

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 1 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

A. PROJECT GENERAL INFORMATION				
1.	Project Location (city)	- specify -	7.	# of dwelling units
2.	CA Zip Code		8.	Compliance Software (version)
3.	Climate Zone	3	9.	Building Orientation (deg)
4.	Total Conditioned Floor Area	113,100 ft <sup>2</sup>	10.	Permitted Scope of Work
5.	Total Unconditioned Floor Area	27,900 ft <sup>2</sup>	11.	Building Type(s)
6.	# of Stories (Habitable Above Grade)	5		

B. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS					§ 140.1
BUILDING COMPLIES					
1. Energy Component	2. Standard Design (TDV)	3. Proposed Design (TDV)	4. Compliance Margin (TDV)	5. Percent Better than Standard	
Space Heating	7.23	7.74	-0.51	-7.1%	
Space Cooling	14.77	14.24	0.53	3.6%	
Indoor Fans	10.71	10.54	0.17	1.6%	
Heat Rejection	--	--	--	--	
Pumps & Misc.	0.02	0.08	-0.06	-300.0%	
Domestic Hot Water	20.51	20.51	--	0.0%	
Indoor Lighting	20.81	20.81	--	0.0%	
<b>COMPLIANCE TOTAL</b>	<b>74.05</b>	<b>73.92</b>	<b>0.13</b>	<b>0.2%</b>	
Receptacle	58.15	58.15		0.0%	
Process	--	--		--	
Other Ltg	39.77	39.77		0.0%	
<b>Process Motors</b>	<b>2.10</b>	<b>8.42</b>		<b>-301.0%</b>	

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**C. PRIORITY PLAN CHECK/ INSPECTION ITEMS** (in order of highest to lowest TDV energy savings)

1st	Space Cooling: Check envelope and mechanical	<p><b>Compliance Margin By Energy Component (from Table B column 4)</b></p>
2nd	Indoor Fans: Check envelope and mechanical	
3rd	Heat Rejection: Check envelope and mechanical	
4th	Domestic Hot Water: Check mechanical	
5th	Indoor Lighting: Check lighting	
6th	Pumps & Misc.: Check mechanical	
7th	Space Heating: Check envelope and mechanical	

**D. EXCEPTIONAL CONDITIONS**

Water heaters have not been sized to meet loads specified in the NACM and may not have adequate capacity.

**E. HERS VERIFICATION**

This Section Does Not Apply

**F. ADDITIONAL REMARKS**

None Provided

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G. COMPLIANCE PATH & CERTIFICATE OF COMPLIANCE SUMMARY			
Identify which building components use the performance or prescriptive path for compliance. "NA"= not in project			
For components that utilize the performance path, indicate the sheet number that includes mandatory notes on plans.			
Building Component	Compliance Path	Compliance Forms (required for submittal)	Location of Mandatory Notes on Plans
Envelope	<input checked="" type="checkbox"/> Performance	NRCC-PRF-ENV-DETAILS (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-ENV-01 / 02 / 03 / 04 / 05 / 06-E	
	<input type="checkbox"/> NA		
Mechanical	<input checked="" type="checkbox"/> Performance	NRCC-PRF-MCH-DETAILS (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-MCH-01 / 02 / 03 / 04 / 05 / 06 / 07-E	
	<input type="checkbox"/> NA		
Domestic Hot Water	<input checked="" type="checkbox"/> Performance	NRCC-PRF-PLB-DETAILS (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-PLB-01-E	
	<input type="checkbox"/> NA		
Lighting (Indoor Conditioned)	<input checked="" type="checkbox"/> Performance	NRCC-PRF-LTI-DETAILS (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-LTI-01 / 02 / 03 / 04 / 05-E	
	<input type="checkbox"/> NA		
Covered Process: Commercial Kitchens	<input type="checkbox"/> Performance	S2 (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-PRC-01/ 03-E	
	<input checked="" type="checkbox"/> NA		
Covered Process: Computer Rooms	<input type="checkbox"/> Performance	S3 (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-PRC-01/ 04-E	
	<input checked="" type="checkbox"/> NA		
Covered Process: Laboratory Exhaust	<input type="checkbox"/> Performance	S4 (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-PRC-01/ 09-E	
	<input checked="" type="checkbox"/> NA		

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G. COMPLIANCE PATH & CERTIFICATE OF COMPLIANCE SUMMARY							
The following building components are only eligible for prescriptive compliance. Indicate which are relevant to the project.				The following building components may have mandatory requirements per Part 6. Indicate which are relevant to the project.			
Yes	NA	Prescriptive Requirement	Compliance Forms	Yes	NA	Mandatory Requirement	Compliance Forms
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lighting (Indoor Unconditioned) §140.6	NRCC-LTI-01 / 02 / 03 / 04 / 05-E	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Commissioning: §120.8 Simple Systems	NRCC-CXR-01 / 02 / 03 / 05-E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lighting (Outdoor) §140.7	NRCC-LTO-01 / 02 / 03-E	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Complex Systems	NRCC-CXR-01 / 02 / 04 / 05-E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lighting (Sign) §140.8	NRCC-LTS-01-E	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Electrical: §130.5	NRCC-ELC-01-E
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solar Thermal Water Heating: §140.5	NRCC-STH-01-E	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solar Ready: §110.10	NRCC-SRA-01 / 02-E
<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	Covered Process: §120.6	NRCC-PRC-01-E
				<input type="checkbox"/>	<input checked="" type="checkbox"/>	Parking Garage	NRCC-PRC-02-E
				<input type="checkbox"/>	<input checked="" type="checkbox"/>	Commercial Refrigeration	NRCC-PRC-05-E
				<input type="checkbox"/>	<input checked="" type="checkbox"/>	Warehouse Refrigeration	NRCC-PRC-06/07/08-E
				<input type="checkbox"/>	<input checked="" type="checkbox"/>	Compressed Air	NRCC-PRC-10-E
				<input type="checkbox"/>	<input checked="" type="checkbox"/>	Process Boilers	NRCC-PRC-11-E

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H. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRCI/NRCA/NRCV) – Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify). See Tables G. and H. in MCH and LTI Details Sections for Acceptance Tests and forms by equipment.		Confirmed	
Building Component	Compliance Forms (required for submittal)	Pass	Fail
Envelope	<input type="checkbox"/> NRCI-ENV-01-E - For all buildings	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-ENV-02-F- NFRC label verification for fenestration	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical	<input type="checkbox"/> NRCI-MCH-01-E - For all buildings with Mechanical Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-02-A- Outdoor Air	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-03-A – Constant Volume Single Zone HVAC	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-04-H- Air Distribution Duct Leakage	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-05-A- Air Economizer Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-06-A- Demand Control Ventilation	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-07-A – Supply Fan Variable Flow Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-08-A- Valve Leakage Test	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-09-A – Supply Water Temp Reset Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-10-A- Hydronic System Variable Flow Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-11-A – Auto Demand Shed Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-12-A- Packaged Direct Expansion Units	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-13-A- Air Handling Units and Zone Terminal Units	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-14-A- Distributed Energy Storage	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-15-A – Thermal Energy Storage	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-16-A- Supply Air Temp Reset Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-17-A – Condensate Water Temp Reset Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-MCH-18-A- Energy Management Controls Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCV-MCH-04-H- Duct Leakage Test	<input type="checkbox"/>	<input type="checkbox"/>

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<b>Building Component</b>	<b>Compliance Forms (required for submittal)</b>	<b>Pass</b>	<b>Fail</b>
Plumbing	<input type="checkbox"/> NRCI-PLB-01-E - For all buildings with Plumbing Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-02-E - required on central systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-03-E - Single dwelling unit systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-21-E - HERS verified central systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-22-E - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCV-PLB-21-H- HERS verified central systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCV-PLB-22-H - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-STH-01-E - Any solar water heating	<input type="checkbox"/>	<input type="checkbox"/>
Indoor Lighting	<input type="checkbox"/> NRCI-LTI-01-E - For all buildings	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-LTI-02-E - Lighting control system, or for an Energy Management Control System (EMCS)	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-LTI-03-E - Line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-LTI-04-E - Two interlocked systems serving an auditorium, a convention center, a conference room, or a theater	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-LTI-05-E - Lighting Control Credit Power Adjustment Factor (PAF)	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-LTI-06-E - Additional wattage installed in a video conferencing studio	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-LTI-02-A - Occupancy sensors and automatic time switch controls.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-LTI-03-A - Automatic daylighting controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-LTI-04-A - Demand responsive lighting controls	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Lighting	<input type="checkbox"/> NRCI-LTO-01-E – Outdoor Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-LTO-02-E- EMCS Lighting Control System	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-LTO-02-A - Outdoor Lighting Control	<input type="checkbox"/>	<input type="checkbox"/>
Sign Lighting	<input type="checkbox"/> NRCI-LTS-01-E – Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
Electrical	<input type="checkbox"/> NRCI-ELC-01-E - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
Photovoltaic	<input type="checkbox"/> NRCI-SPV-01-E Photovoltaic Systems	<input type="checkbox"/>	<input type="checkbox"/>

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Building Component	Compliance Forms (required for submittal)	Pass	Fail
Covered Process	<input type="checkbox"/> NRCI-PRC-01-E Refrigerated Warehouse	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-01-F- Compressed Air Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-02-F- Kitchen Exhaust	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-03-F- Garage Exhaust	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-04-F- Refrigerated Warehouse- Evaporator Fan Motor Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-05-F- Refrigerated Warehouse- Evaporative Condenser Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-06-F- Refrigerated Warehouse- Air Cooled Condenser Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-07F- Refrigerated Warehouse- Variable Speed Compressor	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-08-F- Electrical Resistance Underslab Heating System	<input type="checkbox"/>	<input type="checkbox"/>

I. ENVELOPE GENERAL INFORMATION (See NRCC-PRF-ENV-DETAILS for more information)							Confirmed	
1.	Total Conditioned Floor Area	113,100 ft <sup>2</sup>	5.	Number of Floors Above Grade	5		Pass	Fail
2.	Total Unconditioned Floor Area	27,900 ft <sup>2</sup>	6.	Number of Floors Below Grade	1			
3.	Addition Conditioned Floor Area	0 ft <sup>2</sup>						
4.	Addition Unconditioned Floor Area	0 ft <sup>2</sup>						
7. Opaque Surfaces & Orientation		8. Total Gross Surface Area	9. Total Fenestration Area		10. Window to Wall Ratio			
North Wall		9,000 ft <sup>2</sup>	1,981 ft <sup>2</sup>		22.0%		<input type="checkbox"/>	<input type="checkbox"/>
East Wall		12,150 ft <sup>2</sup>	2,677 ft <sup>2</sup>		22.0%		<input type="checkbox"/>	<input type="checkbox"/>
South Wall		9,000 ft <sup>2</sup>	1,977 ft <sup>2</sup>		22.0%		<input type="checkbox"/>	<input type="checkbox"/>
West Wall		12,150 ft <sup>2</sup>	2,677 ft <sup>2</sup>		22.0%		<input type="checkbox"/>	<input type="checkbox"/>
Total		42,300 ft <sup>2</sup>	9,311 ft <sup>2</sup>		22.0%		<input type="checkbox"/>	<input type="checkbox"/>
Roof		22,620 ft <sup>2</sup>	0 ft <sup>2</sup>		00.0%		<input type="checkbox"/>	<input type="checkbox"/>

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J. FENESTRATION ASSEMBLY SUMMARY								§ 110.6	Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.	Pass	Fail
Fenestration Assembly Name / Tag or I.D.	Fenestration Type	Certification Method <sup>1</sup>	Assembly Method	Area ft <sup>2</sup>	Overall U-factor	Overall SHGC	Overall VT	Status <sup>2</sup>		
Res Fixed Window	VerticalFenestration	NFRCRated	Manufactured	8465	0.36	0.25	0.42	N	<input type="checkbox"/>	<input type="checkbox"/>
Nonres Fixed Window	VerticalFenestration	NFRCRated	Manufactured	846	0.36	0.25	0.42	N	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Site-built fenestration less than 1,000 ft<sup>2</sup>, or more than or equal to 1,000 ft<sup>2</sup> see Reference Nonresidential Appendix NA6.

<sup>2</sup> Status: N - New, A - Altered, E - Existing

Taking compliance credit for fenestration shading devices? (if "Yes", see NRCC-PRF-ENV-DETAILS for more information)	
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K. OPAQUE SURFACE ASSEMBLY SUMMARY							§ 120.7/ § 140.3	Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	Pass	Fail
Surface Name	Surface Type	Area (ft <sup>2</sup> )	Framing Type	Cavity R-Value	Continuous R-Value	U-Factor / F-Factor / C-Factor	Status <sup>1</sup>		
SlabOnOrBelowGradeF073	UndergroundFloor				NA			<input type="checkbox"/>	<input type="checkbox"/>
BelowGradeWallC114	UndergroundWall				NA			<input type="checkbox"/>	<input type="checkbox"/>
MetalFrameWallU082	ExteriorWall				NA			<input type="checkbox"/>	<input type="checkbox"/>
MetalFrameWallU069	ExteriorWall				NA			<input type="checkbox"/>	<input type="checkbox"/>
MetalFrameWallInterior	InteriorWall				NA			<input type="checkbox"/>	<input type="checkbox"/>
FlatNonresWoodFramingAndOtherRoofUnconditioned	Roof				NA			<input type="checkbox"/>	<input type="checkbox"/>
FlatResWoodFramingAndOtherRoofU034Refl08	Roof				NA			<input type="checkbox"/>	<input type="checkbox"/>
FlatNonresWoodFramingAndOtherRoofU034	Roof				NA			<input type="checkbox"/>	<input type="checkbox"/>
OtherFloorU071	ExteriorFloor				NA			<input type="checkbox"/>	<input type="checkbox"/>
TypicalFloorInterior	InteriorFloor				NA			<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> Status: N - New, A - Altered, E - Existing



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L. ROOFING PRODUCT SUMMARY							§ 140.3	Confirmed	
1.	2.	3.	4.	5.	6.	7.		Pass	Fail
Product Type	Product ≥25 lb ft <sup>2</sup>	Aged Solar Reflectance	Thermal Emittance	SRI	Cool Roof Credit	CRRC Product ID Number			
FlatNonresWoodFramingAndOtherRoofUnconditioned	No	0.63	0.85		No			<input type="checkbox"/>	<input type="checkbox"/>
FlatResWoodFramingAndOtherRoofU034Ref108	No	0.55	0.85		No			<input type="checkbox"/>	<input type="checkbox"/>
FlatNonresWoodFramingAndOtherRoofU034	No	0.63	0.85		No			<input type="checkbox"/>	<input type="checkbox"/>

M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information)										§ 110.1 / § 110.2			
Dry System Equipment <sup>1</sup> (Fan & Economizer info included below in Table N)												Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	Equip Type	System Type (Simple <sup>3</sup> or Complex <sup>4</sup> )	Qty	Total Heating Output (kBtu/h)	Supp Heat Source (Y/N)	Supp Heat Output (kBtuh)	Total Cooling Output (kBtu/h)	Efficiency		Acceptance Testing Required? (Y/N) <sub>5</sub>	Status <sup>6</sup>		
								Cooling	Heating				
BaseAirSys5	PVAV		1	558	No	0	550			NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5-2	PVAV		3	50	No	0	50			NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5-3	PVAV		1	73	No	0	50			NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1	SZAC		3	8	No	0	8	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-2	SZAC		6	8	No	0	9	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-3	SZAC		6	8	No	0	10	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-4	SZAC		15	8	No	0	6	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-5	SZAC		6	10	No	0	8	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>

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M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information)										§ 110.1 / § 110.2			
Dry System Equipment <sup>1</sup> (Fan & Economizer info included below in Table N)												Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	Equip Type	System Type (Simple <sup>3</sup> or Complex <sup>4</sup> )	Qty	Total Heating Output (kBtu/h)	Supp Heat Source (Y/N)	Supp Heat Output (kBtuh)	Total Cooling Output (kBtu/h)	Efficiency		Acceptance Testing Required? (Y/N) <sup>5</sup>	Status <sup>6</sup>		
								Cooling	Heating				
BaseZnSys1-6	SZAC		9	11	No	0	13	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-7	SZAC		9	11	No	0	15	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-8	SZAC		3	17	No	0	17	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-9	SZAC		3	17	No	0	20	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-10	SZAC		3	8	No	0	11	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-11	SZAC		3	8	No	0	10	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-12	SZAC		1	10	No	0	10	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-13	SZAC		2	10	No	0	10	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-14	SZAC		2	10	No	0	12	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-15	SZAC		5	10	No	0	9	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>

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M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information)										§ 110.1 / § 110.2			
Dry System Equipment <sup>1</sup> (Fan & Economizer info included below in Table N)												Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	Equip Type	System Type (Simple <sup>3</sup> or Complex <sup>4</sup> )	Qty	Total Heating Output (kBtu/h)	Supp Heat Source (Y/N)	Supp Heat Output (kBtuh)	Total Cooling Output (kBtu/h)	Efficiency		Acceptance Testing Required? (Y/N) <sub>5</sub>	Status <sup>6</sup>		
								Cooling	Heating				
BaseZnSys1-16	SZAC		2	13	No	0	11	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-17	SZAC		3	15	No	0	14	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-18	SZAC		3	15	No	0	17	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-19	SZAC		1	22	No	0	19	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-20	SZAC		1	22	No	0	23	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-21	SZAC		1	10	No	0	12	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-22	SZAC		1	10	No	0	11	SEER- 14.000 / EER-12.200	AFUE-80.0	NA	N	<input type="checkbox"/>	<input type="checkbox"/>

Wet System Equipment <sup>2</sup>								Pumps				24.	Confirmed	
12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	Status <sup>6</sup>	Pass	Fail
Equip Name	Equip Type	Qty	Vol (gal)	Rated Capacity (kBtu/h)	Efficiency	Standby Loss	Tank Ext. R Value	Qty	GPM	HP	VSD (Y/N)			
NonResBaseGasWaterHeater	Conventional	1					NA	NA	NA	NA	No	N	<input type="checkbox"/>	<input type="checkbox"/>
NonResBaseElecWaterHeater	Conventional	1					NA	NA	NA	NA	No	N	<input type="checkbox"/>	<input type="checkbox"/>

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Wet System Equipment <sup>2</sup>								Pumps					Confirmed	
12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Pass	Fail
Equip Name	Equip Type	Qty	Vol (gal)	Rated Capacity (kBtu/h)	Efficiency	Standby Loss	Tank Ext. R Value	Qty	GPM	HP	VSD (Y/N)	Status <sup>6</sup>		
Base Blr	HotWater	NA	NA	NaN		NA	NA	1	19.4	0.500	Yes	N	<input type="checkbox"/>	<input type="checkbox"/>
Base Blr-2	HotWater	NA	NA	NaN		NA	NA	1	19.4	0.500	Yes	N	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> Dry System Equipment includes furnaces, air handling units, heat pumps, etc.

<sup>2</sup> Wet System Equipment includes boilers, chillers, cooling towers, water heaters, etc.

<sup>3</sup> Simple Systems must complete NRCC-CXR-03-E commissioning design review form

<sup>4</sup> Complex Systems must complete NRCC-CXR-04-E commissioning design review form

<sup>5</sup> A summary of which acceptance tests are applicable is provided in NRCC-PRF-MCH-DETAILS

<sup>6</sup> Status: N - New, A - Altered, E - Existing

Discrepancy between modeled and designed equipment sizing? (if "Yes", see Table F. "Additional Remarks" for an explanation)	No
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N. ECONOMIZER & FAN SYSTEMS SUMMARY <sup>1</sup>												\$ 140.4	Confirmed	
1.	2.	3.					4.					5.	Pass	Fail
Equip Name	Outside Air	Supply Fan					Return Fan					Economizer Type (if present)		
	CFM	CFM	HP	BHP	TSP (inch WC)	Control	CFM	HP	BHP	TSP (inch WC)	Control			
BaseAirSys5	NaN	19013	25.000	24.717	5.36	VariableSpeedDrive	NA	NA	NA	NA	NA	DifferentialDryBulb	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5-2	NaN	1715	3.000	2.230	5.36	VariableSpeedDrive	NA	NA	NA	NA	NA	NoEconomizer	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5-3	NaN	1607	3.000	2.089	5.36	VariableSpeedDrive	NA	NA	NA	NA	NA	NoEconomizer	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1	NaN	310	0.125	0.124	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-2	NaN	322	0.250	0.129	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-3	NaN	362	0.250	0.145	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-4	NaN	235	0.125	0.094	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-5	NaN	305	0.125	0.122	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-6	NaN	478	0.250	0.192	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-7	NaN	546	0.250	0.219	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>

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N. ECONOMIZER & FAN SYSTEMS SUMMARY <sup>1</sup>													§ 140.4	Confirmed	
1.	2.	3.					4.					5.	Pass	Fail	
Equip Name	Outside Air	Supply Fan					Return Fan					Economizer Type (if present)			
	CFM	CFM	HP	BHP	TSP (inch WC)	Control	CFM	HP	BHP	TSP (inch WC)	Control				
BaseZnSys1-8	NaN	645	0.500	0.259	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-9	NaN	735	0.500	0.295	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-10	NaN	409	0.250	0.164	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-11	NaN	379	0.250	0.152	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-12	NaN	363	0.250	0.146	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-13	NaN	376	0.250	0.151	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-14	NaN	440	0.250	0.177	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-15	NaN	323	0.250	0.130	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-16	NaN	396	0.250	0.159	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-17	NaN	533	0.250	0.214	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-18	NaN	628	0.500	0.252	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-19	NaN	716	0.500	0.288	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-20	NaN	851	0.500	0.342	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-21	NaN	440	0.250	0.177	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	
BaseZnSys1-22	NaN	413	0.250	0.166	1.27	ConstantVolume	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	

<sup>1</sup> Mechanical ventilation calculations and exhaust fans are included in the NRCC-PRF-MCH-DETAILS section

<b>O. EQUIPMENT CONTROLS</b>	<b>§ 120.2</b>
This Section Does Not Apply	

<b>P. SYSTEM DISTRIBUTION SUMMARY</b>	<b>§ 120.4/ § 140.4(i)</b>
This Section Does Not Apply	

<b>Does the Project Include Zonal Systems? (if "Yes", see NRCC-PRF-MCH-DETAILS for system information)</b>	<b>Yes</b>
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Does the Project Include a Solar Hot Water System? (if "Yes", see NRCC-PRF-MCH-DETAILS for system information)	No
Multifamily or Hotel/ Motel Occupancy? (if "Yes", see NRCC-PRF-MCH-DETAILS for DHW system information)	Yes

Q. INDOOR CONDITIONED LIGHTING GENERAL INFO (see NRCC-PRF-LTI-DETAILS for more info) <sup>3</sup>						§ 140.6	
						Confirmed	
1.	2.	3.	4.	5.		Pass	Fail
Occupancy Type <sup>1</sup>	Conditioned Floor Area <sup>2</sup> (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance			
				Area Category Footnotes (Watts)	Tailored Method (Watts)	<input type="checkbox"/>	<input type="checkbox"/>
Convention, Conference, Multipurpose and Meeting Area	360		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Corridor Area	10,065		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Lounge, Breakroom, or Waiting Area	1,050		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Electrical, Mechanical, Telephone Rooms	807		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Exercise/Fitness Center and Gymnasium Areas	900		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Office Area (>250 square feet)	345		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Retail Sales Area (Retail Merchandise Sales)	17,613		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Stairwell	1,800		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
High-Rise Residential Living Spaces	79,440		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Laundry Area	720		0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Building Totals:	113,100			0			

<sup>1</sup> See Table 140.6-C

<sup>2</sup> See NRCC-LTI-01-E for unconditioned spaces

<sup>3</sup> Lighting information for existing spaces modeled is not included in the table

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<b>R. INDOOR CONDITIONED LIGHTING SCHEDULE</b> (Adapted from NRCC-LTI-01-E) <sup>1</sup>	<b>§ 130.0</b>
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This Section Does Not Apply

<sup>1</sup>If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

<b>S1. COVERED PROCESS SUMMARY – ENCLOSED PARKING GARAGES</b>	<b>§ 140.9</b>
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This Section Does Not Apply

<b>S2. COVERED PROCESS SUMMARY – COMMERCIAL KITCHENS</b>	<b>§ 140.9</b>
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This Section Does Not Apply

<b>S3. COVERED PROCESS SUMMARY – COMPUTER ROOMS</b>	<b>§ 140.9</b>
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This Section Does Not Apply

<b>S4. COVERED PROCESS SUMMARY – LABORATORY EXHAUSTS</b>	<b>§ 140.9</b>
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This Section Does Not Apply

<b>T. UNMET LOAD HOURS</b>
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This Section Does Not Apply

<b>U. ENERGY USE SUMMARY</b>
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	Electric (kWh/yr)	Natural Gas (therms/yr)
Total Annual Baseline	554758	14785.6
Total Annual Proposed	594160	13114.9

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<b>DOCUMENTATION AUTHOR'S DECLARATION STATEMENT</b>			<b>§ 10-103</b>
I certify that this Certificate of Compliance documentation is accurate and complete.			
Documentation Author Name:		Signature:	
Company:			
Address:		Signature Date:	
City/State/Zip:		CEA Identification (If applicable):	
Phone:			
<b>RESPONSIBLE PERSON'S DECLARATION STATEMENT</b>			
I certify the following under penalty of perjury, under the laws of the State of California:			
1	I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or I am a licensed architect.		
2	I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.		
3	I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.		
Responsible Envelope Designer Name:		Signature:	
Company:			
Address:		Date Signed:	
City/State/Zip:		Declaration Statement Type:	
Phone:		Title:	License #:
Responsible Lighting Designer Name:		Signature:	
Company:			
Address:		Date Signed:	
City/State/Zip:		Declaration Statement Type:	
Phone:		Title:	License #:
Responsible Mechanical Designer Name: - specify -		Signature:	
Company:			
Address:		Date Signed:	
City/State/Zip:		Declaration Statement Type:	
Phone:		Title:	License #:



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## NRCC-PRF-ENV-DETAILS -SECTION START-

A. OPAQUE SURFACE ASSEMBLY DETAILS				Confirmed	
1.	2.	3.	4.	Pass	Fail
Surface Name	Surface Type	Description of Assembly Layers	Notes		
SlabOnOrBelowGradeF073	UndergroundFloor			<input type="checkbox"/>	<input type="checkbox"/>
BelowGradeWallC114	UndergroundWall	Concrete - Solid Grout - 115 lb/ft <sup>3</sup> - 8 in.		<input type="checkbox"/>	<input type="checkbox"/>
MetalFrameWallU082	ExteriorWall	Stucco - 7/8 in. Compliance Insulation R10.06 Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 1/2 in.		<input type="checkbox"/>	<input type="checkbox"/>
MetalFrameWallU069	ExteriorWall	Stucco - 7/8 in. Compliance Insulation R10.06 Compliance Insulation R2.00 Compliance Insulation R0.20 Compliance Insulation R0.10 Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 1/2 in.		<input type="checkbox"/>	<input type="checkbox"/>
MetalFrameWallInterior	InteriorWall	Gypsum Board - 5/8 in. Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 5/8 in.		<input type="checkbox"/>	<input type="checkbox"/>
FlatNonresWoodFramingAndOtherRoofUnconditioned	Roof	Metal Standing Seam - 1/16 in.		<input type="checkbox"/>	<input type="checkbox"/>
FlatResWoodFramingAndOtherRoofU034Refl08	Roof	Metal Standing Seam - 1/16 in. Compliance Insulation R28.63		<input type="checkbox"/>	<input type="checkbox"/>
FlatNonresWoodFramingAndOtherRoofU034	Roof	Metal Standing Seam - 1/16 in. Compliance Insulation R28.63		<input type="checkbox"/>	<input type="checkbox"/>
OtherFloorU071	ExteriorFloor	Compliance Insulation R9.83 Plywood - 5/8 in. Carpet - 3/4 in.		<input type="checkbox"/>	<input type="checkbox"/>
TypicalFloorInterior	InteriorFloor	Metal Deck - 1/16 in. Concrete - 140 lb/ft <sup>3</sup> - 4 in. Carpet - 3/4 in.		<input type="checkbox"/>	<input type="checkbox"/>

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## B. OVERHANG DETAILS (Adapted from NRCC-ENV-02-E)

This Section Does Not Apply

C. OPAQUE DOOR SUMMARY					Confirmed	
1.	2.	3.	4.	5.	Pass	Fail
Opaque Door Assembly Name / Tag or I.D.	Door Type	Certification Method	Operation	Overall U-factor		

## NRCC-PRF-MCH-DETAILS -SECTION START-

A. MECHANICAL VENTILATION AND REHEAT (Adapted from 2013-NRCC-MCH-03-E)																	Confirmed		
1. DESIGN AIR FLOWS								2. VENTILATION (§ 120.1)									Pass	Fail	
CONDITIONED ZONE NAME	HEATING / COOLING SYSTEM ID	DESIGN PRIMARY AIR FLOW (CFM)	DESIGN PRIMARY MINIMUM AIR FLOW (CFM)	MINIMUM PRIMARY AIR FLOW FRACTION	MAXIMUM HEATING AIR FLOW (CFM)	MAXIMUM HEATING AIR FLOW FRACTION	DDC CONTROL (Y/N)	VENT SYSTEM ID	CONDITIONED AREA (ft2)	MIN. VENT PER AREA (CFM/ft2)	DESIGN NUM. OF PEOPLE	MIN. VENT PER PERSON (CFM/person)	REQ'D VENT AIR FLOW (CFM)	DESIGN VENT AIR FLOW (CFM)	TRANSFER AIRFLOW (CFM)	DCV (Y/N)			
Thermal Zone: F1 Business Center	BaseAirSys5	426	85	0.20	213	1	Y	BaseAirSys5	360	NA				NA	NA	NA	Y	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Corridor	BaseAirSys5	1,373	277	0.20	687	1	Y	BaseAirSys5	1,920	NA				NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Lounge	BaseAirSys5	1,115	223	0.20	558	1	Y	BaseAirSys5	1,050	NA				NA	NA	NA	Y	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Fitness Center	BaseAirSys5	616	450	0.73	450	1	Y	BaseAirSys5	900	NA				NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Leasing Office	BaseAirSys5	282	56	0.20	141	1	Y	BaseAirSys5	345	NA				NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Mechanical Room	BaseAirSys5	572	114	0.20	286	1	Y	BaseAirSys5	432	NA				NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>

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A. MECHANICAL VENTILATION AND REHEAT (Adapted from 2013-NRCC-MCH-03-E)																	Confirmed	
1. DESIGN AIR FLOWS								2. VENTILATION (§ 120.1)									Pass	Fail
CONDITIONED ZONE NAME	HEATING / COOLING SYSTEM ID	DESIGN PRIMARY AIR FLOW (CFM)	DESIGN PRIMARY MINIMUM AIR FLOW (CFM)	MINIMUM PRIMARY AIR FLOW FRACTION	MAXIMUM HEATING AIR FLOW (CFM)	MAXIMUM HEATING AIR FLOW FRACTION	DDC CONTROL (Y/N)	VENT SYSTEM ID	CONDITIONED AREA (ft2)	MIN. VENT PER AREA (CFM/ft2)	DESIGN NUM. OF PEOPLE	MIN. VENT PER PERSON (CFM/person)	REQ'D VENT AIR FLOW (CFM)	DESIGN VENT AIR FLOW (CFM)	TRANSFER AIRFLOW (CFM)	DCV (Y/N)		
Thermal Zone: F1 Retail N-NW	BaseAirSys5	4,023	1,496	0.37	2,012	1	Y	BaseAirSys5	5,985	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Retail NE	BaseAirSys5	3,065	1,080	0.35	1,532	1	Y	BaseAirSys5	4,320	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Retail SE	BaseAirSys5	2,034	720	0.35	1,017	1	Y	BaseAirSys5	2,880	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F1 Retail SW	BaseAirSys5	3,026	1,107	0.37	1,513	1	Y	BaseAirSys5	4,428	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 1-Bed Core N	BaseZnSys1	NA	NA	0.00	NA	NA	N	- none -	720	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 1-Bed Core West	BaseZnSys1-2	NA	NA	0.00	NA	NA	N	- none -	1,440	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 1-Bed Core East	BaseZnSys1-3	NA	NA	0.00	NA	NA	N	- none -	1,440	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 1-Bed North	BaseZnSys1-4	NA	NA	0.00	NA	NA	N	- none -	3,720	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 2-Bed Core NE-NW	BaseZnSys1-5	NA	NA	0.00	NA	NA	N	- none -	2,160	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 2-Bed East	BaseZnSys1-6	NA	NA	0.00	NA	NA	N	- none -	3,240	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 20 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

A. MECHANICAL VENTILATION AND REHEAT (Adapted from 2013-NRCC-MCH-03-E)																	Confirmed	
1. DESIGN AIR FLOWS								2. VENTILATION (§ 120.1)									Pass	Fail
CONDITIONED ZONE NAME	HEATING / COOLING SYSTEM ID	DESIGN PRIMARY AIR FLOW (CFM)	DESIGN PRIMARY MINIMUM AIR FLOW (CFM)	MINIMUM PRIMARY AIR FLOW FRACTION	MAXIMUM HEATING AIR FLOW (CFM)	MAXIMUM HEATING AIR FLOW FRACTION	DDC CONTROL (Y/N)	VENT SYSTEM ID	CONDITIONED AREA (ft2)	MIN. VENT PER AREA (CFM/ft2)	DESIGN NUM. OF PEOPLE	MIN. VENT PER PERSON (CFM/person)	REQ'D VENT AIR FLOW (CFM)	DESIGN VENT AIR FLOW (CFM)	TRANSFER AIRFLOW (CFM)	DCV (Y/N)		
Thermal Zone: F2-4 2-Bed West	BaseZnSys1-7	NA	NA	0.00	NA	NA	N	- none -	3,240	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 3-Bed NE	BaseZnSys1-8	NA	NA	0.00	NA	NA	N	- none -	1,410	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 3-Bed NW	BaseZnSys1-9	NA	NA	0.00	NA	NA	N	- none -	1,410	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 Studio SE	BaseZnSys1-10	NA	NA	0.00	NA	NA	N	- none -	540	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 Studio SW	BaseZnSys1-11	NA	NA	0.00	NA	NA	N	- none -	540	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F2-4 Corridor	BaseAirSys5-2	1,496	403	0.27	748	1	Y	BaseAirSys5-2	2,760	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 1-Bed Core N	BaseZnSys1-12	NA	NA	0.00	NA	NA	N	- none -	720	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 1-Bed Core West	BaseZnSys1-13	NA	NA	0.00	NA	NA	N	- none -	1,440	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 1-Bed Core East	BaseZnSys1-14	NA	NA	0.00	NA	NA	N	- none -	1,440	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 1-Bed North	BaseZnSys1-15	NA	NA	0.00	NA	NA	N	- none -	3,720	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 2-Bed Core NE-NW	BaseZnSys1-16	NA	NA	0.00	NA	NA	N	- none -	2,160	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 21 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

A. MECHANICAL VENTILATION AND REHEAT (Adapted from 2013-NRCC-MCH-03-E)																	Confirmed	
1. DESIGN AIR FLOWS								2. VENTILATION (§ 120.1)									Pass	Fail
CONDITIONED ZONE NAME	HEATING / COOLING SYSTEM ID	DESIGN PRIMARY AIR FLOW (CFM)	DESIGN PRIMARY MINIMUM AIR FLOW (CFM)	MINIMUM PRIMARY AIR FLOW FRACTION	MAXIMUM HEATING AIR FLOW (CFM)	MAXIMUM HEATING AIR FLOW FRACTION	DDC CONTROL (Y/N)	VENT SYSTEM ID	CONDITIONED AREA (ft2)	MIN. VENT PER AREA (CFM/ft2)	DESIGN NUM. OF PEOPLE	MIN. VENT PER PERSON (CFM/person)	REQ'D VENT AIR FLOW (CFM)	DESIGN VENT AIR FLOW (CFM)	TRANSFER AIRFLOW (CFM)	DCV (Y/N)		
Thermal Zone: F5 2-Bed East	BaseZnSys1-17	NA	NA	0.00	NA	NA	N	- none -	3,240	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 2-Bed West	BaseZnSys1-18	NA	NA	0.00	NA	NA	N	- none -	3,240	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 3-Bed NE	BaseZnSys1-19	NA	NA	0.00	NA	NA	N	- none -	1,410	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 3-Bed NW	BaseZnSys1-20	NA	NA	0.00	NA	NA	N	- none -	1,410	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 Studio SE	BaseZnSys1-21	NA	NA	0.00	NA	NA	N	- none -	540	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 Studio SW	BaseZnSys1-22	NA	NA	0.00	NA	NA	N	- none -	540	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
Thermal Zone: F5 Corridor	BaseAirSys5-3	1,403	403	0.29	701	1	Y	BaseAirSys5-3	2,760	NA			NA	NA	NA	N	<input type="checkbox"/>	<input type="checkbox"/>
								TOTAL	95,760		NA		NA	NA	NA		<input type="checkbox"/>	<input type="checkbox"/>

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 22 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

B. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY													\$ 140.4	
1.	2.	3.	4.		5.	6.	7.			8.			Confirmed	
System ID	System Type	Qty	Rated Capacity (kBtuh)		Economizer	Zone Name	Airflow (cfm)			Fan			Pass	Fail
			Heating	Cooling			Design	Min.	Min. Ratio	BHP	Cycles	ECM Motor		
BaseZnSys1	SZAC	3	8.00	8.00	No	Thermal Zone: F2-4 1-Bed Core N	310	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-2	SZAC	6	8.00	9.00	No	Thermal Zone: F2-4 1-Bed Core West	322	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-3	SZAC	6	8.00	10.00	No	Thermal Zone: F2-4 1-Bed Core East	362	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-4	SZAC	15	8.00	6.00	No	Thermal Zone: F2-4 1-Bed North	235	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-5	SZAC	6	10.00	8.00	No	Thermal Zone: F2-4 2-Bed Core NE-NW	305	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-6	SZAC	9	11.00	13.00	No	Thermal Zone: F2-4 2-Bed East	478	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-7	SZAC	9	11.00	15.00	No	Thermal Zone: F2-4 2-Bed West	546	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-8	SZAC	3	17.00	17.00	No	Thermal Zone: F2-4 3-Bed NE	645	NA	NA	0.3	☒	☐	☐	☐
BaseZnSys1-9	SZAC	3	17.00	20.00	No	Thermal Zone: F2-4 3-Bed NW	735	NA	NA	0.3	☒	☐	☐	☐
BaseZnSys1-10	SZAC	3	8.00	11.00	No	Thermal Zone: F2-4 Studio SE	409	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-11	SZAC	3	8.00	10.00	No	Thermal Zone: F2-4 Studio SW	379	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-12	SZAC	1	10.00	10.00	No	Thermal Zone: F5 1-Bed Core N	363	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-13	SZAC	2	10.00	10.00	No	Thermal Zone: F5 1-Bed Core West	376	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-14	SZAC	2	10.00	12.00	No	Thermal Zone: F5 1-Bed Core East	440	NA	NA	0.2	☒	☐	☐	☐

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 23 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

B. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY													\$ 140.4	
1.	2.	3.	4.		5.	6.	7.			8.			Confirmed	
System ID	System Type	Qty	Rated Capacity (kBtuh)		Economizer	Zone Name	Airflow (cfm)			Fan			Pass	Fail
			Heating	Cooling			Design	Min.	Min. Ratio	BHP	Cycles	ECM Motor		
BaseZnSys1-15	SZAC	5	10.00	9.00	No	Thermal Zone: F5 1-Bed North	323	NA	NA	0.1	☒	☐	☐	☐
BaseZnSys1-16	SZAC	2	13.00	11.00	No	Thermal Zone: F5 2-Bed Core NE-NW	396	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-17	SZAC	3	15.00	14.00	No	Thermal Zone: F5 2-Bed East	533	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-18	SZAC	3	15.00	17.00	No	Thermal Zone: F5 2-Bed West	628	NA	NA	0.3	☒	☐	☐	☐
BaseZnSys1-19	SZAC	1	22.00	19.00	No	Thermal Zone: F5 3-Bed NE	716	NA	NA	0.3	☒	☐	☐	☐
BaseZnSys1-20	SZAC	1	22.00	23.00	No	Thermal Zone: F5 3-Bed NW	851	NA	NA	0.3	☒	☐	☐	☐
BaseZnSys1-21	SZAC	1	10.00	12.00	No	Thermal Zone: F5 Studio SE	440	NA	NA	0.2	☒	☐	☐	☐
BaseZnSys1-22	SZAC	1	10.00	11.00	No	Thermal Zone: F5 Studio SW	413	NA	NA	0.2	☒	☐	☐	☐
BaseVAVBox TrmlUnit	VAVReheatBox	1	10.00	NA	NA	Thermal Zone: F1 Business Center	426	85	0.20	NA	NA	☐	☐	☐
BaseVAVBox TrmlUnit-2	VAVReheatBox	1	53.00	NA	NA	Thermal Zone: F1 Corridor	1373	277	0.20	NA	NA	☐	☐	☐
BaseVAVBox TrmlUnit-3	VAVReheatBox	1	22.00	NA	NA	Thermal Zone: F1 Lounge	1115	223	0.20	NA	NA	☐	☐	☐
BaseVAVBox TrmlUnit-4	VAVReheatBox	1	18.00	NA	NA	Thermal Zone: F1 Fitness Center	616	450	0.73	NA	NA	☐	☐	☐
BaseVAVBox TrmlUnit-5	VAVReheatBox	1	9.00	NA	NA	Thermal Zone: F1 Leasing Office	282	56	0.20	NA	NA	☐	☐	☐
BaseVAVBox TrmlUnit-6	VAVReheatBox	1	9.00	NA	NA	Thermal Zone: F1 Mechanical Room	572	114	0.20	NA	NA	☐	☐	☐

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 24 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

B. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY													§ 140.4	
1.	2.	3.	4.		5.	6.	7.			8.			Confirmed	
System ID	System Type	Qty	Rated Capacity (kBtuh)		Economizer	Zone Name	Airflow (cfm)			Fan			Pass	Fail
			Heating	Cooling			Design	Min.	Min. Ratio	BHP	Cycles	ECM Motor		
BaseVAVBox TrmlUnit-7	VAVReheatBox	1	97.00	NA	NA	Thermal Zone: F1 Retail N-NW	4023	1496	0.37	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BaseVAVBox TrmlUnit-8	VAVReheatBox	1	72.00	NA	NA	Thermal Zone: F1 Retail NE	3065	1080	0.35	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BaseVAVBox TrmlUnit-9	VAVReheatBox	1	52.00	NA	NA	Thermal Zone: F1 Retail SE	2034	720	0.35	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BaseVAVBox TrmlUnit-10	VAVReheatBox	1	77.00	NA	NA	Thermal Zone: F1 Retail SW	3026	1107	0.37	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BaseVAVBox TrmlUnit-11	VAVReheatBox	3	43.00	NA	NA	Thermal Zone: F2-4 Corridor	1496	403	0.27	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BaseVAVBox TrmlUnit-12	VAVReheatBox	1	66.00	NA	NA	Thermal Zone: F5 Corridor	1403	403	0.29	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. EXHAUST FAN SUMMARY													
This Section Does Not Apply													

D. DHW EQUIPMENT SUMMARY – (Adapted from NRCC-PLB-01)											§ 110.3	Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	Pass	Fail
DHW Name	Fuel	Type	Qty	Distribution Type	Rated Input kBtuh	Efficiency	Pilot Energy (Btu/h)	External Tank Insulation	Vol	Standby Loss	Vol. of Suppl. Storage Tank		
NonResBaseGas WaterHeater	Gas	Conventional	1	Nonrecirculating				NA		0.0811635	NA	<input type="checkbox"/>	<input type="checkbox"/>
NonResBaseElec WaterHeater	Electricity	Conventional	1	Nonrecirculating				NA		0.0141995	NA	<input type="checkbox"/>	<input type="checkbox"/>

E. MULTI-FAMILY CENTRAL DHW SYSTEM DETAILS													
This Section Does Not Apply													



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Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
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#### F. SOLAR HOT WATER HEATING SUMMARY (Adapted from NRCC-STH-01)

This Section Does Not Apply

#### G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS (Adapted from 2013-NRCC-MCH-01-E)

§ RA4

**Declaration of Required Acceptance Certificates (NRCA)** – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
NonResBase GasSHWSys tem	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
NonResBase ElecSHWSys tem	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseHWSys tem	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5 -2	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseAirSys5 -3	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-2	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 26 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
Compliance Scope:	NewComplete	Input File Name:	Mid-Rise Mixed Use 5-Story Prototype_CZ03.cibd19

<b>G. MECHANICAL HVAC ACCEPTANCE TESTS &amp; FORMS (Adapted from 2013-NRCC-MCH-01-E)</b>	<b>§ RA4</b>
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**Declaration of Required Acceptance Certificates (NRCA)** – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
																			Pass	Fail
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS		
BaseZnSys1-3	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-4	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-5	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-6	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-7	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-8	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-9	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-10	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-11	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-12	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>

Project Name:	Mid-Rise Mixed-Use (5-story)	NRCC-PRF-01-E	Page 27 of 30
Project Address:		Calculation Date/Time:	17:51, Thu, Jan 16, 2020
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<b>G. MECHANICAL HVAC ACCEPTANCE TESTS &amp; FORMS (Adapted from 2013-NRCC-MCH-01-E)</b>	<b>§ RA4</b>
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**Declaration of Required Acceptance Certificates (NRCA)** – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
																			Pass	Fail
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS		
BaseZnSys1-13	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-14	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-15	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-16	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-17	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-18	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-19	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-20	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-21	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
BaseZnSys1-22	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>

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## NRCC-PRF-LTI-DETAILS -SECTION START-

<b>A. INDOOR CONDITIONED LIGHTING CONTROL CREDITS (Adapted from NRCC-LTI-02-E)</b>	<b>§ 140.6</b>
This Section Does Not Apply	

<b>B. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS (Adapted from NRCC-LTI-02-E)</b>	<b>§ 130.1</b>
This Section Does Not Apply	

§130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive

<b>C. TAILORED METHOD LIGHTING POWER ALLOWANCE SUMMARY AND CHECKLIST (Adapted from NRCC-LTI-04-E)</b>	<b>§ 140.6</b>
General lighting power (see Table D)	0
General lighting power from special function areas (see Table E)	NA
Additional "use it or lose it" (See Table G)	0
<b>Total watts</b>	<b>0</b>

<b>D. GENERAL LIGHTING POWER (Adapted from NRCC-LTI-04-E)</b>	<b>§ 140.6-D</b>
This Section Does Not Apply	

<b>E. GENERAL LIGHTING FROM SPECIAL FUNCTION AREAS (Adapted from NRCC-LTI-04-E)</b>							<b>§ 140.6(c) 3H</b>	
Room Number	Primary Function Area	Illuminance Value (LUX)	Room Cavity Ratio (Table G)	Allowed LPD	Floor Area (ft²)	Allowed Watts	Confirmed	
							Pass	Fail
NA	NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>

Note: Tailored Method for Special Function Areas is not currently implemented

F. ROOM CAVITY RATIO (Adapted from NRCC-LTI-04-E)							
Rectangular Spaces							
Room Number	Task/Activity Description	Room Length (ft)	Room Width (ft)	Room Cavity Height (ft)	RCR	Confirmed	
						Pass	Fail
NA	NA	NA	NA	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>
Non-Rectangular Spaces							
This Section Does Not Apply							

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Note: All applicable spaces are listed under the Non-Rectangular Spaces table

G. ADDITIONAL "USE IT OR LOSE IT" (Adapted from NRCC-LTI-04-E)						
1.	2.	3.	4.	Allowed Watts	Confirmed	
Wall Display	Combined Floor Display and Task Lighting	Combined Ornamental and Special Effects Lighting	Very Valuable Merchandise		Pass	Fail
0	0	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>

<b>5. Wall Display</b>
This Section Does Not Apply

<b>6. Floor Display and Task Lighting</b>
This Section Does Not Apply

<b>7. Combined Ornamental and Special Effects Lighting</b>
This Section Does Not Apply

<b>8. Very Valuable Merchandise</b>
This Section Does Not Apply

H. INDOOR & OUTDOOR LIGHTING ACCEPTANCE TESTS & FORMS (Adapted from NRCC-LTI-01-E and NRCC-LTO-01-E)						§ 130.4	
Declaration of Required Acceptance Certificates (NRCA) –Acceptance Certificates that must be verified in the field. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).							
Test Description		Indoor			Outdoor	Confirmed	
		NRCA-LTI-02-A	NRCA-LTI-03-A	NRCA-LTI-04-A	NRCA-LTO-02-A	Pass	Fail
Equipment Requiring Testing or Verification	# of units	Occ Sensors / Auto Time Switch	Auto Daylight	Demand Responsive	Outdoor Controls		
Occupant Sensors		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic Time Switch		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic Daylighting		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demand Responsive		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Controls		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Standard Design Not Certified