Residential Kitchen Range Hood Certification Program Procedural Guide (2022)

Version 3.1

AHAM VERIFIDE

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AHAM
ASSOCIATION OF HOME APPLIANCE MANUFACTURERS

Leadership ➤ Knowledge ➤ Innovation

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To ensure you are using the most recent version, please see www.aham.org.

FOREWORD

The Association of Home Appliance Manufacturers ("AHAM") sponsors the AHAM Residential Kitchen Range Hood Certification Program in the U.S. ("Program"). The Program provides a uniform, comparable, impartial and commercially practical certification and verification of manufacturers' CFM & Sound in accordance with HVI 920 - 2015, HVI Product Performance Certification Procedure including Verification and Challenge, subject to the amendments specified in Appendix A subsection 1. The Program provides verification of operating and standby energy usage under the requirements of the U.S. Environmental Protection Agency ("EPA") for models that are part of the ENERGY STAR® program. U.S. Government Agencies have specified the number of tests required to obtain a certified value that is representative of a model's energy use. The intent of this industry program is to verify that each kitchen range hood (see definition in Section 1.0) model represented by a manufacturer or brand name owner is consistent within the Program. The intent of the program is to also enable designers, builders, consumers, code officials, and manufacturers, as well as Program Licensees, to confirm and compare ratings. Participation in the Program is voluntary. An independent laboratory under contract to AHAM provides verification in accordance with the most recent edition of AHAM HRH-2 –Residential Kitchen Range Hood Performance Test Procedures. All testing for certification is done in accordance with American National Standards Institute (ANSI) and Standards Council of Canada (SCC) consensus standards. Testing relating to values relating to qualification or verification of ENERGY STAR is to be performed to the edition of the Standards referenced by EPA.

Product energy certification is the responsibility of the product manufacturer. The AHAM Program is not a certification program for energy. It does not test products prior to their entry into market and it does not submit certification compliance information to U.S. government agencies on behalf of the manufacturers.

Other programs, such as the voluntary U.S. ENERGY STAR program administered by the EPA, require that manufacturers obtain third-party qualification of their products prior to distributing them into the U.S. marketplace. The AHAM Program does not qualify products for the EPA ENERGY STAR Program, but may collaborate with the AHAM Program Lab to support members. Qualification for participation in ENERGY STAR is a separate process controlled by the EPA.

The EPA ENERGY STAR program, as of January 1, 2011, requires that any range hood enrolled in the ENERGY STAR program must be part of a third-party verification program. The AHAM Range Hood Verifide™ Program has been recognized as a Verification Administrator for ENERGY STAR.

The program is written to provide kitchen range hood ratings that may be referenced during field verification procedures required for compliance with California's 2019 BUILDING ENERGY EFFICIENCY STANDARDS - TITLE 24, PART 6, AND ASSOCIATED ADMINISTRATIVE REGULATIONS IN PART 1 which was effective in January 2020. Title 24 has been updated for 2022, and it has recognized the AHAM Range Hood Verifide™ Program.

Verification of a product's stated energy consumption is typically conducted through random selection and testing of products already on the market based upon Program selection criteria. The Verification ensures the products deliver the performance claimed. The AHAM Program provides a uniform and commercially practical certification and verification of CFM & Sound and energy consumption values. The intent of this industry Program is to certify, verify, report and publish in a directory the CFM & Sound performance test ratings. The Program cannot and will not enforce a product's compliance with energy efficiency standards or other voluntary program requirements.

The CFM & Sound Values which appear on the packaging of each unit is the participant's public representation that the stated CFM & Sound of its range hoods have been verified through the program. This Mark (and the applicable ratings) must appear on each certified unit or its packaging.

Additionally, the Program Licensee must certify and list the operating and standby power of all models which are listed in the ENERGY STAR program where applicable. Fans that include lighting shall be certified to meet the ENERGY STAR® Program Requirements, Product Specification for Luminaires – Eligibility Criteria for non-directional luminaires unless it is exempt.

The AHAM License Agreement ("Agreement") is a contract and is the governing document for participation in the AHAM Range Hood Certification Program. This Procedural Guide ("Guide") is an extension of, and is incorporated into, the Agreement and provides for the administration and uniform execution of the Program. General information, procedural details and copies of forms are included in the Guide.

AHAM's Range Hood Certification/Verification Task Force, as needed, at their sole discretion, may revise the Guide if such revision is deemed necessary by the Range Hood Certification/Verification Task Force. However, before any changes are accepted the proposed revisions to the program guide shall be balloted per the AHAM Bylaws and shall be subject to the review and approval of any regulatory body that is a stakeholder in this program.

A number of forms are used to administer this Program. The current forms and the accompanying instruction booklet, AHAM Range Hood Certification Program – Instructions for Completing Forms, can be obtained from AHAM or the Program Laboratory.

For additional information, contact:

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DOCUMENT REVISION HISTORY

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1.0	Initial Release	08/22/2019
2.0	Updates for CEC application	10/1/2019
3.0	Further updates to support the CEC application	1/23/2020
3.1	Updates for ENERGY STAR approval	June 2022

Note: All substantial revisions will be indicated by a new version number. The document revision history will list the editorial revisions with the addition of alphanumeric letters next to the procedural guide version number.

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1. DEFINITION OF TERMS

1.1 RANGE HOOD TYPES

1.1.1 DOWNDRAFT KITCHEN EXHAUSTER

A ducted exhauster located adjacent to the cooking function at or near countertop level, sometimes integral with the range. A downdraft kitchen exhauster has an air inlet for removing and exhausting cooking contaminants. A downdraft kitchen exhauster utilizes a relatively high volume of air to capture contaminants by velocity. Includes non-powered downdraft kitchen ventilator.

1.1.2 DUCT TERMINATION FITTING

A ducted fitting mounted at the end of a duct. This includes indoor duct inlets and outlets and outdoor duct inlets and outlets.

1.1.3 FRESH AIR INLET

A passive opening to the exterior of a structure that is used for the introduction of outside air into the living space.

1.1.4 IN LINE VENTILATING FAN

A fan designed to be located within the building structure with ductwork on both intake and exhaust. When an inline fan is offered for use with non-powered kitchen ventilators, additional requirements are described in HVI 920 Appendix IV, Combination Rating.

Additionally, as reference - EPA definition - A fan designed to be located within the building structure and that requires ductwork on both inlet and outlet. In-line fans with multiple inlet or outlet ports are referred to as “multi-port” in-line fans in this specification; all others are referred to as “single port”.

1.1.5 INTEGRATED SUPPLY AND EXHAUST VENTILATOR (ISEV)

A ventilating device with both exhaust and supply systems that mixes the fresh air with a certain amount of recycled air. Sometimes called a balanced ventilator.

1.1.6 KITCHEN FAN

A ceiling or wall mounted, ducted or direct discharge, exhaust fan for exhausting contaminants from a kitchen.

1.1.7 KITCHEN RANGE HOOD

A ducted exhauster for use over cooking equipment that captures contaminants by buoyancy and exhausts them. May be a dual-function appliance incorporating microwave and/or clock function, for example. Includes non-powered kitchen range hoods. Ductless range hoods are excluded.

1.1.8 Non-powered Kitchen Ventilator

A kitchen ventilator without an air moving device, intended for use with a separate power unit. Included are standard (catalogued) range hoods, specialty range hoods, and downdraft kitchen ventilators. The non-powered kitchen ventilator and separate power unit may or may not be offered by the same manufacturer.

1.1.9 Range Hood Power Unit

An interior power unit offered separately for use with a non-powered kitchen ventilator.

1.1.10 Remote Exterior Mounted Ventilator (REMV)

An exhaust fan intended for mounting in an exterior location, usually connected by ducts to an interior device such as a downdraft intake, a range hood shell, or a grille.

1.1.10.1 "Type B" remote exterior mounted ventilator – An exhaust fan which is used as a year-round low velocity whole house ventilation system. The fan is usually mounted on the roof and is ducted to an air intake grille at the ceiling. For purposes of distinguishing this product from other remote exterior mounted ventilators, HVI refers to this product as a "Type B" remote exterior mounted ventilator throughout its procedural publications including HVI Publication 915, HVI Publication 916 and HVI Publication 920. No product distinction is made in the HVI-Certified Home Ventilating Products Directory.

1.1.11. Separate Interior Power Unit

An air-moving device offered for kitchen ventilation in connection with a non-powered kitchen ventilator. The standard HVI name for this category is range hood power unit.

1.1.12 Separate Power Unit for Kitchen Ventilation

A power unit offered separately for use with non-powered kitchen ventilators. The power unit may be a remote exterior mounted ventilator, range hood power unit, or inline fan, any of which may be offered for kitchen ventilation. The separate power unit and non-powered kitchen ventilator may or may not be offered by the same manufacturer. The definition does not include separate power units that are not offered for use in kitchen ventilation applications, even though they may be similar.

1.2 AHAM Verifide Mark

The AHAM Verifide Mark ("The Mark") is the mark or marks owned by AHAM and authorized by AHAM for the use by manufacturers and private brand resellers of range hoods who are Licensees in the Program. The Mark is applied to the model(s) included in the AHAM Program (See Appendix "D").

The Licensor owns registered trademark, service mark, and/or certification mark (hereafter The Mark as more fully identified in the Procedural Guide), and hereby licenses rights to use The Mark in the Unites States and Canada.

1.3 Airflow Rating

Quantity of airflow a product will produce at the specified rating point static pressure, measured in cubic feet per minute (cfm).

1.4 Alternate Test Facility

An independent testing laboratory correlated to the Program Laboratory, qualified to determine Certified Ratings, and deliver ratings to the Program. See the Alternate Laboratory obligations under Section 3.5 and also Appendix G for further information.

1.5 Appropriate Stakeholders

The Appropriate Stakeholder for the program is EPA ENERGY STAR and the California Energy Commission (CEC). They will be notified in the event of a finding of final non-compliance for a given model.

1.6 ASHRAE

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (doing business since 2012 as ASHRAE) is a global professional association seeking to advance heating, ventilation, air conditioning and refrigeration (HVAC&R) systems design and construction. ASHRAE 62.2 is the commonly referenced standard for indoor air quality associated with range hoods.

1.7 Basic Model

A basic model is a single unit that represents a unique performance design configuration. Models that do not adversely differ from the basic model in functional design, performance characteristics and CFM & Sound values are considered derivative models including models of different brand names manufactured by the same Program Licensee. Collectively these models are called a “Basic Model”. Different brand-name models may be in a Basic Model. A unit shall not be designated as a separate basic model if it has the same CFM & Sound values as a designated basic model but differs from it only in decorative treatment or non-functional way; rather, it shall be considered a derivative of the basic model.

1.7.1 A basic model which is tested for purposes of establishing performance data from which other products will be derived but which itself is not manufactured, marketed, or sold will be designated as a “nonproduction basic model”. Certification of derived models may be based on qualifying non-production basic models. Performance ratings for non-production basic models approved by AHAM will not be published in the AHAM-Certified Directory but will nevertheless be considered certified by AHAM.

1.8 Brand Name

The commercial name by which a product line is known to the consumer as determined and provided by the Program Licensee.

1.9 Brand Name Owner

Brand Name Owners are entities having exclusive rights to models offered into the Market and can fully execute the provisions of the Procedural Guide.

1.10 Certification Testing

Initial testing to determine the CFM & Sound values (and for energy verified models, the standby and operating power), determined in accordance with AHAM HRH-2, Residential Kitchen Range Hood Performance Test Procedures (2020), Rev 3.0. For energy verified models, Program Licensee shall also provide the standby and operating power, in accordance with ENERGY STAR test procedure.

1.11 Certified Ratings

Performance ratings (CFM and Sound) based on prescribed and controlled testing of certified products which the AHAM Program Licensee is confident that its certified product will achieve if picked up in the field and tested in accordance with verification procedures at an approved laboratory. These are the values listed in the directory.

1.12 Combination Unit

For EPA references, there is an EPA definition, "A residential ventilating fan that contains a light source for general lighting and/or a night light". The light source is integral to the ventilation fan consisting of lamp(s) and ballasting (as applicable) or LED Light Engine(s) and together with the parts designed to distribute the light, position and protect the lamps, and connect the lamps to the mains. For the purposes of this specification, a night light is any light source that draws less than 4 W total or provides 20 lumens or less.

1.13 Cubic Feet per Minute (CFM)

Cubic feet of air per minute, ft^3/min, at 0.075 lb/ft^3, HVI's "standard" density. The unit of measure for airflow ratings. CFM is always the measurement of a unit's performance as a complete system in a specified duct configuration expressed in cubic feet of air per minute.

1.14 Derivative Model

A model whose certification is derived from another basic model. The unit does not adversely differ from the basic model. For true derivative models (Color, Packaging, Distributer SKU), an RH-1 and RH-2 form is to be submitted to list the model in the Program. Should a unit not be identified as a derivative, it will be treated as a basic model.

1.15 Directory

A document listing all certified models, CFM & Sound ratings and other relevant information for each participating Licensee (New, Product Category, Product Subcategory, Brand Name, Brand Owner, Model, Ducting, Discharge, Speed Setting, SP, Rated CFM, Rated Sones, Rated Watts, ESTAR). The Directory will also detail information such as if the unit was re-rated. The AHAM Directory can be an annual directory, a supplement, and/or a monthly AHAM website directory.

1.16 Documented Interview

A Documented Interview is an interview between the Program Lab and Licensee after a finding of potential non-compliance with Program requirements, or to complete the initiation of a challenge. If conducted via telephone call or in person, the results are documented by the Program Laboratory and issued to the Licensee, with AHAM copied on the report. If conducted via email, AHAM shall also be copied on the mailing.

1.17 Ducted Products

Ventilating products that utilize ductwork to move air between the indoors and outdoors

1.18 Energy Verification Model

A model for which the operating power and standby power have been certified by an EPA-approved Certification Body (CB) and which is subject to energy verification testing under the AHAM program, in accordance to the requirements of the EPA for ENERGY STAR. Models that have not been submitted to ENERGY STAR will not be verified for energy.

1.19 Family of Products

A group of products that include one basic product and one or more derived products that all depend on a common certification test. (See also Basic model, and Derived model and EPA's definition for Product Family.)

1.20 First Line Of Distribution

The initial customer(s) to whom the Licensee and/or its branch office is/are selling its products that are covered by the AHAM Certification Program. The initial customer may be, for example, another manufacturer that is being supplied with the Licensee's products, a private brander, a distributor that will be selling the products to a retailer, or a retailer to whom the Licensee is selling directly.

1.21 Government Agencies

For the AHAM Range Hood Certification Program, the only US federal government agency to which AHAM reports is the US Environmental Protection Agency ("EPA") for those units voluntarily listed with the ENERGY STAR Program. The California Energy Commission is the only US State government agency that AHAM interfaces with directly for determination of approval of AHAM as an alternative performance rating certification organization and certified product directory for use by California to confirm kitchen range hood compliance with the kitchen range hood performance requirements in the California Energy Code.

1.22 Inch of Water Gauge

Inch of Water Gauge (in. w.g.): A traditional unit of pressure used to describe both water and gas pressures. The conventional equivalent of one inch of water is 249.0889 pascal, which is 2.490889 millibars, about 0.036127 pounds per square inch (psi) or about 0.073556 inches (1.86832 millimeters) of mercury. The word "gauge" after a pressure reading indicates that the pressure stated is actually the difference between the absolute, or total, pressure and the ambient air pressure at the time of the reading.

1.23 Letters of Instruction

Letters of Instruction are documents developed by AHAM staff that define or otherwise detail the operation of the program and associated procedural guides. Letters of Instruction are published as an interim step before updating and balloting of the Procedural Guide is completed. Letters of Instruction may be issued when EPA or other stakeholders (i.e. ASHRAE) issue amended rulings and/or guidance, indicating the implementation of such amendment and/or guidance within the AHAM Program. As Letters of Instruction are published, they will be disseminated to program participants. All such letters will be controlled by a revision coding system and maintained under AHAM's document control policy. Letters of Instruction are to be differentiated from AHAM Interpretations, as Interpretations refer only to AHAM Standards.

1.24 License Agreement

A contract between AHAM and Licensees that specifies the obligations of each party as part of the AHAM Range Hood Certification Program. This Procedural Guide acts as a supplement to and as part of the License Agreement.

1.25 Licensee

A manufacturer or brand name owner that executed a license agreement as a Licensee with AHAM and is authorized to participate in the AHAM Range Hood Certification Program.

1.26 Licensor

ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (AHAM), a not-for-profit business association incorporated in the District of Columbia, having its principal office at 1111 19th Street, N.W., Suite 402, Washington, DC 20036.

1.27 Manufacturer

An entity that manufactures range hoods.

1.28 Mixed Basic Models

EPA Definition - Mixed Basic Models are Basic Models that include both ENERGY STAR and non-ENERGY STAR qualified models. In these circumstances, any model selected will be expected to meet the verification criteria for ENERGY STAR verification, regardless of the ENERGY STAR qualification of the model selected.

1.29 Net Free Area, Tested

Net free area of a static ventilating device based on an actual airflow test of the product in accordance with the HVI procedure listed in HVI 920 Appendix V.

1.30 Normalized Airflow Curve

An airflow curve that precisely represents a product's airflow performance relative to the basic static pressure rating point. A normalized curve is used for ratings in addition to the basic rating point. It is developed by applying the Normalized Curve Ratio to the airflow test curve. See HVI 920 Appendix I for details. (See also Section 1.31.).

1.31 Normalized Curve Ratio (NCR)

The ratio between the airflow performance rating and the tested airflow performance, both at the basic static pressure rating point, used for a normalized airflow curve. The NCR is always less than or equal to unity.

1.32 Operating Power

The operating power of a range hood, as measured per Section 5.3 of AHAM HRH-2 (2020), Rev 3.0, expressed in Watts.

1.33 Outdoor Duct Outlet

A duct termination fitting, intended to be mounted on the exterior of the building structure that is used to exhaust air to the outside. Included are wall caps, roof caps, and eave caps.

1.34 Participant

An entity whose range hood model(s) are certified. A participant may or may not be an AHAM Licensee. A non-Licensee participant's range hood may be certified if submitted to the Program by another company (either the manufacturer or the brand-name owner) who is an AHAM Licensee.

1.35 Power Consumption

EPA Definition – The operation of the fan motor consumes electrical power measured in Watts (W).

1.36 Pressure, Static (Ps)

The air pressure that a fan must overcome in order to produce an associated airflow. The static pressure rating point (or points) is the nominal amount of static pressure adopted by HVI for rating the airflow of a given product category as noted in HVI 920. (see HVI 920 Appendices I, II, & IV).

1.37 Private Brand owner

An entity that markets but does not manufacture its own brand name units.

1.38 Probationary Model or Product (Probationary Ratings)

A model that originally had AHAM Certified ratings, but failed an AHAM verification or challenge test. Provisions regulating probationary models are described in other sections of this procedure.

1.39 Product Family

EPA Definition - A fan model and all models derived from it such that differences between the models are limited to those that do not adversely affect product performance. Acceptable differences in characteristics include, but are not necessarily limited to color, finish, and nameplate.

1.40 Production Survey

A survey distributed by AHAM on July 1 of each year. The survey is used to determine the production volume of models within the Program, as well as the number of Basic Models, for each Licensee between July 1 of the previous year and June 30 of the current year to calculate Program participation and basic model fees.

1.41 Program

The AHAM Range Hood Certification Program in its entirety, including Licensee certification, verification testing, challenge testing, the Directory and use of the AHAM Mark.

1.42 Program Laboratory (Technical Administrator)

An independent testing laboratory under contract to AHAM to determine Certified Ratings, administer product directory, select models for testing, perform verification tests, and collect certified data. (See Section 3.2)

1.43 Program Models Sold in North America

All models sold in the United States and Canada whose ratings are required to be certified and submitted to the Program under the terms of the License Agreement, the Procedural Guide and Letters of Instruction from AHAM. Each Licensee shall certify the CFM & Sound values and supply data on all range hood models sold or advertised by the manufacturer as range hoods which are manufactured by it or for it under its brand name(s) for sale within the United States Each Licensee shall also certify the CFM & Sound values and supply data on all private-brand models which the Licensee itself is to distribute within the United States. Each Licensee shall also certify the operating and standby power ratings for all range hood models sold or advertised by it or for it that are also certified to the EPA as ENERGY STAR compliant, in compliance with EPA certification requirements in the United States or have listed with CEC.

1.44 Program Participation Fee

A fee calculated annually that Licensees pay to AHAM for the administration of the Program. Participation Fees are based on the volume of product shipped during a twelve month period between July 1 of the previous year and June 30 of the current year. The Program Participation Fee applies to Licensees following the first full year (365 days) of participation in the Program, which is covered by the Initiation Fee.

1.45 Program Year

The Program Year extends from January 1 through December 30 of each calendar year. Models produced and available for sale during this period are considered to be models of the current Program Year even though a manufacturer or private brand reseller may market at another time.

1.46 Qualified Product List ("QPL")

The ENERGY STAR program's list of all ENERGY STAR qualified products available for sale in the United States

1.47 Residential Ventilation Fan

Residential (home) ventilation – Mechanical ventilation serving residential dwelling units (homes), as opposed to commercial, industrial, or institutional buildings. Residential ventilation, with few exceptions, serves a single dwelling unit whether it is in a single family or low- or high-rise building.

EPA Definition - Residential Ventilating Fan: A fan whose purpose is to actively supply air to or remove air from the inside of a residence. This includes ceiling and wall-mounted fans, or remotely mounted in-line fans, designed to be used in a bathroom or utility room, supply fans designed to provide air to the indoor space, and kitchen range hoods. Supply fans may also be designed to filter incoming air.

1.48 Run-In Period

A 48 hour pre-conditioning of range hoods performed by the Program Laboratory prior to verification testing.

1.49 Sone

A unit for rating sound level that is linear and weighted to represent the response of the average human auditory system.

An internationally recognized unit of loudness, which simplifies reporting of sound output by translating laboratory logarithmic decibel readings into a linear scale that corresponds to the way people sense loudness. A sone is equal in loudness to a pure tone of 1,000 cycles per second at 40 decibels above the listener's threshold of hearing.

1.50 Sound

The rating of the sone measurement for the range hood

1.51 Stakeholder

Individuals, groups or entities that have a concern in the process and results of the Program. Entities may include, but not be limited to: Program Licensees, the Environmental Protection Agency (EPA), California Energy Commission (CEC) and Natural Resources Canada (NRCan).

1.52 Standby Power

The power used by a range hood in a stable non-operational mode, as measured per Section 5.3 of AHAM HRH-2 (2020), Rev 3.0, expressed in Watts.

1.53 Test Procedure

Certification, Verification, and Challenge testing will be according to AHAM HRH-2 Standard (2020), Rev 3.0 procedures and this Program Guide to verify the CFM & Sound; and, for energy verified models, the operating and standby power, with additional specificity provided by approved interpretations and collectively referred to as "Test Procedure". ENERGY STAR testing will be performed according to test procedure specified by EPA.

1.54 Testing Laboratory, AHAM-designated

An independent third party laboratory that has been authorized by AHAM to perform product testing for certification, verification and challenge. A list of AHAM-designated laboratories are shown on page i and Annex G. The Program Lab is the only designated lab for verification and challenge.

1.55 Test Units

Individual range hoods that are certified by Program Lab or Alternate Test Facility, or verified by the Program Laboratory

1.56 Tolerance

Tolerances allow for variations that inevitably occur in any given manufacturing or testing facility. They are not to be used to rate a given model at values other than measured performance. For non-ENERGY STAR products, during verification testing, the CFM & Sound of any unit shall not be less than 90% of its certified CFM and 110% of sound values plus 0.25 sones as per HVI 920 Appendix I. For ENERGY STAR products, the tolerances are determined in accordance with EPA Directive 2011-04 Determination of Testing Failure for ENERGY STAR Verification Program.

1.57 Verification Testing

Annual tests conducted by the Program Laboratory under contract to AHAM in accordance with AHAM HRH-2 Standard (2020), Rev 3.0 and ENERGY STAR procedures to verify the CFM & Sound. For Energy Star verified models, the operating and standby power will also be verified.

1.58 Verified

Confirmation of the Licensee's certified ratings for airflow, sound level and energy (operating power & standby power) according to Program procedures.

1.59 Withdraw from the Market

All instances in which a Licensee exercises the option to Withdraw Basic Model(s) from the AHAM Range Hood Certification Program shall result in immediate removal of all units within the Basic Model(s) under the Licensees control as of the date of notification of withdrawal from the market.

1.60 WORKING SPEED

EPA Definition - The speed that produces 100 CFM, or the lowest speed above CFM that a range hood can produce, when working on the same duct system as the maximum speed test. Two speed range hoods are required to produce at least 90 CFM. Working speed is defined in HVI 916, Section 7.2. https://www.hvi.org/ratings/procedures.cfm

2. PROGRAM SCOPE

The Program will certify the CFM & Sound for range hoods in accordance with HVI 920 -2015, HVI Product Performance Certification Procedure including Verification and Challenge, subject to the amendments specified in Appendix A, subsection 1. For range hoods participating in the ENERGY STAR program, the AHAM Program will verify the CFM/Watt ratio, Sones level, and Standby Power. The program will verify the reported values are consistent with the rated CFM, sound level, Operating Power and Standby Power reported by the Licensee. The rated CFM, sound level, Operating Power and Standby Power reported to the Program by Licensees will be equivalent to the values reported to U.S. government and state agencies. While the Program will communicate with appropriate regulatory agencies within the United States & Canada, including notification of non-compliances, the Program will not determine compliance with any regulatory or other voluntary program requirements.

2.1 APPLICABLE STANDARD

Under the Program, Licensees follow the certification procedure to certify the operating power, standby power, and CFM & Sound determined in accordance with the AHAM HRH-2 Standard – 2020, Rev 3.0

The Program Laboratory will conduct random verification tests and evaluate test data within the framework of the Standard, License Agreement and Procedural Guide requirements and ENERGY STAR eligibility requirements, where applicable.

Licensees must use all practical means at their command to continuously assure that the certified ratings of their range hoods are in compliance with Program requirements.

As for the program itself, the applicable reference standard is HVI 920 - 2015, HVI Product Performance Certification Procedure including Verification and Challenge, subject to the amendments specified in Appendix A, subsection 1

2.2 FACTORS CERTIFIED

Under this Program, the Licensee uses the Minimum or Maximum Certified Rating provided by the Program Laboratory or Alternate Test Facility to certify the operating power, standby power (if applicable), and CFM & Sound in accordance with the AHAM HRH-2 Standard (2020), Rev 3.0. For ENERGY STAR verified models, the standby (if applicable) and operating power shall also be provided. The Licensee is solely responsible for certifying these values with the EPA.

2.3 TOLERANCE

The intent of the industry is to assure that the CFM & Sound for all range hoods produced by each Licensee are 100% of the certified ratings. Tolerances allow for variations that inevitably occur in any given manufacturing or testing facility. They are not to be used to rate a given model at values other than the average performance values of a unit from the assembly line. For non-ENERGY STAR products, during verification testing, the CFM & Sound of any unit shall not be less than 90% of its certified CFM and 110 % of sound values plus 0.25 sones as per HVI 920 Appendix I.

For ENERGY STAR models, the determination of compliance with ENERGY STAR eligibility requirements for CFM/Watt and standby power (if applicable) shall be made according to the requirements of Appendix F.2 (EPA Directive No. 2011-04, most recent date)

2.4 Publication of Directories

AHAM will maintain a listing of all current certified models. This list will be displayed in the on-line Directory of Certified Range Hoods (Kitchen Range Hood Certification (aham.org)). This listing will be made available to anyone requesting it and will be updated monthly.

The AHAM online Directory is updated at least monthly.

Models will be listed in the Directory by Brand Owner followed by duct configuration. All requested duct listings will be specified on Form RH-1: Model Data/Model Submission Form (MSF) for Directory. All fees and submission of a completed Form RH-1: Model Data/ Model Submission Form (MSF) for Directory to the Program Laboratory is required before models will be published in the Directory. Form RH-1 serves as authorization for AHAM to publish a model's certified values.

2.5 Directory Information

The AHAM Range Hood Certification Directory displays currently listed models with their CFM & Sound ratings. The Directory will also detail information such as if the unit was re-rated.

Initially, the directory header will look like this:

Program note – improvements including real time updates, sortable/filterable, export capabilities, PDF's and additional items like presence and pressure associated with an end cap or capture efficiency will be handled in the AHAM Range Hood Certification/Verification Task Force and Steering Committee and are not implemented without approval of the appropriate regulators that may be referencing the directory.

2.5.1 Subcategories for the Range Hood Category that are used in the Directory

2.5.1.1 Chimney Hood

2.5.1.2 Insert/Power Pack

2.5.1.3 Island Hood

2.5.1.4 Microwave

2.5.1.5 Under cabinet

2.6 Program Forms

The forms listed below are used to administer this Program. The forms and the accompanying instruction booklet, Range Hood Certification Program – Instructions for Completing Forms, can be obtained from AHAM or the Program Administrator.

Form Number	Title
RH-1	Model Data/Model Submission Form (MSF) for Directory
RH-2	Cross Index of Model Numbers by Brand
RH-3	Administration Information
RH-4	Range Hood Selection Report
RH-5	Range Hood Verification Testing Report
RH-6	Non-Compliance Notification
RH-7	Notice of Minimum/Maximum Certified Rating
RH-8	Request for Model Deletion
RH-9	Challenge Request Form

2.7 Eligible Models

Each Program Licensee shall report the certified CFM & Sound on all range hood it manufacturers for its brand name(s) or for other Licensee's brand name(s) for sale within the United States. Each model participating in the ENERGY STAR Program must have the certified CFM & Sound, Operating Power, and Standby Power reported. Each manufacturer who is a Licensee shall also report the certified CFM & Sound on all private brand models which the Licensee itself is to distribute within the United States or Canada. Certified values shall be consistent with those submitted to the U.S. government agencies for compliance purposes.

2.8 Submission of Data

Certification data for a new model subject to the Program must be submitted no later than the first day the model is sold or advertised as a range hood, whichever occurs first. The estimated date on which production of certified units will begin must be included in the data provided to the Program Laboratory.

2.8.1 Licensee Information

Licensees shall provide the Program Laboratory with the following information to determine the proper identification of models and responsible individuals. Further information on Program forms can be found in the AHAM Range Hood Certification Program – Instructions for Completing Forms.

a. Model Data / MSF for Directory (Form RH-1)

b. Participants' certified basic models and all derivatives of each basic model (Form RH-2)

c. Administrative Information (Form RH-3)

d. Models no longer produced (Form RH-8)

e. All certified models currently available for sale, annually (Form RH-11)

2.8.2 Mandatory Program Models

Each Licensee shall report the certified CFM & Sound on all range hood models whose ratings are required to be certified and sold or advertised by the manufacturer as range hoods which are manufactured by it or for it under its brand name(s) for sale within the United States. Each model participating in the ENERGY STAR program must have the certified CFM & Sound, Operating power, and Standby Power reported. Reported CFM & Sound values must be identical to certified compliance values submitted to the U.S. government agencies.

These requirements apply to all models to be sold, whether or not they are sold for test market purposes, in a limited quantity, or in a specified market area. Product certification is voluntary and can be selectively elected for models within a product category.

The United States includes all of the states, the District of Columbia, the Territories and other geographical areas associated with, or subject to, the jurisdiction of the United States.

2.8.3 Optional Models

The Licensee may, at its option, selectively certify and supply data on range hoods Basic Model(s) for sale within other countries. The Licensor agrees that Licensee will not claim proprietary rights in The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of The Mark in any countries or jurisdictions not listed in Exhibit C.

These Verification requirements apply to all models to be sold, whether or not they are sold for test market purposes, in a limited quantity, or in a specified market area. Product certification is voluntary and can be selectively elected for models within a product category.

2.8.4 Private Brand Models

The Licensee must report the certified CFM & Sound data on private-brand range hoods whose ratings are required to be certified and that it sells within the United States that are manufactured by an entity separate from and unrelated to it. In order to have such private brands included in the Program, the manufacturer shall report the certified CFM & Sound (and Operating Power and Standby Power for ENERGY STAR models) on all range hoods that it wants listed in the directory.

For private brand models to be listed in the Program, private brand owners who sell models from multiple manufacturers must ensure that all manufacturers for their brand are Licensees. If not, all manufacturers are Licensees, the private brand owner must become a Licensee and certify those models not certified by the manufacturer.

2.9 Rating Configurations

2.9.1 Sound

Products rated at more than one static pressure point will be verified at those points unless the airflow ratings are based on the Normalized Curve, which does not require the additional airflow sound ratings.

2.9.1.1

Exception: When additional airflow ratings are based on the AHAM Normalized Curve procedure, AHAM sound certification is not required for the additional airflow ratings. If included, additional sound ratings shall be AHAM -Certified.

2.9.2. DUCTING

Products with selectable discharge configurations (e.g., vertical and horizontal) and/or duct sizes shall be rated for every discharge possibility and duct size supplied with the product unless the Normalized flow curve has points to cover these other configurations. Here are the common ducting configurations that could be tested and listed in the directory:

- 4”, 5”, 6”, 7”, 8”, 10”, 3 ¼” X 10”, & 3” X 10”

2.9.3 MULTI-SPEEDS

Multiple speed products’ basic ratings shall be at maximum speed, other ratings are optional. Range hoods may optionally be tested and certified at "working speed" in addition to the maximum speed basic certification. In general, working speed is considered low speed for a two-speed hood, and for a multiple- or variable-speed hood, it is a low speed near 100 cfm.

2.9.4 BACKPRESSURE

Note - ENERGY STAR requires a 0.1 in. of static pressure.

2.9.4.1 Ducted product will be tested at 0.1 and 0.25 in. w.g.

2.9.4.2 Direct discharge (unducted) product will be tested at 0.03 in. w.g.

2.9.5 ENERGY

At the Licensee’s option, electrically operated AHAM Certified products may also be certified for energy required to operate them (designated as Energy-to-run-fan).

Energy-to-run-fan (watts) for specific products must be certified and published in the AHAM Verifide Range Hood Products Directory. The value for watts published in the Directory shall be the as-tested value or higher.

Energy used for lights, sensors, heaters, timers, or night lights is not included in the determination of power consumption. This is not to be confused with energy recovery products for which energy certification is mandatory.

2.10 NORMALIZED AIRFLOW CURVE

The Normalized Airflow Curve is a standard method of representing a product’s airflow performance at static pressures in addition to the standard static pressure rating point for the category. Due to prescribed rounding, the test report airflow curve must be normalized for it to agree with the provided certified rating(s). For a description of the procedure for development of an acceptable normalized airflow curve, see HVI 920 Appendix I.

The normalized airflow curve has several purposes including those described below.

2.10.1 First, when a product has more than one certified airflow rating point, either required or optional, the first (basic) rating point may generally be used to create a

normalized airflow curve, and it becomes the source of additional ratings. (See the HVI 920 Appendices for range hood categories.)

2.10.2 Second, a licensee may wish to publish an airflow curve based on the certification test, in addition to the prescribed single number rating(s).

2.10.3 Third, special rating points may be required for unique jurisdictions that require rating at other than the prescribed static pressure. For those, Licensee may obtain Verified ratings to support their communication with the jurisdiction.

2.11 Model Enrollment Form

To ensure that models in the Program are consistent with those available in the market, Licensees shall provide an updated model list to the Program Laboratory, with certified values consistent with those submitted to the EPA for Energy Verification Models or CEC for model listing, using the model enrollment form provided by the Program Laboratory, at the beginning of each calendar year. This form will be made available electronically to Licensees once they join the Program. The Program Laboratory will ensure consistency between the information submitted in January and the Program Directory at that time. Models for selection in the next program year will be selected from the updated model listing received each January. The Licensee is responsible to assure that the values provided on the model enrollment form are equivalent to those reported to the EPA.

2.11.1 Carry-Over Models

Once a model has been submitted for verification, it must continue to be verified throughout the lifetime of the model, (i.e., for as long as the model is available for sale at the distributor level). Identical model numbers are to be carried over from a prior year if no physical changes are made to the models that affect their certified ratings. However, if a carry-over model is to have a different certified rating from its previous rating, the Licensee must provide the Program Laboratory with the old model number and the updated model numbers, which shall be consistent with model numbers reported to government agencies per 1.5.3.1.1. This will be considered a new basic model.

A carry-over model is subject to testing again even though tested during the prior year. The Licensee is responsible for maintaining the performance of that model and must advise the Program Laboratory of any changes in production that may affect its certified values.

2.11.2 Models of Prior Production Still Being Marketed

The Licensee may also submit data on models no longer being produced but which are still available for sale by the brand-name owner. Models shall continue to be submitted as long as they are being marketed by the brand-name owner and will be subject to random selection and verification testing.

2.12 Optional Certified Models

As noted in 2.8.4, the manufacturer-Licensee may certify operating power, standby power, CFM & Sound and supply data on private-brand range hood models that it manufactures for sale within the United States and Canada by an entity separate from and unrelated to it. In order to have such private brands included in the AHAM Range Hood Certification Program,

the manufacturer shall certify operating power, standby power, CFM & Sound and supply data on all range hood models that it manufactures for the same private brand for sale within the United States and Canada.

These certification requirements apply to all models to be sold, whether or not they are sold for test market purposes, in a limited quantity, or in a specified market area. Product certification is voluntary and can be selectively elected for models within a product category.

10% of each Licensee's basic models are subject to verification testing requirements (Section 5.2). The Licensee is responsible for maintaining the performance of that model and must advise the Program Laboratory of any changes in production that may affect its certified values.

2.13 Unit Selection

The Program Lab will purchase verification models on the open retail market. All open market purchased will be invoiced to the Program Licensee by the Program Laboratory.

A model may be excused from Program testing where its manufacturer or private labeler is able to demonstrate that an identical model or model from the same family was procured for verification testing in the preceding 12 months, or has already been procured by an EPA-approved CB for verification testing. Regardless of the previous completed testing, AHAM will send a full list of models to ENERGY STAR for their potential nomination. The program laboratory may decide to select alternative models for testing based on what is available on the open retail market and what is on the EPA priority list.

2.14 Parameters for Eligibility

A range hood is eligible for the AHAM Range Hood Certification Program if the unit's CFM & Sound values will be measured and recorded. The program is listing range hood ratings of airflow, sound and energy. Energy is optional.

AHAM does not determine eligibility in the market but that is determined by various regulatory bodies. See the Appendix in HRH2 as a reference for known range hood regulatory levels.

2.15 Rounding Procedures

Rounding is allowed for the CFM & Sound values provided on Form RH-7: Notice of Minimum or Maximum Certified Rating. "Rounding to the nearest" follows conventional practice, i.e., 5 or more rounds up. Thus, when rounding to the nearest half sone, 2.74 rounds down to 2.5, and 2.75 rounds up to 3.0 sones. See additional details in Section 5.1.8 – Presenting Certified Ratings – Form and Format

2.16 Determination of Models to be Selected for Verification

AHAM will select models for verification testing from 10% of each Licensee's Basic Models (see Section 1.7) provided in Model Submission/Change Form, with at least one (1) model selected from each Licensee, per year in the range hood category. Models from Mixed Basic Models will be selected, obtained and tested according to ENERGY STAR eligibility requirements.

Total number of models will be rounded up from the 10% value. Model selection includes three parts:

2.16.1 Part 1: ENERGY STAR Selection

AHAM is to select models from 10% of each Licensees ENERGY STAR qualified Basic Models for verification testing, while operating under the 10% overall testing requirement for each Licensee.

If a Licensee meets the minimum selection criteria of two models, at least one of the models selected will be an ENERGY STAR qualified model, if applicable.

2.16.2 Part 2: Targeted Selection

AHAM will ask EPA for nominations per brand. AHAM will provide, prior to the start of each program year, to EPA, a confidential list of ENERGY STAR qualified models and Basic Models subject to ENERGY STAR verification testing. EPA may provide suggestions to AHAM regarding specific product classes or energy platforms they would like to see tested. EPA will maintain control over their nominations. Any changes will be approved by EPA before they made.

These lists will include the Name of the Licensee, Original Equipment Manufacturer (OEM), Basic Model, Brand and model number the consumer will see. AHAM will request that EPA indicate which targeted selections are priorities and will make a good faith attempt to make these selections, while still adhering to ENERGY STAR and AHAM Certification Program requirements. As stated in Section 5.2, the AHAM program will strive to ensure that the 10% of a Licensee's non ENERGY STAR Basic Model selections are randomly chosen.

AHAM will also provide EPA with a list of the final testing selections. AHAM shall provide EPA with a semi-annual report of models tested, including a summary of the results. Any targeted models not selected will be included in this report. Reasons for models not being selected could include, but are not limited to, maintaining balance between EPA intentional nominations and random selections, initially targeted models not being available, and other alternate models from the same Basic Model being selected.

2.16.3 Part 3: Random Selection

Any remaining Basic Models which have not been directed for, or excluded from, selection will be randomly selected by the Program Laboratory from all product classes. This selection will be confirmed by AHAM.

2.17 Selection Examples

Example 1: Assume a Licensee has 50 Basic Models and 10 of these Basic Models are ENERGY STAR.

- 10% of 50 total Basic Models is 5 Basic Models, so the Licensee will have a total of 5 Basic Models selected for verification testing.

- 10% of 10 ENERGY STAR Basic Models is 1 Basic Model, so 1 of the 5 Basic Models selected for verification testing will be ENERGY STAR Basic Models, as defined in section 2.14.1.

- The remaining 4 Basic Models will be selected. Models selected for testing in the previous twelve months should not be selected during the current year. Any ENERGY STAR models selected will be required to meet all ENERGY STAR eligibility requirements.

Example 2: Assume a Licensee has 50 Basic Models and 25 of these Basic Models are ENERGY STAR.

- 10% of 50 total Basic Models is 5 Basic Models, so the Licensee will have a total of 5 Basic Models selected for verification testing.

- 10% of 25 ENERGY STAR Basic Models is rounded up to 3 Basic Models, so 3 of the 5 Basic Models selected for verification testing will be ENERGY STAR Basic Models, as defined in section 2.15.1.

- The remaining 5 Basic Models will be selected. Models selected for testing in the previous twelve months should not be selected during the current year. Any ENERGY STAR models selected will be required to meet all ENERGY STAR eligibility requirements.

Example 3: Assume a Licensee has 50 Basic Models and all 50 of these Basic Models are ENERGY STAR.

- 10% of 50 total Basic Models is 5 Basic Models, so the Licensee will have a total of 5 Basic Models selected for verification testing, all of which will be ENERGY STAR Basic Models, as defined in section 2.14.1.

- There will be no Basic Models available for directed or random selection. Models selected for testing in the previous twelve months should not be selected during the current year. Any ENERGY STAR models selected will be required to meet all ENERGY STAR eligibility requirements.

3. PROGRAM REQUIREMENTS

3.1 GOVERNANCE

All actions regarding the Procedural Guide, as well as other program developments and approvals will be acted upon by the AHAM Range Hood Certification Task Force, a task force of AHAM Range Hood Certification Program Licensees that are members of AHAM ("Task Force"). AHAM staff may make small editorial, non-substantive changes to the Procedural Guide without requiring the full approval process. When these changes are made to the Program, Regulators, Licensees, and the Program Laboratory will be notified, and edition numbering will be changed accordingly.

3.2 AHAM OBLIGATIONS

3.2.1 License manufacturers and private-brand resellers to certify, in accordance with the Program, the CFM & Sound accuracy of range hoods sold in the United States and Canada.

3.2.2 Administer verification of operating and standby power ratings under a system acceptable to governmental stakeholders, i.e., the EPA for ENERGY STAR verification and CEC for range hood certification.

3.2.3 Provide administrative staff for the Program.

3.2.4 Authorize use of The Mark reproductions to companies licensed in the Program and provide artwork and text for The Mark.

3.2.5 Oversee publication and distribution of Certification Directory and web page.

3.2.6 Collect Certification Fees and provide an annual budget report to the AHAM Range Hood Certification Task Force.

3.2.7 Upon notification from the Program Laboratory, alert Licensee to the presence of models found on the EPA Qualified Product List (QPL) that are not in the AHAM Directory.

3.2.8 Resolve the EPA nominations to allow for approximately 50% of each Participant's testing requirements to be randomly chosen.

3.2.9 MONITOR:

a. Program participation

b. Re-ratings of all models

c. Challenges by Program participants. AHAM staff will review a challenge to understand if sufficient information is presented for a challenge.

3.2.10 Notify EPA of non-compliance with ENERGY STAR eligibility requirements.

3.2.11 Contract with an independent testing laboratory (Program Laboratory) for:

a. Examination and monitoring of Licensee's test facilities and quality control procedures or data for those manufacturers submitting data from an alternative test facility.

b. Collection and compilation of model data.

c. Random test sample acquisition.

3.2.12 Issue Letters of Instruction when necessary.

3.2.13 Audit the Program Laboratories to ensure that testing and procedures are in according with this Guide.

3.3 LICENSEE OBLIGATIONS

3.3.1 Pay AHAM certification fees, based on a fee structure determined by the Task Force. These fees are billed in four installments, during each calendar quarter of the current year.

3.3.2 Follow the procedures in Section 5.1 to certify the CFM & Sound under standard test conditions for **all range hoods** sold in the United States and Canada that they desire to be listed in the directory.

3.3.3 Follow the procedures in Section 5.1 to certify the efficacy and sound requirements of the specification in each possible configuration (e.g., vertical, horizontal) at working speed and standby power for **all models** submitted to ENERGY STAR. Fans that include lighting shall be certified to meet the ENERGY STAR® Program Requirements, Product Specification for Luminaires – Eligibility Criteria for non-directional luminaires unless it is exempt.

3.3.4 Promptly submit model data, contact information and sample acquisition information to the Program Laboratory under contract to AHAM for verification test selection using Forms RH-1, RH-2, and RH-3. If any information on the above forms changes throughout the Program Year, then the Licensee should resubmit the updated form(s).

3.3.5 Annually provide AHAM with a comprehensive and accurate list of model data for all certified models presently available on the market, on the Product Submission Form.

3.3.6 Annually provide AHAM with the Production Survey in July for all models in the Program. Product certification is voluntary and can be selectively elected for models within a product category.

3.3.7 Accept the Minimum/Maximum Certified Rating for CFM & Sound determined by the Program Laboratory or Alternate Laboratory during testing of the unit.

3.3.8 Furnish test specimens at no cost to the Program and pay all shipping costs.

3.3.9 Display a facsimile of The Mark on the packaging of each certified model sold in the United States. Display a facsimile of The Mark on models included within the AHAM Range Hood Certification Program that are sold in the United States and Canada, identifying its certified ratings. Challenge, if warranted, certified ratings of other Licensees and provide a detailed report documenting the challenge (Section 6).

a. Forward challenge report with supporting documentation to the Program Laboratory and AHAM.
b. Authorize Program to conduct challenge procedure and agree to be responsible for testing costs if the challenged product is determined to be within acceptable tolerances.

3.3.10 Change certified ratings in accordance with Program procedures.

a. Process a voluntary change in ratings (see Section 6.3).
b. Mandatory re-ratings. (Section 5.2.9).

3.3.11 Submit copies of specification sheets and promotional material to AHAM periodically upon request.

3.3.12 Review Directory information and remove models that are no longer available.

3.3.13 Abide by all requirements in this Procedural Guide and the License Agreement.

3.3.14 Provide vigilance and quality control to be confident their products in the field will achieve their certified ratings.

3.4 Program Laboratory Obligations

3.4.1 Obtain Lab accreditations required by the test methods defined in HRH-2 (2020), Rev 3.0. Thus, the laboratory shall be accredited to perform HVI 915 and ANSI/AMCA 300 testing for sound, and HVI 916 and ANSI/AMCA 210 air flow testing.

3.4.2 Be accredited to ISO 17025 and 17065 requirements.

3.4.3 Be an EPA recognized lab per EPA ENERGY STAR.

3.4.4 Collection of certified data from other alternate third party labs, basic model information, etc.

3.4.5 Random test samples acquisition using the open market purchase process.

3.4.6 Verification testing in accordance with AHAM HRH-2 (2020), Rev 3.0 and this Guide giving priority to those models which each Licensee sells in greatest volume and/or has voluntarily re-rated.

1) Annual testing of each basic model;

2) Verification under challenge procedure;

3) Verification of voluntary re-rates.

3.4.7 Issuance of verification test reports (and notices of non-compliance should testing indicate re-rating necessary).

3.4.8 Determination of revised rating to be verified in case of mandatory (either as result of regular Program testing or challenge procedure) or voluntary re-rating.

3.4.9 Disposition of all test samples.

3.4.10 Compilation and dissemination to AHAM of all verified models' ratings by brand for subsequent Directory publication.

3.4.11 Compilation and issuance of annual report summarizing individual participant test results and overall AHAM Range Hood Certification Program test data.

3.4.12 Compares models listed in the AHAM Directory with the current ENERGY STAR QPL & HVI directory (old data) for accuracy. Reports the finding of any units shown on the QPL & HVI directory (old data) but not on the AHAM Directory to AHAM.

3.4.13 Review packaging for content and placement of The Mark (See Section 5.2.3).

3.4.14 Sends a communication to the participant that the testing has started on their model.

3.5 Alternate Test Facility Obligations

3.5.1 A lab must qualify to be approved as an Alternate Test Facility by completing all requirements of the Annex to the AHAM Range Hood Certification Program Procedural Guide - Qualification Requirements for Alternate Test Facilities. Contact AHAM for a copy of this document.

1) The alternate test facility shall have its own quality systems documentation for facility operations (per ISO 17025-2017), maintenance, employee training, and oversight per the Annex listed in 3.5.1. The laboratory must consider and define these and conduct business according to its defined practices.

2) The alternate test facility shall have the required accreditations (NVLAP, A2LA, IAS, etc.) to perform the AHAM HRH-2 (2020), Rev 3.0 test method. Thus, the laboratory shall be accredited to perform HVI 915 and ANSI/AMCA 300 testing for sound, and HVI 916 and ANSI/AMCA 210 air flow testing.

3.5.2 Maintains facility and correlation as required by the Alternate Lab Annex listed in 3.5.1.

3.5.3 Performs initial qualification tests of models Program Licensees wish to add to the Program and issues RH-7 form, stating minimum/maximum certified rating, to the licensee.

3.5.4 Transmits, the minimum/maximum certified ratings to the Program Laboratory.

3.5.5 See Appendix G for approved Alternate Test Facilities.

4. PROGRAM FUNDING

The AHAM Range Hood Certification Task Force determines the annual Certification Fees, which are based on total sales volume and the estimated number of basic models. The Task Force may, at their discretion, change the funding options for the Program. From this funding,

4.1 FEES

Upon joining the Program, and annually in July thereafter, Licensees are required to complete a Production Survey (Appendix E) advising AHAM of the certified sales volume of all room range hoods in the Program for the twelve-month period from July 1 of the previous year through June 30 of the current year. The certified sales volume shall include all models listed in the directory and sold in the United States and Canada that bear The Mark. The survey will also request information on the number of range hood Basic Models in production and the number of these Basic Models which are part of the ENERGY STAR program. The survey will also request information on the number of brands included in the program. Production surveys are held confidential within AHAM, maintained for seven (7) years, and then destroyed.

Certified Sales Volume will be used to determine Program Participation Fees. The number of Basic Models will be compared to the current Directory and will be used to determine Basic Model Fees. The reported number of Basic Models and ENERGY STAR Basic Models will be used to select models for Verification Testing during the following year.

4.1.1 PROGRAM PARTICIPATION FEES

The amount payable by the Licensee during the Program year will be determined by multiplying the current AHAM member or non-member Participation Fee by the certified sales volume. If this amount is less than the minimum Participant Fee specified in the AHAM Production Survey, the Licensee pays the minimum fee. One-quarter of the fee is billed by AHAM at the beginning of each quarter and is payable quarterly by Licensee during the calendar year.

4.1.2 BASIC MODEL FEES

The Basic Model Fees will be determined from the Production Survey submitted in July of each Program Year. Basic Model Fees will be paid in full to AHAM at the beginning of the Program Year to ensure funds for Program testing. If the actual testing fees incurred by the licensee differ from the amount invoiced at the beginning of the Program Year, the difference will either be refunded to the licensee or an additional invoice will be sent to cover the additional testing fees.
Additional basic model fees (if required) will not be billed until after all ENERGY STAR testing has been complete for the model under test.

4.1.3 SAMPLE SELECTION FEES

The Program Laboratory will coordinate the selection of test samples for verification. The Program Laboratory will bill fees for the selection of units directly to the Licensee.

4.1.4 Fee Administration

AHAM pays all Program administration and testing costs except those costs involved in the challenge procedure, additional sample acquisition and testing, additional filter acquisition and testing, shipping costs and costs associated with the Laboratory having to purchase samples on the open retail market. The Program will invoice Licensees for these expenses.

4.2 Yearly Production Survey

AHAM issues a yearly Production Survey to each Licensee in order to calculate fees for the Program (Appendix E). The Licensee is responsible for returning and certifying that the information is accurate and correct.

The following guidelines are to be used to determine which entity involved in a sourcing agreement is responsible for the model:

- If a Licensee buys products from another Licensee, the purchasing Licensee is responsible for the resulting Program fees and must include the sourced units in its own production figures.

- If a Licensee buys products from a non-Licensee, the Licensee is responsible for the resulting Certification Fees and must therefore include the sourced units in its product figures.

- A retailer who is a private brand owner and purchases units from both Licensee and non-Licensee manufacturers may be a Program Licensee. Such a licensee must claim the units manufactured by a non-Licensee as its production and will be responsible for all fees associated with these models.

- In the case of an alternative arrangement (i.e., selling Licensee agrees to pay the Certification Fees), the purchasing Licensee has the ultimate responsibility of ensuring the sourced product production data is properly reported and Program fees are paid.

Failure to return the yearly Production Survey by the due date may result in termination from the program.

4.3 Billing/Invoices

Licensees are invoiced quarterly. If invoices are not paid within 90 days after the invoice date, the participant will be given written notice that they have an additional 45 days to become current or may be subject to termination from the program. Upon termination, all models will be removed from the AHAM directory and The Mark must be removed from the products and packaging (see Section 7.1.10). If a terminated company wishes to rejoin the program, it will be required to pay all outstanding invoices, and a full year Program fees in advance.

4.3.1 Shipping and Invoicing Information

If the Program Laboratory finds it necessary to purchase a test unit, the Licensee will be invoiced for the full purchase price plus travel costs and time at the Program Laboratory's

normal rate. If the test sample has been supplied to the Program Laboratory on a consignment basis, it remains the property of the supplier and will be returned accordingly.

4.4 TERMINATION

A Licensee who is terminated from this Program shall not, upon receipt of notice from AHAM of its termination, reproduce The Mark on the packaging of any range hoods thereafter manufactured by or for its company and shall make no further reference to AHAM's CFM & Sound Values or the AHAM Range Hood Certification Program. This includes all sales literature, websites, and advertising. Money paid to AHAM quarterly as Certification Fees will not be refunded

5. PROGRAM PROCEDURES

5.1 CERTIFICATION

Under the Program, Licensees follow the procedure defined in this section to certify the operating power, standby power, and CFM & Sound, determined in accordance with the AHAM HRH-2 Standard (2020 edition), Rev 3.0. This standard is published under separate cover and is available to all interested parties upon request from AHAM.

For ENERGY STAR models, third party certification is required for CFM/Watt and Standby Power ratings, per ENERGY STAR requirements.

- ENERGY STAR® Program Requirements Product Specification for Residential Ventilating Fans Eligibility Criteria Version 4.1
- ENERGY STAR® Program Requirements, Product Specification for Luminaires – Eligibility Criteria for non-directional luminaires
- Measured versus Reported Values for ENERGY STAR Certification; EPA Directive 2011-05, current version (see Appendix F.1)

The Program Laboratory will conduct random verification tests and evaluate test data within the framework of the Standard, License Agreement and Procedural Guide requirements and ENERGY STAR eligibility requirements, where applicable. It is the responsibility of each participant to rate units in accordance with these documents and test results obtained from the Program Laboratory, or an Alternate Test Facility.

Licensees must use all practical means at their command to continuously assure that the certified ratings of their range hoods are in compliance with Program requirements.

5.1.1 ENTRY TO THE PROGRAM

Licensees enter the Program by having an authorized company representative sign a License Agreement with AHAM and remitting all necessary initiation fees. Contact AHAM for application information and the Program Laboratory for testing information and testing fees.

5.1.2 ALL LICENSEES AND NEW PARTICIPANTS

All range hood models in production in a new participant's product line that they wish to have in the directory on and after the date the License Agreement is signed must be certified. Certifications are not transferrable between products. All listed models must have established CFM & Sound ratings from testing according to AHAM HRH-2 Standard (2020), Rev 3.0 before entering the Program. These certification tests may be performed by the Program Laboratory or an approved Alternate Test Facility (see Section 1.4).

5.1.3 New Models

5.1.3.1 New Models

New models must be submitted to the Program on Form RH-1: Model Data/Model Submission Form (MSF) for Directory, no later than the first day they are advertised or sold by the Licensee as range hoods.

5.1.3.1.1 Whenever an AHAM Program Licensee decides to apply for a new certification for a product using the same model number as a previously certified product, the licensee shall explain in writing to AHAM how to differentiate between obsolete and current stock, so AHAM is able to procure the latest version if required. This requirement applies for any such situation whether it is the result of verification, challenge or a product design change.

5.1.3.1.2 Modification of a model number, including any change or substitution (e.g., of components or configuration) that will adversely affect the AHAM Verifide Certified performance, requires that the product be re-tested and re-certified. It is the Licensee's responsibility to evaluate and control changes that affect the Licensee's confidence in every AHAM certified performance parameter.

5.1.3.2 Preliminary Testing

All models must have established CFM & Sound ratings from testing according to AHAM HRH-2 Standard (2020), Rev 3.0 before entering the Program. This testing must be performed by either the Program Laboratory or an approved Alternate Test Facility. Payment to the laboratory for such testing is the responsibility of the Licensee and is to be handled strictly between the laboratory and the Licensee. See Section 5.1.4 for more details.

5.1.3.3 Establish CFM & Sound

To establish the CFM & Sound ratings, at least one production unit or one prototype model must be submitted to the Program Laboratory or approved Alternate Test Facility to ascertain certified ratings per 5.1.4. Minimum/Maximum Certified Rating values will be displayed on Form RH-7: Notice of Minimum/Maximum Certified Rating. The Licensee determines the certified CFM & Sound, based on the Minimum/Maximum Certified Rating values and communicates this rating to the appropriate test lab using form RH-1 (Model Data/Model Submission Form (MSF) for Directory).

5.1.3.3.1 AHAM Verifide Certification relies primarily on simplified single number ratings that may be insufficient information for designers who plan to incorporate a certified product into a complex non-residential system.

5.1.3.3.2 AHAM Verifide Certification is not appropriate for custom-made, one-of-a-kind, or commercial/industrial products. Other organizations administer programs for this class of products.

5.1.3.3.3 Both AHAM Verifide Certified ratings and licensed ratings from other certifying organizations may be presented on the same page, sheet or publication, as long as it is clear which ratings are certified by AHAM.

5.1.4 Certification Testing

The Licensee shall arrange for testing as described below:

5.1.4.1 Preparation. Preparation of a product for testing may include certain mountings, etc., as described in the HVI 915 or 916 test procedures. The product shall not be specially prepared or tuned because ratings represent performance of production products.

5.1.4.2 Submittal. Program Licensees shall submit the product to an AHAM-designated testing laboratory for product certification testing. The licensee shall designate the desired tests and the ratings that the licensee expects to certify.

Required forms such as test submittal data sheet and/or testing agreement or contract can be obtained directly from each AHAM designated laboratory.

5.1.4.3 Laboratory testing. The AHAM-designated laboratory shall test in accordance with AHAM HRH-2 and its foundational standards.

5.1.4.4 Test Report. The laboratory shall furnish the licensee a copy of a test report that includes the model number of the product tested, performance data, and sufficient photographs to document the test set-ups, and any other item appropriate to the product and test.

5.1.4.5 Fees for testing. Fees for product certification testing are to be paid directly to the testing laboratory by the licensee requesting the testing. Laboratory testing fee schedules are negotiated by AHAM from time to time and a copy of the current fee schedule is available from AHAM.

5.1.5 Application for Certification

The licensee who submitted the product for testing will ensure submission of the following items to the program lab in application for certification.

5.1.5.1 (If testing was not completed at the program lab) A copy of the complete test report, including sufficiently clear copies of the photographs to document the test setup, shall be requested from the testing laboratory to be sent directly to program laboratory. AHAM and the program lab will

not accept lab reports which are not provided directly from the AHAM-designated laboratory.

5.1.5.2 A completed Request for Certification of a Product. The forms required are the RH-1 (Model Data/Model Submission Form (MSF)) and RH-7 (Notice of Minimum/Maximum Certified Rating) forms. Certified ratings for High Speed and Working Speed are required to list a model in the Program.

5.1.5.2.1 Information required includes the name of the company requesting certification, the brand name of the product, the model number of the product, the test report identification number and date, the specific performance certification ratings requested for all applicable parameters, and the earliest date the licensee wishes AHAM to communicate the ratings.

5.1.5.3 Sales literature, or product specification sheet, describing the product tested (may be submitted later if not available at the time).

5.1.5.4 Evidence of listing by a safety agency (such as Underwriters Laboratories).

5.1.6 Issuance of Certification

The Program Lab will review the materials submitted and if all requirements have been met, and if everything is in order, will issue certification.

5.1.6.1 Communication and publication of certified ratings. After issuing certification, and after the Licensee-requested earliest date of publication, AHAM & the program lab are free to communicate the certified ratings and will publish the ratings in the next edition of the AHAM Verifide Directory. (Not Listed = Not Certified)

5.1.7 Certifying Derived Models – Requirements and Procedures

5.1.7.1 Requirements

5.1.7.1.1 A licensee may make application for certification of a "derived" model, basing the request on the test and ratings of a certified basic model for which the licensee already holds AHAM Certification.

5.1.7.1.1.1 A group of models that have a base and derived relationship because their AHAM Certification is based on the same test report are called a “family” of products in this publication. See Definition 1.19.

5.1.7.1.2 The derived model may be certified if it only differs from the basic model in aspects which do not adversely affect the product’s certified performance ratings, such as color, finish, name plate, or other similar variances. As with all

certification, the Licensee's confidence in the model's performance is required. See Definition 1.14.

5.1.7.1.3 Derived model certification shall not be used to avoid testing products that differ significantly from the basic model.

5.1.7.1.4 Performance, test, and rating representation issues with one model number in a family of model numbers shall result in the appropriate effect for the entire family because one test is the basis of the entire family's certification. (i.e., references to a model number within this procedure, including verification and challenge, apply to its entire family.)

5.1.7.1.4.1 The process for withdrawal is outlined in Section 5.2.9.5. In the specific case of a failed verification or challenge test resulting in withdrawal or re-certification of the failed model number or its ratings, the entire family shall be withdrawn or must be re-certified.

5.1.7.1.4.1.1 Exception: If a de-rated derived model passes verification or challenge tests, but test results would not be passing for other models in the family that are not de-rated, those other model numbers shall not be considered to have failed unless they do not meet their specific Certified rating. Those other models may be subjected to a verification test.

5.1.7.1.5 As stated in Section 2.12 which explains private label certification is permitted. A licensee may make application for certification of a derived model for another set of data based on the first licensee's base model.

5.1.7.1.6 A licensee may make application for certification of a derived model for another licensee or non-licensee based on the first licensee's basic model. The first licensee then assumes responsibility for any problems and enforcement. Through these steps non-licensee private label certification is permitted under the Licensee's control and listing of those brands.

5.1.7.1.7 Application for private label certification is the responsibility of the licensee responsible for the basic model.

5.1.7.1.8 Before AHAM can approve any requests for derived private label product certification, the participant desiring the derived private label certification shall be required to execute the AHAM Licensee Agreement (see Appendix B).

5.1.7.2 PROCEDURES

5.1.7.2.1 Certifying a derived model follows a procedure similar to certifying a basic model, with variations described in this Section. A licensee shall submit a Request for Product Certification to AHAM as described in Section 5.1.7.1.1.

5.1.7.2.1.1 All certification information about the basic model is required per RH-1 including, but not limited to, brand name, model number, test report date and model number. Copies of test reports already on file at the program lab are not required to be re-submitted for each listing request.

5.1.7.2.1.2 Using RH-2, the licensee shall describe in writing to the program lab the difference between the derived model number and the basic model number.

5.1.7.2.2 AHAM and the program lab shall review the request and its attachments and evaluate the described differences between the basic and derived models.

5.1.7.2.2.1 If the review finds that the basic model and the derived model have no inappropriate differences, the basic model is in good standing, and all submittal materials have been received, the program lab shall issue certification for the derived model.

5.1.7.2.2.2. If the evaluation of the described differences between the basic model and the derived model causes AHAM or the program lab to be concerned that the difference may have a negative effect on performance, AHAM and the program lab shall request appropriate action from the Licensee before issuing AHAM Verifide Certification. The requested action may include furnishing the program lab with inspection models or a proof test of the derived model.

5.1.7.2.3 The program lab shall issue product certification per 5.1.6 for the derived model in the same way it issues it for basic models, after everything is in order.

5.1.8 Presenting Certified Ratings – Form and Format

5.1.8.1 General Requirements

5.1.8.1.1 Certified Ratings shall be presented as prescribed below wherever the ratings are presented including on products, packaging and associated literature.

5.1.8.1.2 See HVI 920 Appendix I for conversion of units of measure between IP and SI units.

5.1.8.2 Airflow Ratings

5.1.8.2.1 Shall be expressed in cfm, in whole numbers. See HVI 920 Appendix I for SI units.

5.1.8.2.2 Shall be rounded down to the nearest 10 cfm.

5.1.8.2.3 In case more than one rating is to be certified by AHAM, the basic rating shall be rounded down to the nearest 10 cfm as indicated, and additional rating points shall be derived from a normalized curve to the nearest whole number. (See "normalized airflow curve" in section 2.10 and HVI 920 Appendix I.)

5.1.8.2.3.1 Exception: Duct termination fitting rating points shall be derived from the test airflow curve, rounded down to the nearest whole number.

5.1.8.2.4 Presenting ratings. For those products with more than one AHAM Certified airflow rating point, each rating point shall be identified by expressing its static pressure (Ps) in inches of water (in. w.g.). Products with a single rating point may list the static pressure along with the airflow rating. (See HVI 920 Appendix I for SI units.)

5.1.8.3 Sound (Loudness) Ratings

5.1.8.3.1 Shall be expressed in sones according to the rounding rules below.

5.1.8.3.1.1 Greater than 1.5 sones shall be rounded to the nearest 0.5 sones.

5.1.8.3.1.2 From 0.3 sones to and including 1.5 sones shall be rounded to the nearest 0.1 sones.

5.1.8.3.1.3 Less than 0.3 sones will be rated <0.3 sones, because sound testing resolution is inadequate to differentiate more finely at lower levels.

5.1.8.4 Energy Ratings (For Energy-To-Run-Fan – For Energy Recovery Products

5.1.8.4.1 Shall be expressed in watts using three significant digits (e.g., 21.3 Watts, 213 Watts). Watts ratings under 10 shall be expressed with two significant digits instead of three.

5.1.8.4.2 Shall be rounded up to the third digit.

5.1.8.4.3 Fan efficacy (cfm/Watt) may also be expressed in Licensee's literature, provided it is based on a direct calculation of as-tested watts and whole cfm, using data from the airflow test report at the rating point. Fan efficacy (cfm/Watt) is not a certified parameter, but the AHAM standard procedure for presenting fan efficacy is to round down to the nearest one decimal place (tenth). Licensees may optionally list fan efficacy at a lower value.

5.1.8.5 SOUND RATINGS

5.1.8.5.1 For products with more than one Certified speed rating, speed settings shall be identified for each rating point using the prescribed nomenclature as follows:

- HS – highest continuous speed
- MS – medium speed
- LS – lowest speed
- WS – working speed (applicable to range hoods only; See HVI 920, Appendix II, Kitchen Range Hoods – Particular Requirements)
- BS – an additional speed available to provide more airflow or static pressure when required by field conditions. The boost may be:
  - Temporary (non-continuous speed boost, selectable by consumer as needed for various conditions)
  - Permanent (continuous speed boost, selectable upon installation which cannot be changed by consumer and which, by default, becomes the new highest speed)

5.1.8.5.2 For products with infinitely variable speed controls, or with more than three discrete speed settings, and with Certified ratings at more than one speed, speed settings shall be identified by the Certified airflow at the basic rating point for that speed setting (e.g., 80 cfm, 90 cfm, 100 cfm), unless the Licensee elects to certify three or fewer speeds using the nomenclature in Section 5.1.8.5.1 in which case the medium speed is understood to be in the middle between the highest

and lowest speed settings. In cases where a model has an even number of discrete speed settings, medium speed is understood to be the lower of the two middle speed settings.

5.1.8.6 De-rating. Any Licensee company may apply for a lesser performance rating than is shown on the test submitted with the application for certification. The Licensee is required to have confidence the product will meet the ratings.

5.1.8.6.1. AHAM airflow certification ratings may be less than the maximum allowed based on the test report. Airflow ratings shall still be in 10's of cfm as noted in Section 5.1.8.2.2.

5.1.8.6.2 AHAM sound certification ratings may be more than the minimum allowed based on the test report.

5.1.8.6.3 AHAM Energy-to-run-fan(s) certification ratings may be more than the minimum allowed based on the test report.

5.1.8.6.4 AHAM Certified performance ratings of derived models may be de-rated from the Certified performance ratings of the basic model, or a basic model may be de-rated while a derived model is not. Regardless, each Licensee of a product family must pass AHAM Verification and Challenge, based on the Certified rating for that model number.

5.1.8.6.4.1 Basic and derived models must be equivalent in design and construction as described in Section 5.1.7.

5.1.8.6.5 De-rating shall not be used to avoid testing derived models that are not the same as described in Section 5.1.7.

5.1.8.6.6 AHAM Certification is based on "single number" ratings for most products. If multiple units are used for Program certification, that needs to be noted on the submission form. Note: EPA models must be a single sample certification. A full fan performance curve based on Certification testing may be presented in a Licensee's literature and/or website. The curve is not AHAM Certified. (See also Section 2.10)

5.1.8.6.6.1 AHAM nor HVI has no routine procedure for enforcing the accuracy of these curves. Nonetheless, AHAM may become involved as per Appendix B if it receives an inquiry about possible inconsistency. AHAM shall not permit misrepresentation of data related to AHAM Certification and shall protect its certified ratings program.

5.1.9 Record Keeping and Maintenance of AHAM Certification Records

5.1.9.1 The program lab shall maintain a file on each product it certifies. The file shall contain all items related to the product's certification, including a copy of the test report (except for derived models), the Request for AHAM Certification of a Product with attachments, and information documenting the history of all verification and challenge activity related to the specific model number.

5.1.9.2 Each Licensee shall maintain a similar file on its premises.

5.1.9.3 Either AHAM, the Program or the Licensee may call upon the other to help maintain records, furnish missing copies, etc.

5.1.9.4 Each Licensee that has derived or private label models shall furnish AHAM and the program lab information showing product ratings, identification data, test identification and the relationship between Basic and Derived models.

5.1.9.5 Each Licensee shall keep a record of all consumer/marketplace complaints made known to the Licensee relating to a product's compliance with the relevant product performance certification requirements. Each Licensee must take appropriate action with respect to such complaints and any deficiencies found in products that affect compliance with the relevant product performance requirements for certification. Actions taken must be documented.

5.1.9..5.1 Each Licensee must make these records available to AHAM when requested.

5.1.9.6 AHAM and the program lab shall compare information with the Licensee from time to time to verify consistency of record keeping.

5.1.9.7 Upon request from a Licensee competing in kitchen range hoods, AHAM shall review the request and determine how to respond without disclosing confidential information. If required AHAM, will recommend the challenge process.

5.1.9.7.1 Sharing basic and derived family information shall be limited to situations where it is not possible to identify clearly which family a certain product belongs to, and/or to identify all models within the family.

5.1.9.7.2 Sharing any potential basic-and derived family information shall be limited to one product family per request.

5.1.9.8 When a file is no longer active because a Licensee dropped a product, stopped doing business, etc., such files shall be retained by AHAM and the program lab a minimum of seven years.

5.1.9.8.1 Exception: When the product is a basic model that other models derive their certification from, the file shall be retained by AHAM and the program lab a minimum of seven years after all models in the family have been dropped.

5.1.9.9 Each Licensee is required to inform AHAM, without delay, of changes which may affect its ability to conform to the certification requirements. Examples of changes include, but are not limited to, the following:

- The legal, commercial, organizational status or ownership;
- Organization and management (e.g., key managerial, decision making or technical staff);
- Modifications to the product or the production method;
- Contact address and production sites (components manufacturing as well as final assembly sites);
- Major changes to the quality management system.

5.2 VERIFICATION

The Program Laboratory under contract to AHAM will perform annual verification testing. Tests at the Program Laboratory are to be performed on a randomly selected sample (new and unused) procured through open market retail purchases. Ten percent (10%) of each Licensee's basic models (or derivatives thereof) submitted for certification shall be tested annually. Twenty percent (20%) of all Licensee basic models shall be tested within a two (2) year period. A minimum of ten percent (10%) of ENERGY STAR models shall be tested for CFM & Sound, standby power, and operating power each program year.

If more than one-third of the Licensee's annual basic model tests result in a final test failure, then twenty percent (20%) of the Licensee's basic models shall be tested in the following Program Year. If the test failure rate for twenty percent (20%) of the Licensee's basic models is less than or equal to one-third, then testing will resume to ten percent (10%) of the Licensee's basic models the following year.

The fees will be billed directly to the Licensee for the samples purchased on the open market. Verification testing may be performed throughout the year. However, certified models may be re-tested at any time if there is reason to believe that there has been a detrimental change in a model's performance. This will be considered an Administrative Challenge, and the party in error (Licensee or Program) will pay fees for the testing (see Section 6).

Testing at the Program Laboratory will be conducted in accordance with the methods specified in AHAM HRH-2 Standard (2020 edition), Rev 3.0. The test will be done in the order of first CFM tests then Sound tests.

5.2.1 UNIT SELECTION

The Program Laboratory executes the testing in a given year consistent with Section 2.16, DETERMINATION OF MODELS TO BE SELECTED FOR VERIFICATION, which includes the nomination process for ENERGY STAR models.

Once specific models are selected, the Program Laboratory will order for the open retail market.

A model may be exempt and therefor excused from AHAM Program testing if a Licensee is able to demonstrate that an identical model or model from the same family was procured for AHAM Program verification testing in the preceding 12 months. The only exemption for ENERGY STAR verification testing is if a model has already been procured by an EPA-approved Certification Body ("CB") for verification testing. The Program Laboratory may decide to select alternative models for testing based on what is available on the open market and the EPA priority but needs final approval from AHAM on the selection.

The Program Laboratory will work with the Licensee to determine the age of the selected product.

If a second or subsequent unit must be tested (due to a defect as defined in Section 5.2.6), the Licensee will assume all costs of a new retail purchase.

5.2.1.1 UNIT NOT AVAILABLE AT RETAIL

When, after reasonable efforts have been made, it is determined by the Program Lab that a given model is not available for procurement through sources independent from the original equipment manufacturer (OEM) and/or brand owner, AHAM will allow procurement for testing up to three (3) samples of the given model directly from the OEM or brand owner's sales office or warehouse facility.

The models selected must follow a rigorous selection process by personnel from the Program lab. Once specific models are identified by the Program Labs, the Program Laboratory will send a selector to obtain Test Units for verification testing. The selector must be able to choose up to 3 random samples of each specific model(s) from a retail market distributor warehouse. The Licensee will not be informed of what models will be selected prior to the selector's arrival at the selection site.

If selecting from a manufacturer warehouse, the random model(s) must be selected from a lot of at least ten (10) units of the model to be selected. If selecting from a distributor, the random unit(s) must be selected from a lot of at least three (3) units when a single unit is selected. Once a selector identifies a unit for testing in the warehouse, the identified and marked units must leave the facility for shipping to the Program Lab within 48 hours of identification. The units cannot be disturbed and the marking will be evaluated once it arrives at the lab to assure the units have not been tampered with.

5.2.2 TESTING OF MODELS FOR ENERGY STAR VERIFICATION

For ENERGY STAR models, since certification is per 5.1.8.6.6, the program will follow Approach 1 per EPA Directive 2011-04, current version (see Appendix F.2).

5.2.3 VERIFICATION OF AHAM CFM & SOUND VALUES

During verification testing, the Program Laboratory will review The Mark, and the packaging with reference to the Program to determine if it is in accordance with this Guide and compare the stated values to the Certified Rating. When violations occur, the Program Laboratory will notify AHAM within ten (10) business days. AHAM will take appropriate action in accordance with this Guide (See Section 7).

5.2.3.1 When an AHAM Certified product is selected for verification, all certified ratings shall be verified.

5.2.3.2 Test witnessing of Verification Test by the Licensee shall not be permitted.

5.2.4 RUN-IN PERIOD

All range hoods will be not have a run-in by the Program Laboratory prior to verification testing. Products will be put directly on test once they are unboxed.

5.2.5 VERIFICATION TEST REPORT

The Program Laboratory will provide verification test results to the Licensee responsible for the model using a standard report, Form RH-5: Report of Verification of a range hood. A sufficient number of photographs will be taken to demonstrate test set-ups, product packaging, labeling, installation manuals, product specifications, and condition of the unit(s) tested. This report will not be further distributed by the Program Laboratory, except to AHAM in the instance that it is part of a confirmed non-compliance test report.

Once a model has been added to the Program, it must continue to be eligible for selection throughout the life of the model (i.e., for as long as it is offered for sale in that market.) The Program Laboratory will hold the results of all testing in strict confidence, except for:

1) Communication with the Licensee with regards to test results and findings on Licensee's own unit(s); or

2) Communication with Challenger with regards to test results on a challenged unit(s); or

3) Communication with AHAM in regards to test results and findings that indicate non-compliance with the AHAM Program or which AHAM deems necessary for the proper operation of the Program.

5.2.6 RANDOM DEFECT

For a unit to be considered a random production defect, there must be some aspect of the unit that is noticeably defective in a functional or visual manner to the consumer. If a sample is found to be defective by the Program Laboratory during setup and run in only, the Program Laboratory will select a second sample of the same model. The Licensee is responsible for any additional selection and shipping costs. Any unit found to be have a random defect will be replaced by the Licensee, including all units for ENERGY STAR verification.

5.2.7 Finding of Compliance to AHAM Program Requirements

5.2.7.1 The basis for analysis is the certified rating per RH-1, not the initial test report.

5.2.7.2 Range hoods will be tested using the vertical or horizontal discharge designated by HVI. See HVI 920 Appendix II.

5.2.7.3 The measurement for any production unit shall not be less than 90% of the claimed CFM listed in the AHAM directory and on RH-1. Tolerance for working speed airflow is ±15% of rating per HVI 920 Appendix II.

5.2.7.4 The measurement for any production unit shall not be more than 110% of the claimed Sound value plus 0.25 sones listed in the AHAM directory and on RH-1. Sound tests will require careful test laboratory set-up because the Licensee will not be mounting the product on the test ceiling panel.

5.2.7.5 When the model is compliant with the AHAM Program requirements, reported CFM & Sound values are continued in the Directory and a copy of the test report is forwarded to the Licensee and is available to AHAM. Compliance with the AHAM Program does not imply that the product is in compliance with the requirements set forward by government agencies.

5.2.8 Finding of Compliance with ENERGY STAR Eligibility Requirements

For ENERGY STAR models, the determination of compliance with ENERGY STAR eligibility requirements for Lighting, CFM/Watt, Sound and Standby Power shall be made according to the requirements noted below:

The single sample is evaluated against ENERGY STAR® Program Requirements Product Specification for Residential Ventilating Fans Eligibility Criteria Version 4.1.

- The Measured CFM/watt value should be greater than or equal to the ENERGY STAR specification requirements per EPA DIRECTIVE NO. 2011-04 (Appendix F.2).
- The measured Sound should be less than or equal to the ENERGY STAR specification requirements per EPA DIRECTIVE NO. 2011-04 (Appendix F.2).
- The measured standby power should be less than or equal to the ENERGY STAR specification requirements per EPA DIRECTIVE NO. 2011-04 (Appendix F.2).
- Lighting will be assessed to ENERGY STAR® Program Requirements, Product Specification for Luminaires – Eligibility Criteria for non-directional luminaires

5.2.9 Notification of Testing Failure for ENERGY STAR Models

ENERGY STAR models found to be failing a test and potentially non-compliant with the ENERGY STAR eligibility requirements, as outlined in Section 5.2.8, will be reported to EPA within 2 business days of confirmation of potential non-compliance. If this model is known to be offered into the Canadian marketplace, NRCan will be notified at the same time. The participant will be made aware of the potential testing failure after 2 business days. EPA will then proceed as outlined in the EPA Disqualification Process, current version (see Appendix F.3).

Note - If the values measured during a verification test meet the ENERGY STAR verification, but are not compliant with AHAM verification tolerance, as outlined in Section 5.2.7, the model is considered potentially non-compliant with the AHAM Program and the process outlined in section 5.2.10 will commence. EPA will not be notified of this type of potential non-compliance. If the participant chooses to withdraw the model from the ENERGY STAR program, but continues marketing the model, then the responses to potential non-compliance outlined in Section 5.2.9 apply to the model.

5.2.10 Finding of Non-Compliance with AHAM Program Requirements

If the results of the verification test are not within the tolerances outlined in Section 5.2.7, the Program Lab will immediately notify the Licensee of potential non-compliance with the requirements. All of the sample's ratings are classed "probationary" and they must be resolved. If the failed model number is part of a product family, all models in the family are probationary. Communication with the Licensee in this manner is not permitted when determining compliance with ENERGY STAR eligibility requirements per 5.2.8 or 5.2.9. The Licensee must confirm receipt of the potential non-compliance communication with the Program Laboratory within 24 hours. If receipt is not confirmed within this time, the Program Laboratory will continue to contact the Licensee and document the date when receipt of the potential non-compliance is ultimately confirmed. All timing requirements for the Program are initiated when the Licensee confirms receipt of the potential non-compliance to a maximum of 10 business days from first attempted contact.

Once the Licensee confirms receipt of the potential non-compliance notification, the Licensee may participate in a Documented Interview with the Program Laboratory. If a Documented Interview is requested, it must occur within ten business days of the notification of potential non-compliance to determine where differences in rating may have arisen. The Licensee must comply with any requests from the Program Laboratory regarding data, schematics or procedures used by the Licensee to determine the reported certified ratings.

If the Program Laboratory or Licensee identifies a random defect (see Section 5.2.6), the test result will be voided provided the Licensee provides an analysis/explanation of the defect within ten (10) calendar days of notification of non-compliance.

If random defect analysis is performed in the Program Laboratory and the defect is obvious to the Program Laboratory, the test result will be voided, and a second sample will be randomly selected and tested per Section 5.2.6. The purchase cost and test costs of the second sample will be billed to the Licensee. At the Licensee's request, the Program Laboratory technical staff is available to assist the Licensee in verifying relevant energy-using components and interpreting the Test Procedure.

If the test unit is not identified as having a random defect, the Licensee must select one of the following options within ten (10) calendar days after receiving notification of potential Program non-compliance:

Option 1: Challenge the Lab results (see Section 5.2.10.1)

Option 2: Re-Rate the model (See Section 5.2.10.2).

Option 3: Request that a second sample of the model be tested (See Section 5.2.10.3)

Option 4: Correct and retest (See Section 5.2.10.4)

Option 5: Withdraw its product from the market (See Section 5.2.10.5).

Figure 1 provides a summary of the options available and the timing for selecting an option when a Licensee receives a preliminary non-compliance notice. Shaded boxes indicate when AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

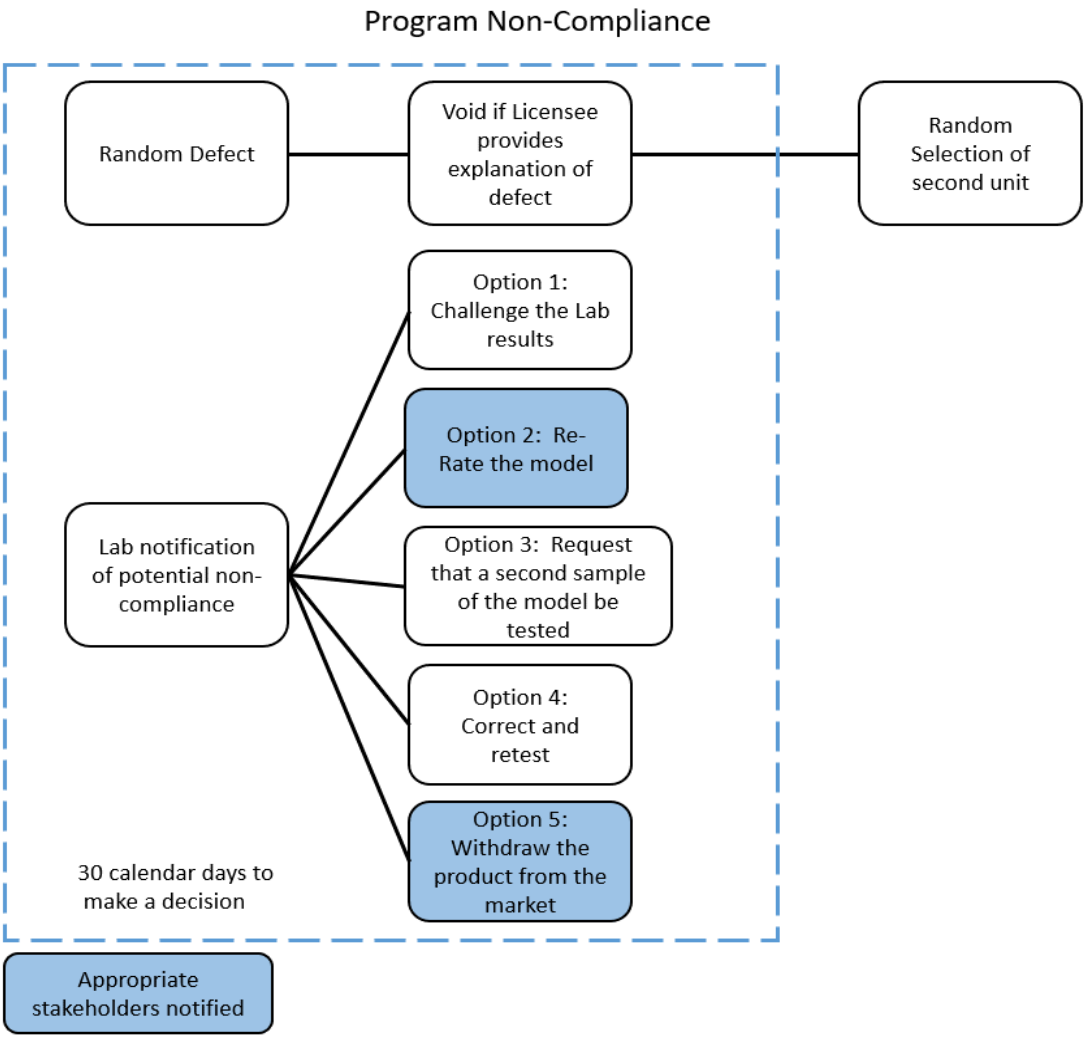


Figure 1 – Options for preliminary non-compliance notice

If the Licensee does not select an option within 30 calendar days, or the Program non-compliance is not sufficiently addressed within 60 calendar days, the Program Laboratory will notify AHAM. AHAM will notify the Licensee that: 1) the Licensee will be removed from the Program, which means all models will be deleted from the Program Directory; 2) The Mark must be removed from all Licensee's products and packaging; and 3) AHAM will notify Appropriate Stakeholders (See section 5.2.11) of Program non-compliance and the removal of the Licensee from the Program.

The manufacturer must come into Program compliance within the timeframe specified in Table 1. Timing for coming into Program compliance varies by the option chosen.

Table 1 – Program compliance timeframe for each option

Option	Description	Days to Notification*	Maximum days to resolution*
1	Challenge Lab results	30	45
2	Re-rate	30	60
3	Second sample testing	30	45
4	Correct & retest	30	60
5	Withdraw product from market	30	30

*After confirmed receipt of potential non-compliance

5.2.10.1 OPTION 1 – CHALLENGE LAB RESULTS

a. The Licensee may challenge the Program Laboratory's determination of potential non-compliance by providing: 1) a detailed written report on why it believes the test value determined by the Program Laboratory is incorrect; and 2) the calculation spreadsheet/protocol used by the Licensee to determine the rating in question. Within five (5) business days of receipt, the Program Laboratory will notify AHAM that it proposes to either accept the Licensee's method and withdraw the Program non-compliance or reject the Licensee's Lab challenge.

b. If the Program Laboratory's final response results in a withdrawal of its initial determination of Program non-compliance, the Program Laboratory will retest all units previously tested and issue a new finding of program compliance (Section 5.2.7) or non-compliance (Section 5.2.9). If the Program Laboratory's final response is a rejection of the challenge, the Licensee must proceed under Option 4: Withdraw Product from Market (Section 5.2.9.5).

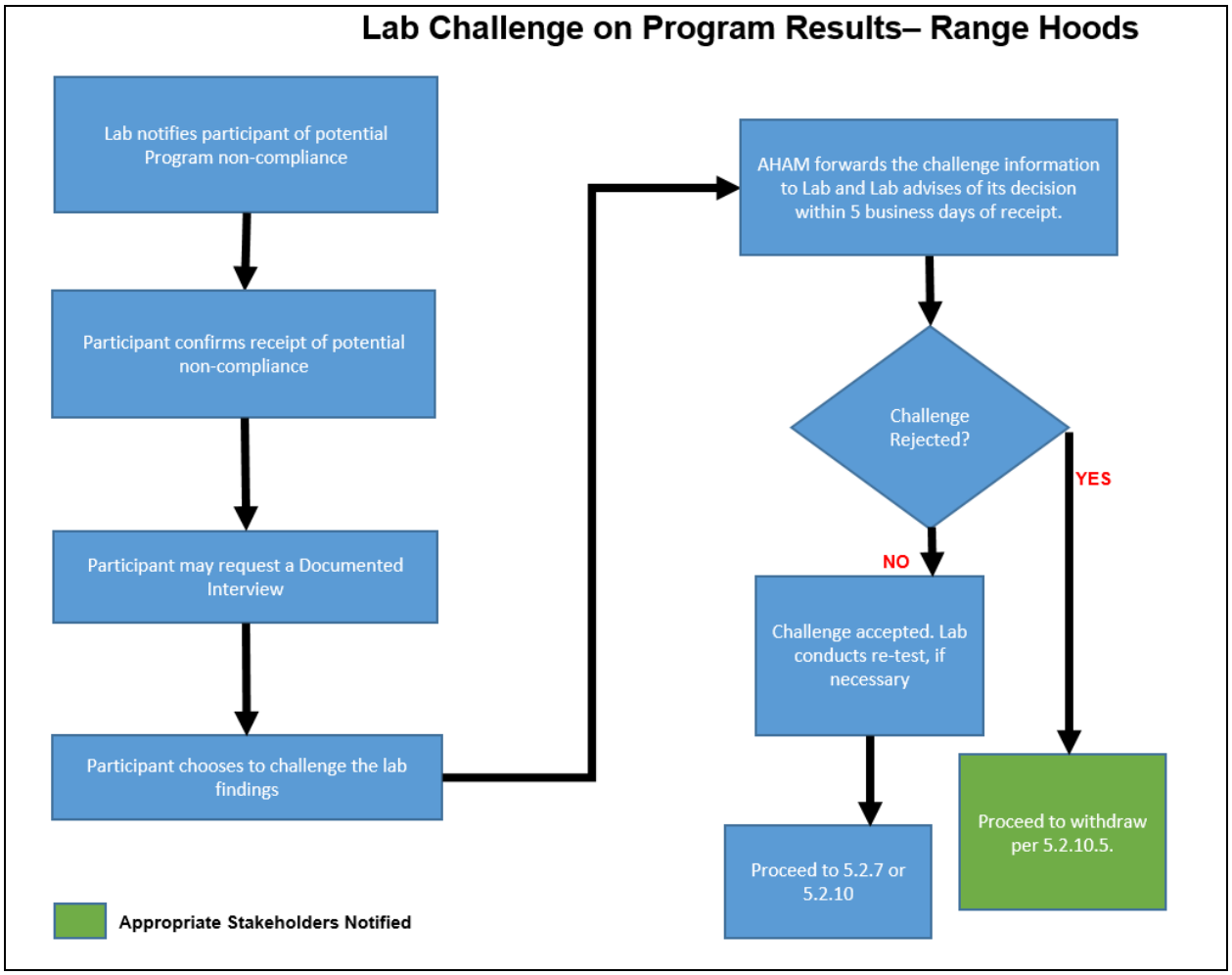


Figure 2 – OPTION 1: Challenge Lab Results

5.2.10.2 OPTION 2 – RE-RATE THE MODEL

If model re-rating is required, the Program Laboratory will send Form RH-6: Notice of Non-Compliance, using certified return receipt mail, to the Licensee responsible for the model. This notice clearly states the next steps to be taken by the Licensee:

a. Shall, within thirty (30) business days from the receipt of Form RH-6: Non-Compliance Notification, revise all future stated claims, in accordance with the Program Laboratory's determination for the Basic Model. The revised claim must not be greater than the Program Laboratory's findings. The Licensee must submit to the Program Laboratory an updated Form RH-1: Model Data for Directory, and if appropriate, Form RH-2: Cross Index of Model Numbers by Brand.

b. Shall, at its expense, within thirty (30) business days from the receipt of Form RH-6: Non-Compliance Notification, give written notice of the revised claim for each model within the Basic model (whether or not all are currently in production) to AHAM and the Program Laboratory.

c. Shall, within thirty (30) days of receipt of Form RH-6: Non-Compliance Notification, correct the certified rating displayed in conjunction with the AHAM CFM & Sound values on the packaging of all future units of that model(s) produced, and shall furnish copies of such revised CFM & Sound values rating to AHAM.

d. Shall revise labels of existing inventory within two (2) months.

e. Shall revise all literature and advertising (for example, specification sheets, full line folders, ad mats, plus any other sales promotion and/or advertising materials that could be used with potential customers) within two (2) months.

f. Shall provide corrected copies of literature, publicity, packaging, etc. to AHAM and all channels in its first line of distribution within two (2) months of re-rate.

When the Licensee, within the allowable time period, takes the required actions, AHAM will advise other Licensees by letter of the re-rate action.

If the Licensee fails to take any of these actions in the allowable time period, AHAM will notify the Licensee that it is in default under the Licensee Agreement, and request that the notices be sent immediately. All other Licensees will be advised of the re-rate action by a letter from AHAM. If the above actions are not completed, AHAM will take appropriate steps to terminate the Licensee from the program.

Revised ratings will be kept on file at AHAM and made available to anyone requesting information on certified ratings. Notice of termination of a participant will be sent to other Licensees, appropriate Government Agencies, and relayed to other interested parties on request.

Licensees observing or receiving reports of re-rated models on display or advertised at other than the re-rated value are urged to report the fact, with identifying details, such as the safety listing agency date code, to AHAM. AHAM will bring the facts to the attention of the Licensee responsible for the brand involved without identifying the source of the complaint and request a report of corrective action taken. Within fifteen (15) business days, the Licensee responsible for the brand must take corrective action and furnish a report evidencing such action to AHAM or will be excluded from the Program.

5.2.10.2.1 Basic Model Brand Name Re-ratings

The Program requires that a basic model and all models derived from that basic model shall be re-rated if any one derivative of that Basic Model is re-rated. This includes all brands of the basic model whether manufactured by the Licensee or for the Licensee by another manufacturer.

Figure 3 provides a summary of the steps required and the timing for selecting to re-rate the tested model(s). Shaded boxes indicate when

AHAM will notify Appropriate Stakeholders (See section 5.2.11) of P

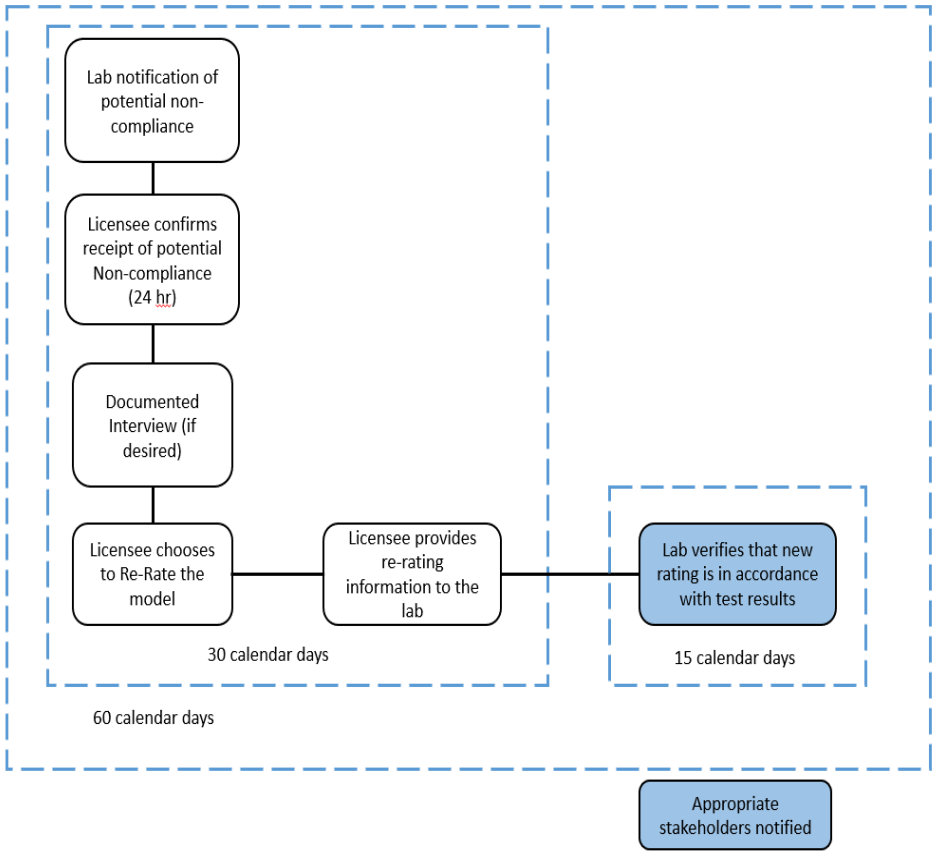


Figure 3 – OPTION 2: Re-rate the Model

5.2.10.3 OPTION 3 – SECOND SAMPLE SELECTION

This option authorizes the Program Laboratory to obtain and test an additional unit of the same basic model (at the Licensee's expense). The request for a selection of a second sample of the model must be made within twenty (20) business days from the receipt of Form RH-6: Non-Compliance Notification from the Program Laboratory.

A verification test, using the methods in AHAM HRH-2 (2020), Rev. 3.0, will then be performed. The certified ratings are continued if the results of the second sample indicate that the certified ratings are within the allowable tolerances. If the unit performs outside the tolerance for its stated values, the Licensee must choose to either re-rate or discontinue the model (See Option 2 and Option 4).

If a second sample is not available for random selection within thirty (30) business days from receipt of Form RH-6: Non-Compliance Notification, the Licensee must re-rate (See Section 5.2.9.2), or discontinue the unit and all derivative models based on the Program Laboratory's test results of the operative sample or samples (See Section 5.2.9.5).

If the Licensee exercises Option 3, Second Sample Selection and the test unit fails, the Licensee shall re-rate the model to the average of the first and second sample tests (See Section 5.2.9.2) or withdraw the model from the market (See Section 5.2.9.5).

Figure 4 provides a summary of the steps required and the timing for selecting a second sample test. Shaded boxes indicate when AHAM will notify Appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

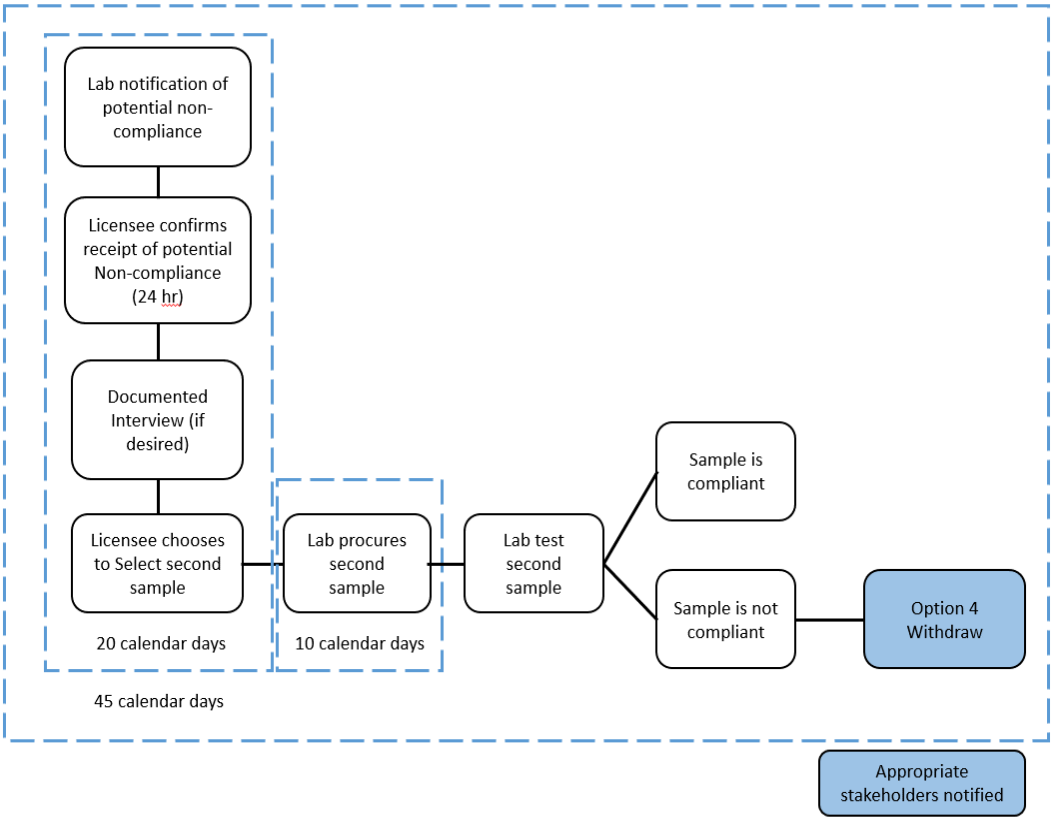


Figure 4 – OPTION 3: Second Sample

5.2.10.4 OPTION 4 – CORRECT & RETEST

If a Licensee elects to add necessary components or modify their factory process to meet their reported certified for non-ESTAR models, it shall, within fifteen (15) business days of receiving a notice of Program non-compliance, provide the Program Laboratory with a summary of their findings and the corrective actions taken for all models within the Basic Model. A random sample will need to be verified by the Program Laboratory within seventy (70) business days after the Program Laboratory receives notification that the Licensee has selected this option.

By selecting Option 4, the Licensee accepts the Program Laboratory's notification of non-compliance and AHAM will notify Appropriate Stakeholders (See section 1.5) that the Licensee has chosen to modify components based on a verification test. The Licensee's documentation of their findings and corrective actions will also be forwarded to Appropriate Stakeholders (See section 1.5).

If the Licensee exercises Option 4, and the second verification test unit fails, the Licensee shall follow the requirements for withdrawing a model (see Section 2.9.5).
If the Licensee exercises Option 4 and the second verification test results in Program compliance, AHAM will notify Appropriate Stakeholders (See section 1.5) of the Program findings and the actions taken by the Licensee. The Licensee is responsible for any additional information which may be required by regulatory and other voluntary programs.

Figure summarizes the steps that must be taken, and the timeframe, for exercising Option 4.

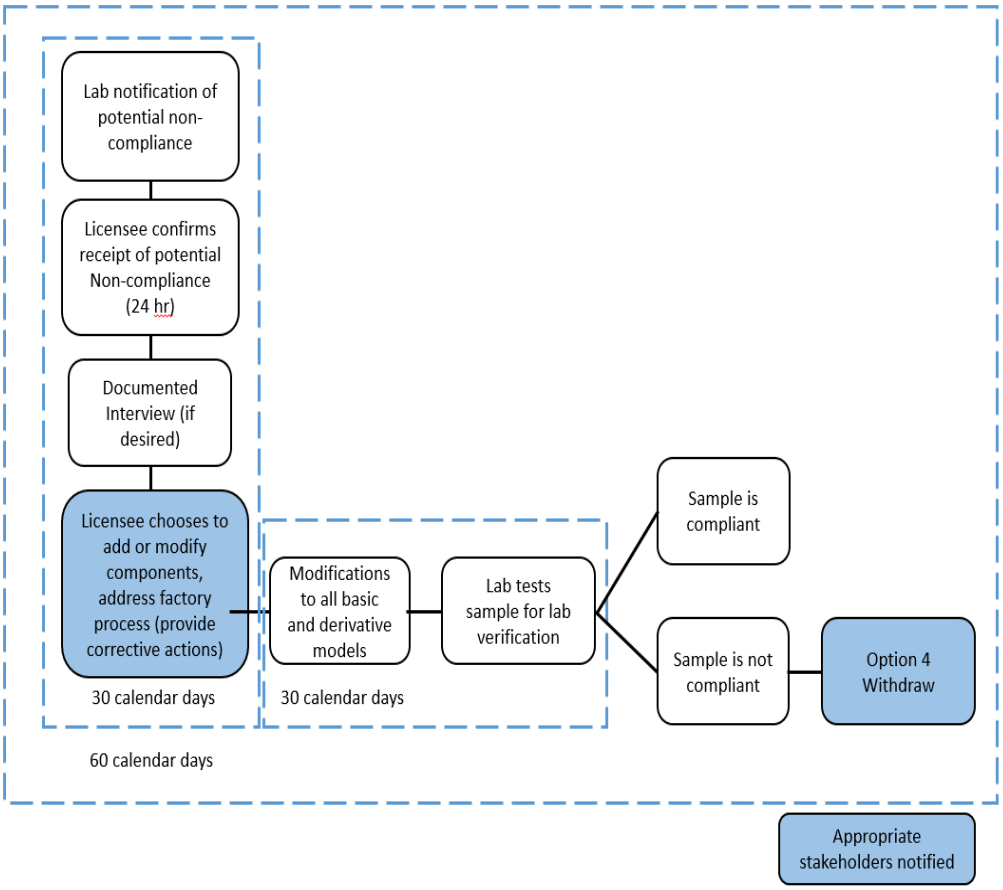


Figure 5 – OPTION 4: Modify Components

5.2.10.5 OPTION 5 – WITHDRAW THE MODEL

The Licensee must withdraw the model, produce no additional units of that model, and show it as a revised rating in the next edition of the Directory under the heading "Discontinued Models." In the subsequent Directory edition, it will show as a deleted model if no further units are in the marketplace. The Licensee must send written notice to AHAM and the Program Laboratory within ten (10) business days from the receipt of Form RH-6: Non-Compliance Notification, stating no further production will occur for this model. This constitutes an acceptance of the Program non-compliance and AHAM will notify Appropriate Stakeholders (See Section 5.2.11)
When a model has failed verification testing, has been discontinued by the Licensee and has been replaced by a counterpart model, the counterpart model shall carry a new model number and shall be subjected to the provisions under New Models (see Section 5.1.3).

If the Licensee believes that the unit selected for Verification Testing is not representative of units produced, the Licensee may request the Program Laboratory to analyze the unit or choose to have the unit returned for analysis.

Figure 5 provides a summary of the steps required and the timing when withdrawal of the model(s) is required. Shaded boxes indicate when AHAM will notify Appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

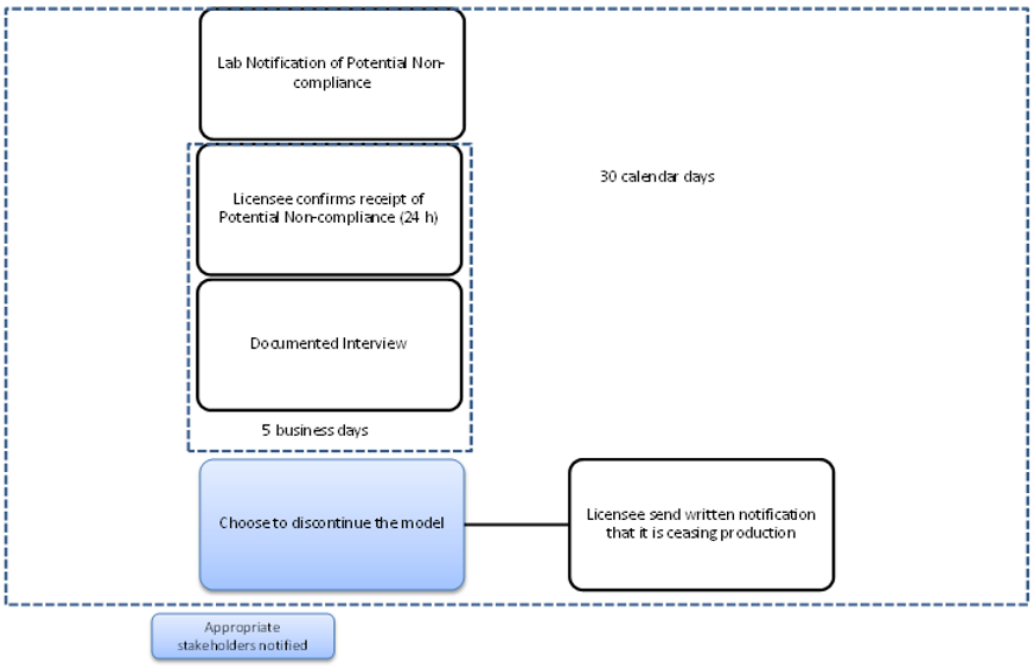


Figure 6 – OPTION 5: Withdraw Model

5.2.11 TERMINATION

Upon being notified of termination from the Program, the terminated licensee will, within sixty (60) days, cease distribution into commerce range hoods with packaging bearing The Mark. AHAM will immediately remove the listing of their models from the web site (www.aham.org/AHAM/What_We_Do/Kitchen_Range_Hood_Certification) and the Directory and, in the event the company is an ENERGY STAR partner, EPA will be notified of termination (See Section 7.1.10).

A Licensee who is terminated from this Program shall not, upon receipt of notice from AHAM of its termination, reproduce The Mark on the packaging of any range hoods thereafter manufactured by or for its company and shall make no further reference to AHAM's CFM & Sound Values or AHAM Range Hood Certification Program. This includes all sales literature, websites, and advertising. Money paid to AHAM quarterly as Certification Fees will not be refunded.

5.2.12 WITHDRAWAL

Upon notifying AHAM of a withdrawal from the Program, the licensee will, within sixty (60) days, cease distribution into commerce range hoods with packaging bearing The Mark. AHAM will immediately remove the listing of their models from the web site (www.aham.org/AHAM/What_We_Do/Kitchen_Range_Hood_Certification) and the Directory and, in the event the company is an ENERGY STAR partner, EPA will be notified of withdrawal (See Section 7.1.10).

5.2.13 RETURN OF UNITS

Test units, or units selected for ENERGY STAR testing that did not need to be tested shall be returned to the appropriate Licensee approximately fifteen (15) calendar days after the Licensee receives the final test report for all units tested for that Licensee. Returned unit(s) will be sent on a COD basis, unless the Licensee has made previous billing or disposition arrangements with the Program Laboratory.

6. CHALLENGE PROCEDURE

6.1 CHALLENGE RULES

The purpose of the AHAM Challenge is to strengthen the AHAM-Certified ratings program and to provide for resolving a documented dispute between Licensees regarding AHAM-Certified Ratings. The dispute may involve certified ratings and/or performance, or the presentation of ratings to the marketplace.

A Licensee within the Program may challenge another Program Licensee, using the Challenge Request Form RH-9 (see example in Appendix C). The Challenge Request Form must be submitted to the Program Laboratory. Challenges shall be in "good faith," with substantial supporting documentation provided to the Program Laboratory at the time of the challenge. Program Licensees may not challenge non-Licensees; this is outside the scope of this Program.

However, if AHAM receives multiple indications from Program Licensees that a non-Licensee may have questionable CFM & Sound, AHAM may initiate a challenge of the specified non-Licensee working through the Task Force. There must be unanimous agreement of the Task Force to challenge the non-Licensee, as Program funds will be used for the Challenge.
AHAM may not challenge a Program Licensee.

6.2 INITIATING A CHALLENGE

A Licensee may challenge CFM and or Sound values. For all challenges, the challenging Licensee ("Challenger") must complete and submit Challenge Request Form RH-9 to AHAM. For the challenge to take place, the Challenger must include an explanation of why the challenge should be granted. To exercise challenges, the Challenger must authorize the Program Laboratory to proceed at the Challenger's expense for the initial Program Laboratory test.

Upon receipt of the Challenge Request form, AHAM will notify the challenged Licensee ("Challenged Manufacturer") in writing, with a copy to the Program Laboratory, of the challenge. The Program Laboratory will then acquire a sample of the challenged model and perform verification testing per Section 5.2. AHAM and the Program Laboratory shall keep the identity of the Challenger and Challenged Manufacturer under this challenge procedure in confidence throughout the challenge proceedings.

If the challenge is not upheld, the Challenger must pay the Program Laboratory for all costs incidental to the test(s). Upon completion of testing, the test unit will be shipped, COD, to the challenger.

If the Program Laboratory results do not verify the Challenged Manufacturer's reported certified ratings, this will be considered a "Verified Challenge." AHAM Staff shall inform the Challenged Manufacturer of the Verified Challenge, including all test data and test report information and the challenged model will be put under probation. The Challenged Manufacturer may also select to follow the steps defined in Results of Non-compliance, as provided in section 5.2.9.

In either case (Verified Challenge or not upheld Challenge), the Program Laboratory shall inform both the Challenger and Challenged Manufacturer of the testing results and provide test data and test report information.

Within thirty (30) calendar days of receipt of a Verified Challenge, the Challenged Manufacturer shall submit a written statement to the Program Laboratory, with copy to AHAM, either 1) disputing the Verified Challenge or 2) agreeing to withdraw its product from the market.

If the Challenged Manufacturer does not dispute the Verified Challenge, it must withdraw its product from the market within thirty (30) calendar days of the receipt of the Verified Challenge. The Challenged Manufacturer must pay all Program Laboratory testing costs incidental to the Verified Challenge.

If the Challenged Manufacturer disputes the Verified Challenge, it must, within thirty (30) calendar days of receipt of the Verified Challenge, provide AHAM Staff with a detailed written summary of its method for determining CFM & Sound for the challenged parameter and support for why this is the correct method. AHAM staff will send it to the Program Laboratory. Within fifteen (15) calendar days of receipt, the Program Laboratory will either accept the Challenged Manufacturer's method and withdraw its Verified Challenge or reject the Challenged Manufacturer's method and reinstate the Verified Challenge. Upon reinstatement of the Verified Challenge, the Challenged Manufacturer must, within thirty (30) calendar days, withdraw its product from the market.

6.3 Voluntary Changes in Ratings

Licensees are allowed to make adjustments to the certified ratings as warranted by reason of quality control data review or annual verification testing. This may be done at any time and does not affect the Licensee's financial obligations under the challenge procedure if it should be in effect during the time the voluntary change is made.

Licensees must notify the Program Laboratory and AHAM when a voluntary change in certified rating is made and provide the Program Laboratory with the revised rating for the model on a revised Form RH-1: Model Data/Model Submission Form (MSF) for Directory. If the rating is to be greater than previously certified, the Program Laboratory must first select and test a sample of the model to support the increased rating. This additional test is not necessary if all previous Program Laboratory verification test results on the model support the increased rating. The Licensee will be responsible for all fees associated with the testing. In the event the Program Laboratory's test is unable to verify a Licensee's increased voluntary change in rating, the original certified rating will remain in force.

The Licensee shall provide corrected copies of literature, publicity, packaging, etc. to AHAM and all channels in its first line of distribution within two (2) months of re-rate. The voluntary change in ratings will also be kept on file at AHAM and relayed to interested parties on request.

6.4 Multiple Challenges

If the Program Laboratory is working on a challenge and receives a separate challenge relating to the ongoing challenge, the Program Laboratory will notify AHAM, and then notify

the second Challenger that a challenge is already underway. Confidentiality between both the Challengers and the Challenged Manufacturer will be maintained. Ultimately, if the challenge is not upheld, the Challengers will split the challenge costs. The Program Laboratory may receive multiple challenges on a similar issue. The Program Laboratory is responsible for reviewing the technical viability of each challenge.

6.5 CHALLENGE OF NON-PARTICIPANT

A **Participant** may challenge the reported claims, or an algorithm of a Non-**Participant**'s model. For all challenges, the challenging **Participant** (Challenger) must agree to pay costs of the challenge (cost = test cost plus admin cost, plus any potential penalty and/or lab challenge costs), and also complete and submit Challenge Request Form found in the appropriate AHAM Verification Program Procedural Guide Part 2 to AHAM Staff. For the challenge to take place, the Challenger must include an explanation of why the challenge should be granted. For claims or algorithm challenges, the Challenger must authorize the **Program Laboratory** to proceed at the Challenger's expense for the initial **Program Laboratory** test.

Once the Challenge Request form has been submitted to AHAM and if adequate information is submitted by the Challenger that meets the acceptance criteria to proceed, the process will move on to testing by the Program Laboratory. If inadequate data is submitted to proceed or is unduly burdensome and the AHAM program participant (Challenger) still wants to proceed, they can appeal to the AHAM Major Appliance Verification Steering Committee (MAVSC). If the MAVSC rules against the appeal, the challenge ends. If the MAVSC agrees with the appeal, the process will move on to testing by the Program Laboratory.

AHAM will notify the challenged Non-**Participant** (Challenged Non-**Participant Manufacturer**) in writing, with a copy to the **Program Laboratory**, of the challenge. The **Program Laboratory** will then acquire a unit of the challenged model from the marketplace and perform verification testing. AHAM and the **Program Laboratory** shall keep the identity of the Challenger and Challenged Non-**Participant Manufacturer** under this challenge procedure in confidence throughout the challenge proceedings.

If the **Program Laboratory** test results do not verify the Challenged Non-**Participant Manufacturer's** reported certified ratings, this will be considered a Successful Challenge (Challenge Upheld). AHAM staff will inform the Challenger and Challenged Non-**Participant Manufacturer** of the Successful Challenge. The Challenger and Challenged Non-**Participant Manufacturer** will receive copies of reports and findings of the Challenge testing.

The Challenged Non-**Participant Manufacturer** can either accept the results or dispute the findings.

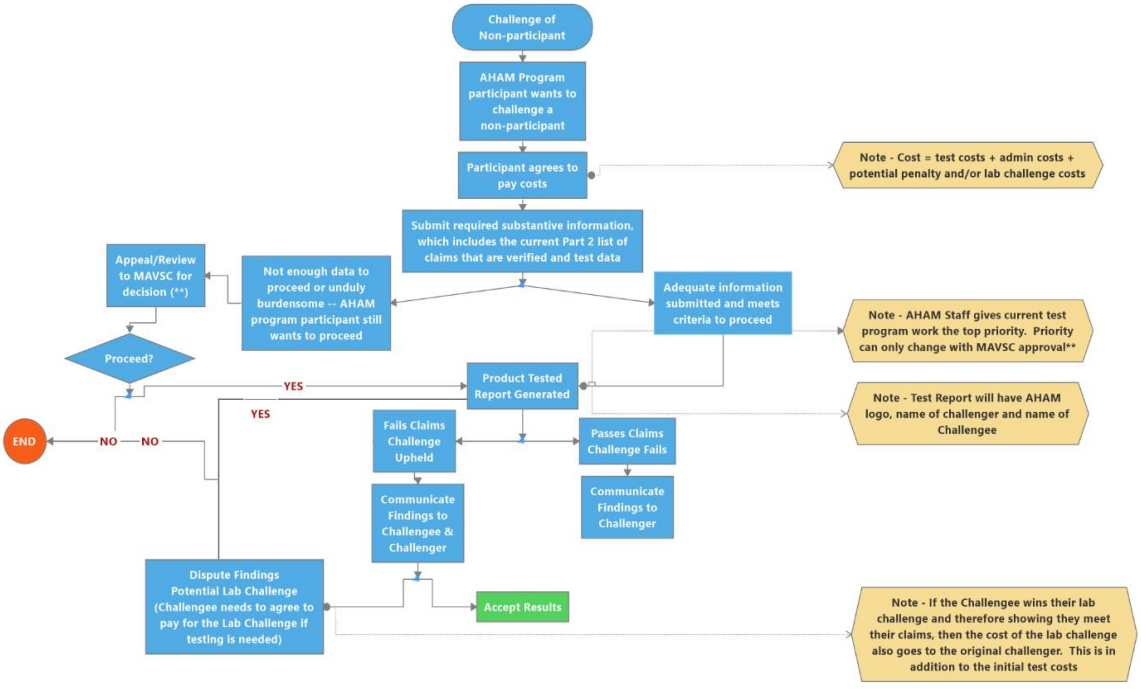
- The challenged non-**Participant Manufacturer** may dispute the Successful Challenge with a Lab Challenge. Within thirty (30) business days of receipt of the Successful Challenge notification, the Challenged Non-**Participant Manufacturer** is to provide AHAM staff with a detailed written summary of its method for determining claims and support for why this is the correct method. The Challenged Non-**Participant Manufacturer** may need to agree to pay for any additional testing they request**.** AHAM will send this to the Program Laboratory. Within fifteen (15)

business days of receipt, the **Program Laboratory** will either accept the challenged manufacturer's method and withdraw its Successful Challenge or reject the challenged manufacturer's method and reinstate the Successful Challenge.

- The challenged non-**Participant** Manufacturer may accept the Successful Challenge by sending acknowledgment to AHAM. This information will be provided to the Challenger.

If the **Program Laboratory** test results confirm the Challenged Non-**Participant Manufacturer's** reported certified ratings, this will be considered a Failed Challenge (Challenge Fails). AHAM staff will inform the Challenger of the Failed Challenge. The Challenger will receive copies of the reports and findings of the Challenge testing. The Challenged non-Participant will be notified that the Challenge is closed.

Upon completion of testing, the test **Unit** will be shipped, COD, to the challenger. The costs of the challenge will be billed to the Challenger.



7. RULES FOR USE OF THE MARK, ADVERTISING AND PROMOTIONAL REFERENCES TO THE PROGRAM

AHAM has no interest in or authority to limit any claims that do not directly impinge on the validity or credibility of the AHAM Range Hood Certification Program Scope. Validation of claims made outside the Program parameters requires separate and independent substantiation.

7.1 RULES FOR USE OF THE MARK AND ADVERTISING

Program and AHAM Verifide Mark in specifications, literature and advertising. Licensees are encouraged to properly use and promote the AHAM Range Hood Certification

7.1.1 THE CFM & SOUND VALUES

Packaging for these units must display the Mark in accordance with this Procedural Guide on units sold in the United States and Canada.

The Mark when used on range hood packaging or on any sales or advertising literature shall conform to the following guidelines:

a. Certified values must be empirical, not estimated.

b. Size of The Mark shall be such that all lettering is legible.

c. The word content of The Mark shall be identical to the artwork provided by AHAM. For languages other than English, see Section 7.1.3.

d. Voltage and frequency of the unit shall be stated. If the unit has multiple voltage/frequency combinations and only one combination will be verified, the CFM & Sound at the lowest voltage must be reported.

e. The CFM & Sound values cannot be greater than the Minimum/Maximum Certified Rating provided by the Program Laboratory.

f. CFM & Sound is to be displayed in a manner in which the pollutant is clearly defined for the given rating.

g. In the event of a difference between the AHAM Program and local governmental requirements in the country of sale, (i.e. room size markings), the AHAM Verifide Mark and relevant AHAM HRH-2 performance claim shall be located on the same retail packaging panel. Each performance claim must be listed with reference to the appropriate standard.

h. Only CFM & Sound are certified. No implication shall ever be made that The Mark covers any other feature or performance factor.

7.1.2 AHAM Verifide Mark

The AHAM Verifide Mark must be present on or near the serial label on the product. See Appendix D.

7.1.3 Language Translation of AHAM Verifide Mark

For models produced and/or distributed in languages other than English, Licensees must provide AHAM with a representative translation of The Mark. After confirmation of the translation, AHAM will add the approved, translated mark to the AHAM graphics. A one-time administrative cost, determined by the Range Hood Certification Task Force, will be charged to the Licensee for translation verification and development of The Mark in the approved language. This Mark would then be available for use by all Licensees in accordance with the terms of this License Agreement and Guide.

7.1.4 Improper Ratings and Claims

During annual verification testing, the Program Laboratory will evaluate the communicated values to determine if it is in compliance with the current ratings listed in the Directory. In the event an incorrect room size or area claim is made on either unit packaging or in advertising or promotional literature, AHAM will immediately notify the Licensee making the incorrect claim that it is in violation of Program procedures and instruct the Licensee to correct the information. Within thirty (30) days of written notice from AHAM, all units being produced shall have the correct information on the package. Within two (2) months following AHAM's written notification, all warehouse inventories, advertising, packaging, and literature must have the correct information.

Failure to take the actions as specified within the allowable time period will result in termination of the Licensee by AHAM.

7.1.5 Statement to Accompany any Reproductions on Literature

The Mark may be used in advertising or promotional literature. However, there may be no alteration in the design of The Mark and Licensee must still follow brand guidelines as cited in Appendix D.

7.1.6 Mixing Certified and Non-Certified Models

Range Hood models that are not certified may not be listed, indicated or described in literature, advertisements, or point-of-purchase material in which AHAM certified models are also listed or described in such a way as to imply that all are certified. If certified and non-certified models are displayed in literature or catalogs, a designation shall be shown of which units are and are not AHAM certified.

7.1.7 Defining What is Being Certified

Only the CFM & Sound ratings (per identified ducting, if applicable) are certified. No implication shall ever be made that The Mark covers any other feature or performance factor.

Any other quantitative performance claims CFM and Sound should appear on the same packaging or literature as the AHAM Mark must be clearly defined by AHAM test data, and

shall be shown to be a scientifically sound derivation of certification test results. Other performance claims cannot imply or state that they are based on AHAM test results.

7.1.8 Reference to the Program Laboratory

Any reference to the Program Laboratory under contract to AHAM must clearly indicate that its function in the Program is limited to testing and technical administration.

For instance, the statement "CFM & Sound is verified by AHAM based on tests by a Laboratory under contract to AHAM" is acceptable. But the statement “CFM & Sound is verified by AHAM and a laboratory" is not acceptable, for it implies incorrectly that the Program Laboratory has a separate verifying function.

7.1.9 Examples of Improper Use or Statements

These rules and suggestions were established to properly promote the AHAM Range Hood Certification Program and are not intended to otherwise limit or restrict participants’ advertising.

Examples that are unacceptable because they might cause confusion as to the scope of the AHAM Range Hood Certification Program are:

a. Accurate uses of The CFM & Sound Values and statement of scope, except when the statement is immediately followed by a phrase such as: “You know you're getting all the clean air delivery you're paying for.” (AHAM makes no verification as to the sales value of any particular model).

b. Any use of the following is unacceptable:

"AHAM rated CFM & Sound. The Association of Home Appliance Manufacturers' Mark is found on the packaging of all (brand name) range hoods and signifies that all performance data are certified as accurate." (All performance data are not certified.)

"Every ... range hood rating is AHAM verified." (Every rating is not verified -- only CFM & Sound.)

"CFM & Sound values are certified by AHAM." (The CFM & Sound values are certified by the Licensee, and verified by AHAM.)

7.1.10 Discontinuing Use of Mark and References to AHAM Range Hood Certification Program

Upon notifying AHAM of intent to Withdraw, or, being notified of termination from, the Program, the withdrawing or terminated licensee will, within sixty (60) days, cease distribution into commerce range hoods with packaging bearing The Mark. AHAM will immediately remove the listing of their models from the web site (www.aham.org/AHAM/What_We_Do/Kitchen_Range_Hood_Certification) and the Directory and, in the event the company is an ENERGY STAR partner, EPA will be notified of termination.

Said Licensee must immediately discontinue publication of documents (including advertisements, websites, etc.,) containing The CFM & Sound values with The Mark or any reference to the Licensee's participation in the Program.

The Licensee must also notify all channels in their first line of distribution of the withdrawal or termination. This notification is required to ensure that the initial customers to whom the Licensee is selling are made aware of the removal of products from the AHAM Range Hood Certification Program

7.2 Submission of Specification Sheets and Promotional Materials for Program Inspection

Two copies of the following shall be forwarded to AHAM upon request:

a. Two copies of specification sheets for model(s) subject to the Program;

b. Two copies of promotional literature which refer to, illustrate, or describe certified models.

AHAM will review these to assure that references to The Mark and Program provisions are in accordance with these recommendations.

APPENDIX A: RATINGS DOCUMENTATION CLARIFICATIONS FOR USE IN THE AHAM RANGE HOOD CERTIFICATION PROGRAM

1. The certification of performance ratings of CFM and Sound within the AHAM Range Hood Certification Program shall be performed in accordance with HVI 920 subject to the amendments specified below:

    a. The term HVI Certification is replaced with AHAM certification and this procedure guide explains AHAM's certification methods

    b. Sections from HVI 920 for products other than range hoods are not used as the AHAM program is only for Range Hoods.

    c. Requirements to communicate with HVI members will not be followed and will be replaced with communication to AHAM members

    d. HVI 920 - Section 1.2.2. Testing is not done in a HVI designated lab.

    e. HVI 920 -Section 1.2.3 AHAM uses a program lab to administer the program and submission of the data. See lab obligations under AHAM PG Section 3.4.

    f. HVI 920 - Section 2.5. Refer to AHAM HRH-2 for test methods used by this program.

    g. HVI 920 Section 4.22 AHAM follows the requirements of NEC 422.6 for listing and subsequent production date code and required safety certification. See AHAM PG 5.1.5.4.

    h. HVI 920 Section 10.1-10.2 Challenge process is replaced with AHAM challenge process 6.1-6.4.

    i. HVI 920 Section 11.0 - Document maintenance will follow AHAM's requirements defined in the PG Forward.

    j. HVI 920 Appendices I, II, and IV are followed directly for range hoods only. The other Appendices are not used.

APPENDIX B: AHAM RANGE HOOD CERTIFICATION PROGRAM LICENSE AGREEMENT

AHAM Range Hood Certification Program

LICENSE AGREEMENT

This Agreement, made this _____ day of _____, 20___, by and between ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (AHAM), a not-for-profit business association incorporated in the District of Columbia, having its principal office at 1111 19th Street, N.W., Suite 402, Washington, DC 20036, hereinafter called "Licensor," and_____ having its principal offices at the following location (full address),_____ hereinafter called "Licensee."

WITNESSETH:

WHEREAS, Licensor has developed and caused to be recognized as a national standard in the USA for determining certain performance characteristics as referenced in "Exhibit A," the title of which standard is also referenced in "Exhibit A";

WHEREAS, Licensor is the sponsor of a Certification Program in the USA ("Certification Program" or "Program") in support of the acceptance and use of that standard and the procedures set forth in the Procedural Guide, all in the public interest, to the end that public confidence in said performance characteristics may be effectively promoted;

WHEREAS, Licensee wishes to participate in said Certification Program;

NOW, THEREFORE, it is agreed by and between the parties hereto as follows:

LICENSEE:

A.1. Shall, upon the signing of this Agreement, have (1) the same person signing this Agreement on its behalf and (2) the engineer designated by such person sign and submit to Licensor the Certification Affidavit attached hereto as "Exhibit A."

A.2. Shall abide by and comply with all provisions of the Procedural Guide developed by AHAM for the implementation of the Certification Program.

A.3. Shall abide by, comply with and have the right to be apprised of all decisions made by the governing AHAM product council or committee which affect this Certification Program. This product council/committee shall meet periodically with AHAM staff for communication, advice and counsel on the operation of the Certification Program, and shall determine all policy for the Certification Program.

A4. Shall abide by the following Certification Program Payment Policy: For Certification Program participants, if invoices are not paid within 90 days after the invoice date, the participant will be given written notice that they have an additional 45 days to become current, or have its product ratings removed from the Certification Program directory. Removal from the directory will result in termination from the program. If a terminated company wishes to rejoin the program, it will be required to pay all outstanding invoices, and a full year program fees in advance.

A.5. Acknowledges that Licensor only owns the registered trademark, service mark, and/or certification mark rights in The Mark (as more fully identified in the Procedural Guide) in the countries and jurisdictions which are listed in Exhibit C which is attached hereto and incorporated herein by reference, and hereby licenses rights to use the use The Mark only in those countries and jurisdictions. Further acknowledges that although Licensor does not object to Licensee's use of The Mark in countries and jurisdictions other than those listed in Exhibit C, that such use is at Licensee's own risk since Licensor owns no registered rights in those countries and jurisdictions. Agrees that Licensee will not claim proprietary rights in The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of The Mark in any countries or jurisdictions not listed in Exhibit C.

LICENSOR AND LICENSEE:

B.1. Agree that the Procedural Guide is an extension of this License Agreement, provides all necessary details for participation in the Certification Program and is incorporated by reference into this Agreement. Agree that Licensor has the right in its sole discretion to make changes to any aspect of the Procedural Guide and Licensee will be bound by those changes. Revisions to procedures which become effective before the Procedural Guide is reprinted will be outlined in Letters of Instruction from Licensor to Licensees; such letters will automatically amend the Procedural Guide upon issuance.

B.2. Agree that this Agreement shall extend for an initial period of one (1) year and shall be automatically renewable for successive additional periods of one (1) year each unless either party, at least thirty (30) days prior to the date of expiration, gives notice in writing that it does not wish the

Agreement to be renewed; provided, however, that either Licensor or Licensee may terminate this License Agreement upon sixty (60) days' written notice to the other party.

B.3. Agree that in the event that Licensee defaults under this Agreement, Licensor may immediately exclude Licensee from the Program by written notice sent by certified mail to Licensee. Under such circumstances, this Agreement will be considered void upon the date of Licensee's receipt of said written notice, and the remaining provisions concerning exclusion of a Licensee outlined in the Procedural Guide shall be followed.

B.4. Agree that the initial data on Licensee's certified rating(s) for model(s) subject to the Program as submitted to the independent testing laboratory under contract to Licensor on forms provided by that laboratory (see the Procedural Guide) shall not be treated as confidential by either the laboratory or Licensor.

B.5. Agree that in the event Licensor promptly notifies all participants of any incorrect rating published in any Certification Directory, supplement thereto, or elsewhere, Licensee agrees not to hold Licensor liable in any way for any damage caused by any such incorrect published rating, unless such damage was the result of an intentional tort, a willful act, or of gross negligence by Licensor in which case the Licensor's liability is limited to any fees AHAM receives directly or indirectly from the Licensee's participation in the Program during the period in which incorrect or improper testing or rating or administration of the Program has occurred. Agree that Licensor shall not indemnify Licensee for any claims of any nature whatsoever that may be asserted against Licensee as a result of its use of either The Mark or as a result of its participation in any aspect of this Program.

B.6 Except as provided in this paragraph, Licensee agrees to indemnify and hold harmless AHAM, its board of directors, officers and employees, their successors and assigns, for and from any and all claims, demands, lawsuits, judgments, contracts, debts, and expenses (including reasonable attorney's fees), of any kind or nature, whether at law or in equity, arising out of or in connection with the Licensee's participation in the AHAM Range Hood Certification Program (including, but not limited to, a Licensee's conduct constituting a breach of this agreement and license), the use or misuse of AHAM Verifide®, and/or the manufacture, design, information for use, warranties and representations, and use of Licensee's range hoods. No claim for indemnity under this paragraph shall be effective until Licensee has received from AHAM written notice of the claim for which AHAM believes it is entitled to indemnification hereunder. **Licensee shall promptly reimburse AHAM for all costs and expenses incurred in defending AHAM against any such claims, demands, causes of action, or liability, including,**

but not limited to, attorney's fees. This indemnification shall survive termination of this agreement and license.

AHAM affirmatively disclaims any obligation to indemnify or hold harmless the Licensee from any and all claims, demands, lawsuits, judgments, contracts, debts, and expenses (including attorney's fees), of any kind or nature, whether at law or in equity, arising out of or in connection with any claims asserting infringement of a third party's trademark and/or arising out of or in connection with any challenge to the validity or enforceability of any AHAM mark. In the event a third party files a claim against the Licensee asserting infringement of a third party's trademark and/or challenging the validity or enforceability of any AHAM mark, Licensee is required to provide AHAM with written notice of the claim within 14 days. AHAM will consider, in good faith but without obligation and in its sole discretion, whether it is appropriate to assist, intervene, indemnify or take any action with respect to the reported claim.

AHAM's policy is to defend its marks and other intellectual property globally through market surveillance and legal actions as required and determined by its Board of Directors. To that end, AHAM requests Licensees to notify it of any improper use of AHAM Marks.

B.7. The interpretation of this Agreement and the parties' performance thereunder shall be governed by the laws of the District of Columbia.

B.8. In the event that any part or parts of this Agreement and/or the Procedural Guide are found to be void, the remaining provisions shall nevertheless be binding, to the extent practicable, with the same effect as though the void parts were deleted.

B.9. This Agreement being the final and complete understanding between the above parties, supersedes and nullifies all prior agreements.

AHAM Range Hood Certification Program

LICENSE AGREEMENT

To be completed by AHAM:

ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (Licensor)

Signed by: _____

Print Name: _____

Title: _____

Date: _____

To be completed by Licensee [See page 5 also]:

Company Name: _____ (Licensee)

Signed By: _____

Print Name: _____

Title: _____

Date: _____

"Exhibit A"

CERTIFICATION AFFIDAVIT
(To be completed by Licensee)

The undersigned hereby certify and state, on behalf of _____ _____ (Licensee) that the ratings of CFM and sound of range hood models submitted for Certification under the foregoing program by said Licensee are accurately determined and stated in accordance with the current edition of AHAM HRH-2.

To be completed by Engineer [Reference Section A.1 (2)]:

Signed by: _____

Print Name: _____

Title: _____

Date: _____

To be completed by same individual that signed the License Agreement on page 5 [Reference Section A.1 (1)]:

Signed by: _____

Print Name: _____

Title: _____

Date: _____

Exhibit “B”

PRIMARY CONTACT FOR ADMINISTRATIVE ISSUES

(Note: All verbal and written communications will be in English)

NAME: _____

TITLE: _____

E-MAIL ADDRESS: _____

PHONE NUMBER: _____

MAILING ADDRESS: _____

_____

_____

_____

CITY: _____

COUNTRY: _____

PRIMARY CONTACT FOR INVOICING/BILLING/PAYMENT

(Note: All verbal and written communications will be in English)

NAME: _____

TITLE: _____

E-MAIL ADDRESS: _____

PHONE NUMBER: _____

MAILING ADDRESS: _____

_____

_____

CITY: _____

COUNTRY: _____

SECONDARY CONTACT FOR ADMINISTRATIVE ISSUES

(Note: All verbal and written communications will be in English)

NAME: _____

TITLE: _____

E-MAIL ADDRESS: _____

PHONE NUMBER: _____

MAILING ADDRESS: _____

_____

_____

_____

CITY: _____

COUNTRY: _____

SECONDARY CONTACT FOR INVOICING/BILLING/PAYMENT

(Note: All verbal and written communications will be in English)

NAME: _____

TITLE: _____

E-MAIL ADDRESS: _____

PHONE NUMBER: _____

MAILING ADDRESS: _____

_____

_____

CITY: _____

COUNTRY: _____

EXHIBIT C

Mark	Country
AHAM VERIFIDE Reg. No. 4478903	USA
AHAM VERIFIDE Reg. No. 4478902	USA
AHAM VERIFIDE Reg. No 4478901	USA
AHAM VERIFIDE Reg. No 4467623	USA

APPENDIX C: AHAM RANGE HOOD CERTIFICATION PROGRAM CHALLENGE REQUEST FORM

Date of Request:	

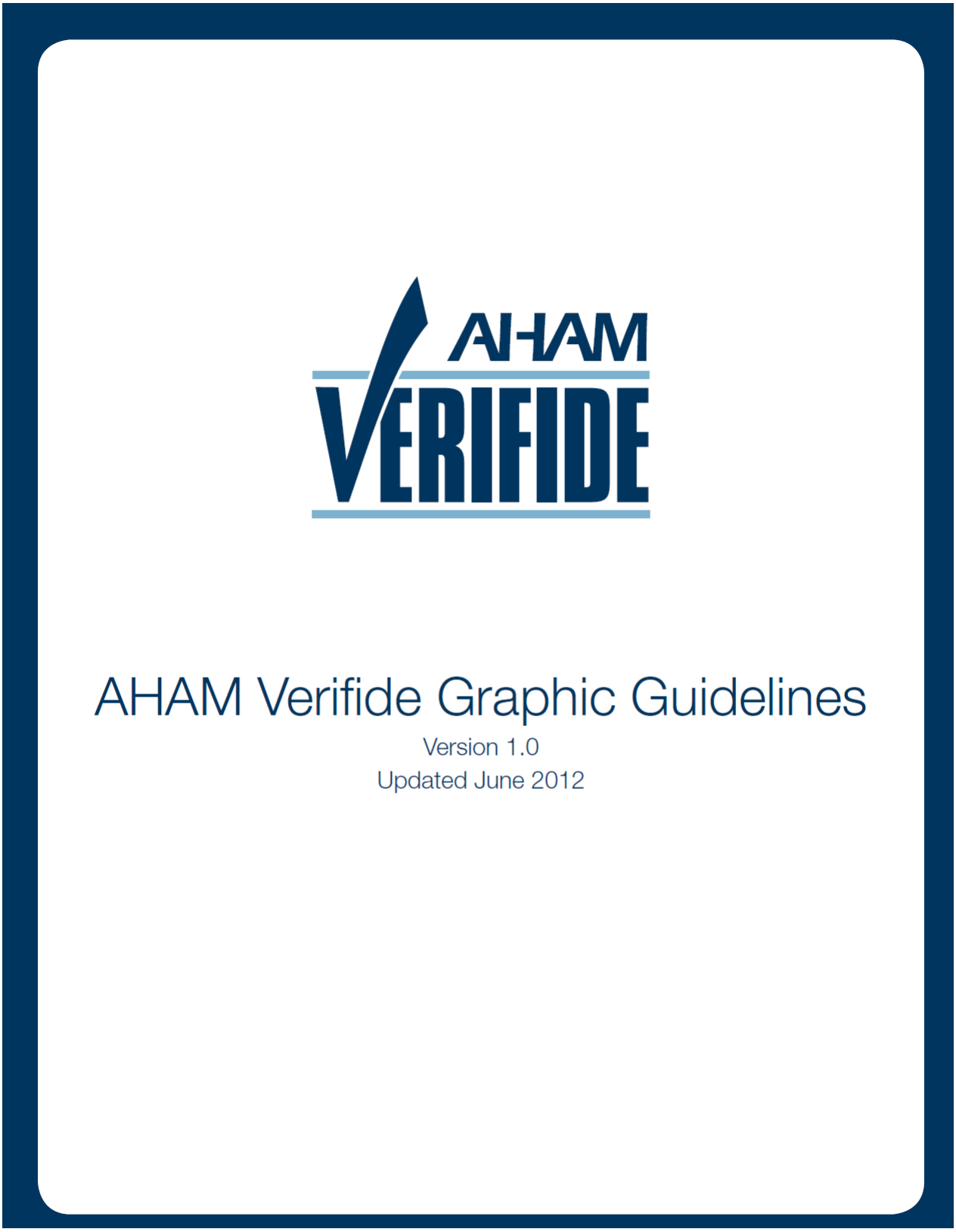
Brand Name:		**Model Number:**	

Manufactured By:		**Manufactured For:**	

Reason for Challenge (check all that apply):		**Required Information for Submittal**
CFM		Reason for challenge
SOUND		Test data or calculations to support challenge

Licensee Approval:	
AHAM Approval:	
Laboratory Approval:	

APPENDIX D: AHAM MARK REQUIREMENTS



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Logo Guidelines

Tagline

CADR Seal

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LOGO GUIDELINES

AHAM Verifide Logos

Core Logo

Logo with Tagline

Contained Logo

Basic Design & Usage

The AHAM Verifide Mark is issued to only licensees in AHAM Verification Programs and is used to signify that the specific program attributes (performance, volume, and/or energy) have been certified accurate by the manufacturer and verified by AHAM in conjunction with the appropriate test procedures. To maximize its impact, the AHAM Mark must appear consistently and legibly as required by each specific Program. At the manufacturer's option, the AHAM Mark may appear in a licensee's product literature, website, or other promotional materials, and in advertising.

The word "Verifide" in the AHAM Mark is a coined term combining the words verified and bonafide, two words that capture what it means to offer trustworthy and accurately rated products.

The logo itself consists of the core AHAM wordmark coupled with a type treatment for the word "Verifide." The "V" in the word "Verifide" is treated as a check mark, quickly signifying that the product that bares this Mark is eligible for ongoing random testing through the AHAM Verification Program.

In addition to the core AHAM Mark, there is also guidance in this document on the AHAM Mark with tagline (see page 9 for details) and a version of the AHAM Mark reversed out of a color (see page 8 for details).

Licensees will note that AHAM is providing flexibility to choose from the color options provided and the optional containment of the logo based on the application. Because each of AHAM's Verification Programs has unique requirements, please refer to page 4 for details on the acceptable size and location requirements.

Licensees should refer to each Program's Procedural Guide for additional guidelines and requirements about advertising and claims.

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AHAM Verifide Graphic Guidelines ➤ Logo Guidelines ➤ 2

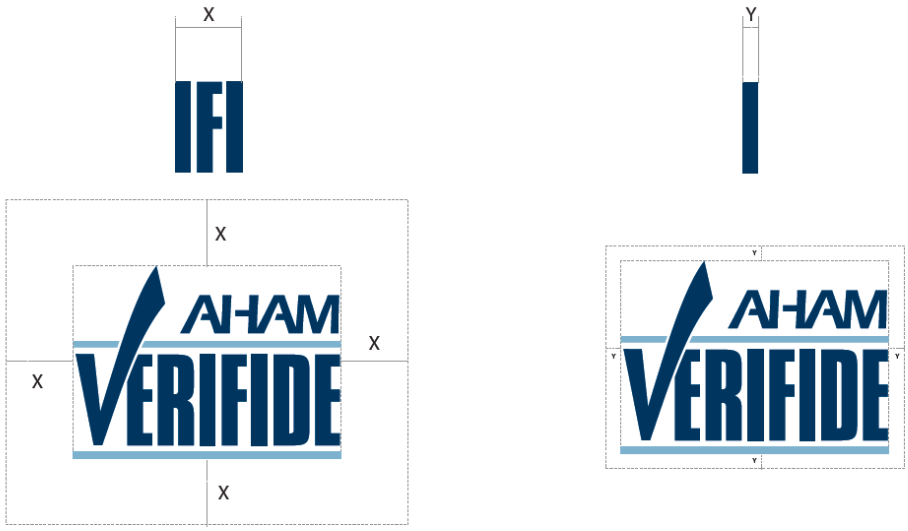
Clear Space

A clear space tolerance has been established around the AHAM Verifide Mark to protect its integrity on marketing materials and on other applications. The clear space ensures that the AHAM Mark is never visually dominated by other elements. It should be kept clear of all type, graphic elements, and imagery whenever possible.

The clear space is defined in relation to the size of the "Verifide" wordmark. It is equal to 1x the width of the letters "IFI." The same clear space rule applies when using the contained version of the logo. For clear space rules regarding the logo with tagline, see page 9.

In instances where space is limited, the clear space for all logos is defined by the width of the letter "I" in the word "Verifide." This ensures that the logo is reproduced as large as possible while still maintaining clearance from other elements.

Please note, clear space does not mean white space. The logo can be reproduced on a light-colored background that complements the logo color, but must be a significantly lighter tone than the lightest color of the logo.



Core Logo Clear Space

Contained Logo Clear Space

Minimum Size & Location

The practical requirement of any logo is that it can be clearly seen and maintains legibility without altering the proportions or composition. The minimum size established for the AHAM Verifide Mark is based on its width. Both the core version of the logo and the contained version of the logo should not be reproduced at less than .5" in width.

Further, each AHAM Verification Program has unique size and location requirements as follows:

AHAM Refrigerator, Refrigerator–Freezer, and Freezer Verification Program

Licensees must incorporate the AHAM Mark on the rating label of the Refrigerator, Refrigerator–Freezer, or Freezer. If the AHAM Mark cannot fit on the rating label, it may be permanently affixed adjacent to the rating label. The size of the AHAM Mark shall be no smaller than 0.5" in width, and the Mark must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the nameplate is included below.

AHAM Clothes Washer Verification Program

Licensees must incorporate the AHAM Mark on the rating label of the Clothes Washer. If the AHAM Mark cannot fit on the rating label, it may be permanently affixed adjacent to the rating label. The size of the AHAM Mark shall be no smaller than 0.5" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the nameplate is included below.

AHAM Dishwasher Verification Program

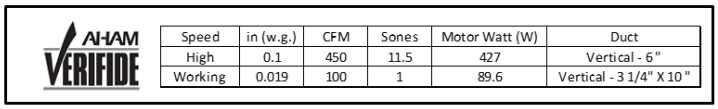
Licensees must incorporate the AHAM Mark on the rating label of the Dishwasher. If the AHAM Mark cannot fit on the rating label, it may be permanently affixed adjacent to the rating label. The size of the AHAM Mark shall be no smaller than 0.5" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the nameplate is included below.

Example of Core Verifide Logo on Nameplate

Example of Contained Verifide Logo on Nameplate

AHAM Range Hood Certification Program.

Licensees must incorporate the Mark on a label or nameplate that will be on the product. The Mark must also be on the packaging of the product. If the Mark can not fit on the nameplate of the Range Hood it is ok to affix it on a separate label adjacent to the nameplate. The size of the AHAM Mark shall be no smaller than 0.5" in width, and the Mark must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the label format is shown below:



Speed	in (w.g.)	CFM	Sones	Motor Watt (W)	Duct
High	0.1	450	11.5	427	Vertical - 6 "
Working	0.019	100	1	89.6	Vertical - 3 1/4" X 10 "

Unacceptable Uses

In order to build a consistently favorable perception of the AHAM Verifide Mark, it is essential that the Mark be used correctly. This page illustrates some incorrect uses of the Mark:

It should never be printed in a non-standard color or with the colors reversed.

It should not be stretched, skewed, distorted, or rotated in any way.

It should never have a keyline around it.

It should not appear with any other text, with the exception of the approved tagline.

It should never appear on a background that affects the legibility of the logo. This includes busy patterns or colors that do not have enough contrast with the words in the logo.

All logo elements must stay within standard proportion.

Color Reproduction

The AHAM Verifide Mark should be reproduced in the approved Pantone colors or their CMYK process equivalents, which are shown below. For on-screen applications, in PowerPoint or on the Web, the RGB color breakdown should be used. For print applications of only two or three colors, the Mark should be reproduced in the AHAM Navy Blue (Pantone 7463) and AHAM Light Blue (Pantone 550). In instances where only one color printing is available (such as on a rating nameplate), there are several acceptable versions of the Mark that may be used depending on the printing specifications.

4-Color and 2-Color Logo

Pantone 7463 or CMYK Equivalent

Pantone 550 or CMYK Equivalent

1 Pantone Color With Tint

Pantone 7463

Pantone 7463 (35% Tint)

Black With Tint

Black

Black (55% Tint)

1 Pantone Color No Tint

Pantone 7463

Black With No Tint

Black

Color Matching

When producing the logo in print, always match the color printed by the vendor to the color breaks on the right (also for visual reference, check against a current Pantone book). This will ensure that the logo is reproduced consistently across all materials.

Spot Color

AHAM Navy Blue
- Pantone 7463

AHAM Light Blue
- Pantone 550

Process/CMYK

AHAM Navy Blue

Cyan	100
Magenta	43
Yellow	0
Black	65

AHAM Light Blue

Cyan	38
Magenta	4
Yellow	0
Black	19

On-screen/RGB

AHAM Navy Blue

Red	0
Green	53
Blue	95

AHAM Light Blue

Red	126
Green	176
Blue	204

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AHAM Verifide Graphic Guidelines ➤ Logo Guidelines ➤ 7

Knock-Out Versions

The AHAM Verifide logo may be reproduced in white in cases where it appears on a field of color. When printing a knock-out version of the logo, it must appear on a shade with a tonal value greater than 40% black for optimal contrast. The AHAM Light Blue may be used on the knock-out version of the logo only if the tonal value of the color behind it is greater than 60%. Below are examples of acceptable uses for the knock-out logo.

Only the core logo or core logo with tagline should be used as a knock-out logo. The contained version of the logo should not be reversed and used as a knock-out logo.

Logo on AHAM Navy Blue With Accent Color

Logo on AHAM Navy Blue Without Accent Color

Logo on 100% Black With Accent Color

Logo on 100% Black Without Accent Color

Logo on 60% Black With Accent Color

Logo on 40% Black Without Accent Color

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AHAM Verifide Graphic Guidelines ➤ Logo Guidelines ➤ 8

TAGLINE

Basic Design & Usage

The AHAM Verifide tagline is "Independently Tested. Consumer Trusted." The words "Independently Tested" are set in "Trade Gothic." The words "Consumer Trusted" are set in "Trade Gothic Bold No. 2" for added emphasis. The tagline should be set in AHAM Navy Blue.

The tagline should be used whenever feasible in marketing promotions or collateral materials. Its proportions and placement should not be altered in any way. Be sure to follow the unacceptable uses outlined on page 10.

There are vertical and horizontal versions of the logo and tagline lock-up. The horizontal treatment is the preferred layout; however, the vertical version may be used in instances where the horizontal space is limited.

The tagline is only for use with the core logo. It should not be used with the contained version of the logo.

When used in body copy, always bold the words "Consumer Trusted."

The tagline may be separated from the logo and used as an independent design element. When moving the tagline away from the logo, it must appear on the same communication piece as the logo and in proximity to the logo so it always shows a connection. Adhere to all of the same rules as the full version of the logo with tagline.

Logo with Tagline - Horizontal

Logo with Tagline - Vertical

Minimum Size

The practical requirement of any logo is that it can be clearly seen and maintains legibility without altering the proportions or composition. The minimum size established for the AHAM Verifide logo with the tagline is based on its width. The horizontal version of the logo with tagline should never be reproduced smaller than 1.25" wide. The vertical version of the logo with tagline should never be reproduced smaller than .685" wide.

Unacceptable Uses

In order to build a consistently favorable perception of the AHAM Verifide wordmark with tagline, it is essential that the logo be used correctly. The logo should follow all of the unacceptable uses outlined on page 6. This page illustrates some additional incorrect uses specifically for the logo with tagline:

The tagline should never be printed in a non-standard color or with the colors reversed.

The tagline should not be stretched, skewed, distorted, or rotated in any way.

The tagline's proportion to the logo should never be altered.

The tagline should never be set in a different font.

APPENDIX E: EXAMPLE OF PROGRAM PRODUCTION SURVEY

CONFIDENTIAL

AHAM RANGE HOOD PRODUCTION SURVEY

DATE:	July 1, 2020
TO:	**Range Hood** Certification New Licensees
FROM:	Randy Cooper, Vice President, Technical Operations and Standards
CA:	Charles Samuels
RE:	**CERTIFIED PRODUCTION SURVEY**
ACTIONS REQUESTED:	(1) Confirm receipt to AHAM (amartin@aham.org) upon receipt. (2) Complete and return to AHAM accounting@aham.org.

The AHAM Range Hood Certification Program requires that continuing program Licensees complete an annual Production Survey each July to accurately determine certification fees for the next calendar year as well as to get an estimation of next year's testing fee. **The information provided in the survey is kept strictly confidential within AHAM.**

Pages 3-5 is the certified survey form to be completed with your actual **certified sales volume** in U.S. Dollar value of Range Hoods shipped for the twelve-month period of July 1, 20**19** through June 30, 20**20**. **The dollar value sales volume for all models that will be included in the AHAM program, the packaging of which will be required to bear the AHAM Verifide Mark, regardless of the individual country of sale, are required to be included in this accounting**. Licensees are required to pay the initial estimated testing fees at the beginning of each program year (January). Certification fees (sometimes called participation fees) will be invoiced quarterly during the calendar year based on the fees shown on the survey.

Please note the "Officer Verification" required on page 5. An officer of each participating company should verify all figures reported to AHAM Certification Programs for accuracy and completeness.

As indicated on the INSTRUCTIONS form (page 2), please

1. Confirm receipt of this form to Angela Martin (amartin@aham.org) upon delivery; and
2. Complete and return the enclosed confidential survey and Officer Verification (pages 3 - 5) to AHAM's Accounting Department at **accounting@aham.org**.

INSTRUCTIONS

1. Confirm receipt of this production survey to Angela Martin via e-mail at amartin@aham.org upon receipt.
2. Review instructions and Guidelines.
3. Fill out Certified Production Survey Form by country as described on the form.
4. Review Billing Information.
5. Have an officer execute the Officer Verification Form.
6. Return Certified Production Survey Form and Officer Verification Form to:

E-MAIL: accounting@aham.org (scan and send)
AHAM Accounting Department
Association of Home Appliance Manufacturers
1111 19th Street N.W., Suite 402
Washington, D.C. 20036
FAX: (202) 872-9354

GUIDELINES FOR OUTSOURCED CERTIFIED UNIT PRODUCT REPORTING

Please use the following guidelines to determine which entity involved in an outsourcing agreement is responsible for reporting and ensuring payment of the certification fees.

1. If a Licensee buys products from another Licensee, the purchasing licensee is responsible for the resulting certification fees and must therefore include the outsourced units in its own dollar value sales production figures (i.e., count the outsourced units as their own production). See attached list of licensees.
2. If a Licensee buys products from a non-licensee, the Licensee is responsible for the resulting certification fees and must therefore include the outsourced units in its product figures (i.e., count the outsourced units as their own production).
3. In the case of an alternative arrangement (i.e., selling licensee agrees to pay the certification fees), the purchasing licensee has the ultimate responsibility of ensuring the outsourced product production data is properly reported and certification fees are paid.

BILLING INFORMATION

- The Participation fee will be divided by four and invoiced at the beginning of each quarter in the calendar year after your first year.
- AHAM Member Licensees will be invoiced in January for calendar year 2021 in the amount of $2,448[1] per 10 % of the basic models then quarterly for the participation fee with total calculation shown on page 4 in #5, *calculation of total fees*.
- At the conclusion of the program year, the actual test fees incurred will be reconciled to the estimated test fees in the production survey. Any difference in test fees will be invoiced to the participating company if great than the estimate or refunded to the participating company if less that estimated.

[1] The fee shown reflects the current estimated 2021 fee for the Basic Model. 2021 fees are subject to change based on actions of the division Board of Directors.

AHAM RANGE HOOD CERTIFICATION PROGRAM
DOLLAR VALUE OF SHIPMENTS OF RANGE HOODS

CERTIFIED PRODUCTION SURVEY
July 1, **2019** - June 30, **2020**
REPORT IS DUE July 31, 2020
FOR NEW Licensees: RETURN WITH LICENSE AGREEMENT

OPTIONS FOR RETURNING COMPLETED FORMS
Via E-MAIL to accounting@aham.org
OR
Via FAX to Accounting Department at FAX No.: (202) 872-9354.

			Send Invoices to:
Company		Name	
Contact Person		Address	
Title			
Phone #		Email:	

Please use the spreadsheet to list the North America sales figures, in US dollars for the United States and Canada only. The Total Sales noted below will auto-calculate and is to be carried over into the worksheet on the following page used to calculate the Participation Fees for the 2021 Program Year.

Country of Sale	Sales Figures (in US Dollars)						
US							
Canada							
Total Sales							

1. Enter your **company's total Range Hood sales amount figure** (in U.S. dollars) during the twelve (12) months from July 1, 2019 through June 30, 2020, as noted in the above spreadsheet.	ACTUAL FIGURE (in U.S. dollars): $_____ **_$9,000,000 (Example)**
2. Sales figure : Multiply the Actual Figure [in #1] by .001 (members) or .0058 (non-members) to calculate the sales portion of the annual certification participation fee ***Minimum participation fee is $1,000.00.** **Maximum Participation fee is $ 35,000 for members.**	**PARTICIPATION FEE***: $_____ $ **9,000.00 (EXAMPLE)** **Example:** 9,000,000(.001)=9,000
3. List all brands covered in the program:	

4. How many basic models will you test at current test cost? Take the number of Basic Models[2] anticipated during year 2021 and multiply it by 10 % sampling rate then round up to the nearest full digit. Next multiply that number times the test cost ($2448) to calculate the associated basic model fee. **Example:** 6 (basic models) x.10 = 1(2448)=$2448 (round to whole number)	NUMBER OF BASIC MODELS: _____ **BASIC MODEL FEE:** **$_____**
5. Calculate Total Fees (**Participation Fee + Basic Model Fee**) **Example:** 9,000+2,448=$11,448.	$_____

[2] A basic model is a single unit representing a specific functional design and performance level.

OFFICER VERIFICATION

I have examined the attached **Confidential** Certified Product Survey information and billing information. In accordance with the instructions and definitions contained on this form, to the best of my knowledge the information presented on this form is complete and accurate.

Signed _____

Printed _____

Title _____

Date _____

List of Current Participants

Faber USA & Canada
Fisher & Paykel Appliances
GE Appliances
LG Electronics, Inc.
Miele, Inc.
Samsung Electronics America, Inc.
Whirlpool Corporation

APPENDIX F: ENERGY STAR CERTIFICATION AND VERIFICATION TESTING DIRECTIVES AND PROCEDURES

These are provided for reference. The latest copy is on the EPA website.

F.1 Measured Versus Reported Values for Certification

THIRD PARTY CERTIFICATION IMPLEMENTATION

ENERGY STAR® PRODUCTS

SUBJECT: Measured versus Reported Values for ENERGY STAR Certification	DIRECTIVE NO. 2011-05 Date: 6/14/2011

To address manufacturer needs to report consistent information on product performance, EPA has developed the following guidelines for certification bodies (CBs) to report values that differ from results obtained for purposes of ENERGY STAR qualification. Reported values are those that will be displayed on the list of qualified products, while measured values are included in laboratory test reports. In many cases, reported values will not differ from measured values. However, manufacturers may occasionally need to report values that differ from those obtained during testing, for example, to ensure that product literature is aligned with EPA lists of qualified products. This guidance provides specific allowances for measured and reported values to deviate, while ensuring that ENERGY STAR qualified product lists provide consumers with an accurate indication of product performance. These specific guidelines are limited to the energy efficiency and energy consumption requirements as follows:

1. Measured values and reported values must both meet the applicable ENERGY STAR specification.

2. For products not subject to Federal energy conservation standards, the reported value shall not be more efficient than the measured value. More conservative ratings are allowed.

3. For products subject to Federal energy conservation standards, the reported value should be the certified rating as determined under DOE's regulations.

This guidance applies to qualification of products for ENERGY STAR. For purposes of subsequent retesting (e.g., verification testing, challenge testing), test results will be evaluated against the ENERGY STAR requirements, not against values measured or reported for qualification. If the CB subsequently modifies the reported value for a product in consultation with the manufacturer, it shall submit the revised product performance information to EPA.

These guidelines support manufacturers' needs for reporting consistent product performance, but are not intended to supersede ENERGY STAR product specifications.

For an energy efficiency specification, the *LCL* and *LCL*(0.05) are compared, and the greater value is compared to the mean (x). The model meets the ENERGY STAR specification if the sample mean is equal to or greater than the lower control limit.

$$Mean\ (x) \geq LCL\ or\ LCL\ (0.05), whichever\ is\ greater$$

For an energy consumption specification, the *UCL* and *UCL*(0.05) are compared, and the smaller value is compared to the mean (x). The model meets the ENERGY STAR specification if the sample mean is equal to or less than the upper control limit.

$$Mean\ (x) \leq UCL\ or\ UCL\ (0.05), whichever\ is\ smaller$$

Consequences of Testing Failures
CBs are required to report testing failures to EPA within 2 days of determining a testing failure. EPA will then notify the manufacturer and provide 20 days for a written response. This may include the submission of additional relevant information to EPA. EPA will review submitted information from the manufacturer and determine if any additional evaluation is necessary. Where applicable, EPA will consult DOE regarding the appropriate application of test methods.

EPA will provide additional time to resolve questions of potential non-compliance as appropriate. If a decision is made to disqualify the product, the manufacturer will be required to discontinue labeling of the product and institute other corrective actions as directed by EPA.

Relationship to Enforcement of Federal energy conservation standards
If verification testing performed in support of the ENERGY STAR program suggests that a model is not compliant with Federal energy conservation standards, DOE will proceed in accordance with 10 CFR Part 429, as appropriate.

Relationship to Enforcement of DOE Certified Ratings
If verification testing performed in support of the ENERGY STAR program suggests that the test data do not support the DOE certified rating, DOE will proceed in accordance with 10 CFR Part 429, as appropriate.

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F.2 Verification Testing Procedures

THIRD PARTY CERTIFICATION IMPLEMENTATION

ENERGY STAR® PRODUCTS

SUBJECT: ENERGY STAR Verification Testing for Certification Bodies - Test Sample Sizes and Determining Testing Failures (Non-Lighting Products)	DIRECTIVE NO. 2011-04 Date: 5/09/2011

Introduction

The third-party certification requirements put in place by the U.S. Environmental Protection Agency (EPA) for ENERGY STAR products include provisions for verifying the performance of qualified products through verification and challenge testing. In conjunction with the verification program being run by certification bodies (CBs), The U.S. Department of Energy (DOE) intends to continue to operate a parallel, targeted verification testing program for ENERGY STAR products that also evaluates how models comply with Federal energy conservation standards. More information on DOE's program is available at http://www1.eere.energy.gov/buildings/appliance_standards/.

Consumers who rely on the ENERGY STAR label in making a purchase decision expect that the unit they purchase will meet ENERGY STAR requirements. EPA has traditionally established program testing requirements with the intention of fulfilling that consumer expectation and ensuring that all units of a qualified model, irrespective of manufacturing and testing variability, meet the ENERGY STAR performance requirements. For certain product categories currently subject to Federal energy conservation standards, the ENERGY STAR specification has allowed for testing consistent with DOE standards, which require testing a sample comprised of no less than two units, and using statistical methods to determine the certified rating of each basic model. Recognizing this variation in sample size approach for qualification, EPA and DOE are proposing that products will be tested for purposes of verification consistent with how they were tested for purposes of qualification using one of the following approaches:

1. If a product was qualified based on a single test, which ENERGY STAR specifications require for products not subject to Federal energy conservation standards, then verification testing will involve a single test.[1]
2. If a product was qualified based on multiple test samples, (e.g., per DOE certification sampling plan associated with Federal energy conservation standards[2]), then four units will be procured at once for verification testing. A spot check will be performed on the first unit. If the test result of the spot check fails by 5% or more, the additional 3 units will be tested and statistical methods applied to the results for purposes of determining a failure.

Testing failures will be referred to EPA for further consideration and a final determination regarding ENERGY STAR compliance. Testing failures that indicate a potential issue with respect to Federal energy conservation standards will be referred to DOE for further testing consistent with DOE's sampling plans for enforcement testing of products as outlined in 10 CFR Part 429.

[1] Approach 1 will apply if multiple tests are required to determine qualification, but all units must individually meet the ENERGY STAR requirements (e.g., displays, imaging equipment).

[2] Approach 2 may also apply to products not subject to Federal energy conservation standards if the ENERGY STAR specification allows for and the manufacturer chooses to qualify a product based on a statistical combination of tests on multiple units.

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Determination of Testing Failure for the ENERGY STAR Verification Program
The following approaches will be applied by DOE and CBs when conducting verification testing of ENERGY STAR products, depending on how the product was originally qualified.

Approach 1: Manufacturer qualifies product for ENERGY STAR based on one representative model
One unit will be selected, obtained, and tested. Consistent with requirements for ENERGY STAR qualification, the measured performance must be equal to or better than the ENERGY STAR specification requirements.

$$Consumption_{Test} \leq ESTAR\ consumption\ specification$$

$$Efficiency_{Test} \geq ESTAR\ efficiency\ specification$$

Approach 2: Manufacturer qualifies product for ENERGY STAR based on multiple test samples
Four units will be selected and obtained at once. One unit will initially be tested for a spot check. If the tested unit fails to meet the requirement by less than 5% of the applicable ENERGY STAR specification, no further tests will be conducted and the model will be considered to meet ENERGY STAR requirements. If the measured performance is not within this range, the three additional units will be tested immediately. In this case, manufacturers shall not be notified of the spot check test results until all four units are tested, at which time a testing failure can be determined.

Test results from the four units will be used to determine if the model meets the ENERGY STAR specification. DOE may also use these results for evaluation of compliance with Federal energy conservation standards.

The following will be calculated on the sample of four units:

Mean (*x*)	$x = \frac{1}{n}\left(\sum_{i=1}^{n} x_i\right)$	n = 4 (number of units tested) X_i = measured energy efficiency or consumption from test i
Standard Deviation (*s*)	$s = \sqrt{\frac{\sum_{i=1}^{n}(x_i - x)^2}{n-1}}$	
Standard Error (s_x)	$s_x = \frac{s}{\sqrt{n}}$	
Lower Confidence Limit (*LCL*)	$LCL = EES - ts_x$	*EES* = energy efficiency specification or standard t = 3.182 (97.5% one-sided student's t statistic for a sample size of 4)
Upper Confidence Limit (*UCL*)	$UCL = ECS + ts_x$	*ECS* = energy consumption specification or standard
5% tolerance on *LCL*	$LCL(0.05) = 0.95 * EES$	
5% tolerance on *UCL*	$UCL\ (0.05) = 1.05 * ECS$	

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F.3 Disqualification Procedures

Disqualification Procedures
ENERGY STAR® Products
Last updated: February 28, 2018

Basis for Product Disqualifications:

1. Testing Failures – Product disqualifications are the result of performance testing failures under ENERGY STAR Verification Testing or U.S. Department of Energy (DOE) Appliance Testing.
2. Product Non-Conformity – In a small number of cases, testing is unnecessary as a basis for product disqualification. Examples include a discrepancy with product categorization, and when a product's marketed use is inconsistent with the intended qualifying use.

Determining Disqualifications:

1. U.S. Environmental Protection Agency (EPA) notification by Certification Body (CB) - CBs are required to report testing failures to EPA within 2 days of determining a testing failure. Upon EPA's review of the information, EPA may determine that a product with a testing failure does not warrant disqualification for reasons such as, CB administrative error, lab administrative error, partner administrative error, or a de minimis performance deviation. In such cases, EPA may decide that no further action will be taken.
2. Brand Owner Partner Notice and Opportunity for Dispute - When EPA believes a product may warrant disqualification, the EPA will notify the brand owner at the email address provided by the brand owner and provide 20 days for a written response. That response may include the submission of additional relevant information to EPA, and should be submitted as a "dispute" if challenging the product's pending disqualification. Where applicable, EPA will consult with DOE regarding the appropriate application of test methods. EPA will review submitted information from the brand owner and determine if any additional product testing and/or analysis is necessary. EPA will provide time necessary to resolve questions of potential non-compliance when a brand owner acts in good faith and as deemed necessary by EPA.
3. EPA will make a final determination of product status and inform the brand owner of its decision.
4. Additional Appeal Opportunity for Brand Owner – When EPA notifies a brand owner at the conclusion of a dispute review that a product will be disqualified, the brand owner may immediately notify EPA of a decision to appeal that determination. EPA will consider new information at that time, or conduct a more detailed examination of testing, where warranted.

Case Management:

1. All matters for which EPA notifies a brand owner of a testing failure are assigned a case number.
2. Brand owner partners, component suppliers and other involved parties are asked to reference the case number in communications with EPA.
3. A case tracking sheet is developed and maintained to document each case.

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Brand Owner Product Control Measures:

Brand owners are provided a standard format for submitting product control measures for disqualified products and provided 20 days from time of notification to submit them. In all instances, where a product has been disqualified, the brand owner is required, at a minimum, to:

- Immediately cease shipment of units displaying the ENERGY STAR label;
- Immediately cease labeling associated units as ENERGY STAR;
- Remove ENERGY STAR references from related marketing materials, spec sheets and websites; and
- Cover or remove labels on units within the brand owner's control.

Additional measures may be required for certain cases. The following factors are considered in developing such requirements:

- Consumer investment;
- Last date of product manufacture;
- Last date of shipment;
- Quantity of units produced;
- Estimated sell-through period of product type;
- Scope and depth of product distribution; and
- Preventative measures adopted.

Product control measures are based on and apply to the model number of the disqualified product. Where a product has been modified after initial certification but not recertified with a new model number, control measures apply to all units with that model number, irrespective of product modifications that may have occurred during the period in which it was a certified product.

In no circumstances may a new ENERGY STAR product be recertified using the model number of a previously disqualified product.

A failure to submit thorough and timely product control measures may affect partnership benefits.

Stakeholder Notification:

1. Qualified Product List update - When a determination to disqualify is made, EPA directs the associated CB to withdraw ENERGY STAR certification for the model(s).
2. ENERGY STAR Integrity Webpage update – Once the product has been removed from the ENERGY STAR Qualified Products List, EPA posts the model on its list of disqualified products on the ENERGY STAR Program Integrity webpage. This webpage provides consumers and utilities with information regarding models that no longer meet product standards.
3. Utilities Notification – On a biweekly basis, those utilities that have opted for

regular product disqualification updates receive notice of product categories affected by disqualifications during that period.

Compliance Monitoring:

As part of its broader effort to ensure proper use of the ENERGY STAR logo, EPA supports a number of initiatives that help ensure the label is effectively removed from disqualified products.

1. Retail Store-Level Assessment (RSL) – The RSL project involves a broad market review of retail-shelf products on a regular basis in major retailers throughout the U.S. to identify products improperly labeled as ENERGY STAR, including any disqualified models that continue to be advertised or labeled as ENERGY STAR products.
2. Disqualified Products Online Assessment – The online assessment identifies products disqualified from ENERGY STAR that remained labeled as ENERGY STAR on brand owner and retailer websites in an effort to monitor compliance with product control seasures that brand owner partners submit when products are disqualified.
3. Customs Port Inspections – ENERGY STAR works closely with U.S. Customs to support the examination and seizure of disqualified products labeled as ENERGY STAR arriving in U.S. ports.

As a federal trademark owner, EPA reserves the right to adjust or modify these procedures as appropriate.

APPENDIX G: ALTERNATE CERTIFICATION LABS

1. 0 ALTERNATE LAB FACILITIES

Riverside Energy Efficiency Laboratory
3100 SH 47, Building 6502
Bryan, Texas 77807