

## 2018 International Energy Conservation Code Errata List

### C202

<b>Errata</b>	<b>IECC Chapter 2 CE Commercial Definitions</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> and 2<sup>nd</sup> Printings

**Section/Table/Figure Number:** Section C202

**Posted:** September 17, 2018

**Correction:**

**APPROVED AGENCY.** An established and recognized agency that is regularly engaged in conducting tests or furnishing inspection services, or furnishing product certification ~~research reports~~, where such agency has been approved by the *code official*.

**Correlation/Historical Notes:** The first and second printings do not reflect the final action of the membership which approved this change as modified.

## C403.3.2.1

### Errata IECC Chapter 4 CE Commercial Energy Efficiency

**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> and 2<sup>nd</sup> Printings

**Section/Table/Figure Number:** Section C403.3.2.1 – Equation 4-7

**Posted:** March 25, 2019

#### Correction:

**C403.3.2.1 Water-cooled centrifugal chilling packages (Mandatory).** Equipment not designed for operation at AHRI Standard 550/590 test conditions of 44°F (7°C) leaving chilled-water temperature and 2.4 gpm/ton evaporator fluid flow and 85°F (29°C) entering condenser water temperature with 3 gpm/ton (0.054 l/s • kW) condenser water flow shall have maximum fullload kW/ton (FL) and part-load ratings requirements adjusted using Equations 4-6 and 4-7.

$$FL_{adj} = FL/K_{adj} \quad \text{(Equation 4-6)}$$

$$PLV_{adj} = IPLV/K_{adj} \quad \text{(Equation 4-7)}$$

where:

$$K_{adj} = A \times B$$

$FL$  = Full-load kW/ton value as specified in Table C403.3.2(7).

$FL_{adj}$  = Maximum full-load kW/ton rating, adjusted for nonstandard conditions.

$IPLV$  = Value as specified in Table C403.3.2(7).

$PLV_{adj}$  = Maximum  $NPLV$  rating, adjusted for nonstandard conditions.

$$A = 0.00000014592 \times (LIFT)^4 - 0.0000346496 \times (LIFT)^3 + 0.00314196 \times (LIFT)^2 - 0.147199 \times (LIFT) + 3.9302$$

$$B = 0.0015 \times L_{vg}E_{vap} + 0.934$$

$$LIFT = L_{vg}Cond - L_{vg}E_{vap}$$

$L_{vg}Cond$  = Full-load condenser leaving fluid temperature (°F).

$L_{vg}E_{vap}$  = Full-load evaporator leaving temperature (°F).

The  $FL_{adj}$  and  $PLV_{adj}$  values are only applicable for centrifugal chillers meeting all of the following fullload design ranges:

1. Minimum evaporator leaving temperature: 36°F.
2. Maximum condenser leaving temperature: 115°F.
3.  $20^\circ\text{F} \leq LIFT \leq 80^\circ\text{F}$ .

**Correlation/Historical Notes:** The subtraction operational sign was left out of the definition of 'A' during production of the 2018 edition. An editorial error.

## C403.3.2.2

<b>Errata IECC Chapter 4 CE Commercial Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section C403.3.2.2

**Posted:** June 8, 2018

**Correction:**

**C403.3.2.2 Positive displacement (air- and watercooled) chilling packages (Mandatory).** Equipment with a leaving fluid temperature higher than 32°F (0°C) and watercooled positive displacement chilling packages with a condenser leaving fluid temperature below 115°F (46°C) shall meet the requirements of Table C403.3.2(7) when tested or certified with water at standard rating conditions, in accordance with the referenced test procedure.

**Correlation/Historical Notes:** This section was part of a reorganization of Section C403 approved by CE119-16. Prior to the reorganization this was Section 403.2.3.2. All subsections of C403.2 were part of the mandatory provisions. This section was not properly labeled when the code was assembled.

## C403.7

<b>Errata IECC Chapter 4 [CE] Commercial Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section C403.7

**Posted:** June 8, 2018

**Correction:**

**C403.7 Ventilation and exhaust systems. (Mandatory)** In addition to other requirements of Section C403 applicable to the provision of ventilation air or the exhaust of air, ventilation and exhaust systems shall be in accordance with Sections C403.7.1 through C403.7.7.

**Correlation/Historical Notes:** This section was created as part of a reorganization of Section C403 approved by CE119-16. The section is a lead in to seven provisions which were mandatory before the reorganization and are labeled as mandatory in the 2018 code. The lead section to Sections C403.7.1 through C403.7.7 is also mandatory. This section was not properly labeled when the code was assembled.

## C403.8.4

<b>Errata IECC Chapter 4 [CE] Commercial Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section C403.8.4

**Posted:** June 8, 2018

**Correction:**

**C403.8.4 Fractional hp fan motors (Mandatory).** Motors for fans that are not less than  $1/12$  hp (~~0.082~~ 0.062 kW) and less than 1 hp (0.746 kW) shall be electronically commutated motors or shall have a minimum motor efficiency of 70 percent, rated in accordance with DOE 10 CFR 431. These motors shall have the means to adjust motor speed for either balancing or remote control. The use of belt-driven fans to sheave adjustments for airflow balancing instead of a varying motor speed shall be permitted.

**Correlation/Historical Notes:** Incorrect conversion to kW.

## C403.9.1

<b>Errata IECC Chapter 4 [CE] Commercial Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section C403.9.1

**Posted:** August 13, 2018

**Correction:**

**C403.9.1 Fan speed control.** Each fan system powered by an individual motor or array of motors with connected power, including the motor service factor, totaling 5 hp (3.7 kW) or more shall have controls and devices configured to automatically modulate the fan speed to control the leaving fluid temperature or condensing temperature and pressure of the heat rejection device. Fan motor power input shall be not more than 30 percent of design wattage ~~or at~~ 50 percent of the design airflow.

**Exceptions:**

1. Fans serving multiple refrigerant or fluid cooling circuits.
2. Condenser fans serving flooded condensers.

**Correlation/Historical Notes:** Corrected to text as approved in CE165-16.

## C403.11

<b>Errata IECC Chapter 4 [CE] Commercial Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section C403.11

**Posted:** June 8, 2018

**Correction:**

**C403.11 Construction of HVAC system elements (Mandatory).** Ducts, plenums, piping and other elements that are part of an HVAC system shall be constructed and insulated in accordance with Sections C403.11.1 through C403.11.3.1.

**C403.11.1 Duct and plenum insulation and sealing (Mandatory).** Supply and return .....

**C403.11.2 Duct construction (Mandatory).** Ductwork shall ....

**C403.11.2.1 Low-pressure duct systems (Mandatory).** Longitudinal and .....

**C403.11.2.2 Medium-pressure duct systems (Mandatory).** Ducts and plenums .....

**C403.11.2.3 High-pressure duct systems (Mandatory).** Ducts and plenums ....

**C403.11.3 Piping insulation (Mandatory).** Piping serving as .....

**C403.11.3.1 Protection of piping insulation (Mandatory).** Piping insulation .....

**Correlation/Historical Notes:** This section was created as part of a reorganization of Section C403 approved by CE119-16. The section is a lead in to seven provisions which were mandatory before the reorganization and are labeled as mandatory in the 2018 code. The lead section to Sections C403.11.1 through C403.11.3.1 is also mandatory. This section was not properly labeled when the code was assembled.



## Table C405.3.2(1)

### Errata IECC Chapter 4C – Commercial Energy Efficiency

**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Printings

**Section/Table/Figure Number:** Table C405.3.2(1)

**Posted:** March 3, 2020

**Correction:**

**TABLE C405.3.2(1)  
INTERIOR LIGHTING POWER ALLOWANCES:  
BUILDING AREA METHOD**

*Table is unchanged*

- a. Where sleeping units are excluded from lighting power calculations by application of Section ~~R405.1 R404.1~~, neither the area of the sleeping units nor the wattage of lighting in the sleeping units is counted.
- b. Where dwelling units are excluded from lighting power calculations by application of Section ~~R405.1 R404.1~~, neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.
- c. Dwelling units are excluded. Neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.

**Correlation Notes:** The errata was a transcription error in adding footnotes to the 2018 edition. The errors occurred in both Tables C405.3.2(1) and C405.3.2(2).

## Table C405.3.2(2)

### Errata IECC Chapter 4C – Commercial Energy Efficiency

**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Printings

**Section/Table/Figure Number:** Table C405.3.2(2)

**Posted:** March 3, 2020

**Correction:**

**TABLE C405.3.2(2)**  
**INTERIOR LIGHTING POWER ALLOWANCES:**  
**SPACE-BY-SPACE METHOD**

*Table and balance of footnotes are unchanged*

- c. Where sleeping units are excluded from lighting power calculations by application of Section ~~R405.1~~ R404.1, neither the area of the sleeping units nor the wattage of lighting in the sleeping units is counted.
- d. Where dwelling units are excluded from lighting power calculations by application of Section ~~R405.1~~ R404.1, neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.

**Correlation Notes:** The errata was a transcription error in adding footnotes to the 2018 edition. The errors occurred in both Tables C405.3.2(1) and C405.3.2(2).

## C405.4.2(2)

### Errata IECC Chapter 4 [CE] Commercial Energy Efficiency

**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Table C405.4.2(2)

**Posted:** July 9, 2018

**Correction:**

**TABLE C405.4.2(2)  
LIGHTING POWER ALLOWANCES FOR BUILDING EXTERIORS**

*Only portion of table is shown*

	LIGHTING ZONES			
	Zone 1	Zone 2	Zone 3	Zone 4
<b>Building Entrances and Exits</b>				
Pedestrian and vehicular entrances and exits <input type="checkbox"/>	14 W/linear foot of opening	14 W/linear foot of opening	21 W/linear foot of opening	21 W/linear foot of opening
Entry canopies	<del>0.02</del> <u>0.20</u> W/ft <sup>2</sup>	0.25 W/ft <sup>2</sup>	0.4 W/ft <sup>2</sup>	0.4 W/ft <sup>2</sup>
Loading docks	0.35 W/ft <sup>2</sup>	0.35 W/ft <sup>2</sup>	0.35 W/ft <sup>2</sup>	0.35 W/ft <sup>2</sup>
<b>Sales Canopies</b>				
Free-standing and attached	<del>0.04</del> <u>0.40</u> W/ft <sup>2</sup>	<del>0.04</del> <u>0.40</u> W/ft <sup>2</sup>	0.6 W/ft <sup>2</sup>	0.7 W/ft <sup>2</sup>
<b>Outdoor Sales</b>				
Open areas (including vehicle sales lots)	<del>0.02</del> <u>0.20</u> W/ft <sup>2</sup>	<del>0.02</del> <u>0.20</u> W/ft <sup>2</sup>	0.35 W/ft <sup>2</sup>	<del>0.05</del> <u>0.50</u> W/ft <sup>2</sup>
Street frontage for vehicle sales lots in addition to "open area" allowance <input type="checkbox"/>	No allowance	7 W/linear foot	7 W/linear foot	21 W/linear foot

**Correlation/Historical Notes:** The numbers for these six values were transposed in publication.

## C406.4

<b>Errata IECC Chapter 4 [CE] Commercial Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section C406.4

**Posted:** June 8, 2018

**Correction:**

**C406.4 Enhanced digital lighting controls.** Interior lighting in the building shall have the following enhanced lighting controls that shall be located, scheduled and operated in accordance with [Section C405.2.2 Sections C405.2.1 through C405.2.3.](#)

**Correlation/Historical Notes:** Section C406.4 was added to the 2015 edition of the code by CE337-13. In the approved change, C406.4 referenced only Section C405.2.2. Section C405.2.2 and its subsections in the 2012 code covered time switch controls, occupant (occupancy) sensors and daylight responsive controls. An unrelated change reorganized Section C405.2 and in the 2015 code and 2018 code Section C405.2.2 only addresses one of those topics. The original change should have been correlated to reference the three control requirements references in the original CE337-13. This correction makes the code consistent with CE337.13.

6 CE

Errata IECC Chapter 6 [CE] Referenced Standards

**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Chapter 6CE

**Posted:** July 9, 2018

**Correction:**

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**AHRI**

Air-Conditioning, Heating, & Refrigeration Institute  
2111 Wilson Blvd, Suite 500  
Arlington, VA 22201

**ISO/AHRI/ASHRAE 13256-1 (~~2017~~ [1998 RA2014](#)): Water-to-Air and Brine-to-Air Heat Pumps—  
Testing and Rating for Performance**

Table C403.3.2(2)

**ISO/AHRI/ASHRAE 13256-2 (~~2017~~ [1998 RA2014](#)): Water-to-Water and Brine-to-Water Heat  
Pumps—Testing and Rating for Performance**

Table C403.3.2(2)

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**ASHRAE**

ASHRAE  
1791 Tullie Circle NE  
Atlanta, GA 30329

**ISO/AHRI/ASHRAE 13256-1 (~~2017~~ [1998 RA2014](#)): Water-to-Air and Brine-to-Air Heat Pumps—  
Testing and Rating for Performance**

Table C403.3.2(2)

**ISO/AHRI/ASHRAE 13256-2 (~~2017~~ [1998 RA2014](#)): Water-to-Water and Brine-to-Water Heat  
Pumps—Testing and Rating for Performance**

Table C403.3.2(2)

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**ISO**

International Organization for Standardization  
Chemin de Blandonnet 8, CP 401, 1214 Vernier  
Geneva, Switzerland

**ISO/AHRI/ASHRAE 13256-1 (~~2017~~ [1998 RA2014](#)): Water-to-Air and Brine-to-Air Heat Pumps—  
Testing and Rating for Performance**

Table C403.3.2(2)

**ISO/AHRI/ASHRAE 13256-2 (~~2017~~ [1998 RA2014](#)): Water-to-Water and Brine-to-Water Heat  
Pumps—Testing and Rating for Performance**

Table C403.3.2(2)

**Correlation/Historical Notes:** The 2017 edition of these standards were not available by December 1, 2017.

## R402.1.1

<b>Errata</b>	<b>IECC Chapter 4 [RE] Residential Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section R402.1.1

**Posted:** August 13, 2018

**Correction:**

**R402.1.1 Vapor retarder.** Wall assemblies in the *building thermal envelope* shall comply with the vapor retarder requirements of Section R702.7 of the *International Residential Code* or Section ~~4405.3~~ 1404.3 of the *International Building Code*, as applicable.

**Correlation/Historical Notes:** Changes in numbering between the 2015 and 2018 IBC were not correlated here.

## R402.3.4

<b>Errata</b>	<b>IECC Chapter 4 [RE] Residential Energy Efficiency</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section R402.3.4

**Posted:** June 8, 2018

**Correction:**

**R402.3.4 Opaque door exemption.** One side-hinged opaque door assembly not greater than 24 square feet (2.22 m<sup>2</sup>) in area shall be exempt from the *U*-factor requirement in Section ~~R402.1.4~~ R402.1.2. This exemption shall not apply to the *U*-factor alternative in Section R402.1.4 and the Total UA alternative in Section R402.1.5.

**Correlation/Historical Notes:** From the 2012 edition to the 2015 edition of the code, the provisions cited in this section were renumbered. The correlation to the new section numbers was in error in the 2015 edition and not corrected for the first printing of the 2018.

### R502.1.1.3

<b>Errata</b>	<b>IECC Chapter 5 [RE] Existing Buildings</b>
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**Code/Standard:** 2018 International Energy Conservation Code

**Applies to following Printings:** 1<sup>st</sup> Printing

**Section/Table/Figure Number:** Section R502.1.1.3

**Posted:** August 20, 2018

**Correction:**

**R502.1.1.3 Service hot water systems.** New service hot water systems that are part of the *addition* shall comply with Section ~~R403.4.~~[R403.5.](#)

**Correlation/Historical Notes:** Simply an incorrect reference. Section R503.1.3 which addresses alterations to service water systems references R403.5.