APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

AUGUST 13, 2020

FINAL EXPRESS TERMS  
FOR PROPOSED BUILDING STANDARDS  
OF THE DIVISION OF THE STATE ARCHITECT (DSA-SS AND DSA-CC)  
REGARDING THE 2019 CALIFORNIA BUILDING CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2

(DSA-SS/CC 02-19)

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)).

If using assistive technology, please adjust your settings to recognize underline, strikeout, italic and ellipsis.

## LEGEND for EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

* Model Code language appears upright
* Existing California amendments appear in *italic*
* Amended model code or new California amendments appear *underlined & italic*
* Repealed model code language appears ~~upright and in strikeout~~
* Repealed California amendments appear in *~~italic and strikeout~~*
* Ellipsis (...) indicate existing text remains unchanged

# FINAL EXPRESS TERMS

# ITEM: 1

DSA proposes to bring forward Chapter 1 as adopted with existing amendments and make new amendment as follows to require special inspection of Type IV Heavy Timber connections to co-adopt with the State Fire Marshal (SFM) and California Building Standards Commission (CBSC) resulting from ICC adoption of the 2019 Group B structural provisions. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER: 1 – SCOPE AND ADMINISTRATION

## SECTION: 110.3.12

**EXPRESS TERMS:**

*Type IV-A, IV-B, and IV-C connection protection inspection. In buildings of Type IV-A, IV-B, and IV-C Construction, where connection fire resistance ratings are provided by wood cover calculated to meet the requirements of Section 2304.10.1.2, inspection of the wood cover shall be made after the cover is installed, but before any other coverings or finishes are installed.*

## ASSOCIATED SECTIONS TO ITEM 1:

Represents section that may be impacted by this proposed code change item – Refer to those items in parentheses for related changes.

**(ITEM 7)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.7*

**(ITEM 8)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.20*

**(ITEM 12)** Chapter 23, WOOD

*Section 2304.10.1.2*

**(ITEM 13)** Chapter 31 – SPECIAL CONSTRUCTION

*Sections 3102.3, 3102.6.1.1*

## Notation:

Authority:Education Code Section 17310, 81143; Health and Safety Code Section 16017

Reference(s): Education Code Section 17310, 81143; Health and Safety Code Section 16017

# ITEM: 2

DSA proposes to co-adopt new definitions applicable to new provisions for mass timber with the SFM and CBSC resulting from ICC adoption of the 2019 Group B structural provisions. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER: 2 – DEFINITIONS

## SECTION: 202 DEFINITIONS

**EXPRESS TERMS:**

…

***MASS TIMBER****. Structural elements of Type IV construction primarily of solid, built-up, panelized or engineered wood products that meet minimum cross section dimensions of Type IV construction.*

…

**WALL, LOAD-BEARING.** Any wall meeting either of the following classifications:

1. Any metal or wood stud wall that supports more than 100 pounds per linear foot (1459 N/m) of vertical load in addition to its own weight.
2. Any masonry or concrete *or mass timber* wall that supports more than 200 pounds per linear foot (2919 N/m) of vertical load in addition to its own weight.

…

## ASSOCIATED SECTIONS TO ITEM 2:

Represents section that may be impacted by this proposed code change item – Refer to those items in parentheses for related changes.

**(ITEM 1)** Chapter 1, SCOPE AND ADMINISTRATION

*Section 110.3.12*

**(ITEM 5)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.1.3.1*

**(ITEM 6)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.4*

**(ITEM 7)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.7*

**(ITEM 8)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.20*

**(ITEM 12)** Chapter 23, WOOD

*Sections 2304.10.1.2, 2304.11.3, 2304.11.4*

**(ITEM 13)** Chapter 31, SPECIAL CONSTRUCTION

*Sections 3102.3, 3102.6.1.1*

**(ITEM 14)** Chapter 17A, REFERENCED STANDARDS

## Notation:

Authority:Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 3

DSA proposes to repeal DSA amendments added in the 2016 CBC since they now align closely with revised provisions in ICC 300-17 referenced in the 2019 CBC, with the exception that DSA will retain the allowable strength load combination below. These provisions are being proposed in this Intervening Code cycle and were not adopted into the current edition of the 2019 CBC due to the overlapping time schedules of the ICC and CBSC code adoption processes.

## CHAPTER 16 – STRUCTURAL DESIGN

## SECTION: *1617.3 Load combinations.*

**EXPRESS TERMS:**

**…**

***1617.3.2 Modifications to load combinations in ICC 300.***  *Modify t~~T~~he text of ICC 300, ~~shall be modified as~~ ~~indicated in Section 1616.3.2.1 through 1616.3.2.3.~~*

***~~1617.3.2.1 ICC 300, Section 303.5.1.~~*** *~~Modify Section 303.5.1 by adding Equation 3-1a and replacing Equation 3-2 as follows:~~*

*~~0.9D + 0.4L + 1.6Z (Equation 3-1a)~~*

*~~1.2D + 1.6L + 1.6R~~~~r~~ ~~(Equation 3-2)~~*

***~~1617.3.2.2 ICC 300, Section 303.5.2.~~*** *~~Modify~~ Section 303.5.2 by adding Equation 3-~~3~~5a~~, adding Equation 3-3b, and replacing Equation 3-4~~ as follows:*

*D + 0.4L + Z (Equation 3-~~3~~5a)*

*~~0.6D + 0.3L + Z (Equation 3-3b)~~*

*~~D + L + R~~~~r~~ ~~(Equation 3-4)~~*

**…**

## ASSOCIATED SECTIONS TO ITEM 3:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 4)** Chapter 16A, **– STRUCTURAL DESIGN**

*Section 1605A.4*

## Notation:

Authority:Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 4

DSA proposes to repeal DSA amendments added in the 2016 CBC since they now align closely with revised provisions in ICC 300-17 referenced in the 2019 CBC, with the exception that DSA will retain the allowable strength load combination below. These provisions are being proposed in this Intervening Code cycle and were not adopted into the current edition of the 2019 CBC due to the overlapping time schedules of the ICC and CBSC code adoption processes.

## CHAPTER: 16A – STRUCTURAL DESIGN

## SECTION: 1605A.4 Modifications to load combinations in ICC 300.

**EXPRESS TERMS:**

## Modify t~~T~~he text of ICC 300, ~~shall be modified as~~ ~~indicated in Section 1616.3.2.1 through 1616.3.2.3.~~

***~~1605A.4.1 ICC 300, Section 303.5.1.~~*** *~~Modify Section 303.5.1 by adding Equation 3-1a and replacing Equation 3-2 as follows:~~*

*~~0.9D + 0.4L + 1.6Z (Equation 3-1a)~~*

*~~1.2D + 1.6L + 1.6R~~~~r~~ ~~(Equation 3-2)~~*

***~~1605A.4.2 ICC 300, Section 303.5.2.~~*** *~~Modify~~ Section 303.5.2 by adding Equation 3-~~3~~5a~~, adding Equation 3-3b, and replacing Equation 3-4~~ as follows:*

*D + 0.4L + Z (Equation 3-~~3~~5a)*

*~~0.6D + 0.3L + Z (Equation 3-3b)~~*

*~~D + L + R~~~~r~~ ~~(Equation 3-4)~~*

***…***

## ASSOCIATED SECTIONS TO ITEM 4:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 3)** Chapter 16, – STRUCTURAL DESIGN

*Section 1617.3.2*

## Notation:

Authority:Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 5

DSA proposes to bring forward Chapter 17A as adopted with existing amendments and provide clarification to an existing amendment referencing other chapters. The new reference to Chapter 23 results from ICC adoption of the 2019 Group B structural provisions in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER: 17A – SPECIAL INSPECTIONS AND TESTS

## *SECTION 1701A.1.3 Reference to other chapters.*

**EXPRESS TERMS:**

**…**

***1701A.1.3.1*** *[DSA-SS/CC] Where reference within this chapter is made to sections in Chapters 16A, 19A, 21A, 22A and 2~~2A~~3, the provisions in Chapters 16, 19, 21, 22 and 2~~2~~3, respectively, shall apply instead as defined in section 1.9.2.2. Referenced sections may not directly correlate, but the corresponding DSA-SS/CC sections to such references still apply.*

**…**

## ASSOCIATED SECTIONS TO ITEM 5:

Represents section that may be impacted by this proposed code change item – Refer to those items in parentheses for related changes.

**(ITEM 6)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.4*

**(ITEM 7)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.7*

**(ITEM 8)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.20*

(**ITEM 9**) Chapter 18A, SOILS AND FOUNDATIONS

*Section 1801A.1.3.1*

**(ITEM 12)** Chapter 23, WOOD

*Section 2304.10.1.2*

## Notation:

Authority:Education Code Section 17310, 81143; Health and Safety Code Section 16017

Reference(s): Education Code Section 17310, 81143; Health and Safety Code Section 16017

# ITEM: 6

DSA proposes to amend an existing amendment to clarify that special inspection of structural glued laminated timber during manufacturing is also required for cross-laminated timber during manufacturing since materials and processes are essentially the same in both standards ANSI/APA A190.1 *Structural Glued Laminated Timber* and ANSI/APA PRG 320 *Standard for Performance-rated Cross-laminated Timber*, in which ANSI/APA PRG 320 references quality assurance standards in ANSI/APA A190.1.

## CHAPTER: 17A – SPECIAL INSPECTIONS AND TESTS

## SECTION: 1705A.5 Wood construction.

**EXPRESS TERMS:**

**…**

***1705A.5.4 Structural glued laminated and cross-laminated timber.****Manufacture of all structural glued laminated and cross-laminated timber shall be continuously inspected by an approved agency.*

*The approved agency shall verify that proper quality control procedures and tests have been employed for all materials and the manufacturing process, and shall perform visual inspection of the finished product. Each inspected member shall be stamped by the approved agency with an identification mark.*

***Exception:****Special Inspection is not required for non-custom glued laminated members of 5 ~~1/8~~1/2-inch maximum width and 18-inch maximum depth, and with a maximum clear span of 32 feet, manufactured and marked in accordance with ANSI/APA A190.1 Section 13.1 for non-custom members.*

## ASSOCIATED SECTIONS TO ITEM 6:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 2)** CHAPTER 2 - DEFINITIONS*, Mass Timber*

## Notation:

Authority:Education Code Section 17310, 81143; Health and Safety Code Section 16017

Reference(s): Education Code Section 17310, 81143; Health and Safety Code Section 16017

# ITEM: 7

DSA proposes to bring forward Chapter 17A as adopted with existing amendments and make the following new amendment requiring special inspection of mass timber. DSA intends to co-adopt these provisions with the SFM and CBSC. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER: 17A – SPECIAL INSPECTIONS AND TESTS

## SECTION: 1705A.5 Wood construction.

**EXPRESS TERMS:**

**…**

***1705A.5.7 Mass timber construction.*** *Special inspections of Mass Timber elements in Types IV-A, IV-B and IV-C construction shall be in accordance with Table 1705A.5.7.*

…

## TABLE 1705A.5.7 REQUIRED SPECIAL INSPECTIONS OF MASS TIMBER CONSTRUCTION

|  |  |  |
| --- | --- | --- |
| **TYPE** | **CONTINUOUS SPECIAL INSPECTION** | **PERIODIC SPECIAL INSPECTION** |
| *1. Inspection of anchorage and connections of mass timber construction to timber deep foundation systems.* |  | *X* |
| *2. Inspect erection of mass timber construction.* |  | *X* |
| *3. Inspection of connections where installation methods are required to meet design loads:* |  |  |
| *3.1. Threaded fasteners:* |  |  |
| *3.1.1. Verify use of proper installation equipment.* |  | *X* |
| *3.1.2. Verify use of pre-drilled holes where required.* |  | *X* |
| *3.1.3. Inspect screws, including diameter, length, head type, spacing, installation angle, and depth.* |  | *X* |
| *3.2. Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads* | *X* |  |
| *3.3. Adhesive anchors not defined in 3.2.* |  | *X* |
| *3.4. Bolted connections* |  | *X* |
| *3.5. Concealed connections* |  | *X* |

**…**

## ASSOCIATED SECTIONS TO ITEM 7:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 1)** Chapter 1, SCOPE AND ADMINISTRATION

*Section 110.3.12*

**(ITEM 8)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.20*

**(ITEM 12)** Chapter 23, WOOD

*Section 2304.10.1.2*

## Notation:

Authority:Education Code Section 17310, 81143; Health and Safety Code Section 16017

Reference(s): Education Code Section 17310, 81143; Health and Safety Code Section 16017

# ITEM: 8

DSA proposes to bring forward Chapter 17A as adopted with existing amendments and make the following new amendment requiring special inspection of mass timber. DSA intends to co-adopt these provisions with the SFM and CBSC. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER: 17A – SPECIAL INSPECTIONS AND TESTS

## SECTION: 1705A.20

**EXPRESS TERMS:**

**…**

***1705A.20 Sealing of mass timber.*** *Periodic special inspections of sealants or adhesives shall be conducted where sealant or adhesive required by Section 703.9 is applied to mass timber building elements as designated in the approved construction documents.*

…

## ASSOCIATED SECTIONS TO ITEM 8:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 1)** Chapter 1, SCOPE AND ADMINISTRATION

*Section 110.3.12*

**(ITEM 7)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.7*

**(ITEM 12)** Chapter 23, WOOD

*Section 2304.10.1.2*

## Notation:

Authority:Education Code Section 17310, 81143; Health and Safety Code Section 16017

Reference(s): Education Code Section 17310, 81143; Health and Safety Code Section 16017

# ITEM: 9

DSA proposes to bring forward Chapter 18A as adopted with existing amendments and provide clarification to existing amendments as follows:

## CHAPTER: 18A – SOILS AND FOUNDATIONS

## SECTION: *1801A.1.3 Reference to other chapters.*

**EXPRESS TERMS:**

***1801A.1.3.1 [DSA-SS/CC]*** *Where reference within this chapter is made to sections in Chapters 16A, 19A, 21A, and 22A, the provisions in Chapters 16, 19, 21 and 22, respectively, shall apply instead as defined in section 1.9.2.2. Referenced sections may not directly correlate, but the corresponding DSA SS/CC sections to such references still apply.*

***…***

**1809*A*.10 Pier and curtain wall foundations.***~~Reserved.~~ Not permitted by DSA-SS, DSA-SS/CC, or OSHPD.*

***…***

## ASSOCIATED SECTIONS TO ITEM 9:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 5)** CHAPTER 17A, Section 1701A.1.3.1

## Notation:

Authority:Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 10

DSA proposes to bring forward Chapter 19 as adopted with existing amendments and provide clarifications to existing amendments pertaining to Shotcrete as follows:

## CHAPTER: 19 – CONCRETE

## SECTION: *1909.4 Shotcrete.*

**EXPRESS TERMS:**

**…**

***1909.4.4 Surface preparation.*** *Concrete or masonry to receive shotcrete shall have the entire surface thoroughly cleaned and roughened by a ~~suitable method~~ a mechanical method acceptable to the enforcement agency, and just prior to receiving shotcrete, shall be thoroughly cleaned of all debris, dirt and dust. Concrete and masonry shall be ~~wetted~~ brought to a saturated surface-dry (SSD) before shotcrete is deposited~~, but not so wet as to overcome suction~~.*

***1909.4.5 Joints.*** *The film of laitance which forms on the surface of the shotcrete shall be removed within approximately two hours after application by brushing with a stiff broom. If this film is not removed within two hours, it shall be removed by thorough wire brushing or ~~sand blasting~~ a mechanical method acceptable to the enforcement agency. Construction joints over eight hours old shall be thoroughly cleaned with air and water prior to receiving shotcrete.*

**…**

## ASSOCIATED SECTIONS TO ITEM 10:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 11)** Chapter 19A, CONCRETE

*Section 1908A.1, 1908A.7, 1908A.12*

## Notation:

Authority:Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 11

DSA proposes to bring forward Chapter 19A as adopted with existing amendments and provide clarifications to existing amendments pertaining to Shotcrete as follows:

## CHAPTER 19A – CONCRETE

## SECTION: *1908A Shotcrete.*

**EXPRESS TERMS:**

**…**

**1908A.1 General.** Shotcrete is mortar or concrete that is pneumatically projected at high velocity onto a surface. Except as specified in this section, shotcrete shall conform to the requirements of this chapter for reinforced concrete *and the provisions of ACI 506R. The specified compressive strength of shotcrete shall not be less than 4,000 psi (20.69 MPa)*.

*Concrete or masonry to receive shotcrete shall have the entire surface thoroughly cleaned and roughened by a suitable mechanical method acceptable to the enforcement agency, and just prior to receiving shotcrete, shall be thoroughly cleaned of all debris, dirt and dust. Concrete and masonry shall be ~~wetted~~ brought to a saturated surface-dry (SSD) condition before shotcrete is deposited~~, but not so wet as to overcome suction~~.*

**…**

**1908A.7 Joints.** Except where permitted herein, unfinished work shall not be allowed to stand for more than 30 minutes unless edges are sloped to a thin edge. For structural elements that will be under compression and for construction joints shown on the approved construction documents, square joints are permitted. Before placing additional material adjacent to previously applied work, sloping and square edges shall be cleaned and wetted.

*The film of laitance which forms on the surface of the shotcrete shall be removed within approximately two hours after application by brushing with a stiff broom. If this film is not removed within two hours, it shall be removed by thorough wire brushing or ~~sand blasting~~ a mechanical method acceptable to the enforcement agency. Construction joints over eight hours old shall be thoroughly cleaned with air and water prior to receiving shotcrete.*

**…**

***1908A.12 Placing.*** *Shotcrete shall be placed in accordance with ACI 506R. In addition to testing requirements in Section 1908A, special inspection and testing shall be in accordance with Section 1705A.19.*

**…**

## ASSOCIATED SECTIONS TO ITEM 11:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 10)** Chapter 19, CONCRETE

*Sections 1909.4.4, 1909.4.5*

## Notation:

Authority:Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 12

DSA proposes to bring forward Chapter 23 as adopted with existing amendments and make new amendment for fire protection design requirements of Type IV Heavy Timber connections and in concealed spaces. DSA intends to co-adopt these provisions with the SFM and CBSC. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER 23 – WOOD

## SECTION: 2304. Connectors and fasteners

**EXPRESS TERMS:**

**…**

***2304.10.1.2 Connection fire resistance rating.*** *Fire resistance ratings for connections in Type IV-A, IV-B, or IV-C construction shall be determined by one of the following:*

1. *Testing in accordance with Section 703.2 where the connection is part of the fire resistance test.*
2. *Engineering analysis that demonstrates that the temperature rise at any portion of the connection is limited to an average temperature rise of 250°F (139°C), and a maximum temperature rise of 325°F (181°C), for a time corresponding to the required fire resistance rating of the structural element being connected. For the purposes of this analysis, the connection includes connectors, fasteners, and portions of wood members included in the structural design of the connection.*

**…**

**2304.11.3 Floors.** Floors shall be without concealed spaces~~.~~ *or with concealed spaces complying with Section 602.4.4.4*. Wood floors shall be constructed in accordance with Section 2304.11.3.1 or 2304.11.3.2.

**2304.11.4 Roof decks.** Roofs shall be without concealed spaces *or with concealed spaces complying with Section 602.4.4.4*. ~~and~~ ~~r~~*Roof* decks shall be constructed in accordance with Section 2304.11.4.1 or 2304.11.4.2. Other types of decking shall be an alternative that provides equivalent fire resistance and structural properties. Where supported by a wall, roof decks shall be anchored to walls to resist forces determined in accordance with Chapter 16. Such anchors shall consist of steel bolts, lags, screws or approved hardware of sufficient strength to resist prescribed forces.

…

## ASSOCIATED SECTIONS TO ITEM 12:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 1)** Chapter 1, SCOPE AND ADMINISTRATION

*Section 110.3.5*

**(ITEM 7)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.7*

## Notation:

Authority: Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM: 13

DSA proposes to bring forward Chapter 31 as adopted with existing amendments and make new amendment for fire protection design requirements of Type IV Heavy Timber membrane structures. DSA intends to co-adopt these provisions with the SFM and CBSC. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER 31 – SPECIAL CONSTRUCTION

## SECTION: 3102 MEMBRANE STRUCTURES

**EXPRESS TERMS:**

**3102.3 Type of construction.** Noncombustible membrane structures shall be classified as Type IIB construction. Noncombustible frame or cable-supported structures covered by an approved membrane in accordance with Section 3102.3.1 shall be classified as Type IIB construction. Heavy timber frame-supported structures covered by an approved membrane in accordance with Section 3102.3.1 shall be classified as Type IV*-HT* construction. Other membrane structures shall be classified as Type V construction.

…

**3102.6.1.1 Membrane.** A membrane meeting the fire propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall be permitted to be used as the roof or as a skylight on buildings of Type IIB, III, IV*-HT* and V construction, provided that the membrane is not less than 20 feet (6096 mm) above any floor, balcony or gallery.

**ASSOCIATED SECTIONS TO ITEM 13:** Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 1)** Chapter 1, SCOPE AND ADMINISTRATION

*Section 110.3.5*

**(ITEM 7)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.7*

## Notation:

Authority: Education Code Section 17310

Reference(s): Education Code Section 17310

# ITEM 14

DSA proposes to bring forward Chapter 35 as adopted with existing amendments and make new amendment for fire protection design specifications for adhesives in Type IV Heavy Timber connections. DSA intends to co-adopt these provisions with the SFM and CBSC. This proposal mirrors the proposed ICC 2019 Group B structural provisions which were adopted by the ICC during their Code Hearings in October of 2019, and as proposed by the State Fire Marshal (SFM) in their 2019 Intervening Code Cycle.

## CHAPTER: 35 – REFERENCED STANDARDS

**SECTION:** **N/A**

**Express Terms:**

***APA***

…

***ANSI/APA PRG 320-18:*** *Standard for Performance-rated Cross Laminated Timber*

*2303.1.4*

…

***ASTM***

…

***D3498-03(2011)****: Standard Specification for Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems.*

…

## ASSOCIATED SECTIONS TO ITEM 14:

Represents section that may be impacted by this proposed code change item – Refer to those Items in parentheses for related changes.

**(ITEM 2)** Chapter 2, DEFINITIONS, Mass Timber

**(ITEM 6)** Chapter 17A, SPECIAL INSPECTIONS AND TESTS

*Section 1705A.5.4*

## Notation:

Authority: Education Code Section 17310

Reference(s): Education Code Section 17310