Standards Committee

Procedures for ASHRAE Standards Actions

PASA

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FOREWORD

The original edition of the Procedures for ASHRAE Standards Actions (PASA), dated June 30, 1994 superseded all previous documentation for communicating ASHRAE’s procedures as a basis for continuation (re-accreditation) under the ANSI Organization Accreditation Method. PASA changes must be approved by the ASHRAE Board of Directors and ANSI.

ASHRAE publishes guidelines and the following types of voluntary consensus standards in the field of heating, refrigeration, air conditioning and ventilation and the allied arts and sciences:

1. Method of Test and Classification
2. Design
3. Protocol
4. Rating Standards

Most ASHRAE Standards are of the Method of Measurement or Test type. ASHRAE Standard Design and Standard Practice documents receive the most use by consulting engineers and architects, requests for committee participation, public review comments, and adoption by code bodies. HVAC equipment manufacturers use all three types of ASHRAE Standards. The project committee voting memberships represent a balance of interest (at least User, Producer, and General) so that no one category has a majority. ASHRAE Standards are used by persons in all three-interest categories.

ASHRAE’s Standard Project Committees may include persons who are not members of ASHRAE (e.g., physiologists, medical doctors, chemists, etc.).

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PROCEDURES FOR ASHRAE STANDARDS ACTIONS

1 INTRODUCTION

Founded in 1894, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) is a technical society of more than 50,000 members, organized and operated for the exclusive purpose of advancing the arts and sciences of heating, refrigeration, air conditioning and ventilation, the allied arts and sciences, and related human factors for the benefit of the general public. ASHRAE sponsors a research program, develops standards, publishes technical data, and organizes meetings and educational activities for both its members and others professionally concerned with refrigeration processes and the design and maintenance of indoor environments. The Society also strives to promote increased public awareness of the requirements for healthful and comfortable indoor environments.

2 SCOPE

These Procedures direct ASHRAE’s standards activities in the field of heating, refrigeration, air conditioning and ventilation, and the allied arts and sciences. These Procedures apply to activities related to the development of consensus for approval, revision, reaffirmation, withdrawal, and maintenance of ASHRAE Standards, and to relations with standards-related committees of other organizations. These procedures shall also apply to guidelines as noted.

ASHRAE leaves to trade associations the writing of rating standards unless a suitable rating standard will not otherwise be available.

3 DEFINITIONS, ABBREVIATIONS AND ACRONYMS, AND CLASSIFICATIONS

Annex A provides definitions, abbreviations and acronyms, and classifications of ASHRAE Standards.

4 APPROVAL OF PROPOSED STANDARDS

4.1 RESPONSIBILITY

The Standards Committee is responsible for formation of project committees and the development, preparation, interpretation, revision, reaffirmation, withdrawal – and submittal to the Board of Directors or its designee for approval – of ASHRAE Standards Actions for Standards, and for Guidelines except as noted. The Board of Directors or its designee will counsel and offer guidance to the Standards Committee on policy level Standards.

Each member of the Standards Committee is appointed to one or more subcommittees by the chair. These subcommittees are responsible for:

- tracking the status of project committees,
- recommending ASHRAE appointments to standards-writing committees of other organizations, monitoring their activities, and maintaining ASHRAE participation in the canvass balloting activities of other standards-writing organizations, and
- ensuring the timely maintenance of existing standards in accordance with ASHRAE procedures; forming interpretations committees for standards when project committees do not exist; considering requests for development of joint sponsorship agreements; and acting in coordination with cognizant
Project Committees, ASHRAE Technical Committees, Task Groups or Technical Resource Groups (PC/TC/TG/TRG) to recommend reaffirmation or withdrawal of standards.

Project Committees are appointed to develop and revise standards in accordance with approved written procedures. The project committees are responsible for the technical content of standards, guidelines and portions thereof. The Standards Committee supervises the work of project committees to ensure that approved procedures have been followed.

4.2 STANDARDS COMMITTEE MEMBERSHIP

4.2.1 Standards Committee
The Standards Committee is a standing general committee and its members are elected by the Board of Directors. The members are selected from various interest groups to prevent dominance of any single interest and may include persons from groups such as manufacturers, consultants, educators, trade associations, government, testing/research laboratories, utilities, code bodies, contractors, consumer/users, and environmentalists. Members of the Standards Committee must be of Fellow, Member, or Associate Member grade. Members of Standards Committee may be Life Members or Presidential Members.

4.2.2 Standards Committee Subcommittees
The Standards Committee (StdC) has the following subcommittees: a) the International Standards Advisory Subcommittee (ISAS), b) the Intersociety Liaison Subcommittee (ILS) c) the Planning, Policy and Interpretations Subcommittees (PPIS), d) the Standards Project Liaison Subcommittee (SPLS), e) the Code Interaction Subcommittee (CIS), and f) the Standards Reaffirmation Subcommittee (SRS).

4.2.2.1 International Standards Advisory Subcommittee (ISAS)
ISAS is responsible for monitoring, reporting and submitting recommendations to the Intersociety Liaison Subcommittee concerning ASHRAE’s regional and international standards activities. ISAS is comprised of StdC and non-StdC members with knowledge of International Standards Development.

4.2.2.2 Intersociety Liaison Subcommittee (ILS)
ILS oversees the Society’s participation in the standards work of other standards development organizations, the American National Standards Institute (ANSI), and ANSI’s Technical Advisory Groups on ISO and IEC standards. ILS is comprised of StdC members only.

4.2.2.3 Planning, Policy and Interpretations Subcommittee (PPIS)
PPIS oversees the maintenance and revision of all standards writing and processing procedures and policies, recommending approvals of new Titles Purposes and Scopes and handling interpretations of existing standards when no project committee exists and evaluates requests for joint sponsorships of Standards and Guidelines. PPIS is comprised of StdC members only.

4.2.2.4 Standards Project Liaison Subcommittee (SPLS)
SPLS oversees the development of Standards and Guidelines, training of PC Chairs, oversees work plans, and waivers of the ASHRAE Units policy. SPLS is comprised of StdC members only.

4.2.2.5 Code Interaction Subcommittee (CIS)
CIS oversees the participation by ASHRAE in the development of model codes and standards by other SDOs that have relevance to ASHRAE technical interests. CIS is comprised of StdC and non-StdC members with knowledge of model code development and the deployment of building regulations.

4.2.2.6 Standards Reaffirmation Subcommittee (SRS)
SRS serves as the project committee for reaffirmation, withdrawal or non-substantive revisions of existing ASHRAE Standards or Guideline.

SRS is a project committee of at least five (5) members, including at least three members of the StdC and applicants responding to an annual call for members posted in ASHRAE Standards Actions. The Chair and Members are appointed annually by the Standards Committee Chair. SRS acts, in limited circumstances, as a project committee for existing standards and is subject to the rules of project committees for reaffirmations, withdrawals, and revisions only to update references, that are not themselves reaffirmations and do not cause a substantive change to the standard. SRS must comply with all ANSI requirements for openness, balance and due process. SRS may act in lieu of a PC, with the advice of the cognizant TC/TG/TRG, to recommend, reaffirmation, withdrawal or revision of an existing standard or guideline based on updated references (that do not cause a substantive change to the standard) or add a second system of units to an existing standard, thereby making the existing standard useable in either SI or IP units.

4.3 ESTABLISHMENT OF PROJECT COMMITTEES

4.3.1 Project Committees
Project committees are authorized by the Standards Committee as either Standard Project Committees (SPCs), which are ad hoc committees, or Standing Standard Project Committees (SSPCs), Guideline Project Committee (GPC), or Standing Guideline Project Committee (SGPC). Project committees are the consensus bodies of the Society. If a project committee is not balanced, efforts to recruit materially affected and interested parties from diverse interest categories to become members of a non-balanced SPC shall be on-going and documented.

A member of the SPLS is appointed as StdC Liaison to the new project committee. A call-for-members announcement is conducted. Drawing from the resulting applications and recruiting efforts, candidate committee members are recommended in consideration of their personal expertise and their effect on committee balance. Recommended members and non-policy level PC Chairs are approved by a majority vote of a designated subcommittee of Standards Committee, normally SPLS. Standards Committee must concur by majority vote for all policy level PC Chairs.

4.3.2 Project Committee Voting Status
Project Committees may have project committee voting members (PCVM), non-voting members (NVM), project subcommittee voting members (PSVM), or consultants.

4.3.3 PC Activity Initiation
At the first official meeting of a new PC, the PC shall vote on whether to concur with, or propose changes to, the original Title, Purpose and Scope (TPS). The PC may conduct business (for example, pass motions) only after the membership roster with at least 5 voting members has been approved by SPLS or the StdC. However, the PC Chair may hold organizational meetings for individuals interested in becoming members of the PC, and the group may begin developing the Standard or Guideline.

4.3.4 Use of Subcommittees
The PC Chair may organize the committee structure using formal subcommittees. If subcommittees are used, the Chair’s recommendation for subcommittee Chair must be approved by SPLS. Responsibilities of various PC subcommittees typically are to develop drafts of one or more assigned clauses of a standard, annexes, or addenda; prepare a system of units; prepare text in appropriate language; establish educational activities; develop draft responses to requests for interpretation; or develop proposed responses to comments resulting from public review. Subcommittee actions shall be submitted as recommendations for action by the parent PC.
4.3.5 Project Committee Officers
PC officers consist of a Chair, Secretary, and in some cases also Vice Chair(s) and Subcommittee Chair(s). The Chair and any Vice Chairs or Subcommittee Chairs must be ASHRAE members. Only individual members as defined in Section 4.3.6 are eligible to serve as Chair, Vice Chair or a Subcommittee Chair. The Chair shall appoint a Secretary and recommend a Vice Chair, if the size or activity of the PC warrants one.

4.3.6 PC Members
A PC shall have individual members and designated PCs may have organizational members. Individual members are appointed as “personal members,” not as representatives of any organization, corporation, partnership, or employer. There shall not be more than one PCVM from any one company, association, agency, or entity.

4.3.7 Participation in Committee Activities
Each PC member is expected to attend meetings and participate in other committee activities, such as conference calls, letter ballots, e-mail correspondence, etc. Failure to regularly do so, without an acceptable reason, shall be sufficient cause for the PC Chair to recommend to SPLS removal of a person from the PC membership roster.

4.3.8 Removal for Cause
The PC Chair may recommend removal of a PC member from the roster for due cause, by submitting a recommendation and justification outlining the reasons for said recommendation and must submit a copy of communications between the PC Chair and PC member concerning this subject with the recommendation, in writing to the SPLS Liaison and Manager of Standards (MOS). The MOS will transmit the recommendations of the PC Chair and SPLS Liaison and related correspondence to SPLS for action in a meeting or by letter ballot. The SPLS Chair may call an executive session of the SPLS or the PC to discuss the matter. Failure of the PC member to properly disclose any conflict of interest shall be grounds for removal from the PC by SPLS.

4.3.9 Removal for Cause Initiated by SPLS
SPLS may, without a recommendation of the PC Chair, remove one or more PC members from the roster and document their reasons for the removal.

4.3.10 Organizational Members
Subject to approval of SPLS, the PC Chair may nominate an organization as an organizational member (OM). An organizational member designates a representative, and at the organization’s discretion, an alternate, to serve in the absence of the representative, to participate in PC activities in the same manner as an individual member, except that the representative and alternate may not serve as a Chair, Vice Chair, or Subcommittee Chair of a committee in accordance with 4.3.10. The designated organizational representative (OR) of the OM may serve as a PCVM or a PSVM of the PC. For consideration of appointment as an OM, the organization should normally be a governmental agency, public interest group, or organization that represents a number of entities such as a trade association. Organizations such as educational institutions or corporations and partnerships engaged in commerce shall not be eligible for OM status.

Organizations are informed of the availability of organizational memberships on specific PCs by one or more of the following:
  a) notice in ASHRAE Insights, ASHRAE Journal, ANSI Standards Action, etc.;
  b) posting on the ASHRAE Web Site;
  c) press releases to the applicable trade press; or
  d) direct communication to potential materially-affected organizations.
4.3.11 Criteria for Considering Organizational Members

The PC Chair should consider the following criteria in nominating organizations for OM status on a PC:

a) the degree to which members of the organization are materially affected by the requirements of the standard;
b) the ability of the representative of the organization to represent the interests of the members of the organization;
c) the capability of the organization to provide an individual with appropriate technical or scientific qualifications to serve as their representative, and if desired, another individual with appropriate technical or scientific qualifications to serve as an alternate organizational representative (AOR);
d) that an official representative of the organization has endorsed the member and the alternate to serve on the project committee; and
e) the willingness of the organization to abide with the terms of organizational membership.

4.3.12 Project Committee Size

The PC shall consist of no less than 5 PCVMs with no upper limit, including the Chair. In addition to the PCVMs, the PC membership may also include PSVMs if the PC is organized into subcommittees or NVMs if not organized into subcommittees.

5 RELATIONSHIPS WITH OTHER STANDARDS-DEVELOPING ORGANIZATIONS

5.1 General

The Standards Committee supervises ASHRAE’s participation in the standards work of other organizations including the American National Standards Institute (ANSI) and international and regional standards organizations including the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

5.2 Joint Sponsorship

A request to jointly sponsor a standard shall be evaluated by the Standards Committee, considering overlap of expertise and responsibility. The evaluation must be reported to Technology Council. A recommendation for joint sponsorship including a recommendation for the lead organization shall be forwarded to the Technology Council and Board of Directors for approval. A recommendation against joint sponsorship shall be forwarded as an information item to the Board of Directors. If joint sponsorship is approved by the Board of Directors, standards-writing and approval procedures must be negotiated with the other organization by the MOS on behalf of the Standards Committee.

The standards-writing and approval procedures should be those of the lead organization. If ASHRAE procedures are not adopted, the adopted procedures must be compatible with ASHRAE procedures in regard to openness of proceedings, public review of drafts, and delegation of technical content to the project committee.

6 COMPLIANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) REQUIREMENTS FOR ACCREDITATION

Since 1976, ASHRAE has been accredited by ANSI as a developer of American National Standards and continuation of this accreditation shall be maintained based on ASHRAE procedures and practices for standards development meeting the criteria for accreditation given in ANSI Essential Requirements: Due process requirements for American National Standards (referenced hereafter as ANSI Essential Requirements or ANSI ER).
7 CRITERIA FOR APPROVAL, WITHDRAWAL, AND DISCONTINUANCE OF ASHRAE STANDARDS AND GUIDELINES

7.1 INTRODUCTION
Approval of an ASHRAE Standard, Guideline or portion thereof, requires verification that the requirements for due process and consensus have been met. Approval thus ensures that each ASHRAE Standard, Guideline or portion thereof, is generally acceptable to the directly and materially interested parties.

7.2 GENERAL
Standards and Guidelines shall be designated, developed, published, and maintained in accordance with these Procedures.

7.2.1 Public Review

7.2.1.1 Advisory Public Review (APR)
A PC may vote by majority of the voting membership to recommend to the SPLS Liaison and SPLS Chair that a draft standard, guideline, or portion thereof, be subjected to an APR if the PC believes that the draft contains new, unusual or potentially controversial elements that the PC believes would benefit from increased public scrutiny prior to finalizing the draft for publication public review (no continuation letter ballot, no roll call vote record, no marked up roster, or submittal form is needed). Any comments received as a result of an APR are deemed to be "supportive" and do not need to be "resolved". Apart from acknowledging receipt of each comment, communication with commenters is optional but may be undertaken to clarify a comment's intent or to invite further participation in the standard development process. The underlying concept of the APR is to gain increased public participation early in the development process and thus to deal with, and potentially resolve, controversy before publication approval is sought. APRs are not submitted through the ANSI process.

7.2.1.2 Normal Track Public Review (NTPR)
A standards action approved by the PC for publication public review that meet any of the following criteria shall be processed as a normal track:

a) there are negative votes with reason within the PC;
b) a credible threat of legal action (in writing) against ASHRAE has been made related to the proposed draft; or
c) the SPLS Liaison has notified the MOS within ten calendar days, from the receipt of the package, with specific justification, that the PC has violated due process.

SPLS must approve the standards, guidelines, or portion thereof, before it can be issued for public review.

7.2.1.3 Fast Track Public Review (FTPR)
A standards action approved by the PC for publication public review that meet all of the following criteria shall be processed as a fast track:

a) there are no negative votes within the PC;
b) no credible threat of legal action (in writing) against ASHRAE has been made related to the proposed draft; and

c) the SPLS Liaison has not notified the MOS within ten calendar days, from the receipt of the package, with specific justification, that the PC has violated due process.

No additional approvals for issuing the standard, guideline or portion thereof, for public review are required.
7.2.2 Publication Approval
Approval of Standards Action by the ASHRAE Board of Directors that have unresolved objectors or a threat of legal action shall be preceded by formally voted recommendations by the project committee and Standards Committee.

Approval of Standards Actions that have no unresolved objectors and no threat of legal action shall be preceded by formally voted recommendations by the project committee and processed for publication by ASHRAE Staff. These Standards Actions shall be reported as an information item to the Standards Committee and the ASHRAE Board of Directors.

The standard, guideline or portion thereof, shall be deemed to have been approved by the BOD upon approval of its designee.

7.2.3 Quorum Requirements
To conduct standards-related business at a meeting of a project committee, StdC or its subcommittees, Technology Council or the Board of Directors, a quorum must be present. A quorum exists if a majority of the voting membership is present.

7.2.4 Voting Requirements for Standards Actions
When a PC considers a vote to recommend publication/public review or publication with knowledge of unresolved objections of a new, revised, or reaffirmed standard, or withdrawal of a standard, the PC shall comply with Sections 7.2.4.1-7.2.4.6.

7.2.4.1 Voting on Standards Actions at Meetings
Standards action votes shall only occur at meetings that have been announced. A quorum must be present for a motion to be made. Project committee voting members who are absent shall be given the opportunity to vote via continuation letter ballot.

7.2.4.2 Numerical Requirements for Standards Action Votes
Standards actions votes must be approved by the project committee with (1) affirmative recorded votes by the majority of the voting membership of the project committee and (2) affirmative votes from at least two-thirds of those voting, excluding abstentions of the project committee.

7.2.4.3 Treatment of Negative Voters on Standards Actions
Persons who cast negative votes on a standards action vote shall be given the opportunity to provide a reason for their negative votes. If a reason is provided, the negative voter will be considered an unresolved objector. Negative voters who do not provide a reason for their negative vote, or negative voters who provide a reason, but indicate they are resolved will not be offered the right to appeal.

7.2.4.4 Responses to Negative Votes with Reason
A written response to each negative voter shall be provided advising them of the disposition of their objection and the reasons therefor.

7.2.4.5 Consideration of Unresolved Objections
All negative voters with a reason statement, and unresolved comments and written responses to each objection, shall be transmitted to all eligible voters to offer them an opportunity to vote, change their vote, or reaffirm their vote. If a negative vote with reason is submitted as part of this reconsideration process no additional response is required and the results shall be final.

7.2.4.6 Approval of Standards Actions by Approval Bodies
When recommendations for standards action votes are considered by SPLS, Standards Committee and the Board of Directors, the recommendation must be approved by a majority of those voting at a meeting, or by letter ballot.

7.2.5 Voting Rules for Meetings
Actions of PCs and PC subcommittees require approval by a majority of those voting at a meeting. Standards action votes must comply with 7.2.4. Issuance of an official interpretation requires affirmative votes of the majority of the voting membership and of at least two-thirds of those voting, excluding abstentions.

7.2.6 Voting Rules for Letter Ballots By Project Committees
The Chair of the PC may authorize a letter ballot to be issued on any matter. When a letter ballot is conducted via e-mail it is intended that members not use “Reply to All,” but reply only to the sender of the e-mail. Open letter ballots may be discussed by the project committees during announced meetings.

7.2.6.1 Numerical requirements for letter ballots
Actions of the PC and subcommittees that are not standards action votes, conducted by letter ballot, require approval by a majority of the voting membership of the committee. Standards action votes must comply with 7.2.4.2. The issuance or revision of an official interpretation require affirmative votes of the majority of the membership and of at least two-thirds of those voting, excluding abstentions.

7.2.7 Negative Votes on Letter Ballots of PCs and Project Subcommittees
Persons who cast negative votes on a letter ballot shall be asked if they wish to comment on reasons for their negative votes. If a vote passes with one or more negative votes with a reason, the results shall be recirculated to the committee to provide voting members with an opportunity to vote, reaffirm their vote, or change their vote. If a reason is not provided for the negative vote, the eligible voters are informed of the negative vote by distribution of the letter ballot results.

The Chair of the entity voting by letter ballot may offer rebuttal to the reasons of the negative voters. After the eligible voters have had at least 7 calendar days to reaffirm their votes, change their votes or to vote, the results shall be final.

7.3 Maintenance of Standards and Guidelines
ASHRAE Standards and Guidelines shall be maintained under periodic maintenance procedures except when use of continuous maintenance procedures has been voted by the Standards Committee. (See definitions of continuous maintenance and periodic maintenance in Annex. A.)

When a PC does exist for a standard on periodic maintenance, the PC is required to approve a motion to initiate a revision to the Standard or Guideline and send that recommendation to the Manager of Standards and the SPLS liaison so a PINS announcement can be made. Once the PINS has been announced, the PC may begin a revision process.

When a PC does not exist, a designated subcommittee of StdC shall (a) form Interpretation Committees to respond to requests for interpretation, and (b) with the advice of the cognizant Technical Committee, Task Group, or Technical Resource Group, shall provide recommendations to the Standards Committee concerning the need for reaffirmation, revision based on updated references or adding a second system of units to a Standard, thereby making the Standard useable in either SI or IP units, withdrawal or the need to form a new project committee to revise a Standard. (See TC, TG, and TRG, Annex. A.)

7.4 DUE PROCESS REQUIREMENTS
The following represents the due process requirements for development of consensus.

7.4.1 Openness

7.4.1.1 Access
Meetings of the Standards Committee, PCs, and their subcommittees are open to all members of ASHRAE and to members of the public who are directly and materially interested by ASHRAE’s standards activities. When there is a discussion of a sensitive issue or of a personal nature, the chair of any of these committees or subcommittees may declare an Executive Session, during which only members of the committee or subcommittee and such other individuals invited by the chair shall be present.

7.4.1.2 Barriers
There shall be no undue financial barriers to participation in project committees. Participation shall not be conditional upon membership in ASHRAE or in any standard cosponsoring organization, or unreasonably restricted on the basis of technical qualifications or other such requirements. (See due process in Annex A.)

7.4.1.3 Notice
Timely and adequate notice of the initiation and development of a new standard or a substantively revised standard and the establishment of a new PC shall be on the ASHRAE web site. In addition, proposals for new American National Standards and proposals to revise, reaffirm, or withdraw approval of existing American National Standards shall be transmitted to ANSI for listing in ANSI and ASHRAE Standards Action. Notices should include a clear and meaningful description of the purpose of the proposed activity.

7.4.2 Lack of Dominance
The standards development process shall not be dominated by any single interest category, individual or organization. Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. Unless a claim of dominance is submitted in writing (electronic communications) by a directly and materially interested party, no test for dominance is required. (See Section 7.4.3, and balance, dominance, and interest category in Annex A.)

7.4.3 Balance and Interest Categories
Historically the criteria for balance are that a) no single interest category constitutes more than one-third of the membership of a project committee dealing with safety-related standards or b) no single interest category constitutes a majority of the membership of a project committee dealing with other than safety-related standards.

The interest categories appropriate to the development of consensus for a standard are a function of the nature of the standard being developed. In defining the interest categories appropriate to the standards activity, consideration shall be given at least to the following:

Producer
User
General

Where appropriate, more detailed categories or subcategories may be considered.

7.4.4 Additional Procedures
ASHRAE shall, as deemed appropriate and needed, provide additional forms, commentary, examples, educational materials, and related information that will support the application and use of these procedures.
7.4.4.1 Appeals to BOD

Annex B provides an appeal mechanism for the impartial handling of procedural complaints regarding any BOD action or inaction.

7.4.4.2 Complaints of Inactions by the Standards Committee, its Subcommittees or Project Committees

In addition to formal appeal of Board standards actions or inactions, failure of the Standards Committee, its subcommittee(s), or a Project Committee to consider a written request may be addressed by writing (including electronic communication) to the Manager of Standards at any time. (See Annex C.)

7.4.5 Public Review Period

The public review comment period shall normally be the minimum allowed by ANSI unless more time is justified. Limited revisions (ISCs) and addenda up to 5 pages may have a 30-day comment period.

7.4.6 Consideration of Public Review Comments Received

All comments to public review drafts shall be submitted electronically via the online comment database. An exception to this rule may be granted by the MOS if the commenter can demonstrate that he/she does not have ready access to the internet. The PC Chair or his/her designee shall submit responses to commenters electronically in the medium specified by MOS.

Public Review Comments received during open public review shall be reported to all members of the PC. Prompt consideration shall be given to all public review comments, including those received through ANSI. An effort to resolve all negative public review comments shall be made, and each negative commenter shall be advised in writing (including electronic communication) of the disposition of the objections and reasons therefor. After consideration of comments or because of new information received, the PC may make changes to the draft. If the committee determines a full subsequent public review is required, responses to comments on the previous public review are not required and interested parties shall be notified of the right to comment on the new draft in ASHRAE and ANSI Standards Actions. Any substantive changes in the draft must be approved and voted on by the PC for publication public review. (See substantive change in Annex A). The PC may consider any public review comments received after the close of the public review period or shall consider them as a new proposal.

7.4.6.1 Late Comments Received Under Periodic Maintenance

Comments received after close of open public review under ASHRAE’s periodic maintenance procedures may be held for consideration at the next revision at the discretion of the PC.

7.4.6.2 Comments Received Under Continuous Maintenance

An SSPC or SGPC that is designated by the Standards Committee as operating under continuous maintenance procedures shall take documented, consensus action on each request for change to any part of its Standard.

7.4.7 Consideration of Standards Proposals

Prompt consideration shall be given by the Standards Committee to proposals made for developing new standards or revising, reaffirming, or withdrawing existing standards.

7.4.8 Records

Records shall be maintained to provide evidence of compliance with the record retention policy in the ANSI Procedures. Records concerning new, revised, or reaffirmed periodic maintenance standards shall be retained for one complete standards cycle, or until the standard is revised. Records concerning new, revised or reaffirmed continuous maintenance standards shall be retained for a minimum of five years or until the standard is completely revised or reaffirmed. Records concerning withdrawn standards shall be retained for at least five years from the date of withdrawal.
7.5 CONSENSUS
Evidence of consensus associated with the approval of an standards, guidelines or portions thereof, by the PC shall be documented.

7.6 CRITERIA FOR APPROVAL
This Section outlines approval requirements for ASHRAE Standards, Guidelines or portions thereof.

7.6.1 APPROVAL OF STANDARDS
With respect to any proposal to approve, revise, or reaffirm an ASHRAE Standard, evidence shall be considered that:
(a) the applicable procedures were followed.
(b) the standard, or portion thereof, is within the scope of ASHRAE’s ANSI registered standards activities,
(c) notice of the development process for the Standard was provided to ANSI in accordance with PINS or its equivalent,
(d) any identified conflict with another ASHRAE or American National Standard was addressed in accordance with the ANSI ER,
(e) other known national standards were examined with regard to harmonization and duplication of content, and if duplication exists, there is a compelling need for the Standard,
(f) ANSI’s patent policy is met,
(g) ANSI’s policy on commercial terms and conditions is met if applicable,
(h) consensus was achieved, including evidence of the following:
   i. the applicable procedures were followed;
   ii. the standard is within the scope of the registered standards activity;
   iii. declaration that conflicts with another ANS have been addressed per procedures;
   iv. a roster of the consensus body indicating the votes of each member, each member’s interest category and a summary of the vote; and
   v. identification of all unresolved negative views and objections, with the names of the objector(s), and a report of attempts toward resolution.
(i) Any appeal meeting the criteria of B1 through B6 of Annex B was completed.

In addition, ASHRAE shall consider any evidence provided that the proposed Standard or portion thereof, is contrary to the public interest, contains unfair provisions, is unsuitable for national use, contradicts federal law(s), or is technically inadequate.

ASHRAE shall not approve Standards that duplicate existing or proposed American National Standards unless there is a compelling need.

7.6.2 APPROVAL OF GUIDELINES
With respect to any proposal to approve, revise, or reaffirm an ASHRAE Guideline, evidence shall be considered that:
(a) the applicable procedures were followed.
(b) other known national standards were examined with regard to harmonization and duplication of content, and if duplication exists, there is a compelling need for the guideline,
(c) consensus was achieved, including evidence of the following:
   i. the applicable procedures were followed;
   ii. declaration that conflict and duplication issues with ANS have been addressed per procedures;
   iii. a roster of the consensus body indicating the votes of each member, each member’s interest category and a summary of the vote; and
iv. identification of all unresolved negative views and objections, with the names of the objector(s), and a report of attempts toward resolution.
(d) Any appeal meeting the criteria of B1 through B6 of Annex B was completed.

In addition, ASHRAE shall consider any evidence provided that the proposed Guideline is contrary to the public interest, contains unfair provisions, is unsuitable for national use, contradicts federal law(s), or is technically inadequate.

7.7 CRITERIA FOR WITHDRAWAL OF STANDARDS OR GUIDELINES

7.7.1 Requirements
In considering a proposal for withdrawal of an existing ASHRAE Standard, Guideline or portion thereof, the Standards Committee shall consider evidence that:
(a) due process requirements were met,
(b) consensus was achieved concerning the withdrawal of the existing Standard, Guideline or portion thereof or consensus is lacking for its continued approval,
(c) the proposal for withdrawal as an ANSI/ASHRAE Standard, ASHRAE Guideline or portion thereof, was provided to the administrator(s) of the appropriate USA Technical Advisory Group(s) and
(d) any appeal to ASHRAE was completed.

7.7.2 Withdrawal for Cause
In the case of a proposal to withdraw an existing ASHRAE Standard, Guideline or portion thereof for cause, the Standards Committee shall consider evidence that:
(a) a significant conflict exists with an American National Standard,
(b) ANSI’s patent policy was violated,
(c) opportunity for consideration of revision was given but revision was not completed, or
(d) the ASHRAE Standard, Guideline or portion thereof:
   1. is contrary to the public interest,
   2. contains unfair provisions,
   3. is technically inadequate, or
   4. is unsuitable for national use.

7.7.3 Other Bases for Withdrawal of Approval
The ASHRAE Board of Directors or its designee also may withdraw approval of an ASHRAE Standard, Guideline or portion thereof, upon (a) advice of counsel, based on evidence of a legal nature, or (b) consideration of facts that have subsequently come to the attention of the Board.

7.8 STANDARD PROJECT DISCONTINUANCE

7.8.1 Project Discontinuation Due to Lack of Membership
Project discontinuation due to lack of membership shall be based on the following:
(a) A new project shall be discontinued by the MOS if a PC Chair and balanced membership have not been approved by SPLS within twelve months after the project is approved by the Board of Directors.
(b) A revision project shall be considered for reaffirmation public review or withdrawal public review by SRS if a PC Chair and balanced membership have not been approved by SPLS within twelve months after the project is approved by Standards Committee.
(c) If committee membership has previously been approved, discontinuation of a project requires approval by SPLS and Standards Committee.
Reasons for discontinuance include the following but are not limited to: the committee has become out of balance; there is no PC Chair; there is an insufficient number of PC members on the committee for a period not less than 7 months.

Waivers of the discontinuation specified above shall be approved by SPLS and StdC, shall have a deadline, and shall contain specific action to be taken by the PC. Multiple waivers shall not be granted in succession. ASHRAE shall notify ANSI of all discontinued projects.

7.8.2 Project Discontinuation Due to Lack of Performance
If the PC has not officially met for 12 months or is not advancing the development of the Standard, Guideline or portion thereof, in a timely manner then the SPLS Liaison shall determine whether another Chair should be sought or, whether the matter should be sent back to PPIS to re-evaluate the need for the project. If the project is discontinued ASHRAE shall notify ANSI.

7.9 Final Notice
Notice of the final action on standards shall be announced in the ASHRAE Standards Actions.

7.10 Emergency Interim Standards Action
Emergency Interim Standards Action may be taken by the Society President without completing all elements of due process on an ASHRAE Standard that has been published or has received publication approval by the Board of Directors. An Emergency Interim Standards Action has effect for limited duration and is for the exclusive purpose of correcting errors, other than errata, when failure to take timely corrective action would:

a) substantively undermine the purpose or technical credibility of the Standard taken as a whole, or
b) constitute undue risk to health or safety of the public or users of the Standard.

The Manager of Standards shall notify ANSI if an Emergency Interim Standards Action has been taken on a published or candidate American National Standard. These procedures do not apply to Guidelines.

When an Emergency Interim Standards Action is taken, the Standards Committee shall initiate concurrent development of a revision or addendum, or initiate withdrawal procedures, to permanently correct the problem using ASHRAE’s consensus procedures. If corrective standards action is not approved by the Board of Directors for publication within two years, the Emergency Interim Standards Action shall be immediately terminated. (See Annex D.)

7.11 Interpretation Requests of Standards
Interpretation requests for a standard must be submitted to the MOS in writing. The Manager of Technical Services or the Chair of the current or past cognizant PC or the Chair’s designee may respond in writing to written requests for unofficial personal interpretations. Cognizant SSPCs, if they exist, and SPCs that have not yet been disbanded will be asked to respond to requests for official interpretations in writing. If no PC exists, StdC will form an Interpretations Committee (IC) to respond. Procedures for interpretations of published Standards, Guidelines or portion thereof, are provided in StdC MOP Reference Manual Section 10. An issuance or revision of an official interpretation requires affirmative votes for the majority of the memberships of each approving and of at least two-thirds of those voting, excluding abstentions.

7.12 Interpretation Requests of ASHRAE Standards Development Procedures
Interpretations requests for ASHRAE’s standards development procedures must be submitted to the MOS in writing. ASHRAE Staff may respond in writing to written requests for unofficial personal interpretations. Requests for official interpretations of procedures shall be submitted to PPIS. An issuance of an official interpretation requires affirmative votes for the majority of the memberships of PPIS and of at least two-thirds of those voting, excluding abstentions.
8 PROCEDURES FOR SYNCHRONIZATION OF THE ASHRAE AND INTERNATIONAL STANDARDS REVIEW AND APPROVAL PROCESS

When opportunities arise, the Standards Committee will encourage PCs to synchronize the review and approval process for ASHRAE and international standards consistent with ANSI procedures. If it is recommended that ASHRAE should use the expedited procedures for the identical adoption of an International Standards Organization (ISO) or International Electrotechnical Commission (IEC) standard the procedures in ANSI Procedures for the National Adoption of ISO and IEC Standards as American National Standards shall apply.

9 PATENTS
ASHRAE agrees to comply with the Patent Policy as stated in ANSI Essential Requirements.

10 COMMERCIAL TERMS AND CONDITIONS
ASHRAE agrees to comply with the Commercial Terms and Conditions policy as stated in ANSI Essential Requirements.

11 ANTITRUST POLICY
ASHRAE agrees to comply with the Antitrust Policy as stated in ANSI Essential Requirements.

12 PINS
At the initiation of a project to develop or revise an ASHRAE American National Standard, ASHRAE shall use the ANSI Project Initiation Notification System (PINS) form. Comments will be addressed in accordance with clause 2.5.1 of the current version of the ANSI ER.
ANNEX A: DEFINITIONS, ABBREVIATIONS AND ACRONYMS, AND CLASSIFICATIONS

A1 DEFINITIONS

addenda: revisions to a Standard or Guideline in the form of a supplement.

alternate organizational representative (AOR): an individual empowered by an organizational member of a project committee to act on their behalf in the activities of the project committee when the representative of the organizational member is absent.

annex: an appendix or attachment. See informative annex and normative annex.

balance: a condition existing when a) no single interest category constitutes more than one-third of the membership of a project committee dealing with safety or b) no single interest category constitutes a majority of the membership of a project committee. (Also see 7.3.3)

clause: the basic component in the subdivision of the text of a standard. See subclause and paragraph.

code intended standard: A standard intended to be adopted as a code using code language.

code language document: A document that presents a set of requirements related to the design, application, or use of HVAC&R and related technologies where all or portions of the document may be enacted as mandatory enforceable requirements by a political jurisdiction. Portions intended to be enforced (normative) are written in mandatory, enforceable language. Portions not intended to be enforced are identified as informative and are to be located in informative notes, in informative annexes (appendices) or in other advisory documents. See annex, informative annex, informative notes and normative annex.

cognizant TC/TG/TRG: the ASHRAE Technical Committee, Task Group, or Technical Resource Group within whose scope a particular standard’s technical content most logically falls. The cognizant TC/TG/TRG provides technical advice to the Standards Committee when a Standard Project Committee does not exist.

conflict (between Standards): refers to a situation where, viewed from the perspective of an implementer, the terms of one standard are inconsistent with the terms of another standard such that implementation of one standard necessarily would preclude proper implementation of the other standard in accordance with its terms.

Conflict of interest: any incompatibility between an individual’s private interests and his or her fiduciary duties as an ASHRAE volunteer.

consensus: substantial agreement, in the judgment of a duly appointed authority, reached by directly and materially interested categories. Substantial agreement means much 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. It is not required that each separate interest subcategory reach consensus on the Standard or Guideline. For ASHRAE Standards and Guidelines and any jointly sponsored Standards and
Guidelines that use ASHRAE Procedures, the project committee is the consensus body. “Duly appointed authority” means the Board of Directors of ASHRAE and, in the case of jointly sponsored Standards, the Boards of Directors of ASHRAE and the joint sponsor(s). For American National Standards, “duly appointed authority” means the ANSI Board of Standards Review.

**continuous maintenance:** maintenance of a Standard by an SSPC or SGPC for which procedures have been established to consider and process proposed changes as they are received.

**dominance:** a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.

**draft types:**

- **advisory public review draft:** a draft submitted for public review that contains unusual, potentially controversial or new elements that the project committee believes would benefit from increased public scrutiny prior to finalizing the draft for publication public review.

- **publication public review draft:** a draft approved for public review that will proceed directly to publication if, as a consequence of the review, no substantive changes are made to the draft.

- **working draft:** an unapproved draft produced for consideration by the project committee or a subcommittee.

**due process:** a course of proceedings carried out in accordance with established rules and principles. Due process allows for equity and fair play for all participants. It means that any person with a direct and material interest in a Standard or Guideline has a right to participate by (a) expressing a position and its basis, (b) having that position considered, and (c) appealing if adversely affected.

**Emergency Interim Standards Action:** action taken by the Society President, without completing all elements of due process, on an ASHRAE Standard that has been published or has received publication approval by the Board of Directors. An Emergency Interim Standards Action has effect for limited duration and is for the exclusive purpose of correcting errors, other than errata, when failure to take timely corrective action would:

(a) substantively undermine the purpose or technical credibility of the Standard taken as a whole, or

(b) constitute undue risk to health or safety of the public or users of the Standard.

**errata:** a list of errors discovered after a document is published.

Examples: typographical errors
- misprints
- misspellings
- grammatical errors
- omission of material approved by the StdC
- erroneous inclusion of material

**fast track:** an approval procedure for a standard, guideline or portion thereof, that meets these criteria:

a. there are no negative votes within the PC;

b. no credible threat of legal action (in writing) against ASHRAE has been made related to the proposed draft;

c. the SPLS Liaison has not notified the MOS within ten calendar days, from the receipt of the package, with specific justification, that the PC has violated due process.

(See **normal track**)
**five-year review:** a review of need for **standards action**, scheduled so that processing and final approval of the resulting recommended action may reasonably be expected within five years from the date of Board approval of publication of ASHRAE Standards and Guidelines, or within five years of ANSI approval as an American National Standard.

**foreword:** introductory remarks, not part of the Standard or Guideline.

**guidelines:** a guideline is a document written in informative language that provides state-of-the-art design or best practice guidance. Guidelines provide information on system selection, design approaches, practices and goals as well as setting optimum achievable performance levels. Guidelines may address issues of concern such as startup and commissioning, operation and maintenance, and assurance that the goals of the associated standard (if any) are achieved. (See ROB 1.201.004)

**independent substantive change (ISC):** a substantive change that is independent of any other substantive change and that does not significantly affect any other requirement in the Standard or Guideline. See **substantive change**.

**informative annex:** additional information of a non-mandatory nature. Changes to informative annexes are not considered substantive. Informative annexes can be changed or deleted without requiring public review. See **normative annex and notes**.

**informative language:** language used in those elements of a standard, guideline or portion thereof, for which compliance is not required, often characterized by the use of “should” or “may.”

**informative notes:** explanatory information, appearing in a Standard, that does not contain requirements or any information considered indispensable for the use of the Standard. Informative notes are to begin with the word“(Informative Note(s))” and be placed after the section of the Standard to which the note applies. If the “informative note” is more than two sentences, the information shall be placed in an informative annex and referred to by the informative note. Where there is more than one informative note, the notes must be numbered sequentially.

**interest:** the perspective of a member of a project committee, as judged by his or her present and past sources of income, fees, or reimbursements of related expenses, in the context of the purpose and scope of the project committee. The perspective may also be judged by the recorded views of the individual, or of any organization he/she is employed by or of which he/she is a member.

**interest category:** a category identified to represent a specific interest.

**interest categories:** a classification of project committee member interests. For some projects, it may be appropriate to designate subcategories of one or more interest category. Default interest categories are:

**Producer:** A member who represents the interest of those that produce materials, products, systems, or services covered in the project scope.

**User:** A member who represents the interest of those that purchase or use materials, products, systems, or services other than for household use covered in the project scope.

**General:** A member who cannot be categorized in any other approved interest category covered in the project scope.

Additional examples of interest categories and subcategories that have been used can be obtained from the MOS.
International Organization for Standardization (ISO): an international non-treaty standards organization based in Geneva, Switzerland. Its members, national standards bodies, promulgate standards covering all fields except electrical. The American National Standards Institute is the U.S. member body.

international organizational liaison (IOL): a non-voting representative of an international trade or professional organization, international standards committee, or other group with an interest in the work of the PC.

interpretation: the written explanation of the meaning of specific provisions of a standard or guideline, as determined by the project committee or the interpretations committee in response to an inquiry.

interpretations committee (IC): a committee of technically qualified individuals whose function is to interpret an ASHRAE standard or guideline.

mandatory language: language that prescribes the requirements of a standard in a manner that is clear and unambiguous. It provides a basis for determining, without a doubt, whether or not compliance with the standard has been achieved. It is often characterized by the use of “shall” or “must.”

normal track: an approval procedure applied to a Standard, Guideline or portion thereof, that meets one or more of these criteria:
   a) receives one or more negative votes upon approval for publication or
   b) where ASHRAE receives a written legal threat
(See fast track)

normative annex: additional information of a mandatory nature which, for reasons of convenience, is placed after the main body of the document. See informative annex.

non-Voting Member (NVM): An NVM is an additional type of membership for PCs not formally organized into subcommittees. NVMs are not eligible to vote on PC motions. NVMs are not included in interest balance or quorum requirements.

organization: a group of people representing a particular interest such as a trade association, public interest group, or government agency.

Organizational Member (OM): An OM is an organization with a voting representative on the PC that represents the interests of that particular organization rather than serving as an individual.

periodic maintenance: review and action on a nominal 5-year cycle to revise a Standard or to reaffirm or withdraw a Standard or Guideline.

policy level document: a standard, guideline, designated as “policy level” by the Board of Directors or the Board’s designee.

project committee (PC): a Standard Project Committee, Standing Standard Project Committee, Guideline Project Committee, or Standing Guideline Project Committee, that serves as the consensus body as defined by ANSI for a Standard, Guideline or portion thereof.

Project Committee Voting Member (PCVM): PCVMs are eligible to vote on PC motions. PCVMs are also eligible to vote on subcommittee motions to which the PCVM is appointed.
Project Subcommittee Voting Member (PSVM): PSVMs are eligible to vote on subcommittee motions to which the PSVM is appointed. PSVMs are not eligible to vote on PC motions. PSVMs are not included in interest balance and quorum requirements for the PC.

**public review comment:** views and/or objections to Standards, Guidelines or portions thereof submitted in accordance with procedures specified in the public review draft during a public review.

**rating:** the assigned values of those performance characteristics, under stated conditions, by which a piece of equipment may be chosen to fit its application. These values apply to all equipment of like nominal size and type (identification) produced by the same manufacturer.

**standard rating:** a rating based on tests performed at standard rating conditions.

application rating: a rating based on tests performed at application rating conditions (other than standard rating conditions).

**rating conditions:** a set of operating conditions under which a level of performance is determined or measured.

**standard rating conditions:** rating conditions used as the basis of comparison of performance characteristics.

**shall:** a verb used to indicate a requirement.

**should:** a verb used to indicate a recommendation.

**SPLS liaison:** a member of the Standards Project Liaison Subcommittee (SPLS) assigned to act as a Standards Committee advisor to a project committee.

**Standard:** a document established by authority or rule that defines properties, processes, dimensions, materials, relationships, procedures, concepts, nomenclature, or test methods for rating purposes. Adherence to due process in its development and achievement of consensus are conditions of approval.

**standards action vote:** an action recommending or approving publication or publication public review of a new, revised, or reaffirmed Standard, Guideline, or portion thereof or withdrawal of a published Standard, Guideline or portion thereof.

**Standards Action:** a periodical published by ANSI to inform interested persons about American National Standards (ANSs), including proposals to initiate projects to develop or revise ANSs, announce intent to reaffirm or withdraw existing ANSs, communicate status of international standards, announce public review of proposed or revised procedures of ANSI accredited standards developers, etc.

**Standard Project Committee (SPC):** a committee of technically qualified individuals with a balanced representation of interests whose function is to formulate, review, reaffirm, or revise an ASHRAE Standard. The SPC is the consensus body and is responsible for the technical content of the standard. It is discharged upon publication of the standard.

**Standing Standard Project Committee (SSPC):** a committee similar in membership and function to a Standard Project Committee except that the committee has a continuing assignment of duties and responsibilities with respect to a Standard. It is expected to provide addenda as needed, generate revision on a regular basis, and render interpretations.
**subcommittee:** a group of individuals appointed by the project committee chair from among the project committee membership who vote on subcommittee activities and whose responsibility it is to develop drafts of one or more assigned sections of a standard, annexes, or addenda; develop draft responses to requests for interpretation; or develop proposed responses to comments resulting from public review; all submitted as recommendations for action by the parent project committee.

**substantive change:** a change that involves an important (has value, weight or consequence), fundamental (is the foundation, without which it would collapse), or essential (belongs to the very nature of a thing) part or changes the meaning of the material or that directly and materially affects the use of the Standard. Changes that may be found substantive when examined in context.

(a) “shall” to “should” or “should” to “shall;”
(b) addition, deletion or revision of mandatory requirements, regardless of the number of changes; or
(c) addition of mandatory compliance with referenced standards.

Changes or deletions made to portions of a draft not intended as part of the approved Standard (e.g., a foreword, informative annex or note), are not considered substantive. See independent substantive change.

**system of units:** inch-pound units (I-P) or International System of Units (SI).

**Technical Resource Group (TRG):** a committee of technical experts appointed by TAC, to prepare or review technical material for standards, the ASHRAE Handbook, Journal articles and technical papers.

**unit conversions - definitions:**

- **alternate system of units:** the system of units listed second (expressed in parentheses when dual systems, I-P and SI are used, expressed in either consistent rational or equivalent values.)

- **equivalent:** exact arithmetic conversions, also called “soft conversion.”

- **primary system of units:** the system of units listed first (expressed in rational values).

- **rational:** based on, or derived from, logical or coherent numbers. Rational values are usually, but not necessarily, rounded numbers. Rational values are not necessarily bound by mathematical equivalency of the primary and secondary units systems. The conversion process is sometimes called “hard conversion.”

**unresolved objectors:** All unresolved commenters and negative PC voters that provided a reason for their negative vote on a standards action vote since the last full public review.

**unresolved public review commenter:** an individual who, during the comment period, submitted public review comments to a proposed or revised draft Standard, Guideline or portion thereof, was not satisfied with the committee response to those comments, and within the time period and procedure specified in the response, requested to remain “unresolved.”
A2 ABBREVIATIONS AND ACRONYMS

ANS American National Standard
ANSI American National Standards Institute
ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
BOD Board of Directors
CIS Code Interaction Subcommittee
IC interpretations committee
IOL international organizational liaison
I-P inch-pound units: units using inches, pounds, and other designations; as opposed to SI units in the metric system. Examples are: foot, Btu, horsepower, gallon.
ISC independent substantive change
ISO International Organization for Standardization
MOS Manager of Standards
PC Project committee.
PCVM project committee voting member
PPIS Planning, Policy and Interpretation Subcommittee
PSVM project subcommittee voting member
SI Le Systeme International d'Unites; the international agreement on the metric system of units. A practical system of units divided into three classes: base units, derived units and supplementary units. The base units are composed of the units of the following seven quantities: length (meter), mass (kilogram), time (second), electric current (ampere), thermodynamic temperature (Kelvin), amount of substance (mole), and luminous intensity (candela).

The second class of SI units contains derived units, i.e., units that can be formed by combining base units according to the algebraic relations linking the corresponding quantities. The names and symbols of some units thus formed in terms of base units can be replaced by special names and symbols which can themselves be used to form expressions and symbols of other derived units.

A third class of SI units, called supplementary units, contain the SI units of plane and solid angle. (Ref. Le Systeme International d’Unites)

SPC Standard Project Committee. The use of this acronym means that a procedure applies only to an SPC and not to an SSPC.
SSPC  Standing Standard Project Committee. The use of this acronym means that a procedure applies only to an SSPC and not to an SPC
SPLS  Standards Project Liaison Subcommittee
SRS   Standards Reaffirmation Subcommittee
StdC  Standards Committee
TAC   Technical Activities Committee
TC    Technical Committee appointed by the TAC
TRG   Technical Resource Group appointed by TAC
TG    Task Group appointed by the Technical Activities Committee
TPS   Title, Purpose and Scope
ANNEX B: APPEALS OF BOARD OF DIRECTORS’ STANDARDS ACTIONS OR INACTIONS

B1 SCOPE
This procedure applies to appeals of ASHRAE Standards or Guidelines and of jointly sponsored standards for which ASHRAE is the lead sponsor.

B2 APPEALABLE MATTERS
An action or inaction of the Board of Directors (BOD) to adopt a new ASHRAE Standard, Guideline, an addendum to an existing Standard or Guideline, or to revise, reaffirm, or withdraw an existing ASHRAE Standard or Guideline is subject to appeal.

B3 WHO MAY APPEAL
Any person directly and materially interested who has been or will be adversely affected by the publication of a new, revision, reaffirmation, or withdrawal of an ASHRAE Standard, Guideline or portion thereof, or lack of such action, may appeal the BOD action or inaction. The appellant must be an unresolved public review commenter, associated with a new, revision, reaffirmation or withdrawal of the ASHRAE Standard or Guideline being appealed, or a PC member who cast a negative vote with reason(s) in relation to his/her vote on the consensus body associated with the creation, revision, reaffirmation or withdrawal of the ASHRAE Standard or Guideline being appealed.

B4 SCOPE OF APPEAL AND BURDEN OF PROOF
An appeal of a BOD standards action or inaction shall be solely based upon procedural grounds. When appeals are filed, the appellant shall demonstrate that ASHRAE Standards development procedures were not followed. Appeals arguments that are based on actions that took place in previous revision cycles will not be considered.

B5 CONTENT OF APPEALS
Each appeal shall:
(a) Identify the appellant, and include the appellant’s contact information;
(b) Substantiate that the appellant is a directly and materially interested party who has been or will be adversely affected by action(s) being appealed;
(c) Identify with precision the Standard, Guideline or portions thereof, and the procedure(s), alleged improper action or inaction appealed;
(d) State concisely the basis for the appeal, the remedial action requested, and the nature of any injury to appellant which might accrue from the matter appealed;
(e) Include any summary supporting data or documentation relied upon as the basis for the appeal;
(f) Consolidate information to be as concise as possible;
(g) Only include information that was made available to the PC prior to the final vote of the PC;
(h) Include the filing fee.
(i) Only include information that was previously submitted during the development of the standard or addendum.

B5.1 FILING FEE
Each appeal shall be accompanied by a filing fee in the amount established by the Technology Council. The filing fee is predetermined and shall be listed on the Appeals Submittal Form. The fee may be waived or reduced by the Appeals Panel Chair upon sufficient evidence of hardship submitted by the appellant. If the filing fee is not submitted by the appeal filing deadline date by the appellant, then the appeal shall be dismissed unless an exception has been granted prior to the close of business on the filing deadline date.
B5.2 COPIES
It shall be the responsibility of the appellant to submit an electronic copy and if requested by the Manager of Standards, up to twenty-five (25) paper copies of each appeal filed at the time of the original electronic submittal.

B6 NOTIFICATION PROCEDURES
Within 15 working days following BOD action on a standard, that results in approval of a new, revision, reaffirmation or withdrawal of a standard or addenda to a standard, the Manager of Standards (MOS) shall notify in writing (including electronic communication) all unresolved public review commenters and/or a PC member who cast negative votes with reason(s) in relation to his/her vote on the consensus body of the BOD action and inform them of their right to appeal that action.

B6.1 An appeal, must be received by the Manager of Standards (MOS) of ASHRAE within 15 working days of the date on the notification letter regarding the BOD action. The Chair of the Appeals Board may grant an extension, if requested prior to the close of the initial 15 working day period and if sufficient justification is provided.

B6.2 Normally, any standards action by the BOD will be suspended during pendency of appeal(s), appropriately filed. The President may, however, maintain the BOD action until and if the Appeals Panel decides to dismiss the appeal, without a hearing, up to a maximum of 90 days. If the Panel decides to dismiss the appeal without a hearing, the President may maintain the action until the next meeting of the Board of Directors. The appealed BOD action shall be immediately suspended if the Appeals Panel does not dismiss the appeal.

B6.3 The MOS shall acknowledge receipt of the appeal, copy acknowledgement to the Chief Staff Officer, notify the President, and send copies of the appeal to the Appeals Board Chair and to the Chairs of Technology Council, Standards Committee and the Project Committee (PC) which developed or revised the Standard or Guideline, if applicable. Upon receipt of the appeal, an Appeals Panel will be established in accordance with Section B8 for the purpose of determining if the appeal will be heard or if the appeal will be dismissed without a hearing.

B7 APPEALS BOARD

B7.1 An Appeals Board and a chair of the Board shall be appointed by the ASHRAE President, with the approval of the Board of Directors. The Appeals Board shall have 15 members. The Appeals Board shall consist of past members of the BOD, past members of the Standards Committee or Technology Council, and/or persons who are knowledgeable about the ANSI Standards development process.

B7.2 Terms of Membership
Terms shall be staggered so that approximately one-third of the membership of the Appeals Board is appointed each year. Members shall be appointed for a term of three years commencing on July 1 and shall be eligible for reappointment for one additional 3-year term, for a total of two consecutive terms. A member of the Appeals Board may serve beyond the normal two-term limitation if the member is serving as chair, provided the term of chair is contiguous with the six-year tenure as a member. The total maximum length of service under such circumstances would be nine years.

B7.3 Vacancies
A vacancy in the membership of the Appeals Board shall be filled for the remainder of the term by an individual appointed by the ASHRAE President.
B7.4 Conflict of interest
A member of the ASHRAE Appeals Board shall act at all times in a manner that promotes confidence in the integrity and impartiality of ASHRAE’s processes and procedures and should avoid a conflict of interest or the appearance of a conflict of interest in connection with all ASHRAE Appeals activities. Should the Appeals Board Chair have a conflict of interest with any appeal he/she shall select another member of the Appeals Board to serve in his/her place with respect to consideration of that appeal.

If a materially affected party (either the appellant or the respondent) asserts that it believes a member of the ASHRAE Appeals Board has a conflict of interest, that materially affected party is required to state the reason(s) for its belief. That information shall then be forwarded to the member of the ASHRAE Appeals Board identified as having a possible conflict for that person’s response. If that member disagrees with the assertion, then the Chair of the ASHRAE Appeals Board shall make a final determination as to whether a conflict of interest exists.

Members of the ASHRAE Appeals Board who are disqualified from a particular discussion shall not participate in the arguments, deliberations or decisions.

B7.5
When appeals of jointly sponsored standards are being considered by ASHRAE as lead sponsor or by ANSI, the joint sponsor shall assist in preparing or responding to appeals in its field of expertise.

B8 CONSIDERATION OF APPEALS

B8.1 Panel Appointment
When an appeal is received by ASHRAE Headquarters in accordance with Section B6.3 six members of Appeals Board shall be randomly selected from a pool of all Appeals Board members that do not have a conflict to hear the appeal. At least four of those selected shall be appointed as the Appeals Panel and the other 2 shall be appointed as alternates. The Appeals Panel alternates will participate in the hearing activities in the event that one of the four other members are unable to serve. The Appeals Board chair will chair the Appeals Panel.

B8.2 Ineligible Panel Members
Any Member of the Appeals Board that served as a PCVM or PSVM on the project committee that is the subject of the appeal during the three years prior to the standards action under appeal shall be ineligible to serve on the Panel. Any Member of the Appeals Board that voted on the draft that is the subject of the appeal as a member of the Standards Committee or Board of Directors shall be ineligible to serve on the Panel.

B8.3 Panel Consideration of Adjudicating the Appeal Without a Hearing
The Appeals Panel shall decide if the appeal shall be dismissed without a hearing. The Appeals Panel Chair or the Chairs designee shall notify the ASHRAE President, the Appellant and the chair of the cognizant PC in writing of the decision. Non-compliance with Section B5 or lack of grounds for an appeal may be reasons for dismissal.

B8.4 Non-Dismissal of Appeal
If the appeal is not dismissed, the BOD action which has been appealed shall be immediately suspended, if not already suspended according to the first sentence of B6.2, and each claim in the appeal shall be considered separately and basic grounds given for each decision.

B8.5 Rebuttal
If the Panel determines that the action is not to be dismissed, a rebuttal of the written statement of appeal, shall be submitted to the MOS by the Chair of the Standards Committee or his/her designee, or the Chair of the PC or his/her designee. The MOS shall distribute it to the Appeals Panel and to the Appellant. The rebuttal, from the Respondent(s) shall be due within 15 working days of the date on the letter of notification. The Chair of the Appeals Panel may grant an extension if requested prior to the close of the initial 15 working day period and if sufficient justification is provided. The rebuttal statement shall be sent to the MOS, who shall distribute it to the Appellant and the Appeals Panel. The Appeals Panel has the authority to announce a hearing schedule at the time the rebuttal is requested or wait until after the rebuttal is received.

B9 HEARING OF APPEALS

B9.1 Notice
If a hearing is to be held, the Appeals Panel chair shall arrange for consideration of the appeal either in person or documented electronic meetings. Both the Appellant and the Respondents (the Chair of the Standards Committee or his/her designee, or the Chair of the PC or the Chair’s designee, as appropriate) shall be given notice at least 15 business days prior to the hearing date, location, and time for an in person hearing or of the hearing date for a hearing conducted by electronic meeting. The hearing may be heard before 15 business days if the Appellant and the Respondents agree in writing (including electronic communication).

B9.2 The Hearing
Prior to the start of the hearing, the Appellant and Respondent(s) shall provide the MOS with 15 copies of an outline of their oral presentation or an electronic copy of what will be displayed for a presentation. No new issues outside of those issues raised in the submitted appeal and rebuttal may be presented at the hearing. Only documentation that the Appellant/Respondent previously provided will be considered. The Appellant is permitted to have up to three people speak on their behalf, and the Respondent is permitted to have up to three people speak on their behalf. However, each party is only allowed a designated amount of time and that time will be shared by any and all people speaking for that party. No additional time will be granted for guests, speakers, experts, etc.

B9.3 Guests
A Standards Committee Liaison and the BOD Ex-Officio member of the Standards Committee shall be invited by MOS to attend the hearing. The hearing shall be open to observation by representatives of directly and materially interested persons, although the number of observers may be limited at the discretion of the Appeals Panel Chair. Anyone planning to attend the hearing shall notify the MOS no less than 15 days prior to the hearing date. Guests that are not designated to speak on behalf of the Appellant or Respondent are not allowed to speak during the hearing or during the question period.

B9.4 Questions
After the Appellant and Respondent have given their presentations, any member of the Appeals Panel may ask questions of either the Appellant or Respondent to clarify the information in the record. The Appellant and Respondent are to respond to the Panel member who asked the question. There is no time limit for this question and answer session unless specified by the Appeals Panel Chair.

B9.5 Executive Session
Following the completion of the question and answer session, the Chair of the Appeals Panel shall close the hearing and shall allow the Panel to deliberate the appeal in an Executive Session.
B10  APPEALS PANEL DECISION
The Appeals Panel shall decide within 15 business days of the hearing or after the receipt of the rebuttal, by majority vote, that the appeal, or any parts of the appeal, be upheld or denied. The Appeals Panel Chair shall, within 14 days following the Appeals Panel’s decision, notify the Appellant(s), Chief Staff Officer, Director of Technology, Manager of Standards, President, Chair of Technology Council, Chair of the Standards Committee, and Chair of the PC of the decision. The decision of the Appeals Panel to uphold, deny, or dismiss an appeal shall be final. If the appeal is dismissed or denied by the Appeals Panel, the action of the BOD, which was appealed shall become effective immediately.
Annex C: Complaints of Actions or Inactions by the StdC, its Subcommittees or PCs
In addition to formal appeal of BOD Standards actions or inactions (PASA Annex B), failure of the StdC, its subcommittee(s), or a PC to consider a written complaint may be addressed by writing to the MOS at any time. The complaint must identify the section of procedures that was violated and provide sufficient detail to support the complaint. Any committee tasked with reviewing a complaint may dismiss the claim if insufficient detail is provided.

C1. Complaints Against StdC Subcommittees or PCs.
The following steps shall occur for complaints against StdC Subcommittees or PCs:

a) A written complaint shall be sent to the MOS and the MOS shall forward it to the Chair of the Committee in question. The MOS shall acknowledge receipt of the complaint. The Chair of the Committee in question shall provide a written response addressing the complaint, to the MOS within 15 working days of receipt of the complaint. A waiver to the response period may be requested by the Chair or ASHRAE Staff to the Chair of Standards Committee for approval. The MOS shall forward the written response to the complainant with a copy to the Chair of Standards Committee.

b) The complainant shall notify the MOS in writing within 15 working days from the receipt of the response whether or not the response resolves the complaint. If no response is received then the Chair of Standards Committee, the complainant and the Chair of the Committee will be notified that the complaint is resolved.

c) If the response does not resolve the complaint, the complaint shall be forwarded to Standards Committee. Standards Committee shall place it on its next agenda for consideration but a meeting shall be called no later than 15 working days after receipt of the complaint.

d) The Standards Committee Chair shall provide a written response, to the MOS. The MOS shall forward the written response to the complainant with a copy to the Chair and Vice-Chair of Technology Council, the Chair of the Subject Committee, the SPLS liaison, and the Staff liaison within 15 working days of receipt of the complaint. A waiver to the response period may be requested by the Chair or ASHRAE Staff to the Chair of Tech Council for approval. The results will be made known to the complainant and the Standards Committee Chair.

e) The complainant shall notify the Standards Committee Chair and MOS in writing within 15 working days from the receipt of the response whether or not the response resolves the complaint. If no response is received then the Standards Committee Chair, the complainant and the Subject Committee Chair will be notified that the complaint is resolved.

f) If the complainant is unresolved, the procedures in C2 d), e) and f) shall be followed.

C2. Complaints against stdC
The following steps shall occur for complaints against StdC.

a) A written complaint shall be sent to the MOS and the MOS shall forward it to the Chair of Standards Committee. The MOS shall acknowledge receipt of the complaint.

b) The StdC Chair shall provide a written response addressing the complainant, to the MOS within 15 working days of receipt of the complaint. Upon receipt of the response, the MOS shall send it to the complainant. A waiver to the response period may be requested by the Chair or ASHRAE Staff to the Chair of Tech Council for approval.

c) The complainant shall notify the MOS in writing within 15 working days from the receipt of the response whether or not the response resolves the complaint. If no response is received then the
Tech Council Chair, the complainant and the StdC Chair will be notified that the complaint is resolved.

d) If the response does not resolve the complaint, the complaint shall be forwarded to Technology Council. Technology Council shall have the authority to decline to hear the complaint. If Technology Council hears the complaint, it is expected to approve a response to the complaint within 15 working days of receipt of the complaint. If the Technology Council needs more time to respond, the Chair of Technology Council shall notify the complainant and the chair of Standards Committee and include a timeline or when actions will occur.

e) The Technology Council Chair shall provide a written response to the MOS. The MOS shall forward the written response to the complainant with a copy to the Director of Technology, Vice-Chair of Technology Council, the Standards Committee Chair, the Chair of the Subject Committee, the SPLS liaison, and the Staff liaison.

f) Technology Council has final authority for complaints against Standards Committee.

C3. FEES
Each complaint filed per C1 or C2 shall be accompanied by a filing fee set by the Standards Committee, found in Section 1.7 of the Standards Committee Manual of Procedures. The fee may be waived or reduced by the Chair of the Technology Council upon sufficient evidence of hardship submitted by the submitter of the complaint.
ANNEX D: UNITS POLICY

The units use or application policy shall include, as a minimum, time-dated directions on the use of SI and I-P in all ASHRAE publications.

TC 1.6 shall serve as the authority on SI and I-P usage and application.

Research projects; codes, standards, guidelines, and addenda thereto; special publications; Insights articles; Journal articles; and Handbooks shall be prepared using the International System of Units (SI) and/or inch pound units (I-P) in formats approved by the Publishing and Education Council.

The Publishing and Education Council shall review annually the approved formats to be used in ASHRAE publications, considering suggestions from members and committees, and shall establish any changes in the approved formats.

The Publishing and Education Council shall consider this Units Policy annually and shall recommend to the Board of Directors the formats to use in ASHRAE publications.

(a) The format for ASHRAE publications shall be dual units, except in cases determined by the Publishing and Education Council, where two separate versions are to be published, where one is rational SI and the other is rational I-P. For selected ASHRAE Standards and Guidelines, the Standards Committee may approve use of SI units only.

(b) In dual unit publications, the units used in calculating the work being reported shall be listed first. The alternate system of units should follow in parentheses. Authors shall round off equivalents in the alternate system of units so that they imply the same accuracy as is implied with primary units. Exceptions require the approval of the Director of Publishing and Education. Handbook volumes shall be published in separate SI and I-P editions.
This normative annex is part of the Procedures (PASA)

ANNEX E: Procedures – Emergency Interim Standards Action

Scope: Emergency interim actions shall apply to Standards and Guidelines.

E1 Justification
The burden of demonstrating need for an Emergency Interim Standards Action rests with the proposer. Interested persons may submit proposals for Emergency Interim Standards Actions to the MOS. Proposals must include the following information:

a) identify the proposer, affiliation and contact information;
b) identify the Standard or Guideline and clause containing the error,
c) describe the error claimed and provide supporting information or data, if any,
d) recommend a change in text, equation, etc. that would eliminate the error or reduce it to acceptable limits and provide supporting information or data, if any,
e) show compliance with the criteria of Section 6.9(a) or 6.9 (b), and
f) identify the type of harm that has been or may be caused by the error.

E2 PC or PPIS Recommendation
Proposals that meet the criteria of Section 6.9 shall be forwarded to the body designated in E5. When a PC having jurisdiction exists, the PC shall submit a recommendation to the MOS on disposition of a proposed Emergency Interim Standards Action at a PC meeting or by letter ballot within 14 days. When a PC does not exist, PPIS shall act in lieu of a PC.

E3 MOS Recommendation
If the PC or PPIS fails to submit a recommendation within 14 days, the MOS shall submit his/her recommendation.

E4 Review and Comment
Upon receipt of a recommendation resulting from E2 or E3, the MOS shall circulate the proposed Emergency Interim Standards Action and recommendation within seven days to the StdC, the Director of Technology, and the MOS for review and comment.

E5 President Will Act
A package composed of the proposed Emergency Interim Standards Action, recommendations resulting from E2 or E3, and recommendations from the Standards Committee Chair, Director of Technology, and MOS, whether positive or negative, shall be submitted within 14 days of receipt by the MOS for the President’s consideration and decision.

E6 Notifications
The MOS shall issue notification of the President’s decision to the proposer, the Editor of the ASHRAE Journal, and ANSI, and shall initiate implementation of the decision as appropriate.
<table>
<thead>
<tr>
<th>Revision</th>
<th>Changes</th>
<th>BOD Approval Date</th>
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<tbody>
<tr>
<td>Original Release</td>
<td>The original edition of the <em>Procedures for ASHRAE Standards Actions Under the ANSI Organization Method</em> (PASA), dated June 30, 1994 superseded all previous documentation for communicating ASHRAE’s procedures as a basis for continuation (re-accreditation) under the ANSI Organization Accreditation Method.</td>
<td>June 29, 1994</td>
</tr>
<tr>
<td>A</td>
<td>The first revision was approved by the Board of Directors on February 2, 1995 and incorporated nine changes for clarifications and in response to comments resulting from ANSI public review of PASA.</td>
<td>February 2, 1995</td>
</tr>
<tr>
<td>B</td>
<td>On April 28, 1995, staff incorporated clarifying revisions to the figures in informative Appendix C and added a new Figure 6. ANSI reaccredited ASHRAE on August 4, 1995 based on this edition.</td>
<td>April 28, 1995</td>
</tr>
<tr>
<td>C</td>
<td>The third revision was approved by the ASHRAE Board of Directors on June 27, 1996 and incorporated twelve changes in response to recommendations in the ExSC Appeals Panel decision letter dated April 23, 1996, the draft ANSI Report of Audit of ASHRAE procedures and operations dated June 10, 1996, and the need for clarification.</td>
<td>June 27, 1996</td>
</tr>
<tr>
<td>D</td>
<td>The fourth revision included broadening the section on membership, by allowing for possibilities for organizational membership. Additionally, this revision incorporates some changes involving written responses to commenters and resolution of commenters. The ASHRAE Board of Directors approved this version January 27, 1999. ANSI reaccredited ASHRAE on May 7, 1999.</td>
<td>January 27, 1999</td>
</tr>
<tr>
<td>E</td>
<td>This revision includes changes to allow the newly approved <em>Board Policy Committee for Standards</em> to have oversight authority for certain project committees. It also deleted references to specific sections of ANSI procedures so that revision to PASA would not be necessary when section numbering in the ANSI procedures changed. The ASHRAE Standards ftp site (<a href="">ftp.ashrae.org/stands-info</a>) is now utilized as the means for advertising standards activities, in lieu of the ASHRAE <em>Journal</em>. The records retention policy has been clarified, and the references to formal Mediation Meetings have been removed. Finally, the appeals procedures were modified to more closely match the ANSI appeals procedures. ANSI reaccredited ASHRAE on November 21, 2001.</td>
<td>June 29, 2000</td>
</tr>
<tr>
<td>F</td>
<td>Editorial revision of Section 6.2.1.2 made to reflect the oversight authority of the Board Policy Committee for Standards.</td>
<td>February 1, 2001</td>
</tr>
<tr>
<td>G</td>
<td>Editorial revision of Sections 4.1 and 6.2 made to reflect removal of Appendix C.</td>
<td>June 27, 2001</td>
</tr>
<tr>
<td>H</td>
<td>This revision included changes in Sections 6.2.1.2-6.2.1.3 to require letter ballot votes for publication approval by the Consensus Body. Appendix B3 was revised to further clarify the appeals process.</td>
<td>January 17, 2002</td>
</tr>
<tr>
<td>I</td>
<td>This revision includes changes in Sections 5, 6.3.6, 6.2.1.3, the Appendix A1 definition of “balance,” and the addition of Section 8 – Patents. Appendix B was revised to assign final approval of appeals to the Board Policy Committee for Standards.</td>
<td>June 27, 2002</td>
</tr>
<tr>
<td>J</td>
<td>This revision includes changes in sections 4.1, 6.2.1, 6.2.2, A1, and A2 to change the reference from Technical Evaluation Committees (TEC’s) to Technical Resource Groups (TRG’s). Changes were also made to sections 6.3.1.3 and 6.7 to remove the reference to the ASHRAE ftp site.</td>
<td>January 30, 2003</td>
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<td>K</td>
<td>This revision includes the addition of a sentence to section 6.3.4.2 (Complaints of Inactions) that clarifies who addresses complaints.</td>
<td>July 3, 2003</td>
</tr>
<tr>
<td>L</td>
<td>This revision addresses the following issues: the clarification of ANSI requirements, removal of the Board Policy Committee for Standards (BPCS) oversight responsibility and changes to the appeals process. The definition of contact information was added to Appendix A.</td>
<td>July 1, 2004</td>
</tr>
<tr>
<td>M</td>
<td>This revision replaces language that was inadvertently deleted in the Nashville revision, to provide the provision to appoint the Appeals Panel Chair.</td>
<td>June 30, 2005</td>
</tr>
<tr>
<td>N</td>
<td>This revision includes revisions to section 4.3.2 (Joint Sponsorship) so that the MOS can negotiate terms of the joint sponsorship agreements. Changes were made to B6, B9.1, and B9.2 to clarify the appeals process. Section B9.2, The Hearing, was added to clarify the rules during the Appeals hearing.</td>
<td>January 26, 2006</td>
</tr>
<tr>
<td>O</td>
<td>This revision includes revisions to Section 4.3.2 (Joint Sponsorship) and removes approval by Technology Council and the BOD of the final negotiated cosponsorship agreement.</td>
<td>March 20, 2006</td>
</tr>
<tr>
<td>P</td>
<td>This revision includes adding the terms “including electronic communication” to Section 4.2.1.1, Section 6.4.3.2, and B9.1. This also includes revisions to 4.3.2 to clarify the language regarding Joint Sponsorship approval. Section 9, Commercial Terms and Conditions, was added. The definition of contact information was added to Appendix A. Revisions were made to Section B5 to add request for contact information and to limit the materials that are allowed in appeals.</td>
<td>June 29, 2006</td>
</tr>
<tr>
<td>Q</td>
<td>This revision includes adding the cm records retention policy to Section 6.3.8, adding Section 6.7, Interpretation Requests, and adding Annex C, Units Policy to PASA per the request of ANSI.</td>
<td>March 2, 2007</td>
</tr>
<tr>
<td>R</td>
<td>This revision in the Introduction section includes, moving part of the information to an informative forward.</td>
<td>October 24, 2008</td>
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<td>S</td>
<td>This revision in Section 3, changes Appendix to Annex.</td>
<td>October 24, 2008</td>
</tr>
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<td>T</td>
<td>This revision in Section 5 deletes text from ANSI Essential Requirements</td>
<td>October 24, 2008</td>
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<td>U</td>
<td>This revision in Section 6.2.1, (Approval) includes Technology Council in the approval of publication drafts</td>
<td>October 24, 2008</td>
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<td>V</td>
<td>This revision includes in Section 6.2.1.2, (Voting Requirements for Standards Actions), changing the vote from letter ballot to recorded votes, adding Technology Council and allowing the Board or its designees to vote.</td>
<td>October 24, 2008</td>
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<tr>
<td>W</td>
<td>This revision includes the deletion of Section 6.2.1.3</td>
<td>October 24, 2008</td>
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<td>X</td>
<td>This revision includes in Section 6.2.2 (Modification of Standards) the addition of the need for a revision to a standard.</td>
<td>October 24, 2008</td>
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<tr>
<td>Y</td>
<td>This revision to Section 6.2.4 (Substantive Changes) deletes the entire section.</td>
<td>October 24, 2008</td>
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<tr>
<td>Z</td>
<td>This revision to Section 6.3.2 (Balance and Lack of Dominance) changes it to read like ANSI Essential Requirements 2008.</td>
<td>October 24, 2008</td>
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<tr>
<td>A</td>
<td>This revision to Section 6.3.3 (Interest Categories) deletes language in order to simplify the interest categories.</td>
<td>October 24, 2008</td>
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<tr>
<td>AB</td>
<td>This revision to section 6.3.4.1 (Appeals to BOD), includes the change from Appendix to Annex and includes the deletion of identifiable, realistic and readily available text.</td>
<td>October 24, 2008</td>
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<td>Revision Description</td>
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<td>AC</td>
<td>This revision to Section 6.3.6(Consideration of Comments Received) includes the</td>
<td>October 24, 2008</td>
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<td>addition of language specifying Public Review. Title reflects as Consideration of</td>
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<td>Public Review Comments Received and within the paragraph, “public review” was</td>
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<td></td>
<td>inserted.</td>
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<td>AD</td>
<td>This revision to Section 6.4 (Consensus) was rewritten to require documentation</td>
<td>October 24, 2008</td>
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<td>that the consensus is in accordance with ANSI Essential Requirements and PASA.</td>
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<td>AE</td>
<td>This revision to Section 6.5 (Criteria for Approval) modified letter (i) to change</td>
<td>October 24, 2008</td>
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<td>Appendix to Annex.</td>
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<td>AF</td>
<td>This revision to Section 8 (Patents) was editorially modified. Removed the text</td>
<td>October 24, 2008</td>
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<td></td>
<td>“such” and “or guideline” from the first sentence.</td>
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<td>AG</td>
<td>This revision to Appendix A includes:</td>
<td>October 24, 2008</td>
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<tr>
<td></td>
<td>• The deletion of ASHRAE Information Representative</td>
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<td></td>
<td>• Modification of the definition of balance by deleting “dealing with product</td>
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<td>standards.”</td>
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<td></td>
<td>• Modified definitions of continuous maintenance definition and interest category</td>
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<td>• Modified definition of informative annex</td>
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<td>• Modified interest categories definition; deleted the definition for all</td>
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<td>subcategories, user, producer and general</td>
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<td>• Added a Method of Test Standard definition</td>
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<td>• Modified the definition for normative annex</td>
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<td>• Modified the definition for public review comment</td>
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<td>• Deleted testing standard definition</td>
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<td>• Modified unresolved commenter definition</td>
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<td>• Deleted Section A3</td>
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<td>AG</td>
<td>This revision to Appendix B includes:</td>
<td>October 24, 2008</td>
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<td>• Appendix B2, deleted the availability of EISA’s to be appealed to the Board as</td>
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<td>this can be handled through the complaint process</td>
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<td>• Appendix B3, modified who the appellant must be and how the vote should be</td>
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<td>• Appendix B5.2, inserted the word “copies”</td>
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<td>• Appendix 6, specified who the MOS should notify, public review commenters and/or</td>
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<td>a PC member who cast negative votes with reason(s) in relation to his/her vote on</td>
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<td>the consensus body</td>
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<td>• Appendix B10, added language requiring that the Appeals Panel vote within</td>
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<td>45 days of the hearing whether or not the appeal is upheld or denied.</td>
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<td>AH</td>
<td>This revision to Section 4.1 includes the addition of the word publishing.</td>
<td>February 25, 2011</td>
</tr>
<tr>
<td>AI</td>
<td>This revision to Section 6 title includes the addition of language for discontinuing</td>
<td>February 25, 2011</td>
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<td>ASHRAE standards.</td>
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<tr>
<td>AJ</td>
<td>This revision to Section 6.3.6 includes language in the first paragraph straight</td>
<td>February 25, 2011</td>
</tr>
<tr>
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<td>from the PC MOP regarding information about the online comment database.</td>
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</tbody>
</table>
| AK   | The revision to Section 6.5 includes added and deleted language. The additions are from the ANSI Essential Requirements and are listed below:  
- Notice of the development process for the standard was provided to ANSI in accordance with PINS or its equivalent  
- Identification of all unresolved negative views and objections, with names of the objector(s), and a report of attempts toward resolution  
- The standard is within the purpose and scope approved by the Standards Committee  
- …and if duplication exists, there is a compelling need for the standard  
- ANSI’s policy on commercial terms and conditions is met if applicable  
The deletion of Section 6.5 includes:  
- StdC prohibitions of commercial references, exclusive use of proprietary materials, or prescribing a proprietary agency for quality control or testing are met, and | February 25, 2011 |
| AL   | The revision to Section 6.7, 6.7.1 and 6.7.2 includes the addition of language regarding the criteria for project discontinuance. The previous sections 6.7 and 6.8 been renumbered due to this addition to 6.8 and 6.9 respectively. | February 25, 2011 |
| AM   | Section 6.10 was added, it includes the word *writing* to clearly specify the method in which interpretation requests are received and responded to. It also editorially corrects the spelling of the word *revision*. | February 25, 2011 |
| AN   | The revision of Section 8 deletes the entire paragraph and adds a blanket statement “ASHRAE agrees to comply with the Patent Policy as stated in the ANSI Essential Requirements.” | February 25, 2011 |
| AO   | The revision of Section 9 deletes the entire paragraph and adds a blanket statement “ASHRAE agrees to comply with the Commercial Terms and Conditions Policy as stated in ANSI Essential Requirements.” | February 25, 2011 |
| AP   | This revision adds a Section 10 which includes information regarding PINS. It states” At the initiation of a project to develop or revise and ASHRAE American National Standard, ASHRAE shall use the ANSI Project Initiation Notification System (PINS) form. | February 25, 2011 |
| AQ | The revision to Annex A includes deletions of definitions. Deleted definitions include:  
  - ASHRAE Alternate – a designated alternate to the ASHRAE Representative appointed by the Standards Committee of another organization and empowered to vote on behalf of ASHRAE on matters dealing with standards. (See ASHRAE Representative)  
  - ASHRAE Representative – an official representative of ASHRAE appointed by the Standards Committee to a committee of another organization and empowered to vote on behalf of ASHRAE on matters dealing with standards.  
  - Contact information – name, affiliation, mailing address, email address, daytime telephone numbers and facsimile numbers  
  - Independent substantive change – a substantive change that is independent of any other substantive change and that does not significantly affect any other requirement in the standard. See substantive change.  
  - Method of Test Standard – a standard setting forth the methods of measuring capacity or other characteristics of a specified material, component, or system, together with a specification of instrumentation, procedure, and calculations.  
  - TC Technical Committee appointed by the TAC | February 25, 2011 |
| AR | The revision to Section A2 includes the addition of the terms below:  
  - BOD Board of Directors  
  - PPIS Planning, Policy and Interpretations Subcommittee  
  - SCD Standards Committee Document  
  - SPLS Standards Project Liaison Subcommittee  
  - SRS Standards Reaffirmation Subcommittee  
  - TPS Title, Purpose and Scope  
  
  The revision to Section A2 also includes a deletion of the terms below:  
  - TC/TG/TRG a TC, TG or TRG  
  - TC Technical Activities Committee | February 25, 2011 |
<p>| AS | The revision to Section 6.2.1 removes one of the approving bodies, Technology Council. | February 25, 2011 |
| AT | The revision to Section 6.2.1.2 removes Technology Council and clarifies comment resolution attempts. It also notes that comments received that are not relevant to the proposed standards action under consideration shall be treated as a new proposal. | February 25, 2011 |
| AU | The revision to Section 6.5 ensures that all procedures were followed and it provides the procedures for documenting consensus. | February 25, 2011 |
| AV | This revision adds a sentence to Section 10 which states: Comments will be addressed in accordance with clause 2.5 of the current version of the ANSI ER. | February 25, 2011 |
| AW | The revision to Annex A adds definitions for informative language and notes. It also updates the current definitions; continuous maintenance, informative annex, normative annex, shall, should, standard, and unresolved public review commenter. | February 25, 2011 |
| AX | The revision to Section B9.1 decreases the notice time to 30 days for appeal hearings if the appeal hearing is being held via conference call. | February 25, 2011 |</p>
<table>
<thead>
<tr>
<th></th>
<th>The revision to Section 4.2.1.1 makes PASA consistent with ASHRAE’s Project Committee Manual of Procedures.</th>
<th>May 15, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>AY</td>
<td>The revision to Section 6.3.5 makes PASA consistent with ANSI ER.</td>
<td>May 15, 2012</td>
</tr>
<tr>
<td>AZ</td>
<td>The revision to Annex B would provide a larger pool of members to expeditiously hear appeals.</td>
<td>May 15, 2012</td>
</tr>
<tr>
<td>BA</td>
<td>The revision to Section 6.2.1.2 brings PASA in line with StdC MOP and StdC Reference Manual.</td>
<td>June 27, 2012</td>
</tr>
<tr>
<td>BC</td>
<td>The revision to Section 6.3.5 is a direct result from the ExSC comments during the last public review of PASA. Procedures are included from when a Project Committee makes substantive changes to the draft after consideration of comments or when new information is received.</td>
<td>June 27, 2012 (PASA Reaccredited 10/12/12)</td>
</tr>
<tr>
<td>BD</td>
<td>Editorial change to Section 6.3.6.2, deleted last part of the sentence that states “in accordance with the continuous maintenance schedule.”</td>
<td>September 27, 2013</td>
</tr>
<tr>
<td>BE</td>
<td>The revision to Annex A and A2 was revised to include additional definitions. Annex B was revised to clarify appealable matters, content of the appeal, filing fee, notification procedures, and conflict of interest. Annex C (Complaints of Actions or Inactions by the StdC, its Subcommittees or PC’s) and Annex E (Emergency Interim Standards Action) were added into PASA.</td>
<td>PASA Reaccredited October 22, 2014</td>
</tr>
<tr>
<td>BI</td>
<td>Section 4.2.2.6 clarified SRS will comply with ANSI requirements of openness, balance and due process. Section 7.11 adds the Chair’s designee can also issue official interpretations of standards. Section 11 Antitrust Policy was added to PASA. Annex A, informative notes was clarified. Annex B removes the option for technical appeals.</td>
<td>PASA Reaccredited April 29, 2015</td>
</tr>
</tbody>
</table>
This revision to PASA includes the following revisions:

- Standards Reaffirmation Subcommittee (SRS) membership – This change clarifies that SRS membership is appointed in a different manner than normal Project Committee (PC) membership.
- Voting requirements – This change overhauls the voting requirements section to ensure the requirements are clear, especially with respect to responding to negative votes with a reason.
- What to do with comments on a subsequent public review – This change is in response to a prior PASA interpretation and clarifies that if there is a full subsequent public review then formal responses do not need to be approved for the original full public review. This is consistent with our current practice and ANSI Essential Requirements.
- Project Discontinuation – This change clarifies the procedures for discontinuing a project. The current procedures indicate in an unclear manner when a discontinuance is automatic and when other committees (SRS and Standard Project Liaison Subcommittee (SPLS)) need to recommend formal action.
- Annex A: Definitions Non-substantive change – This change removes/edits the definition of non-substantive change as to ensure that a change (as defined) is either substantive or non-substantive. Right now there’s a gap where it could be neither. Clarified definitions for informative annex and standards action.
- Annex B: There are currently some unclear provisions in the appeals procedures. These revisions clarify what steps should be taken and defines timelines.
- Annex C: Complaint of actions/inactions – This change modifies the procedures for complaints for action/inaction in an attempt to both streamline the procedures and reduce the potential for frivolous complaints.
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<thead>
<tr>
<th>BL</th>
<th>Editorial: Updated Section 7.11 to reflect new title; Assistant Manager of Research &amp; Technical Services to Manager of Technical Services.</th>
<th>June 12, 2018 Editorial</th>
</tr>
</thead>
<tbody>
<tr>
<td>BM</td>
<td>Editorial: Added “working” in first paragraph to detail the amount of time to send notification of a right to appeal. Keeps it consistent with the document.</td>
<td>July 17, 2018 Editorial</td>
</tr>
<tr>
<td>BN</td>
<td>Editorial: Updated the footer with correct Reaccredited dates</td>
<td>August 20, 2018 Editorial</td>
</tr>
<tr>
<td>BO</td>
<td>Editorial: Revise Section 7.2.6.1 to refer to Section 7.2.4.2 instead of 7.4.2.1; Revise Section 7.4.4.1 to remove “substantive technical,” as ASHRAE’s appeals policy states that ASHRAE will only hear procedural appeals; Revise Section 7.4.6 to add “and ANSI” before Standards Actions; 7.11 added a hyperlink to the full interpretation policy document</td>
<td>PASA Reaccredited December 19, 2018</td>
</tr>
</tbody>
</table>
This revision to PASA includes the following:

- PASA 4.2.2.6, Standards Reaffirmation Subcommittee – this proposed change allows SRS membership approval to stop at the Standards Committee Chair; removing Technology Council is an effort to streamline approval levels.
- PASA 4.3.1, Project Committees – added Guideline Project Committees and Standing Guideline Project committees.
- PASA 4.3.8, Removal for Cause and PASA 4.3.9, Removal for Cause Initiated by SPLS – currently we have a Sample Letter that details this information; this change moves the requirement in the sample letter to the procedures.
- PASA 7.2.2, Publication Approval – this change allows fast track approval of any publication, including policy-level documents, that have no unresolved objections.
- PASA 2, Scope PASA 4, Approval of Proposed Standards, PASA 7, Criteria for Approval, Withdrawal and Discontinuance of ASHRAE Standards, PASA A1 Definitions, PASA Annex B: Appeals of Board of Directors; Standards Actions or Inactions and PASA Annex E: Procedures -Emergency Interim Standards Action - PASA’s current language isn’t clear how Guideline Project Committees (GPC’s) and Standing Guideline Project Committees (SGPC’s) should operate. The proposed change updates PASA by including language in appropriate locations in PASA that allows the users to readily identify and comply with the necessary GPC and SGPC procedures. In addition, grammatical corrections were made.
- PASA 7.2.7, Negative Votes on Letter Ballots of PCs and Project Subcommittees – this change reduces time frame to 7 calendar days for voters to reaffirm their votes or change their votes or to vote during a reconsideration period.
- PASA 7.2.4.2, Numerical Requirements for Standards Action Votes, PASA 7.4.3, Balance and Interest Categories and PASA, Definitions – it was determined the terms “consensus body” and “project committee” are used interchangeably and inconsistently in PASA, the proposed change to solely use “project committee” provides a resolution to the issue.
- PASA 7.3, Maintenance of Standards – procedures were added to address situations where an SSPC, SGPC, SPC or GPC wants to issue an addendum to a Periodic Maintenance standard or guideline.
- PASA (entirety) – the term “standards committee document” and “SCD” is used interchangeably and becomes confusing, the proposed change “standards, guidelines, or portions thereof” provides a resolution to this issue. In addition, grammatical corrections were made.

Editorial changes: The following sections were updated to match the requirements in Section 7.2.2: Sections 7.2.1.2, Normal Track Public Review (NTPR); 7.2.1.3, Fast Track Public Review (NTPR), Definitions: fast track and normal track; 7.2.4.6, Approval of Standards Actions by Approval Bodies
<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BQ</td>
<td>PASA updated to include the editorial updates made to the 2021 ANSI Essential Requirements version. “Edits reflect a consistent use of “directly and materially interested parties” and with respect to appeals and withdrawal -for-cause requests, “directly and materially interested parties who have been or will be adversely affected” by the ANS at issue.”</td>
</tr>
<tr>
<td>BR</td>
<td>PASA section 4.3.6 updated to match Section 4.3.5. Includes “Subcommittee chair” in the list of those who cannot serve if they are a representative or alternate.</td>
</tr>
<tr>
<td>BS</td>
<td>PASA section 4.2.2.6 changed the word “minor” to non-substantive in the first sentence. In the last sentence, changed the words “reaffirm” to “reaffirmation”, “revise” to “revision” and “withdraw” to “withdrawal”. Per changes made in 4/21/20 PASA edition, added “guideline” to SRS responsibilities, it should reflect both standards or guidelines.</td>
</tr>
<tr>
<td>BT</td>
<td>PASA section 4.3.6 – moved text discussing organizational members from this section to PASA section 4.3.8.</td>
</tr>
<tr>
<td>BU</td>
<td>PASA section 5.2 first sentence, second paragraph, changed “organizations” to “organization”.</td>
</tr>
</tbody>
</table>