Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 1 of 19
Project Address:	95814	Calculation Date/Time:	16:00, Fri, Mar 27, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

A. GENERAL INFORMATION

1.	Project Location (city)	- specify -	**8.**	Standards Version	Compliance2019
2.	CA Zip Code	95814	**9.**	Compliance Software (version)	CBECC-Com 2019.1.2
3.	Climate Zone	12	**10.**	Weather File	SACRAMENTO-EXECUTIVE_724830_CZ2010.epw
4.	Total Conditioned Floor Area in Scope	498,589 ft^2	**11.**	Building Orientation (deg)	(N) 0 deg
5.	Total Unconditioned Floor Area	0 ft^2	**12.**	Permitted Scope of Work	NewComplete
6.	Total # of Stories (Habitable Above Grade)	12	13	Building Type(s)	Nonresidential
7.	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: 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 permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope	☒	Performance	Covered Process: Commercial Kitchens	☐	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).*	
	☐	Not Included		☒	Not Included		
Mechanical	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6	*NRCC-LTI -E is required*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7	*NRCC-LTO-E is required*
Domestic Hot Water	☒	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8	*NRCC -LTS-E is required*
	☐	Not Included		☒	Not Included	Mandatory Measures	
Lighting (Indoor Conditioned)	☒	Performance				*Electrical power systems, commissioning and solar ready 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.)*	
	☐	Not Included				Electrical Power Distribution S110.11	*NRCC-ELC-E is required*
Solar Thermal Water Heating	☐	Performance				Commissioning S120.8	*NRCC-CXR-E is required*
	☒	Not Included				Solar Ready S110.10	*NRCC-SRA-E is required*

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ^{2}-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	12.87	12.87	--
Space Cooling	27.63	27.63	--
Indoor Fans	17.94	17.94	--
Heat Rejection	3.47	3.47	--
Pumps & Misc.	7.01	7.01	--
Domestic Hot Water	7.41	7.41	--
Indoor Lighting	33.37	33.37	--
ENERGY STANDARDS COMPLIANCE TOTAL	**109.70**	**109.70**	**-- (0.0%)**

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

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

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

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	120.68	120.68	0.0
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**230.38**	**230.38**	**0.0 (0.0%)**

[1] *Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.*

D. EXCEPTIONAL CONDITIONS

The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.

E. HERS VERIFICATION

This Section Does Not Apply

F. ADDITIONAL REMARKS

This Section Does Not Apply

G. ENVELOPE GENERAL INFORMATION

1	2	3	4
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	37,418 ft²	14,439 ft²	38.6%
East-Facing[2]	24,945 ft²	9,625 ft²	38.6%
South-Facing[3]	37,418 ft²	14,439 ft²	38.6%
West-Facing[4]	24,945 ft²	9,625 ft²	38.6%
Total	**124,726 ft²**	**48,129 ft²**	**38.6%**
Roof	0 ft²	0 ft²	00.0%

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 due west (NW), but excluding 45°00'00" south of west (SW).

H. FENESTRATION ASSEMBLY SUMMARY §110.6

1.	2.	3.	4.	5.	6.	7.	8.	9.
Fenestration Assembly Name / Tag or I.D.	**Fenestration Type / Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area ft²**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
Base_AllCZ_FixedWindowU36	VerticalFenestration FixedWindow N/A	NFRC Rated	Manufactured	48129	0.36	0.25	0.42	N

[1] 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. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.

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

I. ENVELOPE DETAILS §120.7 & §140.3

I1. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9
Surface Name	**Surface Type**	**Description of Assembly Layers**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**U-Factor / F-Factor / C-Factor**	**Status[1]**
Base_CZ12-SlabOnOrBelowGradeF073	UndergroundFloor	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	38353	NA	0	NA	F-Factor: 0.730	N
Base_CZ12-BelowGradeWallC114	UndergroundWall	Concrete - Solid Grout - 115 lb/ft3 - 8 in.	6398	NA	0	NA	C-Factor: 1.140	N
Base_CZ12-NonresMetalFrameWallU062	ExteriorWall	Stucco - 7/8 in. Compliance Insulation R13.99 Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 1/2 in.	124726	Metal	0	14	U-Factor: 0.062	N
NACM_Interior Wall	InteriorWall	Gypsum Board - 5/8 in. Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 5/8 in.	82552	Metal	0	NA	U-Factor: 0.319	N
Base_CZ12-FlatNonresWoodFramingAndOtherRoofU034	Roof	Metal Standing Seam - 1/16 in. Compliance Insulation R28.63	38353	NA	0	29	U-Factor: 0.034	N
NACM_Interior Floor	InteriorFloor	Metal Deck - 1/16 in. Concrete - 140 lb/ft3 - 4 in. Carpet - 3/4 in.	460236	NA	0	NA	U-Factor: 0.238	N
NACM_Drop Ceiling	InteriorFloor	Acoustic Tile - 3/4 in.	460236	NA	0	NA	U-Factor: 0.292	N

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

I2. OVERHANG DETAILS

This Section Does Not Apply

I3. OPAQUE DOOR SUMMARY

This Section Does Not Apply

J. CRRC ROOFING PRODUCT SUMMARY S140.3

1	2	3	4	5
Assembly Name	**Roof Pitch**	**Aged Solar Reflectance**	**Thermal Emittance**	**SRI**
Base_CZ12-FlatNonresWoodFramingAndOtherRoofU034	Low-Slope	0.63	0.85	Not Provided

K. HVAC SYSTEM SUMMARY §110.1 & §110.2

K1. Dry System Equipment (furnaces, air handling units, heat pumps, VRF, etc.)

Dry System Equipment [1] (Fan & Economizer info included below in Table N)

1	2	3	4	5	6	7	8	9	10
Equipment Name	**Equipment Type**	**Qty**	**Heating**				**Cooling**		**Status[5]**
			Total Heating Output (kBtu/h)	**Supp Heat Source (Y/N)**	**Supp Heat Output (kBtuh)**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency**	
BaseAirSys6-Basement	VAV (Packaged3Phase)	1	251	No	0	NA	864	NA	N
BaseAirSys6-Bot	VAV (Packaged3Phase)	1	411	No	0	NA	1210	NA	N
BaseAirSys6-Mid	VAV (Packaged3Phase)	5	437	No	0	NA	1340	NA	N
BaseAirSys6-Hi	VAV (Packaged3Phase)	5	438	No	0	NA	1338	NA	N
BaseAirSys6-Top	VAV (Packaged3Phase)	1	721	No	0	NA	1252	NA	N

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

K2. ECONOMIZER & FAN SYSTEMS SUMMARY §140.4[1]

1	2	3	4	5	6	7	8	9	10	11	12	13
Name or Item Tag	**System Type**	**Design OA**	**Supply Fan**				**Return Fan**				**Economizer Type (if present)**	**Status[5]**
	packaged, DOAS, etc.	**CFM**	**CFM**	**BHP**	**Watts**	**Control**	**CFM**	**BHP**	**Watts**	**Control**		
BaseAirSys6-Basement	VAV	5753	26174	34.026	26960.7	VariableSpeedDrive	NA	NA	NA	NA	DifferentialDryBulb	N
BaseAirSys6-Bot	VAV	5753	28374	36.886	29226.3	VariableSpeedDrive	NA	NA	NA	NA	DifferentialDryBulb	N
BaseAirSys6-Mid	VAV	5753	31349	40.754	32154.6	VariableSpeedDrive	NA	NA	NA	NA	DifferentialDryBulb	N

K2. ECONOMIZER & FAN SYSTEMS SUMMARY §140.4[1]

1	2	3	4	5	6	7	8	9	10	11	12	13
Name or Item Tag	System Type	Design OA	Supply Fan				Return Fan				Economizer Type (if present)	Status[5]
	packaged, DOAS, etc.	CFM	CFM	BHP	Watts	Control	CFM	BHP	Watts	Control		
BaseAirSys6-Hi	VAV	5753	31322	40.719	32127.0	VariableSpeedDrive	NA	NA	NA	NA	DifferentialDryBulb	N
BaseAirSys6-Top	VAV	5753	29639	38.530	30529.4	VariableSpeedDrive	NA	NA	NA	NA	DifferentialDryBulb	N

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

K3. EXHAUST FAN SUMMARY

This Section Does Not Apply

K4. Wet System Equipment (boilers, chillers, cooling towers, etc.)

1	2	3	4	5	6	7	8	9	10	11	12
Name or Item Tag	Equipment Type	Qty	Vol (gal)	Rated Capacity (kBtu/h)	Efficiency	Standby Loss	Pumps				Status[1]
							Qty	GPM	HP	VSD (Y/N)	
Base Blr	HotWater	NA	NA	2944	Thrml. Eff: 0.80	NA	1	147.1	5.000	Yes	N
Base Blr-2	HotWater	NA	NA	2944	Thrml. Eff: 0.80	NA	1	147.1	5.000	Yes	N
Base Tower	OpenTower	NA	NA	5860	NA	NA	1	1176.6	20.000	No	N
Base Tower-2	OpenTower	NA	NA	5860	NA	NA	1	1176.6	20.000	No	N
Base Chlr	Centrifugal	NA	NA	5024	kW/ton: 0.585	NA	1	502.2	15.000	Yes	N
Base Chlr-2	Centrifugal	NA	NA	5024	kW/ton: 0.585	NA	1	502.2	15.000	Yes	N

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

K5. SYSTEM FEATURES §120.2

1	2	3	4	5	6
System Name	**Optimum Start**	**Window Interlocks per §140.4(n)**	**Evaporative Cooling**	**Heat Recovery**	**Other Controls**
BaseAirSys6-Basement	No Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Dual Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Reset
BaseAirSys6-Bot	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Dual Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Reset
BaseAirSys6-Mid	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Dual Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Reset
BaseAirSys6-Hi	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Dual Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Reset
BaseAirSys6-Top	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Dual Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Reset
SHWFluidSysElec	NA	NA	NA	NA	Fixed Temperature Control, No DDC
BaseHWSystem	NA	NA	NA	NA	Fixed Temperature Control, DDC
BaseCWSystem	NA	NA	NA	NA	Fixed Temperature Control, DDC
BaseChWSystem	NA	NA	NA	NA	Outside Air Reset Temperature Control, DDC

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

K6. MECHANICAL VENTILATION AND REHEAT §120.1

1	2	3	4	5	6	7	8	9
Zone Name	Mechanical Ventilation							DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# hotel rooms	# of people	# of bedrooms	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	
Basement Thermal Zone	Office - Office space	0	191.76	0	5753	0	38353	NA
Core_bottom Thermal Zone	Office - Office space	0	136.29	0	4089	0	27258	NA
Perimeter_bot_ZN_1 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_bot_ZN_2 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Perimeter_bot_ZN_3 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_bot_ZN_4 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Core_mid Thermal Zone	Office - Office space	0	136.29	0	4089	0	27258	NA
Perimeter_mid_ZN_1 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_mid_ZN_2 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Perimeter_mid_ZN_3 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_mid_ZN_4 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Core_hi Thermal Zone	Office - Office space	0	136.29	0	4089	0	27258	NA
Perimeter_hi_ZN_1 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_hi_ZN_2 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Perimeter_hi_ZN_3 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_hi_ZN_4 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Core_top Thermal Zone	Office - Office space	0	136.29	0	4089	0	27258	NA
Perimeter_top_ZN_1 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_top_ZN_2 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA
Perimeter_top_ZN_3 Thermal Zone	Office - Office space	0	16.87	0	506	0	3374	NA
Perimeter_top_ZN_4 Thermal Zone	Office - Office space	0	10.87	0	326	0	2174	NA

K7. DISTRIBUTION SUMMARY §120.4/140.4(l)

This Section Does Not Apply

Multifamily or Hotel/Motel Occupancy? (if "Yes", see DOMESTIC/SERVICE HOT WATER SYSTEM SUMMARY)	No

Does the Project include Zonal Systems?	No

K8. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY § 140.4

1	2	3	4	5	6	7	8	9	10	11	12
System ID	Zone Name	System Type	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
			Heating	Cooling	Design	Min.	Min. Ratio	BHP	Watts	Cycles	ECM Motor
BaseVAVTrmlUnit	Basement Thermal Zone	VAVReheatBox	138.00	NA	26174	5753	0.22	NA	NA	NA	☐
BaseVAVTrmlUnit-2	Core_bottom Thermal Zone	VAVReheatBox	130.00	NA	20901	4180	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-3	Perimeter_bot_ZN_1 Thermal Zone	VAVReheatBox	54.00	NA	4071	814	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-4	Perimeter_bot_ZN_2 Thermal Zone	VAVReheatBox	36.00	NA	2538	508	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-5	Perimeter_bot_ZN_3 Thermal Zone	VAVReheatBox	54.00	NA	2298	506	0.22	NA	NA	NA	☐
BaseVAVTrmlUnit-6	Perimeter_bot_ZN_4 Thermal Zone	VAVReheatBox	36.00	NA	2755	551	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-7	Core_mid Thermal Zone	VAVReheatBox	150.00	NA	23209	4642	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-8	Perimeter_mid_ZN_1 Thermal Zone	VAVReheatBox	62.00	NA	4202	840	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-9	Perimeter_mid_ZN_2 Thermal Zone	VAVReheatBox	40.00	NA	2614	523	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-10	Perimeter_mid_ZN_3 Thermal Zone	VAVReheatBox	62.00	NA	2486	506	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-11	Perimeter_mid_ZN_4 Thermal Zone	VAVReheatBox	41.00	NA	2800	560	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-12	Core_hi Thermal Zone	VAVReheatBox	151.00	NA	23198	4640	0.20	NA	NA	NA	☐

K8. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY § 140.4

1	2	3	4	5	6	7	8	9	10	11	12
System ID	Zone Name	System Type	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
			Heating	Cooling	Design	Min.	Min. Ratio	BHP	Watts	Cycles	ECM Motor
BaseVAVTrmlUnit-13	Perimeter_hi_ZN_1 Thermal Zone	VAVReheatBox	62.00	NA	4183	837	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-14	Perimeter_hi_ZN_2 Thermal Zone	VAVReheatBox	41.00	NA	2605	521	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-15	Perimeter_hi_ZN_3 Thermal Zone	VAVReheatBox	62.00	NA	2479	506	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-16	Perimeter_hi_ZN_4 Thermal Zone	VAVReheatBox	41.00	NA	2791	558	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-17	Core_top Thermal Zone	VAVReheatBox	352.00	NA	22104	4421	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-18	Perimeter_top_ZN_1 Thermal Zone	VAVReheatBox	83.00	NA	4206	841	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-19	Perimeter_top_ZN_2 Thermal Zone	VAVReheatBox	55.00	NA	2592	518	0.20	NA	NA	NA	☐
BaseVAVTrmlUnit-20	Perimeter_top_ZN_3 Thermal Zone	VAVReheatBox	83.00	NA	2363	506	0.21	NA	NA	NA	☐
BaseVAVTrmlUnit-21	Perimeter_top_ZN_4 Thermal Zone	VAVReheatBox	55.00	NA	2920	584	0.20	NA	NA	NA	☐

K9. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

L. DOMESTIC/SERVICE HOT WATER SYSTEM SUMMARY

L1. DHW EQUIPMENT SUMMARY

1	2	3	4	5	6	7	8	9	10	11
DHW Name	Heater Element Type	Tank Type	Qty	Tank Vol (gal)	Rated Input (kBtu/h)	Efficiency	Tank Insulation R-value (Int/Ext)	Standby Loss Fraction	Heat Pump Type	Tank Location or Ambient Condition
WaterHeaterElec	Electricity	Storage	1	179.49	52.3 (kW)	Thrml. Eff.: 1.00	NA	SBLF: 0.005	NA	NA

L2. MULTI-FAMILY CENTRAL DHW SYSTEM DETAILS

This Section Does Not Apply

L3. SOLAR HOT WATER HEATING SUMMARY

This Section Does Not Apply

M. COVERED PROCESS SUMMARY §140.9

This Section Does Not Apply

N. INDOOR LIGHTING SUMMARY §140.6

N1. INDOOR CONDITIONED LIGHTING GENERAL INFO § 140.6[1]

						Confirmed	
1	2	3	4	5		Pass	Fail
Occupancy Type [1]	Conditioned Floor Area [2] (ft^2)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance		☐	☐
				Area Category Footnotes (Watts)	Tailored Method (Watts)		
Office Area (Open plan office)	498,589	299,152	0	0	0	☐	☐
Building Totals:	**498,589**	**299,152**	**0**	**0**	**0**		

[1] *See Table 140.6-C*

[2] *See NRCC-LTI-01-E for unconditioned spaces*

[3] *Lighting information for existing spaces modeled is not included in the table*

N2. INDOOR CONDITIONED LIGHTING SCHEDULE § 130.0

This Section Does Not Apply

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

N3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS § 140.6

This Section Does Not Apply

N4: INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS § 130.1

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

N5. TAILORED METHOD CONDITIONED LIGHTING POWER ALLOWANCE SUMMARY AND CHECKLIST § 140.6

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
Total watts	0

N6. GENERAL LIGHTING POWER § 140.6-D

This Section Does Not Apply

N7. GENERAL LIGHTING FROM SPECIAL FUNCTION AREAS § 140.6(c) 3H

Room Number	Primary Function Area	Illuminance Value (LUX)	Room Cavity Ratio (Table G)	Allowed LPD	Floor Area (ft^2)	**Allowed Watts**	**Confirmed**	
							Pass	**Fail**
NA	NA	NA	NA	NA	NA	NA	☐	☐

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

N8. ROOM CAVITY RATIO

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	☐	☐

Non-Rectangular Spaces

This Section Does Not Apply

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

N9. ADDITIONAL "USE IT OR LOSE IT"

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**	☐	☐

N10. Wall Display

This Section Does Not Apply

N11. Floor Display and Task Lighting

This Section Does Not Apply

N12. Combined Ornamental and Special Effects Lighting

This Section Does Not Apply

N13. Very Valuable Merchandise

This Section Does Not Apply

N14. INDOOR & OUTDOOR LIGHTING ACCEPTANCE TESTS & FORMS § 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		☒	☐	☐	☐	☐	☐
Automatic Time Switch		☒	☐	☐	☐	☐	☐
Automatic Daylighting		☐	☒	☐	☐	☐	☐

N14. INDOOR & OUTDOOR LIGHTING ACCEPTANCE TESTS & FORMS § 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		
Demand Responsive		☐	☐	☒	☐	☐	☐
Outdoor Controls		☐	☐	☐	☐	☐	☐

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	YES	NO	Form/Title	Field Inspector	
				Pass	Fail
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	☐	☐
	☐	☒	NRCI-PLB-02-E - Must be submitted for high-rise residential and hotel/ motel central hot water distribution systems to be recognized for compliance	☐	☐
	☐	☒	NRCI-PLB-03-E - Must be submitted for high-rise residential and hotel/motel single dwelling unit hot water system distribution systems to be recognized for compliance	☐	☐
	☐	☒	NRCI-PLB-21-E - Must be HERS verified for central systems in high-rise residential hotel/ motel application	☐	☐
	☐	☒	NRCI-PLB-22-E - Must be HERS verified for single dwelling unit systems in high-rise residential, hotel/motel application	☐	☐
	☐	☒	NRCI-STH-01-E - Must be submitted for solar hot water heating systems	☐	☐
Indoor Lighting	☒	☐	NRCI-LTI-01-E - Must be submitted for all buildings	☐	☐
	☒	☐	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS) to be recognized for compliance	☐	☐
	☐	☒	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance	☐	☐
	☐	☒	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance	☐	☐
	☐	☒	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance	☐	☐
Covered Process	☐	☒	NRCI-PRC-01-E - Must be submitted for all Covered Processes	☐	☐

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to 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). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	YES	NO	Form/Title	Field Inspector	
				Pass	Fail
Envelope	☒	☐	NRCA-ENV-02-F - NRFC label verification for fenestration	☐	☐
	☐	☐	NRCA-ENV-03-F - Daylighting Design PAFs	☐	☐
Indoor Lighting	☒	☐	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls	☐	☐
	☒	☐	NRCA-LTI-03-A - Automatic Daylight Controls	☐	☐
	☒	☐	NRCA-LTI-04-A - Demand Responsive Lighting Controls	☐	☐
	☐	☒	NRCA-LTI-05-A - Institutional Tuning Power Adjustment Factor (PAF)	☐	☐
Covered Process	☐	☒	NRCA-PRC-02-F - Kitchen Exhaust	☐	☐
	☐	☒	NRCA-PRC-03-F - Garage Exhaust	☐	☐
	☐	☒	NRCA-PRC-12-F – Elevator Lighting and Ventilation Controls	☐	☐
	☐	☒	NRCA-PRC-13-F –Escalator and Moving Walkways Speed Control	☐	☐
	☐	☒	NRCA-PRC-14-F – Lab Exhaust Ventilation System	☐	☐
	☐	☒	NRCA-PRC-15-F - Fume Hood Automatic Sash Closures System	☐	☐

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to 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). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	YES	NO	Form/Title	Field Inspector	
				Pass	Fail
Mechanical	☒	☐	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap	☐	☐
	☐	☒	NRCA-MCH-03-A Constant Volume Single Zone HVAC	☐	☐
	☐	☒	NRCA-MCH-04(a)-H Air Distribution Duct Leakage - HERS Verification required	☐	☐
	☐	☐	NRCA-MCH-04(b)-A Air Distribution Duct Leakage - ATT only	☐	☐
	☒	☐	NRCA-MCH-05-A Air Economizer Controls	☐	☐
	☐	☒	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO_2) concentration setpoints	☐	☐
	☐	☒	NRCA-MCH-07-A Supply Fan Variable Flow Controls	☐	☐
	☒	☐	NRCA-MCH-08-A Valve Leakage Test	☐	☐
	☒	☐	NRCA-MCH-09-A Supply Water Temperature Reset Controls	☐	☐
	☒	☐	NRCA-MCH-10-A Hydronic System Variable Flow Controls	☐	☐
	☒	☐	NRCA-MCH-11-A Automatic Demand Shed Controls	☐	☐
	☒	☐	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units	☐	☐
	☒	☐	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance	☐	☐
	☐	☒	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance	☐	☐
	☐	☒	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance	☐	☐
	☒	☐	NRCA-MCH-16-A Supply Air Temperature Reset Controls	☐	☐
	☒	☐	NRCA-MCH-17-A Condenser Water Temperature Reset Controls	☐	☐
	☒	☐	NRCA-MCH-18 Energy Management Control Systems	☐	☐
	☐	☒	NRCA-MCH-19 Occupancy Sensor Controls	☐	☐

Q. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCV/

Building Component	YES	NO	Form/Title	Field Inspector	
				Pass	Fail
Mechanical	☐	☒	NRCV-MCH-04-H Duct Leakage Test	☐	☐
	☐	☒	NRCV-MCH-24-H Enclosure Air Leakage	☐	☐
	☒	☐	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation	☐	☐
	☐	☒	NRCV-MCH-32-H Local Mechanical Exhaust	☐	☐
Plumbing	☐	☒	NRCV-PLB-21-H - HERS verified central systems in high-rise residential, hotel/motel application	☐	☐
	☐	☒	NRCV-PLB-22-H - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application	☐	☐

R. UNMET LOAD HOURS

This Section Does Not Apply

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT § 10-103

Documentation Author Name:	Signature:
Company:	
Address:	Signature Date: 2020-03-27
City/State/Zip:	CEA/ HERS Certification Identification (if applicable):
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 Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: - specify -	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #: