MASS TIMBER FAQ

+ The 2022 CBC includes mass timber construction which is categorized as Type IV-A, IV-B and IV-C. Does the City of LA allow this Type of Construction?

Yes, the City of Los Angeles adopted the 2022 CBC provisions on mass timber and Type IV Construction.

- + Are there any City of Los Angeles amendments to the mass timber provisions of the 2022 CBC? Currently there are no City of Los Angeles mass timber amendments.
- + In what Type of Construction are mass timber elements allowed as primary structure?

Mass timber elements are allowed in any Type of construction where wood is allowed (LABC Section 603).

+ When a building contains noncombustible materials (concrete, steel, light frame) with mass timber, what Type of Construction would it be categorized as?

It could be Type IV, or V Construction where wood and mass timber are allowed as primary members of a building.

+ When a building contains combustible light frame construction with mass timber, what Type of Construction would it be categorized as?

It could be either Type V construction where combustible light frame construction is allowed as primary members.

+ What code evaluation reports are acceptable to the City of LA?

LADBS accepts LARR, ICC, and IAMPO evaluation reports for mass timber elements used in the lateral force resisting system such as diaphragms and shear walls. See <u>Information Bulletin P/BC 2020-119</u> <u>Alternate Building Materials/Products Approval Requirements</u>.

+ What are the minimum requirements for a wood element to be considered mass timber?

Mass timber is defined in Chapter 2 of the LABC as "Structural elements of Type IV construction primarily of solid, built-up, panelized, or engineered wood products that meet the minimum cross-section dimensions of Type IV construction. The minimum dimensions are in LABC Section 2304.11

- What combinations of lateral force resisting systems (LFRS) are allowed in mass timber buildings?
 A mass timber lateral force resisting system with an evaluation report may be used in combination with other LFRS in compliance with ASCE 7.
- Is there a correction sheet for mass timber structures?
 Yes, the "Supplemental Plan Check Correction Sheet for Mass Timber" is located on the Plan Check Standard Correction Lists webpage.
- + Are special inspections required for manufacturers and fabricators of mass timber fabricated products if the fabricator has been approved to perform work without special inspections in accordance with Section 1704.2.5.1?

No. Per section 1704.2.5.1, special inspections during fabrication are not required where the work is done on the premises of a fabricator approved to perform such work without special inspection. Approval shall be based on review of the fabricator 's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship with periodic auditing of fabrication and quality control practices. The approval of the fabrication shops is done under the quality-control program with inspections by ICC-ES or IAPMO-ES and APA-The Engineered Wood Association.

+ How is the fire rating of mass timber determined?

Per section 722.7 of the 2022 CBC, the required fire resistance of mass timber elements shall be determined in accordance with Section 703.2 or Section 703.3. The fire resistance rating of building elements shall be as required in Tables 601 and 602 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.

+ How are the fire resistance of the connections of the mass timber structural members determined in Type IV-A, IV-B, IV-C construction?

Section 2304.10.1.2 of 2022 CBC specifies two options for demonstrating compliance with the fire rating for connections:

- 1. Testing in accordance with Section 703.2 where the connection is part of the fire resistance test.
- 2. Engineering analysis which can demonstrate 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.