BUILDING ENERGY ANALYSIS REPORT

PROJECT:

Project Designer:

Report Prepared by:

Mohamad Nohayli
InnoDez, Inc.

,

Job Number:

191

Date:

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 1 of 45)

Project Name:	Condominiums	Date Prepared:	2023-05-15

A. General Information

1	Project Name	Condominiums			
2	Run Title	Title 24 Analysis			
3	Project Location	3331 W. 59th Place			
4	City	Los Angeles	**5**	Standards Version	Compliance 2022
6	Zip code	90043	**7**	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	8	**9**	Building Orientation (deg)	270
10	Building Type(s)	• High-Rise Residential	**11**	Weather File	LOS-ANGELES-HAWTHORNE_STYP20.epw
12	Project Scope	• New complete scope	**13**	Number of Dwelling Units	25
14	Total Conditioned Floor Area in Scope (ft^2)	29194	**15**	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	14025	**17**	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	0	**19**	Total # of Stories (Habitable Above Grade)	6
20	Residential Conditioned Floor Area	29194			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						**Building Components Complying Prescriptively**	
Envelope (See Table G)	Nonres	Not Included	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Performance		☒	Not Included		
Mechanical (See Table H)	Nonres	Not Included	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Performance		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Performance		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Not Included	Photovoltaics (see Table F)	☒	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Performance		☐	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☒	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☐	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	**Total[2] (kBtu/ft² - yr)**	**Total[2] (kBtu/ft² - yr)**
Standard Design	115.85	62.96	7.84
Proposed Design	98.75	43.07	6.36
Compliance Margins	**17.1**	**19.89**	**1.48**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment

[2] Compliance Totals include efficiency, photovoltaics and batteries

[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	0.28	0.42	-0.14
Space Cooling	15.64	13.49	2.15
Indoor Fans	19.94	8.6	11.34
Heat Rejection	0	0	0
Pumps & Misc.	0.3	0.36	-0.06
Domestic Hot Water	18.6	14.79	3.81
Indoor Lighting	61.09	61.09	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**115.85**	**98.75**	**17.1 (14.8%)**
Photovoltaics	-52.6	-55.7	3.1
Batteries	-0.29	0.02	-0.31
TOTAL COMPLIANCE	**62.96**	**43.07**	**19.89 (31.6%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	45.77	45.77	---
Process	39.81	39.81	---
Other Ltg	7.29	7.29	---
Process Motors	24.37	24.37	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**180.2**	**160.31**	**19.89 (11%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	0.04	0.06	-0.02
Space Cooling	0.55	0.46	0.09
Indoor Fans	1.73	0.67	1.06
Heat Rejection	0	0	0
Pumps & Misc.	0.04	0.05	-0.01
Domestic Hot Water	1.75	1.34	0.41
Indoor Lighting	5.45	5.45	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**9.56**	**8.03**	**1.53 (16%)**
Photovoltaics	-1.6	-1.66	0.06
Batteries	-0.12	-0.01	-0.11
TOTAL COMPLIANCE	**7.84**	**6.36**	**1.48 (18.9%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.49	4.49	---
Process	3.3	3.3	---
Other Ltg	0.78	0.78	---
Process Motors	2.32	2.32	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**18.73**	**17.25**	**1.48 (7.9%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.3	0.4	-0.1	---	---	---
Space Cooling	10.1	8.1	2	---	---	---
Indoor Fans	20.5	8.2	12.3	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	0.3	0.3	0	---	---	---
Domestic Hot Water	21.4	17.3	4.1	---	---	---
Indoor Lighting	67.1	67.1	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**119.7**	**101.4**	**18.3**	**0**	**0**	**0**
Photovoltaics	-70.1	-73.3	3.2	---	---	---
Batteries	0.2	0.2	0	---	---	---
ENERGY USE SUBTOTAL	**49.8**	**28.3**	**21.5**	**0**	**0**	**0**
Receptacle	48.5	48.5	0	---	---	---
Process	43.9	43.9	0	---	---	---
Other Ltg	7.3	7.3	0	---	---	---
Process Motors	26.7	26.7	0	---	---	---
ENERGY USE TOTAL	**176.2**	**154.7**	**21.5**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft^2 / yr)	Proposed Design (kBtu/ft^2 / yr)	Margin (kBtu/ft^2 / yr)	Margin Percentage
GROSS EUI[1]	19.44	18	1.44	7.41
NET EUI[1]	13.91	12.21	1.7	12.22

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- Required minimum PV capacity limited by SARA.
- PV/Battery Building Type has been modified from software defaults for one or more spaces. Review project's PV/Battery Building Type(s) with documentation author. Refer to Energy Code section 140.10 for Nonresidential or 170.2(g) for more information.

D2. MULTIFAMILY REQUIRED SPECIAL FEATURES

- Battery System: -99996 kWh
- Indoor air quality, balanced fan
- Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)
- Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

E1. HERS VERIFICATION SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry.

Building-level Verifications:
- Indoor air quality ventilation
- Kitchen range hood

Cooling System Verifications:
- Verified Refrigerant Charge
- Airflow in habitable rooms (SC3.1.4.1.7)
- Minimum Airflow according to RA3.3 and SC3.3.3.4.1

Heating System Verifications:
- Verified heat pump rated heating capacity
- CEC certified low-static VCHP system
- Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5)
- Verified air filter sizing (SC3.1.4.7)
- Verified air filter pressure drop rating

HVAC Distribution System Verifications:
- Ducts located entirely in conditioned space confirmed by duct leakage testing
- Verified low-leakage ducts in conditioned space must meet maximum 25 cfm leakage to outside (RA3.1.4.3.8)

Domestic Hot Water System Verifications:
- -- None --

F1. REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	**Exception[1]**	**Module Type**	**Array Type**	**Power Electronics**	**CFI**	**Azimuth (deg)**	**Tilt Input**	**Array Angle (deg)**	**Tilt: (x in 12)**	**Inverter Eff. (%)**	**Annual Solar Access (%)**
42	n/a	Standard (14-17%)	Fixed	none	false	180	Degrees	22	4.85	96	100

[1]*See Table D1 for any PV exceptions used.*

F1B. PV BATTERY BUILDING TYPE(S)

01	02	03
Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)	**Conditioned Floor Area (ft^2)**	**Unconditioned Floor Area (ft^2)**
Grocery	0	0
High-Rise Multifamily	29194	14025
Office, Financial Institutions, Unleased Tenant Space	0	0
Retail	0	0
School	0	0
Warehouse	0	0
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0	0
None	0	0

**Building Occupancy Types are defined in Section 100.1 of the Energy Code*

F2. BATTERY SYSTEMS[1]

01	02	03	04	05	06	07
Control	**Capacity (kWh)**	**Charging Efficiency**	**Charging Rate (kW)**	**Discharging Efficiency**	**Discharging Rate (kW)**	**Round Trip Efficiency**
Basic	11	N/A	15	N/A	15	0.9

[1]See Table D1 for any Battery exceptions used.

F3. DWELLING UNIT INFORMATION

01	02	03
Dwelling Unit Name	**Dwelling Unit Type**	**Dwelling Unit Type**
DDU-1 Condo 1 2F-(1/1)	DU-1 Condo 1 2F	S-1-Condo 1 2F
DDU-2 Condo 1 3F-(1/1)	DU-2 Condo 1 3F	S-2-Condo 1 3F
DDU-3 Condo 1 4F-(1/1)	DU-3 Condo 1 4F	S-3-Condo 1 4F
DDU-4 Condo 1 5F-(1/1)	DU-4 Condo 1 5F	S-4-Condo 1 5F
DDU-5 Condo 1 6F-(1/1)	DU-5 Condo 1 6F	S-5-Condo 1 6F
DDU-6 Condo 2 2F-(1/1)	DU-6 Condo 2 2F	S-6-Condo 2 2F
DDU-7 Condo 2 3F-(1/1)	DU-7 Condo 2 3F	S-7-Condo 2 3F
DDU-8 Condo 2 4F-(1/1)	DU-8 Condo 2 4F	S-8-Condo 2 4F
DDU-9 Condo 2 5F-(1/1)	DU-9 Condo 2 5F	S-9-Condo 2 5F
DDU-10 Condo 2 6F-(1/1)	DU-10 Condo 2 6F	S-10-Condo 2 6F
DDU-11 Apartment 2F-(1/1)	DU-11 Apartment 2F	S-16-Apartment 2F
DDU-12 Apartment 3F-(1/1)	DU-12 Apartment 3F	S-17-Apartment 3F
DDU-13 Apartment 4F-(1/1)	DU-13 Apartment 4F	S-18-Apartment 4F
DDU-14 Apartment 5F-(1/1)	DU-14 Apartment 5F	S-19-Apartment 5F
DDU-15 Apartment 6F-(1/1)	DU-15 Apartment 6F	S-20-Apartment 6F
DDU-16 Condo 3 2F-(1/1)	DU-16 Condo 3 2F	S-21-Condo 3 2F
DDU-17 Condo 3 3F-(1/1)	DU-17 Condo 3 3F	S-22-Condo 3 3F
DDU-18 Condo 3 4F-(1/1)	DU-18 Condo 3 4F	S-23-Condo 3 4F
DDU-19 Condo 3 5F-(1/1)	DU-19 Condo 3 5F	S-24-Condo 3 5F
DDU-20 Condo 3 6F-(1/1)	DU-20 Condo 3 6F	S-25-Condo 3 6F
DDU-21 Condo 4 2F-(1/1)	DU-21 Condo 4 2F	S-26-Condo 4 2F
DDU-22 Condo 4 3F-(1/1)	DU-22 Condo 4 3F	S-27-Condo 4 3F
DDU-23 Condo 4 4F-(1/1)	DU-23 Condo 4 4F	S-28-Condo 4 4F
DDU-24 Condo 4 5F-(1/1)	DU-24 Condo 4 5F	S-29-Condo 4 5F
DDU-25 Condo 4 6F-(1/1)	DU-25 Condo 4 6F	S-30-Condo 4 6F

F4. DWELLING UNIT TYPES

01	02	03	04	05	06	07
Name	CFA (ft^2)	Number of Bedrooms	Number in Building	Space Conditioning Systems Assigned	DHW System Name	IAQ Vent Fan Name
DU-1 Condo 1 2F	1030	2	1	DU-1 Condo 1 2F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-2 Condo 1 3F	1030	2	1	DU-2 Condo 1 3F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-3 Condo 1 4F	1030	2	1	DU-3 Condo 1 4F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-4 Condo 1 5F	1030	2	1	DU-4 Condo 1 5F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-5 Condo 1 6F	1030	2	1	DU-5 Condo 1 6F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-6 Condo 2 2F	1030	2	1	DU-6 Condo 2 2F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-7 Condo 2 3F	1030	2	1	DU-7 Condo 2 3F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan

F4. DWELLING UNIT TYPES

01	02	03	04	05	06	07
Name	CFA (ft^2)	Number of Bedrooms	Number in Building	Space Conditioning Systems Assigned	DHW System Name	IAQ Vent Fan Name
DU-8 Condo 2 4F	1030	2	1	DU-8 Condo 2 4F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-9 Condo 2 5F	1030	2	1	DU-9 Condo 2 5F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-10 Condo 2 6F	1030	2	1	DU-10 Condo 2 6F | :Heat Pump System 1:Air Distribution System 1:HVAC Fan 1:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-11 Apartment 2F	800	2	1	DU-11 Apartment 2F | :Heat Pump System 2:Air Distribution System 2:HVAC Fan 2:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-12 Apartment 3F	800	2	1	DU-12 Apartment 3F | :Heat Pump System 2:Air Distribution System 2:HVAC Fan 2:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-13 Apartment 4F	800	2	1	DU-13 Apartment 4F | :Heat Pump System 2:Air Distribution System 2:HVAC Fan 2:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan

F4. DWELLING UNIT TYPES

01	02	03	04	05	06	07
Name	**CFA (ft^2)**	**Number of Bedrooms**	**Number in Building**	**Space Conditioning Systems Assigned**	**DHW System Name**	**IAQ Vent Fan Name**
DU-14 Apartment 5F	800	2	1	DU-14 Apartment 5F | :Heat Pump System 2:Air Distribution System 2:HVAC Fan 2:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-15 Apartment 6F	800	2	1	DU-15 Apartment 6F | :Heat Pump System 2:Air Distribution System 2:HVAC Fan 2:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-16 Condo 3 2F	1318	2	1	DU-16 Condo 3 2F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-17 Condo 3 3F	1318	2	1	DU-17 Condo 3 3F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-18 Condo 3 4F	1318	2	1	DU-18 Condo 3 4F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-19 Condo 3 5F	1318	2	1	DU-19 Condo 3 5F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan

F4. DWELLING UNIT TYPES

01	02	03	04	05	06	07
Name	CFA (ft^2)	Number of Bedrooms	Number in Building	Space Conditioning Systems Assigned	DHW System Name	IAQ Vent Fan Name
DU-20 Condo 3 6F	1318	2	1	DU-20 Condo 3 6F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-21 Condo 4 2F	1266	2	1	DU-21 Condo 4 2F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-22 Condo 4 3F	1266	2	1	DU-22 Condo 4 3F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-23 Condo 4 4F	1266	2	1	DU-23 Condo 4 4F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-24 Condo 4 5F	1266	2	1	DU-24 Condo 4 5F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan
DU-25 Condo 4 6F	1266	2	1	DU-25 Condo 4 6F | :Heat Pump System 3:Air Distribution System 3:HVAC Fan 3:2:3	MF0-Rheem PROPH40 T0 RH120-M1	Default Minimum Balanced IAQ Fan

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
North-Facing[1]	2875	310	10.78
East-Facing[2]	7700	2237.5	29.06
South-Facing[3]	3190	385	12.07
West-Facing[4]	8143	2690	33.03
Total	**21908**	**5622.5**	**25.66**
Roof	5444	0	0

Notes

[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),

[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),

[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),

[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G2B. ROOFING PRODUCT SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06
Name	**Roof Pitch**	**Roof Rise (x in 12)**	**Aged Solar Reflectance**	**Thermal Emittance**	**SRI**
Roof 1	Low slope	0	0.1	0.85	N/A
Roof 2	Low slope	0	0.1	0.85	N/A
Roof 4	Low slope	0	0.1	0.85	N/A
Roof 5	Low slope	0	0.1	0.85	N/A
Roof 6	Low slope	0	0.1	0.85	N/A
Roof 3	Low slope	0	0.1	0.85	N/A

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft^2)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-21 Wall	Exterior Walls	21,908	Wood Framed Wall	21	0	0	U-factor	0.0686	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco	N
R-15 Wall	Interior Walls	42,402	Wood Framed Wall	15	0	0	U-factor	0.0862	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Other Side Finish: Gypsum Board	
Floor	Interior Floors	31,663	Wood Framed Floor	19	0	0	U-factor	0.0476	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6 Ceiling Below Finish: Gypsum Board	N
Roof	Interior Ceiling	36,343	Wood Framed Ceiling	19	0	0	U-factor	0.0499	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x4 Ceiling Below Finish: Gypsum Board	N
R-38 Roof No Attic	Cathedral Ceilings	5,924	Wood Framed Ceiling	38	0	0	U-factor	0.03	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-38 / 2x12 Inside Finish: Gypsum Board	N
Retaining Walls	Underground Walls	3,780	Concrete / ICF / Brick	0	0	0	U-factor	1.0476	Inside Finish: Gypsum Board Mass Layer: 6 in. Concrete	N
Garage Ext Wall	Exterior Walls	2,150	Wood Framed Wall	0	0	0	U-factor	0.3609	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco	N

[1] Status: N - New, A - Altered, E - Existing

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WE1	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls	90	1	21.5	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE1 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 2	90	1	21.5	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 2	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 2	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WN1 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 2	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE1 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 3	90	1	21.5	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 3	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 3	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 3	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE1 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 4	90	1	21.5	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 4	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] Status: N - New, A - Altered, E - Existing

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WE3 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 4	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 4	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE1 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 5	90	1	21.5	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 5	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 5	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 5	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 6	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	Fenestration Type/ Product Type / Frame Type	Parent Surface	Azimuth	Multiplier	Area (ft^2)	Overall U-factor	U-factor Source	Overall SHGC	SHGC Source	Overall VT	Exterior Shading	Status[1]
WE3 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 6	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 7	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 6	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WS1	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South Walls	180	1	62	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 7	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 7	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 8	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 7	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 9	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 7	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WS1 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South Walls 2	180	1	62	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WE2 8	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 8	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 10	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 8	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 11	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 8	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WS1 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South Walls 3	180	1	62	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 9	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 9	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 12	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 9	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 13	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 9	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WS1 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South Walls 4	180	1	62	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE2 10	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 10	90	1	102	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 14	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 10	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 15	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 10	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WS1 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South Walls 5	180	1	62	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 16	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 11	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 17	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 11	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	Fenestration Type/ Product Type / Frame Type	Parent Surface	Azimuth	Multiplier	Area (ft^2)	Overall U-factor	U-factor Source	Overall SHGC	SHGC Source	Overall VT	Exterior Shading	Status[1]
WE3 18	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 11	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 19	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 12	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 20	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 12	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 21	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 12	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 22	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 13	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 23	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 13	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 24	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 13	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	Fenestration Type/ Product Type / Frame Type	Parent Surface	Azimuth	Multiplier	Area (ft^2)	Overall U-factor	U-factor Source	Overall SHGC	SHGC Source	Overall VT	Exterior Shading	Status[1]
WE3 25	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 14	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 26	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 14	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 27	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 14	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 28	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 15	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 29	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 15	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WE3 30	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	East Walls 15	90	1	37	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WW1 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 6	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 2	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 2	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	Fenestration Type/ Product Type / Frame Type	Parent Surface	Azimuth	Multiplier	Area (ft^2)	Overall U-factor	U-factor Source	Overall SHGC	SHGC Source	Overall VT	Exterior Shading	Status[1]
WW2 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 2	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 2	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 2	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 7	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 7	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 3	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 3	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 3	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	Fenestration Type/ Product Type / Frame Type	Parent Surface	Azimuth	Multiplier	Area (ft^2)	Overall U-factor	U-factor Source	Overall SHGC	SHGC Source	Overall VT	Exterior Shading	Status[1]
WW2 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 3	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 3	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 8	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 8	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 7	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 4	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 8	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 4	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 7	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 4	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 8	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 4	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WW3 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 4	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WN1 9	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 9	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 9	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 5	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 10	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 5	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 9	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 5	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 10	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 5	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 5	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

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G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	Fenestration Type/ Product Type / Frame Type	Parent Surface	Azimuth	Multiplier	Area (ft^2)	Overall U-factor	U-factor Source	Overall SHGC	SHGC Source	Overall VT	Exterior Shading	Status[1]
WN1 10	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	North Walls 10	0	1	31	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 11	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 6	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 11	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 6	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 12	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 6	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 6	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 6	270	1	25	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WSW1	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South West Walls	225	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WW1 12	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 7	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 13	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 7	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 14	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 7	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 7	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 7	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW4 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 7	270	1	25	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WSW1 2	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South West Walls 2	225	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 13	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 8	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WW2 15	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 8	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 16	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 8	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 8	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 8	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW4 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 8	270	1	25	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WSW1 3	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South West Walls 3	225	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 14	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 9	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 17	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 9	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WW2 18	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 9	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW3 9	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 9	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW4 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 9	270	1	25	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WSW1 4	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South West Walls 4	225	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW1 15	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 10	270	1	45	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 19	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 10	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW2 20	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 10	270	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

G7B. FENESTRATION SUMMARY (MULTIFAMILY AND COMMON AREAS)

01	02	03	04	05	06	07	08	09	10	11	12	13
Fenestration Name	**Fenestration Type/ Product Type / Frame Type**	**Parent Surface**	**Azimuth**	**Multiplier**	**Area (ft^2)**	**Overall U-factor**	**U-factor Source**	**Overall SHGC**	**SHGC Source**	**Overall VT**	**Exterior Shading**	**Status[1]**
WW3 10	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 10	270	1	86	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW4 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 10	270	1	25	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WSW1 5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	South West Walls 5	225	1	15	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW4 6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 11	270	1	330	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW5	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 12	270	1	190	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N
WW6	Vertical fenestration Architectural Window - Operable (Multifamily only) N/A	West Walls 13	270	1	210	0.3	NFRC	0.23	NFRC	N/A	Standard bug screens	N

[1] *Status: N - New, A - Altered, E - Existing*

H2. DWELLING UNIT HVAC HEATING AND COOLING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13
Dwelling Unit Type Name	Equipment Name	Equipment Type	Quantity	Air Distribution System Name	Fan System name	Heating				Cooling		
						Heat Output at 47	Heat Output at 17	Efficiency Unit	Efficiency	Total Cooling Output	Efficiency Unit	Efficiency
DU-1 Condo 1 2F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-2 Condo 1 3F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-3 Condo 1 4F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-4 Condo 1 5F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-5 Condo 1 6F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-6 Condo 2 2F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-7 Condo 2 3F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-8 Condo 2 4F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-9 Condo 2 5F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15

H2. DWELLING UNIT HVAC HEATING AND COOLING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13
Dwelling Unit Type Name	Equipment Name	Equipment Type	Quantity	Air Distribution System Name	Fan System name	Heating				Cooling		
						Heat Output at 47	Heat Output at 17	Efficiency Unit	Efficiency	Total Cooling Output	Efficiency Unit	Efficiency
DU-10 Condo 2 6F	Heat Pump System 1	VCHP	1	Air Distribution System 1	HVAC Fan 1	30,000	24,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-11 Apartment 2F	Heat Pump System 2	VCHP	1	Air Distribution System 2	HVAC Fan 2	24,000	20,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-12 Apartment 3F	Heat Pump System 2	VCHP	1	Air Distribution System 2	HVAC Fan 2	24,000	20,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-13 Apartment 4F	Heat Pump System 2	VCHP	1	Air Distribution System 2	HVAC Fan 2	24,000	20,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-14 Apartment 5F	Heat Pump System 2	VCHP	1	Air Distribution System 2	HVAC Fan 2	24,000	20,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-15 Apartment 6F	Heat Pump System 2	VCHP	1	Air Distribution System 2	HVAC Fan 2	24,000	20,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-16 Condo 3 2F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-17 Condo 3 3F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-18 Condo 3 4F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15

H2. DWELLING UNIT HVAC HEATING AND COOLING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13
						Heating				Cooling		
Dwelling Unit Type Name	Equipment Name	Equipment Type	Quantity	Air Distribution System Name	Fan System name	Heat Output at 47	Heat Output at 17	Efficiency Unit	Efficiency	Total Cooling Output	Efficiency Unit	Efficiency
DU-19 Condo 3 5F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-20 Condo 3 6F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-21 Condo 4 2F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-22 Condo 4 3F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-23 Condo 4 4F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-24 Condo 4 5F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15
DU-25 Condo 4 6F	Heat Pump System 3	VCHP	1	Air Distribution System 3	HVAC Fan 3	36,000	30,000	HSPF	8.8	N/A	EER SEER	12.2 15

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People# of People	Supply OA CFM	Exhaust CFM		
S-31-Retail 1	Misc - All others	4.13	123.7	123.7	825	N/A
S-32-Retail 2	Misc - All others	2.99	89.7	89.7	598	N/A
S-33-Retail 3	Misc - All others	2.76	82.6	82.6	551	N/A

H10. MULTIFAMILY DWELLING UNIT TYPE CENTRAL / INDIVIDUAL VENTILATION

01	02	03	04	05	06	07	08	09	10	11	12	13
Dwelling Unit Type Name	IAQ Option	Central Fan (If applicable)					Individual Fan (if applicable)					
		IAQ Fan Type Type	Supply Airflow CFM	Supply Fan Efficacy W/CFM	Exhaust CFM	Exhaust Fan Efficacy W/CFM	IAQ Fan Type	Count	Airflow CFM	Fan Efficacy W/CFM	Recovery Efficiency SRE	Recovery Efficiency ASRE
DU-1 Condo 1 2F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-2 Condo 1 3F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-3 Condo 1 4F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-4 Condo 1 5F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-5 Condo 1 6F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-6 Condo 2 2F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-7 Condo 2 3F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-8 Condo 2 4F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-9 Condo 2 5F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-10 Condo 2 6F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53.4	N/A	N/A	N/A
DU-11 Apartment 2F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.5	N/A	N/A	N/A
DU-12 Apartment 3F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.5	N/A	N/A	N/A
DU-13 Apartment 4F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.5	N/A	N/A	N/A

H10. MULTIFAMILY DWELLING UNIT TYPE CENTRAL / INDIVIDUAL VENTILATION

01	02	03	04	05	06	07	08	09	10	11	12	13
Dwelling Unit Type Name	IAQ Option	Central Fan (If applicable)					Individual Fan (if applicable)					
		IAQ Fan Type Type	Supply Airflow CFM	Supply Fan Efficacy W/CFM	Exhaust CFM	Exhaust Fan Efficacy W/CFM	IAQ Fan Type	Count	Airflow CFM	Fan Efficacy W/CFM	Recovery Efficiency SRE	Recovery Efficiency ASRE
DU-14 Apartment 5F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.5	N/A	N/A	N/A
DU-15 Apartment 6F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.5	N/A	N/A	N/A
DU-16 Condo 3 2F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62.04	N/A	N/A	N/A
DU-17 Condo 3 3F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62.04	N/A	N/A	N/A
DU-18 Condo 3 4F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62.04	N/A	N/A	N/A
DU-19 Condo 3 5F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62.04	N/A	N/A	N/A
DU-20 Condo 3 6F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62.04	N/A	N/A	N/A
DU-21 Condo 4 2F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60.48	N/A	N/A	N/A
DU-22 Condo 4 3F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60.48	N/A	N/A	N/A
DU-23 Condo 4 4F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60.48	N/A	N/A	N/A
DU-24 Condo 4 5F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60.48	N/A	N/A	N/A
DU-25 Condo 4 6F	Default Minimum Balanced IAQ Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60.48	N/A	N/A	N/A

I1. WATER HEATER EQUIPMENT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	**Heater Element Type**	**Tank Type**	**Qty**	**Tank Vol (gal)**	**Rated Input**	**Rated Input Unit**	**Efficiency**	**Efficiency Unit**	**Tank Insulation R-value Int/Ext**	**Standby Loss Fraction**	**1st Hr. Rating or Flow Rate (gal)**	**Heat Pump Type**	**Tank Location or Ambient Condition**
Rheem PROPH40 T0 RH120-M10	Heat Pump	N/A	1	40	12	kW	kW	EF	0	0	N/A	Residential (NEEA RATED) pRODUCT	Outside

I2. MULTI-FAMILY WATER HEATING SYSTEM DETAIL

01	02	03	04	05	06	07	08
System Name	**Configuration**	**Type**	**Qty in System**	**Dwelling Unit Distribution Type**	**Water Heater Name**	**Solar Heating System**	**Is Compact Distribution**
MF0-Rheem PROPH40 T0 RH120-M1	Domestic Hot Water (DHW)	Unitary	1	Standard Distribution System	Rheem PROPH40 T0 RH120-M10	N/A	No

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Plumbing	NRCI-PLB-E - For all buildings with Plumbing Systems
Plumbing	NRCI-PLB-03-E - Must be submitted for high-rise residential and hotel/motel single dwelling unit hot water distribution systems to be recognized for compliance.
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-04-A - Demand Responsive Lighting Controls.
Mechanical	NRCA-MCH-20-H Multifamily Ventilation

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation
Mechanical	NRCV-MCH-32 Local Mechanical Exhaust

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Mohamad Nohayli	Documentation Author Signature:
Company: InnoDez, Inc.	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone:

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: Syed P. Alam	Responsible Designer Signature:	
Company: Innodez		
Address: 726 Foxbrough	Date Signed:	
City/State/Zip: Pleasanton, CA 94566	License #: 27087	
Phone:	Title:	Scope:

Responsible Designer Name: Syed P. Alam	Responsible Designer Signature:	
Company: Innodez		
Address: 726 Foxbrough	Date Signed:	
City/State/Zip: Pleasanton, CA 94566	License #: 27087	
Phone:	Title:	Scope:

Responsible Designer Name: Syed P. Alam	Responsible Designer Signature:	
Company: Innodez		
Address: 726 Foxbrough	Date Signed:	
City/State/Zip: Pleasanton, CA 94566	License #: 27087	
Phone:	Title:	Scope:

STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-ELC-E
This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii			
Project Name:	Condominiums	**Report Page:**	**(Page 1 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

A. GENERAL INFORMATION

01	Project Location (city)	Los Angeles	02	Climate Zone	8
			03	Occupancy Types Within Project:	Multi-family/ MF Mixed-use >=4 storiesParking GarageSupport Areas

B. PROJECT SCOPE

This table includes electrical systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[1]	Rating[2] (kVA)	Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Main	New electrical service equipment and meter	50	☐	☐	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	☐

[1] *FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.*

[2] *If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.*

[3] *Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.*

CERTIFICATE OF COMPLIANCE			NRCC-ELC-E
Project Name:	Condominiums	**Report Page:**	**(Page 2 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

01		02		03		04	05	06
Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F)	AND	Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G)	AND	Voltage Drop 130.5(c)/ 160.6(c) (See Table H)	AND	Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I)	Electric Ready 160.9 (See Table J)	**Compliance Results**
Yes	AND	Yes	AND	Yes	AND	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. SERVICE ELECTRICAL METERING

This table includes new or replacement electrical service systems OR equipment to demonstrate compliance with 130.5(a) / 160.6(a). For multifamily occupancies, submetered systems that provide power to common use areas must meet the following metering requirements. Submetered systems providing power to dwelling units do not.

01	02	03				04	05	
Electrical Service Designation/ Description	Rating[1] (kVA)	Required Metering Capabilities per Table 130.5-A				Location of Requirements in Construction Documents	Field Inspector	
		Instantaneous Demand (kW)	Historical Peak Demand (kW)	Tracking kWh for user-defined period	kWh per rate period		Pass	Fail
Main	50	☒	☐	☒	☐		☐	☐

[1] FOOTNOTES: If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.

CERTIFICATE OF COMPLIANCE			NRCC-ELC-E
Project Name:	Condominiums	**Report Page:**	**(Page 3 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/ 160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	
Load Type per Table 130.5-B[1]	Minimum Required Separation of Load per Table 130.5-B	Compliance Method[2]	Location of Requirements in Construction Documents	Field Inspector	
				Pass	Fail
Main					

** NOTES: If "Other*" is selected under Compliance Method above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: For each separate load type, up to 10% of the connected load may be of any type.

[2] Method 1: Switchboards/ motor control centers/ panelboard loads disaggregated for each load type.
Method 2: Switchboards/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring.
Method 4: Complete metering system measures and reports loads by type.
See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/ 180.2(b)4Bviic.

01	02				03	04	05	
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method				Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
							Pass	Fail
Main	☒	Voltage drop less than 5%	☐	Permitted by CA Elec Code (Exception to 130.5(c))*	Attached		☐	☐

** NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

CERTIFICATE OF COMPLIANCE			NRCC-ELC-E
Project Name:	Condominiums	**Report Page:**	**(Page 4 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(d)/ 160.6(d).. Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

01	02	03	04	05	06	07	
Room name or Description	Location/ Type of Controlled Receptacles[1]	Shut-Off Controls	Demand Responsive Controls	Permanent Durable Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector	
						Pass	Fail

** NOTES: If "Other*" is selected under Shut-Off Controls above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: Receptacles dedicated to refrigerators and water dispensers in kitchens, located a minimum of 6ft above the floor specifically for clocks, network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms, circuits rated more than 20 Amps, or connected to a UPS that are intended to be in continuous use and are marked to differentiate them from other receptacles or circuits are excepted from the requirements. .

J. ELECTRIC READY BUILDINGS

This table includes electrical system requirements that must be met when using gas or propane heating, cooking or clothes drying in multifamily occupancies to demonstrate compliance with 160.9.

01	Systems serving multifamily occupancy that use gas or propane include:	☐	Furnaces serving individual dwelling units	☐	Cooktops serving individual dwelling units	☐	Clothes dryers serving individual dwelling units	☐	Clothes dryers in common areas	☒	None of these

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-ELC-E - Must be submitted for all buildings

CERTIFICATE OF COMPLIANCE			NRCC-ELC-E
Project Name:	Condominiums	**Report Page:**	**(Page 5 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature:
Company: InnoDez, Inc.	Signature Date:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Syed P. Alam	Responsible Designer Signature:
Company: Innodez	Date Signed: 2023-05-15
Address: 726 Foxbrough	License: 27087
City/State/Zip: Pleasanton CA 94566	Phone:

Indoor Lighting

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.			
Project Name:	Condominiums	**Report Page:**	**(Page 1 of 8)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

A. GENERAL INFORMATION

01	Project Location (city)	Los Angeles	04	Total Conditioned Floor Area (ft^2)	1,974
02	Climate Zone	8	05	Total Unconditioned Floor Area (ft^2)	11,625
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	6

● High-Rise Residential ● Parking Garage ● Retail ● Support Areas

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	**Conditioned Spaces**		**Unconditioned Spaces**	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft^2)	Calculation Method	Area (ft^2)
☒ New Lighting System	Area Category Method	1974	Area Category Method	11625
☐ New Lighting System - Parking Garage				
Total Area of Work (ft^2)	1974		11625	

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
Project Name:	Condominiums	**Report Page:**	**(Page 2 of 8)**
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C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	**Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)**							**Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)**				**Compliance Results**
	01	02	03	04		05		06	07		08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	=	**Total Allowed** (Watts)	≥	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	=	**Total Adjusted** (Watts) *Includes Adjustments	**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)				(See Table F)	(See Table P)			
Conditioned		1,875.3	0		=	1,875	≥	0	0	=	0	COMPLIES
Unconditioned		7,775.7	0		=	7,776	≥	1,440	0	=	1440	COMPLIES
Controls Compliance (See Table H for Details)												COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)												

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
Project Name:	Condominiums	**Report Page:**	**(Page 3 of 8)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Unconditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
LT5	LT5 - Ceiling Mounted	No	NA	40	Mfr. Spec	36	No	1,440	☐	☐
							Total Designed Watts: UNCONDITIONED SPACES	1,440		

[1]FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

[2]Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Field Inspector	
		Pass	Fail
Required >= 4,000W subject to multilevel	Whole Building Auto Time Switch	☐	☐

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
Project Name:	Condominiums	**Report Page:**	**(Page 4 of 8)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Skylit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Retails	Retail Merchandise Sales	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	Included	Included	No	☐	☐
Parking	All Other Space Types	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Stores	Commercial Industrial Storage Area	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Corridors	Corridor	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Electrical Room	Electrical Mechancial Telephone Room	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Fan Room	Electrical Mechancial Telephone Room	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Stairs	Stairwell	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
					13				
					Plan Sheet Showing Daylit Zones:				

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
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Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft^2)	Area (ft^2)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Retail 1	Retail Merchandise Sales	0.95	825	783.8	No	No
Retail 2	Retail Merchandise Sales	0.95	598	568.1	No	No
Retail 3	Retail Merchandise Sales	0.95	551	523.4	No	No
		TOTALS:	1,974	1,875.3	See Tables J, or P for detail	
Unconditioned Spaces						
01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft^2)	Area (ft^2)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Parking FF	Parking Garage - Parking Area & Ramps	0.1	4,277	427.7	No	No
Parking BF	Parking Garage - Daylight Adaption Zones	1	7,348	7,348	No	No
		TOTALS:	11,625	7,775.7	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	Condominiums	**Report Page:**	**(Page 6 of 8)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
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U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Whole Building Time Switch; Retails; Parking; Stores; Corridors; Electrical Room; Fan Room; Stairs;
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Retails;
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	Whole Building Demand Response;

CERTIFICATE OF COMPLIANCE			**NRCC-LTI-E**
Project Name:	Condominiums	**Report Page:**	**(Page 8 of 8)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature:
Company: InnoDez, Inc.	Signature Date: 2023-05-15
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
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Responsible Designer Name: Syed P. Alam	Responsible Designer Signature:
Company: Innodez	Date Signed: 2023-05-15
Address: 726 Foxbrough	License: 27087
City/State/Zip: Pleasanton CA 94566	Phone:

STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-PLB-E
This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.			
Project Name:	Condominiums	**Report Page:**	**(Page 1 of 3)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

A. GENERAL INFORMATION

01	Project Location (city)	Los Angeles	02	Climate Zone	8
03	Occupancy Types Within Project (select all that apply):				

● High-Rise Residential ● Parking Garage ● Support Areas

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140./ 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03		
My project consists of (check all that apply):	System Type[1,2]	System Components		
☐ New system (DHW system being installed for the first time in newly constructed building)		☐ Equipment	☐ Distribution	☐ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment	☐ Distribution	☐ Controls

[1]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.

[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.

[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	**Compliance Results**
Table F	Table G	Table H	
Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

CERTIFICATE OF COMPLIANCE			**NRCC-PLB-E**
Project Name:	Condominiums	**Report Page:**	**(Page 2 of 3)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

This section does not apply to this project.

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This section does not apply to this project.

H. DOMESTIC HOT WATER CONTROLS

This section does not apply to this project.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

Domestic Water Heating System

CERTIFICATE OF COMPLIANCE			NRCC-PLB-E
Project Name:	Condominiums	**Report Page:**	**(Page 3 of 3)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature:
Company: InnoDez, Inc.	Signature Date: 2023-05-15
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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Company: Innodez	Date Signed: 2023-05-15
Address: 726 Foxbrough	License: 27087
City/State/Zip: Pleasanton CA 94566	Phone:

Solar And Battery

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E

This document is used to demonstrate compliance with prescriptive PV and battery requirements in 140.10/ 170.2 for nonresidential, multifamily and mixed-use buildings and prescriptive solar thermal requirements in 170.2(d)3C for multifamily and hotel/ motel occupancies. When PV/battery/solar thermal requirements don't apply or are traded using the performance approach, this document demonstrates compliance with mandatory solar readiness requirements in 110.10/ 160.8 for newly constructed buildings which are either multifamily ten stories or fewer, hotel/motel ten stories or fewer or all other nonresidential buildings three stories or fewer. It is also used to demonstrate compliance with solar readiness in 110.10/ 160.8 for additions to nonresidential, multifamily or hotel/motel building types which add more than 2,000 ft^2 of roof area. Alterations, or additions of less than 2,000 ft^2 of roof area, are not required to comply with solar readiness, solar PV and battery requirements and do not need to complete this document.

Project Name:	Condominiums	**Report Page:**	**(Page 1 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

A. GENERAL INFORMATION

01	Project Location (city)	Los Angeles	04	Building Occupancies	High-Rise ResidentialParking GarageSupport Areas
02	Climate Zone	8	05	Construction Type	New construction
03	Conditioned Floor Area (ft^2)	29194	06	Number of Stories	Bldg 4-10 stories

B. PROJECT SCOPE

The compliance path the project is using to comply per 110.10(b)1B/ 140.10/ 170.2(g and h) is indicated below.

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)

		01
☐	Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)	The project has included an installed PV system and battery storage system per requirements in 140.10/ 170.2(g and h) as documented in Table J.
☐	Exception to PV and Battery: Not enough Solar Access Roof Area	The total of all available Solar Access Roof Area(s) of the project site is less than three percent of the conditioned floor area as documented in Table J.
☐	Exception to PV and Battery: Required PV < 4kW	The required PV system size is less than 4 kW dc as documented in Table J..
☐	Exception to PV and Battery: No contiguous Solar Access Roof Area	The Solar Access Roof Area(s) of the project site contains less than 80 contiguous square feet as documented in Table J.
☐	Exception to PV and Battery: Can't meet snow load	The project has a roof design where the enforcement authority has verified it is not possible for the PV system, including panels, modules, components, supports, and attachments to the roof structure, to meet ASCE 7-16 Chapter 7, Snow Loads.
☐	Exception to PV and Battery: Multi-tenant without VNEM or Community Solar	The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.
☐	The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.	The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.

CERTIFICATE OF COMPLIANCE			**NRCC-SAB-E**
Project Name:	Condominiums	**Report Page:**	**(Page 2 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)3C (Multifamiily and hotel/ motel occupancies only)

01	
☐	The project includes a hotel/motel or multifamily occupancy with a gas or propane central water-heating system (serves 2+ dwelling units) and includes a permanently installed domestic solar water-heating system to comply with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H. Compliance meets Exception 2 to solar ready requirements in 110.10(b).

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance or see the applicable Table referenced below.

Allocated Solar Zone				**Installed PV System**				**Installed SWH System**				**Smart Tstat and Alternative EE Measure**		**Compliance Results**
01		02		03		04		05		06		07	08	
Required Minimum Area (ft^2)	<=	Designated Area (ft^2)	OR	Required Minimum DC Power Rating (Watts)	<=	Designed DC Power Rating (Watts)	OR	Required Minimum Solar Savings Fraction	<=	Designed/Rated Solar Savings Fraction	OR	JA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	COMPLIES
(See Table F)				(See Tables G or J)				(See Table H)				(See Table I)		
	<=		OR	0	<=	42,000	OR		<=		OR			
				Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).										
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table J.														COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table is includes remarks made by the permit applicant to the Authority Having Jurisdiction.

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	Condominiums	**Report Page:**	**(Page 3 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

F. ALLOCATED SOLAR ZONE

This section does not apply to this project.

G. PERMANENTLY INSTALLED SOLAR PV FOR SOLAR READY EXCEPTION

This section does not apply to this project.

H. PERMANENTLY INSTALLED SOLAR HOT WATER SYSTEMS

This section does not apply to this project.

I. SMART THERMOSTATS AND ALTERNATIVE EFFICIENCY MEASURE FOR SOLAR READY EXCEPTION

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	Condominiums	**Report Page:**	**(Page 4 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

J. PHOTOVOLTAIC (PV) AND BATTERY SYSTEMS

This table documents compliance with prescriptive photovoltaic and battery system requirements in 140.10/ 170.2(g and h). Unless the project meets one of the listed exceptions, or trades-off PV in an energy model using performance path, 140.10/ 170.2(g and h) requires installed photovoltaic and battery systems for newly constructed buildings. The installed PV systems must meet the minimum requirements in Joint Appendix 11.

Photovoltaic (PV) System

01	02	03	04	05	06	07	08
Occupancy	Conditioned Floor Area (ft^2)	Area of New Roof[1] (ft^2)	Roof Area < 70% Solar Access[2] (ft^2)	Plansheet or Document showing Solar Access Calculations	Occupied Roof Area[3] (ft^2)	Solar Access Roof Area (SARA) (ft^2)	Min Size of PV System Required (kWdc)
						Total Min Size PV System Required for all Spaces (kWdc):	0
						Total Size PV System in Design (kWdc):	42

[1]FOOTNOTES: Includes the area of the building's roof space capable of structurally supporting a PV system and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2 Section 1511.2.
[2]Solar access must be determined using CEC approved solar access calculation tools found at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/solar-assessment-tools.
[3]As specified by CBC Section 503.1.4.

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-SAB-01-E - Must be submitted for all buildings that must comply with solar readiness or PV/Battery requirements.

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

CERTIFICATE OF COMPLIANCE			**NRCC-SAB-E**
Project Name:	Condominiums	**Report Page:**	**(Page 5 of 5)**
Project Address:	3331 W. 59th Place	**Date Prepared:**	5/15/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature:
Company: InnoDez, Inc.	Signature Date:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Syed P. Alam	Responsible Designer Signature:
Company: Innodez	Date Signed: 2023-05-15
Address: 726 Foxbrough	License: 27087
City/State/Zip: Pleasanton CA 94566	Phone:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Condominiums	5/15/2023
System Name	**Floor Area**
Condo 1&2	10,300

ENGINEERING CHECKS

Number of Systems	10
Heating System	
Output per System	30,000
Total Output (Btuh)	300,000
Output (Btuh/sqft)	29.1
Cooling System	
Output per System	30,000
Total Output (Btuh)	300,000
Total Output (Tons)	25.0
Total Output (Btuh/sqft)	29.1
Total Output (sqft/Ton)	412.0
Air System	
CFM per System	1,000
Airflow (cfm)	10,000
Airflow (cfm/sqft)	0.97
Airflow (cfm/Ton)	400.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00
Note: values above given at ARI conditions	

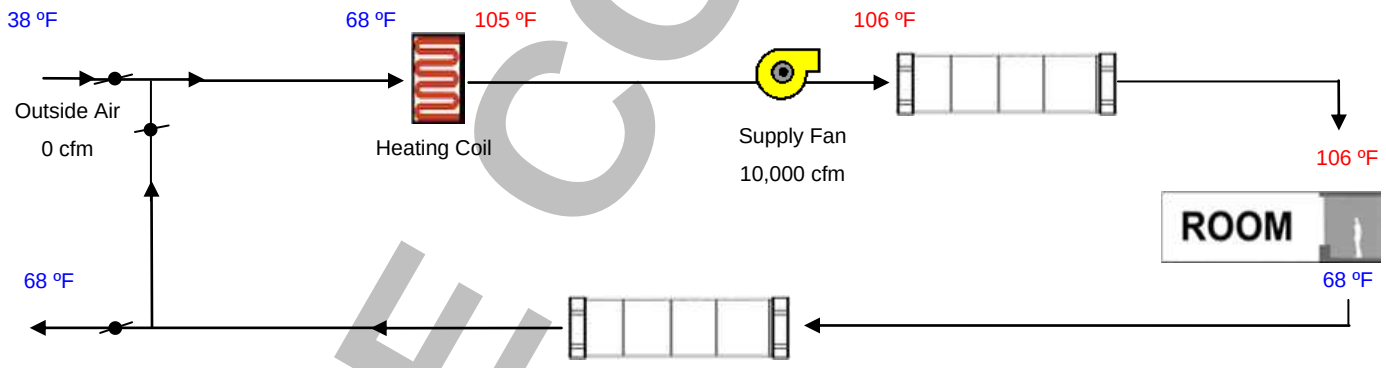
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	5,978	122,481	7,912	1,240	49,927
Return Vented Lighting		0			
Return Air Ducts		1,316			580
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		7,675			-7,675
Supply Air Ducts		1,316			580
TOTAL SYSTEM LOAD		132,787	7,912		43,412

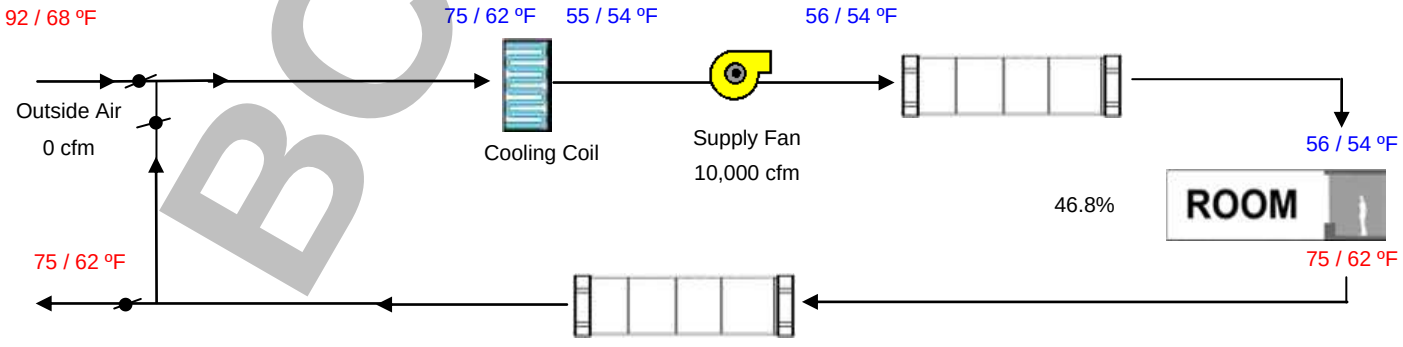
HVAC EQUIPMENT SELECTION

Condo 1 & 2	255,063	24,466		251,135
Total Adjusted System Output (Adjusted for Peak Design conditions)	255,063	24,466		251,135
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Condominiums	5/15/2023
System Name	**Floor Area**
Apartment	4,000

ENGINEERING CHECKS

Number of Systems	5
Heating System	
Output per System	24,000
Total Output (Btuh)	120,000
Output (Btuh/sqft)	30.0
Cooling System	
Output per System	24,000
Total Output (Btuh)	120,000
Total Output (Tons)	10.0
Total Output (Btuh/sqft)	30.0
Total Output (sqft/Ton)	400.0
Air System	
CFM per System	800
Airflow (cfm)	4,000
Airflow (cfm/sqft)	1.00
Airflow (cfm/Ton)	400.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00

Note: values above given at ARI conditions

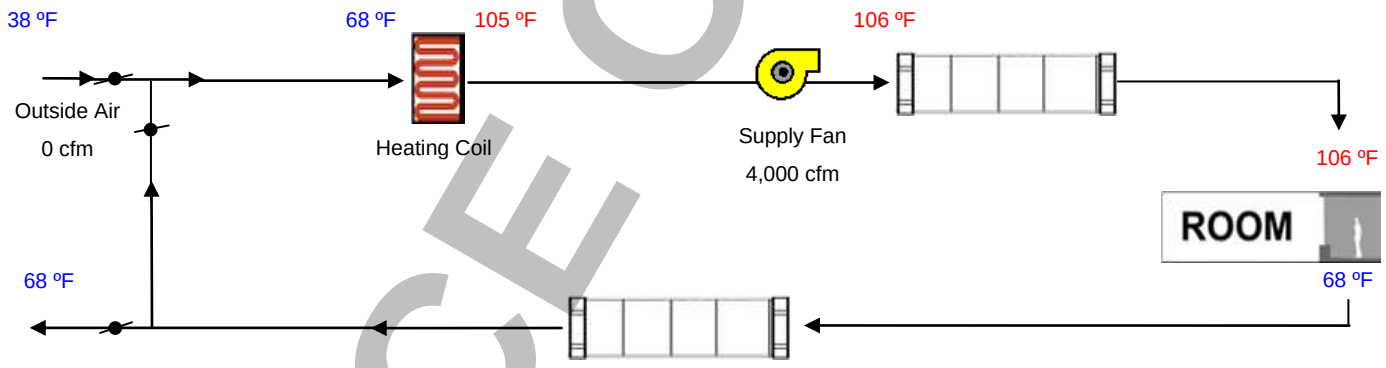
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,923	39,436	3,073	364	14,684
Return Vented Lighting		0			
Return Air Ducts		424			171
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		3,070			-3,070
Supply Air Ducts		424			171
TOTAL SYSTEM LOAD		43,354	3,073		11,956

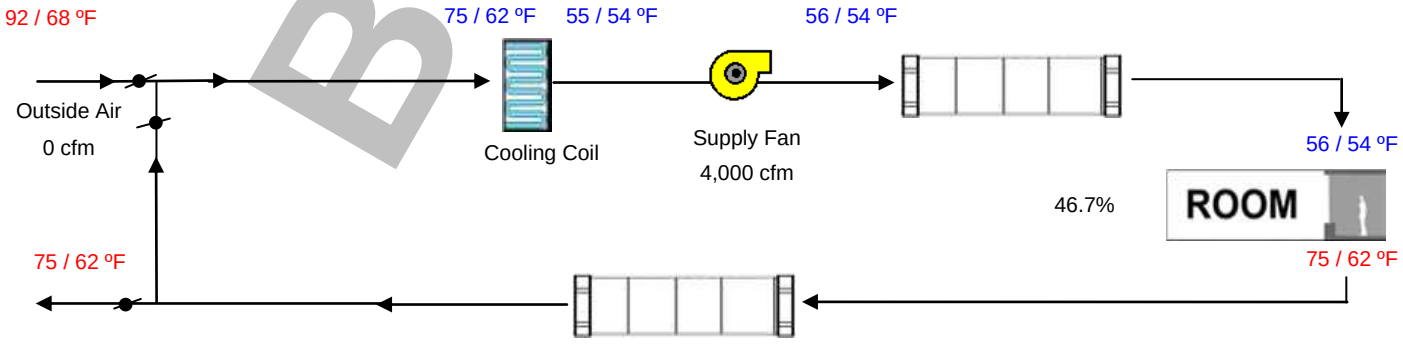
HVAC EQUIPMENT SELECTION

Apartment	107,037	4,749		100,454
Total Adjusted System Output (Adjusted for Peak Design conditions)	107,037	4,749		100,454
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Condominiums	5/15/2023
System Name	**Floor Area**
Condo 3&4	12,920

ENGINEERING CHECKS

Number of Systems	10
Heating System	
Output per System	36,000
Total Output (Btuh)	360,000
Output (Btuh/sqft)	27.9
Cooling System	
Output per System	36,000
Total Output (Btuh)	360,000
Total Output (Tons)	30.0
Total Output (Btuh/sqft)	27.9
Total Output (sqft/Ton)	430.7
Air System	
CFM per System	1,200
Airflow (cfm)	12,000
Airflow (cfm/sqft)	0.93
Airflow (cfm/Ton)	400.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00

Note: values above given at ARI conditions

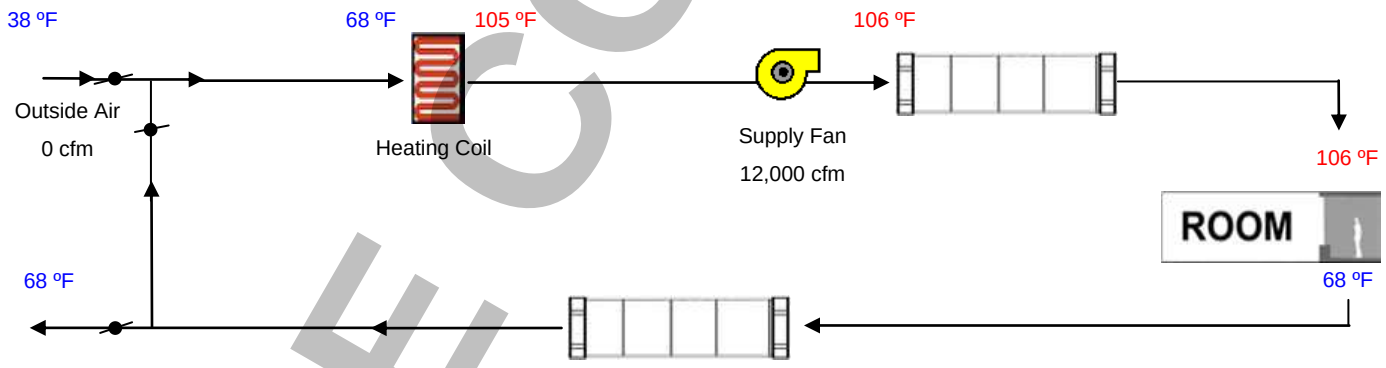
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	8,256	170,034	9,925	1,432	57,498
Return Vented Lighting		0			
Return Air Ducts		1,827			668
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		7,675			-7,675
Supply Air Ducts		1,827			668
TOTAL SYSTEM LOAD		181,362	9,925		51,159

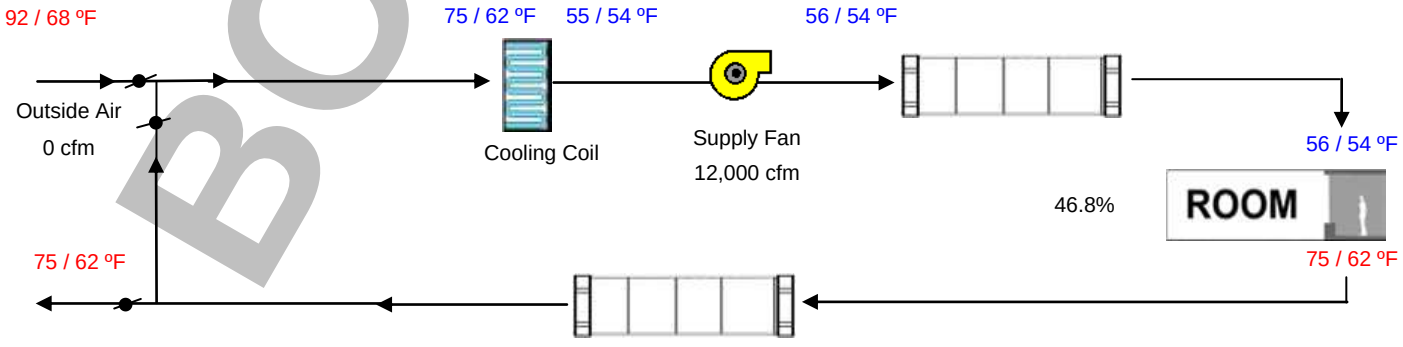
HVAC EQUIPMENT SELECTION

Condo 3 & 4	321,142	14,388		301,362
Total Adjusted System Output (Adjusted for Peak Design conditions)	321,142	14,388		301,362
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Condominiums	5/15/2023
System Name	**Floor Area**
Retails 1,2&3	1,974

ENGINEERING CHECKS

Number of Systems	3
Heating System	
Output per System	36,000
Total Output (Btuh)	108,000
Output (Btuh/sqft)	54.7
Cooling System	
Output per System	36,000
Total Output (Btuh)	108,000
Total Output (Tons)	9.0
Total Output (Btuh/sqft)	54.7
Total Output (sqft/Ton)	219.3
Air System	
CFM per System	1,200
Airflow (cfm)	3,600
Airflow (cfm/sqft)	1.82
Airflow (cfm/Ton)	400.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00
Note: values above given at ARI conditions	

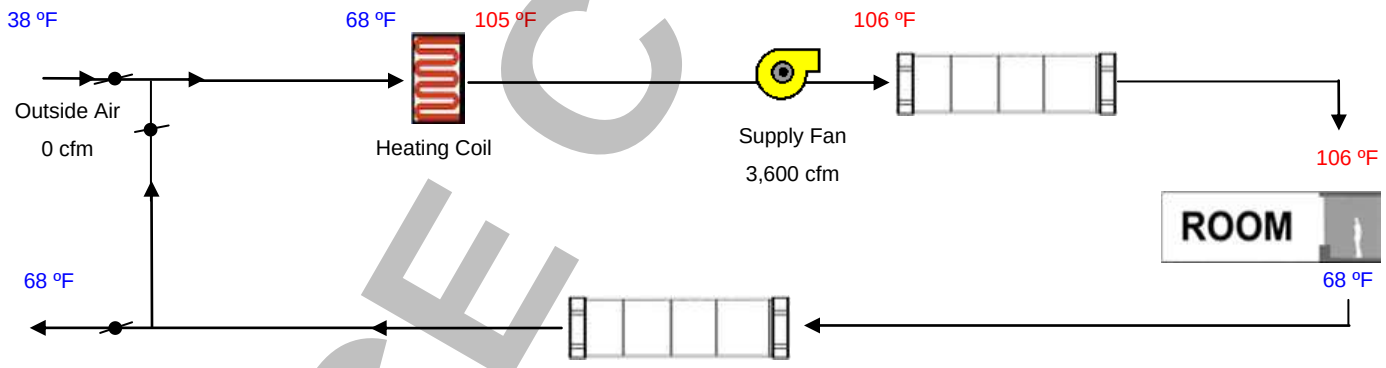
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	2,139	44,092	1,516	273	10,974
Return Vented Lighting		0			
Return Air Ducts		474			128
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		2,302			-2,302
Supply Air Ducts		474			128
TOTAL SYSTEM LOAD		47,342	1,516		8,927

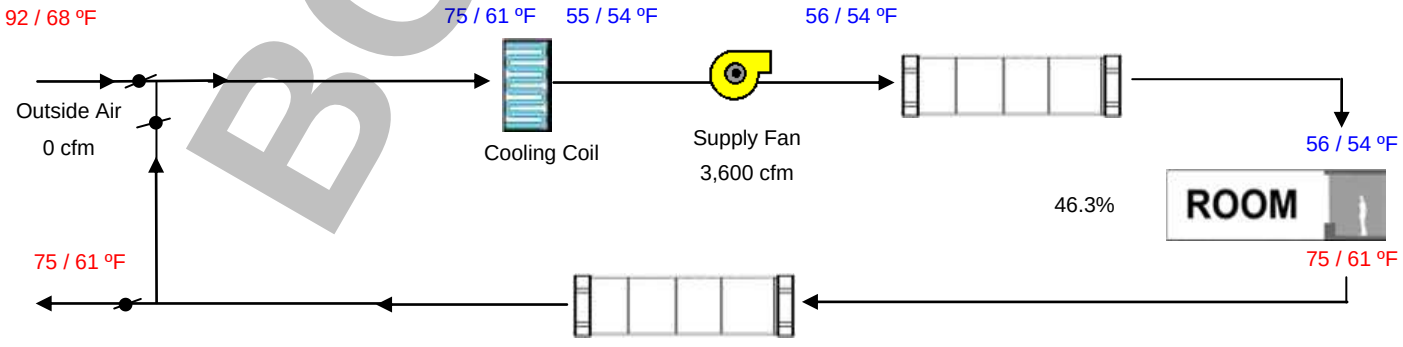
HVAC EQUIPMENT SELECTION

Retails	96,913	3,509		90,409
Total Adjusted System Output (Adjusted for Peak Design conditions)	96,913	3,509		90,409
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



ENERGY USE AND COST SUMMARY — ECON-1

Project Name: *Condominiums*

Date: *5/15/2023*

Rate: **Fuel Type:** *Electricity*

	STANDARD			PROPOSED			MARGIN		
	Energy Use (kWh)	Peak Demand (kW)	Cost ($)	Energy Use (kWh)	Peak Demand (kW)	Cost ($)	Energy Use (kWh)	Peak Demand (kW)	Cost ($)
Jan	*5,126,548*	*6,916.7*		*5,124,935*	*6,913.9*		*1,612*	*2.8*	
Feb	*4,629,883*	*6,913.1*		*4,628,359*	*6,912.0*		*1,523*	*1.1*	
Mar	*4,965,179*	*6,700.9*		*4,963,388*	*6,696.6*		*1,791*	*4.4*	
Apr	*4,571,391*	*6,377.2*		*4,569,591*	*6,373.1*		*1,800*	*4.1*	
May	*4,539,280*	*6,128.8*		*4,537,442*	*6,125.4*		*1,838*	*3.4*	
Jun	*4,218,538*	*5,885.9*		*4,216,654*	*5,883.4*		*1,884*	*2.5*	
Jul	*4,238,642*	*5,725.8*		*4,236,644*	*5,722.7*		*1,998*	*3.1*	
Aug	*4,247,697*	*5,736.8*		*4,245,586*	*5,732.3*		*2,111*	*4.5*	
Sep	*4,264,396*	*5,948.3*		*4,262,531*	*5,944.8*		*1,865*	*3.5*	
Oct	*4,750,197*	*6,416.4*		*4,748,375*	*6,413.5*		*1,821*	*2.9*	
Nov	*4,611,537*	*6,429.6*		*4,609,998*	*6,426.9*		*1,539*	*2.7*	
Dec	*4,885,354*	*6,590.6*		*4,883,807*	*6,589.4*		*1,548*	*1.2*	
Year	*55,048,643*	*6,916.7*		*55,027,312*	*6,913.9*		*21,331*	*2.8*	
CO_2		**tons/yr**			**tons/yr**			**tons/yr**	

Rate: **Fuel Type:** *Natural Gas*

	STANDARD			PROPOSED			MARGIN		
	Energy Use (therms)	Peak Demand (kBtu/hr)	Cost ($)	Energy Use (therms)	Peak Demand (kBtu/hr)	Cost ($)	Energy Use (therms)	Peak Demand (kBtu/hr)	Cost ($)
Jan	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Feb	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Mar	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Apr	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
May	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Jun	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Jul	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Aug	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Sep	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Oct	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Nov	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Dec	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
Year	*0*	*0.0*		*0*	*0.0*		*0*	*0.0*	
CO_2		**tons/yr**			**tons/yr**			**tons/yr**	

Annual Totals	Energy	Demand	Cost	Cost/sqft	Virtual Rate
Electricity	*55,027,312* **kWh**	*6,914* **kW**	**$** *0*	**$** *0.00* **/sqft**	**$** *n/a* **/kWh**
Natural Gas	*0* **therms**	*0* **kBtu/hr**	**$** *0*	**$** *0.00* **/sqft**	**$** *0.00* **/therm**
		Total	**$** *0*	**$** *0.00* **/sqft**	

Site Energy Use Index: ***6,433.11*** **kBtuh/yr**