

CERTIFICATE OF FIELD VERIFICATION AND D	JAGNOSTIC TESTING	CF-4R-F	MECH-20
Duct Leakage Test – Completely New or Replacement	***************************************		age 1 of 2)
Site Address:	Enforcement Agency:	Permit Number:	
Enter the Duct System Name or Identification/Tag:	, R V		
	h		
No. of the Control of	90		· · · · · · · · · · · · · · · · · · ·
Note: Submit one Installation Certificate for each duct system	that must demonstrate complian	ice in the dwelling	
This certificate is required for compliance for completely new for completely new or replacement duct systems in existing dwreplacement duct system can also include existing parts of the plenums, etc.) if those parts are accessible and they can be sea	ellings. For existing dwellings, original duct system (e.g., regist	a completely new	or
Duct Leakage Diagnostic Test - completely new or replace	nent duct system	Ā	
Enter a value for the Allowed Leakage (CFM) for the duct syst	em leakage verification. The va	lue entered must l	oe the
Verified Low Leakage Ducts in Conditioned Space criteria or o	one of the three calculated leakage	ge fates described	below.
Verified Low Leakage Ducts in Conditioned Space (VLLD) for verified low leakage ducts in conditioned space is shown in	the special features section of the	ightance credit ie CF-1R, the	Allowed
leakage to outside test method must be used to verify duct leak	age (refer to RA3.1.4.3.4), and 2	5 CFM must be	Leakage (CFM)
entered for Allowed Leakage.			(C11V1)
Allowed leakage calculation – (select one calculation method) 0.06) for calculations. When utilizing Low Leakage Air Handi	rom this section). Use 6% (leak	<i>age factor;=</i> uct léakage may	
be specified by the CF-1R to be less than 6%, in which case the	e user-specified leakage rate mus	the used in the	
calculations below. For example, if the user-specified leakage	(specified as a percentage of fan	airflow) is	
reported on the CF-1R as 3%, then use a leakage factor of 0.03	in the calculations below.		
Cooling system method:	J'AN	en,	
Nominal capacity of condenser in Tons	0 x leakage factor =	<u>(CFM)</u>	
	du		
Heating system method: 21.7 x Output Capacity in Thousands o	EDITA VI lankana fratari - 6	(CFM)	
21.7 x Output Capacity in Thousands o	Blu/III x leakage jactor —	(CrMi)	
☐/Measured airflow method (RA333)	gira -		
Enter measured fan flow in CFM here	x leakage factor = 69	(CFM)	
			Actual
Enter value for Actual leakage (CEM) in the right column, from		duct leakage	Leakage
pressurization test procedure from Reference Residential Appe	ndix RA3.1(CFM @ 25 Pa).		(CFM)
Li	et Actual Leakage from duct lea	kage test (CFM)	698
Pass if Actual Leakage is less than Allowed Leakage		649C O F	ass □ Fajl
For complete replacement of duct systems only, if the 6 percent	t leakage rate criteria cannot he	. %	
test should be performed to verify that the excess leakage is co	ming only from a pre-existing fu	rnace cabinet	700
(air handler cabinet), and not from other accessible portions of			7 6
installation (No sampling allowed).	List Actual Leakage from si		Page [] Foll
Pass if all accessible leaks (except for existing air handler)	are scaled using smoke		Pass Fail

Registration Number: Registration Date/Time: HERS Provider: 2008 Residential Compliance Forms August 2009

CERTIFICATE OF FIELD VERIFICATION AND	DIAGNOSTIC TESTING	CF-4R-MECH-20
Duct Leakage Test - Completely New or Replacement	nt Duct System	(Page 2 of 2)
Site Address:	Enforcement Agency:	Permit Number:
☐ Outside air (OA) ducts for Central Fan Integrated (CFI) y leakage testing. CFI OA ducts that utilize controlled motorize meet ASHRAE Standard 62.2, and close when OA ventilation during duct leakage testing. ☐ All supply and return register boots must be scaled to the	ed dampers, that open only who n is not required, may be config	en OA yentilation is required to
☐ New duct installations cannot utilize building cavities as ☐ Mastic and draw bands must be used in combination with connections.		
DECLARATION STATEMENT. • I certify under penalty of perjury, under the laws of the State of	A Paris	
 I am the certified HERS rater who performed the verification see The installed feature, material, component, or manufactured dev (the installation) complies with the applicable requirements in R specified on the Certificate(s) of Compliance (CF-1R) approved 	ice requiring HERS verification the eference Residential Appendices R	at is identified on this certificate
 The information reported on applicable sections of the Installation responsible for the installation conforms to the requirements spe enforcement agency. 	on Certificate(s) (CF-6R), signed as	
Builder or Installer information as shown on the Installation Ce	rtificate (CF-6R)	
Company Name: (Installing Subcontractor or General Contractor or	r Builder/Owner)	
Responsible Person's Name:	CSLB License:	
HERS Provider Data Registry Information	*	
Sample Group # (if applicable):	☐ tested/verified dwelling	☐ not-tested/verified dwelling in a HERS sample group
HERS Rater Information		
HERS Rater Company Name:		
Responsible Rater's Name	Responsible Rater's Signature	
Responsible Rater's Certification Number w/ this HERS Provider:	Date Signed:	, , , , , , , , , , , , , , , , , , , ,

Registration Date/Time:

Registration Number: _____ 2008 Residential Compliance Forms

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HERS Provider:



CEI	RTIFICATE OF FIELD VERIFICATION AND D	IAGNOSTIC TESTING	GF-4	IR-MECH-2
	t Leakage Test – Existing Duct System			(Page 1 of
	Address:	Enforcement Agency:	Permit Numl	oer:
Ente	r the Duct System Name or Identification/Tag:	710		
		and 1 h	,	
	r the Duct System Location or Area Served:	/ / (li mana in the deva	Ilia o
Note	: Submit one Installation Certificate for each duct system i	nat must aemonstrate comp	Thance in the awe	uung.
	installation certificate is required for compliance for alteralitioning systems and duct systems.	ations and additions in exis	ting dwellings to s	space
duct comp	: For existing dwellings, a completely new or replacement system (e.g., register boots, air handler, coil, plenums, etc. pletely new or replacement duct system installed in an exist age Test – Completely New or Replacement Duct System.") if those parts are accessib ing dwelling, use the Instal	ble and they can b	e sealed. Foi
Duc	t Leakage Diagnostic Test – existing duct system			
Sele	ct one compliance method from the following four choices	. 00	1 J	
	option 1. Measured leakage less than 15% of Fan Airflow.	OF I		
	ption 2. Measured leakage to outside less than 10% of Fan	Airflow.		
$\Box Q$	ption 3. Reduce leakage by 60% or more, and conduct smo	ke test to seal all accessible	e leaks	
	ption 4. Fix all accessible leaks using smoke test, and HEF	S rater must verify	*	
1000	e: (Option 1 must be attempted before utilizing Option 4)	Fr. Jahr		
Dete	ermine nominal Fan Airflow using one of the following the	ee calculation methods.	***************************************	
7	cooling system method: Size of condenser in Tons 714	x 400 CFI		
ПI	leating system method: 21.7 xHeating Outpo	ut Capacity (kBtuh) =	CFMCFM	
	Measured system airflow using RA3. naii flow test procedur	és: <u>7/8</u> CFM		
1	Option 1 used then: Allowed leakage = Fan Airflow Actual leakage = CFM	x 0.15 = 7 2 0	CrW	. way I have
		tual leakage is less than A	Ilowed leakage	☐ Pass ☐
	Option 2 used then: Allowed leakage = Fan Airflow	x = 0.10 = 724	CFM	
2	Actual leakage to outside = 726 CFM	_		121
	Pass if Actual leaka	ge to outside is less than A	llowed leakage (☐ Pass ☐
	Option 3 used then: Initial leakage prior to start of work= 728 CFM	Л		
	Final leakage after sealing all accessible leaks using smok		FM	
3	Initial leakage 737 Final leakage 737	= Leakage reduction		
	(Leakage reduction 7 3 3 / Initial leakage 7 3			735
ı			eduction ≥ 60%	☐ Pass ☐ I
		T 422 II \0 11/4		
4	Option 4 used then: All accessible leaks repaired using smoke test. HERS rat			737

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CERTIFICATE OF FIELD VERIFICATION AND	DIAGNOSTIC TESTING	CF-4R-MECH-21
Duct Leakage Test – Existing Duct System		(Page 2 of 2)
Site Address:	Enforcement Agency:	Permit Number:
- *		
☐ Outside air (OA) ducts for Central Fan Integrated (CFI) ve leakage testing. CFI OA ducts that utilize controlled motorize meet ASHRAE Standard 62.2, and close when OA ventilation during duct leakage testing. ☐ All supply and return register boots must be sealed to the duct leakage compliance option 3 (leakage reduction by 60%)	ed dampers, that open only when it is not required, may be configured to the configuration of	n OA ventilation is required to med to the closed position for compliance – applies to
☐ New duct installations cannot utilize building cavities as ☐ Mastic and draw bands must be used in combination with duct connections. DECLARATION STATEMENT	The second of the second	
 I certify under penalty of perjury, under the laws of the State of I am the certified HERS rater who performed the verifications The installed feature, material, component, or manufactured de (the installation) complies with the applicable requirements in I requirements specified on the Certificate(s) of Compliance (CF 	rivices identified and reported on th vice requiring HERS verification th Reference Residential Appendices R	is certificate (responsible rater). at is identified on this certificate RA2 and RA3 and the
 The information reported on applicable sections of the Installat responsible for the installation conforms to the requirements sp enforcement agency. 	ion Certificate(s) (CF-6R), signed a ecified on the Certificate(s) of Com	nd submitted by the person(s)
Builder or Installer information as shown on the Installation Ce Company Name: (Installing Subcontractor or General Contractor or	rtificate (CF-6R) Builder/Owner)	
Responsible Person's Name:	CSLB License:	
HERS Provider Data Registry Information Sample Group # (if applicable):	☐ tested/verified dwelling	☐ not-tested/verified dwelling in a HERS sample group
HERS Rater Information HERS Rater Company Name:		
Responsible Rater's Name	Responsible Rater's Signature	
Responsible Rater's Certification Number w/ this HERS Provider:	Date Signed:	

Registration Number: _____ 2008 Residential Compliance Forms Registration Date/Time: _______HERS Provider: _______August 2009

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CERTIFICATE OF FIELD VERIFICATION AND I	CF-4R-MECH-22	
HSPP/PSPP Installation; Cooling Coil Airflow & Fan	(Page 1 of 2)	
Site Address:	Enforcement Agency:	Permit Number:

As many as 4 systems in the dwelling can be documented for compliance using this form. Attach an additional form(s) for any additional systems in the dwelling as applicable.

Hole for the placement of a Static Pressure Probe (HSPP), and Permanently installed Static Pressure Probe (PSPP) in the supply plenum

Select o	ne method from the two choices be	low for co	mpliance with the I	HSPP/PSPP require	ment for this	dwelling.	
	HSPP		(6 mm) hole labele			evaporator	coil in the supply
		1/4 inch	as shown in the figure (6 mm) hole equipped.	re in Section RA3.	o.1.1. ntly installed	pressuré pr	obe Tabeled and
▫╱╴	PSPP	located of	downstream of the e RA3.3.1.1.	vaporator coil in th	e supply ple	num as show	n in the figure in
System	Name or Identification/Tag		743			~	
-	Location or Area Served		744 ~				À
installe	n that a HSPP or PSPP has been d on the air handler per the ments of RA3.3.1.1. Enter Pass or l			TO!			
THO COO	ling coil airflow must be perfor	med as s	necified in Refere	ow verification is nce Residential A	ppendix RA	3.3. Result	s of the cooling
coil air Select o	ling coil airflow must be perfor flow diagnostic test must be em ne method from the three choices be pagnostic Fan Flow Using Plen	ined as specification of the contraction of the con	pecified in Reference the table below. In compliance with the ure Matching accurate	nce Residential A his measure requ Cooling Coil Airf ording to the prod	ppendix RA ires verifica ow test required edures in R	3.3. Result tion by a Harament for the A3.3.3.1.1	s of the cooling ERS rater.
coil air	ling coil airflow must be perfor flow diagnostic test must be end ne method from the three choices be priagnostic Fan Flow Using Plen priagnostic Fan Flow Using Flow	imed as spectated in the control of	ne fitted in Reference to the fable below. It is compliance with the ure Matching according to the configuration of the configuration o	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.
Select o	ling coil airflow must be perfor flow diagnostic test must be em ne method from the three choices be pagnostic Fan Flow Using Plen	imed as spectated in the control of	ne fitted in Reference to the fable below. It is compliance with the ure Matching according to the configuration of the configuration o	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.
Select of DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	ling coil airflow must be perfor flow diagnostic test must be em- ne method from the three choices be diagnostic Fan Flow Using Plen diagnostic Fan Flow Using Flow diagnostic Fan Flow Using Flow Name or Identification/Tag	med as specification of the control	ne fitted in Reference to the fable below. It is compliance with the ure Matching according to the configuration of the configuration o	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.
Select of DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	ling coil airflow must be perfor flow diagnostic test must be em- ne method from the three choices be diagnostic Fan Flow Using Plen- diagnostic Fan Flow Using Flow diagnostic Fan Flow Using Flow Name or Identification/Tag Location of Area Served	med as specification of the control	ne fitted in Reference to the fable below. It is compliance with the ure Matching according to the configuration of the configuration o	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.
Select on D D D D System System Nomina outdoor Enter the from the control of t	ling coil airflow must be perfor flow diagnostic test must be em- ne method from the three choices be diagnostic Fan Flow Using Plen diagnostic Fan Flow Using Flow diagnostic Fan Flow Using Flow Name or Identification/Tag Location of Area-Served al Cooling Capacity (ton) of the r unit.	med as systemed in the pelow for the pelow f	ne fitted in Reference to the fable below. It is compliance with the ure Matching according to the configuration of the configuration o	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.
Select on D D D D D D D D D D D D D D D D D D	ling coil airflow must be perfor flow diagnostic test must be emme method from the three choices be biagnostic Fan Flow Using Plen biagnostic Fan Flow Using Flow biagnostic Fan Flow Using Flow Name or Identification/Tag Location or Area-Served al Cooling Capacity (ton) of the runit.	med as specified as specified in the pelow for the pelow for the pelow for the pelow Capture with the pelow Capture for the pelow capture iteria in the pelow capture iter	pecified in Reference to the lable below. Its compliance with the ure Matching according to the lable below	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.
Select or Select or Depth Dept	ling coil airflow must be perfor flow diagnostic test must be entire method from the three choices be liagnostic Fan Flow Using Plendiagnostic Fan Flow Using Flow diagnostic Pan Flow Using Flow Diagnostic Pan Flow Using Flow Diagnostic Pan Flow Diagnostic Pan Flow Diagnostic Pan Plan Pan Pan Pan Pan Pan Pan Pan Pan Pan P	med as specified as specified in the peloty for the peloty for the peloty for the peloty Capture of the peloty Capture of the peloty Capture of the peloty for the peloty f	pecified in Reference to the lable below. Its compliance with the ure Matching according to the lable below	nce Residential A his measure requ Cooling Coil Airf ording to the proced ling to the proced	ppendix RA ires verifica ow test required in R lures in RA	3.3. Result tion by a Harrison for the A3.3.3.1.1	s of the cooling ERS rater.

Registration Number:	Registration Date/Time:	_HERS Provider:	
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CERTIFICATE OF FIELD VERIFICA'				ING	CF-4	4R-MECH-22
HSPP/PSPP Installation; Cooling Coil A	irflow & Fan	Watt Dr	aw Test		(Page 2 of 2)	
Site Address:	Enforcement Agency:			Permit N	lumber:	
Fan Watt Draw Verification When the Certificate of Compliance indicates Fan We must be performed as specified in Reference Resident in the table below. This measure requires verification cooling coil airflow. The fan watt draw measurement target criteria specified by the CF-IR for the dwelling Select one method from the two choices below for co	ntial Appendix RA on by a HERS rat ont and cooling co org.	13.3. Result er. Note: F il airflow m	s of the Fan Wa Fan watt draw m easurement mus	tt Draw ust be m t simulta	diagnostic test easured simult meously meet c	must be entered aneously with or exceed their
Portable Watt Meter Measurement accord	-					
Utility Revenue Meter Measurement acco	rding to the pro	cedures in	RA3.3.3.3.2			······································
System Name or Identification/Tag	755					
System Location or Area Served	156				Ý.	
Enter the air handler Target (CFM) from the cooling coil airflow test table above.	757				()	
Enter the fan watt draw requirement from the CF-1R (Watt/CFM).	756	40			× × × × × × × × × × × × × × × × × × ×	
Calculate the target maximum Watt draw for the test by multiplying the Watt/CFM criteria specified on the CF-1R by the air handler Target (CFM). Target (Watt)	75%		A			
Enter the diagnostically tested Watt draw (Watt). Tested (Watt)	1 1760	2.	D'A	1		
The system complies if Tested (Watt) is less than or equal to Target (Watt) Enter pass or Fail			D. J.	, jan		
 DECLARATION STATEMENT I certify under penalty of perjury, under the laws I am the certified HERS rater who performed the The installed feature, material, component, or may (the installation) complies with the applicable recognised on the Certificate(s) of Compliance (CI) The information reported on applicable sections responsible for the installation conforms to the reenforcement agency. 	e verification serve anufactured device quirements in Re F-1R) approved by of the Installation	Pices identifice requiring ference Respoy the local of Certificate	ed and reported HERS verificat idential Append enforcement age (s) (CF-6R), sig	on this of that it ices RA2 ency.	certificate (responsible) seidentified on 2 and RA3 and submitted by t	consible rater). this certificate the requirements the person(s)
Builder or Installer information as shown on the						
Company Name: (Installing Subcontractor or Gener	al Contractor or	Builder/Ow	ner)			•
Responsible Person's Name:		CSLB Lice	ense:			
HERS Provider Data Registry Information		·				
Sample Group # (if applicable):	:	□ tested/	verified dwellin		☐ not-tested/ in a HERS sar	verified dwelling nple group
HERS Rater Information						
HERS Rater Company Name:						
Responsible Rater's Name		Responsib	le Rater's Signa	ture		4.
Responsible Rater's Certification Number w/ this HE	ERS Provider:	Date Signe	ed:			

Registration Date/Time: _



	RTIFICATE OF FIELD VERIFICATI	ON AND I	DIAGI	OSTIC TES	ring	CF	-4R-MECH-23
-	ification of High EER Equipment Address:		II	rcement Agency:		TD a respect to	<u>(</u> Page 1 of 1) Number:
Site.	Augress:		Enio	rcement Agency:		rermit	ianwer:
Proc multi	fication of High EER Equipment edures for verification of High EER Equipment are ple systems, the procedures must be applied to each liance using this form. Attach an additional forme	ch system sepa	rately.	As many as 4 syst	ems in the	e dwelling can	lling units with be documented for
1	System Name or Identification/Tag	76	2				
2	System Location or Area Served	76	3				
3	Certified EER Rating of the installed equipment (Btu/Watt-hr)	76	7				
4	Make and Model Number of the installed Outdoor Unit	765	66			£	
5	Make and Model Number of the installed Inside Coil	717	GB	×			
6	Make and Model Number of the installed Furnace or Air Handler.	7642	70	W. P.			
7	Minimum Equipment EER required for compliance as reported on the CF-1R	771					
□ W	hen a high EER system specification includes a time	me delay relay	the in	stallation of the til	ne delay	relay must be v	rerified for
□ W	liance credit. Refer to Reference Residential App hen installation of specific matched equipment is ed for compliance credit. Refer to Reference Resi	necessary to a	chieve	î high EER, instal	lation of t	he specific equ	ipment must be
8	If the Certified EER Rating in row 3 is equal or greater than the required minimum EER in row 7, the unit complies. If the unit complies enter Pass	D. M.	光	JON 1	>		
• I (t sp	LARATION STATEMENT certify under penalty of perjury, under the laws of am the certified HERS rater who performed the vene installed feature, material component, or manufacture installation) complies with the applicable requirecified on the Certificate(s) of Compliance (CF-1) are information reported on applicable sections of the sponsible for the installation conforms to the requirecement agency.	offication servifactured device the service of the	rices ide ce requinter ference by the lo certifi	ntified and reportering HERS verific Residential Apper cal enforcement a cate(s) (CF-6R), s	ed on this ation that dices RA gency.	is identified on 22 and RA3 an	sponsible rater). In this certificate If the requirements the person(s)
	er or Installer information as shown on the Ins						
Comp	any Name: (Installing Subcontractor or General C	Contractor or l	Builder/	Owner)			
Respo	nsible Person's Name:		CSLB	License:			
HER	S Provider Data Registry Information						
	le Group # (if applicable):		☐ test	ed/verified dwelli	ng	☐ not-tested in a HERS sa	/verified dwelling mple group
	S Rater Information						
HEK	Rater Company Name:						
Respo	nsible Rater's Name		Respoi	nsible Rater's Sign	ature		
Respo	nsible Rater's Certification Number w/ this HERS	Provider:	Date S	igned:			

Registration Date/Time:

Registration Number: _____2008 Residential Compliance Forms

August 2009

HERS Provider:



	TIFICATE (OF FIELD VI	ERIFIC	CATION AND I	DIAGNOSTIC	CTESTING	· CI	F-4R-MECH-24
Cha	rge Indicator	Display (CIII)					(Page 1 of 1)
Site A	ddress:				Enforcement	Agency:	Permi	t Number:
Charge for the and a democratic show	e CID is in Refi CID has been instrating complerant charge ven in the table be	play (CID) spe- erence Residen- nstalled on the liance with the rification comp blow.	cificatio tial App system, refrigera diance f		refrigerant chan verification fo ion requiremen not required fo	ge verification r an installed t for that system r a system tha	n is required for system is sufficem, thus submit has a passing	icient for ittal of a standard
Syste	m Name or Ide	ntification/Tag		841				
Syste	m Location or A	Area Served		842			41	
1	□Yes	□No		isplay is mounted		5. 98	74 75 K	ž.
2	□Yes	□No	65 F a	ystem has operated and outdoor temper n is operating prop	ature is greater	than 55 F, an	d, the display	
3	□Yes	□No	The C	ID was installed b	y the manufactu	ırer	(Ma	and the second
4	□Yes	□No	or if 3	is No, the CID wa	s-installed acco	rding to the n	anufacturer's	specifications
Yes t	o 1 and 2 and ye	es to either 3 or	4 is a p	ass 🔏 🤼	enter Pass of	fail K	□Pass	✓ □ Fail
 I c I a Th (th sp Th res en 	m the certified H the installed feature the installation) con ecified on the Cer the information rep sponsible for the forcement agency	Ity of perjuly, un ERS rater who p e, material, comp mplies with the a rtificate(s) of Cor orted on applica installation confo	erformed conent, or pplicable npliance ble sections to the	the verification server manufactured device requirements in Re- (CF-IR) approved the soft the Installation are requirements specially the soft the Installation are requirements specially the Installation Court of the Installat	ices identified an the requiring HER ference Residenti y the local enford Certificate(s) (C fied on the Certif	d reported on the Second of the Second	nis certificate (rout is identified RA2 and RA3 and RA3 and RA3 and submitted b	esponsible rater). on this certificate nd the requirements y the person(s)
				he Installation Cere eneral Contractor or I				
Respo	nsible Person's N	ame:			CSLB License:			
HERS	Provider Data	Registry Inform	ation					
Sampl	e Group # (if app	licable):			☐ tested/verifie	d dwelling		ed/verified dwelling sample group
	Rater Informat							
-HHKS	Rater Company	Name:						
iiiiii								
	nsible Rater's Na	me		,,,	Responsible Rat	er's Signature		

Registration Date/Time: _

Registration Number: _____ 2008 Residential Compliance Forms

August 2009

HERS Provider:

	RTIFICATE OF FIELD		The state of the s	***************************************	STING		CF-4R-MECH-25
	rigerant Charge Verificat	tion - Sta	ındard Measuren	nent Procedure			(Page 1 of 5
Site A	Address:			Enforcement Agen	cy:	Permit I	Number:
comp the r	: If installation of a Charge I. pliance, a MECH-24 Certifica efrigerant charge verification ompliance.	ate (instea	d of this MECH-25	Certificate) should b	e used to dei	nonstrai	te compliance with
As m any a	any as 4 systems in the dwell additional systems in the dwel	ing can be Iling as ap	e documented for co oplicable.	mpliance using this f	°orm. Attach	an addi	itional form(s) for
Proc is rec	perature Measurement Acc edures for installing TMAH a quired for compliance, TMAH acement space-conditioning s	ıre specifi I are also	ed in Reference Res required for compli	idential Appendix RA ance. STMS are only	13.2. If refri v required fo	gerant c	harge verification
TMA	AH - Access Holes in Supply	and Ret	urn Plenums of Air	· Handler		4	
Syste	em Name or Identification/Ta	g	827	M	4		·
Syste	em Location or Area Served		828		A	7 /	
1	□Yes ੳ □¶ □No	5/16 i labele	nch (8 mm) access h d according to Figu	ole upstream of eval e in Section RA3-2.	orative ^j coil 3,2.2.	in the re	eturn plenum and
2	□Yes ∜30 □No	5/16 i and la	nch (8 mm) access t beled according to I	ole downsfream of e Figure in Section RA	vaporațive c 3.2,2(2.2.	olf in th	e supply plenum
Yes t	to 1 and 2 is a pass.			Enter Pass or Fail	1. V	Pass	✓ □ Fail
STM	S - Sensor on the Evaporate	or Coil 🛚	A THE	Promise Contraction			
Syste	em Name or Identification/Ta	130-7	S. E. S. D.	Ta Chris			
3	□Yes ∅ Z □No Ç	The sen specific Directo	ations, or is installed	ed, or field installed d by methods/specifi	according to cations appr	manufa oved by	acturer's the Executive
4	□Yes 8 3 □No	digital the HEJ	hermometer. The so S rater without cha	ed with a standard m ensor mini plug is ac nging the airflow thr	cessible to though the con	ie install idenser	ling technician and coil
5	□Yes 🏸 □No	The sen	sor measures the sat	uration temperature	of the coil w	ithin 1.3	degrees F
	o 3, 4, and Mis a pass." if STMS are not applicable	Otherwise	Enter enter Pass or Fail	✓ □ N/A	✓ □ I	ass	✓ □ Fail
STM	S - Sensor on the Condense	r Coil					
	m Name or Identification/Tag		835				
6	□Yes 836 □No		ations, or is installed	ed, or field installed I by methods/specific			
7	□Yes Ø 7 □No	digital t	hermometer. The se	ed with a standard mensor mini plug is according the airflow thr	cessible to th	e install	ling technician and
8	□Yes %}∜ □No	The sen	sor measures the sat	uration temperature	of the coil w	ithin 1.3	degrees F

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√ □ N/A

✓ □ Fail

✓ □ Pass

Yes to 6, 7, and 8 is a pass. Enter N/A if STMS are not applicable. Otherwise enter Pass or Fail

CERTIFICATE OF FIELD VERIFIC	CATION AND DI	agnostic tes	TNG	CF-	4R-MECH-25
Refrigerant Charge Verification - Sta	ndard Measurem	ent Procedure			(Page 2 of 5)
Site Address:		Enforcement Agend			iber:
Standard Charge Measurement Procedure Procedures for determining Refrigerant Charge Residential Appendix RA3.2. As many as 4 syste additional form(s) for any additional systems in a The system should be installed and charged The system must meet minimum airflow reques If outdoor air dry-bulb is 55°F or below, the Space Conditioning Systems	using the Standard Choms in the dwelling can the dwelling as applica in accordance with tho uirements as prerequis	arge Measurement Prod be documented for con ble. a manufacturer's specif ite for a valid refrigera	cedure are a apliance usin ications befo nt charge tes	ng this form. ore starting th st.	Attach an
System Name or Identification/Tag	7/6				
System Location or Area Served	may any many				
Outdoor Unit Serial #	778			4	
Outdoor Unit Make	779	40 1	1		
Outdoor Unit Model	780		M	in.	
Nominal Cooling Capacity Btu/hr	781 2	()" A			
Date of Verification	7823.	() x	A	VY	
Calibration of Diagnostic Instruments			A De	<i>y</i>	
Date of Refrigerant Gauge Calibration	J. 7231	M. J.) (must l	oe re-calibra	ited monthly)
Date of Thermocouple Calibration	-0237	. (\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(must l	oe re-calibra	ted monthly)
Measured Temperatures (°F)		9			
System Name or Identification/Tag	794				÷
Supply (evaporator leaving) air dry bulb					
temperature (T _{supply} , db) Return (evaporator entering) air dry-bulb	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
temperature (T _{rettirns/db}) Return (evaporator entering) air wet-bulb	7 7 5 7				
temperature (T _{return} , wb)	788				
Evaporator saturation temperature (Tevaporator, sat)	784				
Condensor saturation temperature	790				
(T _{condensor} , sat) Suction line temperature (T _{suction})	<u> </u>				
Liquid Line Temperature (T _{liquid})	792				
Condenser (entering) air dry-bulb	1 1 6-				
temperature (T _{condenser} , db)	793				
17131 6 55 the FR	Ron				
55 x 1297 4 65 1	and [78	anticonium producerania produce	Ho.	Error	·
Registration Number: 2008 Residential Compliance Forms	Registration D	ate/Time:	H	ERS Provide	r:

CERTIFICATE OF FIELD VERIFICATE OF FIELD VERIFICATION - Stan			TIMC	CF-4R-MECH (Page 3	
Reirigerant Charge Verification - Stan Site Address:	abla messalem	Enforcement Agency:		Permit Number:	
Minimum Airflow Requirement					
Temperature Split Method Calculations fo Verification. The temperature split method i	r determining Min is specified in Refe	nimum Airflow Req cence Residential Ap	uirement pendix R <i>A</i>	for Refrigerant Chargo 13.2.	8
System Name or Identification/Tag	794				
Calculate: Actual Temperature Split = $T_{return, db}$ - $T_{supply, db}$	765				
Target Temperature Split from Table RA3.2-3 using T _{return, wb} and T _{return, db}	796 FEL			4	
Calculate difference: Actual Temperature Split – Target Temperature Split =	797	M			
Passes if difference is between -4°F and +4°F or upon remeasurement, if between -4°F and -100°F Enter Pass or Fail	798	OFA			
Note: Temperature Split Method Calculation airflow measurement procedures specified in measured, the value must be equal to or great	Reférence Residen	tial Appendix RA3.3.	∢If ačtual	cooling coil airflow is	
Calculated Minimum Airflow Requiremen	t (ČFM) – Nomi	nal Cooling Capacit	y (ton) X	300 (cfm/ton)	
System Name or Identification/Fag	0742	6)"			
Calculated Minimum Airflow Requirement (CFM)	1809				
Measured Airflow using RA3;3 procedures (CFM)	801				
Passes if measured airflow is greater than or equal to the calculated minimum airflow requirement. Enter Pass or Fail	802				
Superheat Charge Method Calculations fo fixed orifice metering device systems	r Refrigerant Cha	nrge Verification. T	his proced	dure is required to be use	d fo
System Name or Identification/Tag	803				
Calculate: Actual Superheat =	07.37				
T _{suction} - T _{evaporator} , sat	<u> </u>				
Target Superheat from Table RA3.2-2 using Treturn, wb and Tcondenser, db	BOT				
Calculate difference: Actual Superheat – Target Superheat =	806				
System passes if difference is between -6°F and +6°F Enter Pass or Fail	907				
Registration Number:	Registration L	Date/Time:		HERS Provider:	201

CERTIFICATE OF FIELD VERIFIC		***************************************			F-4R-MECH-
Refrigerant Charge Verification - Stan Site Address:	ndard Measurement Procedure Enforcement Agency:			(Page 4 of Permit Number:	
			<u> </u>		
Subcooling Charge Method Calculations f	on Daswiganant Ch	anga Vonifiaat	iom This proc	edure in ren	nired to be used
for thermostatic expansion valve (TXV) and				edule is req	uned to be used
System Name or Identification/Tag	gor				
Calculate: Actual Subcooling =	809				
F _{condenser, sat} — T _{liquid} Farget Subcooling specified by manufacturer	8/0				
Calculate difference: Actual Subcooling – Target Subcooling =	811				
System passes if difference is between 4°F and +4°F Enter Pass or Fail	912	1	<u> </u>	4	>
Metering Device Calculations for Refriger	ant Charga Variti	nation This n	noedura in red	nirêd to be	used for
hermostatic expansion valve (TXV) and elec				uned to be	1504 101
System Name or Identification/Tag	P1130			A PW	pried.
Calculate: Actual Superheat =	V MAI	246		N. V.	
Suction — Tevaporator, sat Enter allowable superheat range from					
nanufacturer's specifications (or use range	X 875 TA				
petween 3°F and 26°F if manufacturer pecification is not available)) *		
System passes if actual superheat is within he allowable superheat range Enter Pass or Fail	(P)/6				
FOR TO	I TON	•			

CERTIFICATE OF FIELD VERIFICATION AND DIAGNOSTIC TESTING CF-4R-ME						
Refrigerant Charge Verification - Standard	(Page 5 of 5					
Site Address:		Enforcement Agency:	Permit Number:			
		WESTERN WICHER ANNUAL CONTROL OF THE STREET				
Standard Charge Measurement Summary: System shall pass both refrigerant charge criteria, airflow criteria based on measurements taken concapplicable verification criteria must be re-measure	currently dur	ing system operation. If co				
System Name or Identification/Tag	17					
System meets all refrigerant charge and airflow requirements. Enter Pass or Fail	318					
 DECLARATION STATEMENT I certify under penalty of perjury; under the laws of the I am the certified HERS rater who performed the veri The installed feature, material, component, or manufar (the installation) complies with the applicable required specified on the Certificate(s) of Compliance (CF-IR). The information reported on applicable sections of the responsible for the installation conforms to the required enforcement agency. Builder or Installer information as shown on the Installation company Name: (Installing Subcontractor or General Company Name: (Installing Subcontractor or General Company Name) 	ification service actured device ments in Refe) approved by e Installation ements specification (certical)	requiring HERS verification to requiring HERS verification to rence Residential Appendices the local enforcement agency Certificate(s) (CF-6R), signed fied on the Certificate(s) of Conficate (CF-6R)	this certificate (responsible rater). that is identified on this certificate RA2 and RA3 and the requirements . and submitted by the person(s)			
Responsible Person's Name:		CSLB License:				
HERS Provider Data Registry Information						
Sample Group # (if applicable):		☐ tested/verified dwelling	☐ not-tested/verified dwelling in a HERS sample group			
HERS Rater Information						
HERS Rater Company Name:						
Responsible Rater's Name	Ī	Responsible Rater's Signature				
Responsible Rater's Certification Number w/ this HERS P	Provider: I	Date Signed:				

_Registration Date/Time: _

_HERS Provider: _

August 2009

Registration Number: _____2008 Residential Compliance Forms