Chapter Comm 63

ENERGY CONSERVATION

Note: Chapter Comm 63 as it existed on June 30, 2002 was repealed and a new chapter Comm 63 was created, Register December 2001 No. 552, effective July 1, 2002; **Chapter Comm 63 was repealed and recreated, Register February 2008 No. 626, eff. March 1, 2008.**

Subchapter I — Purpose and Application

Comm 63.001 Purpose. This chapter regulates the design and construction of buildings for the effective use of energy. This chapter provides flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy. This chapter is not intended to abridge safety, health or environmental requirements contained in other applicable codes.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

Comm 63.002 Application. **(1)** MIXED OCCUPANCY. Where a building includes both residential and commercial occupancies, each occupancy shall be separately considered and meet the applicable provisions of IECC chapter 4 for residential or IECC chapter 5 for commercial.

(2) EXEMPT BUILDINGS AND STRUCTURES. The following buildings or portions of buildings separated from the remainder of the building by building thermal envelope assemblies complying with this chapter shall be exempt from the building thermal envelope provisions of this code:

(a) Those with a peak design rate of energy usage less than 3.4 Btu/h–ft^2 or 1.0 watt/ft^2 of floor area for space conditioning purposes.

(b) Those that do not contain conditioned space.

(c) Glazed structures or glazed portions of buildings used for the production of plant life or for maintaining plant life as the primary purpose.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

Subchapter II — Changes, Additions or Omissions to the International Energy Conservation Code (IECC)

Comm 63.0100 Changes, additions or omissions to IECC. Changes, additions or omissions to the IECC are specified in this subchapter and are rules of the department and are not requirements of the IECC.

Note: The sections in this chapter are generally numbered to correspond to the numbering used in the IECC, i.e., s. Comm 63.0101 refers to section IECC 101.

History: CR 06–120: cr, Register February 2008 No. 626, eff. 3–1–08.

Comm 63.0101 Administration and enforcement. The requirements in IECC sections 101, 103 to 106 are not included as part of this chapter.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

Comm 63.0102 Materials, systems and equipment. These are department rules in addition to the requirements in IECC section 102:

(1) PROHIBITION OF HEATED SIDEWALKS. The installation or use of heated sidewalks is prohibited as specified in s. 101.124, Stats.

Note: Section 101.124, Stats., reads as follows: "Heated Sidewalks Prohibited. In this section "exterior pedestrian traffic surface" means any sidewalk, ramp, stair, stoop, step, entrance way, plaza or pedestrian bridge not fully enclosed within a building and "heated" means heated by electricity or energy derived from the combustion of fossil fuels, but not including the use of waste thermal energy. "Exterior pedestrian traffic surface" does not include any means of ingress or egress by the physically disabled required under s. 101.13 (2). No person may construct a heated exterior pedestrian traffic surface. The department or any city, village, town or county is prohibited from approving any plan under s. 101.12 which includes such heated surface. The department shall order any existing heated exterior pedestrian traffic surface in operation to be shut off. This section does not apply to any inpatient health care facility as defined in s. 50.135 (1), or community–based residential facility, as defined in s. 50.01 (1g)."

(2) ASHRAE FUNDAMENTAL DATA. (a) *General.* Except as specified in par. (b), when available, information on thermal properties, performance of building envelope sections, and components and heat transfer shall be obtained from ASHRAE Handbook of Fundamentals.

(b) *Exceptions.* 1. When the information is not available from ASHRAE Handbook of Fundamentals, the data shall be obtained from laboratory or field–test measurements. If laboratory or field test measurements are used for envelope heat transmission, the measurements shall be obtained using one of the following test methods:

a. ASTM C177, Test method by guarded hot plate apparatus.

b. ASTM C335, Test method of horizontal pipe insulation.

c. ASTM C518, Test method by means of the heat flow meter apparatus.

d. ASTM C1363, Test method by means of a hot box apparatus.

2. For foam plastic insulation that incorporates a substance other than air as the insulating medium, laboratory or field tests shall be conducted on representative samples that have been aged for the equivalent of 5 years or until the R–Value has stabilized to determine thermal properties or performance. The tests shall be conducted by an independent third party.

3. Integrally insulated concrete masonry systems within the scope of the National Concrete Masonry Association (NCMA) shall be evaluated for the thermal performance of the masonry or concrete units in accordance with one of the following:

a. NCMA Evaluation Procedures for the Integrally–Insulated Concrete Masonry Walls.

b. Default values as approved by the department.

4. All other concrete or masonry units not within the scope of the NCMA Evaluation Procedures shall comply with one of the following methods for determining the thermal performance of the assembly or system:

a. Default values as approved by the department.

b. Laboratory or field–test measurements specified in subd. 1.

c. Department material approval process as specified in ch. Comm 61 to determine the U−factor.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0202 General definitions. (1) ADDITIONS. This is a department definition for this chapter in addition to the definitions in IMC section 202: "Effective aperture" or "EA" means for windows, the visible light transmittance times the window wall ratio per wall; and for sky lights, the well efficiency times the visible light transmittance times the sky light area times 0.85 divided by the gross exterior roof area.

(2) SUBSTITUTIONS. Substitute the following definition for the corresponding definition listed in IECC section 202: "Approved" has the meaning given in s. Comm 62.0202 (2) (a).

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0302 Exterior design conditions. These are department rules in addition to the requirements in IECC section 302: The exterior design temperatures used for heating and cooling load calculations shall be as specified under Table 63.0302.

Table 63.0302
Exterior Design Conditions

County	Winter	Summer		County	Winter	Summer	
	Design Temp (F)	Dry Bulb (°F)	Wet Bulb (°F)		Design Temp (F)	Dry Bulb (°F)	Wet Bulb (°F)
Adams	−20	87	75	Marathon	−20	87	75
Ashland	−25	86	70	Marinette	−20	87	75
Barron	−25	86	75	Marquette	−15	87	75
Bayfield	−25	86	70	Menominee	−20	87	75
Brown	−15	87	75	Milwaukee	−10	89	77
Buffalo	20	87	75	Monroe	−20	87	75
Burnett	−25	86	75	Oconto	−20	87	75
Calumet	−15	87	75	Oneida	−25	86	75
Chippewa	−25	86	75	Outagamie	−15	87	75
Clark	−20	87	75	Ozaukee	−10	89	77
Columbia	−15	87	75	Pepin	−20	87	75
Crawford	−15	87	75	Pierce	−25	86	75
Dane	−15	87	75	Polk	−25	86	75
Dodge	−15	87	75	Portage	−20	87	75
Door	−15	87	75	Price	−25	86	75
Douglas	−25	86	70	Racine	−10	89	77
Dunn	−25	86	75	Richland	−15	87	75
Eau Claire	−20	87	75	Rock	−10	89	77
Florence	−25	86	75	Rusk	−25	86	75
Fond du Lac	−15	87	75	St. Croix	−25	86	75
Forest	−25	86	75	Sauk	−15	87	75
Grant	−15	87	75	Sawyer	−25	86	75
Green	−15	87	75	Shawano	−20	87	75
Green Lake	−15	87	75	Sheboygan	−15	87	75
Iowa	−15	87	75	Taylor	−25	86	75
Iron	−25	86	70	Trempealeau	−20	87	75
Jackson	−20	87	75	Vernon	−20	87	75
Jefferson	−10	89	77	Vilas	−25	86	75
Juneau	−20	87	75	Walworth	−10	89	77
Kenosha	−10	89	77	Washburn	−25	86	75
Kewaunee	−15	87	75	Washington	−10	89	77
La Crosse	−20	87	75	Waukesha	−10	89	77
Lafayette	−15	87	75	Waupaca	−20	87	75
Langlade	−20	87	75	Waushara	−15	87	75
Lincoln	−25	86	75	Winnebago	−15	87	75
Manitowoc	−15	87	75	Wood	−20	87	75

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0401 Certificate. The requirements in IECC section 401.3 are not included as part of this code.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0402 Building thermal envelope. Substitute the following wording for the requirements and the exceptions in IECC section 402.5:

(1) MOISTURE CONTROL. Except as specified in sub. (2), the building design may not create conditions of accelerated deterioration from moisture condensation. Above−grade frame walls, floors and ceilings shall be provided with an approved vapor retarder. The vapor retarder shall be installed on the warm−in−winter side of the thermal insulation.

(2) EXCEPTION. Where other approved means to avoid condensation in unventilated framed wall, floor, roof and ceiling cavities are provided.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0403 Systems. (1) ELECTRICAL POWER AND LIGHTING. This is a department rule in addition to the requirements in IECC section 403: In residential buildings having individual dwelling units, provisions shall be made to determine the electrical energy consumed by each tenant by separately metering individual dwelling units.

(2) INSULATION. Substitute the following wording for the requirements, but not the exception, in IECC section 403.2.1: Supply and return ducts shall be insulated to a minimum of R−8, except ducts in floor trusses shall be insulated to a minimum of R−4.

(3) MECHANICAL VENTILATION. Substitute the following wording for the requirements in IECC section 403.5: Each mechanical ventilation system, either supply or exhaust or both, shall be equipped with a readily accessible switch or other means for shutoff, or volume reduction and shutoff, when ventilation is not required. Automatic or gravity dampers that close when the system is not operating shall be provided for all outdoor air exhausts. Motorized dampers that automatically close when the system is not operating shall be provided on all outdoor air intakes.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0404 Calculation software tools. This is a department informational note to be used under IECC section 404.6:

Note: The federal Department of Energy has developed REScheckTM, a computer program that may be used in demonstrating compliance for a residential building which has no more than 3 stories and has 3 or more dwelling units. The REScheck program may be downloaded at http://www.energycodes.gov/. When using the program, the applicable code must be defined as the "2006 IECC." The use of the "Wisconsin" option will apply requirements associated with a 1 or 2 family dwelling, which are more restrictive than those associated with low−rise multifamily buildings.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0501 General application. This is a department rule in addition to the requirements in IECC section 501.2: All of the following rules shall apply regardless of whether the IECC chapter 5 or ASHRAE 90.1 standard is used to determine compliance:

(1) Section Comm 63.0503 (1) relating to design loads.

(2) Sections Comm 63.0503 (7) and (8) relating to economizers.

(3) Section Comm 63.0505 relating to lighting systems.

(4) IECC section 505.2.2.1 relating to dual switching.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0502 Moisture control. Substitute the following wording for the requirements and exceptions in IECC section 502.5:

(1) GENERAL. Except as specified in sub. (2), the building design may not create conditions of accelerated deterioration from moisture condensation. Above−grade frame walls, floors and ceilings shall be provided with an approved vapor retarder. The vapor retarder shall be installed on the warm−in−winter side of the thermal insulation.

(2) OTHER APPROVED MEANS. Where other approved means to avoid condensation in unventilated framed wall, floor, roof and ceiling cavities are provided.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0503 Building mechanical systems. (1) CALCULATION OF HEATING AND COOLING LOADS. The following wording is a department requirement in addition to the requirements in IECC section 503.2.1: Design heating and cooling loads shall be determined in accordance with s. Comm 63.0302 and Table 63.0302.

(2) EQUIPMENT AND SYSTEM SIZING. Substitute the following wording for the requirements and the exceptions in IECC section 503.2.2: Heating and cooling equipment and systems shall be sized to provide the minimum space and system loads calculated in accordance with s. Comm 63.0302.

(3) HVAC EQUIPMENT PERFORMANCE. Substitute the following wording for the requirements in IECC tables 503.2.3 (1) and 503.2.3 (2):

TABLE 503.2.3 (1)
UNITARY AIR CONDITIONERS AND CONDENSING UNITS, ELECTRICALLY OPERATED, MINIMUM EFFICIENCY REQUIREMENTS

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION	MINIMUM EFFICIENCY[b]	TEST PROCEDURE[a]
Air Conditioners, Air Cooled	< 65,000 Btu/h[d]	Split system	13.0 SEER	ARI 210/240
		Single package	13.0 SEER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	Split system and single package	10.3 EER[c] (before Jan 1, 2010) 11.2 EER[c] (as of Jan 1, 2010)	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Split system and single package	9.7 EER[c] (before Jan 1, 2010) 11.0 EER[c] (as of Jan 1, 2010)	ARI 340/360

TABLE 503.2.3 (1) (continued)
UNITARY AIR CONDITIONERS AND CONDENSING UNITS, ELECTRICALLY OPERATED, MINIMUM EFFICIENCY REQUIREMENTS

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION	MINIMUM EFFICIENCY[b]	TEST PROCEDURE[a]
Air Conditioners, Air Cooled	≥240,000 Btu/h and < 760,000 Btu/h	Split system and single package	9.5 EER[c] 9.7 IPLV[c] (before Jan 1, 2010) 10.0 EER[c] 9.7 IPLV[c] (as of Jan 1, 2010)	ARI 340/360
	≥760,000 Btu/h	Split system and single package	9.2 EER[c] 9.4 IPLV[c] (before Jan 1, 2010) 9.7 EER[c] 9.4 IPLV[c] (as of Jan 1, 2010)	
Through−the−Wall, Air Cooled	< 30,000 Btu/h[d]	Split System	10.9 SEER (before Jan 23, 2010) 12.0 SEER[c] (as of Jan 23, 2010)	ARI 210/240
		Single Package	10.6 SEER[c] (before Jan 23, 2010) 12.0 SEER[c] (as of Jan 23, 2010)	
Air conditioners, Water and Evaporatively Cooled	< 65,000 Btu/h	Split system and single package	12.1 EER	ARI 210/240
	≥ 65,000 Btu/h and < 135,000 Btu/h	Split system and single package	11.5 EER[c]	
	≥135,000 Btu/h and < 240,000 Btu/h	Split system and single package	11.0 EER[c]	ARI 340/360
	≥ 240,000 Btu/h	Split system and single package	11.0 EER[c] 10.3 IPLV[c]	

For SI: 1 British thermal unit per hour = 0.2931 W.
a. Chapter 6 contains a complete specification of the referenced test procedure, including the referenced year version of the test procedure.
b. IPLVs are only applicable to equipment with capacity modulation.
c. Deduct 0.2 from the required EERs and IPLVs for units with a heating section other than electric resistance heat.
d. Single−phase air−cooled air conditioners < 65,000 Btu/h are regulated by the National Appliance Energy Conservation Act of 1987 (NAECA), SEER values are those set by NAECA.

TABLE 503.2.3 (2)
UNITARY AND APPLIED HEAT PUMPS, ELECTRICALLY OPERATED, MINIMUM EFFICIENCY REQUIREMENTS

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION	MINIMUM EFFICIENCY[b]	TEST PROCEDURE[a]
Air cooled (Cooling mode)	< 65,000 Btu/h[d]	Split system	13.0 SEER	ARI 210/240
		Single package	13.0 SEER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	Split system and single package	10.1 EER[c] (before Jan 1, 2010) 11.0 EER[c] (as of Jan 1, 2010)	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Split system and single package	9.3 EER[c] (before Jan 1, 2010) 10.6 EER[c] (as of Jan 1, 2010)	ARI 340/360

TABLE 503.2.3 (2) (continued)
UNITARY AND APPLIED HEAT PUMPS, ELECTRICALLY OPERATED, MINIMUM EFFICIENCY REQUIREMENTS

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION	MINIMUM EFFICIENCY[b]	TEST PROCEDURE[a]
Air cooled (Cooling mode)	≥ 240,000 Btu/h	Split system and single package	9.0 EER[c] 9.2 IPLV[c] (before Jan 1, 2010) 9.5 EER[c] 9.2 IPLV[c] (as of Jan 1, 2010)	ARI 340/360
Through−the−Wall, (Air Cooled, Cooling Mode)	< 30,000 Btu/h[d]	Split System	10.9 SEER (before Jan 23, 2010) 12.0 SEER[c] (as of Jan 23, 2010)	ARI 210/240
		Single Package	10.6 SEER[c] (before Jan 23, 2010) 12.0 SEER[c] (as of Jan 23, 2010)	
Water source (Cooling mode)	< 17,000 Btu/h	86°F entering water	11.2 EER	ARI/ASH-RAE−13256−1
	< 17,000 Btu/h and < 135,000 Btu/h	86°F entering water	12.0 EER	ARI/ASH-RAE−13256−1
Groundwater source (Cooling mode)	< 135,000 Btu/h	59°F entering water	16.2 EER	ARI/ASH-RAE−13256−1
Ground source (Cooling mode)	< 135,000 Btu/h	77°F entering water	13.4 EER	ARI/ASH-RAE−13256−1
Air cooled (Heating mode)	< 65,000 Btu/h[d] (Cooling capacity)	Split system	7.7 HSPF	ARI 210/240
		Single Package	7.7 HSPF	
	≥ 65,000 Btu/h and < 135,000 Btu/h (Cooling capacity)	47°F db/43°F wb outdoor air	3.2 COP (before Jan 1, 2010) 3.3 COP (as of Jan 1, 2010)	
	≥ 135,000 Btu/h (Cooling capacity)	47°F db/43°F wb outdoor air	3.1 COP (before Jan 1, 2010) 3.2 COP (as of Jan 1, 2010)	ARI 340/360
Through−the−Wall, (Air Cooled, Heating Mode)	< 30,000 Btu/h[d]	Split System	7.1 HSPE (before Jan 23, 2010) 7.4 HSPE (as of Jan 23, 2010)	ARI 210/240
		Single Package	7.0 HSPE (before Jan 23, 2010) 7.4 HSPE (as of Jan 23, 2010)	
Water source (Heating mode)	< 135,000 Btu/h (Cooling capacity)	68°F entering water	4.2 COP	ARI/ASH-RAE−13256−1
Groundwater source (Heating mode)	< 135,000 Btu/h (Cooling capacity)	50°F entering water	3.6 COP	ARI/ASH-RAE−13256−1
Ground Source (Heating mode)	< 135,000 Btu/h (Cooling capacity)	32°F entering water	3.1 COP	ARI/ASH-RAE−13256−1

For SI: °C = [(°F) − 32] / 1.8, 1 British thermal unit per hour = 0.2931 W.
Db = dry−bulb temperature, °F; wb = wet−bulb temperature, °F
a. Chapter 6 contains a complete specification of the referenced test procedure, including the referenced year version of the test procedure.
b. IPLVs and Part load rating conditions are only applicable to equipment with capacity modulation.
c. Deduct 0.2 from the required EERs and IPLVs for units with a heating section other than electric resistance heat.
d. Single−phase air−cooled heat pumps < 65,000 Btu/h are regulated by the National Appliance energy Conservation Act of 1987 (NAECA), SEER and HSPF values are those set by NAECA.

(4) TEMPERATURE CONTROLS. Substitute the following wording for the requirements in IECC sections 503.2.4 and 503.2.4.1: Each heating and cooling system shall have at least one temperature control device that complies with IECC sections 503.2.4.1.1, 503.2.4.2 and 503.2.4.3.

(5) SHUTOFF DAMPER CONTROLS. Substitute the following wording for the requirements and the exceptions in IECC section 503.2.4.4:

(a) Except as specified in par. (b), both outdoor air supply and exhaust ducts shall be equipped with motorized dampers that will automatically shut when the systems or spaces served are not in use.

(b) 1. Gravity dampers may be utilized in buildings less than 3 stories in height.

2. Gravity dampers may be utilized for outside intake or exhaust airflows of 300 cfm or less.

(6) DUCT AND PLENUM INSULATION AND SEALING. Substitute the following wording for the requirements, but not the exceptions or the subsequent paragraph, in IECC section 503.2.7: All supply ducts and return air ducts and plenums shall be insulated with a minimum of R−4 insulation when located in unconditioned spaces and with a minimum of R−8 insulation when located outside the building envelope. When located within a building envelope assembly, the duct or plenum shall be separated from the building exterior or unconditioned or exempt spaces by a minimum of R−8 insulation. All supply ducts located in plenums within the building envelope shall be insulated to R−4.

(7) HVAC SYSTEM COMPLETION. The requirements in IECC sections 503.2.9 to 503.2.9.3 are not included as part of this chapter.

(8) COOLING WITH OUTSIDE AIR. (a) *General.* Substitute the following wording for the requirements in IECC section 503.3.1 the first paragraph: Supply air economizers shall be provided on each cooling system as specified in Table 63.0503.

(b) *Economizer requirements.* Substitute the following wording for the requirements in IECC Table 503.3.1 (1):

Table 63.0503

Climate Zones	Economizer Requirement
6 and 7	Economizers on all split cooling systems and groundwater source cooling systems ≥54,000 Btu/h Economizers on all other cooling systems ≥33,000 Btu/h

(9) COMPLEX HVAC SYSTEMS AND EQUIPMENT. Substitute the following wording for the requirements, but not the exceptions, in IECC section 503.4.1: Each cooling system shall have economizer controls complying with sub. (8). Economizers shall be capable of operating at 100 percent of outside air, even if additional mechanical cooling is required to meet the cooling load of the building.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08; correction made to (9) under s. 13.92 (4) (b) 7., Stats., Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0504 Service water heating. (1) TEMPERATURE CONTROLS. The requirements in IECC section 504.3 are not included as part of this chapter.

(2) HEAT TRAPS. The requirements in IECC section 504.4 are not included as part of this chapter.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0505 Lighting systems. (1) DAYLIT AREAS. These are department rules in addition to the requirements in IECC section 505: Luminairies providing general lighting that are in or are partially in daylit areas described in pars. (a) or (b) shall be controlled according to the applicable requirements in sub. (2).

(a) *Determining daylit areas.* 1. Except as determined under par. (b), the horizontal daylit area under skylights shall be the rough opening of the skylight plus, in each of the lateral and longitudinal dimensions of the skylight, the lesser of 70% of the floor−to−ceiling height, the distance to the nearest 60−inch or high permanent partition, or one half the horizontal distance to the edge of the closest skylight or vertical glazing.

2. Except as determined under par. (b), the daylit area illuminated by vertical glazing shall be the daylit depth multiplied by the daylit width, where the daylit depth is 15 feet, or the distance on the floor, perpendicular to the glazing, to the nearest 60−inch or higher permanent partition, whichever is less; and the daylit width is the width of the window plus, on each side, either 2 feet, the distance to a permanent partition, or one half the distance to the closest skylight or vertical glazing, whichever, is least.

(b) *Alternative.* The daylit area shall be as calculated using a method acceptable to the department.

(2) CONTROLS. These are department rules in addition to the requirements in IECC section 505:

(a) *General.* Except as provided in par. (b), daylit areas in any interior enclosed space greater than 250 square feet and a lighting density more than 0.8 W/ft2 shall have at least one control that meets all of the following requirements:

1. Controls only luminaires in the daylit areas.

2. Controls at least 50% of the lamps or luminaires in the daylit area, in a manner described in IECC section 505.2.2.1.

3. Controls luminaires in vertically daylit areas separately from horizontally daylit area.

(b) *Exceptions.* The requirements of this subsection do not apply to any of the following:

1. Daylit areas where the effective aperture of glazing is equal or less than 0.1 for vertical glazing and 0.01 for horizontal glazing.

2. Daylit areas where existing adjacent structures or natural objects obstruct daylight to the extent that effective use of daylighting is not feasible.

(3) LIGHTING POWER EXCEPTIONS. These are department exceptions to the requirements in IECC 505.5.1:

(a) Lighting for theatrical purposes, including performance, stage, film production and video production.

(b) Lighting for photographic processes.

(c) Lighting integral to equipment or instrumentation and is installed by the manufacturer.

(d) Task lighting for plant growth or maintenance.

(e) Advertising signage or directional signage.

(f) In restaurant buildings and areas, lighting for food warming or integral to food preparation equipment.

(g) Lighting equipment that is for sale.

(h) Lighting demonstration equipment in lighting education facilities.

(i) Lighting approved because of safety or emergency considerations, inclusive of exit lights.

(4) LINE−VOLTAGE LIGHTING TRACK AND PLUG−IN BUSWAY. Substitute the following for the requirements in IECC section 505.5.1.4: The wattage of line−voltage lighting track and plug−in busway which allows the addition or relocation of luminaires without altering the wiring of the system shall be the volt−ampere rating of the branch circuit feeding the luminaries or an integral current limiter controlling the luminaires, or the higher of the maximum relamping rated wattage of all of the luminaires included in the system, listed on a permanent factory installed label, or 30 W/linear foot.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0506 Total building performance. This is a department informational note to be used under IECC section 506:

Note: ComCheck is a computer program that may be used only for determining building envelope, lighting or total building compliance. The ComCheck computer program may be download at :http:/www.energycodes.gov/.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.

Comm 63.0900 Referenced standards. This is a department rule in addition to the requirements in IECC chapter 6: The following standards are hereby incorporated by reference into this code:

(1) ASTM C 177−04, Test method for steady−state heat flux measurements and thermal transmission properties by means of the guarded−hot−plate apparatus.

(2) ASTM C 335−05, Test method for steady state heat transfer properties of horizontal pipe insulation.

(3) ASTM C518−04, Test Method for steady−state thermal transmission properties by means of the heat flow meter apparatus.

(4) ASTM C1363−05, Test method for thermal performance of materials and envelope assemblies by means of a hot box apparatus.

(5) National Concrete Masonry Association (NCMA) Evaluation Procedures of Integrally Insulated Concrete Masonry Walls, January 1, 1999.

Note: ASTM standards may be purchased from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

NCMA Evaluation Procedures may be obtained from the National Concrete Masonry Association, 2302 Horse Pen Road, Herndon, VA 20171−3499.

Copies of the standards adopted under this section are on file in the offices of the department, the legislative reference bureau.

History: CR 06−120: cr. Register February 2008 No. 626, eff. 3−1−08.