Project N	TIFICATE OF COMPLIANCE lame School Building N Classrooms			(; α)	t 1 of	<u> </u>	Dat	TG e /5/20							
	OR LIGHTING SCHEDULE and FIELD INS	PECTIO	N ENEF	GY CH	ECKLI	ST			-						
	tion Certificate, LTG-1- INST (Retain a copy and verify form					*********	spector								
	The second secon				٠		spector								
A separ	ate of Acceptance, LTG-2A and LTG-3A (Retain a copy and ate Lighting Schedule Must Be Filled Out for Conditioned arting Schedule is only for														
Ø	CONDITIONED SPACE	□ ı	JNCONDIT	IONED SP	ACE										
Ø	The actual indoor lighting power listed below includes all with §146(a).														
Ø	Only for offices: Up to the first 0.2 watts per square foot calculation of actual indoor lighting power density in account of actual indoor lighting power density in account of the control of the contr														
	Luminaire (Type, Lamps, Ballasts)														
A	В	E	F	G		Н									
				How w	rattage termined			lnso	ector						
None or Item Tag	Complete Luminaire Description <sup>1</sup> (r.e., 3 tamp fluorescent troffer, F3218, one dimmable electronic ballasts)		Watts per Luminaire	CEC Default From NA8	According To §130 (d or e)	Number of Luminaires	Installed Watts (D X F)	Pass	Fair						
	Designed Allowance: 1136 sqft at 0,477 w/sf				Ħ		542	0	O						
	Designed Allowance. 176 sqft at 0.477 w/sf						84	□.	Ø						
	Designed Allowance. 240 sqft at 0.477 w/sf						114	O	O.						
	Designed Allowance 240 sqft at 0 477 w/sf						114	ū	O						
	Designed Allowance 240 sqft at 0.477 w/sf						114	Q.	, EJ						
	Designed Allowance 240 sqft at 0.477 w/sf					<u> </u>	114		П						
	Designed Allowance: 874 sqft at 0.477 w/sf						417	O.	· O						
	Designed Allowance <sup>-</sup> 963 sqft at 0.477 w/sf						459	0	D						
	Designed Allowance. 963 sqft at 0 477 w/sf					ļ	459								
	Designed Allowance 963 sqft at 0 477 w/sf					ļ	459	0							
	Designed Allowance: 963 sqft at 0 477 w/sf					-	459	<u>D</u>	O						
	Designed Allowance 963 sqft at 0 477 w/sf						459		-						
	Designed Allowance 963 sqft at 0.477 w/sf						459		(D)						
	Designed Allowance. 963 sqft at 0.477 w/sf					<del> </del>	459								
	Designed Allowance: 963 sqft at 0 477 w/sf						459								
	Designed Allowance: 963 sqft at 0.477 w/sf					-	459								
	Designed Allowance. 963 sqft at 0 477 w/sf						459	7.2							
	Designed Allowance 963 sqft at 0.477 w/sf						459	9	Ve. 37						
	Designed Allowance. 963 sqft at 0 477 w/sf					<del>  </del>	459								
	Designed Allowance 963 sqft at 0 477 w/sf								10%						
	Building total number of pages		Ins	nstalled Wat stalled Wat (S er into LTG	ts Buildin um of all	g Total pages)	7,472	<u> 21874</u>	29431 C						

	TIFICATE OF COMPLIANCE	·····		(Par	t 1 of :	3)	L Dat	TG	-1
Project BCSD	Name School Building N Classrooms							e /5/20	<u> </u>
NDC	OR LIGHTING SCHEDULE and FIELD IN	ISPECTIO	N ENEF	RGY CH	ECKLI	ST			
nstalla	ation Certificate, LTG-1- INST (Retain a copy and verify for	m is completed	and signed	)		Field In	spector		
Certific	cate of Acceptance, LTG-2A and LTG-3A (Retain a copy	and verify form	is complete	d and signe	d)	Fleid in	spector		
	rate Lighting Schedule Must Be Filled Out for Conditione hting Schedule is only for.	d and Uncond	itioned Sp	aces Instal	led Lightii	ng Power	r listed or	1	
Ø	CONDITIONED SPACE			IONED SF					_
<b>E</b> Z)	The actual indoor lighting power listed below includes with §146(a).								
Ø	Only for offices. Up to the first 0.2 watts per square for calculation of actual indoor lighting power density in ac 0.2 watts per square foot is totaled below.	t of portable li cordance with	ghting sha the Excer	Il not be re ation to §14	quired to 16(a). All p	be includ oortable l	led in the lighting in	) OXC	98
	Luminaire (Type, Lamps, Ballasts)			Ins	talled W	atts		,	
Α	В	С	D_		E	F	G		Н
					vattage termined			insp	
					©	]			K
					d or	- K	installed Watts (D X F)		
None			Watts per Luminalre¹	CEC Default	According To §130 (d c	Number of Luminaires	₽ Q		1
or Item	Complete Luminaire Description' (i.e, 3 lamp fluorescent troffer,		Vatts	From	န် ဝ ၂၀ န	Juna,	nsta Natt	Pass	100
Tag	F32T8, one dimmable electronic ballasts)		> 1	NA8		2 3		2.513	4
	Designed Allowance 963 sqft at 0 477 w/sf						459		
							***************************************		1
				+					
						<del> </del>			20
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	100 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1							o	
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								3 <b>0</b> )	8
				Installed W			459		
	Building total number of pages:		Ins	talled Wat (S	ts Buildin um of all				
	building total number of pages.		Ente	er into LTG			7,932		
Watta	ge shall be determined according to Section 130 (d and e) Watt then describe on Page 2 of the Inspection Checklist Form and to	age shall be rat ake appropriate	ing of light f action to co	ixture, not re rrect Verify	ating of buli building pl	o ans if nec	essary		
	ro 5 1 by EnergySoft User Number 5232 RunCod	e: 2012-01-057		ID 09				qe 18	

CERTIFICATE OF COMPLIANO Project Name	<i></i>		(Part 2	01 0)	Date	G-1C
BCSD School Building N Classrooms					1/5	/2012
INDOOR LIGHTING SCHEDULE and FIELD				.1	250.62	<del></del>
Fill in controls for all spaces: a) area controls, b) in automatic daylighting controls for daylit areas > 2, general lighting controlled separately from display controls for retail stores > 50,000 ft², in accordance	, ornamental and	i display case lighting	ing controls for lighting control and g) deman	dayiit areas > s, f) tailored li d responsive :	ghting co automatic	ntrois –
MANDATORY LIGHTING CONTROLS - FIE	LD INSPECT	ON ENERGY CHE	CKLIST		FI Insp	eld ector
Type/ Description	Number of Units	Location in Bu	ııldıng	Special Features	Pass	Fail
			-		, O	0
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and the state of t					o.	i i
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According to the second						<u>.</u> П
			,,		學直法	
SPECIAL FEATURES INSPECTION CHECK The local enforcement agency should pay special justification and documentation, and special verific and may reject a building or design that otherwise submitted.	attention to the i	tems specified in this enforcement agency	checklist. Thes	adequacy of	the rustifi	cation.
Field Inspector's Notes or Discrepancies:						
EnergyPro 5.1 by EnergySoft User Number 5232	RunCoda: 20	12-01-05T15:53:42	ID. 09091		Page	19 of 34

CERTIFICATE OF	COMPLIANCE		(Part 3 of 3	
Project Name BCSD School Building i	N Classrooms			Date 1/5/2012
CONDITIONED AND UN	CONDITIONED SPACE	E LIGHTING N	UST NOT BE COMBINED FOR C	OMPLIANCE
Indoor Lighting P	ower for Conditioned Sp	aces	Indoor Lighting Power for Unc	onditioned Spaces
		Watts		Watts
Installed Lighting (from Conditioned LTG-1C, Pag	je 2)	7,932	Installed Lighting (from Unconditioned LTG-1C, Page 2)	
Lighting Control Credit Conditioned Spaces (from LTG-	- -2C)	0	Lighting Control Credit Unconditioned Spaces (from LTG-2C)	
Adjusted Installed Lighting Power	<b></b>	7,932	Adjusted Installed Lighting Power	=
Complies if Installed ≤ Allo	wed	1	Complies if Installed ≤ Allowed	<b>1</b>
Allowed Lighting Power Conditioned Spaces (from L	TG-3C or PERF-1)	7,932	Allowed Lighting Power Unconditioned Spaces (from LTG-3C)	
system with controls is instal The LTG-2A and LTG-3A fo	lied in the building or space orms are not considered or	omplete forms a	ly constructed building or space or whe ed as meeting the Acceptance Require and are not to be accepted by the enforc	ments ement agency unless
system with controls is instal The LTG-2A and LTG-3A fo the boxes are checked and/o agency that certifies plans, s of §10-103(b) of Title 24 Par	lled in the building or spacerms are not considered or filled and signed. In adopting the translation of the The field inspector mucopy of the LTG-2A and Lirecords.	omplete forms and dition, a Certificates, and est receive the pr TG-3A for each	ed as meeting the Acceptance Require	ments cement agency unless tted to the enforcement meet the requirements re the building can
system with controls is instal The LTG-2A and LTG-3A fo the boxes are checked and/c agency that certifies plans, s of §10-103(b) of Title 24 Pari receive final occupancy. A c	lled in the building or spacerms are not considered or filled and signed. In adopting the translation of the The field inspector mucopy of the LTG-2A and Lorrecords.	omplete forms and dition, a Certificate certificates, and a st receive the pr	ad as meeting the Acceptance Require nd are not to be accepted by the enforc te of Acceptance forms shall be submi operating and maintenance information operly filled out and signed forms before the control of the control of t	ments sement agency unless tted to the enforcement meet the requirements re the building can ust be provided to the  LTG-2A and LTG-3A
system with controls is instal The LTG-2A and LTG-3A fo the boxes are checked and/c agency that certifies plans, s of §10-103(b) of Title 24 Pari receive final occupancy. A c	lled in the building or spacerms are not considered or filled and signed. In adopting the translation of the The field inspector mucopy of the LTG-2A and Lorrecords.	omplete forms and dition, a Certificates, and est receive the pr TG-3A for each	ad as meeting the Acceptance Require and are not to be accepted by the enforce of Acceptance forms shall be submipperating and maintenance information operly filled out and signed forms before the form the form of the form	ments xement agency unless tted to the enforcement reset the requirements re the building can ust be provided to the  LTG-2A and LTG-3A  Controls and Sensors and Automatic
system with controls is instal frie LTG-2A and LTG-3A fo he boxes are checked and/o agency that certifies plans, s of §10-103(b) of Title 24 Par receive final occupancy. A c owner of the building for the!	lled in the building or spacers are not considered or or filled and signed. In addition, pecifications, installation of the the things of the LTG-2A and Linecords.	omplete forms and thon, a Certificates, and st receive the pr TG-3A for each es Controlled Number Lumina	ad as meeting the Acceptance Require and are not to be accepted by the enforce of Acceptance forms shall be submipperating and maintenance information operly filled out and signed forms before the form the form of the form	ments sement agency unless tied to the enforcement in meet the requirements re the building can ust be provided to the  LTG-2A and LTG-3A  Controls and Sensors and Automatic Daylighting Controls
system with controls is instal frie LTG-2A and LTG-3A for he boxes are checked and/o agency that certifies plans, s of §10-103(b) of Title 24 Par eceive final occupancy. A c owner of the building for the!	lled in the building or spacers are not considered or or filled and signed. In addition, pecifications, installation of the the things of the LTG-2A and Linecords.	omplete forms and thon, a Certificates, and st receive the pr TG-3A for each es Controlled Number Lumina	ad as meeting the Acceptance Require and are not to be accepted by the enforce of Acceptance forms shall be submipperating and maintenance information operly filled out and signed forms before the form the form of the form	ments sement agency unless tied to the enforcement in meet the requirements re the building can ust be provided to the  LTG-2A and LTG-3A  Controls and Sensors and Automatic Daylighting Controls Acceptance
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CERTIFICATE OF COMP FIELD INSPECTION EN	,	Part 1 of 4	) MECH-10
Project Name			Date
BCSD School Building N Classro		17.000	1/5/2012
Project Address  Bakersfield	Climate Zone		Floor Area   Addition Floor A 628   n/a
GENERAL INFORMATION		10,	020 1 7//4
	nresidential 🏻 🗖 High-Rise Reside	ntial 🗀 He	otel/Motel Guest Room
	locatable Public School Bldg   Condition	ed Spaces	☐ Unconditioned Spaces (affidavit)
	w Construction   Addition	AI	teration
Approach of Compliance.	mponent	TDV 🗖 Uı	nconditioned (file affidavit)
Front Orientation, N. E. S. W or in Degr	Energy		,
HVAC SYSTEM DETAILS	ees. O deg	FIELD INCOM	OTION ENERGY OUECKING
MVAC 515 IEM DETAILS	1		CTION ENERGY CHECKLIS
	1		riteria or Requirements
Equipment <sup>2</sup> Item or System Tags	Inspection Criteria	Pass	Fail - Describe Reason
(i.e. AC-1, RTU-1, HP-1)	HP N-1		
Equipment Type <sup>3</sup>	Packaged VAV		
Number of Systems	1		
Max Allowed Heating Capacity <sup>1</sup>	200,000 Btu/hr		
Mınımum Heating Efficiency <sup>1</sup>	3.20 COP		
Max Allowed Cooling Capacity <sup>1</sup>	192,000 Btu/hr		
Cooling Efficiency <sup>1</sup>	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 (Integrated)		
Thermostat	Setback Required		
Fan Control	Variable Speed		0
		FIELD INSPE	CTION ENERGY CHECKLIS
Equipment <sup>2</sup>	Inspection Criteria	Pass	Fail - Describe Reason
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	HP N-2		
Equipment Type <sup>3</sup> :	Packaged VAV		
Number of Systems	1		
Max Allowed Heating Capacity <sup>1</sup>	200,000 Btu/hr		
Minimum Heating Efficiency <sup>1</sup>	3.20 COP		
Max Allowed Cooling Capacity <sup>1</sup>	192,000 Btu/hr		
Cooling Efficiency <sup>1</sup>	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 (Integrated)		
Thermostat	Setback Required	<u> </u>	
Fan Control	Variable Speed		
the building plans) the responsible party shall be additional detailed discrepancy use Pa	ce efficiency and capacity is less than the Proposed ( all resubmit energy compliance to include the new ch- je 2 of the Inspection Checklist Form Compliance fai t), VAV, HP (Pkg or split), Hydronic, PTAC, or other.	anges	

CERTIFICATE OF COM FIELD INSPECTION EN		LIST		(Pa	rt 1 o	f 4)		MECH-1	
Project Name BCSD School Building N Classe			ong otto appearance occurrence and discovery					Date 1/5/2012	
Project Address Bakersfield		Clima	ite Zone 13		1	ond Floo 16,628		Addition Floor Ar n/a	
GENERAL INFORMATION			High-Rise Resid	antial		Llata!/	Matal	uest Room	
Cunding Typo:	onresidential					***************************************		ditioned Spaces	
****	elocatable Public School		***	ned S	•		(affidav		
Phase of Construction:	ew Construction		Addition	- 701		Alterat	tion		
	omponent		Overall Envelope Energy	e ID\		Uncon	ditione	d (file affidavit)	
Front Orientation: N, E, S, W or in Deg	ees. 0 deg								
HVAC SYSTEM DETAILS				F				RGY CHECKLIS	
•				-				equirements	
Equipment <sup>2</sup> Item or System Tags	Inspec	_	Pass	F	all - D	escribe Reaso			
(i.e. AC-1, RTU-1, HP-1)	HP N-3								
Equipment Type <sup>3</sup> .	Packaged VAV								
Number of Systems	1						·		
Max Allowed Heating Capacity <sup>1</sup>	200,000 Btu/hr								
Minimum Heating Efficiency	3.20 COP								
Max Allowed Cooling Capacity <sup>1</sup>	192,000 Btu/hr			$\perp$					
Cooling Efficiency <sup>1</sup>	10.6 EER								
Duct Location/ R-Value	Attıc, Roof Ins / 4.2	2							
When duct testing is required, submit MECH-4A & MECH-4-HERS	No								
Economizer	Diff. Temp (Integra	ited)						□	
Thermostat	Setback Required								
Fan Control	Variable Speed								
				F	ELD INS	PECTIC	N ENE	RGY CHECKLIS	
Equipment <sup>2</sup>	Inspec	tion C	riteria		Pass	F	ait - D	escribe Reasor	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	HP N-4								
Equipment Type <sup>3</sup> .	Packaged VAV								
Number of Systems	1								
Max Allowed Heating Capacity <sup>1</sup>	200,000 Btu/hr								
Minimum Heating Efficiency <sup>1</sup>	3.20 COP								
Max Allowed Cooling Capacity <sup>1</sup>	192,000 Btu/hr								
Cooling Efficiency <sup>1</sup>	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	ited)							
Thermostat	Setback Required								
Fan Control	Variable Speed								
If the Actual installed equipment performs the building plans) the responsible party s     For additional detailed discrepancy use P     Indicate Equipment Type: Gas (Pkg or, S)	hall resubmit energy comp age 2 of the Inspection Che	hance to	o include the new c form Compliance fa	hange alls il s	s			omittal or from	

CERTIFICATE OF COMP			Part 1 of 4	<b>!</b> )	ME	
Project Name					Date 1/5	
BCSD School Building N Classroo Project Address	oms	Climate Zone	Total Conc	Floor Area	Addition	
Bakersfield		13		,628		
GENERAL INFORMATION	· · · · · · · · · · · · · · · · · · ·					
Building Type: ☑ Nor	residential	☐ High-Rise Reside	ntial 🗀 H	lotel/Motel G	uest Ro	
	ocatable Public Schoo	l Bldg 🖾 Condition	ed Spaces	☐ Uncond	ditioned nt)	
Phase of Construction: 🛛 Nev	w Construction	☐ Addition		Iteration		
Approach of Compliance   Cor	mponent	Overall Envelope Energy	TDV 🗆 U	Inconditioned	l (file af	
Front Orientation: N, E, S, W or in Degre	es. 0 deg					
HVAC SYSTEM DETAILS	· · · · · · · · · · · · · · · · · · ·		FIELD INSPE	CTION ENE	RGY CH	
			Meets C	Criteria or R	equiren	
Equipment <sup>2</sup>	Inspec	tion Criteria	Pass	Fail - D	escribe	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	CU/FC N-1, 2					
Equipment Type <sup>3</sup>	Split DX					
Number of Systems	2					
Max Allowed Heating Capacity	18,000 Btu/hr					
Minimum Heating Efficiency <sup>1</sup>	n/a	**************************************				
Max Allowed Cooling Capacity <sup>1</sup>	15,000 Btu/hr	******				
Cooling Efficiency <sup>1</sup>	16.0 SEER / 13.0 I	EER				
Duct Location/ R-Value	n/a					
When duct testing is required, submit MECH-4A & MECH-4-HERS	No		0			
Economizer	No Economizer					
Thermostat	Setback Required					
Fan Control	Constant Volume					
			FIELD INSPE	CTION ENE	RGY CH	
Equipment <sup>2</sup>	Inspec	tion Criteria	Pass	Fail - De	scribe	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)						
Equipment Type <sup>3</sup> .						
Number of Systems			1 0			
Max Allowed Heating Capacity <sup>1</sup>						
Minimum Heating Efficiency <sup>1</sup>						
Max Allowed Cooling Capacity <sup>1</sup>						
Cooling Efficiency <sup>†</sup>						
Duct Location/ R-Value						
When duct testing is required, submit MECH-4A & MECH-4-HERS			O			
Economizer						
Thermostat						
Fan Control						
If the Actual installed equipment performant the building plans) the responsible party shide additional detailed discrepancy use Pag 1 Indicate Equipment Type: Gas (Pkg or, Spit).	all resubmit energy comp ge 2 of the Inspection Chi	liance to include the new ch scklist Form Compliance fa	anges		omittal o	
o monotro Equipment (Apor Gas () ng o), opin	.,,, in (ing or spin)	,, 5,			Pa	

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST	(Part 2 of 4)	MECH-10
Project Name BCSD School Building N Classrooms	The state of the s	Date 1/5/2012
Discrepancies:		
	And the same of th	and the same of th
	A CONTRACTOR OF THE CONTRACTOR	
	A	
	According to the second	
	a a para hada hada haqaya qara a asaa	
	- And the second	
	And the state of t	***************************************
1 #		4
	estatura de la composição	
	44444444444444444444444444444444444444	
EnergyPro 5.1 by EnergySoft User Number. 5232 RunCode. 2012-01-05	T15.53·42 ID: 09091	Page 24 o

CERTIFICATE OF COMP	LIAN	ICE and	FIELD IN	ISPECTI	ON ENE	RGY CH	HECKLIS	ST (F	Part 3 of	4) M	E
Project Name BCSD School Building N Classro	oms									Date 1/3	5/2
Required Acceptance Tests				**************************************		<del>/////////////////////////////////////</del>					
Designer: This form is to be used by the designer boxes by all acceptance tests that apply the number of systems. The NA number part of the plans, completion of this sect	and liste designa	ed all equipmer ites the Section	nt that require: n in the Appen	s an acceptan dix of the Nor	ice test. If all e rresidential Ri	equipment of eference App	a certain typ endices Mai	oe requires a	test, list the e	equipment des	scrii
Building Departments: Systems Acceptance: Before occupan normal use, all control devices serving t Systems Acceptance: Before occupan The MECH-1C form is not considered a person performing the test (Example H' checked-off forms are required for ALL specifications, installation, certificates, a properly filled out and signed forms before	he buildi cy permi complet VAC inst newly in: ind operi	ng or space shit is granted. Al ed form and is aller, TAB cont stalled equipme ating and maint	all be certified I newly installed not to be acceractor, controlled in additionance information	as meeting the d HVAC equivalent depth of the by the base contractor, in a Certificate mation meet the	he Acceptance ipment must be puilding depart PE in charge of of Acceptance	e Requireme be tested usin tment unless of project) ar e forms shal	nts for Code ng the Accep the correct to d what Acce be submitte	Compliance stance Requi coxes are ch eptance test i ed to the builk	i. rements. ecked. The ed must be cond ding departme	quipment requ ucted. The fol ent that certifie	urin Ilowi
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·			4	•		
TEST DESCRIPTION		MECH-2A	I MECH-3A	MECH-4A	MECH-5A	MECHIGA	MECH-7A	MECH-8A	MECH-9A	MECH-10A	I N
TEST DESCRIPTION	City	Ouldoor Ventilation For	MECH-3A  Constant Volume & Single-Zone	Air Distribution	MECH-5A  Economizer	Demand Control Ventilation	MECH-7A Supply Fan	Valve Leakage	MECH-9A Supply Water Temp	MECH-10A Hydronic System Variable Flow	1
Equipment Requiring Testing or Venification	Oty.	Ouldoor Ventilation	Constant Valume &	Air		Demand Control	Supply	Valve	Supply Water	Hydronic System Variable	1
		Ouldoor 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	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Ouldoor 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	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Ouldoor Ventilation For VAV & CAV [2]	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV ØI	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Outdoor Ventilation For VAV & CAV Ø	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	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Ouldoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	M
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Ouldoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Ouldoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Ouldoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1
Equipment Requiring Testing or Verification PUHY-P192 Run as Standard Heat Pump	4	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV Ø	Valve Leakage Test	Supply Water Temp Reset	Hydronic System Variable Flow Control	1

	NICAL VE	NTILATIO	N AND	REHE	AT								ME	CH-3C
Project Name BCSD Scho	ool Building N	Classrooms								17			Date 1/5/2	2012
		MEC	ANICAL	VENTILATION	ON (§121(	(b)2)				REHE	AT LIMITA	TION (§144	(d))	
		AF	EA BASIS		000	CUPANCY	BASIS				VAV MIN	MUM		
	A	В	С	D	E	F	G	н	1	J	к	L	M	N
Zone	/System	Condition Area (ft²)	CFM per ft <sup>2</sup>	Mın 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	B X 0.4 CFM / ft <sup>2</sup>	Max of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Transfe Air
Special Ed 100		1,136	0.38	432				432	371	***************************************			- Andrews	ě
Classroom 101		963	0.38	366				366	366					
Classroom 102		963	0 38	366			***************************************	366	366	6				
Classroom 103		963	0 38	366				366	366					
Work Room 11	5	240	0 38	91		···		91	91					
Work Room 11	7	240	0 38	91				91	91					
HP N-1							Total	1,712	1,652					
Classroom 104		963	0.38	366				366	366					
Classroom 105		963	0.38	366				366	366					
Classroom 106		963	0 38	366				366	366					
Classroom 107		963	0 38	366				366	366					
Work Room 11	9	240	0.38	91				91	91					
Work Room 11	9	240	0,38	91				91	91					
HP N-2							Total	1,646	1,646					
Special Ed 108		874	0.38	332				332	332					
			•	Totals						Column I Total	Design Vent	alation Air		
С	Minimum ventilat	ion rate per Section	on §121, Ta	able 121-A.								d-11d to -10 to -10 do 10 to 10 do 10 d		
E		eat or the greater			of occupant	s and 50%	of the CBC oc	cupant load	for egress ou	rposes for space	s without fixe	ed seating.		
Н		tion Air (REQ'D V												
ſ		han or equal to H												· · · · · · · · · · · · · · · · · · ·
J		y CFM (Fan CFM												
K	Condition area (f				- with		**************************************	*						
L	Maximum of Coli	ımns H, J, K, or 3	00 CFM							, , t ,				
М	This must be less	s than or equal to	Column L a	nd greater the	an or equal	to the sum	of Columns H	plus N						
N	Transfer Air mus	t be provided whe rence between th	re the Real	ired Ventilation	n Air (Colu	mn H) is ar	eater than the	Design Min	imum Air (Col mn M), Colum	umn M). Where in H minus M.	equired, tran	isfer air must	be greater t	han or
EnergyPro 5.1	by EngraySoft	User Numi					e: 2012-01-05			ID: 09091				ge 29 of 3

CERTIFICATE OF COM	PLIAN	CE and F	IELD INSP	ECHONE	NERGY CH	ECKLIST	(Part 4 of 4)	MECH-1
Project Name BCSD School Building N Classro	ooms							Date 1/5/2012
TEST DESCRIPTION		MECH-12A	MECH-13A	MECH-14A	MECH-15A			
Equipment Requiring Testing	Qty.	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	4	Ø						
Mitsubishi MUY-A15NA / MSY-A15NA	2			d				
			a					
							*	
					0		A 14 10 19 19 19 19 19 19 19 19 19 19 19 19 19	
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EnergyPro 5 1 by EnergySoft Us	er Number	5232		RunCode: 2012-01	-05T15:53:42	ID: 09091		Page 26 o

		14 WIAT	REHE	AI								MEC	CH-3C	MECHANICAL VE	NTILATIO	N AN	O REHE	AT								ME	CH-3C
uilding N	Classrooms											Date 1/5/2	2012	Project Name BCSD School Building N	l Classrooms											Date	2012
	MECI	HANICAL	VENTILATI	ON (§121	(b)2)				REHE	AT LIMITA	TION (§144	(d))		(#T)(***********************************	MECI	HANICAL	VENTILATI	ON (§121	(b)2)				REHE	AT LIMITA	TION (§144)	(d))	<u> </u>
	AF	EA BASIS		ос	CUPANCY	BASIS				VAV MIN	MUM				AF	REA BASIS	)	oc	CUPANCY	BASIS				VAV MIN	IMUM		
	В	С	D	E	F	G	н		J	К	L	М	N	A	В	С	D	E	F	G	н	i	J	к	L	M	N
п	Condition Area (ft²)	CFM per ft <sup>2</sup>	Mın 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	B X 0.4 CFM / ft <sup>2</sup>	Max of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Transfer Air	Zone/System	Condition Area (It <sup>2</sup> )	CFM per ft²	Mın 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	BX04 CFM/(t²	Max of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Transfer
	1,136	0.38	432	2			432	371	1				60	Classroom 109	963	0.38	366				366	366					
	963	0 38	366	3			366	366	3					Classroom 110	963	0 38	366				366	366					
	963	0 38	366				366	366	3					Classroom 111	963	0.38	366				366	366					
	963	0 38	366				366	366	5					HP N-3						Total	1,430	1,430					
	240	0 38	91				91	91	1					Classroom 112	963	0 38	366				366	366					
	240	0 38	91				91	91	1					Classroom 113	963	0 38	366				366	366					
						Total	1,712	1,652	?					Classroom 114	963	0 38	366				356	366					
	963	0.38	366				366	366						Classroom 115	963	0 38	366				366	366					
	963	0.38	366				366	366	3					HP N-4						Total	1,464	1,464					
	963	0 38	36€	<u> </u>			366	366	3					Electrical Rooms	176	0.15	26			*****	26	26			·	*****	
	963	0 38	366	j			366	366	5					CU/FC N-1, 2						Total	26	26					
	240	0.38	91				91	91																			
	240	0,38	91	<u> </u>		***********************	91	9:																			}
				<u> </u>		Total		1,646						A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		~~~~	***************************************							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	874	0.38	332			<u> </u>	332	332	?																		<u> </u>
			Totals	Ĺ	]				Column I Total	Design Ven	tilation Air	,	L				Totals	<u> </u>	J		<u> </u>		Column I Total	Design Vent	lation Air		
num ventija	tion rate per Secti	on §121, Ta	able 121-A.											C Minimum ventila	tion rate per Secti	on §121.	able 121-A								***		***************************************
d on fixed	eat or the greater	of the expe	cted number	of occupan	ts and 50%	of the CBC oc	ccupant load	l for égress p	urposes for space	s without flx	ed seating,			E Based on fixed	seat or the greater	of the exp	ected number	of occupan	its and 50%	of the CBC oc	cupant load	for egress pu	rposes for space	s without fixe	ed seating		
	tion Air (REQ'D V														ation Air (REQ'D V												
be greater	than or equal to H	, or use Tra	ınsfer Air (col	umn N) to n	nake up the	difference.									than or equal to H												
gn fan supp	y CFM (Fan CFM	) x 50%; or	the design zo	one outdoor	airflow rate	per §121.								J Design fan supr	ly CFM (Fan CFM	) x 50%; o	the design zo	ne outdoor	arflow rate	per §121.							
lition area	t <sup>2</sup> ) x 0.4 CFM / ft <sup>2</sup>	or												K Condition area	It2) x 0.4 CFM / It2	; or											
mum of Co	umns H, J, K, or 3	00 CFM									<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>			L Maximum of Co	lumns H, J, K, or 3	BOO CFM			4.5			A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1					
sfer Air mu	s than or equal to t be provided whe rence between th	re the Requ	ired Ventilati	on Air (Coli	ımn H) is ar	eater than the	Design Min	imum Air (Co	olumn M). Where	required, trai	nsfer air must	be greater th	nan or	N Transfer Air mu	es than or equal to st be provided whe	ere the Rec	uired Ventilati	on Air (Col	umn H) is g	eater than the	Design Mini			required, tran	isfer air must	be greater t	han or
rgySoft	User Num		verdisamon P	ur (Column		de: 2012-01-0			ID: 09091	····		Pac	ge 29 of 34	EnergyPro 5 1 by EnergySoft	erence between ti User Num		ventilation A	ir (Column		Design Minimu de: 2012-01-03		nn M), Colum	n H minus M. ID. 09091			Do	ge 30 of 34

Project Name BCSD School Building N Cl	REMENTS		(Part 1 of 2	2) MEC
	assrooms			1/5/20
Itam or System Tago		ate Air Systems Type (Cei	ntral, Single Zone, Package	e, VAV, or etc)
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	NEWSER'S	HP N-1	HP N-2	HP N-3
Number of Systems	K58377#475	1	1	1
	Indicate Pag	e Reference on Plans or S	Schedule and indicate the a	applicable except
MANDATORY MEASURES	T-24 Sections			
Heating Equipment Efficiency	112(a)	3.20 COP	3 20 COP	3 20 COP
Gooling Equipment Efficiency	112(a)	10 6 EER	10.6 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	1,646 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 S
Setback and Setup Control	122(e)	Setback Required	Setback Required	Setback Requi
Outdoor Damper Control	122(i)	Auto	Auto	Auto
Isolation Zones	122(g)	n/a	n/a	n/a
Pipe Insulation	123	Refrigerant	Refrigerant	Refrigerant
Duct Location/ R-value	124	Attic, Roof Ins / 4 2	Attic, Roof Ins / 4 2	Attic, Roof Ins I
PRESCRIPTIVE MEASURES		n/a	n/a	n/a
Calculated Design Heating Load	144(a & b)	n/a 124,915 Blu/hr	n/a 124,916 Btw/hr	n/a 124,915 Btu/i
Calculated Design Heating Load Proposed Heating Capacity	144(a & b) 144(a & b)		<u> </u>	
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load	144(a & b) 144(a & b) 144(a & b)	124,915 Blu/hr	124,916 Btw/hr	124,915 Blu/
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)	124,915 Blu/hr n/a	124,915 Btu/hr n/a	124,915 Blu/. n/a
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)	124,915 Blu/hr n/a 190,900 Blu/hr	124,916 Btwhr n/a 190,982 Btwhr	124,915 Btu/ n/a 189,757 Btu/
Calculated Design Heating Load Proposed Heating Capacity Calculated Design Cooling Load Proposed Cooling Capacity Fan Control DP Sensor Location	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c) 144(c)	124,915 Blu/hr n/a 190,900 Blu/hr	124,916 Btwhr n/a 190,982 Btwhr	124,915 Btu/ n/a 189,757 Btu/
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) 144(c) 144(c)	124,915 Blu/hr n/a 190,900 Blu/hr	124,916 Btwhr n/a 190,982 Btwhr	124,915 Blu/ n/a 189,757 Blu/
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(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d)	124,915 Blu/hr r/a 190,900 Blu/hr Variable Speed	124,915 Btwhr n/a 190,982 Btwhr Vanable Speed	124,915 Btu/ n/a 189,757 Btu/ Variable Spe
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)	124,915 Blu/hr n/a 190,900 Blu/hr Variable Speed No	124,915 Btwhr n/a 190,982 Btwhr Variable Speed No	124,915 Blu/ n/a 189,757 Blu/ Variable Spe No Diff Temp (Integ
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)	124,915 Blu/hr n/a 190,900 Blu/hr Variable Speed  No Diff Temp (Integrated)	124,915 Btwhr n/a 190,982 Btwhr Variable Speed  No Diff. Temp (Integrated)	124,915 Blu/ n/a 189,757 Blu/ Variable Spe No
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(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d) 144(f) 144(f)	124,915 Blu/hr n/a 190,900 Blu/hr Variable Speed  No Diff Temp (Integrated) Coldest Zone	124,915 Btu/hr n/a 190,982 Btu/hr Vanable Speed  No Diff. Temp (Integrated) Coldest Zone	124,915 Blu/ n/a 189,757 Blu/ Variable Spe- No Diff Temp (Integ
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 <sup>1</sup>	144(a & b) 144(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d) 144(e) 144(f) 144(f)	124,915 Blu/hr n/a 190,900 Blu/hr Variable Speed  No Diff Temp (Integrated) Coldest Zone	124,915 Btu/hr n/a 190,982 Btu/hr Vanable Speed  No Diff. Temp (Integrated) Coldest Zone	124,915 Blu/ n/a 189,757 Blu/ Variable Spe- No Diff Temp (Integ
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(a & b) 144(a & b) 144(a & b) 144(c) 144(c) 144(c) 144(d) 144(f) 144(f)	124,915 Blu/hr n/a 190,900 Blu/hr Variable Speed  No Diff Temp (Integrated) Coldest Zone	124,915 Btu/hr n/a 190,982 Btu/hr Vanable Speed  No Diff. Temp (Integrated) Coldest Zone	124,915 Bluv n/a 189,757 Bluv Variable Spe No Diff Temp (Integ Coldest Zor

	Indicate Air Systems Type (Central, Single Zone, Package, VAV, or etc)			
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	\$26Y\$\$W\$	HP N-4	CU/FC N-1, 2	
Number of Systems	2000	1	2	
	Indicate Pag	e Reference on Plans or	Schedule and indicate the	applicable exception(s
MANDATORY MEASURES	T-24 Sections			
Heating Equipment Efficiency	112(a)	3.20 COP	n/a	
Cooling Equipment Efficiency	112(a)	10 6 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)	1,464 cfm	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)	Selback Required	Setback Required	***************************************
Outdoor Damper Control	122(f)	Auto	Auto	**************************************
Isolation Zones	122(g)	n/a	л/а	
Pipe Insulation	123	Refrigerant		
Duct Location/ R-value	124	Attic, Roof Ins / 4 2	n/a	
PRESCRIPTIVE MEASURES Calculated Design Heating Load	144(a & b)	n/a	n/a	
Proposed Heating Capacity	144(a & b)	124,915 Btu/hr	0 Btu/hr	
Calculated Design Cooling Load	144(a & b)	n/a	n/a	
Proposed Cooling Capacity	144(a & b)	189,980 Btu/hr	21,190 Btu/hr	
Fan Control	144(c)	Variable Speed	Constant Volume	
DP Sensor Location	144(c)			
	144(c)			
Supply Pressure Reset (DDC only)	144(d)	No	No	
Supply Pressure Reset (DDC only) Simultaneous Heat/Cool	1 1	Diff Temp (Integrated)	No Economizer	
,,,,,	144(0)		Constant Temp	
Simultaneous Heat/Cool	144(e) 144(f)	Coldest Zone		
Simultaneous Heat/Cool Economizer		Coldest Zone Warmest Zone	Constant Temp	
Simultaneous Heat/Cool Economizer Heat Air Supply Reset	144(f)		Constant Temp	
Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating Air Cooled Chiller Limitation	144(f) 144(f)		Constant Temp	
Simultaneous Heat/Cool Economizer Heat Air Supply Reset Cool Air Supply Reset Electric Resistance Heating	144(f) 144(i) 144(g)		Constant Temp  No	

	OPE MANDATORY MEASURES: NONRESIDENTIAL	ENV-MN
Project Name	hool Building N Classrooms	1/5/2012
DESCRI		
	Envelope Measures:	
§118(a)	Installed insulating material shall have been certified by the manufacturer to comply with the C Standards for insulating material, Title 20 Chapter 4, Article 3	California Quality
§118(c)	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements 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 be caulked, gasketed, weatherstripped or otherwise sealed.	
§116(a) 1:	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft.² of window area, 0.3 cfm/ft.² of door area for residential doors, 0.3 cfm/ft.² of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft.² for nonresidential double doors (swinging)	
§116(a) 2·	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U	J-factor
§116(a) 3.	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fe applicable default SHGC	
§116(b)	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the bu weatherstripped (except for unframed glass doors and fire doors).	ilding, and shall be

MIFOLIV	NICAL MANDATORY MEASURES: NONRESIDENTIAL	MECH-MN
Project Name BCSD Scho	ool Building N 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 Rewith 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, of equipment, shall be insulated in accordance with Standards Section 123.	or within HVAG
§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 facility exempt from the requirements of Section 112 (d)) shall be installed with an automatic accessible manual override that allows operation of the system during off-hours for up to 4 hour 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	time switch with an rs. The time switch ogram backup
1B.	An occupancy sensor to control the operating period of the system; or	4
1Ç.	A 4-hour timer that can be manually operated to control the operating period of the system.	pararily aparata tha
2.	Each space conditioning system shall be installed with controls that temporarily restart and tem system 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 I independently of other isolation areas; and shall be controlled by a time control device as descri	e feet; shall be provide be setback or shut off
§122(c)	Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stops accessible only authorized personnel	
§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	operation when the
§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 legal control shall be adjustable up to 85 degrees F or higher. Where used for both heating and cool capable of providing a deadband of at least 5 degrees F within which the supply of heating and reduced to a minimum.	ower. For cooling, the ling, the control shall b
Ventilatio	n	
§121(e):	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilat on these plans.	tion rates as specified
§122(f);	All gravity ventilating systems shall be provided with automatic or readily accessible manually o openings to the outside, except for combustion air openings	perated dampers in a
§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 systemiding or space shall be certified as meeting the Acceptance Requirements for Code Complia	stems serving the
Service V	/ater Heating Systems	
§113(c)	Installation	
~	Temperature controls for public lavatories  The controls shall limit the outlet Temperature to 11	0°F.
3.	Circulating service water-heating systems shall have a control capable of automatically turning	- 62 Abr Abres ( maller in the com-

EnergyPro 5.1 by EnergySoft User Number 5232 RunCode: 2012-01-05T15:53:42 ID: 09091 Page 34 of 34

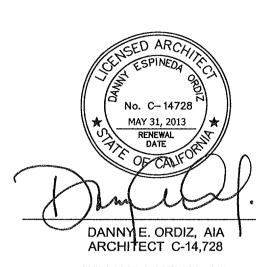






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WILLIAM J. MELBY, AIA ARCHITECT C-16,835

IDENTIFICATION STAMP DIVISION OF STATE ARCHITECT OFFICE OF REGULATION SERVICES APPL. #:02-112027

PTN # 63321-112

NEW ELEMENTARY SCHOOL 9801 HIGHLAND KNOLLS DR BAKERSFIELD CALIFORNIA 93306

NEW MIDDLE SCHOOL 4115 VINELAND ROAD BAKERSFIELD CALIFORNIA 93306

BAKERSFIELD CITY SCHOOL DISTRICT 1300 BAKER STREET BAKERSFIELD CALIFORNIA

93305

DATE	
	DESCRIPTION
	JOB NU

200101244 CAD DRAWING FILE:

DRAWN BY: KW CHECKED BY: CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK.
REPORT DISCREPANCIES TO THE ARCHITECT.

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SHEET TITLE TITLE 24 **BUILDING "N"** 

SHEET IDENTIFICATION NUMBER M-535

يرسد المداد استعلاماته فعطية