

CHAPTER 2. ENGINEERING BULLETINS, STATE LETTERS OF
ACCEPTANCE

2-1. GENERAL: This chapter discusses HUD's acceptance of housing systems, subsystems and components through the use of Engineering Bulletins and State Letters of Acceptance.

2-2. PRIME SPONSOR'S REQUIREMENTS:

- A. An eligible prime sponsor shall have a factory capable of producing the component or system, or shall legally control the production, in addition to controlling transportation, distribution and installation.
- B. Eligibility requires that completed components or systems be made available for inspection.

2-3. CATEGORIES OF MODULAR AND PANELIZED HOUSING:

- A. Three Categories of modular and panelized housing and related components have been established for purposes of issuing acceptance documents. They are:

Category	Acceptance Documents
I	SEB or SLA
II	SEB only
III	State label only

- B. Category I:

Includes factory-produced modular housing units which comply with the MPS and the HUD accepted building code in all respects, except for special features included in the SEB.

Technical acceptance documents are necessary because certain elements are concealed in the factory, and cannot be inspected at the construction site.

- C. Category II:

Includes modules and components that are complex and have structural features that are either not addressed by, or not in compliance with HUD MPS.

- 1. All features, other than structural, must comply with the HUD MPS.
- 2. A technical suitability analysis is performed to determine whether the structural aspects of the

submission meet the objectives of HUD MPS.

3. Review of plans, specifications and calculations is made to determine acceptability to HUD of any special structural features. This includes:
 - a. Review of the sponsor's quality control program.
 - b. Inspection of the production facility and existing units manufactured in the plant.

D. Category III includes:

1. Factory-produced Category I housing units or components whose structural features, materials and systems of construction are subject to State agency design and construction regulations.
2. Initial HUD review and acceptance of State standards and enforcement procedures.
3. Annual monitoring of State labeling program based on individual HUD/State agreement.
4. Appearance in a current listing of Category III State Agencies in this Handbook (see Appendix 2) or the HUD-accepted listing is on the World Wide Web. Listed States comply with the following:
 - a. Units have a unique identification, and an official State label indicating acceptance under the State program.
 - b. Units have a permanently affixed data plate that describes design loads and specifications (e.g. live load, snow load, wind load, seismic zone). Units must meet the requirements of the 1995 Model Energy Code or the latest HUD-accepted MEC standard.

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- c. Builder certification that all non-structural features comply with the MPS and HUD accepted building codes. The HUD Field Office or Homeownership Center has the responsibility of determining acceptability of non-structural features.

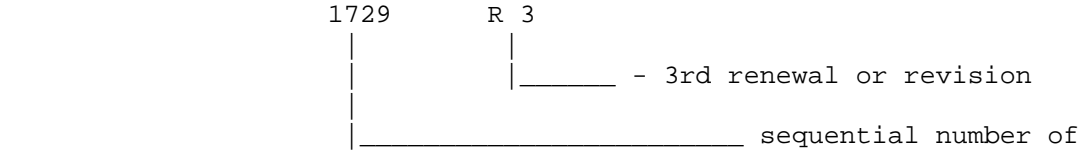
2-4. ADMINISTRATION PROCEDURES:

- A. Applications: Only prime sponsors (See Definitions) can apply for acceptance documents.
- B. Processing: Responsibilities of sponsors are listed in

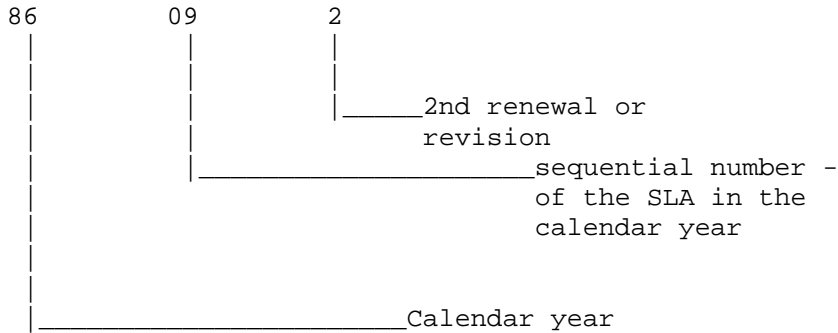
Chapter 1. HUD processing procedures are listed below.

C. Numbering Bulletins:

1. SEBs are numbered sequentially by Headquarters with revisions indicated by an R followed by the sequential number of the revision as shown below:



2. MEBs are numbered sequentially by Headquarters.
3. SLAs are numbered by the State Office as shown below:



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2-5. PREPARING SUBMISSIONS:

- A. Category I Submissions must comply with HUD MPS, in addition to containing required technical information which may include:

1. Lifting and transportation details.
2. Unit assembly/erection method on prepared foundation.
3. Connections between prefabricated elements.

- B. Category II Submission Information includes:

1. Supporting information for special structural features (i.e. tests and/or calculations).
2. Evidence of compatibility between special structural features and adjacent building elements.
3. Identification of, and support and documentation

for, elements in compliance with HUD MPS when conformance is not self-evident.

4. Plant and site of fabrication and erection, and details for structural connections, lifting and transportation.
5. When possible, design procedures and test methods recommended by authoritative organizations such as those listed in 1-5.B.
6. Engineering assumptions and computations in support of a proposal, with the drawings listed in the acceptance document.
7. The imprinted seal of a professional design engineer on drawings and calculations for highly complex submissions.
8. Test results conducted and certified by a recognized US testing laboratory, or other qualified professional firm or organization, or witnessed by a technical representative of such an organization and certified by one of its officers.

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9. Certification includes:
 - a. A detailed description of the specimen tested
 - b. A description of test objectives
 - c. A description of testing procedures and of accuracy of instruments (reference standards tests when used)
 - d. Complete test data and results
 - e. Interpretation of test results, including pass/fail statement

C. Submissions by Sponsors: The following are guidelines of data to include in applications for an Engineering Bulletin or an SLA.

1. Organization Data
 - a. Company or corporate name.
 - b. Main office address, including street address and zip code.
 - c. Address of each manufacturing plant proposed for system production under HUD housing programs.

- d. Names and respective positions of principal officers: the person in charge of production and the person in charge of quality control.
- e. Relationship of prime sponsor company to any parent, affiliated, or subsidiary companies. Indicate all licensed producers.
- f. Detailed quality control program, including responsibilities for supervision and inspection.

(HUD may require documentation that the quality control program has been reviewed and approved by a qualified independent quality control agency).

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- g. Indicate organizational relationship of inspectors to the principal officers.
 - h. For franchise operations, evidence of the prime sponsor's legal responsibility for quality control, inspection, and certification of the product.
 - i. Evidence of legal responsibility for the necessary monitoring of the franchises performance in the transportation, erection, inspection, and furnishing the builder's warranty, as appropriate.
2. Production Data:
- a. Evidence that the sponsor is fully prepared to produce the component submitted for determination of technical suitability.
 - b. Street address, name of owner and date of completion of at least one existing unit of the particular system produced in the sponsor's factory; or the location of a prototype unit that may be inspected.
 - c. Description of plant facilities, and of the capability, means and methods of manufacture.
 - d. Description of method of transportation and special construction, bracing and securing necessary during transportation.
 - e. Description of field installation, erection and handling procedures at the site, and of field quality control program.

- f. Current marketing and distribution data. When the application is for an SEB, list any dwelling units (ten (10) minimum) erected under SIAs or under HUD programs within the past year.

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3. Engineering Data:

- a. A complete set of manufacturing and erection drawings, to scale, and no larger than 18" x 24". Drawings may be reduced as long as clarity is retained. The following information shall be shown on the drawings:
 - 1. A complete title block, drawing number, date, revision dates as applicable.
 - 2. Foundation plans and details, including anchorage of structure to foundation, and any special structural features of the foundation that may be required, with notation of loads transmitted to foundations.

At least one foundation plan meeting the MPS shall be shown. (The foundation itself is field-constructed, and is not covered by the SEB.)
 - 3. Drawings containing structural floor and roof framing plans, elevations of loadbearing walls and other loadbearing elements. Provide drawings, as required, showing resistance to racking, sections and details showing size and spacing of all structural members, components and their connections, including: Type and method of fastening all covering materials, such as subflooring, sheathing, siding, interior and exterior finish.
 - a. Complete details, sizes of members, and subflooring, sheathing, siding, interior and exterior finish.
 - b. Details of insulation, vapor barrier installation, and attic, basement and crawl space ventilation: calculations as may be required to show that the insulation meets the MPS.

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- c. Structural details necessary to show special construction features, including methods of fabricating, erecting, joining, connecting and finishing all elements.

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- d. General structural design notes, showing live load, wind and snow loads, seismic zones, allowable stresses, and modulus of elasticity for all structural materials, limits of deflection-to-span ratios, and other pertinent data.
- 4. Architectural floor plans, elevations, and building cross sections.
 - 5. Other Structural Information
 - a. "Description of Materials, Form HUD 92005," for a typical house, specifying only the structurally related items (Nos., 1-12, 14, 26 and 27). A copy of this form is included in Appendix 3. Structural engineering design assumptions and calculations, and MPS structural design requirements shall be observed.
 - b. Details of any known variances of the product or system from MPS requirements.
 - c. Copies of acceptances received from other public and private agencies, and documents upon which such actions are based, if available.
 - d. Recommendations as to use limits with respect to geographical, environmental, physical, and durability considerations. In the case of durability, the degree and type of maintenance required shall be stated.
 - e. Laboratory and field test data pertinent to determination of acceptability.
 - 6. Outline description using format shown as part of Appendices 1B and 1E, and indicating Category I or II Construction.

- a. Include a brief description of the component, with emphasis on special construction features. Show descriptive material, where practicable, on drawings and in specifications.

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- b. List all pertinent drawings, with numbers, dates and descriptive titles.
- c. List addresses of manufacturing plants to produce units in the acceptance document.
- d. Include references to special test requirements such as fire ratings, flame-spread ratings, and long-term aging and durability.

4. Furnishing Information:

- a. Prime sponsors forwarding incomplete submissions to obtain bulletins will be asked to supply necessary missing information. Prompt responses will expedite processing.
- b. All inquiries to, and requests for, information from the sponsor shall be answered to the satisfaction of HUD staff.

2-6. FACTORY INSPECTIONS:

A. Initial Inspection:

The prime sponsor shall have a factory capable of producing the components described. The factory will be inspected by HUD Field Office or Homeownership Center personnel having jurisdiction, or other representatives designated by HUD Headquarters.

- 1. Initial inspection shall be made for all Category I, Category II, and MEB submissions not more than six months before the issuance of an acceptance document.
- 2. Form [HUD 92051-M](#) "Modular and Panelized Housing Factory Inspection Report" shall be filed at the issuing office for each plant to be listed on the acceptance document before issuance.
 - a. This report shall show a satisfactory:

- Manufacturing process
- Quality control program
- Prototype unit

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b. See sample Form [HUD 92051-M](#) in Appendix 4

3. When an initial or other factory inspection cannot be made in a timely manner by HUD personnel, the manufacturer may arrange with the Field Office or Homeownership Center to employ a HUD-approved fee inspector to make the inspection.

B. Additional Inspections:

All manufacturing facilities listed in acceptance documents must be inspected at least once each year by HUD Field Office or Homeownership Center personnel having jurisdiction, or by other representatives designated by HUD Headquarters (See 2-6.A.3).

1. Annual inspections are made in the same manner as an initial inspection, to verify originally gathered information.
2. An annual inspection shall be arranged to serve as the inspection required when acceptance documents are renewed every three years.
3. When inspection reveals that factories no longer produce dwelling units:
 - a. On Form [HUD 92051-M](#) under Item III, Recommendation, the box indicating "Restriction, Unacceptable for Mortgage Insurance," must be checked.
 - b. No further inspections shall be made until the sponsor notifies HUD that production will be resumed on a specific date.
 - c. During such periods, HUD will contact the prime sponsor at 12-month intervals, reporting results on Form [HUD 92051-M](#).
 - d. While the manufacturer is on a "Restricted Basis" no units or components shall be accepted under any HUD program. Products during such a period shall not be identified as conforming to an acceptance document.

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4. Field Inspection for a modular unit or component is the same as for field constructed units, except as modified by the acceptance document.

2-7. RENEWALS SUPPLEMENTS AND REVISIONS:

A. Renewals:

1. Shall be obtained every three years after initial issuance of an Engineering Bulletin or an SLA, in accordance with the User Fee Regulation, see 1-3, B. 3) & 4) and 1-4.
2. Are processed by the issuing office.

B. Supplements:

1. Are issued to reflect minor technical changes in an existing bulletin, such as an addition or deletion of plant, an address change, or correction of a typographical error
2. Shall be initiated by the prime sponsor
3. Should contain only the information being changed
4. Are reviewed and processed by the issuing Office.

C. Revisions:

1. Are issued to reflect significant changes in a system or subsystem
2. Are initiated by the prime sponsor, who presents a complete submission in accordance with 2-4
3. Are processed through the original issuing Office
4. Shall be processed in conformance with the User Fee regulation, see 1-4.

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2-8. IDENTIFICATION OF CATEGORY I AND II FACTORY-BUILT HOUSING UNITS:

A. Serial Numbers:

1. A serial number shall be assigned to each unit to be fabricated under BUD requirements, and shall be entered in the permanent records of the manufacturer before the start of fabrication.
2. Records of serial numbers shall be available to the HUD inspector upon request.

3. The serial number must be conspicuous (by stencil, placard, etc.) on the unit at all stages of construction, as notice that the work shall meet pertinent HUD requirements.

B. Data Plates:

1. Completed housing units shall be identified by a serially numbered, permanent plate affixed near the main electrical panel or other readily accessible location before shipment from the factory.
2. The permanent data plate must show the manufacturer's name and address, date of completion in factory, design loads for wind and snow and seismic zone, and conformance to the 1992 Model Energy Code.

C. Unmarked Units:

HUD will not insure mortgages on factory-produced dwelling units not identified by serial numbers as described above.

D. Components:

Panels, joists, beam and column assemblies, etc., shall either:

1. be manufactured in a plant whose total production meets SEB requirements; or

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2. be identified individually by the number of the HUD acceptance document (SEB or MEB).

2-9. POST-ACCEPTANCE RESPONSIBILITIES:

For all units and components fabricated to meet HUD requirements, under a HUD document of technical suitability, the sponsor must:

- A. Produce, identify and guarantee the components in strict accordance with the terms of the acceptance document, including referenced drawings, specifications, and quality control procedures.
- B. Control the transportation, field erection and installation of the component, and monitor these operations for compliance with the MPS, accepted quality control program, and other acceptance documents.
- C. Comply with all HUD certification requirements.

- D. Correct all poor performance, failure, or manufacturing defects reported to, the sponsor by HUD. If correction is not made as soon as practicable, the acceptance document may be canceled.
- E. For at least a year after issuance, compile a list of all properties in which the component or system has been used, to a minimum of 10 dwelling units.
- F. The list shall include the address or description of the location of the units, and the date of installation or erection.
- G. Upon request, this list must be submitted for review by HUD.
- H. Inform HUD in advance of changes in production facilities, transportation, field erection procedures, design, or materials used in the product, corporate structure, address or name or affiliation of the prime manufacturer or sponsor.

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2-10. CANCELLATION:

A. Reasons for Cancellation:

An acceptance document is subject to cancellation at any time. Cancellation may be based on several factors including, but not limited to:

1. Unacceptable performance of the component or housing unit, or sponsor's non-compliance with paragraph 2-7.
2. Failure of the sponsor to maintain proper quality control; failure to identify units or components fabricated under HUD requirements.
3. Nonproduction or cessation of operations, or change of address or corporate structure without notification to HUD.
4. Failure to report changes in the component or in production facilities.
5. Failure to correct poor performance, structural failures, or manufacturing defects.
6. Violation of prohibitions against advertising.
7. Issuance of a more comprehensive form of acceptance, e.g., a SEB supersedes a SLA.

B. Processing Cancellations:

Cancellations are processed by the office which issued the acceptance document. All offices and sponsors holding copies of the acceptance document will receive copies of the cancellation.

1. Field Offices or Homeownership Centers shall recommend cancellation of Engineering Bulletins issued by Headquarters when sufficient cause is known.
2. Cause for cancellation shall be clearly documented on Modular and Panelized Housing Factory Inspection Report Form [HUD 92051m](#).

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3. Prior to cancellation, HUD will attempt to reach the sponsor to determine whether the prime sponsor is able to rectify the cause for cancellation, or is in agreement that the bulletin should be canceled.
4. A copy of all correspondence and reports associated with cancellation of a State Letter of Acceptance must be forwarded to Headquarters when cancellation is initiated.
5. Documents issued by Headquarters will be canceled by a formal printed "Notice", with desk distribution the same as for Engineering Bulletins.

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