



**VIRTUAL/TELECONFERENCE
MASS TIMBER TASK FORCE
4822 Madison Yards Way, Virtual, Madison
Contact: Brad Wojciechowski (608) 266-2112
December 3, 2021**

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

10:00 A.M.

OPEN SESSION – CALL TO ORDER – ROLL CALL

- A. Adoption of Agenda (1-2)**
- B. Approval of Minutes of November 3, 2021 (3-4)**
- C. Reminders: Scheduling Concerns**
 - 1) Attendance Conflicts Impacting December 3, 2021 Meeting
 - 2) Attendance Inquiry for January 2022 Meeting
- D. Administrative Matters – Discussion and Consideration**
 - 1) Department and Staff Updates
- E. Administrative Rules Matters – Discussion and Consideration (5-11)**
 - 1) Review of Proposed Changes to IBC (SPS 362) Chapters 5, 6, 7 Relative to Mass Timber
- F. Alternative Procedures for Design of Mass Timber Tall Buildings – Discussion and Consideration (12-13)**
 - 1) Developing Table of Contents for Alternative Procedures for Mass Timber Guidebook
 - 2) Relating Mass Timber to Other Alternative Building Procedures
- G. Public Comments**

ADJOURNMENT

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 at 4822 Madison Yards Way, Madison, Wisconsin, unless otherwise noted. In order to confirm a meeting or to request a complete copy of the board's agenda, please call the listed contact person. The board may also consider materials or items filed after the transmission of this notice. Times listed for the commencement of disciplinary

hearings may be changed by the examiner for the convenience of the parties. Requests for interpreters for the deaf or hard of hearing, or other accommodations, are considered upon request by contacting the Affirmative Action Officer, 608-266-2112, or the Meeting Staff at 608-266-5439.

**VIRTUAL/TELECONFERENCE
MASS TIMBER TASK FORCE
MEETING MINUTES
NOVEMBER 3, 2021**

PRESENT: Justin Gavin, Laura Hasburgh (*arrived at 9:03 a.m.*), Michael Mazmanian, Richard Paur, Erich Roden, Alexander Timmer

EXCUSED: John Peronto

STAFF: Brad Wojciechowski, Executive Director; Jon Derenne, Legal Counsel; Branden Piper, Administrator, Division of Industry Services; Garry Krause, Bureau Director, Safety and Buildings; Erik Hansen, Consultant, Building Systems-Senior; Kimberly Lee, Consultant, Building Systems-Senior; Jason Hansen, Consultant, Building Systems-Adv; Megan Glaeser, Bureau Assistant; and other Department Staff

CALL TO ORDER

Richard Paur, Chairperson, called the meeting to order at 9:01 a.m. A quorum was confirmed with five (5) members present.

ADOPTION OF AGENDA

MOTION: Alexander Timmer moved, seconded by Erich Roden, to adopt the Agenda as published. Motion carried unanimously.

(Laura Hasburgh arrived at 9:03 a.m.)

APPROVAL OF MINUTES OF OCTOBER 5, 2021

MOTION: Erich Roden moved, seconded by Michael Mazmanian, to approve the Minutes of October 5, 2021 as published. Motion carried unanimously.

ADMINISTRATIVE RULE MATTERS

SPS 361-366 as it Relates to Mass Timber Construction

MOTION: Alexander Timmer moved, seconded by Laura Hasburgh, to recommend the Commercial Building Code Council adopt the Mass Timber aspects of the 2021 International Building Code as presented by DIS staff, with the following exceptions which will require further discussion: Chapters 5, 6, 7. Motion carried unanimously.

ADJOURNMENT

MOTION: Michael Mazmanian moved, seconded by Erich Roden, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 11:13 a.m.

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Wisconsin Department of Safety and Professional Services

DRAFT – SUBJECT TO CHANGE

Review of Proposed Changes to
IBC (SPS 362) Chapters 5, 6 and 7 Relative to Mass Timber

**Draft for Task Force Meeting
December 3, 2021**

DRAFT

2021 INTERNATIONAL BUILDING CODE – IBC (SPS 362)

CHAPTERS 5, 6 AND 7

NO.	IBC/SPS	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE/PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
	CHAPTER 2	CLARIFICATION	ICC/DIS	IBC 202 - DEFINITIONS <ul style="list-style-type: none"> DEFINITIONS FOR MASS TIMBER <ol style="list-style-type: none"> INCORPORATES IV-HT (HEAVY TIMBER), IV-A, IV-B, IV-C (VARYING DEGREES OF FIRE RESISTANCE RATING FOR BUILDING ELEMENTS). 	MINIMAL	APPROVED BY TASK FORCE 11/3/2021
	CHAPTER 4	ADDITIONS	ICC/DIS	IBC 403.2 - SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE <ul style="list-style-type: none"> WATER SUPPLY TO FIRE PUMPS FOR BUILDINGS OF MASS TIMBER CONSTRUCTION HIGHER THAN 120' <ol style="list-style-type: none"> EXTENDS REQUIREMENT OF WATER SUPPLY TO FIRE PUMPS (IF REQUIRED) BE CONNECTED TO NOT LESS THAN 2 MAINS LOCATED IN DIFFERENT STREETS FOR TYPE IV-A AND IV-B. 	SIGNIFICANT	APPROVED BY TASK FORCE 11/3/2021

	CHAPTER 5	ADDITIONS/ CHANGES	ICC/DIS	<p>IBC 504.3, 504.4, 506.2 - GENERAL BUILDING HEIGHTS AND AREA</p> <ul style="list-style-type: none"> • <u>BUILDING HEIGHTS, NUMBER OF STORIES AND ALLOWABLE AREA TO ADDRESS MASS TIMBER CONSTRUCTION TYPES IV-A, IV-B AND IV-C. – SEE ATTACHED TABLES 504.3, 504.4 AND 506.2.</u> • <u>FIRE SEPARATION/THERMAL BARRIER OF MASS TIMBER CONSTRUCTION ADDRESSED. REQUIRES A THERMAL BARRIER FOR ANY REQUIRED INCIDENTAL USE AND OCCUPANCY SEPARATION (FIRE BARRIER OR HORIZONTAL ASSEMBLY). ONLY APPLIES TO IV-B AND IV-C (IV-A INHERENTLY PROTECTED).</u> <p>SEE ALSO: ICC SIGNIFICANT CHANGES TO THE 2021 IBC TABLE 504.4.</p>	SIGNIFICANT	ADDITIONAL DISCUSSION BY TASK FORCE

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	CHAPTER 6	CHANGES	ICC/DIS	<p>IBC 601, 602.4 - TYPES OF CONSTRUCTION</p> <ul style="list-style-type: none"> • <u>PROVISIONS FOR MASS TIMBER CONSTRUCTION ADDED TO TABLE 601. NOTE CORRELATION BETWEEN NEW TYPES IV-A, IV-B, AND IV-C WITH EXISTING TYPES I-A AND I-B.</u> • <u>FIRE RATING OF THE MASS TIMBER MEMBER, OR THE RATING OF THE NONCOMBUSTIBLE PROTECTION APPLIED DIRECTLY TO THE MASS TIMBER MEMBER, OR COMBINATION OF BOTH USED TO DETERMINE COMPLIANCE FOR TYPE IV-A, IV-B AND IV-C.</u> • <u>FRTW STILL ACCEPTABLE FOR FRAMING AND SHEATHING WITHIN EXTERIOR WALLS IN TYPE IV-HT.</u> • <u>PROVISIONS FOR PROTECTION OF CONCEALED SPACES IN ALL TYPE IV CONSTRUCTION.</u> • <u>PROVISIONS FOR ENCLOSURE OF INTERIOR EXIT STAIRWAYS AND ELEVATOR HOISTWAYS IN HIGH RISE BUILDINGS FOR TYPE IV-A, IV-B, IV-C CONSTRUCTION.</u> • <u>DEFINED CHARACTERISTICS OF NEW CONSTRUCTION TYPES:</u> <u>TYPE IV-A – COMPLETE NONCOMBUSTIBLE PROTECTION</u> <u>TYPE IV-B- PARTIAL NONCOMBUSTIBLE PROTECTION</u> <u>TYPE IV-B – NO NONCOMBUSTIBLE PROTECTION</u> • <u>PROTECTION LIMITED TO TESTED ASSEMBLIES</u> • <u>ESTABLISHES MASS TIMBER AS A VIABLE CONSTRUCTION MATERIAL FOR BUILDINGS OF SIGNIFICANT SIZE.</u> • <u>SEE “MASS TIMBER BUILDINGS AND THE IBC”. PUBLISHED BY ICC/AWC.</u> • <u>MINOR MODIFICATIONS TO TYPE IV-HT EXTERIOR WALL CONSTRUCTION AND CONCEALED SPACES TO ALIGN WITH MASS TIMBER CATEGORY.</u> 	SIGNIFICANT	ADDITIONAL DISCUSSION BY TASK FORCE

	CHAPTER 7			IBC 703.6, 704.6, 722.7 - FIRE AND SMOKE PROTECTION FEATURES <ul style="list-style-type: none"> • <u>PRESCRIPTIVE AND PERFORMANCE BASED DETERMINATION OF NONCOMBUSTIBLE PROTECTION TO MASS TIMBER ELEMENTS REQUIRED PER 722.7 AND 703.6.</u> • <u>REQUIREMENTS FOR SEALING JOINTS OF INTERSECTING ELEMENTS TO LIMIT TRANSMISSION OF FIRE, SMOKE AND HOT GASSES.</u> • RELOCATION OF TABLE 602 TO 705.5 AND INCLUSION OF MASS TIMBER CONSTRUCTION TYPE. • <u>MASS TIMBER PRESCRIPTIVE FIRE RESISTANCE PROVISIONS. NONCOMBUSTIBLE PROTECTION MUST ACCOUNT FOR 2/3 OF REQUIRED RATING.</u> 						SIGNIFICANT	
		CHANGES/ ADDITIONS	ICC/DIS								

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	CHAPTER 17	ADDITION/ MODIFICATION	ICC/DIS	<p>IBC 1705.5.3SPECIAL INSPECTIONS AND TESTS</p> <ul style="list-style-type: none"> <u>SPECIAL INSPECTION REQUIREMENTS FOR MASS TIMBER ANCHORAGE AND CONNECTIONS SIMILAR TO OTHER PREFABRICATED SYSTEMS INCLUDING MASS TIMBER TO DEEP FOUNDATIONS (INVOLVING TIMBER PILES), ERECTION VERIFICATION, SPECIALIZED CONNECTIONS, ADHESIVE ANCHORS, OTHER UNUSUAL CONNECTIONS OR ASSEMBLIES AS DETERMINED NECESSARY BY THE BUILDING OFFICIAL.</u> 	MODERATE	APPROVED BY TASK FORCE 11/3/2021

	CHAPTER 23	ADDITION/ MODIFICATION	ICC/DIS	<p>WOOD</p> <ul style="list-style-type: none"> • <u>TESTING OPTION AND CALCULATION OPTION PROVIDED FOR MASS TIMBER CONNECTING ELEMENTS REQUIRED TO HAVE A PRESCRIBED FIRE RESISTANCE RATING.</u> • <u>SPECIFICS OF APPLICATION TO CONNECTIONS THAT ARE A PART OF A TESTED ASSEMBLY BUT NOT TESTED AS AN INDIVIDUAL ELEMENT.</u> • <u>OPTIONS FOR ENGINEERED ANALYSIS OF CONNECTIONS (COMPLETELY EMBEDDED OR COVERED).</u> • <u>IMPORTANCE OF CHAR CONTRACTION AND INCORPORATING INTO CONNECTION ANALYSIS IDENTIFIED.</u> 	MINIMAL	APPROVED BY TASK FORCE 11/3/2021
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**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and title of person submitting the request: Brad Wojciechowski		2) Date when request submitted: November 24, 2021 <small>Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting</small>	
3) Name of Board, Committee, Council, Sections: Choose an item. Mass Timber			
4) Meeting Date: December 3, 2021	5) Attachments: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6) How should the item be titled on the agenda page? <p style="text-align: center;">Alternative Procedures for Design of Mass Timber Tall Buildings – Discussion and Consideration</p> 1) Developing Table of Contents for Alternative Procedures for Mass Timber Guidebook 2) Relating Mass Timber to Other Alternative Building Procedures	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <i>(If yes, please complete Appearance Request for Non-DSPS Staff)</i> <input type="checkbox"/> Yes <Appearance Name(s)> <input checked="" type="checkbox"/> No	9) Name of Case Advisor(s), if applicable: <Click Here to Add Case Advisor Name or N/A>	
10) Describe the issue and action that should be addressed: Continued discussion of Table of Contents for Mass Timber Guidebook based on the 2005 Los Angeles Tall Buildings Structural Design Council. https://www.latallbuildings.org/documents			
11) Authorization <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  <hr/> Signature of person making this request </div> <div style="text-align: center;"> November 24, 2021 <hr/> Date </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> <hr/> Supervisor (Only required for post agenda deadline items) </div> <div style="text-align: center;"> <hr/> Date </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> <hr/> Executive Director signature (Indicates approval for post agenda deadline items) </div> <div style="text-align: center;"> <hr/> Date </div> </div>			
Directions for including supporting documents: 1. This form should be saved with any other documents submitted to the Agenda Items folders. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

WISCONSIN TALL MASS TIMBER GUIDE –TABLE OF CONTENT - DRAFT

1. Intent, scope and justification
 - a. Intent
 - b. Scope
 - c. Justification
2. Analysis and design
 - a. Fire rating requirements
 - b. Fire consultant
 - c. Fire rating documentation and justification
 - d. Peer review
 - i. Qualifications and selection
 - ii. Peer review scope
3. Construction
 - a. Gypsum detailing requirements
 - b. Mass timber special inspections