

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 1 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

A. G	A. GENERAL INFORMATION							
1.	Project Location (city)	- specify -	8.	Standards Version	Compliance2019			
2.	CA Zip Code	95814	9.	Compliance Software (version)	CBECC-Com 2019.1.3			
3.	Climate Zone	12	10.	Weather File	SACRAMENTO-EXECUTIVE_724830_CZ2010.epw			
4.	Total Conditioned Floor Area in Scope	498,589 ft <sup>2</sup>	11.	Building Orientation (deg)	(N) 0 deg			
5.	Total Unconditioned Floor Area	0 ft <sup>2</sup>	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** Performance Performance The following building components are ONLY eligible for prescriptive Covered Process: Commercial compliance and should be documented on the NRCC form listed if within Envelope (see Table G) Kitchens the scope of the permit application (i.e. compliance will not be shown Not Included Not Included on the NRCC-PRF-E). Performance Performance Indoor Lighting (Unconditioned)§140.6 NRCC-LTI-E Covered Process: Computer Rooms Mechanical (see Table H) Not Included Not Included NRCC-LTO-E Outdoor Lighting §140.7 $\boxtimes$ Performance Performance Sign Lighting §140.8 NRCC -LTS-E Domestic Hot Water (see Table I) Covered Process: Laboratory Exhaust Not Included Not Included **Mandatory Measures** Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form Performance Lighting (Indoor Conditioned, see listed if applicable (i.e. compliance will not be shown on the Table K) NRCC-PRF-E.) NRCC-ELC-E is required Not Included Electrical Power Distribution S110.11 Performance Commissioning \$120.8 NRCC-CXR-E is required Solar Thermal Water Heating (see Table I) Solar Ready S110.10 NRCC-SRA-E is required

Report Version: NRCC-PRF-01-E-10092020-6384

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 2 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

# 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) <sup>1</sup>
Space Heating	10.71	10.71	
Space Cooling	26.96	26.96	
Indoor Fans	17.18	17.18	
Heat Rejection	3.35	3.35	
Pumps & Misc.	6.71	6.71	
Domestic Hot Water	7.41	7.41	
Indoor Lighting	33.37	33.37	
ENERGY STANDARDS COMPLIANCE TOTAL	105.69	105.69	(0.0%)

<sup>&</sup>lt;sup>1</sup> Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

# C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS<sup>1</sup>

☐ This project is pursuing CalGreen Tier 1	0	☐ This project is pursuing CalGreen Tier 2			
Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) <sup>1</sup>		
Receptacle	120.68	120.68			
Process					
Other Ltg					
Process Motors					
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	226.37	226.37	0.0 (0.0%)		

<sup>&</sup>lt;sup>1</sup> Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 3 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

C3. 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	0.2	0.2	0.0	2,695.7	2,695.7	
Space Cooling	289.9	289.9	0.0			
Indoor Fans	286.1	286.1	0.0			
Heat Rejection	36.1	36.1	0.0			
Pumps & Misc.	91.7	91.7	0.0			
Domestic Hot Water	131.9	131.9	0.0			
Indoor Lighting	586.4	586.4	0.0			
Compliance Total	1,422.3	1,422.3		2,695.7	2,695.7	
Receptacle	2,135.6	2,135.6				
Process						
Other Ltg		<b>O</b>				
Process Motors						
TOTAL	3,557.9	3,557.9		2,695.7	2,695.7	

# **C4. UNMET LOAD HOURS**

This Section Does Not Apply

## 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

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 4 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

1	2	3	4
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing <sup>1</sup>	37,418 ft <sup>2</sup>	14,439 ft <sup>2</sup>	38.69
East-Facing <sup>2</sup>	24,945 ft <sup>2</sup>	9,625 ft <sup>2</sup>	38.69
South-Facing <sup>3</sup>	37,418 ft <sup>2</sup>	14,439 ft²	38.6
West-Facing <sup>4</sup>	24,945 ft <sup>2</sup>	9,625 ft <sup>2</sup>	38.69
Total	124,726 ft²	48,129 ft <sup>2</sup>	38.69
	0 ft <sup>2</sup>	0 ft <sup>2</sup>	00.0

#### Notes:

<sup>&</sup>lt;sup>4</sup> 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).

G2. CRRC ROOFING PRODUCT SUMMARY							
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			

G3. OPAQUE SURFACE ASSEMBLY SU	G3. OPAQUE SURFACE ASSEMBLY SUMMARY							
1	2	3	4	5	6	7	8	9
Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value	U-Factor / F-Factor / C-Factor	Status <sup>1</sup>	Description of Assembly Layers
Base_CZ12-SlabOnOrBelowGradeF073	UndergroundFloor	38353	NA	0	NA	F-Factor: 0.730	N	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0
Base_CZ12-BelowGradeWallC114	UndergroundWall	6398	NA	0	NA	C-Factor: 1.140	N	Concrete - Solid Grout - 115 lb/ft3 - 8 in.
Base_CZ12- NonresMetalFrameWallU062	ExteriorWall	124726	Metal	0	14	U-Factor: 0.062	N	Stucco - 7/8 in. Compliance Insulation R13.99 Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 1/2 in.

<sup>&</sup>lt;sup>1</sup> 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).

<sup>&</sup>lt;sup>2</sup> 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).

<sup>&</sup>lt;sup>3</sup> 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).

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 5 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

1	2	3	4	5	6	7	8	9
Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value	U-Factor / F-Factor / C-Factor	Status <sup>1</sup>	Description of Assembly Layers
NACM_Interior Wall	InteriorWall	82552	Metal	0	NA	U-Factor: 0.319	N	Gypsum Board - 5/8 in. Air - Metal Wall Framing - 16 or 24 in. OC Gypsum Board - 5/8 in.
Base_CZ12- FlatNonresWoodFramingAndOtherRoof U034	Roof	38353	NA	0	29	U-Factor: 0.034	N	Metal Standing Seam - 1/16 in. Compliance Insulation R28.63
NACM_Interior Floor	InteriorFloor	460236	NA	0	NA	U-Factor: 0.238	N	Metal Deck - 1/16 in. Concrete - 140 lb/ft3 - 4 in. Carpet - 3/4 in.
NACM_Drop Ceiling	InteriorFloor	460236	NA	0	NA	U-Factor: 0.292	N	Acoustic Tile - 3/4 in.

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

### G4. OPAQUE DOOR SUMMARY

G5. FENESTRATION ASSEMBLY SUI	MMARY							
1	2	3	4	5	6	7	8	9
Fenestration Assembly Name / Tag or I.D.	Fenestration Type / Product Type / Frame Type	Certification Method <sup>1</sup>	Assembly Method	Area ft <sup>2</sup>	Overall U-factor	Overall SHGC	Overall VT	Status <sup>2</sup>
Base_AllCZ_FixedWindowU36	VerticalFenestration FixedWindow N/A	NFRC Rated	Manufactured	48129	0.36	0.25	0.42	N

<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. 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.

<sup>&</sup>lt;sup>2</sup> Status: N - New, A – Altered, E – Existing

G6. OVERHANG DETAILS	
This Section Does Not Apply	

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 6 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

## G6. OVERHANG DETAILS

This Section Does Not Apply

# H. HVAC SYSTEM SUMMARY

		D	ry System Equipment <sup>1</sup> (	Fan & Economizer in	fo included below in T	able N)					
1	2	3	4	5	6	7	8	9	10		
	Heating Cooling S										
Equipment Name	<b>Equipment Type</b>	Qty	Total Heating Output (kBtu/h)	Supp Heat Source (Y/N)	Supp Heat Output (kBtuh)	Efficiency	Total Cooling Output (kBtu/h)	Efficiency	iatus <sup>5</sup>		
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		

H2. FAN SYSTEMS	SUMMARY <sup>1</sup>			4.0								
1	2	3	4	5	6	7	8	9	10	11	12	13
	System Type	Design OA		<b>Su</b>	ipply Fan				Return Fan		Economizer Type	ts.
Name or Item Tag	packaged, DOAS, etc.	CFM	CFM	ВНР	Watts	Control	CFM	ВНР	Watts	Control	(if present)	Status <sup>5</sup>
BaseAirSys6- Basement	VAV	5753	26174	34.026	26960.7	(VariableSpeedDri ve	NA	NA	NA	NA	DifferentialDryBu lb	N
BaseAirSys6-Bot	VAV	5753	28374	36.886	29226.3	VariableSpeedDri ve	NA	NA	NA	NA	DifferentialDryBu lb	N
BaseAirSys6-Mid	VAV	5753	31349	40.754	32154.6	VariableSpeedDri ve	NA	NA	NA	NA	DifferentialDryBu lb	N
BaseAirSys6-Hi	VAV	5753	31322	40.719	32127.0	VariableSpeedDri ve	NA	NA	NA	NA	DifferentialDryBu lb	N

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 7 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

H2. FAN SYSTEMS	SUMMARY <sup>1</sup>											
1	2	3	4	5	6	7	8	9	10	11	12	13
	System Type	Design OA		Su	pply Fan		Return Fan					St
Name or Item Tag	packaged, DOAS, etc.	CFM	CFM	ВНР	Watts	Control	CFM	ВНР	Watts	Control	Economizer Type (if present)	atus <sup>5</sup>
BaseAirSys6-Top	VAV	5753	29639	38.530	30529.4	VariableSpeedDri ve	NA	NA	NA	NA	DifferentialDryBu lb	N
<sup>1</sup> Status: N - New, A – Altere	rd, E – Existing					,						

# H3. EXHAUST FAN SUMMARY

H4. Wet System Equipment (b	oilers, chillers, coolir	g towe	rs, etc.)								
1	2	3	4	5	6	7	8	9	10	11	12
Name or Item Tag	Equipment Type	Oty	Vol (gal)	Rated Capacity	Efficiency	Standby Loss		Status <sup>1</sup>			
Name of item rag	Equipment Type	Qty	voi (gai)	(kBtu/h)	Efficiency	Stalluby Loss	Qty	GPM	НР	VSD (Y/N)	tus¹
Prop Blr-1	HotWater	NA	NA	2944	Thrml. Eff: 0.80	NA	1	147.1	5.000	Yes	N
Prop Blr-2	HotWater	NA	NA	2944	Thrml. Eff: 0.80	NA	1	147.1	5.000	Yes	N
Prop Tower-1	OpenTower	NA	NA NA	5860	NA	NA	1	1176.6	20.000	No	N
Prop Tower-2	OpenTower	NA	NA	5860	NA	NA	1	1176.6	20.000	No	N
Prop Chlr-1	Centrifugal	NA	NA	5024	kW/ton: 0.585	NA	1	502.2	15.000	Yes	N
Prop Chlr-2	Centrifugal	NA	7/ NA	5024	kW/ton: 0.585	NA	1	502.2	15.000	Yes	N
sto us: N - New, A – Altered, E – Existing											

H5. SYSTEM SPECIAL FEATUR	RES				
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

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 8 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

SYSTEM SPECIAL FEATU	RES				
1	2	3	4	5	6
System Name	Optimum Start	Window Interlocks per §140.4(n)	Evaporative Cooling	Heat Recovery	Other Controls
BaseAirSys6-Bot	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and I Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Res
BaseAirSys6-Mid	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and I Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Re
BaseAirSys6-Hi	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Re
BaseAirSys6-Top	Optimum Start	NA	No Evaporative Cooler	No Heat Recovery	No DCV Controls, DDC Controls and Maximum Reheat Controls Differential Drybulb Economizer Warmest Zone Supply Air Temp. Re
SHWFluidSysElec	NA	NA (	NA	NA	Fixed Temperature Control, No DE
Prop_HWSystem	NA	NA	NA	NA	Fixed Temperature Control, DDC
Prop_CWSystem	NA	NA	NA	NA	Fixed Temperature Control, DDC
Prop_ChWSystem	NA	NA	NA	NA	Outside Air Reset Temperature Con DDC

H6. MECHANICAL VENTILATION									
1	2	3	4	5	6	7	8	9	
		Mechanical Ventilation							
Zone Name	Ventilation Function	# hotel rooms	# of people	# of bedrooms	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	Sensor Controls, or Both	
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	

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 9 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

1	2	3	4	5	6	7	8	9	
	Mechanical Ventilation								
Zone Name	Ventilation Function	# hotel rooms	# of people	# of bedrooms	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	Sensor Controls, or Both	
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	

Multifamily or Hotel/Motel Occupancy? (if "Yes", see DOMESTIC/SERVICE HOT WATER SYSTEM SUMMARY)					
Does the Project include Zonal Systems?	No				

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 10 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

H7. ZONAL SYSTEM A	·			5	6	T -		9	10	- 44	12
1	2	3		apacity tuh)	6	7 Airflow (cfm)	8	9 10 11 12 Fan			
System ID	Zone Name	System Type	Heating	Cooling	Design	Min.	Min. Ratio	ВНР	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	
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	

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 11 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

H7. ZONAL SYSTEM A	H7. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY											
1	2	3	4	5	6	7	8	9	10	11	12	
System ID				Capacity tuh)		Airflow (cfm)			Fan			
System ib	Zone Name	System Type	Heating	Cooling	Design	Min.	Min. Ratio	ВНР	Watts	Cycles	ECM Motor	
BaseVAVTrmlUnit-15	Perimeter_hi_ZN_3 Thermal Zone	VAVReheatBox	62.00	NA	2479	506	0.20	NA (	NA I	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		

# H8. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

# I. DOMESTIC/SERVICE HOT WATER SYSTEM SUMMARY

I1. DHW EQUIPME	NT 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

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 12 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

#### **12. MULTI-FAMILY CENTRAL DHW SYSTEM DETAILS**

This Section Does Not Apply

#### 13. SOLAR HOT WATER HEATING SUMMARY

This Section Does Not Apply

### J. COVERED PROCESS SUMMARY



This Section Does Not Apply

## K. INDOOR LIGHTING SUMMARY

## **K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

1	2	2 3 4 5							
	Conditioned Floor Area <sup>2</sup>	Installed Lighting Power	Lighting Countries Countries		Additional (Custom) Allowance				
Occupancy Type <sup>1</sup>	(ft²)	(Watts)	Lighting Control Credits (Watts)	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				

<sup>&</sup>lt;sup>1</sup> See Table 140.6-C

## **K2. INDOOR CONDITIONED LIGHTING SCHEDULE**

This Section Does Not Apply

### **K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS**

<sup>&</sup>lt;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

<sup>&</sup>lt;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.

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 13 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

## **K4: INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS**

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

K5. TAILORED METHOD CONDITIONED LIGHTING POWER ALLOWANCE SUMMARY AND CHECKLIST					
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				

#### **K6. GENERAL LIGHTING POWER**

This Section Does Not Apply

#### K7. GENERAL LIGHTING FROM SPECIAL FUNCTION AREA Confirmed Room Cavity Ratio Illuminance Value Allowed LPD Room Number Primary Function Area Floor Area (ft<sup>2</sup>) **Allowed Watts** (LUX) (Table G) Pass Fail NA NA NA NA NA NA

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

K8. ROOM CAVITY RATIO								
Rectangular Spaces								
Poom Number	Task/Activity Description	Room Length (ft)	Room Width (ft)	Room Cavity Height (ft)	RCR	Confirmed		
Room Number	lask/Activity Description	ROOM Length (It)				Pass	Fail	
NA	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

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 14 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

K9. ADDITIONAL "USE IT OR LOSE IT"										
1. 2. 3. 4. Confirmed										
Wall Display	Combined Floor Display and Task Lighting	Combined Ornamental and Special Effects Lighting	Very Valuable Merchandise	Allowed Watts	Pass	Fail				
0	0	0	0	0						

# K10. Wall Display

This Section Does Not Apply

# K11. Floor Display and Task Lighting

This Section Does Not Apply

# K12. Combined Ornamental and Special Effects Lighting

This Section Does Not Apply

# K13. Very Valuable Merchandise

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 15 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

#### L. 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: <a href="https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCI/">https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCI/</a>

<b>Building Component</b>	YES	NO	Form/Title	1	eld ector
				Pass	Fail
Envelope	$\boxtimes$		NRCI-ENV-01-E - Must be submitted for all buildings		
Mechanical	$\boxtimes$		NRCI-MCH-01-E - Must be submitted for all buildings		
	$\boxtimes$		NRCI-PLB-01-E - Must be submitted for all buildings		
		$\boxtimes$	NRCI-PLB-02-E - Must be submitted for high-rise residential and hotel/ motel central hot water distribution systems to be recognized for compliance		
Plumbing		$\boxtimes$	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		
		$\boxtimes$	NRCI-PLB-21-E - Must be HERS verified for central systems in high-rise residential hotel/ motel application		
		$\boxtimes$	NRCI-PLB-22-E - Must be HERS verified for single dwelling unit systems in high-rise residential, hotel/motel application		
		$\boxtimes$	NRCI-STH-01-E - Must be submitted for solar hot water heating systems		
	$\boxtimes$		NRCI-LTI-01-E - Must be submitted for all buildings		
	$\boxtimes$		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		
Indoor Lighting			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		
		Ø	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance		
		$\boxtimes$	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance		
Covered Process		$\boxtimes$	NRCI-PRC-01-E - Must be submitted for all Covered Processes		

Report Generated at: 2020-10-20 11:48:13

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 16 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

#### M. 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		eld ector
				Pass	Fail
Envelope	$\boxtimes$		NRCA-ENV-02-F - NRFC label verification for fenestration		
Lilvelope			NRCA-ENV-03-F - Daylighting Design PAFs		
			NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls		
Indoor Lighting	$\boxtimes$		NRCA-LTI-03-A - Automatic Daylight Controls		
	$\boxtimes$		NRCA-LTI-04-A - Demand Responsive Lighting Controls		
		$\boxtimes$	NRCA-LTI-05-A - Institutional Tuning Power Adjustment Factor (PAF)		
		$\boxtimes$	NRCA-PRC-02-F - Kitchen Exhaust		
		$\boxtimes$	NRCA-PRC-03-F - Garage Exhaust		
Covered Process		$\boxtimes$	NRCA-PRC-12-F – Elevator Lighting and Ventilation Controls		
Covered Process		$\boxtimes$	NRCA-PRC-13-F –Escalator and Moving Walkways Speed Control		
		$\boxtimes$	NRCA-PRC-14-F – Lab Exhaust Ventilation System		
		$\boxtimes$	NRCA-PRC-15-F - Fume Hood Automatic Sash Closures System		

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 17 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

### M. 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		eld ector
				Pass	Fail
	×		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		
		$\boxtimes$	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		
	$\boxtimes$		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 (CO2) concentration setpoints		
		Ø	NRCA-MCH-07-A Supply Fan Variable Flow Controls		
			NRCA-MCH-08-A Valve Leakage Test		
Mechanical			NRCA-MCH-09-A Supply Water Temperature Reset Controls		
	$\boxtimes$		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		
		X	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance		
	D		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		
	$\boxtimes$		NRCA-MCH-18 Energy Management Control Systems		
		⋈	NRCA-MCH-19 Occupancy Sensor Controls		

Report Version: NRCC-PRF-01-E-10092020-6384

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 18 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

#### N. 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		eld ector
					Fail
		×	NRCV-MCH-04-H Duct Leakage Test		
Mechanical		X	NRCV-MCH-24-H Enclosure Air Leakage		
Mechanical	$\boxtimes$		NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation		
		$\boxtimes$	NRCV-MCH-32-H Local Mechanical Exhaust		
Plumbing		$\boxtimes$	NRCV-PLB-21-H - HERS verified central systems in high-rise residential, hotel/motel application		
Piullionig		$\boxtimes$	NRCV-PLB-22-H - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application		

Project Name:	040012-OffLrg-CECStd19	NRCC-PRF-01-E	Page 19 of 19
Project Address:	95814	Calculation Date/Time:	12:36, Tue, Oct 20, 2020
Input File Name:	040012-OffLrg-CECStd.cibd19		

Project Address.	93014		Calculation Date/Time.	12.36, Tue, OC	1 20, 2020		
Input File Name:	040012-OffLrg-CECStd.cibd19						
	AUTHOR'S DECLARATION STATEMENT ate of Compliance documentation is accurate and complete.						
Documentation Author Name:		6: .	— Signature:				
Company:		Signatu					
Address:		Signatu	Signature Date: 2020-10-20				
City/State/Zip:			CEA/ HERS Certification Identification (if applicable):				
Phone:							
RESPONSIBLE PERS	ON'S DECLARATION STATEMENT					<u> </u>	
<ol> <li>The information prov</li> <li>I am eligible under Di</li> <li>The energy features a of Title 24, Part 1 and Pi</li> <li>The building design fe plans and specifications</li> <li>I will ensure that a co</li> </ol>	Index penalty of perjury, under the laws of the State of California: ided on this Certificate of Compliance is true and correct. vision 3 of the Business and Professions Code to accept responsibility for and performance specifications, materials, components, and manufacture art 6 of the California Code of Regulations. Evatures or system design features identified on this Certificate of Complia submitted to the enforcement agency for approval with this building pe impleted signed copy of this Certificate of Compliance shall be made availed that a completed signed copy of this Certificate of Compliance is requi	ed devices for the bu ance are consistent v rmit application. ilable with the buildi	illding design or system design with the information provided ng permit(s) issued for the bu	n identified on this on other applicab ilding, and made a	s Certificate of Compliance conform to the reconsecution of the compliance documents, worksheets, calculars available to the enforcement agency for all ap	lations,	
Responsible Envelope Designer Name: Company:		Signatu	Signature:				
Address:			Date Signed:				
City/State/Zip:	3						
Phone:	40	Title:			License #:		
Responsible Lighting [	Designer Name:				· · · · · · · · · · · · · · · · · · ·		

Report Version: NRCC-PRF-01-E-10092020-6384