

Florida Building Code, 9th Edition (2026) - Energy Conservation

EnergyGauge Summit® Fla/Com-2026, Effective Date: Dec 31, 2026

C407: FBC Total Building Performance Compliance Option

Compliance applying the requirements of Sections C402.5, C403.2, C404, C405.2, C405.4, C405.5, C407 and C408. The building energy cost shall be equal to or less than 85 percent of the standard reference design building.

Check List

Applications for compliance with the Florida Building Code, Energy Conservation shall include:

- ☐ The full compliance report generated by the software that contains the project summary, compliance summary, certifications and detailed component compliance reports.
- ☐ The compliance report must include the full input report generated by the software as contiguous part of the compliance report.
- ☐ Boxes appropriately checked in the Mandatory Section of the compliance report.

Filing Copy --- Not For Official Use

PROJECT SUMMARY

Short Desc: FBC2026

Description: FBC2026

Owner: Enter Owner's name here

Address1: Anywhere

City: Anywhers

Address2: Enter Address here

State: FL

Zip: 32952

Type: Office

Class: New Finished building

Jurisdiction: MIAMI, MIAMI-DADE COUNTY, FL (232400)

Conditioned Area: 5549 SF

Conditioned & UnConditioned Area: 5549 SF

No of Stories: 1

Area entered from Plans 0 SF

Permit No: 0

Max Tonnage 5.8

If different, write in: _____

Filing Copy ---- Not For Official Use

Compliance Summary			
Component	Design	Criteria	Result
Gross Energy Cost (in \$)	2116.00	2587.00	PASSED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			PASSES
PLANT			PASSES
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			PASSES
Met all required compliance from Check List?			Yes/No/NA
IMPORTANT MESSAGE Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code

Prepared By: _____

Building _____

Official: _____

Date: _____

Date: _____

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: _____

Date: _____

If Required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: _____

Reg No: _____

Signature _____

Electrical _____

Reg No: _____

Signature _____

Designer: _____

Lighting _____

Reg No: _____

Signature _____

Designer: _____

Mechanical _____

Reg No: _____

Signature _____

Designer: _____

Plumbing _____

Reg No: _____

Signature _____

Designer: _____

(*) Signature is required where Florida Law requires design to be performed by registered design professionals per C103.1.1.1.2

Project: FBC2026
Title: FBC2026
Type: Office
(WEA File: FL_MIAMI_INTL_AP.tm3)

Building End Uses

	1) Proposed	2) Baseline
Total	136.48	217.91
	\$2,116	\$3,399
ELECTRICITY(MBtu/kWh/\$)	136.48	217.91
	39994	63893
	\$2,116	\$3,399
AREA LIGHTS	15.90	41.20
	4649	12079
	\$246	\$643
EXTERNAL LIGHT	2.24	3.88
	657	1136
	\$35	\$60
MISC EQUIPMT	48.90	48.90
	14335	14335
	\$758	\$763
PUMPS & MISC	0.00	0.00
	2	4
	\$0	\$0
RENEWABLES	-6.85	0.00
	-2007	0
	\$-106	\$0
SPACE COOL	48.80	69.90
	14294	20490
	\$756	\$1,090
SPACE HEAT	0.00	0.00
	8	11
	\$0	\$1
VENT FANS	23.40	49.90
	6857	14626
	\$363	\$778

	1) Proposed	2) Baseline
WATER HEATERS	4.09	4.14
	1199	1212
	\$63	\$64
Credits Applied: None		PASSES
Passing Criteria = 2587		
Design (including any credits) = 2116		
Passing requires Proposed Building cost to be at most 76.1% of		
Baseline cost. This Proposed Building is at 62.2%		

Project: FBC2026						
Title: FBC2026						
Type: Office						
(WEA File: FL_MIAMI_INTL_AP.tm3)						
External Lighting Compliance						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Uncovered Parking Areas -- Parking lots and Drives	Yes	0.026	500.0	13	150
Ext Light 3	Loading areas -- llaw enforcement, fire, emergency	No	0.182	100.0	18	30
Tradable Surfaces: 150 (W) Allowance for Tradable: 281.2 (W)					PASSES	
All External Lighting: 180 (W)						
Complicance check includes a excess/Base allowance of 280.00(W)						
Ext Light 3-- 11.8 W from the excess/Base allowance was applied to this item to comply						

Project: FBC2026

Title: FBC2026

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

Lighting Controls Compliance

Acronym	ID	Description	Area (sq.ft)	Compliance
<u>Space 1</u>	<u>12</u>	<u>Space 1 (Lobby (General) - Reception and Waiting)</u>	<u>1,568</u>	COMPLIANCE: PASSES CONTROLS IN SPACE: 1-Manual (Local Control) 4-Light Reduction (30%-70%) 7-Occupant Sensor Auto OFF (Full or Partial) 9-Time-Switch: Auto Full Off or Scheduled Off
<u>Space 2</u>	<u>12</u>	<u>Space 2 (Lobby (General) - Reception and Waiting)</u>	<u>906</u>	COMPLIANCE: PASSES CONTROLS IN SPACE: 1-Manual (Local Control) 7-Occupant Sensor Auto OFF (Full or Partial) 9-Time-Switch: Auto Full Off or Scheduled Off
<u>Space 3</u>	<u>17</u>	<u>Space 3 (Office - Enclosed)</u>	<u>945</u>	COMPLIANCE: PASSES CONTROLS IN SPACE: 1-Manual (Local Control) 2-Occupancy Sensor - Manual ON only 4-Light Reduction (30%-70%) 8-Occupant Sensor Auto Full OFF
<u>Space 4</u>	<u>17</u>	<u>Zo0Sp1 (Office - Enclosed)</u>	<u>1,393</u>	COMPLIANCE: PASSES CONTROLS IN SPACE: 1-Manual (Local Control) 2-Occupancy Sensor - Manual ON only 4-Light Reduction (30%-70%) 8-Occupant Sensor Auto Full OFF

<u>Space 5</u>	<u>2 Zo0Sp1 (Storage & Warehouse - Inactive Storage)</u>	<u>736</u> COMPLIANCE: PASSES CONTROLS IN SPACE: 1-Manual (Local Control) 2-Occupancy Sensor - Manual ON only 4-Light Reduction (30%-70%) 7-Occupant Sensor Auto OFF (Full or Partial) 9-Time-Switch: Auto Full Off or Scheduled Off
		PASSES

Filing Copy ---- Not For Official Use

Project: FBC2026

Title: FBC2026

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

System Report Compliance

Sys1	3.5 TONS	Constant Volume Air Cooled Split System < 65000 Btu/hr	No. of Units 1
-------------	-----------------	--	---------------------------

Component	Category	Capacity	Eff Design	Eff Criteria	Integrated Eff-Design	Integrated Eff-Criteria	Com- pliance
Cooling System	Air Conditioners Air Cooled Split System < 45000 Btu/h Cooling Capacity	42000	16.00	14.30			PASSES
Heating System	Electric Furnace	27296	1.00	1.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	1400	0.50	0.82			PASSES
Air Distribution System (Sup)	ADS System (Sup)		5.00	4.20			PASSES
Air Distribution System (Ret)	ADS System (Ret)		5.00	4.20			PASSES

Sys2	5+ TONS	Constant Volume Air Cooled Split System < 65000 Btu/hr	No. of Units 1
-------------	----------------	--	---------------------------

Component	Category	Capacity	Eff Design	Eff Criteria	Integrated Eff-Design	Integrated Eff-Criteria	Com- pliance
Cooling System	Air Conditioners Air Cooled Split System 45000 - 65000 Btu/h Cooling Capacity	60000	16.00	14.30			PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) Split System < 65000 Btu/h Cooling Capacity	34120	8.00	7.50			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	2000	0.50	0.82			PASSES
Air Distribution System (Sup)	ADS System (Sup)						PASSES
Air Distribution System (Ret)	ADS System (Ret)		5.00	4.20			PASSES

Sys3	System 10	Constant Volume Packaged System--902	No. of Units 1
-------------	------------------	---	---------------------------

Component	Category	Capacity	Eff Design	Eff Criteria	Integrated Eff-Design	Integrated Eff-Criteria	Com- pliance
Cooling System	Air Conditioners Air Cooled 65000 - 135000 Btu/h Cooling Capacity	70000	13.50	11.00	15.00	14.10	PASSES

EnergyGauge Summit® Fla/Com-2026. Effective Date: Dec 31, 2026

Florida Building Code, 9th Edition (2026) - Energy Conservation C407: FBC Total Building Performance Compliance Option

Heating System	Heat Pumps Air Cooled (Heating Mode) 65000 to 135000 Btu/h Clg Cap	36000	5.00	3.40				PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	1500	0.80	0.82				PASSES
Air Distribution System (Sup)	ADS System (Sup)		5.00	4.20				PASSES
Air Distribution System (Ret)	ADS System (Ret)							PASSES
Sys4	System 11	Constant Volume Air Cooled Single Package System < 65000 Btu/hr						No. of Units 1
Component	Category	Capacity	Eff Design	Eff Criteria	Integrated Eff-Design	Integrated Eff-Criteria		Comp- liance
Cooling System	Air Conditioners Air Cooled Single Pkg < 65000 Btu/h Cooling Capacity	56000	15.00	13.40				PASSES
Heating System	Electric Furnace	30000	1.00	1.00				PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	1500	0.80	0.82				PASSES
Air Distribution System (Sup)	ADS System (Sup)		6.00	6.00				PASSES
Air Distribution System (Ret)	ADS System (Ret)		5.00	4.20				PASSES
								PASSES

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance
Domestic hot-water heater	1	10.00	85.000	82.000			Gas Fired >= 2,500,000 Btu/h	PASSES
								PASSES

Project: FBC2026
 Title: FBC2026
 Type: Office
 (WEA File: FL_MIAMI_INTL_AP.tm3)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Electric Storage water heater	<= 12 [kW]; 20 - 55 gal	0.93	0.92			PASSES
Water Heater 2	Gas Storage water heater	<= 75000 Btu/h; 55 - 100 Gal	0.83	0.78			PASSES
Water Heater 3	Oil Storage water heater	<= 105000 Btu/h; <= 50 Gallons	0.90	0.58	10.00		PASSES
							PASSES

Project: FBC2026
 Title: FBC2026
 Type: Office
 (WEA File: FL_MIAMI_INTL_AP.tm3)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Heating System (Steam, Steam Condensate, & Hot Water)	3.00	False	105.00	0.28	2.00	1.50	PASSES
Cooling Systems (Chilled Water, Brine and Refrigerant)	4.00	False	45.00	0.33	2.00	1.20	PASSES
Domestic and Service Hot Water Systems	2.00	False	130.00	0.30	2.00	1.70	PASSES
							PASSES

Mandatory Requirements (as applicable)

Requirements compiled by US Department of Energy and Pacific Northwest National Laboratory. Adopted for FBC with permission. Not all may be applicable

Topic	Section	Component	Description	Yes	N/A	Exempt
1. Plan Review						
7001 Plan Review	C105.2	Envelope	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed. []- Exception	☐	☐	☐
7040 Fenestration	C402.5.1	Envelope	The vertical fenestration area $\leq$ 30 percent of the gross above-grade wall area. []- Exception	☐	☐	☐
7041 Fenestration	C402.5.1	Envelope	The skylight area $\leq$ 3 percent of the gross roof area. []- Exception	☐	☐	☐
7042 Fenestration	C402.5.1.1	Envelope	Vertical Fenestration Area Allowance: A maximum of 40 percent of gross above-grade wall area is permitted to be vertical fenestration area provided $\geq$ 50 percent of the conditioned floor area is within a daylight zone, daylight responsive controls are installed, and glazing assemblies within the scope of NFRC 200 have visible transmittance $\geq$ 1.1 times SHGC. []- Exception	☐	☐	☐
7043 Fenestration	C402.5.1.2	Envelope	A maximum of 6 percent of roof area is permitted to be skylight area provided daylight responsive controls are installed in daylight zones under skylights. []- Exception	☐	☐	☐
7044 Fenestration	C402.5.2	Envelope	In enclosed spaces $>$ 2,500 ft ² directly under a roof with ceiling heights $>$ 15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is $\geq$ half the floor area; (b) the skylight area to daylight zone is $\geq$ 3 percent with a skylight VT $\geq$ 0.40; or a minimum skylight effective aperture $\geq$ 1 percent. []- Exception Buildings in climate zones 6 through 8 Spaces where the proposed general lighting power densities $<$ 0.5 W/ft ² . Areas with obstructions that block direct beam sunlight on $\geq$ 1/2 of the roof over the enclosed area for more than 1,500 daytime hours per year	☐	☐	☐

7045 Fenestration	C402.5.2.2	Envelope	Skylights in office, storage, automotive service, manufacturing, non-refrigerated warehouse, retail store, and distribution/sorting area have a measured haze value > 90 percent unless designed to exclude direct sunlight. []- Exception Skylights designed to exclude direct sunlight entering the occupied space by the use of fixed or automated baffles, geometry of skylight and well, or optical diffusers. Requirement does not apply	☐	☐	☐
7004 Plan Review	C105.2	Exterior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices. []- Exception	☐	☐	☐
7003 Plan Review	C105.2	Interior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices. []- Exception	☐	☐	☐
7002 Plan Review	C105.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical and service water heating systems and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks. Hot water system sized per manufacturer's sizing guide. []- Exception	☐	☐	☐
7027 Post Construction	C405.6	Project	Group R-2 dwelling units have separate electrical meters. []- Exception Requirement does not apply.	☐	☐	☐
2. Footing / Foundation Inspection						
7006 Insulation	C107	Envelope	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
7008 Insulation	C303.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐
7009 Insulation	C303.2	Envelope	Slab edge insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐
7014 Insulation	C303.2.1	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities. []- Exception	☐	☐	☐

7036 Insulation	C402.2.4	Envelope	Slab edge insulation depth/length consistent with insulation specifications reported in plans and COMcheck reports. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil. []- Exception Requirement does not apply	☐	☐	☐
7037 Insulation	C402.2.5	Envelope	Installed below-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
7076 HVAC	C403.14.2, C403.14.3	Mechanical	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature above 50F and outdoor temperature above 40F. []- Exception Requirement does not apply	☐	☐	☐
3. Framing / Rough-In Inspection						
7012 Fenestration	C303.1.3	Envelope	Fenestration products rated in accordance with NFRC certified and as to performance labels or certificates provided. []- Exception Default values are used.	☐	☐	☐
7031 Air Leakage	C402.6.2.3.2	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and average assembly air leakage <= 0.04 cfm/ft2. Air barrier penetrations are sealed in an approved manner. []- Exception Requirement does not apply	☐	☐	☐
7046 Fenestration	C402.5.3	Envelope	Vertical fenestration SHGC value. []- Exception	☐	☐	☐
7047 Fenestration	C402.5.3	Envelope	Skylight SHGC value. []- Exception	☐	☐	☐
7048 Fenestration	C402.5.3, C402.5.3.4	Envelope	Installed vertical fenestration U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports. []- Exception	☐	☐	☐
7049 Fenestration	C402.5.3.4	Envelope	Installed skylight U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports. []- Exception	☐	☐	☐
7050 Fenestration	C402.5.5	Envelope	U-factor of opaque swinging and nonswinging doors associated with the building thermal envelope meets requirements. []- Exception	☐	☐	☐
7053 Air Leakage	C402.6.1	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and either constructed or tested in an approved manner. Air barrier penetrations are sealed in an approved manner. []- Exception Climate Zone 2B Requirement does not apply	☐	☐	☐
7060 Air Leakage	C402.6.2.3.1	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability <= 0.004 dfm/ft2. Air barrier penetrations are sealed in an approved manner. []- Exception Requirement does not apply	☐	☐	☐

7061 Air Leakage	C402.6.3	Envelope	Factory-built fenestration and doors are labeled as meeting air leakage requirements. []- Exception Field fabricated fenestration assemblies Fenestration in buildings that comply with air leakage requirements with a whole building air leakage test. Doors that comply with special International Building Code requirements	☐	☐	☐
7063 Air Leakage	C402.6.6	Envelope	Vestibules are installed on all building entrances . Doors have self-closing devices. []- Exception Building entrances with revolving doors. Doors not intended to be used as a building entrance. Doors opening directly from a sleeping unit or dwelling unit. Doors that open directly from a space <=3000 ft2. Doors with air curtain. Existing door is being r	☐	☐	☐
4. Plumbing Rough-In Inspection						
7024 HVAC	C404.7	Mechanical	Drain water heat recovery (DWHR) units comply with CSA B55.2 with pressure loss < 10 psi at maximum flow. Group R occupancies have DWHR efficiencies in accordance with CSA B55.1. []- Exception Requirement does not apply.	☐	☐	☐
7143 HVAC	C404.5, C404.5.1, C404.5.2	Mechanical	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details. []- Exception Requirement does not apply.	☐	☐	☐
7145 HVAC	C404.6.1, C404.6.1.1	Mechanical	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F. []- Exception Requirement does not apply.	☐	☐	☐
7146 HVAC	C404.6.1, C404.6.2	Mechanical	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace. []- Exception Requirement does not apply.	☐	☐	☐
7147 HVAC	C404.6.3	Mechanical	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle. []- Exception Requirement does not apply.	☐	☐	☐
5. Mechanical Rough-In Inspection						

7132 Air Leakage	C403.7.7	Envelope	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details. []- Exception Gravity dampers acceptable for exhaust and relief dampers Gravity dampers acceptable in buildings <3 stories Gravity dampers acceptable in systems with outside or exhaust air flow rates less than 300 cfm Dampers no larger than 24 inches in any dimension	☐	☐	☐
7018 HVAC	C403.3	Mechanical	HVAC equipment efficiency verified. []- Exception	☐	☐	☐
7019 HVAC	C403.3	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only as per Footnote b to Table C403.3.2(3). []- Exception Requirement does not apply	☐	☐	☐
7020 HVAC	C403.9	Mechanical	Large diameter fans where installed shall be tested and labeled in accordance with AMCA 230 and meet efficacy requirements of Table C403.9. []- Exception Requirement does not apply.	☐	☐	☐
7021 HVAC	C404.2	Mechanical	Service water heating equipment meets efficiency requirements. []- Exception	☐	☐	☐
7066 HVAC	C403.10.1, C403.10.2	Mechanical	Gas hot water boilers > 1,000,000 and < 10,000,000 Btuh have a weighted average thermal efficiency > 90% and distribution system meets requirements of C403.10.2. []- Exception Requirement does not apply.	☐	☐	☐
7067 HVAC	C403.11.1	Mechanical	Fan systems with total system motor capacity >=5 hp associated with heat rejection equipment configured to automatically modulate the fan speed to control the leaving fluid temperature or condensing temp/pressure of heat rejection device. []- Exception Fans serve multiple refrigerant or fluid cooling circuits. Condenser fans serve flooded condensers. Requirement does not apply.	☐	☐	☐
7068 HVAC	C403.11.2	Mechanical	Multiple-cell heat rejection equipment with variable speed fan drives are controlled to operate the maximum number of fans allowed and so that all fans operate at the same fan speed required for the instantaneous cooling duty. The minimum fan speed will be the minimum allowable speed of the fan drive system in accordance with the manufacturer's recommendations. []- Exception Requirement does not apply.	☐	☐	☐
7069 System Specific	C403.11.3	Mechanical	Centrifugal fan open-circuit cooling towers having combined rated capacity >= 1100 gpm meets minimum efficiency requirement: >=40.2 gpm/hp. []- Exception Centrifugal open-circuit cooling towers with external sound attenuation or that have ducted inlet or discharge. Requirement does not apply.	☐	☐	☐

7070 HVAC	C403.11.4	Mechanical	Open-circuit cooling towers having water cooled chiller systems and multiple or variable speed condenser pumps, are designed so that tower cells can run in parallel with larger of flow criteria. []- Exception Requirement does not apply	☐	☐	☐
7071 HVAC	C403.11.5	Mechanical	Condenser heat recovery system that can heat water to 85 °F or provide 60% of peak heat rejection is installed for preheating of service hot water. []- Exception Facility operates < 24/7 Total installed heat capacity of water cooled systems <= 6 MMBtu/h of heat rejection Design SWH load <= 1 MMBtu/h Facilities using condenser heat recovery for space heating with heat recovery exceeding 30% of the peak water-cooled	☐	☐	☐
7072 HVAC	C403.12.3, C403.12.3.1, C403.12.3.2	Mechanical	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.12.3.1 and refrigeration compressor systems that comply with C403.12.3.2.. []- Exception Systems have working fluid in the refrigeration cycle that goes through both subcritical and supercritical states (transcritical). Systems use ammonia refrigerant. Requirement does not apply.	☐	☐	☐
7073 HVAC	C403.13.1	Mechanical	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch. []- Exception Requirement does not apply.	☐	☐	☐
7074 HVAC	C403.13.1, C403.13.2	Mechanical	HVAC ducts and plenums insulated in accordance with C403.13.1 and constructed in accordance with C403.13.3, verification may need to occur during Foundation Inspection. []- Exception Factory-installed as part of HVAC equipment Where the design temperature difference between the inside and outside of the duct or plenum is less than 15°F. Requirement does not apply.	☐	☐	☐
7075 HVAC	C403.13.3	Mechanical	HVAC piping insulation insulated in accordance with Table C403.13.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation. []- Exception Piping within HVAC equipment. Factory-installed piping within room fan-coils and unit ventilators tested under AHRI 440 Fluid temperatures between 60 and 105°F. Fluid not heated or cooled. Strainers and valves associated with 1 inch or smaller piping Under	☐	☐	☐
7077 HVAC	C403.2.1	Mechanical	Zone isolation devices and controls installed where applicable. []- Exception Exhaust and outdoor air connections having fan systems 5000 cfm or smaller Exhaust airflow less than 10% of design Zones and systems intended to operate continuously or are inoperative when all other zones are inoperative Requirement does not apply	☐	☐	☐

7078 HVAC	C403.2.2	Mechanical	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4. []- Exception Requirement does not apply.	☐	☐	☐
7079 HVAC	C403.2.3	Mechanical	Buildings > 100,000 sq ft served by more than one HVAC system controlled by direct digital control (DDC) system with fault detection diagnostics. []- Exception Requirement does not apply. R-1 or R-2 occupancies.	☐	☐	☐
7081 System Specific	C403.3.2	Mechanical	Equipment minimum efficiency: []- Exception	☐	☐	☐
7082 System Specific	C403.3.2	Mechanical	Equipment minimum efficiency: []- Exception	☐	☐	☐
7083 HVAC	C403.3.3	Mechanical	Hot gas bypass limited to: ≤240 kBtu/h – 50% >240 kBtu/h – 25% []- Exception	☐	☐	☐
7084 HVAC	C403.3.4	Mechanical	Boilers provided with combustion air positive shutoff with a variable speed combustion air fan motor or modulated fan airflow control. []- Exception Requirement does not apply.	☐	☐	☐
7085 HVAC	C403.3.4.1	Mechanical	Boilers > 5,000,000 Btu/h can maintain stack-gas oxygen concentrations of 5% or 3% according to Table C403.3.4.1. []- Exception Requirement does not apply.	☐	☐	☐
7086 HVAC	C403.3.4.2	Mechanical	System turndown requirement met through multiple single-input boilers, one or more modulating boilers, or a combination of single-input and modulating boilers. Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0 MBtu/h and 10 MBtu/h has 4:1 turndown ratio, boiler input > 10.0 MBtu/h has 5:1 turndown ratio. []- Exception	☐	☐	☐
7090 HVAC	C403.4.1.3	Mechanical	Where thermostatic control setpoints are adjustable by occupants or HVAC operators, the adjustments are independent for heating and cooling setpoint. []- Exception Requirement does not apply.	☐	☐	☐
7091 HVAC	C403.4.1.4	Mechanical	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure. []- Exception Requirement does not apply.	☐	☐	☐
7093 HVAC	C403.4.1.5	Mechanical	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint ≤ 60F and cooling setpoint ≥ 80F. []- Exception Heating/cooling provided by site-recovered energy or with transfer air that would otherwise be exhausted. Requirement does not apply	☐	☐	☐

7094 HVAC	C403.4.1.6	Mechanical	Hot water boilers supplying heat via one- or two-pipe systems include outdoor setback control. []- Exception Requirement does not apply.	☐	☐	☐
7098 HVAC	C403.4.3	Mechanical	The heating of fluids in hydronic systems that have been previously mechanically cooled, and the cooling of fluids that have been previously mechanically heated are limited in accordance with Sections C403.4.3.1-C403.4.3.3. Single boiler systems >500,000 Btu/h have multistaged or modulating burner. []- Exception Requirement does not apply.	☐	☐	☐
7099 HVAC	C403.4.3.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used. []- Exception	☐	☐	☐
7100 HVAC	C403.4.3.2	Mechanical	Two-pipe hydronic systems using a common distribution system have controls to allow a deadband ≥ 15 °F, allow operation in one mode for at least 4 hrs before changeover, and have reset controls to limit heating and cooling supply temperature to ≤ 30 °F. []- Exception	☐	☐	☐
7101 HVAC	C403.4.3.3.1	Mechanical	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements. []- Exception A deadband of less than 20°F is allowed where a temperature optimization controller is used.	☐	☐	☐
7102 HVAC	C403.4.3.3.2	Mechanical	Closed-circuit cooling tower within heat pump loop have either automatic bypass valve or lower leakage positive closure dampers. Open-circuit tower within heat pump loop have automatic valve to bypass all heat pump water flow around the tower. Open- or closed-circuit cooling towers used in conjunction with a separate heat exchanger have heat loss by shutting down the circulation pump on the cooling tower loop. Open- or closed circuit cooling towers have a separate heat exchanger to isolate the cooling tower from the heat pump loop, and heat loss is controlled by shutting down the circulation pump on the cooling tower loop. []- Exception Heat pump system must reject heat throughout the year. Requirement does not apply.	☐	☐	☐
7103 HVAC	C403.4.3.3.3	Mechanical	Two-position automatic valve interlocked to shut off water flow when hydronic heat pump with pumping system > 10 hp is off. []- Exception	☐	☐	☐
7104 HVAC	C403.4.5	Mechanical	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down. []- Exception	☐	☐	☐

7105 HVAC	C403.4.7	Mechanical	Doors or operable openings from conditioned space to outdoors > 40 sq ft contain automatic controls interlocked with the heating and cooling system. []- Exception Building entrances with auto closing devices. Emergency exits. Enclosed spaces without thermostat or control sensor. Food preparation. Warehouses with operable openings for occupancy. Entrance doors as part of vestibule. Operable openings into radiant heating	☐	☐	☐
7106 HVAC	C403.4.8.1	Mechanical	Dehumidification controls do not use mechanical cooling to reduce humidity < 60% or a dew point < 55F []- Exception Requirement does not apply.	☐	☐	☐
7107 HVAC	C403.4.8.2	Mechanical	Humidity controls do not use fossil fuel or electricity for a humidity > 30% in warmest zone. []- Exception Requirement does not apply.	☐	☐	☐
7108 HVAC	C403.4.8.3	Mechanical	Zones served by systems with both humidification and dehumidification prevent simultaneous operation. []- Exception Requirement does not apply.	☐	☐	☐
7109 HVAC	C403.5, C403.5.1, C403.5.2	Mechanical	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation. []- Exception Individual cooling units not served by chilled water in climate zones 1A and 1B. Where more than 25% of the system capacity is for process needs of spaces that need high humidity Systems that operate less than 20 hours per week If outdoor air cooling will	☐	☐	☐
7110 HVAC	C403.5.2	Mechanical	Economizer operation will not increase heating energy use during normal operation. []- Exception Economizers on VAV systems	☐	☐	☐
7111 HVAC	C403.5.3.3	Mechanical	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones. []- Exception Requirement does not apply.	☐	☐	☐
7112 HVAC	C403.5.3.4	Mechanical	System capable of relieving excess outdoor air during air economizer operation to prevent over pressurizing the building. The relief air outlet located to avoid recirculation into the building. []- Exception Requirement does not apply.	☐	☐	☐
7113 HVAC	C403.5.3.5	Mechanical	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details. []- Exception Requirement does not apply.	☐	☐	☐

7114 HVAC	C403.5.4, C403.5.4.1, C403.5.4.2, C403.5.1	Mechanical	Water economizers provided where required, meet the requirements for design capacity, maximum pressure drop and integrated economizer control. []- Exception Modulating fan control not required for chilled water and evaporative cooling units with fan motors of < 1 hp where the units are not used to provide ventilation air and the indoor fan cycles with the load. Requirement does not apply.	☐	☐	☐
7115 HVAC	C403.5.5	Mechanical	Fault detection and diagnostics installed with air-cooled unitary DX units or VRF units having economizers. []- Exception Requirement does not apply.	☐	☐	☐
7116 HVAC	C403.6.1	Mechanical	Supply air systems serving multiple zones have VAV systems with controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone. See section for details. []- Exception Zones or systems with at least 75% of energy used for heating or warming air Systems that prevent reconditioning, mixing or simultaneous supply of air that has previously been mechanically cooled (including via economizers) or heated. Requirement does not	☐	☐	☐
7117 HVAC	C403.6.2	Mechanical	Single-duct VAV systems use terminal devices configured to reduce the supply of primary supply air before reheating or recooling takes place. []- Exception Requirement does not apply.	☐	☐	☐
7118 HVAC	C403.6.3	Mechanical	Systems that have 1 warm air duct and 1 cool air duct use terminal devices configured to reduce the flow from one duct to a minimum before mixing of air from the other duct takes place. []- Exception Requirement does not apply.	☐	☐	☐
7119 HVAC	C403.6.4	Mechanical	Individual dual-duct or mixing heating and cooling systems with a single fan and with total capacities > 90,000 Btu/h not equipped with air economizers. []- Exception Requirement does not apply.	☐	☐	☐
7120 HVAC	C403.6.5	Mechanical	Multiple zone HVAC systems have supply air temperature reset controls based on building loads or outside temperatures. []- Exception Systems that prevent re-heating, re-cooling, or mixing of heated and cooled supply air. Systems in which at least 75% of the energy for reheating is from site recovered or site solar energy resources. Zones in climate zones 1A and 3A with less than 300	☐	☐	☐
7121 HVAC	C403.6.6	Mechanical	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls. []- Exception VAV systems that recirculate air from other zones without directly mixing it with outdoor air or dual-duct dual-fan VAV systems, or VAV systems with fan-powered terminal units. Systems where the design exhaust airflow is more than 70% of design outdoor ai	☐	☐	☐

7122 HVAC	C403.6.7	Mechanical	Parallel-flow fan-powered VAV air terminals have automatic controls configured to 1) turn off the terminal fan except when space heating is required or where required for ventilation, 2) turn on the terminal fan as the first stage of heating before the heating coil is activated, and 3) during heating for warmup or setback temperature control, either operate the terminal fan and heating coil without primary air or, reverse the terminal damper logic and provide heating from the central air handler by primary air. []- Exception Requirement does not apply.	☐	☐	☐
7123 HVAC	C403.6.8	Mechanical	Systems with DDC of individual zones reporting to the central control panel configured to reset the static pressure setpoint based on zone requiring the most pressure. The DDC is capable of monitoring zone damper positions or have an alternative method of indicating the need for static pressure. See section for details. []- Exception Requirement does not apply.	☐	☐	☐
7124 HVAC	C403.6.9	Mechanical	VAV fans have static pressure sensors located so controller setpoint ≤ 1.2 w.c.. []- Exception Requirement does not apply.	☐	☐	☐
7125 HVAC	C403.6.9	Mechanical	Static pressure sensors used to control VAV fans located such that the controller setpoint is ≤ 1.2 inches w.c.. Where this results in one or more sensors being located downstream of major duct splits, not less than one sensor located on each major branch. []- Exception Requirement does not apply.	☐	☐	☐
7126 HVAC	C403.7.1	Mechanical	Demand control ventilation provided for spaces >250 ft ² and >15 people/1000 ft ² occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow $>3,000$ cfm. []- Exception Systems with energy recovery. Multiple-zone systems without DDC. Multiple-zone systems with design outdoor air of less than 750 cfm. Spaces where $>75\%$ required for makeup air. Correctional cells, education laboratories, barber, beauty and nail salons, and	☐	☐	☐
7127 HVAC	C403.7.2	Mechanical	Enclosed parking garage ventilation has separate ventilation systems for each section, can reduce airflow < 0.05 cfm/sq ft of floor area and $>20\%$ of design capacity. []- Exception Garages with no mechanical cooling or heating that have a total ventilation system horsepower ≤ 5 hp. Requirement does not apply.	☐	☐	☐
7128 HVAC	C403.7.3	Mechanical	Units that provide ventilation air to multiple zones and operate in combination with zone heating and cooling systems do not use heating or heat recovery to warm supply air to a temperature greater than 60°F when representative building loads or outdoor air temperatures indicate that the majority of zones require cooling. []- Exception Requirement does not apply.	☐	☐	☐

7129 HVAC	C403.7.4	Mechanical	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2). [- Exception Where prohibited by the International Mechanical Code. Laboratory fume hood systems with a VAV hood exhaust and room supply systems capable of reducing volumes to 50% or less of design volume. Laboratory fume hood systems with direct makeup (auxiliary) ai	☐	☐	☐
7130 HVAC	C403.7.5	Mechanical	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria. Type I exhaust hoods contain demand control kitchen ventilation with > 50% reduction in exhaust. [- Exception Requirement does not apply	☐	☐	☐
7131 HVAC	C403.7.6	Mechanical	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2). [- Exception Requirement does not apply.	☐	☐	☐
7133 HVAC	C403.7.8, C403.7.8.1	Mechanical	Classrooms, training rooms, conference and multipurpose rooms, lounges, enclosed offices, open office areas and corridors contain occupied standby ventilation controls. [- Exception Requirement does not apply.	☐	☐	☐
7134 HVAC	C403.8.1	Mechanical	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp. [- Exception Hospital and laboratory systems that utilize flow control devices on exhaust and/or return. Individual exhaust fans with motor nameplate horsepower less than 1 hp. Requirement does not apply.	☐	☐	☐
7135 HVAC	C403.8.2	Mechanical	HVAC fan motors not oversized beyond allowable limits. [- Exception Requirement does not apply.	☐	☐	☐
7136 System Specific	C403.8.3	Mechanical	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95. [- Exception Single fans with motor nameplate horsepower of <= 1 hp or 0.89 kW. Embedded fans with motor nameplate horsepower < 5 hp or 4.1 kW. Multiple fans in series or parallel have a combined motor nameplate horsepower of <= 5 hp and are operated functionally as a	☐	☐	☐
7137 HVAC	C403.8.4	Mechanical	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed. [- Exception Motors in the airstream within fan coils and terminal units only provide heating to the space served. Motors in space-conditioning equipment that comply with Section C403.3.2 or Sections C403.8.1. through C403.8.3. Motors that comply with Section C405.7.	☐	☐	☐

7138 HVAC	C403.8.6	Mechanical	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section. []- Exception Modulating fan control is not required for chilled water and evaporative cooling units with fan motors of less than 1 hp where the units are not used to provide ventilation air and the indoor fan cycles with the load. Where the volume of outdoor air requi	☐	☐	☐
7139 HVAC	C403.15	Mechanical	Dehumidification systems for plant growth and maintenance are tested in accordance with DOE 10 CFR 430, has on-site heat recovery > 75% of dehumidification energy or ha a solid or liquid desiccant. []- Exception Requirement does not apply	☐	☐	☐
7140 HVAC	C403.16	Mechanical	Service water pressure boost systems contain pressure sensors for pump control, no devices used to reduce pressure and booster pumps do not operate when there is no service water flow. []- Exception Requirement does not apply	☐	☐	☐
7141 HVAC	C403.17	Mechanical	Clean water pumps achieve a pump energy index (PEI) <= 1.0. []- Exception Requirement does not apply	☐	☐	☐
7142 HVAC	C404.2.1	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment >= 1,000 kBtu/h serves the entire building, thermal efficiency >= 92 Et. Where multiple pieces of water-heating equipment serve the building with combined rating >= 1,000 kBtu/h, the combined input-capacity-weighted-average thermal efficiency >= 90 Et. Exclude input rating of equipment in individual dwelling units and equipment <= 100 kBtu/h. []- Exception 25 percent or more of the annual service water heating requirement is provided by on-site renewable energy or site-recovered energy. Water heater is < 105 kBtu/h. Water heaters installed in dwelling units . Requirement does not apply.	☐	☐	☐
7198 HVAC	C408.2.2.1	Mechanical	Air outlets and zone terminal devices have means for air balancing. []- Exception Fans with fan motors of 1 hp (0.74 kW) or less Requirement does not apply	☐	☐	☐
7199 HVAC	C408.2.2.2	Mechanical	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections. []- Exception Pumps with pump motors of 5 hp (3.7 kW) or less Where throttling results in no greater than 5 percent of the nameplate horsepower draw above that required if the impeller were trimmed.	☐	☐	☐
7210 System Specific	Table_C403.3.2a	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=40.2 gpm/hp . []- Exception	☐	☐	☐
7211 System Specific	Table_C403.3.2b	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=20.0 gpm/hp. []- Exception	☐	☐	☐

7212 System Specific	Table_C403.3.2c	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 16.1 gpm/hp. []- Exception	☐	☐	☐
7213 System Specific	Table_C403.3.2d	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 7.0 gpm/hp []- Exception	☐	☐	☐
7214 System Specific	Table_C403.3.2e	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 134 kBtu/h-hp w/ Ammonia test fluid. []- Exception	☐	☐	☐
7215 System Specific	Table_C403.3.2f	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 110 kBtu/h-hp w/ Ammonia test fluid. []- Exception	☐	☐	☐
7216 System Specific	Table_C403.3.2g	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 160 kBtu/h-hp w/ R-448A test fluid. []- Exception	☐	☐	☐
7217 System Specific	Table_C403.3.2h	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 137 kBtu/h-hp w/ R-448A test fluid. []- Exception	☐	☐	☐
7218 System Specific	Table_C403.3.2i	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 176 kBtu/h-hp. []- Exception	☐	☐	☐
6. Rough-In Electrical Inspection						
7162 Controls	C405.2.7	Exterior Lighting	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting $> 30\%$. []- Exception Emergency lighting normally auto controlled to off during building operation, safety requirements, or decorative gas lighting. Lighting specific to covered vehicle egress where required for safety, security or eye adaptation. Requirement does not apply.	☐	☐	☐
7163 Controls	C405.2.9	Exterior Lighting	Interior parking area lighting controlled by occupancy sensors or time switch control. []- Exception Lighting zones < 1.5 footcandles. Opening to wall ratio $< 40\%$ Distance from opening $< 0.5 \times$ height. Openings obstructed.	☐	☐	☐
7154 Controls	C405.2.1, C405.2.1.1	Interior Lighting	Occupancy sensors installed in classrooms/lecture/training rooms, computer rooms/data center, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, medical supply rooms, enclosed offices, laundry areas, open plan office areas, restrooms, storage rooms, telemedicine rooms, locker rooms, corridors, warehouse storage areas, and other spaces ≤ 300 sqft that are enclosed by floor-to-ceiling height partitions. []- Exception Requirement does not apply.	☐	☐	☐

7155 Controls	C405.2.1.2	Interior Lighting	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by time-switch. []- Exception Requirement does not apply.	☐	☐	☐
7156 Controls	C405.2.1.3	Interior Lighting	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces ≥ 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas ≤ 600 sq.ft. within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by $\geq 80\%$ of the full zone general lighting power within 20 minutes of all occupants leaving that control zone. []- Exception Requirement does not apply.	☐	☐	☐
7157 Controls	C405.2.10, C405.2.10.1, C405.2.10.2	Interior Lighting	Sleeping or dwelling units provided with lighting controls []- Exception Lighting zones < 1.5 footcandles. Opening to wall ratio $< 40\%$ Distance from opening $< 0.5 \times$ height. Openings obstructed.	☒	☐	☐
7158 Controls	C405.2.2, C405.2.2.1	Interior Lighting	Each area not served by occupancy sensors (per C405.2.1.1) have time-switch controls and functions detailed in sections C405.2.2.1. []- Exception Requirement does not apply.	☐	☐	☐
7159 Controls	C405.2.3.1	Interior Lighting	Spaces required to have dimming controls have a manual control that allows the occupant to reduce the connected lighting load to 10% of full power. []- Exception High-end trim lighting controls. Requirement does not apply.	☐	☐	☐
7160 Controls	C405.2.4, C405.2.4.1, C405.2.4.2	Interior Lighting	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone. []- Exception Spaces where health patient care is directly provided. Lighting required to have specific application controls. Sidelit zones on first floor in Group A-2 and M occupancies. New buildings having total connected lighting power $\leq$ the adjusted interior light	☐	☐	☐
7161 Wattage	C405.2.5	Interior Lighting	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting. []- Exception	☐	☐	☐
7025 Post Construction	C405.10	Project	Total voltage drop across the combination of feeders and branch circuits $\leq 5\%$. []- Exception Requirement does not apply.	☐	☐	☐

7026 Post Construction	C405.13	Project	Buildings with gross conditioned floor area > 10,000 ft ² will be equipped with a energy monitoring system in compliance with C405.13.1 through C405.13.11. []- Exception Requirement does not apply.	☐	☐	☐
7028 Post Construction	C405.7	Project	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6. []- Exception Transformers meet the Energy Policy Act of 2005 special purposes exclusions. Transformers meet the Energy Policy Act of 2005 non-general purpose exclusions Transformers meet the Energy Policy Act of 2005 exclusions with multiple voltage taps where the hig	☐	☐	☐
7029 Post Construction	C405.8	Project	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist). []- Exception Air-over electric motors. Component sets of an electric motor. Liquid-cooled electric motors. Submersible electric motors. Inverter-only electric motors. Requirement does not apply.	☐	☐	☐
7151 Post Construction	C405.10.1, C405.10.2	Project	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers. []- Exception A variable voltage drive system that reduces operating voltage in response to light loading is installed. Requirement does not apply.	☐	☐	☐
7152 Post Construction	C405.12, C405.12.1	Project	50% of 15/20 amp receptacles installed in enclosed offices, conference rooms, copy rooms, break rooms, classrooms and workstations and > 25% of branch circuit feeders for modular furniture will have automatic receptacle control in accordance with C405.11.1. []- Exception Requirement does not apply.	☐	☐	☐
7. Insulation Inspection						
7005 Insulation	C107	Envelope	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection. []- Exception	☐	☐	☐
7007 Insulation	C107	Envelope	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
7010 Insulation	C303.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐

7011 Insulation	C303.1, C303.1.1, C303.1.2	Envelope	Roof insulation installed per manufacturer's instructions and is labeled with R-value or insulation certificate providing R-value and other relevant data. Blown or poured loose-fill insulation, thickness, settled R-value, density, coverage area and number of bags listed on certification. Spray foam insulation lists installed thickness, R-value indicated on certification. []- Exception Roof insulation above deck	☐	☐	☐
7013 Insulation	C303.2, C402.2.3	Envelope	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs. []- Exception All perimeter framing fully insulated at metal or wood framed prescriptive levels. Concrete floor slab insulation turns up and contacts underside of floor under wall assembly. Requirement does not apply.	☐	☐	☐
7016 Insulation	C402.4	Envelope	Low slope roofs over cooled conditioned space in climate zones 0-3 satisfy one of the following: 3-year-aged solar reflectance ≥ 0.55 and thermal emittance ≥ 0.75 or 3-year-aged solar reflectance index ≥ 64.0 . []- Exception Roofs covered by PV or solar systems, vegetative roofs, above roof decks, skylights or HVAC Ballasted Roof Shaded or Covered Roof Roofs where 75% of roof area complies with more than one exception	☐	☐	☐
7032 Insulation	C402.2.1	Envelope	Roof assembly meets minimal thermal resistance installed between roof framing or in a continuous fashion on the roof assembly as stipulated. Requirements for above deck insulation, minimum thickness, suspended ceilings, staggered joints and skylight curbs will be met. []- Exception Requirement does not apply.	☐	☐	☐
7033 Insulation	C402.2.1.2	Envelope	Skylight curbs are insulated to the level of roofs with insulation above deck or R-5. []- Exception Unit skylight curbs included as a component of a skylight listed and labeled per NFRC 100. Requirement does not apply.	☐	☐	☐
7034 Insulation	C402.2.2	Envelope	Above-grade wall insulation installed between wall framing, integral to or continuous with wall assembly or any combination of these insulation methodologies. For continuous insulation, joints are staggered. []- Exception Requirement does not apply.	☐	☐	☐
7035 Insulation	C402.2.3	Envelope	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. Mass floors meet the weight requirements in C402.2.3. []- Exception	☐	☐	☐
7038 Insulation	C402.2.6	Envelope	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5. []- Exception Heated slab-on-grade. Requirement does not apply.	☐	☐	☐
7039 Insulation	C402.2.6	Envelope	Thermally ineffective panel surfaces of sensible heating panels have insulation $\geq R-3.5$. []- Exception Requirement does not apply.	☐	☐	☐

EnergyGauge Summit® Fla/Com-2026. Effective Date: Dec 31, 2026

Florida Building Code, 9th Edition (2026) - Energy Conservation C407: FBC Total Building Performance Compliance Option

7051 Insulation	C402.5.5.2	Envelope	Non-swinging opaque doors have an assembly U-factor ≤ 0.440 in climate zones 0-6 or ≤ 0.36 in climate zones 7 and 8 []- Exception Requirement does not apply.	☐	☐	☐
7052 Air Leakage	C402.5.7, C403.7.7	Envelope	Stair and elevator shaft vents have motorized dampers that automatically close. Reference section C403.7.7 for operational details. []- Exception Requirement does not apply	☐	☐	☐
7054 Air Leakage	C402.6.1.1	Envelope	The air barrier design is documented as required in Section C402.6.1.1 []- Exception	☐	☐	☐
7055 Air Leakage	C402.6.1.2	Envelope	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage. []- Exception Climate Zone 2B Requirement does not apply	☐	☐	☐
8. Final Inspection						
7015 Post Construction	C401.3	Envelope	A building thermal envelope certificate is supplied and completed by an approved third party. []- Exception	☐	☐	☐
7017 Insulation	C402.7	Envelope	Thermal bridges in above grade walls at balconies and floor decks, cladding supports, structural beams and columns and vertical fenestration comply with Section C402.7. []- Exception Requirement does not apply.	☐	☐	☐
7056 Air Leakage	C402.6.1.2.1	Envelope	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing. []- Exception Requirement does not apply.	☐	☐	☐
7057 Air Leakage	C402.6.1.2.2, C402.6.1.2.2.1	Envelope	Electrical and communication boxes are caulked, taped, gasketed or sealed to air barrier. Air sealed boxes in accordance with NEMA OS 4. []- Exception Requirement does not apply.	☐	☐	☐
7058 Air Leakage	C402.6.2, C402.6.2.1	Envelope	Building thermal envelope air leakage is tested and verified to be ≤ 0.35 cfm/sq ft of buiding thermal envelope area by approved third party in accordance with ASTM E3158 or equivalent approved method. []- Exception Requirement does not apply. Air leakage < 0.45 cfm/sq ft with smoke tracer or infrared testing. Climate zone 2B. Buildings $> 25,000$ sq ft in climate zones 0-4 other than Group I and R occupancies. Air leakage tested in accordance with C402.6.2.2 and ≤ 0 .	☐	☐	☐
7059 Air Leakage	C402.6.2.2	Envelope	Dwelling unit or sleeping unit building thermal envelope is air leakage tested in accordance with ASTM E779, ANSI/RESNET /ICC 380, ASTM E1827 or equivalent approved method. []- Exception Requirement does not apply.	☐	☐	☐

7062 Air Leakage	C402.6.4	Envelope	Doors and access openings to shafts, chutes, stairways and elevator lobbies from conditioned space are gasketed, weather-stripped or sealed. []- Exception Doors comply with Section 716 of IBC. Doors and openings comply with UL 1784.	☐	☐	☐
7064 Air Leakage	C402.6.7	Envelope	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway. []- Exception Requirement does not apply	☐	☐	☐
7164 Wattage	C405.5.1	Exterior Lighting	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts. []- Exception	☐	☐	☐
7030 Controls	C408.3	Interior Lighting	Lighting systems and receptacle controls have been tested to ensure proper calibration, adjustment, programming, and operation in accordance with C408.3.1.1 through C408.3.1.6. []- Exception	☐	☐	☐
7205 Post Construction	C408.2.5	Interior Lighting	Furnished as-built drawings for electric power systems within 90 days of system acceptance. []- Exception	☐	☐	☐
7022 HVAC	C404.3	Mechanical	Heat traps installed on supply and discharge piping of non-circulating systems. []- Exception Tank inlets/outlets associated with solar water heating systems. Requirement does not apply.	☐	☐	☐
7023 HVAC	C404.4	Mechanical	All service water heating piping meets the thickness requirements of Table C404.4.1. []- Exception Factory installed piping. Valves, pumps and strainers < 1 inch in diameter. Hot water not heated by fossil fuel or electricity. Piping for user controlled shower or baths. Cold water piping of demand recirculation system. Piping in existing buildings. Pip	☐	☐	☐
7065 HVAC	C403.1.1	Mechanical	HVAC systems and equipment design loads calculated in accordance with ANSI/ASHRAE/ACCA Standard 183 or by an approved equivalent computational procedure []- Exception Requirement does not apply.	☐	☐	☐
7080 HVAC	C403.3.1	Mechanical	HVAC systems and equipment capacity does not exceed calculated loads. []- Exception Required standby equipment with proper controls per code. Multiple units of the same type of equipment with sequencing controls.	☐	☐	☐
7087 HVAC	C403.4.1	Mechanical	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system. []- Exception Perimeter systems with one control for each exposure and with the thermostat located within the zones served.	☐	☐	☐
7088 HVAC	C403.4.1.1	Mechanical	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed. []- Exception Requirement does not apply.	☐	☐	☐

7089 HVAC	C403.4.1.2	Mechanical	Thermostatic controls have a 5 °F deadband. []- Exception Manual changeover thermostats. Precision indoor temperature control required.	☐	☐	☐
7092 HVAC	C403.4.1.4	Mechanical	Temperature controls have setpoint overlap restrictions. []- Exception Requirement does not apply.	☐	☐	☐
7095 HVAC	C403.4.2	Mechanical	Each zone equipped with setback controls using automatic time clock or programmable control system. []- Exception Zones operated continuously. Zones have a full HVAC load demand not exceeding 6,800 Btu/h (2 kW) and having a readily accessible manual shutoff switch Requirement does not apply.	☐	☐	☐
7096 HVAC	C403.4.2.1, C403.4.2.2	Mechanical	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup []- Exception Requirement does not apply.	☐	☐	☐
7097 HVAC	C403.4.2.3	Mechanical	Systems include optimum start controls. []- Exception Requirement does not apply. Dwelling or sleeping units.	☐	☐	☐
7144 HVAC	C404.6.1	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe. []- Exception Requirement does not apply.	☐	☐	☐
7148 HVAC	C404.8.1	Mechanical	Pool heaters are equipped with on/off switch and no continuously burning pilot light. []- Exception	☐	☐	☐
7149 HVAC	C404.8.2	Mechanical	Time switches are installed on all pool heaters and pumps. []- Exception Where 24-hr pump operation required for public health Solar and waste heat recovery pool heating pumps Requirement does not apply	☐	☐	☐
7150 HVAC	C404.8.3	Mechanical	Vapor retardant pool covers are provided for heated pools and permanently installed spas. []- Exception Pools deriving >75% of the energy for heating (of not fewer than 3 months) from heat pump or site-recovered energy. Requirement does not apply	☐	☐	☐
7153 Renewable Energy	C405.15.1, C405.15.2	Mechanical	Buildings in climate zones 0 - 7 comply with the on-site and/or off-site renewable energy requirements of Section C405.15. []- Exception Requirement does not apply.	☐	☐	☐
7197 Post Construction	C408.2.1	Mechanical	Commissioning plan developed by registered design professional or approved agency. []- Exception Requirement does not apply	☐	☐	☐
7200 Post Construction	C408.2.3.1	Mechanical	HVAC equipment, systems and system-to-system relationships have been tested to ensure proper operation. []- Exception Unitary or packaged HVAC equipment without supply air economizers.	☐	☐	☐

7201 Testing	C408.2.3.2	Mechanical	HVAC and service water heating control systems have been tested to ensure proper operation, calibration and adjustment of controls. []- Exception	☐	☐	☐
7202 Post Construction	C408.2.3.3	Mechanical	Economizers have been tested to ensure proper operation. []- Exception	☐	☐	☐
7203 Post Construction	C408.2.4	Mechanical	Preliminary commissioning report completed and certified by registered design professional or approved agency. []- Exception	☐	☐	☐
7204 Post Construction	C408.2.5	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance. []- Exception	☐	☐	☐
7206 Post Construction	C408.2.5.1	Mechanical	An air and/or hydronic system balancing report is provided for HVAC systems. []- Exception	☐	☐	☐
7207 Post Construction	C408.2.5.2	Mechanical	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy. []- Exception	☐	☐	☐
7209 Post Construction	C408.3.2.2	Mechanical	Furnished O&M manuals for HVAC systems within 90 days of system acceptance. []- Exception	☐	☐	☐
7165 Energy Credits	C406.2.1.3	Project	Envelope energy credit measure E03 has been selected for energy credit - tested air leakage is lower than the required air leakage in C402.6.2. []- Exception	☐	☐	☐
7166 Energy Credits	C406.2.1.4	Project	Envelope energy credit measure E04 has been selected for energy credit - All roof areas have an additional R-10 continuous insulation []- Exception	☐	☐	☐
7167 Energy Credits	C406.2.1.5	Project	Envelope energy credit measure E05 has been selected for energy credit - 90% of opaque wall areas have an additional R-5 insulation. []- Exception	☐	☐	☐
7168 Energy Credits	C406.2.2.4	Project	HVAC energy credit measure H04 has been selected for energy credit - dwelling and sleeping units controlled automatically setback heating and cooling setpoint temperatures by 5F. []- Exception	☐	☐	☐
7169 Energy Credits	C406.2.2.5	Project	HVAC energy credit measure H05 has been selected for energy credit - dedicated outdoor air systems follow the control requirements of C406.2.2.5. []- Exception	☐	☐	☐
7170 Energy Credits	C406.2.3.1.1	Project	Service water heating energy credit measure W01 has been selected for energy credit - At least 30% of the buildings hot water loads served by renewable or waste heat energy. []- Exception	☐	☐	☐
7171 Energy Credits	C406.2.3.1.2	Project	Service water heating energy credit measure W02 has been selected for energy credit - a heat pump water heaters serve >= 30% of hot water heating load. []- Exception	☐	☐	☐

7172 Energy Credits	C406.2.3.2	Project	Service water heating energy credit measure W04 has been selected for energy credit - hot water pipe insulation is <= 1.5 times the thickness required in C404.4. Piping is insulated from hot water source to fixture shutoff. []- Exception	☐	☐	☐
7173 Energy Credits	C406.2.3.3	Project	Service water heating energy credit measure W05 has been selected for energy credit - For Group B or E buildings > 5,000 sq ft, service water heating systems shall have point of use water heaters with piping insulated in Table C404.4.1. []- Exception	☐	☐	☐
7174 Energy Credits	C406.2.3.3	Project	Service water heating energy credit measure W06 has been selected for energy credit - thermostatic balancing valves installed in hot water recirculation systems. []- Exception	☐	☐	☐
7175 Energy Credits	C406.2.3.3	Project	Service water heating energy credit measure W07 has been selected for energy credit - self regulating electric heat cables, kits and controls installed on central hot water systems in buildings > 10,000 sq ft. []- Exception	☐	☐	☐
7176 Energy Credits	C406.2.3.4	Project	Service water heating energy credit measure W08 has been selected for energy credit - each dwelling unit in Group R-2 buildings with a central water heating system provided with a hot water meter to provide consumption data for each dwelling unit. []- Exception	☐	☐	☐
7177 Energy Credits	C406.2.3.5	Project	Service water heating energy credit measure W09 has been selected for energy credit - dwelling units, sleeping units and guest rooms have maximum flow rates in accordance with Table C406.2.3.5. []- Exception	☐	☐	☐
7178 Energy Credits	C406.2.3.6	Project	Service water heating energy credit measure W10 has been selected for energy credit - Drain water heat recovery units with a recovery efficiency of >= 54% (CSA B55.1) preheat cold water serving building showers. []- Exception	☐	☐	☐
7179 Energy Credits	C406.2.4	Project	Energy credit measure P01 has been selected for energy credit - energy monitoring system installed that complies with C405.13.1 through C405.13.5. []- Exception	☐	☐	☐
7180 Energy Credits	C406.2.5.2	Project	Energy credit measure Envelope L02 has been selected for energy credit - qualifying spaces has general lighting controlled by high-end trim lighting controls in compliance with C406.2.5.2. []- Exception	☐	☐	☐
7181 Energy Credits	C406.2.5.3	Project	Lighting energy credit measure L03 has been selected for energy credit - increased occupancy sensor control in accordance with C406.2.5.3.1 through C406.2.5.3.3. []- Exception	☐	☐	☐

7182 Energy Credits	C406.2.5.4	Project	Lighting energy credit measure L04 has been selected for energy credit - 5% increase in daylight area over typical daylight area from Table C406.2.5.4. []- Exception	☐	☐	☐
7183 Energy Credits	C406.2.5.5	Project	Lighting energy credit measure L05 has been selected for energy credit - Group R-2 occupancies have occupancy sensor interior lighting control on lighting and receptacles. []- Exception	☐	☐	☐
7184 Energy Credits	C406.2.6.1	Project	Energy credit measure Q01 has been selected for energy credit - Qualifying elevators in the building >= 3 stories have efficiency class A per ISO 25745-2 Table 7. []- Exception	☐	☐	☐
7185 Energy Credits	C406.2.6.2	Project	Energy credit measure Q02 has been selected for energy credit - Group A-2 buildings, commercial kitchen equipment comply with Tables C406.2.6.2(1) through C406.2.6.2(4). []- Exception	☐	☐	☐
7186 Energy Credits	C406.2.6.3	Project	Energy credit measure Q03 has been selected for energy credit - Groups R-1 and R-2 buildings with efficient dishwashers, refrigerators and freezers. []- Exception	☐	☐	☐
7187 Energy Credits	C406.2.6.4	Project	Energy credit measure Q04 has been selected for energy credit - Building contains a fault detection and diagnostics monitoring system. []- Exception	☐	☐	☐
7188 Energy Credits	C406.3.1	Project	Renewable energy credit measure R01 has been selected for energy credit - renewable energy (on-site and off-site) is above minimum requirements of C405.15 to generate energy credits. []- Exception	☐	☐	☐
7189 Energy Credits	C406.3.2	Project	Load management energy credit measure G01 has been selected for energy credit - demand responsive lighting controls for interior lighting comply with C405.2.8.1. []- Exception	☐	☐	☐
7190 Energy Credits	C406.3.3	Project	Load management energy credit measure G02 has been selected for energy credit - building has automatic load management controls in accordance with C406.3.3. []- Exception	☐	☐	☐
7191 Energy Credits	C406.3.4	Project	Load management energy credit measure G03 has been selected for energy credit - building has automatic shading load management controls for east, west and south exposures that are >20% of all wall area. []- Exception	☐	☐	☐
7192 Energy Credits	C406.3.5	Project	Load management energy credit measure G04 has been selected for energy credit - electric storage devices charging managed by an automatic load management system storing energy during nonpeak periods and discharge during peak periods. []- Exception	☐	☐	☐

7193 Energy Credits	C406.3.6	Project	Load management energy credit measure G05 has been selected for energy credit - automated controls installed to activate ice or chilled water storage equipment to reduce peak demand in summer. []- Exception	☐	☐	☐
7194 Energy Credits	C406.3.7	Project	Load management energy credit measure G06 has been selected for energy credit - automated load management controls installed for electric service hot water systems in accordance with ANSI/CTA-2045-B to preheat SHW prior to peak periods and suspending operation during peak periods. []- Exception	☐	☐	☐
7195 Energy Credits	C406.3.8	Project	Load management energy credit measure G07 has been selected for energy credit - building has additional interior mass and night flush control of HVAC system meeting requirements of C406.3.8. []- Exception	☐	☐	☐
7196 Post Construction	C408.1.1	Project	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. []- Exception	☐	☐	☐
7208 Post Construction	C408.3.2.2	Project	Furnished O&M instructions for systems and equipment to the building owner or designated representative. []- Exception	☐	☐	☐