

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
 For Inclusion on Board Agenda

Resolution or Ordinance (Blue) Waiver of First Requested
 Recommendations of Boards, Commissions & Committees (Green)
 Other Business (Pink)

TO : PRESIDENT AND BOARD OF TRUSTEES

FROM: Scott R. Niehaus, Village Manager

DATE : February 8, 2022 **(BOT) Date:** February 17, 2022

SUBJECT: Text Amendments to Section 150.035, pertaining to two sections (R313 and R502.1.4): Use of TGI floor joists and open web joist, and a fire sprinkler requirement in houses over 4,000 square feet in defined area.

SUBMITTED BY: William J. Heniff, AICP, Director of Community Development

BACKGROUND/POLICY IMPLICATIONS:
 The Board of Building Appeals (BOBA) recommends approval local amendments to the relevant sections of Building Code regarding the change to the local amendments to the 2018 International Residential Code. The first change is to allow the use of TGI and Open Web floor joist with the installation of 5/8" drywall covering the joists in all cases. The second amendment requires the installation of fire sprinklers in all new houses or individual townhome units over 4,000 square feet.

Please place this item on the February 17, 2022 Village Board agenda for consideration and approval. BOBA recommends approval of the amendments to Chapter 150.035 as set forth within the draft Ordinance, with a waiver of first reading.

Fiscal Impact/Funding Source:


Review (as necessary):
 Finance Director _____ Date _____
 Village Manager _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the agenda distribution.



MEMORANDUM

TO: Scott R. Niehaus, Village Manager

FROM: William J. Heniff, AICP, Director of Community Development 

MEETING DATE: February 17, 2022

SUBJECT: **Text Amendments to Section 150.035, pertaining to two sections (R313 and R502.1.4): Use of TGI floor joists and open web joist, and a fire sprinkler requirement in houses over 4,000 square feet in defined area**

At the February 2, 2022 meeting of the Board of Building Appeals (BOBA), the members considered the local amendments to the relevant sections of Building Code regarding the change to the local amendments to the 2018 International Residential Code. The first change is to allow the use of TGI and Open Web floor joist with the installation of 5/8" drywall covering the joists in all cases. The second amendment requires the installation of fire sprinklers in all new houses or individual townhome units over 4,000 square feet.

Attached is the staff report to BOBA and draft Ordinance amending the Chapter 150 code provisions as it pertains to the 2018 International Building Code.

ACTION REQUESTED

Please place this item on the February 17, 2022 Village Board agenda for consideration and approval. BOBA recommends approval of the amendments to Chapter 150.035 as set forth within the draft Ordinance, with a waiver of first reading.



MEMORANDUM

TO: Board of Building Appeals (BOBA) Members

FROM: Keith Steiskal, Building Commissioner

MEETING DATE: February 2, 2022

SUBJECT: International Residential Code Edits to Section 150.035 of the Village Code (the Building Code)

The 2018 International Residential Code (IRC) was previously been adopted by Lombard by reference, along with local residential code amendments. This code has a section to address single family and townhome sprinkler systems. Currently the Lombard ordinance pertaining to this section of code requires the use of fire sprinklers when using “TGI” or “Open Web” type floor joist. Based on current fire tests of TGI and Open Web joists, staff is recommending two edits.

The first ordinance edit recognizes recent burn tests data that shows TGI and Open Web floor joist can withstand fire for the same amount of time as a typical solid sawn wood floor joist as long as it is covered with drywall. To further recognize this, the IRC now states TGI and Open Web joist can be installed, but only with the use of drywall covering them. Staff is recommending the drywall covering the TGI and Open Web joist be 5/8 inch. The recommendation to follow the recent test data and remove the restrictions to using TGI and Open Web joists is something the City of Chicago and other major municipalities have already done.

The second edit pertains to fire sprinklers. While fire sprinkler requirements would be removed for houses and townhomes using TGI or Open Web floor joist covered with drywall, staff recommends fire sprinklers be required for all new house or individual townhome units over 4,000 square feet. While Lombard has very few houses over 4,000 square feet, these very large homes do pose a significant risk. They are as large as a smaller apartment building, but without the safety features of an apartment building such as a required monitored fire alarm, protected escape stairways, fire sprinklers that would automatically be required in an apartment, etc. These structures also are a challenge to first responders as the large complex interior can take a significant amount of time to execute a search and rescue operation. Large homes over 4,000 square feet typically represent less than 10% of the total new homes built in Lombard.

The Community Development staff has worked with the Lombard Fire Department to ensure both departments support the recommended ordinance edits. Staff also worked with the local builders to get feedback. The home builders argued the 4,000 square foot houses are generally over

\$750,000, so there are not the same budgetary concerns as we see with smaller houses. As such they also could support such a change.

The proposed code changes to Section 150.035, referenced IRC Sections R313 and R502.1.4, are noted below, with additions underlined and deletions in strikeout.

Delete Section R313 for all one or two family houses or individual townhouse units where the where the square footage of the house or townhouse is over 4,000 square feet. Square footage shall include the basement, but not the garage or unfinished attics.

Section R502.1.4 Prefabricated Wood I-Joists: Change to read as follows: Lightweight wood truss assemblies and "I" joists are not permitted unless installed in accessory structure or in any structure with 5/8" type-x drywall covering all "open web joists" or "I-Joists", ~~and a complete NFPA-13 sprinkler system is installed in the entire building.~~

ACTION REQUESTED

Per BOBA initial direction, staff provides code amendments to Section 150.035 of the Village Code for BOBA consideration and a recommendation of approval to the Village Board of Trustees.

ORDINANCE NO. _____

**AN ORDINANCE GRANTING APPROVAL OF TEXT AMENDMENTS
TO TITLE 15, CHAPTER 150, SECTION 150.025 OF THE LOMBARD VILLAGE
CODE**

(Local Amendments to the Building Code Providing for the Use of Open Web and I-Joists)

WHEREAS, the Village of Lombard maintains a Building Code which is found in Title 15, Chapter 150 of the Lombard Code of Ordinances; and,

WHEREAS, the Board of Trustees deem it reasonable to periodically review said Building Code and make necessary changes; and,

WHEREAS, a review of the Building Code has been conducted by the Village of Lombard Board of Building Appeals on February 2, 2022; and,

WHEREAS, the Board of Building Appeals has filed its recommendations with the President and Board of Trustees recommending approval of the text amendments described herein; and,

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

SECTION 1: That Title 15, Chapter 150, Section 150.035 of the Lombard Village Code shall be amended by deleting 150.035 and replacing as set forth below.

150.035 Adoption by reference.

All provisions as listed in the International Residential Code, 2018 edition, are hereby adopted and incorporated by reference with the following changes:

Section R101.1 Title: Insert "Village of Lombard"

Section R105.2 Work exempt from permit; Delete the following exemptions: 1, 2, 3, 4, 5, 7 and 10.

Residing a single-family home or accessory structure.

Sheds less than 80 square feet and less than 8 feet in height.

Patios less than 100 square feet.

Section R105.5 Expiration: Delete this section entirely and refer to Section 150.042, paragraphs A, B, C, and D.

Table R301.2(1) Ground Snow Load: The following information shall be inserted in the table:

Ground snow load	25
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Wind Ultimate Speed	105
Seismic Design Category	B
Weathering	severe
Frost Depth	42
Termite	Yes
Winter Design Temp	-4
Radon	Zone 2

Delete note "f" at the bottom of Table R301.2(1)

R302.2 Townhouses-Exception shall be amended to read

"A common 2-hour fire-resistance wall constructed of masonry is permitted for townhouses".

R302.3 Two family dwellings shall be amended to read

"Dwelling units in two-family dwellings shall be separated from each other by a 2-hour masonry wall or a 2-hour floor meeting ASTM E 119 or UL 263".

R302.3 Two family dwellings Exception 1 shall be amended to read "A fire-resistance rating of 1 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13".

R302.3 Two family dwellings—Delete exception 2

Section R312.1 Delete "more than 30 inches" and insert "more than 24 inches".

Delete Section R313 for all one or two family houses or individual townhouse units where the square footage of the house or townhouse is not over 4,000 square feet. Square footage shall include the basement, but not the garage or unfinished attics.

Delete Table R302.6 and replace with "The Minimum distance between a residence and accessory structures shall be 10 feet unless a 1-hour fire resistance wall is installed at the accessory structure". Two (2) feet shall be the minimum separation.

Change section R309.2 Separation required.

To read as follows: The garage shall be separated from the residence and its attic by means of minimum " type X Fire Code gypsum board applied to the garage side of the wall and/or ceiling.

Add Section R309.5 Service Doors: All detached garages shall have a service door. The door shall be side-hinged, not less than 2 feet 8 inches in width, and not less than 6 feet 8 inches in height. Side hinged door to open to house for attached garage and open to outside for detached garage. A switched electric light and a 3 foot by 3 foot landing are required at all service doors. One switched light, one ceiling mounted receptacle, and one wall mounted receptacle shall be required on the inside of each garage.

Add Section R309.6

All garages built after May 1, 2013 shall have gutters installed, or equal as approved by the Community Development Director or his/her designee.

Detached garages with more than 18 inches of grade difference shall not use a thickened edge slab type foundation.

Add to Section R315 Carbon Monoxide Detectors

R315.4 Provide a minimum of one Carbon Monoxide detector in every dwelling unit. Provide a minimum of one carbon monoxide detector on each story including basements in a multiple story dwelling. All carbon monoxide detectors shall be approved and listed and shall be installed in accordance with the manufacturer's installation instructions.

R315.5 Alterations, repairs and additions. When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the entire building shall be provided with carbon monoxide detectors located as required for new dwellings.

R315.6 Power source; Required carbon monoxide detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source. Wiring shall be permanent and without a disconnecting source other than those required for over-current protection.

Section R325.1 Site Address; Add to end of sentence the following: The minimum size of numbers for addresses shall be 4" high and of a contrasting color to mounting surface.

Section R502.1.4 Prefabricated Wood I-Joists: Change to read as follows: Lightweight wood truss assemblies and "I" joists are not permitted unless installed in accessory structure or in any structure with 5/8" type-x drywall covering all "open web joists" or "I-Joists".

Add 802.11.2-Wood roof trusses must have metal gusset plates covered with 1/2" plywood, glued and screwed. Plywood must extend 6" beyond each side of the metal gusset plate (3 sides if 4th side is obstructed by roof sheathing or drywall ceiling).

Delete the plumbing and electric sections of this code, except Chapter 25, Plumbing Administration and Chapter 26, General Plumbing Requirements.

Appendix E: Delete all sections and replace with the following: Manufactured housing units shall comply with all sections of this code and all other applicable Village Ordinances denoted in Title XV as they apply to the construction for all single family detached dwellings.

SECTION 2: That this ordinance shall be in full force and effect after its passage, approval and publication in pamphlet form as provided by law.

Passed on first reading this ____ day of _____, 2022.

Ordinance No. _____
Re: Chapter 150
Page 4

First reading waived by action of the Board of Trustees this ____ day of _____,
2022.

Passed on second reading this ____ day of _____, 2022.

Ayes: _____

Nays: _____

Absent: _____

Approved this ____ day of _____, 2022.

Keith T. Giagnorio, Village President

ATTEST:

Elizabeth Brezinski, Village Clerk

Published in pamphlet from this ____ day of _____, 2022.

Elizabeth Brezinski, Village Clerk