

The Existing Building Code Monthly Newsletter provides practical guidance for Design Professionals, Property Owners, and Building Managers.

A photograph of a multi-story brick building with a fire escape on the side. The building has many windows and a classic architectural style. The image is used as a background for the newsletter content.

WORK AREA CALCULATIONS & THRESHOLD TRIGGERS

One of the most significant changes introduced by the **New York City Existing Building Code (EBC)** is the concept of Work Area. Chapter 6 elevates work area from a filing detail to a central compliance metric. The percentage of a building included within the work area determines whether a project is classified as a Level 1 Alteration or a Level 2 Alteration, which in turn determines which Code requirements apply.

For owners, architects, and engineers, understanding how work area is measured may be just as important as understanding the technical requirements of Chapters 8 and 9.

What is Work Area?

The EBC defines a work area as the portion or portions of a building consisting of all reconfigured spaces shown on the construction documents. Work area is the key measuring tool used to determine alteration level.

CONTINUED ON PAGE 2

IN THIS ISSUE...

- Case Study: Addition & Alteration of a Single Family Home
- Code Spotlight: Code Section Focus
- FAQs You Can Use
- Codesearch

The calculation itself is straightforward:

$$\text{Work Area} \div \text{Building Area} = \text{Work Area Percentage}$$

For this purpose, building area includes the floor area of the entire building, both above and below grade, excluding vent shafts and courts. Exterior wall thickness is included in the measurement.

The challenge is not the math; it is determining exactly what should be counted as work area.

What Counts Toward Work Area?

Chapter 6 generally treats the reconfiguration of interior space as work area. Such reconfigurations might affect partitions, walls, ceilings, stairs, ramps, mezzanines, shaft openings, and ceiling-height modifications. Therefore, those are examples of work that contribute to the calculation of work area.

By contrast, some work does not automatically increase the work area. While stand-alone mechanical, plumbing, fire-protection, elevator, or boiler work is governed by Chapter 8 as a Level 1 Alteration, it is generally not counted as work area, unless it changes the layout of the space. For instance, mechanical equipment work might not be included in work area, but the construction or alteration of a mechanical room would be included in the calculation. Similarly, many exterior-envelope modifications do not contribute to work area calculations. The replacement of windows, including changes in window sizes, might not be included in the work area calculation. However, the creation or sealing of windows or skylights that are required for ventilation must be.

This distinction is important because two projects with similar construction costs may produce very different work area percentages depending on how much space is actually being reconfigured.

The Critical Threshold: 50%

The most important trigger in Chapter 6 is the 50% threshold. Where the work area is 50% or less of the building area, the project is classified as a Level 1 Alteration under Section 602. Where the work area is greater than 50%, the project becomes a Level 2 Alteration under Section 603.

This distinction matters because Level 2 projects must comply with both the applicable Level 1 requirements in Chapter 8 and Level 2 requirements in Chapter 9. In practical terms, crossing the threshold expands the project's compliance obligations.

For that reason, project teams should understand the work area percentage early in design, and revise their calculation through design evolutions, rather than waiting until final filing preparation.

Open Applications: When They Matter...

Another new concept that practitioners and owners need to be aware of is cumulative work area.

Under Section 601.2.1.1, work areas from multiple applications filed after the EBC's effective date must be included in the alteration level determination when those applications remain open. By contrast, work areas of other applications are not included in the cumulative calculation once those applications are signed-off.

The practical implication may be significant in smaller buildings and those with large anchor tenants. A project that appears to involve several small filings may still trigger Level 2 requirements if the combined open applications push the work area beyond 50% of the building area. Owners and applicants should avoid unnecessary cumulative impacts by ensuring that applications are signed-off as work is completed.

...and When They Don't

The EBC text does offer some relief in the cumulative work area calculation. Section 601.2.1.2 provides a targeted limitation on the cumulative work area calculation for determining whether a Level 2 alteration exceeds 75% of the building area. Unlike Section 601.2.1.1, which requires all open alteration applications to be aggregated when classifying the level of alteration, this provision considers only those open applications that are related to the same project scope. As a result, unrelated pending applications are excluded from the 75% calculation, providing relief from some of the Code's highest compliance obligations (including such components as additional stairs, smokeproof exit enclosures, and emergency/standby power) when those separate projects might otherwise artificially increase the total work area.

Real-World Examples

Consider a tenant fit-out involving reconfiguration of offices, conference rooms, and circulation paths across one floor of a building. If the reconfigured area remains at or below 50% of the building area, the project would generally be treated as a Level 1 alteration.

Now consider a phased renovation in which multiple applications collectively affect most of the building. Even if each filing appears modest

when viewed independently, the cumulative work area may exceed the threshold and trigger Level 2 classification. Depending on the scope of work, the increased compliance obligations might include the performance of a structural condition assessment; accessibility improvements to other areas of the building; or compliance with current exhaust and ventilation requirements.

Similarly, major projects involving more than 75% of a building may require consideration of all phased work within the same project scope when determining work area.

A Practical Takeaway

The new EBC shifts the compliance focus from construction cost to the extent of spatial reconfiguration. As a result, project strategy, filing strategy, and Code strategy are now closely linked. A seemingly simple decision about where to draw a work area boundary can influence whether a project remains a Level 1 alteration or becomes a Level 2 alteration with broader compliance obligations.

The calculation of work area is intended to be straightforward. But design teams will need to evaluate work area percentages early, track cumulative filings carefully, and revisit calculations whenever the project scope changes.

EXISTING BUILDING CODE RESOURCES & TRAINING

Scan to learn more about NYC's Existing Building Code!

*Register for the Wednesday,
October 7 training session*

Questions...
ebc@buildings.nyc.gov



FAQs YOU CAN USE . . .

Q: Are dwelling and sleeping units undergoing Level 1 alterations required to comply with the accessibility requirements of BC Chapter 11?

A: Yes, with limitations. Dwelling or sleeping units in Occupancy Groups I-1, I-2, I-3 or R-1: the requirements of BC Section 1107 only apply to the spaces being altered except where the units in the Work Area exceed more than 50% of the units in the building under single ownership, the requirements of BC Section 1107 apply to all the units under that single ownership.

Alterations to dwelling or sleeping units in Occupancy Group R-2: where dwelling or sleeping units are subject to Level 1 Alteration in Occupancy Group R-2, the requirements of BC Section 1107 apply only to the spaces being altered. (see EBC Sections 806.2.8.1 and 806.8.2)

Q: Is it permissible to add two floors to an existing 5-story residential building Group R-2 of construction class IIIB?

A: No, as per EBC 1101.2, it is prohibited to make an addition to a building that would create, extend or increase any existing noncompliance. So, as this building is considered noncompliant as to permissible number of stories for IIIB construction classification in accordance with BC Table 504.4, this addition will not be permissible.

To construct this addition, the RDP may advise the building owner to consider upgrading the construction classification to IIIA and protecting the building with an automatic sprinkler system in accordance with BC Chapter 9. These changes will make the addition permissible

Q: What distinguishes the EBC from the NYCBC?

A: Until July 17, 2027, both the construction of new buildings and the alteration, maintenance, and repair of existing buildings will continue to be governed by the 2022 NYC Construction Codes. Within those regulations is the limited allowance to comply with a Prior Code, as applicable. Beginning July 2027, the alteration, repair, and maintenance of existing buildings will be governed by the EBC, the latest addition to the suite of NYC Construction Codes. Both the BC and the EBC are the product of NYC-specific review and amendment of model Codes published by the International Code Council. However, the EBC is organized by type of alteration (Chapters 5-14), while the NYC BC is organized by building systems. (Refer to EBC 101.1; EBC 101.2.)

CASE STUDY: ADDITION & ALTERATION OF A SINGLE FAMILY HOME

Scope of Work

One-story horizontal addition at the first floor of single family home.

The project also includes an Alteration Level 1 to accommodate a reconfigured kitchen, toilet room, and closet.



Relevant Building Information

Unsprinklered, non-high-rise building
Building classified as Occupancy Group R-3
Originally constructed in 1925

EBC General Provisions

- 302.4 New and replacement materials, assemblies and details
- 302.6 Existing buildings in fire districts
 - 302.6.2 Changes to buildings
- 302.7.2 Calculation of increase in floor surface area
- 303.2 Fire resistive elements
- 303.6 Interior environment

EBC Level 1 Requirements

- 801.3 New and replacement materials, assemblies and details
- 803.2.1 Existing shafts & vertical openings in Prior Code buildings
- 803.7.1 Light & air requirements for replacement windows
- 803.9.1 Construction type
- 803.9.2 Roof coverings

EBC Addition Requirements

- 1101.1 Scope
- 1101.2 Creation or extension of noncompliance
- 1101.3 Other Work
- 1102.2 Area limitations
- 1102.5 Existing buildings within the fire district
- 1107.1 Minimum requirements
- 1108 Other building systems

Key Takeaways

For a one-story horizontal addition and first-floor interior alteration to a Prior Code single-family dwelling, EBC Chapter 11 treats the new rear addition as an addition while related work in the existing house is classified separately as an Alteration Level 1. In this case, the Group R-3 addition to a 1925 wood-frame dwelling increases floor surface area by 12.41%, remaining below the EBC's 110% threshold and below the 25% building-floor-area limit applicable to the addition. While the addition itself must comply with current Code requirements for new construction, including structural, energy conservation, fire protection, means of egress, and building systems, the Code does not require the entire building to be upgraded. The Alteration Level 1 work area is less than 50% of the total building area, although Chapter 8 supplemental requirements apply to the first floor where relevant. Accessibility and architectural condition assessment requirements are not triggered for this R-3 dwelling.



CODE SPOTLIGHT

502.3 New and replacement materials, assemblies and details. New and replacement materials, assemblies and details permitted by the applicable Code for new construction shall be used in accordance with Section 302.4.

EXCEPTION: Provided no unsafe condition is created, like materials, assemblies and details shall be permitted for limited alterations.

CODE SPOTLIGHT (CONTINUED)

This section clarifies the Department's position on the use of new and replacement materials as part of an LAA. Materials, assemblies and details in an existing system or installations which occurred under Prior Codes are not required to comply with the standards for new construction. However, any new and replacement materials would be subject to compliance with the current Construction Codes.

This section provides clarity as to whether existing conditions can continue and how new construction within existing buildings must be addressed. The exception provides flexibility by allowing the use of like materials, assemblies and details as part of an LAA if it does not compromise safety. For example, replacing a window in a historic building with another in-kind that may not comply with the requirements for new construction may be appropriate if a new window would otherwise disrupt the historic character of the building.

CODESEARCH

Start by solving each clue. Then search for key Code terms.

1. modification of an existing building beyond ordinary maintenance (10 letters)
2. construction that increases the building size or floor area (8 letters)
3. the legal category describing how a building or space is used (9 letters)
4. a safe route leading occupants out of a building (4 letters)
5. work performed to restore a component to proper condition (6 letters)
6. a floor level located partly or entirely below ground (8 letters)
7. a floor inserted between the floor and ceiling of a story (9 letters)
8. a room or area occupied by a single tenant as a distinct unit (11 letters)
9. a space suitable for living, sleeping, eating, or cooking (9 letters)
10. a vertical opening used for movement between floors (5 letters)
11. the person responsible for submitting an application for approval (9 letters)
12. the portion of a building consisting of all reconfigured spaces shown on the construction documents (8 letters)
13. a building recognized for historical significance under applicable regulations (16 letters)
14. the measured area of a structure used in determining work-area percentages (12 letters)
15. the act of changing the arrangement or layout of space within a building (15 letters)

BONUS CHALLENGE: Which key term is most important in determining project classification & requirements?

EBC MONTHLY NEWSLETTER **SEPTEMBER 2026**

Q M W H I S T O R I C B U I L D I N G
P C O C C U P A N C Y L T R A E X V P
M Z R N P A T N E T W I N O Q D N O B
E X K E X I T V O T E A U A S O T G U
L M A R E A K N H D C P I L I A O G I
B A S E M E N T D T H P L T C P N U L
A R E P A I R Q W I A W A D A P N R D
T M G L U F M N C O N R O I N L O A I
I O E T A E E H U L U A B R E I I T N
B I E Z B P Z Z P G E N N C K C F I G
A H Z N Z M Z A I I O T A O A A A O A
H L Z Y E A N F N C F P I N H N R N R
K A A M B H N G G C S H O S P T U E E
M B N Z Z O B I E T C N O I T I D D A
U I Z O C N U O N T A H U G C P O O M
F T M E R G I A C E G C N R A T C N O
D A R W H E N N C I U O O E N I C H K
P N J R T E A A S O R F C I T O A C E
C T A L T E R A T I O N N R G N N Y V
A H P O F O C C U P A N C Y H U T S Q