

2021

AHRI Policy & Procedures for the Development of Standards

Approved by the AHRI Standards Committee, August 2021



we make life better®

2311 Wilson Boulevard, Suite 400
Arlington, VA 22201, USA
www.ahrinet.org
PH 703.524.8800
FX 703.562.1942

Foreword:

This *AHRI Policy and Procedures for the Development of Standards* document is owned and maintained by the AHRI Standards Committee, a standing committee of the AHRI Board of Directors, and defines the policies and procedures related to development and approval of AHRI standards and guidelines.

Copies of this document shall be made freely available to interested parties.

Figures and examples in this document, unless otherwise noted, should be considered as informative.

TABLE OF CONTENTS

	PAGE
SECTIONS	
Section 1. Authority and Intent.....	1
1.1 Incorporation.....	1
1.2 Bylaws.....	1
1.3 Accreditation.....	1
1.4 Intent of standards.....	1
Section 2. Definitions.....	1
2.1 Addenda.....	1
2.2 Alternate Voter.....	2
2.3 ANS.....	2
2.4 ANSI.....	2
2.5 Approval ballot.....	2
2.6 Balance.....	2
2.7 BSR-8.....	2
2.8 BSR-9.....	2
2.9 Canadian Interest.....	2
2.10 Charter.....	2
2.11 Consensus.....	2
2.12 Consensus Body (CB).....	2
2.13 Continuous maintenance.....	3
2.14 Days.....	3
2.15 Derivative standard.....	3
2.16 Editorial change.....	3
2.17 Electronic ballot.....	3
2.18 Errata.....	3
2.19 Guideline.....	3
2.20 Interest Category.....	3
2.21 I-P units.....	3
2.22 Meeting.....	3
2.23 NOI.....	3
2.24 NSC.....	3
2.25 Periodic maintenance.....	4
2.26 PINS.....	4
2.27 Primary Voter.....	4
2.28 Project Charter.....	4

2.29	Quorum	4
2.30	Reaffirmation	4
2.31	Recirculation	4
2.32	Revision	4
2.33	SCC	4
2.34	Shall	4
2.35	Should	4
2.36	SI units	4
2.37	Simple decision	5
2.38	Stabilized maintenance.....	5
2.39	Standard	5
2.40	Standards Committee (StdC).....	5
2.41	Standards Subcommittee (SSC).....	5
2.42	Standards Technical Committee (STC).....	5
2.43	Standards Technical Committee Charter.....	5
2.44	Standards Work Group (SWG)	5
2.45	Substantive or technical change	5
2.46	Withdrawal.....	5
Section 3. Deliverables		6
3.1	Use of AHRI Standards.....	6
3.2	Types of Deliverables.....	6
3.2.1	Standards	6
3.2.2	Guidelines.....	6
3.2.3	Naming	6
3.3	Measurements	8
3.3.1	Single SI	8
3.3.2	Dual	8
3.3.3	Joint	8
Section 4. Standards Activity Structure.....		8
4.1	Summary	8
4.1.1	Standards Committee.....	9
4.1.2	Standards Subcommittees	9
4.1.3	Standards Technical Committees.....	9
4.1.4	Standards Work Groups.....	9
4.1.5	Consensus Body.....	9
4.2	Standards Committee	10
4.2.1	Standards Committee Membership.....	11

4.2.2	Standards Committee Leadership	11
4.2.3	Standards Committee Decision making.....	11
4.3	Standards Subcommittee	11
4.3.1	Standards Subcommittee Scope and Responsibilities.....	11
4.3.2	Standards Subcommittee Membership.....	12
4.3.3	Standards Subcommittee Leadership	12
4.3.4	Standards Subcommittee Meetings and Decisions	12
4.4	Standards Technical Committee.....	12
4.4.1	Standards Technical Committee Scope and responsibilities.....	12
4.4.2	Standards Technical Committee Membership	13
4.4.3	Standards Technical Committee Leadership.....	14
4.4.4	Standards Technical Committee Meetings and Decisions	14
4.5	Standards Work Group.....	14
4.5.1	Standards Work Group Scope and Responsibilities.....	14
4.5.2	Standards Work Group Membership	14
4.5.3	Standards Work Group Leadership.....	14
4.5.4	Standards Work Group Meetings and Decisions	15
4.6	Consensus Body.....	15
4.6.1	Consensus Body Scope and Responsibilities.....	15
4.6.2	Consensus Body Membership.....	15
4.6.3	Consensus Body Balloting.....	15
4.6.4	Interest Categories	15
Section 5.	Meetings and decisions.....	16
5.1	Meetings.....	16
5.2	Simple Decisions.....	17
5.3	Approval ballots.....	17
5.3.1	By a Standards Subcommittee:.....	17
5.3.2	By a Standards Technical Committee:.....	17
5.3.3	By a Standards Work Group:.....	18
5.3.4	Procedure	18
5.3.5	Recirculation.....	18
5.3.6	Negative Ballot	19
5.3.7	Substantive changes.....	19
Section 6.	Development and Approval	19
6.1	Work Program	19
6.2	Initiation of Activity.....	19
6.2.1	Decision to Start	19

6.2.2	Approval of Project Charter.....	20
6.2.3	ANSI and SCC filings.....	20
6.3	Working Draft Stage	21
6.4	Public Review	21
6.4.1	Announcement of Review	21
6.4.2	Review Comment Collection and Adjudication	21
6.4.3	Revision of Draft	22
6.5	Standards Subcommittee Approval	22
6.6	AHRI-only Publication	22
6.7	Consensus Body Balloting	22
6.7.1	Initial Ballot.....	22
6.7.2	Recirculation.....	23
6.7.3	Substantive changes.....	24
6.8	ANSI/SCC Publication.....	24
6.9	Appeals.....	24
6.9.1	Appeals Process	25
6.10	Suits or Claims	25
Section 7. Maintenance.....		25
7.1	Reaffirmation and Withdrawal.....	25
7.1.1	Reaffirmation.....	26
7.1.2	Withdrawal	26
7.2	Interpretations	27
7.3	Addenda and Errata.....	27
7.3.1	Addenda.....	27
7.3.2	Errata	27
7.4	Discontinuance/Cancellation of an Activity.....	27
7.5	Continuous and Stabilized Maintenance	28
7.5.1	Continuous Maintenance	28
7.5.2	Stabilized Maintenance.....	28
7.6	National adoption.....	29
7.7	Joint development with or adoption of standards from other organizations.....	29

APPENDICES

Appendix A.	AHRI Patent Policy – Normative.....	30
Appendix B.	AHRI Records Retention Policy -- Normative.....	32
Appendix C.	ANS Commercial Terms and Conditions -- Normative	33
Appendix D.	AHRI Antitrust Policy -- Normative.....	34
Appendix E.	Normative References	35

Appendix F. Process Stages and Flowcharts -- Informative36

TABLES

Table 1: Summary of stages (informative)36

FIGURES

Figure 1: Example of the title of a standard (informative).....7

Figure 2: AHRI standards structure (informative).....10

Figure 3: Revise existing standard, or create new standard (informative).....36

Figure 4: Reaffirm, or withdraw standard (informative)37

Figure 5: Public review through publication as AHRI-only designation (informative).....37

Figure 6: Consensus Body through ANS and/or NSC (informative).....38

AHRI POLICY & PROCEDURES FOR THE DEVELOPMENT OF STANDARDS

Section 1. Authority and Intent

1.1 *Incorporation.*

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) is a legal entity, duly incorporated under the law of the Commonwealth of Virginia, United States, and can be held legally responsible for its standards development activities.

1.2 *Bylaws*

The AHRI Bylaws authorizes the development and approval of AHRI standards under a policy approved by the Standards Committee, a standing committee of the AHRI Board of Directors. All AHRI standards activities, including those of the Standards Committee, Standards Subcommittees, Standards Technical Committees, Standards Work Groups, and Consensus Bodies are subject to the current provisions of AHRI's governance documents including the Articles of Incorporation, Bylaws, and standards-related actions of AHRI's Board of Directors. The procedures outlined in this policy and procedure document are subject to authority and restrictions outlined in the AHRI governance documents listed above. Any conflict between the policy and procedures stated in this document and AHRI's governance documents shall be resolved in favor of AHRI's governance documents.

1.3 *Accreditation*

AHRI has been accredited by the American National Standards Institute (ANSI) to develop American National Standards (ANS). This accreditation is through compliance of this *AHRI Policy and Procedures for the Development of Standards* document with the *ANSI Essential Requirements*.

AHRI has also been accredited by Standards Council Canada (SCC) to develop National Standards of Canada (NSC). This accreditation is through compliance of this *AHRI Policy and Procedures for the Development of Standards* document with the *SCC Requirements & Guidance*.

AHRI shall notify these respective organizations upon revision of this document..

1.4 *Intent of standards*

The procedures in this document are intended to comply with internationally accepted standards principles and practices as outlined in the *ANSI Essential Requirements* and *SCC Requirements & Guidance*, and are not designed or intended to introduce barriers to trade or to discriminate among products based on place of origin, AHRI standards are not developed as a means to fix prices, exclude competition, or otherwise inhibit commerce beyond what is necessary to meet requirements of relevant technical regulations, or other legitimate sectoral or local requirements for compatibility, environmental protection, health and safety. AHRI standards are not meant to mislead consumers and other users of a product, process or service addressed by the standard.

Section 2. Definitions

2.1 *Addenda*

Technical or substantive changes made to a single item or small portion of the document in order to correct errors in the publication of the standard or guideline. See Section 7.3.1.

2.2 *Alternate Voter*

The member who is designated by the company by whom they are employed or who they represent, as an alternate to the primary voter from that company. Only if the primary voter does not participate in the ballot does the alternate cast a ballot. See also *Primary Voter*.

2.3 *ANS*

An American National Standard, a standard developed and approved under the ANSI-accredited AHRI standards process and meeting the requirements of the ANSI Essential Requirements. These standards include the ANSI designation in their title.

2.4 *ANSI*

The American National Standards Institute, the national standards body for the United States.

2.5 *Approval ballot*

A formal ballot carried out by a Standards Subcommittee, Standards Technical Committee, or Standards Work Group in a meeting or by electronic ballot to approve or advance work to the next phase as described in Section 5.3. See also *Simple decision*.

2.6 *Balance*

A requirement that the Consensus Body have not more than half its members with a single Interest Category.

2.7 *BSR-8*

The form submitted to the ANSI Board of Standards Review (BSR) to announce the public review of a candidate ANS.

2.8 *BSR-9*

The form submitted to the ANSI Board of Standards Review (BSR) to apply for consideration of the standard as an ANS.

2.9 *Canadian Interest*

Specification of how a standard or potential standard meets the needs of the Canadian market or industry and how Canadian interests will be represented, using SCC's Canadian Interest Form. The completion of this form is required for all standards intended for approval as NSC.

2.10 *Charter*

See *Project Charter* or *Standards Technical Committee Charter*.

2.11 *Consensus*

Consensus means substantial agreement has been reached by directly and materially affected parties. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution

2.12 *Consensus Body (CB)*

The group responsible for final approval of an ANS or NSC, as described in Section 4.6.

2.13 *Continuous maintenance*

A mode of maintenance where an ANS is registered with ANSI under that option and the standard is open continuously for review and comment. This mode allows for portions of a standard to undergo review and revision, while the entire document must be reviewed every five years. See Section 7.5.1.

2.14 *Days*

All days in this document are calendar days.

2.15 *Derivative standard*

A standard based upon another published standard, generally using the same method of test, but applicable to a specific climate or country.

2.16 *Editorial change*

A non-substantive change to correct spelling or grammar, or an explanatory change to aid in comprehension or understanding, that does not change the technical meaning of the document. See also *Substantive change*.

2.17 *Electronic ballot*

A ballot carried out via email or web form, etc. rather than in a meeting. See also *Approval ballot*.

2.18 *Errata*

Non-substantive or editorial errors which do not affect the substantive or technical content or meaning of the standard or guideline. See Section 7.3.2.

2.19 *Guideline*

An AHRI publication as described in Section 3.2.2.

2.20 *Interest Category*

A description of a person's interest in AHRI standards. See Section 4.6.4.

2.21 *I-P units*

Inch-pound or imperial units of measurement (as opposed to SI units).

2.22 *Meeting*

A scheduled meeting of the Standards Committee, Standards Subcommittee, Standards Technical Committee, or Standards Work Group with adequate prior notice, prior document distribution, and a quorum of members present, as described in Section 5.1.

2.23 *NOI*

A Notice of Intent submitted to SCC to inform them of the start of a new activity intended to produce an NSC, the public review of the draft, or final publication of the standard.

2.24 *NSC*

A National Standard Canada, a standard developed and approved under the SCC-accredited AHRI standards process and meeting the requirements of the SCC Requirements & Guidance. These standards include the CAN designation in their title.

2.25 *Periodic maintenance*

The default maintenance schedule for standards where the standard must be revisited and reviewed such that any reaffirmation, withdrawal, or publication of revision take place within five years of the previous approval. See also *Continuous maintenance* and *Stabilized maintenance*.

2.26 *PINS*

The form submitted to the ANSI Project Initiation Notification System to inform ANSI of the start of a new activity intended to result in an ANS.

2.27 *Primary Voter*

The member who is designated by the company by whom they are employed or who they represent, as the primary voter from that company; only one person from a company may vote. If the primary voter does not participate in the ballot, then the Alternate Voter may cast a ballot. See Section 4.4.2.1. See also *Alternate Voter*.

2.28 *Project Charter*

The document authorizing the start of an activity to develop or revise a standard or guideline, and defining the scope, deliverable, business need, and project schedule as described in Section 6.2.2.

2.29 *Quorum*

The attendance of 50% of voting members in a meeting.

2.30 *Reaffirmation*

Reapproval of a standard as-is without substantive changes as described in Section 7.1.1.

2.31 *Recirculation*

The process of sending comments associated with a negative ballot, and the attempts at resolution to those comments, to eligible voters, giving them the opportunity to change their vote based upon those comments, as described in Sections 5.3.5 and 6.7.2.

2.32 *Revision*

Changing and republishing a standard or guidelines with substantive changes.

2.33 *SCC*

Standards Council Canada, the national standards body for Canada.

2.34 *Shall*

The word “Shall” designates a mandatory action.

2.35 *Should*

The word “Should” designates a provision which is not mandatory, but which is desirable as good practice.

2.36 *SI units*

Units of measurement defined by the International System of Units, commonly known as the metric system (as opposed to I-P units).

2.37 *Simple decision*

A decision made in a meeting by ballot or consensus by a Standards Subcommittee, Standards Technical Committee, or Standards Work Group, as described in Section 5.2. (See also *Approval ballot*.)

2.38 *Stabilized maintenance*

A maintenance schedule that allows a standard to be revisited less often than every five years if no changes are likely to be made, as described in Section 7.5.2.

2.39 *Standard*

An AHRI publication as described in Section 3.2.1.

2.40 *Standards Committee (StdC)*

The standing committee of the AHRI Board of Directors responsible for oversight of the AHRI standards activity, as described in Section 4.2.

2.41 *Standards Subcommittee (SSC)*

The group responsible for standards activities within a specific product grouping or topic, as described in Section 4.3.

2.42 *Standards Technical Committee (STC)*

The group responsible for development and initial approval of a standard or guidelines, as described in Section 4.4.

2.43 *Standards Technical Committee Charter*

The document approved by the SSC defining the scope of the STC.

2.44 *Standards Work Group (SWG)*

An optional subset of a Technical Committee, as described in Section 4.5.

2.45 *Substantive or technical change*

A change to a document that directly or materially affects the use or implementation of the document. Substantive changes include

- a) addition or deletion of shall/must statements, or change of should/may to shall/must or vice versa
- b) addition or deletion of requirements
- c) addition of mandatory compliance with referenced standards
- d) changes that will make a previously conformant application no longer conformant, or vice versa

See also *Editorial change*.

2.46 *Withdrawal*

Formal action to withdraw a level of approval of a standard, with or without ceasing publication as described in Section 7.1.2.

Section 3. Deliverables

3.1 *Use of AHRI Standards*

The use of AHRI standards is voluntary.

While AHRI cannot control how its standards are used by others, AHRI standards are not designed for nor intended by AHRI to be used for creating unnecessary obstacles to trade, either intra-national or international; discriminating among products on the basis of place of origin; fixing prices or inhibiting competition or commerce beyond what is necessary to meet requirements of relevant technical regulations; or misleading consumers or other users of products which are based on AHRI standards.

AHRI standards intended for conformity assessment shall include a clear statement to that effect in the introductory pages.

3.2 *Types of Deliverables*

AHRI develops, publishes, and maintains both standards and guidelines. The process for development of standards and guidelines is defined in Section 6.

3.2.1 *Standards*

AHRI standards are designed for use in conformance testing and certification and use language such as “shall” or “must” to state requirements for testing purposes.

AHRI standards may be approved as AHRI-only or may also be further approved as ANS and/or NSC standards. All AHRI standards shall be revised, reaffirmed, or withdrawn within five years of publication. Issuance of addenda or errata does not affect the publication date.

AHRI does not publish safety standards.

AHRI standards are classified as one of two types: product standards, or application standards.

3.2.1.1 *Product Standards*

Product standards provide means for the expression of published product performance such as capacity, efficiency, or pressure drop, or directly or indirectly support that expression.

3.2.1.2 *Application Standards*

Application standards use physical measurements in conjunction with a product standard to provide results at conditions beyond those in the product standard.

3.2.2 *Guidelines*

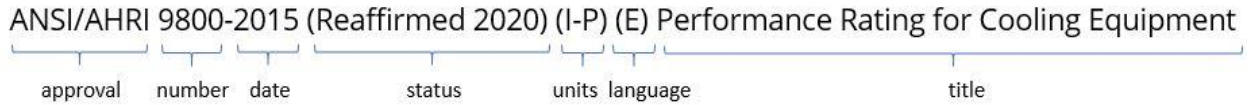
AHRI Guideline documents cover such topics as terminology, nomenclature, and instructional or explanatory information. Guidelines provide voluntary provisions only and are not mandatory.

Guidelines are published with AHRI-only approval and are not submitted for ANS and/or NSC designation. Guidelines shall be reviewed every five years for continued correctness and applicability, and may be either revised, reaffirmed, or withdrawn.

3.2.3 *Naming*

Standards and guidelines are named as shown in Figure 1.

Figure 1: Example of the title of a standard (informative)



3.2.3.1 Organizational Approval

A prefix listing the approvals given the standard by organizations. Multiple approvals may be combined, separated by a slash (/).

- “ANSI” for a standard approved in accordance with ANSI requirements. Standards intended for this approval but have not yet been given final approval shall carry the BSR designation instead.
- “CAN” for a standard approved in accordance with SCC requirements.
- “ASHRAE” for a standard jointly developed and approved by ASHRAE and AHRI.
- “AHRI” for a standard or guideline approved by AHRI.

3.2.3.2 Number

The number of the standard. In instance where two standards have been consolidated into a single standard the compound number shall be separated by a slash (/).

Guidelines are named with a letter (A-Z) instead of a number.

Product standards shall be numbered with “0” as its last digit for I-P unit standards or “1” for SI unit standards.

Application standards shall be numbered with “5” as its last digit for I-P unit standards or “6” for SI unit standards.

For derivative standards applicable to a specific climate, a suffix consisting of a dash (-) followed by the ASHRAE 169 climate code, for example 9800-0B-2015. For derivative standards applicable to a specific country, a suffix consisting of a dash (-) followed by the ISO 3166 country code, for example 9800-SA-2015.

3.2.3.3 Date

The year of publication, separated from the standard’s number by a hyphen.

If an effective date or applicability is related to the use of the standard or guideline it shall be noted on the inside title page separately from the name.

3.2.3.4 Status

For a revision or withdrawal, the status of the document (Reaffirmed or Withdrawn), together with the date of that action, in parentheses, while retaining the original publication date.

A Revision is noted by a change of the Date element, discarding the previous publication date.

3.2.3.5 Units

Specification of the measurement units used in the document, in parentheses, either (SI) for an SI-unit standard, (I-P) for an I-P-unit standard, or (SI/I-P) for a standard using joint measurement units.

A standard not using any units of measure and applicable to both shall be considered as using joint units.

3.2.3.6 Language

If the standard is available in multiple languages each shall be identified with letters in parentheses designating the language of the standard using ISO 639-1. Any standard not so identified is assumed to be in English. In any case where the English and any translated version do not agree the English version shall prevail.

3.2.3.7 Errata or Addenda

Any errata or addenda to the document shall be identified with a number e.g. (Erratum 1) or (Addendum 2).

3.2.3.8 Title

A descriptive title.

3.3 *Measurements*

All AHRI standards and guidelines shall use SI units, and may optionally also use I-P units, following one of these options:

3.3.1 *Single SI*

Publish the standard or guideline as SI only, with all rating, testing, and certification measurements using SI units.

3.3.2 *Dual*

Publish separate documents for SI and I-P. All rating, testing, and certification measurements shall use SI units for the SI document and I-P units for the I-P document. The measurements in the separate SI and I-P unit documents are not necessarily equivalent. Other differences between the two documents shall be noted.

3.3.3 *Joint*

Publish a single document using both SI and I-P units with all rating, testing, and certification measurements presented in both SI and I-P units. Conversion of SI to I-P units shall be done as specified in the document *Guide for Developing AHRI SI Standards*.

The selection of one the above options shall be based upon market need and shall be specified in the project charter. Numbering appropriate to the option shall be used in the document name.

Section 4. Standards Activity Structure

4.1 *Summary*

The AHRI standards activity is conducted by the following groups.

All participants in the AHRI standards activity shall complete and submit to AHRI staff a Conflict of Interest form.

4.1.1 *Standards Committee*

The AHRI Bylaws establishes a Standards Committee (StdC), a standing committee of the AHRI Board of Directors with responsibility for maintenance of policy and procedures for the AHRI standards activity. (See Section 4.2.)

4.1.2 *Standards Subcommittees*

There shall be one or more Standards Subcommittees (SSC), standing committees each established and overseen by the StdC, with each having responsibility for standards within a specific scope or topic as assigned by the StdC. (See Section 4.3.)

4.1.3 *Standards Technical Committees*

There shall be one or more Standards Technical Committees (STC), standing committees each reporting to each Standards Subcommittee, with responsibility for developing, approving, and maintaining standards and guidelines as assigned by the Standards Subcommittee. (See Section 4.4.)

4.1.4 *Standards Work Groups*

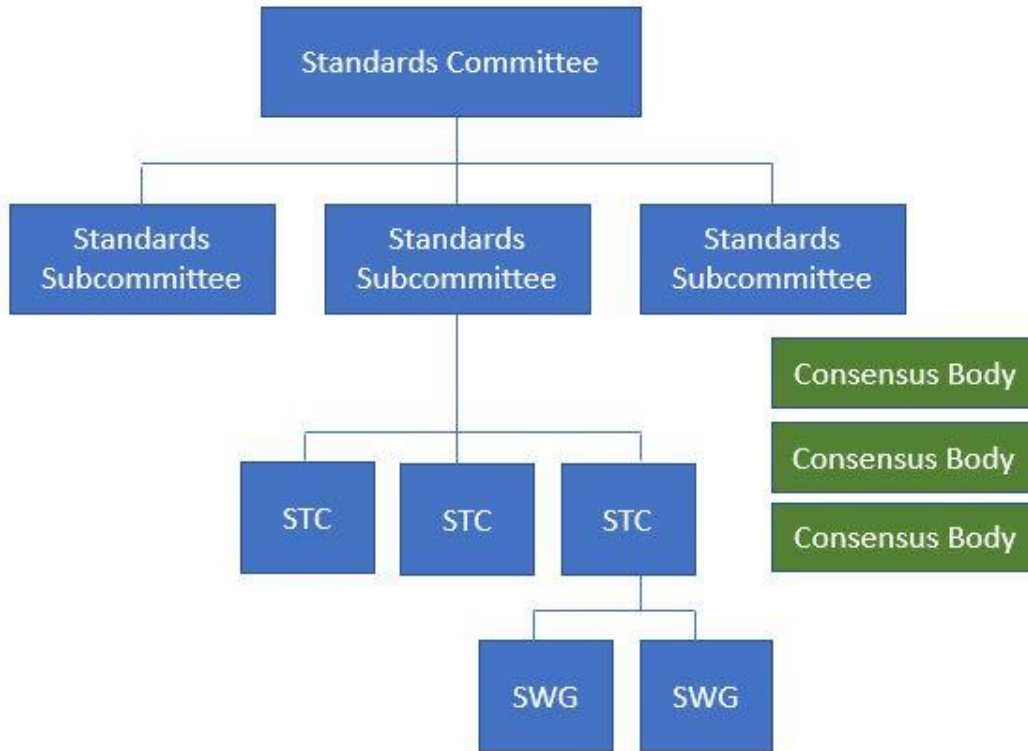
Each STC may establish one or more optional and temporary Standards Work Groups (SWG) to do a portion of the STC's work. (See Section 4.5.)

4.1.5 *Consensus Body*

One or more Consensus Bodies (CB) shall be established. The CB is the standing group conforming to ANSI balance requirements which gives final approval to publish an AHRI standard as an ANS and/or NSC standard. (See Section 4.6.)

Figure 2 shows the AHRI standards structure.

Figure 2: AHRI standards structure (informative)



4.2 *Standards Committee*

The Standards Committee (StdC) is a standing committee of the AHRI Board of Directors, as defined by the AHRI Bylaws, and advises the Board on matters pertaining to domestic and international standards and technical activities as developed by the AHRI standards activity.

Overall responsibilities of the StdC and approval of StdC membership are as defined in the AHRI Bylaws. In case of conflict, the Bylaws and other AHRI governance documents shall take precedence over this document.

Certain responsibilities given by the Bylaws to the StdC for initiation, development, and approval of standards are delegated to Standards Subcommittees, Standards Technical Committees, and Consensus Bodies as outlined in this document.

The StdC may also charter advisory groups whose responsibilities are other than for the development of AHRI standards and guidelines.

4.2.1 *Standards Committee Membership*

Standard Committee members and the Standards Committee chair shall be appointed annually for one (1)-year terms by the AHRI Chairman of the Board. Individual members of the Standards Committee shall be representatives selected based upon areas of responsibilities for the Member manufacturer or their expertise specific to the scope of the Standing Committee, and voting shall be by Committee members present. Decisions and recommendations by members of the Standards Committees shall be based on the best interests of the industry and the Association, rather than the interests of a particular Member. The Standards Committees perform any work within their particular field that is assigned by the Bylaws or the Board of Directors, or that is referred to it by the Association.

4.2.2 *Standards Committee Leadership*

Selection of and duties of the StdC Chair are in accordance with the Bylaws.

The StdC Vice Chair is selected by the StdC Chair and approved by the members of the StdC. The duties of the Vice Chair are to assist the StdC Chair.

4.2.3 *Standards Committee Decision making*

The quorum for the Standards Committee shall be half of the members thereof. Committee action shall be by majority vote of those members present and voting, presuming a quorum is present. The Standards Committee Members may assign a proxy in writing to another Member of the Committee, but no Committee Member is permitted to assign more than one proxy in a 365-day period.

4.3 *Standards Subcommittee*

4.3.1 *Standards Subcommittee Scope and Responsibilities*

Standards Subcommittees (SSC) are standing committees formed by and reporting to the StdC. The StdC shall define the scope of topics for which the SSC has responsibility. An SSC may be dissolved by the StdC.

A Standards Subcommittee is responsible for the following:

- 4.3.1.1** Forming Standards Technical Committees
- 4.3.1.2** Initiating specific standards activities by approving their charters, and assigning them to Standards Technical Committees
- 4.3.1.3** Giving final approval for publication of AHRI standards and guidelines
- 4.3.1.4** Assuring maintenance of published standards and guidelines
- 4.3.1.5** Approval of memberships for the corresponding Consensus Body
- 4.3.1.6** Oversight of the portfolio of AHRI standards and guidelines within its assigned scope, including identification and resolution of issues related to alignment and harmonization among standards and guidelines, and completeness of or gaps in the portfolio. The SSC is responsible for addressing issues brought to its attention by the StdC.

4.3.2 *Standards Subcommittee Membership*

Each SSC shall have a minimum of six and maximum of 12 members. Individual members of the SSC must be an employee or designated representative of an AHRI member company. No AHRI member company, including subsidiaries and related companies, shall have more than a single employee or representative as a member of the SSC. SSC members are approved by the SSC Chair upon nomination from any source and serve for three-year terms which are renewable. A company represented by a primary voting member in the SSC may also designate an alternate voter.

The SSC shall issue a call for participation among AHRI membership when SSC membership falls below the desired number. Nominations may also be submitted at any time to the Chair; a waiting list of nominations shall be kept by AHRI staff for later consideration when new members are needed. The Chair shall select individuals for membership from the list of nominees; selection shall be based on the criteria of industry expertise in the SSC's topic and knowledge of and experience with the AHRI standards activity. The Chair should seek balance among different aspects of the industry in the nominees.

Members who do not attend two out of every three meetings without notification may be removed by the Chair.

4.3.3 *Standards Subcommittee Leadership*

The initial Chair of a new SSC is selected by the StdC Chair upon recommendation of AHRI staff. Subsequent Chairs of the SSC are recommended by the members of the SSC and approved by the StdC.

The duty of the SSC Chair is to approve changes to the SSC membership, and plan and conduct SSC meetings and facilitate SSC discussions, all assisted by AHRI staff.

The SSC shall also have a Vice Chair, selected by the SSC Chair and approved by the members of the SSC, whose duty is to assist the SSC Chair.

The SSC Chair and/or Vice Chair may be removed by the StdC Chair for any reason.

4.3.4 *Standards Subcommittee Meetings and Decisions*

Standards Subcommittee meetings and decision making are conducted as per Section 5.

4.4 *Standards Technical Committee*

4.4.1 *Standards Technical Committee Scope and responsibilities*

Standards Technical Committees (STC) are standing committees formed by and reporting to the SSC. The SSC shall define the scope of topics for which the STC has responsibility, assign standards and standards activities to the STC, and shall select the STC Chair.

A STC is responsible for developing, approving, and maintaining one or more standards and guidelines within that scope as assigned by the SSC and in accordance with the process in Section 6.

The STC is formed through SSC approval, via Approval ballot, of a Standards Technical Committee charter defining the scope of the STC.

The STC may be dissolved by the SSC.

4.4.2 *Standards Technical Committee Membership*

Each STC should seek to have a sufficient number of members in order to accomplish their assigned work. A STC shall have a minimum of three voting members; the activities of a STC with fewer than three voting members is suspended. AHRI may publicize a call for participation for specific STCs that are lacking members. A person may join the STC at any time.

A person, upon leaving employment with their company, shall no longer be a member of the STC but may reapply for membership under their new employment. A member may also resign.

STC membership may include both voting members and non-voting participants.

4.4.2.1 Voting Members

Voting membership in the STC is open to:

4.4.2.1.1 Any person employed by or representing an AHRI member company. If employed by a company who is qualified to become an AHRI member but is not a member, the person may not become a voting member of the STC but may be a non-voting member.

4.4.2.1.2 Any person interested in or affected by AHRI standards or employed by or representing an organization interested in or affected by AHRI standards but that is not eligible for AHRI membership.

No company, including subsidiaries and related companies, shall have more than a single employee or representative as a voting member of the STC; if a company has more than one employee or representative as a member of the STC the company shall designate which is the primary voter and which are and alternate voters so that the company has only one vote on any ballot; any others shall be non-voting members.

Voting members who do not attend two out of every three meetings without notifying the Chair or AHRI staff, or who do not participate in two out of every three Approval ballots, may be changed from voting to non-voting membership by the Chair. As appropriate the company shall be asked to designate another primary voting member.

4.4.2.2 Non-voting Members

Non-voting members of the STC are those people with a demonstrable interest in the AHRI activity who are not eligible to become a voting member as defined in Section 4.4.2.1.

Non-voting members who do not attend two out of every three meetings without notifying the Chair or AHRI staff, may be removed from membership.

4.4.2.3 Joining the STC

Initial membership in a newly formed STC is approved by the SSC; the SSC shall accept at least one qualified person from each AHRI member company that applies.

Additional members employed by or representing a company already represented on the STC may join at any time by application to the STC Chair; the Chair shall accept at least one qualified person from each AHRI member company that applies.

Additional members not employed by or representing a company already represented on the STC may join by application to the STC Chair and approved by the SSC; the new member must then attend and contribute to two out of the following three meetings as a non-voting member before becoming a voting member of the STC.

4.4.2.4 Balance

The STC should make and document outreach efforts to achieve a balance of interests among its voting members in order to ensure a broad stakeholder perspective in the development of the standard. (See Section 4.6.4 for Interest Categories.)

4.4.3 *Standards Technical Committee Leadership*

The Chair of the STC is selected by the SSC. The duty of the STC Chair is to approve membership in the STC, plan and conduct STC meetings and facilitate STC discussions, all assisted by AHRI staff.

Each STC shall have a Vice Chair, selected by the STC Chair and approved by the STC, whose duty is to assist the STC Chair in his or her responsibilities. The STC Chair and/or Vice Chair may be removed by the SSC Chair for any reason.

4.4.4 *Standards Technical Committee Meetings and Decisions*

Standards Technical Committee meetings and decision making are conducted as per Section 5.

4.5 *Standards Work Group*

The STC may, by Approval ballot, create one or more Standards Work Groups (SWG) to work on development of a specific standard or portion of a standard within its scope. A scope, deliverables, and schedule for the SWG shall be included in the Approval ballot. Anything approved by the SWG must then go to the STC for STC approval.

4.5.1 *Standards Work Group Scope and Responsibilities*

SWGs are temporary and are formed by and report to the STC. The work of the SWG shall be within the scope of the STC as defined by the SSC. An activity to develop or to revise a standard or guideline, or portion thereof, can be assigned by the STC to a SWG. Upon completion and approval of the work by the SWG, and acceptance by the STC, the SWG is dissolved.

4.5.2 *Standards Work Group Membership*

A SWG is a subset of the STC and SWG members must first be STC members, either voting or non-voting. A SWG member's voting status may be different than their voting status in the STC; eligibility for voting in the SWG is the same as for the STC as defined in Section 4.4.2.1.

No company, including subsidiaries and related companies, shall have more than a single employee or representative as a voting member of the SWG; if a company has more than one employee or representative as a member of the SWG the company shall designate primary and alternate voting members so that the company has only one vote on any ballot; any others shall be non-voting members.

For standards intended for SCC approval, the SWG shall have a balanced representation of interest categories among voting members, such that no single category of interests is more than half of the voting membership. (See Section 4.6.4 for Interest Categories.) The SWG must also have appropriate representation of Canadian interests. In the event that this balance and/or Canadian representation cannot be achieved, outreach efforts made to achieve balance and Canadian representation shall be documented.

4.5.3 *Standards Work Group Leadership*

The Chair of the SWG is selected by the STC. The duty of the Chair is to plan and conduct SWG meetings and facilitate SWG discussions, assisted by AHRI staff. The SWG may optionally have a Vice Chair approved by the STC; the duties of the Vice Chair are to assist the Chair.

The SWG Chair may be removed by the STC Chair for any reason.

4.5.4 *Standards Work Group Meetings and Decisions*

SWG meetings and decision making are conducted as per Section 5.

4.6 *Consensus Body*

4.6.1 *Consensus Body Scope and Responsibilities*

Consensus Bodies (CB) are standing bodies with responsibility for final review and balloting to approve an AHRI standard as an ANS and/or NSC standard.

A CB does not have leadership, nor does it hold meetings. CB membership and balloting activities are administered by AHRI staff.

4.6.2 *Consensus Body Membership*

Each CB shall have a membership of between eight and 12 people. Membership in the CB shall be open to all interested parties and is not conditional on membership in any organization. The opportunity to join a CB shall be advertised on the AHRI website and through other appropriate media, and targeted, proactive outreach may be conducted in order to get participation from specific interest categories. Outreach efforts shall be documented as evidence of attempts to obtain balance. A waiting list of candidates may be kept when the CB has sufficient membership.

Applications for CB membership are managed by AHRI staff. When there is a membership opening the AHRI staff person assigned to the CB shall, together with the Chair of the corresponding SSC, select a candidate from among the applicants to present to the SSC for approval. Selection of members shall be based on the criteria of industry expertise and knowledge of and interest in AHRI standards.

Membership of the CB must show a balance of interests; no single Interest Category (see Section 4.6.4) shall constitute a majority of the membership of the Consensus Body.

The names, affiliations, and Interest Category of the CB members shall be made available to any interested party upon request.

Membership in the CB is for a period of three years and may be renewed after reapplication.

A member shall be dismissed from the CB after not voting on two out of three consecutive ballots, except in the case of notice of recusal to AHRI staff.

4.6.3 *Consensus Body Balloting*

The process for Consensus Body balloting is defined in Section 6.7.

4.6.4 *Interest Categories*

The following Interest Categories are used to classify members of the Consensus Body and Standards Technical Committees. Each member shall self-declare the category that best describes their interest in AHRI standards and the interests and viewpoints that they represent.

4.6.4.1 *Component Manufacturer*

Those who are or are employed by or represent a company that is predominantly involved in the design and manufacture of components and subassemblies that go into the manufacture of HVACR equipment, or a person representing those interests.

4.6.4.2 Product Manufacturer

Those who are or are employed by or represent a company that is predominantly involved in the design and manufacture of finished HVACR products and equipment, which may or may not include components and subassemblies coming from other manufacturers, or a person representing those interests.

4.6.4.3 Regulatory Agency

Those who represent or are employed by any local, state, or federal government regulatory agency, or a person representing those interests.

4.6.4.4 Testing Laboratory

Those who are predominantly involved in the testing and/or certification of products, or a person representing those interests.

4.6.4.5 Consumer/User

Those who use or are interested in the use of or represent the views and concerns of those who use products described by the standard.

4.6.4.6 General Interest

Those who have interest in the subject of the standard but are not included in any of the other Interest Categories.

Section 5. Meetings and decisions

5.1 *Meetings*

This Section applies to Standards Subcommittees, Standards Technical Committees, and Standards Work Groups.

Meetings shall be scheduled by the Chair a minimum of two weeks (for virtual meetings) or four weeks (for physical meetings) in advance of the meeting. The meeting agenda and any documents to be discussed during the meeting should be circulated to committee members a minimum two weeks in advance of the meeting. Exceptions to these minimum timeframes may be made on a case-by-case basis by approval of 3/4 of voting members.

A quorum of 50% of voting members is required for a meeting; if a quorum is not present then the meeting should be ended and rescheduled. If a meeting starts with quorum but then loses that quorum the meeting should end. No decisions shall be made or ballots conducted without a quorum present. For STCs with a membership of less than five voting members, the requirement for meeting quorum shall be established by the STC.

All meetings must have an AHRI staff member present and shall be conducted in accordance with AHRI antitrust guidelines.

Decisions in a meeting shall be made using a simple parliamentary procedure of motion, second, discussion, and vote.

AHRI staff shall keep meeting minutes consisting of, at minimum, a record of members and others in attendance, topics discussed, and decisions made. Meeting minutes should be prepared and circulated within a week of the meeting and presented for approval at the following meeting.

For STC and SWG meetings, when an Alternate is not available, a voting member may assign a proxy to another voting member. All proxy assignments must be in writing (email is acceptable) and must be granted before the Chair calls the meeting to order. Voting members designating proxies are asked to inform AHRI staff and the STC or SWG chair of the proxy as a courtesy, prior to the meeting. Proxies will count toward quorum.

Decisions, actions, or inactions of committee leadership may be appealed by committee members to the higher body, i.e. the STC to the SSC, or the SSC to the StdC.

5.2 *Simple Decisions*

This Section applies to Standards Subcommittees, Standards Technical Committees, and Standards Work Groups.

Simple decisions include such questions as

- a) Acceptance of agenda or meeting minutes
- b) Meeting schedule
- c) Individual items of technical content in the standard or guideline
- d) Except for standards intended for SCC approval, recommendation to the STC by the SWG of work for inclusion or approval
- e) Other questions not in the list of Approval ballots in Section 5.3.

The committee may make Simple decisions in a meeting when a quorum is present, either by ballot or consensus, or by a seven-day electronic ballot with a majority of voting members participating. A Simple decision ballot requires a majority of those voting to approve. Consensus of the committee in a meeting is determined by the Chair.

5.3 *Approval ballots*

This Section applies to Standards Subcommittees, Standards Technical Committees, and Standards Work Groups.

Decisions to be made by Approval ballot include the following:

5.3.1 *By a Standards Subcommittee:*

- a) The formation of a new STC and approval of the STC charter, revisions of existing STC charters, and dissolution of STCs
- b) Approval of project charters for new work or revision of existing work, and assignment of the work to the STC
- c) Decisions for reaffirmation and withdrawals
- d) Approval of an AHRI standard or guideline
- e) Approval of interpretations
- f) Cancellation of an activity
- g) Approval to start a national adoption activity

5.3.2 *By a Standards Technical Committee:*

- a) Approval of project charters for new work or revision of existing work
- b) Decisions for reaffirmation and withdrawals
- c) The formation of a SWG and approval of scope; or dissolution of a SWG other than for completion of work
- d) Approval to advance a draft standard to public review
- e) Decision to approve and advance a draft standard or guideline to SSC approval

5.3.3 *By a Standards Work Group:*

- a) For a standard intended for SCC approval, the decision to approve the standard and recommend it to the STC for further approval

5.3.4 *Procedure*

Approval decisions shall be made by the committee by either electronic ballot open for a period of minimum 14 days, or in a committee meeting with quorum in attendance. For approval of changes of single items in a document that has been previously approved and sent back to the STC, the ballot period is minimum seven days.

An Approval ballot shall include a clearly stated ballot question and voting options. Electronic ballots shall also include the open and close dates of the ballot, a contact person for questions, and the document or a link to the document being balloted. Any extension to the balloting period must be announced to and be applicable to all voting members. A minority report or negative comments may be attached to the ballot by request of any voting member.

Voters shall respond with one of the following:

- a) Approval, with optional comments
- b) Negative with comments
- c) Abstain with justification

A voter may change his or her ballot by either submitting a new ballot before the close of the ballot period, or by sending a request to change the ballot to the responsible AHRI staff person via email before the close of the ballot period; a voter's ballot may not be changed without written instruction to do so. The voter shall be sent a written confirmation of the change.

For approvals by the STC to advance a standard or guide to the SSC, or for approval by the SSC to publish a document as an AHRI standard, a negative vote without any comments relevant to the substantive or technical aspects of the draft or the procedural aspects of its development and approval shall be counted as an abstention for purposes of determining quorum.

A ballot not submitted is counted as "not voting" and not as an abstention. Abstentions without justification, and unreturned or blank ballots shall be counted as "not voting".

Approval of the ballot requires that a majority of the voting members of the committee cast a vote (counting abstentions), and at least two-thirds of those voting approve (not counting abstentions). For STCs with a membership of less than five voting members, at least three voting members must vote.

5.3.5 *Recirculation*

For approvals by the STC to advance a standard or guide to the SSC, or for approval by the SSC to publish a document as an AHRI standard, if the ballot decision is affirmative but there are substantive comments attached to any negative ballot the negative comments shall be circulated to the voting members of the committee. The STC and/or Chair shall make an attempt to resolve the issue with the person who voted negatively; if that attempt fails then a recirculation ballot shall be conducted to give voters the opportunity to change their vote based upon the comments. Unresolved comments and attempts at resolution shall be circulated; the Chair may ask the voter who submitted the negative comment for further clarification of the issue(s), which shall also be circulated.

The original submitted ballot shall be applied for any voter who does not cast a ballot in the recirculation.

For ballots conducted electronically, a recirculation ballot shall be conducted for a period of minimum seven days. For ballots conducted during a meeting, a recirculation ballot shall be conducted at the following meeting.

Non-substantive comments do not require recirculation.

5.3.6 *Negative Ballot*

If the ballot decision for advancement of a standard or guideline at the STC level is negative the STC shall address any comments received, revise the draft standard as appropriate, and vote again. The STC may also, by Approval ballot, recommend to the SSC that the activity be cancelled.

If the negative ballot for advancement of a standard or guideline is at the SSC level the ballot results and comments shall be sent back to the STC for revision of the draft. After reapproval the STC shall resubmit the standard to the SSC.

5.3.7 *Substantive changes*

Any substantive changes made to the standard after approval shall be balloted again at that same level, as defined in section 6.

Section 6. Development and Approval

This Section applies to both development of new standards and guidelines, as well as revisions of existing standards and guidelines.

6.1 *Work Program*

AHRI shall publish on its web page a work program listing current standards activities and the status of each including publications, using the International Harmonized Stage Codes. AHRI shall also submit to SCC every six months a current work program.

6.2 *Initiation of Activity*

6.2.1 *Decision to Start*

A new standards activity may be started to develop a new standard or guideline, or to revise, reaffirm, or withdraw an existing standard or guideline.

6.2.1.1 If the standard is intended to be approved as an ANS or an NSC, AHRI staff shall submit the required notification to the appropriate national body for the start of a development or revision activity.

6.2.1.2 *New Standard or Guideline*

The decision to start a new activity for development of a new standard or guideline may be based on inputs or recommendations from any source, including industry or market input, regulatory or certification requests, public review comments, or date of prior publication.

Recommendations or suggestions for a new standard or guideline may be submitted to AHRI staff who shall send them to the appropriate STC or SSC. In the case that there is no appropriate STC to do the work the SSC may choose to form a new STC.

The STC, either existing or new, shall then develop a project charter for the new activity. The charter shall be approved by both the STC and the SSC.

6.2.1.3 Revision of Existing Standard or Guideline

AHRI staff shall track the status of existing standards and guidelines with regard to date of publication and inform the STC in sufficient time that the standard or guideline can be revised, reaffirmed, or withdrawn within five years of publication. Recommendations can also be accepted from any source for a revision. Based upon the need for action, or upon recommendations from any source, the responsible STC shall review the document and make a decision whether to:

- a) Start an activity to revise an existing standard or guideline, by development and approval of a project charter
- b) Reaffirm an existing standard or guideline for five years; see Section 7.1.1.
- c) Withdraw an existing standard or guideline, either from ANSI and/or SCC approval or also from AHRI approval; see Section 7.1.2.

6.2.2 *Approval of Project Charter*

The project charter for the new standards/guidelines development or revision activity shall use the approved AHRI project charter template.

The project charter shall include at minimum the following information:

- a) Name, number, and title of the proposed standard or guideline
- b) The scope of the activity, including type of the deliverable and business/market need to be addressed
- c) The units (SI or SI and I-P) to be used in the document
- d) If the standard is a derivative, the number and title of the original standard and how this standard will differ
- e) The intended level of approval, whether AHRI-only or also ANSI and/or SCC
 - i. For an intended ANS standard, justification for this status
 - ii. For an intended NSC standard, the completion of the Canadian Interest Form, identification of the International Classification for Standards (ICS) code, and a description of how Canadian interests will be represented in the development of the standard.
- f) A list of existing standards published by other organizations, including national or international standards, that address the same or similar topics. If the proposed standard is similar to an existing standard the project charter shall provide a justification for the new standard, and an explanation for how the new standard shall align or harmonize with other existing standards. AHRI shall make good faith efforts to coordinate standardization activities and harmonize related standards in order to avoid conflict and market confusion.

The project charter shall be approved by both the STC and SSC by Approval ballots.

Any later revision of the project charter requires both STC and SSC approval by Approval ballot.

6.2.3 *ANSI and SCC filings*

If the new or revised standard is intended for approval as an ANS and/or NSC standard, AHRI staff shall submit the required notification for a new activity.

Any public comments resulting from these filings within 30 days of their publication in ANSI Standards Action and/or SCC CNS shall be promptly acknowledged in writing and submitted to the STC for resolution. Actions may include an explanation, revision, or cancellation of the activity. The STC's decision shall be communicated to the commenter, who shall also be informed of her right to appeal.

6.2.3.1 Assertion of duplication for standards intended for ANS

If comments received within 30 days from the publication date of a PINS announcement in ANSI's Standards Action assert that a proposed standard duplicates or conflicts with an existing American National Standard (ANS) or a candidate ANS that has been announced previously (or concurrently) in Standards Action, AHRI shall proceed as outlined in ANSI Essential Requirements section 2.5.1.

6.3 *Working Draft Stage*

The assigned STC shall develop or revise the standard or guideline as specified in the project charter. Meetings shall be conducted and decisions made in accordance with Section 5.

The STC may form a subset ad hoc SWG to do some or all of the technical development work then recommend this work to the STC for approval as a whole or for inclusion into other work. For standards intended for SCC approval the SWG's recommendation of the standard to the STC must be by Approval ballot; other work is recommended by Simple decision.

For a guideline, a public review is optional and may be conducted if decided by the STC by Simple decision. After completion of their work the STC shall approve advancing the guideline to the SSC by Approval ballot.

For a standard, after completion of the STC's work (and if the SWG developed some portion of the work, after approval by the SWG) the STC shall approve advancing the standard to the public review stage by Approval ballot.

6.4 *Public Review*

6.4.1 *Announcement of Review*

A proposed standard shall be circulated for public review after approval by the STC. The review shall be announced on the AHRI web page, and the STC and/or AHRI staff may make specific outreach to specific interested groups or individuals. Members of the SSC and CB should also be invited to participate.

The proposed standard shall be made available on the AHRI website together with instructions including the open and close dates for the review, an email address for questions, and a form used for submission of comments. The review for a standard intended for AHRI-only or ANS status shall be open for a period of minimum 45 days; the review for a standard intended for NSC status shall be open for minimum 60 days.

If the standard is intended for ANS and/or NSC status AHRI staff shall notify ANSI and/or SCC of the review. Comments resulting from the reviews circulated by those organizations shall be combined with other public comments from the review.

For a standard intended for SCC approval, any reviewer can request that a French translation be provided.

6.4.2 *Review Comment Collection and Adjudication*

Comments to the proposed standards shall include the location in the draft of the text being commented upon, description of the problem or issue, and a recommended solution. The STC may follow up with the commenter to clarify these elements if they are not included.

AHRI staff shall confirm receipt of comments to each commenter. All comments must be considered.

Compiled comments shall be circulated to STC members. The STC shall adjudicate all comments by reviewing each and deciding by consensus which action to apply to each individual comment:

- a) Accept: accept the comment as is and make changes to the draft as recommended

- b) Accept with modification: accept the spirit of the comment but make changes to the draft differently than what was recommended by the commenter
- c) Reject: reject the comment. The STC must state a reason for the rejection.
- d) Defer: defer the comment to a later revision.

After completion of the above adjudication activity the STC shall ratify the collective comment decisions by Simple ballot; the collected comments and decision, and the decision to ratify these decisions must all be recorded.

AHRI staff shall compile the STC's decisions on the comments and return the decisions related to each commenter's comments to the commenter, along with a notification of right to appeal.

Comments received outside of the announced comment period are not required to be addressed in the current revision and may be deferred for consideration in the next revision of the standard. Comments not related to the substance of the circulated draft shall be forwarded to the SSC for information. All comments shall be acknowledged.

6.4.3 *Revision of Draft*

The STC shall develop a revised draft implementing changes in accordance with the comment decisions made. After completion of the public review stage the STC shall advance the draft to the SSC by Approval ballot.

If substantive changes are made after the review the STC shall conduct an additional public review. In this event the STC may choose either to send to review the entire document or just those portions which have changed; in the latter case, the entire document shall be distributed for context, and those portions open for review shall be clearly identified.

6.5 *Standards Subcommittee Approval*

The STC shall provide to the SCC a summary of the development of the standard, including the project charter, SWG roster, STC roster, results of the public review, and summary of Approval ballot results including any negative comments and recirculation ballots.

After approval by the STC, final approval for publication of the draft as an AHRI-only standard is given by the SSC by Approval ballot. Criteria such as technical completeness and accuracy, and adherence to the project charter and scope shall be considered.

If the SSC ballot has a negative result the draft shall be returned to the STC, together with comments, for their revision of the document. If substantive changes are made the STC shall conduct another public review before resubmission of the draft to the SSC.

6.6 *AHRI-only Publication*

After approval by the Standards Subcommittee, AHRI staff shall prepare the standard or guideline for publication as an AHRI-only standard.

6.7 *Consensus Body Balloting*

Decisions to approve an AHRI standard as an ANS and/or NSC standard shall be made by the Consensus Body associated with the Standards Subcommittee responsible for the standard.

6.7.1 *Initial Ballot*

An electronic ballot shall be circulated to all members of the CB for a period of minimum 14 days. The following information shall be attached to the ballot:

- a) a clearly stated ballot question;

- b) voting options, including a requirement that negative votes must be accompanied by comments related to the proposal, and that votes unaccompanied by such comments shall be recorded as “negative without comments” without further notice to the voter;
- c) the open and close dates of the ballot;
- d) a copy of the document or a link to the document being balloted;
- e) any unresolved objections and attempts at resolution;
- f) the Consensus Body roster including names, affiliation, and Interest Category of each member; and
- g) the AHRI staff person to contact for any questions.

Upon request, a CB member shall be provided with the project charter and a summary of voting results for previous approval stages for the standard and the number of comments received, accepted, and rejected from the public review.

Any extension to the balloting period must be announced to and be applicable to all CB members.

Voters shall respond with one of the following:

- a) Approval, with optional comments
- b) Negative with required comments
- c) Abstain, with optional comments

Negative votes shall include comments related to the following:

- a) technical aspects of the proposed standard; the reasons for a negative vote shall be given and should include specific wording or actions that would resolve the objection
- b) procedural aspects or philosophical nature of the standard’s development and approval (does not require a suggested resolution)
- c) potential conflict or duplication of the proposed standard with an existing ANS or NSC (does not require a suggested resolution)

A ballot not submitted is counted as “not voting” and not an abstention.

A voter may change his or her ballot by either submitting a new ballot before the close of the ballot period, or by sending a request to change the ballot to the responsible AHRI staff person via email before the close of the ballot period; a voter’s ballot may not be changed without written instruction to do so. The voter shall be sent a written confirmation of the change.

Approval for publication of an AHRI standard as an ANS and/or NSC standard requires that a majority of the Consensus Body cast a vote (counting abstentions), and at least two-thirds of those voting approve (not counting abstentions).

AHRI staff shall keep records of the ballot including at minimum a copy of the document being voted upon, the roster of eligible voters and the Interest Category of each, a summary result including the list of voters and the ballot totals, comments received, and any requests to change votes.

6.7.2 *Recirculation*

In the event of any negative votes with comments, efforts shall be made to address and resolve those comments.

6.7.2.1 Comments from negative ballots related to the proposed standard shall be sent to the STC which developed the standard with a request for the STC to respond. (Negative votes without comment are counted as abstentions and shall not be recirculated.) Responses from the STC may include, for example, such things as an explanation why the change requested is not technically correct or feasible, that the STC has already considered and rejected the idea, or the STC's decision that resolution of the comment be deferred to the next revision of the standard. STC approval of their response is by Simple decision.

The STC could also choose to address the comment by revising the standard, in which case the standard would need to be approved again with new ballots by the STC, SSC, and CB.

6.7.2.2 The response from the STC shall be sent to the voter who submitted the negative comment. The voter shall be allowed maximum seven days to withdraw the comments and change his or her ballot to the affirmative based on the response. Negative votes shall not be changed or withdrawn without instructions from the voter to do so. The voter shall be notified of his or her right to appeal.

6.7.2.3 If the voter does not change his or her ballot then the unresolved negative comments together with the STC's response shall be circulated to the CB to give them the opportunity to respond, reaffirm, or change their vote. AHRI staff shall open a recirculation ballot. The question on the recirculation ballot shall be whether to approve the entire standard based on the unresolved objections with attempts at resolution. This recirculation ballot shall be conducted in the same manner as other CB ballots, with the exception that for any CB member who does not vote their vote from the original ballot shall be counted.

6.7.2.4 The results of the recirculation ballot constitute the final decision of the Consensus Body. If the ballot is approved AHRI staff shall submit the standard to ANSI and/or SCC to receive the ANS and/or NSC designation. If the ballot fails the standard retains the AHRI designation but may be returned to the STC to address any issues raised during the Consensus Body balloting.

6.7.3 *Substantive changes*

Any substantive changes necessary after Consensus Body approval shall require a revision of the standard.

6.8 *ANSI/SCC Publication*

After approval of the standard by the CB, AHRI staff shall submit the appropriate notification to ANSI and/or SCC, and shall prepare the standard for publication as an ANS and/or NSC standard.

For a standard approved by SCC, both English and French versions shall be published, and the standard shall include a statement in the introductory pages indicating that the standard was developed in accordance with SCC's *Requirements & Guidance*.

6.9 *Appeals*

Any participant in the AHRI standard process, or stakeholder or party participating in, interested in, or potentially affected by AHRI standards may appeal any action taken or not taken with regard to the AHRI standards activity. The burden of proof to show adverse effect shall be on the appellant.

Appeals may only be made with regard to process including whether a technical issue was afforded due process; specific technical issues related to the content of AHRI standards or guidelines are resolved through the review, commenting, and approval process.

6.9.1 *Appeals Process*

Appeals shall be made in writing via email to AHRI_Standards@ahrinet.org within 30 days of the action, or within one standards cycle for an inaction, being appealed. Receipt of the appeal shall be acknowledged by AHRI staff within ten days, and a simple answer or explanation shall be provided by the SSC, STC, or AHRI staff person responsible for the standard or guideline within an additional 30 days. The appellant shall be given the opportunity to withdraw his or her appeal based upon that simple answer. If the appellant does not withdraw the appeal AHRI shall proceed as follows.

6.9.1.1 An Appeals Board shall be formed, composed of the following people:

- a) The Chair of the STC, or an STC member selected by the Chair
- b) The Chair of the SSC, or an SSC member selected by the Chair
- c) The Chair of the StdC, or an StdC member selected by the Chair

6.9.1.2 The Appeals Board shall make their decisions by consensus. Lack of consensus on a decision for the appellant means that the appeal fails.

6.9.1.3 The Appeals Board shall provide a written response to the appellant within 45 days of the appellant's last response.

6.9.1.4 The appellant shall then have maximum 14 days to respond to the Appeals Board, either to state satisfaction with the solution and withdrawal of the appeal, or to ask for a meeting to further discuss the issues raised and attempt to find a resolution satisfactory to the appellant and to the members of the Appeals Board. The appellant may be assisted at the meeting by up to two people of his or her choosing. A requested meeting shall be held at a time and place acceptable to the appellant and members of the Appeals Board and shall be scheduled at least two weeks in advance. If the appellant does not respond within ten days to a request to set up a meeting the appeal shall be considered withdrawn.

The decision of the Appeals Board at the meeting shall be the final decision of AHRI regarding the appeal.

6.9.1.5 For an ANSI or SCC standard, if after the meeting the appellant is not satisfied with the procedural solution offered by the Appeals Board he or she may submit an appeal to ANSI and/or SCC as appropriate.

All communications with regard to the appeal and responses shall be documented.

6.10 *Suits or Claims*

AHRI shall promptly notify ANSI regarding any suit or claim made against AHRI arising from a standard approved as an ANS and provide updates to ANSI of the status of such claims.

AHRI shall promptly notify SCC regarding any suit or claim made against AHRI arising from a standard approved as an NSC and provide updates to SCC of the status of such claims.

Section 7. Maintenance

7.1 *Reaffirmation and Withdrawal*

AHRI standards shall be regularly reviewed by the STC to determine if a standard should be revised, reaffirmed, withdrawn.

Any revision, reaffirmation, withdrawal, or decision for stabilization shall be completed within five years of prior publication.

Revision of an existing standard or guideline is discussed in Section 6.

If the standard is approved as an ANS or an NSC, AHRI staff shall submit the required notification to the appropriate national body for any of the following actions. If an extension to the schedule is necessary AHRI staff shall submit appropriate filings to ANSI and/or SCC.

7.1.1 *Reaffirmation*

A standard may be reaffirmed if the technical content of the standard is still applicable and continues to meet the needs of industry, regulators, and/or testers with no technical changes.

For Canadian standards, the balanced SWG shall approve the reaffirmation by Approval ballot, then send this action to the STC for their approval. The reaffirmed standard must continue to comply with the requirements of *SCC Requirements & Guidelines* 6.11.3.

The STC with ownership of the standard shall make a decision by Approval ballot to reaffirm the standard, after which the SSC shall approve the reaffirmation by Approval ballot.

For ANSI- or SCC-approved standards, upon the decision by the STC to reaffirm, AHRI staff shall submit the appropriate filings to ANSI and/or SCC to initiate public review of this action. Any comments received shall be referred to the STC for resolution. Upon resolution of any comments received, or if no comments are received, the reaffirmation can be advanced to the SSC. (If the STC decides that comments received require that substantive changes be made to the standard then a revision activity may be started; see Section 6.2.1.3.) Upon approval by the SSC, AHRI staff shall notify ANSI and/or SCC, as applicable, of the reaffirmation decision using appropriate filings, and shall prepare a version of the reaffirmed standard for publication.

Substantive or technical changes are not allowed; should such changes be necessary the standards must be revised rather than reaffirmed. Editorial changes are allowed and must clearly be identified in the front matter of the document. The name of the standard shall reflect the reaffirmed status.

7.1.2 *Withdrawal*

A standard or guideline may be withdrawn if the technical content of the standard or guideline is no longer applicable, does not meet the needs of industry, regulators, and/or testers, has been replaced or superseded by another standard, or no longer meets the process requirements of AHRI, ANSI, and/or SCC. A standard or guideline may also be withdrawn in advance of a revision of the document if continued publication of the original document would cause market confusion or damage. The withdrawal decision should take into account whether the standard is referenced in regulation, and the appropriate regulatory or legislative body should be notified.

For Canadian standards, the balanced SWG shall approve the withdrawal by Approval ballot, then send this action to the STC for their approval.

The STC with ownership of the standard shall make a decision by Approval ballot to withdraw the standard, after which the SSC shall approve the withdrawal by Approval ballot.

For ANSI- or SCC-approved standards, upon the decision by the STC to withdraw, AHRI staff shall submit the appropriate filings to ANSI and/or SCC to initiate public review of this action. Any comments received shall be referred to the STC for resolution. Upon resolution of any comments received, or if no comments are received, the withdrawal shall be referred to the SSC for Approval ballot.

A standard with ANS and/or NSC approval shall be withdrawn from that approval if the standard has not been revised or reaffirmed within ten years of its approval. This action may be done by AHRI staff without SSC approval, using appropriate filings.

A standard with ANS and/or NSC approval may be withdrawn from just one or both of those approvals while still retaining its AHRI-only approval status. The STC's and SSC's decision may also include whether the withdrawn standard should continue to be made available on the AHRI web page for reference purposes. Whenever the document continues to be made publicly available, whether fully withdrawn or while retaining its AHRI-only approval, its status shall be noted in the name.

7.2 *Interpretations*

Requests for interpretation of AHRI standards and guidelines may be submitted by any party via email to AHRI staff. AHRI staff should acknowledge receipt of the request via email within ten days.

A recommended interpretation shall be developed by the STC or SSC, then approved by the SSC by Approval ballot and returned to the person requesting the interpretation via email.

The interpretation shall then be referred to or retained by the STC for inclusion in the next revision of the standard or guideline.

7.3 *Addenda and Errata*

7.3.1 *Addenda*

An addendum may be made to correct technical errors in the publication of the standard or guideline. An addendum is for the purpose of error correction and not for revision.

Any party may bring errors to the attention of the STC; the STC shall make a decision whether the issue is indeed an error and how to address the error, whether through issuing an addendum or including the change in a future revision. Addenda shall go through the same approval process as the original standard or guideline with the exception that a public review is not necessary. During review and ballot, only the suggested changes shall be considered for comment and approval, though the entire document should be made available to provide context.

Upon final approval, the publication of the standard or guideline shall clearly be identified as including an addendum, and the changes shall be clearly marked in the body of the document.

7.3.2 *Errata*

Errata may be made to correct non-substantive production or editorial errors which do not affect the substantive or technical content or meaning of the standard or guideline.

Errata are addressed by publication of a corrected document prepared by AHRI staff. Corrections do not need approval but shall be clearly identified in the revised document and the SSC shall be notified. Publication of a revision to correct errata does not affect the publication date of the document.

7.4 *Discontinuance/Cancellation of an Activity*

An activity to develop or revise a standard or guideline, once started, may be cancelled by Approval ballot decision of the SSC responsible for the standard or guideline, or by the Vice President responsible for the AHRI standards activity.

AHRI staff shall notify ANSI and/or SCC of this action as appropriate.

7.5 *Continuous and Stabilized Maintenance*

Periodic maintenance is the default procedure for AHRI standards, including those with ANS and/or NSC approval. Under Periodic maintenance a standard shall be republished either as a revision or reaffirmation, or withdrawn, within five years of prior approval. AHRI standards may also be maintained under Continuous Maintenance when the entire standard or portions thereof need to be revised more frequently, or under Stabilized Maintenance when the entire standard is not likely to change over time. In the case when the AHRI standard also has ANSI and/or SCC approval appropriate filings to ANSI and/or SCC shall be made to place the standard in Continuous or Stabilized modes of maintenance.

7.5.1 *Continuous Maintenance*

An ANS standard that needs to be updated, in whole or in part, more frequently than every five years can be placed under Continuous Maintenance through appropriate filings to ANSI. The same stages of development and approval as for a periodic maintenance revision must be followed, but only specific, identified portion(s) of the standards shall be considered for approval during the revision activity.

While specific portions may be revised more often, the entire standard must be reviewed and approved at least once every five years.

The entire standard must be open to comment during all stages, but any comments received outside of those identified revision portions shall be deferred until the applicable portion of the standard is considered for revision; comments must be acknowledged, and the commenter notified of this deferral.

An ANSI PINS is not required for revisions of a standard under Continuous Maintenance.

7.5.2 *Stabilized Maintenance*

An ANS standard that does not change or will likely not need to be revised after five years can be placed under Stabilized Maintenance through appropriate filings to ANSI.

A standard that is maintained under the stabilized maintenance process shall satisfy the following eligibility criteria:

- a. the standard addresses mature technology or practices, and as a result is not likely to require revision; and
- b. the standard is other than safety or health related; and
- c. the standard has been reaffirmed at least once; and
- d. at least ten years have passed since the approval or last revision of the standard; and
- e. the standard is required for use in connection with existing implementations or for reference purposes.

An AHRI standard, with or without ANS and/or NSC approval and which is maintained under the stabilized maintenance option, is subject to review on a ten-year cycle rather than the normal five-year cycle. If it is determined in connection with this review that the standard shall continue to be maintained under the stabilized maintenance option and as such does not require revision or withdrawal, then this shall be communicated by AHRI to ANSI and/or SCC via the submittal of appropriate filings.

If a recommendation is made at any time by a materially affected and interested party that a standard maintained under the stabilized maintenance option requires revision or should be withdrawn, then that recommendation shall be considered in the same manner as a new proposal but within a maximum of 60 days from receipt. A recommendation should include rationale to begin a revision and shall not be dismissed due to the fact that it does not necessarily suggest a specific revision. The submitter of such a recommendation shall be responded to in writing by AHRI within 60 days of the receipt of the recommendation and advised of the decision relative to the maintenance status of the standard.

Any standard maintained under the stabilized maintenance option shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests.

7.6 *National adoption*

As a standards developer accredited by ANSI and SCC, AHRI has authority to adopt an international standard within its scope as an ANS and/or NSC.

The recommendation to adopt an international standard as an ANS or NSC may come from any source. The decision to act upon the recommendation and start an approval review activity shall be made by Approval ballot by the SSC responsible for the topic. After approval the SSC shall assign the activity to a STC. The international standard shall go through the same stages as the revision and approval of any other existing standard with approval by the STC, SSC, and CB; see Section 6. The international standard may be adopted as-is or with changes.

National adoptions shall be in compliance with the requirements of, for ANSI, the *ANSI Procedures for the National Adoption of ISO or IEC Standards as American National Standards*; or, for SCC, the *SCC Requirements & Guidance – National Adoptions of International/Regional Standards and Other Deliverables*.

7.7 *Joint development with or adoption of standards from other organizations*

AHRI may work together with a partner standards developing organization to develop a joint standard. AHRI and the partner organization should create a Memorandum of Understanding (MoU) to define the ownership and responsibility for maintenance of the standard, and the process used to develop and approve the joint standard. STC members may work as members of the partner organization's development committee as defined by the MoU.

The development and approval of the standard shall be assigned to an STC and SSC in the same manner as other AHRI standards. Any standard to which the name of AHRI is added shall go through the same stages as the revision and approval of any other standard i.e. with approval by the STC, SSC, and CB; see Section 6. A public review conducted by the partner organization may fulfill the public review requirement of the AHRI process.

Standards that have already been developed and approved by another standards developing organization may be adopted by AHRI, and published with the addition of the AHRI name, after going through the same stages of approval of any other existing standard.

Standards that have already been developed and approved by another standards developing organization may be approved as an ANS or NSC after going through the same stages of approval of any other ANS or NSC.

APPENDIX A. AHRI PATENT POLICY – NORMATIVE

A1. *Inclusion of Patents in AHRI, ANS, and NSC Standards*

AHRI has no objection in principle to drafting an AHRI, ANS, or NSC standard in terms that include the use of an essential patent claim (i.e. one whose use would be required for compliance with that standard) if it is considered that technical reasons justify this approach.

Participants in the AHRI standards development process are encouraged to bring to the attention of AHRI patents with claims believed to be essential.

If AHRI receives a notice that a proposed, revised, or approved AHRI/ANS/NSC standard may require the use of such a patent claim that is not already covered by an existing assurance, the procedures in this Section shall be followed.

A2. *Statement from Patent Holder*

AHRI shall receive from the patent holder or a party authorized to make assurances on its behalf, in written or electronic form, either:

- a) assurance in the form of a general disclaimer to the effect that such party does not hold and does not currently intend holding any essential patent claim(s); or
- b) assurance that a license to such essential patent claim(s) will be made available to applicants desiring to utilize the license for the purpose of implementing the standard either:
 - i. under reasonable terms and conditions that are demonstrably free of any unfair discrimination; or
 - ii. without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

Such assurance shall indicate that the patent holder (or third party authorized to make assurances on its behalf) shall include in any documents transferring ownership of patents subject to the assurance, provisions sufficient to ensure that the commitments in the assurance are binding on the transferee, and that the transferee shall similarly include appropriate provisions in the event of future transfers with the goal of binding each successor-in-interest.

The assurance shall also indicate that it is intended to be binding on successors-in-interest regardless of whether such provisions are included in the relevant transfer documents.

A3. *Record of Statement*

A record of the patent holder's statement shall be retained in the files of AHRI and shall be published on the AHRI website.

A4. *Notice*

When AHRI receives from a patent holder the assurance set forth in A2 b) above, the standard shall include a note substantially as follows:

NOTE – The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights.

By publication of this standard, no position is taken with respect to the validity of any such claim(s) or of any patent rights in connection therewith. If a patent holder has filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, then details may be obtained from the standards developer.

A5. *Responsibility for Identifying Patents*

Neither AHRI nor ANSI is responsible for identifying patents for which a license may be required by an AHRI, ANSI, or NSC standard or for conducting inquiries into the legal validity or scope of those patents that are brought to their attention.

APPENDIX B. AHRI RECORDS RETENTION POLICY -- NORMATIVE

Records for any standard placed under periodic maintenance shall be retained for at least one complete standards cycle, or until the standard is revised. Records related to withdrawn standards and guidelines shall be retained for at least five years from withdrawal.

Records for any standard placed under continuous maintenance shall be retained for a minimum of five (5) years or until approval of the subsequent revision or reaffirmation of the complete standard.

Records for any standard placed under stabilized maintenance shall be retained until the standard is reaffirmed, revised, or subsequently reviewed in connection with the stabilized maintenance of the standard as an ANS.

APPENDIX C. ANS COMMERCIAL TERMS AND CONDITIONS -- NORMATIVE

Except as otherwise permitted, an American National Standard (ANS) shall not include terms or conditions that are primarily contractual or commercial in nature, as opposed to technical, engineering or scientific in nature. Thus, for example, an ANS shall not include contractual requirements (C1); endorse or require the use of proprietary products or services (C2); or endorse or require the use of particular conformity-assessment bodies, testing facilities or training organizations (C3).

C1. Contractual Requirements

Except as provided below, ANS shall not include contractual requirements such as those relating to particular products or services, guarantees, warranties, reworks, indemnities, buybacks, price-related terms and other conditions of sale or use.

C2. Endorsements of Proprietary Products or Services

ANS shall not endorse or require the purchase or use of proprietary products or service providers as a condition of implementing the standard. Proprietary in this context means products or services that are the property of an owner and cannot be obtained or recreated without the consent of the owner. For example, an ANS may not endorse or require the purchase or use of brand-name tools or components, licenses, manufacturer lists, service provider lists or copyrighted materials.⁷

However, for informational purposes, where known sources exist for products or services necessary to comply with the ANS, it is permissible, but not obligatory, to identify the sources (which may include a source's name and address) in a footnote, an appendix, or reference to a website. The referenced products or services shall be reasonably available from the referenced sources, the words "or the equivalent" shall be added to the reference, and the reference shall also expressly state that identification of products or services is not an endorsement of those products or services or their suppliers.

C3. Conformity Assessment,

Testing and Training In connection with ANS that relate to the determination of whether products or services conform to one or more standards, the process or criteria for determining conformity may be standardized as long as the description of the process or criteria is limited to technical, engineering or scientific concerns and does not include what would otherwise be contractual or commercial terms.

It is permissible for health, safety or environmental protection reasons to include a generic requirement for third-party, i.e., independent, conformity assessment, testing or training. ANS shall not dictate the use or non-use of a particular conformity-assessment body, testing facility or training organization.

However, for informational purposes, where known sources exist for products or services necessary to determine compliance with the ANS, it is permissible, but not obligatory, to identify the sources (which may include a source's name and address) in a footnote, an appendix, or reference to a website. The referenced products or services shall be reasonably available from the referenced sources, the words "or the equivalent" shall be added to the reference, and the reference shall also expressly state that identification of sources is not an endorsement of those sources.

APPENDIX D. AHRI ANTITRUST POLICY -- NORMATIVE

AHRI, ANSI, and NSC standards shall be developed in accordance with applicable antitrust and competition laws, and meetings amongst competitors to develop these standards are to be conducted in accordance with these laws.

AHRI staff shall be present at AHRI meetings and hold such meetings in accordance with AHRI's antitrust guidelines.

APPENDIX E. NORMATIVE REFERENCES

- E1.** Bylaws of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI), latest edition.
- E2.** *Guide for Developing AHRI SI Standard* (AHRI), latest edition.
- E3.** American National Standards Institute (ANSI) *Essential Requirements*, latest edition (abbreviated as ANSI ER).
- E4.** Standards Council Canada (SCC) *Requirements & Guidance – Accreditation of Standards Development Organizations*, latest edition (abbreviated as SCC R&G).

APPENDIX F. PROCESS STAGES AND FLOWCHARTS -- INFORMATIVE

F1. Stages

The stages for development and approval of AHRI standards and guidelines are shown in Table 1.

Table 1: Summary of stages (informative)

Stage name	Section	Intn'l Harmonized Stage Code	Approval required to advance	Applicability			
				AHRI Guideline	AHRI-only standard	ANS	NSC
Initiation (project charter)	6.2	10	STC and SSC Approval ballot	X	X	X	X
Working Draft	6.3	20	STC Approval ballot	X	X	X	X
Public Review	6.4	40	STC Approval ballot	n/a	X	X	X
Standards Subcommittee Approval	6.5	50	SSC Approval ballot	X	X	X	X
AHRI Publication	6.6	60		X	X	X	X
Consensus Body Approval	6.7	50	CB ballot	n/a	n/a	X	X
ANSI/SCC Publication	6.8	60		n/a	n/a	X	X

F2. Flowcharts

Flowcharts in Figure 3 through Figure 6 summarize the process for standards, from starting the standards activity through review, approval, and publication. The normative description of the process is found in Section 5.

Figure 3: Revise existing standard, or create new standard (informative)

Revise existing standard, or create new standard

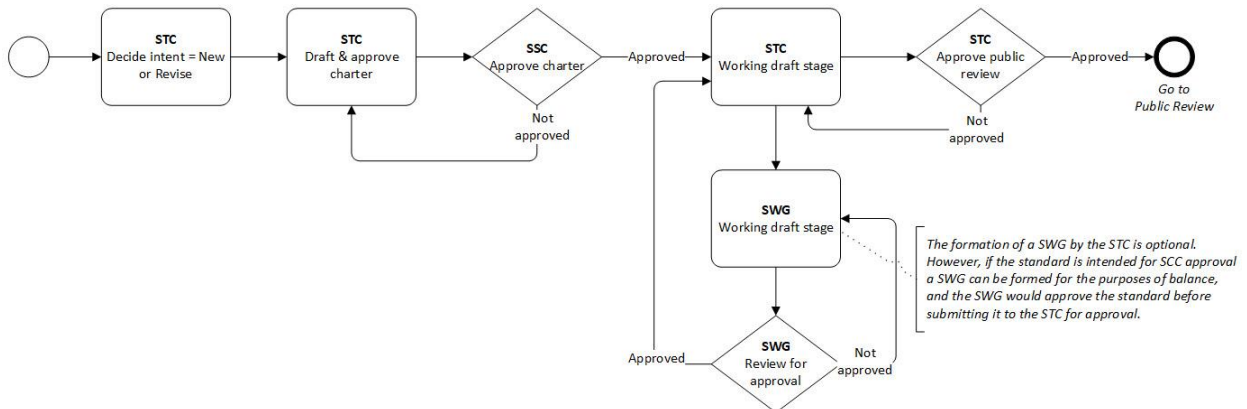


Figure 4: Reaffirm, or withdraw standard (informative)

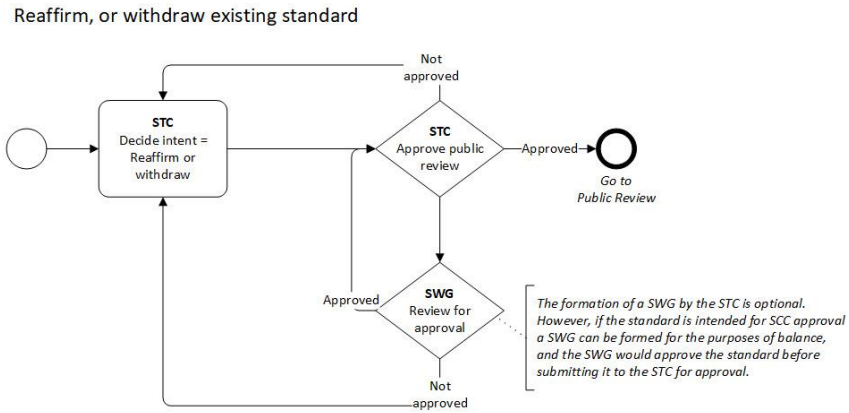


Figure 5: Public review through publication as AHRI-only designation (informative)

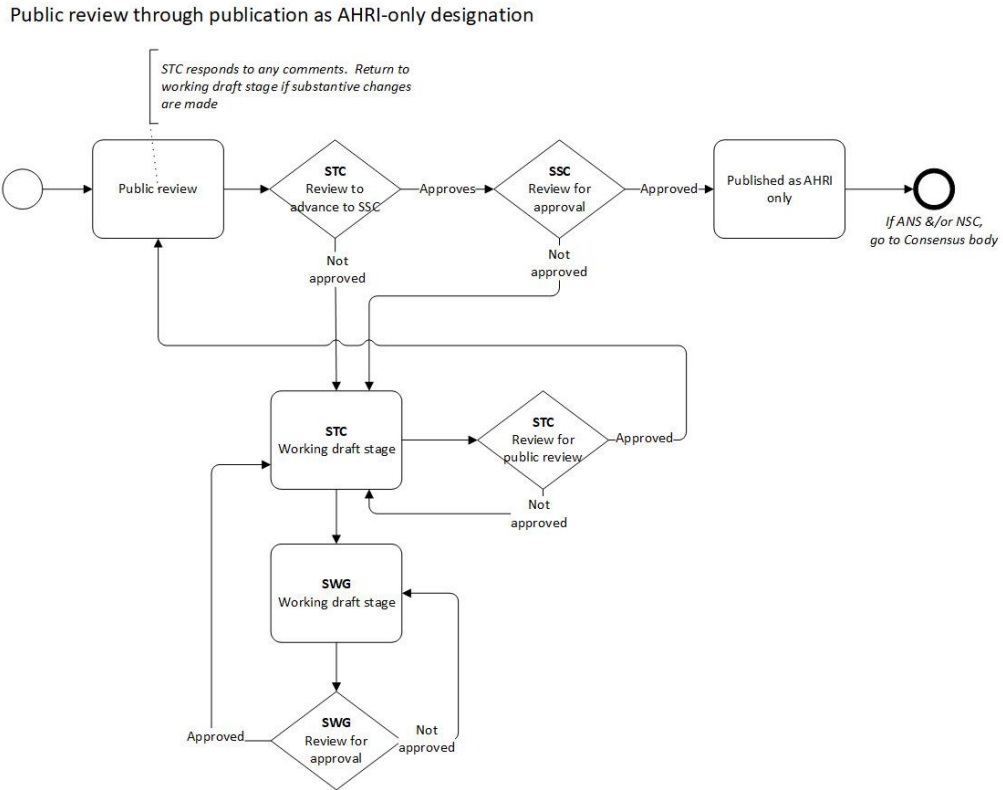


Figure 6: Consensus Body through ANS and/or NSC (informative)

