



# Interior Lighting Compliance Certificate

## Project Information

Energy Code: 90.1 (2013) Standard  
Project Title: 24108 Kroger Fenton MI  
Project Type: Alteration

Construction Site:  
15100 Silver Parkway  
Fenton, Michigan 48430

Owner/Agent:

Designer/Contractor:  
Jeffery A. Scott Architects, p.c.  
32316 GRAND RIVER AVE. SUITE  
200  
Farmington, Michigan 48336

## Allowed Interior Lighting Power

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts
1-Retail	79832	1.26	100588
Total Allowed Watts =			100588

## Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
<u>Retail (79832 sq.ft.)</u>				
LED: B12: Other:	1	306	114	34884
LED: C18: Other:	1	127	39	4953
LED: B13: Other:	1	21	56	1176
LED: C20: Other:	1	25	39	975
LED: D2: Other:	1	61	53	3233
LED: CC3: Other:	1	9	31	279
LED: D3: Other:	1	4	26	104
LED: K6: Other:	1	9	77	693
LED: M13: Other:	1	32	22	704
LED: M16: Other:	1	14	32	448
LED: M17: Other:	1	6	59	354
Track Lighting: Wattage based on current limiting device capacity	0	0	19620	19620
Total Proposed Watts =			67423	

## Interior Lighting PASSES

### Interior Lighting Compliance Statement

*Compliance Statement:* The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title

Signature

Date



COMcheck Software Version COMcheckWeb

# Exterior Lighting Compliance Certificate

**Project Information**

Energy Code: 90.1 (2013) Standard  
Project Title: 24108 Kroger Fenton MI  
Project Type: Alteration  
Exterior Lighting Zone: 0 (Unspecified)

Construction Site: 15100 Silver Parkway Fenton, Michigan 48430	Owner/Agent:	Designer/Contractor: Jeffery A. Scott Architects, p.c. 32316 GRAND RIVER AVE. SUITE 200 Farmington, Michigan 48336
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**Allowed Exterior Lighting Power**

A	B	C	D	E
Area/Surface Category	Quantity	Allowed Watts /	Tradable Wattage	Allowed Watts (B X C)
Total Tradable Watts (a) =				0
Total Allowed Watts =				0
Total Allowed Supplemental Watts (b) =				500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.  
(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

**Proposed Exterior Lighting Power**

Exterior Lighting TBD: Exterior lighting zone not specified (see project screen)



# COMcheck Software Version COMcheckWeb

## Mechanical Compliance Certificate

### Project Information

Energy Code: 90.1 (2013) Standard  
Project Title: 24108 Kroger Fenton MI  
Location: Fenton, Michigan  
Climate Zone: 5a  
Project Type: Alteration

Construction Site:  
15100 Silver Parkway  
Fenton, Michigan 48430

Owner/Agent:

Designer/Contractor:  
Jeffery A. Scott Architects, p.c.  
32316 GRAND RIVER AVE. SUITE  
200  
Farmington, Michigan 48336

### Mechanical Systems List

#### Quantity System Type & Description

- 7 RTU-1-7  
Heating: 1 each - Central Furnace, Gas, Capacity = 240 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et  
Cooling: 1 each - Single Package DX Unit, Capacity = 146 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 10.80 EER, Required Efficiency = 10.80 EER  
Proposed Part Load Efficiency = 19.50 IEER, Required Part Load Efficiency = 12.20 IEER  
Fan System: RTU Supply | Sales -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 1 Supply, Single-Zone VAV, 5000 CFM, 3.8 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.
- 1 RTU-8  
Heating: 1 each - Central Furnace, Gas, Capacity = 240 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et  
Cooling: 1 each - Single Package DX Unit, Capacity = 119 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.00 EER, Required Efficiency = 11.00 EER  
Proposed Part Load Efficiency = 20.70 IEER, Required Part Load Efficiency = 12.70 IEER  
Fan System: RTU-8 SUPPLY | Prep Areas -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 2 Supply, Single-Zone VAV, 4000 CFM, 3.8 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.
- 1 RTU-9  
Heating: 1 each - Central Furnace, Gas, Capacity = 150 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)  
Cooling: 1 each - Single Package DX Unit, Capacity = 73 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.20 EER, Required Efficiency = 11.00 EER  
Proposed Part Load Efficiency = 23.10 IEER, Required Part Load Efficiency = 12.70 IEER  
Fan System: RTU-9 SUPPLY | VESTIBULE -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 3 Supply, Constant Volume, 2400 CFM, 1.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.

## Quantity System Type & Description

- 1 RTU-10  
Heating: 1 each - Central Furnace, Gas, Capacity = 180 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)  
Cooling: 1 each - Single Package DX Unit, Capacity = 91 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.50 EER, Required Efficiency = 11.00 EER  
Proposed Part Load Efficiency = 21.00 IEER, Required Part Load Efficiency = 12.70 IEER  
Fan System: RTU-10 SUPPLY | PICKUP/RECYCLING -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
Passes  
  
Fans:  
FAN 4 Supply, Constant Volume, 3000 CFM, 3.8 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.
- 1 RTU-11  
Heating: 1 each - Central Furnace, Gas, Capacity = 150 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)  
Cooling: 1 each - Single Package DX Unit, Capacity = 73 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.20 EER, Required Efficiency = 11.00 EER  
Proposed Part Load Efficiency = 23.10 IEER, Required Part Load Efficiency = 12.70 IEER  
Fan System: RTU-11 SUPPLY | PHARMACY -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 5 Supply, Single-Zone VAV, 2400 CFM, 1.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.
- 1 RTU-12  
Heating: 1 each - Central Furnace, Gas, Capacity = 108 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)  
Cooling: 1 each - Single Package DX Unit, Capacity = 73 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.20 EER, Required Efficiency = 11.00 EER  
Proposed Part Load Efficiency = 23.10 IEER, Required Part Load Efficiency = 12.70 IEER  
Fan System: RTU-12 SUPPLY | OFFICES -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 6 Supply, Single-Zone VAV, 2400 CFM, 1.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.
- 1 RTU-13,14  
Heating: 1 each - Central Furnace, Gas, Capacity = 108 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)  
Cooling: 1 each - Single Package DX Unit, Capacity = 73 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.20 EER, Required Efficiency = 11.00 EER  
Proposed Part Load Efficiency = 23.10 IEER, Required Part Load Efficiency = 12.70 IEER  
Fan System: RTU-13,14 SUPPLY | BACKROOM -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 7 Supply, Constant Volume, 2400 CFM, 1.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.
- 1 RTU-15  
Heating: 1 each - Central Furnace, Gas, Capacity = 108 kBtu/h  
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)  
Cooling: 1 each - Single Package DX Unit, Capacity = 63 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 19.50 SEER, Required Efficiency = 13.00 SEER  
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00  
Fan System: RTU-15 | DOCK -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 8 Supply, Constant Volume, 2000 CFM, 1.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM VERIFICATION REQUIRED.

## Quantity System Type & Description

- 1 ECR Mini split  
Cooling: 1 each - Variable Refrigerant Flow, Capacity = 33 kBtu/h, Air-Cooled Condenser  
Proposed Efficiency = 0.00 SEER, Required Efficiency = 13.00 SEER  
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00  
Fan System: FC-1 | ECR -- Compliance (Motor nameplate HP and fan efficiency method) : Passes  
  
Fans:  
FAN 9 Supply, Single-Zone VAV, 915 CFM, 0.1 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP  
  
SYSTEM COMPLIANCE FAILS: PROPOSED EFFICIENCY FAILS TO MEET CODE REQUIREMENTS.
- 1 Water Heater  
Gas Storage Water Heater, Capacity: 90 gallons, Input Rating: 199 kBtu/h w/ Circulation Pump  
Proposed Efficiency: 96.00 % Et, Required Efficiency: 80.00 % Et  
  
SWH COMPLIANCE REQUIRED.



# Inspection Checklist

Energy Code: 90.1 (2013) Standard

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2, 6.4.4.2.1, 6.7.2 [PR2] <sup>1</sup>	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.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> M6.1 Mech Design Summary
4.2.2, 7.7.1, 10.4.2 [PR3] <sup>1</sup>	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.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> P0.1 Water Heater Sizing, per MI Dept of Ag Hot Water Requirements worksheet
4.2.2, 8.4.1.1, 8.4.1.2, 8.7 [PR6] <sup>2</sup>	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%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
4.2.2, 9.4.3, 9.7 [PR4] <sup>1</sup>	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.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.4 [PR5] <sup>1</sup>	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 ft <sup>2</sup> .	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Part of Danfoss Energy Management System Commissioning, refer to EMS sheets

## Additional Comments/Assumptions:

1 High Impact (Tier 1)    2 Medium Impact (Tier 2)    3 Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
6.4.3.7 [FO9] <sup>3</sup>	Freeze protection and snow/ice melting system sensors for future connection to controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply. <b>Location on plans/spec:</b> NA

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
7.4.4.1 [PL2] <sup>3</sup>	Temperature controls installed on service water heating systems (<=120°F to maximum temperature for intended use).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> P5.1 Detail, PSD-6C, WH temp set to 120 deg F
7.4.4.2 [PL3] <sup>1</sup>	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> HW Circulation pumps with scheduled timers

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.1.4, 6.4.1.5 [ME1] <sup>2</sup>	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	Efficiency: _____	Efficiency: _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
6.4.3.4.1 [ME3] <sup>3</sup>	Stair and elevator shaft vents have motorized dampers that automatically close.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> NA
6.4.3.4.2, 6.4.3.4.3 [ME4] <sup>3</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> M6.1 RTU Schedule notes with economizer requirements
6.4.3.4.5 [ME39] <sup>3</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> NA
6.4.3.4.4 [ME5] <sup>3</sup>	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> HVAC equipment controlled by EMS
6.4.3.8 [ME6] <sup>1</sup>	Demand control ventilation provided for spaces >500 ft <sup>2</sup> and >25 people/1000 ft <sup>2</sup> 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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> DOAS units with Demand Control Ventilation based on CO2 levels
6.5.3.2.1 [ME40] <sup>2</sup>	DX cooling systems >= 75 kBtu/h (>= 65 kBtu/h effective 1/2016) and chilled-water and evaporative cooling fan motor hp >= ¼ designed to vary indoor fan airflow as a function of load and comply with operational requirements.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> M6.1 RTU Schedule, RTU supply fans are direct drive with variable air volume  See the Mechanical Systems list for values.
6.4.4.1.1 [ME7] <sup>3</sup>	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Packaged RTUs with vertical airflow drops through roof curbs
6.4.4.1.2 [ME8] <sup>2</sup>	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	R- _____	R- _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Refer to Mechanical General Notes
6.4.4.1.3 [ME9] <sup>2</sup>	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.	_____ in.	_____ in.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.4.1.4 [ME41] <sup>3</sup>	Thermally ineffective panel surfaces of sensible heating panels have insulation $\geq$ R-3.5.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> Packaged RTU
6.4.4.2.1 [ME10] <sup>2</sup>	Ducts and plenums sealed based on static pressure and location.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> M0.1 Mechanical General Notes
6.4.4.2.2 [ME11] <sup>3</sup>	Ductwork operating $>3$ in. water column requires air leakage testing.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> M6.1 RTU Schedule, Ductwork not expected to be 3 in wc pressure
6.5.1.5 [ME16] <sup>1</sup>	Economizer operation will not increase heating energy use during normal operation.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.2.3 [ME19] <sup>3</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Rigid humidity requirements.  <b>Location on plans/spec:</b> Specific humidity control for Pharmacy and Grocery Sales areas with cases
6.5.2.4.1 [ME68] <sup>3</sup>	Humidifiers with airstream mounted preheating jackets have preheat auto-shutoff value set to activate when humidification is not required.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> NA
6.5.2.4.2 [ME69] <sup>3</sup>	Humidification system dispersion tube hot surfaces in the airstreams of ducts or air-handling units insulated $\geq$ R-0.5.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> NA
6.5.2.5 [ME70] <sup>3</sup>	Preheat coils controlled to stop heat output whenever mechanical cooling, including economizer operation, is active.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.3.5 [ME72] <sup>2</sup>	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.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> RTUs with direct drive VFD supply fans
6.5.3.3 [ME42] <sup>3</sup>	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.  <b>Location on plans/spec:</b> NA  <i>See the Mechanical Systems list for values.</i>
6.5.4.2 [ME25] <sup>3</sup>	HVAC pumping systems $>10$ hp designed for variable fluid flow.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Systems with three or fewer control valves.  <b>Location on plans/spec:</b> NA

☐ 1 High Impact (Tier 1)
 ☐ 2 Medium Impact (Tier 2)
 ☐ 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
7.5.3 [ME78] <sup>2</sup>	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 $\geq 90$ Et. Where multiple pieces of water-heating equipment serve the building with combined rating is $\geq 1,000$ kBtu/h, the combined input-capacity-weighted-average thermal efficiency, thermal efficiency must be $\geq 90$ Et. Exclude input rating of equipment in individual dwelling units and equipment $\leq 100$ kBtu/h.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.5.6.1 [ME56] <sup>1</sup>	Exhaust air energy recovery on systems meeting Tables 6.5.6.1-1, and 6.5.6.1-2.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Commercial kitchen hoods. <b>Location on plans/spec:</b> M6.1 Air Balance and RTU Schedules
6.5.7.1.1 [ME32] <sup>2</sup>	Kitchen hoods $>5,000$ cfm have make up air $\geq 50\%$ of exhaust air volume.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. <b>Location on plans/spec:</b> M6.1 Air Balance Schedule
6.5.7.1.2 [ME46] <sup>3</sup>	Conditioned supply air to space with a kitchen hood shall not exceed the greater of a) supply flow required to meet space heating or cooling, or b) hood exhaust flow minus the available air transfer from available spaces.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. <b>Location on plans/spec:</b> M6.1 Air Balance Schedule
6.5.7.1.5 [ME49] <sup>3</sup>	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. <b>Location on plans/spec:</b> M0.1 Mechanical General Notes Captive Air Testing and Startup Requirements
6.5.8.1 [ME34] <sup>2</sup>	Unenclosed spaces that are heated use only radiant heat.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply. <b>Location on plans/spec:</b> NA
6.5.9 [ME35] <sup>1</sup>	Hot gas bypass limited to: $\leq 240$ kBtu/h - 15% $>240$ kBtu/h - 10%			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. <b>Location on plans/spec:</b> M6.1 RTU Schedule, Equipment with Dehumidification Options
7.4.2 [ME36] <sup>2</sup>	Service water heating equipment meets efficiency requirements.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 High Impact (Tier 1)    2 Medium Impact (Tier 2)    3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.3.9 [ME63] <sup>2</sup>	Heating for vestibules and air curtains include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating systems controlled by a thermostat in the vestibule with setpoint <= 60F.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Controlled through EMS
6.5.10 [ME73] <sup>3</sup>	Doors separating conditioned space from the outdoors have controls that disable/reset heating and cooling system when open.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Building entrances have automatic closing devices.

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10] <sup>2</sup>	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
9.4.1.1 [EL11] <sup>2</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.4.1.1 [EL2] <sup>2</sup>	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.4.1.2 [EL11] <sup>2</sup>	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
9.4.1.1f [EL13] <sup>1</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
9.4.1.3 [EL4] <sup>1</sup>	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.6.2 [EL8] <sup>1</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
10.4.1 [EL9] <sup>2</sup>	Electric motors meet requirements where applicable.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
6.4.3.1.2 [FI3] <sup>3</sup>	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Controlled through EMS
6.4.3.2 [FI20] <sup>3</sup>	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Controlled through EMS
6.4.3.3.1 [FI21] <sup>3</sup>	HVAC systems equipped with at least one automatic shutdown control.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> Controlled through EMS
6.4.3.3.2 [FI22] <sup>3</sup>	Setback controls allow automatic restart and temporary operation as required for maintenance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.4.3.6 [FI6] <sup>3</sup>	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.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.1 [FI7] <sup>3</sup>	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.2 [FI8] <sup>3</sup>	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
6.7.2.3 [FI9] <sup>1</sup>	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 ft <sup>2</sup> of conditioned area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> M0.1 Mechanical General Notes
6.7.2.4 [FI10] <sup>1</sup>	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> M0.1 Mechanical General Notes, Danfoss EMS Commissioning
7.4.4.3 [FI11] <sup>3</sup>	Public lavatory faucet water temperature <=110°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
7.4.4.4 [FI12] <sup>3</sup>	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.  <b>Location on plans/spec:</b> EMS, M5.1 REFER TO PSD-6C
8.7.1 [FI16] <sup>3</sup>	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
8.7.2 [FI17] <sup>3</sup>	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.2.2.3 [FI18] <sup>1</sup>	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"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
10.4.3 [FI24] <sup>2</sup>	Elevators are designed with the proper lighting, ventilation power, and standby mode.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.

**Additional Comments/Assumptions:**

☐ 1 High Impact (Tier 1)
 ☒ 2 Medium Impact (Tier 2)
 ☐ 3 Low Impact (Tier 3)