CERTIFICATE OF COMP	LIANCE and	FIELD IN	ISPECTI	ON ENE	RGY CH	HECKLIS	ST (F	Part 3 of	4) M I	ECH-1
Project Name New Office Building									Date 12/	1/2011
Required Acceptance Tests										
This form is to be used by the designer a boxes by all acceptance tests that apply a the number of systems. The NA number of part of the plans, completion of this section Building Departments: Systems Acceptance: Before occupant ormal use, all control devices serving the Systems Acceptance: Before occupant ormal use.	and listed all equipme designates the Section on will allow the respons by permit is granted for e building or space sh	nt that require n in the Appen nsible party to r a newly cons nall be certified	s an acceptar dix of the Nor budget for the tructed buildir as meeting the	nce test. If all entersidential Research	equipment of eference App rk appropriat r a new space e Requireme	a certain typ pendices Mar tely. ee-conditioninents for Code	ne requires a nual that des ng system se Compliance	test, list the escribes the tes	quipment des t. Since this fo	scription an orm will be
The MECH-1C form is not considered a considered a considered a considered a considered a considered a considered for the checked-off forms are required for the considerations, installation, certificates, are properly filled out and signed forms befor	completed form and is AC installer, TAB con ewly installed equipm of operating and main	not to be acce tractor, control ent. In addition tenance inforn	epted by the b ls contractor, n a Certificate nation meet th	uilding depart PE in charge of Acceptanc	tment unless of project) ar e forms shall	the correct be described what Acce	poxes are cheptance test in detection to the build	ecked. The ed must be condu ling departme	ucted. The fol nt that certifie	llowing es plans,
TEST DESCRIPTION	MECH-2A	MECH-3A	MECH-4A	MECH-5A	MECH-6A	MECH-7A	MECH-8A	MECH-9A	MECH-10A	MECH-1
									Hydronic	

TEST DESCRIPTION		MECH-2A	MECH-3A	MECH-4A	MECH-5A	MECH-6A	MECH-7A	MECH-8A	MECH-9A	MECH-10A	MECH-11A
Equipment Requiring Testing or Verification	Qty.	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
Carrier 48TCLA06C1-5	1	◩	◩		◩						
Carrier 48TCLA04C1-5	3	Ø	Ø		Ø						
Carrier 48TCLA05C1-5	2	Ø	Ø								
EnergyPro 5.1 by EnergySoft User	Number:	4964	Ri	unCode: 2011-	12-01T11:05:2	2	ID:		•		Page 23 of 3

CERTIFICATE OF COM	/IPLIAN	CE and F	IELD INSP	PECTION E	NERGY CH	ECKLIST (Part 4 of 4)	MECH-1C
Project Name New Office Building							Date 12/1/2011
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 B	y:
Carrier 48TCLA06C1-5	1						
Carrier 48TCLA04C1-5	3						
Carrier 48TCLA05C1-5	2						

mar Climate Zone 10 residential □ High-Rise Resident	Total Cond. F	Date 12/1/2011
mar 10		
	6.28	
residential	,	7 n/a
residentiai 🔟 High-Rise Residen	val 🗖 Hat	ol/Matal Owest Bases
		el/Motel Guest Room Unconditioned Spaces
ocatable Public School Bldg. Conditioned	d Spaces	(affidavit)
Construction		ration
nponent	DV 🗖 Unc	onditioned (file affidavit)
es: 180 deg		
	FIELD INSPECT	TION ENERGY CHECKLIST
	Meets Cri	teria or Requirements
Inspection Criteria	Pass	Fail – Describe Reason ²
Suite C RTU-5 & 6		
2		
50,000 Btu/hr		
80% AFUE		
45,000 Btu/hr		
13.0 SEER / 11.0 EER		
Conditioned / 4.2		
No		
Diff. Enth (Integrated)		
Setback Required		
Constant Volume		
	FIELD INSPECT	TION ENERGY CHECKLIST
Inspection Criteria	Pass	Fail – Describe Reason
1		
_	Inspection Criteria Suite C RTU-5 & 6 Packaged DX 2 50,000 Btu/hr 80% AFUE 45,000 Btu/hr 13.0 SEER / 11.0 EER Conditioned / 4.2 No Diff. Enth (Integrated) Setback Required Constant Volume	Overall Envelope TDV

CERTIFICATE OF COMPLIANCE and	(Part 2 of 4)	MECH-1C
FIELD INSPECTION ENERGY CHECKLIST Project Name		Date
New Office Building		12/1/2011
Discrepancies:		
EnergyPro 5.1 by EnergySoft User Number: 4964 RunCode: 2011-12-01	T11:05:22 ID:	Page 22 of 31

Project Name New Office Building					Date 12/1/2011	
Project Address 32246 Clinton Keith Road Wildo	omar	Climate Zone 10		nd. Floor Area ,287	Addition Floor Area <i>n/a</i>	
GENERAL INFORMATION	nresidential	E Historia Desiden	-41-1 1	l-+-1/M-+-1 O	t Danes	
building Type.		☐ High-Rise Resider		Hotel/Motel G — Uncon-	ditioned Spaces	
☐ Schools (Public School) ☐ Re	locatable Public School	ol Bldg. 🗹 Conditione	ed Spaces	(affida		
Phase of Construction:	w Construction	□ Addition		Alteration		
Approach of Compliance:	mponent	Overall Envelope Energy	TDV 🗖 I	Jnconditione	d (file affidavit)	
Front Orientation: N, E, S, W or in Degre	ees: 180 deg					
HVAC SYSTEM DETAILS	,		FIELD INSP	ECTION ENE	RGY CHECKLIST	
			Meets	Criteria or R	equirements	
Equipment ²	Inspec	tion Criteria	Pass	Fail – D	escribe Reason ²	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	Suite A RTU-1					
Equipment Type ³ :	Packaged DX					
Number of Systems	1					
Max Allowed Heating Capacity ¹	50.000 Btu/hr					
Minimum Heating Efficiency ¹	80% AFUE					
Max Allowed Cooling Capacity ¹	59,000 Btu/hr					
Cooling Efficiency ¹	13.0 SEER / 10.8	EER				
Duct Location/ R-Value	Conditioned / 4.2					
When duct testing is required, submit MECH-4A & MECH-4-HERS	No					
Economizer	Diff. Enth (Integral	ted)				
Thermostat	Setback Required	-			_	
Fan Control	Constant Volume					
			FIELD INSP	ECTION ENE	RGY CHECKLIST	
Equipment ²	Inspec	tion Criteria	Pass		escribe Reason ²	
Item or System Tags						
(i.e. AC-1, RTU-1, HP-1)	Suite A RTU-2					
Equipment Type ³ :	Packaged DX					
Number of Systems Max Allowed Heating Capacity ¹	50,000 Btu/hr					
Minimum Heating Efficiency ¹	80% AFUE					
Max Allowed Cooling Capacity ¹	34,600 Btu/hr					
Cooling Efficiency ¹	13.0 SEER / 11.0	EER				
Duct Location/ R-Value	Conditioned / 4.2					
When duct testing is required, submit						
MECH-4A & MECH-4-HERS	No Diff. Enth (Integral	ted)				
Economizer Thermostat	Setback Required					
Fan Control	Constant Volume					
If the Actual installed equipment performathe building plans) the responsible party significant detailed discrepancy use Passible and the property of the party significant property. Indicate Equipment Type: Gas (Pkg or, Sp. 1986).	nce efficiency and capacit nall resubmit energy com ge 2 of the Inspection Ch	oliance to include the new cha lecklist Form. Compliance fail	from the energy anges.			

		ORRC ce		s compliance approac	h cannot b	e used).	Go to Overal	l Envelop	е Арр
oach.									
				THE ROOFING PRODUCT nd16 with a Low-Sloped			EQUIREMENTS	S: Pas	
	•			·			er than 2:12 pito		
od frame	d roofs i	n Climate 2	Zones 3 an	d 5 are exempted, solar	reflectance	and therm	nal emittance or		
								DI	
ctor of 0.	048 or lo	ower. See	Opaque Si	urface Details roof assen	nbly below,	Column H	of ENV-2C.	L	<u>'</u>
ar reflectá	ınce and	thermal e	mittance o	SRI, see spreadsheet o	calculator at	www.enei	rgy.ca.gov/title2	4/	1
		mal mass	over the ro	of membrane with a wei	ght of at lea	st 25 lb/ft ²	are exempt fror	^m	1
ntial build	dings an			ith low-sloped roofs in C	Climate Zone	es 1 throug	gh 9, 12 and 16	are _	1
				list Form and take appro	opriate action	n to correc	ct. Verify buildin	ng plans if	neces
		-			·			lg plane ii	
				Type ²	Refle		Emmitance	SRI⁵	
									\perp
									+
									\perp
					ı —				
ited Asph	nalt Roc	f Coating	☐ Cem	ent-Based Roof Coating			Other		
ergySoft	Use	er Number	: 4964	RunCode: 2011-12	2- 01 T11:05;	22 1	D:		
∍rgySoft	Use	er Number	: 4964	RunCode: 2011-12	2-01T11:05:	22 /	D:		
C I I I I I I I I I I I I I I I I I I I	od frame U-factor al buildin ctor of 0. overed by r reflecta ons that h riteria bel ntial build the low-s e on this S ≥ 2:12 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	od framed roofs in U-factor of 0.039 al building roofs is ctor of 0.048 or kovered by building roofs is ctor of 0.048 or kovered by building reflectance and ons that have the riteria below. In this page of the low-sloped role on this page of Roof Slope ≤ 2:12 > 2:12 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	od framed roofs in Climate U-factor of 0.039 or lower. al building roofs in Climate ctor of 0.048 or lower. See overed by building integrate ar reflectance and thermal e ons that have thermal mass riteria below. Intial buildings and hotels are the low-sloped roofing criterie on this page of the Inspective of the I	od framed roofs in Climate Zones 3 an U-factor of 0.039 or lower. See Opaqual building roofs in Climate Zone 3 and ctor of 0.048 or lower. See Opaque Stovered by building integrated photovoltar reflectance and thermal emittance or ons that have thermal mass over the roofs to be on this page of the Inspection Check Roof Slope Product Weight ≤ 2:12 > 2:12 Product Weight ≤ 2:12 > 2:12 Product Weight Product Start Product Meight Product Start Product Meight Product Start Product Start Product Start Product Start Product Start Product Start Product October Product Product Directory. Product Product Directory. Product Product Directory. Product Product Directory. Product Produ	od framed roofs in Climate Zones 3 and 5 are exempted, solar U-factor of 0.039 or lower. See Opaque Surface Details roof a all building roofs in Climate Zone 3 and 5 are exempted, solar ictor of 0.048 or lower. See Opaque Surface Details roof asser overed by building integrated photovoltaic panels and building ir reflectance and thermal emittance or SRI, see spreadsheet ones that have thermal mass over the roof membrane with a weinteria below. In the low-sloped roofing criteria. In th	od framed roofs in Climate Zones 3 and 5 are exempted, solar reflectance U-factor of 0.039 or lower. See Opaque Surface Details roof assembly, Co al building roofs in Climate Zone 3 and 5 are exempted, solar reflectance a ctor of 0.048 or lower. See Opaque Surface Details roof assembly below, overed by building integrated photovoltaic panels and building integrated solar reflectance and thermal emittance or SRI, see spreadsheet calculator at one that have thermal mass over the roof membrane with a weight of at lear interia below. In the low-sloped roofing criteria. The ontis page of the Inspection Checklist Form and take appropriate actions that have the Inspection Checklist Form and take appropriate actions the low-sloped roofing criteria. The ontis page of the Inspection Checklist Form and take appropriate actions the low-sloped roofing criteria. The ontis page of the Inspection Checklist Form and take appropriate actions and the low-sloped roofing criteria. The ontis page of the Inspection Checklist Form and take appropriate actions the Inspection Checklist Form and take appropriate actions the equation (0.2+0.7(p _{inital} − 0.2) to obtain a calculated aged value. We shall be a paged Reflectance is a calculated value using the equation above. The low-sloped Coatings, the coating must be applied across the entire roof su coatings manufacturer and meet minimum performance requirements listed.	od framed roofs in Climate Zones 3 and 5 are exempted, solar reflectance and therm U-factor of 0.039 or lower. See Opaque Surface Details roof assembly, Column H of all building roofs in Climate Zone 3 and 5 are exempted, solar reflectance and thermator of 0.048 or lower. See Opaque Surface Details roof assembly below, Column H overed by building integrated photovoltaic panels and building integrated solar thermator reflectance and thermator of SRI, see spreadsheet calculator at www.ene ons that have thermal emittance or SRI, see spreadsheet calculator at www.ene ons that have thermal mass over the roof membrane with a weight of at least 25 lb/ft² riteria below. In this page of the Inspection Checklist Form and take appropriate action to correct Roof Slope Product Weight Stib/ft² Product Aged Solar Reflectance³ Roof Slope Product Weight Product Reflectance³ Reflectance³ Reflectance³ It ID Number can be obtained from the Cool Roof Rating Council's Rated Product Directory then use the equation (0.2+0.7(p _{Initial} − 0.2) to obtain a calculated aged value. Where p is serious Reflectance is a calculated value using the equation above. de Applied Coatings, the coating must be applied across the entire roof surface and coatings manufacturer and meet minimum performance requirements listed in §118	od framed roofs in Climate Zones 3 and 5 are exempted, solar reflectance and thermal emittance or U-factor of 0.039 or lower. See Opaque Surface Details roof assembly, Column H of ENV-2C. al building roofs in Climate Zone 3 and 5 are exempted, solar reflectance and thermal emittance or Sctor of 0.048 or lower. See Opaque Surface Details roof assembly below, Column H of ENV-2C. Sovered by building integrated photovoltaic panels and building integrated solar thermal panels are arreflectance and thermal emittance or SRI, see spreadsheet calculator at www.energy.ca.gov/title2 or site that have thermal mass over the roof membrane with a weight of at least 25 lb/ft² are exempt from the low-sloped roofing criteria. e on this page of the Inspection Checklist Form and take appropriate action to correct. Verify building Roof Slope Product Weight Product Aged Solar Reflectance Stolar Reflectance Stolar Stol	U-factor of 0.039 or lower. See Opaque Surface Details roof assembly, Column H of ENV-2C. al building roofs in Climate Zone 3 and 5 are exempted, solar relectance and thermal emittance or SRI clovered by building integrated photovoltaic panels and building integrated solar thermal panels are ureflectance and thermal emittance or SRI, see spreadsheet calculator at www.energy.ca.gov/title24/ solar that have thermal mass over the roof membrane with a weight of at least 25 lb/ft² are exempt from interia below. Intial buildings and hotels and motels with low-sloped roofs in Climate Zones 1 through 9, 12 and 16 are on this page of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if Product Solar Type² Reflectance³ Emmittance SRI⁵ Roof Slope Product Weight Product Aged Solar Thermal Emmittance SRI⁵ Roof Slope Product Weight Type² Reflectance³ Emmittance SRI⁵ Internal Emmittance SRI⁵ SRI⁵ SRI⁵ Aged Solar Thermal Emmittance SRI⁵ Internal Emmittance SRI⁵ SRI⁵ SRI⁵ SRI⁵ Aged Solar Thermal Emmittance SRI⁵ S

AND FIELD INSPECTION ENERGY CHECKLIST

New Office Building

Required Acceptance Tests

party to budget for the scope of work appropriately.

FICATE OF COMPLIANCE and INSPECTION ENERGY CHECKLIST	(Part 2 of 4)	MECH-1C
e ce Building		Date 12/1/2011
ncies:		12/1/2011
nicies.		
5.1 by EnergySoft User Number: 4964 RunCode: 2011-12-01	T11:05:22 ID:	Page 22 of 3

Project Name New Office Building					1		Date 12/1/2011	
Project Address 32246 Clinton Keith Road	l Wildon	nar	Climate Zone	10		6,287	Addition Floor Area	
GENERAL INFORMATION	vviidori	iai				0,201	11/4	
Building Type:	✓ Non	residential	☐ High-Ri	se Resident	ial 🗖	Hotel/Motel C	uest Room	
☐ Schools (Public School)	☐ Relo	catable Public Schoo	l Bldg. ☑	Conditioned	Spaces		onditioned Spaces	
Phase of Construction:	☑ New	Construction	☐ Addition		· -	(affidate	vit)	
Approach of Compliance:	□ Com	nonent	Overall	Envelope T	DV 🗖		d (file affidavit)	
		·	L Energy			Onconditione	d (ilic allidavit)	
Front Orientation: N, E, S, W of HVAC SYSTEM DETAIL		es: 180 deg		I	FIEL D INC	DESTINAL ENE	DOV OUTOVI IOT	
HVAC STSTEW DETAIL	.3						RGY CHECKLIST	
F		l	lan Orlania			ts Criteria or F	escribe Reason ²	
Equipment ² Item or System Tags		inspec	tion Criteria	Pass	Faii – D			
(i.e. AC-1, RTU-1, HP-1)		Suite B RTU-3						
Equipment Type ³ :		Packaged DX						
Number of Systems		1						
Max Allowed Heating Capacity	,1	50,000 Btu/hr						
Minimum Heating Efficiency ¹		80% AFUE						
Max Allowed Cooling Capacity	,1	34,600 Btu/hr						
Cooling Efficiency ¹		13.0 SEER / 11.0 E	EER					
Duct Location/ R-Value		Conditioned / 4.2						
When duct testing is required, MECH-4A & MECH-4-HERS	submit	No						
Economizer		Diff. Enth (Integrate	ed)					
Thermostat		Setback Required						
Fan Control		Constant Volume						
					FIELD INS	SPECTION ENE	RGY CHECKLIST	
Equipment ²		Inspec	tion Criteria		Pass	Fail – D	escribe Reason ²	
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		Suite B RTU-4						
Equipment Type ³ :		Packaged DX						
Number of Systems		1						
Max Allowed Heating Capacity	,1	50,000 Btu/hr						
Minimum Heating Efficiency ¹		80% AFUE						
Max Allowed Cooling Capacity	,1	34,600 Btu/hr						
Cooling Efficiency ¹		13.0 SEER / 11.0 I	EER					
Duct Location/ R-Value		Conditioned / 4.2						
When duct testing is required, MECH-4A & MECH-4-HERS	submit	No						
Economizer		Diff. Enth (Integrate	ed)					
Thermostat		Setback Required						
Fan Control		Constant Volume						
If the Actual installed equipment the building plans) the responsit For additional detailed discrepar Indicate Equipment Type: Gas (ole party sha ncy use Pag	Il resubmit energy comp e 2 of the Inspection Che	liance to include ecklist Form. Co	the new char mpliance fails	nges.		lbmittal or from	

Enforcement Agency: Systems Acceptance. Before Occupancy Per	mit is granted for a n	ewly constructed bu	ilding or space or whenever nev
fenestration is installed in the building or space The ENV-2A form is not considered a complete	shall be certified as form and is not to b	meeting the Accept e accepted by the e	ance Requirements. nforcement agency unless the
boxes are checked and/or filled and signed. In enforcement agency that certifies plans, speci			
information meet the requirements of §10-103(b) of Title 24 Part 6.	The field inspector r	nust receive the properly filled
out and signed forms before the building can re fenestration product line must be provided to the	eceive final occupand	cy. A copy of the EN	IV-2A for each different
renestration product line must be provided to tr	ie owner of the build	ing for their records.	
Test Description		ENV-2A	Test Performed By:
Fenestration Products Name or ID Requiring Testing or Verification	Area of like Products	Building Envelope Acceptance Test	
PPG SOLARBAN 60 (2) Clear	972	V	
EnergyPro 5.1 by EnergySoft User Number: 4964	RunCode: 2011-12	?-01T11:05:22 ID:	Page 18 of

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for Envelope Fenestrations system. The designer is required to check the acceptance tests and list all the fenestration products that require an acceptance test. If all the site-built fenestration of a certain type requires a test, list the different fenestration products and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible

CERTIFICA AND FIELD					E GY CHECKLIST	Г	(P	art 2 of 3)		ENV	-1C
Project Name					<u></u>	•					Date	2044
Vew Office Buil		T (00	OL BO	250)							12/1/2	2011
ROOFING PRO		_ `			is compliance approach c	annot h	e used)	Go to Overall	Fnve	lone /	Annroac	h or
Performance Appi	oach.						,			iopc /		
					THE ROOFING PRODUCT			EQUIREMENTS	:	Pass	Fail ¹	N/A
					and16 with a Low-Sloped. 2:				-			
Low-cloped Wa					ith a Steep-Sloped with less nd 5 are exempted, solar refl				in.			
SRI that have a	U-facto	r of 0.039	or lower.	See Opaq	ue Surface Details roof asse	mbly, Co	olumn H of	ENV-2C.	D			
that have a U-fa	actor of (0.048 or I	ower. See	Opaque S	d 5 are exempted, solar rele surface Details roof assembly	below,	Column H	of ENV-2C.	KI			
					Itaic panels and building integor SRI, see spreadsheet calc				1/			
	ons that	have the			oof membrane with a weight							
High-rise reside	ential bui	ildings an			with low-sloped roofs in Clim	ate Zone	s 1 throug	gh 9, 12 and 16 a	are			
exempled from					klist Form and take appropria	te actio	n to correc	t Verify buildin	a plane			"
CRRC Product ID		Slope		Weight	Product		d Solar	Thermal	y pian	3 11 1160	ossaiy.	
Number ¹		2 > 2:12		≥ 5lb/ft ²	Type ²	Refle	ectance ³	Emmitance	SF	RI ⁵	Pass	Fail ⁶
						□ ⁴						
						□ ⁴						
same directory and Roof Rating Council 4. Check box if the A 5. The SRI value ned 6. If Fail then descrit	use the sized aged Refeated to be on this contract.	equation Product flectance calculat s page of	(0.2+0.7(p Directory. is a calculated from a state of the linspection)	_{initial} – 0.2) ated value spreadshe ction Chec	Rating Council's Rated Proc to obtain a calculated aged v using the equation above. et calculator at http://www.er klist Form and take appropria	value. Watergy.ca	/here p is .gov/title24 n to correc	the Initial Solar 4/ ct. Verify buildin	Reflect g plans	tance f	cessary.	Cool
					t be applied across the entire imum performance requirem							е
☐ Aluminum-Pigme					nent-Based Roof Coating	OTTO HOL	ĭ	Other	•••	2010 00	ating.	
Discrepancies:	nica Asp	Jilait 1100	or coating	- 0011	Tent Based Floor Coating			Otrici				
EnergyPro 5.1 by En	ergySoft	t Us	er Numbei	: 4964	RunCode: 2011-12-01	T11:05:	22 I	D:			Page 1	7 of 31

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12/1/2011

ENGINEE

HANDLE

SOUTHL,
energy consutitle 24 calcul
hvac, plumbing and electi
1491 Glenneyre St., Laguna Bez
PH: 949/497-3591 FAX:
E-mail Address:

JAMES HOCHICE FOR:
32246 CLINTON KEITH ROAD, WILDOI

DATE: 11.28.11 JOB NO: TM/SL/JH CHECKED: GD/PK SCALE: AS NOTED

M1.3