

# City of Philadelphia



(Bill No. 180953)

## AN ORDINANCE

Amending Title 4 of The Philadelphia Code, entitled “The Philadelphia Building Construction and Occupancy Code,” Subcode R, entitled “The Philadelphia Residential Code” by adding amendments to the 2015 edition of the “International Residential Code” as adopted by the Commonwealth of Pennsylvania, Subcode EC, entitled the Philadelphia Energy Conservation Code by adding amendments as adopted by the Commonwealth of Pennsylvania and Subcode P, entitled “The Philadelphia Plumbing Code,” to allow for technical amendments to be made by regulation, all to conform with the Pennsylvania Uniform Construction Code Act: all under certain terms and conditions.

*THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:*

SECTION 1. Subcode “R” of Title 4 of The Philadelphia Code, entitled “The Philadelphia Residential Code,” is hereby amended as follows:

### SUBCODE "R" (THE PHILADELPHIA RESIDENTIAL CODE)

\* \* \*

§ R-1.2 The "2015 International Residential Code", copies of which are on file with the Department of Licenses and Inspections, is incorporated as if fully set forth herein, subject to the following local and state amendments.

\* \* \*

[§ R-1.2.3 Additional amendments developed by the UCC Review and Advisory Council will be established by Regulation of the PA Department of Labor and Industry prior to October 1, 2018. Such amendments shall become part of this code as if adopted herein.]

\* \* \*

### PART III – BUILDING PLANNING AND CONSTRUCTION

#### CHAPTER 3 BUILDING PLANNING

\* \* \*

#### *SECTION R301 DESIGN CRITERIA*

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Table R301.2(1) is revised to include the climatic and geographic design criteria for Philadelphia as follows:

## Table R-R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

\* \* \*

### SECTION R302 FIRE-RESISTANT CONSTRUCTION

Pursuant to the UCC, delete Section R302.5.1 and replace as follows:

*R-R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors.*

\* \* \*

### SECTION R325 MEZZANINES

Pursuant to the UCC, delete Section R325.5 and replace as follows:

*R-R325.5 Openness. Mezzanines shall be open and unobstructed to the room in which they are located except for walls not more than 36 inches (914mm) in height, columns and posts.*

*Exception: Mezzanines or portions thereof are not required to be open to the room in which they are located, provided that the aggregate floor area of the enclosed space is not greater than 10 percent of the mezzanine area.*

## CHAPTER 5 FLOORS

### SECTION R507 EXTERIOR DECKS

Pursuant to the UCC, delete Table R507.6 and replace as follows:

TABLE R-R507.6  
DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft. - in.)

SPECIES <sup>a</sup>	SIZE	ALLOWABLE JOIST SPAN <sup>b</sup>			MAXIMUM CANTILEVER <sup>c, f</sup>		
		SPACING OF DECK JOISTS (inches)			SPACING OF DECK JOISTS WITH CANTILEVERS <sup>c</sup> (inches)		
		12	16	24	12	16	24

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<i>Southern Pine</i>	2X6	9-11	9-0	7-7	1-3	1-4	1-6
	2X8	13-1	11-10	9-8	2-1	2-3	2-5
	2X10	16-2	14-0	11-5	3-4	3-6	2-10
	2X12	18-0	16-6	13-6	4-6	4-2	3-4
<i>Douglas fir-larch<sup>d</sup>, hem-fir<sup>d</sup>, spruce-pine-fir<sup>d</sup></i>	2X6	9-6	8-8	7-2	1-2	1-3	1-5
	2X8	12-6	11-1	9-1	1-11	2-1	2-3
	2X10	15-8	13-7	11-1	3-1	3-5	2-9
	2X12	18-0	15-9	12-10	4-6	3-11	3-3
<i>Redwood, western cedars, ponderosa pine<sup>e</sup>, redpine<sup>e</sup></i>	2X6	8-10	8-0	7-0	1-0	1-1	1-2
	2X8	11-8	10-7	8-8	1-8	1-10	2-0
	2X10	14-11	13-0	10-7	2-8	2-10	2-8
	2X12	17-5	15-1	12-4	3-10	3-9	3-1

*For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.*

*a. No. 2 grade with wet service factor.*

*b. Ground snow load, live load = 40 psf, dead load = 10 psf, L/□ = 360.*

*c. Ground snow load, live load = 40 psf, dead load = 10 psf, L/□ = 360 at main span, L/□ = 180 at cantilever with a 220-pound point load applied to end.*

*d. Includes incising factor.*

*e. Northern species with no incising factor.*

*f. Cantilevered spans not exceeding the nominal depth of the joist are permitted.*

## CHAPTER 6 WALL CONSTRUCTION

### SECTION R602 WOOD WALL FRAMING

*Pursuant to the UCC, delete Section R602.3.1 and replace as follows:*

*R-R602.3.1 Stud size, height and spacing. The size, height and spacing of studs shall be in accordance with Table R602.3.(5).*

*Exceptions:*

*1. Utility grade studs shall not be spaced more than 16 inches (406 mm) on center, shall not support more than a roof and ceiling, and shall not exceed 8 feet (2438 mm) in height for exterior walls and load-bearing walls or 10 feet (3048 mm) for interior nonload-bearing walls.*

*2. Where snow loads are less than or equal to 25 pounds per square foot (1.2 kPa), and the ultimate design wind speed is less than or equal to 130 mph (58.1 m/s), 2-inch by 6-inch (38 mm by 14 mm) studs supporting a roof load with not more than 6 feet (1829 mm) of tributary length shall have a maximum height of 18 feet (5486 mm) where spaced at 16 inches (406 mm) on center, or 20 feet (6096 mm) where spaced at 12 inches (304.8 mm) on center. Studs shall be minimum No. 2 grade lumber.*

*3. Exterior load-bearing studs not exceeding 12 feet (3658 mm) in height provided in accordance with Table R-R602.3(6). The minimum number of full height studs adjacent to*

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openings shall be in accordance with Section R602.7.5. The building shall be located in Exposure B, the roof live load shall not exceed 20 psf (0.96 kPa), and the ground snow load shall not exceed 30 psf (1.4 kPa). Studs and plates shall be No. 2 grade lumber or better.

TABLE R-R602.3(6)  
ALTERNATE WOOD BEARING WALL STUD SIZE, HEIGHT AND SPACING

STUD HEIGHT	SUPPORTING	STUD SPACING <sup>a</sup>	ULTIMATE DESIGN WIND SPEED					
			115 mph		130 mph <sup>b</sup>		140 mph <sup>b</sup>	
			Maximum roof/floor span <sup>c</sup>		Maximum roof/floor span <sup>c</sup>		Maximum roof/floor span <sup>c</sup>	
			12 ft.	24 ft.	12 ft.	24 ft.	12 ft.	24 ft.
11 ft.	Roof Only	12 in.	2 X 4	2 X 4	2 X 4	2 X 4	2 X 4	2 X 4
		16 in.	2 X 4	2 X 4	2 X 4	2 X 6	2 X 4	2 X 6
		24 in.	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
	Roof and One Floor	12 in.	2 X 4	2 X 6	2 X 4	2 X 6	2 X 4	2 X 6
		16 in.	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
		24 in.	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
12 ft.	Roof Only	12 in.	2 X 4	2 X 4	2 X 4	2 X 6	2 X 4	2 X 6
		16 in.	2 X 4	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
		24 in.	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
	Roof and One Floor	12 in.	2 X 4	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
		16 in.	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6
		24 in.	2 X 6	2 X 6	2 X 6	2 X 6	2 X 6	DR

For SI: 1 inch = 25.4mm, 1 foot = 304.8 mm, 1 mph = 0.447 m/s, 1 pound = 4.448 N.

DR = Design Required.

a. Wall studs not exceeding 16 inches on center shall be sheathed with minimum 1/2-inch gypsum board on the interior and 3/8-inch wood structural panel sheathing on the exterior. Wood structural panel sheathing shall be attached with 8d (2.5" x 0.131") nails not greater than 6 inches on center along panel edges and 12 inches on center at intermediate supports, and all panel joints shall occur over studs or blocking.

b. Where the ultimate design wind speed exceeds 115 mph, studs shall be attached to top and bottom plates with connectors having a minimum 300-pound lateral capacity.

c. The maximum span is applicable to both single- and multiple-span roof and floor conditions. The roof assembly shall not contain a habitable attic.

Pursuant to the UCC, delete Section R602.7.5 and Table R602.7.5 and replace as follows:

R-R602.7.5 Supports for headers. Headers shall be supported on each end with one or more jack studs or with approved framing anchors in accordance with Table R602.7(1) or R602.7(2). The full-height stud adjacent to each end of the header shall be end nailed to each end of the header with four-16d nails (3.5 inches x 0.135 inches).

\* \* \*

## PART IV—ENERGY CONSERVATION

### CHAPTER 11 ENERGY EFFICIENCY

#### SECTION N1101 GENERAL

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*Pursuant to the UCC, delete Section N1101.4 and replace as follows:*

*R-N1101.4 Above code programs. The building official or other authority having jurisdiction shall be permitted to deem a national, state or local energy efficiency program to exceed the energy efficiency required by this chapter. Buildings approved in writing by such an energy efficiency program shall be considered in compliance with this chapter.*

*Pursuant to the UCC, add the following definition to Section N1101.6:*

*R-N1101.6 Additional defined terms.*

*Framing Factor. The fraction of the total building component area that is structural framing.*

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## SECTION N1102 BUILDING THERMAL ENVELOPE

Pursuant to the UCC, delete TABLE N1102.1.2 and replace as follows:

**TABLE R-N1102.1.2  
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT<sup>a</sup>**

CLIMATE ZONE	FENESTRATION U-FACTOR <sup>b</sup>	SKYLIGHT <sup>b</sup> U-FACTOR	GLAZED FENESTRATION SHGC <sup>b,e</sup>	CEILING R-VALUE	WOOD FRAME WALL R-VALUE <sup>f</sup>	MASS WALL R-VALUE <sup>f</sup>	FLOOR R-VALUE	BASEMENT <sup>c</sup> WALL R-VALUE	SLAB <sup>d</sup> R-VALUE & DEPTH	CRAWL SPACE <sup>c</sup> WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.40	49	20 or 13 + 5 <sup>h</sup>	8/13	19	5/13 <sup>f</sup>	0	5/13
4 except marine	0.35	0.55	0.40	49	20 or 13 + 5 <sup>h</sup>	8/13	19	10/13	10, 2 ft.	10/13
5 and marine 4	0.32	0.55	NR	49	20 or 13 + 5 <sup>h</sup>	13/7	30 <sup>g</sup>	15/19	10, 4 ft.	15/19
6	0.32	0.55	NR	49	20 + 5 <sup>h</sup> or 18 + 6.5 <sup>h</sup>	15/20	30 <sup>g</sup>	15/19	10/ 4 ft.	15/19
7 and 8	0.32	0.55	NR	49	20 + 5 or 13 + 10 <sup>h</sup>	19/21	38 <sup>g</sup>	15/19	10/ 4 ft.	15/19

For SI: 1 foot = 304.8 mm.

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.  
Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home.  
"10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.10 and Table N1101.10.
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.
- i. The second R-value applies when more than half the insulation is on the interior of the mass wall.
- j. R-18 insulation shall be permitted in place of R-20 requirement provided the wall framing factor is 20% or less or exterior walls with 24" o.c. nominal vertical stud spacing.

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*Pursuant to the UCC, delete Section N1102.4.1.2 and replace as follows:*

*R-N1102.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour. Testing shall be conducted in accordance with ASTM E779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.*

*During testing:*

- 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.*
- 2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.*
- 3. Interior doors, if installed at the time of the test, shall be open.*
- 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.*
- 5. Heating and cooling systems, if installed at the time of the test, shall be turned off.*
- 6. Supply and return registers, if installed at the time of the test, shall be fully open.*

## *SECTION N1103 SYSTEMS*

*Pursuant to the UCC, delete Section N1103.3.5 and replace as follows:*

*R-N1103.3.5 Building cavities (Mandatory). Building framing cavities shall not be used as supply ducts.*

*Pursuant to the UCC, add Sections R-N1103.3.6 and R-N1103.3.7 as follows:*

*R-N1103.3.6 Ducts buried within ceiling insulation. Where supply and return air ducts are partially or completely buried in ceiling insulation, such ducts shall comply with all of the following:*

- 1. The supply and return ducts shall have an insulation R-value not less than R-8.*
- 2. At all points along each duct, the sum of the ceiling insulation R-value against and above the top of the duct, and against and below the bottom of the duct, shall be not less than R-19, excluding the R-value of the duct insulation.*
- 3. In Climate Zones 1A, 2A and 3A, the supply ducts shall be completely buried within ceiling insulation, insulated to an R-value of not less than R-13 and in compliance with the vapor retarder requirements of Section 604.11 of the International Mechanical Code or Section M1601.4.6 of the International Residential Code, as applicable.*

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*Exception: Sections of the supply duct that are less than 3 feet (914 mm) from the supply outlet shall not be required to comply with these requirements.*

*R-N1103.3.6.1 Effective R-value of deeply buried ducts. Where using a simulated energy performance analysis, sections of ducts that are: installed in accordance with Section R403.3.6; located directly on, or within 5.5 inches (140 mm) of the ceiling; surrounded with blown-in attic insulation having an R-value of R-30 or greater and located such that the top of the duct is not less than 3.5 inches (89 mm) below the top of the insulation, shall be considered as having an effective duct insulation R-value of R-25.*

*R-N1103.3.7 Ducts located in conditioned space. For ducts to be considered as inside a conditioned space, such ducts shall comply with either of the following:*

*1. The duct system shall be located completely within the continuous air barrier and within the building thermal envelope.*

*2. The ducts shall be buried within ceiling insulation in accordance with Section R403.3.6 and all of the following conditions shall exist:*

*2.1. The air handler is located completely within the continuous air barrier and within the building thermal envelope.*

*2.2. The duct leakage, as measured either by a rough-in test of the ducts or a post-construction total system leakage test to outside the building thermal envelope in accordance with Section R403.3.4, is less than or equal to 1.5 cubic feet per minute (42.5 L/min) per 100 square feet (9.29 m<sup>2</sup>) of conditioned floor area served by the duct system.*

*2.3. The ceiling insulation R-value installed against and above the insulated duct is greater than or equal to the proposed ceiling insulation R-value, less the R-value of the insulation on the duct.*

*Pursuant to the UCC, delete Section N1103.5.2 without replacement.*

## *SECTION N1105 SIMULATED PERFORMANCE ALTERNATIVE (PERFORMANCE)*

*Pursuant to the UCC, delete Section N1105.2 and replace as follows:*

*R-N1105.2 Mandatory requirements. Compliance with this section requires that the mandatory provisions identified in Section N1101.13 be met. All supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6. Compliance with this section requires that the mandatory provisions identified in Section 1102.4.1.2 be met.*

## *SECTION N1106 ENERGY RATING INDEX COMPLIANCE ALTERNATIVE*

*Pursuant to the UCC, delete Table N1106.4 and replace as follows with added footnote "a":*

### *TABLE R-N1106.4*



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## MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX <sup>a</sup>
1	57
2	57
3	57
4	62
5	61
6	61
7	58
8	58

a. Where on-site renewable energy is included for compliance using the ERI analysis of Section N1106.4, the building shall meet the mandatory requirements of N1106.2 and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table N1102.1.2 or Table N1102.1.4.

## PART V – MECHANICAL

### CHAPTER 16 DUCT SYSTEMS

#### SECTION M1601 DUCT CONSTRUCTION

Pursuant to the UCC, delete Exception #3 of Section M1601.4.1, and replace as follows:

R-M1601.4.1 Joints, seams and connections.

Exceptions:

3. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams. This exception shall not apply to snap-lock and button-lock type joints and seams that are located outside of conditioned spaces.

#### SECTION M1602 RETURN AIR

Pursuant to the UCC, delete Section M1602.2 and replace as follows:

R-M1602.2 Return air openings. Return air openings for heating, ventilation and air conditioning systems shall comply with all of the following:

1. Openings shall not be located less than 10 feet (3048 mm) measured in any direction from an open combustion chamber or draft hood of another appliance located in the same room or space.

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2. The amount of return air taken from any perimeter room or space shall be not greater than the flow rate of supply air delivered to such room or space.

3. Return and transfer openings shall be sized in accordance with the appliance or equipment manufacturers' installation instructions, Manual D or the design of the registered design professional.

4. Return air shall not be taken from a closet, bathroom, toilet room, kitchen, garage, mechanical room, boiler room, furnace room or unconditioned attic.

Exceptions:

1. Taking return air from a kitchen is not prohibited where such return air openings serve the kitchen only, and are located not less than 10 feet (3048 mm) from the cooking appliances.

2. Dedicated forced-air systems serving only the garage shall not be prohibited from obtaining return air from the garage.

3. Taking return air from an unconditioned crawl space shall not be accomplished through a direct connection to the return side of a forced-air furnace. Transfer openings in the crawl space enclosure shall not be prohibited.

4. Return air from one dwelling unit shall not be discharged into another dwelling unit.

\* \* \*

## PART VIII—ELECTRICAL

### CHAPTER 39

#### POWER AND LIGHTING DISTRIBUTION

##### SECTION E3901 RECEPTACLE OUTLETS

Pursuant to the UCC, delete Section E3901.7 and replace as follows:

*R-E3901.7 Outdoor outlets. At least one receptacle outlet that is accessible while standing at grade level and located not more than 6 feet, 6 inches (1981 mm) above grade, shall be installed outdoors at the front and back of each dwelling unit having direct access to grade. Balconies, decks, and porches that are accessible from inside of the dwelling unit and that have a usable area of 20 square feet (1.86m<sup>2</sup>) or greater shall have at least one receptacle outlet installed within the perimeter of the balcony, deck, or porch. The receptacle shall be located not more than 6 feet, 6 inches (1981mm) above the balcony, deck, or porch surface.*

Pursuant to the UCC, delete Section E3901.11 and replace as follows:

*R-E3901.11 Foyers. Foyers that are not part of a hallway in accordance with Section E3901.10 and that have an area that is greater than 60 square feet (5.57 m<sup>2</sup>) shall have a receptacle(s) located in each wall space that is 6 feet (1829 mm) or more in width, but a minimum of one receptacle. Doorways, door-side windows that extend to the floor, and similar openings shall not*

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*be considered as wall space.*

SECTION 2. Subcode "P" of Title 4 of The Philadelphia Code, entitled "The Philadelphia Plumbing Code," is hereby amended as follows:

## SUBCODE "P" (THE PHILADELPHIA PLUMBING CODE)

\* \* \*

### CHAPTER 1 GENERAL

\* \* \*

#### SECTION P-106.0 PLUMBING REGULATIONS.

P-106.1 Authorization: In enacting this code, the Council recognizes that the department has promulgated technical regulations governing the manner in which plumbing work is to be performed and the materials that are to be used. Those regulations are hereby reaffirmed. The department is authorized to promulgate additional such regulations and to amend existing such regulations as it deems necessary or appropriate from time to time, *provided no such regulations enacted after July 1, 2018 shall remain effective after June 30, 2020.* [The department is also authorized to promulgate any other regulations necessary or appropriate to implement the provisions of this code. Promulgation of regulations shall be made subject to published notice and upon request, a public hearing.]

*P-106.1.1 Standards of plumbing regulations. In developing or amending the technical regulations governing plumbing installations, the Department shall develop regulations based upon the model plumbing codes enacted by the Pennsylvania Uniform Construction Code, Act 45 of 1999, as amended (the "UCC"); to include:*

*A. The development of any necessary local exceptions to such model plumbing codes, provided that such amendments would equal or exceed the minimum requirements of the UCC and remain subject to the following standards imposed by the UCC:*

- 1. That certain clear and convincing local climatic, geologic, topographic or public health and safety circumstances or conditions justify the exception;*
- 2. the exception shall be adequate for the purpose intended and shall meet a standard of performance equal to or greater than that prescribed by the UCC; and*

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3. *the exception would not diminish or threaten the health, safety and welfare of the public.*

*B. National standards that eliminate to the greatest extent possible the use of lead in the installation of plumbing materials both to protect the soil from contamination and to meet the requirements of the Federal Reduction of Lead in Drinking Water Act.*

*C. National standards that allow for methods and materials which promote sustainability and conservation in the City's built environment.*

*D. Regulations that allow for alterations to existing plumbing systems installed under prior or current plumbing codes and standards, pursuant to updated plumbing codes enacted by the UCC.*

SECTION 3. Subcode "EC" of Title 4 of The Philadelphia Code, entitled "The Philadelphia Energy Conservation Code," is hereby amended as follows:

## SUBCODE "EC" (THE PHILADELPHIA ENERGY CONSERVATION CODE)

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### IECC—RESIDENTIAL PROVISIONS

\* \* \*

#### CHAPTER 4 RESIDENTIAL ENERGY EFFICIENCY

#### SECTION R402 BUILDING THERMAL ENVELOPE

*Delete Section R402.4.1.2 and replace as follows:*

*EC-R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour. Testing shall be conducted in accordance with ASTM E779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.*

*During testing:*

1. *Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.*

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2. *Dampers, including exhaust, intake, makeup air, backdraft and flue dampers, shall be closed, but not sealed beyond intended infiltration control measures.*
3. *Interior doors, if installed at the time of the test, shall be open.*
4. *Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.*
5. *Heating and cooling systems, if installed at the time of the test, shall be turned off.*
6. *Supply and return registers, if installed at the time of the test, shall be fully open.*

## SECTION R403 SYSTEMS

*Delete Section R403.3.5 and replace as follows:*

*R403.3.5 Building cavities (Mandatory). Building framing cavities shall not be used as supply ducts.*

SECTION 4. The provisions of Section 1 of this Ordinance shall be effective immediately. The provisions of Sections 2 and 3 of this Ordinance are subject to review under the Pennsylvania Construction Code Act (Act 45 of 1999, P.L. 491, as amended) and shall become effective 35 days after the date of enactment unless a challenge has been filed with the Secretary of the Pennsylvania Department of Labor and Industry pursuant to the requirements of Section 503 of Act 45 of 1999, as amended (35 P.S. sec. 7210.503). The Commissioner of the Department of Licenses and Inspections shall provide written certification to the Chief Clerk within ten days of the filing of any challenge, and further such certification regarding the resolution of any challenge.

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Explanation:

[Brackets] indicate matter deleted.

*Italics* indicate new matter added.

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CERTIFICATION: This is a true and correct copy of the original Bill, Passed by the City Council on December 13, 2018. The Bill was Signed by the Mayor on January 03, 2019.



Michael A. Decker  
Chief Clerk of the City Council