

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

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

C401.2.1: ASHRAE Prescriptive Compliance Option

Compliance applying ASHRAE Section 5, Building Envelope; Section 6, Heating, Ventilating, and Air Conditioning; Section 7, Service Water Heating; Section 8, Power; Section 9, Lighting; and Section 10, Other Equipment

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.

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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: _____

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Compliance Summary			
Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			PASSES
ADDITIONAL EFFICIENCY, RENEWABLE AND LOAD MANAGEMENT REQUIREMENTS	87.00	43.00	PASSED
LIGHTING POWER	1518.00	3944.11	PASSES
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)

Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
All Fenestration	FBC2026	Percent Fenestration Max allowed (%)	13.960	40.000	Yes
SOUTH	ZONE 1	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo1Wa1Wi1	SOUTH	Exterior Window: SHGC Max allowed	.200	0.230	Yes
Pr0Zo1Wa1Wi1	ZONE 1	Exterior Window: UValue Max allowed	.400	0.620	Yes
WEST	ZONE 1	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo1Wa2Wi1	WEST	Exterior Window: SHGC Max allowed	.200	0.230	Yes
Pr0Zo1Wa2Wi1	ZONE 1	Exterior Window: UValue Max allowed	.400	0.620	Yes
Pr0Zo1Rf1	ZONE 1	Exterior Roof UValue Max allowed	.033	0.048	Yes
Pr0Zo1F11	ZONE 1	Slab Floor F-Value Max allowed	.600	0.730	Yes
SOUTH	ZONE 2	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo2Wa1Wi1	SOUTH	Exterior Window: SHGC Max allowed	.200	0.230	Yes
Pr0Zo2Wa1Wi1	ZONE 2	Exterior Window: UValue Max allowed	.400	0.620	Yes
EAST	ZONE 2	Exterior Wall: UValue Max allowed	.048	0.089	Yes
WEST	ZONE 2	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo1Rf1	ZONE 2	Exterior Roof UValue Max allowed	.033	0.048	Yes
Pr0Zo1F11	ZONE 2	Slab Floor F-Value Max allowed	.600	0.730	Yes
EAST	ZONE 3	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo3Wa3Wi1	EAST	Exterior Window: SHGC Max allowed	.200	0.230	Yes
Pr0Zo3Wa3Wi1	ZONE 3	Exterior Window: UValue Max allowed	.400	0.620	Yes
Pr0Zo3F11	ZONE 3	Slab Floor F-Value Max allowed	.600	0.730	Yes
EAST	ZONE 4	Exterior Wall: UValue Max allowed	.048	0.089	Yes
EAST-2	ZONE 4	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo3Wa3Wi1	EAST-2	Exterior Window: SHGC Max allowed	.200	0.230	Yes
Pr0Zo3Wa3Wi1	ZONE 4	Exterior Window: UValue Max allowed	.400	0.620	Yes
SOUTH	ZONE 4	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo4F11	ZONE 4	Slab Floor F-Value Max allowed	.600	0.730	Yes
EAST	ZONE 5	Exterior Wall: UValue Max allowed	.048	0.089	Yes
Pr0Zo9Wa1Wi1	EAST	Exterior Window: SHGC Max allowed	.200	0.230	Yes
Pr0Zo9Wa1Wi1	ZONE 5	Exterior Window: UValue Max allowed	.400	0.620	Yes
Pr0Zo9Rf1	ZONE 5	Exterior Roof UValue Max allowed	.033	0.048	Yes

Meets Prescriptive Envelope Requirements -- PASSES

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) 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					PASSES	

Project: FBC2026 Title: FBC2026 Type: Office (WEA File: FL_MIAMI_INTL_AP.tm3)								
Lighting Power Compliance								
Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Space 1	12	Lobby (General) - Reception and Waiting	1,568	23.0	1	330	330	1,254
Space 2	12	Lobby (General) - Reception and Waiting	906	23.0	1	330	330	725
Space 3	17	Office - Enclosed	945	12.0	1	374	374	690
Space 4	17	Office - Enclosed	1,393	12.0	1	330	330	1,017
Space 5	2	Storage & Warehouse - Inactive Storage	736	10.0	1	154	154	258
Design : 1518 (W) Effective: 1518 (W) Allowance: 3944.111 (W) Passing requires Design to be at most 100% of Criteria							PASSES	

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>	12	<u>Space 1 (Lobby (General) - Reception and Waiting)</u>	1,568	COMPLIANCE: PASSES REQUIRED: All of 1 7 ; one of 8 9 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>	12	<u>Space 2 (Lobby (General) - Reception and Waiting)</u>	906	COMPLIANCE: PASSES REQUIRED: All of 1 7 ; one of 8 9 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>	17	<u>Space 3 (Office - Enclosed)</u>	945	COMPLIANCE: PASSES REQUIRED: All of 1 4 8 ; one of 2 3 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>	17	<u>Zo0Sp1 (Office - Enclosed)</u>	1,393	COMPLIANCE: PASSES REQUIRED: All of 1 4 8 ; one of 2 3 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 COMPLIANCE: PASSES</u> REQUIRED: All of 1 4 7 ; one of 2 3 ; one of 8 9 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

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System Report Compliance

Sys1	3.5 TONS	Constant Volume Air Cooled Split System < 65000 Btu/hr	No. of Units 1
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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	13.40			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
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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
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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

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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

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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

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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

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Additional Efficiency Requirements

Energy Credit Required: 43
Credits Proposed: 87

Compliance: PASSED

P-Group Energy monitoring

P01	Energy Monitoring	3
	Complies with 11.5.2.4	True

L-Group Energy savings in lighting systems

L02	Continuous Dimming and High-End Trim.	7.6
	Complies with 11.5.2.5.2 Continuous Dimming and High-End Trim. Not including dwelling units or guest rooms	True
	Percent of gross lighted floor area receiving high-end trim (Not including dwelling units or guest rooms)	95

L-Group Energy savings in lighting systems

L03	Occupancy Sensor Control Areas	6
	Complies with 11.5.2.5.3 Occupancy Sensor Control Areas.	True

L-Group Energy savings in lighting systems

L04	Increased Daylighting Control Area	16
	Gross lighted floor area (SF)	10000
	Actual daylight area with continuous dim (SF)	5000

R-Group Renewable energy

R01	On-Site Renewable Energy	42
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Complies with 11.5.2.6 R01 On-Site Renewable energy	True
Actual total rating of on-site renewable energy systems (W).	4000
Project gross conditioned floor area of all floors.	5000
Claiming exception to 10.5..1.1	False

G-Group Load Management

G01	Lighting Load Management	6.16
	Percentage lighting load management (in %)	77

Energy Credit Required: 43
Credits Proposed: 87

Compliance: PASSED

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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						
8001 Plan Review	4.2.2, 5.4.3.1.1, 5.7	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	☐	☐	☐
8020 Plan Review	5.5.4.2.3	Envelope	In buildings > 2,500 ft2, any enclosed spaces directly under a roof with ceiling heights > 15 ft. and used as an office, lobby, atrium, concourse, corridor, storage (including nonrefrigerated warehouse), gymnasium, fitness/exercise area, playing area, gymnasium seating area, convention exhibit/event space, courtroom, automotive service, fire station engine room, manufacturing corridor/transition and bay areas, retail, library reading and stack areas, distribution/sorting area, transportation baggage and seating areas, or workshop, the following requirements apply: The daylight zone under skylights is >= half the floor area and (a) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40 or (b) the minimum skylight effective aperture >= 1 percent. The skylights have a measured haze value > 90 percent. []- Exception Areas with obstructions that block direct beam sunlight on >= 1/2 of the roof over the enclosed area for more than 1,500 daytime hours per year between 8 am and 4 pm. Spaces where the daylight zone under rooftop monitors is > 50 percent of the enclosed space floor area. Enclosed spaces where 90 percent of the skylight area is shaded on June 21 at noon by permanent architectural features of the building (documentation required). Enclosed spaces where the total area minus the primary and secondary sidelighted area(s) is less than 2500 ft2 and where the lighting is controlled according to sidelighting requirements described in Section 9.4.1.1(e) Requirement does not apply.	☐	☐	☐
8006 Plan Review	9.7	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	☐	☐	☐

8005 Plan Review	4.2.2, 9.4.3, 9.7	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	☐	☐	☐
8002 Plan Review	4.2.2, 6.4.4.2.1, 6.7.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks. []- Exception	☐	☐	☐
8003 Plan Review	4.2.2, 7.7.1, 10.4.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide. []- Exception	☐	☐	☐
8007 Plan Review	4.2.5.2	Mechanical	Commissioning shall be performed as stated in Sections 5.9.2, 6.9.2, 7.9.2, 8.9.2, 9.9.2, 10.9.2, 11.2(d), and G1.2.1(c). Commissioning must utilize ASHRAE/IES Standard 202 or other generally accepted engineering standards acceptable to the building official. FPT and verification requirements for commissioning are as stated in Section 4.2.5.1. Commissioning shall document compliance of the building systems, controls, and building envelope with required provisions of this standard. Commissioning requirements shall be incorporated into the construction documents. []- Exception Buildings, additions, or alterations with less than 10,000 ft ² of conditioned space and combined heating, cooling, and service water heating equipment totaling less than 960,000 Btu/h in capacity. Buildings or portions of buildings that use the Simplified Approach Option for HVAC Systems in Section 6.3. Dwelling units. Nonrefrigerated warehouses.	☐	☐	☐
8004 Plan Review	4.2.2, 8.4.1.1, 8.4.1.2, 8.7	Project	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%. []- Exception	☐	☐	☐
2. Footing / Foundation Inspection						
8008 Insulation	4.2.4	Envelope	Installed below-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
8009 Insulation	5.8.1.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐

8010 Insulation	4.2.4	Envelope	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
8011 Insulation	5.8.1.2	Envelope	Slab edge insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐
8012 Insulation	5.5.3.5	Envelope	Slab edge insulation depth/length. []- Exception	☐	☐	☐
8013 Insulation	5.8.1.7	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities. []- Exception	☐	☐	☐
8014 Insulation	5.8.1.7.3	Envelope	Insulation in contact with the ground has $\leq 0.3\%$ water absorption rate per ASTM C272. []- Exception	☐	☐	☐
8016 Insulation	6.4.4.1.5	Envelope	Bottom surface of floor structures incorporating radiant heating insulated to $\geq R-3.5$. []- Exception Requirement does not apply.	☐	☐	☐
8015 HVAC	6.4.3.7	Mechanical	Freeze protection and snow/ice melting system sensors for future connection to controls. []- Exception Requirement does not apply	☐	☐	☐
3. Framing / Rough-In Inspection						
8017 Air Leakage	5.4.3.1	Envelope	The buildings complies with measured air leakage requirements in Section 5.4.3.1.4 or with continuous air barrier design and installation in accordance with Section 5.9.1.2 []- Exception Requirement does not apply.	☐	☐	☐
8018 Air Leakage	5.4.3.2	Envelope	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner. []- Exception Requirement does not apply.	☐	☐	☐
8019 Air Leakage	5.4.3.4	Envelope	Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are ≥ 7 ft apart (≥ 16 ft apart for adjoining floor area ≥ 40000 sq.ft.). Vestibule floor area ≤ 750 sq.ft. or 2 percent of the adjoining conditioned floor area. []- Exception Doors not intended to be used as a building entrance. Doors opening directly from a dwelling unit. Building entrances for buildings located in climate zone 1 or 2. Doors into semiheated spaces. Enclosed elevator lobbies into parking garages. Building entrances in climate zone 3, < 4 stories and $< 10,000$ ft ² . Building entrances in climate zones 4-8 and < 1000 ft ² . Doors that open directly from a space ≤ 3000 ft ² and separated from the building entrance. Self-closing doors in climate zones 0-4 with an air curtain. Self-closing doors < 15 stories in climate zones 5-8 with an air curtain. Requirement does not apply	☐	☐	☐

8021 Fenestration	5.5.4.3a	Envelope	Vertical fenestration U-Factor. []- Exception	☐	☐	☐
8022 Fenestration	5.5.4.3b	Envelope	Skylight fenestration U-Factor. []- Exception	☐	☐	☐
8023 Fenestration	5.5.4.4.1	Envelope	Vertical fenestration SHGC value. []- Exception	☐	☐	☐
8024 Fenestration	5.5.4.4.2	Envelope	Skylight SHGC value. []- Exception	☐	☐	☐
8025 Fenestration	5.8.2.1, 5.8.2.3, 5.8.2.4, 5.8.2.5	Envelope	Fenestration products rated (U-factor, SHGC, and VT) in accordance with NFRC or energy code defaults are used. []- Exception	☐	☐	☐
8026 Fenestration	5.8.2.2	Envelope	Fenestration and door products are labeled, or a signed and dated certificate listing the U-factor, SHGC, VT, and air leakage rate has been provided by the manufacturer. []- Exception	☐	☐	☐
8027 Fenestration	5.5.3.6	Envelope	U-factor of opaque doors associated with the building thermal envelope meets requirements. []- Exception	☐	☐	☐
4. Plumbing Rough-In Inspection						
8028 HVAC	7.4.4.1	Mechanical	Temperature controls installed on service water heating systems ($\leq 120^{\circ}\text{F}$ to maximum temperature for intended use). []- Exception Manufacturer's instructions specify a higher minimum setting.	☐	☐	☐
8029 HVAC	7.4.4.2	Mechanical	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace. []- Exception	☐	☐	☐
8030 HVAC	7.4.6	Mechanical	Heat traps installed on non-circulating storage water tanks. []- Exception	☐	☐	☐
5. Mechanical Rough-In Inspection						
8031 HVAC	6.4.1.4, 6.4.1.5	Mechanical	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1. []- Exception	☐	☐	☐
8032 HVAC	6.4.1.5.2	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only. []- Exception Requirement does not apply	☐	☐	☐
8033 HVAC	6.4.3.4.1	Mechanical	Stair and elevator shaft vents have motorized dampers that automatically close. []- Exception Nonmotorized gravity backdraft dampers are acceptable in buildings <3 stories or for any height in Climate Zones 0, 1, 2, and 3. Requirement does not apply	☐	☐	☐

8034 HVAC	6.4.3.4.2, 6.4.3.4.3	Mechanical	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. []- Exception Ventilation systems serving unconditioned spaces. Gravity dampers acceptable in buildings <3 stories Gravity dampers acceptable in systems with outside or exhaust air flow rates less than 300 cfm where dampers are interlocked with fan Kitchen exhaust systems Continuous operation. Requirement does not apply.	☐	☐	☐
8035 HVAC	6.4.3.4.5	Mechanical	Parking garage ventilation shall meet the following: 1) Separate ventilation systems and control systems for each section, 2) Control systems shall automatically detect and control contaminant levels and capable to reduce airflow to 20% or less of design capacity and 3) The ventilation system for each section shall have controls that result in fan motor demand <= 30% of design wattage at 50% of the design airflow. []- Exception Garage ventilation systems having a total ventilation system horsepower <5 hp at fan system design conditions and where the parking garage section has no mechanical conditioning. Requirement does not apply.	☐	☐	☐
8036 HVAC	6.4.3.4.4	Mechanical	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required. []- Exception HVAC systems intended to operate continuously.	☐	☐	☐
8037 HVAC	6.4.3.8	Mechanical	Demand control ventilation provided for spaces larger than the floor area of Table 6.4.3.8 based on occupant outside airflow in cfm per 1000 sq ft and served by an air economizer, automatic damper or with design airflow > 3000 cfm []- Exception Multiple-zone systems without DDC of individual zones communicating with a central control panel. Spaces where 75 percent of the supply outdoor airflow is required for makeup air that is exhausted from the space or transfer air required for makeup air that is exhausted from the space(s). Space is one of following occupancy type: Correctional cells, daycare sickrooms, science labs, laboratories, beauty and nail salons, and bowling alley seating. Spaces where ASHRAE 170 does not permit reduction of airflow.	☐	☐	☐
8038 HVAC	6.5.3.2.1	Mechanical	DX cooling systems >= 75 kBtu/h (>= 65 kBtu/h effective 1/2016) and chilled-water and evaporative cooling fan motor hp >= 1/4 designed to vary supply fan airflow as a function of load and comply with operational requirements. []- Exception Chilled-water and evaporative cooling units with <1 hp fan motors not used to provide ventilation air and the indoor fan cycles with the load. Minimum speed requirements of Standard 62.1 will be applied. Requirement does not apply.	☐	☐	☐

8039 HVAC	6.4.4.1.1	Mechanical	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant. []- Exception	☐	☐	☐
8040 HVAC	6.4.4.1.2	Mechanical	HVAC ducts and plenums insulated per Table 6.8.2. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection. []- Exception Factory-installed as part of HVAC equipment Ducts/plenums located in heated, semi-heated, or cooled spaces R-3.5 for runouts <10 ft to air terminals/outlets Backs of air outlets or outlet plenums to unconditioned or indirectly condition spaces	☐	☐	☐
8041 HVAC	6.4.4.1.3	Mechanical	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection. []- Exception Piping within HVAC equipment. Fluid temperatures between 60 and 105°F. Fluid not heated or cooled. Runouts <4 ft in length. Pipe unions in heating systems. Requirement does not apply.	☐	☐	☐
8042 HVAC	6.4.4.1.4	Mechanical	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5. []- Exception Requirement does not apply.	☐	☐	☐
8043 HVAC	6.4.4.2.1	Mechanical	Ducts and plenums having pressure class ratings are Seal Class A construction. []- Exception Requirement does not apply	☐	☐	☐
8044 HVAC	6.4.4.2.2	Mechanical	Ductwork operating >3 in. water column requires air leakage testing. []- Exception Requirement does not apply.	☐	☐	☐

8045 HVAC	6.5.1, 6.5.1.1, 6.5.1.3, 6.5.1.4	Mechanical	Air economizers provided where required (and not exempted), meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, air relief, and provide a means to relieve excess outside air during operation. []- Exception High-efficiency cooling equipment has been installed. The qualifying minimum equipment efficiency has been computed and is represented above. Air/evap condenser serving space with open-case refrigeration Filtration requirements applicable to the conditioned area would be compromised per Section 6.2.1 in Standard 62.1. Medical facility where 75% of design air is to be humidified above 35°F, other buildings more than 25% of design air designed is it to be humidified above 35°F dew-point temperature (not applicable to computer rooms). Systems that will be operated < 20 hours per week. Systems serving residential spaces with system capacity < 675 kBtu/h. System has condenser heat recovery serving service water heat. System serves computer room that have total design cooling load < 3,000 kBut/h and building not served by centralized chilled water plant, or room design load < 600 kBtu/hr and is served by centralized chilled water plant, or cooling towers are not permitted. Transmission and infiltration losses at outdoor temp = 60°F are > sensible design cooling loads (net of losses).	☐	☐	☐
8046 HVAC	6.5.1, 6.5.1.2, 6.5.1.2.1, 6.5.1.3	Mechanical	Water economizers provided where required , meet the requirements for design capacity, maximum pressure drop and integrated economizer control. Capable if providing 100% of the expected system cooling load when outdoor air <= 50F. []- Exception Requirement does not apply	☐	☐	☐
8047 HVAC	6.5.1.4	Mechanical	Economizer operation will not increase heating energy use during normal operation. []- Exception Economizers on VAV systems that raise zone heating due to a reduction in supply air temperature.	☐	☐	☐

8048 HVAC	6.5.2.1	Mechanical	Zone controls can limit reheating, recooling, simultaneous heating and cooling and sequence heating and cooling to each zone. []- Exception Zones for which the volume of air that is reheated, recooled, or mixed is no greater than required to meet Standard 62.1; 20% of the zone design peak supply for systems with DDC and 30% for other systems; air flow rate approved by the AHJ; OR airflow rate that complies with applicable codes/accreditation standards Zones with DDC include: larger of <=20% zone peak flow, flow required per Standard 62.1, higher rate approved by AHJ for outlying conditions, OR airflow rate that complies with applicable codes/accreditation standards; air flow reheated/recooled/mixed <= 50% of zone peak supply rate; first stage of heating consists of modulating the zone supply air temperature setpoint to a maximum setpoint with airflow held at dead band flow rate; AND second stage of heating modulates airflow rate from the dead band flow rate up to the heating maximum flow rate. 75% of the energy is provided from site-recovered or site-solar energy Laboratory exhaust systems compliant with Section 6.5..7.2. Requirement does not apply	☐	☐	☐
8049 HVAC	6.5.2.2.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used. []- Exception	☐	☐	☐
8050 HVAC	6.4.3.11.1	Mechanical	Electric motor driven chilled-water plants have measurement devices installed and measure the electricity use and efficiency []- Exception Requirement does not apply	☐	☐	☐
8051 HVAC	6.4.3.11.2	Mechanical	Electricity use and efficiency are trended every 15 minutes and graphically displayed, including hourly, daily, monthly, and annual data. Data are preserved for 36 months or more. []- Exception Requirement does not apply	☐	☐	☐
8052 HVAC	6.5.2.2.2	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	☐	☐	☐
8053 HVAC	6.5.2.2.3	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.	☐	☐	☐

8054 HVAC	6.5.2.3	Mechanical	Dehumidification controls provided to prevent reheating, recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream. []- Exception Capability of first reducing supply air volume 50% or less of the design rate or minimum outdoor air ventilation, or per regulatory standard, whichever is larger, before combined heating/cooling occurs. Cooling capacity <80 kBtu/h and capability to unload cooling equipment. Cooling capacity <40 kBtu/h. Rigid humidity requirements. Site-recovered or site-solar energy sources or. Use of a desiccant systems.	☐	☐	☐
8055 HVAC	6.5.2.4.1	Mechanical	Humidifiers with airstream mounted preheating jackets have preheat auto-shutoff value set to activate when humidification is not required. []- Exception Requirement does not apply.	☐	☐	☐
8056 HVAC	6.5.2.4.2	Mechanical	Humidification system dispersion tube hot surfaces in the airstreams of ducts or air-handling units insulated $\geq R-0.5$. []- Exception Mechanical cooling (including economizer operation) does not occur simultaneously with humidification. Requirement does not apply.	☐	☐	☐
8057 HVAC	6.5.2.5	Mechanical	Preheat coils controlled to stop heat output whenever mechanical cooling, including economizer operation, is active. []- Exception	☐	☐	☐
8058 HVAC	6.5.1.5	Mechanical	Water economizer specified on hydronic cooling and humidification systems designed to maintain inside humidity at $>35^{\circ}\text{F}$ dewpoint if an economizer is required. []- Exception	☐	☐	☐
8059 HVAC	6.5.3.1.1	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 of 1 hp or less. Fans exhausting air from fume hoods.	☐	☐	☐
8060 HVAC	6.5.3.1.2	Mechanical	HVAC fan motors not larger than the first available motor size greater than the bhp. []- Exception For fans <6 bhp, if the first available motor larger than the bhp has a nameplate rating within 50% of the bhp, this first available motor may be selected. For fans ≥ 6 bhp, if the first available motor larger than the brake hp has a nameplate rating with 30% of the brake hp, this first available motor may be selected. Fans with motor nameplate horsepower < 1	☐	☐	☐

8061 HVAC	6.5.3.1.3	Mechanical	Fans have energy index (FEI) ≥ 1.00 at highest design airflow. VAV fans have an FEI ≥ 0.95. []- Exception Fans that are not embedded with a horsepower < 1.0 hp or electrical input power < 0.89 kW. Embedded fans with a combined horsepower ≤ 5 hp or with an electrical input power ≤ 4.1 kW. Embedded fans listed under Section 6.4.1.1. Embedded fans included in equipment with third-party-certified seal. Ceiling fans. Fans used for moving gases at temperatures above 482°F. Fans used for operation in explosive atmospheres. Reversible fans used for tunnel ventilation. Fans outside the scope of AMCA 208. Fans when operating during emergency conditions.	☐	☐	☐
8062 HVAC	6.5.3.7	Mechanical	Motors for fans $\geq 1/12$ hp and < 1 hp are electronically-commutated motors or have a minimum motor efficiency of 70%. These motors are also speed adjustable for either balancing or remote control. []- Exception Fans in HVAC equipment Intermittent operating dryer exhaust, range hoods and range booster fans Fans in radon systems Fans not covered in scope of Table 6.5.3.7 Ceiling fans covered under 10 CFR 430 Appendix U Requirement does not apply	☐	☐	☐
8063 HVAC	6.4.3.10	Mechanical	DDC system installed and capable of and configured to provide control logic including monitoring zone and system demand for fan pressure, pump pressure, heating, and cooling; transferring zone and system demand information from zones to air distribution system controllers and from air distribution systems to heating and cooling plant controllers; automatically detecting and alerting system operator when zones and systems excessively drive the reset logic; allow operator removal of zone(s) from the reset algorithm; AND capable of trending and graphically displaying input and output points. []- Exception Requirement does not apply.	☐	☐	☐
8064 HVAC	6.5.3.2.2	Mechanical	VAV fans have static pressure sensors positioned so setpoint ≤ 1.2 in. w.c. design pressure. []- Exception Systems with DDC of individual boxes reporting to the central control panel and reset of static pressure setpoint based on the zone requiring the most pressure.	☐	☐	☐
8065 HVAC	6.5.3.2.3	Mechanical	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure. Controls provide: zone damper monitoring or indicator of static pressure need; autodetection, alarm, and operator override of zones excessively triggering reset logic. []- Exception	☐	☐	☐

8066 HVAC	6.5.3.3	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 air intake flow. Requirement does not apply.	☐	☐	☐
8067 HVAC	6.5.3.5	Mechanical	Multiple zone HVAC systems have supply air temperature reset controls. []- Exception Systems that do not reheat, recool, or mix heated and cooled supply air Systems that use site recovered or site solar energy for at least 75% of the energy for reheating (on an annual basis). Requirement does not apply.	☐	☐	☐
8068 HVAC	6.5.4.1	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	☐	☐	☐
8069 HVAC	6.5.4.2	Mechanical	HVAC pumping systems with ≥ 3 control values designed for variable fluid flow (see section details). []- Exception Differential pressure set-point reset is not required where valve position is used to comply with Section 6.5.4.4. Variable-pump flow control not required on heating-water pumps where more than 50% of annual heat is generated by an electric boiler. Variable flow not required for primary pumps in a primary/secondary system Variable flow not required for a coil pump provided for freeze protection Variable flow not required for heat recovery coil runaround loops Requirement does not apply	☐	☐	☐
8070 HVAC	6.5.4.3, 6.5.4.3.1, 6.5.4.3.2	Mechanical	Fluid flow shutdown in pumping systems to multiple chillers or boilers when systems are shut down. []- Exception	☐	☐	☐
8071 HVAC	6.5.4.4	Mechanical	Temperature reset by representative building loads in pumping systems >10 hp for chiller and boiler systems >300,000 Btu/h. []- Exception Chilled-water supply is already cold such that blending would be required to achieve the reset supply temperature. A specific temperature is required for a process application. Water temperature reset is not required. Requirement does not apply.	☐	☐	☐
8072 HVAC	6.5.4.5.1	Mechanical	Two-position automatic valve interlocked to shut off water flow when compressor is off. []- Exception Fluid Economizer	☐	☐	☐

8073 HVAC	6.5.4.5.2	Mechanical	Hydronic heat pumps and water-cooled unitary air conditioners with pump systems >5 hp have controls or devices to reduce pump motor demand. []- Exception	☐	☐	☐
8074 HVAC	6.5.4.6	Mechanical	Chilled-water and condenser water piping sized according to design flow rate and total annual hours of operation (Table 6.5.4.6). []- Exception Piping is not in the critical circuit at design conditions nor during more than 30% of operating hours. Piping systems <= total pressure drop than a system constructed with standard weight steel pipe with piping and fittings sized per Table 6.5.4.6.	☐	☐	☐
8075 HVAC	6.5.5.2.1	Mechanical	Fan systems with motors or array of motors (including the motor service factor) with connected power totaling >=5 hp associated with heat rejection equipment to have controls and/or devices that result in fanmotor demand of <= 30% of design wattage at 50% of design airflow and automatically modulates fan speed to control the leaving fluid temperature or condensing temp/pressure of heat rejection device. []- Exception Condenser fans serving multiple refrigerant or fluid cooling circuits. Condenser fans serving flooded condensers. Requirement does not apply	☐	☐	☐
8076 HVAC	6.5.5.2.2	Mechanical	Multicell heat rejection equipment with variable-speed fan drives installed that operate the maximum number of fans allowed that comply with manufacturers specs and control all fans to the same fan speed required for the instantaneous cooling duty. []- Exception	☐	☐	☐
8077 HVAC	6.5.6.1, 6.5.6.1.1	Mechanical	Nontransient dwelling units shall be provided with outdoor air energy recovery ventilation systems that meet the requirements of Section 6.5.6.1.1 []- Exception Nontransient dwelling units in Climate Zone 3C. Nontransient dwelling units <= 500 ft2 of floor area in Climate Zone 0, 1, 2, 3, 4C, and 5C. Energy recovery requirements at heating design condition in Climate Zones 0, 1, and 2. Enthalpy recovery requirements at cooling design condition in Climate Zones 4, 5, 6, 7, 8. Requirement does not apply	☐	☐	☐

8078 HVAC	6.5.6.1, 6.5.6.1.2	Mechanical	Fan systems serving spaces other than nontransient dwelling units have an energy recovery system meet the requirements in Tables 6.5.6.1.2-1 and 6.5.6.1.2-2 []- Exception Laboratory systems. Systems serving spaces heated < 60°F. Heating energy recovery > 60% of the outdoor air heating energy is recovered or renewable energy in Climate Zones 5 through 8. Enthalpy recovery ratio for heating in Climate Zones 0, 1, and 2. Enthalpy recovery ratio for cooling design in Climate Zones 3C, 4C, 5B, 5C, 6B, 7, and 8. Sum of the exhaust rates < 75% of the design outdoor airflow rate. Systems in Climate Zones 0 through 4 requiring dehumidification. Systems expected to operate < 20 hours per week. Indoor pool dehumidifiers meeting Section 6.5.6.4. Requirement does not apply.	☐	☐	☐
8079 HVAC	6.5.6.2	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 condenser load Facilities providing 60% of their service water heating from site-solar, site-recovered, or other energy sources.	☐	☐	☐
8080 HVAC	6.5.7.1	Mechanical	Conditioned supply air to space with mechanical exhaust <= the greater of criteria of supply flow, required ventilation rate, exhaust flow minus the available transfer air (see section details). []- Exception Biosafety level >= 3. Vivarium spaces. Spaces with regulated positive pressure air flows. Requirement does not apply	☐	☐	☐
8081 HVAC	6.5.7.2.1	Mechanical	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume. []- Exception Where hoods are used to exhaust ventilation air that would otherwise exfiltrate or be exhausted by other fan systems. Certified grease extractor hoods that require a face velocity no greater than 60 fpm. Requirement does not apply	☐	☐	☐
8082 HVAC	6.5.7.2.2	Mechanical	Kitchen hoods with a total exhaust airflow rate >5000 cfm meet replacement air, ventilation system, or energy recovery requirements shown in Table 6.5.7.1.3. []- Exception Systems where transfer air that would otherwise be exhausted is used for at least 75% of all the replacement air. Requirement does not apply.	☐	☐	☐
8083 HVAC	6.5.7.2.3	Mechanical	Kitchen hoods with a total exhaust airflow rate >5000 cfm meet replacement air, ventilation system, or energy recovery requirements. []- Exception Requirement does not apply	☐	☐	☐

8084 HVAC	6.5.7.2.4	Mechanical	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems. []- Exception Requirement does not apply	☐	☐	☐
8085 HVAC	6.5.8.1	Mechanical	Unenclosed spaces that are heated use only radiant heat. []- Exception Loading docks with air curtains. Requirement does not apply	☐	☐	☐
8086 HVAC	6.5.9	Mechanical	Hot gas bypass limited to: ≤240 kBtu/h – 15% >240 kBtu/h – 10% []- Exception	☐	☐	☐
8087 HVAC	6.4.3.9	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 ≥ 85F. []- Exception Heating/cooling provided by site-recovered energy or with transfer air that would otherwise be exhausted. Requirement does not apply	☐	☐	☐
8088 Controls	6.5.10	Mechanical	Doors separating conditioned space from the outdoors have controls that disable/reset heating and cooling system when open. []- Exception Building entrances have automatic closing devices Space has no thermostat Alteration project to existing building Loading dock	☐	☐	☐
8089 HVAC	7.4.2	Mechanical	Service water heating equipment meets efficiency requirements. []- Exception Water heating equipment >140 gallon capacity is not required to meet standby loss requirements when insulated, no pilot light, and flue damper or fan-assisted combustion. Storage water heater capacity <20 gallons.	☐	☐	☐
8090 HVAC	7.5.1	Mechanical	Combined space and water heating system not allowed unless standby loss less than calculated maximum. AHJ has approved or combined connected load <150 kBtu/h. []- Exception	☐	☐	☐
8091 HVAC	7.5.2	Mechanical	Service water heating equipment used for space heating complies with the service water heating equipment requirements. []- Exception	☐	☐	☐
8143 System Specific	6.4.1.4, 6.4.1.5	Mechanical	Equipment minimum efficiency: []- Exception	☐	☐	☐
8144 System Specific	6.4.1.4, 6.4.1.5	Mechanical	Equipment minimum efficiency: []- Exception	☐	☐	☐
8145 System Specific	6.4.1.1, 6.8.1-7a	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥40.2 gpm/hp . []- Exception	☐	☐	☐
8146 System Specific	6.4.1.1, 6.8.1-7b	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥20.0 gpm/hp. []- Exception	☐	☐	☐

8147 System Specific	6.4.1.1, 6.8.1-7c	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 16.1 gpm/hp. []- Exception	☐	☐	☐
8148 System Specific	6.4.1.1, 6.8.1-7d	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 7.0 gpm/hp []- Exception	☐	☐	☐
8149 System Specific	6.5.5.3	Mechanical	Centrifugal fan open-circuit cooling towers having combined rated capacity ≥ 1100 gpm meets minimum efficiency requirement: ≥ 38.2 gpm/hp. []- Exception Centrifugal open-circuit cooling towers with external sound attenuation or that have ducted inlet or discharge.	☐	☐	☐
8150 System Specific	6.4.1.1, 6.8.1-7e	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 176 kBtu/h-hp []- Exception	☐	☐	☐
6. Rough-In Electrical Inspection						
8096 Controls	9.4.1.4	Exterior Lighting	Automatic lighting controls for exterior lighting installed according to Section 9.4.1.4. []- Exception	☐	☐	☐
8093 Controls	9.4.1.1	Interior Lighting	Automatic control requirements prescribed in Table 9.6.1, for the appropriate space type, are installed. Mandatory lighting controls (labeled as 'REQ') and optional choice controls (labeled as 'ADD1' and 'ADD2') are implemented. []- Exception	☐	☐	☐
8094 Controls	9.4.1.1	Interior Lighting	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants. []- Exception Remote locations permitted for safety or security if used with a clearly labeled indicator pilot light.	☐	☐	☐
8095 Controls	9.4.1.1f	Interior Lighting	Daylight areas under skylights and roof monitors that have more than 150 W combined input power for general lighting are controlled by photocontrols. []- Exception Daylighted areas under skylights existing adjacent structures or natural objects block direct beam sunlight for more than 1500 daytime hours per year between 8 a.m. and 4 p.m. Daylighted areas where the skylight VT is less than 0.4. Buildings in climate zone 8 where the input power of the general lighting is less than 200W. Requirement does not apply.	☐	☐	☐
8097 Controls	9.4.1.3	Interior Lighting	Separate lighting control devices for specific uses installed per approved lighting plans. []- Exception	☐	☐	☐
8098 Wattage	9.5.2.2	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 Other merchandise categories can be included in Retail Areas 2 through 4, provided that the need for additional lighting power is approved by the authority having jurisdiction. Requirement does not apply.	☐	☐	☐

8100 Wattage	9.5.2.4	Interior Lighting	Where space LPD requirements are adjusted based on room cavity ratios, dimensions are consistent with approved plans. []- Exception Requirement does not apply.	☐	☐	☐
8099 Other Equipment	10.4.1	Mechanical	Electric motors meet requirements where applicable. []- Exception	☐	☐	☐
8092 Controls	8.4.2	Project	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device. []- Exception Receptacles intended for 24 hour operation of equipment. Spaces where safety or security concerns prohibit automatic shutoff. Space type is not private office, open office, or computer classroom. Requirement does not apply.	☐	☐	☐
7. Insulation Inspection						
8101 Insulation	4.2.4	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	☐	☐	☐
8102 Insulation	5.8.1.2, 5.8.1.3	Envelope	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the ceiling slope is <= 3:12. []- Exception	☐	☐	☐
8103 Insulation	4.2.4	Envelope	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
8104 Insulation	5.8.1.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐
8105 Insulation	4.2.4	Envelope	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. []- Exception	☐	☐	☐
8106 Insulation	5.8.1.2	Envelope	Floor insulation installed per manufacturer's instructions. []- Exception	☐	☐	☐
8107 Insulation	5.8.1.1	Envelope	Building envelope insulation is labeled with R-value or insulation certificate has been provided listing R-value and other relevant data. []- Exception	☐	☐	☐
8108 Insulation	5.8.1.9	Envelope	Building envelope insulation extends over the full area of the component at the proposed rated R or U value. []- Exception	☐	☐	☐
8109 Insulation	5.8.1.4	Envelope	Eaves are baffled to deflect air to above the insulation. []- Exception	☐	☐	☐

8110 Insulation	5.8.1.5	Envelope	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space. []- Exception Insulation materials rely on air spaces adjacent to reflective surfaces in order to achieve rated performance.	☐	☐	☐
8111 Insulation	5.8.1.6	Envelope	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation. []- Exception	☐	☐	☐
8112 Insulation	5.8.1.7.1	Envelope	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access. []- Exception	☐	☐	☐
8113 Insulation	5.8.1.7.2	Envelope	Foundation vents do not interfere with insulation. []- Exception	☐	☐	☐
8114 Insulation	5.8.1.8	Envelope	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly. []- Exception	☐	☐	☐
8. Final Inspection						
8115 Air Leakage	5.4.3.3	Envelope	Weatherseals installed on all loading dock cargo doors in Climate Zones 4-8. []- Exception Requirement does not apply	☐	☐	☐
8138 Wattage	9.4.2	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	☐	☐	☐
8135 Post Construction	8.7.3.1	Interior Lighting	Furnished as-built drawings for electric power systems within 90 days of system acceptance. []- Exception	☐	☐	☐
8136 Post Construction	8.7.3.2	Interior Lighting	Furnished O&M instructions for systems and equipment to the building owner or designated representative. []- Exception	☐	☐	☐
8137 Wattage	9.2.2.1	Interior Lighting	Interior installed lamp and fixture 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	☐	☐	☐
8116 HVAC	6.4.3.1.1	Mechanical	Heating and cooling to each zone is controlled by a thermostat control. []- Exception Perimeter systems with one control for each exposure and with the thermostat located within the zones served.	☐	☐	☐
8117 HVAC	6.4.3.1.2	Mechanical	Thermostatic controls have a 5 °F deadband. []- Exception Thermostats requiring manual changeover between heating and cooling Where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.	☐	☐	☐
8118 HVAC	6.4.3.2	Mechanical	Temperature controls have setpoint overlap restrictions. []- Exception	☐	☐	☐

8119 HVAC	6.4.3.3.1	Mechanical	HVAC systems equipped with at least one automatic shutdown control. [- Exception Controls for residential occupancies may start and stop the system under two schedules per week. Systems designed for continuous operation Systems with capacity <15,000 Btu/h and with manual controls	☐	☐	☐
8120 HVAC	6.4.3.3.2	Mechanical	Setback controls allow automatic restart and temporary operation as required for maintenance. [- Exception Radiant heating systems with a setback temperature >= 4°F below the occupied heating set point.	☐	☐	☐
8121 HVAC	6.4.3.3.3	Mechanical	Systems with setback controls and DDC include optimum start controls. Optimum start algorithm considers mass radiant slab floor temperature. [- Exception Residential spaces are not required to have optimum start controls. Requirement does not apply	☐	☐	☐
8122 HVAC	6.4.3.3.4	Mechanical	Zone isolation devices and controls. [- 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 Systems with capacity <15,000 Btu/h and with manual controls	☐	☐	☐
8123 HVAC	6.4.3.5	Mechanical	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed. [- Exception Heat pumps regulated by and meeting NAECA requirements and using internal electric resistance heating.	☐	☐	☐
8124 HVAC	6.4.3.12	Mechanical	Air economizer has a fault detection and diagnostics (FDD) system (see details for configuration and operational requirements). [- Exception Requirement does not apply	☐	☐	☐
8125 HVAC	6.4.3.6	Mechanical	When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited. Humidity control prohibits the use of fossil fuel or electricity to produce RH > 30% in the warmest zone humidified and RH < 60% in the coldest zone dehumidified. [- Exception Zones served by desiccant systems Systems in zones requiring specific humidity levels as approval by AHJ	☐	☐	☐
8126 Post Construction	6.7.3.1	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance. [- Exception	☐	☐	☐
8127 Post Construction	6.7.3.2	Mechanical	Furnished O&M manuals for HVAC systems within 90 days of system acceptance. [- Exception	☐	☐	☐
8128 Post Construction	6.7.3.3	Mechanical	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 ft2 of conditioned area. [- Exception Requirement does not apply	☐	☐	☐
8129 HVAC	6.7.3.2	Mechanical	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls. [- Exception	☐	☐	☐

8130 HVAC	7.4.4.3	Mechanical	Public lavatory faucet water temperature $\leq 110^{\circ}\text{F}$. []- Exception	☐	☐	☐
8131 HVAC	7.4.4.4	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. []- Exception	☐	☐	☐
8132 HVAC	7.4.5.1	Mechanical	Pool heaters are equipped with on/off switch and no continuously burning pilot light. []- Exception Requirement does not apply	☐	☐	☐
8133 HVAC	7.4.5.2	Mechanical	Pool covers are provided for heated pools and pools heated to $>90^{\circ}\text{F}$ have a cover $\geq R-12$. []- Exception Pools deriving $>60\%$ of the energy for heating from site-recovered Requirement does not apply	☐	☐	☐
8134 HVAC	7.4.5.3	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 require pumps Requirement does not apply	☐	☐	☐
8139 Controls	10.4.3	Mechanical	Elevators are designed with the proper lighting, ventilation power, and standby mode. []- Exception Requirement does not apply.	☐	☐	☐
8140 HVAC	7.4.3	Mechanical	All piping in recirculating system insulated []- Exception Requirement does not apply.	☐	☐	☐
8141 HVAC	7.4.3.1	Mechanical	First 8 ft of outlet piping in nonrecirculating storage system, or branch piping connected to recirculated, heat traced, or impedance heated piping is insulated. []- Exception Factory-installed piping in water heaters. Piping that conveys hot water not heated from fossil fuels or electricity. Piping < 1 in., insulation is not required. Piping in existing buildings where alterations have insufficient space or access to meet the requirements. Insulation is not required where piping passes through a framing member. Insulation is not required on piping at the point where a vertical support of the piping is installed. Requirement does not apply.	☐	☐	☐
8142 HVAC	7.4.3	Mechanical	All heat traced or externally heated piping insulated []- Exception Requirement does not apply.	☐	☐	☐