

BEST CONFERENCES: MANUSCRIPT PREPARATION GUIDELINES

The purpose of these Guidelines is to ensure that there is a degree of consistency for all submissions for publishing the papers to be presented at the BEST Conferences. These Guidelines provide:

- Instructions for review and finalizing the manuscripts
- Instruction regarding organization of papers
- Formatting instructions

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DEADLINES

Submission of Final Draft for Review	– November 2, 2009
Submission of Reviewed Manuscript back to authors	-- January 15, 2010
Resubmission of Final Manuscripts by authors	-- February 15, 2010
Submission of PowerPoint Presentations for Review	– March 12, 2010

If papers cannot be delivered within 14 days after deadline for paper submission (e.g., for BEST2 by the beginning of November 2009), the author should communicate with the Session Chair to that effect and to see if some adjustment in schedule may be possible. Otherwise the organizers will have the option of excluding the paper and inviting an alternate paper from the pool of submitted abstracts. Persons who are participating in the Panel discussions may prepare either a full paper or a shorter, position-paper on the topic under discussion. These papers will be included in the proceedings.

REVIEW PROCESS

The submitted manuscripts will be reviewed by the session and track chairs and selected additional reviewers. They will be returned to the authors with comments from the reviewers as soon as possible.

Manuscripts should be submitted in electronic format simultaneously to three people: (1) the session chair, (2) the track chair and (3) Stephanie Stubbs at NIBS (Project Manager).

Each manuscript must be provided with a caption before the title as shown below:

Either *for review only* or *final version for publication*

After review and submission of the final manuscript, an electronic copy should be resubmitted to the above three persons.

FORMATTING

Use the word processing format MS Word *.doc 1997-2003 for the review process and *.pdf for the final version. Use 1-inch margins and 12 pt font (New Times Roman) for the text, and 12 pt Font (Arial Bold) for the headings. Paper titles should be in 14 pt font (Arial Bold).

It must be printed single-spaced with 1" margins, on 8 1/2 x 11 in. (216 x 279 mm) paper. Do not right justify the text. An abstract of not more than 250 words, summarizing the paper and key words must be included in the paper. An example is provided in Appendix A at the end of these guidelines.

MANUSCRIPT PREPARATION

The papers will be published on CD or flash drives. As such, there is less need to have strict page limits as are needed for printed proceedings. However, we request that the paper be as succinct as possible. This is both to minimize the effort that both readers and reviewers will have to make to understand what you have to teach them.

As far as the organization of the paper is concerned, it should be governed by the subject matter. A general outline that may be suitable for your paper follows:

1. MANUSCRIPT OUTLINE

- 1.1 **Title.** Should be short and to the point but descriptive of contents.
- 1.2 **Author Note.** At the bottom of the first text page, show the job title, affiliation, and address (city, state, and country) for each author in the following form: (see Appendix A for an example)
- 1.3 **Abstract.**
- 1.4 **Introduction.**
- 1.5 **Main Body.**
- 1.6 **Discussion.**
- 1.7 **Conclusions.**
- 1.8 **Acknowledgments.**
- 1.9 **Nomenclature.** [if appropriate]
- 1.10 **References.** Use the author date method to cite references, not the reference number, insert the author's last name and the date of publication in parentheses within the text. Alphabetize the list of references at the end of the paper (see Section 3.4.1).
- 1.11 **Bibliography.** May include source materials useful to the reader as general background information but not mentioned specifically in the text. See Section 3.4.2 for examples of preferred forms.
- 1.12 **Appendixes.**
- 1.13 **Tables.** Number tables consecutively. Identify each using a suitable heading. Tables should be placed in the text as close as possible to the text referencing them.
- 1.15 **Figures.** Number Figures consecutively. Identify each using a suitable heading. Figures should be placed in the text as close as possible to the text referencing them.
- 1.16 **Computer Programs.** Inclusion code of computer programs is not appropriate. Program identification will be limited to what is necessary for technical use of the material. Any semblance of commercial or sales promotion should not be included.

2. MANUSCRIPT FORMAT

- 2.1 **Headings.**
 - First level. Flush left, all caps. Indent paragraphs.
 - Second level. Flush left, caps and lowercase. Indent paragraphs.
 - Third level. Paragraph indented, caps and lowercase, followed by a period. Paragraph begins on the same line.

- Optional. If a fourth level is needed, use the third-level heading with only the first word capitalized. If a fifth level is needed, begin with a centered head in all caps and then proceed with the levels above.

2.2 Lists. Indent items in a list, preceded by a number or a bullet, whichever is preferred, but used consistently throughout the paper.

Example:

The HVAC system was designed to accommodate the following:

1. Placement of research equipment and walls anywhere in the laboratory without major modification.
2. Minimal energy consumption.

Short listed items may be indented and preceded by a bullet.

Example:

... are the following:

- relative equipment first cost;
- relative future cost of gas and electric energy;
- relative amounts of heating and cooling loads.

Separate items in a list within text using semicolons, each item preceded by a number in parentheses.

Example:

... the following: (1) relative equipment first cost; (2) relative future cost of gas and electric energy; and (3) relative amounts of heating and cooling loads.

2.3 Equations. Position equations using a standard indentation from the left margin (i.e., all equations should have the same indentation). Place equation numbers flush right. Indent a list of definitions of symbols used in an equation. When the word "where" separates the equation and the list of definitions, position it flush left.

Example:

$$f = a + b \tag{1}$$

where

- a = apples
- b = bananas
- f = fruit salad

If an equation requires more than one line, break it before an operational sign (+, -, x, :, =) and align the operational signs on the left. If two or more displayed equations are grouped together, leave space between the individual equations. Spell out the word "equation" and capitalize it in the text ("substituting into Equation 6 ..."). In a highly mathematical or theoretical paper, consider developing equations in appendixes rather than in the body of the paper.

2.4 Tables and Figures. The heading and title appear **above** the table but **below** the figure. Number tables and figures consecutively.

Example:

TABLE 1: Comparison of Selected Criteria for Thermal Environments

Place tables and figures (with captions) in the text as close as possible to the text where they are referenced.

Spell out and capitalize the words "table" and "figure" within the text ("see Figure 1", "as in Table 2", etc.).

2.5 Page and Line Numbering. Pages should be numbered consecutively with the first page given as page one. Line numbering should not be invoked.

3 NOTES ON STYLE

3.1 Commercialism. Commercialism should be avoided in the paper and the presentation. Commercialism includes visual, written or verbal references to any organization for the purpose of promotion or commercial advantage of that organization.

Trade names or company logos or slogans should be avoided on figures or in photographs. When that is unavoidable, they should be referred to in the text using generic descriptions. The inclusion of trade and/or company names and/or logos of a company name and/or logos of historical nature may be allowed where featured equipment is no longer manufactured, or company and/or product names are used in the context of historical development. The key point is to avoid "promotion or commercial advantage".

Specific reference to government, ASHRAE or standards/codes is allowed. Examples include (but are not limited to): ANSI, CGSB, ASHRAE, ARI and AHAM standards and CFR documents.

Reports of organizations and names of software are permitted in the reference list. Reference to software can also be made in the body of the text. If the software is in the public domain, provide a footnote noting that the software is in the public domain.

Current technical information disseminated to the audience sometimes includes proprietary aspects which are presented to inform and educate the members. The proprietary character of the information may be identified to make evident the limitations of its use.

Authors may give full particulars of their affiliation in the author's note on the first page of their papers (see Section 3.1.2).

Grants or other financial aid and other special assistance may be described in an "Acknowledgments" section following the conclusions.

3.2 Units of Measurement. Dual units of measurement (inch-pound (I-P) and International System of Units (SI)) are preferred. However, SI units go first and I-P units are written in parenthesis. Only SI units should be used in Tables.

Do not mix symbols and names in the same expression:
ft/min or feet per minute, not feet/min

Do not express plurals by adding an "s"
10 Btu, not 10 Btu's; 1 kg, 14 kg

Do not use periods with symbols:
min, ft, s (not sec), m, mm
EXCEPTION: in. for inch

Leave a space between the numerical value and the symbol:
100 W, 10 cfm, 55 mm
EXCEPTION: There is no space between number and degree of plane angle or degrees of temperature 45°, 62°F, 20°C

Use only one solidus per expression, and separate unit symbols with a raised dot:
Btu (ft².h.°F) W (m² × °C)

SI units.

"L" is the symbol for litre, not lower case "ell" or script "ell". "Centi-" is not an acceptable SI prefix, and the use of cm should be avoided. The centimeter is used only for cloth, clothing sizes, and anatomical measurements.

3.3 Numbers. Always use numerical values in conjunction with scientific and mathematical abbreviations:
4 ft, 12 in., 2 m, 3 m²

Only Arabic numbers are used.
Spell out the numbers one to ten in the text.
Use the numerical value for any number over ten.
Four-digit numbers need no comma (1200).
All digits of a range of pages are given (343-367).
Percentages. Always use a numerical value and the percentage symbol.

3.4 Spelling. Abbreviations: Words should not be abbreviated in the text.

3.5 Acronyms. Conventional acronyms for organizations noted in section 3.1 are permitted. For all other organizations, their names should be provided in full when first used,

followed by the acronym in brackets. Acronyms for specific entities or programs shall also be defined first, but **ad hoc** acronyms specific to the paper in question for the mere convenience of saving a few words will not be accepted.

For example:

Water Resistive Barrier (**WRB**), or Weather Resistive Barrier (**WRB**) are descriptions that are commonly recognized and used for the same material in different jurisdictions, but should non-the-less be defined. However, the use of **BEM** for building envelope material or building enclosure material would not be accepted.

4 REFERENCES AND BIBLIOGRAPHY

A reference list is composed only of works cited in the text and a bibliography is a general reading list - the two must not be combined.

In both cases, if the entries are to be of any use, accuracy is essential. Do not write titles from memory. Verify all references against the source and be sure that the authors' names are spelled correctly; that the title is written as it appears in print; and that correct volume, issue, and page numbers and dates are listed.

A list of references or sources that are not quoted directly in the text should be included as a separate listing under the heading "Bibliography."

4.1 Author-Date Method. The preferred method of citation, widely used in scientific texts, is the author-date method. Cite the source by enclosing the author's name and the date of the paper in parentheses and inserting this in the text within parentheses. (*NOTE:* there is no comma between name and date).

For example:

... a feeling of thermal comfort may be associated with phenomena other than thermal conditions alone (Winakor 1978; Woods et al. 1982).

... of such flow were clearly defined (Bailey 1951); however, ...

If the author's name has just been mentioned, only the date need be inserted within parentheses.

... were clearly defined by Bailey (1951); however, ...

Two authors' names may be included; for three or more, use "et al".

(Jones and Smith 1982)

(Jones et al. 1980)

If the "author" is an organization, use initials:

(ASHRAE 1982)

The full name can be spelled out in the reference entry. A reference to a personal communication

should be handled with an asterisk and footnote.

The reference list at the end of the paper does not need to be numbered. Entries are arranged in alphabetical order, chronologically for a particular author or group of authors. All authors are listed in an entry (i.e., no "et al."). The following forms are preferred:

Last name, initials. Date. Title (sentence-style capitalization, i.e. Capitalize only the first letter and proper nouns.). Journal or book title, underlined. If journal: volume number and pages. If book: city: publisher:

Examples:

Holman, J.P. 1968. Heat transfer. New York: McGraw Hill.

ASHRAE. 1989. 1989 ASHRAE Handbook–Fundamentals, p. 367 Atlanta: American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Moyer, R.C. 1983. Fume hood diversity for reduced energy consumption. ASHRAE Journal, Vol. 25, No. 9 (Sept.), pp. 50-52.

or

Moyer, R.C. 1983. Fume Hood diversity for reduced energy consumption. ASHRAE Journal, Sept. 1983, pp. 50-52.

Holzle, A.M., D.M. Munson, E.A. McCullough, and F.H. Rohles, Jr. 1983. A validation study of the ASHRAE summer comfort envelope. ASHRAE Transactions, Vol. 90, Part 1B, pp. 126-138.

This is the form for standards:

ASHRAE. 1981. *ANSI/ASHRAE Standard 95-1981, Methods of testing to determine the thermal performance of solar domestic water heating systems*. Atlanta: American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.

EXCEPTION: Authors of survey papers may find it necessary to use another method of citation in which a number, [9], is given at the appropriate place in the text, referring to a numbered list of references. This method should be used only when several works are cited at once or when many of the references are to proprietary names.

Recent research [1-9] has shown

Other investigators [10-17] have found

One manufacturer [10], states

4.2 Bibliographies. List papers or other publications cited for general background information in a bibliography.

The bibliography should follow the author-date style.

A bibliography presented in addition to a list of numbered references should follow a slightly

different style: Each entry should list the author (last name first), title, and facts of publication - each element separated by a period. The entries are not numbered. If there is more than one author, all names should be listed (no "et al."). Journal information should include the journal title, volume number (with date in parentheses), and page numbers. For a book, list place of publication, publisher, and date.

The following are examples:

Azer, N.Z., and S. Said. Augmentation of condensation heat transfer by internally finned tubes and twisted tape inserts. Proceedings of the 7th International Heat Transfer Conference. Munich, 1982

Luu, M., and A.E. Bergles. Experimental study of augmentation of in-tube condensation of Refrigerant 113. ASHRAE Transactions 1979, Vol. 85, Part 2, pp. 132-145.

Royal, J. Augmentation of in-tube condensation of R-113. Ph.D. dissertation, Department of Mechanical Engineering, Iowa State University, Ames, 1975.

APPENDIX A – Example Set-up of Abstract

SESSION M2 – M2.5 – Measurement and Interpretation of Moisture

FIELD MEASUREMENTS OF MOISTURE IN BUILDING MATERIALS AND ASSEMBLIES: PITFALLS AND ERROR ASSESSMENT

Donald M. Onysko¹, Christopher J. Schumacher², Peter Garrahan³

ABSTRACT

Moisture meters are becoming ubiquitous in their use on building sites by building inspectors, supervisors, installers of flooring finishes, and other building specialists in their forensic work. The point of their use on construction sites is to enable their users to decide on avoidance of excessive built-in moisture or to determine why a moisture problem has developed. When things go badly and building scientists are called in to investigate failures moisture meters are essential tools to assist in the early stages of an investigation. The trouble is that many users are novices in their use and in the interpretation of readings provided by a moisture meter.

There are several families of tools available to enable practitioners to apprise themselves of the amount of water stored in materials and to judge whether the levels measured pose a risk to the assembly once completed. These tools include hand held resistance-based and capacitance-based moisture meters and others.

This paper will provide some of the background to the accuracy of handheld moisture meters and some of the pitfalls in their use and interpretation. Unless they are in the hands of a knowledgeable user, they should not be used solely as the basis for undertaking major remediation works without more detailed investigation.

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