

OPERATIONS MANUAL

AHRI GENERAL OPERATIONS MANUAL



GENERAL OM – JANUARY 2023

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PREFACE

The following manual outlines the general procedures and policies of the Performance Certification Program operated by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). This manual is to be used in conjunction with the product-specific certification program operations manual. Where this manual and the Product-Specific Operations Manual differ, the Product-Specific Operations Manual shall prevail.

The revision of this manual supersedes all previous revisions. The current edition of this manual, as well as the Product-Specific Operations Manuals, can be accessed through the AHRI website, www.ahrinet.org.

The AHRI Performance Certification Program provides for independent verification of the manufacturers' stated equipment performance. Safety criteria are not within the scope of this program.

Participation in the program is voluntary. Any manufacturer, regardless of AHRI membership, may obtain approval of Program Ratings and use of the AHRI Certification Mark hereinafter referred to as the "Mark". The Mark is the Participant's public representation that the ratings of randomly selected samples have been verified by an independent laboratory in accordance with test procedures prescribed by this operations manual. A Certification Agreement is executed between the manufacturer and AHRI specifying the conditions under which such Ratings and the Mark may be used. No manufacturer has the right to use Program Ratings or to state that their products have been tested in conformance with the procedures outlined in this Rating Procedure unless and until they have received written authority from AHRI to use the Mark as applied to the specific approved Program Ratings.

This Operations Manual has been prepared to assure that administration of the program is carried out in a uniform manner. It is an amplification of the Certification Agreement signed by licensees and AHRI. General information, procedural details, and copies of forms are included in this operations manual. Provisions of the Operations Manual may be amended as provided in the Certification Agreement.

The AHRI Certification Programs comply with requirements in the latest edition of ISO/IEC Guide 17065, *General requirements for bodies operating product certification systems*.

Note:

This Operations Manual supersedes the AHRI General OM – January 2022.

GENERAL OPERATIONS MANUAL
AHRI CERTIFICATION PROGRAMS

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Introduction

Definition of AHRI Product Performance Certification Program. The AHRI Product Performance Certification Program is a voluntary program, administered and governed by AHRI, which ensures that various types of heating, ventilation, air conditioning, refrigeration and water heating products perform according to manufacturers' published claims. Products that are certified through the AHRI Product Performance Certification Program are continuously tested, at the direction of AHRI, by an Independent Third-party Laboratory Contracted by AHRI (Laboratory) to determine the product's ability to conform to one or more product rating standards or specifications.

"AHRI Product Performance Certification Program" and "AHRI Certification Program" are general terms that refer to the individual certification programs offered by AHRI which are specific to a particular product or group of products.

Purpose of the AHRI Product Performance Certification Program. The purpose of the AHRI Product Performance Certification Program is to:

- Assure buyers that manufacturers produce products with consistently valid ratings thus enhancing buyer confidence in the performance of participating manufacturers' products and discouraging the marketing of products with invalid ratings;
- Encourage fair competition in the market;
- Maintain industry-driven certification;
- Facilitate compliance to various state and federal efficiency regulations;
- Serve as an accredited Certification Body (CB) to Participants for compliance with ENERGY STAR® Qualification;
- Facilitate applicable tax credits and rebates; and
- Meet verification and reporting requirements driven by state and federal government regulations.

Credibility of the AHRI Product Performance Certification Program. In addition to having over 60 years of experience certifying the performance of HVACR and water heating products, the AHRI Product Performance Certification Program is accredited through the Standards Council of Canada (SCC) and Comité Français d'accréditation (COFRAC) to ISO/IEC Standard 17065 – *General requirements for bodies operating certification programs*.

Benefits of AHRI Product Performance Certification. The AHRI Product Performance Certification Program is beneficial to manufacturers of HVACR and water heating equipment, the industry as a whole, and to consumers and regulatory authorities. AHRI Product Performance Certification:

- Is recognized throughout the world;
- Provides consumers with a reliable apples-to-apples comparison of equipment they are considering purchasing;
- Increases consumer confidence – independent testing verifies that the product shall perform as the manufacturer claims;
- Provides a level playing field for manufacturers – competing products are tested and rated to the same standard or specification;
- Provides the basis for private business and government cooperation – many AHRI certified products are regulated by the government, and AHRI certification may facilitate compliance to minimum efficiency standards, including some set by foreign governments;
- Facilitates compliance with EPA's ENERGY STAR® verification and reporting requirements; and
- Maintains integrity in the HVACR industry.

Differences between AHRI Membership and AHRI Certification Program Participation. AHRI is a trade association that administers certification programs. If a manufacturer is a member of AHRI, the manufacturer can represent itself as an AHRI member. Manufacturers that participate in the AHRI Certification Program are referred to as AHRI Certification Program Participants. While many certification program Participants also enjoy AHRI membership, membership in AHRI is not a requirement for participation in the AHRI Certification Program.

AHRI members who participate in the AHRI Certification Program do receive some benefits and opportunities that are not available to non-members. Benefits and opportunities for manufacturers who are both AHRI members and AHRI Certification Program Participants include:

- a reduced licensing fee rate;
- participation and voting rights in the certification program's compliance committee;
- potential to be elected to serve on committees that are responsible for the management of the AHRI Certification Program including the AHRI Certification Committee.

Product-Specific Certification Programs Offered. Visit the AHRI website, www.ahrinet.org, to view a list of certification programs currently offered. A product is eligible for AHRI Product Performance Certification if the product meets the program scope defined in the applicable Product-Specific Operations Manual and the Applicant meets the eligibility requirements outlined in Section 2 of the General Operations Manual.

Some AHRI certified products are subject to government regulation. Participation in the AHRI Certification Program does not necessarily satisfy a program Participant's obligation to abide by government regulations.

1. Overview of AHRI Certification Program Requirements and Privileges

The following is a general overview of the requirements and privileges of an AHRI Certification Program Participant. It is not inclusive of all specific requirements and privileges required of, or granted to, a program Participant.

TABLE 1. AHRI CERTIFICATION PROGRAM REQUIREMENTS AND PRIVILEGES	
Requirement/Privilege	General Description
Qualify for entrance into the certification program	<ul style="list-style-type: none"> • Meet program eligibility requirements; • Complete the Application for AHRI Certification, including providing sales volume information and product data; • Execute the applicable agreements with AHRI which obliges the Participant to observe all clauses of the certification program. The Governing Documents, including the AHRI General Operations Manual, the relevant standard, the Product-Specific Operations Manuals, and the Certification Agreements, collectively explain the rating/testing requirements and the operations and policies of the AHRI Certification Program; • Pay applicable fees to cover licensing costs and all costs associated with qualification testing; and • Successfully pass all qualification tests.
Execute agreements with AHRI per Table 2. (Certification Agreement – OEM; Certification Agreement – PBM)	<ul style="list-style-type: none"> • Maintain program eligibility requirements; • Agree to observe the program's Governing Documents in exchange for being able to claim product certification and use the AHRI Certification Mark. Failure to observe the Governing Documents shall be grounds for program violation(s) and potential termination from the Program; • Agree to rate certified products in accordance with the applicable rating standard; and • Pay all invoices which cover costs associated with licensing and testing.
Agree to certify all products that fall within the scope and Intended Market of the certification program (unless an exception has been granted by the Certification Committee)	<ul style="list-style-type: none"> • To promote market trust in the ratings of AHRI certified equipment and to avoid marketplace confusion, Participants are generally not permitted to pick-and-choose which products to certify; program Participants are required to observe the Certify-All Policy.

Submit to product testing to verify performance claimed by the Participant	<ul style="list-style-type: none">• Each year, AHRI shall test at least 20% of each OEM Participant's certified Basic Models or Basic Model Group(s) (BMG);• Products that are unable to meet the requirements of the applicable rating standard are subject to mandatory re-rates or shall be made obsolete, meaning they may no longer be manufactured or sold;• Products that fall below the minimum state or federal efficiency requirements shall be removed from the AHRI Directory of Certified Product Performance (Directory) and the government agency shall be notified;• Participants with high test failure rates are subject to additional requirements and testing;• Submit to challenge tests if initiated by other program Participants; and• Submit to discretionary tests if requested by AHRI.
Maintain all certified product data in the AHRI Directory of Certified Product Performance (www.ahridirectory.org)	<ul style="list-style-type: none">• The Directory is a publicly-accessible online database for viewing AHRI certified ratings and downloading certificates of certification;• Directory data is used by AHRI to compile reports for some legislative, regulatory, and/or utility agencies;• AHRI certified data that is displayed for the Participant's product are required to match the data displayed in the Directory;• AHRI utilizes the Directory to perform field-requested certified rating verifications; and• Failure to maintain accurate product data in the Directory shall be grounds for program violation(s).
AHRI is recognized by EPA as a Certifying Body (CB) for participation in the ENERGY STAR® program	<ul style="list-style-type: none">• For program Participants who elect AHRI as their CB for participation in the ENERGY STAR® program, AHRI shall provide the EPA with applicable product data from the Directory, and test data, to meet the Participant's ENERGY STAR® verification and reporting requirements.
Proper use of the AHRI Certification Mark and claims to certification	<ul style="list-style-type: none">• Certified equipment is required to carry the AHRI Certification Mark;• When AHRI certified ratings are displayed by the Participant, the ratings are required to note they are certified in accordance with the Applicable Rating Standard; and• Published certification ratings making claims to certification within the scope of the Applicable Rating Standard do not need to state they are rated in accordance with the Applicable Rating Standard.
Challenge the ratings of other manufacturers	<ul style="list-style-type: none">• Program Participants may initiate challenges against other program Participants or manufacturers not in the Program; and• Challenges are mediated by AHRI in accordance with the certification program governing documents and substantiated through product testing.

2. Program Eligibility

2.1 Determining Program Eligibility. Any corporate entity, domestic or international, that is an Original Equipment Manufacturer (OEM) or Private Brand Marketer (PBM) of a production model(s) that falls within the scope of the certification program is eligible to have its product(s) receive AHRI certification. The scope of a certification program can be found in Section 1 of the Product-Specific Operations Manual.

2.1.1 Definition of Licensee. A corporate entity, capable of bearing its own legal rights and obligations that has a signed Certification Program Licensee Agreement with AHRI. "Participant" and "Licensee" are general terms that are used interchangeably throughout the General OM. "Participant" is equivalent to the definition of a "Licensee"

2.1.2 Definition of Original Equipment Manufacturer (OEM) Licensee. A corporate entity, capable of bearing legal rights and obligations, that manufactures and markets, under one or more brand names, equipment that falls within the scope of a certification program.

2.1.3 Definition of Private Brand Marketer (PBM). A corporate entity, capable of bearing legal rights and obligations, that markets equipment manufactured by a different corporate entity (an OEM) under one or more brand names.

2.1.4 Definition of Production Model. A “production model” is a model for which a manufacturer regularly publishes data, catalogs, specification sheets, or marketing materials and which is intended for regular production or sale. A product that is not marketed or solicited for sale, yet is produced as a one-of-a-kind item at the request of a customer, is not considered a production model and is thus ineligible for certification.

2.2 Definition of Brand Name. The name a product, or group of products, is traded under for commercial purposes. Brand names shall be linked to an OEM or PBM in the Certification Agreement. The Licensee shall provide proof of legal ownership of the brand names listed in the Certification Agreement.

2.3 Eligibility of PBMs that Purchase Non-Certified Equipment. A PBM that purchases equipment not certified by the OEM is still eligible to join the certification program. However, in such a situation, the PBM shall have its equipment certified under the procedures established for an OEM Applicant and, if accepted into the program, shall be considered an OEM Participant.

2.4 Participation in Multiple Certification Programs. Corporations often manufacture and/or sell a variety of products which can be AHRI certified. A corporation is eligible to participate in multiple AHRI certification programs. However, eligibility for one (1) program does not grant automatic eligibility or admission into another. Eligibility and qualification shall be determined, and applicable fees assessed, for each program.

2.5 Acquisition of, or Merger with, an AHRI Certification Program Participant. Certification program Participants acquired by, or merging with, another company may continue certification of the products that are already certified. The new company shall notify AHRI in writing, as soon as possible after the acquisition, of their intent to continue or rescind certification. The new company shall sign new Certification Agreements with AHRI, continue making all necessary certification program payments, and continue with all requirements noted in the AHRI General Operations Manual and Product-Specific Operations Manual. The new company shall be responsible for paying any outstanding invoices owed by the previous company and any existing program violations received by the acquired company prior to the merger or acquisition shall be transferred to the new company. If the new company is going to change the technology of the products currently certified, and/or is going to introduce new products that are not already AHRI certified, such product(s) shall undergo qualification.

If one (1) or both of the previous companies held program violations on the date of the acquisition or merger, the new company shall assume the responsibility for all violations. In the case where both companies held program violations at the time of acquisition or merger, the new company shall assume the greater number of program violations held. Any inherited program violations shall be removed from the new company's record five (5) calendar years after they were issued to the previous company.

EXAMPLE: Company A and Company B merged to form Company C. At the time of merger, Company A has one (1) program violation. At the time of merger, Company B has three (3) program violations issued respectively on April 1, 2010, September 21, 2011, and March 15, 2013. Company C enters the program with three (3) program violations. The respective violations shall be removed from Company C's record on April 2, 2015, September 22, 2016, and March 16, 2018.

3. General Notes about the Qualification Process

3.1 Program Applicant. A program Applicant is a Corporate Entity that has applied for entrance, but has yet to complete the requirements of acceptance, into the AHRI Certification Program. The Applicant shall receive written notification from AHRI following the successful completion of the qualification process. At that time, the Applicant shall be considered a program Participant and granted the rights and privileges held by program Participants.

3.2 Length of Qualification Process. The length of the qualification process is dependent upon how quickly paperwork can be completed and exchanged between AHRI and the Applicant, type of product, availability of equipment for testing, test scheduling and conduction, and payment of invoices. AHRI makes every effort to accommodate qualification tests quickly. Applicants who understand the certification process and are diligent in completing necessary paperwork, providing equipment, and paying invoices can typically complete the process within a few months.

3.3 Establishing Product Ratings Prior to Seeking Certification. The Applicant shall have established product performance ratings for all products to be certified prior to applying for entrance into the certification program. When submitting the Certification Application Package, the Applicant shall submit at least one (1) test report for each basic model/BMG in accordance with Section 9.17.1 or as specified in the Product-Specific Operations Manual.

3.4 Claiming Certification during Qualification Process. At no time during the qualification process is an Applicant to imply or claim certification. Certification may not be claimed until the Applicant successfully completes the qualification process and AHRI sends the Applicant written notification that the subject product(s) have been granted AHRI certification.

3.5 Compliance with Sample Selection and Presentation Procedures. Unless otherwise noted, Applicants subject to qualification testing shall comply with Sections 9.4, 9.5, 9.6, 9.7, 9.8 and 9.9 of this manual in the selection and presentation of test samples.

3.6 Applicant Invoice Payment. Failure to provide payment within 30 calendar days of invoice date shall result in the cancellation of application and discontinuation of the qualification process. AHRI shall not perform testing, or any function related to testing, without first receiving payment.

3.7 Applicant Manufacturer's Decision Forms. In the event of a test failure, AHRI shall send the Applicant a Manufacturer's Decision Form (MDF). The Applicant has seven (7) calendar days to return the completed MDF to AHRI indicating the Applicant's elected course of action in response to the test failure. Failure to return the MDF in this timeframe shall result in automatic re-rating of the Basic Model or BMG in accordance with Section 9.15.2.4.1. For programs where re-rate is not an option, the Applicant may be required to submit to more testing or the Applicant's request for certification may be denied and the qualification process terminated.

3.8 Changes to Program Scope or Governing Documents during the Qualification Process. AHRI shall notify the Applicant of any changes to the certification program scope or Governing Documents that are implemented during the Applicant's qualification process. The Applicant is expected to comply with these changes. If the Applicant decides for any reason it cannot comply, the Applicant shall voluntarily terminate its application to the program.

Prior to commencing the qualification process, AHRI shall make every effort to notify an Applicant of any expected program changes.

3.9 Termination of the Qualification Process.

3.9.1 Voluntary Termination of Application. The Applicant may request to terminate its application, in writing, any time during the qualification process. In such cases, any agreements signed by the Applicant and AHRI shall be void. Any payments paid by the Applicant, up to the

time of termination, are non-refundable. If the Applicant seeks AHRI certification in the future, the qualification process shall start from the beginning.

3.9.2 *AHRI Termination of Application.* AHRI reserves the right to terminate the qualification process of any Applicant who does not provide:

- Required payment, paperwork, data, and/or equipment within the required timeframes;
- Make false claims to certification prior to official notification; or
- Does not successfully complete qualification testing requirements.

AHRI shall notify the Applicant, in writing, of such termination of application. In such cases, all agreements signed shall be void. Any payments made to AHRI by the Applicant, up to the date of termination, are non-refundable. If the Applicant seeks AHRI certification in the future, the qualification process shall start from the beginning.

3.9.3 *AHRI Termination of Application Due to Program Cancellation.* In the event AHRI cancels a certification program while an Applicant is in the midst of the qualification process, AHRI shall notify the Applicant in writing and refund any participation fees paid that have yet to be applied to unperformed tests and refund any licensing fees paid. Any agreements signed shall become void. If the program is ever reinstated by AHRI and the Applicant wishes to join the program, the qualification process shall start from the beginning.

4. Qualification Process for OEM Applicant

STEP 4.1 *Certification Application Package.* The Applicant shall submit the following completed documents for each program of interest:

- Application for AHRI Certification;
- New Applicant License Fee Form-Sales Volume;

Upon receipt, AHRI will provide the Applicant with login credentials to the AHRI Directory of Certified Product Performance. Within sixty (60) calendar days of receiving the login credentials, the Applicant shall proceed with submitting:

- Product specific ratings and data;
- At least one test report, in accordance with Section 9.17.1, for every BMG or Basic Model subject to certification or as specified in the Product-Specific Operations Manual; and
- As applicable for some programs:
 - Witness Test Facility Approval documents (found in Product-Specific Operations Manual of programs that support witness testing);
 - Selection Rating Software programs/catalogs (refer to Section 17);
 - An Applicant requesting AHRI to submit data to regulatory organizations (e.g. California Energy Commission [CEC], US Department of Energy [DOE], Federal Trade Commission [FTC], Natural Resources Canada [NRCan]) shall submit third-party authorization, compliance forms and other necessary information; and
 - Additional information may be needed to meet ENERGY STAR® program requirements.

Unless otherwise noted in the Product-Specific Operations Manual, product specific ratings and data shall be submitted via the Directory. All forms and data sheets can be obtained from AHRI. Completed forms, catalogs, and other documents, in PDF format, shall be submitted via the Directory.

Any questions regarding the Certification Application Package should be addressed to AHRI.

STEP 4.2 Processing Application Package

STEP 4.2.1 Performance Certification Agreement for Original Equipment Manufacturer (OEM Agreement). Upon review and acceptance of the application package, AHRI shall send the Certification Agreement to the Applicant. The Applicant shall complete and return the Certification Agreement to AHRI within 60 calendar days of issuance to proceed with the qualification process. It is acceptable to sign the documents with electronic signatures.

If the Agreement is not returned to AHRI within 60 calendar days of issuance, the program application shall be cancelled, and the qualification process shall be discontinued.

STEP 4.2.2 Participation and Licensing Fee Invoice. AHRI shall send an invoice for the costs of the qualification tests (Participation Fee) and Licensing Fees (determined by the Applicant's reported Annual Sales Volume) to the Applicant's designated billing contact (copied to the designated AHRI Certification Program Compliance Officer).

STEP 4.3 Selection and Qualification Testing

STEP 4.3.1 Qualification Letter. AHRI shall notify the Applicant, in writing, which models shall be subject to qualification test. This notification is referred to as the "selection letter." The Applicant has 5 business days from the date of the selection letter (or as otherwise noted in the selection letter sent to the Applicant) to review and submit any comments or concerns regarding the selection. No changes to the selection may be made without AHRI approval.

STEP 4.3.2 Laboratory Selection Process for Programs with Multiple Laboratories. For programs having multiple Laboratories, AHRI shall select the Laboratory performing the test at its discretion. AHRI's decision shall be based on several criteria including but not limited to Laboratory capacity and programs' objectives. Any Second Sample or any additional sample tests shall be performed by the same Laboratory that performed the First Sample test, unless testing at another laboratory is approved by AHRI. Laboratory selected for testing shall be final and shall not change regardless of the outcome of the test.

STEP 4.3.3 Number of Qualification Tests. Where no qualification test quantity is specified in the Product-Specific Operations Manual, the Applicant shall test the greater of the following:

- Test two (2) models; or
- The Annual Testing Requirement in Section 3 of the Product-Specific Operations Manual

If an Applicant uses AHRI as its Certifying Body (CB) for participation in the ENERGY STAR® program, at least 10% of the Basic Models/BMGs that include ENERGY STAR® models shall be tested.

STEP 4.3.3.1 Introduction of New Basic Models or BMGs. Applicants who chose to introduce new Basic Models or BMGs within the first year following qualification may be subject to additional testing.

STEP 4.3.3.2 Additional Testing. AHRI may require additional testing at its discretion.

STEP 4.3.4 Preparing Qualification Test Samples. Applicants shall comply with Sections 9.4, 9.5, 9.6, 9.7, 9.8, and 9.9 of this manual. Failure to comply shall result in the cancellation of the program application.

For witness test programs, the Applicant shall have the selected samples and be prepared to test the samples at the AHRI approved facility on the mutually agreed upon date. Test facility inspections can be conducted in conjunction with Qualification Testing. Refer to Section 9.12.

STEP 4.3.5 Shipment Damage. In case of observed shipment damage by the Laboratory, shipment damage documentation shall be sent to the Applicant by the Laboratory prior to testing the sample. The Applicant may choose to have the Laboratory attempt to repair the sample prior to testing or produce new samples for selection with approval from AHRI. The Applicant shall inform AHRI of its decision within 24 hours of receiving the damage notification.

For an Applicant's first sample, failure to notify AHRI within 72 hours of receiving the damage notification of its decision shall result in the termination of the application process.

For a Second Sample, failure to notify AHRI within 24 hours of receiving the damage notification shall result in the forfeiture of further testing opportunities and the Basic Model/BMG shall be re-rated to the failed First Sample test's results in accordance with Section 9.15.2.4.1.

If the Applicant chooses to have the Laboratory repair the unit, the Applicant may not claim improper handling or installation by the Laboratory. The Laboratory reserves the right to invoice the Applicant directly for any repair work requested by the Participant.

STEP 4.4 Qualification Testing. All Qualification Tests shall pass, or re-rates of the data in accordance with the test results shall be accepted, to move onto the next step of the qualification process. AHRI shall follow the process for Annual Tests, as noted in Section 9, unless otherwise specified. The Applicant shall receive a copy of the test report.

STEP 4.4.1 Successful Completion of All Qualification Tests. If all qualification tests pass, proceed to STEP 4.5.

STEP 4.4.2 First Sample Qualification Test Failure. Unless otherwise noted in the Product-Specific Operations Manual, following first-sample qualification failure, the Applicant shall choose to:

- Re-rate the Basic Model or all models within the failed sample's BMG proportionate to the failed test's results in accordance with Section 9.15.2.4.1. If this option is chosen, AHRI shall select and test additional untested Basic Models or BMGs until the required number of qualification tests pass. The re-rated data shall be reflected in all the Applicant's printed literature, specifications, and software;
- Re-rate all untested Basic Models or BMGs per Section 9.15.2.4.1. The re-rated data shall be reflected in all the Applicant's printed literature, specifications, and software; or
- Test second sample of the same model, as described in Section 9.15.2.4.2.

The Applicant shall communicate its elected option to AHRI via Manufacturer's Decision Form in accordance with Section 3.7.

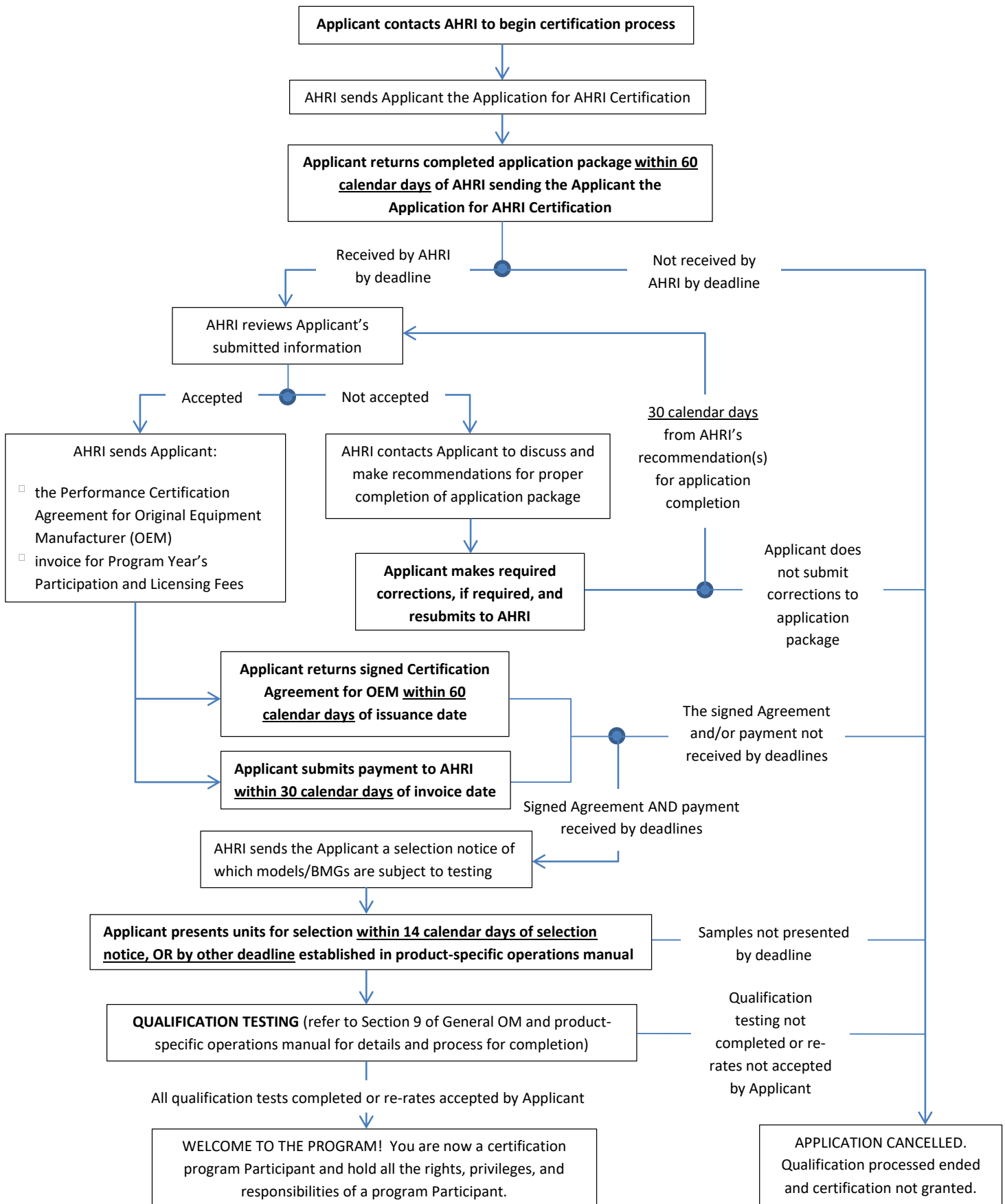
STEP 4.4.3 Second Sample Qualification Test Failure. Unless otherwise noted in the Program-Specific Operations Manual, following second sample qualification failure, the Applicant shall choose to:

- If permitted in the Product-Specific Operations Manual, re-rate Basic Model or all models within the failed sample's BMG in accordance with Section 9.15.2.4.1. If this option is chosen, AHRI shall select and test additional untested Basic Models or BMGs until the required number of qualification tests pass. The re-rated data shall be reflected in all the Applicant's printed literature, specifications, and software; or
- Re-rate all untested Basic Models or BMGs in accordance with Section 9.15.2.4.1. The re-rated data shall be reflected in all the Applicant's printed literature, specifications, and software.

The Applicant shall communicate its elected option to AHRI via Manufacturer's Decision Form in accordance with Section 3.7.

STEP 4.5 Welcome to the Program. After all steps have been completed and invoices paid, the Applicant shall be sent a Welcome Letter granting rights to use the AHRI Certification Mark and the Applicant's certified products shall be listed in the AHRI Directory of Certified Product Performance (Directory).

FIGURE 1. CERTIFICATION PROGRAM QUALIFICATION PROCESS FOR OEM APPLICANTS



5. Qualification Process for a PBM Applicant

STEP 5.1 Certification Application Package. The Applicant shall submit a completed Application for AHRI Certification for each program of interest.

Upon receipt, AHRI will notify the OEM to submit product-specific data (i.e. PBM/OEM equipment matchups) via the AHRI Directory of Certified Product Performance.

As applicable for some programs, the Applicant shall submit:

- Selection Rating Software;
- Additional information may be needed to meet ENERGY STAR® program requirements.

Unless otherwise noted in the Product-Specific Operations Manual, product-specific ratings and data shall be submitted via the AHRI Directory. All forms can be obtained from AHRI. Completed forms, catalogs, and other documents, in PDF format, shall be submitted via the Directory.

Any questions regarding the Certification Application Package should be addressed to AHRI. All items in the Certification Application Package shall be returned to AHRI within 60 calendar days of being sent to the Applicant, otherwise the qualification process shall be discontinued.

STEP 5.2 Processing Application Package

STEP 5.2.1 Performance Certification Agreement for Private Brand Marketer (PBM Agreement). Upon review and acceptance of the application package, AHRI shall send the PBM Agreement to the Applicant. The Applicant shall complete and return the PBM Agreement to AHRI within 60 calendar days of issuance to proceed with the qualification process. It is acceptable to sign the documents with electronic signatures and to return all agreements and forms to AHRI.

If the agreements are not returned to AHRI within 60 calendar days of issuance the qualification process shall be discontinued.

STEP 5.2.2 OEM Agreement on Behalf of the PBM Applicant. If the PBM's products are already being tested and certified by a participating OEM, PBM Applicants shall not be required to undergo testing of their products. The OEM Applicant that provides equipment to the PBM shall acknowledge its relationship with the PBM by executing the OEM Agreement Appendix C.

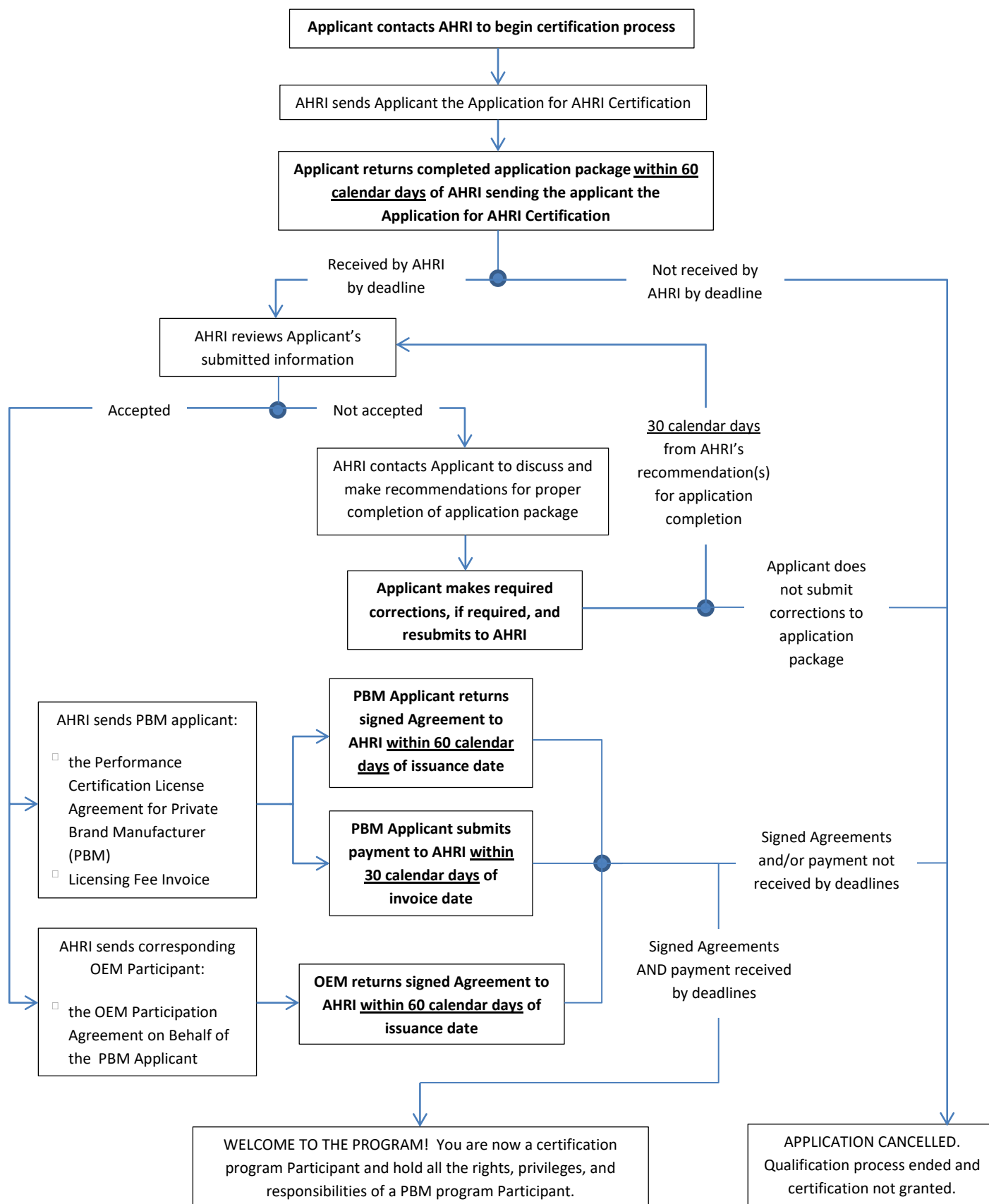
AHRI shall send the OEM the OEM Agreement Appendix C. (If the OEM is not currently a Participant in the AHRI Certification Program, the OEM shall be required to follow all the steps listed above for an OEM Applicant. The PBM's acceptance in the program shall not occur until the OEM meets all of the requirements for admittance and participation.) The OEM shall sign and return the agreement to AHRI within 60 calendar days of issuance. It is acceptable to sign the agreement with electronic signatures and to return the agreement to AHRI.

If the OEM does not return the OEM Agreement to AHRI within 60 calendar days of issuance, the PBM's program application shall be cancelled and the qualification process discontinued.

STEP 5.2.3 Licensing Fee Invoice. AHRI shall send an invoice for the costs of licensing fees to the Applicant's designated billing contact (copied to the designated AHRI Certification Program Compliance Officer).

STEP 5.3 Welcome to the Program. After all steps have been completed and invoices paid, the Applicant shall be sent a welcome letter granting rights to use the AHRI Certification Mark and the Applicant's certified products shall be listed in the Directory. The listings shall reflect the ratings associated with the corresponding OEM product. If the OEM product is removed, the corresponding PBM product shall also be removed. PBM Applicants shall not have access to change product ratings.

FIGURE 2. CERTIFICATION PROGRAM QUALIFICATION PROCESS FOR PBM APPLICANTS



6. Governing Documents of the AHRI Certification Program

6.1 *Governing Documents*. The governing documents of the AHRI Certification Program collectively explain the operations, obligations, and privileges of the program. Participants are required to abide by the provisions of all the governing documents. Failure to do so shall be grounds for a program violation and/or termination from the certification program.

TABLE 2. LIST OF AHRI CERTIFICATION PROGRAM GOVERNING DOCUMENTS

Governing Document	Purpose	Effective Term	How to Acquire Document	Responsible Party
Certification Agreement (for OEM Participants) - OR - Certification Agreements (for PBM Participants)	These agreements describe legal requirements of participating in the certification program. It grants the Participant a non-exclusive license to claim AHRI certification and use the AHRI Certification Mark. The agreement obligates the OEM of certified products to submit to product testing.	Three (3) years and automatically renewed for successive one-year periods. The agreement is void if the Participant voluntarily leaves or is terminated from the program.	Contact AHRI	AHRI
AHRI General Operations Manual	This manual describes the procedural and administrative requirements common to all AHRI Product Performance Certification Programs.	Until revised by AHRI	www.ahrinet.org	AHRI Certification Committee
Product-Specific Operations Manual	This manual describes the procedural and administrative requirements, specific to an individual certification program. The Product-Specific manual prevails if the Product-Specific and general operations manual differ.	Until revised by AHRI	www.ahrinet.org	Compliance Committee (Each OM shall be approved by the Certification Committee before it becomes official)
Product Performance Rating Standard	The standard provides the technical requirements of rating and testing equipment and to which certified equipment shall be tested.	Until revised by the author of the standard. For most programs, AHRI is the author. For some programs the author may be DOE or another regulatory/standards-writing body.	www.ahrinet.org for all AHRI or ANSI/AHRI standards; or other author's website	Applicable Standards Technical Committee (AHRI and ANSI/AHRI standards only)

6.2 *Amendment to Governing Documents*. Any governing document may be amended at any time with notice from AHRI. Participants are expected to abide by all current governing documents.

7. Certify-All Policy

7.1 Certify-All Policy. OEM and PBM Participants are required to certify all products that:

- Fall within the Program Scope; and
- Fall within the Intended Market of the certification program.

Program Applicants and Participants may not selectively choose which products to certify within the Intended Market. Any and all products that fall within the Program Scope and which are sold within the program's Intended Market are required to be certified. Failure to abide by the Certify-All Policy shall be grounds for a program violation.

Licensing fees shall be paid on all certified products.

7.1.1 Program Scope. The program scope defines the product(s) covered by each certification program. The program scope is listed in Section 1 of each Product-Specific Operations Manual.

7.1.1.1 Products that Fall Outside of the Program Scope. A product that is outside of the program scope, or to which the Applicable Rating Standard does not apply, is ineligible for AHRI performance certification.

7.1.1.2 Products Capable of Operating Outside of Program Scope. Some products fall under the scope of the certification program but are capable of operation in conditions outside of the program scope and/or Applicable Rating Standard. Such products are still required to be certified. However, the ratings of these products, when operated at conditions outside of the program scope and/or Applicable Rating Standard, are not certified.

7.1.2 Intended Market. The Intended Market is the specific geographical region into which certified equipment is sold and/or marketed for sale.

The Intended Market of any AHRI Certification Program is either the U.S. and Canada or Global and is specifically defined in Section 1 of the Product-Specific Operations Manual. Unless explicitly noted in the Product-Specific Operations Manual, the U.S. and Canada is the Intended Market for an AHRI Certification Program.

7.1.2.1 U.S. and Canadian Intended Market. All products that fall under the program scope and are marketed and/or sold in the United States, United States Territories, and Canada are required to be certified.

7.1.2.1.1 Elective Certification of Products Marketed/Sold Outside the U.S. and Canadian Intended Market. Certification of the product marketed and/or sold outside of the Intended Market is optional. Licensing fees shall be paid on all certified products, regardless of where they are sold. If a Participant does not wish to carry certification of a model for use outside the Intended Market, this product shall carry a different model number from an existing AHRI model to avoid confusion.

7.1.2.2 Global Intended Market. All products that fall under the program scope and which are marketed and/or sold anywhere in the world are required to be certified.

7.1.3 Products Designated "For Export Only." The AHRI Certification Programs and the Directory do not allow listing of product ratings that do not comply with applicable U.S. Federal minimum efficiency requirements for products designated for sale in the intended market. Models that fall below Federal and State minimum requirements that are specifically designated for sale outside of the US are permitted to be certified, sold, and listed in the "For Export Only" section of

the Directory. If the models fall within the program scope and Intended Market, then such “For Export Only” models are required to be certified. Licensing fees shall be paid on all certified products, regardless of where they are sold.

7.1.4 Exceptions to the Certify-All Policy. Any exceptions to the Certify-All Policy can be found in Section 1 of the Product-Specific Operations Manual.

Deviation from the Certify-All policy is rarely granted. A Participant's request for deviation shall be made in writing to the AHRI Vice President, Certification Programs for presentation to the Certification Committee. The request shall demonstrate compelling reason for the deviation and is subject to Certification Committee approval.

TABLE 3. EXAMPLES OF CERTIFY-ALL POLICY

1.	<p>A Participant manufactures 25 product lines in a certification program with a U.S. and Canadian Intended Market. The Participant markets and sells 9 of the lines exclusively in the U.S. and Canada, 12 lines in both the U.S. and Canada and Asia, and 4 lines exclusively in Asia. Per program rules, the Participant is required to certify the 21 lines that are marketed and sold in the U.S. and Canada.</p> <p>The Participant has the option to certify some or all of the products marketed and sold in Asia. The Participant is required to include any certified products sold in Asia in its certified sales volume report.</p> <p>If the Participant does not wish to carry certification of a product sold in Asia that is sold in the US and Canada as a certified product, the Asian product shall carry a distinctively different model number to avoid market confusion.</p> <p>Had the program had a global Intended Market, all 25 product lines would have required certification.</p>
2.	<p>A manufacturer would like to join a certification program with a US and Canadian Intended Market. The manufacturer offers 80 models that fall within the program's scope, however all 80 models are marketed and sold outside of the US and Canada. Under program rules, the Applicant is able to choose which of the models it wants to certify; not all are required to be certified.</p> <p>Had the program had a global Intended Market, all 80 models would have required certification.</p>
3.	<p>A Participant manufactures a product line that falls within the scope of a certification program with a U.S. and Canadian Intended Market. However, the model is not heavily marketed, doesn't have a high sales volume, AHRI certification is not important to the consumers of the model, and only the Participant's factory is able to generate product ratings. The Participant does not want to certify the custom product. However, because the model falls under the product scope and is sold in the US and Canada, it is required to be certified. Additionally, the Participant shall be required to provide product ratings, or a means for generating product ratings, to AHRI.</p> <p>Had the Participant opted NOT to market or solicit sale of this product in any format and a customer required it, this product is not a Production Model and exempt from certification. In this situation, the Participant could provide ratings to the customer, however, cannot claim certification.</p>
4.	<p>A Participant manufactures a product that is capable of operating in multiple modes, not all of which fall under the scope of the certification program. The product is still required to be certified because it shall be operated at some conditions that fall under the program scope. The Participant shall explicitly state which operating modes/ratings are outside the scope of the program.</p>
5.	<p>A company, wishing to join the certification program as a PBM, sells 8 product lines that fall within the scope of a certification program with a global Intended Market. The company does not manufacture any of the products, rather purchases them from 5 different OEM suppliers, one of which is not an AHRI Certification Program Participant. Since the program has a global Intended Market, the company wishing to join the program is required to carry certification for all 8 of the product lines. The company shall be designated a PBM Participant for the lines that are already AHRI certified by the OEM suppliers. However, the company wishing to join the program is required to act as an OEM Participant for the product line not certified by the OEM supplier.</p>

8. Proper Use of the AHRI Certification Mark and Claims to Certification

8.1 *Use of the AHRI Certification Mark, Certified Ratings, and Claims to Certification.* Any product listed in the AHRI Directory of Certified Product Performance is required to carry the AHRI Certification Performance Mark.

All Marks, certified ratings, and claims to certification must be displayed in accordance with the AHRI Governing Documents.

Participants may choose to incorporate the AHRI Certified mark with the certification program name and applicable Standard into the equipment nameplate. The Brand Usage Guide can be found at: <http://www.ahrinet.org/BUG>.

8.1.1 *Improper Use and Claims.* Improper or unauthorized use of the AHRI Certification Mark, improper display of certified ratings, or false or improper claims to certification shall be grounds for a program violation and/or legal action.

Unauthorized claims should be reported to AHRI.

8.1.2 *Acceptable Language for Use with the AHRI Certified Mark in Advertising or Promotional Material*

- AHRI Certified
- Certified by AHRI
- Tested and certified by AHRI
- Participants company product is certified by AHRI to AHRI Standard #
- Participants Company's product is listed in the AHRI Directory of Certified Product Performance
- The trusted mark of performance assurance

8.1.3 *Unacceptable Language for Use with the AHRI Certified Mark in Advertising or Promotional Material*

- Approved by
- Verified by
- "Seal" or "Seal of Approval"
- AHRI Approved
- "Tested against" or "Audited against"
- "Tested to" or "Audited to"
- "Tested by" or "Audited by"
- Meets AHRI requirements

8.1.4 *Displaying the AHRI Certified Mark with Phrase Marks.* Use the AHRI Certified phrase marks in marketing and advertising material to show that a company carries AHRI Certified equipment and components. The three approved phrase marks are:

- WE INSTALL CERTIFIED PRODUCTS
- ASK ABOUT OUR CERTIFIED PRODUCTS
- WE INSTALL CERTIFIED MATCHED SYSTEMS

These marks may be used on an array of promotional materials, including your company's website, point-of-purchase displays, sales materials, contractor advertisements, clothing, and company owned cars and vans, etc. If the application displays or references a variety of products, not all of which are AHRI Certified, use the "Ask About our Certified Products" phrase mark.

8.2 Issuing Corrections to Marketing Materials. Corrections to all advertisements, specifications, literature, software, websites, etc. shall be made whenever:

- A product is re-rated due to test failure, is made obsolete, or no longer certified; or
- AHRI requests corrective action in response to a marketing material program violation.

All corrections shall be made in accordance with Table 4.

TABLE 4. ACTIONS FOR MANDATORY MARKETING MATERIAL CORRECTIONS	
Required Action	Deadline
<ul style="list-style-type: none"> • Advise AHRI, in writing, of the steps being taken to correct all marketing materials 	Within 14 calendar days of AHRI confirmation of the MDF, AHRI request to issue correction, or program violation.
<ul style="list-style-type: none"> • Withdraw all known marketing materials containing previous ratings or claims to certification • Provide AHRI with a copy of the draft public notification of corrections* • Provide AHRI with a copy of those parties to receive the notification and corrections* • Provide AHRI with corrected marketing materials, including equipment selection software* • Provide corrected materials to all distributors, dealers, and other affected parties 	Within 60 calendar days of AHRI confirmation of the MDF, AHRI request to issue correction, or program violation.
<p>* AHRI shall give written-approval prior to dissemination to public. If not approved, AHRI shall advise the Participant on steps to make the correction satisfactory.</p>	

8.3 New Product Introductions and Claims to Certification. If performance ratings are available for a new product that falls under the Program Scope and Intended Market, but the product has yet to be officially launched in the market and/or is not yet available for purchase, the Participant is required to:

- Notify AHRI prior to introducing the product to the marketplace.
- Provide AHRI with a means for generating product ratings (i.e. cataloged data, Selection Rating Software, or copies of each rating sheet provided to the field); and
- Properly display the AHRI Certification Mark and properly note AHRI certification where ratings are displayed.

Selection Rating Software for the new product is subject to Section 17. AHRI must approve the software before it can be used to generate ratings that shall be disseminated by the Participant.

At the time product marketing materials (e.g. catalogs, specifications, selection software and/or other means for accessing product ratings) become available to the general public, the participant is required to list the product in the Directory.

9. Equipment Testing

9.1 Summary of Annual Testing Process. Each program year, AHRI tests a portion of the Participant's certified Basic Models or BMGs listed in the Directory. The purpose of this testing is to verify that the Participant has rated its certified products in accordance with the Applicable Rating Standard or the Product Specific Operations Manual, as applicable.

Testing shall continue throughout the program year, and longer if necessary, until all required testing is completed. AHRI uses the Directory as the basis for selecting which Basic Models or BMGs shall be tested. AHRI notifies the Participant and the Laboratory of the selections and establishes the deadline for presenting test samples.

After AHRI has chosen the specific test samples, the Participant is responsible for shipping the samples to the Laboratory, or in the case of a witness test, reserving the samples until the witness test occurs.

The Laboratory tests the samples per the certification program's Applicable Rating Standard. Laboratory data is compared to the Participant's rating data in the Directory. The Participant's ratings, when compared to the Laboratory's test results, are expected to fall within the allowable tolerances of the Applicable Rating Standard. It is considered a passing test when each certified rating point for the tested product meets this expectation. Samples that are inoperable and/or fail to perform within the allowable tolerances of the Applicable Rating Standard or one (1) or more Operating Tests (such as Maximum Operating Conditions or Voltage Tolerance Tests) as specified in the Applicable Rating Standard or the Product Specific Operations Manual, as applicable may require repair, further testing, re-rate, and/or made obsolete, depending on the specific situation.

Testing continues throughout a Participant's time in the certification program, even if all of a Participant's certified products have been subject to AHRI test. Continual testing promotes continued market confidence in the AHRI Certification Mark as indication that a product performs in accordance to the Participant's claims.

9.2 The Independent, Third-Party Laboratory Contracted by AHRI (Laboratory). An ISO 17025 accredited Laboratory is contracted by AHRI to support the testing operations of each certification program. The Laboratory is selected by AHRI through a competitive bidding process. For certification programs with ENERGY STAR® products, the Laboratory shall be recognized by the U.S. Environmental Protection Agency (EPA). During the term of the contract with the selected Laboratory, all AHRI tests are conducted or witnessed by the Laboratory personnel. In some instances, multiple Laboratories may be contracted to support the testing operations of a single certification program.

The Laboratory is responsible for:

- Developing, publishing (for AHRI and Participants), and administering a testing schedule that allows all selected equipment to be tested within the calendar year;
- Providing and maintaining a web-based tracking system that allows AHRI and Participants to view unit selection/test status and, if desired, plan involvement in setting up the test sample prior to testing;
- Coordinating and making the physical selection of the test sample or major components as allowed by individual programs from the Participant's manufacturing facility or warehouse;
- Acquires units from Participant's distributors if necessary;
- Proper uncrating/re-crating, receiving, handling, and disposing of the sample at the Laboratory in accordance with operations manuals;
- Accurately installing, starting, and operating the sample on the test stand per the Participant's installation instructions;
- Coordinating and conducting Participant's facility approvals and witness testing for programs that have a witness test provision;

- Conducting tests in strict accordance with the Applicable Rating Standard and operation manuals; and
- Compiling accurate and thorough test reports and delivering them to AHRI for approval, and then delivered to the Participant in a timely fashion.

9.3 Types of Tests. Annual testing is required of all OEM Participants. Qualification testing is required for all OEM Applicants. In some cases, as specified in the Program-Specific Operations Manual, a form of qualification testing may be required of Participants.

AHRI reserves the right to require discretionary tests, outside of annual and qualification tests, of products for any reason including, but not limited to, situations where ratings appear beyond the probable range of performance, counterpart model tests, and challenge tests.

9.4 Selection of Basic Models or BMGs for Test.

9.4.1 AHRI Method for Making Basic Model/BMG Selections for Test. AHRI selects Basic Models or BMGs listed in “Active” or “Production Stopped” status in the Directory.

The Basic Models or BMGs shall be selected at random or by methods prescribed in the Product-Specific Operations Manual.

If a Production Stopped model is selected for testing and is not available at the Participant’s facility or warehouse, the Participant has the option to discontinue the model in the AHRI Directory. AHRI, at its discretion, could select an alternate model or procure the Production Stopped model from distributors.

Except in the case of challenge tests, AHRI shall send the Applicant or Participant written notification of the Basic Models or BMGs that shall be tested. AHRI refers to this written notification as the “selection letter.” The Participant has 5 business days from the date of the selection letter (or as otherwise noted in the selection letter sent to the Participant) to review and submit any comments or concerns regarding the selection. No changes to the selection may be made without AHRI approval.

9.4.1.1 General Definition of Basic Model. A Basic Model is the market-recognized nomenclature of a product possessing a discrete performance rating. The Product-Specific Operations Manual specifies the exact product features that define a Basic Model.

Example: The specific energy input, storage capacity, and recovery efficiency of a commercial water heater shall affect performance, and therefore each combination of these characteristics is considered a separate Basic Model.

9.4.1.2 General Definition of Basic Model Group (BMG). A BMG is a set of models that share characteristics which allow the performance of one (1) model to be generally representative of the performance of other models within the group. This group of products does not necessarily have to share discrete performance. The Product-Specific Operations Manual specifies the exact product features that define a BMG.

Example: A basic model group of commercial boilers is a set of models that range in size, but are of similar type, design, and construction. A basic model group would consist of boilers that are:

- Constructed of the same material (i.e. aluminum, cast iron, or steel);
- Have the same control mechanism (i.e. condensing, modulating, pressure fired, power burner, natural draft, etc.);

- Have the same vent size; and
- Have the same energy input capacity.

Example: A basic model group of residential air-conditioning systems consists of outdoor units (which have same condenser, outdoor coil surface area, and outdoor air quantity) that are paired with specific indoor models (coils)

9.4.2 *Number of Basic Models or BMGs Subject to Annual Testing.* The Product-Specific Operations Manual specifies the number of Basic Models or BMG that are subject to annual testing. Unless otherwise specified in the Product-Specific Operations Manual, a minimum of 20% of the Participant's Basic Models or BMGs listed in the Directory shall be subject to annual testing. The Directory count is based on the total number of Basic Models or BMGs that are listed in "Active" and "Production Stopped" status. If 20% of the Participant's Basic Models or BMGs is a fractional number, the number of tested units shall be rounded up to the next whole number.

TABLE 5. EXAMPLE CALCULATION OF ANNUAL TESTING REQUIREMENT	
Number of "Active" and "Production Stopped" Directory Listings	Annual Testing Requirement
20 Basic Models	4 units
6 BMGs	2 units
50 Basic Models	10 units
79 BMGs	16 units

9.4.2.1 *Introduction of New BMGs.* Participants who choose to introduce new BMGs during a testing year may be subject to additional testing. For example: The certification program requires the Participant to test 20% of its listed BMGs. If Participant A has 15 BMGs, it shall be assigned three (3) annual tests. If it adds a BMG in the calendar year, and no qualification testing is prescribed by the Product-Specific Operations Manual for this new BMG, this shall bring the total to 16 BMGs and shall raise the requirement to a total of four (4) annual tests for the current program year.

9.4.3 *Test Laboratory Selection Process for Programs with Multiple Laboratories.* For programs having multiple Laboratories, AHRI shall select the Laboratory performing the test at its discretion. AHRI's decision shall be based on several criteria including but not limited to Laboratory capacity and programs' objectives. Any Second Sample or any additional sample tests shall be performed by the same Laboratory that performed the First Sample test when possible. Laboratory selected for testing shall be final and shall not change regardless of the outcome of the test.

9.4.4 *Ratings for Selected Basic Models or BMGs.* AHRI testing requires comparison of the Applicant or Participant's ratings to measurements acquired through Laboratory testing. For Participant tests, AHRI shall use the ratings published in the Directory. For Applicant tests, AHRI shall use the ratings from data submittals provided by the Applicant in the certification application package.

For certification programs in which the Directory, or Applicant data submittal forms, does not explicitly quantify rating data, AHRI shall use Selection Rating Software, which includes electronic catalogs, to acquire the ratings. Selection Rating Software shall be furnished and maintained per Section 17. For Participants, approved rating software name and version shall be published in the Directory per Section 11.5.

9.5 *Methods for Acquiring Test Samples.* Unless otherwise noted, all test samples shall be acquired in accordance with this Section. The Product-Specific Operations Manual indicates which method(s) AHRI or the Laboratory may use to choose the specific test sample.

Once AHRI has chosen the specific sample to test, the sample shall not be manipulated in any way by the Participant.

Failure to retain the specific test sample(s) selected by AHRI or the Laboratory before they are tested shall be grounds for a program violation and sample(s) shall require re-selection. Re-selection fees shall apply.

9.5.1 Random Sample Selection. The Participant shall be instructed by AHRI to prepare a pool of samples for each of the selections noted in the selection letter. Each selection pool must consist of at least three (3) samples of the specific model noted in the selection letter.

AHRI or Laboratory personnel shall visit the Participant's site and randomly select a test sample from the selection pool, and then tag and tape the selected sample, thus ensuring test sample integrity. The tape may only be removed by Laboratory personnel and the tags shall remain on the sample until testing is completed. The sample may come from a Participant's (or its PBM's) production line, wholesaler's, distributor's, or contractor's inventory.

9.5.2 Test Sample Selection from Scheduled Production Model or Stock Lists. AHRI may request the Participant to provide a list of all units scheduled to come through the production line, or a list of all available stock units. AHRI shall select a test sample from the list.

9.5.3 Purchase Test Sample from Wholesaler, Distributor, or Contractor. AHRI reserves the right to purchase test samples from a wholesaler, distributor, or contractor with access to the Applicant or Participant's products. Such purchases may come from the wholesaler's, distributor's, or contractor's stock or be ordered. The Applicant or Participant shall reimburse AHRI or the Laboratory for any purchases made through a wholesaler, distributor, or contractor.

9.5.4 Build-To-Specifications Test Sample Selection. AHRI shall provide specifications, using Participant's product data, to which the Participant shall build the test sample.

9.5.5 Random Component Test Sample Selection. The Participant shall build up the test sample using components selected by AHRI or a Laboratory representative. AHRI or Laboratory personnel may select the components at the Participant's facility. Or, alternatively, the Participant may be asked to provide a list of component serial numbers from which components shall be chosen. In both cases, component serial numbers shall be recorded at time of selection and confirmed upon delivery to the Laboratory.

9.6 Required Timeframe to Present Test Samples for Selection. Unless otherwise noted, all test samples shall be required to be presented for selection in accordance with this Section.

The Participant shall have test samples available for selection within 30 calendar days of the selection letter issue date.

For Participants, failure to present first samples for selection within the timeframe shall be grounds for a program violation and the Basic Model or BMG being removed from the Directory. The Basic Model or BMG shall remain removed from the Directory until samples are available for selection. For Applicants, failure to present first samples for selection shall result in termination of the application process.

Failure to have second samples available for selection within the timeframe allotted shall forfeit the Participant's opportunity for further testing and shall result in an automatic re-rate of the Basic Model or BMG per Section 9.15.2.4.1.

9.7 Number of Test Samples Selected. Unless the Participant has voluntarily chosen the two sample supply option, AHRI or the Laboratory shall pick one (1) specific unit to test from each of the selected Basic Models or BMGs. This unit is referred to as a test sample.

9.7.1 Two Sample Supply Option. The Participant has the option to have two (2) samples initially selected as to assure, if needed, the availability of another sample. After the samples are selected and sealed, the Participant may ship both samples to the Laboratory or hold one of the selected samples until requested.

9.8 Shipment of Test Samples to the Laboratory. Unless otherwise noted, all test samples shall be required to be shipped to the Laboratory designated by AHRI in the selection letter in accordance with this Section.

9.8.1 Preparation of Test Samples for Shipment to the Laboratory. At a minimum, in preparation for shipment to the Laboratory, the Participant shall:

- Tag each sample to show Participant name, model number, and test number (if already issued by AHRI or the Laboratory);
- Send each sample, including the spare sample if requested by AHRI;
- Seal the samples in a manner to prevent tampering;
- Provide published installation instructions, start-up, and operation instructions for each sample in printed or electronic format;
- Provide primary and backup contacts (including names, titles, emails, and phone numbers) who are able to respond to Laboratory inquiries within 2 hours, assuming a 24 hour/7 day per week testing schedule;
- Specify break-in time if allowed by program;
- Include instructions for how the samples are to be handled upon completion of testing (provide shipping address or permission to donate or scrap); and
- Identify the Participant name, model numbers, and any other required tracking information on the outer packaging of the sample.

9.8.1.1 Participant's Required Equipment Provision. The Participant is responsible for having available at its test Facility or shipping all necessary equipment and parts to the designated test facility to ensure that the sample functions properly and test(s) can be performed in accordance with the Applicable Rating Standard.

9.8.2 Deadline for the Laboratory to Receive the Test Sample. The selected test sample shall be received at the Laboratory within 14 calendar days after the sample was selected.

If the Laboratory does not receive a first sample within the allotted timeframe, the Participant shall receive a program violation and the Basic Model or BMG shall be removed from the Directory. The Basic Model or BMG shall remain off the Directory until the sample is received.

If the Laboratory does not receive a second sample within the allotted timeframe, the Participant forfeits the opportunity for further testing and the Basic Model or BMG shall be re-rated in accordance with Section 9.15.2.4.1.

9.9 Laboratory Receipt and Check-In of Test Samples. When the test sample arrives at the Laboratory, the Laboratory shall:

- Record the date of test sample receipt;
- Verify that the test sample received is the one selected by AHRI or the Laboratory; and
- Perform a visual inspection of the sample and document the date of inspection and any damage/issues found. Any issues shall be photographed.
- Verify the correct use of the AHRI Certification Performance Mark on the test sample.

The Laboratory shall provide test sample receipt dates to AHRI and immediately notify AHRI if a non-selected sample has been received or if there is an issue with the sample.

9.9.1 Wrong Test Sample Shipped to Laboratory. If a test sample is sent to the Laboratory and found not to be the selected sample, AHRI shall return it to the Participant, at the Participant's expense, shall issue a program violation, and remove the selected product's listing from the Directory until the selected test sample is received. AHRI and/or the Laboratory reserve the right to invoice the Participant for hours spent handling the wrong sample and re-selection fees, if required.

9.9.2 Suspected Sample Tampering. If the tape and/or tags placed on the test sample by AHRI or the Laboratory during the sample selection process is broken and/or missing, the sample cannot be accepted for test. AHRI shall contact the Participant and the Participant shall be required to present new samples for selection. AHRI and/or the Laboratory reserve the right to invoice the Participant for hours spent handling the tampered sample and re-selection fees.

9.9.3 Shipment Damage. In case of observed shipment damage by the Laboratory, shipment damage documentation shall be sent to the Participant by the Laboratory prior to testing the sample. The Participant may choose to have the Laboratory attempt to repair the sample prior to testing or produce new samples for selection with approval from AHRI. The Participant shall inform AHRI of its decision within 24 hours of receiving the damage notification.

For a Participant's first sample, failure to notify AHRI of its decision within 72 hours of receiving the damage notification shall be grounds for a program violation.

For a Second Sample, failure to notify AHRI within 24 hours of receiving the damage notification shall result in the forfeiture of further testing opportunities and the Basic Model/BMG shall be re-rated to the failed First Sample test's results in accordance with Section 9.15.2.4.1.

If the Participant chooses to have the Laboratory repair the unit, the Participant may not claim improper handling or installation by the Laboratory. The Laboratory reserves the right to invoice the Participant directly for any repair work requested by the Participant.

9.10 Presence of Applicant/Participant Personnel at the Laboratory. Prior to the start of the test, Participant personnel are permitted in the Laboratory test facility. Participants may be present at the Laboratory to validate their equipment is installed and operated in accordance with the Participant's installation instructions. Once testing commences, Participants are not permitted to tamper with or adjust samples unless previously approved by AHRI. Also, sample performance details shall not be available to the Participants until all tests have been completed. The Participant shall coordinate their visit with the Laboratory. The Participant is responsible for all costs associated with travel and lodging of its personnel during such visits. Refer to Appendix A for additional guidance on the presence of Applicants/Participants at the Laboratory.

9.11 Laboratory's Handling of Samples. Only Laboratory personnel shall install test samples. Laboratory personnel shall use the installation, start up and service instructions provided by the Participant.

9.11.1 Repairs and Adjustments Prior to Testing. Prior to testing, the Laboratory may only repair leaks, repair or replace items damaged by shipping or handling. Such repairs and replacements can only be done with the Participant's permission. If the sample cannot be repaired, the Participant shall provide new samples for selection. The Laboratory reserves the right to directly invoice the Participant for any requested repairs.

9.11.1.1 Test Sample Refrigerant Charge. All packaged equipment shall arrive at the Laboratory pre-charged. In cases where charging instructions are not provided, pre-charged packaged equipment shall not have charge adjusted prior to Laboratory testing.

For non-packaged equipment, packaged equipment shipped without charge, and pre-charged packaged equipment that requires charge adjustments, the equipment shall be

charged as outlined in the Product-Specific Operations Manual. If charging instructions are not included in the Product-Specific Operations Manual, then the equipment shall be charged in accordance with the instructions provided in the Participant's installation and operational manuals.

- When charging by weight, the laboratory shall make adjustments for added line length or installed measurement equipment as required. For a given specified range for superheat, sub-cooling, or refrigerant pressure, the average of the range shall be used to determine the refrigerant charge. If multiple instructions are given, the Participant shall be asked to sign off on the preferred method.
- The Laboratory shall then add or subtract the correct amount of refrigerant to achieve the pre-determined weight, superheat, sub-cooling, or refrigerant pressure. This single refrigerant charge shall then be used to conduct all cooling cycle and heating cycle tests.

Note: detailed instructions provided by the Participant may not include optimization procedures based on performance or efficiency.

Once the correct refrigerant charge is determined, the test shall be maintained and run until completion without interruption and at that refrigerant charge. Upon completion of the AHRI test, the Participant may instruct the Laboratory to conduct additional testing as private tests.

9.11.1.2 Fan Speed. Unless specified in writing, Laboratory personnel shall not make adjustments.

9.11.2 Adjustments during Testing. Equipment shall not be adjusted during testing.

9.11.3 Completion of Testing. Unless otherwise noted, all AHRI tests shall be conducted in accordance with this Section.

Unless the sample is, or becomes, inoperable during testing, the testing cycle shall be completed and data obtained for all certified criteria.

At the conclusion of testing, the Laboratory shall, at the choice of the Applicant or Participant, ship the samples to a requested destination, save them for private testing, donate them to schools, or scrap them. If the samples shall be shipped, the Applicant or Participant is responsible for associated shipping costs. If no choice is made, samples shall be scrapped following 30 calendar days of the completion of testing.

9.12 Witness Testing. Some AHRI Certification Programs allow for witness testing, where Laboratory personnel shall conduct AHRI certification program testing on the Participant's premises. AHRI certification program witness tests are only conducted on AHRI-approved test stands.

9.12.1 Preparing for a Witness Test. Once a sample is selected by AHRI for witness testing, the sample shall be reserved by the Participant and not manipulated.

The Participant is permitted to install the sample on the approved test stand prior to the arrival of AHRI or its designated authority. It is acceptable for the Participant to have started the unit and to have it "on point" prior to the arrival of AHRI or Laboratory's Representative (Representative). Upon arrival, AHRI or the Representative shall verify that the unit is the selected sample and verify the correct use of the AHRI Certification Performance mark on the test sample.

If AHRI or the Representative determines the unit is not the selected sample, or the selected sample is accidentally released prior to the witness test taking place, the Participant shall be charged by AHRI and/or the Laboratory for the hours, travel, lodging, and/or maintenance, etc. for lost time.

9.12.2 AHRI-Approved Facility or Test Stand (Facility). A Facility that:

- Has completed the required facility inspection procedure from AHRI's Representative in accordance with 9.12.2.1; and
- Is declared qualified by AHRI to support AHRI certification program tests.

The Participant, if using its own Facility, is required to maintain AHRI-approved test stand(s) capable of testing any of its certified Basic Models or BMGs. The only exception to this is if the product-specific OM allows for units to be shipped and tested at another Facility or at the Laboratory premises.

AHRI issues a certificate of qualification for each approved Facility. The Participant shall be able to present the original, current certificate on request.

Approved facility status shall expire every two (2) years, or following a change made to the test stand, whichever comes first.

9.12.2.1 Facility Inspection Procedure. Required qualification documents can be downloaded from AHRI's website. The Participant shall submit completed qualification documents to AHRI 14 calendar days after receipt of the selection letter. AHRI shall notify the Representative of the facility inspection.

The Representative shall perform a technical review of the qualification documents and a detailed Facility Inspection of the Participant's Facility to verify that it is able to execute a test in accordance with the Applicable Rating Standard. Based on the Representative's recommendation, AHRI shall determine whether to approve the Facility for conducting AHRI certification testing.

9.12.3 Facility Malfunction. If a Facility malfunction prevents the completion of a test, or is causing the sample to fail test, the Participant has eight (8) hours to fix the Facility while the Representative is still on-site. Only adjustments to the Facility are permissible; the sample may not be adjusted. Once Facility repairs are made, the Representative shall re-approve the Facility prior to conducting any tests. Data taken prior to malfunction shall be voided, and the test shall commence from the beginning.

If the Facility problem cannot be corrected within eight (8) hours, the Representative reserves the right to end the test. In such a case, the Facility shall lose its approval, the Participant shall be required to surrender the Facility approval certificate, and the Participant is required to repair the Facility and have it re-approved within 30 calendar days. The Participant shall be invoiced for the re-qualification of the test stand.

For a first sample test, failure to have the test stand repaired and re-approved within 30 calendar days shall be grounds for a program violation and removal of the Basic Model or BMG from the Directory until the test stand is re-approved. The only exception to this is if the product-specific OM allows for units to be shipped and tested at another Facility or at the Laboratory premises. For a second sample test, failure to have the test stand repaired and re-approved within 30 calendar days shall be grounds for a program violation, forfeiture of further testing opportunities, and the Basic Model or BMG shall be re-rated in accordance with Section 9.15.2.4.1. The only exception to this is if the product-specific OM allows for units to be shipped and tested at another Facility or at the Laboratory premises.

Test stand qualification invoices shall be paid, and the test stand re-qualified, before any tests can be conducted.

If the Representative is unable to conduct any test stand approvals or witness tests at the Participant's site due to an inoperable or malfunctioning test stand, the Laboratory reserves the right to invoice the Participant directly for hours spent at the Participant's site, travel expenses, and maintenance (lodging and meals).

9.12.4 *Inoperable Witness Test Sample*. An inoperable sample is one that does not start or is incapable of running long enough to complete a test. The inoperability is not attributed to a malfunctioning witness test stand or improper sample installation on the test stand.

If the unit is deemed inoperable by AHRI then AHRI shall re-select a test sample and the witness test shall be re-scheduled. The test must be conducted within 30 calendar days of the inoperable sample notification. For a first sample test, failure to conduct the test within 30 calendar days shall be grounds for a program violation and removal of the Basic Model or BMG from the Directory. For a second sample test, failure to conduct the test within 30 calendar days shall result in the forfeiture of further testing opportunities and the Basic Model of BMG shall be re-rated in accordance with Section 9.15.2.4.1.

AHRI or the Laboratory reserves the right to invoice the Participant directly for hours spent at the Participant's site, travel expenses, and maintenance (lodging and meals). All invoices shall be paid before any tests can be conducted.

9.12.5 *Witness Test Policies and Procedures*. Other witness test policies and procedures are detailed in the Product-Specific Operations Manual.

9.13 *Inoperable Sample (Laboratory Test)*. An inoperable sample is a sample that does not start or is incapable of running long enough to complete a test. The Laboratory shall notify AHRI and the Participant immediately following the Laboratory's identification of a suspected inoperable sample.

An inoperable test sample shall remain hooked up on the test stand. Within two (2) hours of the inoperable sample notification, the Participant shall initiate discussion with the Laboratory to verify that the sample is installed properly with correct settings and components. If, at the direction of the Participant, the Laboratory can make the sample operable by using documented procedures, the test shall continue.

If no problem with the sample installation or settings can be identified within the two (2) hour period, it is assumed the sample is inoperable, at which time the Laboratory is authorized to remove the sample from the test stand. The Laboratory shall notify AHRI of the inoperable sample. The Participant shall be required to replace the sample in accordance with Section 9.13.1.

The Laboratory reserves the right to invoice the Participant directly for time spent waiting for the Participant's response and action. If the sample cannot be made operable, the Laboratory also reserves the right to invoice the Participant directly for the inoperable sample set-up and disconnect time.

9.13.1 *Replacing an Inoperable Sample*. Once AHRI is notified that a sample is inoperable, the Participant shall immediately arrange for the Laboratory to acquire a new sample for testing. Failure to send the new sample to the Laboratory as per Section 9.5 and 9.6 shall result in a program violation and removal of the Basic Model or Basic Model Group from the Directory. The results of the new sample shall overwrite the results of the Inoperable Sample. Re-selection fees may apply.

9.14 *Evaluation of Non-Representative Test Results*. If the test result of any verified descriptor exceeds two (2) times the allowed tolerance in the program, the Participant may submit to AHRI additional information to explain the anomaly. Examples of what could have caused the anomaly are:

- Improper setup
- Measurement error
- Component failure

AHRI shall evaluate the Participant information and determine if the result is non-representative. Non-representative results are considered invalid and a replacement test will be conducted. If the result is non-representative, AHRI shall inform the Participant if a new sample is required or if the same sample shall be retested. Retest or Re-selection fees may apply.

9.14.1 Replacing a Sample with Non-Representative Test Results. Once AHRI has notified the Participant that a new sample is required due to a non-representative test result, the Participant shall immediately arrange for the Laboratory to acquire a new sample for testing. Failure to send the new sample to the Laboratory as per Section 9.5 and 9.6 shall result in a program violation and removal of the Basic Model or Basic Model Group from the Directory.

9.15 Test Results.

9.15.1 Passing Test. A passing test is where the sample's certified rating points are tested, compared to the Published Ratings listed in the Directory, and fall within the allowable tolerances of the Applicable Rating Standard or the Product-Specific Operations Manual, as applicable.

Following a passing test, the model's performance ratings are preserved in the Directory and no further action is required of the Participant. The Participant shall receive a copy of the test report.

9.15.2 Failed Test. A failed test is where the sample's certified rating points are tested, compared to the Published Ratings listed in the Directory, and is outside the allowable tolerances specified in the Applicable Rating Standard. The test is a failure if any of the tested certified rating points are outside of the allowable tolerances of the Applicable Rating Standard or the Product-Specific Operations Manual, as applicable. The Participant shall receive a copy of the test report.

A failed test that results in the re-rating of the Basic Model or BMG is considered an "involuntary re-rate."

9.15.2.1 First Sample Test Failure. A sample that is labeled as a First Sample that fails when it is tested is considered a First Sample Failure.

9.15.2.2 Second Sample Test Failure. A sample that is labeled as a Second Sample that fails when it is tested is considered a Second Sample Failure. A second sample test failure is considered final unless the Product-Specific Operations Manual offers an option for further testing.

9.15.2.3 Failed Test Notification and Response.

9.15.2.3.1 Laboratory Response to Failed Test. Immediately following failure, the Laboratory shall notify AHRI and the Participant of the failure and provide a test report. The sample shall remain hooked up on the test stand for two (2) hours following the Participant's notification of the failure. The Participant may directly make arrangements with the Laboratory to keep the sample hooked up on the test stand for longer and the Laboratory shall immediately notify AHRI and the Participant of the failure. Within two (2) hours of notification, the Participant may opt to conduct private testing to determine the cause of failure.

9.15.2.3.2 AHRI Response to Failure Notification. AHRI shall send the Participant a Manufacturers Decision Form (MDF).

9.15.2.3.2.1 Manufacturers Decision Form (MDF). The MDF lists the courses of action available to the Participant after a test failure. The Participant has seven (7) calendar days to return the completed MDF to AHRI, indicating the Participant's elected course of action. If a completed MDF is not received within seven (7) calendar days, the Basic Model or BMG shall automatically be re-rated to the failed test results per Section 9.15.2.4.1.

9.15.2.3.3 Participant Response to Failure Notification. Within two (2) hours of being notified of the failure, the Participant may:

- Opt to proceed with private testing in an attempt to find the reason for failure; or
- Instruct the Laboratory to remove the sample from the test stand. The Participant is still required to file an MDF in accordance with Section 9.15.2.3.2.1.

If more than two (2) hours passes without the Participant's decision to conduct private testing, or the Participant and Laboratory do not make an agreement to keep the sample on the test stand longer, the Laboratory may disconnect and remove the sample from the test stand.

All repairs require approval by AHRI prior to the restart of testing and any request for approval shall include a detailed explanation of the repair. If the Participant chooses to make repairs to the sample while it is still on the test stand, such repairs shall be completed within eight (8) hours, or a mutually agreed upon timeframe between the Participant and the Laboratory. If repairs are not completed within the timeframe, the Laboratory may remove the test sample from the test stand.

The Participant is responsible for all costs for repairs and fees for occupying the test stand while the unit is in repair. Immediately following repair, the sample shall be tested by AHRI in accordance with Section 9.11.3.

9.15.2.4 MDF Options Following Test Failure. MDFs are unique to each certification program. The available options following test failure are dependent on whether the test is for an Applicant or Participant, and whether the test is a first or second sample. All subsequent tests shall be conducted following the same procedure as the First Sample Test.

9.15.2.4.1 Re-rate Basic Model or BMG. When a Basic Model or BMG is re-rated:

- The tested model shall be re-rated to the failed test result utilizing the nearest "round-off" multiple specified in the test standard, but no better than the actual test results;
- If the model is part of a Basic Model Group (BMG), all models within the BMG shall be re-rated proportionate to the failed test's results and shall remain re-rated until another test within the BMG is conducted and passes;
- All re-rates shall be reflected in the AHRI Directory of Certified Product Performance;
- Obsolete the sample in accordance with Section 9.15.2.4.3 if the re-rated model or BMG falls below federal minimum requirements;

- The Participant is required to issue corrections, per Section 8.2 to all product literature, software, and marketing materials containing AHRI certified ratings of the affected model(s); and

If the affected product(s) are DOE listed, the Laboratory's measured values and the Participant's claimed ratings prior to re-rate shall be reported by AHRI to DOE daily.

If the affected product(s) are ENERGY STAR®, the Laboratory's measured values and the Participant's claimed ratings prior to re-rate shall be reported by AHRI to the EPA within two (2) business days of failure.

If the Basic Model or BMG which is being re-rated is associated with a PBM product, the PBM product is also subject to the criteria listed above.

9.15.2.4.2 Second Sample Test. The Participant shall present a second sample for selection and testing, identical to the first sample tested, in accordance with Sections 9.5, 9.6, 9.7, 9.8, and 9.9. If the product is custom and required to come from a selection pool of units, AHRI shall work with the Participant to find an available unit identical to the first sample tested.

Prior to conducting the second sample test, AHRI shall invoice the Participant. If the Participant fails to present samples for selection, provide samples to the Laboratory for testing, or make payment, the Participant forfeits the opportunity for further testing and the Basic Model or BMG shall be re-rated in accordance with Section 9.15.2.4.1. If the participant chooses to re-rate their ratings following a second sample test, the Basic Model or BMG shall be re-rated based on the second sample's test results or as specified in the Product Specific Operations Manual.

9.15.2.4.3 Obsolete the Model. Obsolete models or BMGs are those that are no longer manufactured or sold following an AHRI test failure. Obsolete is mandatory for any model with a final test result that fails to meet federal minimum requirements.

9.15.2.4.3.1 Participant Requirements Following Obsolescence. After a sample is made obsolete, OEM and PBM Participants are required to:

- Immediately cease manufacturing and selling the affected product(s); and
- Comply with Section 8.2 to remove the product(s) from product literature, software, and marketing materials.

An OEM Participant may wish to offer a Counterpart Model to replace an obsolete model. A counterpart model shall be approved and tested, as a discretionary test, by AHRI prior to being released to the market as a new product, listed in the Directory, or claiming AHRI certification.

9.15.2.4.3.1.1 Counterpart Model Requirements. A counterpart model is required to:

- Fall within the scope of the certification program;
- Bear a new model designation that the public can clearly differentiate from that of the obsolete model; and
- Implement a physical design change from the obsolete model that favorably affects its performance to meet minimum requirements.

9.15.2.4.3.1.2 Counterpart Model Approval and Testing. The Participant shall provide AHRI with:

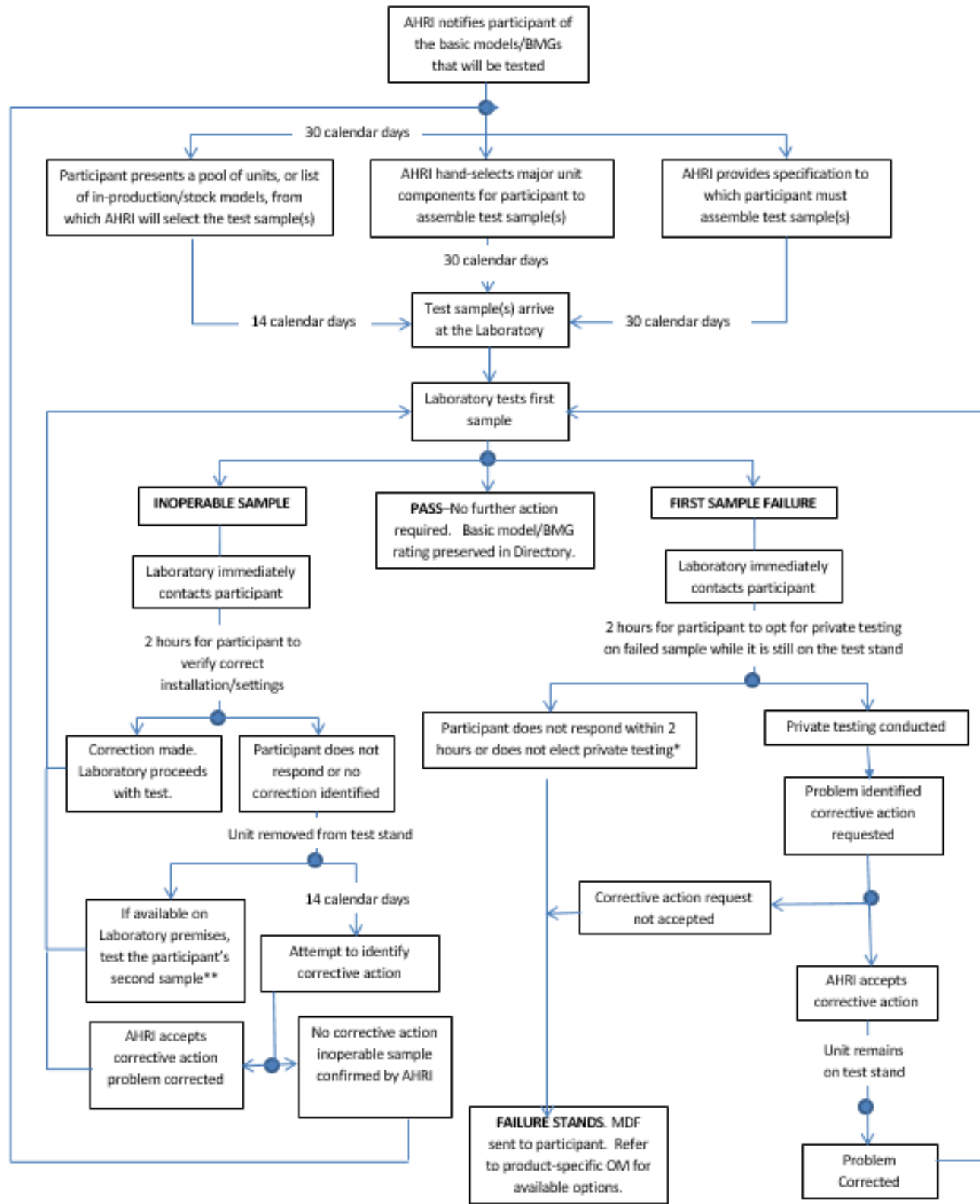
- Model number of the counterpart model;
- Model number of the obsolete model that the counterpart model shall replace;
- Written description and drawings or photos of the physical design change made; and
- Ratings for the counterpart model.

AHRI shall review the information supplied and notify the Participant, in writing, if the selected model number and design changes are acceptable. If accepted, the counterpart model shall be acquired as per Section 9.5 and tested. AHRI shall invoice the Participant for the counterpart model testing. If not accepted or payment is not received, the product shall not be certified and cannot be released to market. Introduction of a counterpart model without notification and subsequent testing by AHRI shall be grounds for a program violation.

The sample shall be tested within 14 calendar days of receipt at the Laboratory. A sample requiring witness test shall be tested within 30 calendar days of the sample being made available.

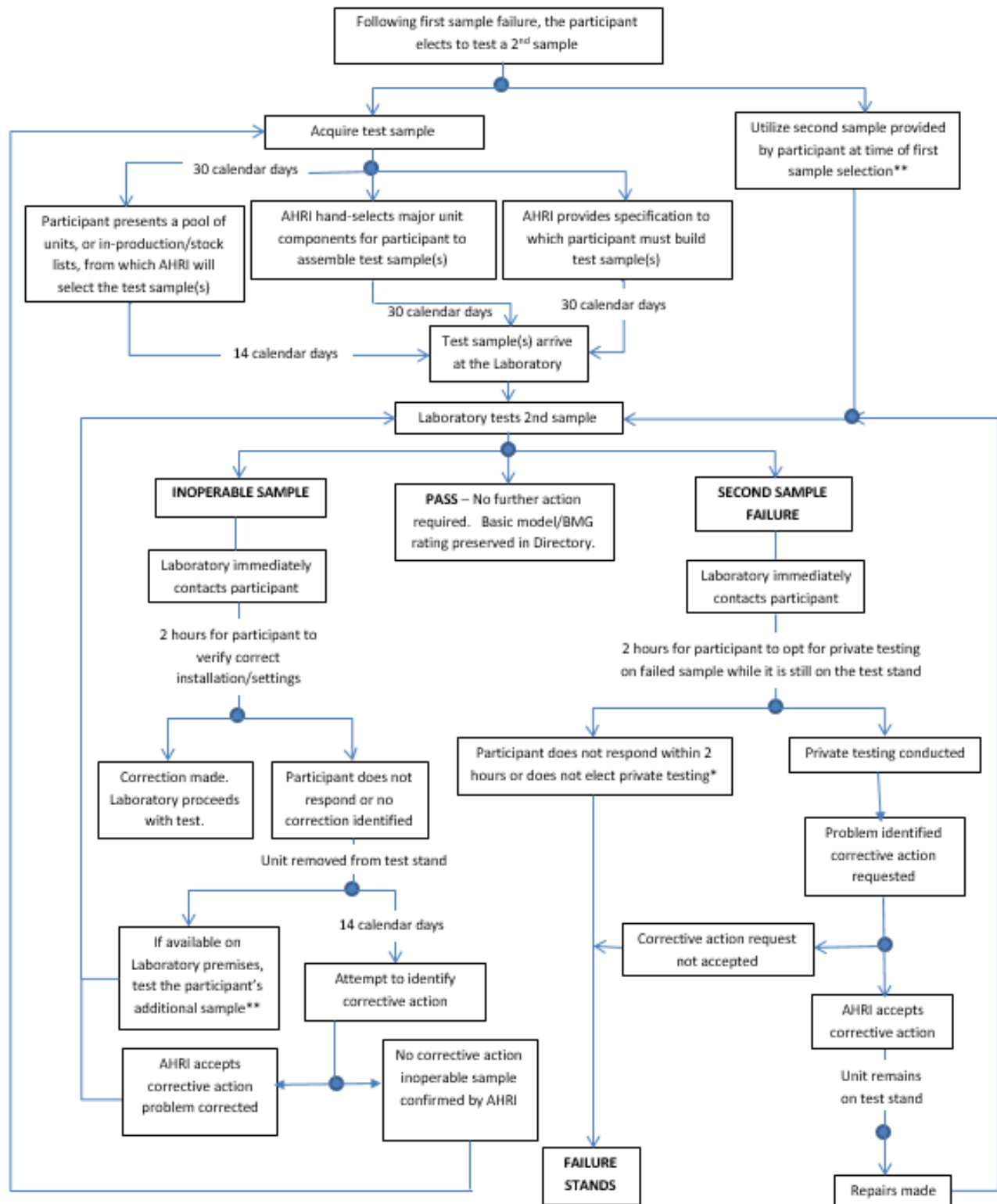
AHRI shall notify the Participant, in writing, of the test results. If the sample passes, the model or BMG is certified, shown in the Directory, and may be released to market. If the sample fails, the product shall not be certified, shall not be listed in the Directory, and cannot be released to market.

FIGURE 3. FIRST SAMPLE SELECTION/TESTING/DECISION PROCESS



* Laboratory authorized to remove unit from test stand.

FIGURE 4. SECOND SAMPLE SELECTION/TESTING/DECISION PROCESS



* Laboratory authorized to remove unit from test stand.

9.16 Consequences for Improper Ratings. Assign one (1) Penalty Test immediately for any model that is involuntarily Re-rated or Obsolete. Penalty Test Re-rates will follow the same consequences as first and second sample failures.

9.17 Certification Test Results from a Non-Contracted Laboratory. AHRI only accepts data, in the form of a test requested by AHRI, from the program's Laboratory to determine if an AHRI test yields a passing or failing result. AHRI does not accept certification test results that have been acquired through private tests and/or through a laboratory with which AHRI does not have a current testing contract for that program.

Participants are unlimited in their use of private test data and data obtained at a non-contracted laboratory to establish performance data.

9.17.1 Minimum Requirements of Test Reports Submitted to AHRI by Applicants or Participants. Program Applicants and Participants requesting to challenge the ratings of another manufacturer are required to submit their own test reports to AHRI. Such tests are not required to have been conducted by AHRI's Laboratory. The test shall be conducted in accordance with the Applicable Rating Standard and the following items, at minimum, are required to be included in test reports:

- Test Procedure Name;
- Test Date;
- Serial Number;
- Sample description (e.g.: number of products listed);
- Equipment calibration dates and next due dates and within range/Environmental conditions (e.g.: temperature, humidity);
- Test engineer and witness names and signatures;
- Test results organized by applicable test procedure section; and
- Marked to indicate test results relevant to ENERGY STAR® (if applicable).

9.18 Challenging Ratings of Others/AHRI Investigation of Ratings Claims. AHRI is proactive in seeking and remedying false ratings and claims to AHRI certification. The AHRI Certification Program offers Participants the opportunity to "challenge" the ratings of other program Participants and equipment manufacturers or marketers that are not Participants in the AHRI Certification Program. Such a challenge is mediated by AHRI and substantiated by product testing. Challenge testing procedures are discussed in Section 10 of this manual.

A Participant may request AHRI to investigate false or improper claims to certification.

9.19 AHRI's Usage of Private Test Results. Results of private test shall not be used unless approved by AHRI. For AHRI to consider private test results, a formal written request shall be made to the AHRI Senior Technical Advisor by the company's Certification Compliance Officer.

9.20 Certification Performance Letters. Certification Performance Letters are sent annually to the Participant's CEO to relate the Participant's testing results for the previous three (3) years. If the Participant has no failures throughout that three (3) year time period, the letter shall be accompanied by a certificate acknowledging the Participant's achievement. When using the Certification Performance Letter or certificate for advertising, only the exact wording from the certificates and/or letter can be used. Further, a company can only reference its own accomplishments. No comparisons with other companies are permitted.

10. Challenge Tests

10.1 What May be Challenged. Any Participant in the AHRI Certification Program may challenge the certified ratings of another Participant, OEM or PBM, or the ratings of a manufacturer not in the AHRI Certification Program. The challenged product shall fall within the scope of the program. The “challenger” shall be a Participant in the program under which they are challenging a product’s ratings. Products that are not AHRI-certified can also be challenged.

10.2 Challenge Mediation. Challenges shall be mediated by AHRI and substantiated by product testing.

10.3 Challenging an AHRI Certified Model.

10.3.1 Procedure for Initiating a Challenge. Challenge requests from an AHRI Certification Program Participant shall be submitted, in writing, to the AHRI Vice President, Certification Programs. For each model being challenged, the challenger shall provide AHRI with:

- Model number of the unit being challenged;
- A copy of the disputed ratings in the Directory, a Selection Rating Software output sheet, or advertised ratings if not in the AHRI Program;
- Challenger’s test findings, in accordance with Section 9.17.1, for the sample being challenged; and
- Photos of the unit tested by the challenger to show the model matches the disputed model listed in the Directory. At least one (1) photo of the disputed model’s nameplate, showing the model number, is required. If the model is a system made up of multiple components, at least one (1) photo of each component nameplate is required. All nameplates shall be legible in the photo.

The AHRI Vice President, Certification Programs shall review the materials provided by the challenger and determine if the challenge test is warranted. Within seven (7) calendar days of receiving all items noted above, the AHRI Vice President, Certification Programs shall notify the challenger, in writing, of his decision.

10.3.1.1 Initiating a Challenge Test with Proprietary Information. Some AHRI Certification programs have test procedures where the manufacturer must provide a proprietary means to override system performance in order to conduct the test (i.e. running a variable speed compressor at steady state). In lieu of Challenger’s test findings and photos of the unit, the challenger shall provide a technical analysis (including benchmark data) that demonstrates the disputed ratings are incorrect. AHRI staff shall determine if the technical analysis is enough to initiate a challenge test.

10.3.2 Obtaining Equipment for a Challenge Test. AHRI shall obtain two random samples of the model being challenged. One (1) shall be tested, and the other kept on reserve in the event it is required for a second sample test.

AHRI attempts to obtain such samples from distributors, contractors, or wholesalers and, in such a case, does not notify the challenged party of the challenge request. AHRI may procure samples from challenged party or the challenger, if necessary. AHRI shall notify the challenged party, in writing, once the samples have been obtained and shipped to the Laboratory.

If samples are not readily available from a distributor, contractor, or wholesaler, AHRI shall approach the challenged party to obtain samples or to request a list of sources where the samples could be obtained. In such an instance, it may be necessary to reveal that a product rating has been challenged; however, AHRI shall not divulge the name of the challenger. In such a case, the challenged party is required to produce samples using the selection process for regularly scheduled tests. Failure to comply shall result in the challenged party forfeiting the challenge test and the disputed Basic Model or BMG shall be removed from the Directory. The Participant shall be

required to obsolete the Basic Model or BMG and correct all product literature and specifications in accordance with Section 8.2.

10.3.2.1 Obtaining Equipment for Challenge Tests with Proprietary Information. Some AHRI Certification Programs have test procedures where the manufacturer must provide a proprietary means to override system performance in order to conduct the test (i.e. running a variable speed compressor at steady state). For such tests, after units have been obtained AHRI will contact the challenged party, notifying them that they have been challenged, and request the proprietary means to operate the equipment. The Challenged party will only be given minimum information required to provide the correct means to operate the equipment

10.3.3 Administering Challenge Tests for Witness Test Programs. The disputed product shall be tested at the Laboratory. If the Laboratory is unable to conduct the test, the challenge test may be carried out at the challenged party's facility. To host the challenge test, the challenged party shall have a Facility that is approved by AHRI for witness testing. Laboratory personnel shall approve the challenged party's Facility prior to conducting the challenge test.

If the challenged party's facility is not approved, AHRI shall locate a Facility for the sample to be tested in. AHRI Certification Program Participants agree to make their Facilities available for Challenge Tests for Witness Testing, if requested by AHRI. The test facility for ENERGY STAR® products shall be recognized by EPA.

The Laboratory's representative shall be present for the installation of the sample in the test chamber and for the duration of the test. The sample shall be installed and commissioned in accordance with manufacturer's instructions, and the unit shall be handled in accordance with Section 9.

10.3.4 Testing. Tests shall be conducted in accordance with applicable rating and test standards and in accordance with Section 9. Challenge tests are separate of any regularly scheduled program.

10.3.5 Test Failures. If the first sample of the challenged model fails, the challenged party shall receive a copy of the test data and shall be given the options noted in Section 9. The challenged party shall not be told who initiated the challenge. Failure to make a decision or supply samples within the noted time frames shall result in an automatic forfeiture of the challenge test. In such a case or if the final test result is a "fail," the challenged party is required to correct all publications and ratings to the results obtained by the Laboratory and in accordance with Section 8.2. The corrected ratings shall be shown in the Directory. If the first sample was inoperable and test results could not be obtained, the challenged party shall be given the options noted in Section 9.15.2.4.

If the challenged sample belonged to a PBM and a re-rate or obsolete is required, the associated OEM's ratings shall also be affected.

10.3.6 Release of Test Results/Information Regarding Challenge. The final outcome (pass or fail) of the challenge test shall be released to both parties, in writing, within 15 calendar days of the test's completion. Only the challenged party (and AHRI) shall receive copies of test data. The challenged party shall not be told who initiated the challenge.

10.3.7 Challenge Test Fees. For challenge tests, the same fees apply as those for regularly scheduled testing.

The cost of all fees (e.g. selection, sample shipment and disposition, witness testing facility approval (if applicable), and testing) associated with the challenge test shall be borne by one of the two parties concerned. If the final outcome of the challenge test is a "pass," the challenging party

is responsible for all costs. If the final outcome of the challenge test is a “fail,” the challenged party is responsible for all costs.

If the challenged party elects to test a second sample, all associated costs for the second sample testing shall be paid by the challenged party.

10.4 Challenging a Non-AHRI Certified Unit.

10.4.1 Procedure for Initiating a Challenge of a Non-Certified Model. A party wishing to challenge the ratings of a non-certified product shall submit, in writing, their challenge request to AHRI. For each model being challenged, the challenger shall provide AHRI with:

- Model number of the unit being challenged;
- A list of contractors, wholesalers, distributors and contacts, if known;
- A copy of the disputed ratings published by the manufacturer;
- Challenger’s test findings, in accordance with Section 9.16.1, for the unit being challenged; and
- Photos of the unit tested by the challenger to show the model matches the disputed model. At least one photo of the disputed model’s nameplate, showing the model number, is required. The nameplate shall be legible in the photo.

AHRI shall review the requested challenge and approve or reject the challenge request.

10.4.2 Obtaining Equipment for a Challenge Test. AHRI shall obtain two samples of the model being challenged from a wholesaler, contractor, distributor, or if necessary, the product’s manufacturer. If the challenged party is unable to produce the sample, the Challenger may provide samples for the Challenge Tests. One sample shall be tested and the other held in reserve by AHRI if required for a second sample test. It may be necessary for AHRI to divulge that the product is being challenged by the AHRI Certification Program. AHRI shall not divulge the name of the party requesting the challenge.

10.4.3 Testing and Handling of Challenged Sample. The testing shall be administered in accordance with Section 9. If a witness test is necessary, such a test shall be conducted at the challenger’s facility. If the section is sponsoring the challenge test, the section shall vote on where to host the witness challenge test.

10.4.4 Test Failure of Challenged Sample. If a tested product fails its first test, AHRI shall notify the manufacturer that 1) the product’s ratings have been challenged through the AHRI Certification Program, 2) the product has failed a first sample test, 3) offer the manufacturer the opportunity to test a second sample being held on reserve, and 4) notify the manufacturer that final test results shall be published in the AHRI Directory.

10.4.5 Notification of Test Results/Information Regarding Challenge. The final outcome (pass or fail) of the challenge test shall be released to the manufacturer of the challenged product, the challenger and the compliance committee. Only the challenged party (and AHRI) shall receive copies of test data. The challenged party shall not be told who initiated the challenge.

10.4.6 Publication and Use of Test Results. The final test results, “pass” or “fail”, along with the ratings published by the manufacturer, shall be shown in the Directory. The listing shall clearly indicate that the product is not AHRI certified but has been tested in accordance with program rules. The listing shall remain in the Directory for one (1) year.

The challenger, any AHRI members, or certification program Participants, are not permitted to advertise the information or data gleaned from the challenge test in their own literature or publications. The only information publicly available about the challenge test is the data shown in the Directory. The challenger may not claim AHRI certification.

10.4.7 Non-Certified Unit Challenge Test Fees. If AHRI approves the challenge request, the challenger agrees to fund the test and all costs associated with the challenge of the non-certified unit shall be paid by the challenger.

10.5 Disposition of Tested Samples. Regardless of the test result, AHRI shall retain ownership of the tested samples and dispose of the samples in any way it sees fit.

11. AHRI Directory of Certified Product Performance

11.1 Purpose of Directory. Every certified model/BMG is required to be listed in the AHRI Directory of Certified Product Performance. AHRI uses the Directory to:

- Acquire Participant certified ratings for conducting tests;
- Facilitate the Executive Dashboard/Analytics Application
- Publicly report the certified ratings of equipment;
- Select equipment for testing;
- Conduct certified data verifications requested by the field;
- Compile and send reports to legislative, regulatory, and/or utility agencies who maintain agreements with AHRI to utilize AHRI certified product performance data;
- Allow users to download AHRI Certificates of Product Ratings; and
- Identify tax credit/rebate eligible products.

11.2 Maintenance of Directory Data. Participants are required to:

- List all AHRI certified products in the AHRI Directory of Certified Product Performance, www.ahridirectory.org;
- Keep all Directory data current such that all data contained in the Directory matches the certified ratings displayed in the Participant's product literature, software, and marketing materials;
- Maintain a minimum of one (1) Basic Model or BMG, in "Active" or "Production Stopped" status, in the Directory. The model or BMG shall be in "Active" or "Production Stopped" status. If no listing is viewable on the Directory for 180 calendar days, the Participant shall lose certification and shall re-qualify its equipment; and
- Perform their individual data entry/data maintenance work in the Directory. For a fee, AHRI shall provide data entry services. Contact AHRI to request such service.

11.3 PBM Directory Listings. PBMs are not given login access to the Directory as their certified ratings are required to mirror those of the associated OEM products. Any changes to the associated OEM product listing, including rating changes and model status changes, shall also affect the PBM listing and be automatically changed by AHRI.

11.4 Model Status. Each model listed in the Directory is assigned a model status.

11.4.1 Active. Models that a Participant is currently producing and selling or offering for sale; or new models that are being marketed, but are not yet produced. Active models are AHRI Certified.

11.4.2 Production Stopped. Models that a Participant is no longer producing, but is still selling or offering for sale. Production Stopped models shall be listed in the Directory for 24 months. After 24 months, the models' status shall be changed to Discontinued unless the Participant discontinues the models sooner. Production Stopped models are AHRI Certified.

11.4.3 Discontinued. Models that a Participant no longer produces and is no longer selling or offering for sale. These models are not AHRI certified. Discontinued models will be searchable for five (5) years.

11.4.4 Obsolete. Models that a Participant no longer produces, sells, or offers for sale following an AHRI test failure. Models/BMGs that fail to meet minimum federal performance requirements, if such requirements, exist shall be made obsolete. Obsolete models will be searchable in the Directory for five (5) years. Obsolete models are not AHRI Certified.

11.5 Proper Display of Participant Selection Rating Software/Catalog in the Directory. Some certification programs do not explicitly quantify certified rating data in the Directory. For these programs, the Participant is required to list the Selection Rating Software where certified product ratings can be located. At minimum, the following information shall be provided in the Directory listing:

- Software name; and
- Version number, revision number, or revision date

If the Participant has more than one (1) Selection Rating Software available to users, each shall be listed in the Directory after approval from AHRI.

All Selection Rating Software listed in the Directory shall be approved by AHRI. Refer to section XX of this manual and to the product-specific OM for Selection Rating Software requirements.

11.6 Directory Display of Ratings Following Test Failure. Test failures that result in model/BMG re-rates are noted in the Directory.

TABLE 9. DIRECTORY DISPLAY OF RE-RATES FOLLOWING TEST FAILURE		
Model Status	How Re-Rate shall Displayed in Directory	Term for Displaying Re-Rate in the Directory
Active	If a model/BMG is re-rated following AHRI test failure, AHRI shall display the ratings achieved by the Laboratory alongside a "WAS" line showing the model/BMG's rating prior to test	Rating remains in place until the model/BMG is no longer certified or until the model/BMG is tested again and validates its certified rating. The "WAS" line shall be removed six (6) months following re-rate. Re-rate statements on the certificate shall be removed 6 months following AHRI's receipt of corrected catalog or software.
Production Stopped		At no time following re-rate may the Participant change the rating to be better than the test results.
Obsolete		Rating and "WAS" line remain for 24 months unless the Participant requests the listing be discontinued from the Directory sooner.
		Rating and "WAS" line remain in place for 6 months. Then the product shall be removed from the Directory.

11.7 Data Locks. Directory data shall be locked, and incapable of being modified by the Participant, when:

- Basic Model/BMG is in "obsolete" status;
- Basic Model/BMG has been selected for testing. The listing shall be unlocked after testing is complete;

- Rating method (e.g. Selection Rating Software) additions/revisions are pending AHRI approval; and/or
- Basic Model/BMG is a counterpart model/BMG and is pending AHRI approval.
- Basic Model/BMG is re-rated and has not been retested.

11.8 AHRI Removal of Directory Data. AHRI shall remove data from the Directory when:

- Applicant or Participant fails to comply with the terms of the Governing Documents;
- Applicant or Participant is terminated from the program;
- 24 months (or less if directed by Participant) after a model/BMG is placed in “Production Stopped” status; OR
- Six (6) months after a model/BMG is placed in “Obsolete” status.

11.9 Assignment of Directory User Names/Passwords. Each OEM program Applicant or Participant is assigned a user name and password for appropriate staff members. Access to the Directory is given at three (3) different levels: Licensee Master (add/edit data and add new Brand Names), Licensee Data Entry (add/edit data), and Licensee View Only (only view Directory data) that allows uploading, editing, and deletion of the Applicant/Participant's own data.

11.10 Technical Assistance for Directory Usage. Submit a ticket using the “Support” widget on the Directory for assistance in using the Directory.

12. Assessment and Payment of Certification Fees

12.1 Fees Collected by AHRI. Operational costs of the certification program are determined by AHRI based on the required program expenses. AHRI shall collect the following fees from the Participant. The list is intended to be comprehensive, but may not be all-inclusive:

- Annual licensing fee;
- Annual participation fee;
- Second sample test fees;
- Replacement sample test fees for inoperable units;
- Participant witness test stand re-qualifications following test stand malfunction;
- Counterpart model tests;
- Challenge test fees;
- Discretionary test fees;
- Penalty test fees; and
- Facility and Laboratory audit fees for AHRI and ENERGY STAR® testing (if applicable).

12.2 Additional Fees. The Participant is responsible for the following additional fees paid to others, if applicable. The list is intended to be comprehensive, but may not be all-inclusive:

- Shipping costs to and from the Laboratory;
- Laboratory fees for making repairs and adjustments to test samples;
- Laboratory expenses for attempting to test inoperable samples;
- Private tests or any tests that are requested by the Participant that are beyond the requirement for AHRI certification testing;
- Private tests requested by a Participant to provide supporting data for initiating a challenge test;
- Laboratory personnel travel and maintenance (lodging and meals) for programs supporting witness testing and ENERGY STAR® laboratory audits;

- Expenses for Laboratory personnel hours, travel, and maintenance (lodging and meals) in the event the Participant's witness test stand is inoperable or malfunctioning, resulting in the incompleteness of test; and
- Participant laboratory qualifications that are not associated with a certification test.

12.3 Schedule of Certification Fees. Refer to www.ahrinet.org, or contact AHRI, for information regarding testing fees (and facility approval if applicable).

Note: Applicants may incur additional/different fees during the qualification process. Contact AHRI for more information.

12.4 Payment Deadlines. All AHRI invoices are expected to be paid in full within 30 calendar days of invoice date. AHRI shall not perform testing, or functions related to testing, without first receiving payment. Participants shall be subject to termination per Section 14.2.2 for failure to provide invoice payment.

12.4.1 Payment of Annual Licensing and Participation Fees – For Participants. Annual licensing and participation fee invoices are sent in December and payment is applied to the following year. Payment is expected by 1 February (e.g. 2019 certification invoices are sent out in December 2018 and due 1 February 2019). A quarterly payment option, which includes a finance charge, is available to Participants already established in the program.

12.5 Explanation of Licensing Fee. Payment of the licensing fee authorizes the Participant to claim AHRI certification and use the AHRI Performance Certification Mark. The licensing fee also covers the cost of the AHRI Certification Mark labels which are provided by AHRI.

For OEM Participants, the licensing fee is based on the Participant's reported annual certified product sales volumes (products which fall within the scope and the Intended Market of the product-specific certification program). The OEM Participant's licensing fee is calculated as:

Annual licensing fee = Participant's reported certified product sales volume (USD) x licensing fee rate

For PBM Participants, the licensing fee is a fixed value.

12.5.1 Reporting Certified Product Sales Volumes. All shipments bearing AHRI certification shall be accounted for in a report submitted by the OEM. Data is required for each certification program in which the OEM Participant belongs.

Each summer, AHRI shall request the Participant to report the actual sales (in USD) of certified products from the previous year (e.g. data reported in July 2018 should reflect sales from 1 July 2017 – 30 June 2018). Certified product sales volume reports shall be returned to AHRI within 30 calendar days of the request. AHRI shall keep all sales volume information confidential.

12.5.1.1 Failure to Report Certified Product Sales Volumes. Failure to submit a completed Product Sales Volume form by the deadline shall result in Termination for Non-Submittal of Certified Product Sales Volume.

12.6 Explanation of Participation Fee. The participation fee, which is assessed only to OEM Participants, covers costs of the Participant's testing fees and a portion of the overhead administrative costs of the AHRI certification program.

12.7 Voluntary Withdrawal or Termination from the Program. Barring any outstanding payments owed to AHRI, a Participant that voluntarily withdraws or is terminated from the certification program shall receive a refund for paid participation fees that have not yet been applied towards equipment testing. Licensing fees shall not be refunded.

AHRI shall not provide refunds to Participants that have any outstanding certification fee invoices.

12.8 *Dissolution of a Program.* Barring any outstanding payments owed to AHRI, if a certification program is dissolved, all who participated shall receive a refund for paid participation fees that have not yet been applied towards equipment testing. Licensing fees shall not be refunded.

AHRI shall not provide refunds to Participants that have any outstanding certification fee invoices. Payment details are determined by the AHRI Certification Committee.

12.9 *Questions Regarding Invoices or Certification Fees.* All questions regarding invoices or certification fees should be addressed to the Accounting department (accounting@ahrinet.org).

13. Participant Contacts

13.1 *Maintenance of Contacts.* A Participant is required to name and maintain contact information for the individuals who are responsible for managing the company's participation in the program. AHRI shall be notified immediately of any changes to the contact list. Additionally, the Laboratory shall be notified immediately of any changes to the primary and secondary test support contacts.

13.1.1 *Method for Declaring/Updating Contacts.* Designated contacts can be changed by submitting the Application for AHRI Certification to AHRI's Certification Programs Administrator. An electronic copy of this form may be obtained from AHRI's Certification Programs Administrator. To maintain the accuracy of AHRI's records, AHRI shall periodically ask Participants to verify/correct contact information.

Additionally, the Participant shall notify the Laboratory of any changes to the primary and/or secondary test support contacts.

TABLE 10. PROGRAM PARTICIPANT CONTACTS	
Role	Responsibility
AHRI Certification Program Compliance Officer	<p>This individual is responsible for ensuring the Participant's compliance with AHRI Certification Program rules including, but not limited to:</p> <ul style="list-style-type: none"> • issues relating to the Certification Agreement; • receiving certification test selections, scheduling selections and tests; • managing actions following inoperable sample or test failure; • Directory listings; • certification sales volumes inquiries; and • program violations and/or terminations <p>Unless otherwise noted in this manual, or the Product-Specific Operations Manual, all written notifications generated by AHRI shall be sent to the Certification Program Compliance Officer. This individual shall also receive courtesy copies of all invoices.</p>
Primary and Secondary Test Support Contacts	<p>These individuals shall be contacted by the Laboratory in the event a sample appears to be inoperable or failing test. These individuals are permitted to provide guidance to the Laboratory regarding proper sample installation and operation. These individuals shall be able to respond to Laboratory inquiries within two (2) hours assuming a 24 hour / 7 day per week testing schedule.</p>
Billing Contact	<p>This individual receives all invoices related to AHRI certification and is responsible for invoice approval and payment.</p>
Marketing Contact	<p>To increase the value to Participants, AHRI is dedicated to promoting its certification programs and the AHRI Performance Certified brand to the HVACR industry and its consumers. Participants are encouraged to help with this promotion by advertising their products' certification status and ratings. AHRI shall occasionally contact the marketing contact to inquire about the Participants' marketing efforts, inform them of AHRI's marketing and brand awareness efforts, and to update and educate Participants on AHRI's brand usage guidelines.</p>
Chief Executive Officer (CEO)/President	<p>AHRI provides the Participant's CEO with an annual summary of the corporation's performance in the program. These summaries are typically sent in June reporting the previous year's performance. Any Participant that achieves zero first sample test failures within three (3) consecutive years shall also receive a certificate of commendation from the Chairman of the Board of Directors and the President of AHRI. AHRI may contact the CEO if the corporation's performance in the program is excessively or consistently poor, or if the corporation is facing publication of program violations in the Directory or termination from the program.</p>

14. Issuance of Violations and/or Termination

14.1 Program Violation. When a Participant breaches any term(s) of the Governing Documents, they shall receive a program violation. Each instance of program violation shall remain on the Participant's record for five (5) consecutive years from the violation letter date.

14.1.1 Program Violation Letter. AHRI shall send a program violation letter providing:

- The specific term(s) of the Governing Documents breached;
- The assigned Violation Tier Type per Table 11;
- Required corrective action with deadline and, in some cases, a request for evidence of corrective action; and
- Instructions for appealing the violation.

TABLE 11. PROGRAM VIOLATION TIER TYPES AND EXAMPLES	
Tier 1: Major Violations	<ul style="list-style-type: none"> • Misrepresentation of AHRI Certified Data; • Misleading marketing using the AHRI name or AHRI Certification Mark; • Improper or unauthorized claims to AHRI Certification; • Violations of Certify-All Policy; • Failure to maintain accurate product data in AHRI Directory; • Failure to issue corrections to marketing materials for a re-rate due to test failure; or • Failure to correct either a Tier 1 or Tier 2 program violation.
Tier 2: Minor Violations	<ul style="list-style-type: none"> • Failure to provide AHRI with most recent issue of Selection Rating Software; • Failure to update product-specific Basic Model Group (BMG) or data submittal forms; • Failure to provide test samples for selection within required timeframe; or • Test samples not received by the Laboratory within the required timeframe.
<p><i>Note: The examples in this table are not exhaustive. For violations not covered in this example, AHRI shall assign a Program Violation Tier in accordance with the severity of the Governing Document breach.</i></p>	

14.1.2 Participant Response to Program Violation. Within 15 calendar days of the violation letter date, the Participant shall:

- Respond, in writing, to the AHRI Vice President, Certification Programs, with a report of the corrective action it has taken and, if requested, proof of correction; and
- If the Participant does not agree the program violation is warranted, the Participant may file an appeal in accordance with Section 15.5.

Unless an appeal has been filed, failure to submit a corrective action response to AHRI within 15 calendar days of the violation letter date shall be grounds for a Tier 1 program violation.

14.1.2.1 AHRI Review of Corrective Action. Within seven (7) calendar days of receipt, AHRI shall review the Participant's corrective action submission and respond to the Participant, in writing, with its approval or disapproval.

AHRI shall approve the submission if it demonstrates the Participant has complied with the corrective action and evidence of submission requirements noted in the violation letter. Even if approved, the program violation shall remain on the Participant's record per Section 14.1.

AHRI shall not approve the submission if it fails to demonstrate the Participant's compliance with the requested corrective action and evidence submission, and the Participant shall receive a Tier 1 program violation if an approved corrective action submission is not completed within 15 calendar days. If the Participant does not agree with the judgment, an appeal can be filed in accordance with Section 15.5.

14.1.3 Accumulation of Program Violations. If program violations accumulate, they shall have consequence per Table 12.

TABLE 12. CONSEQUENCES OF PROGRAM VIOLATION ACCUMULATION	
Number of Program Violations (within the same Product Specific Certification Program) Accumulated within A Consecutive 5-year Period	Consequence
Three (3) Tier 1 violations	Participant shall be terminated from the certification program for one (1) year subsequent to the termination date
Three (3) Tier 2 Violations	Equivalent to receiving one (1) Tier 1 violation

14.2 Program Termination. Program termination voids the signed Certification Agreement and cancels the Participant's right to claim AHRI certification. Program termination can be voluntary or imposed by AHRI.

14.2.1 Voluntary Termination. A Participant may voluntarily terminate its own participation in a program by requesting, in writing, to terminate its participation in accordance with the signed Certification Agreement.

14.2.2 Termination by AHRI. AHRI shall terminate a Participant from the program if:

- Payment of an AHRI invoice is 30 calendar days overdue; or
- Participant's certified product sales volume report is 30 calendar days overdue.

When a Participant is terminated from the program by AHRI, they shall receive a program termination letter providing the reason for termination and instructions for appeal. Upon termination, the Participant's listings in the Directory shall be removed from the Directory. The Participant may file a termination appeal in accordance with Section 15.5.

14.2.3 Reinstatement Following Program Termination or Resignation. A former Participant seeking reinstatement to a program must apply as an Applicant and complete the qualification process. Prior to reinstatement, the former Participant is required to provide payment for any outstanding AHRI certification invoices. Upon AHRI receiving all outstanding payments, the Applicant may proceed with the qualification process.

A reinstated Participant who had exited the program with program violation(s), shall re-enter the program with a record of violations issued within the past five (5) years.

14.2.3.1 Waiting Period for Reinstatement. A former Participant who voluntarily resigned from the program may apply and begin the qualification process at any time.

A former Participant terminated from the program by AHRI may apply no sooner than one (1) calendar year subsequent to the termination date.

14.2.3.1.1 Exception for PBMs for Waiting Period for Reinstatement. PBMs that are terminated for non-payment of fees may apply to join the certification program without having to wait the one (1) calendar year from the termination date. All outstanding obligations will be due prior to rejoining the certification program.

15. Program Hierarchy, Communications, Disputes, Complaints, and the Appeals Process

15.1 Program Hierarchy and Responsibility. All bodies within the hierarchy of the AHRI Certification Program are tasked with maintaining the integrity of the certification program to increase its value to the HVACR industry and its consumers. In the order noted below, the bodies may be required to review, and vote on, an Applicant or Participant's appeal of an AHRI decision (e.g. discontinuation of qualification process, test failure, fee assessment), program violation, or termination.

15.1.1 AHRI Vice President, Certification Programs. The AHRI Vice President, Certification Programs is tasked with overseeing the daily operations and administration of the AHRI certification program and enforce the procedures and rules noted in the Governing Documents.

15.1.2 AHRI Certification Committee. The Certification Committee is tasked by the AHRI Board of Directors to oversee the operations of all AHRI Certification Programs and has authority to act on behalf of the AHRI Board of Directors. The Certification Committee is comprised of individuals that are employees of AHRI member companies. The members of the Certification Committee are appointed by the AHRI Chairman. The Certification Committee approves all certification programs and governing documents; recommends the development and dissolution of certification programs; continually reviews certification program performance and maintenance procedures; and suggests changes to the administrative procedures and policies. The Certification Committee is responsible for the contents of the General OM, gives final approval to the Product-Specific OM, and provides interpretation of certification program policies. The Certification Committee has the authority to direct the individual compliance committees to take action regarding the operations of their respective programs.

15.1.3 AHRI Board of Directors. The AHRI Board of Directors is comprised of 15 AHRI members – including Chair, Vice Chair, immediate past Chair, and Treasurer. The Board of Directors monitors the procedures, policies, and performance of the AHRI Certification Program.

15.2 Accrediting Body. The AHRI Certification Programs are accredited to ISO/IEC Standard 17065 by the Standards Council of Canada (SCC) and Comité Français d'accréditation (COFRAC). SCC and COFRAC conduct an annual review of AHRI Certification Program procedures and operations. Participants shall not refer to AHRI's accreditation to COFRAC.

15.3 Communication between Parties. Although most of the communication between parties can be conducted informally, this manual and the product-specific manual specify certain communications that are required to be in writing. Communications related to corrective action requests, program violations, application or program termination, or decision appeals filed by the Applicant or Participant may be transmitted via email.

Unless otherwise noted, written communications from AHRI to the Applicant or Participant shall be given to the most recent Certification Program Compliance Officer on record.

Unless otherwise noted, written communication to AHRI shall be given to the Certification Engineer for the respective certification program. Communications related to corrective action requests, program violations, program termination, or decision appeals shall be given to the Vice President, Certification Programs.

15.4 Registering Comments, Disputes, and Complaints. Comments and complaints regarding the operation of the AHRI Certification Program are to be submitted, in writing, to the AHRI Vice President, Certification Programs and shall be dealt with in a constructive and timely manner. They shall be noted in the certification program's quality system documentation and the sender shall receive a written or verbal response regarding AHRI's intended action.

15.5 Appealing an AHRI Decision/Program Violation/Termination. An Applicant or Participant disagrees with a decision, program violation, or termination, has the right to appeal the judgment.

Appeals shall be conducted in the order of the AHRI Certification Program hierarchy, beginning with the Vice President, Certification and, if necessary, ending with the AHRI Board of Directors.

To be considered, the appeal shall be received within 15 calendar days of the AHRI decision, violation letter, or termination notice. Failure to file within that timeframe forfeits the Participant's opportunity to appeal the decision, violation, or termination at a later date and the judgment shall be upheld.

15.5.1 Appeals Requirement. The Applicant or Participant shall file a request for appeal, in writing, to the AHRI Vice President, Certification Programs. The appeal shall include:

- Specific reason(s) why the decision is incorrect, or the violation or termination is unwarranted; and
- If available, supporting evidence to support the appeal.

15.5.2 Appeal Review by AHRI Vice President, Certification Programs. As the first level of appeal, the Vice President, Certification Programs shall review the submitted appeal. Within 15 calendar days of receipt, he/she shall respond, in writing, with a decision.

If the appeal is approved, the decision shall be overturned, or the violation or termination stricken from the Applicant or Participant's record.

If the appeal is not approved, the Applicant or Participant has 15 calendar days from the date of the Vice President's decision to:

- Take corrective action; or
- Appeal the decision, violation, or termination to the hierarchy of the certification program in accordance with Section 15.5.

Any violation which is not appealed by the Participant shall be corrected within the allotted timeframe; else another violation shall be issued.

Request for further appeal within the program hierarchy shall be sent, in writing, to the AHRI Vice President, Certification Programs.

15.5.3 Appeal Hearings. Appeal hearings are required for appeals above the AHRI Vice President, Certification Programs. In an appeal hearing, the reviewing body votes to uphold or overturn the subject decision, violation, or termination.

15.5.3.1 Preparation for an Appeal Hearing. Participant appeals, and any supporting documentation to be reviewed during the appeals hearing, shall be sent, in writing, to the AHRI Vice President, Certification Programs. The Vice President shall coordinate and schedule all appeal hearings. The Vice President shall forward members of the reviewing body information provided by the Participant. Prior to providing AHRI

with information that is intended to be distributed to members of the reviewing body; the Participant shall carefully review all information for conformity with federal, local, and state antitrust laws. Such information should be received by AHRI at least 30 calendar days in advance of the hearing date to allow sufficient time for distribution and review.

15.5.3.2 Appeal Hearing Location and Participants. Appeal hearings are typically, and preferably, held at AHRI Headquarters in the presence of the Participant, members of the reviewing body, and AHRI staff. If an appeal hearing at AHRI Headquarters shall be significantly delayed due to the unavailability of reviewing body members or the Participant, members of the reviewing body or the Participant may be asked to participate in the hearing telephonically.

The Participant shall participate in the appeal hearing or else forfeit the appeal. In such a case, the decision, violation, or termination stands and no further appeal can be made.

15.5.3.3 Appeal Hearing Voting Requirements. A typical hearing consists of presentations by the Participant and AHRI, a question and answer period conducted by the reviewing body, the reviewing body's deliberation, and a vote by the reviewing body to uphold or overturn the subject decision, violation, or termination. At least 50% of the membership of the reviewing body shall be available to hold the appeal hearing.

A majority vote of the reviewing body present (including any assigned proxy votes) is required to overturn a decision, violation, or termination. In the case of a tie, the program decision, violation, or termination shall stand.

15.5.4 Directory Listings during the Appeals Process. If a program violation has resulted in the Participant's listing(s) being removed from the Directory, the listing(s) shall remain hidden until the appeals process has ended. AHRI is not responsible for damages arising from the removal of the listings.

15.6 Antitrust Laws and Confidentiality. All parties are obliged to abide by all federal, state, and local antitrust laws.

Information provided by the Participant and AHRI to members of an appeal reviewing body is to be kept confidential.

16. Environmental Protection Agency (EPA) ENERGY STAR® Testing Requirements

16.1 AHRI and ENERGY STAR®. The EPA has developed requirements for the testing and verification of ENERGY STAR® products. These include:

- Qualification prior to labeling,
- Laboratory qualification, and
- Comprehensive verification testing.

As of 30 December 2010, all products seeking ENERGY STAR® qualification shall be part of a third-party certification program. AHRI is an EPA recognized Certification Body (CB) and AHRI Certification Program Participants can meet ENERGY STAR® qualification and verification requirements without any additional testing on products they wish to label ENERGY STAR®. ENERGY STAR® program and partner requirements can be found at www.energystar.gov.

Only AHRI Certification Program Participants may choose AHRI as their CB for ENERGY STAR®. The Participant shall submit an ENERGY STAR® Authorization Form that designates AHRI as the CB and submit product data to EPA. The authorization form can be found at www.ahrinet.org.

16.2 ENERGY STAR® Product Qualification. In order to qualify new products as ENERGY STAR®, the Participant shall submit the following information to AHRI:

- Complete ENERGY STAR® Certified Product Data Submission Form; and
- Test report(s) of the representative model for each Basic Model or Basic Model group submitted.

16.3 ENERGY STAR® Laboratory Requirements. A Participant's submitted test report shall be accepted by AHRI, if it is submitted from one (1) of the following:

- The Participant's laboratory; which shall either be:
 - Audited by AHRI. If this option is chosen, the Participant shall request an audit by completing an audit request form;
 - Annually, the Laboratory shall audit the Participant's laboratory using the AHRI ENERGY STAR® Facility Checklist. The checklist can be found at www.ahrinet.org;
 - Once the audit has been conducted and the Facility has been approved, the Participant shall be given its Facility's EPA-Issued Organization ID.
 - Already audited and approved by another EPA recognized CB, other than AHRI. The Participant shall provide the audit report to AHRI for approval; or
 - Accredited to ISO 17025 to the test method applicable to the product test reports submitted, by an EPA recognized accreditation body. The Participant shall provide the audit report to AHRI. The Participant's laboratory shall also be recognized by EPA for that product category.
- An EPA-recognized third-party laboratory. The Participant shall identify the laboratory's EPA-Issued Organization ID.

16.4 ENERGY STAR® Annual Testing Requirements. AHRI shall select at least 10% of each Participant's ENERGY STAR® Basic Model(s) or BMGs (that are registered or certified with AHRI) as part of the AHRI Annual Testing Requirement, with a minimum of one (1) model tested annually.

16.5 ENERGY STAR® Test Sample Sizes, and Determination of Test Failures. EPA Directive No. 2011-04 provides instructions to CBs on test sample sizes for ENERGY STAR® products and determining testing failures. Products shall be tested for purposes of verification consistent with how they were qualified in the ENERGY STAR® program. Participants shall choose one (1) of the following approaches: (both approaches apply to federally regulated products):

16.5.1 ENERGY STAR® Test Procedure for Single Test Sample Approach. The Participant qualified the model for ENERGY STAR® by submitting to AHRI one (1) test report. If this approach is chosen then, when selected for AHRI annual verification testing one (1) sample shall be procured. When the sample is tested it shall have to meet or exceed the ENERGY STAR® specification.

16.5.1.1 Failure for ENERGY STAR®. If the sample fails to meet the ENERGY STAR® specification requirements, AHRI is required to report testing failures to EPA within two (2) calendar days. EPA shall then contact the Participant and request additional information on the cause of the failure. Refer to Figure 5.

16.5.2 ENERGY STAR® Test Procedure for Multiple Test Sample Approach. The Participant qualified the model for ENERGY STAR® by submitting to AHRI multiple test reports from multiple test samples (e.g., per DOE certification sampling plan). If this approach is chosen then, when selected for AHRI annual verification testing then four (4) samples shall be procured, at once. When selected by AHRI for verification testing the four (4) samples shall be wrapped with tamper proof tape by the Laboratory, but only one (1) sample shall be sent to the Laboratory for testing. The Laboratory personnel shall randomly designate the first sample selection.

16.5.2.1 Test Failure for Multiple Test Sample Approach. If the tested first sample fails to meet the ENERGY STAR® specification requirements by greater than 5% then the remaining three (3) samples shall be immediately sent to the Laboratory for testing. The four (4) test results shall be used to determine if the model meets the ENERGY STAR® specification based on the calculations in Directive No. 2011-04. If the calculations determine that the model does not meet ENERGY STAR® specifications, AHRI is required to report testing failures to EPA within two (2) calendar days of determining a test failure. In cases where the product-specific Operations Manual does not provide pass/fail criteria for up to four samples, compliance with AHRI test requirements shall be determined in accordance with Figures 6 and 7.

16.6 Fees for using AHRI as the Participant's ENERGY STAR® CB.

16.6.1 Test Fees. Annual testing for ENERGY STAR® program requirements is included in the AHRI Annual Participation Fee Invoice.

16.6.2 Participant Laboratory Approval Fees. Participant laboratory audit fees are not included in the AHRI Annual Participation fee. The Participant shall be invoiced separately for the one (1) day audit and auditor's travel and lodging expenses.

FIGURE 5. SINGLE TEST APPROACH PROCESS

Single Test Approach (Refer to Section 16.5.1)

Determination of ENERGY STAR® Pass/Fail Requirement: *Measured performance must be equal to or better than the ENERGY STAR® specification requirements.*

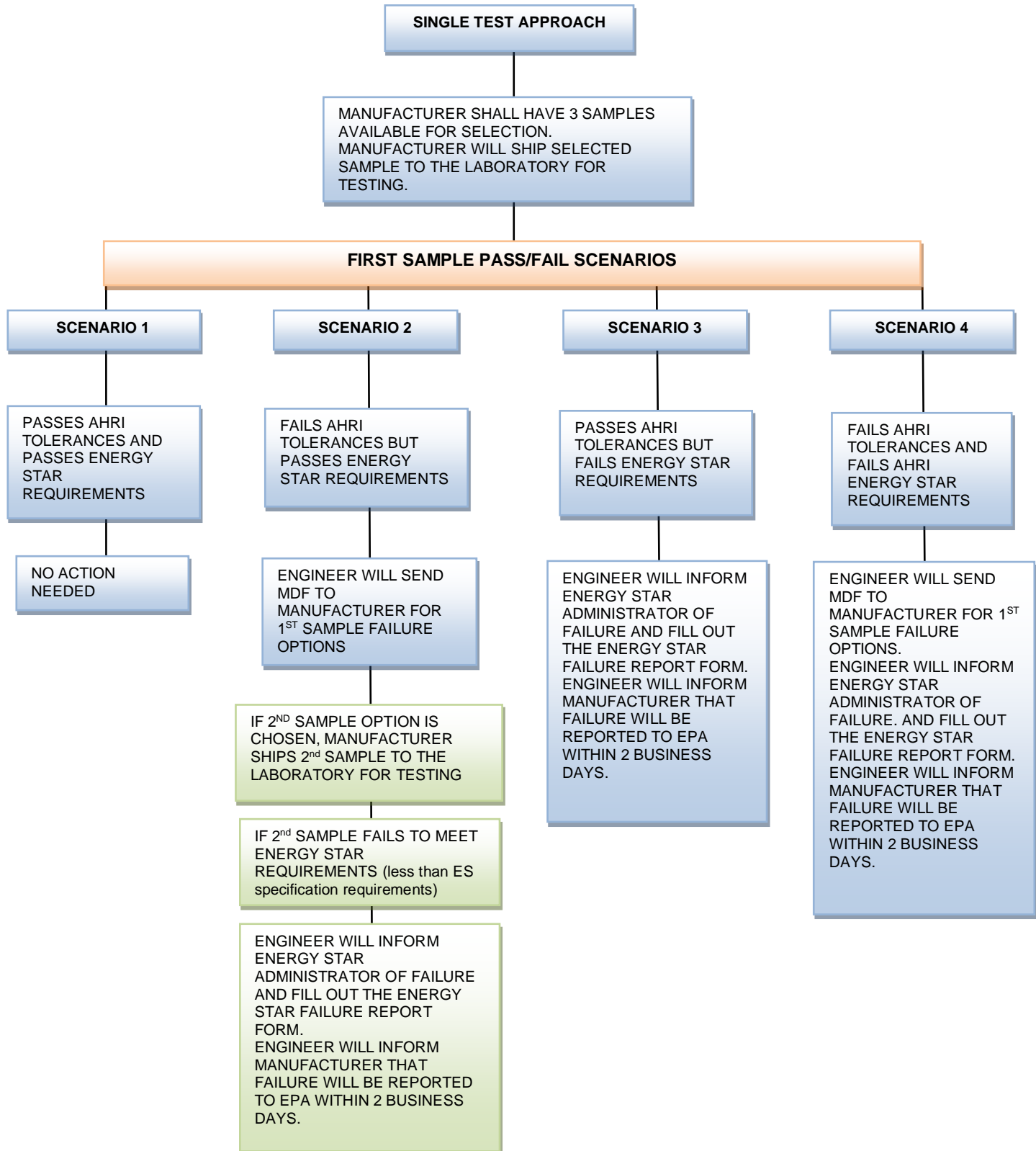


FIGURE 6. MULTIPLE TESTS APPROACH PROCESS

Multiple Tests Approach (Refer to Section 16.5.2)**Determination of ENERGY STAR® Pass/Fail Requirement:**

First Sample: *If measured performance of first sample fails to meet the applicable ENERGY STAR® specification by 5% or more, three additional units shall be tested.*

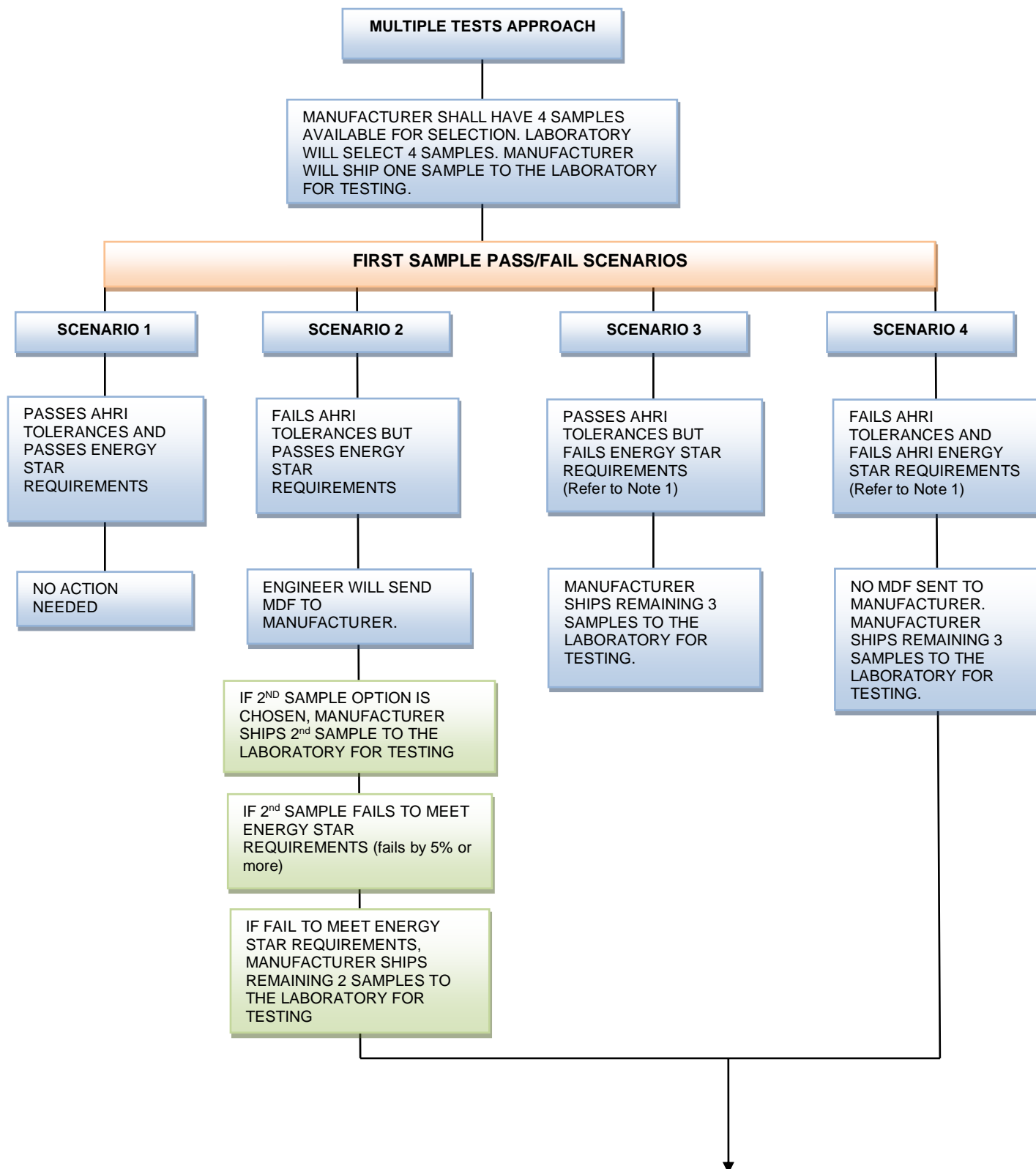
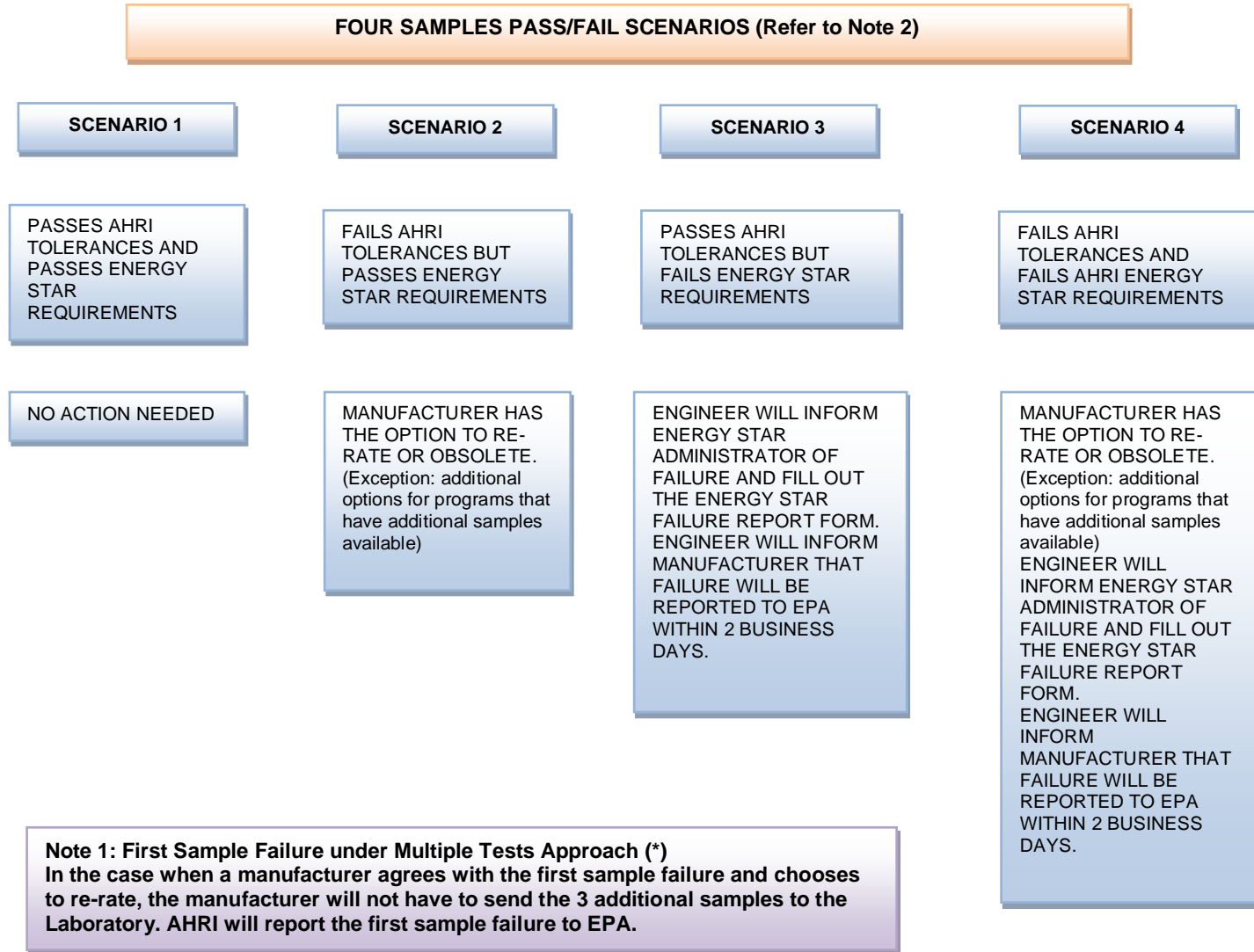


FIGURE 7. FOUR SAMPLES PASS/FAIL SCENARIOS

Four Samples: Use mean and formula from Directive 2011-04 to determine whether it meets ENERGY STAR® specification requirements.



Note 2: Final Pass/Fail Ratings from 4 Samples

To determine whether the final ratings (from results of 4 samples) pass or fail:

- ENERGY STAR ratings: Use verification formula from Directive 2011-04
- Federally regulated minimum efficiency ratings: Use DOE verification plan
 - o If fails: use DOE sampling plan to re-rate
- Non-federally regulated ratings: Use mean

Note 3: BMG Re-rates

If a model is re-rated in a BMG that contains ENERGY STAR models:

- Engineer needs to check that ENERGY STAR model(s) in BMG still meet ENERGY STAR specification requirements
 - o If rating(s) of model(s) fall below the ENERGY STAR requirements due to re-rate, AHRI will inform EPA/update the ENERGY STAR Qualified Products List (QPL) to remove the affected listed model(s).

17. Selection Rating Software

17.1 Selection Rating Software Approval. For certification programs in which the Directory does not explicitly quantify rating data, AHRI shall use Selection Rating Software, which includes electronic catalogs. The approved Selection Rating Software name and version shall be published in the Directory. All Selection Rating Software shall be reviewed and approved by AHRI prior to its release to other users and prior to its publication in the Directory. Release of the software to other users, or the issuance of ratings using the software, before AHRI approval is obtained shall be grounds for a program violation.

Failure to provide or maintain the most recent issue of software with AHRI shall be grounds for a program violation.

If approved software becomes inoperable by AHRI, AHRI shall provide a written corrective action request.

17.2 Selection Rating Software Requirements. Software shall be provided to AHRI in one (1) of the following formats:

- Web-based;
- Installed onto Virtual Machine (for PC-based software); or
- Electronic catalog.

The operating language, along with all informational screens, inputs, and outputs shall be in English. The units of measure shall be consistent with the Performance Rating Standard and the Product-Specific Operating Manual.

The Participant shall provide to AHRI any required usernames and passwords, along with installation and operating instructions in English.

All use of Marks, certified ratings, and claims to certification, on screen or in print, must be displayed in accordance with this manual and the Product-Specific Operations Manual.

Each page of data output from an approved Selection Rating Software must include:

- Software name;
- Version number, revision number, or revision date; and
- Print date.

17.2.1 AHRI Mark. The AHRI Mark shall be included on any Selection Rating Software output that includes certified ratings. For non-certified units or applications, the AHRI Mark shall not be included on the Selection Rating Software output.

17.2.2 Statements Regarding Certification. All outputs from an approved Selection Rating Software shall include one of the following statements unless otherwise specified in the Product-Specific Operations Manual:

17.2.2.1 Units Within the Scope of the Program. “Certified in accordance with the AHRI (insert program name) Certification Program, which is based on AHRI Standard (insert associated Standard number). Certified units may be found in the AHRI Directory at www.ahridirectory.org.”

17.2.2.2 Applications or Units Outside the Scope of the Program. “Application or unit is outside of the scope of AHRI (insert program name) Certification Program but is rated in accordance with AHRI Standard (insert associated Standard number).”

Any discrepancy with the certified statements or the Certified Mark on the output sheet shall be grounds for a program violation.

17.2.3 Virtual Machine Requirements. For Participants with PC-based software, AHRI shall provide the Participant with a login and password to a personalized Virtual Machine to install the software. The Participant shall prove the software has been installed and is operating correctly by generating two (2) random selections and furnishing data output sheets to AHRI. After this is provided by the Participant, AHRI shall further review the software for approval.

17.2.4 Multiple Rating Methods. If multiple rating programs are available to users, each shall be provided to AHRI for approval. All rating methods containing certified data must, based on identical input rating conditions, produce matching results.

If the Directory lists quantified certified data, and also references a Selection Rating Software, the certified data must produce matching results when based on identical input rating conditions.

17.3 AHRI Approval Process for Selection Rating Software. The Participant shall request approval of the Selection Rating Software following any changes or updates that directly or indirectly impact the technical characteristics of any units. The Participant shall include a summary of the changes with the request for approval. AHRI shall review the Selection Rating Software within seven (7) calendar days of receipt.

AHRI shall grant approval if:

- The software has been successfully installed and operated to generate selections and certified rating data;
- It appears to comply with Section 17.2;
- Section 17.2.4, if applicable, is satisfied; and
- The software complies with requirements noted in the Product-Specific Operations Manual, if applicable.

Upon approval, the Participant shall make the necessary updates/revisions to Directory listings. If rejected, AHRI shall provide written notification and request corrective action.

At minimum, the version number listed in the Directory shall be incremented for any updates that affect rated performance of certified products, model numbers of certified products, or addition or removal of certified products.

For non-technical updates, such as pricing changes, the Participant shall notify AHRI and provide access to the new version of the software, but AHRI approval is not required. If the version number is changing, the Participant shall make the necessary revision to the Directory listings and notify AHRI.

17.4 Corrective Action for Selection Rating Software. Within 30 calendar days of request for corrective action, the software must be corrected and resubmitted to AHRI. The software shall go through the approval process in accordance with Section 17.3.

For Participants, failure to take corrective action on Directory-listed software to AHRI's satisfaction shall be grounds for a program violation and all affected products shall be removed from the Directory until satisfactory corrective action has been taken. For Applicants, failure to take satisfactory corrective action shall terminate the application process.

17.5 Approved Rating Software Violation. Rating software that has been approved by AHRI may still be the subject of a program violation and corrective action if, following approval, it is found not to be in compliance with Section 17.2. While AHRI strives to verify complete compliance with Section 17.2 during the approval process, the large and complex nature of rating software may prevent discovery of all non-compliances.

Appendix A. Presence of Applicants/Participants at the Laboratory

Observed testing is allowed strictly for the purpose of validating installation and setup of the sample by the Applicant and Participant. Additional guidance for certification program Applicants and Participants observing AHRI testing at third-party laboratory (Laboratory) is as follows.

A1 Observed Testing. For all testing where the Applicant/Participant will be observing testing,

A1.1. Laboratory personnel shall physically setup the sample and review the setup with the participant prior to running the sample.

A1.2. The Laboratory shall discuss specific settings and set points with the participant in advance, including, but not limited to, airflow, static, and refrigerant charging parameters. These parameters shall not contradict the information provided in the participant's installation and operations manual, and on the AHRI Directory.

A1.3 Participants shall follow all Laboratory policies regarding safety, security, and confidentiality. Once testing has started, the Laboratory may require that Participants wait in a predetermined waiting area until test completion

A2 All AHRI Testing

A2.1 The unit shall be setup according to the Applicant/Participant's instructions and all tests shall be run to completion.

A2.1.1 Detailed setup instructions provided by the Applicant/Participant shall not contradict the instructions outlined in the Applicant/Participant's installation and operation manual.

A2.1.2 Detailed setup instructions provided by the Applicant/Participant shall not contradict the instructions outlined in the AHRI General OM, the Product Specific OM, and the relevant standards.

A2.2 In cases where the Laboratory has difficulty obtaining the initial setup parameters as agreed upon in Sections A1.2 and A2.1, the Laboratory may share limited information with the Applicant/Participant to resolve the problem.

A2.2.1 The Laboratory shall inform AHRI immediately that they are having difficulty and will reach out to the Applicant/Participant. A summary of the problem must be provided to AHRI.

A2.2.2 The information shared with the Applicant/Participant shall be limited to data related to initial setup parameters as described in Section A1.2 (ex. refrigerant temperatures, refrigerant pressures, refrigerant charge, airflow, static pressure, etc.).

A2.2.3 In no case shall certified data be shared with the Applicant/Participant.

A2.2.4 The Laboratory shall resolve the setup issues with guidance from the Applicant/Participant/ and complete all tests as noted in Section A2.1.

A2.3 After completion of all testing and confirmation of the results by the Laboratory personnel, the data may be shared with the Applicant/Participant. The Applicant/Participant may review the data and elect to conduct private testing. Decision must be made within two (2) hours as noted in Section 9.15.2.3.1.