



# Dehumidifier Certification Program Procedural Guide

January 2006



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## FOREWORD

The Association of Home Appliance Manufacturers (AHAM) sponsors the Dehumidifier Certification Program. This Program provides a uniform and commercially practical verification of manufacturers' certified water removal capacity and energy factor (EF) rating(s) for household dehumidifiers that are rated at between 110 and 120 volts with a maximum rating of 16 amps. An independent laboratory under contract to AHAM provides verification.

Participation in the Program is voluntary. Participants' models must be certified and listed in a Directory of Certified Dehumidifiers. A participant's public representation that the stated water removal capacity and energy factor (EF) ratings of its dehumidifiers are subject to verification is the certification seal that appears on each unit.

The AHAM manufacturer's license agreement is the basic contractual document for participation in the Certification Program. This *Procedural Guide* (referred to hereafter as the Guide) is an extension of and incorporated into that agreement and provides for administration of the Program and its execution in a uniform manner. General information and procedural details are included in this Guide. The *Procedural Guide* may be revised at any time by consensus of the participants and approval by AHAM's Major Appliance Engineering Council as the need for such revision is deemed advisable.

A number of forms are used to administer this Program. The current forms and the accompanying instructions booklet, AHAM *Dehumidifier Certification Program – Instructions for Completing Forms*, can be obtained from AHAM or Intertek.

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*This January 2006 version supersedes the 1984 version of the Dehumidifier Procedural Guide.*

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## 1.0 BASIC OUTLINE OF ROLES

### 1.1 Role of AHAM

- A. Licenses U.S. manufacturers and private-brand sellers to certify, under the AHAM program, the water removal capacity rating and energy factor of dehumidifiers sold in the United States and, on a selective basis, abroad.
- B. Licenses foreign manufacturers and importers to certify, under the AHAM Program, the water removal capacity rating and energy factor of dehumidifiers sold in the United States.
- C. Provides administrative staffing for the Program.
- D. Provides an electronic version of the certification seal to companies licensed in the Program.
- E. Monitors release and use of seals.
- F. Collects certification fees quarterly from Licensees for purposes of funding the Program.
- G. Publishes and distributes a periodic Certification Directory
- H. Monitors:
  - (1) Program participation
  - (2) All re-ratings
  - (3) All challenges
- I. Informs participants of:
  - (1) All re-ratings.
  - (2) Exclusion of any Licensee from the Program.
- J. Contracts with an independent testing laboratory for those activities noted in Section 1.2

## **1.2 Role of Laboratory**

- A. Examination and monitoring of Licensees' testing facilities and quality control procedures or data, as needed.
- B. Collection of certified data, basic model information, etc.
- C. Random test samples acquisition.
- D. Verification testing in accordance with ANSI/AHAM Standard DH-1 (latest edition), and this Guide (including specified tolerances), 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.
- E. Issuance of verification test reports (and notices of non-compliance should testing indicate re-rating necessary).
- F. Determination of revised rating to be certified in case of mandatory (either as result of regular Program testing or challenge procedure) or voluntary re-rating.
- G. Disposition of all test samples.
- H. Compilation and dissemination to AHAM of all certified models' ratings by brand for subsequent Certification Directory publication.
- I. Compilation and issuance of annual report summarizing individual participant test results and overall Certification Program test data.

## **1.3 Role of Licensee**

- A. Certifies water removal capacity and energy factor ratings.
- B. Places certified water removal capacity rating on nameplate of all units within the Program.
- C. Affixes certification seals to each unit produced under the Program.

- D. Pays AHAM quarterly an amount equal to the current Unit Production Fee multiplied by 1/4 of its certified units produced during the 12-month period ending the previous June 30.
- E. Submits model data and sample acquisition information to the Laboratory under contract to AHAM.
- F. Furnishes test specimens at no cost to Program and pays all shipping costs to and from the Laboratory.
- G. May challenge certified ratings of other Licensees on basis of full and proper test of a sample unit.
  - Forwards challenge with supporting test data to the laboratory (with copy to AHAM).
- H. Re-rates certified ratings in accordance with Program procedures.
  - (1) Voluntary re-ratings.
    - (i) May voluntarily re-rate on basis of quality control
    - (ii) Notification of re-rating must be sent to the Laboratory and the revised rating must appear on all units subsequently produced.
  - (2) Mandatory re-ratings.
    - (i) Accepts revised rating(s) determined by the Laboratory.
    - (ii) Notification of re-rating must be sent to the first line of distribution, and all literature must be revised at its next printing (with evidence of each action provided to AHAM).
- I. Submits copies of specification sheets and promotional material to AHAM periodically upon request.
- J. Confirms all communications in writing - All communications must be confirmed in writing (e-mail or letter) to be considered official. Neither AHAM nor the Laboratory will assume any liability for the actions take which are not confirmed in writing.

## 2.0 GENERAL INFORMATION

### 2.1 Factors Certified

Under this Program, Licensees certify (1) water removal capacity<sup>1</sup> as determined in accordance with ANSI/AHAM DH-1 (latest edition) and the tolerances outlined in this Procedural Guide and (2) energy factor<sup>2</sup> as determined in accordance with this Procedural Guide.

### 2.2 To Enter the Program

To Enter the Program - A Licensee enters the Program by completing and submitting to AHAM (a) a Production Survey, (b) a signed License Agreement (including signed Certification Affidavit), and (3) payment of the required fees.

### 2.3 Laboratory Examination

Each participating manufacturer may then be required, at the discretion of AHAM and the Laboratory based on available data, to have its laboratory testing facilities examined and its quality-control procedures reviewed by the Laboratory. This examination will help the Laboratory determine if a manufacturer's quality control procedures indicate need for the early scheduling of tests of that manufacturer's units. Foreign Licensees may be required to send qualified representatives to the United States to meet with AHAM and the Laboratory to review the quality control records, procedures and test results of its certified dehumidifiers.

- A. The plant visit will generally take only one day.
- B. The manufacturer should provide technical data on calibration of instruments used in the testing facilities, information from the cross-testing of units with other manufacturers or the Laboratory, and other regularly conducted calibration-work data. Forms for taking data, calculation sheets, etc., should also be made available for review. The quality control department should provide records showing the extent of the statistical analysis of product evaluation, especially statistics that give a prompt indication of quality during a manufacturing process. Manufacturers are invited to communicate with the Laboratory regarding specific details of the inspection and survey.

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<sup>1</sup> Water removal capacity is expressed in both *pints per 24 hours* (English units) and *liters per day* (metric units)

<sup>2</sup> Energy factor (EF) is expressed in liters per kilowatt-hour (L/kWh)

- C. The Laboratory may visit Non-Licensee participants (whose models are certified by either the Licensee-manufacturer or Licensee brand name owner) for a general review of their participation in the Program. In some cases, these participants may have testing facilities of their own, and may monitor production of their brand dehumidifiers. When models are manufactured by a non-Licensee plant, the Licensee must obtain authorization from the non-Licensee manufacturer for the visit.
- D. Licensees having more than one manufacturing location, relocating operations, or establishing new facilities are required to inform the Laboratory of such changes.

## **2.4 Program Policy Decisions**

The AHAM Major Appliance Engineering Council, composed of AHAM member company representatives, is responsible for approving decisions on policy matters related to this Program. Recommendations from the Participants will be taken into consideration wherever possible.

## **2.5 Certification Seal**

At the time and place of manufacture, a certification seal bearing the words, "AHAM Certified, Water Removal, Energy Factor, ANSI/AHAM DH-1" must be affixed to each dehumidifier under the Program. The certified water removal capacity rating must be listed on the nameplate of each unit.

- A. Graphic Elements CD containing the certification seal artwork and reproduction requirements (size and color, for example) is provided at no additional charge to each Licensee whose certification payments to the Program are current.
- B. The AHAM certification seal is separate from and independent of any other label. The certification seal must be affixed to each certified dehumidifier. Licensees may elect to either have the seal embedded directly in the nameplate or may elect to have labels made that can be affixed directly onto the nameplate. All label specifications must be in accordance with the AHAM Graphic Standards CD.
- C. Licensees may not sell, lend, transfer, or otherwise dispose of the actual certification seals in any manner other than by affixing them to Licensee's production of certified dehumidifiers.

- D. The specific rules for use of the certificate seal, as well as rules on advertising and promotional references to the Program are included in Section 6.0 of this Guide.

## 2.6 Program Funding

Upon joining the Program, and annually in July thereafter, Licensees are required to complete a Production Survey form advising AHAM of the actual production of dehumidifiers sold in the United States for the twelve-month period of July 1 of the previous year through June 30 of the current year.

- A. The amount payable by the Licensee during the calendar year will be determined by multiplying the current AHAM member or non-member Unit Production Fee (established periodically by the Major Appliance Engineering Council) by the reported Production figure. If this amount is less than the minimum participant fee specified in the AHAM Fee Schedule, the Licensee pays the minimum fee. One-quarter of the fee is billed quarterly by AHAM and is payable quarterly by Licensee during the calendar year.
- B. New Licensees just entering the market that do not have any production during the specified period noted above (July 1 of previous year to June 30 of current year) pay a flat fee for the first year of participation. Refer to the current AHAM Fee Schedule.
- C. AHAM pays all Program costs except those costs involved in second sample verification, the challenge procedure, additional sample acquisition, shipping costs, and costs associated with the Laboratory having to purchase samples on the open market.

## 2.7 Program Forms

The forms listed below are used to administer this Program. The forms and the accompanying instructions booklet, *Dehumidifier Certification Program – Instructions for Completing Forms*, and can be obtained from AHAM or Intertek.

Form Number	Title
D-1	Model Data for Directory
D-2	Cross Index of Model Numbers
D-3	Contact and Selection Site Form
D-4	Selection Report
D-5	Report of Water Removal Capacity Test and Energy
Factor	
D-5-F1	First Sample Failure Notification
D-5-F2	Second Sample Failure Notification

D-6	Notice of Non-Compliance
D-8	Request for Model Deletion
D-9	Challenge Request Form

## 2.8 Program Procedural Guide

The Procedural Guide is intended to assure the integrity of the Program and to impartially maintain the uniformity and equity of its administration.

## 3.0 CERTIFICATION DATA AND INFORMATION TO BE SUPPLIED BY LICENSEE

### 3.1 Licensee Information

Licensee shall provide the Laboratory with sufficient information to determine the proper identification of:

- A. Models to be listed in the Certification Directory
- B. Participants' basic models
- C. The best manner and means of obtaining samples for testing.  
Such samples are to be furnished by Licensee at no cost to the Program.

### 3.2 Models to be Included in the Program

Each Licensee (both foreign and domestic) shall certify water removal capacity and energy factor, supply data on, and submit for Directory listing *all* dehumidifiers they manufacture or are manufactured for them under their brand names for sale in the United States and all private-brand models, which the Licensee is to distribute in the United States<sup>3</sup> [This is known as the “all or nothing” rule.]

- A. The manufacturer-Licensee may certify and supply data on private-brand models that it manufactures for sale to and distribution by a concern separate from and unrelated to it. However, to have any such private brands included in the Certification Program, the manufacturer shall certify and supply data on all models which it manufactures for the same private brand and include the production data for these models in the annual Production Survey.

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<sup>3</sup> 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.

- B. The U.S. Licensee may, at its option, selectively certify and supply data on model(s) manufactured for export. The Licensee must include the production data for these models in the Production Survey.
- C. These requirements for certification apply to all models to be sold whether or not they are sold for test market purposes in a limited quantity and specified market area. Certification is not required for limited quantity models distributed on a consignment basis for test purposes.

### **3.3 Carry-Over Models**

The Licensee shall also submit data on carry-over models (models whose production started in previous years but which are still being produced during the current Program year) for continued certification listing. Identical model numbers may be carried over from a prior year if no physical changes are made in the models which would affect their certified ratings. However, if a carry-over model is to have different certified rating(s) from its previous one, it must be assigned a new model number.

The Licensee is responsible for maintaining the performance of the model and must advise the Laboratory of any changes in production which may affect its certified values.

### **3.4 Models of Prior Production Still Being Marketed**

The Licensee may also submit data on models no longer being produced but, are still available for sale by the brand name owner. Models may continue to appear in the Certification Directory only as long as they are being marketed by the brand-name owner and will be subject to possible annual testing even though tested during a prior year.

### **3.5 Submission of Data**

Certification data for a model subject to the Program must be submitted no later than the first day of production of that model. The estimated date on which production will begin must be included on the data form provided to the Laboratory.

### **3.6 Publication of Directories**

AHAM maintains a real-time on-line Directory of Certified Dehumidifiers which list Program models and their certified ratings. Data from the on-line directory can be searched and printed. A printable PDF file is available quarterly.

In the event that an incorrect rating, model number, or other error in Licensee's certified model listing appears in the Directory of Certified Dehumidifiers, AHAM will issue a correction notice to all Program participants advising of the correct listing. If the error was the result of incorrect data supplied by Licensee, the Licensee responsible for the model(s) will be responsible for any costs relative to issuance of this notice to participants. However, if the error was the result of an oversight on the part of AHAM staff or the Laboratory, the correction notice will be issued at no cost to the Licensee.

### **3.7 Program Year**

The Program Year runs January 1 to December 31. Models available for sale during this period are considered to be models of the current Program year even though manufacturer or reseller may give them some other year designation.

### **3.8 Submitting Data**

Only an AHAM Licensee may submit data to the Program. Manufacturer-Licensees shall submit forms for their own brands and may submit for brands manufactured by them for private-brand resellers. Private-brand resellers should normally have the form submitted on their behalf by the Licensee-manufacturers unless other arrangements are made by both parties (with the Laboratory). However, if a Licensee-reseller's brand is produced by a non-Licensee-manufacturer, the forms then must be submitted by the Licensee reseller. Duplicate forms shall not be submitted. The private brand owner is ultimately responsible for all listings under its brand name.

## **4.0 TEST PROCEDURES AND APPLICABLE STANDARDS**

### **4.1 Certified Ratings**

Under the AHAM Dehumidifier Certification Program, water removal capacity and energy factor will be certified by the Licensee in accordance with ANSI/AHAM Standard DH-1 (latest edition) and this Procedural Guide (including tolerance limits).

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

### **4.2 Tolerance**

The water removal capacity and energy factor ratings of any production unit shall be no less than 95% of its claimed rating.

- A. This tolerance is to allow for variations in testing that inevitably occur in any given laboratory facility, variations between laboratories, and variations in components. It is not to be used to rate a given model at values better than the expected average value of all units from the assembly line.
- B. The intent of the industry is to assure that the average water removal capacity of each Licensee is 100% of the certified rating.
- C. The Laboratory will conduct tests and evaluate test data within the framework of the Standard, License Agreement, and this Guide. It is the responsibility of each participant to rate units in accordance with these documents and applicable government regulations.

#### **4.3 Verification Testing**

Regular verification testing will be performed by the Laboratory. Tests are to be performed on randomly selected samples for the Licensee's regular production. In addition, verification tests of any model may be performed if examination of data submitted by the Licensee indicates that a rating may be improperly stated.

- A. The extent of the Laboratory's testing under this Program may vary depending on the number of confirming tests necessary due to findings of non-compliance, and the Program's schedule for testing.
- B. The Laboratory's findings will be given to the Licensee responsible for the model on a standard report form, **Form D-5, Report of Water Removal Capacity and Energy Factor Test**. This report is confidential to the Licensee and is not to be used for commercial or advertising purposes. Its issuance does not necessarily imply that the sample has met the requirements for continued listing.
- C. The report will indicate the findings of compliance or non-compliance.

#### **4.4 Number of Models Tested In a Program Year**

This program requires verification testing of all (100%) new basic models and half (50%) of any carry over models. The number of models on which the Laboratory will conduct verification testing each year is therefore calculated as follows: 100% of new basic models + 50% of carryover basic models. Prior to the beginning of each Program Year, the participant must furnish the Laboratory with a list identifying all the new and carryover basic models so that the number

of units and the specific models to be tested during the Program Year can be determined.

The Laboratory is the sole judge of the accuracy of the certified ratings subject to all provisions of this Guide and of the License Agreement.

#### **4.5 Confidentiality**

The Laboratory will hold the results of all the testing in strict confidence, except for:

- A. Communication with the Licensee with regard to the test results and findings on Licensee's own unit(s);
- B. Communication with a challenging Licensee with regard as outlined under Challenge Procedure, Section 5.17 of this Guide;
- C. Communication with AHAM with regard to test results and findings, which AHAM deems necessary for the proper operation of the Program.

#### **4.6 Test Conditions**

Testing at the Laboratory will be conducted in accordance with the methods specified ANSI/AHAM Standard DH-1 (latest edition).

Certified ratings must be within the allowable tolerance as stated in Section 4.2 of this Guide. Changes in testing procedures and methods will be periodically reviewed to determine the feasibility of their application to the Certification Program.

#### **4.7 Acquisition and Shipping of Test Samples**

The Laboratory randomly selects units either from manufacturer's and distributors' stocks or from the open market. Units selected for the certification program shall be provided by the participants on a consignment basis if at all possible and shipped to the Laboratory on a PREPAID freight basis.

Samples may be purchased by the Laboratory on the open market where stock is not available from manufacturers or resellers facilities, or at the request of the Licensee. However, costs for open market purchase must be paid for by the Licensee.

If a second or subsequent unit must be tested, the Licensee will assume all costs incident to the selection, testing and handling of such units.

The Laboratory will invoice Licensee directly in accordance with the current fee schedule in the Service Contract between the Laboratory and AHAM.

When selection of a second or subsequent sample cannot be accomplished as part of the Laboratory's normal national selection program, the Licensee will be invoiced per diem plus travel expenses.

#### **4.8 Disposal of Test Samples**

As provided in the license agreement, the Laboratory must be notified by the Licensee of the method selected for disposal of tested dehumidifiers. All tested units will be returned to the Licensee unless an optional method is requested by Licensee which the Laboratory is able to honor. If the Licensee has special instruction for disposal of their unit, they must notify the Laboratory in writing within 30 business days following receipt of the test report. All costs associated with the optional method of disposal shall be borne by the Licensee.

- A. The Licensee may give standing instructions to the Laboratory to return all units to his address (or other designated point) until further notice. In this case, no separate notice is required. The units tested will then automatically be forwarded as instructed.
- B. Material Return Orders for the return of goods should be made out to the Association of Home Appliance Manufacturers, Dehumidifier Certification Program, and should be mailed to the Laboratory. Units supplied to the Program on a consignment basis remain the property of the supplier. No purchase order for return is required.
- C. All units shipped from the Laboratory will be forwarded on a freight-charge COLLECT basis. Participants are asked to advise the Laboratory of the base routing for the return of goods and to supply "Return-Goods" tags, if required.

## **5.0 VERIFICATION TESTING RESULTS AND FOLLOW-UP ACTIONS**

### **5.1 Finding of Compliance**

When the results of verification tests indicate that the certified water removal capacity and energy factor are within the allowable tolerance as specified in this Guide, verification is automatically established for the model tested and any derivatives thereof. The certified ratings for water removal capacity and energy factor are continued in the Certification Directory and a copy of the test report is forwarded to the participant.

## **5.2 Finding of Non-Compliance – General**

If the results of the first sample verification test are not within the allowable test tolerance for one or more ratings, AHAM and the Licensee are immediately notified by the Laboratory of the failure. The Licensee has three options:

- (1) Request that a second sample be tested (See Sections below)
- (2) Re-rate on the basis of the single sample test (Section 5.9)
- (3) Withdraw its product from the market. (Section 5.6)

A sample is deemed defective if the Laboratory determines the sample is not functioning properly. For example, one or more of the components may be inoperable, the bucket may not seat properly, or the unit may not run.

## **5.3 Second Sample Testing Following Non-Compliance**

If so requested, a second unit of the same model or a derivative is selected and tested at the Licensee's expense by the Laboratory.

If the results of test of the second unit are within the allowable tolerance of the certification program, the model and any derivatives are considered verified and the rating(s) may be continued at their present values. If the results of the test of the second unit are not within the allowable tolerance of the certification program, refer to Section 5.5 of this Guide.

## **5.4 Second (or Additional) Sample Not Available**

If no unit is available (from manufacturer's and distributors' stocks or from the open market) for second or subsequent test within 30 business days of the previous test, re-rating or withdrawal of the product from the market is required. In the case of withdrawal because a second (or additional) sample is not available, the unit will be listed in the Directory under the section "Models Withdrawn from the Program" with its last published rating.

## **5.5 Second Sample Non-Compliance**

If the second sample test results are less than the tolerance allows for any of the certified ratings, the Licensee has two options: (1) Re-rate in accordance with the Laboratory's results or (2) Withdraw the product (refer to Section 5.6 of this Guide).

## 5.6 Withdrawing Model Due to Non-Compliance

If the Licensee elects to withdraw a model following failure of one or more certified ratings, the model will be removed from its current listed section in the Directory and placed in the Directory under a section titled “Models Withdrawn from Certification Program“. The withdrawn models will show both the previous rating(s) and the revised rating(s). Withdrawn models for which no additional sample was available for testing (refer to Section 5.4 of this Guide) will be listed with previous ratings only. Licensee will notify the first line of distribution and furnish AHAM and the Laboratory with a copy of the notification.

## 5.7 Cost of Testing

The Program assumes all costs incident to the selection and testing of one unit of each model required to be tested, unless the samples are purchased on the open market (refer to Section 4.7). If the results of the first unit tested indicate that any of its certified ratings are not within the allowable tolerance, the Licensee responsible for certification of the model will assume all costs incurred in the obtaining, testing and handling of any subsequent units.

## 5.8 Review of Quality Control Records

The Licensee's quality control records are subject to review by the Laboratory and, on the basis of quality control, the Laboratory shall decide whether one unit was a random defect. If a random defect is determined, a third sample will be selected and tested.

## 5.9 Notification of Revised Ratings

If re-rating of a model is required, **Form D-6, Notice of Non-Compliance**, is sent from the Laboratory by certified mail to the Licensee responsible for the model. This notice clearly states the next steps to be taken by the Licensee:

- A. Shall within 21 business days of receiving written notice from the Laboratory that water removal capacity and/or energy factor has been misstated; revise the stated claim(s) in accordance with the Laboratory's determination for the basic model group. The revised claim must not be greater than the water removal capacity and energy factor determined by the Laboratory.

- B. Shall, at their expense, within these 21 business days, give written notice of the revised claim(s) for each model within the basic model group (whether or not all are currently in production) to all distributors or others in the first line of distribution, including private brand owners. In addition, every reasonable effort shall be made to assure that the dealers and brand owner are notified.
- C. Shall revise all literature (for example, specification sheets, full line folder, ad mats, plus any other sales promotion and/or advertising materials which could be used with potential customers) at its next printing.
- D. Shall furnish to AHAM and the Laboratory copies of the following:
  - (1) notice to the first line of distribution within 21 business days;
  - (2) evidence of reasonable action to notify dealers and brand owner within 21 business days;
  - (3) revised literature as soon as printed.
- D. Failure to take action within the time period allowed will result in expulsion from the Program.
- F. When the Licensee, within the allowable time period, takes the required action, AHAM will, upon receipt of the notice to distributors, concurrently advise other Licensees of their re-rate action.
- G. If the Licensee fails to take action by the time the Laboratory notifies AHAM that the allowable time period for notice to sales outlets has expired, AHAM will notify the Licensee that he is in default under the Licensee Agreement, and request that the notices be sent immediately. Concurrently with this notification, all other Licensees will be advised of the re-rate action by letter.
- H. Immediately after receiving the notification from AHAM, the Licensee must follow the steps outlined under Notification of Revised Ratings, Section 5.9 of this Guide. If this is not done, AHAM will take appropriate steps to exclude the Licensee from the Program.

### **5.10 Exclusion from the Program**

A Licensee who is excluded from this Program shall not, upon receipt of notice from AHAM of their exclusion, affix the certification seal to any Dehumidifier

thereafter manufactured by or for their company and shall make no further reference to AHAM's certification seal or Certification Program. Money paid to AHAM for quarterly production of certified units is not refundable.

Revised ratings will be identified in a suitable manner in the Directory and displayed in the on-line directory.

### **5.11 Extending Period for Re-rating**

If the Laboratory is unable to complete the testing of an additional unit due to extenuating circumstances, the period allowed for re-rating action may be extended. Such extension becomes valid only when the participant is notified in writing by the Laboratory (with copy to AHAM).

### **5.12 Market Surveillance**

Licenses 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, to AHAM. AHAM will bring the facts to the attention of the Licensee for the brand involved without identifying the source of the complaint, and request a report of corrective action taken. Within 21 business days, the Licensee responsible for the brand must take corrective action and furnish a report evidencing such action to AHAM.

### **5.13 Basic Model Brand Name Re-ratings**

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

### **5.14 Challenge Procedure**

A Licensee may challenge the certified ratings of another participant's model. A challenger must complete **Form D-9, Challenge Request Form**, and submit it to the Laboratory. For the challenge to take place, the Licensee must include an explanation of why the challenge should be granted, and authorize the Laboratory to proceed at the challenging Licensee's expense for the initial Laboratory test. Upon receipt of this information, the Laboratory shall notify AHAM. AHAM will notify the challenged Licensee, in writing (with copy to the Laboratory) of the challenge instituted. The Laboratory will then acquire a sample of the challenged model and perform verification testing. AHAM and the Laboratory shall keep the identity of the challenger under this challenge procedure in strict confidence.

This challenge procedure may also be initiated by AHAM, at its discretion, should a model's rating(s) be in doubt. If the challenge initiated by AHAM is not substantiated, the challenge procedure will be funded by the Program. If it is substantiated, the challenged Licensee must pay for all costs incidental to the test(s).

- A. If the challenge is not upheld, the challenging Licensee must pay the Laboratory for all costs incidental to the test. The test unit will be shipped, freight collect, to the challenger.
- B. If the challenge is upheld, the challenged model must be re-rated. (See Notification of Revised Ratings, Section 5.12 of this Guide.) All costs incidental to a single Laboratory test, which upholds a challenge, are paid by AHAM from Program funds.

### **5.15 Voluntary Changes in Rating**

Licensees are encouraged to make adjustments to the certified ratings when such is indicated by reason of quality control data review. This may be done at any time except when the challenge procedure or mandatory re-rate procedure is in effect against that model's rating(s).

A Licensee must notify the Laboratory and AHAM when a voluntary change in certified rating(s) is made and provide the Laboratory with the revised rating(s) for the model on a revised **Form D-1, Model Data for Directory Form**. If the rating(s) are greater than previously certified, the 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 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 Laboratory's test is unable to verify a Licensee's increased voluntary change in rating, the original certified rating will remain in force.

Changes in certified ratings under the foregoing conditions, which are not the result of changes in component parts of a previously certified model, do not require a change of model designation. However if, for example, a change in a dehumidifier compressor modifies any of the previously certified data, the model number must be changed. This can be accomplished by the addition of a letter or number or by other means acceptable to the Licensee and the Licensee and the Program.

## **6.0 RULES FOR USE OF THE SEAL, ADVERTISING AND PROMOTIONAL REFERENCES**

### **6.1 Rules for Use of the Seal and Advertising**

Licensees may not use the certification seal or the terms "certified" or "AHAM verified" in connection with advertising to the public in referring to products that have not been certified or from which certification has been withdrawn. However, Licensees are encouraged to the proper usage and promotion of the Certification Program and the certification seal in specifications, literature and advertising.

### **6.2 Definition of the Seal**

The AHAM Dehumidifier Certification Seal is the mark issued by AHAM to all manufacturers and private brand resellers that are Licensees in the AHAM Dehumidifier Certification Program. Under this Program, manufacturers certify and AHAM verifies that:

The water removal capacity of all dehumidifiers bearing this mark are determined and accurately stated in accordance with ANSI/AHAM Standard DH-1 (latest edition) and the energy factor of all dehumidifiers bearing the mark are determined and accurately stated in accordance with this Procedural Guide.

### **6.3 Use of the Seal**

Licensees are provided with a Graphics Standard CD containing the seal and the reproduction requirements. Licensees must then reproduce the certification seal for inclusion on the actual certified units or on the hangtags attached to the units. The following requirements must be followed:

- A. Size of seal should be such that all lettering is legible.
- B. In word content, it must be identical to the AHAM Seal included in the Graphics Standard CD.
- C. It is preferred that the seal color be the same as that of the AHAM seal; if not, it should be black and white or, if reproduced on the nameplate, it should be in clearly distinguishable shades of the nameplate background color.

- D. The seal shall be affixed to the Dehumidifier in a permanent manner and shall be placed where it is visible without having to remove any grilles, etc from the Dehumidifier. As an exception to placing the seal directly on the units, the seal may be reproduced on a hangtag attached to the Dehumidifier unit. In this case, the hangtag paper stock must have a basic weight of not less than 110 pounds per 500 sheets (25 1/2 inches x 30 1/2 inches index) and the material attaching the hangtag to the unit must be of sufficient strength to ensure that if gradual pressure is applied to the hangtag by pulling it away from where it is attached to unit, the hangtag will tear before the material used to affix the hangtag to the unit breaks.

#### **6.4 Statement to Accompany Seal Reproduction**

Reproductions of the seal may be used in advertising or promotional literature. However, there may be no alteration in seal design and all copy should be legible in reproductions. It is preferred that the color is the same as the AHAM Seal provided in the Graphics Standard CD; if not, it should be black and white. When so used, the following statement, or similar to it, may appear in close proximity to it:

When this “AHAM Certified” seal is affixed to a Dehumidifier and the water removal capacity and energy factor appear in the AHAM Certification Directory, it signifies that these ratings are certified accurate by the manufacturer and verified by the Association of Home Appliance Manufacturers in accordance with ANSI/AHAM Standard DH-1 (latest edition) and this Procedural Guide.

#### **6.5 Mixing Certified and Non-certified Models**

Dehumidifier models that are not under certification may not be listed, indicated or described in literature, advertisements, or point-of-purchase material in which AHAM certified models also are listed or described because such listing could be misleading.

#### **6.6 Defining What Is Being Certified**

Only water removal capacity and energy factor are certified. No implication should ever be made that the seal covers any other feature or performance factor.

#### **6.7 Reference to the Laboratory**

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

## **6.8 Submission of Specification Sheets and Promotional Material**

Two copies of specification sheets for models subject to the Program and two copies of promotional literature which refer to, illustrate, or describe certified models, shall be forwarded to AHAM upon request by participants in the AHAM Dehumidifier Certification Program. AHAM shall review these to assure that references to the AHAM seal and Program provisions are in accordance with these recommendations.

## **6.9 Rules for Use of AHAM's Dehumidification Selection Guide**

Participants shall make no room size or area dehumidification claims on any advertising literature or specification sheets referring to AHAM's Certification Program or seal unless:

1. The AHAM Dehumidification Selection Guide and accompanying wording (as shown in the Directory of Certified Dehumidifiers) is reproduced in its entirety, and;
2. All such claims are based on the values shown in the Guide.

## **6.10 Examples of Improper Use or Statements Which Might Cause Confusion as to the Scope of AHAM Verification**

Following are examples of practices which must be avoided.

- A. Use of an incomplete or poorly reproduced version of the Certification Seal. (All printed information on the seal must be clear and legible.)
- B. Statements that might cause confusion as to the scope of AHAM verification. For example:
  - (i) Accurate use of the AHAM seal and statement as to scope, except that the statement is immediately followed by: "You know that you are getting all the water removal capacity you are paying for." (AHAM makes no verification as to the sales value of any particular model.)
  - (ii) Use of the following:

"AHAM rated capacities. The Association of Home Appliance Manufacturers' seal is found on all (brand name) Dehumidifiers

and signifies that all performance data stated are verified as accurate." (All performance data are not verified.)

"Every Dehumidifier rating is AHAM verified." (Every rating is not verified).

"AHAM certified water removal capacity and energy factor."  
(The capacity is certified by the Licensee; it is verified by AHAM.)

### **6.11 Accurate Representation**

The above examples are typical of kinds of statements or usages which can cause confusion or suggest more than is covered by the scope of the Program. These rules and suggestions were established to properly promote the Dehumidifier Certification Program and are not intended to otherwise limit or restrict participants' advertising. Every circumstance where the principle of accurate representation applies cannot be anticipated and dealt with here. It is the responsibility of the Licensee not to misrepresent their status in the Program under any circumstances. If there are questions, Licensees should submit intended uses of the seal, draft advertisements and/or any other certification claims to AHAM for advanced review.

### **6.12 Discontinuing Use of Seal and References to AHAM Certification Program**

Upon withdrawal or termination of certification, a Licensee must immediately discontinue use of the certification seal and discontinue publication of documents (including advertisement, websites, etc.,) containing the certification logo or reference to the Licensee's participation in the Certification 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 in the AHAM Certification Program that they have been purchasing.

## APPENDIX A - DEFINITION OF TERMS

**AHAM Licensee** – An organization that has agreed in writing to the provisions of the Program and has been authorized by the Association of Home Appliance Manufacturers to participate in it. The term “AHAM” has been dropped in references to “Licensee” in this Guide.

**Basic Model** – A model that has been designated as such by the Licensee responsible for it. Each basic model differs from other models either in basic functional design or water removal capacity and/or energy factor. Other models which are like the basic model are considered derivative models. Together they are called a model group. Different brand-name models may be in a basic model group. A model should not be designated as a basic model if it has the same capacity as a designated basic model but differs from it only because of different decorative treatment; rather, it should be considered a derivative of the basic model, i.e., in the same model group.

**Brand Name** – The market name by which a product line is known as determined and provided by the Program participant.

**Carry Over Model** – A model that has been previously listed in the certification directory.

**Certified** – A statement by the Licensee that the water removal capacity and energy factor ratings as claimed was determined in accordance with ANSI/AHAM Standard DH-1 (latest edition) and this Procedural Guide (including tolerance limits).

**Directory** – A listing of all models of each participating Licensee which are within the Certification Program. This Directory is available on-line.

**Energy Factor** – A measure of the energy efficiency of a dehumidifier calculated by dividing the water removed from the air by the energy consumed, measured in L/kWh.<sup>4</sup>

**First Line of Distribution** - The initial customer(s) to whom the Licensee and/or its branch office is 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.

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<sup>4</sup> Source: CAN/CSA C749-94, Performance of Dehumidifiers (Reaffirmed 2000)

**Manufacturer** – The organization that produced the dehumidifier.

**Participant** – An organization having models listed in AHAM’s Directory of Certified Dehumidifiers. A participant may or may not be an AHAM Licensee. A non-Licensee participant’s dehumidifiers are certified and submitted to the Program by another company (either the manufacturer or the brand-name owner) who then must be an AHAM Licensee.

**Private Brand Reseller** – An organization that markets, but does not manufacture, its own brand-name units.

**Program Models** – All models whose ratings are required to be certified and submitted to the Program under the terms of the license agreement, this Procedural Guide, and letters of instruction from AHAM.

**Testing Laboratory (Administrator)** – An independent testing laboratory under contract to AHAM to perform verification and challenge tests and collect certified data; hereinafter referred to as “the Laboratory”.

**Verification Test** – A test conducted by the Laboratory in accordance with ANSI/AHAM Standard DH-1 (latest edition) and this Procedural Guide to determine the water removal capacity and energy factor.

**Verified** – Confirmation of the Licensee’s water removal capacity and energy factor ratings by AHAM according to Program Procedures.

## APPENDIX B – ENERGY CONSUMPTION TEST AND ENERGY FACTOR CALCULATION PROCEDURES

### Energy Consumption Test<sup>5</sup>

During the performance of the Capacity Test done in accordance with ANSI/AHAM DH-1 (latest version), a watt-hour meter shall be used to measure dehumidifier energy consumption (e).

The watt-hour meter shall be accurate to within 0.5 percent of the indicated value and have a scale with graduations of 1 watt-hour or less.

Record the dehumidifier's energy consumption (e) in kilowatt-hours (kWh)

### 2.0 Energy Factor Calculation<sup>6</sup>

2.1 Calculate the energy factor of the dehumidifier as follows:

$$EF = m_{kg}/(ep)$$

Where

EF = energy factor (in L/kWh)

$m_{kg}$  = mass of condensate collected during the ANSI/AHAM DH-1 Capacity Test test period, in kg

*Note: Convert the mass of condensate collected from mass in pounds ( $m_{lb}$ ) to mass in kg ( $m_{kg}$ ), use the following calculation:  $m_{kg} = m_{lb} \times 0.454$*

e = energy consumption measured during the ANSI/AHAM DH-1 Capacity Test test period, in kWh (See 1 above)

$\rho$  = density of water at the test temperature, 1.0 kg/L

2.2 Values of EF shall be rounded to the nearest 0.01 L/kWh

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<sup>5</sup> Based on *Energy Star Program Requirements for Dehumidifiers*, Version 2.0, #4. Environmental Protection Agency

<sup>6</sup> Based on CAN/CSA C749-94 (*Performance of Dehumidifiers*) Reaffirmed 2000. Section 4.

### 3.0 Expressing Water Removal Capacity in Metric Units

- 3.1 To convert the water removal capacity from pints/24 hours to L/24 hours, use the following formula:

$$C_{r (L/24 \text{ hours})} = \text{Water Removal Capacity (pints/24 hours)} \times 0.473 \text{ L/pint}$$

Where:

$$C_{r (L/24 \text{ hours})} = \text{Water Removal Capacity (L/24 hours)}$$

*Note: Water removal capacity is expressed in both pints/24 hours and L/24 hours in the AHAM Directory of Certified Dehumidifiers.*