HOME VENTILATING INSTITUTE

HVI Addendum A to
HVI Publication 903:2020

FIRST-PARTY LABORATORY TESTING PROCEDURES

Reference: HVI Publication 903:2020 Sections 4.4.2 & 5.8

Background:

Issue #1:
HVI Publication 903:2020 does not have sufficient detail for completing a First Party Lab-to-Designated Lab comparison for HERV products. This Addendum A addresses the tolerances needed for approval of HERV First Party Labs.

On December 21, 2021, the HVI HERV Committee approved a proposal for HERV First Party Lab-to-Designated Lab comparison tolerancing, shown below as 4.4.2.7 and 5.8.7, and that it be sent to and approved by the HVI Lab Oversight Committee.

On January 11, 2022, the Designated Voting Members of the HVI Lab Oversight Committee approved the HERV First Party Lab-to-Designated Lab comparison tolerancing as recommended by the HERV Committee.

Issue #2:
A separate topic within this Addendum A is that HVI 903:2020 referenced ISO17025:2005 for General Requirements for the competence of testing and calibration laboratories. ISO17025:2005 was only valid until June 1, 2021. In an April 8, 2021 Lab Oversight Committee Meeting, it was approved that the ISO17025:2005 references be removed from HVI Publication 903:2020. The existing approved HVI First Party Labs did not use ISO17025:2005 for their approval references.

HVI 903:2020 Addendum A

Issue #1: Add Sections 4.4.2.7 & 5.8.7 for the HERV First Party Lab-To-Designated Lab comparisons.

Issue #2:Remove the ISO17025:2005 references throughout the document.

~~1.1.1. ISO17025:2005 or~~ ISO17025:2017– General requirements for the competence of testing and calibration laboratories. ~~ISO17025:2005 remains valid until June 1, 2021.~~

1.1.1.1. Within this publication, reference for specific ISO17025:~~2005~~ 2017 sections will be identified as ~~X.X:2005 and~~ X.X:2017 ~~for specific ISO17025:2017 sections~~.

4.1.4. Laboratory accreditation to ~~ISO17025:2005 or~~ ISO17025:2017

4.2.2.1. Laboratory personnel conducting the testing shall be properly trained and qualified. Personnel will be assessed per ~~5.2:2005 or~~ 6.2:2017. Assessment team will utilize Applicant's training records as well as onsite observation.

4.2.2.2. Environmental controls will be assessed per ~~5.3.2:2005 or~~ 6.3.3:2017~~.~~

4.2.2.3. Testing and calibration will be assessed per ~~5.6.2.1:2005 or~~ 6.4:2017

4.4.2.7 Tolerances for HERV First Party Lab-To-Designated Lab comparisons

4.4.2.7.1 Airflow - Use same tolerancing (5%) and comparison method of HVI 903 Section 4.4.2, excluding 4.4.2.5 (sound) for Net Supply Airflow. Actual static pressure is recorded and not the traditional rounded to 25 Pa, 50 Pa, 75 Pa … etc. rating points.

4.4.2.7.2 Energy - 5% comparison tolerance for SRE and TRE percentages at -25°C, 0°C and 35°C. relative to designated laboratory tested values. Example – Designated Lab SRE testing results of 70% SRE. Applicant lab would have to show SRE results between 66.5% (70%x.95) and 73.5% (70%x1.05).

4.4.2.7.3 Product - The product selected for the First-Party Lab-to-Designated Lab comparisons must have the full range of air and energy performance capability that the lab will use as their HVI Approved Lab scope.

4.4.2.7.4 HERV lab comparisons are to use SI units and single decimal points.

5.8.7 Tolerances for annual audit HERV First-Party Lab-to-Designated Lab comparisons

5.8.7.1 Airflow - Use same tolerancing (5%) and comparison method of HVI 903 Section 4.4.2, excluding 4.4.2.5 (sound) for Net Supply Airflow. Actual static pressure is recorded and not the traditional rounded to 25 Pa, 50 Pa, 75 Pa … etc. rating points.

5.8.7.2 Energy - 5% comparison tolerance for SRE and TRE percentages at -25°C, 0°C and 35°C. relative to designated laboratory tested values. Example – Designated Lab SRE testing results of 70% SRE. Lab would have to show SRE results between 66.5% (70%x.95) and 73.5% (70%x1.05).

5.8.7.3 Product – The lab must test an ERV for the annual audit if they wish their HVI Approved Lab scope to include First-

Party testing for both HRVs and ERVs. The product selected for the First-Party Lab-to-Designated Lab comparisons must have the full range of air and energy performance capability that is identified in their Approved Lab scope.

Appendix A – Alternative Qualification if First-Party Lab is not ISO17025-Accredited

A1. An Applicant may be approved by HVI if the HVI Assessment team determines the laboratory meets the requirements of the following sections of ~~ISO17025:2005 or~~ ISO17025:2017.

A1.1. Document Control – ~~4.3:2005, 5.4.1:2005, 5.4.2:2005 and 5.4.7:2005 or~~ 8.3:2017, 7.2:2017, and 7.11:2017.

A1.2. Purchasing Services and Supplies – ~~4.6:2005 or~~ 6.6:2017

A1.3. Nonconforming test or calibrations – ~~4.9:2005 or~~ 7.10:2017

A1.4. Corrective action – ~~4.11:2005 or~~ 8.7:2017

A1.5. Technical records – ~~4.13:2005 or~~ 7.5:2017

A1.6. Personnel qualifications – ~~5.2.5:2005 or~~ 6.2:2017

A1.7. Accommodation and environmental conditions – ~~5.3:2005 or~~ 6.3:2017

A1.8. Test Equipment – ~~5.5:2005 or~~ 6.4:2017

A1.9. Measurement traceability – ~~5.6.2:2005 or~~ 6.5:2017

A1.10. Handling of test items – ~~5.8:2005 or~~ 7.4:2017

A1.11. Reporting of results – ~~5.10:2005 or~~ 7.8:2017

Requirements for Appendix A approval using the ISO17025~~:2005~~ sections are ~~identical to~~ the same as used for the UL Client Test Data Program

Impact on existing approved HVI First Party Labs: No Impact or re-approval required

Impact on certifications that used existing approved HVI First Party Labs: No impact

Impact on verification program: No impact

Approval Authority: HVI Board of Directors approval, April 21, 2022

Date of Implementation: April 21, 2022