BCSD School Bld G Classrooms		AND THE RESIDENCE AND ASSESSMENT AND ASSESSMENT ASSESSM	Date 1/5/2012	
Project Address Bakersfield	Climate Zone 13	Total Cond Floor Area 9,344	Addition Floor Area	
GENERAL INFORMATION				
Building Type 21 Noi	nresidential   High-Rise Resider		Guest Room nditioned Spaces	
—	ocatable Public School Bldg. 🖾 Conditione	d Spaces		
Phase of Construction.   Ø Ne	w Construction   Addition	☐ Alteration		
Approach of Compliance:     Compliance   Com	mponent   Overall Envelope Energy	TDV 🗀 Uncondition	ed (file affidavit)	
Front Orientation N, E, S, W or in Degree				
HVAC SYSTEM DETAILS		FIELD INSPECTION EN	FRGY CHECKLIST	
110770		Meets Criteria or		
Equipment <sup>2</sup>	Inspection Criteria		Describe Reason	
Item or System Tags				
(re. AC-1, RTU-1, HP-1)	HP G-1			
Equipment Type <sup>3</sup> ,	Packaged VAV			
Number of Systems	· · · · · · · · · · · · · · · · · · ·		📅:	
Max Allowed Heating Capacity <sup>1</sup>	200,000 Btu/hr   3.20 COP	<del>                                     </del>	<del>-</del>	
Minimum Heating Efficiency	192,000 Btu/hr			
Max Allowed Cooling Capacity  Cooling Efficiency	10.6 EER			
Duct Location/ R-Value	Attic, Roof Ins / 4.2	<del>                                     </del>		
When duct testing is required, submit MECH-4A & MECH-4-HERS	No		<u> </u>	
Economizer	Diff. Temp (Integrated)			
Thermostat	Setback Required			
Fan Control	Variable Speed			
		FIELD INSPECTION EN	ERGY CHECKLIST	
			22	
Equipment <sup>2</sup>	Inspection Criteria	Pass Fail - I	Describe Heason	
Equipment <sup>2</sup> Item or System Tags (i.e. AC-1, RTU-1, HP-1)	Inspection Criteria  HP G-2	Pass Fail - I		
Item or System Tags				
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	HP G-2 Packaged VAV 1		0	
Item or System Tags (r.e. AC-1, RTU-1, HP-1) Equipment Type <sup>3,</sup>	HP G-2 Packaged VAV 1 200,000 Btu/hr		0	
Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type <sup>3,</sup> Number of Systems Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup>	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP		0 0 0	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)  Equipment Type <sup>3</sup> .  Number of Systems  Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup> Max Allowed Cooling Capacity <sup>1</sup>	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP 192,000 Btu/hr		0 0 0 0	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)  Equipment Type <sup>3,</sup> Number of Systems  Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup> Max Allowed Cooling Capacity <sup>1</sup> Cooling Efficiency <sup>1</sup>	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP 192,000 Btu/hr 10.6 EER			
Item or System Tags (i.e. AC-1, RTU-1, HP-1)  Equipment Type <sup>3</sup> .  Number of Systems  Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup> Max Allowed Cooling Capacity <sup>1</sup> Cooling Efficiency <sup>1</sup> Duct Location/ R-Value	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP 192,000 Btu/hr			
Item or System Tags (i.e. AC-1, RTU-1, HP-1)  Equipment Type <sup>3</sup> .  Number of Systems  Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup> Max Allowed Cooling Capacity <sup>1</sup> Cooling Efficiency <sup>1</sup> Duct Location/ R-Value  When duct testing is required, submit	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP 192,000 Btu/hr 10.6 EER Attic, Roof Ins / 4.2			
Item or System Tags (i.e. AC-1, RTU-1, HP-1)  Equipment Type <sup>3</sup> .  Number of Systems  Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup> Max Allowed Cooling Capacity <sup>1</sup> Cooling Efficiency <sup>1</sup> Duct Location/ R-Value  When duct testing is required, submit  MECH-4A & MECH-4-HERS  Economizer	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP 192,000 Btu/hr 10.6 EER Attic, Roof Ins / 4.2 No Diff. Temp (Integrated)			
Item or System Tags (i.e. AC-1, RTU-1, HP-1)  Equipment Type <sup>3</sup> .  Number of Systems  Max Allowed Heating Capacity <sup>1</sup> Minimum Heating Efficiency <sup>1</sup> Max Allowed Cooling Capacity <sup>1</sup> Cooling Efficiency <sup>1</sup> Duct Location/ R-Value  When duct testing is required, submit  MECH-4A & MECH-4-HERS	HP G-2 Packaged VAV 1 200,000 Btu/hr 3.20 COP 192,000 Btu/hr 10.6 EER Attic, Roof Ins / 4.2			

FIELD INSPECTION ENI	PLIANCE and	IST	(F	Part 1 o	f 4)	MECH-1
Project Name	<del> </del>	201				Date
BCSD School Bld G Classrooms					<u>-</u>	1/5/2012
Project Address		Climate Zone	3		ond Floor Area 9,344	Addition Floor A
Bakersfield GENERAL INFORMATION			3		9,344	1 Iva
77 11	nresidential	🗀 High-Ri	se Residen	F1 (eít	Hotel/Motel C	Suest Boom
panding type					ditioned Spaces	
	elocatable Public School I		Conditione	_ <del></del>	(affida	
Phase of Construction: ZI Ne	w Construction	☐ Addition			Alteration	****
Approach of Compliance.   Cl Co	omponent	D Cverall Energy	Envelope T	ην 🗀	Unconditione	d (file affidavit)
Front Orientation <sup>,</sup> N, E, S, W or in Degr	ees: 0 deg			,		
HVAC SYSTEM DETAILS				FIELD INS	PECTION EN	RGY CHECKLIS
				Meet	s Criteria or F	Requirements
Equipment <sup>2</sup>	Inspection	on Criteria		Pass	Fall D	escribe Reaso
tem or System Tags (i.e. AC-1, RTU-1, HP-1)	CU/FC G-1, 2					
Equipment Type <sup>3</sup> :	Split DX					
Number of Systems	2					
Max Allowed Heating Capacity <sup>1</sup>	18,000 Btu/hr					
Minimum Heating Efficiency	n/a					
Max Allowed Cooling Capacity <sup>1</sup>	15,000 Btu/hr					
Cooling Efficiency <sup>1</sup>	16.0 SEER / 13.0 EE	ER				
Duct Location/ R-Value	n/a					0
When duct testing is required, submit WECH-4A & MECH-4-HERS	No					0
Economizer	No Economizer					<u> </u>
Thermostat	Setback Required					
an Control	Constant Volume					
				FIELD INS	PECTION ENE	RGY CHECKLIS
Equipment <sup>2</sup>	Inspectio	on Criteria		Pass	Fail – D	escribe Reaso
tem or System Tags Le AC-1, RTU-1, HP-1)						
Equipment Type <sup>3</sup> .						
Number of Systems						
Max Allowed Heating Capacity <sup>1</sup>			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	n		
/unimum Heating Efficiency						0
Max Allowed Cooling Capacity <sup>1</sup>						
rax Allowed Cooling Capacity						
	I.					
Cooling Efficiency <sup>1</sup>						****
						O
Cooling Efficiency <sup>†</sup> Duct Location/ R-Value When duct testing is required, submit						
Cooling Efficiency <sup>1</sup> Duct Location/ R-Value  When duct testing is required, submit  MECH-4A & MECH-4-HERS				О		0

MECH-1C

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST	(Part 2 of	4) MECH-1C
Project Name BCSD School Bld G Classrooms		Date 1/5/2012
Discrepancles:		
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EnergyPro 5.1 by EnergySoft User Number 5232 RunCode: 2012-01-	05T13:42:54 ID 09091	Page 18 of 2
Energy To S. Fuy Energy Cont. Geor Hambor Sees Transcode: 2012-01		1 200 10012

CERTIFICATE OF COMP	LIAN	ICE and	FIELD IN	ISPECTI	ION ENE	RGY CH	HECKLI	ST (F	art 3 of 4	1) M	ECH-10
Project Name BCSD School Bld G Classrooms										Date	5/2012
Required Acceptance Tests					· · · · · · · · · · · · · · · · · · ·					1/3	5/2012
•											
Designer: This form is to be used by the designer a boxes by all acceptance tests that apply the number of systems. The NA number part of the plans, completion of this section.	and liste designa	ed all equipment tes the Section	nt that require o in the Appen	s an acceptar dix of the Noi	nce test. If all nresidential R	equipment of eference Apr	a certain typ sendices Mai	e requirés a	test, list the ed	quipment des	scription and
Building Departments:					·		-				
Systems Acceptance: Before occupant normal use, all control devices serving the Systems Acceptance: Before occupant. The MECH-1C form is not considered a person performing the test (Example, Huchecked-off forms are required for ALL respecifications, installation, certificates, air properly filled out and signed forms before	ne building permit complete VAC instructions of the complete value v	ng or space sh t is granted. Al ed form and is aller, TAB cont stalled equipment ating and main!	all be certified I newly installe not to be acce tractor, control ent. In addition tenance inform	as meeting the d HVAC equivalent day the by the by the base contractor, as a Certificate ration meet the second contractor.	he Acceptanc ipment must t building depar PE In charge of Acceptanc	e Requireme be tested using tracent unless of project) ar se forms shall	ints for Code ing the Accep the correct to ind what Accell be submitte	Compliance tance Required to the build to th	rements. ecked, The eq must be condu ling departmen	pipment requicted. The folion that certifie	uiring testing lowing es plans,
		· · · · · · · · · · · · · · · · · · ·		*****************************	******************						***************************************
TEST DESCRIPTION		MECH-2A	MECH-3A	MECH-4A	MECH-5A	MECH-6A	MECH-7A	MECH-8A	MECH-9A	MECH-10A	MECH-11
	Qtv	Ouldoor Ventialion For	Constant Volume & Single-Zone	Air Distribution	Economizer	Demand Control Ventilation	Supply Fan	MECH-8A Valve Leakuge Tesi	Supply Water Temp,	Hydronic System Variable Flow	Automati Demand Shed
Equipment Requiring Testing or Ventication	Qty 2	Outdoor Ventiation	Constant Volume &	Air		Demand Control	Supply	Valve	Supply Water	Hydronic System Variable	Automati Demand
Equipment Requiring Testing or Ventication PUHY-P192 Run es Standard Heat Pump	1	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	Automati Demand Shed Control
TEST DESCRIPTION  Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump Mitsubishi MUY-A15NA / MSY-A15NA	2	Outdoor Ventiation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls 辺	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Equipment Requiring Testing or Venlication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls [2]	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp, Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Equipment Requiring Testing or Ventication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV ZI	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls 57	Demand Control Vantilation DCV	Supply Fan VAV	Valve Leakuge Test	Supply Water Temp, Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Equipment Requiring Testing or Ventication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakuge Test	Supply Water Temp, Reset	Hydronic System Variable Flow Control	Automati Demand Shed Control
Equipment Requiring Testing or Ventication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls  II	Demand Control Vantillation DCV	Supply Fan VAV	Valve Leak-ige Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Vantiliation DCV	Supply Fan VAV	Valve Leak/age Test  □ □ □ □ □ □ □	Supply Water Temp, Reset	Hydronic System Variable Flow Control	Automatili Demand Shed Control
Equipment Requiring Testing or Venlication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Oucis	Economizer Controls	Demand Control Vanillation DCV	Supply Fan VAV	Valve Leak-ige Test	Supply Water Temp, Reset	Hydronic System Variable Flow Control	Automatili Demand Shed Control
Equipment Requiring Testing or Ventication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Oucis	Economizer Controls	Demand Control Vanillation DCV	Supply Fan VAV	Valve Leak/age Test  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Equipment Requiring Testing or Ventication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Oucis	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
Equipment Requiring Testing or Venlication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Oucts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Valve Leakage Test	Supply Water Temp, Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Equipment Requiring Testing or Venlication PUHY-P192 Run es Standard Heat Pump	2	Outdoor Venblation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Oucts	Economizer Controls Z	Demand Control Ventilation DCV	Supply Fan VAV Ø  □  □  □  □  □  □  □  □  □  □  □  □	Valve Leakage Test	Supply Water Termp. Reset	Hydronic System Variable Flow Control	Control

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Project Name ICSD School Bld G Classrooms	;						"	7/5/2012
TEST DESCRIPTION		MECH-12A	MECH-13A	MECH-14A	MECH-15A		······································	
Equipment Requiring Testing	Qty.	Faull Detection & Diagnostics for DX Units	Automatic Fault Detection & Diagnostics for Air & Zone	Oistributed Energy Storage DX AC Systems	Thermal Energy Storage (TES) Systems		Test Portonned By	
PUHY-P192 Run as Standard Heat Pump	2	Ø						
Mitsubishi MUY-A15NA / MSY-A15NA	2		0		<u> </u>			
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			0					**************************************
		0						
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		0					—— ——— · — · — · — · — · — · — · — · —	
EnergyPro 5.1 by EnergySoft Us	er Number	5232		RunCode: 2012-01	-05T13:42:54	ID 09091		Pago 20 of 27

BCSD School Bld G Classr				1/5/2012
Item or System Tags	Indic		ntral, Single Zone, Packag	
(i e AC-1, RTU-1 HP-1)	1986-2005 P. C. S. T. S. T. S. C. S. T. S. T. S. C. S. T.	HP C-1	HP Q-2	CU/FC G-1, 2
Number of Systems	20469741364754	-	1	2
		e Reference on Plans or	Schedule and Indicate the	applicable exception
MANDATORY MEASURES	T-24 Sections	44400	0.00.000	n/a
Heating Equipment Efficiency	112(a)	3 20 COP	3 20 COP	
Cooling Equipment Efficiency	112(a)	10 6 EER	10.6 EER	16 0 SEER / 13.0 EE
HVAC Heat Pump Thermostat	112(b), 112(c)	Yes	Yes	n/a
Furnace Controls/Thermostat	112(c), 115(a)	n/a	n/a	n/a
Natural Ventilation	121(b)			
Mechanical Ventilation	121(b)	1,628 cfin	1,589 clm	26 cfm
VAV Minimum Position Control	121(c)	No	No	No
Demand Control Ventilation	121(c)	<b>Y</b> ⊕s	Yes	Na
Tene Control	122(e)	Programmable Switch	Programmable Switch	Programmable Switc
Setback and Setup Control	122(e)	Selback Required	Setback Required	Setback Required
Outdoor Damper Control	122(1)	Aulo	Auto	Auto
Isolation Zones	122(g)	_ <i>n/</i> a	nla	n/a
Pipe Insulation	123	Refrigerant	Refrigerant	
Duct Location/ R-value	124	Attic, Roof Ins / 4 2	Attic, Roof Ins / 4 2	n/a
PRESCRIPTIVE MEASURES Calculated Design Heating Load	144(a & b)	n/a	n/a	ก/อ
Proposed Heating Capacity	144(a & b)	124,915 Budhr	124,915 Bt⊔/hr	0 Btu/hr
Calculated Design Cooling Load	144(a & b)	n/a	n/a	n/a
Proposed Cooling Capacity	144(a & b)	190,768 Btu/nr	190,524 Btw/hr	21,209 Btu/hr
Fan Control	144(c)	Variable Speed	Variable Speed	Constant Volume
DP Sensor Location	144(c)			
Supply Pressure Reset (DDC only)	144(c)			
Simultaneous Heat/Cool	144(d)	No	No	No
Economizer	144(8)	Diff. Femp (Integrated)	Diff Temp (Integrated)	No Economizer
Heat Air Supply Reset	144(f)	Coldest Zone	Coldesi Zone	Constant Femp
Cool Air Supply Reset	144(f)	Warmest Zone	Warmest Zone	Constant Temp
Electric Resistance Heating	144(g)			
Air Cooled Chiller Limitation	144(i)			
Duct Leakage Sealing If Yes, a		No	No	No
MECH-4-A must be submitted	144(k)		1	

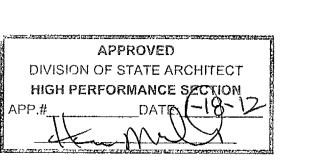
EnergyPro 5 1 by EnergySoft User Number 5232 RunCodo: 2012-01-05T13:42:54 ID. 09091 Page 21 of 27

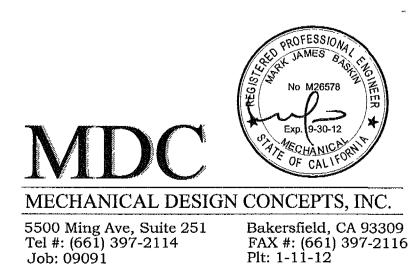
Project Name BCSD Sof	ool Bld G Clas	srooms		******									Date 1/5/2	2012
		MECH	IANICAL	VENTILATION	ON (§121(	b)2)				REHE	AT LIMITA	TION (§144	(d))	
		AR	EA BASIS		OC	CUPANCY	BASIS		VAY MINIMUM			IMUM		
A		В	c	Ö	E	F	G	Н	i	J	К	L	M	N
Zon	e/System	Condition Area (IL <sup>2</sup> )	CFM per ft <sup>2</sup>	Min CFM By Area B X C	Number Of People	CFM per Parson	Min CFM by Occupant EXF	FIEQYD V.A. Max of D or G	Design Ventilation Air CFM	50% of Design Zone Supply CFM	B X 0.4 CFM / It <sup>2</sup>	Max. of Columns H. J. K. 300 GFM	Design Minimum Air Selpoint	Transfer Air
95P 114		450	0.15	68				68	68		***************			
Classroom 10t		963	0.38	366				366	366					
Special Ed 10	<u> </u>	1,136	0.38	432				432	371			<u> </u>		- 60
Classroom 10:	? 	963	0.38	306				366	366					L
Classroom 10:	3	963	Ø 38	366				366	366			<u> </u>		
Work Room 10	78	240	0 38	91		<u> </u>		91	91					
HP G-1 :-					,		Fotal	1,688	1,628					
Spaech 115	****	450	0.15	58				en	58					
Classroom 10-	4	963	0.38	366				366	366			<u></u>		ļ
Special Ed 10	5	874	0 38	332				332	332			<u> </u>		
Classroom 10	5	963	Ó 38	366				366	366					
Cleasroom 10	7	963	0 38	365				366	266			ļ		
Work Room 10	29	240	0.38	91				91	91					
HP 6-2							Total	1,589	1,589				1	ļ
Electrical Roo	TIS .	176	0.15	26			,	28	26					
	· · · · · · · · · · · · · · · · · · ·			Totals			ļ			Column I Total	Design Ven	titation Au	and Address of the State of the	
<u> </u>		tion rate per Section								······				
<u>в</u> н		eal or the greater										od seating		
		tion Air (REQ D V	/	···×······				BASIS or	OCCUPANCY	BASIS (Column	O or G).	· · · · · · · · · · · · · · · · · · ·		•
······································		man or equal to H			, , , , , , , , , , , , , , , , , , , ,								***************************************	***************************************
<u>J</u>		y CFM (Fan CFM		the design zo	na outdoor	asflow rate	per §121.			······································				
<u> </u>		f) x 0.4 CFM / ft <sup>2</sup> ,		***************************************	~ <del></del>	····					· · · · · · · · · · · · · · · · · · ·			
Mt .		umns H, J, K, or 3			· · · · · ·	,							***	
N	Transfer Air mus	s than or equal to I be provided whe rence between ih	re the Reat	ired Ventilation	n Air (Colu	mn H) is ar	eater than the	Design Min	imum Air (Col mn M), Colum	umn M) Where a	required, train	ster air must	be greater th	nan or
EnergyPro 5,	t by EnergySoft	User Numt		***************************************	,*		le: 2012-01-05			ID: 09091			Pag	ge 22 of 27

EIAAET	OPE MANDATORY MEASURES: NONRESIDENTIAL	ENV-MM
Project Nam		Date 1/5/2012
	hool Bld G Classrooms	1/3/2012
DESCRI	PHON Envelope Measures;	
§118(a)	Installed insulating material shall have been certified by the manufacturer to comply with the Ca Standards for insulating material, Title 20 Chapter 4, Article 3.	lifornia Quality
§118(c)	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke Sections 2602 and 707 of Title 24, Part 2.	
§118(f)	The opaque portions of framed demising walls in nonresidential buildings shall have insulation of no less than R-13 between framing members.	
§117(a).	All Exterior Joints and openings in the building that are observable sources of air leakage shall weatherstripped or otherwise sealed	
§116(a) 1	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceed window area, 0.3 cfm/ft.2 of door area for residential doors, 0.3 cfm/ft.2 of door area for nonresid (swinging and sliding), and 1.0 cfm/ft.2 for nonresidential double doors (swinging)	ding 0 3 cfm/ft <sup>2</sup> of ential single doors
§116(a) 2 <sup>-</sup>	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-f	
§116(a) 3	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fen applicable default SHGC	
§116(b)	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the build weatherstripped (except for unframed glass doors and fire doors).	ling, and shall be

roject Name	rool Bld G Clas	eronne											Date 1/5/	2012	
000 001	idor Ella G Cia:			VENTILATI	C41 (C) C41	2.101						~~~~		.072	
~~~~~		<del></del>	TANICAL REA BASIS		1	DJZ) CUPANCY	0.4010	•••••		HEME	VAV MIN	TON (§144	(0))		
	Α	8	C C	D D	É		G	H	,		K	IMOM			
Zar	ne/System	Condition Area (ft²)	CFM per ft	Min CFM By Area B X C	Number Of People	CFM per Person	Min GFM by Occupant EXF	PECYD V A. Max of D or G	Design Ventilation Air CFM	50% af Design Zone Supply CFM	BX04 CFM/8	Max. of Columns H, J, K, 300 CFM	M Design Minimum Air Selpaint	nimum Air Transf	
CUIFO G-1			·		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Total	26	26	,	1			<u>.                                    </u>	
						•								i	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								<b>†</b>	·			
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1,		tion Air (REQ'D V	*****			************		DAGIG OF	COCOPANOY	munipo) eacha	ru or caj.				
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J		CFM (Fan CFM		the design zo	no outdoor	arriow rate	per § 121.								
<u>K</u>		(°) x 0 4 CFM / It <sup>2</sup>												***********	
t	Maximum of Col	umns H. J. K. or 3	IOO CFM						-					·	
М	This must be les	s lhan or equal to	Column L	and greater th	an or equal	to the sum	of Columns H	olus N							
N	Transfer Alt mus equal to the diffe	t be provided whe	ere the Rec	ured Ventilati	on Air (Colu	mm H) is gr	eater than the	Design Min	ımum Air (Calı	ums M), Where :	required, tran	ster air must	be greater t	श्वत द्वर	

Project Name BCSD Sch	ool Bld G Classrooms	Date 1/5/2012
Equipme	nt and System Efficiencies	
§111.	Any appliance for which there is a California standard established in the Appliance Efficiency Re with the applicable standard	gulations will comply
§115(a)	Fan type central furnaces shall not have a pilot light.	
§123·	Piping, except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, o equipment, shall be insulated in accordance with Standards Section 123.	r within HVAC
§124:	Air handling duct systems shall be installed and insulated in compliance with Sections 601, 602, the CMC Standards.	603, 604, and 605 of
Controls		
§122(e):	Each space conditioning system shall be installed with one of the following	
1A 1B	Each space conditioning system serving building types such as offices and manufacturing facilities explicitly exempt from the requirements of Section 112 (d)) shall be installed with an automatic tracessible manual override that allows operation of the system during off-hours for up to 4 hours shall be capable of programming different schedules for weekdays and weekends and have programabilities that prevent the loss of the device's program and time setting for at least 10 hours if An occupancy sensor to control the operating period of the system; or	ime switch with an The time switch gram backup
	A 4-hour timer that can be manually operated to control the operating period of the system	
2	Each space conditioning system shall be installed with controls that temporarily restart and temp system as required to maintain a setback heating and/or a setup cooling thermostat setpoint.	porarily operate the
§122(g).	Each space conditioning system serving multiple zones with a combined conditioned floor area of square feet shall be provided with isolation zones. Each zone shall not exceed 25,000 square with isolation devices, such as valves or dampers that allow the supply of heating or cooling to be independently of other isolation areas; and shall be controlled by a time control device as described.	feet; shall be provided setback or shut off
§122(c).	Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stoj authorized personnel	os accessible only to
§122(b):	Heat pumps shall be installed with controls to prevent electric resistance supplementary heater of heating load can be met by the heat pump alone	····
§122(a&b)	Each space conditioning system shall be controlled by an individual thermostat that responds to zone. Where used to control heating, the control shall be adjustable down to 55 degrees F or lo control shall be adjustable up to 85 degrees F or higher. Where used for both heating and coolin capable of providing a deadband of at least 5 degrees F within which the supply of heating and of reduced to a minimum.	wer. For cooling, the ng, the control shall be
Ventilatio	n	
§121(e).	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation these plans	on rates as specified
§122(f):	All gravity ventilating systems shall be provided with automatic or readily accessible manually op- openings to the outside, except for combustion air openings.	
§121(f)	Ventilation System Acceptance Before an occupancy permit is granted for a newly constructed new ventilating system serving a building or space is operated for normal use, all ventilation syst building or space shall be certified as meeting the Acceptance Requirements for Code Complian	tems serving the
Service V	Vater Heating Systems	
§113(c)	Installation	
3.	Temperature controls for public lavatories. The controls shall limit the outlet Temperature to 110	)°F.
2	Circulating service water-heating systems shall have a control capable of automatically turning owhen hot water is not required.	off the circulating puni





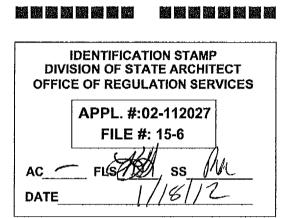


ARCHITECTS, INC.

5500 MING AVENUE SUITE 280 BAKERSFIELD, CALIFORNIA 93309 TELEPHONE (661) 832-5258 FACSIMILE (661) 832-4291



WILLIAM J. MELBY, AIA ARCHITECT C-16,835



PTN # 63321-112

**NEW ELEMENTARY** SCHOOL 9801 HIGHLAND KNOLLS DR BAKERSFIELD CALIFORNIA 93306

NEW MIDDLE.SCHOOL 4115 VINELAND ROAD BAKERSFIELD CALIFORNIA 93306

FOR:

BAKERSFIELD CITY SCHOOL DISTRICT 1300 BAKER STREET BAKERSFIELD CALIFORNIA

93305

MARK	DATE	DESCRIPTION
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JOB NUMBER 200101244

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海河西域湖湖域 网络属翅科科 SHEET TITLE TITLE 24 **BUILDING "G"** 

SHEET IDENTIFICATION NUMBER

M-527