



Metropolitan Nashville and Davidson County, TN

Legislation Text

File #: BL2023-1994, **Version:** 1

An ordinance amending Metropolitan Code Section 16.08.012 to regulate mass timber construction with the standards set forth in the 2021 Edition of the International Building Code and the 2021 Edition of the International Fire Code.

BE IT ENACTED BY THE COUNCIL OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY:

Section 1. That Metropolitan Code Section 16.08.012 is hereby amended by creating new subsection G as follows and renumber the existing subsection G and subsequent subsections accordingly:

G. Section 602 of the 2018 Edition of the International Building Code is hereby amended by adding a new Section 602.1.2 as follows:

602.1.2 Alternative provisions for mass timber construction.

As an alternative to construction types defined in Sections 602.2 through 602.5, buildings and structures erected or to be erected, altered, or extended in height or area may be classified as construction Type IV-A, IV-B or IV-C in accordance with Chapter 6 of the 2021 International Building Code (IBC). Buildings and structures classified as Type IV-A, IV-B or IV-C shall comply with all provisions of the 2021 International Building Code and 2021 International Fire Code (IFC) specific to mass timber and the construction type of the building or structure, as well as all other applicable provisions of this code, including provisions for buildings of Type IV construction.

Section 2. This ordinance will take effect immediately after its final passage, the welfare of The Metropolitan Government of Nashville and Davidson County requiring it.

Analysis

This ordinance amends Section 16.08.012 of the Metropolitan Code to amend the adopted 2018 Edition of the International Building Code (IBC) to use the provisions of the 2021 Edition of the International Building Code (IBC) and the 2021 Edition of the International Fire Code (IFC) specific to mass timber and the construction type of the building or structure to regulate new construction utilizing mass timber. Mass timber products are solid, structural load-bearing components such as columns, beams, and panels. They are typically manufactured off-site in factories by fastening multiple layers of wood together with glue, dowels, or nails and are engineered for high strength.

Under the 2018 IBC, mass timber construction is included with other forms of wood construction and is limited to no more than up to 6 stories in height. Under the 2021 IBC, mass timber construction is split between three subtypes (Type IV-A, Type IV-B, and Type IV-C). Type IV-A is limited to no more than up to 18 stories in height; Type IV-B is limited to no more than up to 12 stories in height; and Type IV-C is limited to no more than up to 9 stories in height. This subtype delineation is determined based on amount of exposure of the mass timber portion of the building, with Type IV-A having all mass timber fully protected by noncombustible material inside

and out. Additionally, various considerations and conditions may result in lower allowable maximum heights for mass timber structures. The ordinance under consideration adopts these subtype classifications, allowing for the use of mass timber for construction up to 18 stories in height.