

**California State Fire Marshal
Flammability Standards for Building Insulation Materials**

January 29, 2014 Draft

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<To be added later>

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CSFM Flammability Standards for Building Insulation Materials Task Force Analysis and Recommendations

FOREWORD <Need to review and revise, newly proposed text>

The Office of the State Fire Marshal convened a working group (see Appendix A) to review and examine the following areas using current or relevant studies, reports, and scientific data. This was done as a result of recent passage of AB 127. After reviewing the information, the working group reported on the following key issues, and provided recommendations to the State Fire Marshal as noted below.

The task group was requested to focus their efforts on the following areas, which are consistent with new requirements in Health and Safety Code §13108.1:

1. Review the California flammability standards for building insulation materials, including whether the flammability standards for some insulation materials can only be met with the addition of chemical flame retardants.
2. Determine if updated insulation flammability standards should be adopted that maintain overall building fire safety and ensure that there is adequate protection from fires that travel between walls and into confined areas, including crawl spaces and attics, for occupants of the building and any firefighters who may be in the building during a fire.

SOURCES OF DATA <This is from the smoke alarm task group and may not be applicable for our group. Need to review and revise?>

The task force was asked to review current research, testing, published reports, codes, standards and regulations to form a basis for our observations, conclusions and recommendations. It was agreed that referenced documents considered by the task force be limited to those directly related to U.S. codes, standards and research. These documents had to include data and observations that are applicable to modern technologies, concerns and furnishings. Anecdotal data would be considered by the committee, but not given as much weight as the technical data described above. Data from sources outside of the U.S. was not considered since the equipment and installation requirements in other countries are typically different from those adopted in the U.S.

The referenced documents that the task force selected to use as a basis for their work are included in Appendix B. In many cases data and findings cited in this report include footnotes references to the source document.

1. ISSUES AND ANALYSIS (Phase 1)

<Add titles and brief (one or two paragraph?) explanations. The following topics were discussed at the initial meeting. Some items appear to be duplicates. >

- Synopsis/intent of AB 137, use data from transcripts of testimony?
- Intent of existing codes and regulations – Jess B.
- Material test methods versus assembly test methods
- Building envelop versus all insulation requirements in the codes
- Attics, walls, below grade, and crawl spaces = envelop? What areas of the building?
- Thermal barriers in lieu of insulation materials with FR chemicals
- What occupancies? Commercial versus residential
- Foam insulation versus all types of insulations?
- What is the impact on fire fighters?
- What flame retardants are of particular concern, are all included in one bucket, evaluate one by one? Can they be grouped or individually identified?
- Cover flame retardants that are most often used in commercial production? Five commonly used?
- Maintaining the same level of fire safety – goal of any changes??
- Are the current test methods the right test methods to provide the correct level of fire safety?
- Is there a link between the required test results and the actual need in the codes?
- What is the criteria used to determine/measure that the level of fire safety is maintained? Match the intent of the bill?
- Way to judge economic impact? Is this needed?
- Supply chain considerations? Outside scope of this work?
- Impact on sprinklered versus non-sprinklered buildings?

CURRENT STATE REGULATIONS AND LOCAL ORDINANCES

California regulations covering insulation are included in Health and Safety Code, Sections _____.

- List of fire tests in the California codes

2. OBSERVATIONS AND CONCLUSIONS (Phase 2)

Based on a review of the data provided, some of the more significant observations and conclusions that supported the task force recommendations are as follows:

ISSUES LACKING CONSENSUS < This is from the smoke alarm task group and may not be applicable for our group. need to review and revise?>

The task force worked effectively together to compile this report and for the most part agreed on the content, with some exceptions. The task force wanted to make sure that any recommendations provided to the State Fire Marshal represent a strong consensus of voting members. We therefore required each recommendation included below to obtain a 2/3 majority vote.

3. RECOMMENDATIONS (Phase 3)

In order to address concerns raised in AB 137, the task force recommends that the following recommendations be considered. While they capture the intent of the Task Force, we recognize that ultimate execution of each may require changes in regulations, codes, standards, and even legislation. As a result, it is expected additional work will be needed to develop enforceable language and precise definitions of terms.

Regulations and Legislation

Other Organizations

Education and Messaging

Future Stakeholder Interactions

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APPENDIX A

**CSFM FLAMMABILITY STANDARDS FOR BUILDING INSULATION
MATERIALS WORKING GROUP**

<Add names/affiliations, if multiple reps for
an organization identify the alternate>

Kevin Reinertson, Division Chief, Chair
Code Development and Analysis Division
CAL FIRE – Office of the State Fire Marshal

Howard Hopper, FPE
UL LLC

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APPENDIX B

REFERENCED DOCUMENTS

The referenced documents that the task force selected to use as a basis for their work are included below. These are limited current research, testing, published reports, codes, standards and regulations. These documents are limited to current applicable subjects that are directly related to U.S. codes, standards and research.

<Add titles and URLs>

R-1
R-2
R-3

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APPENDIX C

Related California Laws and Regulations <Add sections from the California Building and Residential Codes?>

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