

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

Class Room - Pala Office Buildings
35990 Pala Temecula Road
Pala, CA 92059

Project Designer:

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Job Number:

20Q4014-CR.1-8

Date:

10/26/2020

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2019 Building Energy Efficiency Standards.

This program developed by EnergySoft Software – www.energysoft.com.

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A. GENERAL INFORMATION					
1.	Project Location (city)	Pala	8.	Standards Version	Compliance2019
2.	CA Zip Code	92059	9.	Compliance Software (version)	EnergyPro 8.1
3.	Climate Zone	10	10.	Weather File	RIVERSIDE-MARCH-AFB_722860_CZ2010.epw
4.	Total Conditioned Floor Area in Scope	1,000 ft²	11.	Building Orientation (deg)	(E) 92 deg
5.	Total Unconditioned Floor Area	0 ft²	12.	Permitted Scope of Work	NewEnvelopeAndMechanical
6.	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7.	Total # of dwelling units	0	14	Gas Type	Propane

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	<input checked="" type="checkbox"/>	Performance	Covered Process: Commercial Kitchens	<input type="checkbox"/>	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).			
	<input type="checkbox"/>	Not Included		<input checked="" type="checkbox"/>	Not Included				
Mechanical	<input checked="" type="checkbox"/>	Performance	Covered Process: Computer Rooms	<input type="checkbox"/>	Performance	Indoor Lighting (Unconditioned)§140.6	NRCC-LTI -E is required		
	<input type="checkbox"/>	Not Included		<input checked="" type="checkbox"/>	Not Included	Outdoor Lighting §140.7	NRCC-LTO-E is required		
Domestic Hot Water	<input type="checkbox"/>	Performance	Covered Process: Laboratory Exhaust	<input type="checkbox"/>	Performance	Sign Lighting §140.8	NRCC -LTS-E is required		
	<input checked="" type="checkbox"/>	Not Included		<input checked="" type="checkbox"/>	Not Included	Mandatory Measures			
Lighting (Indoor Conditioned)	<input type="checkbox"/>	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.)			
	<input checked="" type="checkbox"/>	Not Included				Electrical Power Distribution S110.11		NRCC-ELC-E is required	
Solar Thermal Water Heating	<input type="checkbox"/>	Performance				Commissioning S120.8		NRCC-CXR-E is required	
	<input checked="" type="checkbox"/>	Not Included				Solar Ready S110.10		NRCC-SRA-E is required	

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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	36.90	62.18	-25.28
Space Cooling	128.48	116.51	11.97
Indoor Fans	144.25	46.54	97.71
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	48.22	48.22	--
Indoor Lighting	41.73	41.73	--
ENERGY STANDARDS COMPLIANCE TOTAL	399.58	315.18	84.40 (21.1%)

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

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS¹

<input type="checkbox"/> This project is pursuing CalGreen Tier 1		<input type="checkbox"/> This project is pursuing CalGreen Tier 2	
Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) ¹
Receptacle	76.74	76.74	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	476.32	391.92	84.4 (17.7%)

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

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D. EXCEPTIONAL CONDITIONS

This project includes partial performance compliance scope options. The building must show compliance with all other applicable compliance scope options (performance or prescriptively) before occupying.

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

This project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.

The user model includes space(s) that are designed to be served by mechanical cooling systems, but the cooling systems were not included in the simulation model. A cooling system has been modeled for both the proposed and standard cases.

The user model includes space(s) without sufficient cooling equipment. Cooling equipment has been added to the model to meet cooling loads.

E. HERS VERIFICATION

This Section Does Not Apply

F. ADDITIONAL REMARKS

This report is based on the drawings received on 10/07/2020.

SCOPE OF WORK: New (rebuild) Class Room.

NOTE: This report may not accurately reflect the mechanical design as the CBECC energy modeling engine does not support the proposed design. The Energy Consultant made every effort to reflect the mechanical system design with tools available in the currently approved CBECC energy modeling engine.

1) DO NOT USE FOR ACTUAL HEATING/COOLING DESIGN. 2) The Title 24 calculations used for this project are used for the purpose of complying with the current Title 24 code provisions and are intended to be used in order to obtain compliance per Title 24 regulations. They are NOT intended to be used as a substitute for the heating and cooling loads required for the structure(s) that are normally done by a mechanical engineer(s) of HVAC contractor(s) and in NO CIRCUMSTANCES are to be used in lieu of the normal calculation methods used by a mechanical engineer(s) of HVAC contractor(s). 3) The assembly components found in this document are for modeling purposes only and may not reflect the actual conditions of the walls, roof(s), floor(s), windows and doors of the structure.

G. ENVELOPE GENERAL INFORMATION

1	2	3	4
Opaque Surfaces & Orientation	Total Gross Surface Area (ft ²)	Total Fenestration Area (ft ²)	Window to Wall Ratio (%)
North-Facing ¹	250 ft ²	19 ft ²	07.6%
East-Facing ²	400 ft ²	152 ft ²	38.0%
South-Facing ³	250 ft ²	60 ft ²	24.0%

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G. ENVELOPE GENERAL INFORMATION			
West-Facing ⁴	400 ft ²	90 ft ²	22.5%
Total	1,300 ft²	321 ft²	24.7%
Roof	1,000 ft ²	0 ft ²	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 ft ²	Overall U-factor	Overall SHGC	Overall VT	Status ²
_FixedGlazing	VerticalFenestration FixedWindow N/A	NFRC Rated	Manufactured	19	0.36	0.25	0.42	N
_GlazedDoor	VerticalFenestration GlazedDoor N/A	NFRC Rated	Manufactured	152	0.50	0.23	0.37	N
_OperableGlazing	VerticalFenestration OperableWindow N/A	NFRC Rated	Manufactured	150	0.46	0.22	0.32	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

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I. ENVELOPE DETAILS §120.7 & §140.3

II. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9
Surface Name	Surface Type	Description of Assembly Layers	Area (ft ²)	Framing Type	Cavity R-Value	Continuous R-Value	U-Factor / F-Factor / C-Factor	Status ¹
_CLG.7	Roof	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-38 Gypsum Board - 5/8 in.	1000	Wood	38	NA	U-Factor: 0.033	N
_2x6 Studwall at 16 O.C.9	ExteriorWall	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 5.5in., R-21 Gypsum Board - 5/8 in.	1300	Wood	21	NA	U-Factor: 0.068	N
_SlabOnGrade27	UndergroundFloor	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	1000	NA	0	NA	F-Factor: 0.730	N

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

II. OVERHANG DETAILS

This Section Does Not Apply

III. OPAQUE DOOR SUMMARY

1	2	3
Assembly Name	Overall U-factor	Status ¹
_Wood Door20	0.600	N

J. CRRC ROOFING PRODUCT SUMMARY §140.3

This Section Does Not Apply

K. HVAC SYSTEM SUMMARY §110.1 & §110.2

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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 (kBtu/h)	Efficiency	Total Cooling Output (kBtu/h)	Efficiency	
Ductless Mini-Split	MiniSplitHP (Split3Phase)	1	50	No	0	HSPF-8.20	29	SEER-13.00 / EER-11.70	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		
Ductless Mini-Split	MiniSplitHP	0	1125	0.200	174.4	ConstantVolume	NA	NA	NA	NA	NA	N

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

K3. EXHAUST FAN SUMMARY						
1	2	3	4	5	6	7
System ID	Zone Name	Qty	CFM	Motor BHP	Motor Watts	Total Static Pressure (in H2O)
Classroom1	1-Classroom	1	578	0.200	174.4	1.43

K4. Wet System Equipment(boilers,chillers,cooling towers,etc.)
This Section Does Not Apply

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

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.

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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)	
1-Classroom	Education - Classrooms (ages 9-18)	0	25.00	0	380	578	1000	NA

K7. DISTRIBUTION SUMMARY §120.4/140.4(I)

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?

Yes

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
Ductless Mini-Split	1-Classroom	MiniSplitHP	50.00	29.00	1125	NA	NA	0.200	174.4	<input type="checkbox"/>	<input type="checkbox"/>

K9. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

L. DOMESTIC/SERVICE HOT WATER SYSTEM SUMMARY

L1. DHW EQUIPMENT SUMMARY

This Section Does Not Apply

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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

This Section Does Not Apply

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O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION					
<p><i>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 must be retained and provided to the building inspector during construction and can be found online at:</i></p> <p>https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/</p>					
Building Component	YES	NO	Form/Title	Field Inspector	
				Pass	Fail
Envelope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCI-ENV-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCI-MCH-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
Plumbing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-PLB-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-PLB-02-E - Must be submitted for high-rise residential and hotel/ motel central hot water distribution systems to be recognized for compliance	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-PLB-21-E - Must be HERS verified for central systems in high-rise residential hotel/ motel application	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-PLB-22-E - Must be HERS verified for single dwelling unit systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-STH-01-E - Must be submitted for solar hot water heating systems	<input type="checkbox"/>	<input type="checkbox"/>
Indoor Lighting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-LTI-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance	<input type="checkbox"/>	<input type="checkbox"/>
Covered Process	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCI-PRC-01-E - Must be submitted for all Covered Processes	<input type="checkbox"/>	<input type="checkbox"/>

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

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Building Component	YES	NO	Form/Title	Field Inspector	
				Pass	Fail
Mechanical	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCA-MCH-03-A Constant Volume Single Zone HVAC	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-04(a)-H Air Distribution Duct Leakage - HERS Verification required	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	NRCA-MCH-04(b)-A Air Distribution Duct Leakage - ATT only	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-05-A Air Economizer Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-07-A Supply Fan Variable Flow Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-08-A Valve Leakage Test	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-09-A Supply Water Temperature Reset Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-10-A Hydronic System Variable Flow Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-11-A Automatic Demand Shed Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-16-A Supply Air Temperature Reset Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-17-A Condenser Water Temperature Reset Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-18 Energy Management Control Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCA-MCH-19 Occupancy Sensor Controls	<input type="checkbox"/>	<input type="checkbox"/>

Project Name:	Class Room - Pala Office Buildings	NRCC-PRF-01-E	Page 12 of 13
Project Address:	35990 Pala Temecula Road Pala 92059	Calculation Date/Time:	16:15, Mon, Oct 26, 2020
Input File Name:	20Q4014-CR.1-8.cibd19x		

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 must 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCV-MCH-04-H Duct Leakage Test	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCV-MCH-24-H Enclosure Air Leakage	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCV-MCH-32-H Local Mechanical Exhaust	<input type="checkbox"/>	<input type="checkbox"/>
Plumbing	<input type="checkbox"/>	<input checked="" 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"/>	<input checked="" 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"/>

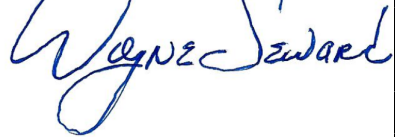
R. UNMET LOAD HOURS

This Section Does Not Apply

Project Name:	Class Room - Pala Office Buildings	NRCC-PRF-01-E	Page 13 of 13
Project Address:	35990 Pala Temecula Road Pala 92059	Calculation Date/Time:	16:15, Mon, Oct 26, 2020
Input File Name:	20Q4014-CR.1-8.cibd19x		

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Wayne Seward	Signature:	
Company: Bear Technologies Consulting, Inc.		
Address: 3431 Don Arturo Drive	Signature Date: 2020-10-26	
City/State/Zip: Carlsbad CA 92010	CEA/ HERS Certification Identification (if applicable): NR19-04-20052	
Phone: 760.635.2327		

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: Paul Olson	Signature:	
Company: Paul T. Olson Architect		
Address: 1050 Rod Street	Date Signed:	
City/State/Zip: Fallbrook CA 92028		
Phone: 760.728.9691	Title:	License #:
Responsible Lighting Designer Name: Paul Olson	Signature: NOT IN SCOPE	
Company: Paul T. Olson Architect		
Address: 1050 Rod Street	Date Signed:	
City/State/Zip: Fallbrook CA 92028		
Phone: 760.728.9691	Title:	License #:
Responsible Mechanical Designer Name: Paul Olson	Signature:	
Company: Paul T. Olson Architect		
Address: 1050 Rod Street	Date Signed:	
City/State/Zip: Fallbrook CA 92028		
Phone: 760.728.9691	Title:	License #:

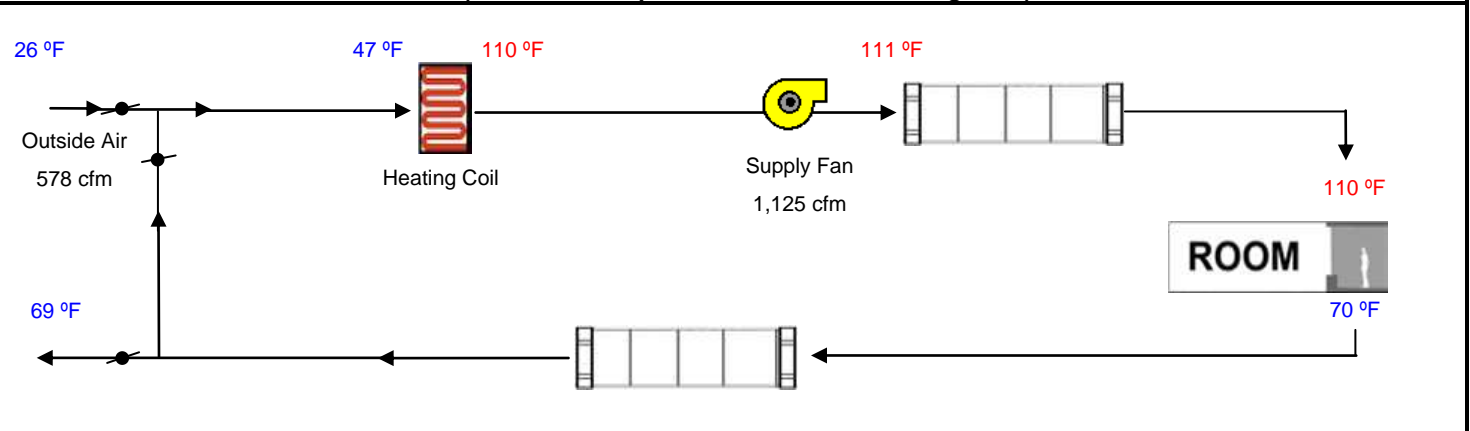
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Class Room - Pala Office Buildings	Date	10/26/2020
System Name	Ductless Mini-Split	Floor Area	1,000

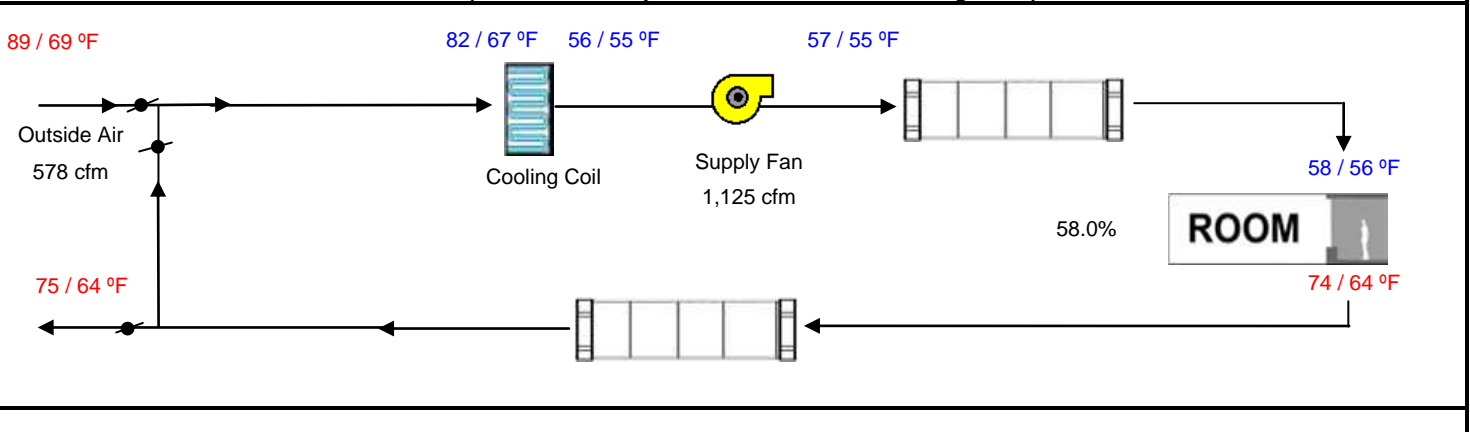
ENGINEERING CHECKS		SYSTEM LOAD				
Number of Systems	1	Total Room Loads Return Vented Lighting Return Air Ducts Return Fan Ventilation Supply Fan Supply Air Ducts TOTAL SYSTEM LOAD	COIL COOLING PEAK			COIL HTG. PEAK
Heating System			CFM	Sensible	Latent	CFM
Output per System	48,000		1,334	23,129	7,692	390
Total Output (Btuh)	48,000			0		
Output (Btuh/sqft)	48.0			1,156		818
Cooling System				0		0
Output per System	30,000		578	8,545	1,270	578
Total Output (Btuh)	30,000			608		-608
Total Output (Tons)	2.5			1,156		818
Total Output (Btuh/sqft)	30.0					
Total Output (sqft/Ton)	400.0			34,595	8,962	43,773

Air System		HVAC EQUIPMENT SELECTION				
CFM per System	1,125	_Ductless Mini-Split		30,971	0	29,979
Airflow (cfm)	1,125					
Airflow (cfm/sqft)	1.13					
Airflow (cfm/Ton)	450.0					
Outside Air (%)	51.4%	Total Adjusted System Output (Adjusted for Peak Design conditions)		30,971	0	29,979
Outside Air (cfm/sqft)	0.58					
Note: values above given at ARI conditions		TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

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



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



ZONE LOAD SUMMARY

Project Name
Class Room - Pala Office Buildings

Date
10/26/2020

System Name
Ductless Mini-Split

Floor Area
1,000

ZONE LOAD SUMMARY

[illegible]

Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

This document is used to demonstrate compliance with requirements in [§110.9](#), [§110.12\(c\)](#), [§130.0](#), [§130.1](#), [§140.6](#) and [§141.0\(b\)2](#) for indoor lighting scopes using the prescriptive path.

Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 1 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

A. GENERAL INFORMATION

01	Project Location (city)		Pala		04	Total Conditioned Floor Area (ft²)		1,000					
02	Climate Zone		10		05	Total Unconditioned Floor Area (ft²)		0					
03	Occupancy Types Within Project (select all that apply):				06	# of Stories (Habitable Above Grade)		1					
<input type="checkbox"/>	Office		<input type="checkbox"/>	Retail	<input type="checkbox"/>	Warehouse		<input type="checkbox"/>	Hotel/Motel	<input type="checkbox"/>	School	<input type="checkbox"/>	Support Areas
<input type="checkbox"/>	Parking Garage		<input type="checkbox"/>	High-Rise Residential	<input type="checkbox"/>	Relocatable		<input type="checkbox"/>	Healthcare	<input checked="" type="checkbox"/>	Other (Write in)		See Table I

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in [§140.6](#) or [§141.0\(b\)2](#) for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft ²)	Calculation Method	Area (ft ²)
<input checked="" type="checkbox"/> New Lighting System	Area Category Method	1000	Area Category Method	0
<input type="checkbox"/> New Lighting System - Parking Garage				
Total Area of Work (ft²)	1000		0	

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Indoor Lighting

NRCC-LTI-E

CERTIFICATE OF COMPLIANCE					NRCC-LTI-E				
Project Name:			Class Room - Pala Office Buildings			Report Page:			(Page 2 of 7)
Project Address:			35990 Pala Temecula Road			Date Prepared:			10/26/2020

C. COMPLIANCE RESULTS

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

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1	Allowed Lighting Power per §140.6(b) (Watts)						≥	Adjusted Lighting Power per §140.6(a) (Watts)				Compliance Results	
	01	02	03	04	=	Total Allowed (Watts)		06	07	=	08		09
	Complete Building §140.6(c)1	Area Category §140.6(c)2	Area Category Additional §140.6(c)2G (+)	Tailored §140.6(c)3 (+)				Total Designed (Watts)	Adjustments		Total Adjusted (Watts) *Includes Adjustments		
									PAF Lighting Control Credits §140.6(a)2 (-)				
									(See Table I)				
Conditioned		700	0		=	700	≥	558	0	=	558	COMPLIES	
Unconditioned					=		≥			=			
Controls Compliance (See Table H for Details)												COMPLIES	
Rated Power Reduction Compliance (See Table Q for Details)													

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change ¹	Watts per luminaire ²	How is Wattage determined	Total Number of Luminaires	Excluded per §140.6(a)3	Design Watts	Field Inspector	
									Pass	Fail
LED	_LED	No	No	31	Mfr. Spec	18	No	558	<input type="checkbox"/>	<input type="checkbox"/>
Total Designed Watts: CONDITIONED SPACES								558		

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 3 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

F. INDOOR LIGHTING FIXTURE SCHEDULE

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

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

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces. When a control having a * is shown, the notes section of this table provides more detail on how compliance is achieved. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

Building Level Controls

01	02	03
Mandatory Demand Response §110.12(c)	Shut-off controls §130.1(c)	Field Inspector
		Pass Fail
Not Required <= 10,000 SF	See Area/Space Level Controls	<input type="checkbox"/> <input type="checkbox"/>

Area Level Controls

04	05	06	07	08	09	10	11	12
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(a)	Multi-Level Controls §130.1(b)	Shut-Off Controls §130.1(c)	Primary/Sky lit Daylighting §130.1(d)	Secondary Daylighting §140.6(d)	Interlocked Systems §140.6(a)1	Field Inspector
								Pass Fail
Classroom	Classroom, Lecture, or Training Vocational Area	Manual ON/OFF	Dimmer	Occupancy Sensor	Included	Included	No	<input type="checkbox"/> <input type="checkbox"/>

*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.

EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to [§130.1\(d\)2](#)

	13
	Plan Sheet Showing Daylit Zones:
	E-1

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 4 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

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

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

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft ²)	Area (ft ²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Classroom	Classroom, Lecture, or Training Vocational Area	0.7	1,000	700	No	No
TOTALS:			1,000	700	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

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

This section does not apply to this project.

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 5 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS

This section does not apply to this project.

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

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be 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/

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCI-LTI-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	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.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	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.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCI-LTI-05-E- Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCI-LTI-06-E- Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 6 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-05-A. - Must be submitted for institutional tuning power adjustment factor (PAF)	<input type="checkbox"/>	<input type="checkbox"/>

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 7 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**I certify that this Certificate of Compliance documentation is accurate and complete.**

Documentation Author Name: Wayne Seward	Documentation Author Signature:
Company: Bear Technologies Consulting, Inc.	Signature Date: 2020-10-26
Address: 3431 Don Arturo Drive	CEA/ HERS Certification Identification (if applica NR19-04-20052
City/State/Zip: Carlsbad CA 92010	Phone: 760.635.2327

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name: Paul Olson	Responsible Designer Signature:
Company: Paul T. Olson Architect	Date Signed: 2020-10-26
Address: 1050 Rod Street	License:
City/State/Zip: Fallbrook CA 92028	Phone: 760.728.9691

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Outdoor Lighting

NRCC-LTO-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E	
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 1 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

A. GENERAL INFORMATION

01	Project Location (city)	Pala	04	Total Illuminated Hardscape Area (ft²)	0
02	Climate Zone	10			
03	Outdoor Lighting Zone per Title 24 Part 1 §10.114 or as designated by Authority Having Jurisdiction (AHJ):				
<input type="checkbox"/>	LZ-0: Very Low - Undeveloped Parkland	<input type="checkbox"/>	LZ-2: Moderate - Rural Areas	<input type="checkbox"/>	LZ-4: High - Must be reviewed by CA Energy Commission for Approval
<input type="checkbox"/>	LZ-1: Low - Developed Parkland	<input checked="" type="checkbox"/>	LZ-3: Moderately High - Urban Areas		

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in [§140.7](#) or [§141.0\(b\)\(2\)](#) for alterations.

My Project Consists of:

01		02			
<input checked="" type="checkbox"/>	New Lighting System	Must Comply with Allowances from §140.7			
<input type="checkbox"/>	Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? <input type="radio"/> Yes <input type="radio"/> No			
03		04	05		
% of Existing Luminaires Being Altered ¹		Sum Total of Luminaires Being Added or Altered	Calculation Method		
<input type="checkbox"/> < 10%	<input type="checkbox"/> >= 10% and < 50%	<input type="checkbox"/> >= 50%			

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

¹ FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Outdoor Lighting

NRCC-LTO-E

CERTIFICATE OF COMPLIANCE			NRCC-LTO-E
Project Name:	Class Room - Pala Office Buildings	Report Page:	(Page 2 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

C. COMPLIANCE RESULTS															
Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.															
Calculations of Total Allowed Lighting Power (Watts) §140.7 or §141.0(b)2L												Compliance Results			
01		02		03		04		05		06		07		08	09
General Hardscape Allowance §140.7(d)1 (See Table I)	+	Per Application §140.7(d)2 (See Table J)	+	Sales Frontage §140.7(d)2 (See Table K)	+	Ornamental §140.7(d)2 (See Table L)	+	Per Specific Area §140.7(d)2 (See Table M)	OR	Existing Power Allowance §141.0(b)2L (See Table N)	=	Total Allowed (Watts)	≥	Total Actual (Watts)	07 must be >= 08
0	+	---	+	---	+	---	+	216	OR	---	=	216	≥	216	COMPLIES
Cutoff Compliance (See Table G for Details)										N/A					
Controls Compliance (See Table H for Details)										COMPLIES					

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

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.
E-1

Outdoor Lighting

NRCC-LTO-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTO-E		
Project Name:		Class Room - Pala Office Buildings	Report Page:		(Page 3 of 7)
Project Address:		35990 Pala Temecula Road	Date Prepared:		10/26/2020

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with [§140.7](#) all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per [§141.0\(b\)2L](#) only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included).

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire ^{1, 2}	How is Wattage determined	Total number luminaires ²	Luminaire Status ³	Excluded per §140.7(a)	Design Watts	Cutoff Req. > 6,200 initial lumen output §130.2(b) ⁴	Field Inspector	
										Pass	Fail
M/P	_LED M/P	<input type="checkbox"/> Linear	27	Mfr. Spec	8	New	<input type="checkbox"/>	216	NA: < 6200 lumens	<input type="checkbox"/>	<input type="checkbox"/>
Total Design Watts:								216			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.

EX: Luminaire is lighting a statue; EXCEPTION 2 to [§130.2\(b\)](#)

¹FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per [§130.0\(c\)](#)

² For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.

³ Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.

⁴ Compliance with mandatory cutoff requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by [§130.2\(b\)](#)

G. CUTOFF REQUIREMENTS (BUG)

This section does not apply to this project.

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Report Version: 2019.1.003
Schema Version: rev 20190401

Report Generated: 2020-10-26 16:12:34

Outdoor Lighting

NRCC-LTO-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E	
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Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.

*When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.*

Mandatory Controls

01	02	03	04	05	
Area Description	Shut-Off §130.2(c)1	Auto-Schedule §130.2(c)2	Motion Sensor §130.2(c)3	Field Inspector	
				Pass	Fail
Building Facade	Photocontrol	Yes	Yes	<input type="checkbox"/>	<input type="checkbox"/>

* NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.

EX: Not permitted by health & safety to be turned off; EXCEPTION 1 to [§130.2\(c\)](#)

I. LIGHTING POWER ALLOWANCE (per [§140.7](#))

This table includes areas using allowance calculations per [§140.7](#). General Hardscape Allowance is per [Table 140.7-A](#) while "Use it or lose it" Allowances are per [Table 140.7-B](#). Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.

	01				
	<input type="checkbox"/> General Hardscape Allowance Table I (below)	"Use it or lose it" Allowance (select all that apply) (select all that apply)			
		<input type="checkbox"/> Per Application Table J	<input type="checkbox"/> Sales Frontage Table K	<input type="checkbox"/> Ornamental Table L	<input checked="" type="checkbox"/> Per Specific Area Table M
Calculated General Hardscape Lighting Power Allowance per Table 140.7-A (LZ 0, 1 & 4)					
This section does not apply to this project.					
Calculated General Hardscape Lighting Power Allowance per Table 140.7-A (LZ 2 & 3)					
This section does not apply to this project.					

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Outdoor Lighting

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CERTIFICATE OF COMPLIANCE			NRCC-LTO-E		
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Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020		

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This table includes areas using the wattage allowance per specific area from [Table 140.7-B](#). More than one specific area allowance may be taken in a single project, if applicable. However, multiple specific area allowances may not be taken for the exact same area on the site.

01	02	03	04	05	06	07	08	09	10
Area Description	Specific Area Type per Table 140.7-B	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		Specific Area (ft ²) ¹	Allowed Density (W/ft ²)	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Building Facade	BuildingFacade	1300	0.17	221	M/P	27	8	216	216
Total Design Watts for this Area:								216	
Total Allowance (Watts) All Areas:									216

¹ FOOTNOTES: See [Table 140.7-B](#) for rules for calculating the specific areas (ft² for these additional lighting allowances.

² For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Outdoor Lighting

NRCC-LTO-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTO-E
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Project Address:	35990 Pala Temecula Road	Date Prepared:	10/26/2020

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be 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/

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCI-LTO-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCI-LTO-02-E- Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. 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: <http://www.energy.ca.gov/title24/attcp/providers.html>

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	<input type="checkbox"/>	<input type="checkbox"/>

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft

Outdoor Lighting

NRCC-LTO-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name:	Class Room - Pala Office Buildings	Report Page: (Page 7 of 7)
Project Address:	35990 Pala Temecula Road	Date Prepared: 10/26/2020

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Wayne Seward	Documentation Author Signature:
Company: Bear Technologies Consulting, Inc.	Signature Date: 2020-10-26
Address: 3431 Don Arturo Drive	CEA/ HERS Certification Identification (if applica NR19-04-20052
City/State/Zip: Carlsbad CA 92010	Phone: 760.635.2327

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name: Paul Olson	Responsible Designer Signature:
Company: Paul T. Olson Architect	Date Signed: 2020-10-26
Address: 1050 Rod Street	License:
City/State/Zip: Fallbrook CA 92028	Phone: 760.728.9691

Registration Number:

Registration Date/Time:

Registration Provider: Energysoft