COMcheck Software Version 4.1.5.1 Envelope Compliance Certificate

Project Information

Energy Code:	90.1 (2013) Standard
Project Title:	New Sheetz Store "CAMERON (SAWYER RD)"
Location:	Cameron, North Carolina
Climate Zone:	3a
Project Type:	New Construction
Vertical Glazing / Wall Area:	17%
Performance Sim. Specs:	EnergyPlus 8.1.0.009 (EPW: USA_NC_Charlotte-Douglas.Intl.AP.723140_TMY3.epw)

Construction Site: Sawyer Road Cameron, NC 28326 Owner/Agent: Sheetz Incorporated 5700 Sixth Avenue Altoona, PA 16602 814-946-3611 Designer/Contractor: H.F. Lenz Company 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300

Floor Area

6077

Building Area

1-Retail : Nonresidential

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor _(a)
Roof 1: Insulation Entirely Above Deck, Cool roof performance data NA, [Bldg. Use 1 - Retail]	6077		38.4	0.026	0.039
Floor 1: Slab-On-Grade:Unheated, Horizontal with vertical 2 ft., [Bldg. Use 1 - Retail] (c)	331		15.0	0.690	0.690
NORTH					
Rear Exterior Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1650	21.0	0.0	0.062	0.089
Drive Thru Upper Windows: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 1.20, VT 0.26, [Bldg. Use 1 - Retail] (b)	14			0.400	0.500
Drive Thru Operating Windows: Metal Frame:Operable, Perf. Type: Energy code default, Single Pane, Clear , SHGC 0.82, PF 0.71, VT 0.76, [Bldg. Use 1 - Retail]	32			1.250	0.600
EAST					
Cooler Side Exterior Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1018	21.0	0.0	0.062	0.089
Glass No Canopy: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, VT 0.26, [Bldg. Use 1 - Retail] (b)	27			0.400	0.500
Glass Large Canopy Above Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 1.50, VT 0.26, [Bldg. Use 1 - Retail] (b)	26			0.400	0.500
Delivery Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	22			0.110	0.700
Entrance Door: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Type: Energy code default, Single Pane, Clear , SHGC 0.82, PF 0.55, VT 0.76, [Bldg. Use 1 - Retail]	42			1.250	0.770
SOUTH					
Front Exterior Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1790	21.0	0.0	0.062	0.089
Glass Small Canopy: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 0.62, VT 0.26, [Bldg. Use 1 - Retail] (b)	224			0.400	0.500

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor _(a)
Glass Large Canopy Above Front Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 1.54, VT 0.26, [Bldg. Use 1 - Retail] (b)	50			0.400	0.500
Glass Next to Front Entrance Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 0.60, VT 0.26, [Bldg. Use 1 - Retail] (b)	40			0.400	0.500
Glass Above Large Canopy: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, VT 0.26, [Bldg. Use 1 - Retail] (b)	30			0.400	0.500
Glass Large Canopy Above Side Seating Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 1.45, VT 0.26, [Bldg. Use 1 - Retail] (b)	22			0.400	0.500
Glass Next to Side Seating Entrance Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 0.42, VT 0.26, [Bldg. Use 1 - Retail] (b)	24			0.400	0.500
Entrance Door Front: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Type: Energy code default, Single Pane, Clear , SHGC 0.82, PF 0.60, VT 0.76, [Bldg. Use 1 - Retail]	42			1.250	0.770
Entrance Door Side Seating: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Type: Energy code default, Single Pane, Clear , SHGC 0.82, PF 0.42, VT 0.76, [Bldg. Use 1 - Retail]	22			1.250	0.770
WEST					
Side Entry Exterior Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1018	21.0	0.0	0.062	0.089
Glass Small Canopy: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 0.50, VT 0.26, [Bldg. Use 1 - Retail] (b)	118			0.400	0.500
Glass Large Canopy Above Front Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 1.54, VT 0.26, [Bldg. Use 1 - Retail] (b)	50			0.400	0.500
Glass Nex to Entrance Door: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 0.60, VT 0.26, [Bldg. Use 1 - Retail] (b)	40			0.400	0.500
Glass Above Large Canopy: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, VT 0.26, [Bldg. Use 1 - Retail] (b)	30			0.400	0.500
Glass Large Canopy At Side Seating: Metal Frame:Fixed, Perf. Specs.: Product ID Vitro, SHGC 0.20, PF 0.42, VT 0.26, [Bldg. Use 1 - Retail] (b)	52			0.400	0.500
Entrance Door: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Type: Energy code default, Single Pane, Clear , SHGC 0.82, PF 0.60, VT 0.76, [Bldg. Use 1 - Retail]	42			1.250	0.770
Delivery Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	22			0.110	0.700

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 1% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2013) Standard requirements in COM*check* Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Lawrence DiGennaro

Name - Title

Signature	\cap	
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02/09/2021

Date

Project Title: New Sheetz Store "CAMERON (SAWYER RD)" Data filename: I:\Projects\2021\210000\210012x01\Design Files\COMCheck\COMCheck.cck Report date: 02/05/21 Page 2 of 23

COM*check* Software Version 4.1.5.1 Interior Lighting Compliance Certificate

Project Information

Energy Code:	90.1 (2013) Standard
Project Title:	New Sheetz Store "CAMERON (SAWYER RD)"
Project Type:	New Construction

Construction Site: Sawyer Road Cameron, NC 28326 Owner/Agent: Sheetz Incorporated 5700 Sixth Avenue Altoona, PA 16602 814-946-3611 Designer/Contractor: H.F. Lenz Company 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300

Allowed Interior Lighting Power

	A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Retail		6077	1.26	7657
			Total Allowed Watts	6 = 7657

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Retail				
Interior LED 1: A1: 1'x4' Recessed LED Troffer: Other:	1	38	40	1520
Interior LED 2: A4B: LED Pendant Fixture: Other:	1	30	26	780
Interior LED 3: B: LED Pendant Fixture: Other:	1	2	10	20
Interior LED 4: BB1: LED Recessed Downlight: Other:	1	50	11	550
Interior LED 5: BB2B: LED Pendant Downlight: Other:	1	21	14	284
Interior LED 6: BB3: LED Pendant Downlight: Other:	1	34	19	646
Interior LED 7: BB4B: LED Pendant Downlight: Other:	1	5	23	116
Interior LED 8: C: LED Pendant Fixture: Other:	1	9	9	81
Interior LED 9: D: LED Pendant Fixture: Other:	1	8	18	144
Interior LED 10: M: LED Exit Sign: Other:	1	2	1	Exempt
Exemption:Exit Signs				
Interior LED 11: N: Pendants in Seating Area: Other:	1	3	25	75
Interior LED 12: OO: Vaportight LED Industrial: Other:	1	14	16	224
Interior LED 13: UU: Vaportight LED Industrial: Other:	1	11	44	484
Interior LED 14: n/a: Reach-in Refrig. Dislay: Other: Exemption:Retail Display Window	1	26	10	Exempt
Tungsten Halogen 1: DD: Emergency Lighting Unit: Other: Exemption:Emergency Lighting Auto-off During Operating Hours	1	8	18	Exempt
Emergency LED 1: EE1: Emergency Interior Remote Head: Other: Exemption:Emergency Lighting Auto-off During Operating Hours	1	6	1	Exempt
Emergency LED 2: EE2: Emergency Interior Remote Head: Other: Exemption:Emergency Lighting Auto-off During Operating Hours	2	4	2	Exempt
Emergency LED 3: GG1: Emergency Exterior Remote Head: Other: Exemption:Emergency Lighting Auto-off During Operating Hours	1	14	1	Exempt
Emergency LED 4: GG2: Emergency Exterior Remote Head: Other:	1	2	2	Exempt

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Exemption:Emergency Lighting Auto-off During Operating Hours				
Emergency LED 5: ZZ1: LED Exit Sign: Other:	1	3	8	Exempt
Exemption:Exit Signs				
Interior LED 15: V: LED Pendant Fixture: Other:	1	1	136	136
		Total Propos	ed Watts =	5060

Interior Lighting PASSES: Design 34% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design 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 COM*check* Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DAVID J. ANDERSON - SENIOR ASSOCIATE

Name - Title

Signature

2/5/21 Date

COMcheck Software Version 4.1.5.1 **Exterior Lighting Compliance Certificate**

Project Information

Energy Code:
Project Title:
Project Type:
Exterior Lighting Zone

Construction Site: Sawyer Road Cameron, NC 28326 90.1 (2013) Standard New Sheetz Store "CAMERON (SAWYER RD)" New Construction 2 (Neighborhood business district)

Owner/Agent: Sheetz Incorporated 5700 Sixth Avenue Altoona, PA 16602 814-946-3611

Designer/Contractor: H.F. Lenz Company 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Kitchen Exit (Other door (not main entry))	3 ft of door	20	Yes	60
Utility Room Exit (Other door (not main entry))	3 ft of door	20	Yes	60
Front Canopy (Entry canopy)	203 ft2	0.25	Yes	51
Side Canopy (Entry canopy)	75 ft2	0.25	Yes	19
Exterior Wall Sconces (Illuminated length of facade wall or surface)	450 ft	2.5	No	1125
Sheetz Signage above Front Canopy (Illuminated length of facade wall or surface)	22 ft	2.5	No	55
Sheetz Signage above Front Canopy (Illuminated length of facade wall or surface)	22 ft	2.5	No	55
LED Wall Packs Fixtures (Walkway >= 10 feet wide)	654 ft2	0.14	Yes	92
Sidewalk Bollards (Walkway >= 10 feet wide)	1600 ft2	0.14	Yes	224
Side Canopy (Entry canopy)	44 ft2	0.25	Yes	11
Drive-thru Canopy (Drive-up windows/doors)	1 windows	400	No	400
Drive-thru Canopy (Drive-up windows/doors)	1 windows	400	No	400
MTO Signage front of building (Illuminated length of facade wall or surface)	22 ft	2.5	No	55
24/7 Drive-Thru Signage rear of building (Illuminated length of facade wall or surface)	22 ft	2.5	No	55
		Total Tradab	ole Watts (a) =	516

Fotal Tradable Watts (a) =

Total Allowed Watts =

Total Allowed Supplemental Watts (b) =

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

(b) A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Kitchen Exit (Other door (not main entry) 3 ft of door width): Tradable Wattage Exterior LED 1: X1: Exit from Sales Area II: Other:	1	1	37	37
Utility Room Exit (Other door (not main entry) 3 ft of door width): Tradable Wattage Exterior LED 2: X1: Exit from Work Room Area: Other:	1	1	37	37
Front Canopy (Entry canopy 203 ft2): Tradable Wattage				

2661

600

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Exterior LED 3: F: Front Canopy Downlight: Other:	1	11	3	33
Side Canopy (Entry canopy 75 ft2): Tradable Wattage Exterior LED 5: F: Front Canopy Downlight: Other: Exterior LED 6: T: Front Canopy Lt Sconce: Other:	1 1	5 1	3 12	15 12
Exterior Wall Sconces (Illuminated length of facade wall or surface 450 ft): Non-trada Exterior LED 11: T: Wall Sconce: Other:	<u>bie vvaitage</u> 1	10	11	110
Sheetz Signage above Front Canopy (Illuminated length of facade wall or surface 22	ft). Non-trad	-		
Exterior Linear Fluorescent 1: N/A: Sheetz sign above front canopy: 34" T5 HO 39W: Electronic: Exemption:Advertising or directional signage	4	1	156	Exempt
Exterior Linear Fluorescent 2: N/A: Sheetz sign above front canopy: 34" T5 HO 39W: Electronic: Exemption:Advertising or directional signage	4	1	156	Exempt
LED Wall Packs Fixtures (Walkway >= 10 feet wide 654 ft2): Tradable Wattage				
Exterior LED 10: X: Area Security Light: Other:	1	3	70	210
Sidewalk Bollards (Walkway >= 10 feet wide 1600 ft2): Tradable Wattage Exterior LED 12: PP: Sidewalk Bollards: Other:	1	16	34	544
Side Canopy (Entry canopy 44 ft2): Tradable Wattage Exterior LED 9: F: Front Canopy Downlight: Other:	1	2	3	6
Drive-thru Canopy (Drive-up windows/doors 1 windows or doors): Non-tradable Watta	age			
LED 7: X1: Drive-Thru Window: Other:	1	1	37	37
LED 8: X1: Drive-Thru Window: Other:	1	1	37	37
MTO Signage front of building (Illuminated length of facade wall or surface 22 ft): Nor	n-tradable W	attage		
Linear Fluorescent 4: N/A: MTO sign front bldg: 34" T5 HO 39W: Electronic: Exemption:Advertising or directional signage	4	1	156	Exempt
24/7 Drive-Thru Signage rear of building (Illuminated length of facade wall or surface	22 ft): Non-t	radable Wa	<u>ittage</u>	
Linear Fluorescent 5: N/A: 24/7 Drive-Thru sign rear bldg: 34" T5 HO 39W: Electronic: Exemption:Advertising or directional signage	4	1	156	Exempt
	Total Tra	dable Propos	sed Watts =	894

Exterior Lighting PASSES: Design 20% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COM*check* Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DAVID J. ANDERSON - SENIOR ASSOCIATE

Name - Title

Signature

2/5/21 Date

COMcheck Software Version 4.1.5.1 Mechanical Compliance Certificate

Project Information

Energy Code: Project Title: Location: Climate Zone: Project Type: 90.1 (2013) Standard New Sheetz Store "CAMERON (SAWYER RD)" Cameron, North Carolina 3a New Construction

Construction Site: Sawyer Road Cameron, NC 28326 Owner/Agent: Sheetz Incorporated 5700 Sixth Avenue Altoona, PA 16602 814-946-3611 Designer/Contractor: H.F. Lenz Company 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300

Mechanical Systems List

Quantity System Type & Description

HVAC System 1 (Single Zone): 1 Heating: 1 each - Other, Electric, Capacity = 184 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Single Package DX Unit, Capacity = 150 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.50 EER, Required Efficiency: 11.00 EER + 12.7 IEER Fan System: FAN SYSTEM 1 | Retail -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 1 Supply, Constant Volume, 4800 CFM, 5.0 motor nameplate hp, 0.0 fan efficiency grade 1 HVAC System 2 (Single Zone): Heating: 1 each - Other, Electric, Capacity = 123 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Single Package DX Unit, Capacity = 90 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 13.10 EER, Required Efficiency: 11.20 EER + 12.9 IEER Fan System: FAN SYSTEM 2 | Kitchen -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 2 Supply, Constant Volume, 3000 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade 1 HVAC System 3 (Single Zone): Heating: 1 each - Other, Electric, Capacity = 184 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Single Package DX Unit, Capacity = 124 kBtu/h, Air-Cooled Condenser, Air Economizer

Proposed Efficiency = 13.10 EER, Required Efficiency: 11.20 EER + 12.9 IEER

Fan System: FAN SYSTEM 3 | Work Room -- Compliance (Motor nameplate HP method) : Passes

Fans:

FAN 3 Supply, Constant Volume, 3600 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade

1 Water Heater 2:

Electric Storage Water Heater, Capacity: 80 gallons w/ Circulation Pump Proposed Efficiency: 0.64 SL, %/h (if > 12 kW), Required Efficiency: 0.64 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2013) Standard requirements in COM*check* Version 4.1.5.1 and to comply with any applicable

mandatory requirements listed in the Inspection Checklist.

DAVID J. ANDERSON - SENIOR ASSOCIATE

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2/5/21

Date

Name - Title

Signature

COMcheck Software Version 4.1.5.1 Inspection Checklist

Energy Code: 90.1 (2013) Standard

Requirements: 0.0% were addressed directly in the COM*check* 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, 5.4.3.1.1, 5.7 [PR1] ¹	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.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2, 6.4.4.2.1, 6.7.2 [PR2] ¹	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.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2, 7.7.1, 10.4.2 [PR3] ¹	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.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2, 8.4.1.1, 8.4.1.2, 8.7 [PR6] ²	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%.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2, 9.4.3, 9.7 [PR4] ¹	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.	□Complies □Does Not □Not Observable □Not Applicable	

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

Section #	Plan Review	Complies?	Comments/Assumptions
& Req.ID			
9.7 [PR8] ¹	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.	□Complies □Does Not □Not Observable □Not Applicable	
6.7.2.4 [PR5] ¹	Detailed instructions for HVAC systems commissioning included on	□Complies □Does Not	
	the plans or specifications for projects >=50,000 ft2.	□Not Observable □Not Applicable	
5.5.4.2.3 [PR7] ²	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.	□Complies □Does Not □Not Observable □Not Applicable	

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

Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
4.2.4 [FO1] ²	Installed below-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	R	R	□Complies □Does Not □Not Observable □Not Applicable	<i>See the Envelope Assemblies table for values.</i>
4.2.4 [FO3] ²	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	R Unheated Heated	R Unheated Heated	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [FO4] ²	Slab edge insulation installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	
5.5.3.5 [FO5] ²	Slab edge insulation depth/length.	ft	ft	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.1.7 [FO6] ¹	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.7.3 [FO7] ¹	Insulation in contact with the ground has <=0.3% water absorption rate per ASTM C272.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.7 [FO9] ³	Freeze protection and snow/ice melting system sensors for future connection to controls.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.5 [FO11] ³	Bottom surface of floor structures incorporating radiant heating insulated to $>=$ R-3.5.	R	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.

Section #	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
& Req.ID 5.4.3.2 [FR1] ³	Factory-built and site-assembled fenestration and doors are labeled or certified as meeting air			Complies	
	leakage requirements.			□Not Observable □Not Applicable	
5.5.4.3a [FR8] ¹	Vertical fenestration U-Factor.	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
				□Not Observable □Not Applicable	
5.5.4.3b [FR9] ¹	Skylight fenestration U-Factor.	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
				□Not Observable □Not Applicable	
5.5.4.4.1 [FR10] ¹	Vertical fenestration SHGC value.	SHGC:	SHGC:	□Complies □Does Not	See the Envelope Assemblies table for values.
				□Not Observable □Not Applicable	
5.5.4.4.2 [FR11] ¹	Skylight SHGC value.	SHGC:	SHGC:	□Complies □Does Not	See the Envelope Assemblies table for values.
				□Not Observable □Not Applicable	
5.8.2.1, 5.8.2.3,	Fenestration products rated (U- factor, SHGC, and VT) in			□Complies □Does Not	
5.8.2.4, 5.8.2.5 [FR12] ²	accordance with NFRC or energy code defaults are used.			□Not Observable □Not Applicable	
5.8.2.2 [FR13] ¹	Fenestration and door products are labeled, or a signed and			Complies	
	dated certificate listing the U- factor, SHGC, VT, and air leakage rate has been provided by the manufacturer.			□Not Observable □Not Applicable	
5.5.3.6 [FR14] ²	U-factor of opaque doors associated with the building	U Swinging	U Swinging	□Complies □Does Not	See the Envelope Assemblies table for values.
	thermal envelope meets requirements.	Nonswinging	Nonswinging	□Not Observable □Not Applicable	
5.4.3.1 [FR15] ¹	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces in climate zones 1-6.			□Complies □Does Not □Not Observable □Not Applicable	

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 High Impact (Tier 1)
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Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
7.4.4.1 [PL2] ³	Temperature controls installed on service water heating systems (<=120°F to maximum temperature for intended use).	□Complies □Does Not □Not Observable □Not Applicable	
7.4.4.2 [PL3] ¹	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	□Complies □Does Not □Not Observable □Not Applicable	

Section # & Reg.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.1.4, 6.4.1.5 [ME1] ²	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	Efficiency:	Efficiency:	□Complies □Does Not □Not Observable □Not Applicable	See the Mechanical Systems list for values.
6.4.3.4.1 [ME3] ³	Stair and elevator shaft vents have motorized dampers that automatically close.			Complies Does Not Not Observable Not Applicable	
6.4.3.4.5 [ME39] ³	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.4.4 [ME5] ³	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.8 [ME6] ¹	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.			Complies Does Not Not Observable Not Applicable	
6.5.3.2.1 [ME40] ²	DX cooling systems >= 75 kBtu/h (>= 65 kBtu/h effective 1/2016) and chilled-water and evaporative cooling fan motor hp >= $\frac{1}{4}$ designed to vary indoor fan airflow as a function of load and comply with operational requirements.			□Complies □Does Not □Not Observable □Not Applicable	<i>See the Mechanical Systems list for values.</i>
6.4.4.1.1 [ME7] ³	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.2 [ME8] ²	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	□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.3 [ME9] ²	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.	in.	in.	□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.4 [ME41] ³	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.2.1 [ME10] ²	Ducts and plenums sealed based on static pressure and location.			Complies Does Not Not Observable Not Applicable	

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.4.2.2 [ME11] ³	Ductwork operating >3 in. water column requires air leakage testing.			□Complies □Does Not □Not Observable	
6.4.4.2.2 [ME11] ³	Ductwork operating >3 in. water column requires air leakage testing.			□Complies □Does Not	
	-			□Not Observable □Not Applicable	
6.4.4.2.2 [ME11] ³	Ductwork operating >3 in. water column requires air leakage			□Complies □Does Not	
	testing.			□Not Observable □Not Applicable	
6.5.1.5 [ME16] ¹	Economizer operation will not increase heating energy use			□Complies □Does Not	
	during normal operation.			□Not Observable □Not Applicable	
6.5.1.5 [ME16] ¹	Economizer operation will not increase heating energy use			□Complies □Does Not	
	during normal operation.			□Not Observable □Not Applicable	
6.5.2.3 [ME19] ³	Dehumidification controls provided to prevent reheating,			□Complies □Does Not	
	recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.			□Not Observable □Not Applicable	
6.5.2.4.1 [ME68] ³	Humidifiers with airstream mounted preheating jackets have preheat auto-shutoff value set to activate when humidification is			□Complies □Does Not □Not Observable	
6.5.2.4.2	not required. Humidification system dispersion			□Not Applicable □Complies	
[ME69] ³	tube hot surfaces in the airstreams of ducts or air-			Does Not	
	handling units insulated >= R- 0.5.			□Not Applicable	
6.5.2.5 [ME70] ³	Preheat coils controlled to stop heat output whenever mechanical cooling, including			□Complies □Does Not	
	economizer operation, is active.			□Not Observable □Not Applicable	
6.5.3.5 [ME72] ²	Motors for fans $>= 1/12$ hp and < 1 hp are electronically-			□Complies □Does Not	
	commutated motors or have a minimum motor efficiency of 70%. These motors are also speed adjustable for either balancing or remote control.			□Not Observable □Not Applicable	
6.5.3.5 [ME72] ²	Motors for fans >= 1/12 hp and < 1 hp are electronically- commutated motors or have a minimum motor efficiency of			Complies Does Not Not Observable	
	70%. These motors are also speed adjustable for either balancing or remote control.			□Not Applicable	

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.5.3.5 [ME72] ²	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.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.3.3 [ME42] ³	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			Complies Does Not Not Observable Not Applicable	<i>See the Mechanical Systems list for values.</i>
6.5.3.3 [ME42] ³	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			□Complies □Does Not □Not Observable □Not Applicable	<i>See the Mechanical Systems list for values.</i>
6.5.3.3 [ME42] ³	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			□Complies □Does Not □Not Observable □Not Applicable	<i>See the Mechanical Systems list for values.</i>
6.5.4.2 [ME25] ³	HVAC pumping systems >10 hp designed for variable fluid flow.			Complies Does Not Not Observable Not Applicable	
6.5.6.1 [ME56] ¹	Exhaust air energy recovery on systems meeting Tables 6.5.6.1-1, and 6.5.6.1-2.			Complies Does Not Not Observable Not Applicable	
6.5.7.1.1 [ME32] ²	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.7.1.2 [ME46] ³	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.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.7.1.2 [ME46] ³	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.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.7.1.2 [ME46] ³	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.			□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.5.7.1.5 [ME49] ³	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.8.1 [ME34] ²	Unenclosed spaces that are heated use only radiant heat.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.9 [ME35] ¹	Hot gas bypass limited to: <=240 kBtu/h - 15% >240 kBtu/h - 10%			□Complies □Does Not □Not Observable □Not Applicable	
6.5.9 [ME35] ¹	Hot gas bypass limited to: <=240 kBtu/h - 15% >240 kBtu/h - 10%			□Complies □Does Not □Not Observable □Not Applicable	
6.5.9 [ME35] ¹	Hot gas bypass limited to: <=240 kBtu/h - 15% >240 kBtu/h - 10%			□Complies □Does Not □Not Observable □Not Applicable	
7.4.2 [ME36] ²	Service water heating equipment meets efficiency requirements.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.9 [ME63] ²	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.			□Complies □Does Not □Not Observable □Not Applicable	
6.5.10 [ME73] ³	Doors separating conditioned space from the outdoors have controls that disable/reset heating and cooling system when open.			□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10] ²	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	Complies Does Not	
		□Not Observable □Not Applicable	
9.4.1.1 [EL1] ²	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.	□Complies □Does Not □Not Observable □Not Applicable	
9.4.1.1 [EL2] ²	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	□Complies □Does Not □Not Observable □Not Applicable	
9.4.1.2 [EL11] ²	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	□Complies □Does Not	
	adynghe clansicon zone ngheng.	□Not Observable □Not Applicable	
9.4.1.1f [EL13] ¹		□Complies □Does Not □Not Observable □Not Applicable	
9.4.1.4 [EL3] ²	Automatic lighting controls for exterior lighting installed.	□Complies □Does Not □Not Observable □Not Applicable	
9.4.1.3 [EL4] ¹		□Complies □Does Not □Not Observable □Not Applicable	
9.6.2 [EL8] ¹	allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	□Complies □Does Not □Not Observable □Not Applicable	
10.4.1 [EL9] ²	Electric motors meet requirements where applicable.	□Complies □Does Not □Not Observable □Not Applicable	

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
4.2.4 [IN2] ¹	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.	R Above deck Metal Attic	R Above deck Metal Attic	□Complies □Does Not □Not Observable □Not Applicable	<i>See the Envelope Assemblies table for values.</i>
5.8.1.2, 5.8.1.3 [IN3] ¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the ceiling slope is $\leq 3:12$.			Complies Does Not Not Observable Not Applicable	
4.2.4 [IN6] ¹	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	R Mass Metal Steel Wood	R Mass Metal Steel Wood	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	
4.2.4 [IN8] ²	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	R Mass Steel Wood	R Mass Steel Wood	□Complies □Does Not □Not Observable □Not Applicable	<i>See the Envelope Assemblies table for values.</i>
5.8.1.1 [IN10] ²	Building envelope insulation is labeled with R-value or insulation certificate has been provided listing R-value and other relevant data.			Complies Does Not Not Observable Not Applicable	
5.8.1.9 [IN18] ²	Building envelope insulation extends over the full area of the component at the proposed rated R or U value.			Complies Does Not Not Observable Not Applicable	
5.8.1.4 [IN11] ²	Eaves are baffled to deflect air to above the insulation.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.5 [IN12] ²	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.			Complies Does Not Not Observable Not Applicable	
5.8.1.6 [IN13] ²	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.7.1 [IN15] ²	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.			Complies Does Not Not Observable Not Applicable	

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2 Medium Impact (Tier 2)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.8.1.7.2 [IN16] ²	Foundation vents do not interfere with insulation.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.8 [IN17] ³	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.			□Complies □Does Not □Not Observable □Not Applicable	

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
5.4.3.3 [FI1] ¹	Weatherseals installed on all loading dock cargo doors in Climate Zones 4- 8.	□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.1.2 [FI3] ³	Thermostatic controls have a 5 °F deadband.	□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.2 [FI20] ³	Temperature controls have setpoint overlap restrictions.	□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.3.1 [FI21] ³	HVAC systems equipped with at least one automatic shutdown control.	□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.3.2 [FI22] ³	Setback controls allow automatic restart and temporary operation as required for maintenance.	□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.6 [FI6] ³	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.	□Complies □Does Not □Not Observable □Not Applicable	
6.7.2.1 [FI7] ³	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	□Complies □Does Not □Not Observable □Not Applicable	
6.7.2.2 [FI8] ³		□Complies □Does Not □Not Observable	
6.7.2.3	An air and/or hydronic system	Not Applicable	
[FI9] ¹	balancing report is provided for HVAC systems serving zones >5,000 ft2 of conditioned area.	Does Not	
6.7.2.4	HVAC control systems have been	□Not Applicable □Complies	
[FI10] ¹	tested to ensure proper operation, calibration and adjustment of controls.	Does Not Not Observable Not Applicable	
7.4.4.3 [FI11] ³	Public lavatory faucet water temperature <=110°F.	Complies Does Not	
		□Not Observable □Not Applicable	
7.4.4.4 [FI12] ³	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank.	□Complies □Does Not	
		□Not Observable □Not Applicable	

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
8.7.1 [FI16] ³			
		□Not Applicable	
8.7.2 [FI17] ³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	□Complies □Does Not	
		□Not Observable □Not Applicable	
9.2.2.3 [FI18] ¹	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.	□Complies □Does Not	See the Interior Lighting fixture schedule for values.
		□Not Observable □Not Applicable	
9.4.2 [FI19] ¹	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.	□Complies □Does Not	See the Exterior Lighting fixture schedule for values.
		□Not Observable □Not Applicable	
10.4.3 [FI24] ²	Elevators are designed with the proper lighting, ventilation power, and standby mode.	□Complies □Does Not	
		□Not Observable □Not Applicable	