

**TAC: Code Administration** 

This document created by the Florida Department of Business and Professional Regulation -

850-487-1824

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA11908						1
Date Submitted	02/04/2025	Section	107.1	Proponent	Jack Butler	
Chapter	1	Affects HVHZ	No	Attachments	No	
TAC Recommendation	Pending Review					
Commission Action	Pending Review					
<u>Comments</u>						
General Comments No	Α	Iternate Lan	guage No			
<b>Related Modifications</b>						
107.3.1 (revised), 202 (new)						

## **Summary of Modification**

Add ability to provide digital construction documents when approved by the building official, clarify terms, and provide a means for accommodating digital documents in the approval process.

# Rationale

The first proposed modification allows digital construction documents to be supplied where that is a form acceptable to the authority having jurisdiction. Adding that option to the permit application process brings the code up to date by recognizing a practice that it is already being applied. Section 107.2 explicitly allows "electronic media documents," so the proposed modification makes the two sections consistent. The second proposed modification reflects the need to recognize the intent of the original term "additional construction documents," which is to demonstrate how the proposed design addresses the special conditions, by replacing "additional" with "supplemental," adding the reason for requesting the supplemental documents, and clarifying who may prepare such documents. The proposed deletion of "registered design professional" recognizes that state professional practice laws determine who may or must prepare these additional construction documents depending on their nature. However, the requirement for a registered design professional to prepare any supplemental document is preserved. Putting that requirement at the end of the paragraph allows it to apply to both regular and supplemental construction documents. The revised wording in the Exception clause is intended to recognize that it is the nature of the proposed work, and not the person who might prepare an unnecessary construction document, that should determine whether a specific construction document is not necessary for the contemplated project. For example, an interior modification may not need an exterior elevation, which, under the laws of the jurisdiction, might be prepared by anyone. A building official should be able to avoid the submission and subsequent review of any unnecessary construction documents in accordance with the nature of the proposed work.

# **Fiscal Impact Statement**

#### Impact to local entity relative to enforcement of code

Local governments will experience reduced cost of storing and handling paper documents. Impact to building and property owners relative to cost of compliance with code Allowing digital construction documents will save an average of \$112.50 per permit application (average of 25 18"x24" plan sheets times two sets at \$2.25 per sheet printing cost).

### Impact to industry relative to the cost of compliance with code

Industry will receive reduced cost of plan production and submission, in addition to getting approval or plan review notifications sooner.

### Impact to small business relative to the cost of compliance with code

Small businesses will experience reduced costs for material, shipping, and labor.

# **Requirements**

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Digital documents are more readily distributed and made available for use.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Provides the ability for local governments to accept digital documents in their original form and ensure preparation by the indicated persons through digital signature verification.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Proposed modification removes current discrimination against digital construction documents.

Does not degrade the effectiveness of the code

Digital documents are equally effective in demonstrating code compliance.

## [A] 107.1 General.

Submittal documents consisting of *construction documents*, statement of *special inspections*, geotechnical report and other data shall be submitted in two or more sets, <u>or in digital format when allowed by the *building official*</u>, with each permit application. The construction documents shall be prepared by a *registered design professional* where required by Chapter 471, Florida Statutes or Chapter 481, Florida Statutes. Where *special conditions* exist, the *building official* is authorized to require additional <u>supplemental</u> construction documents to be <u>provided prepared by a registered design professional</u>. The construction documents shall be prepared by a registered design professional where required by Chapter 471, Florida Statutes or Chapter 481, Florida Statutes.

**Exception:** The *building official* is authorized to waive the submission of *construction documents* and other data not required to be prepared by a *registered design professional* if it is found that the nature of the work applied for is such that review of <u>the waived</u> *construction documents* is not necessary to obtain compliance with this code.

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA11910						2
Date Submitted	02/04/2025	Section	107.3.1	Proponent	Jack Butler	
Chapter	1	Affects HVHZ	No	Attachments	No	
TAC Recommendation	Pending Review					
Commission Action	Pending Review					
<u>Comments</u>						
General Comments No	A	Iternate Lan	guage No			
<b>Related Modifications</b>						
107.1 (revised), 202 (new)						

## **Summary of Modification**

Add ability to provide digital construction documents when approved by the building official, clarify terms, and provide a means for accommodating digital documents in the approval process.

# Rationale

The proposed modification reflects the requirements for digital construction documents now contained in Florida Statutes. Adding that option to the permit application process brings the code up to date by recognizing a practice that it is already being applied. Section 107.2 explicitly allows "electronic media documents," so the proposed modification makes the two sections consistent.

# **Fiscal Impact Statement**

### Impact to local entity relative to enforcement of code

Local governments will experience reduced cost of storing and handling paper documents.

Impact to building and property owners relative to cost of compliance with code

- Allowing digital construction documents will save an average of \$112.50 per permit application (average of 25 18"x24" plan sheets times two sets at \$2.25 per sheet printing cost).
- Impact to industry relative to the cost of compliance with code

Industry will receive reduced cost of plan production and submission, in addition to getting approval or plan review notifications sooner.

Impact to small business relative to the cost of compliance with code

Small businesses will be better able to comply with code.

# Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Digital documents are more readily distributed and made available for use.

# Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Provides the ability for local governments to accept digital documents in their original form and ensure preparation by the indicated persons through digital signature verification.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Proposed modification removes current discrimination against digital construction documents.

# Does not degrade the effectiveness of the code

Digital documents are equally effective in demonstrating code compliance.

### [A] 107.3.1 Approval of construction documents.

When the *building official* issues a *permit*, the *construction documents* shall be *approved*, in writing or by stamp, as "Reviewed for Code Compliance." One When submitted as physical documents, one set of *construction documents* so reviewed shall be retained by the *building official*. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the *building official* or a duly authorized representative. When submitted in digital form, any approved digital *construction document* returned with the *permit* shall contain a digital stamp added by the *building official* to convey approval. A physical copy of any approved digital *construction document* shall be provided at the site of work and shall be open to inspection by the *building official* or a duly authorized representative.

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA11911						3
Date Submitted Chapter	02/04/2025 1	Section Affects HVHZ	107.3.4 No	Proponent <b>Attachments</b>	Jack Butler <b>Yes</b>	
TAC Recommendation Commission Action	Pending Review Pending Review					
<u>Comments</u>						
General Comments No	Α	Iternate Lan	guage No			
<b>Related Modifications</b>						
202 (delete d. new feed news)						

202 (deleted, revised, new)

## **Summary of Modification**

Provide flexibility required for residential construction projects as a result of FBC-Residential pointing to FBC-Building for code administration.

# Rationale

The new definitions proposed for Building Designer and Building Designer in Responsible Charge are intended to address multiple problems. First, the code and its many referenced standards presently do not have a uniform term to reference the person who prepares construction documents. The proposed term of 'Building Designer' is used in ANSI/TPI 1, so it already has some recognition in the industry. Second, Florida allows unregistered persons to prepare construction documents for residential and small commercial construction. Florida extends this ability to property owners. The code includes the term 'Design Professional', but using that as the generic version of who prepared the construction documents adds an implied level of qualification that may not be appropriate in all cases; Building Designer is a more neutral term that is universally applicable. Additional construction documents should not include the documents that are common for the proposed type of construction; they should address how the proposed design will meet the intent of the code relative to those special conditions. Replacing "additional" with "supplemental" will reinforce that intent. (See attached file.)

# **Fiscal Impact Statement**

Impact to local entity relative to enforcement of code

Clarification.

- Impact to building and property owners relative to cost of compliance with code Clarification.
- Impact to industry relative to the cost of compliance with code Clarification.
- Impact to small business relative to the cost of compliance with code Clarification.

# **Requirements**

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Clarification.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Clarification of current intent of Florida Statutes and the building code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Clarification.

Does not degrade the effectiveness of the code

Clarification.

Modification

CA11911Text

107 Submittal Documents.

**[A] 107.3.4.1 Deferred submittals.** Deferral of any submittal items shall have the prior approval of the *building official*. The *registered design professional building designer in responsible charge* shall list the *deferred submittals* on the *construction documents* for review by the *building official*.

Reserved. The building official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a building designer who shall act as the building designer in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute building designer in responsible charge who shall perform the duties required of the original building designer in responsible charge is charge of the original building designer in responsible charge is changed or is unable to continue to perform the duties. The building designer in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Where the laws of the jurisdiction require all construction documents to be prepared by a registered design professional, the building designer in responsible charge shall be a registered design professional.

...

### [A] 107.3.4 Design professional Building designer in responsible charge.

Documents for *deferred submittal* items shall be submitted to the *registered design professional* <u>building designer</u> in *responsible charge* who shall review them and forward them to the *building official* with a notation indicating that the *deferred submittal* documents have been reviewed and found to be in general conformance to the design of the building. The *deferred submittal* items shall not be installed until the *deferred submittal* documents have been *approved* by the *building official*.

#### 202 Definitions.

**BUILDING DESIGNER.** A person engaged by the owner or the owner's authorized agent to prepare construction documents. Where required by law, the building designer shall be a registered design professional.

[A] DESIGN PROFESSIONAL, REGISTERED. See "Registered design professional."

[A] DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, REGISTERED. See "Registered design professional in responsible charge."

**[A] REGISTERED DESIGN PROFESSIONAL.** An individual <u>A building designer</u> who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed. This includes any registered design professional so long as they are practicing within the scope of their license, which includes those licensed under Chapters 471 and 481, Florida Statutes.

[A] REGISTERED DESIGN PROFESSIONAL BUILDING DESIGNER IN RESPONSIBLE CHARGE. A registered design professional building designer engaged by the owner or the owner's authorized agent to review and coordinate certain aspects of the project, as determined by the building official, for compatibility with the design of the building or structure, including submittal documents prepared by others, deferred submittal documents and phased submittal documents.

**SPECIAL CONDITION.** An element of the construction site or design that is outside the parameters upon which the code is based or exceeds the prescriptive guidance found in the code and is unique to the project rather than generally applicable within the project area. General project characteristics, such as size of the structure and the cost of construction, are not special conditions.

<u>SUPPLEMENTAL CONSTRUCTION DOCUMENT.</u> A construction document not normally provided as part of the standard *permit* application package for the type of work proposed that demonstrates how the proposed design addresses

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a special condition presented by the project so as to meet the intent of the code.

1703 Approvals.

**1703.1.1 Independence.** An *approved agency* shall be objective, competent and independent from the contractor responsible for the work being inspected. The agency shall disclose to the *building official* and the *registered design professional building designer in responsible charge* possible conflicts of interest so that objectivity can be confirmed.

Sent: To: Subject:	Christopher Reeves <jira@icc-ts.atlassian.net> Monday, November 27, 2023 5:21 PM abutler@mpzero.com ICCTO-1865 Meaning of the terms 'special conditions' and 'additional construction documents'</jira@icc-ts.atlassian.net>
Reply above this line.	
Christopher Reeves h	nas commented on your request:
Jack Butler,	
	nse to your email correspondence regarding "special conditions" and the need for "additional nts". All comments are based on the 2018 International Building Code (IBC) unless noted
define what constitute the code or proposed example, the code do occupancies which m large buildings may a beyond basic code lin necessarily related to	ared design professional where "special conditions" exist. Admittedly, while the code doesn't es "special conditions", such conditions are typically matters not provided for or addressed by I design alternatives to the basic provisions in the code as regulated by Section 104.11. For pes not specifically address how to construct a chemical refinery or other special hazardous hay require unusual height or area limitations due to a specific process or equipment. Extremely also warrant a specific egress design study to justify an additional exit access travel distance mitations. "Special conditions", as alluded to in your correspondence, is not, in my opinion, the cost of the project or other local amendments.
data or additional stud	construction documents" could include drawings, structural calculations, research reports, test dies, prepared by a registered design professional, to substantiate equivalent compliance with with final approval subject to the building official.
If you would like to dis	scuss this further, I can be reached directly at (888) 422-7233, X4309.
Sincerely,	
Chris Reeves	
International Code Co Central Regional Offic	I & Engineering Services ouncil, Inc. ce
888-ICC-SAFE (422- creeves@iccsafe.org	

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How was our service for this request?



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Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

SP11962					4
Date Submitted	02/13/2025	Section	107.3.5	Proponent	Rebecca Quinn obo FL Div Emerg Mgnt
Chapter	1	Affects HVHZ	No	Attachments	Yes
TAC Recommendation Commission Action	Pending Review Pending Review				
<u>Comments</u>					
General Comments No	Α	Iternate Lan	guage No		
<b>Related Modifications</b>					

11963

# **Summary of Modification**

Certain documentation is required for construction in flood hazard areas: elevation to which Lowest Floors are elevated, the elevation to which dry floodproofing will extend, and design of dry floodproofing. Proposal specifies use of FEMA certificates specifically designed for those purposes.

## Rationale

Certain documentation is required to be submitted for construction in flood hazard areas: elevation to which Lowest Floors are elevated, the elevation to which dry floodproofing will extend, and design of dry floodproofing measures. The proposal specifies use of FEMA certificates that are specifically designed for those purposes. More than half of Florida NFIP communities participate in the NFIP Community Rating System (244 out of 469). A basic requirement for all CRS Communities is use of the FEMA Elevation Certificate. FDEM reports use of the Elevation Certificate by non-CRS Communities. FEMA requires use of the Dry Floodproofing measures. NFIP Elevation Certificate: FEMA Flood insurance policies that take into account the dry floodproofing measures. NFIP Elevation Certificate FEMA Form FF-206-FY-22-152 (3/22) - fema\_form-ff-206-fy-22-152.pdf NFIP Non-Residential Certificate for Non-Residential Structures: https://www.fema.gov/sites/default/files/documents/fema\_form-ff-206-fy-22-153.pdf

## **Fiscal Impact Statement**

Impact to local entity relative to enforcement of code

Lessens burden caused when permittees use other forms of certification.

Impact to building and property owners relative to cost of compliance with code None, because owners must submit the documentation in some form.

Impact to industry relative to the cost of compliance with code

The change does not affect the technical requirements of the code.

Impact to small business relative to the cost of compliance with code

The change does not affect the technical requirements of the code.

# **Requirements**

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Yes, especially the FEMA Dry Floodproofing Certificate because it requires certification of compliance with ASCE

24.

# Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The change does not affect the technical requirements of the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

The change does not affect the technical requirements of the code.

## Does not degrade the effectiveness of the code

No; improves effectiveness because the FEMA Forms are designed to collect the information necessary to help determine compliance

107.3.5 [Examination of Documents] Minimum plan review criteria for buildings. The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions; and all exterior elevations: SP11962Text Modification Commercial Buildings: [partial shown] Building 1. Site requirements: Flood hazard areas, flood zones, base flood elevations, and design flood elevations 8. Structural requirements shall include: Flood requirements in accordance with Section 1612, including proposed lowest floor elevations provided on a FEMA Elevation Certificate, enclosures, flood damage-resistant materials, and dry floodproofing design certification on a FEMA Dry Floodproofing Certificate Residential (one- and two-family): [partial shown] 6. Structural requirements shall include: Flood hazard areas, flood zones, base flood elevations, design flood elevations, proposed lowest floor elevations provided on a FEMA Elevation Certificate, enclosures, equipment, and flood damage-resistant materials. **110.3 Required inspections.** The building official upon notification from the permit holder or his or her agent shall make the following inspections, and shall either release that portion of the construction or shall notify the permit holder or his or her agent of any violations which must be corrected in order to comply with the technical codes. The building official shall determine the timing and sequencing of when inspections occur and what elements are inspected at each inspection. Building [partial shown] 1. Foundation inspection. To be made after trenches are excavated and forms erected and shall at a minimum include the following building components: Stem-wall ·Monolithic slab-on-grade ·Piling/pile caps ·Footers/grade beams 1.1. In flood hazard areas, upon placement of the lowest floor, including basement, and prior to further vertical construction, the FEMA Elevation Certificate elevation cortification shall be submitted to the building official authority having juris 6. Final inspection. To be made after the building is completed and ready for occupancy. 6.1. In flood hazard areas, as part of the final inspection, a final FEMA Elevation Certificate certification of the lowest floor elevation or an as-built FEMA Dry Floodproofing Certificate for the elevation to which a building is dry floodproofed, as applicable, shall be submitted to the building official authority having jurisdiction 111.2 [Certificate of Occupancy] Certificate issued. After the building official inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following: [partial shown] 6. For buildings and structures in flood hazard areas, a statement that documentation of the as-built lowest floor elevation has been provided and is retained in the records of the building official authority having jurisdiction 1612.5 Flood hazard documentation. The following documentation shall be prepared and sealed by a licensed professional surveyor and mapper or a registered design professional, as applicable, and submitted to the building official:

1. For construction in flood hazard areas other than coastal high hazard areas or coastal A zones:

1.1. The elevation of the lowest floor, including the basement, <u>provided on a FEMA Elevation Certificate</u> as required by the lowest floor elevation inspection in Section 110.3, Building, 1.1 and for the final inspection in Section 110.3, Building, 6.1.

SP11962Text Modification

1.2 For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.7.2.1 of ASCE 24, construction documents shall include a statement that the design will provide

for equalization of hydrostatic flood forces in accordance with Section 2.7.2.2 of ASCE 24. 1.3. For dry floodproofed nonresidential buildings, construction documents shall include a statement provided on a FEMA Dry Floodproofing <u>Certificate</u> that the dry floodproofing is designed in accordance with ASCE 24 and shall include the flood emergency plan specified in Chapter 6 of ASCE 24. 1.4 For dry floodproofed nonresidential buildings, the elevation to which the building is dry floodproofed provided on a FEMA Dry. Floodproofing Certificate as required for the final inspection in Section 110.3, Building, 6.1. 2. For construction in coastal high hazard areas and coastal A zones: 2.1. The elevation of the bottom of the lowest horizontal structural member provided on a FEMA Elevation Certificate as required by the lowest floor elevation inspection in Section 110.3, Building, 1.1 and for the final inspection in Section 110.3, Building, 5.1. 2.2. Construction documents shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16. 2.3. For breakaway walls designed to have a resistance of more than 20 psf (0.96 kN/m<sup>2</sup>) determined using allowable stress design, construction documents shall include a statement that the breakaway wall is designed in accordance with ASCE 24. 2.4 For breakaway walls where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.7.2.1 of ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.7.2.2 of ASCE 24.

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Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA11993					5
Date Submitted Chapter	02/11/2025 1	Section Affects HVHZ	105.2 No	Proponent Attachments	James Schock No
TAC Recommendation Commission Action	Pending Review	W			
<u>Comments</u>					
General Comments No		Alternate Lan	guage No		
<b>Related Modifications</b>					

# Summary of Modification

This change removes permitting requirements for accessibility renovations to One and Two Family Dwellings providing an accessible entry and path of travel through the dwelling unless, it involves structural bearing walls.

## Rationale

The reason for this modification is that the Florida Accessibility code does not apply to one and two family dwellings, therefore there is no code requirements specified other than the statutory 29 inch clear bathroom door.

# **Fiscal Impact Statement**

### Impact to local entity relative to enforcement of code

No impact.

Impact to building and property owners relative to cost of compliance with code No cost impact however it will assist persons with disablities to adapt their homes and allow for longer independent living to occur

Impact to industry relative to the cost of compliance with code None

Impact to small business relative to the cost of compliance with code Reduces cost of permitting to the disabled community.

# **Requirements**

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Helps provide the disabled and senior population with the ability to continue independent living as long as possible

# Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The Florida accessibility code does not apply to One and Two Family Dwellings other than requiring a 29 inch door in the bathroom. Therefore there really is no possible code review.

# Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This Modification does not discriminate against any materials, products or systems

Does not degrade the effectiveness of the code

This modification only eliminates permitting requirements for an issue that is not addressed by the code.

[A] 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant CA11993Text Modification authorization for any work to be done in any manner in violation of the provisions of this code. Permits shall not berequired for the following:

Accessibility:

Renovation of an existing residential One and Two Family Dwelling providing access too or path of travel through the dwelling to provide for an accessible route shall not require a permit unless it involves the renovation of an existing bearing wall.

Gas:

1. Portable heating appliance.

2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

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Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA12098					6
Date Submitted	02/13/2025	Section	107.3.5	Proponent	Shane Gerwig
Chapter	1	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Pending Review	1			
Commission Action	Pending Review	1			
<u>Comments</u>					
General Comments No	A	Alternate Lang	guage No		
Related Modifications					

N/A

# **Summary of Modification**

During discussion of Declaratory Statement DS 2024-002, it was evident that the application of this section is confusing and not consistently administered throughout Florida. This adds numbering structure consistent with framework throughout the code.

# Rationale

This modification editorially structures this section consistent with the rest of the code. Dring consideration of Declaratory Statement DS 2024-002 it was evident that this section was not uniformly applied throughout Florida. This modification provides framework to the existing language of the code to improved consistency with the application of this section.

# **Fiscal Impact Statement**

Impact to local entity relative to enforcement of code
 Editorial modification only. Will not have financial impact. May increase efficiency.
 Impact to building and property owners relative to cost of compliance with code
 Editorial modification only. Will not have financial impact.

Impact to industry relative to the cost of compliance with code Editorial modification only. Will not have financial impact.

Impact to small business relative to the cost of compliance with code

Editorial modification only. Will not have financial impact.

## Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Adds clarity to code.

Adds clarity to code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not change the technical elements of the code and does not discriminate against materials, products, methods, or systems of construction.

**Does not degrade the effectiveness of the code** This modification does not degrade the effectiveness of the code.

**BCIS Reports** 

CA12098Text Modification

See attached file.

I

**107.3.5** Minimum pPlan review criteria for buildings. The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions; and all exterior elevations:

#### 107.3.5.1 Commercial Buildings:

Wall systems Floor systems

Threshold inspection plan Stair systems

Wood Steel Aluminum Concrete Plastic Glass

9. Materials shall be reviewed and shall at a mini- mum include the following:

Gypsum board and plaster Insulating (mechanical) Roofing

Roof systems

Masonry

Insulation

#### 107.3.5.1.1 Building:

1.	Site requirements:
	Parking Fire access Vehicle loading Driving/turning radius Fire hydrant/water supply/post indicator valve (PIV) Set back/separation (assumed property lines) Location of specific tanks, water lines and sewer lines Flood hazard areas, flood zones, and design flood elevations
2.	Occupancy group and special occupancy requirements shall be determined.
3.	Minimum type of construction shall be deter- mined (see Table 504.3a).
4.	Fire-resistant construction requirements shall include the following components:
	Fire-resistant separations Fire-resistant protection for type of construction Protection of openings and penetrations of rated walls Fire blocking and draftstopping and calculated fire resistance
5.	Fire suppression systems shall include:
	Early warning smoke evacuation systems Schematic fire sprinklers Standpipes Pre-engineered systems Riser diagram.
6.	Life safety systems shall be determined and shall include the following requirements:
	Occupant load and egress capacities Early warning Smoke control Stair pressurization Systems schematic
7.	Occupancy load/egress requirements shall include:
	Building Area Occupancy load Gross Net Means of egress Exit access Exit Exit discharge Stairs construction/geometry and protection Doors Emergency lighting and exit signs Specific occupancy requirements Construction requirements Horizontal exits/exit passageways
8.	Structural requirements shall include: Soil conditions/analysis Termite protection Design loads Wind requirements Building envelope Impact resistant coverings or systems Structural calculations (if required) Foundation Flood requirements in accordance with Section 1612, including lowest floor elevations, enclosures. flood damage- resistant materials

 Accessibility requirements shall include the fol- lowing: Site requirements Accessible route Vertical accessibility Toilet and bathing facilities Drinking fountains Equipment Special occupancy requirements Fair housing requirements

11. Interior requirements shall include the follow- ing:

Interior finishes (flame spread/smoke development) Light and ventilation Sanitation

- 12. Special systems:
  - Elevators Escalators Lifts

 Swimming pools: Barrier requirements Spas Wading pools

14. Location and installation details. The specific location and installation details of each fire door, fire damper, ceiling damper and smoke damper shall be shown and properly identified on the building plans by the designer.

#### 107.3.5.1.2 Electrical:

#### Electrical:

trical: Wiring Services Feeders and branch circuits Overcurrent protection Grounding Wiring methods and materials GFCIs Equipment

Special occupancies Emergency systems Communication systems Low voltage Load calculations Design flood elevation

#### 107.3.5.1.3 Plumbing:

Minimum plumbing facilities Fixture requirements Water supply piping Sanitary drainage Water heaters Vents Roof drainage Back flow prevention Irrigation Location of water supply line Grease traps Environmental requirements Plumbing riser Design flood elevation

#### 107.3.5.1.4 Mechanical:

Energy calculations Exhaust systems: Clothes dryer exhaust Kitchen equipment exhaust Specialty exhaust systems Equipment

Equipment location Make-up air Page: 2

Cc Cf Ap Ba La Do 107.3.5.1.5 Ga Ve Cc Cf Ap Ty Fin L Do 107.3.5.2 D As 107.3.5.3 R Sit	as piping enting ombustion air himneys and vents opliances /pe of gas replaces P tank location iser diagram/shutoffs esign flood elevation <b>bemolition:</b> subsets removal <b>Residential (one- and two-family):</b> te requirements: Set back/separation (assumed property lines) Location of septic tanks <u>Building Area</u> Fire-resistant construction (if required)
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Eg	Building Area Fire-resistant construction (if required)
Eg	Fire-resistant construction (if required)
Eg	
Eg	Fire
Eg	Smoke detector locations
	gress:
	Egress window size and location stairs construction requirements
St	ructural requirements shall include:
	Wall section from foundation through roof, including assembly and materials connector tables wind requirements structural calculations (if required) Flood hazard areas, flood zones, design flood elevations, lowest floor elevations enclosures, equipment, and flood damage- resistant materials
Ac	ccessibility requirements: Show/identify Accessible bath
Im	npact resistant coverings or systems
<u>107.3.5.4 E</u>	xemptions:
	ans examination by the building official shall not be required for the following work
	eplacing existing equipment such as mechanical units, water heaters, etc.
	croofs
	inor electrical, plumbing and mechanical repairs nuual maintenance permits
	ototype plans:
	Except for local site adaptions, siding, foundations and/or modifications. Except for structures that require waiver.

Mod\_12098\_Text\_107.3.5.pdf

Manufactured buildings plan except for foundations and modifications of buildings on site.

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA12099					7
Date Submitted	02/13/2025	Section	107.5	Proponent	Shane Gerwig
Chapter	1	Affects HVHZ	No	Attachments	No
TAC Recommendation	Pending Review	W			
Commission Action	Pending Review	W			
<u>Comments</u>					
General Comments No		Alternate La	anguage Y	es	
<b>Related Modifications</b>					

N/A

# **Summary of Modification**

Permits a local building official to accept a sworn affidavit from a building code administrator in addition to engineers and architects to determine plans and construction complies with building code.

## Rationale

This modification adds flexibility to the industry by allowing additional individuals to assist with plan review and inspections for projects that may be outside of the alternative plan review and inspection process outlined in Florida Statutes Section 553.791.

## **Fiscal Impact Statement**

### Impact to local entity relative to enforcement of code

This modification has not impact to the local entity relative to enforcement of code.

Impact to building and property owners relative to cost of compliance with code

This option may offer financial savings to building and property owners by allowing more individuals to complete this service.

Impact to industry relative to the cost of compliance with code

This option may offer financial savings to industry by allowing more individuals to complete this service.

Impact to small business relative to the cost of compliance with code

This option may offer financial savings to industry by allowing more individuals to complete this service.

# **Requirements**

 Has a reasonable and substantial connection with the health, safety, and welfare of the general public This modification is administrative in nature and has no impact on technical provisions of the code.
 Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

# Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This modification reduces the current discrimination in methods by allowing qualified individuals to perform plan review and inspections if permitted by the local building official.

# Does not degrade the effectiveness of the code

This modification is administrative in nature and has no impact on technical provisions of the code.

# Alternate Language

Proponent	Shane Gerwig	Submitted	4/16/2025 8:26:37 AM	Attachments No	0
Rationale:					
This modificat	ion will add efficiency t	o the administrativ	e procedures to the permit	ting process.	
scal Impact	t Statement				
developmer	nt initiatives in the local ding and property ow	l area.	projects. The expedient tur		
Reduced co engineering Impact to indu Reduced co engineering Impact to sma This option equirement	osts through time savin fees may slightly incre ustry relative to the co osts through time savin fees may slightly incre fill business relative to may offer financial sav S	gs due to a more e ease due to the add ost of compliance gs due to a more e ease due to the add o the cost of com ings to industry by	efficient permitting process. ditional work. <b>with code</b> efficient permitting process. ditional work. <b>pliance with code</b> allowing more individuals	However, architecter However, architecter to complete this serv	ural and vice.
Reduced co engineering Impact to indu Reduced co engineering Impact to sma This option equirement Has a reasona With a more	osts through time savin fees may slightly incre- ustry relative to the co- osts through time savin fees may slightly incre- all business relative to may offer financial sav S able and substantial co- e efficient process, plar	gs due to a more e ease due to the add ost of compliance gs due to a more e ease due to the add o the cost of com rings to industry by connection with the ns examiners can f	efficient permitting process. ditional work. e with code efficient permitting process. ditional work. pliance with code	However, architector However, architector to complete this serv fare of the general complex project revie	ural and vice. <b>public</b> ews.
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107.6 Affidavits. The building official may shall accept a sworn affidavit from a registered architect or engineer stating that the plans submitted conform to the technical codes. For buildings and structures, the affidavit shall state that the plans conform to the laws as to egress, type of construction and general arrangement and, if accompanied by drawings, show the structural design and that the plans and design conform to the requirements of the technical codes as to strength, stresses, strains, loads and stability. The building official may without any examination or inspection accept such affidavit, provided the architect or engineer who made such affidavit agrees to submit to the building official copies of inspection reports as inspections are performed and upon completion of the structure, electrical, gas, mechanical or plumbing systems a certification that the structure, electrical, gas, mechanical or plumbing systems a sume full responsibility for compliance with all provisions of the technical codes and other pertinent laws or ordinances. The building official shall ensure that any person conducting plans review is qualified as a plans examiner under Part XII of Chapter 468, Florida Statutes.

107.6.1 Building permits issued in flood hazard areas on the basis of an affidavit. Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R. Parts 59 and 60), the authority granted to the building official to issue permits, to rely on inspections, and to accept plans and construction documents on the basis of affidavits and plans submitted pursuant to Sections 105.14 and 107.6, shall not extend to the flood load and flood-resistance construction requirements of the Florida Building Code. 107.6.2 Affidavits provided pursuant to Section 553.791, Florida Statutes. For a building or structure in a flood hazard area, the building official shall review any affidavit certifying compliance with the flood load and flood-resistant construction requirements of the Florida Building Code.

**107.6 Affidavits.** The building official may accept a sworn affidavit from a <u>building code administrator</u>, registered architect, or engineer stating that the plans submitted conform to the technical codes. For buildings and structures, the affidavit shall state that the plans conform to the laws as to egress, type of construction and general arrangement and, if accompanied by drawings, show the structural design and that the plans and design conform to the requirements of the technical codes as to strength, stresses, strains, loads and stability. The building official may without any examination or inspection accept such affidavit, provided the <u>building code administrator</u>, architect, or engineer who made such affidavit agrees to submit to the building official copies of inspection reports as inspections are performed and upon completion of the structure, electrical, gas, mechanical or plumbing systems a certification that the building official codes. Where the building official register shall each architect or engineer shall assume full responsibility for compliance with all provisions of the technical codes and other pertinent laws or ordinances. The building official shall ensure that any person conducting plans review is qualified as a plans examiner under Part XII of Chapter 468, Florida Statutes, and that any person con- ducting inspections is qualified as a building inspector under Part XII of Chapter 468, Florida Statutes.

Mod12099\_TextOfModification.pdf

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA12205					8
Date Submitted Chapter	02/17/2025	Section Affects HVHZ	105.3.1.2 No	Proponent Attachments	Shannon Few No
TAC Recommendation Commission Action	Pending Revie Pending Revie	W	NO	Attachments	
<u>Comments</u>					
General Comments No		Alternate Lan	guage No		
<b>Related Modifications</b>					

There are no related modifications.

## **Summary of Modification**

Proposing to change the dollar amount in section 4 from \$5,000 to \$15,000.

# Rationale

The \$5,000 amount was put into effect in the early 1980's and our proposal to increase to \$15,000 reflects the impact of inflation since adoption.

## **Fiscal Impact Statement**

#### Impact to local entity relative to enforcement of code

There is no impact to enforcement of code.

Impact to building and property owners relative to cost of compliance with code

It will decrease the cost to the property owners as projects under \$15,000 will no longer need the sign and seal from an engineer.

Impact to industry relative to the cost of compliance with code

It is a cost saving measure that will simplify the process on these smaller projects.

Impact to small business relative to the cost of compliance with code

It will decrease the cost to the business owners as projects under \$15,000 will no longer need the sign and seal from an engineer.

## Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public. There is no negative impact to the health, safety, and welfare of the general public.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

We are not proposing any changes related to products, methos or systems of construction.

# Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

It does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

## Does not degrade the effectiveness of the code

The change does not degrade the effectiveness of the code.

CA12205Text Modification

Page: 1

1. 4. Any specialized mechanical, electrical, or plumbing document for any new building or addition which includes a medical gas, oxygen, steam, vacuum, toxic air filtration, halon, or fire detection and alarm system which costs more than \$5,000 \$15,000.

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA12257					9
Date Submitted	02/17/2025	Section	110.3.14	Proponent	Cade Booth
Chapter	1	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Pending Review	N			
Commission Action	Pending Review	N			
<u>Comments</u>					
General Comments No	Alternate Language No				
<b>Balatad Madifications</b>					

## **Related Modifications**

t601, 602.4, 703.8, 703.9, t705.5, 718.2.1, 722.7, 403.3.2, [F]3314.1, 2301.3, 2304.10.8, 2304.11.1, 2304.11.3, 2304.11.4, 1711.1, t1711.1, 1711.2, 110.3.14, 202, t504.3, t504.4, t506.2, 508.4.4.1, 509.4.1.1, 1405.5, 1406.2.1, 1406.3, 3102.3, 3102.6.1.1, D102.2.5, and refs ch 35.

# **Summary of Modification**

The proposed updates the FBC to include mass timber, aligning it with national standards and advancements in building science, fire safety, and structural integrity. Backed by extensive research and testing, this ensures clear enforcement, cost-effective compliance, and statewide consistency.

# Rationale

For a comprehensive understanding of the proposed mass timber code modifications, be sure to review the full rationale statement PDF. It includes a summary of mass timber's history, the benefits of adoption for Florida, the need for action, and key supporting information. You'll also find links to technical resources and documents that provide further validation. Don't miss this essential guide to why mass timber belongs in the Florida Building Code! In summary, as mass timber construction continues to gain traction across the U.S., including within Florida, it is crucial for the Florida Building Code (FBC) to be updated to incorporate provisions for this proven and innovative construction method. With 40 states already adopting mass timber regulations based on the International Building Code (IBC), these proposed modifications align Florida with nationally recognized consensus codes. The changes will provide a clear, standardized framework for enforcement, streamline compliance for building owners and developers, and support greater design flexibility, all while maintaining rigorous fire safety and structural integrity standards. Adopting mass timber into the FBC will also help Florida keep pace with emerging construction technologies, ensuring the state can effectively regulate these advancements without compromising safety or performance.

## **Fiscal Impact Statement**

# Impact to local entity relative to enforcement of code

Positive; lowers impact. Including mass timber in the FBC provides a consistent regulatory framework for building and fire code officials. It streamlines enforcement, reduces uncertainty, and improves efficiency in plan reviews and inspections by ensuring uniform standards across jurisdictions.
#### Impact to building and property owners relative to cost of compliance with code

Positive; lowers impact. The inclusion of mass timber offers a new construction method that can lower costs for building owners. A consistent regulatory approach statewide simplifies approvals, reduces delays, and allows owners to choose cost-effective materials without uncertainty.

#### Impact to industry relative to the cost of compliance with code

Positive; neutral or lowers impact. Including mass timber in the FBC gives builders and developers more construction options, increasing competition and potentially lowering costs. Consistent enforcement across the state reduces regulatory uncertainty and streamlines the approval process.

#### Impact to small business relative to the cost of compliance with code

Positive; lowers impact. Small businesses benefit from a uniform regulatory framework, reducing compliance costs. With mass timber, smaller firms can leverage prefabrication, shorter timelines, and cost savings, leading to more cost-effective projects and new business opportunities.

#### Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Yes. Mass timber has been thoroughly tested for structural integrity and fire performance, proving its safety and durability. Its inclusion in the Florida Building Code ensures consistent regulation statewide, reducing uncertainty for officials and enhancing safety through uniform enforcement.

# Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, strengthens and improves FBC. Mass timber, included in national codes since 2021, is supported by comprehensive research and testing. It offers a durable, fire-safe alternative that expands construction options without compromising safety, strengthening the code with new, tested materials.

# Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No discrimination and aligns with national standards since its 2021 IBC inclusion. Adopted in 40 states, with 6 more in process, mass timber is not replacing existing methods but adds a tested, proven option, ensuring fairness in material selection without preference or restriction.

#### Does not degrade the effectiveness of the code

Adopting mass timber strengthens the FBC by adding structural and fire safety criteria validated by testing and research from the ICC TWB. It doesn't alter or weaken requirements for other construction types but ensures consistent enforcement of tested, nationally accepted standards.

# CHAPTER 1

# SCOPE AND ADMINISTRATION

## **SECTION 110**

INSPECTIONS

Add new section as follows:

**110.3.14** Types IV-A, IV-B, and IV-C connection protection inspection. In buildings of Types 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 2304.10.8, inspection of the wood cover shall be made after the cover is installed, but before any other coverings or finishes are installed.

Mod12257\_TextOfModification.pdf

Th following document is a comprehensive package of all code modifications related to mass timber proposals. It is provided for your reference as it is essential these proposals be able to be reviewed in context rather than in isolation, as the adoption of new construction types – Type IV-A, IV-B, and IV-C – has broad implications throughout the Florida Building Code. Having context of these provisions together ensures a clear understanding of their interconnections, facilitating informed decision-making regarding the integration of mass timber construction into the code.

The proposed modifications to the Florida Building Code have been organized in a presentation sequence for logic rather than strictly following the order of the code. This approach ensures that the rationale for mass timber construction is presented clearly, allowing stakeholders to understand the technical justification before diving into specific code provisions. This proposal package first establishes the construction types themselves – Types IV-A, IV-B, IV-C – to provide a foundational understanding. It then transitions into details of fire protection, followed by specific provisions necessary to integrate mass timber into the code. Finally, it addresses additional supporting provisions, including inspections, allowable heights and areas, and distinctions where existing code is applicable to the existing Type IV-HT only. The sequence is intended to provide a comprehensive package for consideration and referce for the inclusion of mass timber in the Florida Building Code, 9<sup>th</sup> edition.

A Table of Contents (in order of appearance in the package) and Index (in order of section reference) have been provided for reference.

Thank you.

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# CHAPTER 6 TYPES OF CONSTRUCTION

#### SECTION 601 GENERAL

**Revise table as follows:** 

# TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TY	PE I	TYP	PE II	TYP	e III		т	YPE IV		TYPE V	
BOILDING ELEMENT	Α	В	Α	В	Α	В	A	B	<u>C</u>	HT	Α	В
Primary structural frame <sup>f</sup> (see Section 202)	3 <sup>a, b</sup>	2 <sup>a,b,c</sup>	1 <sup>b, c</sup>	0°	1 <sup>b, c</sup>	0	<u>3</u> ª	<u>2</u> ª	<u>2</u> ª	HT	1	0
Bearing walls												
Exterior <sup>e, f</sup>	3	2	1	0	2	2	<u>3</u>	2	2	2	1	0
Interior	3ª	2ª	1	0	1	0	<u>3</u>	2	<u>2</u>	1/HT <sup>g</sup>	1	0
Nonbearing walls and partitions Exterior						See 1	able 70	5.5				
Nonbearing walls and partitions Interior <sup>d</sup>	0	0	0	0	0	0	<u>0</u>	<u>0</u>	<u>0</u>	See Section 2304.11.2	0	0
Floor construction and associated secondary structural members (see Section 202)	2	2	1	0	1	0	2	2	2	нт	1	0
Roof construction and associated secondary structural members (see Section 202)	1 <sup>1</sup> / <sub>2</sub> <sup>b</sup>	1 <sup>b,c</sup>	1 <sup>b,c</sup>	0°	1 <sup>b,c</sup>	0	<u>11/2</u>	1	1	нт	1	0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b. Where every part of the roof construction is 20 feet or more above the floor or mezzanine immediately below, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking, except where any of the following conditions apply.

- 1. In Group F-1, H, M, and S-1 occupancies.
- 2. Where the roof is an occupiable space.
  - Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
- c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed for roof construction, including primary structural frame members, where a 1-hour or less fire-resistance rating is required.
- d. Not less than the fire-resistance rating required by other sections of this code.
- e. Not less than the fire-resistance rating based on fire separation distance (see Table 705.5).
- f. Not less than the fire-resistance rating as referenced in Section 704.10.
- g. Heavy timber bearing walls supporting more than two floors or more than a floor and a roof shall have a *fire-resistance rating* of not less than 1 hour.

#### SECTION 602 CONSTRUCTION CLASSIFICATION

Revise and add new sections as follows:

**602.4 Type IV.** Type IV construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of solid wood, laminated wood, heavy timber (HT) or structural composite lumber (SCL) without concealed spaces. The minimum dimensions for permitted materials including solid timber, glued laminated timber, structural composite lumber (SCL), and cross laminated timber and details of Type IV construction shall comply with the provisions of this section and Section 2304.11. Exterior walls complying with Section 602.4.4.1 or 602.4.4.2 shall be permitted. Interior walls and partitions not less than 1 hour fire resistance rating or heavy timber complying with Section 2304.11.2.2 shall be permitted. Type IV construction is that type of construction in which the *building elements* are *mass timber* or noncombustible materials and have *fire-resistance ratings* in accordance with Table 601. *Mass timber* elements shall meet the *fire-resistance-rating* requirements of this section 703.2. The minimum dimensions and permitted materials for *building elements* with section 703.4.1.1. *Mass timber* elements of Types IV-A, IV-B and IV-C construction shall be protected with *noncombustible protection* applied directly to the *mass timber* in accordance with Section 502.4.1.1. *Mass timber* elements of Types IV-A, IV-B and IV-C construction shall be protected with *noncombustible protection* applied directly to the *mass timber* in accordance with Section 703.6 and comply with Section 722.7.

*Cross-laminated timber* shall be labeled as conforming to ANSI/APA PRG 320 as referenced in Section 2303.1.4.

Exterior *load-bearing walls* and *nonload-bearing walls* shall be *mass timber* construction, or shall be of noncombustible construction.

**Exception:** Exterior *load-bearing walls* and *nonload-bearing walls* of Type IV-HT construction in accordance with Section 602.4.4.

The interior *building elements*, including *nonload-bearing walls* and partitions, shall be of *mass timber* construction or of noncombustible construction.

**Exception:** Interior *building elements* and nonload-bearing walls and partitions of Type IV-HT construction in accordance with Section 602.4.4.

Combustible concealed spaces are not permitted except as otherwise indicated in Sections 602.4.1 through 602.4.4. Combustible stud spaces within light frame walls of Type IV-HT construction shall not be considered concealed spaces, but shall comply with Section 718.

In *buildings* of Type IV-A, IV-B, and IV-C construction with an occupied floor located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, up to and including 12 *stories* or 180 feet (54 864 mm) above *grade plane, mass timber* interior exit and elevator hoistway enclosures shall be protected in accordance with Section 602.4.1.2. In *buildings* greater than 12 *stories* or 180 feet (54 864 mm) above *grade plane*, interior exit and elevator hoistway enclosures shall be constructed of noncombustible materials.

**602.4.1 Type IV-A.** *Building elements* in Type IV-A construction shall be protected in accordance with Sections 602.4.1.1 through 602.4.1.6. The required *fire-resistance rating* of noncombustible elements and protected *mass timber* elements shall be determined in accordance with Section 703.2.

**602.4.1.1 Exterior protection.** The outside face of *exterior walls* of *mass timber* construction shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes, as specified in Table 722.7.1(1). Components of the *exterior wall covering* shall be of noncombustible material except *water-resistive barriers* having a peak heat release rate of less than 150kW/m<sup>2</sup>, a total heat release of

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less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18MJ/kg as determined in accordance with ASTM E1354 and having a *flame spread index* of 25 or less and a *smoke-developed index* of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m<sup>2</sup>.

**602.4.1.2 Interior protection.** Interior faces of all *mass timber* elements, including the inside faces of exterior *mass timber* walls and *mass timber* roofs, shall be protected with materials complying with Section 703.3.

**602.4.1.2.1 Protection time.** *Noncombustible protection* shall contribute a time equal to or greater than times assigned in Table 722.7.1(1), but not less than 80 minutes. The use of materials and their respective protection contributions specified in Table 722.7.1(2) shall be permitted to be used for compliance with Section 722.7.1.

**602.4.1.3 Floors.** The floor assembly shall contain a noncombustible material not less than 1 inch (25 mm) in thickness above the *mass timber*. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. The underside of floor assemblies shall be protected in accordance with Section 602.4.1.2.

**602.4.1.4 Roofs.** The *interior surfaces* of *roof assemblies* shall be protected in accordance with Section 602.4.1.2. *Roof coverings* in accordance with Chapter 15 shall be permitted on the outside surface of the *roof assembly*.

**602.4.1.5** Concealed spaces. Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the *Florida Building Code, Mechanical*, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected in accordance with Section 602.4.1.2.

**602.4.1.6 Shafts.** *Shafts* shall be permitted in accordance with Sections 713 and 718. Both the *shaft* side and room side of *mass timber* elements shall be protected in accordance with Section 602.4.1.2.

**602.4.2 Type IV-B.** *Building elements* in Type IV-B construction shall be protected in accordance with Sections through 602.4.2.6. The required *fire-resistance rating* of noncombustible elements or *mass timber* elements shall be determined in accordance with Section 703.2.

**602.4.2.1 Exterior protection**. The outside face of *exterior walls* of *mass timber* construction shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes, as specified in Table 722.7.1(1). Components of the *exterior wall covering* shall be of noncombustible material except *water-resistive barriers* having a peak heat release rate of less than 150kW/m<sup>2</sup>, a total heat release of less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18MJ/kg as determined in accordance with ASTM E1354, and having a *flame spread index* of 25 or less and a *smoke-developed index* of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m<sup>2</sup>.

**602.4.2.2 Interior protection**. Interior faces of all *mass timber* elements, including the inside face of exterior *mass timber* walls and *mass timber* roofs, shall be protected, as required by this section, with materials complying with Section 703.3.

**602.4.2.2.1 Protection time**. *Noncombustible protection* shall contribute a time equal to or greater than times assigned in Table 722.7.1(1), but not less than 80 minutes. The use of materials and their respective protection contributions specified in Table 722.7.1(2) shall be

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permitted to be used for compliance with Section 722.7.1.

**602.4.2.2.2 Protected area**. Interior faces of *mass timber* elements, including the inside face of exterior *mass timber* walls and *mass timber* roofs, shall be protected in accordance with Section 602.4.2.2.1.

**Exceptions:** Unprotected portions of *mass timber* ceilings and walls complying with Section 602.4.2.2.4 and the following:

1. Unprotected portions of *mass timber* ceilings and walls complying with one of the following:

- 1.1 Unprotected portions of *mass timber* ceilings, including attached beams, shall be permitted and shall be limited to an area less than or equal to 100 percent of the floor area in any *dwelling unit* within a story or *fire area* within a story.
- 1.2 Unprotected portions of *mass timber* walls, including attached columns, shall be permitted and shall be limited to an area less than or equal to 40 percent of the floor area in any *dwelling unit* within a story or *fire area* within a story.
- 1.3 Unprotected portions of both walls and ceilings of *mass timber*, including attached columns and beams, in any *dwelling unit* or *fire area* shall be permitted in accordance with Section 602.4.2.2.3.

<u>2</u>. *Mass timber* columns and beams that are not an integral portion of walls or ceilings, respectively, shall be permitted to be unprotected without restriction of either aggregate area or separation from one another.

**602.4.2.2.3 Mixed unprotected areas.** In each *dwelling unit* or *fire area*, where both portions of ceilings and portions of walls are unprotected, the total allowable unprotected area shall be determined in accordance with Equation 6-1.

 $(\underline{U_{tc}}/\underline{U_{ac}}) + (\underline{U_{tw}}/\underline{U_{aw}}) \le 1 \quad \text{(Equation 6-1)}$ 

where:

 $\underline{U}_{tc}$  = Total unprotected mass timber ceiling areas.

 $U_{ac}$  = Allowable unprotected *mass timber* ceiling area conforming to Exception 1.1 of Section 602.4.2.2.2.

 $\underline{U}_{tw}$  = Total unprotected *mass timber* wall areas.

 $U_{aw}$  = Allowable unprotected *mass timber* wall area conforming to Exception 1.2 of Section 602.4.2.2.2.

**602.4.2.2.4 Separation distance between unprotected mass timber elements.** In each *dwelling unit* or *fire area*, unprotected portions of *mass timber* walls shall be not less than 15 feet (4572 mm) from unprotected portions of other walls measured horizontally along the floor.

**602.4.2.3 Floors.** The floor assembly shall contain a noncombustible material not less than 1 inch (25 mm) in thickness above the *mass timber*. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. Except where unprotected *mass timber* ceilings are permitted in Section 602.4.2.2.2, the underside of floor assemblies shall be protected in accordance with

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Section 602.4.1.2.

**602.4.2.4 Roofs.** The *interior surfaces* of roof assemblies shall be protected in accordance with Section 602.4.2.2 except, in nonoccupiable spaces, they shall be treated as a concealed space with no portion left unprotected. *Roof coverings* in accordance with Chapter 15 shall be permitted on the outside surface of the roof assembly.

**602.4.2.5 Concealed spaces.** Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the *Florida Building Code, Mechanical*, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected in accordance with Section 602.4.1.2.

**602.4.2.6 Shafts.** Shafts shall be permitted in accordance with Sections 713 and 718. Both the *shaft* side and room side of *mass timber* elements shall be protected in accordance with Section 602.4.1.2.

**602.4.3 Type IV-C.** Building elements in Type IV-C construction shall be protected in accordance with Sections 602.4.3.1 through 602.4.3.6. The required *fire-resistance rating* of *building elements* shall be determined in accordance with Section 703.2.

**602.4.3.1 Exterior protection.** The exterior side of walls of combustible construction shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes, as determined in Table 722.7.1(1). Components of the *exterior wall covering* shall be of noncombustible material except *water-resistive barriers* having a peak heat release rate of less than 150 kW/m<sup>2</sup>, a total heat release of less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a *flame spread index* of 25 or less and a *smoke-developed index* of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m<sup>2</sup>.

602.4.3.2 Interior protection. Mass timber elements are permitted to be unprotected.

**602.4.3.3 Floors.** Floor finishes in accordance with Section 804 shall be permitted on top of the floor construction.

**602.4.3.4 Roof coverings.** *Roof coverings* in accordance with Chapter 15 shall be permitted on the outside surface of the roof assembly.

**602.4.3.5 Concealed spaces.** Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the *Florida Building Code, Mechanical*, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes, as specified in Table 722.7.1(1).

**602.4.3.6 Shafts.** Shafts shall be permitted in accordance with Sections 713 and 718. Shafts and elevator hoistway and *interior exit stairway enclosures* shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes, as specified in Table 722.7.1(1), on both the inside of the *shaft* and the outside of the *shaft*.

**602.4.4 Type IV-HT.** Type IV-HT (Heavy Timber) construction is that type of construction in which the *exterior walls* are of noncombustible materials and the interior *building elements* are of solid wood, laminated heavy timber or *structural composite lumber* (SCL), without concealed spaces or with concealed spaces complying with Section 602.4.4.3. The minimum dimensions for permitted materials including solid timber,

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glued-laminated timber, SCL and *cross-laminated timber* (CLT) and the details of Type IV construction shall comply with the provisions of this section and Section 2304.11. *Exterior walls* complying with Section 602.4.4.1 or 602.4.4.2 shall be permitted. Interior walls and partitions not less than 1-hour fire-resistance rated or heavy timber conforming with Section 2304.11.2.2 shall be permitted.

**602.4.1** <u>602.4.4.1</u>. Fire-retardant-treated wood in *exterior walls*. *Fire-retardant-treated wood* framing and sheathing complying with Section 2303.2 shall be permitted within *exterior wall* assemblies with a 2-hour rating or less.

**602.4.2** <u>602.4.2</u> <u>Cross-laminated timber in *exterior walls.* Cross-laminated timber not less than 4 inches (102 mm) in thickness complying with Section 2303.1.4 shall be permitted within *exterior wall* assemblies with a 2-hour rating or less. Heavy timber structural members appurtenant to the *CLT exterior wall* shall meet the requirements of Table 2304.11 and be fire-resistance rated as required for the *exterior wall*. The exterior surface of the *cross-laminated timber* and heavy timber elements shall be is protected by one the following:</u>

- 1. *Fire-retardant-treated wood* sheathing complying with Section 2303.2 and not less than 15/32 inch (12 mm) thick.
- 2. Gypsum board not less than 1/2 inch (12.7 mm) thick; or
- 3. A noncombustible material.

**602.4.4.3** Concealed spaces. Concealed spaces shall not contain combustible materials other than *building elements* and electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the *Florida Building Code, Mechanical*. Concealed spaces shall comply with applicable provisions of Section 718. Concealed spaces shall be protected in accordance with one or more of the following:

- 1. The building shall be sprinklered throughout in accordance with Section 903.3.1.1 and automatic sprinklers shall also be provided in the concealed space.
- 2. The concealed space shall be completely filled with noncombustible insulation.
- 3. Combustible surfaces within the concealed space shall be fully sheathed with not less than 5/8 -inch *Type X gypsum board*.

**Exception:** Concealed spaces within interior walls and partitions with a 1-hour or greater *fire-resistance rating* complying with Section 2304.11.2.2 shall not require additional protection.

**602.4.3 602.4.4 Exterior structural members.** Where a horizontal separation of 20 feet (6096 mm) or more is provided, wood columns and arches conforming to heavy timber sizes complying with Section 2304.11 shall be permitted to be used externally.

## CHAPTER 7 FIRE AND SMOKE PROTECTION FEATURES

#### SECTION 703 FIRE-RESISTANCE RATINGS AND FIRE TESTS

#### Add new sections as follows:

**703.8 Determination of noncombustible protection time contribution.** The time, in minutes, contributed to the *fire-resistance rating* by the *noncombustible protection* of *mass timber building elements*, components, or assemblies, shall be established through a comparison of assemblies tested using procedures set forth in ASTM E119 or UL 263. The test assemblies shall be identical in construction, loading and materials, other than the *noncombustible protection*. The two test assemblies shall be tested to the same criteria of structural failure with the following conditions:

- 1. Test Assembly 1 shall be without protection.
- Test Assembly 2 shall include the representative noncombustible protection. The protection shall be fully defined in terms of configuration details, attachment details, joint sealing details, accessories and all other relevant details.

The *noncombustible protection* time contribution shall be determined by subtracting the *fire-resistance* time, in minutes, of Test Assembly 1 from the *fire-resistance* time, in minutes, of Test Assembly 2.

**703.9 Sealing of adjacent mass timber elements.** In *buildings* of Types IV-A, IV-B and IV-C construction, sealant or adhesive shall be provided to resist the passage of air in the following locations:

- 1. At abutting edges and intersections of mass timber building elements required to be fire-resistance rated.
- 2. At abutting intersections of *mass timber building elements* and *building elements* of other materials where both are required to be fire-resistance rated.

Sealants shall meet the requirements of ASTM C920. Adhesives shall meet the requirements of ASTM D3498.

**Exception:** Sealants or adhesives need not be provided where they are not a required component of a tested fire-resistance-rated assembly.

#### **SECTION 705** PROJECTIONS

#### **Revise table as follows:**

#### **TABLE 705.5** FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE<sup>a, d, g</sup>

	01			
FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H <sup>e</sup>	OCCUPANCY GROUP F-1, M, S-1 <sup>f</sup>	OCCUPANCY GROUP A, B, E, F-2, I, R, S-2, U <sup>h</sup>
X < 5 <sup>b</sup>	All	3	2	1
5 C V = 10	IA <u>, IVA</u>	3	2	1
5 2 X < 10	Others	2	1	1
	IA, IB <u>, IVA, IVB</u>	2	1	1°
$10 \le X < 30$	IIB, VB	1	0	0
	Others	1	1	1°
X ≥ 30	All	0	0	0
$5 \le X < 10$ $10 \le X < 30$ $X \ge 30$	Others IA, IB <u>, IVA, IVB</u> IIB, VB Others	2 2 1 1 0	2 1 1 0 1 0	1 1° 0 1° 0

For SI: 1 foot = 304.8 mm.
a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
b. See Section 706.1.1 for party walls.

Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
 The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.

e.

f.

For special requirements for Group H occupancies, see Section 415.6. For special requirements for Group S aircraft hangars, see Section 412.4.1. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the g. exterior walls is 0 hours.

For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.

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#### SECTION 718 CONCEALED SPACES

#### **Revise section as follows:**

718.2.1 Fireblocking materials. Fireblocking shall consist of the following materials:

- 1. Two-inch (51 mm) nominal lumber.
- 2. Two thicknesses of 1-inch (25 mm) nominal lumber with broken lap joints.
- 3. One thickness of 0.719-inch (18.3 mm) wood structural panels with joints backed by 0.719-inch (18.3 mm) wood structural panels.
- 4. One thickness of 0.75-inch (19.1 mm) particleboard with joints backed by 0.75-inch (19 mm) particleboard.
- 5. One-half-inch (12.7 mm) gypsum board.
- 6. One-fourth-inch (6.4 mm) cement-based millboard.
- 7. Batts or blankets of *mineral wool*, *mineral fiber* or other *approved* materials installed in such a manner as to be securely retained in place.
- 8. Cellulose insulation-installed as tested for the specific application.
- 9. Mass timber complying with Section 2304.11.
- One thickness of <sup>19</sup>/<sub>32</sub>-inch (15.1 mm) fire-retardant-treated wood structural panel complying with Section 2303.2.

#### SECTION 722 CALCULATED FIRE-RESISTANCE

Add new sections as follows:

**722.7 Fire-resistance rating for mass timber.** The required *fire resistance* of *mass timber* elements in Section 602.4 shall be determined in accordance with Section 703.2. The *fire-resistance rating* of *building elements* shall be as required in Tables 601 and 705.5 and as specified elsewhere in this code. The *fire-resistance rating* of the *mass timber* elements shall consist of the *fire resistance* of the unprotected element added to the protection time of the *noncombustible protection*.

**722.7.1 Minimum required protection.** Where required by Sections 602.4.1 through 602.4.3, *noncombustible protection* shall be provided for *mass timber building elements* in accordance with Table 722.7.1(1). The rating, in minutes, contributed by the *noncombustible protection* of *mass timber building elements*, components or assemblies, shall be established in accordance with Section 703.6. The protection contributions indicated in Table 722.7.1(2) shall be deemed to comply with this requirement where installed and fastened in accordance with Section 722.7.2.

# TABLE 722.7.1(1) PROTECTION REQUIRED FROM NONCOMBUSTIBLE COVERING MATERIAL

REQUIRED FIRE-RESISTANCE RATING OF BUILDING ELEMENT PER Table 601 AND Table 602 (hours)	MINIMUM PROTECTION REQUIRED FROM NONCOMBUSTIBLE PROTECTION (minutes)
<u>1</u>	40
2	80
<u>3 or more</u>	120

#### TABLE 722.7.1(2) PROTECTION PROVIDED BY NONCOMBUSTIBLE COVERING MATERIAL

NONCOMBUSTIBLE PROTECTION	PROTECTION CONTRIBUTION (minutes)
1/2-inch Type X gypsum board	25
5/8-inch Type X gypsum board	<u>40</u>

**722.7.2 Installation of gypsum board noncombustible protection.** *Gypsum board* complying with Table 722.7.1(2) shall be installed in accordance with this section.

**722.7.2.1 Interior surfaces.** Layers of *Type X gypsum board* serving as *noncombustible protection* for *interior surfaces* of wall and ceiling assemblies determined in accordance with Table 722.7.1(1) shall be installed in accordance with the following:

1. Each layer shall be attached with Type S drywall screws of sufficient length to penetrate the *mass timber* at least 1 inch (25 mm) when driven flush with the paper surface of the gypsum board.

**Exception:** The third layer, where determined necessary by Section 722.7, shall be permitted to be attached with 1-inch (25 mm) No. 6 Type S drywall screws to furring channels in accordance with AISI S220.

- 2. Screws for attaching the base layer shall be 12 inches (305 mm) on center in both directions.
- 3. Screws for each layer after the base layer shall be 12 inches (305 mm) on center in both directions and offset from the screws of the previous layers by 4 inches (102 mm) in both directions.

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- 4. All panel edges of any layer shall be offset 18 inches (457 mm) from those of the previous layer.
- 5. All panel edges shall be attached with screws sized and offset as in Items 1 through 4 and placed at least 1 inch (25 mm) but not more than 2 inches (51 mm) from the panel edge.
- 6. All panels installed at wall-to-ceiling intersections shall be installed such that ceiling panels are installed first and the wall panels are installed after the ceiling panel has been installed and is fitted tight to the ceiling panel. Where multiple layers are required, each layer shall repeat this process.
- 7. All panels installed at a wall-to-wall intersection shall be installed such that the panels covering an *exterior wall* or a wall with a greater *fire-resistance rating* shall be installed first and the panels covering the other wall shall be fitted tight to the panel covering the first wall. Where multiple layers are required, each layer shall repeat this process.
- 8. Panel edges of the face layer shall be taped and finished with joint compound. Fastener heads shall be covered with joint compound.
- 9. Panel edges protecting *mass timber* elements adjacent to unprotected *mass timber* elements in accordance with Section 602.4.2.2 shall be covered with 11/4-inch (32 mm) metal corner bead and finished with joint compound.

**722.7.2.2 Exterior surfaces.** Layers of *Type X gypsum board* serving as *noncombustible protection* for the outside of the exterior *mass timber* walls determined in accordance with Table 722.7.1(1) shall be fastened 12 inches (305 mm) on center each way and 6 inches (152 mm) on center at all joints or ends. All panel edges shall be attached with fasteners located at least 1 inch (25 mm) but not more than 2 inches (51 mm) from the panel edge. Fasteners shall comply with one of the following:

1. Galvanized nails of minimum 12 gage with a 7/16-inch (11 mm) head of sufficient length to penetrate the *mass timber* a minimum of 1 inch (25 mm).

2. Screws that comply with ASTM C1002 (Type S, W or G) of sufficient length to penetrate the *mass timber* a minimum of 1 inch (25 mm).

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# CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE

#### SECTION 403 HIGH-RISE BUILDINGS

**Revise section as follows:** 

**403.3.2 Water supply to required fire pumps.** In <u>all</u> *buildings* that are more than 420 feet (128 000 mm) in building height and buildings of Type IV-A and IV-B construction that are more than 120 feet (36 576 mm) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

**Exception:** Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections.

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# CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION

Add new section as follows:

#### SECTION 3314 FIRE SAFETY REQUIREMENTS FOR BUILDINGS OF TYPES IV-A, IV-B, AND IV-C CONSTRUCTION

[F] 3314.1 Fire safety requirements for buildings of Types IV-A. IV-B, and IV-C construction. Buildings of Types IV-A, IV-B, and IV-C construction designed to be greater than six stories above grade plane shall comply with the following requirements during construction unless otherwise approved by the fire code official.

- 1. Standpipes shall be provided in accordance with Section 3313.
- 2. A water supply for fire department operations, as approved by the fire code official and the fire chief.
- 3. Where building construction exceeds six stories above grade plane, at least one layer of noncombustible protection where required by Section 602.4 shall be installed on all building elements more than 4 floor levels, including mezzanines, below active *mass timber* construction before erecting additional floor levels.

#### Exceptions:

- 1. Shafts and vertical exit enclosures shall not be considered a part of the active mass timber construction.
- 2. Noncombustible material on the top of mass timber floor assemblies shall not be required before erecting additional floor levels.
- 4. Where building construction exceeds six stories above grade plane required exterior wall coverings shall be installed on all floor levels more than 4 floor levels, including mezzanines, below active mass timber construction before erecting additional floor level.

Exception: *Shafts* and vertical exit enclosures shall not be considered a part of the active mass timber construction.

CHAPTER 23 WOOD

#### SECTION 2301 GENERAL

Revise section as follows:

**2301.3** Nominal sizes-Dimensions. For the purposes of this chapter, where dimensions of lumber are specified, they shall be deemed to be nominal dimensions unless specifically designated as actual dimensions (see Section 2304.2). Where dimensions of *cross-laminated timber* thickness are specified, they shall be deemed to be actual dimensions.

#### SECTION 2304 GENERAL CONSTRUCTION REQUIREMENTS

Add new section and revise sections as follows:

**2304.10.8 Fire protection of connections.** Connections used with *fire-resistance*-rated members and in fire-resistance-rated assemblies of Type IV-A, IV-B or IV-C construction shall be protected for the time associated with the fire-resistance rating. Protection time 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.

**2304.11.1.1 Columns**. Minimum dimensions of columns shall be in accordance with Table 2304.11. <u>Columns shall be connected in an approved manner</u>. Columns shall be continuous or <u>aligned vertically from floor to floor in superimposed throughout</u> all stories <u>of Type IV-HT construction and connected in an approved manner</u>. Girders and beams at column connections shall be closely fitted around columns and adjoining ends shall be cross tied to each other, or intertied by caps or ties, to transfer horizontal *loads* across joints. Wood bolsters shall not be placed on tops of columns unless the columns support roof *loads* only. Where traditional heavy timber detailing is used, connections shall be permitted to be by means of reinforced concrete or metal caps with brackets, by properly designed steel or iron caps, with pintles and base plates, by timber splice plates affixed to the columns by metal connectors housed within the contact faces, or by other *approved* methods.

**2304.11.3 Floors.** Floors shall be without concealed spaces or with concealed spaces complying with Section 602.4.4. 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 and roof or with concealed spaces complying with Section 602.4.3. 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 are being provided. 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.

# CHAPTER 17 SPECIAL INSPECTION AND TESTS

#### SECTION 1711 MASS TIMBER CONSTRUCTION

Add new sections and table as follows:

**1711.1 Mass timber construction.** Inspections of mass timber elements in Types IV-A, IV-B and IV-C construction shall be in accordance with Table 1711.1.

<b>TABLE 1711.1</b>
<b>REQUIRED INSPECTIONS OF MASS TIMBER CONSTRUCTION</b>

		TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC INSPECTION
<u>1.</u>		chorage and connections of mass timber imber deep foundation systems.	=	X
2.	Inspect erection	of mass timber construction.	=	<u>X</u>
<u>3.</u>	Inspection of co required to meet	nnections where installation methods are tessign loads.		
		Verify use of proper installation equipment.	=	<u>X</u>
	Threaded	Verify use of pre-drilled holes where required.	=	X
	<u>fasteners</u>	Inspect screws, including diameter, length, head type, spacing, installation angle and depth.	=	X
		s installed in horizontal or upwardly inclined ist sustained tension loads.	X	=
	Adhesive ancho	rs not defined in preceding cell.	=	X
	Bolted connection	ons.	=	X
	Concealed conn	ections.	=	X

**1711.2 Sealing of mass timber.** Periodic *special inspections* of sealants or adhesives shall be conducted where sealant or adhesive required by Section 703.7 is applied to *mass timber building elements* as designated in the *approved construction documents*.

# CHAPTER 1 SCOPE AND ADMINISTRATION

#### SECTION 110 INSPECTIONS

#### Add new section as follows:

**110.3.14 Types IV-A, IV-B, and IV-C connection protection inspection.** In buildings of Types 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 2304.10.8, inspection of the wood cover shall be made after the cover is installed, but before any other coverings or finishes are installed.

#### CHAPTER 2 DEFINITIONS

#### SECTION 202 DEFINITIONS

Revise and add new definitions as follows:

[BS] 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.
- 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.

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.

**NONCOMBUSTIBLE PROTECTION (FOR MASS TIMBER).** Noncombustible material, in accordance with Section 703.5, designed to increase the *fire-resistance rating* and delay the combustion of *mass timber*.

# CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS

#### SECTION 504 BUILDING HEIGHT AND NUMBER OF STORIES

TABLE 504.3ª

**Revise tables as follows:** 

						TYPE OF	CONSTR	UCTION					
OCCUPANCY	See	Ту	rpe I	Тур	oe II	Type III		Type IV				Type V	
CLASSIFICATION	Footnotes	А	в	А	в	Α	в	A	B	<u>c</u>	нт	Α	В
	NS <sup>b</sup>	UL	160	65	55	65	55	<u>65</u>	<u>65</u>	<u>65</u>	65	50	40
A,B,E,F,M,S,U	S	UL	180	85	75	85	75	<u>270</u>	<u>180</u>	<u>85</u>	85	70	60
	NS <sup>c,d</sup>		1.00					100		65		50	40
H-1, H-2, H-3, H-5	S	UL	160	65	55	65	55	<u>120</u>	<u>90</u>	<u>65</u>	65	50	40
	NS <sup>c,d</sup>	UL	160	65	55	65	55	<u>65</u>	<u>65</u>	<u>65</u>	65	50	40
H-4	S	UL	180	85	75	85	75	<u>140</u>	<u>100</u>	<u>85</u>	85	70	60
	NS <sup>d,e</sup>	UL	160	65	55	65	55	<u>65</u>	<u>65</u>	<u>65</u>	65	50	40
I-1Condition 1, I-3	S	UL	180	85	75	85	75	<u>180</u>	<u>120</u>	<u>85</u>	85	70	60
	NS <sup>d,e,f</sup>	UL	160	65									
I-1Condition 2, I-2	S	UL	180	85	55	65	55	<u>65</u>	<u>65</u>	<u>65</u>	65	50	40
	NS <sup>d,g</sup>	UL	160	65	55	65	55	65	65	65	65	50	40
I-4	S	UL	180	85	75	85	75	180	120	85	85	70	60
	NS <sup>d, h</sup>	UL	160	65	55	65	55	<u>65</u>	<u>65</u>	<u>65</u>	65	50	40
Rh	S13R	60	60	60	60	60	60	60	<u>60</u>	<u>60</u>	60	60	60
	S	UL	180	85	75	85	75	270	180	85	85	70	60

For SI: 1 foot = 304.8 mm.

Note: UL = Unlimited; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2;

a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.

b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.

c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.

d. The NS value is only for use in evaluation of existing building height in accordance with the Florida Building Code, Existing Building.

e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies Condition 1, see Exception 1 of Section 903.2.6.

f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and the *Florida Fire Prevention Code*.

g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.

h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

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TABLE 504.4<sup>a, b</sup> ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

	ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE TYPE OF CONSTRUCTION See Type I Type II Type III Type IV Type V												
OCCUPANCY CLASSIFICATION	See	Тур	be l	Тур	pe II	Тур	e III		Type V				
	Footnotes	A	В	Α	В	A	В	A	B	<u>c</u>	НТ	A	В
A-1	NS	UL	5	3	2	3	2	<u>3</u>	<u>3</u>	<u>3</u>	3	2	1
	S	UL	6	4	3	4	3	<u>9</u>	<u>6</u>	4	4	3	2
A-2 NS		UL	11	3	2	3	2	<u>3</u>	<u>3</u>	<u>3</u>	3	2	1
M2	S	UL	12	4	3	4	3	<u>18</u>	<u>12</u>	<u>6</u>	4	3	2
A-3	NS	UL	11	3	2	3	2	<u>3</u>	<u>3</u>	<u>3</u>	3	2	1
A-5	S	UL	12	4	3	4	3	<u>18</u>	<u>12</u>	<u>6</u>	4	3	2
A-4	NS	UL	11	3	2	3	2	<u>3</u>	<u>3</u>	<u>3</u>	3	2	1
A-4	S	UL	12	4	3	4	3	<u>18</u>	<u>12</u>	<u>6</u>	4	3	2
A 5	NS	UL	UL	UL	UL	UL	UL	1	1	1	UL	UL	UL
A-5	S	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
D	NS	UL	11	5	3	5	3	<u>5</u>	<u>5</u>	<u>5</u>	5	3	2
В	S	UL	12	6	4	6	4	<u>18</u>	<u>12</u>	<u>9</u>	6	4	3
r.	NS	UL	5	3	2	3	2	<u>3</u>	3	<u>3</u>	3	1	1
E	S	UL	6	4	3	4	3	<u>9</u>	<u>6</u>	4	4	2	2
F 1	NS	UL	11	4	2	3	2	<u>3</u>	3	<u>3</u>	4	2	1
F-1	S	UL	12	5	3	4	3	10	7	5	5	3	2
	NS	UL	11	5	3	4	3	5	5	5	5	3	2
F-2	S	UL	12	6	4	5	4	12	8	6	6	4	3
	NS <sup>c, d</sup>							NP	NP	NP			
H-1	S	1	1	1	1	1	1	1	1	1	1	1	NP
	NS <sup>c, d</sup>							1	1	1		<u> </u>	+
H-2	S	UL	3	2	1	2	1	2	2	2	2	1	1
	NS <sup>c, d</sup>							<u><u> </u></u>	<u><u> </u></u>	3			
H-3	S	UL	6	4	2	4	2	4	4	4	4	2	1
	NS <sup>c, d</sup>	UL	7	5	3	5	2	<u><u>5</u></u>	<u><u></u><u>5</u></u>	<u><u><u></u></u></u>	5	3	2
H-4	S	UL	8	6	4	6	3	<u> </u>	<u> </u>	<u>5</u> 6	6	4	3
	NS <sup>c, d</sup>	UL	0	0	4	0	4			-	0	4	3
H-5		4	4	3	3	3	3	2	2	2	3	3	2
	S		0					3	3	3			
I-1 Condition 1	NS <sup>d, e</sup>	UL	9	4	3	4	3	4	4	4	4	3	2
	S	UL	10	5	4	5	4	<u>10</u>	7	5	5	4	3
I-1 Condition 2	NS <sup>d, e</sup>	UL	9	4	3	4	3	3	3	3	4	3	2
	S	UL	10	5			-	<u>10</u>	<u>6</u>	4			
I-2	NS <sup>d, f</sup>	UL	4	2	1	1	NP	NP	NP	NP	1	1	NP
	S	UL	5	3				1	<u>5</u>	1			
I-3	NS <sup>d, e</sup>	UL	4	2	1	2	1	2	<u>2</u>	<u>2</u>	2	2	1
	S	UL	5	3	2	3	2	<u>7</u>	<u>5</u>	<u>3</u>	3	3	2
I-4	NS <sup>d, g</sup>	UL	5	3	2	3	2	<u>3</u>	<u>3</u>	<u>3</u>	3	1	1
	S	UL	6	4	3	4	3	<u>9</u>	<u>6</u>	<u>4</u>	4	2	2
М	NS	UL	11	4	2	4	2	<u>4</u>	<u>4</u>	<u>4</u>	4	3	1
171	S	UL	12	5	3	5	3	<u>12</u>	<u>8</u>	<u>6</u>	5	4	2

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					R OF S	TYPE OF					_								
OCCUPANCY CLASSIFICATION	See	Ту	oe I	Ту	pe II	Тур	e III		Тур	e IV		Ту	pe V						
OLADOIN IOA NON	Footnotes	A	В	Α	В	Α	В	Δ	B	<u>C</u>	HT	A	В						
	NS <sup>d, h</sup>	UL	11	4								3	2						
R-1	S13R	4	4	4 4	4	4	4	4	4	4	4	4	3						
	S	UL	12	5	- 5	5	5	<u>18</u>	12	<u>8</u>	5	4	3						
	NS <sup>d, h</sup>	UL	11	4								3	2						
R-2	S13R	4	4	4	- 4	4	4	4	<u>4</u>	4	4	4	3						
	S	UL	12	5	5	5	5	<u>18</u>	<u>12</u>	<u>8</u>	5	4	3						
	NS <sup>d, h</sup>	UL	11	4	4			4				3	3						
R-3	S13R	4	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	4
-	S	UL	12	5	5	5	5	<u>18</u>	12	5	5	4	4						
	NS <sup>d, h</sup>	UL	11	4								3	2						
R-4	S13R	4	4	4	4	4	4	4	<u>4</u>	4	4	4	3						
	S	UL	12	5	5	5	5	18	12	5	5	4	3						
S-1	NS	UL	11	4	2	3	2	4	4	<u>4</u>	4	3	1						
5-1	S	UL	12	5	4	4	4	<u>10</u>	7	5	5	4	2						
S-2	NS	UL	11	5	3	4	3	4	4	<u>4</u>	5	4	2						
3-2	S	UL	12	6	6 4	5	4	<u>12</u>	<u>8</u>	<u>5</u>	6	5	3						
U	NS	UL	5	4	2	3	2	4	4	4	4	2	1						
0	S	UL	6	5	3	4	3	9	6	5	5	3	2						

#### TABLE 504.4<sup>a, b</sup>—continued ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

**Note:** UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2.

a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.

b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.

c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.

d. The NS value is only for use in evaluation of existing *building height* in accordance with the *Florida Building Code, Existing Building.* e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6.

For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6. f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and the *Florida Fire Prevention Code*.

g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.

h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8

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#### SECTION 506 BUILDING AREA

#### **Revise table as follows:**

#### TABLE 506.2<sup>a, b</sup> ALLOWABLE AREA FACTOR ( $A_t$ = NS, S1, S13R, or SM, as applicable) IN SOLUARE FEET

00000000000	TYPE OF CONSTRUCTION												
OCCUPANCY CLASSIFICATION	SEE FOOTNOTES	Тур	pe I	Тур	e II	Тур	e III Type IV					Type V	
		Α	В	Α	В	Α	В	A	B	<u>c</u>	HT	A	В
	NS	UL	UL	15,500	8,500	14,000	8,500	45,000	30,000	18,750	15,000	11,500	5,500
A-1	S1	UL	UL	62,000	34,000	56,000	34,000	180,000	120,000	75,000	60,000	46,000	22,00
	SM	UL	UL	46,500	25,500	42,000	25,500	135,000	<u>90,000</u>	56,250	45,000	34,500	16,50
A-2	NS	UL	UL	15,500	9,500	14,000	9,500	45,000	30,000	18,750	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	180,000	120,000	75,000	60,000	46,000	24,00
	SM	UL	UL	46,500	28,500	42,000	28,500	135,000	90,000	56,250	45,000	34,500	18,00
	NS	UL	UL	15,500	9,500	14,000	9,500	45,000	30,000	18,750	15,000	11,500	6,000
A-3	S1	UL	UL	62,000	38,000	56,000	38,000	180,000	120,000	75,000	60,000	46,000	24,00
	SM	UL	UL	46,500	28,500	42,000	28,500	135,000	90,000	56,250	45,000	34,500	18,000
	NS	UL	UL	15,500	9,500	14,000	9,500	45,000	30,000	18,750	15,000	11,500	6,000
A-4	S1	UL	UL	62,000	38,000	56,000	38,000	180,000	120,000	75,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	135,000	90,000	56,250	45,000	34,500	18,000
	NS												
A-5	S1	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
	SM							_					
	NS	UL	UL	37,500	23,000	28,500	19,000	108,000	72,000	45,000	36,000	18,000	9,000
В	S1	UL	UL	150,000	92,000	114,000	76,000	432,000	288,000	180,000	144,000	72,000	36.00
	SM	UL	UL	112,500	69,000	85,500	57,000	324,000	216,000	135,000	108,000	54,000	27,00
	NS	UL	UL	26,500	14,500	23,500	14,500	76,500	51,000	31,875	25,500	18,500	9,500
E	S1	UL	UL	106,000	58,000	94,000	58,000	306,000	204,000	127,500	102,000	74,000	38,00
	SM	UL	UL	79,500	43,500	70,500	43,500	229,500	153,000	95,625	76,500	55,500	28,50
	NS	UL	UL	25,000	15,500	19.000	12,000	100,500	67,000	41,875	33,500	14,000	8,500
F-1	S1	UL	UL	100,000	62.000	76,000	48,000	402,000	268,000	167,500	134.000	56,000	34,00
1-1	SM	UL	UL	75,000	46,500	57,000	36,000	301,500	201,000	125,625	100,500	42,000	25,50
	NS	UL	UL	37,500	23,000	28,500	18,000	151,500	101,000	63,125	50,500	21,000	13,000
F-2	S1	UL	UL	150,000	92,000	114,000	72,000	606,000	404,000	252,500	202,000	84,000	52,000
1-2	SM	UL	UL	112,500	69,000	85,500	54,000	454,500	303,000	189,375	151,500	63,000	39,000
	NSc	UL	OL	112,500	09,000	85,500	54,000	404,000	303,000	107,575	151,500	05,000	39,000
H-1	S1	21,000	16,500	11,000	7,000	9,500	7,000	<u>10,500</u>	10,500	10,500	10,500	7,500	NP
	NS <sup>c</sup>												
H-2	S1	21,000	16,500	11,000	7,000	9,500	7.000	10,500	10,500	10,500	10,500	7,500	3,00
п-2	SM	21,000	10,500	11,000	7,000	9,500	7,000	10,500	10,300	10,500	10,500	7,500	3,00
	NS <sup>c</sup>												
H-3	S1	UL	60,000	26,500	14,000	17,500	13,000	25,500	25,500	25,500	25,500	10,000	5.00
H-3	SM	UL	00,000	20,500	14,000	17,500	15,000	23,300	25,500	23,300	25,500	10,000	5,00
	NS <sup>c, d</sup>	UL	UL	37,500	17,500	28,500	17,500	72,000	54,000	40,500	36,000	18,000	6,500
H-4	S1	UL	UL	37,500	70,000	28,500	70,000	288,000	<u>54,000</u> 216,000	<u>40,500</u> 162,000	144,000	72,000	26,00
11-4	SI	UL	UL	112,500	52,500	85,500	52,500	288,000	162,000	121,500	144,000	54,000	26,00
	NS <sup>c, d</sup>	UL	UL	-	-	-	-			40,500		-	-
11.6				37,500	23,000	28,500	19,000	<u>72,000</u>	<u>54,000</u>		36,000	18,000	9,000
H-5	S1	UL	UL	150,000	92,000	114,000	76,000	288,000	216,000	<u>162,000</u>	144,000	72,000	36,00
	SM	UL	UL	112,500	69,000	85,500	57,000	216,000	162,000	<u>121,500</u>	108000	54,000	27,00

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# CA12257Text Modification

OCCUPANCY CLASSIFICATION	SEE	IN SQUARE FEET TYPE OF CONSTRUCTION											
	FOOTNOTES	Type I		Type II		Type III		Type IV				Type V	
		Α	В	Α	В	A	В	A	B	<u>c</u>	HT	Α	В
I-1	NS <sup>d, e</sup>	UL	55,000	19,000	10,000	16,500	10,000	<u>54,000</u>	<u>36,000</u>	<u>18,000</u>	18,000	10,500	4,500
	S1	UL	220,000	76,000	40,000	66,000	40,000	216,000	144,000	72,000	72,000	42,000	18,000
	SM	UL	165,000	57,000	30,000	49,500	30,000	<u>162,000</u>	<u>108,000</u>	<u>54,000</u>	54,000	31,500	13,500
I-2	NS <sup>d, f</sup>	UL	UL	15,000	11,000	12,000	NP	36,000	<u>24,000</u>	<u>12,000</u>	12,000	9,500	NP
	S1	UL	UL	60,000	44,000	48,000	NP	<u>144,000</u>	<u>96,000</u>	<u>48,000</u>	48,000	38,000	NP
	SM	UL	UL	45,000	33,000	36,000	NP	108,000	<u>72,000</u>	<u>36,000</u>	36,000	28,500	NP
	NS <sup>d, e</sup>	UL	UL	15,000	10,000	10,500	7,500	36,000	24,000	<u>12,000</u>	12,000	7,500	5,000
I-3	S1	UL	UL	60,000	40,000	42,000	30,000	144,000	<u>96,000</u>	48,000	48,000	30,000	20,000
	SM	UL	UL	45,000	30,000	31,500	22,500	108,000	<u>72,000</u>	<u>36,000</u>	36,000	22,500	15,000
	NS <sup>d, g</sup>	UL	60,500	26,500	13,000	23,500	13,000	76,500	<u>51,000</u>	25,500	25,500	18,500	9,000
I-4	S1	UL	121,000	106,000	52,000	94,000	52,000	306,000	204,000	102,000	102,000	74,000	36,000
	SM	UL	181,500	79,500	39,000	70,500	39,000	229,500	153,000	76,500	76,500	55,500	27,000
	NS	UL	UL	21,500	12,500	18,500	12,500	61,500	41,000	26,625	20,500	14,000	9,000
М	S1	UL	UL	86,000	50,000	74,000	50,000	246,000	164,000	102,500	82,000	56,000	36,000
	SM	UL	UL	64,500	37,500	55,500	37,500	184,500	123,000	76,875	61,500	42,000	27,000
R-1	NS <sup>d, h</sup>	UL	UL	24,000	16,000	24,000	16,000	<u>61,500</u>	<u>41,000</u>	<u>25,625</u>		12,000	.,
	S13R										20,500		7,000
	S1	UL	UL	96,000	64,000	96,000	64,000	246,000	164,000	102,500	82.000	48,000	28,000
	SM	UL	UL	72,000	48,000	72,000	48,000	184,500	123,000	76,875	61,500	36,000	21.000
	NS <sup>d, h</sup>		02	, 2,000	10,000	,2,000	10,000				01,000	20,000	21,000
	S13R	UL	UL	24,000	16,000	24,000	16,000	<u>61,500</u>	<u>41,000</u>	25,625	20,500	12,000	7,000
R-2	S1	UL	UL	96,000	64,000	96,000	64,000	246,000	164,000	102,500	82,000	48,000	28,000
	SM	UL	UL	72,000	48,000	72,000	48,000	184,500	123,000	76,875	61,500	36,000	21,000
	NS <sup>d, h</sup>	UL	UL		UL	UL	UL	UL		UL	UL	UL	UL
	S13R												
R-3	S1												
	SM												
	NS <sup>d,h</sup>												
	S13R	UL	UL	24,000	16,000	24,000	16,000	<u>61,500</u>	<u>41,000</u>	<u>25,625</u>	20,500	12,000	7,000
R-4	S1	UL	UL	96.000	64.000	96,000	64,000	246,000	164,000	102,500	82.000	48,000	28,000
	SM	UL	UL	72,000	48,000	72,000	48,000	184,500	123,000	76,875	61,500	36,000	21,000
	NS	UL	48,000	26,000	17,500	26,000	17,500	76,500	51,000	31,875	25,500	14,000	9,000
S-1	S1	UL	192,000	104,000	70,000	104,000	70,000	306,000	204,000	127,500	102,000	56,000	36,000
	SM	UL	192,000	78,000	52,500	78,000	52,500	229,500	153,000	95,625	76,500	42,000	27,000
	NS	UL	79,000	39,000	26,000	39,000	26,000	115,500	77,000	48,125	38,500	21,000	13,500
S-2	S1	UL	316,000	156.000	104.000	156,000	104.000	462,000	308,000	192,500	38,500 154.000	21,000 84,000	54.000
5-2	SM		237,000	156,000	78,000	156,000	78,000	346,500	231,000	144.375	154,000	63,000	40,500
	NS <sup>i</sup>	UL	35,500	,		14,000	,	<u>546,500</u> 54,000	36,000	22,500	,	9,000	40,500 5,500
U	S1	UL		19,000	8,500		8,500	216,000	144,000	<u>22,500</u> 90,000	18,000		
U	1 21	UL	142,000	76,000	34,000	56,000	34,000	210,000	144,000	20,000	72,000	36,000	22,000

(continued)

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# TABLE 506.2<sup>a, b</sup>—continuedALLOWABLE AREA FACTOR ( $A_t$ = NS, S1, S13R, S13D or SM, as applicable)IN SQUARE FEET

Note: UL = Unlimited; NP = Not Permitted

For SI: 1 square foot =  $0.0929 \text{ m}^2$ .

NS = Buildings not equipped throughout with an automatic sprinkler system; S1 = Buildings a maximum of one story above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; SM = Buildings two or more stories above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2;

a. See Chapters 4 and 5 for specific exceptions to the allowable area in this chapter.

- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing building area in accordance with the Florida Building Code, Existing Building.
- e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6.
- f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and the *Florida Fire Prevention Code*.
- g. New Group I-4 occupancies see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

#### SECTION 508 MIXED USE AND OCCUPANCY

#### **Revise section as follows:**

**508.4.1** Construction. Required separations shall be *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both, so as to completely separate adjacent occupancies. *Mass timber* elements serving as *fire barriers* or *horizontal assemblies* to separate occupancies in Type IV-B or IV-C construction shall be separated from the interior of the *building* with an *approved* thermal barrier consisting of *gypsum board* that is not less than 1/2 inch (12.7 mm) in thickness or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275.

**Exception:** The thermal barrier shall not be required on the top of horizontal assemblies serving as occupancy separations.

#### SECTION 509 INCIDENTAL USES

#### Add new section as follows:

**509.4.1.1 Type IV-B and IV-C construction.** Where Table 509 specifies a fire-resistance-rated separation, *mass timber* elements serving as *fire barriers* or *horizontal assemblies* in Type IV-B or IV-C construction shall be separated from the interior of the incidental use with an *approved* thermal barrier consisting of *gypsum board* that is not less than 1/2 inch (12.7mm) in thickness or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275.

**Exception:** The thermal barrier shall not be required on the top of horizontal assemblies serving as incidental use separations.

# CHAPTER 14 EXTERIOR WALLS

#### SECTION 1405 INSTALLATION OF WALL COVERINGS

#### **Revise section as follows:**

**1405.5 Wood Veneers.** Wood veneers on exterior walls of buildings of Type I, II, III and IV-<u>HT</u> construction shall be not less than 1 inch (25mm) nominal thickness, 0.438-inch (11.1 mm) exterior *hardboard* siding or 0.375-inch (9.5 mm) exterior-type *wood structural panels* or *particleboard* and shall conform to the following:

- 1. The veneer shall not exceed 40 feet (12 190 mm) in height above grade. Where *fire-retardant-treated wood* is used, the height shall not exceed 60 feet (18 290 mm) in height above grade.
- 2. The veneer is attached to or furred from a noncombustible *backing* that is fire-resistance rated as required by other provisions of this code.
- 3. Where open or spaced wood *veneers* (without concealed spaces) are used, they shall not project more than 24 inches (610 mm) from the *building* wall.

#### SECTION 1406 COMBUSTIBLE MATERIALS ON THE EXTERIOR SIDE OF EXTERIOR WALLS

#### **Revise sections as follows:**

**1406.2.1 Type I, II, III and IV-<u>HT</u> construction.** On buildings of Type I, II, III and IV-<u>HT</u> construction, exterior wall coverings shall be permitted to be constructed of combustible materials, complying with the following limitations:

- 1. Combustible exterior wall coverings shall not exceed 10 percent of an exterior wall surface area where the fire separation distance is 5 feet (1524 mm) or less.
- 2. Combustible exterior wall coverings shall be limited to 40 feet (12 192 mm) in height above grade plane.
- 3. Combustible exterior wall coverings constructed of fire-retardant-treated wood complying with Section 2303.2 for exterior installation shall not be limited in wall surface area where the fire separation distance is 5 feet (1524 mm) or less and shall be permitted up to 60 feet (18 288 mm) in height above grade plane regardless of the fire separation distance.
- 4. Wood veneers shall comply with Section 1405.5.

**1406.3 Balconies and similar projections.** Balconies and similar projections of combustible construction other than *fire-retardant-treated wood* shall be *fire-resistance* rated where required by Table 601 for floor construction or shall be of heavy timber construction in accordance with Section 2304.11. The aggregate length of the projections shall not exceed 50 percent of the *building*'s perimeter on each floor.

#### Exceptions:

- 1. On *buildings* of Type I and II construction, three *stories* or less above *grade plane, fire-retardant-treated wood* shall be permitted for balconies, porches, decks and exterior *stairways* not used as required *exits*.
- Untreated wood, and plastic composites that comply with ASTM D7032 and Section 2612, are permitted for pickets and rails or similar guard devices that are limited to 42 inches (1067 mm) in height.
- 3. Balconies and similar projections on *buildings* of Type III, IV-<u>HT</u> and V construction shall be permitted to be of Type V construction, and shall not be required to have a *fire-resistance rating* where sprinkler protection is extended to these areas.
- Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited.

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# CHAPTER 31 SPECIAL CONSTRUCTION

#### SECTION 3102 MEMBRANE STRUCTURES

#### **Revise sections as follows:**

**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-<u>HT</u> construction. Other membrane structures shall be classified as Type V construction.

**Exception**: Plastic less than 30 feet (9144 mm) above any floor used in *greenhouses*, where *occupancy* by the general public is not authorized, and for aquaculture pond covers is not required to meet the fire propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701.

**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<u>-HT</u> and V construction, provided the *membrane* is not less than 20 feet (6096 mm) above any floor, balcony or gallery.

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# CHAPTER 35 REFERENCED STANDARDS

Revise or add references as follows:

AISI S220—20	North American Standard for Cold-formed Steel Framing-Nonstructural
	Members, 2020 Edition
	722.7.2.1
ANSI/APA PRG 320-2019	Standard for Performance-Rated Cross-Laminated Timber
	602.4
ASTM C920—18	Standard for Specification for Elastomeric Joint Sealants
1011100120 10	703.9
ASTM C1002-20	Specification for Steel Self-Piercing Tapping Screws for the Application of
Abrill Clouz <u>20</u>	Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel
	Studs
	<u>722.7.2.2</u>
A STM D2409 10-	
ASTM D3498— <u>19a</u>	Standard Specifications for Adhesives for Field-Gluing Wood Structural
	Panels (Plywood or Oriented Strand Board) to Wood Based Floor Systems
	<u>703.9</u>
ASTM D7032— <u>21</u>	Standard Specification for Establishing Performance Ratings for Wood-
	Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards
	and Handrails
	<u>703.9, 705.2.3.1</u>
ASTM E84— <u>21a</u>	Standard Test Methods for Surface Burning Characteristics of Building
	Materials
	202, 602.4.1.1, 602.4.2.1, 602.4.3.1,
ASTM E119— <u>20</u>	Standard Test Methods for Fire Tests of Building Construction and
—	Materials
	703.8
ASTM E1354—17	Standard Test Method for Heat and Visible Smoke Release Rates for
	Materials and Products using an Oxygen Consumption Calorimeter
	602.4.1.1, 602.4.2.1, 602.4.3.1
NFPA 241—22	Standard for Safeguarding Construction, Alteration and Demolition
	Operations
	3301.1, 3303.2
NEDA 275 22	5301.1, 5305.2 Standard Method of Fire Tests for the Evaluation of Thermal Barriers
NFPA 275— <u>22</u>	
NED 4 501 00	508.4.4.1, 509.4.1
NFPA 701— <u>23</u>	Standard Methods of Fire Tests for Flame Propagation of Textiles and
	Films
	3102.3, 3102.6.1.1
UL 263—11	Fire Tests of Building Construction and Materials – with Revisions through
	August 2021
	<u>703.8</u>
UL 723—18	Standard for Test for Surface Burning Characteristics of Building
	Materials
	602.4.1.1, 602.4.2.1, 602.4.3.1

# APPENDIX D FIRE DISTRICTS

#### SECTION D102 BUILDING RESTRICTIONS

#### **Revise section as follows:**

**D102.2.5 Structural fire rating.** Walls, floors, roofs and their supporting structural members shall be a minimum of 1-hour fire-resistance-rated construction.

#### **Exceptions:**

- 1. Buildings of Type IV-HT construction.
- 2. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. Automobile parking structures.
- 4. Buildings surrounded on all sides by a permanently open space of not less than 30 feet (9144 mm).
- 5. Partitions complying with Section 603.1, Item 11.

CA12257Rationale

FBC - Mass Timber Summary

#### BACKGROUND

The **Ad Hoc Committee on Tall Wood Buildings (TWB)** was created by the ICC Board in 2015 to explore the science of tall wood buildings and develop code changes for such structures.

The TWB and its various working groups (WGs) held meetings, studied issues, and sought input from expert sources worldwide. The TWB posted these documents and input on its website for interested parties to follow its progress and allow public input throughout.

At its first meeting, the TWB discussed **several performance objectives** to be met with the proposed criteria for tall wood buildings:

- **No collapse** under reasonable scenarios of complete burnout of fuel without considering automatic sprinkler protection.
- No unusually high radiation exposure from the subject building to adjoining properties that could present a risk of ignition under reasonably severe fire scenarios.
- No unusual response to typical radiation exposure from adjacent properties that could present a risk of ignition of the subject building under reasonably severe fire scenarios.
- No unusual fire department access issues.
- Egress systems designed to protect building occupants during the design escape time, plus a factor of safety.
- **Highly reliable fire suppression systems** to reduce the risk of failure during reasonably expected fire scenarios. The degree of reliability should be proportional to evacuation time (height) and the risk of collapse.

The comprehensive package of proposals from the TWB meets these performance objectives.

#### DEFINITIONS

Included in the proposal are three new or revised definitions: **Wall, Load-Bearing; Mass Timber;** and **Noncombustible Protection (for Mass Timber).** These definitions are important for understanding the proposed changes to Type IV Construction.

#### Load-Bearing Wall

The modification to the term **"load-bearing wall"** has been updated to include **"mass timber"** as a category equivalent to other materials. Based on research conducted by wood trade associations, **mass timber walls** (e.g., sawn, glued-laminated, cross-laminated timbers) have the ability to support the minimum 200 pounds per linear foot vertical load requirement required of "load bearing".

#### Mass Timber

The term **"mass timber"** already exists undefined in previous editions of the Florida Building Code (FBC). The definition proposed represents both legacy heavy timber (a.k.a. Type IV construction) and the three new construction types proposed for **FBC Chapter 6**. The purpose of defining this term is to establish that the term represents various sawn and engineered timber products referenced in **FBC Chapter 23 (Wood)** and PRG-320 "Standard for Performance-Rated Cross-Laminated Timber."

FBC –Mass Timber Summary

FBC - Mass Timber Summary

#### Noncombustible Protection (For Mass Timber)

The definition of "Noncombustible Protection (For Mass Timber)" was created to address the passive fire protection requirement of mass timber.

- Mass timber is permitted to have its own fire-resistance rating (e.g., Mass Timber only) and/or have a fire-resistance rating based on a combination of mass timber fire resistance plus protection by noncombustible materials, as defined in Section 703.5 (e.g., additional materials that delay combustion, such as gypsum board).
- While it is uncommon to list a code section number within a definition, it was necessary in this case to ensure that the user understands the intent.
- Protection by a noncombustible material will act to delay the combustion of mass timber.

#### TYPES OF CONSTRUCTION

The committee recognized tall mass timber buildings worldwide generally fall into three categories:

- 1. Fully Protected Mass Timber The mass timber is fully protected by noncombustible materials.
- 2. **Partially Exposed Mass Timber** Some portions of mass timber may be exposed in limited amounts on walls and/or ceilings.
- 3. Unprotected Mass Timber The mass timber structure may be fully exposed.

The **TWB** determined that fire testing was necessary to validate these concepts. During its first meeting, members discussed the nature and intent of fire testing to ensure meaningful results for the TWB and, more specifically, for the fire service. A test plan was subsequently developed, consisting of one-bedroom apartments on two levels, each with a corridor leading to a stairway. The purpose of the tests was to evaluate the contribution of mass timber to a fire, the performance of connections and joints, and conditions for responding fire personnel.

The **Fire WG** refined the test plan, which was implemented in a series of five full-scale, multi-story building tests at the **ATF laboratories** in Beltsville, MD. The results, along with testing conducted by others, helped form the basis for the **Codes WG** to develop its code change proposals, including this one, which was approved by the TWB.

#### MASS TIMBER CONSTRUCTION CLASSIFICATIONS

#### Type IV-A: Fully Protected Mass Timber

Type IV-A is completely protected with noncombustible materials, primarily layers of **5/8-inch Type X** gypsum board. Fire tests have shown that mass timber construction protected in this way can survive a complete burnout of a residential fuel load without engaging the mass timber in the fire.

To ensure uniform protection, the text clearly requires **all** building elements to be protected, including floor surfaces, walls and ceiling surfaces, interior roof surfaces, underside of floor surfaces, and shafts.

FBC –Mass Timber Summary

CA12257Rationale

Type IV-A is designed to have **the same fire resistance rating as Type I-A construction**, requiring **2-hour and 3-hour structural elements**. The fire resistance rating of structural elements was set conservatively to **sustain fuel loads without sprinkler protection** and **without contributing structural members to the fire,** similar to the IBC strategy for Type I construction.

#### Type IV-B: Partially Exposed Mass Timber

FBC – Mass Timber Summary

Type IV-B allows for some exposed **wood surfaces** on ceilings, walls, columns, and beams. However, the amount of exposed wood is **limited** to restrict potential contribution to an interior fire.

Type IV-B has undergone the same fire tests as Type IV-A. Results show a predictable char layer develops on mass timber, similar to traditional sawn lumber, provided **substantial delamination is avoided**. While portions of mass timber may be unprotected, concealed spaces, shafts, and other specified areas must **be fully protected** with noncombustible materials.

Type IV-B is designed to have **the same base fire resistance requirements as Type I-B construction**, and therefore requires **2-hour structural elements**. Unlike Type I-B, the IBC allowance to reduce structural elements to 1-hour protection **is not proposed for Type IV-B**.

#### Type IV-C: Fully Exposed Mass Timber

Type IV-C construction allows **fully exposed mass timber**, with the key restrictions that concealed spaces, shafts, elevator hoistways, and interior exit stairway enclosures must be protected with noncombustible materials.

This construction type is different from traditional **Heavy Timber (Type IV-HT)** because **Type IV-C requires a 2-hour fire rating**. However, despite this added fire rating, the **height in feet for Type IV-C remains the same as Type IV-HT**. The committee proposed **additional floors** for some occupancy groups in Type IV-C construction.

#### Modifications to Tables 601 and 602

This proposal includes **modifications to Tables 601 and 602** to set performance requirements for mass timber construction, aligning them with **Type I construction standards**:

- Type IV-A → Same fire resistance ratings as Type I-A
- Type IV-B → Same fire resistance ratings as Type I-B
- Type IV-C → Fire resistance is achieved solely through mass timber

Because **Type IV-C lacks a direct counterpart in Type I construction**, its fire resistance ratings were set to **match those of Type IV-B**. As a result, permitted building heights for Type IV-C are **significantly reduced** in both feet and stories, as reflected in proposed changes to Tables 504.3, 504.4, and 506.2.

FBC -Mass Timber Summary

CA12257Rationale

# Rationale Statement for Proposed Modification to the Florida Building Code, 9<sup>th</sup> edition (2026)

The proposed modification seeks to incorporate provisions for the use of mass timber in the 9<sup>th</sup> edition of the Florida Building Code (FBC), aligning it with advancements in building science, fire safety, and structural integrity. This proposal is supported by thousands of hours of research, rigorous fire and structural testing, and extensive modeling by national and international experts and researchers, including the ICC Ad Hoc Committee on Tall Wood Buildings (TWB).

The TWB was established in 2015 in response to concerns from code officials regarding mass timber buildings being constructed without the benefit of codified regulations – precisely the situation in Florida today. To ensure the appropriate degree of rigor, the TWB was composed of a balanced group of stakeholders and subject matter experts to investigate and evaluate the feasibility of tall wood construction and develop comprehensive code provisions addressing fire and life safety concerns. The result was a package of code changes that were successfully integrated into the 2021 International Building Code (IBC), followed by refinements in the 2024 IBC. These provisions now form the foundation for the safe and consistent use of mass timber in 40 states and counting.

Recognizing the critical importance of consistent regulatory frameworks, national consensus codes – including the IBC and NFPA standards – have incorporated mass timber as a safe and viable construction method. The National Association of State Fire Marshals (NASFM) reaffirmed this in a November 2022 position statement, emphasizing:

"The use of approved mass timber in tall-wood building construction is of the highest concern to NASFM as we stand for the safety of citizens and firefighters. This identified material and construction type has most recently been evaluated in the model code community. Many facts have been discovered through independent research and testing that have validated this method as meeting the technical requirements of the codes." [Emphasis added]

Similarly, the International Association of Fire Chiefs (IAFC) urged jurisdictions to adopt the mass timber provisions of the IBC, stating in January 2020:

[The IAFC] "Urge communities who are considering new mass-timber buildings to utilize the code provisions found in the 2021 ICC Code documents. There are many opportunities for consideration of buildings that may be taller, larger, or without the protection that was studied. Communities should continue to use the codes and standards that were established through the model code development process." [emphasis added]

Mass timber construction is expanding rapidly across the United States, including in Florida, as developers and architects seek sustainable, efficient, and cost-effective building solutions. However, Florida currently lacks codified mass timber provisions, creating regulatory uncertainty and enforcement challenges for building and fire code officials.

To address this gap, the American Wood Council (AWC) developed the Mass Timber AMM Guide to assist with the 8<sup>th</sup> edition of the Florida Building Code. This guide, based on the 2024 IBC, provided

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for membership by the Building Officials Association of Florida (BOAF) and additionally available from the AWC, provides essential guidance on mass timber construction. However, because the guide does not carry the force of law, formal adoption of mass timber provisions in the Florida Building Code remains necessary to ensure consistent regulation and enforcement across jurisdictions, provide clarity and uniformity for building and fire code officials, streamline the permitting and inspection processes, and maintain the highest standards of fire and life safety.

#### By adopting these provisions into the Florida Building Code, Florida will:

- 1. **Ensure Regulatory Alignment** Maintain consistency with the latest national model codes and standards, facilitating uniformity and a predictable regulatory environment for developers, architects, engineers, and code officials across jurisdictions.
- 2. Enhance Sustainability Include an additional construction option utilizing renewable materials, contributing to lower embodied carbon for a more sustainable built environment.
- Promote Economic Growth Enable innovative construction methods that reduce costs and reduce construction timelines, benefiting both the public and private sectors with projected stimulation of Florida's forestry and manufacturing industries.
- 4. **Strengthen Regulatory Consistency** Provide clear and uniform guidelines for building and fire code officials, ensuring efficient enforcement of mass timber provisions across the state.
- Maintain Fire and Life Safety Ensure the adoption of mass timber includes the rigorous safety measures developed through extensive research and code development, in alignment with the positions of NASFM and the IAFC.

#### The Need for Action:

Mass Timber buildings are currently being constructed in Florida without the benefit of codified requirements, leaving building and fire code officials without the necessary framework to regulate these structures consistently and safely. Failing to adopt these provisions risks creating a patchwork of enforcement and inconsistent safety standards.

It is critical that Florida act now to provide a building code that will ensure that all mass timber buildings meet the highest standards of fire and life safety by adopting the proposed modifications.

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#### For more information:

For more information, the following resources provide technical, regulatory, and real-world evidence demonstrating the safety, reliability, and benefits of tall mass timber construction:

- ICC Ad Hoc Committee on Tall Wood Buildings: This committee was established to explore the building science of tall wood buildings and develop related code changes. <a href="https://www.iccsafe.org">iccsafe.org</a>
  - https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/iccad-hoc-committee-on-tall-wood-buildings/
    - Note: The "Meeting Minutes and Documents" and "Resource Documents" sections of the committee webpage above contain the extensive research and technical information reviewed by the ad hoc committee, including original rationale statements for each proposed section.
    - Based on comprehensive analysis of this information, the committee developed a set of proposals that were adopted to establish regulations that were determined to effectively address fire and life safety considerations for tall mass timber buildings.
- Understanding the Tall Mass Timber Code Changes: A guide detailing the code changes approved by the ICC Ad Hoc Committee on Tall Wood Buildings, offering insights into the technical requirements and safety considerations for mass timber construction.
  - For Building Code Officials: https://awc.org/wp-content/uploads/2023/11/MTCC-Guide-Print-20180919.pdf
  - For Fire Code Officials: https://awc.org/wp-content/uploads/2022/01/tmt\_toolkit.pdf
- TMT Fire Testing: A catalog of research and testing on the fire resistance and safety of mass
  timber components and structures, including related literature and fire test videos. <a href="https://www.awc.org">awc.org</a>

o https://awc.org/woodaware/tmt-fire-testing/

- Position Statements:
  - International Association of Fire Chiefs (IAFC): www.iafc.org/about-iafc/positions/position/tall-wood-mass-timber-buildings
  - National Association of State Fire Marshals (NASFM): www.firemarshals.org/NASFM-Documents (on list at bottom of page)

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# **TAC:** Code Administration

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Building

CA11852					10
Date Submitted	01/28/2025	Section	35	Proponent	Thomas Sputo
Chapter	35	Affects HVHZ	No	Attachments	No
TAC Recommendation	Pending Review				
Commission Action	Pending Review				
<u>Comments</u>					
General Comments No	A	Iternate Lang	guage No		

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**Related Modifications** 

# Summary of Modification

Update addresses of SDI and SJI in lists of reference standards

## Rationale

Update addresses for SDI and SJI in Chapter 35. This will allow users of the Code to more easily contact these Institutes

#### **Fiscal Impact Statement**

Impact to local entity relative to enforcement of code

None

- Impact to building and property owners relative to cost of compliance with code None
- Impact to industry relative to the cost of compliance with code None
- Impact to small business relative to the cost of compliance with code None

#### Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public Increases safety by providing correct contact addresses for these institutes

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Improves Code by providing correct contact addresses for these institutes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not discriminate, administrative change only.

Does not degrade the effectiveness of the code

BCIS Reports

Does not degrade, administrative change only

CA11852Text Modification

SDI SteelDeckInstitute P.O.Box<del>25</del> <u>70</u> FoxRiverGrove,IL 60021-Florence, SC 29503 -SЛ Steel Joist Institute 140 W. Evans Street, Suite 203 P.O. Box 70 Florence, SC 29501 29503

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# **TAC:** Code Administration

Total Mods for Code Administration in Pending Review : 11

Total Mods for report: 11

# Sub Code: Residential

CA11777					11
Date Submitted	01/18/2025	Section	101.1	Proponent	Greg Burke
Chapter	1	Affects HVHZ	No	Attachments	No
TAC Recommendation	Pending Review				
Commission Action	Pending Review				
<u>Comments</u>					
General Comments No	Α	Iternate Lan	guage No		
<b>Related Modifications</b>					

FBCR302 FBCB901.6.1 FBCB901.6.2 FBCB903.3.1.3 FBCB907.6.6 FBCEx505.2 FBCEx505.3 FBCEx702.4 FBCEx702.5 FBCFG101.2

## **Summary of Modification**

Adds three- and four- family dwellings to the scope.

## Rationale

Housing and skilled labor is at a crisis point in the United States. Demand is outpacing supply in a critical way. To entice development and local authorities in providing more options for first time buyers or those who are wishing to down-size, the scope change will enable an opportunity for choice. Moving these two dwelling types into the FBC,R allows construction in an equivalent manner to single-, two-family, and townhouses buildings. More cost savings can come in the form of reduced egress requirements. Single exits could be required that would have stairs meet the riser/tread dimensions reduced from the commercial maximum requirement to the residential requirements for treads and risers. In Occupancy Group R2, under the FBC, B live load will be reduced to 40 psf from the commercial requirement of 100 psf. Other sections of the FBC.R may allow for potential for smaller HVAC units. Financial institutions finance these two types of dwelling units as single-family homes. It is not until a building has five or more residential units that the financing is a commercial loan. For this reason alone, three-family, and four-family dwelling units should be included in the FBC, R. It is possible to purchase these dwellings with an FHA Loan. Realtors in Florida are also permitted to sell up to four units on a residential license. With proper zoning, three-family and fourfamily dwelling units can be designed and constructed to be compatible in single-family neighborhoods. Most can be constructed within a 35-foot height limit, common in many parts of the state. Normally, three-family, and four-family dwellings are two, two and one-half or three stories above the grade plane making them compatible with a singlefamily or two-family home. The footprint of either a three- or a four-family building could be designed and constructed in dimensions of forty feet by sixty feet.

## **Fiscal Impact Statement**

#### Impact to local entity relative to enforcement of code

The less restrictive application of a residential code souldlessen the burden on enforcement. Impact to building and property owners relative to cost of compliance with code Less expensive construction and sales cost.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

May provide more opportunity for small developers and contractors.

## **Requirements**

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

The design of three- and four-family dwelligs are similar in nature to a duplex. As such the dgree of health, safety and elfare is enhanced by admitting these two dwelling types to the residential code.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The modification is in line with industry standards for financing and sales.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No.

Does not degrade the effectiveness of the code

No.

#### FBC,B 101.2 Scope.

The provisions of the *Florida Building Code, Residential* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, removal, and demolition of detached one-<u>, and</u> two-<u>, three-</u> and four- family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.