



# 2021 I-Code Implementation



# Agenda

- Timeline
- Regulatory Structure
- What to Expect In the Coming Year
- Examples of Significant Changes

SUBMIT YOUR QUESTIONS/ CONCERNS TO Q&A


# Code Adoption



- Applications filed on or after July 13, 2025, may apply the 2018 or 2021 I-Codes.
- Applications filed on or after January 13, 2026, MUST apply the 2021 I-Codes.




# Pa Uniform Construction Code (UCC)

- Building Code governing design, construction, alteration, and maintenance of buildings throughout Pennsylvania.
  - Established and amended under the Pa Construction Code Act (PCCA).
  - Current regulation requires adoption of triennial International Codes 4.5 years after publication.
    - Code is further modified by Pa laws and by Review & Advisory Council Review/ Recommendation Process.
    - Philadelphia was permitted early adoption of 2018 commercial codes and hasn't experienced full effect of 3-year adoption cycle.
  - Code may be further modified by local jurisdiction if changes meet or exceed PA UCC provisions.
    - Reviewed, approved and posted by Pa DLI
    - Requires City Ordinance
    - Certain sections cannot be changed through this municipal change process (i.e. Provision adopted through legislation, accessibility, elevator/boilers)
- 



# Pa Uniform Construction Code (UCC) Accessibility Provisions

- The PCCA requires that the accessibility provisions of the most recently published edition of the ICC codes must be adopted by December 31 of the year of issuance. Accordingly, 2021 Accessibility provisions were adopted on January 1, 2022.
  - In October 2022, the Commonwealth Court ruled that the adoption process violated the Pa Constitution by delegating legislative authority to a 3<sup>rd</sup> party (ICC). The 2018 accessibility provisions were reinstated and will remain in effect until new regulations are adopted.
  - Can't adopt or modify at the local level.
  - If new laws are not adopted by July 13, 2025, we will enforce the 2021 I-Codes with the 2018 accessibility provisions (IBC: Ch 10, 11, Appendix E, ICC-A117.1-09; Pools: 2010 ADA).
  - Review the Department's (rescinded) FAQ on [2021 Accessibility Changes](#) to learn more about changes, including increased clearances, should laws be enacted.
- 

# Pa Uniform Construction Code (UCC)

UNIFORM CONSTRUCTION CODE

## UCC Review & Advisory Council

The Uniform Construction Code (UCC) Review and Advisory Council were established by the Pennsylvania Construction Code Act (PCCA). The Council consists of 21 members, with appointments made by the Governor and the General Assembly.

[Letter from RAC Chair](#) → [2021 RAC Changed Sections](#) →

**Department of Labor and Industry**

- Newsroom >
- Resources >
- Departments and Offices >
- Programs and Services >
  - Employment and Workforce Development >
  - Unemployment >
  - Workers' Compensation >
  - Labor Management Relations >
- Mediation >
- General Safety >
- Pennsylvania Labor Relations Board >
- Industrial Board >
- Fee Schedules >
- Bureau of Occupational and Industrial Safety >
- Labor Law Compliance >
- Disability and Vocational Rehabilitation >

**About the Council**

The members represent industry sectors that participate in the various aspects relating to the building - including building component design, construction, building code enforcement, and local government representation.

The Council is charged with making recommendations to the Governor, the General Assembly, and Labor & Industry regarding proposed changes to the PCCA. The Council is also charged with reviewing the most recent triennial building code updates published by the International Code Council (ICC). The PCCA requires the Council to submit a report to Labor & Industry's Secretary within a prescribed timeline, specifying the updates to be adopted as part of Pennsylvania's UCC.

The council is required to review the applicable triennial code revisions to the following International Codes adopted as the UCC:

- International Building Code (IBC)
- International Energy Conservation Code (IECC)
- International Existing Building Code (IEBC)
- International Fire Code (IFC)
- International Fuel Gas Code (IFGC)
- International Mechanical Code (IMC)
- ICC Performance Code for Buildings and Facilities (ICCPC)
- International Plumbing Code (IPC)

**Meeting Minutes**

[RAC Meeting Minutes - May 2, 2024](#) →

Date	Days	Running	Activity
1/31/2021			ICC Officially Publishes 2021 ICC Family of Codes
11/15/2021			Open Public Comment for Sections Not Changing from 2018 to 2021
2/13/2022	90		Close Public Comment for Sections Not Changing from 2018 to 2021
3/10/2022			RAC Meeting
5/12/2022			RAC Meeting
7/14/2022			RAC Meeting
9/8/2022	207		Publish list of additional sections to be considered
10/13/2022	620	20.66667	RAC Initiate PA Review of 2021 ICC Family of Codes
11/12/2022	30		Rac Opens Public Comment on 2021 ICC Family of Codes
			TAC Committee Applications are Opened
			TAC Committee Applications are Closed
			Public Comment Closed
12/12/2022	30		RAC Receives Public Comment and Assigns Comments to TAC's
3/12/2023	120		RAC Meets With Update From TAC Committee's Being Presented
3/16/2023	4		TAC Review Completed with Final Reports to Dept L&I
9/14/2023	182		RAC Receives Final Report From TAC Committee's
12/7/2023	84		TAC Final Reports are Posted for Public Review
1/4/2024	28		RAC First Public Hearing (EAST)
1/15/2024	11		RAC Second Public Hearing (Harrisburg)
2/1/2024	17		RAC Third Public Hearing (WEST)
2/29/2024	28		RAC Meeting to Deliberate
3/28/2024	28		RAC Meeting to Deliberate
4/18/2024	21		RAC Meeting to Deliberate
5/2/2024	14		RAC Meeting to Deliberate
5/16/2024	14		RAC Meeting to Deliberate
5/30/2024	14		RAC Meeting to Deliberate
6/13/2024	14		RAC Meeting to Deliberate
6/27/2024	14		RAC Meeting to Deliberate
7/25/2024	70		Draft Report Presented to the RAC
9/12/2024	49		Final Report Approved by RAC
10/1/2024	19		Final Report Submitted to Dept L&I
2/27/2025			RAC Meeting
5/8/2025			RAC Meeting
7/13/2025	285		Go Live

- Chapter 7 Fire and Smoke Protection Features, was adopted with the following modifications:
  - Section 704.2 Column protection, was not modified as part of the Pennsylvania 2018 IBC adoption, maintaining the 2015 IBC language. The national language was not modified in 2021 code, and as such, this language again was maintained in the current Pennsylvania 2021 IBC adoption as follows:
 

*704.2 Column protection. Where columns are required to have protection to achieve a fire-resistance rating, the entire column shall be provided individual encasement protection by protecting it on all sides for the full column height, including connections to other structural members, with materials having the required fire-resistance rating. Where the column extends through a ceiling, the encasement protection shall be continuous from the top of the foundation or floor/ceiling assembly below through the ceiling space to the top of the column.*
  - Section 704.4.1 Light-frame construction, was not modified as part of the Pennsylvania 2018 IBC adoption, maintaining the 2015 IBC language. The national language was not modified in 2021 code, and as such, this language again was maintained in the current Pennsylvania 2021 IBC adoption as follows:
 

*704.4.1 Light-frame construction. Studs and boundary elements that are integral elements in load-bearing walls of light-frame construction shall be permitted to have required fire-resistance ratings provided by the membrane protection provided for the load-bearing wall.*

## Review & Advisory Council Site

includes complete info on regulatory process, including minutes of meetings.

## Full Adoption Timeline

2024 adoption timeline will be posted here, with public comment period of unchanged sections in 2025.

## Final Report

View full report of amendments to the 2021 I-Codes to be adopted through PA DLI regulation.

# What to Expect In Philadelphia

## Code Bulletin on Implementation

- Identify ‘optional’ and mandatory implementation dates.
- Regulation on [Permit Filing Date](#).
- Initial Building Permit establishes code edition to be used for the building, including trades. What constitutes an initial building permit?
- Can’t mix code editions.
- Permit Application Extensions- will only authorize one extension for RFI. More stringent rules on pick-up.
- Master Approvals- individual permit applications must be filed by application date. If missed, will need to resubmit.
- Preliminary plan reviews, including variances, will not carry over.
- Need to act on permits issued under the 2018 I-Codes within expiration period.

DEPARTMENT OF LICENSES AND INSPECTIONS <b>CODE BULLETIN OF INFORMATION</b>		CODE OF GENERAL ORDINANCES OF THE CITY OF PHILADELPHIA TITLE 4 — BUILDING CONSTRUCTION AND OCCUPANCY CODE
		<b>B-1801</b>
SUBJECT OF BULLETIN: <b>IMPLEMENTATION OF THE 2018 INTERNATIONAL CODES FOR PHILADELPHIA</b>		REFERENCE CODE SECTION(S): PA UCC Act and Regulations
ISSUED BY		
NAME: Michael Fink	ISSUE DATE: June 7, 2018	
TITLE: Building Code Official	PAGE 1 OF 3	

**ISSUE #1**

The Pennsylvania Uniform Construction Code (PA UCC) was amended by Act 36 of 2017 to allow the City of Philadelphia to adopt provisions of the 2018 International Codes, developed by the International Code Council, for the purpose of regulating the construction, alteration, repair and use of buildings in Philadelphia that do not meet the definition of "residential building" under section 103 of the UCC.

Residential buildings are defined by the UCC as, "Detached one-family and two-family dwellings and multiple single-family dwellings which are not more than three stories in height with a separate means of egress which includes accessory structures."

As residential buildings are regulated by the International Residential Code (IRC), Act 36 allows Philadelphia to adopt the 2018 edition of all other International Codes, without the amendments established by the UCC Review and Advisory Council in its review of the 2015 International Codes. This authorizes Philadelphia to enforce a single set of construction codes without State interference, including the accessibility provisions of the 2018 Codes as adopted by the State on January 1, 2019.


The 2018 International Codes become effective in Philadelphia on October 1, 2018 for all construction except that which is regulated under the IRC.

The 2015 International Codes, with amendments as determined by the UCC Review and Advisory Council become effective throughout Pennsylvania on October 1, 2018. This only includes the 2015 IRC in Philadelphia.

# What to Expect In Philadelphia

## Adopting Ordinances

- An ordinance is required to incorporate UCC updates into the Philadelphia Code.
- Ordinance adopts latest I-Code with state and local amendments. Can be lengthy but is generally incorporating past local laws and those provisions mandated by the State.
  - This 20-page ordinance only include Pa UCC changes (past and present) and past local changes.
  - Those changes mandated by the UCC are annotated accordingly.
- If all ordinances are not passed by July 13, the 2021 Codes (with Pa changes) still take effect. Local changes will continue to be enforced, unless conflicting with the UCC.

 **City of Philadelphia** City Council  
Chief Clerk's Office  
402 City Hall  
Philadelphia, PA 19107

**BILL NO. 220638**  
(As Amended, 11/29/22)

Introduced June 23, 2022

Councilmember Squilla

Referred to the  
Committee on Licenses and Inspections

**AN ORDINANCE**

Amending Title 4 of The Philadelphia Code, known as the Philadelphia Code, and Occupancy Code," by adopting the amendments to the 2015 International Building Code, as amended by the 2018 International Building Code, and the 2018 International Residential Code Act, all as amended.

THE COUNCIL OF THE CITY OF PHILADELPHIA

SECTION 1. Subcode "R" of Title 4 of the Philadelphia Code, known as the Philadelphia Code, is hereby repealed and its provisions read as follows:

SUBCODE "R" (THE PHILADELPHIA RESIDENTIAL CODE)

Article R-1.0 Pursuant to the Pennsylvania Code, known as the Pennsylvania Code, "2018 International Residential Code" which was legally existed prior to the Act or were amended by the Act, the City Council is hereby adopted as the Philadelphia Code.

§ R-1.1 The "2018 International Residential Code" is hereby adopted as the Philadelphia Code.

§ R-1.2

**City of Philadelphia**

BILL NO. 220638, as amended continued

**R-R310.6 Alterations or repairs of existing basements.** An emergency escape and rescue opening is not required for existing basements undergoing alterations or repairs, where such alterations or repairs do not increase the existing story height of the basement.

Exception: New sleeping rooms created in an existing basement shall be provided with emergency escape and rescue openings in accordance with Section R310.1.

**SECTION R311 MEANS OF EGRESS**

**Pursuant to the UCC, delete Section R311.7.4 and replace as follows:**

**R-R311.7.4 Walkline.** The walkline across winder treads and landings shall be concentric to the turn and parallel to the direction of travel entering and exiting the turn. The walkline shall be located 12 inches (305 mm) from the inside of the turn. The 12-inch (305 mm) dimension shall be measured from the widest point of the clear stair width at the walking surface. Where winders are adjacent within a flight, the point of the widest clear stair width of the adjacent winders shall be used.

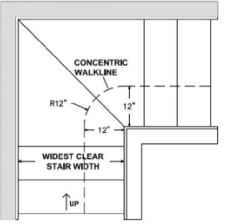


Figure R311.7.4  
WINDER TREAD AND LANDING DETAIL





# What to Expect In Philadelphia

## Substantive Ordinances

Intent to pursue some new changes, which will require City Council to pass ordinance.

### Admin Code

- Clean-up several sections
- Limit period for initial inspection to a max of 14 days prior to start of work.
- Increase permit reinstatement fee to cover administrative costs

### Fire Code

- Adopt 2021 maintenance and operation provisions, with past local modifications and limited amendments. UCC only covers Fire Code sections referenced by the Building Code (for construction).

### Property Maintenance Code

- Adopt 2021 maintenance provisions, with past local modifications and limited amendments.
- 



# What to Expect In Philadelphia

## Substantive Ordinances (cont'd)

### Plumbing Code

- [Additional local amendments](#) based on 2021 IPC changes.
- PAB hearing conducted in Nov to receive public comment. A 2<sup>nd</sup> hearing is anticipated for questions/ comment on final ordinance format.

### Mechanical Code

- Allow use of A2L refrigerants to prepare for phasing out of HCF refrigerants under the federal [2020 AIM Act](#).
- Proposal will follow [ICC transition recommendations](#). Will also require acceptance from Pa DLI as meeting/ exceeding UCC.

### Energy Code

- Consider retraction of certain UCC amendments to 2021 residential energy code provisions.

NOTE: Ordinances may not be introduced or heard at the same time.



# What to Expect In Philadelphia

## Updated Forms

- New forms will be available for 2021 Codes.
- Both 2018 and 2021 will be posted. Must select the correct form.
- All FAQs, bulletins, info sheets, EZ permits etc. will be updated as needed.
  - Most will be revised but not re-issued.

\*\*\*DO NOT MAIL THIS FORM\*\*\*



Department of  
**Licenses and Inspections**  
CITY OF PHILADELPHIA

INTERNAL USE ONLY

Date Received \_\_\_\_\_


Application Number \_\_\_\_\_

**Structural Design Criteria Form**

All calculations shall comply with the requirements of ASCE 7-16, ASCE 24-14, and the 2018 Philadelphia Building Code.

Complete all sections applicable

<b>Property Address</b> Enter the location of work.	1	Address _____
<b>Risk Category (1604.5)</b> Check the corresponding risk category.	2	<input type="checkbox"/> Category I: Building <input type="checkbox"/> Category II: Building <input type="checkbox"/> Category III: Building <input type="checkbox"/> Category IV: Building
<b>Floor Live Loads (1607)</b> Use this section to provide Floor Live Load values.	3	<input type="checkbox"/> a) Basement <input type="checkbox"/> b) First Floor <input type="checkbox"/> c) Second Floor <input type="checkbox"/> d) Third Floor <input type="checkbox"/> e) Additional Floors
<b>Roof Live Loads (1607.13)</b> Use this section to provide values about the Roof Live Loads and the Roof Live Load Reduction Factor (if any).	4	<input type="checkbox"/> Roof Live Loads <input type="checkbox"/> Roof Live Load Red
<b>Snow Loads (1608)</b> Use this section to provide Snow Load values.	5	<input type="checkbox"/> a) Ground Snow Load <input type="checkbox"/> b) Flat-roof Snow Load i) Exposure Factor, ii) Thermal Factor, C iii) Importance Factor iv) Minimum Snow Load, $P_m$ (ASCE 7, 7.3.



Department of  
**Licenses and Inspections**  
CITY OF PHILADELPHIA

**RESIDENTIAL DUCT & ENVELOPE TESTING (DET) FORM**

House Address: \_\_\_\_\_ Permit #: \_\_\_\_\_ Date: \_\_\_\_\_

Permit holder: \_\_\_\_\_ Phone: \_\_\_\_\_

**I. Building Envelope Air Leakage (mandatory):**

**Blower door test (Mandatory)**

**Test Result:**

Fan Flow at 50 Pascals = \_\_\_\_\_ CFM50      Total Conditioned Volume = \_\_\_\_\_ ft<sup>3</sup>

ACH50 = CFM50 x 60 / Volume = \_\_\_\_\_ ACH50

**Visual Inspection (Mandatory)**

Air Barrier and Insulation Installation Final Inspection Checklist (on reverse) has been completed and signed

Testing company: \_\_\_\_\_ Phone: \_\_\_\_\_

Tester Name (print): \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

BPI or HERS certification number: BPI no: \_\_\_\_\_ HERS Rater no: \_\_\_\_\_ HERS RFI no: \_\_\_\_\_

**II. Heating and Cooling System Duct Leakage**

I certify that all portions of the ducts are located entirely within the building thermal envelope. Testing is not required.

Owner or approved third party signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Total duct leakage test**

Energy code compliance path:  Prescriptive (including REScheck)  Performance or Energy Rating Index

# What to Expect In Philadelphia

## Assistance in Understanding Changes

- Publish list of changes, by Code, as they will be applied in Philadelphia.
- Info Session Series for in-depth review of changes.
  - Series 1- Mid 2025
  - Series 2- Late 2025/ Early 2026
  - Series 3- Mid 2026

Department of Licenses and Inspections  
CITY OF PHILADELPHIA

Reference Code(s):  
International Residential Code

FAQ:  
What are the significant changes between the 2015 and 2018 International Residential Code?

[Return Home](#)

Department of Licenses and Inspections  
CITY OF PHILADELPHIA

Reference Code(s):  
International Residential Code

This document includes a summary of significant changes to the 2015 International Residential Code (IRC) and includes the PA Uniform Advisory Council (RAC) Report amendments. This document provides information for the identified code changes.

**Disclaimer:** This document shall be utilized as guidance only. The user is responsible to review the provisions of the International Residential Code, referenced Standards, and the directives of the PA Uniform Advisory Council. The Department of Licenses and Inspections may not be held responsible for a formal application for a construction permit or pre-approval.

**Summary of changes between the 2015 and 2018 International Residential Code**  
(Items marked with an asterisk (\*) are identified as major code changes)

Chapter 2 (Definitions)

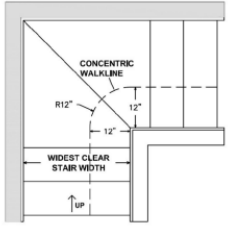
- Definition – Carbon monoxide alarm and detector
- Definition – Crawlspace
- Definition – Repair

Chapter 3 (Building Blocks)

- Section R301.2.2.5 – Concrete construction
- Section R302.1 – Exterior walls
- Section R302.2 – Townhouse double wall fire separation
- Section R302.5.1 – Opening protection
- Section R302.13 – Fire protection of floors

Section R311.7.4 amended by PA UCC RAC Report to include image related to walkline measurements.

**R311.7.4 Walkline.** The walkline across winder treads and landings shall be concentric to the turn and parallel to the direction of travel entering and exiting the turn. The walkline shall be located 12 inches (305 mm) from the inside of the turn. The 12-inch (305 mm) dimension shall be measured from the widest point of the clear stair width at the walking surface. Where winders are adjacent within a flight, the point of the widest clear stair width of the adjacent winders shall be used.



**Figure R311.7.4**  
WINDER TREAD AND LANDING DETAIL

- **Section R311.7.5.3** amended to effectively mandate a radius or bevel "nosing" for treads.

**R311.7.5.3 Nosings.**  
Nosings at treads, landings and floors of stairways shall have a radius of curvature at the nosing not greater than 9/16 inch (14 mm) or a bevel not greater than 1/4 inch (12.7 mm). A nosing projection not less than 1/4 inch (19 mm) and not more than 1 1/4 inches (32 mm) shall be provided on stairways. The greatest nosing projection shall not exceed the smallest nosing projection by more than 1/8 inch (9.5 mm) within a stairway.  
**Exception:** A nosing projection is not required where the tread depth is not less than 11 inches (279 mm).
- **Section R311.7.8.1** amended to clarify handrail design requirements.

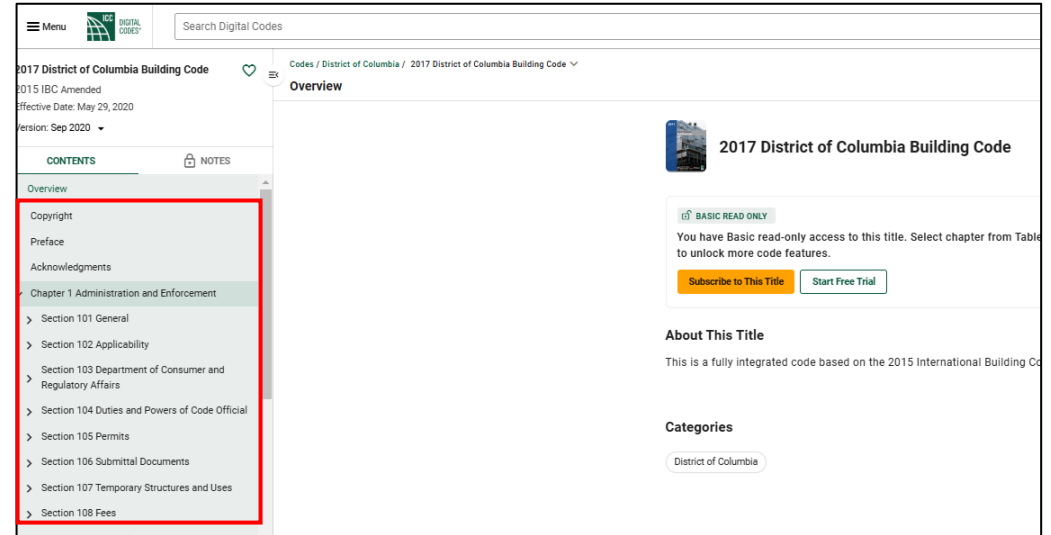
**R311.7.8 Handrails.**  
Handrails shall be provided on not less than one side of each flight of stairs with four or more risers.

**R311.7.8.1 Height.**  
Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).  
**Exceptions:**
  1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
  2. Where handrail fittings or bindings are used to provide continuous transition between flights, transitions at winder treads, the transition

# What to Expect In Philadelphia

## Electronic Access to Consolidated Codes

- All Building Construction and Occupancy Sub-Codes, except Admin Code, will be published to ICC's website.
- Free access to read-only version. Paid subscription provides additional functionality.
- An integrated PDF of each code will be available on L&I website.
- Integrated codes will be published as completed by ICC. Very limited pool will be available by July 13.
- Public can continue to access free versions of I-Codes and the Philadelphia Code, which identifies all local and state changes to I-Codes.



The screenshot shows the ICC Digital Codes website interface. The main content area displays the '2017 District of Columbia Building Code' overview. A sidebar on the left, titled 'CONTENTS', lists the code's structure, including sections from Copyright to Section 108 Fees. The 'Overview' section of the sidebar is highlighted with a red box. The main content area includes a 'BASIC READ ONLY' notice, a 'Subscribe to This Title' button, and a 'Start Free Trial' button. Below this, there is an 'About This Title' section and a 'Categories' section with a 'District of Columbia' tag.

## DC Construction Codes

### Integrated Codes

To assist the public, three of the District of Columbia Construction Codes may also be viewed in an ICC, which consolidates the respective ICC codes, ANSI/ASHRAE/IES 90.1-2013 and the District of Columbia Code. The following integrated codes are available through the links below:

- [2017 District of Columbia Building Code - Part 1](#)
- [2017 District of Columbia Building Code - Part 2](#)
- [2017 District of Columbia Building Code - Part 3](#)
- [2017 District of Columbia Energy Conservation Code](#)
- [2017 District of Columbia Green Construction Code](#)

# What to Expect In Philadelphia

## Answers to your questions

- Request that L&I issue an interpretation on a specific code section. This [form](#), linked in our newsletter, can also be used for 2021 code issues/ concerns.
- Look out for future newsletters or trainings for public response.

Note: Continue to use [www.phila.gov/get-help](http://www.phila.gov/get-help) for direct responses to code questions.

## Future Sessions

Do you have any recommendations for additional webinar topics, general process clarification or general code interpretation? Complete and submit this [online form](#) to provide your feedback.

Note: This form is for general process clarification and/or general code interpretations and no direct response will be provided by the Department. Any project-specific questions requiring a direct response must be submitted through the [help desk](#).



Department of  
**Licenses and Inspections**  
CITY OF PHILADELPHIA

### Recommendations Form

Please use this form to submit recommendations for a webinar topic, process clarification, and/or code interpretation requests. Note: A direct response from the department will not be provided to the requestor.

Select the type of recommendation:


- Webinar Topic
- Process Clarification
- Code Interpretation

NEXT



# Code Changes - IBC

## IBC

- Mass Timber Provisions
    - Introduce 3 new construction types: IV-A (18 stories, 270'), IV-B(12 stories, 180'), and IV-C (9 stories, 85')
    - Fire Resistance, Fire Protection, and Structural Requirements
  - Puzzle (Escape Rooms) - 411. 5
    - Escape room classified as special amusements with unique exit requirements.
  - Energy Storage Systems
    - Provisions align with F-1207.
  - Allowance of NFPA 13R sprinklers - 903.3.1.2
    - Based on level of fire department access instead of strictly on height/ no of stories
    - Further modified under the UCC to limit height of roof assembly to 45'
  - Single exit from stories - 1006.3.4
    - Instead of using Common Path of Travel, total travel to an exit is now used to determine when 2 exits are required from a story. Travel limits same.
- 



# Code Changes – IBC (continued)

- Egress illumination - 1008.2.1
  - Increase required lighting for along stairs & landings from 1 foot-candle to 10 f-c while stairs are in use, through the use of occupant sensors.
- Structural Design Criteria - Ch 16
  - Most changes designed to align with ASCE 7
  - Include component and cladding wind zones, classification of mixed occupancy bldgs. with larger assembly spaces as Risk Category 3, clarification of dead loads, updated snow loads, hydrostatic and expansive soil uplift pressures addressed, and secondary drainage system rain loads.
- Shipping Containers (w/ Risk Category Exemptions, including sheds) - 3115
  - Verification of construction, condition, and structural integrity.
  - Compliance with standard code provisions (foundation, ventilation, roof assembly, etc..)

Additional changes to UCC, including modifications to fire resistance for column protection and light frame construction.







# Code Changes - IEBC


- Sprinkler requirements
  - New requirements for I-2 and additional areas listed in Table B-903.2.11. 6 (high rise, atrium, live work units, etc.)
- When significant portions of a building's exterior wall coverings or exterior wall envelopes are added or replaced, they must comply with the requirements of Chapters 14 and 26 of the IBC. IEBC 309, 309.1
- Some accessibility changes but adoption is unresolved.
- Certain provisions moved for clarification.

No UCC changes relevant to Philadelphia.





# Code Changes - IRC

- R302.5 – Doors between the garage and residence must be self-latching.
  - R305.1 –The minimum ceiling height is reduced to 6 feet 6 inches under beams spaced apart at least 36 inches apart.  
Further modified under the UCC to clarify that max height is to the bottom of the beam.
  - R310.1 - Alley between yard and public way must be a minimum of 36".  
Further modified under the UCC to allow reduction to 30" for infill lots with shared alley easement where there is a min  
yard  
size of 80 sq ft.
  - R314.3- Additional smoke alarm locations.
  - R326 - Habitable attics are required to be considered a story above grade plane unless it meets the same criteria as mezzanines.  
Further modified under the UCC to eliminate certain criteria.
- 




## Code Changes – IRC (Continued)

- R507—New deck design requirements, to include revised prescriptive design tables
- R704 – Requirements for soffit material and installation are expanded.  
Further modified under the UCC
- E3601.8- An emergency service disconnect is required in a readily accessible outdoor location.  
Further modified under the UCC to apply only to detached and semi-detached buildings.






# Code Changes - IPC

- P606.1 - In multiple tenant buildings, where a common water supply piping system is installed to supply other than one- and two-family dwellings, a main shutoff valve shall be provided for each tenant.
  - P708.1.6 – Removable traps and fixtures that are removable without disturbing concealed piping can be used as substitutes for cleanouts.
  - P718 / 719 – Allowance of relining/cure-in-place rehabilitation for building sewers. The methods covered in sections 717 and 718 are considered as trenchless pipe restoration technologies.
    - Gravity drains 4” or larger servicing one-and-two family dwellings only.
    - Requires pre and post video recorded survey as part of permit process.
    - Some 2021 changes, such as those relating to gender-neutral bathrooms, were already adopted in Philadelphia.
    - No modification under UCC.
- 



# Code Changes - IMC

- M401.2 / M403.1 - Mechanical ventilation is required all for dwelling units, regardless of classification as residential or commercial under the Energy Code.
  - M401.4 / M501.3.14 - Intake Opening and Exhaust Outlet Locations: Allows for the elimination of separation between intake and exhaust openings of dwelling units where an approved factory-built intake/exhaust combo termination fitting is used.
  - Table M403.3.1.1 - Recirculation of Mechanical Exhaust Prohibited: Revised text of footnote g to the table to allow only a small amount of air to leak from the exhaust airstream of a wheel type ERV into the outdoor airstream of that ERV. Makes it consistent with ASHRAE 62.1.
  - 1107-1110 Refrigerant Piping: Revise sections to remove regulations for ammonia refrigeration systems and defer to the standards of International Institute of Ammonia Refrigeration (IIAR) , which primarily focuses on the safe design, operation, inspection, and maintenance of closed-circuit ammonia refrigeration systems.
    - Intent is to modify to allow A2L refrigerants as recommended by the ICC; however, other requirements (i.e. refrigerant pipe penetrations) will remain.
- 




# Energy Code - Commercial

## Building Envelope

- Increased insulation requirements and reduced fenestration U-factors and solar heat gain coefficients.
- Extended requirements for envelope air leakage testing and verification.
- New provisions for operable openings interlocking and mandatory controls.

## Mechanical Systems

- Updated equipment efficiency requirements.
  - Refinement of energy recovery ventilation requirements.
  - Updated fan efficiency metric.
- 



# Energy Code – Commercial (continued)

## Electrical Power and Lighting Systems

- Increased lighting efficacy and decreased lighting power density requirements.
- New provisions for automatic receptacle control.
  - *Provisions are not mandatory under the UCC.*
- New provisions for energy metering and monitoring.

## Additional Efficiency Requirements

- Increased number of additional efficiency options

Very few modifications under the UCC.





# Energy Code - Residential

## 2021 IECC


### Building Envelope

- Increased insulation requirements and reduced fenestration U-factors and solar heat gain coefficients.
- Revised air leakage requirements.
- Revised duct testing requirements.

### Mechanical Systems

- Clarification on duct location and insulation requirements.
- Removed exception for duct testing in conditioned spaces.
- New mechanical ventilation system testing requirements.

### Electrical Power and Lighting Systems

- New exterior lighting requirements for limited residential buildings.
  - New interior lighting controls requirements.
- 





# Energy Code - Residential (continued)

## Energy Rating Index Compliance Alternative

- ERI values have been lowered and an additional 5 percent energy reduction is applied.


## Additional Efficiency Package Options

- New section requiring additional efficiency in residential buildings is added.
- Five options for achieving compliance with this section are included: enhanced envelope performance, more efficient HVAC equipment performance, reduced energy used in service water heating, more efficient duct thermal distribution system, and improved air sealing and efficiency ventilation system.

## [2021 IECC Code Adoption Kit | NAHB](#) lists changes in simple format

UCC incorporates significant modifications, including alternate insulation values, removal of additional efficiency package, and modified lighting.

Local changes have yet to be determined.






# Fire Code


- Section F-508 - New requirements for fire command centers to be provided for any new large buildings classified as a Group F-1 & S-1 occupancy.
- Section 903.2 - Group S-2 Open Parking Garages now required to be equipped with automatic sprinkler systems where the fire area exceeds 48,000 SF. Mechanical access parking garages also required to be provided with fire protection systems to include automatic sprinkler systems, mechanical smoke removal system, and fire control equipment rooms.
- Section F-903.3.1.2 - Revised provisions for NFPA 13R system limitations associated with maximum structure heights and story allowances.

Modifications under UCC to increase maximum height limitations for NFPA 13R system allowance within 45'-0" of lowest level of fire department vehicle access in alignment with IFC 2024.

- Section 1006.3 - Clarified language on egress requirements associated with occupied roof levels.
  - Section 1006.3.4 - Revised language to recognize Maximum Exit Access Travel Distance (revised from Common Path of Egress Travel) for buildings/stories with access to only one exit
- 




## Fire Code (continued)

- Section 1010.2.8 - New revision for Locking Arrangement Allowances to address intruder protection for Educational occupancies per NFPA 80, to include Group E, Group B educational occupancies, and Group I-4 occupancies.
  - Section 1204 - Added provisions to regulate the use of Portable Generators.
  - Section 1205.3.3 - Clarified requirements for smoke and heat ventilation associated with Solar PV installations.
  - Section 1207 - Energy Storage System provisions reformatted, with revised language to address growing and changing technology, including revised residential ESS requirements for vehicle impact protection.
  - Section 2404.3.3.6 - Spray booths are no longer restricted to a maximum size of 1,500 sf.
  - Table 3203.8 - High pile storage of lithium-ion batteries now considered a high hazard commodity.
- 



# Property Maintenance Code

- 505.5 - Provisions added to govern abandonment of non-potable water reuse systems that owner ceases use or not maintained, in accordance with the Plumbing Code.
  - 506.3 - Added language to govern maintenance & cleaning of grease interceptors and automatic grease removal devices, to include access to documented records of maintenance, cleaning, and repairs for inspection by the code official.
  - 704.6.2 - New language introduced for wireless smoke alarm interconnection provisions to be exempt from physical interconnection requirements where all alarms are programmed to sound upon activation of one alarm.
- 

# Resources

## L&I:

Submit topics of concern through our [recommendations form](#).

Submit questions on current codes/ processes through [www.phila.gov/li/get-help](http://www.phila.gov/li/get-help).

Track legislative changes and content updates through our newsletter.

Attend future info sessions.

## ICC

[www.iccsafe.org](http://www.iccsafe.org)

Access public information, become a member, or subscribe to digital codes.

The screenshot shows a digital codebook interface. At the top, it displays 'SECTION 602 ALTERATION—LEVEL 1' with a yellow 'INSIGHTS' tag. Below this, there is a collapse arrow and 'INSIGHTS (1)'. The main content area includes '602.1 Scope. INSIGHTS' followed by a paragraph: 'Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment or fixtures using new materials, elements, equipment or fixtures that serve the same purpose.' This is followed by another collapse arrow and 'INSIGHTS (1)'. Below that is '602.2 Application.' with the text: 'Level 1 alterations shall comply with the provisions of Chapter 7.' The next section is 'SECTION 603 ALTERATION—LEVEL 2'. Underneath is '603.1 Scope. INSIGHTS' followed by a paragraph: 'Level 2 alterations include the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment, and shall apply where the work area is equal to or less than 50 percent of the building area.' An 'Exception' is noted: 'The movement or addition of nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height shall not be considered a Level 2 alteration.' Below this is an expand arrow and 'INSIGHTS (4)'. A horizontal menu contains four items: 'Code Change Details', 'Hearing Videos', 'Key Changes', and 'Premium Answers'. The final visible section is '603.2 Application.' with the text: 'Level 2 alterations shall comply with the provisions of Chapter 7 for Level 1 alterations as well as the provisions of Chapter 8.' At the bottom, it shows 'SECTION 604 ALTERATION—LEVEL 3'. The interface includes standard icons for copy, bookmark, print, and share at the top right.