections as a method to demonstrate compliance.

The package would show or describe various parameters to ensure permitted plan configurations do not exceed the limits of applicable codes and approved calculations. Typical parameters could include, but are not limited to, allowable width, length, height of modules or buildings; maximum live, dead and other loads, maximum wind speeds and exposures, etc.

Any structural and architectural options including restrictions on their use or application would be made part of the approved documents. The set could contain custom charts and tables for various structural members similar to prescriptive joist, header and girder tables provided in building and other codes. Some typical options are identified below:

- A. Optional window and door schedules
- B. Header charts for optional windows, doors and other openings
- C. Mate line girder charts for various spans and loading conditions
- D. Interior and exterior column and stud charts

- E. Optional stair configurations
- F. Optional bath and kitchen configurations including:
 - 1. Island kitchens
 - 2. U-kitchen
 - 3. L-kitchen
 - 4. Half- and full-baths

“AS-BUILT” PLAN SUBMITTALS

Buildings designed using a MAP would be identified on monthly production reports by entering “yes” under the “[MAP/System] Yes/No” column. Manufacturers would file copies of “as-built” documents monthly with the Commission which would generally consist of a cover page, dimensioned floor plans, elevations and cross sections. Additional documents or information would be submitted when necessary to identify or verify the selection of various building elements.

MANUFACTURER AND DESIGNATED AGENCY RESPONSIBILITIES

Compliance assurance manual would include relevant internal document controls and identify by title person(s) responsible for developing specific documents from MAPs.

Inspection agencies would be responsible for monitoring manufacturers’ ability to develop specific plans and related designs from MAPs. Manufacturers that are unwilling or unable to develop conforming designs would be required to obtain individual approvals from their evaluation agencies.

Evaluation agencies would be responsible for ensuring MAPs are not overly complex or burdensome on inspection agency inspectors.