

## ASTME541 Early History

NCSBCS, in 1970, asked the Bureau to develop a program to accredit laboratories. The need for such a program was recognized, and NBS initiated LEAP in January 1971, to develop the criteria by which laboratories could be evaluated against ANSI Standard A119.1, "Standard for Mobile Homes."

LEAP produced four research reports which NCSBCS and NBS turned over to ASTM for processing as national consensus standards. Two ASTM committees, E32, "Criteria for Evaluating Agencies Concerned with Systems Analysis, Testing, and/or Compliance Assurance of Manufactured Buildings," and E36, "Criteria for the Evaluation of Testing and/or Inspection Agencies," were established to process the documents. The E32 Committee produced a standard which in time (1975) was to win consensus agreement--ASTM E541, "Criteria for Evaluating Agencies Engaged in Systems Analysis and Compliance Assurance for Manufactured Buildings." The E36 Committee, meanwhile, pressed ahead with the development of generic criteria for the evaluation of testing laboratories.

<https://www.govinfo.gov/content/pkg/GOVPUB-C13-dbc3d5af58d4c7cc0f10c20501735ee/pdf/GOVPUB-C13-dbc3d5af58d4c7cc0f10c20501735ee.pdf>

*The National Conference of States on Building Codes and Standards (NCSBCS), formed in 1967 to consider problems of building regulation, has suggested that the states may utilize the services and facilities of qualified public or private institutions to provide building analyses, testing and inspections.*

### **Project LEAP: Laboratory Evaluation And Accreditation Program**

**History Of ASTME541:** Criteria For Compliance Assurance Agencies For Manufactured Building

**April 1973 Prepared By:** National Conference Of States On Building Codes And Standards

**For accreditation purposes. Project LEAP has divided the building-evaluation services, that may be performed by accredited agencies, into three distinct functions;**

- 1) analysis
- 2) testing
- 3) compliance assurance

<https://www.govinfo.gov/content/pkg/GOVPUB-C13-b9778dc1645857bd788ef09a4c19f229/pdf/GOVPUB-C13-b9778dc1645857bd788ef09a4c19f229.pdf>

## **Building Technology INC**

### **National Conference of States on Building Codes and Standards/National Bureau of Standards.**

BTI was involved in seminal work in the development of a regulatory system for factory produced housing in the early 1970s. This work, known as the Laboratory Evaluation and Accreditation Program (LEAP) and the Coordinated Evaluation System (CES), was performed under contract to the National Bureau of Standards and finally incorporated into ASTM E 541-75, "Standard Criteria for Agencies Engaged in System Analysis and Compliance Assurance for Manufactured Building.

<https://www.bldgtechnology.com/services/regulatory.html>

### **References Of ASTM E541**

#### **California HCD**

##### **John Westfall's response to revising ASTM E541**

Janet,

Congratulations, I appreciate your efforts in resurrecting the standard. Manufactured Housing Program at California Department of Housing and Community Development will be interested in the latest evolution/iteration of E541.

Just a note, the standard currently does not differentiate any particular product or type of industrialized building but only general manufacturing oversight. I am not sure it will do our Department(s) service to focus on any particular type of building being manufactured. The guidance should apply to all products manufactured. Good luck to you. ***John J. Westfall***

District Representative II

Manufactured and Factory-Built Housing Programs

CA Department of Housing & Community Development

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<https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/third-party-agencies-may-2019.pdf>

#### **California HCD**

QUALITY ASSURANCE INSPECTOR

APPLICATION APPROVAL CHECKLIST FOR INSPECTIONS OF: COMMERCIAL MODULAR - SPECIAL PURPOSE COMMERCIAL MODULAR - and MULTI-UNIT MANUFACTURED HOUSING UNITS

NOTE: R= Requirement for Renewal Applications

O= Requirement for Original Approval Applications I. Review HCD - MH 469 application for completeness: Purpose of Application [Original or Renewal] R & O Name, address, phone number of applicant R & O Quality Assurance Agency Employment Status R & O \$295 [Original] OR \$267 [Renewal] Fee attached R & O II. ATTACHMENT #1 - Review Attached Applicant Verification Forms \*

Applicant Verification Fees [\$13]. R & O Statement of Citizenship, Birth Certificate and/or other documents.

\*[Required only if citizenship was not previously verified by department]

R & O III. ATTACHMENT #2 - Review attached Absence of Conflict of Interest Statement

form HCD- MH 471: Name, Signature, Date, County, State entered at bottom of page R & O IV. ATTACHMENT #3 - QUALIFICATIONS - A QAI shall satisfy all the provisions of ASTM

Standard E 541, Part B, §14 and T25, CCR, Chapter 3, §4856 as noted below <https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/hcd-mh001.pdf> (edited)

### Ca HCD 3rd Party Agencies

<https://www.hcd.ca.gov/building-standards/manufactured-modular-factory-built/docs/third-party-agency-list.pdf>

### HUD

#### ASTME541 HUD Regulations As Of August 12th, 2021§3282.358

Personnel.

(a) Each primary inspection agency shall have qualified personnel capable of carrying out all of the functions for which the primary inspection agency is seeking to be approved or disapproved. Where a State intends to act as the exclusive IPIA in the State, it shall show that it has adequate personnel to so act in all plants in the State.

(b) Each submission shall indicate the total number of personnel employed by the submitting party, the number of personnel available for this program, and the locations of the activities of the personnel to be used in the program.

(c) Each submission shall include the names and qualifications of the administrator and the supervisor who will be directly responsible for the program, and résumés of their experience.

(d) Each submission shall contain the information set out in paragraphs (d)(1) through (d)(9) of this section. Depending upon the functions (DAPIA or IPIA) to be undertaken by a particular primary inspection agency, some of the categories of personnel listed may not be required. In such cases, the submission should indicate which of the

categories of information are not required and explain why they are not needed. The submission should identify which personnel will carry out each of the functions the party plans to perform. The qualifications of the personnel to perform one or more of the functions will be judged in accordance with the requirements of ASTM Standard E-541 except that the requirement for registration as a professional engineer or architect may be waived for personnel whose qualifications by experience or education equal those of a registered engineer or architect. The categories of personnel to be included in the submission are as follows:[https://www.ecfr.gov/cgi-bin/text-idx?SID=64ecabf78658019920cc40ed209baf5d&mc=true&node=se24.5.3282\\_1358&rgn=div8](https://www.ecfr.gov/cgi-bin/text-idx?SID=64ecabf78658019920cc40ed209baf5d&mc=true&node=se24.5.3282_1358&rgn=div8)

ecfr.gov

[Electronic Code of Federal Regulations \(eCFR\)](#)

Electronic Code of Federal Regulations (eCFR) published by the Government Publishing Office

### **Interstate Industrialized Buildings Commission: Adopted July 2018: ASTM E541 References Uniform Administrative Procedures**

<https://interstateibc.org/wp-content/uploads/2018/08/UAP2018.pdf>The Interstate Compact on Industrialized/Modular Buildings was created to promote uniformity and encourage coordination in state industrialized buildings programs in a manner to assure interstate reciprocity.

An agency of the member states, the Interstate Industrialized Buildings Commission (IIBC) was established in 1992 and is responsible for carrying out the activities of the compact. Between 2008 and 2017, registered manufacturers in 44 states and five provinces manufactured 58,644 certified modules.<https://interstateibc.org/>

**See More References With Screenshots In ASTME541 Slack Channel**