INST	TALLATION	CERTIFI	CATE				(Page 1	of 12) (CF-6R
Site Address Permit Number									
field v testing subcord depart field v	erification and dig and the proceduntractor shall conment. The builde	iagnostic test res specified aplete the CF r also shall p iagnostic test	required for each ing is complete, to in this section. With a copy of the copy	the build Then the Certificathe The Insta	er or the build installation in te), and keep llation Certif	der's subcontors complete, the oit at the build	ractor shall comp to builder or the b ding site for revie	lete diagnos ouilder's ew by the bu	tic ilding
*****	CEC Certified	Distribution	If	# of	Rated Input				External
Heater Type	Mfr Name & Model Number	Type (Std, Point- of-Use, etc)	Recirculation,	Identical Systems	(kW or Btu/hr) ¹	Tank Volume (gallons)	Efficiency (EF, RE) ²	Standby Loss (%) ²	Insulation R-value ²
 Recovery (RE), Thermal Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Thermal Efficiency and Rated Input. R-12 external insulation is mandatory for storage water heaters with an energy factor of less than 0.58. Kitchen Piping: If indicated on the CF-1R, all hot water piping ≥ 3/4 inches in diameter that runs from the hot water source to the kitchen fixtures is insulated. Faucets & Shower Heads: All faucets and showerheads installed are certified to the Energy Commission, pursuant to Title 24, Part 6, Section 111. Central Water Heating in Buildings with Multiple Dwelling Units (required for prescriptive) 									
✓ ☐ All hot water piping in main circulating loop is insulated to requirements of §150(j) ☐ Central hot water systems serving six or fewer dwelling units which have (1) less than 25' of distribution piping outdoors; (2) zero distribution piping underground; (3) no recirculation pump; and (4) insulation on distribution piping that meets the requirements of Section 150(j) ☐ Central hot water systems serving more than 6 dwelling units - presence of either a time control or a time/temperature control									
equ wit	ivalent to or mor h the <i>Energy Eff</i>	e efficient tha <i>iciency Stana</i>	fy that equipmen an that specified in lards for resident evices (from the A	n the cert ial build	ificate of corings; and 3)	npliance (Forrequipment that	n CF-1R) submit at meets or excee	ted for comp ds the appro	liance
Co	talling Subcontra ntractor (Co. Nar								
Sig	nature:			Date	:				

INSTALLATION CERTIFICATE	(Page 2 of 12) CF-6R
Site Address	Permit Number

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(a).

FENESTRATION/GLAZING:

Item	Manufacturer/Brand Name (GROUP LIKE RODUCTS)	Product U-factor ¹ (≤ CF-1R value) ²	Product SHGC ¹ (≤CF-1R value) ²	# of Panes	Total Quantity of Like Product (Optional)	Area Square Feet	Exterior Shading Device or Overhang	Comments/Location/ Special Features
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

¹⁾ Use values from a fenestration product's NFRC label. For fenestration products without an NFRC label, use the default values from Section 116 of the Energy Efficiency Standards.

²⁾ Installed U-factor must be less than or equal to values from CF-1R. Installed SHGC must be less than or equal to values from CF-1R, or a shading device (exterior or overhang) is installed as specified on the CF-1R. Alternatively, installed weighted average U-factors for the total fenestration area are less than or equal to values from CF-1R. If using default table SHGC values from §116 identify whether tinted or not.

✓ □ I, the undersigned, verify that the fenestration/glazing listed above my signature: 1) is the actual fenestration
product installed; 2) is equivalent to or has a lower U-factor and lower SHGC than that specified in the certificate of
compliance (Form CF-1R) submitted for compliance with the Energy Efficiency Standards for residential buildings; and
3) the product meets or exceeds the appropriate requirements for manufactured devices (from Part 6), where applicable.

Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor

Copies to: Building Department, HERS Rater (if applicable) Building Owner at Occupancy

INSTALLATIO	N CERTIFICATE	<u> </u>			(Pa	ge 3 of 12)	CF-6R	
Site Address		Permit Nu	Permit Number					
An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(a). HVAC SYSTEMS: Heating Equipment								
Equip Type (pkg. heat pump)	CEC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (AFUE, etc.) ¹ (≥CF-1R value)	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)	

Cooling Equipment

Equip Type (pkg. heat pump)	CEC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (SEER or EER) ¹ (≥CF-1R value)	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)

1. ≥ symbol reads *greater than or equal to what is indicated on the CF-1R value*. Include both SEER and EER if compliance credit for high EER air conditioner is claimed.

✓ □I I, the undersigned, verify that equipment listed above is: 1) is the actual equipment installed, 2) equivalent to or
more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the
Energy Efficiency Standards for residential buildings, and 3) equipment that meets or exceeds the appropriate
requirements for manufactured devices (from the Appliance Efficiency Regulations or Part 6), where applicable.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	
Signature:	Date:

INSTALLATION CERTIFICATE	CF-6R							
Site Address	Permit Number	er						
INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE								
INSTALLER COMPLIANCE STATEMENT The building was: ✓ □ Tested at Final ✓ □ Tested at Rough-in								
 INSTALLER VISUAL INSPECTION AT FINAL CONSTRUCTION STAGE FOR NEW DUCTS: □ Remove at least one supply and one return register, and verify that the spaces between the register boot and the interior finishing wall are properly sealed. □ If the house rough-in duct leakage test was conducted without an air handler installed, inspect the connection points between the air handler and the supply and return plenums to verify that the connection points are properly sealed. □ Inspect all joints to ensure that no cloth backed rubber adhesive duct tape is used <i>on new ducts</i>. 								
✓ □ DUCT LEAKAGE REDUCTION								
Procedures for field verification and diagnostic testing of air distribution systems NEW CONSTRUCTION:	are available in RA	1CM, Appen	dix RC4.3					
Duct Pressurization Test Results (CFM @ 25 Pa)		Measured Values						
1 Enter Tested Leakage Flow in CFM:								
Fan Flow: Calculated (Nominal: ✓ □ Cooling ✓ □ Heating) or ✓ □ Measur If Fan Flow is Calculated as 400 cfm/ton x number of tons or as 21.7 cfm/(kB Capacity in Thousands of Btu/hr, enter total calculated or measured fan flow in the control of the	tu/hr) x Heating		✓ ✓					
Pass if Leakage Percentage < 6% for Final or < 4% at Rough-in without air h [100 x [(Line # 1) /(Line # 2)]]	□ Pass □ Fail							
ALTERATIONS: Duct System and/or HVAC Equipment Change-Out	·							
Enter Tested Leakage Flow in CFM from Pre-Test of Existing Duct System I System Alteration and/or Equipment Change-Out.	Prior to Duct							
Enter Tested Leakage Flow in CFM from Final Test of New Duct System or System for Duct System Alteration and/or Equipment Change-Out.	Altered Duct							
Enter Reduction in Leakage for Altered Duct System [(Line # 4) Minus(Line # 5)] - (Only if Applicable)								
7 Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)			✓ ✓					
Entire New Duct System - Pass if Leakage Percentage < 6% for Final. [100 x [(Line # 5) /Line # 2)]]			□ Pass □ Fail					
TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or I Out Use one of the following four Test or Verification Standards for compliance		Change-	✓ ✓					
9 Pass if Leakage Percentage < 15% [100 x [(Line # 5) /(I	Line # 2)]]		☐ Pass ☐ Fail					
Pass if Leakage to Outside Percentage < 10% [100 x [(Line # 7) /			□ Pass □ Fail					
Pass if Leakage Reduction Percentage > 60% [100 x [(Line # 6) / and Verification by Smoke Test and Visual Inspection	(Line # 4)]]		□ Pass □ Fail					
12 Pass if Sealing of all Accessible Leaks and Verification by Smoke Test and V	☐ Pass ☐ Fail							
Pass if One of Lines # 9 through # 12 pass ☐ Pass ☐ Fail ✓ ☐ I, the undersigned, verify that the above diagnostic test results were performed in conformance with the requirements for compliance credit. I, the undersigned, also certify that the newly installed or retrofit Air-Distribution System Ducts, Plenums and Fans comply with Mandatory requirements specified in Section 150 (m) of the 2005 Building Energy Efficiency standards.								
Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	er							
Signature:	Date:							

		(Page 5 of 12) CF-6 Permit Number			
✓ □ THERMOSTATIO	C EXPANSION	VALVE (TXV)			
Procedures for field verifice	ation of thermost	tatic expansion valves are available in R	ACM, Apper	ndix RI.	
	Access is pro	vided for inspection. The procedure shal	<u> </u>	T]
		ual verification that the TXV is installed	on		
✓ ☐ Yes ☐ No the system and installation of the specific equipment shall be verified.					
	33441 3 V V V V V V V V V V V V V V V V V V				
		Yes is a p	ass Pass	Fail	
REFRIGERANT C			0 0	1' G	
Verification for Required R Thermostatic Expansion Va		e and Adequate Airflow for Split System	i Space Coo	ling Syst	tems without
Outdoor Unit Serial #					
Location					7
Outdoor Unit Make					7
Outdoor Unit Model					7
Cooling Capacity		Btu/hr			
Date of Verification					
Date of Refrigerant Gaug	ge Calibration	(must be checked	monthly)		
Date of Thermocouple C	Calibration	(must be checked	monthly)		
edures for Determining Re	efrigerant Charg	rocedure (outdoor air dry-bulb 5. e using the Standard Method are availal	ole in RACM	I, Append	
cedures for Determining Re Note: The system should be procedure.	efrigerant Charg		ole in RACM	I, Append	
cedures for Determining Re Note: The system should be procedure.	efrigerant Charg e installed and ch	e using the Standard Method are availal arged in accordance with the manufactu	ole in RACM	<i>f, Append</i> cations b	
redures for Determining Revote: The system should be brocedure. sured Temperatures Supply (evaporator leaving)	efrigerant Charge e installed and ch ng) air dry-bulb t	e using the Standard Method are available arged in accordance with the manufacture (Tsupply, db)	ole in RACM	A Appendications b	
Redures for Determining Revote: The system should be brocedure. Sured Temperatures Supply (evaporator leaving Return (evaporator entering)	efrigerant Charge e installed and ch ng) air dry-bulb t ing) air dry-bulb	e using the Standard Method are available arged in accordance with the manufacture temperature (Tsupply, db) temperature (Treturn, db)	ole in RACM	<i>f, Append</i> cations b	
Return (evaporator entering ent	efrigerant Charge e installed and ch ng) air dry-bulb t ing) air dry-bulb ing) air wet-bulb	temperature (Treturn, wb)	ole in RACM	or Appendications b	
Return (evaporator enteri Return (evaporator enteri Evaporator saturation ten	efrigerant Charge installed and charge installed and charge ing) air dry-bulb ing) air dry-bulb ing) air wet-bulb ingprature (Tevap	temperature (Treturn, wb)	ole in RACM	oF oF	
seedures for Determining Revote: The system should be procedure. sured Temperatures Supply (evaporator leaving Return (evaporator entering Return (evaporator entering Return (evaporator saturation temperature)	efrigerant Charge installed and charge installed and charge installed and charge ing) air dry-bulb ing) air dry-bulb ing) air wet-bulb ingerature (Tevap (Tsuction, db)	temperature (Treturn, wb) temperature (Treturn, wb)	ole in RACM	or o	
Return (evaporator enteri Return (evaporator enteri Evaporator saturation ten	efrigerant Charge installed and charge installed and charge installed and charge ing) air dry-bulb ing) air dry-bulb ing) air wet-bulb ingerature (Tevap (Tsuction, db)	temperature (Treturn, wb) temperature (Treturn, wb)	ole in RACM	oF oF oF oF	
Return (evaporator entering Evaporator saturation ten Suction line temperature Condenser (entering) air	efrigerant Charge installed and charge installed i	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb)	ole in RACM	or o	
Return (evaporator enterior Evaporator saturation ten Suction line temperature Condenser (entering) air	efrigerant Charge installed and charge installed i	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb)	ole in RACM	or o	
Return (evaporator entering Suction line temperatures Superheat Charge Method (Actual Superheat (from Target Sup	efrigerant Charge installed and charge installed a	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) orator, sat) Refrigerant Charge orator, sat	ole in RACM	or o	
Return (evaporator entering Suction line temperatures Superheat Charge Method (Actual Superheat (from Target Sup	efrigerant Charge installed and charge installed a	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb)	ole in RACM	or o	
Return (evaporator enterior Evaporator saturation ten Suction line temperature Condenser (entering) air Superheat Charge Method (Actual Superheat (from Target Superheat — Target Temperature Split Method) Temperature Split Method	efrigerant Charge installed and charge installed i	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) temperature (Tondenser, db) temperature (Tcondenser, db) temperature (Tsupply, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Tsupply, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Tsupply, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb)	ole in RACM	or o	
Return (evaporator enterior Evaporator saturation ten Suction line temperature Condenser (entering) air Superheat Charge Method (Actual Superheat (from Target Superheat — Target Temperature Split Method) Temperature Split Method	efrigerant Charge installed and charge installed a	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Tondenser, db) Refrigerant Charge temperature (Tsupply, db) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Treturn, wb) temperature (Tsupply, db) temperature (Treturn, wb)	ole in RACM	or o	
Note: The system should be procedure. Supply (evaporator leaving Return (evaporator entering Return (evaporator entering Suction line temperature Condenser (entering) air Superheat Charge Method (Actual Superheat (from Target Superheat — Target Temperature Split Method Split Method Calculation in the System Superheat — Target Superheat —	efrigerant Charge e installed and charge installed and charge installed and charge e installed and charge e installed and charge ing) air dry-bulb ing) air wet-bulb ing) air dry-bulb ing) air dry-bulb ing) air wet-bulb ing) air dry-bulb ing) air dry-bulb ing) air dry-bulb ing) air dry-bulb ing) air wet-bulb ing) air	temperature (Tsupply, db) temperature (Treturn, db) temperature (Treturn, wb) temperature (Tondenser, db) temperature (Tcondenser, db) temperature (Treturn, wb)	ole in RACM	or o	

INSTALLATION CERTIFICATE						(Page 6 of 12) CF-6F			
Site Ac	ldress					Permit Nun	nber		
Standar		all pass both	t Summary: n refrigerant charge and ective actions were take						
✓	☐ Yes	□ No	System Passes						
Note: To verificate shall use Procede	The system shation shall be see the Standa dures for Dete	nould be instance documents of Charge Intermining Research	stalled and charged in aced on CF-6R before start Measure Procedure:	cordance with the man cing this procedure. If o	ufacturer's outdoor air	s specification dry-bulb is	55 °F or above	e, installer	
			r Refrigerant Charge						
	al liquid line		. 1 1. 1 1			ft			
			uid line length:		<u> </u>	ft			
	erence (Actua			1:00		ft		 1	
Man	uracturer's co	orrection (c	ounces per foot)	x difference in length (+ = add) (- = remove		nces			
Calc	ulated Airflo	w: Cooling	Adequate Airflow Verif Capacity (Btu/hr)CFM (Measured ai	_ X 0.033 (cfm/Btu-hr)) =		_ CFM low).		
Sy	rrective actio	ss both ref ns were tak	t Summary: rigerant charge and adeq ten, both criteria must be stem Passes			rom the sam	e measuremen	ts. If	
	lling Subcon ractor (Co. N		. Name) OR General Owner						
Sign	ature:			Date:					
				1					

INST	ALLAT	ION CE	RTIFICATI	${f E}$				(Page 7	7 of 12)	CF-6R	
Site Address						Permi	t Number				
MIS	CELL	ANEO	US CRED	ITS							
			PPLY DUCT L								
		-	n and diagnostic			-		-	-	C, RE & RH.	
✓ ⊔	✓ ☐ LESS THAN 12 LINEAL FEET OF SUPPLY DUCT OUTSIDE OF CONDITIONED SPACE COMPLIANCE CREDIT										
✓											
	Yes to this compliance credit is a pass ✓ □ Pass ✓ □ Fail										
✓ □	SUPPLY	DUCTS I	LOCATED IN	CONDITIO	ONED SE	PACE COMPI	LIANCE CRE	DIT			
√	□ Yes	□No	Ducts are located	within the co	onditioned	volume of buildi	nα				
	<u> </u>	110	Ducis are located			ompliance cred		✓ □ P	'ass ✓	✓ □ Fail	
	1. Sup 2. Bur 3. Dee	ply duct so ied supply ply buried	cation is requir urface area rec ducts on the c supply ducts ESIGN VERII	luction eiling	пришисе	create for the	.onowing.				
✓	□ Yes	□No	Adequate airflo	w verified							
✓	□ Yes	ПМо	The duct system RE.4.2		n meets th	ne requirements	s specified in R	ACM, Ap	pendix R	E, Section	
✓	□ Yes		The duct syster								
✓	Duct sizes duct system layout and locations of supply & return registers match the duct system										
	1						ıll is a pass	✓ □ Pa	iss	✓ □ Fail	
√ ⊔	SUPPLY	DUCTS S	SURFACE AR	EA REDUC	CTION C	OMPLIANCE	CREDIT				
							R-4.2	R-6	0	R-8.0	
	Crawl			Deeply		Duct	Surface	Surfa		Surface	
				Other	Diameter	Area	Are	a	Area		
П	П			П							
				П							
		1	Tota	l Surface Ar	ea for Ea	ch R-Value =					
✓ ☐ Yes ☐ No atches Performance's CF-1R?							✓				
	Yes to all is a pass										
✓ □	✓ □ BURIED DUCTS ON THE CEILING COMPLIANCE CREDIT										
	□ Yes		Buried Ducts o								
☐ Yes ☐ No Verified High Insulation Installation Quality								✓	✓		
Yes	to duct sys	tem design	, supply duct su	ırface area r	eduction a	and this compli	ance credit is a	pass	☐ Pass	☐ Fail	
✓ 🗖 ī	—- DEEPLY F	—— BURIED I	OUCTS COMP	LIANCE C	REDIT						
✓	□ Yes		Deeply Buried								
/	Yes □ No Verified High Insulation Installation Quality										
Yes	Yes to duct system design, supply duct surface area reduction and this compliance credit is a pass										

Site Address Permit Number Fan WATT DRAW									
Procedures for measuring the air handler watt draw are available in RACM, Appendix RE3.2.									
Procedures for measuring the air handler watt draw are available in RACM, Appendix RE3.2.									
Procedures for measuring the air handler watt draw are available in RACM, Appendix RE3.2.									
Method For Fan Watt Draw Measurement RE3.2.1 Portable Watt Meter Measurement									
RE3.2.1 Portable Watt Meter Measurement RE3.2.2 Utility Revenue Meter Measurement RE3.2.2 Utility Revenue Meter Measurement Measured Fan Watt Draw Cfm Watts Cfm Watts/cfm Enter results of Watts/cfm									
RE3.2.2 Utility Revenue Meter Measurement									
Measured Fan Flow (enter total cfm from airflow verification) Enter results of Watts/cfm Watts/cfm									
Measured Fan Flow (enter total cfm from airflow verification) Enter results of Watts/cfm Watts/cfm									
Enter results of Watts/cfm									
Yes No Measured fan watt/cfm draw is equal to or lower than the									
Yes									
Yes S No fan watt/cfm draw documented in CF-1R Yes is a pass Pass Fail									
Ves is a pass Pass Fail									
✓ □ ADEQUATE AIRFLOW VERIFICATION Procedures for measuring the airflow are available in RACM, Appendix RE3.1. ✓ Method For Airflow Measurement □ RE4.1.1 Diagnostic Fan Flow Using Flow Capture Hood □ RE4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching □ Yes □ No Duct design exists on plans Measured Airflow: Rated Tons cfm/ton ✓ □ Yes □ No Measured airflow is greater than the criteria in Table RE-2 ✓ □ Yes is a pass Fail Total cfm cfm/ton **Yes is a pass Fail **Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1 ✓ □ Yes □ No Adequate airflow verified (see adequate airflow credit) 2 ✓ □ Yes □ No Refrigerant charge or TXV 3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
Procedures for measuring the airflow are available in RACM, Appendix RE3.1. ✓ Method For Airflow Measurement									
✓ Method For Airflow Measurement □ RE4.1.1 Diagnostic Fan Flow Using Flow Capture Hood □ RE4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching □ RE4.1.3 Diagnostic Fan Flow Using Flow Grid Measurement □ Yes □ No Duct design exists on plans Measured Airflow: Rated Tons cfm/ton Yes is a pass Pass Fail Total cfm cfm/ton Yes is a pass Pass Fail Total cfm cfm/ton Adequate airflow is greater than the criteria in Table RE-2 Yes is a pass Pass Fail Yes is a pass Pass Fail Colling capacity are available in RACM, Appendix RF3. Adequate airflow credit) Refrigerant charge or TXV Adequate airflow verified (see adequate airflow credit) Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. Refrigerant charge or TXV Adequate airflow credit verified Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity indicated on the CF-1R, then the electrical input for the									
RE4.1.1 Diagnostic Fan Flow Using Flow Capture Hood RE4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching RE4.1.3 Diagnostic Fan Flow Using Flow Grid Measurement Yes No Duct design exists on plans Measured Airflow: Rated Tons cfm/ton Rated Tons cfm/ton Total cfm cfm/ton									
RE4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching RE4.1.3 Diagnostic Fan Flow Using Flow Grid Measurement Yes No Duct design exists on plans Measured Airflow: Total cfm cfm/ton Rated Tons cfm/ton Yes No Measured airflow is greater than the criteria in Table RE-2 Yes Fail Yes Rated Tons cfm/ton Yes is a pass Fail Yes is a pass Fail Yes is a pass Fail Yes No Adequate airflow verified (see adequate airflow credit) Yes No Refrigerant charge or TXV Yes No Duct leakage reduction credit verified Yes No No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity indicated on the Performance's CF-1R, then the electrical input for the Pass No No No No No No No									
RE4.1.3 Diagnostic Fan Flow Using Flow Grid Measurement Yes No Duct design exists on plans									
Yes									
Measured Airflow: Rated Tons cfm/ton Yes No Measured airflow is greater than the criteria in Table RE-2 Yes Section Yes Y									
✓ □ Yes □ No Measured airflow is greater than the criteria in Table RE-2 ✓ ✓ Yes is a pass Yes is a pass Fail ✓ □ MAXIMUM COOLING CAPACITY Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1 ✓ □ Yes □ No Adequate airflow verified (see adequate airflow credit) 2 ✓ □ Yes □ No Refrigerant charge or TXV 3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. 5 ✓ □ Yes □ No If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
Yes is a pass Pass Fail Yes is a pass Pass Fail Waximum Cooling Capacity Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1									
Yes is a pass Pass Fail Yes is a pass Pass Fail Waximum Cooling Capacity Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1									
Yes is a pass Pass Fail ✓ □ MAXIMUM COOLING CAPACITY Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1 ✓ □ Yes □ No Adequate airflow verified (see adequate airflow credit) 2 ✓ □ Yes □ No Refrigerant charge or TXV 3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity indicated on the Performance's CF-1R, then the electrical input for the									
✓ □ MAXIMUM COOLING CAPACITY Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1 ✓ □ Yes □ No Adequate airflow verified (see adequate airflow credit) 2 ✓ □ Yes □ No Refrigerant charge or TXV 3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. 5 ✓ □ Yes □ No If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3. 1 ✓ □ Yes □ No Adequate airflow verified (see adequate airflow credit) 2 ✓ □ Yes □ No Refrigerant charge or TXV 3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. 5 ✓ □ Yes □ No If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
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2 ✓ □ Yes □ No Refrigerant charge or TXV 3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
3 ✓ □ Yes □ No Duct leakage reduction credit verified 4 ✓ □ Yes □ No Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3. If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
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If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the									
5 ✓ ☐ Yes ☐ No cooling capacity in the CF-1R, then the electrical input for the									
installed systems must be ≤ to electrical input in the CF-1R.									
Yes to 1, 2, and 3; and Yes to either 4 or 5 is a pass Pass Fail									
<u></u>									
✓ ☐ HIGH EER AIR CONDITIONER									
Procedures for verification are available in RACM, Appendix RI. 1 ✓ □ Yes □ No □ FER values of installed systems match the CF-1R									
1 ✓ □ Yes □ No EER values of installed systems match the CF-1R 2 ✓ □ Yes □ No For split system, indoor coil is matched to outdoor coil ✓ ✓									
3 ✓ □ Yes □ No Time Delay Relay Verified (If Required) □ □									
Yes to 1 and 2; and 3 (If Required) is a pass Pass Fail									
Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner									
Signature: Date:									

INSTALLATION CERTIFICATE	(Page 9 of 12) CF-6R
Site Address	Permit Number

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(a).

BUILDING ENVELOPE LEAKAGE DIAGNOSTICS

170000	ures joi ji	iciu verij	ication and diagnostic testing of envelope leakage are available in RACM, Appe	man IC.					
Diagnostic Testing Results									
✓ Building Envelope Leakage (CFM @ 50 Pa) as measured by Rater:									
1.									
2.									
2a.	Yes	No	If Mechanical Ventilation is required on the CF-1R ('Yes' in line 2), has it been installed?						
2b.	☐ Yes	No	Check this box 'yes' if mechanical ventilation is required ('Yes' in line 2) and ventilation fan watts are no greater than shown on CF-1R. Measured Watts =						
3. Yes No Check this box "yes" if measured building infiltration (CFM @ 50 Pa) is greater than the CFM @ 50 values shown for an SLA of 1.5 on CF-1R (If this box is checked no, mechanical ventilation is required.)									
4. Check this box "yes" if measured building infiltration (CFM @ 50 Pa) is less than the CFM @ 50 values shown for an SLA of 1.5 on CF-1R, mechanical ventilation is installed and house pressure is greater than minus 5 Pascal with all exhaust fans operating.									
Pass if: a. Yes in line 1 and line 3, or									
b. Yes in line 1 and line2, 2a, and 2b, or c. Yes in line 1 and Yes in line 4. Otherwise fail.									
reduction results an (The bui certifyin	n below d nd the wo lder shall g that diag	efault as rk I perfo provide gnostic t	erify that the building envelope leakage meets the requirements claimed for build sumptions as used for compliance on the CF-1R. This is to certify that the above ormed associated with the test(s) is in conformance with the requirements for conthe HERS provider a copy of the CF-6R signed by the builder employees or subsesting and installation meet the requirements for compliance credit.)	e diagnost npliance o	ic test credit.				
Test 1	Test Performed								
			r (Co. Name) OR General OR Owner						
Signature: Date:									

INSTALLATION CERTIFICATE	(Page 10 of 12) CF-6R
Site Address	Permit Number

Insulation Installation Quality Certificate

✓ □ Description of Insulation, (CF-6R, formerly IC-1) signed by the installer stating: insulation manufacturer's named to the installer stating insulation manufacturer's named to the insulation man	ame
material identification, installed R-values, and for loose-fill insulation: minimum weight per square foot and minimum	um
inches	

 \checkmark \square Installation meets all applicable requirements as specified in the High Quality Insulation Installation Procedures (ACM, Appendix RH)

✓ FI	OOR					
			All floor joist cavity insulation installed to uniformly fit the cavity side-to-side and end-to-end			
Yes	No	NA	An noor joist cavity institution histaried to dimornity in the cavity side-to-side and end-to-end			
			Insulation in contact with the subfloor or rim joists insulated			
Yes	No	NA	The state of the s			
			Insulation properly supported to avoid gaps, voids, and compression			
Yes	No	NA				
	ALLS					
☐ Yes	□ No	□ NA	Wall stud cavities caulked or foamed to provide an air tight envelope			
		INA				
☐ Yes	□ No	NA	Wall stud cavity insulation uniformly fills the cavity side-to-side, top-to-bottom, and front-to-back			
Yes	No	NA	No gaps			
			N 11 2/41 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Yes	No	NA	No voids over 3/4" deep or more than 10% of the batt surface area.			
			Hard to access wall stud cavities such as; corner channels, wall intersections, and behind			
Yes	No	NA	tub/shower enclosures insulated to proper R-Value			
			Small spaces filled			
Yes	No	NA	Sman spaces mice			
			Rim-joists insulated			
Yes	No	NA				
Var	□ No		Loose fill wall insulation meets or exceeds manufacturer's minimum weight-per-square-foot			
Yes		NA	requirement IG PREPARATION			
			G PREPARATION			
☐ Yes	□ No	NA	All draft stops in place to form a continuous ceiling and wall air barrier			
Yes	No	NA	All drops covered with hard covers			
Yes	No	NA	All draft stops and hard covers caulked or foamed to provide an air tight envelope			
			All recessed light fixtures IC and air tight (AT) rated and sealed with a gasket or caulk between the			
Yes	No	NA	housing and the ceiling			
			Floor cavities on multiple-story buildings have air tight draft stops to all adjoining attics			
Yes	No	NA				
			Eave vents prepared for blown insulation - maintain net free-ventilation area			
Yes	No	NA	Lave venus prepared for blown insulation - maintain net nec-ventilation area			
☐ Yes	□ No	□ NA	Knee walls insulated or prepared for blown insulation			
Yes	No	NA	Area under equipment platforms and cat-walks insulated or accessible for blown insulation			
			1			
Yes	No	NA	Attic rulers installed			

INSTALLATION CERTIFICATE						(Page 11 of 12) CF-6R		
Site Address						Permit Number		
✓	ROOI	F/CEII	LING B	BATTS				
	Yes No NA No gaps							
	Insulation in contact with the sin hamism							
	Yes	No	NA D	Recessed light fixtures covere				
	Yes	No	NA 🗆	Net free-ventilation area main				
	Yes	No OOF/	NA	 NG LOOSE-FILL				
					ae entire ceiling (or roof) area fro	am the outside of all exterior walls		
Yes No NA Insulation uniformly covers the entire ceiling (or roof) area from the outside of all exterior was								
	Yes No NA Baffles installed at eaves vents or soffit vents - maintain net free-ventilation area of eave vent							
	Yes No NA Attic access insulated							
	□ □ □ □ Yes No NA Recessed light fixtures covered							
	Yes No NA Recessed light flattices covered Yes No NA Insulation at proper depth – insulation rulers visible and indicating proper depth and R-value							
	Yes No NA Loose-fill insulation meets or exceeds manufacturer's minimum weight and thickness requirement weight for the target R-value. Target R-value Manufacturer's minimum required weight for the target R-value (pounds-per-square-foot). Manufacturer's minimum required thickness at time of installation Manufacturer's minimum required settled thickness Note: To receive compliance credit the HERS rate shall verify that the manufacturer's minimum weight and thickness has been achieved for the target R-value. (CF-6R only)							
✓ Pro	ocedure Installi	ereby ones.	certify to	tor (Co. Name) OR General oe) OR Owner	plicable requirements as specifie	d in the Insulation Installation		
-	Signature: Date:							

INSTALLA'	ΓΙΟΝ CERTIFICATE	1	(Page 12 of 12) CF-6				
Site Address				Permit Number			
County Subdivi	sion			Lot Number			
Description	of Insulation (Formerl	y IC-1 Form)					
1. RAISED F	LOOR						
Material _	(inches)		Brand Name				
Thickness	(inches)		Thermal Resistance (R-Value)				
2. SLAB FLO	OOR/PERIMETER						
Material _			Brand Name				
Thickness	(inches)		Thermal Resistance (R-Value)			
Perimeter 1	Insulation Depth (inches)						
3. EXTERIO	R WALL						
Frame Typ	e						
A. Cavity	Insulation						
Materia	ess (inches)		Brand Name	D 1/ 1			
I hickno	or Foam Sheathing		Thermal Resistance (R-Value)				
	al		Brand Name				
Thickn	ess (inches)		Thermal Resistance (R-Value)			
			`	,			
4. FOUNDA			Brand Name				
Thickness	(inches)			R-Value)			
			(
5. CEILING							
Batt or Bla	nket Type		Brand Name	D. X. 1			
Thickness	(inches)			R-Value)			
Contractor	Type 's min installed weight/ft²	lb	Brand Minimum thickness	inches			
				nce (R-Value)			
6. ROOF							
Material	(; 1)		Brand Name	D 1/ 1			
Thickness Declaration	(inches)		Thermal Resistance (K-value)			
✓ ☐ I hereby certify that the above insulation was installed in the building at the above location in conformance with the							
current <i>Energy</i>	certify that the above insulat Efficiency Standards for resid	i the building at the abov	a Code of Regulations) as indicated				
	e of Compliance, where app		Tile 2 1, 1 art o, Camforni	a code of regulations) as marcared			
Item #s	Signature	Date	Installing Subcontractor (Co. Name) OR				
(if applicable)	Signature		General Contractor (Co. Name) OR Owner				
,			OR Window Distribut				
T. //	Gianata and But		T + 112 C 1	(C. N.) OP			
Item #s (if applicable)	Signature Date		Installing Subcontract General Contractor (C				
(11 applicable)			OR Window Distribut				
Item #s	Signature	Date	Installing Subcontract				
(if applicable)			General Contractor (C OR Window Distribut				
			OK WINGOW DISTIBUTE	IOI			