TOWN OF ITHACA

LOCAL LAW NO. 8 OF THE YEAR 2022

A LOCAL LAW AMENDING CHAPTER 144 OF THE TOWN OF ITHACA CODE, TITLED "ENERGY CODE SUPPLEMENT"

Be it enacted by the Town Board of the Town of Ithaca as follows:

Section 1. Chapter 144 (Energy Code Supplement) of the Town of Ithaca Code is amended as follows:

A. Section 144-201.2 is deleted and replaced by new Section 144-201.2 reading as follows:

"**144-201.2**
This ECS provides requirements and standards that are in addition to, and shall supplement, the requirements and standards set forth in the ECCCNYS and in Chapter 125, Building Construction and Fire Prevention, of the Code of the Town of Ithaca. If a requirement of the ECS is less stringent than that of the ECCCNYS in effect at the time of application for a building permit, then the more stringent ECCCNYS requirement shall take precedence. The ECS shall be followed to the greatest extent possible while meeting any more stringent requirements of the ECCCNYS. The plans, specifications, and other materials required by the Code Enforcement Officer relating to the ECS-related components of the building, structure, and/or property, shall be submitted to the Code Enforcement Officer in conjunction with an application for a building permit pursuant to said Chapter 125 and pursuant to Chapter 270, Zoning, of the Code of the Town of Ithaca."

B. Section 144-C402.5.3.7 is deleted and replaced by new Section 144-C402.5.3.7 reading as follows:

"144-C402.5.3.7
ELECTRIC VEHICLE PARKING SPACES shall be provided with a dedicated branch circuit, raceways, and all other electric vehicle charging equipment. All electrical systems and equipment shall be installed to meet the standards of the National Electric Code in effect at the time of application for a building or electrical permit. The branch circuit shall be identified for electric vehicle service in the service panel or subpanel directory. Electrical room(s) serving areas with EV PARKING SPACES shall be designed to accommodate the electrical equipment and distribution required to serve all of the ELECTRIC VEHICLE CHARGING STATIONS."

C. Section 144-C402.5.4.1 is deleted and replaced by new Section 144-C402.5.4.1, followed by new Sections 144-C402.5.4.2 and 144-C402.5.4.3, new Figure 144-C402.5.4.3, and new Table 144-C402.5.4.3, all reading as follows:

“144-C402.5.4.1
The building must maintain 50% or more of the following five existing building elements, based on their total combined surface area.

A. Exterior of above-grade and below-grade exterior walls
B. Interior of above-grade and below-grade exterior walls
C. Floors
D. Ceilings
E. Roof decks as defined by the Building Code of New York State (exterior surface area)

The 50% threshold relates to the total combined surface area of all listed building elements. Any individual elements, or portions thereof, may be replaced, as long as the total surface area of all the unaltered elements is at least 50% of the starting (pre-construction) total surface area of the elements.

144-C402.5.4.2
Any insulation may be altered to the extent allowed by the ECCCNYS in effect at the time of building permit application. The existing building structure must be re-purposed for a different permitted use (for example, when an old school is adapted for use as apartments). A MAJOR RENOVATION of a building and re-use for the same purpose shall not be eligible for this point.

144-C402.5.4.3 Examples
The diagrams and example calculation below are for informational purposes only. All requirements are included in 144-C402.5.4.1 and 144-C402.5.4.2, above. The simplified diagrams in Figure 144-C402.5.4.3 highlight which surface areas should be counted for two example buildings. An example calculation is provided in Table 144-C402.5.4.3. The diagram on the left shows a small residential building with a basement and an attic with insulation on the floor. The exterior surface area of the roof deck is counted, and the ceiling of the second story is counted; note that the floor of the attic is not counted. The diagram on the right shows a two-story commercial building with a flat roof and no basement or attic. Insulation is between the roof deck and the ceiling of the second story.

Figure 144-C402.5.4.3

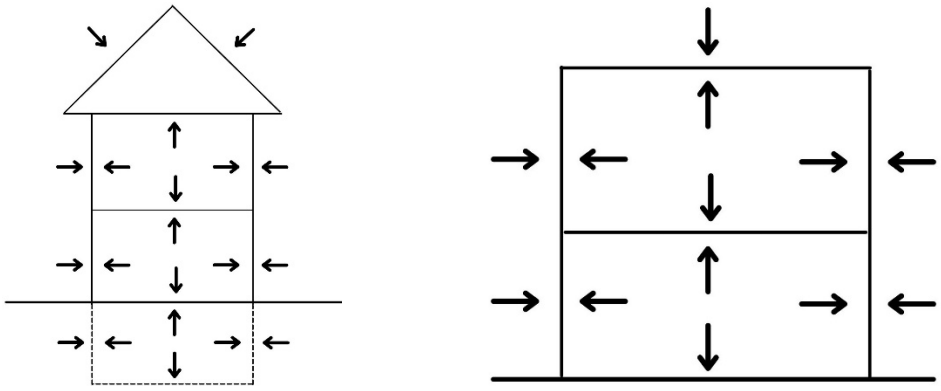

Table 144-C402.5.4.3

Adaptive Reuse Example Calculation - Single Family Home		
Home Dimensions		
Building width	30	ft
Building length	30	ft
Stories	2	
Height/story	10	ft
Height of basement	8	ft
Height of roof peak from 2nd floor ceiling	10	ft
A. Exterior of above-grade and below-grade exterior walls		
8 above grade walls (N, S, E, W walls of two stories)	8	
Surface area of each above grade wall	300	sq ft
Total surface area above-grade exterior walls	2,400	sq ft
4 below grade walls (N, S, E, W walls of basement)	4	
Surface area of each below-grade wall	240	sq ft
Total surface area below-grade exterior walls	960	sq ft
Total surface area, exterior of above-grade and below-grade exterior walls	**3,360**	sq ft
B. Interior of above-grade and below-grade exterior walls		
Use same calculations as for exterior side (above)		
Total surface area, interior of above-grade and below-grade exterior walls	**3,360**	sq ft
C. Floors		
3 floors (1st story, 2nd story, basement)	3	
Surface area of floor	900	sq ft
Total surface area, floors	**2,700**	sq ft
D. Ceilings		
3 ceilings (1st story, 2nd story, basement)	3	
Surface area of ceiling	900	sq ft
Total surface area, ceilings	**2,700**	sq ft
E. Roof decks (exterior surface area)		
Roof height	10	ft
Roof triangle base (half of house)	15	ft
Hypotenuse (H) is roof length (one side)	18	ft
Roof width = house width	30	ft
Roof area (one side only) = H*roof width	540	sq ft
Total surface area, roof	**1,080**	sq ft
Total surface area, all building elements	**13,200**	sq ft
50% of total surface area	6,600	sq ft
If at least 6,600 sq ft of the building elements are kept, the building will earn the Adaptive Reuse point.		

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D. Section 144-R502.5.3.7 is deleted and replaced by new Section R502.5.3.7 reading as follows:

"144-R502.5.3.7
ELECTRIC VEHICLE PARKING SPACES shall be provided with a dedicated branch circuit, raceways, and all other electric vehicle charging equipment. All electrical systems and equipment shall be installed to meet the standards of the National Electric Code in effect at the time of application for a building or electrical permit. The branch circuit shall be identified for electric vehicle service in the service panel or subpanel directory. Electrical room(s) serving areas with EV PARKING SPACES shall be designed to accommodate the electrical equipment and distribution required to serve all of the ELECTRIC VEHICLE CHARGING STATIONS."

E. Section 144-R502.5.3.10 is deleted and replaced by new Section 144-R502.5.3.10 reading as follows:

"144-R502.5.3.10
Except for Accessible EV PARKING SPACES and EV PARKING SPACES used for single family dwellings or two-family dwellings, each EV PARKING SPACE shall be posted with signage indicating that the space is only to be used for electric vehicle charging purposes. Days and hours of operations and any other restrictions on use of the parking space shall be included if time limits or tow-away provisions are to be enforced."

F. Section 144-R502.5.4.1 is deleted and replaced by new Section 144-R502.5.4.1, followed by new Sections 144-R502.5.4.2 and 144-R502.5.4.3, new Figure 144-R502.5.4.3, and new Table 144-R502.5.4.3, all reading as follows:

"144-R502.5.4.1
The building must maintain 50% or more of the following five existing building elements, based on their total combined surface area.

A. Exterior of above-grade and below-grade exterior walls
B. Interior of above-grade and below-grade exterior walls
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The 50% threshold relates to the total combined surface area of all listed building elements. Any individual elements, or portions thereof, may be replaced, as long as the total surface area of all the unaltered elements is at least 50% of the starting (pre-construction) total surface area of the elements.

144-R502.5.4.2

Any insulation may be altered to the extent allowed by the ECCCNYS in effect at the time of building permit application. The existing building structure must be re-purposed for a different permitted use (for example, when an old school is adapted for use as apartments). A MAJOR RENOVATION of a building and re-use for the same purpose shall not be eligible for this point.

144-R502.5.4.3 Examples

The diagrams and example calculation below are for informational purposes only. All requirements are included in 144-R502.5.4.1 and 144-R502.5.4.2, above. The simplified diagrams in Figure 144-R502.5.4.3 highlight which surface areas should be counted for two example buildings. An example calculation is provided in Table 144-R502.5.4.3. The diagram on the left shows a small residential building with a basement and an attic with insulation on the floor. The exterior surface area of the roof deck is counted, and the ceiling of the second story is counted; note that the floor of the attic is not counted. The diagram on the right shows a two-story commercial building with a flat roof and no basement or attic. Insulation is between the roof deck and the ceiling of the second story.

Figure 144-R502.5.4.3

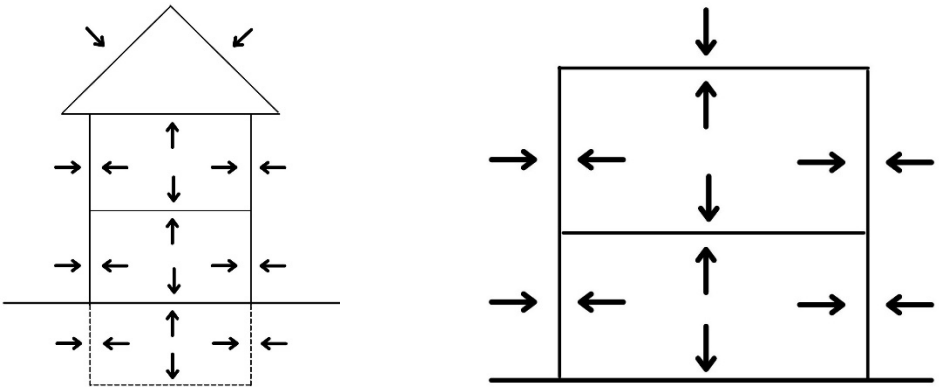

Table 144-R502.5.4.3

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Building width	30	ft
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Surface area of ceiling	900	sq ft
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G. Appendix A – Lighting Power Allowances, Table 144-AA1 Interior Lighting Power Allowances, Electrical/mechanical room (in the Common Space Types column), is amended by replacing the value of 0.48 in the LPA (watts/sq. ft) column with the value of 0.43.

Section 2. In the event that any portion of this law is declared invalid by a court of competent jurisdiction, the validity of the remaining portions shall not be affected by such declaration of invalidity.

Section 3. This local law shall take effect immediately upon its filing with the New York State Secretary of State.