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**VIRTUAL/TELECONFERENCE**  
**MASS TIMBER TASK FORCE**  
**Virtual, 4822 Madison Yards Way, Madison**  
**Contact: Brad Wojciechowski (608) 266-2112**  
**December 3, 2024**

*The following agenda describes the issues that the Task Force plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the meeting minutes for a record of the actions of the Task Force.*

**AGENDA**

**9:00 A.M.**

**OPEN SESSION – CALL TO ORDER – ROLL CALL**

- A. Adoption of Agenda (1-2)**
- B. Approval of Minutes of October 31, 2024 (3)**
- C. Introductions, Announcements and Recognition**
- D. Reminders: Scheduling Concerns**
- E. Administrative Matters**
  - 1) Department, Staff and Task Force Updates
- F. Administrative Rules Matters – Discussion and Consideration**
- G. Alternative Procedures for Design of Mass Timber Tall Buildings – Discussion and Consideration (4-13) *Additional Materials***
  - 1) Developing Content for Alternative Procedures for Mass Timber Guidebook
  - 2) ICC Performance Code for Buildings and Facilities Review
  - 3) Relating Mass Timber to Other Alternative Building Procedures
- H. Public Comments**

**ADJOURNMENT**

**NEXT MEETING: MARCH 4, 2025**

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MEETINGS AND HEARINGS ARE OPEN TO THE PUBLIC, AND MAY BE CANCELLED WITHOUT NOTICE.

Times listed for meeting items are approximate and depend on the length of discussion and voting. All meetings are held virtually unless otherwise indicated. In-person meetings are typically conducted at 4822 Madison Yards Way, Madison, Wisconsin, unless an alternative location is listed on the meeting notice. In order to confirm a meeting or to request a complete copy of the board's agenda, please visit the Department website at <https://dsps.wi.gov>. The board may also consider materials or items filed after the transmission of this notice. Times listed for the commencement of any agenda item may be changed by the board for the convenience of the parties. The person credentialed by the board has the right to demand that the meeting at which final action may be taken against the credential be held in open

session. Requests for interpreters for the hard of hearing, or other accommodations, are considered upon request by contacting the Affirmative Action Officer or reach the Meeting Staff by calling 608-267-7213.

### 3. Analysis, Design, and Detailing

For Type IV construction, beyond the prescriptive requirements of the adopted building code, ~~it is noted that~~ an alternate, performance-based, pathway is available for design and permitting.

The goal of this chapter is to provide guidance on design parameters, ~~as well as any necessary supervision and peer review by~~ third-party ~~peer reviews professionals (where required)~~, to meet the projects performance ~~objectivesgoals~~. These performance ~~goals/objectives, which should be approved agreed to be among~~ ~~between at various~~ project stakeholders, ~~which may include (design team, ownership, insurers, the design team, AHJ, tenants, and community first responders, to name a few...)~~, early in the approval process; ~~and could include~~The level of performance (survivability, repairability, or continued operations despite extraordinary events) should be determined at the project onset so that appropriate structural ~~d (among other topics)~~ design load combinations, fire ~~endurance ratingsperformance and life safety goals~~, serviceability criteria, and structural ~~stability or integrityload path checks, and other considerations may be applied accordingly to fulfill objectives (including redundancy/progressive collapse mitigation)~~.

#### 3.1 Structural Design Considerations

The structural design should follow, at a minimum, the ~~prescriptive~~ requirements of the National Design Specification referenced by the current version of the Wisconsin Commercial Building Code.; ~~however, performance-based design objectives may be set higher than typically required by code to minimize damage to the structure, architectural and/or mechanical systems, and building contents. Generally, code minimum requirements are established to prevent damage under routine service conditions and ensure that building occupants may evacuate buildings safely when an extraordinary event occurs. Higher performance-based design objectives, however, may be established at the discretion of project stakeholders (e.g. owners, insurers, tenants, and first responders) to minimize damage to the structure, architectural and/or mechanical systems, and building contents.~~

~~**3.1.1 Load combinations** should cite a model building code or other rational means of risk assessment to determine load combination factors and the effects of individual hazards (wind, seismic, flood, etc.) that result in applied loading conditions.~~

~~**3.1.1.1 Standard Basic, code code-required load combinations** (e.g. ASCE/SEI 7) for strength design or allowable stress design should be addressed, at a minimum., clarifying if supplemental or enhanced requirements are being considered (similar to the performance-based design approaches developed for seismic design taken for high seismic regions of the country), those methods of load determination, applied load combination factors, and risk assessment should be indicated in the calculations. These additional considerations/enhancements could consider structural redundancy (progressive collapse) and structural integrity (rotational compatibility/ductility, structural and non-structural) depending on the site/project specific requirements.~~

Commented [KJ1]: Better title than "Structural"?

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**3.1.1.2 Load combinations for extraordinary events** are defined in the most recent edition of ASCE/SEI 7 to address low-probability events such as fires, explosions, and vehicular impacts that may cause disproportionate structural collapse by damaging columns. Among these extraordinary events, fire damage is generally applicable to performance-based design of mass timber structures that seek an alternative solution to the encapsulation requirements prescribed by building codes. Load combinations should consider the:

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- Capacity of a structure or critical structural element to withstand the effects of a fire and simultaneous gravity loads,
- Residual capacity of damaged structures or critical structural elements affected by fire, and
- Stability requirements of the structure as a whole or critical elements, including the influence of second-order effects.

Whether to use ASCE 7, FDS, or other rationally derived load combination equations to determine the demands of mass timber structures subjected to fire is at the discretion of the design team, AHJ, and peer reviewers. The selected load combinations should be matched to either allowable stress design (ASD) or strength design (LRFD) methods. For further guidelines to assess the capacities of fire-damaged structures or structural elements, see Section 3.3 Fire Endurance Protection Considerations.

Commented [HLFW2]: Fire Design Specification

### **3.1.2 Structural systems and components**

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The design (and documentation) should clearly define the structural load path and system, including defining primary, secondary, and main lateral force resisting members (including the role, or multiple roles, each individual members may serve). In comparison to systems made from other materials, building codes and design standards contain very relatively few prequalified mass timber lateral systems. Additionally, innovative structural systems such as hybrid and composite mass timber are being developed; emphasizing the need for an alternate (performance-based) design approach (beyond the limited prequalified systems currently referenced in building codes).

Commented [KJ3]: Better way to phrase?

### **3.1.3 Structural design references**

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Despite the rapid development of national design standards for mass timber construction, such as the most recent editions of the NDS and Special Design Provisions for Wind and Seismic (SDPWS), it is recommended the design teams will likely need to reference, utilize and/or at least consider, review, the additional requirements of these updated editions of these design standards and state-of-the-art research (e.g. considering the lateral design requirements of 2021 Special Design Provisions for Wind and Seismic (SDPWS), even for building codes referencing earlier versions of IBC). It is also noted that this to keep pace with industry developments and best practices state of the art research may come from sources outside of the United States. Refer to Chapter X for recommended references/design guides associated with many of the topics discussed above.

Commented [JK4]: Reference chapter

### 3.2 Non-Structural Design Considerations

Serviceability considerations, including lateral drifts, floor deflections, and floor vibrations may often control, or at least provide significant guidance towards, the overall design of a structure (beyond standard strength designs/calculations). Additionally, due to the lightweight nature of mass timber construction, there are frequently additional non-structural design principals (e.g. acoustic design, sound mitigation, and thermal/energy performance) that need to be considered during design.

The reader is once again encouraged to review **Chapter X** for additional references associated with the topics above.

**Commented [KJ5]:** Need to find a better title than “non-structural”.

What other none-structural considerations do we want to add?

**Commented [HLFW6R5]:** What about “Additional Design Considerations” and then moving this to 3.3 and the fire section become 3.2?

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### 3.3 Fire ~~Endurance-Protection~~ Considerations

~~Performance-based fire designs may choose to modify the fire endurance durations/requirements from the code required minimum ratings, for a given occupancy/structure type. Fire protection measures including both passive (i.e., fire resistance and flame spread rating) and active (i.e., automatic fire sprinkler and smoke detection systems) features are designed to meet the goals of life safety for occupants, safe access for firefighters, and protection of property. The goals are often unique for each project and will be based on the stakeholders’ needs and desires. When utilizing performance-based designs, the fire protection measures outlined by the prescriptive code(s) may be modified while still achieving the specific fire and life safety goals of the prescriptive code(s).~~

#### 3.3.1 Structural Fire-Resistance Requirements

~~The design team should provide clear documentation noting what structural elements are considered exposed, concealed and/or partially concealed, and the associated fire resistance rating required for each element. Structural details provided to the AHJ should identify the required minimum fire resistance rating of each element per current prescriptive requirements and clearly outline the methods used to meet or exceed the minimum prescriptive fire resistance requirements, particularly where members rely on charring of the wood structural members to achieve the fire resistance rating. The design team should provide clear documentation noting what structural elements are considered exposed, concealed and/or partially concealed, and the associated fire rating of each element. Structural calculations provided to the AHJ should include calculations for both the standard design scenario and for any fire scenario(s), particularly where members rely on charring of the structure to achieve this rating.~~

For elements where the fire protection is provided by a combination of a non-combustible material and a wood charring layer, the contribution of each towards the overall fire resistance rating should be documented; with the contribution of the non-combustible materials (where applicable) providing a minimum of 2/3 of the overall required fire resistance rating.

Any-When supplement testing ~~to be desired-completed~~ (potentially as part of the project's variance process), ~~the should be certified by an independent, accredited 3<sup>rd</sup>-party testing agency. The~~ testing procedure ~~should be confirmed as acceptable with the stakeholders,~~ and results should be reviewed for approval by Project AOR, EOR, Fire Engineer, and AHJ.

### 3.3.13.3.2 Minimum Fire-Resistance Rating (FRR's) Recommendations

Element	Minimum Fire-Resistance Rating
Primary Structural Frame:	
Buildings up to 180'-0" or 12 stories	2 hours <sup>1</sup>
Buildings taller than 180'-0" or 12 stories	3 hours <sup>1,2</sup>
Bearing Walls	Refer to primary structural frame <sup>3,4</sup>
Non-Bearing Walls and Partitions	0 hours
Floor Construction and Associated Secondary Structural Members	2 hours
Roof Construction and Associated Secondary Structural Members:	
Buildings up to 180'-0" or 12 stories	1 hour
Buildings taller than 180'-0" or 12 stories	1.5 hours
Structural Connections	FRR to match, at a minimum, the lower of the connection member(s) FRR

<sup>1</sup> Roof support rating is permitted to be reduced by one hour where supporting a roof only (not including additional occupancies/loading)

<sup>2</sup> For buildings not greater than 420 feet in building height, the fire-resistance rating of floor framing elements (e.g. CLT slabs and glulam beams) shall be permitted to be reduced to 2 hours.

<sup>3</sup> No reduction for roof framing is permitted

<sup>4</sup> Minimum fire-rating for exterior walls to be based on fire separation distance

### 3.3.23.3.3 Mass Timber Fire -Resistance Rating Validation

#### 3.3.2.13.3.3.1 National Design ~~Standards-Specification~~ (Char ~~Depth~~ Method)

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Primary and Secondary Structure:

The utilization of NDS provisions and calculations for the determination of char ~~rates~~ depth is a well-established and industry recognized procedure. For the scope of this guideline, it is recommended that the following (additional) items be considered:

- Load Resistance Factored Design Fire Factors: 2022 Fire Design Specification (FDS) for Wood Construction has included additional Fire Factors (not currently covered in NDS) for the use of Fire Factors with LRFD provisions (~~Table 3.2.5~~).

- Extreme Event Loading: For loading in a fire scenario, the designer is referenced to the 2022 the most current edition of the Fire Design Specification (FDS) for Wood Construction section 3.1.3.4.

- Char Calculations Beyond Fire Resistance Ratings Beyond 2-h Hours: For members requiring fire resistance ratings beyond the 2-hours, which is the duration the current NDS provisions have been validated for, it is recommended the design team provide specific testing, verifying the char rates utilized for design. It is recommended that the calculated char depth for a given duration char rates should not be reduced beyond those calculated based on extrapolation of the current NDS equations.

For projects utilizing Douglas Fir, American Spruce or European Spruce, the design team is advised to refer to the 3-hour testing provided by the USDA Forest Product Laboratory for the Ascent project.

### 3.3.2.2 Connection Details of Primary and Secondary Members: 3.3.3.2

- Bearing type connections may either be previously tested and listed for intended use, should utilize include appropriate noncombustible protection, or require be tested load testing (under a fire event) to achieve the FRR noted in section 2.1.1 desired fire resistance rating.
  - Connections utilizing intumescent paint for noncombustible protection should be load tested (under a fire event) to confirm compatibility between materials
  - At the AHJ's discretion, the use of engineering analysis could be provided to validate the fire resistance rating of connections per current building code provisions, section 2304.10.1 of IBC 2021
- All other mass timber connections should be load tested (under a fire event) for the specified fire resistance rating.
- Testing results shall be provided to the AHJ for review and should meet the requirements of Section 2.1.3.

### 3.3.2.3 3.3.3 Non-Combustible Protection

Gypsum detailing requirements to follow IBC 2021 section 722.7.

Sealants: Sealing of adjacent mass timber elements per 703.7. Sealants shall meet the requirements of ASTM C920. Adhesives shall meet the requirements of ASTM D3498.

Fire Blocking: Materials to meeting the requirements of 718.2.1

### 3.3.2.4 Fire Testing/Certification Requirements:

Testing to be completed, and results certified, by an independent, accredited 3<sup>rd</sup>-party testing agency. Testing procedure and results to be reviewed for approval by Project AOR, EOR, Fire Engineer, and AHJ.

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**Commented [KJ7]:** Typical comment: Can we use the word "should"?

Cannot require, but should we say "recommend"?

**Commented [KJ8]:** Confirm Reference

**Commented [KJ9]:** Confirm reference

**Commented [KJ10]:** There was a lot of discussion on this topic, but it needs to be resolved/finalized. I would recommend Jason Korb (KA) work with Laura (FPL) to make any recommended updates:

Korb previously noted some general concerns regarding discrepancies in the IBC 2021 code (section 722.7). It is recommended that the guideline specify specific detailing requirements in lieu of relying on a reference to IBC 2021

Has a lot more that is codified? General requirements. Sealant. ASPM requirements. Specific materials for fire protection. Gypsum must be met. 2 years ago implemented. Special inspections required based on building officials. Who is appropriate qualifications? Daily/monthly/yearly reports. Up to the special inspector to work with owner, contractor.

"Proposal FS81-18 (new IBC 722.7) defined the level of noncombustible protection required and how to achieve this level, including a prescriptive method recognizing 1/2" Type X gypsum board providing 25 minutes of protection and 5/8" Type X gypsum board providing 40 minutes of protection. Proposal FS5-18 (new IBC 703.6) defined methods to determine the level of noncombustible protection provided by other applied materials through using the E119 test procedure. FS73-18 (IBC 718.2.1) added mass timber as a fire blocking material."

**Commented [KJ11]:** A new code section, IBC 703.7, was included in proposal FS6-18. It required that certain adhesives be applied at abutting edges and intersections of fire resistance-rated mass timber elements unless t...

**Commented [KJ12]:** Any additional guidance/recommendations required? (I don't necessarily think so, but just confirming)

**Commented [HLFW13R12]:** FPL is not an accredited lab, but our results were used for Ascent. Additionally, this is redundant with what was stated in Section 3.3.1.

### 3.3.3.3.4 Exposure Additional Passive Fire Protection Considerations

#### Primary and Secondary Structure:

The floor assembly should contain a non-combustible material no less than 1" in thickness above the mass timber floor. No additional limits are directly required of the primary and secondary structural exposure, contingent on meeting the fire-resistance ratings specified in Section 2.1.1.

#### Concealed Spaces:

It is the committee's opinion that mass timber should not be permitted in concealed spacings with the following exceptions: (1) non-combustible protection is provided within the interior (mass timber) space or (2) significant project specific testing/data is obtained and approved by the AOR/EOR, AHJ, and independent third party peer reviewer.

#### Exterior Walls (Façade):

The committee would note the following recommendations, consistent with the ~~xxxxxxx~~ 2021 IBC:

- "Exterior side of exterior walls protected by a non-combustible material—e.g., 5/8" Type X gypsum sheathing"
- "No combustible exterior wall coverings except for certain water-resistant barriers"
- "No exposed mass timber on the inside and outside surfaces of exit enclosures and elevator hoistways in high-rise buildings (occupied floor > 75 feet from lowest fire department access)"
- "Noncombustible construction only for exit enclosures and elevator hoistways greater than 12 stories or 180 feet"

### 3.3.4—Additional Recommendations:

#### 3.3.5 Prevention of Ignition and Control of Fire Development/Spread

The risk of accidental fire must be reduced. Additionally, should a fire occur, the severity, duration, and spread must be controlled. The risk of ignition is accomplished by ensuring potential ignition sources are away from combustible materials and by selecting equipment with fire-safe features and design.

In the case of ignition, the rate of fire development and subsequent heat and smoke production must be controlled. For mass timber structures, this can be achieved by compartment geometry to reduce radiant feedback, proper selection of construction materials including interior finishes and exterior walls designs, ventilation control including pressurization and smoke extraction systems, compartmentalization with fire walls and smoke barriers, and adequately designed suppression systems.

#### 3.3.6 Fire Detection and Notification

A fire detection system that provides early detection must be installed throughout any mass timber structure. The system shall notify occupants, emergency personnel, and activate any

**Commented [KJ14]:** Committee to consider if we want to discuss exposure of mass timber walls (not columns) and slabs (e.g. separation of 15 feet if exposing walls/ceilings in a dwelling unit)

**Commented [HLFW15R14]:** Is this covered by stating the minimum fire and life safety goals of the prescriptive code must be met? Can certainly mention the maximum amount of exposed mass timber and required distances between exposed surfaces if the committee would like to.

**Commented [KJ16]:** Committee wanted a strong and clear stance.

Additional Korb Commentary:

Prohibition of concealed spacings in Type IVHT has been removed. However, the concealed spaces language in the IBC and its commentary are not in agreement. Further discussion required.

Provide additional commentary on gypsum detailing.

Lean on prescriptive method: gypsum detailing requirements have been defined by Fire Design Specification for Wood Construction (WPC)

**Commented [HLFW17R16]:** I am of the opinion that no exposed mass timber should be permitted in concealed spaces. Mass timber may be used only with noncombustible protection as required for the interior mass timber.

**Commented [KJ18]:** What document are these from?



active fire protection systems such as a smoke extraction system, door releases, or a suppression system. The system operation must be well documented and agreed upon by the location fire department.

### 3.3.7 Fire Suppression

Automatic fire suppression systems are required for all mass timber structures and properly designed in accordance with NFPA 13 for each hazard identified within the structure. When approaching design considerations outside of the prescriptive requirements, additional redundancies within the fire suppression system (sprinkler system and standpipe system) shall be considered.

#### Water Supply:

- Dual water supply for buildings 120 feet and above, in accordance with IBC 403.3.2 (2021), and including the following exception:
  - i. *“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”*
- Water supply in accordance with 2021 IFC 3313 and 2021 IBC 3313

#### Sprinklers:

- i. Building fully sprinklered with an NFPA 13-compliant sprinkler system

Smoke Evacuation: Fire Department thoughts?

#### Type 1A Construction?

### 3.4 Fire Engineering Consultant:

#### TT Thoughts:

For buildings higher than 12 stories or 180' (typically only required if designing alternative solutions to prescriptive fire protection requirements)

#### Qualifications and Selection

- Previous Mass Timber Experience
- Selected by Ownership/Design to be approved by AHJ

#### Scope

1. Review mass timber framing and connections protection in concealed areas
2. Review mass timber connections in exposed connections
3. Review gypsum detailing per requirements of Section 3.2.2.2.
4. Smoke evacuation

**Commented [KJ19]:** Any additional clarification required (I don't necessarily think so, just want to make sure)

**Commented [KJ20]:** Is the committee comfortable with TT's thoughts/recommendations below? If so, I can "formalize" the language.

**Commented [BW21R20]:** May reference other guides that have been published.

5. Review testing provided by manufacturers for compliance with relevant standards

3.5 Peer Review

Qualifications and selection

For each project higher than 12 stories or 180', a Mass Timber Peer Review Panel (MTPRP) shall be convened. The MTPRP shall be a panel or a structural engineering firm with at least three (3) members with previous experience in relevant mass timber buildings.

The MTPRP shall be selected by the Building Official based on their qualifications applicable to the Mass Timber Peer Review of the project. The Building Official may request the opinion of the Project Sponsor and EOR on proposed SPRP members, with the Building Official making the final decision on the MTPROP membership.

The MTPRP shall bear no conflict of interest with respect to the project and shall not be part of the design team for the project.

The MTPRP provides their professional opinion to and acts under the instruction of the building official.

3.5.1 3.4.2 Review scope

To provide an independent, objective, technical review of those aspects of the building design that relate to the structural performance of the building according to the requirements and guidelines described on this building, and to advise Building Officials whether the design generally conforms to the intent of this documentation and other requirements set forth by the Building Official

Review structural calculations, under normal conditions and under a fire scenario; including the use of foreign codes, where applicable.

The MTPRP shall be convened as early in the structural design phase as practicable.

XXXXXXX

**Commented [KJ22]:** These are TT's thoughts. Originally there were differing opinions on the peer review, but I believe the concensus was that a peer review is valuable, but the team wanted to make it clear what types of projects required these peer reviews.

If the committee agrees, I can formalize the thoughts below.

**Commented [KJ23]:** I believe the following concerns have already been addressed/clarified above, but want to keep for the record:

*Performance based approach. To verify prescriptive limitations. Requirements are peer review acting on behalf of the building owner. Due diligence for beyond code. Acting on part of city or building officials reviewing on their behalf. Foreign to DSPS practices. Contract that out? Would have to go through a petition. Special inspections – On the ownership team to run. The reviewer would not be from the state – independent reviewer. (For discussion – the EOR for Ascent performed the Sis. Pros and cons?) It could be a different structural firm outside the state. State could create the committee. Expertise – Not an additional ask for the plan review. Special inspections, the building owner/reviewer. The building official reviews and approves - selected*

*Joe Ricker*

*We do have to remember work within the rules we do have. Existing systems or legislative action.*

*Korb*

*Peer review seems excessive. Everyone will have opinions. The data must speak for themselves.*

*Lo ricco*

*Prescriptive measures are approved. We do not need peer review. Peer review intended for performance-based route. More general approach.*

*Roles*

*Peer review*

*Technical. Review responsibilities*

*Building Officials - Enough data, qualified, threshold for substantial evidence. Standard of care. Justifying analysis*

*1 example: Exposed area. 18 story timber structure. Fully encapsulated. How much exposure would trigger a peer review. May be based on occupancy.*

*1. For areas outside the code. Needs to have some technical judgment in concert with the building review with the engineers. Backstop for building official for technical knowledge on the job.*

*2. Mazmanian*

*Common practice? Always the option to use this approach for comfort. Always thresholds in the code. If you can use the codified approach, then it is not needed. If you exceed requirements, you must use a performance based approach should have a peer review is required. ...*

#### 4. Construction and Post-Occupancy

Mass Timber construction to follow the general requirements of Type IV Construction, unless otherwise noted in this guide.

##### 4.1 During Construction

Construction requirements per 2021 IFC 3303.5

Standpipes

Dual water supply

Non-combustible protection installed on levels 4 stories below the active mass timber construction

Required wall coverings shall be installed on levels 4 stories below the active mass timber construction

1. The Mass Timber Guidebook shall reference 2021 IFC 3303.5. To establish preliminary meeting to review planned measure and timeline for implementation throughout the course of the project. Outline regular meeting and inspection schedule. This may involve the inspection field staff and construction staff as it relates to Mass Timber construction.

- o Should we include an inspection schedule, and would this be considered useful in the guidebook.

- Deviations and Field Modifications – Any substantial field modifications or deviations from the approved construction drawings should be reviewed with field inspector prior to implementation. (Example: structural modifications due to field variation – flange extension, component modification, etc.)

- If there are substantial field modifications from approved plan review the building construction, the initial plan review shall require a secondary plan review or AHJ plan reviewer (CBC chapter 361 JG) or delegated associate before implementation.

- We are not requiring anything beyond the current WI commercial building code.

NFPA 33 – Mass Timber construction.

##### 4.2 Special Inspections

Mass timber special inspections

Follow the requirements of IBC 2021 (1705.5.3)...recommend including these requirements specifically in the guideline

Mass timber inspector qualification and selection

Previous experience in relevant mass timber buildings

Submit credentials to the city

Commented [KJ24]: These were TT's original thoughts

Commented [KJ25]: These are additional thoughts from the committee throughout our meetings

Provide access to the plans prior the start of construction

Submit monthly reports to the city

**Commented [KJ26]:** These were TT's original thoughts

- Strongly recommend requiring special inspections for all mass timber projects, but specifically in accordance with the goals of the task force, for any project designed outside the parameters of the prescriptive code path shall require special inspections

o (Note: the only way we can require this in Wisconsin is as a condition of approval associated with a variance. Any project designed outside of the prescriptive path would require a variance as a path to approval.)

This Guidebook shall follow the requirements of IBC 2021 (1705.5.3) to recommend including these requirements specifically in the guideline.

In final document, DPD legal will have to reference table

Post Occupancy Inspection Guidance: Icc and American Wood Council.

Reference IBC and Fire Code. G7 ICC safety Guidelines for inspection. Wood construction in general

Currently adopt 2015. Recommendations for unique instances. Will have a variance for a new code, or agree to certain criteria.

Executive summary; 4 or more stories

#### 4.2 Post Occupancy

The owner shall ensure that required passive protection remains in place over the life of the building, section 701.6 of the IFC.

#### DO WE WANT AN ADDITIONAL SECTION OF FIRE SAFETY?

Standpipes – Do we need to define standpipes?

Dual water supply

Non-combustible protection installed on levels 4 stories below the active mass timber construction

Required wall coverings shall be installed on levels 4 stories below the active mass timber construction

**Commented [KJ27]:** These were additional comments from the committee throughout our meetings

**Commented [KJ28]:** This section needs some work:

Committee Questions:

What lessons learned from post-occupancy evaluations of Mass Timber Buildings are different from standard construction practices?

Buildings should be maintained and inspected as part of an annual fire inspection program.

Reference WI statute or local jurisdiction for commercial buildings. Aesthetically would be prudent.

Distinction between fire inspection and structural inspections (typically not required) could be considered during a regular maintenance program.

Other factors that should be considered specifically related to mass timber buildings?

Reference specific codes, and site in our bibliography?

Post occupancy inspections are recommended, however, they are not required.

**Commented [KJ29]:** Comments from prior committee meetings

I. **Closing Remarks**

**Commented [KJ30]:** Need to select committee members to develop a first draft

