4<u>6</u>. Within individual dwelling and sleeping units in Groups R-2, <u>*R*-2.2</u> and R-3, where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:

4.1<u>6.1</u>. One means of egress and one emergency escape and rescue opening.

4.2<u>6.2</u>. Two means of egress.

<u>4.3</u> 6.3. In R-2.2 occupancies a certified fire escape is acceptable as a secondary means of egress for existing buildings for this section of the code.

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204.

Item 17. Flammability Standards for Building Insulation Materials

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<u>2603.2.1 Labeling of polystyrene foam insulation without flame retardants.</u> In addition to the requirements of Section 2603.2, polystyrene foam insulation boards manufactured with no flame retardants added shall be labeled in accordance with this section.

<u>1. Each board shall be labeled on each face every 8 square feet in red 1/2" text</u> with the following information:

WARNING - FIRE HAZARD

This product is required to be installed below a minimum 3.5-inch thick concrete slab on grade.

NOT FOR VERTICAL OR ABOVE GRADE APPLICATIONS

This product contains NO flame retardants

Not tested for flame spread or smoke development requirements of the model building codes

2. Each package shall be labeled on at least two sides in red 1/2" text with the following information:

<u>WARNING – COMBUSTIBLE MATERIAL</u>

Keep away from ignition sources

Maintain code required separation between product storage and structures under construction (minimum 30 feet).

•••

2603.3 Surface Burning Characteristics. Unless otherwise indicated in this section, foam plastic insulation and foam plastic cores of manufactured assemblies shall have a flame spread index of not more than 75 and a smoke-developed index of not more than 450 where tested in the maximum thickness intended for use in accordance with ASTM E84 or UL 723. Loose fill-type foam plastic insulation shall be tested as board stock for the flame spread and smoke-developed indexes.

Exceptions:

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<u>6. Polystyrene foam insulation boards with a maximum thickness of 2-inches</u> when installed below a minimum 3.5-inch thick concrete slab on grade.

...

2603.4.1.15. Foam plastic insulation installed in the horizontal portions of frost protected shallow foundations in accordance with CRC Section R403.3, CBC Section 1809.5/ASCE 32, or CEC Section 110.8.

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50 Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204.

PART 2

[Chapter 1]

[The OSFM is maintaining the adoption of those existing California amendments or building standards in Chapter 1 without modification.]

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204.

[Chapter 2]

[The OSFM is maintaining the adoption of those existing California amendments or building standards in Chapter 2 without modification.]

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

five feet (1524 mm) from exterior walls, property lines and public ways. 2. Battery systems that are an integral part of an electric vehicle are allowed provided the installation complies with Section 625.48 of NFPA 70.

3. Battery systems less than 1 KWh (3.6 Mega joules).

R327.3 Installation. Stationary storage battery systems shall be installed in accordance with the manufacturer's instructions and their listing, if applicable, and shall not be installed within the habitable space of a dwelling unit.

R327.4 Electrical installation. Stationary storage battery systems shall be installed in accordance with NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction.

R327.5 Ventilation. Indoor installations of stationary storage battery systems that include batteries that produce hydrogen or other flammable gases during charging shall be provided with ventilation in accordance with Section M1307.4.

R327.6 Protection from impact. Stationary storage battery systems installed in a location subject to vehicle damage shall be protected by approved barriers.

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2 Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

Item 4. Flammability Standards for Building Insulation Materials

R316.2.1 Labeling of polystyrene foam insulation without flame retardants. In addition to the requirements of Section 2603.2, polystyrene foam insulation boards manufactured with no flame retardants added shall be labeled in accordance with this section.

<u>1. Each board shall be labeled on each face every 8 square feet in red 1/2" text</u> with the following information:

WARNING - FIRE HAZARD

This product is required to be installed below a minimum 3.5-inch thick concrete slab on grade.

NOT FOR VERTICAL OR ABOVE GRADE APPLICATIONS

This product contains NO flame retardants

Not tested for flame spread or smoke development requirements of the model building codes

2. Each package shall be labeled on at least two sides in red 1/2" text with the following information:

WARNING - COMBUSTIBLE MATERIAL

Keep away from ignition sources

Maintain code required separation between product storage and structures under construction (minimum 30 feet).

R316.3 Surface Burning Characteristics. Unless otherwise allowed in Section R316.5, foam plastic or foam plastic cores used as a component in manufactured assemblies used in building construction shall have a flame spread index of not more than 75 and shall have a smoke development index of not more than 450 when tested in the maximum thickness and density intended for use in accordance with ASTM E84 or UL 723.

Exceptions:

<u>1.</u> Foam plastic insulation more than 4 inches (102 mm) thick shall have a flame spread index of not more than 75 and a smoke-developed index of not more than 450 where tested at a thickness of not more than 4 inches (102mm) provided that the end use is approved in accordance with section R316.6 using the thickness and density intended for use.

2. Polystyrene foam insulation boards with a maximum thickness of 2-inches when installed below a minimum 3.5-inch thick concrete slab on grade

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2 Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

PART 2

45-DAY EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF THE STSATE FIRE MARSHAL REGARDING THE 2019 CALIFORNIA REFERENCE STANDARD CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 12

(2018 TRIENNIAL RULEMAKING CYCLE)

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

LEGEND FOR EXPRESS TERMS (California only codes - Parts 1, 6, 8, 11, 12)

- 1. Existing California amendments appear upright.
- 2. Amended or new California amendments appear <u>underlined</u>.
- 3. Repealed California language appears upright and in strikeout.

45-DAY EXPRESS TERMS

The Office of the State Fire Marshal (OSFM) proposes to maintain the Standards contained in Part 12 the California Referenced Standards Code for the 2019 edition of the California Referenced Standards Code with the following modification.

Chapters 12-13 Standards for Insulating Material

QUALITY STANDARDS

Sec. 12-13-1553. The manufacturer shall cause the testing of samples of insulating material for conformity with the quality standards described in this section.

• • •

(k) Polystyrene in Board Form.

•••

3. A. Resistance to combustion. The material shall be tested to meet the requirements of Sections 2602.1-2602.6 <u>2603.2 and 2603.3</u> of the 1994 Uniform Building Code <u>California Building Code</u>, with the additional provision that the surface-burning characteristics shall be determined according to ANSI/ASTM E 84-79 and shall not exceed the following values:

Flame spread.....75

Smoke developed450

Exception: Polystyrene foam insulation boards with a maximum thickness of 2inches when installed below a minimum 3.5-inch thick concrete slab on grade.

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50 Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204
