ENVEL	OPE MANDATORY MEASURES: NONRESIDENTIAL	ENV-MN
Project Name	n Elementary School	Date 3/22/2012
DESCRI		1 0,22,20,72
	Envelope Measures:	**************************************
§118(a):	Installed insulating material shall have been certified by the manufacturer to comply with the Calif Standards for insulating material, Title 20 Chapter 4, Article 3.	ornia Quality
§118(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke de Sections 2602 and 707 of Title 24, Part 2.	ensity requirements of
§118(f):	The opaque portions of framed demising walls in nonresidential buildings shall have insulation wit of no less than R-13 between framing members.	h an installed R-value
§117(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall be weatherstripped or otherwise sealed.	
§116(a) 1:	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding window area, 0.3 cfm/ft.2 of door area for residential doors, 0.3 cfm/ft.2 of door area for nonresidential double doors (swinging).	
§116(a) 2:	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-fac	tor.
§116(a) 3:	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fenes applicable default SHGC.	stration, or the
§116(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the buildin weatherstripped (except for unframed glass doors and fire doors).	g, and shall be

	LIMIN	ICE and	FIELD IN	ISPECTI	ON ENE	RGY CH	HECKLIS	<u>ST (</u> F	Part 3 of 4	4) M l	ECH-1C
Project Name Mt. Vernon Elementary School										Date 2/2	2/2012
Required Acceptance Tests										3/2	2/2012
Designer:											
This form is to be used by the designer a coxes by all acceptance tests that apply the number of systems. The NA number part of the plans, completion of this secti	and liste designa	ed all equipmer ites the Section	nt that requires	s an acceptan	ce test. If all e residential Re	equipment of eference App	a certain typ cendices Ma	oe requires a	test, list the e	quipment des	scription and
Building Departments: Systems Acceptance: Before occupant ormal use, all control devices serving the	cy permi	t is granted for	a newly cons	tructed buildir	ig or space, o	r a new spac	e-conditioning	ng system se	rving a buildin	ng or space is	operated fo
systems Acceptance: Before occupant	cy permi	t is granted. All	an de certinea I newly installe	ed HVAC equi	pment must b	e nequireme se tested usi	ng the Accep	tance Requi	rements.		
person performing the test (Example: H\ checked-off forms are required for ALL repecifications, installation, certificates, a properly filled out and signed forms before	newly ins nd opera	stalled equipme ating and maint uilding can rece	ent. In additior enance inform eive final occu	n a Certificate nation meet th pancy.	of Acceptanc ie requiremen	e forms shal its of §10-10	l be submitte 3(b) and Title	d to the build -24 Part 6. T	ling departme The building in	nt that certifie spector must	es plans, receive the
TEST DESCRIPTION		MECH-2A	MECH-3A	MECH-4A	MECH-5A	MECH-6A	MECH-7A	MECH-8A	MECH-9A	MECH-10A	MECH-11A
										Hydronic	
Equipment Requiring Testing or Verification	Qty.	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
	Qty.	Ventilation For	Volume & Single-Zone	Distribution		Control Ventilation	Supply Fan	Leakage	Water Temp.	System Variable Flow	Demand Shed
	Oty.	Ventilation For VAV & CAV	Volume & Single-Zone Unitary	Distribution Ducts	Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty.	Ventilation For VAV & CAV ☑	Volume & Single-Zone Unitary ☑	Distribution Ducts	Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Qty.	Ventilation For VAV & CAV ☑	Volume & Single-Zone Unitary ☑	Distribution Ducts	Gontrols □ □	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty.	Ventilation For VAV & CAV □ □	Volume & Single-Zone Unitary ☑ □	Distribution Ducts	Controls □ □ □	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty.	Ventilation For VAV & CAV □ □ □ □	Volume & Single-Zone Unitary ☑	Distribution Ducts	Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty.	Ventilation For VAV & CAV □ □ □ □ □ □	Volume & Single-Zone Unitary □ □ □ □ □	Distribution Ducts □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Controls □ □ □ □ □ □ □ □ □ □ □	Control Ventilation DCV	Supply Fan VAV	Leakage Test □ □ □ □ □ □ □ □ □ □ □	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Qty.	Ventilation For VAV & CAV □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Volume & Single-Zone Unitary Unitary	Distribution Ducts	Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty.	Ventilation For VAV & CAV □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Volume & Single-Zone Unitary □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Distribution Ducts	Controls Controls Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Qty.	Ventilation For VAV & CAV	Volume & Single-Zone Unitary Unitary	Distribution Ducts	Controls Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty. 1	Ventilation For VAV & CAV	Volume & Single-Zone Unitary □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Distribution Ducts	Controls Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
Equipment Requiring Testing or Verification Itisubishi Electric MSZ-GE09NA	Qty.	Ventilation For VAV & CAV	Volume & Single-Zone Unitary Unitary	Distribution Ducts	Controls Controls Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test C C C C C C C C C C C C C C C C C C	Water Temp. Reset	System Variable Flow Control	Demand Shed Control
	Oty. 1	Ventilation For VAV & CAV	Volume & Single-Zone Unitary	Distribution Ducts	Controls Controls	Control Ventilation DCV	Supply Fan VAV	Leakage Test	Water Temp. Reset	System Variable Flow Control	Demand Shed Control

System Efficiencies pliance for which there is a California standard established in the Appliance Efficiency Regulations will comply applicable standard. be central furnaces shall not have a pilot light. except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC tent, shall be insulated in accordance with Standards Section 123. dling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of C Standards. Deace conditioning system serving building types such as offices and manufacturing facilities (and all others not be yexempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an able manual override that allows operation of the system during off-hours for up to 4 hours. The time switch acapable of programming different schedules for weekdays and weekends and have program backup lities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; purpancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
pliance for which there is a California standard established in the Appliance Efficiency Regulations will comply applicable standard. Decentral furnaces shall not have a pilot light. Execept that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC lent, shall be insulated in accordance with Standards Section 123. Idling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of C Standards. Deace conditioning system shall be installed with one of the following: Deace conditioning system serving building types such as offices and manufacturing facilities (and all others not be exampted from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an include manual override that allows operation of the system during off-hours for up to 4 hours. The time switch is capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC ent, shall be insulated in accordance with Standards Section 123. dling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of C Standards. Deace conditioning system shall be installed with one of the following: Deace conditioning system serving building types such as offices and manufacturing facilities (and all others not be exampted from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an able manual override that allows operation of the system during off-hours for up to 4 hours. The time switch a capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC lent, shall be insulated in accordance with Standards Section 123. dling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of C Standards. Deace conditioning system shall be installed with one of the following: Deace conditioning system serving building types such as offices and manufacturing facilities (and all others not be exampt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an include that allows operation of the system during off-hours for up to 4 hours. The time switch is capable of programming different schedules for weekdays and weekends and have program backup lities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or ur timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
dling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of C Standards. Deace conditioning system shall be installed with one of the following: Deace conditioning system serving building types such as offices and manufacturing facilities (and all others not be exampled to the system during off-hours for up to 4 hours. The time switch with an able manual override that allows operation of the system during off-hours for up to 4 hours. The time switch is capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
coace conditioning system shall be installed with one of the following: coace conditioning system serving building types such as offices and manufacturing facilities (and all others not by exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an ible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch a capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or ur timer that can be manually operated to control the operating period of the system. Coace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Coace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
pace conditioning system serving building types such as offices and manufacturing facilities (and all others not by exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an ible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch is capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
pace conditioning system serving building types such as offices and manufacturing facilities (and all others not by exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an ible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch is capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
pace conditioning system serving building types such as offices and manufacturing facilities (and all others not by exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an ible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch is capable of programming different schedules for weekdays and weekends and have program backup ities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; upancy sensor to control the operating period of the system; or are timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
or timer that can be manually operated to control the operating period of the system. Deace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
pace conditioning system shall be installed with controls that temporarily restart and temporarily operate the as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Deace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
as required to maintain a setback heating and/or a setup cooling thermostat setpoint. Dace conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided.
feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provide
plation devices, such as valves or dampers that allow the supply of heating or cooling to be setback or shut off Indently of other isolation areas; and shall be controlled by a time control device as described above.
ostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stops accessible only to zed personnel.
imps shall be installed with controls to prevent electric resistance supplementary heater operation when the load can be met by the heat pump alone
cace conditioning system shall be controlled by an individual thermostat that responds to temperature within t Where used to control heating, the control shall be adjustable down to 55 degrees F or lower. For cooling, the shall be adjustable up to 85 degrees F or higher. Where used for both heating and cooling, the control shall be of providing a deadband of at least 5 degrees F within which the supply of heating and cooling is shut off or d to a minimum.
s shall be provided to allow outside air dampers or devices to be operated at the ventilation rates as specified e plans.
rity ventilating systems shall be provided with automatic or readily accessible manually operated dampers in a gs to the outside, except for combustion air openings.
ion System Acceptance. Before an occupancy permit is granted for a newly constructed building or space, or ntilating system serving a building or space is operated for normal use, all ventilation systems serving the or space shall be certified as meeting the Acceptance Requirements for Code Compliance
leating Systems
tion
rature controls for public lavatories. The controls shall limit the outlet Temperature to 110°F.
ting service water-heating systems shall have a control capable of automatically turning off the circulating pun ot water is not required.

CERTIFICATE OF COM	IPLIAN	ICE and F	IELD INSP	ECTION E	NERGY CH	ECKLIST	(Part 4 of 4)	MECH-1C
oject Name								Date
t. Vernon Elementary School				yeminin kalina kali				3/22/2012
TEST DESCRIPTION		MECH-12A Fault Detection & Diagnostics	MECH-13A Automatic Fault Detection & Diagnostics for	MECH-14A Distributed Energy Storage DX AC	MECH-15A Thermal Energy Storage (TES)	americani addici di izi izana addica destributur		
Equipment Requiring Testing	Qty.	for DX Units	Air & Zone	Systems	Systems		Test Performed By:	
subishi Electric MSZ-GE09NA	1							
				П				
							TO THE	
				□	П			
		.EJ		П	.0			
		J						
		П						ari i ari ar
		旦						
				П	П			
		О			П			
				Ē				
		D		口				
			口	Ē	G	e en	<u> </u>	
				Б	E			
		П						
		I		П			ka terjan serialikus erile sinen engan kanin anjiran akkiri majarang metana erapada ha <mark>kalikus</mark>	
		П			' ' '			
		П				<u> </u>	***************************************	
TO THE TOTAL THE PORT OF THE PORT OF THE PROPERTY OF THE PROPERTY OF THE PORT OF THE PROPERTY OF THE PORT OF THE P		П			旦	organistic in the second secon		
				Д	E.	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		
nergyPro 5.1 by EnergySoft U	ser Number:	20441	l	RunCode: 2012-03-	22T10:07:42	ID: 3990		Page 10 of 1

FIELD INSPECTION ENE					Date
Mt. Vernon Elementary School					3/22/2012
Project Address		Climate Zone	Total Cond.		Addition Floor Area
2161 Potomac Ave. Bakersfield GENERAL INFORMATION		13	13	O	136
	nresidential	☐ High-Rise Resider	ntial D Ho	tal/Motal G	uest Room
ballating Type.				Uncon	ditioned Spaces
	ocatable Public School	\	*	(affida	
Phase of Construction:	v Construction	☑ Addition		eration	
Approach of Compliance: □ Co	nponent	□ Overall Envelope ⁻ Energy	□ Un	conditioned	d (file affidavit)
Front Orientation: N, E, S, W or in Degree	es: 0 deg				
HVAC SYSTEM DETAILS			FIELD INSPEC	TION ENE	RGY CHECKLIST
			Meets Cr	iteria or R	equirements
Equipment ²	Inspec	tion Criteria	Pass	Fail - D	escribe Reason ²
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	IDU/ODU-1				
Equipment Type ³ :	Split DX				
Number of Systems	1				
Max Allowed Heating Capacity ¹	10,900 Btu/hr				: []
Minimum Heating Efficiency ¹	10.00 HSPF				
Max Allowed Cooling Capacity ¹	9,000 Btu/hr				П
Cooling Efficiency ¹	21.0 SEER / 0.0 E	ER			
Duct Location/ R-Value	n/a	Military with 2000 at a consistency about the first seven any signification and account of the seven as a consistency of the s			
When duct testing is required, submit MECH-4A & MECH-4-HERS	No				
Economizer	No Economizer				
Thermostat	Setback Required				
Fan Control	Constant Volume				
			FIELD INSPEC	TION ENE	RGY CHECKLIST
Equipment ²	Inspec	tion Criteria	Pass	Fail - D	escribe Reason ²
Item or System Tags (i.e. AC-1, RTU-1, HP-1)				<u> </u> :	Ġ
Equipment Type ³ :					
Number of Systems					. 🗆
Max Allowed Heating Capacity ¹					
Minimum Heating Efficiency ¹					П
Max Allowed Cooling Capacity ¹					П
Cooling Efficiency ¹					
Duct Location/ R-Value					
When duct testing is required, submit MECH-4A & MECH-4-HERS					
Economizer					
Thermostat					
Fan Control					

EnergyPro 5.1 by EnergySoft User Number: 20441 RunCode: 2012-03-22T10:07:42 ID: 3990

Project Name Date Mt. Vernon Elementary School 3/22/20	CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST	(Part 2 of 4)	MECH-10
Discrepancies:	Project Name Mt. Vernon Elementary School		Date 3/22/2012
	Discrepancies:		
			· ·
			· · · · · · · · · · · · · · · · · · ·
		(COMPANIENTA MONEY MARIA) — William A CAMBURA (MARIA) MARIA — A MARIA (MARIA — A MARIA (MARIA) MARIA (MARIA (MARIA) MARIA (M	
			WTW. II TO BE TO SEE THE SECOND SECON
			· · · · · · · · · · · · · · · · · · ·
			7

			· inimia anno maria anno maria ina
	and a superior of the contract		
		ele de membre de como que en experimenta de compresión es que en en esta de describación esta esta esta esta e	
	·		

	ARCHITECTURE - ENGINEERING 6011 N. F	Phone (559) 436088	Revision: Revision Description: Rev. I	
	Sheet Title: TITLE 24	MT. VERNON ELEMENTARY SCHOOL	KITCHEN ADDITION	BAKERSFIELD CITY SCHOOL DISTRICT
	IDENTIFIC DIV. OF THE OFFICE OF RE	# : 15-	STAM ARCHI ON SER	
	ACFL DATE TRACKING	#: 6332		8
	REGISTAL STATES	32712 P. 6-30-14 CHANICA OF CALIF		
		39	9(
	Sheet No.:			

Ownership of Documents

This document, the ideas and designs

incorporated herein, as an instrument of
Professional Service is the property of
Integrated Designs by SOMAM Inc.
and is not to be used, in whole or in part for
any other project without written authorization.

© COPYRIGHT 2012