



COMcheck-Web™

Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	MC-NPL
Location:	Norristown, Pennsylvania
Climate Zone:	4a
Project Type:	New Construction
Project No:	49799
All Electric:	false
Is Renewable:	false
Has Battery:	false
Has Charger:	true
Has Heat Pump:	false

Construction Site:

1001 Powell Street
Norristown, Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
Montgomery County
Norristown, Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
Kimmel Bogrette Architecture
Blue Bell, Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Notes:

Energy Credits

Description	Credit
Enhanced Envelope Performance	1.0

Credits: 1.0 Required 1.0 Proposed

Building Area

Description	Floor Area
1-Library (Library) : Nonresidential	85759





Envelope Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: MC-NPL
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction
Vertical Glazing / Wall Area: 0.241

Construction Site:

1001 Powell Street
Norristown, Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
Montgomery County
Norristown, Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
Kimmel Bogrette Architecture
Blue Bell, Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof: Main Roof, [Bldg. Use 1 - Library]	28456	---	30.00	0.032	0.032
Roof: East Roof, [Bldg. Use 1 - Library]	14036	---	30.00	0.032	0.032
Roof: Green Roof, [Bldg. Use 1 - Library]	10048	---	30.00	0.032	0.032
Floor: Slab on Grade, Vertical 2 ft., [Bldg. Use 1 - Library] (c)	1008	---	10.00	0.540	0.540
Floor: 1st Floor, [Bldg. Use 1 - Library]	18421	---	30.00	0.030	0.076
Floor: Slab over Offices, Vertical 2 ft., [Bldg. Use 1 - Library] (c)	420	---	10.00	0.900	0.620
NORTH					
Ext Wall: North Ext Wall, [Bldg. Use 1 - Library]	16786	13.00	7.50	0.064	0.064
Window: N Windows Clear, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.37, VT 0.68, [Bldg. Use 1 - Library] (b)	1781	---	---	0.220	0.380
Window: N Windows Tint, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.50, [Bldg. Use 1 - Library] (b)	1221	---	---	0.220	0.380
Door: N Doors, Swinging, [Bldg. Use 1 - Library]	42	---	---	0.350	0.610
EAST					
Ext Wall: East Ext Wall, [Bldg. Use 1 - Library]	10689	13.00	7.50	0.064	0.064
Window: E Windows, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.50, [Bldg. Use 1 - Library] (b)	914	---	---	0.220	0.380
Door: E Door, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.30, VT 0.68, [Bldg. Use 1 - Library] (b)	28	---	---	0.350	0.770
SOUTH					
Ext Wall: South Ext Wall, [Bldg. Use 1 - Library]	10243	13.00	7.50	0.064	0.064
Window: S Windows, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.50, [Bldg. Use 1 - Library] (b)	2027	---	---	0.220	0.380
Door: S Doors, Swinging, [Bldg. Use 1 - Library]	126	---	---	0.350	0.610
Door: Overhead Doors, Garage door < 14% glazing, [Bldg. Use 1 - Library]	569	---	---	0.230	0.310
Door: S Door - glass, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.36, VT 0.68, [Bldg. Use 1 - Library] (b)	21	---	---	0.220	0.450
WEST					
Ext Wall: West Ext Wall, [Bldg. Use 1 - Library]	7541	13.00	7.50	0.064	0.064

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Window: W Windows, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.48, [Bldg. Use 1 - Library] (b)	281	---	---	0.220	0.380
Window: W Curtainwall - glass, Perf. Specs.: Product ID Guardian SNX70+ with dot frit, SHGC 0.24, VT 0.40, [Bldg. Use 1 - Library] (b)	4569	---	---	0.210	0.380
Door: W Door, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.30, VT 0.68, [Bldg. Use 1 - Library] (b)	42	---	---	0.350	0.770
Door: W CW Door, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.24, VT 0.40, [Bldg. Use 1 - Library] (b)	21	---	---	0.200	0.450

- (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 12% 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 2018 IECC requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Martin D. Kimmel - President



11.10.2025

Name - Title

Signature

Date



Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100% 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.

Plan Review

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [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 Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C402.4.2 [PR14] ¹	In enclosed spaces > 2,500 ft ² directly under a roof with ceiling heights >15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M series
C402.4.1 [PR10] ¹	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: Not Applicable
C402.4.1 [PR11] ¹	The skylight area <= 3 percent of the gross roof area.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: Not Applicable, No skylights

Additional Comments/Assumptions:

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1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Footing / Foundation Inspection

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [FO4] ²	Slab edge insulation installed per manufacturer's instructions.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C303.2.1 [FO6] ¹	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C105 [FO3] ²	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.2.4 [FO7] ²	Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or ≥ 10 inches of soil.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply. <i>See the Envelope Assemblies table for values</i>

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Framing / Rough-In Inspection

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12] ²	Fenestration products rated in accordance with NFRC.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: Spec section 08 800
C402.5.2, C402.5.4 [FR18] ³	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C402.5.7 [FR17] ³	Vestibules are installed on all building entrances. Doors have self-closing devices.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A2 & A4 plans, A10.1 and specifications
C303.1.3 [FR13] ¹	Fenestration products are certified as to performance labels or certificates provided.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: Spec section 08 800
C402.4.3 [FR10] ¹	Vertical fenestration SHGC value.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.4.3, C402.4.3.4 [FR8] ¹	Installed vertical fenestration U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.5.1.2.1 [FR19] ¹	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability ≤ 0.004 dfm/ft ² . Air barrier penetrations are sealed in an approved manner.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Mechanical Rough-In Inspection

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.5.5, C403.2.4.3 [ME3] ³	Stair and elevator shaft vents have motorized dampers that automatically close. Referenece section C403.7.7 for operational details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A7 details and specifications
C403.7.7 [ME58] ³	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: Mechanical specifications

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Rough-In Electrical Inspection

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C405.8.2, C405.8.2.1 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.9 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits $\leq 5\%$.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E Series

Additional Comments/Assumptions:

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

Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3] ¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is ≤ 3 in 12.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C402.2.1 [IN20] ¹	Insulation installed on a suspended ceiling having ceiling tiles is not being specified for roof/ceiling assemblies. Continuous insulation board installed in 2 or more layers with edge joints offset between layers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C402.2.3 [IN8] ²	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.2.6 [IN18] ³	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C105 [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.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.5.1.1 [IN1] ¹	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C303.1 [IN10] ²	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C303.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C303.2, C402.2.4 [IN9] ²	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C105 [IN6] ¹	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>

Additional Comments/Assumptions:

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

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.1.1 [FI57] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C402.5.6 [FI37] ¹	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details and specifications
C402.5.8 [FI26] ³	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: Electrical specifications

Additional Comments/Assumptions:

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

Project Information

Energy Code: 2021 IECC
Project Title: MC-NPL COPY
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction
Project No: 93813
All Electric: false
Is Renewable: false
Has Battery: false
Has Charger: true
Has Heat Pump: false

Construction Site:

1001 Powell Street
Norristown , Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
Montgomery County
Norristown , Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
482 Norristown Rd
Kimmel Bogrette Architecture
Blue Bell , Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Notes:

Energy Credits

Description	Credit
Enhanced envelope performance	5.0
10% cooling efficiency improvement	6.0
Dedicated outdoor air	0.0
Enhanced digital lighting controls	2.0
Reduced lighting power	44.0

Credits: 10.0 Required 57.0 Proposed

Building Area

Description	Floor Area
1-Library (Library) : Nonresidential	85759



Envelope Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: MC-NPL COPY
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction
Vertical Glazing / Wall Area: 0.241

Construction Site:

1001 Powell Street
Norristown , Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
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Designer/Contractor:

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482 Norristown Rd
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Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof:Main Roof, Insulation Entirely Above Deck, [Bldg. Use 1 - Library]	28456	---	30.00	0.032	0.032
Roof: East Roof, Insulation Entirely Above Deck, [Bldg. Use 1 - Library]	14036	---	30.00	0.032	0.032
Roof:Green Roof, Insulation Entirely Above Deck, [Bldg. Use 1 - Library]	10048	---	30.00	0.032	0.032
Floor: Slab on Grade, Unheated Slab-On-Grade, Vertical 2 ft., [Bldg. Use 1 - Library] (c)	1008	---	15.00	0.520	0.520
Floor: 1st Floor, Concrete Floor (over unconditioned space), [Bldg. Use 1 - Library]	18421	---	30.00	0.030	0.057
Floor: Slab over Offices, Heated Slab-On-Grade, Vertical 2 ft., [Bldg. Use 1 - Library] (c)	420	---	15.00	0.860	0.620
Ext Wall: North Ext Wall, Metal Frame, 16" o.c., [Bldg. Use 1 - Library]	16786	13.00	7.50	0.064	0.064
Window: N Windows Clear, Metal Frame with Thermal Break, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.36, VT 0.68, [Bldg. Use 1 - Library] (b)	1781	---	---	0.220	0.360
Window: N Windows Tint, Metal Frame with Thermal Break, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.50, [Bldg. Use 1 - Library] (b)	1221	---	---	0.220	0.360
Door: N Doors, Insulated Metal, Swinging, [Bldg. Use 1 - Library]	42	---	---	0.350	0.370
Ext Wall: East Ext Wall, Metal Frame, 16" o.c., [Bldg. Use 1 - Library]	10689	13.00	7.50	0.064	0.064
Window: E Windows, Metal Frame with Thermal Break, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.50, [Bldg. Use 1 - Library] (b)	914	---	---	0.220	0.360
Door: E Door, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.30, VT 0.68, [Bldg. Use 1 - Library] (b)	28	---	---	0.350	0.630
Ext Wall: West Ext Wall, Metal Frame, 16" o.c., [Bldg. Use 1 - Library]	7541	13.00	7.50	0.064	0.064
Window: W Windows, Metal Frame with Thermal Break, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.48, [Bldg. Use 1 - Library] (b)	281	---	---	0.220	0.360
Window: W Curtainwall - glass, Metal Frame with Thermal Break, Perf. Specs.: Product ID Guardian SNX70+ with dot frit, SHGC 0.24, VT 0.40, [Bldg. Use 1 - Library] (b)	4569	---	---	0.210	0.360
Door: W Door, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.30, VT 0.68, [Bldg. Use 1 - Library] (b)	42	---	---	0.350	0.630

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Door: W CW Door, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.24, VT 0.40, [Bldg. Use 1 - Library] (b)	21	---	---	0.200	0.450
Ext Wall: South Ext Wall, Metal Frame, 16" o.c., [Bldg. Use 1 - Library]	10243	13.00	7.50	0.064	0.064
Window: S Windows, Metal Frame with Thermal Break, Perf. Specs.: Product ID Guardian SN68 on Green/Gray, SHGC 0.29, VT 0.50, [Bldg. Use 1 - Library] (b)	2027	---	---	0.220	0.360
Door:S Doors, Insulated Metal, Swinging, [Bldg. Use 1 - Library]	126	---	---	0.350	0.370
Door: Overhead Doors, Insulated Metal, Garage door < 14% glazing, [Bldg. Use 1 - Library]	569	---	---	0.230	0.310
Door: S Door - glass, Perf. Specs.: Product ID Guardian SN68 on Clear, SHGC 0.30, VT 0.68, [Bldg. Use 1 - Library] (b)	21	---	---	0.220	0.450

- (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 21% 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 2021 IECC requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date
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Inspection Checklist

Energy Code: 2021 IECC

Requirements: 100% 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.

Plan Review

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [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 Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 series
C402.4.2 [PR14] ¹	In enclosed spaces > 2,500 ft ² directly under a roof with ceiling heights >15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: see calcs
C402.4.1 [PR10] ¹	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: calcs performed & available
C402.4.1 [PR11] ¹	The skylight area <= 3 percent of the gross roof area.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: n/a

Additional Comments/Assumptions:

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

Footing / Foundation Inspection

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [FO4] ²	Slab edge insulation installed per manufacturer's instructions.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8
C303.2.1 [FO6] ¹	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8
C105 [FO3] ²	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values
C402.2.4 [FO7] ²	Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	See the Envelope Assemblies table for values

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Framing / Rough-In Inspection

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12] ²	Fenestration products rated in accordance with NFRC certified and as to performance labels or certificates provided.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: specs
C402.5.4 [FR18] ³	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C402.5.9 [FR17] ³	Vestibules are installed on all building entrances. Doors have self-closing devices.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A2 & door hardware spec
C402.4.3 [FR10] ¹	Vertical fenestration SHGC value.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.4.3, C402.4.3.4 [FR8] ¹	Installed vertical fenestration U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.4.5 [FR14] ²	U-factor of opaque swinging and nonswinging doors associated with the building thermal envelope meets requirements.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.5.1.3 [FR19] ¹	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability ≤ 0.004 dfm/ft ² . Air barrier penetrations are sealed in an approved manner.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Mechanical Rough-In Inspection

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.5.7, C403.7.7 [ME3] ³	Stair and elevator shaft vents have motorized dampers that automatically close. Reference section C403.7.7 for operational details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply. Location on plans/spec: A7
C403.7.7 [ME58] ³	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M series

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Rough-In Electrical Inspection

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.7 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C405.8 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C405.9.1, C405.9.2 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.10 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C405.1.1 [EL30] ²	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy >= 65 lm/W or luminaires with efficacy >= 45 lm/W or comply with C405.2.4 or C405.3.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.12 [EL32] ²	Buildings with gross conditioned floor area > 25,000 ft2 will be equipped with a energy monitoring system in compliance with C405.12.1 through C405.12.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M series

Additional Comments/Assumptions:

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

Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3] ¹	Roof insulation installed per manufacturer's instructions and is labeled with R-value or insulation certificate providing R-value and other relevant data. Blown or poured loose-fill insulation is installed only where the roof slope is ≤ 3 in 12.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C402.2.1 [IN20] ¹	Roof assembly meets minimal thermal resistance installed between roof framing or in a continuous fashion on the roof assembly as stipulated in Table C402.1.3. Requirements for above deck insulation, minimum thickness, suspended ceilings, staggered joints and skylight curbs will be met.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A3 & A8
C402.2.3 [IN8] ²	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.2.6 [IN18] ³	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C105 [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.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>
C402.5.1.1 [IN1] ¹	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 details
C303.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 & specs
C303.2, C402.2.4 [IN9] ²	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A3 & A8
C105 [IN6] ¹	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Envelope Assemblies table for values</i>

Additional Comments/Assumptions:

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

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C406.2.4 [FI66] ¹	10% cooling efficiency improvement - all HVAC and Plant cooling equipment is 10% more efficient than required by 2021 IECC.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M series
C406.3 [FI67] ¹	Reduced lighting power - this credit specifies that the connected lighting power is >= 10% more efficient than 2021 IECC requirements.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C406.4 [FI54] ¹	Enhanced Digital Lighting Controls - Interior lighting has the following enhanced lighting controls in accordance with Sections C405.2.1 through C405.2.3, Luminaires capable of continuous dimming and being addressed individually, at least 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures with load shedding or occupancy sensors, Sequence of Operations documentation, and functional testing per Section C408.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C401.3 [FI58] ¹	A thermal envelope certificate will be supplied and completed by an approved third party.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C406.6 [FI52] ¹	Dedicate outdoor air system efficiency energy credit - Building equipped with independent ventilation system designed to provide 100-percent outdoor air to each individual occupied space, as specified by the IMC. The ventilation system is capable of total energy recovery and includes HVAC system controls that manage temperature resets at least 25 percent of delta design supply-air / room-air temp.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M Series
C406.8 [FI68] ¹	Enhanced envelope performance - the building thermal envelope UA value is >= 15% better than the total UA of the envelope specified by Section C402.1.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A8 series
C408.1.1 [FI57] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C402.5.10 [FI26] ³	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: A3, A8 & E series
C402.5.11 [FI59] ¹	Operable openings > 40 ft2 will be interlocked with heating and cooling systems to setback setpoint temperatures within 10 minutes of opening.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C402.5.8 [FI37] ¹	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: hardware spec and A8

Additional Comments/Assumptions:

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

Project Information

Energy Code: 2021 IECC
Project Title: MC-NPL COPY
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction
Project No: 93813
All Electric: false
Is Renewable: false
Has Battery: false
Has Charger: true
Has Heat Pump: false

Construction Site:

1001 Powell Street
Norristown , Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
Montgomery County
Norristown , Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
482 Norristown Rd
Kimmel Bogrette Architecture
Blue Bell , Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Notes:

Energy Credits

Description	Credit
Enhanced envelope performance	5.0
10% cooling efficiency improvement	6.0
Dedicated outdoor air	0.0
Enhanced digital lighting controls	2.0
Reduced lighting power	44.0

Credits: 10.0 Required 57.0 Proposed

Building Area

Description	Floor Area
1-Library (Library) : Nonresidential	85759



Mechanical Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: MC-NPL COPY
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction

Construction Site:

1001 Powell Street
Norristown, Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
Montgomery County
Norristown, Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
482 Norristown Rd
Kimmel Bogrette Architecture
Blue Bell, Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Mechanical Systems List

Quantity	Component	Description
HVAC Systems		
1	AHU-G1 (Single Zone):	Split System Heat Pump Heating Mode: Capacity = 38 kBtu/h, Proposed Efficiency = 9.30 HSPF2, Required Efficiency = 7.50 HSPF2 Cooling Mode: Capacity = 36 kBtu/h, Proposed Efficiency = 17.60 SEER2, Required Efficiency = 14.30 SEER2 Proposed Part Load Efficiency = 12.30, Required Part Load Efficiency = 0.00 Fan System: AHU-G1 Fan DHS Ground Floor -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: AHU-G1 Supply, Constant Volume, 1200 CFM, 0.4 motor nameplate hp, 0.80 fan energy index, fan exception: Single fan < 1 HP or < 0.89 kW
1	AHU-G2 (Single Zone):	Split System Heat Pump Heating Mode: Capacity = 38 kBtu/h, Proposed Efficiency = 8.60 HSPF2, Required Efficiency = 7.50 HSPF2 Cooling Mode: Capacity = 30 kBtu/h, Proposed Efficiency = 17.80 SEER2, Required Efficiency = 14.30 SEER2 Proposed Part Load Efficiency = 12.30, Required Part Load Efficiency = 0.00 Fan System: AHU-G2 Fan DHS Ground Floor -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: AHU-G2 Supply, Constant Volume, 1000 CFM, 0.2 motor nameplate hp, 0.80 fan energy index, fan exception: Single fan < 1 HP or < 0.89 kW
3	AHU-G3, G4, G5 (Single Zone):	Split System Heat Pump Heating Mode: Capacity = 28 kBtu/h, Proposed Efficiency = 9.50 HSPF2, Required Efficiency = 7.50 HSPF2 Cooling Mode: Capacity = 18 kBtu/h, Proposed Efficiency = 18.90 SEER2, Required Efficiency = 14.30 SEER2 Proposed Part Load Efficiency = 12.30, Required Part Load Efficiency = 0.00 Fan System: AHU-G3, G4, G5 Fan DHS Ground Floor / Conference D11 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: AHU-G3, G4, G5 Supply, Constant Volume, 600 CFM, 0.2 motor nameplate hp, 0.80 fan energy index, fan exception: Single fan < 1 HP or < 0.89 kW

Quantity	Component	Description
1	AHU-1.5 (Single Zone):	Split System Heat Pump Heating Mode: Capacity = 14 kBtu/h, Proposed Efficiency = 9.20 HSPF2, Required Efficiency = 7.50 HSPF2 Cooling Mode: Capacity = 18 kBtu/h, Proposed Efficiency = 25.00 SEER2, Required Efficiency = 14.30 SEER2 Proposed Part Load Efficiency = 12.30 , Required Part Load Efficiency = 0.00 Fan System: AHU-1.5 Fan IT Room 148 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: AHU-1.5 Supply, Constant Volume, 600 CFM, 0.1 motor nameplate hp, 0.80 fan energy index , fan exception: Single fan < 1 HP or < 0.89 kW
1	AHU-E (Single Zone):	Cooling: 1 each - Split System (Cooling Equip), Capacity = 36 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: None Proposed Efficiency = 25.00 SEER2, Required Efficiency = 13.40 SEER2 Proposed Part Load Efficiency = 12.50 , Required Part Load Efficiency = 0.00 Fan System: AHU-E Fan Switchgear Room 229 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: AHU-E Supply, Constant Volume, 1200 CFM, 0.1 motor nameplate hp, 0.80 fan energy index , fan exception: Single fan < 1 HP or < 0.89 kW
1	RTU-1 (Multiple-Zone):	Heating: 1 each - Central Furnace (RTU-1 Furnace), Gas, Capacity = 688 kBtu/h Proposed Efficiency = 81.00% Et, Required Efficiency: 81.00 % Et Cooling: 1 each - Single Package DX Unit (Cooling Equip), Capacity = 578 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 9.80 EER, Required Efficiency = 9.80 EER Proposed Part Load Efficiency = 17.60 IEER, Required Part Load Efficiency = 13.00 IEER Fan System: RTU-1 Fan Floors 1 & 2 Area A -- Compliance (Brake HP and fan efficiency method) : Passes Fans: RTU-1 Supply, Multi-Zone VAV, 20750 CFM, 40.0 motor nameplate hp, 35.8 design brake hp (35.8 max. BHP), 67.00 fan energy index Pressure Drop Credits: Particulate filtration credit: MERV 13 through 15, 4.5207 credit Particulate filtration credit: MERV 9 through 12, 2.5115 credit Fully ducted return and/or exhaust air systems, 2.5115 credit
1	RTU-2 (Multiple-Zone):	Heating: 1 each - Central Furnace (RTU-2 Furnace), Gas, Capacity = 688 kBtu/h Proposed Efficiency = 81.00% Et, Required Efficiency: 81.00 % Et Cooling: 1 each - Single Package DX Unit (Cooling Equip), Capacity = 460 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 10.90 EER, Required Efficiency = 9.80 EER Proposed Part Load Efficiency = 18.30 IEER, Required Part Load Efficiency = 13.00 IEER Fan System: RTU-2 Fan Floors 1 & 2 Area B -- Compliance (Brake HP and fan efficiency method) : Passes Fans: RTU-2 Supply, Multi-Zone VAV, 18000 CFM, 30.0 motor nameplate hp, 29.3 design brake hp (29.3 max. BHP), 67.00 fan energy index Pressure Drop Credits: Particulate filtration credit: MERV 13 through 15, 3.9216 credit Particulate filtration credit: MERV 9 through 12, 2.1786 credit Fully ducted return and/or exhaust air systems, 2.1786 credit
1	RTU-3 (Multiple-Zone):	Heating: 1 each - Central Furnace (RTU-3 Furnace), Gas, Capacity = 688 kBtu/h Proposed Efficiency = 81.00% Et, Required Efficiency: 81.00 % Et Cooling: 1 each - Single Package DX Unit (Cooling Equip), Capacity = 305 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 10.40 EER, Required Efficiency = 9.80 EER Proposed Part Load Efficiency = 16.80 IEER, Required Part Load Efficiency = 13.00 IEER Fan System: Unspecified
Water Heaters		
1	EWH-1:	Electric Storage Water Heater, Capacity: 50 gallons No minimum efficiency requirement applies
1	EWH-2:	Electric Storage Water Heater, Capacity: 47 gallons No minimum efficiency requirement applies
1	EWH-3:	Electric Storage Water Heater, Capacity: 47 gallons No minimum efficiency requirement applies

Quantity	Component	Description
1	EWB-4:	Electric Storage Water Heater, Capacity: 50 gallons No minimum efficiency requirement applies
1	EWB-5:	Electric Storage Water Heater, Capacity: 28 gallons No minimum efficiency requirement applies
1	EWB-7:	Electric Storage Water Heater, Capacity: 0 gallons No minimum efficiency requirement applies
1	EWB-8:	Electric Storage Water Heater, Capacity: 0 gallons No minimum efficiency requirement applies
1	EWB-9:	Electric Storage Water Heater, Capacity: 0 gallons No minimum efficiency requirement applies
1	EWB-10:	Electric Storage Water Heater, Capacity: 0 gallons No minimum efficiency requirement applies
1	EWB-11:	Electric Storage Water Heater, Capacity: 0 gallons No minimum efficiency requirement applies

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 2021 IECC requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Brett Schweiger - Mechanical Coordinator		04-22-2026
Name - Title	Signature	Date



Inspection Checklist

Energy Code: 2021 IECC

Requirements: 74% 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.

Plan Review

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: see calcs
C103.2 [PR2] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical and service water heating systems and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks. Hot water system sized per manufacturer's sizing guide.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A

Additional Comments/Assumptions:

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1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Footing / Foundation Inspection

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.13.2, C403.13.3 [FO9] ³	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature above 50F and outdoor temperature above 40F.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Plumbing Rough-In Inspection

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6] ³	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Mechanical Rough-In Inspection

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41] ³	Thermally ineffective panel surfaces of sensible heating panels have insulation $\geq$ R-3.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.2.1 [ME112] ³	Zone isolation devices and controls installed where applicable.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.5.5 [ME113] ²	Fault detection and diagnostics installed with air-cooled unitary DX units or VRF units having economizers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C403.2.2 [ME59] ¹	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.7.1 [ME59] ¹	Demand control ventilation provided for spaces >500 ft ² and >15 people/1000 ft ² occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow $>3,000$ cfm.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.7.2 [ME115] 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 Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C403.7.3 [ME140] ³	Units that provide ventilation air to multiple zones and operate in combination with zone heating and cooling systems do not use heating or heat recovery to warm supply air to a temperature greater than 60°F when representative building loads or outdoor air temperatures indicate that the majority of zones require cooling.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.7.6 [ME141] ³	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.7.4 [ME57] ¹	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C403.7.5 [ME116] ³	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C403.12.1, C403.12.2 [ME60] ²	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.5, C403.5.1, C403.5.2 [ME62] ¹	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.5.2 [ME16] ¹	Economizer operation will not increase heating energy use during normal operation.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.5.3.3 [ME124] ¹	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.5.3.4 [ME125] ¹	System capable of relieving excess outdoor air during air economizer operation to prevent over pressurizing the building. The relief air outlet located to avoid recirculation into the building.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.5.3.5 [ME126] ¹	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.1 [ME75] ²	Hydronic and multizone HVAC system controls are VAV fans driven by mechanical or electrical variable speed drive per Table C403.4.1.1.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.9 [ME67] ²	VAV fans have static pressure sensors located so controller setpoint ≤ 1.2 w.c..	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.1.3 [ME24] ²	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.3.3.2 [ME121] ³	Closed-circuit cooling tower within heat pump loop have either automatic bypass valve or lower leakage positive closure dampers. Open-circuit tower within heat pump loop have automatic valve to bypass all heat pump water flow around the tower. Open- or closed-circuit cooling towers used in conjunction with a separate heat exchanger have heat loss by shutting down the circulation pump on the cooling tower loop. Open- or closed circuit cooling towers have a separate heat exchanger to isolate the cooling tower from the heat pump loop, and heat loss is controlled by shutting down the circulation pump on the cooling tower loop.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.12.3 [ME61] ²	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.6.1 [ME130] ³	Supply air systems serving multiple zones have VAV systems with controls configured to reduce the volume of air that is reheated, re-cooled or mixed in each zone. See section for details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.2 [ME131] ³	Single-duct VAV systems use terminal devices configured to reduce the supply of primary supply air before reheating or recooling takes place.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.3 [ME132] ³	Systems that have 1 warm air duct and 1 cool air duct use terminal devices configured to reduce the flow from one duct to a minimum before mixing of air from the other duct takes place.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.4 [ME133] ³	Individual dual-duct or mixing heating and cooling systems with a single fan and with total capacities > 90,000 Btu/h not equipped with air economizers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.5 [ME134] ³	Multiple zone HVAC systems have supply air temperature reset controls based on building loads or outside temperatures.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.7 [ME136] ³	Parallel-flow fan-powered VAV air terminals have automatic controls configured to 1) turn off the terminal fan except when space heating is required or where required for ventilation, 2) turn on the terminal fan as the first stage of heating before the heating coil is activated, and 3) during heating for warmup or setback temperature control, either operate the terminal fan and heating coil without primary air or, reverse the terminal damper logic and provide heating from the central air handler by primary air.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.8 [ME137] ³	Systems with DDC of individual zones reporting to the central control panel configured to reset the static pressure setpoint based on zone requiring the most pressure. The DDC is capable of monitoring zone damper positions or have an alternative method of indicating the need for static pressure. See section for details.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.9 [ME138] ³	Static pressure sensors used to control VAV fans located such that the controller setpoint is <= 1.2 inches w.c.. Where this results in one or more sensors being located downstream of major duct splits, not less than one sensor located on each major branch.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.1.4 [ME63] ²	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.6.6 [ME135] ³	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	See the Mechanical Systems list for values Location on plans/spec: N/A
C403.8.1 [ME65] ³	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	See the Mechanical Systems list for values Location on plans/spec: N/A

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.3.3 [ME35] ¹	Hot gas bypass limited to: <=240 kBtu/h – 50% >240 kBtu/h – 25%	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C408.2.2.1 [ME53] ³	Air outlets and zone terminal devices have means for air balancing.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.11.3, C403.11.3.1, C403.11.3.2 [ME123] ³	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.11.3.1 and refrigeration compressor systems that comply with C403.11.3.2..	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.8.2 [ME21] ²	HVAC fan motors not oversized beyond allowable limits.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.8.3 [ME117] ²	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M3.1
C403.8.3 [ME117] ²	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M3.1
C403.8.3 [ME117] ²	Fans have a fan energy index (FEI) >= 1.00. Variable volume fans will have an FEI >= 0.95.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: M3.1
C403.8.4 [ME142] ²	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.8.6 [ME143] ²	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.9 [ME144] ²	Large diameter fans where installed shall be tested and labeled in accordance with AMCA 230.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C403.13.1 [ME71] ²	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.3 [ME55] ²	HVAC equipment efficiency verified.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	<i>See the Mechanical Systems list for values</i>

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Rough-In Electrical Inspection

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.7 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: E series
C405.8 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.9.1, C405.9.2 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.10 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits ≤ 5%.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.1.1 [EL30] ²	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy ≥ 65 lm/W or luminaires with efficacy ≥ 45 lm/W or comply with C405.2.4 or C405.3.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.12 [EL32] ²	Buildings with gross conditioned floor area > 25,000 ft ² will be equipped with a energy monitoring system in compliance with C405.12.1 through C405.12.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	

Additional Comments/Assumptions:

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

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.4.1 [FI47] ³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.1.1 [FI42] ³	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.1.2 [FI38] ³	Thermostatic controls have a 5 °F deadband.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.1.3 [FI20] ³	Temperature controls have setpoint overlap restrictions.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.2 [FI39] ³	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.2.1, C403.4.2.2 [FI40] ³	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.4.2.3 [FI41] ³	Systems include optimum start controls.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C404.3 [FI11] ³	Heat traps installed on supply and discharge piping of non-circulating systems.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C303.3, C408.2.5.3 [FI8] ³	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C406.2.4 [FI66] ¹	10% cooling efficiency improvement - all HVAC and Plant cooling equipment is 10% more efficient than required by 2021 IECC.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C406.3 [FI67] ¹	Reduced lighting power - this credit specifies that the connected lighting power is >= 10% more efficient than 2021 IECC requirements.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C406.4 [FI54] ¹	Enhanced Digital Lighting Controls - Interior lighting has the following enhanced lighting controls in accordance with Sections C405.2.1 through C405.2.3, Luminaires capable of continuous dimming and being addressed individually, at least 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures with load shedding or occupancy sensors, Sequence of Operations documentation, and functional testing per Section C408.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C406.6 [FI52] ¹	Dedicate outdoor air system efficiency energy credit - Building equipped with independent ventilation system designed to provide 100-percent outdoor air to each individual occupied space, as specified by the IMC. The ventilation system is capable of total energy recovery and includes HVAC system controls that manage temperature resets at least 25 percent of delta design supply-air / room-air temp.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C406.8 [FI68] ¹	Enhanced envelope performance - the building thermal envelope UA value is $\geq$ 15% better than the total UA of the envelope specified by Section C402.1.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.1.1 [FI57] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.1 [FI28] ¹	Commissioning plan developed by registered design professional or approved agency.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.3.1 [FI31] ¹	HVAC equipment, systems and system-to-system relationships have been tested to ensure proper operation.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.3.2 [FI10] ¹	HVAC and service water heating control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.3.3 [FI32] ¹	Economizers have been tested to ensure proper operation.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.4 [FI29] ¹	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.5 [FI7] ³	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.5.1 [FI43] ¹	An air and/or hydronic system balancing report is provided for HVAC systems.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.5.2 [FI30] ¹	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C403.1.1 [FI50] ³	HVAC systems and equipment design loads calculated in accordance with ANSI/ASHRAE/ACCA Standard 183 or by an approved equivalent computational procedure	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A
C403.3.1 [FI27] ³	HVAC systems and equipment capacity does not exceed calculated loads.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	Location on plans/spec: N/A

Additional Comments/Assumptions:

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

Project Information

Energy Code:	2021 IECC
Project Title:	MC-NPL COPY
Location:	Norristown, Pennsylvania
Climate Zone:	4a
Project Type:	New Construction
Project No:	93813
All Electric:	false
Is Renewable:	false
Has Battery:	false
Has Charger:	true
Has Heat Pump:	false

Construction Site:

1001 Powell Street
Norristown , Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
Montgomery County
Norristown , Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
482 Norristown Rd
Kimmel Bogrette Architecture
Blue Bell , Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Notes:

Energy Credits

Description	Credit
Enhanced envelope performance	5.0

Credits: 10.0 Required 5.0 Proposed

Building Area

Description	Floor Area
1-Library (Library) : Nonresidential	85759



Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: MC-NPL COPY
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction

Construction Site:

1001 Powell Street
Norristown, Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
Montgomery County
Norristown, Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
482 Norristown Rd
Kimmel Bogrette Architecture
Blue Bell, Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Allowed Interior Lighting Power

A	B	C	D
Area Category	Floor Area (ft2)	Allowed Watts / ft2	Allowed Watts
1-Library (Library:Reading Area)	85759	0.96	
Total Allowed Watts:			82329

Proposed Interior Lighting Power

A	B	C	D
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	# of Fixture	Fixture Watt.	(B X C)
<u>1-Library (Library:Reading Area).</u>			
A: A: LED:	117	27	3159
T: T: LED:	5	42	210
D1: D1: LED:	29	10.5	304.5
D2: D2: LED:	110	15.7	1727
D3: D3: LED:	238	30.7	7306.6
B-4: B-4: LED:	19	12	228
Q: Q: LED:	7	16	112
C6: C6: LED:	27	42	1134
B-6: B-6: LED:	51	18	918
A2: A2: LED:	280	31	8680
G: G: LED:	20	26	520
C6 1: C6 1: LED:	8	42	336
H: H: LED:	25	22	550
S: S: LED:	55	30	1650
O: O: LED:	5	32	160
M: M: LED:	12	22.5	270
N: N: LED:	1	43.37	43.37
L: L: LED:	27	40	1080

A	B	C	D
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	# of Fixture	Fixture Watt.	(B X C)
K2: K2: LED:	21	36	756
B-20: B-20: LED:	10	120	1200
B-18: B-18: LED:	4	108	432
B--42: B--42: LED:	8	252	2016
B-14: B-14: LED:	2	84	168
A4: A4: LED:	4	31	124
G-2: G-2: LED:	20	46.6	932
I: I: LED:	7	30	210
B-9: B-9: LED:	7	27	189
B-24: B-24: LED:	3	144	432
B-22: B-22: LED:	6	132	792
B-28: B-28: LED:	9	168	1512
B-12: B-12: LED:	2	72	144
Total Proposed Watts:			37295.5

Proposed Interior Lighting Controls

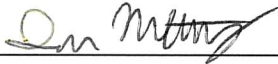
Fixture	Lighting Control
<u>1-Library (Library:Reading Area)</u>	
A: A: LED:	Occupancy Sensor, Manual Control
T: T: LED:	Manual Control
D1: D1: LED:	Interior Timeswitch, Manual Control
D2: D2: LED:	Interior Timeswitch, Manual Control
D3: D3: LED:	Interior Timeswitch, Manual Control
B-4: B-4: LED:	Interior Timeswitch, Manual Control
Q: Q: LED:	Interior Timeswitch, Manual Control
C6: C6: LED:	Occupancy Sensor, Manual Control
B-6: B-6: LED:	Interior Timeswitch, Manual Control
A2: A2: LED:	Manual Control
G: G: LED:	Occupancy Sensor, Manual Control
C6 1: C6 1: LED:	Manual Control
H: H: LED:	Manual Control
S: S: LED:	Manual Control
O: O: LED:	
M: M: LED:	
N: N: LED:	
L: L: LED:	
K2: K2: LED:	
B-20: B-20: LED:	
B-18: B-18: LED:	
B--42: B--42: LED:	
B-14: B-14: LED:	
A4: A4: LED:	
G-2: G-2: LED:	
I: I: LED:	
B-9: B-9: LED:	
B-24: B-24: LED:	

Fixture	Lighting Control
B-22: B-22: LED:	
B-28: B-28: LED:	
B-12: B-12: LED:	

Interior Lighting PASSES: Design 55% 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 2021 IECC requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Ira Matthews-Electrical Coordinator		04-21-2026
Name - Title	Signature	Date



Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: MC-NPL COPY
Location: Norristown, Pennsylvania
Climate Zone: 4a
Project Type: New Construction
Exterior Lighting Zone: Residential mixed use area (LZ2)

Construction Site:

1001 Powell Street
Norristown, Pennsylvania 19401

Owner/Agent:

Meera Ponnappa
425 Swede Street
Montgomery County
Norristown, Pennsylvania 19404
610-278-6782
Meera.Ponnappa@montgomerycountypa.gov

Designer/Contractor:

Martin Kimmel
482 Norristown Rd
Kimmel Bogrette Architecture
Blue Bell, Pennsylvania 19422
610-834-7805
mkimmel@kimmel-bogrette.com

Allowed Exterior Lighting Power

A	B	C	D	E
Area/Surface Category	Quantity	Allowed Watts / ft2	Tradable Wattage	Allowed Watts (B X C)
parking (Parking area)	18741 ft2	0.04	No	749.64
Plaza (Plaza area)	2975 ft2	0.10	No	297.5
open parking (Parking area)	15575 ft2	0.04	No	623.0
Walkway (Walkway >= 10 feet wide)	6203 ft2	0.10	No	620.3000000000001
Total Tradable Watts (a):				2290.44
Base Site Allowance (b):				400
Total Allowed Watts:				2690.44

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

(b) A base site allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A	B	C	D	E
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	Lamps/Fixture	# of Fixture	Fixture Watt.	(C X D)
<u>parking (Parking area, 18741 ft2): Tradeable Wattage</u>				
P: P: LED:	0	48	32	1536
<u>Plaza (Plaza area, 2975 ft2): Tradeable Wattage</u>				
STP: STP: LED:	0	16	11	176
KL: KL: LED:	0	3	2	6
BOL: BOL: LED:	0	3	6	18
<u>open parking (Parking area, 15575 ft2): Tradeable Wattage</u>				
PL-BLC: PL-BLC: LED:	0	5	69	345
<u>Walkway (Walkway >= 10 feet wide, 6203 ft2): Tradeable Wattage</u>				
STP: STP: LED:	0	5	11	55
BOL: BOL: LED:	0	3	6	18

A	B	C	D	E
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	Lamps/Fixture	# of Fixture	Fixture Watt.	(C X D)
COL: COL: LED:	0	5	17	85
Total Tradable Proposed Watts:				2239

Proposed Exterior Lighting Controls

Fixture	Lighting Control
<u>parking (Parking area, 18741 ft2).</u>	
P: P: LED:	
<u>Plaza (Plaza area, 2975 ft2).</u>	
STP: STP: LED:	Daylight Shutoff, Exterior Timeswitch
KL: KL: LED:	Daylight Shutoff, Exterior Timeswitch
BOL: BOL: LED:	Daylight Shutoff, Exterior Timeswitch
<u>open parking (Parking area, 15575 ft2).</u>	
PL-BLC: PL-BLC: LED:	Daylight Shutoff, Exterior Timeswitch
<u>Walkway (Walkway >= 10 feet wide, 6203 ft2).</u>	
STP: STP: LED:	Daylight Shutoff, Exterior Timeswitch
BOL: BOL: LED:	Daylight Shutoff, Exterior Timeswitch
COL: COL: LED:	Daylight Shutoff, Exterior Timeswitch

Exterior Lighting PASSES: Design 17% 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 2021 IECC requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Ira Matthews-Electrical Coordinator



04-21-2026

Name - Title

Signature

Date



Inspection Checklist

Energy Code: 2021 IECC

Requirements: 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.

Plan Review

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C103.2 [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 Comply ☐ Not Observable ☐ Not Applicable	
C103.2 [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 Comply ☐ Not Observable ☐ Not Applicable	

Additional Comments/Assumptions:

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1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Rough-In Electrical Inspection

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3.1 [EL22] ¹	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern $\geq$ 50 percent.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.2.7 [EL28] ¹	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting $>$ 30%.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.7 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.8 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.9.1, C405.9.2 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.10 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits $\leq$ 5%.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.1.1 [EL30] ²	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy $\geq$ 65 lm/W or luminaires with efficacy $\geq$ 45 lm/W or comply with C405.2.4 or C405.3.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.12 [EL32] ²	Buildings with gross conditioned floor area $>$ 25,000 ft ² will be equipped with a energy monitoring system in compliance with C405.12.1 through C405.12.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.2.1, C405.2.1.1 [EL18] ¹	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, corridors, warehouse storage areas, and other spaces $\leq$ 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.2.1.2 [EL19] ¹	Occupancy sensors control function in warehouses: In warehouses, the lighting in aiseways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by time-switch.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1.3 [EL20] ¹	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces ≥ 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas ≤ 600 sq.ft. within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by $\geq 80\%$ of the full zone general lighting power within 20 minutes of all occupants leaving that control zone.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.2.2, C405.2.2.1 [EL21] ²	Each area not served by occupancy sensors (per C405.2.1.1) have time-switch controls and functions detailed in sections C405.2.2.1.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.2.4, C405.2.4.1, C405.2.4.2 [EL23] ²	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.2.5 [EL27] ¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	

Additional Comments/Assumptions:

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

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17] ³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C405.5.1 [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 Comply ☐ Not Observable ☐ Not Applicable	See the Exterior Lighting fixture schedule for values
C406.8 [FI68] ¹	Enhanced envelope performance - the building thermal envelope UA value is >= 15% better than the total UA of the envelope specified by Section C402.1.5.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.1.1 [FI57] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.2.5 [FI16] ³	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	
C408.3 [FI33] ¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐ Complies ☐ Does Not Comply ☐ Not Observable ☐ Not Applicable	

Additional Comments/Assumptions:

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