Schools (Public School)	Climate Zone	Total Cond Floo 12,536			
roject Address Bakersfield ENERAL INFORMATION uilding Type. Schools (Public School)	Climate Zone 13		or Area Addition Floor Area		
Bakersfield ENERAL INFORMATION uilding Type. Schools (Public School)	13				
uilding Type. Schools (Public School)			n/a		
Schools (Public School)					
☐ Schools (Public School) □	Nonresidential High-Rise Resident	tial Hotel/I	Motel Guest Room		
hase of Construction	Relocatable Public School Bldg 🛮 🗷 Conditione	d Spaces Unconditioned Spaces (affidavit)			
	New Construction Addition	□ Alteration			
pproach of Compliance.	Component Overall Envelope	DV 🔲 Uncon	ditioned (file affidavit)		
ront Orientation, N, E, S. W or in De					
VAC SYSTEM DETAILS		FIELD INSPECTIO	ON ENERGY CHECKLIST		
		Meets Criter	ria or Requirements		
guipment ²	Inspection Criteria	Pass F	ail - Describe Reason ²		
em or System Tags e. AC-1, RTU-1, HP-1)	HP P-1				
quipment Type ³ :	Packaged VAV	0			
umber of Systems	1		0		
ax Allowed Heating Capacity ¹	200,000 Btu/hr				
Inimum Heating Efficiency ¹	3.20 COP				
ax Allowed Cooling Capacity ¹	192,000 Btu/hr				
ooling Efficiency ¹	10.6 EER		<u> </u>		
uct Location/ R-Value	Attic, Roof Ins / 4.2				
Then duct testing is required, submit ECH-4A & MECH-4-HERS	No	0	0		
conamizer	Diff. Temp (Integrated)				
hermostat	Setback Required				
an Control	Variable Speed				
			N ENERGY CHECKLIST		
quìpment ²	Inspection Criteria	Pass F	ail - Describe Reason ²		
em or System Tags e. AC-1, RTU-1, HP-1)	HP P-2				
quipment Type ³ :	Packaged VAV				
umber of Systems	1				
ax Allowed Heating Capacity ¹	108,000 Btu/hr				
inimum Heating Efficiency ¹	3.30 COP	<u> </u>			
ax Allowed Cooling Capacity ¹	96,000 Btu/hr				
ooling Efficiency ¹	11 0 EER	<u> </u>			
uct Location/ R-Value	Attic, Roof Ins / 4.2				
then duct testing is required, submit ECH-4A & MECH-4-HERS	No	0			
conomizer	Diff. Temp (Integrated)				
nermostat	Setback Required	<u> </u>			
	Variable Speed				
ax Allowed Heating Capacity ¹ snimum Heating Efficiency ¹ ax Allowed Cooling Capacity ¹ ooling Efficiency ¹ uct Location/ R-Value then duct testing is required, submit ECH-4A & MECH-4-HERS conomizer	108,000 Btu/hr 3.30 COP 96,000 Btu/hr 11 0 EER Attic, Roof Ins / 4.2 No Diff. Temp (Integrated)				

CERTIFICATE OF COMP FIELD INSPECTION ENE			Part 1 of 4)	•	MECH-1C
Project Name	*******************	······································			Date 4 (F (2042)
BCSD School Building P Classro Project Address	oms	Climate Zone	Total Cond	Floor Area	1/5/2012 Addition Floor Are
Bakersfield		13	12,5		n/a
GENERAL INFORMATION					
Building Type: ☑ No	residential	☐ High-Rise Reside	ntial 🏻 Ho		iuest Room
☐ Schools (Public School) ☐ Re	ocatable Public Schoo	Bldg. 🗹 Condition	ed Spaces 8	Uncon (affida	ditioned Spaces vit)
Phase of Construction:	w Construction	☐ Addition	☐ Alte	eration	
Approach of Compliance: Co	nponent	Overall Envelope Energy	TDV 🗖 Un	conditione	d (file affidavit)
Front Orientation: N, E, S, W or in Degre	es: 0 deg	21019			
HVAC SYSTEM DETAILS	······································		FIELD INSPEC	TION ENE	RGY CHECKLIST
			Meets Cr	iteria or F	equirements
Equipment ²	Inspec	tion Criteria	Pass	Fail - D	escribe Reason ²
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	HP P-3				
Equipment Type ³ :	Packaged VAV				
Number of Systems	1				
Max Allowed Heating Capacity ¹	200,000 Btu/hr				
Minimum Heating Efficiency ¹	3.20 COP				
Max Allowed Cooling Capacity ¹	192,000 Btu/hr				
Cooling Efficiency ¹	10.6 EER				
Duct Location/ R-Value	Attic, Roof Ins / 4 2)			
When duct testing is required submit MECH-4A & MECH-4-HERS	No				
Economizer	Diff. Temp (Integra	ted)			<u> </u>
Thermostat	Setback Required				
Fan Control	Variable Speed				
			FIELD INSPEC	TION ENE	RGY CHECKLIST
Equipment ²	Inspect	ion Criteria	Pass	Fail - D	escribe Reason ²
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	HP P-4				
Equipment Type ³ :	Packaged VAV				
Number of Systems	1				
Max Allowed Heating Capacity ¹	108,000 Btu/hr				
Minimum Heating Efficiency ¹	3.30 COP				
Max Allowed Cooling Capacity ¹	96,000 Btu/hr				
Cooling Efficiency ¹	11.0 EER				
Duct Location/ R-Value	Attic, Roof Ins / 4.2		0		
When duct testing is required submit MECH-4A & MECH-4-HERS	No				
Economizer	Diff. Temp (Integra	ted)			
Thermostat	Setback Required				
Fan Control	Variable Speed				
If the Actual installed equipment performan the building plans) the responsible party sh 2 For additional detailed discrepancy use Par 3. Indicate Equipment Type: Gas (Pkg or, Spl	all resubmit energy compl ge 2 of the Inspection Che	iance to include the new ch odist Form. Compliance fa	anges		bmittal or from

Number of Systems Max Allowed Heating Capacity¹ Minimum Heating Efficiency¹ Max Allowed Cooling Capacity¹ 15,000 Btu/hr Cooling Efficiency¹ 16.0 SEER / 13.0 EER Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS No Economizer No Economizer No Economizer Thermostat Setback Required Constant Volume Equipment² Inspection Criteria Inspection Criteria Minimum Heating Efficiency¹ Minimum Heating Efficiency¹ Max Allowed Cooling Capacity¹ Minimum Heating Efficiency¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS	ned Sp e TDV	oaces [536 tel/Motel G	Date 1/5/2012 Addition Floor Area n/a Guest Room ditioned Spaces
Project Address Bakersfield GENERAL INFORMATION Building Type: Schools (Public School) Relocatable Public School Bidg. Nonresidential Relocatable Public School Bidg. Condition Phase of Construction: Approach of Compliance: Component Component Coverall Envelop Energy Front Orientation: N. E. S, W or in Degrees: Odeg HVAC SYSTEM DETAILS Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Amax Allowed Heating Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4HERS Max Allowed Heating Capacity ¹ Max Allowed Heating Capacity ¹ No Equipment Type ³ No Economizer Thermostat Setback Required Constant Volume Cooling Efficiency Max Allowed Heating Capacity ¹ Minimum Heating Efficiency Max Allowed Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency Max Allowed Heating Capacity ¹ Minimum Heating Efficiency Max Allowed Heating Capacity ¹ Minimum Heating Efficiency Max Allowed Resting is required, submit Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency Max Allowed Resting is required, submit Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency Max Allowed Resting is required, submit Mech-4A & Mech-4-Hers Mech-4A & Mech-4-Hers	ned Sp e TDV	12,5 Ho paces I	tel/Motel G Uncon (affida	Addition Floor Are n/a Guest Room ditioned Spaces
Bakersfield GENERAL INFORMATION Building Type: ☑ Nonresidential ☐ High-Rise Residence Schools (Public School) ☐ Relocatable Public School Bidg. ☑ Condition Phase of Construction: ☑ New Construction ☐ Addition Approach of Compliance ☐ Component ☐ Overall Envelope Energy Front Orientation: N. E. S. W or in Degrees: ☐ 0 deg ☐ HVAC SYSTEM DETAILS Equipment Tags (item or System Tags (ite. AC-1. RTU-1, HP-1) ☐ CU/FC P-1, 2 Equipment Type 3 ☐ Split DX Number of Systems ☐ 2 ☐ Max Allowed Heating Capacity 1 ☐ 15,000 Btu/hr Cooling Efficiency 1 ☐ 16.0 SEER / 13.0 EER Duct Location/ R-Value When duct testing is required, submit Mex Allowed Heating Capacity 1 ☐ No Economizer Thermostat ☐ Setback Required Equipment Type 3 ☐ Inspection Criteria	ned Sp e TDV	12,5 Ho paces I	tel/Motel G Uncon (affida	n/a Guest Room ditioned Spaces
Building Type: ZI Nonresidential ☐ High-Rise Residence Schools (Public School) ☐ Relocatable Public School Bidg. ZI Condition: ☐ New Construction ☐ Addition Approach of Compliance: ☐ Component ☐ Overall Envelope Energy Front Orientation: N, E, S, W or in Degrees: ☐ 0 deg ☐ HVAC SYSTEM DETAILS Equipment²	ned Sp e TDV	☐ Ho paces ☐ ☐ Alte	tel/Motel G Uncon (affida	Guest Room ditioned Spaces
Building Type: Z Nonresidential High-Rise Residence Schools (Public School) Relocatable Public School Bidg. Z Condition Schools (Public School) Relocatable Public School Bidg. Z Condition Phase of Construction: Z New Construction Addition Overall Envelope Representation: N. E. S. Wor in Degrees: Odeg HVAC SYSTEM DETAILS Equipment Item or System Tags (i.e. AC-1. RTU-1, HP-1) CU/FC P-1, 2 Equipment Type ³ . Split DX Number of Systems 2 Max Allowed Heating Capacity 18,000 Btu/hr Minimum Heating Efficiency 17,000 Btu/hr Max Allowed Cooling Capacity 16,000 Btu/hr Cooling Efficiency 17,000 Btu/hr When duct testing is required, submit MECH-4A & MECH-4-HERS (i.e. AC-1. RTU-1, HP-1) Equipment Type ³ No Economizer Required Constant Volume Equipment Type ³ Number of System Tags (i.e. AC-1. RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity 1 Inspection Criteria Insp	ned Sp e TDV	oaces [Uncon (affida	ditioned Spaces
Schools (Public School)	ned Sp e TDV	oaces [Uncon (affida	ditioned Spaces
Phase of Construction: Description: Descriptio	VQT e	□ Alte		
Approach of Compliance: Component Overall Envelop Energy Front Orientation: N. E. S., W or in Degrees: 0 deg HVAC SYSTEM DETAILS Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1. RTU-1, HP-1) CU/FC P-1, 2 Equipment Type ³ . Split DX Number of Systems 2 Max Allowed Heating Capacity ¹ 18,000 Btu/hr Minimum Heating Efficiency ¹ 16.0 SEER / 13.0 EER Duct Location/ R-Value 1/a When duct testing is required, submit MECH-44 & MECH-4-HERS Equipment ² Inspection Criteria			CIGROIL	****
Front Orientation: N, E, S, W or in Degrees: 0 deg HVAC SYSTEM DETAILS Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1. RTU-1, HP-1) CU/FC P-1, 2 Equipment Type ³ . Split DX Number of Systems 2 Max Allowed Heating Capacity ¹ 18,000 Btu/hr Minimum Heating Efficiency ¹ 16,00 Btu/hr Cooling Efficiency ¹ 16.0 SEER / 13.0 EER Duct Location/ R-Value 17/a When duct testing is required, submit MECH-4A & MECH-4-HERS No Economizer Thermostat Setback Required Fan Control Constant Volume Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MeCH-4A & MECH-4-HERS	FIE		conditions	d (file affidavit)
Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1. RTU-1, HP-1) CU/FC P-1, 2 Equipment Type ³ . Split DX Number of Systems 2 Max Allowed Heating Capacity ¹ 18,000 Btu/hr Minimum Heating Efficiency ¹ 15,000 Btu/hr Cooling Efficiency ¹ 16.0 SEER / 13.0 EER Duct Location/ R-Value n/a When duct testing is required, submit MECH-4A & MECH-4-HERS Equipment ² Inspection Criteria Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Inspection Criteria Inspection Criteria Inspection Criteria Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS When duct testing is required, submit MECH-4A & MECH-4-HERS	FIE			- (inc aindavii)
Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1. RTU-1, HP-1) CU/FC P-1, 2 Equipment Type ³ Split DX Number of Systems 2 Max Allowed Heating Capacity ¹ 18,000 Btu/hr Minimum Heating Efficiency ¹ 15,000 Btu/hr Cooling Efficiency ¹ 16.0 SEER / 13.0 EER Duct Location/ R-Value n/a When duct testing is required, submit MECH-4A & MECH-4-HERS Equipment System Tags (i.e. AC-1. RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Minimum Heating Efficiency ¹ Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS	FIE			
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Item or System Tags (i.e. AC-1. RTU-1, HP-1) Equipment Type ⁹ . Split DX Number of Systems 2 Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS Fan Control Equipment ² Item or System Tags (i.e. AC-1. RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				lequirements
(i.e. AC-1. RTU-1, HP-1) Equipment Type ³ . Number of Systems 2 Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ² 15,000 Btu/hr Cooling Efficiency ¹ 16.0 SEER / 13.0 EER Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS No Economizer Thermostat Fan Control Constant Volume Equipment ² Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Minimum Heating Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS		Pass	Fall - D	escribe Reason ²
Number of Systems Max Allowed Heating Capacity¹ Minimum Heating Efficiency¹ Max Allowed Cooling Capacity¹ Max Allowed Cooling Capacity¹ Tooling Efficiency¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS Fan Control Equipment² Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type³ Number of Systems Max Allowed Heating Capacity¹ Minimum Heating Efficiency¹ Max Allowed Cooling Capacity¹ Max Allowed Cooling Capacity¹ Max Allowed Cooling Capacity¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS		D		D
Max Allowed Heating Capacity Max Allowed Heating Efficiency Max Allowed Cooling Capacity Max Allowed Heating Capacity Max Allowed Capacity Max Allowed Cooling Capacity Mount Cooling Efficiency Max Allowed Cooling Capacity Multiple Capacity Max Allowed Cooling Capacity Max Allowed Cooling Capacity Mount Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Most Economizer Thermostat Equipment ² Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Minimum Heating Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MCH-4A & MECH-4-HERS No Setback Required Constant Volume Inspection Criteria Inspection Criteria Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Max Allowed Cooling Capacity Max Allowed Cooling Capacity Max Allowed Cooling Capacity Minimum Heating Efficiency Max Allowed Cooling Capacity Minimum Heating Efficiency Duct Location/ R-Value Max Allowed Cooling Capacity Max Allowed Cooling Capacity Max Allowed Cooling Capacity Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS 15,000 Btu/hr 16.0 SEER / 13.0 EER No No No Seconomizer No No Setback Required Constant Volume Inspection Criteria Inspection Criteria Max Plowed Heating Capacity Minimum Heating Efficiency Max Allowed Cooling Capacity Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS			0	
Cooling Efficiency¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS Economizer Thermostat Fan Control Equipment² Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type³ Number of Systems Max Allowed Heating Capacity¹ Minimum Heating Efficiency¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS Economizer Thermostat Fan Control Equipment ² Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
When duct testing is required, submit MECH-4A & MECH-4-HERS Economizer Thermostat Fan Control Equipment ² Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
MECH-4A & MECH-4-HERS Economizer Thermostat Fan Control Equipment ² Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Economizer No Economizer Thermostat Setback Required Fan Control Constant Volume				
Fan Control Constant Volume Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Equipment ² Inspection Criteria Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS		0		
Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Item or System Tags (i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS	FIE	LD INSPEC	TION ENE	RGY CHECKLIST
(i.e. AC-1, RTU-1, HP-1) Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS		Pass F		escribe Reason ²
Equipment Type ³ Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS		0		
Number of Systems Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				0
Max Allowed Heating Capacity ¹ Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS	_			
Minimum Heating Efficiency ¹ Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Max Allowed Cooling Capacity ¹ Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Cooling Efficiency ¹ Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
Duct Location/ R-Value When duct testing is required, submit MECH-4A & MECH-4-HERS				
When duct testing is required, submit MECH-4A & MECH-4-HERS				
				О
Thermostat				
Fan Control				
If the Actual installed equipment performance efficiency and capacity is less than the Proposed the building plans) the responsible party shall resubmit energy compliance to include the new c2 For additional detailed discrepancy use Page 2 of the Inspection Checklat Form. Compliance f 3. Indicate Equipment Type: Gas (Pkg or, Split), VAV HP (Pkg or split), Hydronic PTAC, or other	hanges. ails if a l	•		omittal or from
EnergyPro 5.1 by EnergySoft		ID: 09091		Page 19 of 3

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST	(Part 2 of 4)	MECH-1
Project Name BCSD School Building P Classrpoms		Date 1/5/201
Discrepancies:		
		······

		······································

	Annual Control of the	······································

MECHANICAL VENTILATION AND REHEAT

CERTIFICATE OF COMP	LIA	VCE and	FIELD II	<u> VSPECI</u>	IUN ENE	RGY C	1ECKLI	S1 (F	Part 3 of	4) W	ECH
Project Name	1									Date	C 100 45
BCSD School Building P Classroo		······································								77.	5/2012
Required Acceptance Tests	1										
Designer:	1										
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 list design	od all equipme ates the Section	int that require in in the Appei	s an accepta ndix of the No	nce test. If all presidential R	equipment o	a certain typ	ne requires a	test list the	enuinment de	scription
Duilding Departments	***	\									
Building Departments: Systems Acceptance: Before occupant	ov norm	aranted for	r a newly cons	structed buildin	വെ വേടവാഹം വ	r a naw sna	a-conditioni	na evetom ee	anina a buildi	na or onno i	anarnt
normal use, all control devices serving to Systems Acceptance: Before occupant	ne buildi	ng or space st	rall be certified	as meeting t	he Acceptanc	e Requireme	nts for Code	Compliance	a bunui L	ng or space is	s operan
Systems Acceptance: Before occupant	cy perm	it is granted. A	ii newly install	ed HVAC equ	ipment must t	oe tested usi	ng the Accep	otance Requi	rements.		
The MECH-1C form is not considered a	complet	ed form and is	not to be acc	epted by the t	uilding depar	tment unless	the correct l	ooxes are ch	ecked. The e	automent real	uirina te
person performing the test (Example, H)	VAC inst	aller TAR CON	tractor, contro	is contractor.	PE in charge	of project) as	d what Acce	entance fest	must be cond	jucted. The fol	llowing
checked-off forms are required for ALL	newly in	stalled equilitim	ent. In addition	n a Certificate	of Acceptanc	e forms shal	be submitte	d to the build	ding departme	ent that certific	es plans
specifications, installation, certificates, a properly filled out and signed forms befo	nd oper	ating and malif	feuguce mou	nation meet ti	ne requiremen	nts of §19-19	3(b) and Title	2-24 Part 6	The building in	rspector must	receive
property integ our and signed forms beto	te me o	unumg can rec	BIAS JEL PACE	pundy.					·····		
		4504.01	1 11501104	MECHAN	MECHEN	MECHICA	1 MET COL 7A	MERCHAN	14500.00	1.40001.404	1
TEST DESCRIPTION	······································	MECH-2A	MECH-3A	MECH-4A	MECH-5A	MECH-6A	MECH-7A	MECH-8A	MECH-9A	MECH-10A Hydronic	MECH
TEST DESCRIPTION		Outdoor	Constant		MECH-5A	Demand			Supply	Hydronic System	Autor
TEST DESCRIPTION		Outdoor Ventilation	Constant Volume &	Air		Demand Control	Supply	Valve	Supply Water	Hydronic System Variable	Autor
TEST DESCRIPTION Equipment Requiring Testing or Verification	Qty.	Outdoor	Constant		MECH-5A Economizer Contcols	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Con
	Qty.	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone	Air Distribution	Economizer	Demand Control Ventilation	Supply Fan VAV	Valve Leakage Test	Supply Water Temp.	Hydronic System Variable Flow	Autor Dem Sh Cor
Equipment Requiring Testing or Verification		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	Autor Dem Sh Cor
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	2	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	Autor Den Sh Cor
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Ouldoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls IZI	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Con
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV 91 [2]	Constant Volume & Single-Zone Unitary	Air Distribution Ducits	Economizer Controls II	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Con
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls IZ	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test □ □	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Con R
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary Unitary Unitary	Avr Distribution Ducts	Economizer Controls 27	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test □ □ □ □ □	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Derr Sh Con
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Avr Distribution Ducts	Economizer Controls III	Demand Control Ventilation DCV	Supply Fart VAV	Valve Leakage Test □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Derr Sh Con
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Avr Distribution Ducts	Economizer Controls II	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Demm Sh Con
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Arr Distribution Ducts	Economizer Controls III	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Con
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Arr Distribution Ducts	Economizer Controls ZI	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Sh Com
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Cutdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Awr Distribution Ducts	Economizer Controls Z	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Com
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Cutdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Aw Distribution Ducts	Economizer Controls II	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Autor Dem Sh Com
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump PUHY-P96 Run as Standard Heat Pump	2	Cutdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Aw Distribution Ducts	Economizer Controls III	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	MECH Autor Dem Sh Con

CERTIFICATE OF COM	PLIAN	CE and F	IELD INSP	ECTION E	NERGY CH	ECKLIST	(Part 4 of 4)	MECH-1C
Project Name BCSD School Building P Classro	oome							Date 1/5/2012
TEST DESCRIPTION	JOHNS	MECH-12A	MECH-13A	MECH-14A	MECH-15A			1702012
Equipment Requiring Testing	Qtv.	Fault Detection & Diagnostics for DX Units	Automatic Fault Detection & Diagnostics for Air & Zone	Distributed Energy Storage DX AC Systems	Thermal Energy Storage (TES) Systems		Test Performed By	
PUHY-P192 Run as Standard Heat Pump	2	2 1						
PUHY-P96 Run as Standard Heat Pump	2	[Z]	0					
Mitsubishi MUY-A15NA / MSY-A15NA	2							
						Marian	***************************************	
					0			
			0					
		0			0		***************************************	
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Project Name BCSD School Building P Cl	assrooms			Date 1/5/2012
	···	ate Air Systems Type (Ce	ntral, Single Zone, Package,	VAV, or etc)
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	3.45	HP P-1	HP P-2	HP P-3
Number of Systems		1	1	7
	Indicate Pag	e Reference on Plans or	Schedule and indicate the a	oplicable exception
MANDATORY MEASURES	T-24 Sections			
Heating Equipment Efficiency	112(a)	3.20 COP	3.30 COP	3 20 COP
Cooling Equipment Efficiency	112(a)	10 6 EER	11 0 EER	10.6 EER
HVAC Heat Pump Thermostat	112(b), 112(c)	Yes	Yes	Yes
Furnace Controls/Thermostat	112(c), 115(a)	n/a	n/a	n/a
Natural Ventilation	121(b)			
Mechanical Ventilation	121(b)	1,652 cfm	823 cfm	1,430 cfm
VAV Minimum Position Control	121(c)	No	No	No
Demand Control Ventilation	121(c)	Yes	Yes	Yes
Time Control	122(e)	Programmable Switch	Programmable Switch	Programmable Switt
Setback and Setup Control	122(e)	Setback Required	Setback Required	Setback Required
Outdoor Damper Control	122(f)	Auto	Auto	Auto
Isolation Zones	122(g)	n/a	n/a	n/a
Pipe Insulation	123	Refrigerant	Refrigerant	Refngerant
Duct Location/ R-value	124	Attic, Roof Ins / 4.2	Attic, Roof Ins / 4 2	Attic, Roof Ins / 4.2
PRESCRIPTIVE MEASURES		n/a	n/a	n/a
Calculated Design Heating Load	144(a & b)	124,915 Btu/hr	67,454 Btu/hr	124,915 Btu/hr
Proposed Hoating Capacity	144(a & b)	n/a	n/a	n/a
Calculated Design Cooling Load	144(a & b)	190,884 Btu/hr	95,503 Btu/hr	189,743 Blu/hr
Proposed Cooling Capacity	144(a & b)	Variable Speed	Variable Speed	Variable Speed
Fan Control	144(c)			
DP Sensor Location	144(c)	***************************************		····
Supply Pressure Reset (DDC only)	144(c)	No	No	No
	144(d)	Diff. Temp (Integrated)	Diff. Temp (Integrated)	Diff. Temp (Inlegrate
Simultaneous Heat/Cool		Din. (Chip (Mogration)		
Simultaneous Heat/Cool	144(e)	Coldest Zone	Coldest Zone	Coldest Zone
Simultaneous Heat/Cool Economizer Heat Air Supply Reset	144(1)	Coldest Zone	Coldest Zone Warmest Zone	Coldest Zone Warmest Zone
Símultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset	144(f) 144(f)	Coldest Zone Warmest Zone	Coldest Zone Warmest Zone	Coldest Zone Warmest Zoпe
Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating ¹	144(f) 144(f) 144(g)			
Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset	144(f) 144(f)			

	IREMENTS		(Part 1 of 2)	MECH
Project Name BCSD School Building P Cl	assrooms			Date 1/5/201
	Indic	ate Air Systems Type (Ce	ntral, Single Zone, Package, V	'AV, or etc)
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	X-82 (C) 83	HP P-4	CU/FC P-1, 2	
Number of Systems	30.59	1	2	
	Indicate Pag	e Reference on Plans or	Schedule and indicate the app	licable exception
MANDATORY MEASURES	T-24 Sections			
Heating Equipment Efficiency	112(a)	3 30 COP	n/a	
Cooling Equipment Efficiency	112(a)	11 0 EER	16 0 SEER / 13.0 EER	
HVAC Heat Pump Thermostat	112(b), 112(c)	Yes	n/a	
Furnace Controls/Thermostat	112(c), 115(a)	n/a	n/a	**************************************
Natural Ventilation	121(b)			
Mechanical Ventilation	121(b)	732 clm	26 cfm	
VAV Minimum Position Control	121(c)	No	No	
Demand Control Ventilation	121(c)	Yes	No	
Time Control	122(e)	Programmable Switch	Programmable Switch	
Setback and Setup Control	122(e)	Setback Required	Setback Required	
Outdoor Damper Control	122(f)	Auto	Auto	
Isolation Zones	122(g)	n/a	n/a	
Pipe Insulation	123	Refrigerant		
Duct Location/ R-value	124	Attic, Roof Ins / 4.2	n/a	
DDECODIDTIVE MEACHDES				
PRESCRIPTIVE MEASURES		n/a	n/a	
Calculated Design Heating Load	144(a & b)	n/e 67,454 Btu/hr	n/a 0 Stu/hr	
Calculated Design Heating Load Proposed Heating Capacity	144(a & b) 144(a & b)	······································		
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load	144(a & b) 144(a & b) 144(a & b)	67,454 Btu/hr	0 Btu/hr	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity	144(a & b) 144(a & b) 144(a & b) 144(a & b)	67,454 Btu/hr n/a	0 Stu/hr n/e	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c)	67,454 Btu/hr n/a 95.003 Btu/hr	0 Stu/hr n/e 21,190 Stu/hr	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location	144(a & b) 144(c)	67,454 Btu/hr n/a 95.003 Btu/hr	0 Stu/hr n/e 21,190 Stu/hr	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only)	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c)	67,454 Btu/hr n/a 95.003 Btu/hr	0 Stu/hr n/e 21,190 Stu/hr	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool	144(a & b) 144(c) 144(c)	67,454 Btw/hr n/a 95,003 Btw/hr Variable Speed	0 Btu/hr n/a 21,190 Btu/hr Constant Volume	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d)	67,454 Btw/hr n/a 95,003 Btw/hr Variable Speed No	0 Btu/hr n/a 21,190 Btu/hr Constant Volume Na	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e)	67,454 Btu/hr n/a 95.003 Btu/hr Variable Speed No Diff Temp (Integrated)	0 Btu/hr n/a 21,190 Btu/hr Constant Volume No No Economizer	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset	144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f) 144(f)	67,454 Btw/hr n/a 95,003 Btw/hr Variable Speed No Diff Temp (Integrated) Coldest Zone	0 Btu/hr n/e 21,190 Btu/hr Constant Volume Na No Economizer Constant Temp	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating	144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f) 144(f) 144(f)	67,454 Btw/hr n/a 95,003 Btw/hr Variable Speed No Diff Temp (Integrated) Coldest Zone	0 Btu/hr n/e 21,190 Btu/hr Constant Volume Na No Economizer Constant Temp	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating Air Cooled Chiller Limitation Duct Leakage Sealing If Yes, a	144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f) 144(f) 144(f) 144(g) 144(f)	67,454 Btw/hr n/a 95,003 Btw/hr Variable Speed No Diff Temp (Integrated) Coldest Zone	0 Btu/hr n/e 21,190 Btu/hr Constant Volume Na No Economizer Constant Temp	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer Heat Air Supply Reset	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f)	67,454 Btw/hr n/a 95,003 Btw/hr Variable Speed No Diff Temp (Integrated) Coldest Zone	0 Btu/hr n/e 21,190 Btu/hr Constant Volume Na No Economizer Constant Temp	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating Air Cooled Chiller Limitation Duct Leakage Seating If Yes, a MECH-4-A must be submitted	144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f) 144(f) 144(f) 144(g) 144(g) 144(h)	67,454 Btu/hr n/a 95,003 Btu/hr Variable Speed No Diff Temp (Integrated) Coldest Zone Warmest Zone	O Btu/hr n/a 21,190 Btu/hr Constant Volume No No Economizer Constant Temp Constant Temp No	electro heat is use
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location Supply Pressure Reset (DDC only) Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating Air Cooled Chiller Limitation Duct Leakage Sealing If Yes, a MECH-4-A must be submitted 1 Total installed capacity (MBtu/hr, explain which exception(s) to §1.	144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f) 144(f) 144(g) 144(l) 144(k)	67,454 Btu/hr n/a 95,003 Btu/hr Variable Speed No Diff Temp (Integrated) Coldest Zone Warmest Zone	O Btwhr n/a 21,190 Btwhr Constant Volume Na No Economizer Constant Temp Constant Temp No No	electric heat is used

		MECH	IANICAL	VENTILATION	ON (§121(b)2)				REHE	AT LIMITA	TION (§144	(d))	
		AR	EA BASIS		000	CUPANCY	BASIS				VAV MIN	IMUM		
	A	В	С	D	E	F	G	н	í	J	K	L	M	N
Zone	System	Condition Area (ft²)	CFM per ft ²	Min CFM By Area B X C	Number Of People	CFM per Person	Min CFM by Occupant E X F	REQ'D V.A. Max of D or G	Design Ventilation Air CFM	50% of Design Zone Supply CFM	BX 0.4 CFM / ft ^z	Max. of Columns H. J. K, 300 CFM	Design Minimum Air Setpoint	Transfer Air
Special Ed 100		1,136	0.38	432				432	371					60
Classroom 101		963	0.38	366				366	366					
Classroom 102		963	0.38	366				366	366					
Classroom 103		963	0.38	366				366	366					
Work Room 112		240	0.38	91				91	91					
Nork Room 113		240	0 38	91			1	91	91					
HP P-1							Total	1,712	1.652					
Classroom 104		963	0 38	366				366	366					
Classroom 105		963	0 38	366				366	366					
Nork Room 114		240	0 38	91				91	91					
HP P-2							Totai	823	823					
Special Ed 106		874	0.38	332				332	332					
Classroom 107		963	0.38	366				366	366					
Classroom 108		963	0 38	366				366	366					
Classroom 109		963	0.38	366				366	366					
				Totals						Column I Total	Design Vent	tilation Air		
						•								
C	Minimum ventilati	on rate per Secti	on §121, T	able 121-A.										
E	Based on fixed se	eat or the greater	of the expe	cted number	of occupant	s and 50%	of the CBC oc	cupant load	for egress pu	moses for space	s without fixe	ed seating.		
Н	Required Ventilat	on Air (REQ'D V	.A.) is the la	arger of the ve	ntilation rat	es calculate	ed on an AREA	BASIS or	OCCUPANCY	BASIS (Column	D or G).			
1	Must be greater t	nan or equal to H	. or use Tra	ınsfer Aır (colu	ımn N) to m	ake up the	difference.							
J	Design fan supph	CFM (Fan CFM	x 50%; or	the design zo	ne ouldoor	airflow rate	per §121.							
К	Condition area (fl	2) x 0.4 CFM / it2,	or											
L	Maximum of Colu	mns H, J, K or 3	00 CFM											
М	This must be less	than or equal to	Column L a	and greater tha	an or equal	to the sum	of Columns H	plus N.						
N	Transfer Air must equal to the differ	be provided whe	re the Required	uired Ventilation	on Air (Colu	mn H) is gr	eater than the	Design Min	mum Air (Col	umn M). Where i	equired, tran	sfer air must	be greater th	nan or
EnergyPro 5.1		User Numi		V STRUCKTOT PA	, Committee		le: 2012-01-05		wy, Goldsii	1D 09091			Par	ge 25 of 30

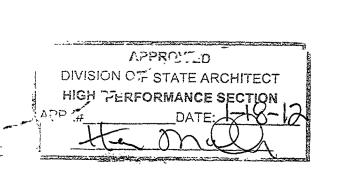
MECHA	NICAL VE	NTILATIO	N AND	REHE	AT								MEC)H-3
Project Name BCSD Sch	ool Building F	Classrooms											Date 1/5/2	2012
			ANICAL	VENTILATIO	ON (8121	(b)2)	***************************************			REHE	AT LIMITA	TION (§144	(d))	
		7	EA BASIS			CUPANCY	BASIS				VAV MIN	***************************************	(-2/	
	Α	В	С	D	E	F	G	н	1	3	K	L	M	N
Zon	e/System	Condition Area (11°)	CFM per ft?	Min CFM By Area B X C	Number Ot People	CFM per Person	Min CFM by Occupant E X F	REQ'D V.A. Max of D or G	Design Ventilation Air CFM	50% of Design Zone Supply CFM	BX0.4 CFM/ft ²	Max. of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Trans Ai
HP P-3							Total	1,430	1,430					
Classroom 110	7	963	0.38	366				366	366					
Classroom 11	7	963	0 38	366				366	366					
HP P-4							Total	732	732	*****************				
Electrical Root	ns	176	0 15	26				26	26					
CU/FC P-1, 2	?						Total	26	26					
				Totals						Column I Total	Design Ven	tilation Air		
				Otals				L	L	Columnitions		makon Asi		L
С	Mınimum venti	ation rate per Section	on §121, T	able 121-A.										
E	Based on fixed	seat or the greater	of the expe	cted number	of occupan	nts and 50%	of the CBC oc	cupant load	for egress pu	rposes for space	es without fix	ed seating.		
Н	Required Vent	lation Air (REO'D V	.A.) is the k	arger of the ve	entilation ra	ites calculat	ed on an ARE	A BASIS or	OCCUPANCY	BASIS (Column	D or G).			
1	Must be greate	Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference.												
J	Design fan sup	ply CFM (Fan CFM) x 50%; or	the design zo	ne outdoor	r airflow rate	per §121.					······	·····	
K	Condition area	(ft²) x 0.4 CFM / ft²	or											
Ł	Maximum of C	olumns H, J. K, or 3	00 CFM											
M	This must be le	ess than or equal to	Column L	and greater th	an or equa	I to the sum	of Columns H	plus N.						
N	Fransier Air m	ist be provided whe ference between th	ere the Req	ured Ventilati	on Air (Col	umn H) is gi	reater than the	Design Min	imum Air (Col	umn M). Where	required, ira	nster att mus	r be greater l	nan or

FNAFI	OPE MANDATORY MEASURES: NONRESIDENTIAL	ENV-MA
Project Nam		Date 1/5/2012
DESCR	hool Building P Classrooms	77072072
	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	alifornia 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.	density requirements of
§118(f):	The opaque portions of framed demisting walls in nonresidential buildings shall have insulation of no less than R-13 between framing members.	with an installed R-valu
§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 nonresidential double doors (swinging).	eding 0.3 cfm/ft.² of dential single doors
§116(a) 2:	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-	factor.
§116(a) 3.	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fer applicable default SHGC.	nestration, or the
§116(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the buil weatherstripped (except for unframed glass doors and fire doors).	ding, and shall be

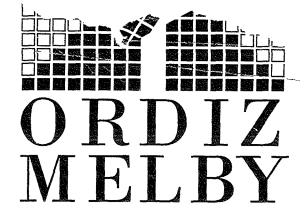
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roject Name	VICAL MANDATORY MEASURES: NONRESIDENTIAL	MECH-MM					
CSD Scho	ol Building P Classrooms	Date 1/5/2012					
	t and System Efficiencies						
§111.	Any appliance for which there is a California standard established in the Appliance Efficiency Re with the applicable standard.	egulations 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.						
§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.	Each space conditioning system serving building types such as offices and manufacturing facilit 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 procapabilities that prevent the loss of the device's program and time setting for at least 10 hours if	ime switch with an s. The time switch gram backup					
18	An occupancy sensor to control the operating period of the system; or						
1C.	A 4-hour timer that can be manually operated to control the operating penod of the system						
2.	ch space conditioning system shall be installed with controls that temporarily restart and temporarily operate the stem as required to maintain a setback heating and/or a setup cooling thermostat setpoint.						
§122(g)·	Each space conditioning system serving multiple zones with a combined conditioned floor area 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 be setback or shut off bed above.					
§122(c):	Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint sto authorized personnel.	ps accessible only to					
§122(b)·	Heat pumps shall be installed with controls to prevent electric resistance supplementary heater 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 coolicapable of providing a deadband of at least 5 degrees F within which the supply of heating and reduced to a minimum.	wer. For cooling, the na. the control shall be					
Ventilatio	······································						
§121(e):	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation these plans.	ion rates as specified					
§122(f):	All gravity ventilating systems shall be provided with automatic or readily accessible manually of 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 sysbuilding or space shall be certified as meeting the Acceptance Requirements for Code Compilar	tems serving the					
Service W	ater Heating Systems						
§113(c)	Installation	***************************************					
3	Temperature controls for public lavatories. The controls shall limit the outlet Temperature to 110						
2.	Circulating service water-heating systems shall have a control capable of automatically turning of when hot water is not required.	off the circulating pump					

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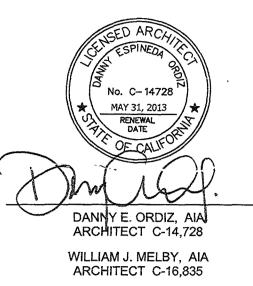






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93306

NEW MIDDLE SCHOOL 4115 VINELAND ROAD BAKERSFIELD CALIFORNIA 93306

FOF

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