

Mass Timber Course of Construction Insurance Project Questionnaire + Checklist

Who can use this document:	Contractors, Developers, Owners and Design Teams.
How to use this document:	This document is an editable form that teams can fill out to aid in collecting mass timber project-specific information to share with their insurance team.
When to use this document:	A project team should engage a broker or underwriter as early as possible in the planning stages of a construction project, ideally during the initial design phase or when the project scope is being defined.
How will this help me:	The goal is to provide project-specific information about mass timber, pre-emptively addressing some of the common questions and concerns insurers may have to pave the way for a more efficient and informed process when working with your broker or underwriter. Keep in mind that this document is not intended to address all topics nor be a universally accepted form that provides all necessary information to insurers.

Document Collection – Required for Assessment

- 1. Site Plan
- 2. Architectural Data Sheet
- 3. Architectural Floor Plans
- 4. Architectural Building Elevations
- 5. Architectural Renderings (if available)
- 6. Structural Floor Plans (Framing)
- 7. Geotechnical Report
- 8. Project Schedule Detailed (Level 1 or 2 preferred)
- 9. Project Values Detailed Breakdown
 - a. (include owner-furnished items)

- 10. Insurance Specifications
 - a. Requested coverages
 - b. Limits and sublimits
 - c. Deductibles
- 11. Contractor Water Damage Prevention Plan
- 12. Contractors Quality Management Plan/ Moisture Management Plan
- 13. Crane Safety Plan
- 14. Contractors Fire Safety Plan (approved by AHJ)
- 15. Alternative Solutions
- 16. Other Items

Project Team

	Owner/ Developer	Architect	Structural Engineer	3D BIM Model Consultant	General Contractor	Mass Timber Installer
Name of Company						
Project Lead Contact Name (First, Last)					Site Super:	
Company Location						
Previous Mass Timber Experience (Y/N)						
Project Name, Scale (Storeys, GBA, Sector), Year and Location						
Scope of Work for MT Procurement, Supply + Install						



Mass Timber Supplier

1.	Company:
2.	Location (of manufacturing facility servicing the project):
3.	Annual production capacity:
4.	How long have they been producing mass timber?
5.	Number of projects supplied and volume of timber:
6.	Is CLT certified to ANSI/APA PRG 320? \bigcirc Yes \bigcirc No
7.	Is glulam certified to ANSI A190.1? O Yes O No
8.	Will the manufacturer provide onsite technical support or assistance? \bigcirc Yes \bigcirc No
9.	Does the project plan to have a Quality Management Plan for the mass timber elements? \bigcirc Yes \bigcirc No
	a. If "Yes", please describe or provide:
10.	Provide selected manufacturers for all mass timber elements:
11.	Will any of the mass timber elements be coming from outside of Canada? \bigcirc Yes \bigcirc No
	a. If "Yes", indicate what manufacturer and locations:
	i. Who is responsible for overseas/marine shipments?
	ii. Will internationally sourced CLT have ANSI/APA PRG 320 certification? $$ Yes $$ No
	iii. If "No", describe process to ensure international certifications meet or exceed ANSI/APA PRG 320 and will be accepted by the authority having jurisdiction (AHJ) or meet National Building Code (NBC) requirements for CLT certification:



General Project Information

1.	Project name:
2.	Address:
3.	Total # of storeys:
4.	# of mass timber storeys:
5.	# of concrete storeys:
6.	# of LWF storeys:
7.	# of storeys below grade:
8.	Intended occupancies/use for below-grade spaces (e.g. parking, storage):
9.	Project structural description:
10.	Finished floor elevation (FFE) of Level 1 (feet above MSL):
11.	Project involves non-structural renovations: O Yes O No
	a. If "Yes," please describe:
12.	Project involves structural renovations or modifications: \bigcirc Yes \bigcirc No
	a If "Yes" please describe:
Сс	ost Breakdown of Project Values
1.	Construction hard costs (\$CAD):
2.	Owner furnished equipment or FFE (\$CAD):
3.	Delay in startup/soft costs (\$CAD):
4.	Anticipated value of mass timber package (\$CAD):
	a. Value of mass timber package as a % of total hard cost: %
	b. % of mass timber package cost directly related to materials: %
	c. % of mass timber package cost related to labour and overhead (installation): %
5.	If Damage to Existing Property coverage is requested, provide desired limits (\$CAD):



Project Schedule

1.	What is the total construction duration?
2.	Anticipated construction start date? (YYY/MM/DD)
3.	Anticipated mass timber install date? (YYYY/MM/DD)
4.	Anticipated mass timber install completion date? (YYYY/MM/DD)
5.	Anticipated construction completion date? (YYY/MM/DD)
6.	Project includes Phased Turnover or Phased Occupancy: \bigcirc Yes \bigcirc No
	a. If "Yes", provide a separate phased turnover schedule with values for each phase:
	b. Provided: O Yes O No
7.	Anticipated date for completion of permanent building enclosure (dried-in)?

Select what mass timber products are to be used on the project and indicate in what application (i.e. beam/column, floor panel, etc.) (select all that apply):

	CLT -	Cross-l	aminat	ted Tir	mber
--	-------	---------	--------	---------	------

- NLT Nail-Laminated Timber
- Glulam Glue-Laminated Timber
- MPP Mass Plywood Panel
- LVL Laminated Veneer Lumber
- LSL Laminated Strand Lumber
- OSL Oriented Stand Lumber
- PSL Parallel Strand Lumber



Identify the primary material used for the main structural system of the building:

1.	Floors:
2.	Elevator core(s):
З.	Stair shaft(s):
4.	Columns:
5.	Beams:
6.	Shear walls:
7.	Partition walls:
8.	Exterior walls:
9.	Roof framing/trusses:

Indicate estimated percentage of each material used in the structural system of the entire building:

- **1.** Mass timber: _____ %
- **2.** Steel: _____%
- **3.** Concrete: _____%
- 4. Light wood frame: _____ %
- **5.** Other: _____%

What is the project's lateral force-resisting system (to resist wind and seismic forces)?

Describe: ____

Βι	Building Code Compliance			
1.	What version of the Building Code is the building designed to?			
2.	Will this be the first mass timber building in this jurisdiction? $igtherarcology$ Yes $igcology$ No			
3.	What is the level of familiarity with mass timber in this jurisdiction?			
	a. Describe:			
4.	Are any alternative solutions requested? \bigcirc Yes \bigcirc No			
	a. If "Yes", describe:			

Indicate the Fire-Resistance Rating of the Structural Elements:

1.	Beams, columns, bearing walls:
2.	Floor assembly:
З.	Roof assembly:
4.	Exterior walls:

Achieving Fire-Resistance Ratings of Mass Timber Elements

Charring method (exposed mass timber)
Percentage of total surface area of mass timber: %?
Encapsulated with non-combustible material (e.g. GWB)

Floor System

1. Will the floor panels receive a concrete or gypsum-based poured topping? \bigcirc Yes \bigcirc No

Sprinklers

- 1. Is the building sprinklered? \bigcirc Yes \bigcirc No
- 2. Describe the sprinkler system: _
- **3.** Will the fire protection and detection system (including sprinklers, smoke detectors, and fire alarm panels) be installed, tested and fully operational before introducing combustible finishing materials into the structure and prior to the commissioning of building systems, processing equipment, or power generation equipment?
 - a. \bigcirc Yes \bigcirc No
 - b. Comments:
- 4. Will there be temporary sprinkler coverage during construction? \bigcirc Yes \bigcirc No

Mechanical

1. Describe the mechanical system used for heating and cooling the building:

2.	Will these systems require vertical shafts? \bigcirc Yes \bigcirc No
	a. If "Yes", describe:
3.	Will these systems require penetrations through the mass timber elements? $$ $$ Yes $$ $$ No
	a. If "Yes", will these penetrations be primarily cut/drilled in the mass timber manufacturing facility or on site?
	i. Manufacturer's facility:
	ii. On site:
	b. Describe the firestop system used at the penetrations of mass timber members and assemblies:
	c. When will firestopping of penetrations be installed?
	d. Is there a formal process to address field modification reviews? (e.g. P.Eng review and approval)? O Yes O No
4.	Describe methods to control climatization and prevent extreme temperatures or humidity swings in building?



Exterior Envelope & Roof Assembly

- **1.** Describe enclosure assembly:
- 2. What is the exterior envelope install schedule in relation to the mass timber superstructure installation?
- **3.** Describe the roof assembly system:

Project/Permit Status

1.	What is the current project drawing stage?
2.	What is the current municipal permit stage?
3.	Has the project obtained a Building Permit? \bigcirc Yes \bigcirc No
4.	Are any special transport permits required? \bigcirc Yes \bigcirc No
	a. Is a police or other escort necessary? O Yes O No
	b. Will there be oversized loads during material transport? \bigcirc Yes \bigcirc No
	c. Will the project require closing one or more streets at the jobsite during delivery and installation? \bigcirc Yes \bigcirc No
5.	What is the Contract format? (e.g. IPD, DBB, Design Assist, etc.)
Material Procurement	
1.	Describe the transportation method (truck, rail barge):
2.	What is the distance from manufacturer's facility to the project site?
3.	What is the method for tracking this transportation?
4.	How are the mass timber elements protected during transport and in storage (e.g. wrapped, containers, prevention of pooled/trapped water, etc.)?
5.	What is the anticipated duration between mass timber arriving on site and its installation?
6.	Is off-site storage of mass timber materials required? \bigcirc Yes \bigcirc No
7.	What is the address/conditions of the off-site storage locations and distance from site?



8.	What is the value of the mass timber materials stored (\$CAD)?	
9.	Are there security measures in place to monitor the off-site storage location? $igodot$ Yes $igodot$ No	
10.	Is any pre-assembly or additional fabrication taking place at the off-site storage location? $igodot$ Yes $igodot$ No	
Installation		
1.	How many truck loads of mass timber materials will be received per day?	
2.	What is the protocol for material receipt (checking inventory, inspecting for damage)?	
3.	What is the protocol for inspection of stored materials?	

Risk Mitigation

- 1. What plan is in place if the replacement of mass timber elements is needed?
- 2. How quickly can those parts be manufactured and replaced if they are needed?

Site Safety Measures

- 1. What site security measures are being implemented?
 - Fencing
 - □ Third-party monitoring (CCTV and intrusion alarm)
 - Camera (type)
 - Illumination during non-working hours
 - Lighting
 - On-site guard (hours)
 - Others
- 2. When will site security measures start and terminate relative to the construction schedule?

Describe:



3. Coordination with local fire department

- a. Has the fire department been consulted about the use of mass timber and provided response plans? O Yes O No
- **b.** What is the distance of the serving fire department to the project site?
- c. Describe any permanent water supply available (i.e. fire hydrants) to site prior to delivery of mass timber:

4. Construction site fire safety

a. Describe hot works fire safety measures:

b. Will the project require temporary heating during construction? \bigcirc Yes \bigcirc No

- i. If yes, describe type and fuel source:
- c. Describe plan for removal of construction debris and other housekeeping measures:
- **d.** Fire extinguishers on site (NFPA standards)? \bigcirc Yes \bigcirc No
- e. Temporary standpipes? \bigcirc Yes \bigcirc No
- f. Describe compliance measures in accordance with NFPA 221:
- g. Other measures:



Install and Site Management

- **1.** Does the Contractor have an on-site moisture management plan? \bigcirc Yes \bigcirc No
- 2. What methods are being used to protect the mass timber from moisture once on site?
 - a. Describe:
- 3. What methods are being used to monitor the moisture content of wood?
 - a. Describe:
- 4. What methods are being used to dry the mass timber prior to installing coverings?
 - a. Describe:
- 5. Are remote sensors being used for moisture monitoring and or leak detection? \bigcirc Yes \bigcirc No
- 6. What measures will be implemented to prevent aesthetic damage to mass timber elements, including discolouration, marring, staining, UV exposure, or other superficial imperfections that may alter their appearance?
- 7. Are temporary enclosures being installed to aid with moisture protection during construction? \bigcirc Yes \bigcirc No
- 8. Describe the mass timber erection method (tower cranes, mobile cranes, fork trucks, etc.):