

Florida Building Code, 8th Edition (2023) - Energy Conservation.

Filing Version - Not for Compliance Submission

EnergyGauge Summit® Fla/Com-2023, Effective Date: Dec 31, 2023

C401.2.1: ASHRAE Compliance Option

Compliance applying ASHRAE 4.2.1.1(c) Normative Appendix G Performance Rating Method

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.

PROJECT SUMMARY

Short Desc: FBC2023

Description: FBC2023

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: 4887 SF

Conditioned & UnConditioned Area: 4887 SF

No of Stories: 1

Area entered from Plans 0 SF

Permit No: 0

Max Tonnage 5.8

If different, write in: _____

Compliance Summary

Component	Design	Criteria	Result
Appendix G Performance Criteria	0.81	0.52	FAILED
Proposed Bldg Unmet Hours	200.00	300.00	PASSED
Budget Bldg Unmet Hours	241.00	300.00	PASSED
LIGHTING CONTROLS			FAILS
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			PASSES
PLANT			PASSES
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			FAILS
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

Project: FBC2023
Title: FBC2023
Type: Office
(WEA File: FL_MIAMI_INTL_AP.tm3)

ASHRAE 90.1-0 Appendix G Rating

Proposed Building Energy Cost (\$): 2628

Baseline Building Energy Cost (\$): 3258

Percent Improvement over Baseline (%): 19.3

ASHRAE 4.2.1.1 Performance Cost Index PCI: 0.81

ASHRAE 4.2.1.1 Performance Cost Index Target PCI_t: 0.52

ASHRAE 4.2.1.1 Appendix G compliance: FAILED

Hours Unmet Proposed: 200

Hours Unmet Baseline: 241

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: _____
Electrical Designer: _____ Reg No: _____
Lighting Designer: _____ Reg No: _____
Mechanical Designer: _____ Reg No: _____
Plumbing Designer: _____ Reg No: _____

(*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

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Building End Uses

	1) Proposed	2) Baseline
Total	<i>169.20</i>	<i>209.35</i>
	<i>\$2,628</i>	<i>\$3,258</i>
ELECTRICITY(MBtu/kWh/\$)	<i>169.20</i>	<i>209.35</i>
	<i>49580</i>	<i>61347</i>
	<i>\$2,628</i>	<i>\$3,258</i>
AREA LIGHTS	<i>25.50</i>	<i>40.70</i>
	<i>7465</i>	<i>11919</i>
	<i>\$396</i>	<i>\$633</i>
MISC EQUIPMT	<i>45.60</i>	<i>45.60</i>
	<i>13365</i>	<i>13365</i>
	<i>\$708</i>	<i>\$710</i>
PUMPS & MISC	<i>0.00</i>	<i>0.00</i>
	<i>9</i>	<i>9</i>
	<i>\$0</i>	<i>\$0</i>
SPACE COOL	<i>64.70</i>	<i>77.15</i>
	<i>18962</i>	<i>22606</i>
	<i>\$1,005</i>	<i>\$1,200</i>
SPACE HEAT	<i>0.90</i>	<i>0.75</i>
	<i>250</i>	<i>222</i>
	<i>\$13</i>	<i>\$12</i>
VENT FANS	<i>32.50</i>	<i>45.15</i>
	<i>9529</i>	<i>13227</i>
	<i>\$505</i>	<i>\$702</i>

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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	0.04	500.0	20	300
Ext Light 3	Loading areas -- llaw enforcement, fire, emergency	No	0.35	100.0	35	30

Tradable Surfaces: 300 (W) Allowance for Tradable: 420 (W)

All External Lighting: 330 (W)

Compliance check includes a excess/Base allowance of 400.00(W)

PASSES

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Lighting Controls Compliance

Acronym	ID	Description	Area (sq.ft)
<u>Space 1</u> Lighting Controls PASSES	<u>12</u>	<u>Lobby (General) - Reception and Waiting</u>	<u>906</u>
<u>Space 2</u> Lighting Controls FAILS Control type 1 required for compliance not found Control type 7 required for compliance not found Atleast one additional control type 8 9 required for compliance	<u>12</u>	<u>Lobby (General) - Reception and Waiting</u>	<u>906</u>
<u>Space 3</u> Lighting Controls FAILS Atleast one of the following additional control types 2 3 required for compliance	<u>17</u>	<u>Office - Enclosed</u>	<u>945</u>
<u>Space 4</u> Lighting Controls FAILS Control type 1 required for compliance not found Control type 4 required for compliance not found Control type 8 required for compliance not found Atleast one of the following additional control types 2 3 required for compliance	<u>17</u>	<u>Office - Enclosed</u>	<u>1,393</u>
<u>Space 5</u> Lighting Controls FAILS Control type 4 required for compliance not found	<u>2</u>	<u>Storage & Warehouse - Inactive Storage</u>	<u>736</u>

FAILS

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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	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
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
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
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	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
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Cooling System	Air Conditioners Air Cooled 65000 - 1355000 Btu/h Cooling Capacity	70000	13.50	11.00	15.00	14.10	PASSES
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	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
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	Compliance
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]	0.93	0.92			PASSES
Water Heater 2	Gas Storage water heater	<= 75000 Btu/h; 55 - 100 Gal	0.83	0.78			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	1.00	1.00	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	0.80	1.10	FAILS

FAILS

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. To be checked by Designer or Engineer						
5010 Insulation	5.8.1.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5012 Insulation	5.8.1.2	Envelope	Slab edge insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5013 Insulation	5.5.3.5	Envelope	Slab edge insulation depth/length.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5017 Insulation	6.4.4.1.5	Envelope	Bottom surface of floor structures incorporating radiant heating insulated to $\geq R-3.5$.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5077 SYSTEM_SPECIF	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, and provide a means to relieve excess outside air during opera	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5086 SYSTEM_SPECIF	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 $\leq 50F$.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5087 SYSTEM_SPECIF	6.5.1.5	Mechanical	Economizer operation will not increase heating energy use during normal operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5093 SYSTEM_SPECIF	6.5.2.2.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5097 SYSTEM_SPECIF	6.5.2.2.3	Mechanical	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5108 SYSTEM_SPECIF	6.5.1.6	Mechanical	Water economizer specified on hydronic cooling and humidification systems designed to maintain inside humidity at >35 °F dewpoint if an economizer is required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5109 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5112 SYSTEM_SPECIFI	6.5.3.1.2	Mechanical	HVAC fan motors not larger than the first available motor size greater than the bhp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5153 HVAC	6.5.6.1	Mechanical	Exhaust air energy recovery on systems meeting Tables 6.5.6.1-1, and 6.5.6.1-2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5188 SYSTEM_SPECIF	7.4.2	Mechanical	Service water heating equipment meets efficiency requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5191 SYSTEM_SPECIF	7.5.2	Mechanical	Service water heating equipment used for space heating complies with the service water heating equipment requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5206 Insulation	5.8.1.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5208 Insulation	5.8.1.2	Envelope	Floor insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5255 Controls	10.4.3	Mechanical	Elevators are designed with the proper lighting, ventilation power, and standby mode.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5261 SYSTEM_SPECIF	6.4.1.1, 6.8.1-7a	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 40.2 gpm/hp .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5262 SYSTEM_SPECIF	6.4.1.1, 6.8.1-7b	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 20.0 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5263 SYSTEM_SPECIF	6.4.1.1, 6.8.1-7c	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 16.1 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5264	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7d	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 7.0 gpm/hp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5265	SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5266	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7e	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 176 kBtu/h-hp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5267	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7f	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 157 kBtu/h-hp w/ R-507A test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5268	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 134 kBtu/h-hp w/ Ammonia test fluid..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5269	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7h	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 135 kBtu/h-hp w/ R-507A test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5270	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7i	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement ≥ 110 kBtu/h-hp w/ Ammonia test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5271	SYSTEM_SPECIF	7.5.3	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment $\geq 1,000$ kBtu/h serves the entire building, thermal efficiency must be ≥ 90 Et. Where multiple pieces of water-heating equipment serve the bui	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5285	SYSTEM_SPECIF	6.5.3.2.4	Mechanical	Return and relief fans used to meet Section 6.5.1.1.5 have relief air rate controlled to maintain building pressure through differential supply-return airflow tracking. Systems with supply fans allowed to control the relief system based on outdoor air damp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5288	HVAC	6.5.2.6	Mechanical	Units that provide ventilation air to multiple zones and operate in conjunction with zone heating and cooling systems are prevented from using heating or heat recovery to warm supply air above 60°F when representative building loads or outdoor air tempera	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5289	HVAC	6.5.4.7	Mechanical	Chilled-water cooling coils provide a 15°F or higher temperature difference between leaving and entering water temperatures and a minimum of 57°F leaving water temperature at design conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5290	SYSTEM_SPECIF	6.5.3.4	Mechanical	Parallel-flow fan-powered VAV air terminals have automatic controls to a) turn off the terminal fan except when space heating is required or if required for ventilation; b) turn on the terminal fan as the first stage of heating before the heating coil is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5291	SYSTEM_SPECIF	6.5.3.7	Mechanical	Required minimum outdoor air rate is the larger of minimum outdoor air rate or minimum exhaust air rate required by Standard 62.1, Standard 170, or applicable codes or accreditation standards. Outdoor air ventilation systems shall comply with one of the f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5292	HVAC	6.8.1-15, 6.8.1-16	Mechanical	Electrically operated DX-DOAS units meet requirements per Tables 6.8.1-15 or 6.8.1-16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. To be checked by Plan Reviewer							
5001	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5002	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 st	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5003 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 manufact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5004 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 br	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5005 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 shoul	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5006 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 shoul	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5015 Insulation	5.8.1.7.3	Envelope	Insulation in contact with the ground has $\leq 0.3\%$ water absorption rate per ASTM C272.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5023 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.). Ves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5028 Plan Review	5.5.4.2.3	Envelope	In buildings $> 2,500$ ft ² , 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, gym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5029 Plan Review	5.5.4.2.3	Envelope	In buildings $> 2,500$ ft ² , 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, gym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5030 Plan Review	5.5.4.2.3	Envelope	In buildings $> 2,500$ ft ² , 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, gym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5031 Plan Review	5.5.4.2.3	Envelope	In buildings $> 2,500$ ft ² , 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, gym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5032 Plan Review	5.5.4.2.3	Envelope	In buildings $> 2,500$ ft ² , 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, gym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5033 Plan Review	5.5.4.2.3	Envelope	In buildings $> 2,500$ ft ² , 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, gym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5054 HVAC	6.4.3.4.4	Mechanical	Ventilation fans > 0.75 hp have automatic controls to shut off fan when not required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5055 HVAC	6.4.3.8	Mechanical	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5074 HVAC	6.4.4.1.4	Mechanical	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5098 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5115 SYSTEM_SPECIFI	6.5.3.1.3	Mechanical	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5122 SYSTEM_SPECIF	6.5.3.6	Mechanical	Motors for fans >= 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5127 SYSTEM_SPECIF	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 s	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5129 SYSTEM_SPECIF	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 o	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5130 SYSTEM_SPECIF	6.5.3.3	Mechanical	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5133 SYSTEM_SPECIF	6.5.3.5	Mechanical	Multiple zone HVAC systems have supply air temperature reset controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5136 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5137 HVAC	6.5.4.2	Mechanical	Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0 HVAC pumping systems with >= 3 control values designed for variable fluid flow (see section details).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5145 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5146 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5147 SYSTEM_SPECIF	6.5.4.5.1	Mechanical	Two-position automatic valve interlocked to shut off water flow when hydronic heat pump with pumping system >10 hp is off.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5148 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5150 SYSTEM_SPECIF	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 devises that result in fanmotor demand of <= 30% of design wattage at 50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5152 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5167 SYSTEM_SPECIF	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 minu the available transfer air (see section details).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5171 HVAC	6.5.7.2.1	Mechanical	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5174 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5176 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5178 HVAC	6.5.7.2	Mechanical	Fume hoods exhaust systems >=5,000 cfm have VAV hood exhaust and supply systems, direct make-up air or heat recovery.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5179 HVAC	6.5.8.1	Mechanical	Unenclosed spaces that are heated use only radiant heat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5190 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5201 Other Equipment	10.4.1	Mechanical	Electric motors meet requirements where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5226 HVAC	6.4.3.3.2	Mechanical	Setback controls allow automatic restart and temporary operation as required for maintenance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5229 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5231 SYSTEM_SPECIF	6.4.3.3.4	Mechanical	Zone isolation devices and controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5254 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5275 Controls	9.4.1.4d	Exterior Lighting	Outdoor parking area luminaires >= 78W and <= 24 ft height controlled to reduce wattage by 50% when area unoccupied over 15 minutes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5278 Controls	9.4.1.2a	Interior Lighting	Controlled power limited to <= 1500W. Parking garage lighting is equipped with automatic shutoff controls per Section 9.4.1.1(i).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5279 Controls	9.4.1.2b	Interior Lighting	Parking garage luminaire power is automatically reduced by >= 30% when zone < 3600 ft2 has no occupancy after 20 minutes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5280 Controls	9.4.1.2c	Interior Lighting	Parking garage luminaires in or around covered entrances/exits between building and garage automatically reduced by >= 50% from sunset to sunrise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5281 Controls	9.4.1.2d	Interior Lighting	Parking garage: Power to luminaires <= 20 ft of any perimeter wall that has a net opening-to-wall ratio >=40% and no exterior obstructions within 20 ft, is automatically reduced in response to daylight >= 50%.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5283 Other Equipment	6.8.1-14	Mechanical	Vapor compression based indoor pool dehumidifiers (single package (indoor air/water cooled or w/out air-cooled condenser) or split system indoor air-cooled) have a minimum 3.5 MRE efficiency rating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5284 Controls	6.4.3.3.5	Mechanical	Hotels/motel w/ > 50 guest rooms have automatic controls for the HVAC equipment serving each room configured per Section 6.4.3.3.5 subsections 1-3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. To be checked by Inspector						
5014 Insulation	5.8.1.7	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5016 HVAC	6.4.3.7	Mechanical	Freeze protection and snow/ice melting system sensors for future connection to controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5018 Air Leakage	5.4.3.1	Envelope	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces in climate zones 1-6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5020 Air Leakage	5.4.3.2	Envelope	Factory-built and site-assembled fenestration and doors are labeled or certified as meeting air leakage requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5038 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5039 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5041 SYSTEM_SPECIF	7.4.4.1	Mechanical	Temperature controls installed on service water heating systems ($\leq 120^{\circ}\text{F}$ to maximum temperature for intended use).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5042 SYSTEM_SPECIF	7.4.4.2	Mechanical	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5043 SYSTEM_SPECIF	7.4.6	Mechanical	Heat traps installed on non-circulating storage water tanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5044 HVAC	6.4.1.4, 6.4.1.5	Mechanical	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5045 SYSTEM_SPECIF	6.4.1.5.2	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5046 HVAC	6.4.3.4.1	Mechanical	Stair and elevator shaft vents have motorized dampers that automatically close.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5047 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5050 HVAC	6.4.3.4.5	Mechanical	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5060 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 $\geq \frac{1}{4}$ designed to vary supply fan airflow as a function of load and comply with operational requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5063 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5064 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5068 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5075 HVAC	6.4.4.2.1	Mechanical	Ducts and plenums having pressure class ratings are Seal Class A construction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5076 SYSTEM_SPECIF	6.4.4.2.2	Mechanical	Ductwork operating >3 in. water column requires air leakage testing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5088 SYSTEM_SPECIF	6.5.2.1	Mechanical	Zone controls can limit reheating, recooling, simultaneous heating and cooling and sequence heating and cooling to each zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5094 SYSTEM_SPECIF	6.4.3.11.1	Mechanical	Electric motor driven chilled-water plants have measurement devices installed and measure the electricity use and efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5095 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5096 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5104 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5105 HVAC	6.5.2.4.2	Mechanical	Humidification system dispersion tube hot surfaces in the airstreams of ducts or air-handling units insulated $\geq R-0.5$.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5107 HVAC	6.5.2.5	Mechanical	Preheat coils controlled to stop heat output whenever mechanical cooling, including economizer operation, is active.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5128 SYSTEM_SPECIF	6.5.3.2.2	Mechanical	VAV fans have static pressure sensors positioned so setpoint ≤ 1.2 in. w.c. design pressure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5149 SYSTEM_SPECIF	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).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5162 SYSTEM_SPECIF	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5177 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5181 SYSTEM_SPECIF	6.5.9	Mechanical	Hot gas bypass limited to: ≤ 240 kBtu/h – 15% > 240 kBtu/h – 10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5182 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 > 45 F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating s	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5184 Controls	6.5.10	Mechanical	Doors separating conditioned space from the outdoors have controls that disable/reset heating and cooling system when open.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5192 Controls	9.4.1.1 except(g)	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5193 Controls	9.4.1.1 except(g)	Interior Lighting	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5194 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5198 Controls	9.4.1.4	Exterior Lighting	Automatic lighting controls for exterior lighting installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5199 Controls	9.4.1.3	Interior Lighting	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5200 Wattage	9.6.2	Interior Lighting	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5202 Wattage	9.6.4	Interior Lighting	Where space LPD requirements are adjusted based on room cavity ratios, dimensions are consistent with approved plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5203 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5204 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 $\leq 3:12$.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5209 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5210 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5211 Insulation	5.8.1.4	Envelope	Eaves are baffled to deflect air to above the insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5212 Insulation	5.8.1.5	Envelope	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5213 Insulation	5.8.1.6	Envelope	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5214 Insulation	5.8.1.7.1	Envelope	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5215 Insulation	5.8.1.7.2	Envelope	Foundation vents do not interfere with insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5216 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5218 SYSTEM_SPECIF	6.4.3.1.1	Mechanical	Heating and cooling to each zone is controlled by a thermostat control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5219 HVAC	6.4.3.1.2	Mechanical	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5222 HVAC	6.4.3.2	Mechanical	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5223 HVAC	6.4.3.3.1	Mechanical	HVAC systems equipped with at least one automatic shutdown control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5235 SYSTEM_SPECIF	6.4.3.5	Mechanical	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5236 SYSTEM_SPECIF	6.4.3.12	Mechanical	Air economizer has a fault detection and diagnostics (FDD) system (see details for configuration and operational requirements).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5237 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 deh	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5243 SYSTEM_SPECIF	7.4.4.3	Mechanical	Public lavatory faucet water temperature <=110°F.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5244 SYSTEM_SPECIF	7.4.4.4	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5245 SYSTEM_SPECIF	7.4.5.1	Mechanical	Pool heaters are equipped with on/off switch and no continuously burning pilot light.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5246 SYSTEM_SPECIF	7.4.5.2	Mechanical	Pool covers are provided for heated pools and pools heated to >90°F have a cover >=R-12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5248 SYSTEM_SPECIF	7.4.5.3	Mechanical	Time switches are installed on all pool heaters and pumps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5253 Wattage	9.2.2.3	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5256 SYSTEM_SPECIF	7.4.3	Mechanical	All piping in recirculating system insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5257 SYSTEM_SPECIF	7.4.3	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5258 SYSTEM_SPECIF	7.4.3	Mechanical	All heat traced or externally heated piping insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5273 Wattage	9.4.4	Interior Lighting	At least 75% of all permanently installed lighting fixtures in dwelling units have >= 55 lm/W efficacy or a >= 45 lm/W total luminaire efficacy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. To be checked by Inspector at Project Completion and Prior to Issuance of Certificate of Occupancy

5007 Plan Review	6.7.2.4	Mechanical	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 ft2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5008 Plan Review	6.7.2.4	Mechanical	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 ft2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5239 Post Construction	6.7.2.1	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5240 Post Construction	6.7.2.2	Mechanical	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5241 Post Construction	6.7.2.3	Mechanical	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 ft2 of conditioned area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5242 HVAC	6.7.2.4	Mechanical	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5251 Post Construction	8.7.1	Interior Lighting	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5252 Post Construction	8.7.2	Interior Lighting	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>