REFRIGERANT CHARGE VERIFICATION

CALIFORNIA ENERGY COMMISSION

CEC-NRCI-MCH-25-F

CERTIFICATE OF INSTALLATION

Note: This table completed by ECC Registry.

Project Name:	Enforcement Agency:
Dwelling Address:	Permit Number:
City and Zip Code:	Permit Application Date:

A. System Information

Each system requiring refrigerant charge verification will be documented on a separate certificate.

01	Space Conditioning System Identification or Name	
02	Space Conditioning System Location or Area Served	
03	Condenser (or package unit) Make or Brand	
04	Condenser (or package unit) Model Number	
05	Nominal Cooling Capacity (tons) of Condenser	
06	Condenser (or package unit) Serial Number	
07	Refrigerant Type	
08	Other Refrigerant Type (if applicable)	
09	Liquid Line Filter Drier Installed According to Manufacturer's Specifications (if applicable)	
10	System Installation Type	
11	Fault Indicator Display (FID) Status (Note: Even systems with a FID must have refrigerant charge verified by installer)	
12	Is the system of a type that the minimum airflow can be verified for all indoor units using an approved measurement procedure (RA3.3 or RA3.3.3)?	
13	Is the system of a type that approved refrigerant charge verification procedures can be used to verify compliance with the refrigerant charge verification requirements when temperatures are ≥ 55°F (RA3.2.2, or RA1)?	
14	Date of Refrigerant Charge Verification for this System	
15	Refrigerant Charge Verification Method Used	
16	Person Who Performed the Refrigerant Charge Verification Reported on this Certificate of Installation	
17	ECC Verification Compliance Requirement Status	

REFRIGERANT CHARGE VERIFICATION

B1. Metering Device Verification

Superheat Method can only be used on systems that do not have a variable metering device.

01	Refrigerant Metering Device	
02	Superheat Method Applicability Status	

B2. Metering Device Verification

Subcooling Method can only be used on systems that have a variable metering device.

01	Refrigerant Metering Device	
02	Subcooling Method Applicability Status	

C. Instrument Calibration

Procedures for instrument calibration are given in Reference Residential Appendix RA3.2.2 and RA3.2.2.2

01	Date of Digital Refrigerant Gauge Calibration	
02	Date of Digital Thermocouple Calibration	
03	Digital Refrigerant Gauge Calibration Status	
04	Digital Thermocouple Calibration Status	

D. Measurement Access Hole (MAH) Verification

Procedures for installing MAH are specified in Reference Residential Appendix RA3.2.2.3

01	Method Used to Demonstrate Compliance with the Measurement Access Hole (MAH) Requirement	

E. Minimum System Airflow Rate Verification

Procedures for verifying minimum system airflow are specified in Reference Residential Appendix RA3.3.3.

01	02	03
Indoor Unit Name or Description of Area Served	Minimum Required System Airflow Rate (cfm)	System Airflow Rate Verification Status

04	Compliance Statement:
Notes:	

F1. Data Collection for Superheat Method

Procedures for determining Refrigerant Charge using the Standard Charge Verification Procedure are given in Reference Residential Appendix RA3.2.2 and RA3.2.2.2

01	Lowest Return Air Dry-bulb Temperature that Occurred During the Refrigerant Charge Verification Procedure (°F)	
02	Measured Condenser Air Entering Dry-bulb Temperature ($T_{condenser, db}$) (°F)	
03	Outdoor Temperature Qualification Status	
04	Measured Return (evaporator entering) Air Dry-bulb Temperature ($T_{return, db}$) (°F)	
05	Measured Return (evaporator entering) Air Wet-bulb Temperature ($T_{return, wb}$) (°F)	
06	Measured Suction Line Temperature ($T_{suction}$) (°F)	
07	Measured Suction Line Pressure ($P_{suction}$ - psig)	
08	Evaporator Saturation Temperature ($T_{evaporator, sat}$) from Digital Gauge or P-T Table using Line F07 (°F)	
09	Measured Superheat (Line F06 – Line F08) (°F)	
10	Target Superheat (from Table RA3.2-2, using F02 and F05) (°F)	
11	Compliance Statement:	

F2. Data Collection and Calculations for Subcooling Method

Procedures for determining Refrigerant Charge using the Standard Charge Verification Procedure are given in Reference Residential Appendix RA3.2.2

01	Lowest Return Air Dry-bulb Temperature that Occurred During the Refrigerant Charge Verification Procedure (°F)	
02	Measured Condenser Air Entering Dry-bulb Temperature ($T_{condenser, db}$)	
03	Outdoor Temperature Qualification Status	
04	Measured Liquid Line Temperature (T_{liquid}) (°F)	
05	Measured Liquid Line Pressure (P_{liquid}) (psig)	
06	Condenser Saturation Temperature ($T_{condensor, sat}$) from Digital Gauge or P-T Table using Line F05 (°F)	
07	Measured Subcooling (Line F06 – Line F04) (°F)	
08	Target Subcooling from Manufacturer (°F)	
09	Compliance Statement:	

G. Metering Device Verification for Subcooling Method

Procedures for the verification of proper metering device operation are specified in RA3.2.2.6.2

01	Measured Suction Line Temperature ($T_{suction}$) (°F)	
02	Measured Suction Line Pressure ($P_{suction}$) (psig)	
03	Evaporator Saturation Temperature ($T_{evaporator, sat}$) from Digital Gauge or P-T Table using line G02 (°F)	
04	Measured Superheat (Line G01 – Line G03) (°F)	
05	Measured Superheat (Line G04) is between 4°F and 25°F (inclusive)	
06	Measured Superheat (Line G04) is within Manufacturer's Specifications (if known)	
07	Compliance Statement:	

H. Weigh In Charge Procedure

Procedures for Refrigerant Charge using the Weigh-in Charging Procedure are given in Reference Residential Appendix RA3.2.2.2 and RA3.2.3

01	Measured Condenser Air Entering Dry-bulb Temperature ($T_{condenser, db}$) (°F)	
02	Specify the Method of Weigh-in	
03	Manufacturer's Standard Charge for Condenser (lbs, oz.)	
04	Manufacturer's Standard Liquid Line Length (ft)	
05	Manufacturer's Standard Liquid Line Diameter (in)	
06	Manufacturer's Standard Indoor Coil Size (tons)	
07	Installed Liquid Line Length (ft)	
08	Installed Liquid Line Diameter (in)	
09	Installed Indoor Coil Size (tons)	
10	Charge Adjustment to Standard Charge from Manufacturer's Specifications (ounces, positive = add, negative = remove)	
11	Refrigerant Required to be Weighed in by the Installer (lbs, oz)	
12	Refrigerant Weighed in by Installer (lbs, oz)	
13	Compliance Statement:	

I. Weigh In Charge Procedure – Additional Requirements

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

01	If refrigerant line connections require welding, the system is braised with dry nitrogen in the lines and indoor coil.
02	i. In all cases where the OEM instructions call for checking for gas leaks with vacuum, prior to introducing refrigerant, system is evacuated to 500 microns or less and, when isolated, has risen no more than 300 microns after 5 minutes. ii. In all cases where the OEM instructions call for checking for gas leaks with nitrogen gas, the system was pressurized to the manufacturer's specified pressure and if the pressure could not be maintained, leaks were located and fixed.
03	Observation and documentation of the vacuum and pressurization tests are not required if no fittings (other than the fitting to the compressor) are compression or flare fittings.
04	The calculated weight adjustment for lineset length is based on the length and diameter of the lineset.
05	The calculated weight adjustment for coil size is based on manufacturer instructions.
06	The actual total weight adjustment is equal to the sum of the calculated weight adjustments for lineset and coil size.
07	The calculated and actual total weights of refrigerant in the system are recorded on or near the nameplate label, in indelible ink or other permanent means.
08	When applicable and if necessary to avoid delay of approval of dwelling units completed when outside temperatures are below 55°F, the enforcement agency may approve compliance with the refrigerant charge verification requirements based on registration of this CF2R-MCH-25, documenting use of the RA3.2.3.1 HVAC Installer Weigh-In Charging Procedure when the optional Section RA3.2.3.2 ECC Rater Observation of Weigh-In Charging Procedure is not used. As condition for such enforcement agency approval, the responsible person's signature on this compliance document affirms the installer agrees to return to correct refrigerant charge if a ECC Rater determines at a later time, when the outside temperature is 55°F or greater, that refrigerant charge correction is necessary.

J. Verification of New Package Unit Factory Charge

Note: There is no ECC verification requirement for New Package Unit Factory Charge. The Enforcement Agency has responsibility for this verification.

01	The responsible person's signature on this document affirms that this new package unit has correct refrigerant charge as provided by the manufacturer prior to shipment from the factory, and no modifications have been made to this packaged unit that would result in a change to the amount of refrigerant in the unit.

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CALIFORNIA ENERGY COMMISSION

CEC-NRCI-MCH-25-F

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA/AEA/ECC Certification Identification (If applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Installation is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation and attest to the declarations in this statement (responsible builder/installer), otherwise I am an authorized representative of the responsible builder/installer.
3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
4. I reviewed a copy of the Certificate of Compliance approved by the enforcement agency that identifies the specific requirements for the scope of construction or installation identified on this Certificate of Installation, and I have ensured that the requirements that apply to the construction or installation have been met.
5. I understand that a completed signed copy of this Certificate of Installation shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.
6. I understand that a completed signed copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

NRCI-MCH-25-F User Instructions

Section A. System Information

1. This information is user input from the Certificate of Installation (MCH-01).
2. This information is user input from the Certificate of Installation (MCH-01)
3. This information is user input from the Certificate of Installation (MCH-01).
4. This information is user input from the Certificate of Installation (MCH-01)
5. This information is user input from the Certificate of Installation (MCH-01).
6. This information is user input from the Certificate of Installation (MCH-01)
7. Choose the type of refrigerant used by the system being verified. R-454, R-22 and R-410A are the most common, but other types may occasionally be encountered.
8. If "Other" is chosen in A07, then indicate the type of refrigerant being used. Documentation of refrigerant may be requested.
9. If applicable, a liquid line filter direr shall be installed according to the manufacturer's specifications.
10. Indicate whether the HVAC system is Completely New, Replacement or an Alteration. These are defined in detail the Residential Compliance Manual.
11. N/A
12. Most ducted split systems and package systems are of the type that minimum airflow can be verified using an approved measurement procedure. Examples of systems that do not meet this description are ductless systems. Selecting "No" here may subject the project to additional scrutiny by enforcement personnel.
13. Most ducted split systems and package systems are of the type that approved refrigerant charge verification procedures detailed in Residential Appendix RA3.2.2 or RA1 can be used (i.e., Standard Charge Verification procedures). Examples of systems that may not meet this description are "mini splits" or variable refrigerant flow systems that may only be charged using weigh-in procedures. Selecting "No" here may subject the project to additional scrutiny.
14. Specify the date the refrigerant charge verification was performed by the installer.
15. Select the refrigerant charge verification method used from the choices provided:
    - Superheat (outdoor temperature must be ≥ 55°F); this verification method can only be used when the outdoor temperature is at or above 55°F. It is only used on systems with fixed orifice refrigerant metering devices (non-variable metering devices). This method is detailed in Reference Appendix RA3.2.2.6.1. Systems verified using this method may be eligible for ECC verification compliance using Group Sampling.
    - Subcooling (outdoor temperature must be ≥ 55°F); this verification method can only be used when the outdoor temperature is at or above 55°F. It is only used on systems with variable metering devices (TXV or EXV). This method is detailed in Reference Appendix RA3.2.2.6.2. Systems verified using this method may be eligible for ECC verification compliance using Group Sampling.
    - Weigh-in; this verification method can be used at any outdoor temperature allowed by the equipment manufacturer. This method is detailed in Reference Appendix RA3.2.3. Systems verified using this method are NOT eligible for ECC verification compliance using Group Sampling.
    - New Package Unit Factory Charge; Choose this option when a new package unit is being installed that has an AHRI rating. This helps ensure that the unit was properly charged at the factory.
16. Identify who will be performing the verification that is documented on this Certificate of Installation, select from the two options.
17. The Group Sampling status is automatically displayed based on the input results of A15 and A16. Group Sampling procedures are detailed Residential Appendix RA2.6.3.

Section B1 and B2. Metering Device Verification

(This section is required if A15 equals Superheat – B1 Or Subcooling – B2)

1. Select the correct metering device used on the system being verified. This will check against the refrigerant charge verification method selected in A15. An error message will appear in B02 if the wrong verification method has been selected. Superheat verification can only be used on systems with fixed orifice and Subcool verification can only be used on systems with variable metering devices (TXV or EXV).
2. An error message here indicates that the wrong verification method may have been selected. Superheat verification can only be used on systems with fixed orifice and Subcool verification can only be used on systems with variable metering devices (TXV or EXV).

Section C. Instrument Calibration

(This section is required for all verification methods selected in A15 except New Package Unit Factory Charge)

1. Enter the date of most recent Digital Refrigerant Gauge Calibration Field Check. Analog gauges are not allowed for verification purposes under the 2025 Standards. Specification for pressure gauges is found in Residential Appendix RA3.2.2.2.3. Procedures for the field check procedure are detailed in RA3.2.2.4.2. Calibration field check must happen at least once every 30 days.
2. Enter the date of the most recent Digital Thermocouple Calibration. Specifications for thermocouples and temperature sensors can be found in Residential Appendix RA3.2.2.2.2. Procedures for calibration are detailed in RA3.2.2.4.1. Calibration must happen at least once every 30 days.
3. Digital Refrigerant Gauge Calibration status will appear automatically. If the date entered in C01 is more than 30 days prior to date of verification this row will indicate that calibration is required and you will not be allowed to continue filling out this document until calibration is performed.
4. Digital Thermocouple Calibration status will appear automatically. If the date entered in C02 is more than 30 days prior to date of verification this row will indicate that calibration is required and you will not be allowed to continue filling out this document until calibration is performed.

Section D. Measurement Access Hole (MAH) Verification

1. Indicate the method used to demonstrate compliance with the MAH requirement by selecting the appropriate method from the drop down list. Procedures for installing MAH's are detailed in RA3.2.2.3. Selecting that the MAH cannot be installed consistent with Figure 3.2-1 may result in additional scrutiny by enforcement personnel. For Weigh-in verification methods only If A12 = NO, then system is exempt from the MAH requirement and a special message will show up here.

Section E. Minimum System Airflow Rate Verification

1. This information is automatically calculated based on the information given in A10. This is the target minimum system airflow required for the system being verified.
2. This information is automatically calculated based on the MCH-23 or MCH-28, which documents the measured airflow (or alternative method) of the system being verified. If the measured airflow is not adequate it will not comply with the airflow requirements and refrigerant charge verification cannot be performed until the airflow meets the requirement. For Weigh-in verification methods only If A12 = NO, then system is exempt from the airflow rate requirement and a special message will show up here.

Section F1. Superheat Charge Verification Method – Data Collection

(This section is required if A15 equals Superheat)

1. Measure and record the lowest return air dry-bulb temperature that occurred during the refrigerant charge procedure in degrees F. This temperature must remain above 70°F during the verification procedure. This requirement is detailed in Residential Appendix RA3.2.2.5.
2. Measure and record the condenser air dry-bulb temperature ($T_{condenser}$) in degrees F. This value is used to determine the target superheat from table RA3.2-2. This value must be at least 55°F and no more than 115°F to use the Superheat Charge Verification Method.
3. If a value less than 55°F or greater than 115°F is entered in F02 the Superheat Method cannot be used.
4. Measure and record the return air dry-bulb temperature ($T_{return,db}$) in °F. This measurement is taken at the MAH (or alternate location specified in F01. This procedure is detailed in RA3.2.2.5.
5. Measure and record the return air wet-bulb temperature ($T_{return,wb}$) in °F. This measurement is taken at the MAH (or alternate location specified in F01. This procedure is detailed in RA3.2.2.5. This value is used to determine the target superheat from table RA3.2-2.
6. Measure and record the suction line temperature ($T_{suction}$) in °F. This procedure is detailed in RA3.2.2.5. This value is used to calculate the measured superheat.
7. Measure and record the suction line pressure ($P_{suction}$) in psig. This procedure is detailed in RA3.2.2.5. This value is used to determine the evaporator saturation temperature ($T_{evaporator,sat}$) from a pressure temperature chart for the appropriate refrigerant (can be internal to a digital gauge), which is entered into F08.
8. Enter the evaporator saturation temperature ($T_{evaporator,sat}$) from the digital gauge or a separate pressure-temperature chart that corresponds to the suction line pressure entered in F07, in °F.
9. Measured superheat is automatically calculated as the difference between the suction line temperature (F06) and the evaporator saturation temperature (F08)
10. Enter target superheat from Table RA3.2-2. This table requires values for the condenser air dry-bulb temperature (F02) and the return air wet-bulb temperature (F05)
11. System passes superheat method when F10 is within plus or minus 5°F of F09.

Section F2. Subcooling Charge Verification Method – Data Collection

(This section is required if A15 equals Subcooling)

1. Measure and record the lowest return air dry-bulb temperature that occurred during the refrigerant charge procedure in °F. This temperature must remain above 70°F during the verification procedure. This requirement is detailed in Residential Appendix RA3.2.2.5.
2. Measure and record the condenser air dry-bulb temperature ($T_{condenser}$) in °F. This value must be at least 55°F and no more than 115°F to use the Subcooling Charge Verification Method.
3. If a value less than 55°F or greater than 115°F is entered in F02 the Subcooling Method cannot be used.
4. Measure and record the liquid line temperature (T_{liquid}) in °F. This procedure is detailed in RA3.2.2.5. This value is used to calculate the measured subcool temperature.
5. Measure and record the liquid line pressure (P_{liquid}) in psig. This procedure is detailed in RA3.2.2.5. This value is used to determine the condenser saturation temperature ($T_{condenser,sat}$) from a pressure temperature chart for the appropriate refrigerant (can be internal to a digital gauge), which is entered into F06.
6. Enter the condenser saturation temperature ($T_{condenser,sat}$) from the digital gauge or a separate pressure-temperature chart that corresponds to the liquid line pressure entered in F05, in °F.
7. Measured Subcooling is automatically calculated as the difference between the liquid line temperature (F04) and the condenser saturation temperature (F06)

8. Enter target subcooling from manufacturer. This may be a challenge to find for older equipment. Internet searches can sometimes result in archived equipment specifications for the equipment in question, or sometimes a very similar model. If the manufacturer's target cannot be found the Commission's Executive Director may provide additional guidance for compliance.
9. System passes Subcooling method when F08 is within plus or minus 3°F of F07.

Section G. Metering Device Verification for Subcooling Method

(This section is required if A15 equals Subcooling)

1. Measure and record the suction line temperature ($T_{suction}$) in °F. This procedure is detailed in RA3.2.2.5. This value is used to calculate the measured superheat.
2. Measure and record the suction line pressure ($P_{suction}$) in psig. This procedure is detailed in RA3.2.2.5. This value is used to determine the evaporator saturation temperature ($T_{evaporator,sat}$) from a pressure temperature chart for the appropriate refrigerant (can be internal to a digital gauge), which is entered into G03.
3. Enter the evaporator saturation temperature ($T_{evaporator,sat}$) from the digital gauge or a separate pressure-temperature chart that corresponds to the suction line pressure entered in G02, in °F.
4. Measured superheat is automatically calculated as the difference between the suction line temperature (G01) and the evaporator saturation temperature (G03)
5. There are two possible criteria for passing. If the manufacturer's specification is known it should be used, otherwise the CEC requirement is that the superheat be between 4°F and 25°F, inclusive. This row checks the CEC requirement.
6. If the manufacturer's target superheat for ensuring proper metering device operation is known, it supersedes the CEC requirement of being between 4°F and 25°F. If "Yes, documentation to be provided upon request." is selected, the installer should be prepared to provide documentation for the target values used.
7. There are two possible criteria for passing. If the manufacturer's specification is known it should be used, otherwise the CEC requirement is that the superheat be between 4°F and 25°F, inclusive. If "Yes, documentation to be provided upon request." is selected in G06, the installer should be prepared to provide documentation for the target values used.

Section H. Weigh In Charge Procedure

(This section is required if A15 equals Weigh-in with installer Or Weigh-in with ECC Rater observation)

1. Measure and record the outside air dry-bulb temperature in °F. This will affect the procedures that may be used for ECC verification. If the installer opts to use the weigh-in method when the outside air dry-bulb temperature is above 55°F, ECC verification may only utilize the standard charge procedure (super heat or subcool) if the system is conducive to that procedure.
2. Specify the method of weigh-in. There are two options that may be used. One is to add or remove a small, weighed portion of refrigerant from a factory charged unit (Charge Adjustment). The other is to weigh the entire charge of refrigerant before introducing it into the system (Total Charge). Select either one. Note: The amount of refrigerant in systems that are not newly installed cannot be assumed to be the factory charge. Altered systems using existing refrigerant must use the Total Charge method. Only new, factory installed equipment can utilize the Charge Adjustment method.
3. Enter the Manufacturer's Standard Charge for condenser in pounds and ounces. This is the amount of refrigerant that the manufacturer specifies for a "standard" installation (typical coil match, typical line set size and length). For the Charge Adjustment method, this is the amount of refrigerant that factory charges the system to. Be prepared to provide manufacturer's documentation to support this value.

4. The Manufacturer's Standard Charge, specified in H03 is based on a standard liquid line length, typically 25 feet. Enter the value here, in feet. Be prepared to provide manufacturer's documentation to support this value.
5. The Manufacturer's Standard Charge, specified in H03 is based on a standard liquid line diameter. Enter the value here, in inches (for example: 1/4", 3/8", etc.). Be prepared to provide manufacturer's documentation to support this value.
6. The Manufacturer's Standard Charge, specified in H03 is based on a standard indoor (evaporator) coil size. Enter the value here, in tons. Be prepared to provide manufacturer's documentation to support this value.
7. Enter the length of the liquid line installed on the system being verified, in feet. This value must be compared to the standard liquid line length entered in H04 and used to determine if the Manufacturer's Standard Charge entered in H03 is appropriate.
8. Enter the diameter of the liquid line installed on the system being verified, in inches (for example: 1/4", 3/8", etc.). This value must be compared to the standard liquid line diameter entered in H05 and used to determine if the Manufacturer's Standard Charge entered in H03 is appropriate.
9. Enter the size of the indoor (evaporator) coil installed on the system being verified, in tons. This value must be compared to the standard coil size entered in H06 and used to determine if the Manufacturer's Standard Charge entered in H03 is appropriate.
10. Enter the Charge Adjustment to Standard Charge, in ounces. This is the amount of refrigerant that the manufacturer specifies to add to, or remove from, the Manufacturer's Standard Charge entered in H03. This value must come from manufacturer's specifications using the standard values entered in H04 through H06 to the installed values entered in H07 through H09. If refrigerant is to be added, this value should be a positive number. If refrigerant is to be removed, this value should be a negative number. Be prepared to provide manufacturer's documentation to support this value.
11. This value is calculated automatically. If "Charge Adjustment" was specified in H02, then the value shown here will be the same as the value shown in H10. This is the amount of weighed refrigerant that will be added or removed from the factory charged unit. If refrigerant is to be added, this value should be a positive number. If refrigerant is to be removed, this value should be a negative number. If "Total Charge" was specified in H02, then the value shown here will be the value in H03 added to the value in H10. This is the total amount of refrigerant that will be in the system, all of which must be weighed before introducing into the system.
12. Enter the amount of refrigerant weighed and added to, or removed from, system. If refrigerant is to be added, this value should be a positive number. If refrigerant is to be removed from a factory charged system, this value should be a negative number. This value must match the value in H11 for the system to pass.
13. If the value in H11 equals the value in H12, a statement will appear here indicating that the system passes the weigh-in method. Otherwise, a statement will appear here indicating that the system does not pass.

Section I. Weigh-In Charge Verification – Additional Requirements

(This section is required if A15 equals Weigh-in with installer Or Weigh-in with ECC Rater observation)

1. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. If refrigerant line connections require welding, the requirement for brazing lines charged with dry nitrogen is specified in Residential Appendix RA3.2.3.1.5.

2. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. The requirement for checking refrigerant lines for leaks with nitrogen gas by pressurized to the manufacturer's specified pressure and if the pressure cannot be maintained, leaks shall be located and fixed is specified in Residential Appendix RA3.2.3.1.5.
3. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. The requirement for checking refrigerant lines for leaks by evacuating to 500 microns or less and rising by no more than 300 microns after 5 minutes is specified in Residential Appendix RA3.2.3.1.5.
4. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. Observation and documentation of the vacuum and pressurization tests are not required if no fittings (other than the fitting to the compressor) are compression or flare fittings is specified in Residential Appendix RA3.2.3.1.5.
5. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. The calculated weight adjustment for lineset length is based on the length and diameter of the lineset is specified in Residential Appendix RA3.2.3.1.5.
6. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. The calculated weight adjustment for coil size is based on manufacturer instructions is specified in Residential Appendix RA3.2.3.1.5.
7. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. The actual total weight adjustment is equal to the sum of the calculated weight adjustments for lineset and coil size is specified in Residential Appendix RA3.2.3.1.5.
8. Additional requirements are items that must be done, but are not specifically required to be checked by the ECC rater. By signing the Declaration Statement on this document, the installer is declaring that all of these additional requirements have been met. The calculated and actual total weights of refrigerant in the system are recorded on or near the nameplate label, in indelible ink or other permanent means is specified in Residential Appendix RA3.2.3.1.5.

Section J. Verification of New Package Unit Factory Charge

(This section is required if A15 is New Package Unit Factory Charge)

1. By signing the Declaration Statement at the bottom of this form, the installer is declaring that the package unit was an AHRI certified unit and that no modifications were made to the unit to change the factory charge.

Documentation Declaration Statements

1. The person who prepared the NRCI will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, will complete the fields for their name, company (if applicable), address, phone number, license number (if applicable), date and signature.