

Public Review: Mitigation79 2020-2

Two additional proposed revisions to Sections 7 and 9 for:

- SGM-SF 2017 *Soil Gas Mitigation Standards in Existing Homes*;
- RMS-MF 2018 *Radon Mitigation Standards for Multifamily Buildings*; and
- RMS-LB 2018 *Radon Mitigation Standards for Schools and Large Buildings*.
 - 7.5.1 *Fan design*
 - 9.4.3 *System equipment (Labeling)*

COMMENT DEADLINE: November 8th, 2020

REQUESTED PROCESS AND FORM FOR FORMAL PUBLIC REVIEW COMMENTS

Submittals (MS Word preferred) may be attached by email to StandardsAssist@gmail.com

- 1) *Do not submit marked-up or highlighted copies of the entire document.*
- 2) *If a new provision is proposed, text of the proposed provision must be submitted in writing. If modification of a provision is proposed, the proposed text must be submitted utilizing the strikeout/underline format.*
- 3) *For substantiating statements: Be brief. Provide abstract of lengthy substantiation. (If appropriate, full text may be enclosed for project committee reference.)*

REQUESTED FORMAT

Title of Public Review Draft: **Mitigation79 2020-2**

- **Name:** _____ **Affiliation:** _____
- **Clause or Subclause:** _____
- **Comment/Recommendation:** _____
- **Substantiating Statements:** _____
- Check here if your comment is supportive in nature and does not require substantive changes in the current proposal in order to resolve your comment.

Repeat the five bullet items above for each comment.

Requested registration of your contact information and copyright release.

**ONE TIME REGISTRATION
CONTACT INFORMATION AND COPYRIGHT RELEASE**

NOTE: AARST Consortium on National Radon Standards encourages original commentary on its standards. Commenters that choose to submit comments without an author's signature (due to difficulties in timeliness, proximity or other) shall be deemed to have done so at their sole discretion and have thereby acknowledged and accepted the copyright release herein. If commenters submit comments authored by others, those comments must also be accompanied by a signed copyright release from the author of the original comment. The original comment author and representing commenters may be asked to engage in dialog supporting their position.

Name: _____ Affiliation: _____
Address: _____ City: _____ State: _____ Zip: _____
Telephone: _____ Fax: _____ E-mail: _____

Copyright Release:

I hereby grant the AARST National Radon Standards Consortium the non-exclusive royalty rights, including non-exclusive royalty rights in copyright, in my proposals and I understand that I acquire no rights in publication of this standard in which my proposals in this or other similar analogous form is used. I hereby attest that I have the authority and am empowered to grant this copyright release.

Author's Signature: _____
Date _____

PLEASE FAX TO (913) 780-2090 or SHIP TO: StandardsAssist@gmail.com
Commenters are responsible for informing the standards assistant staff a when changing contact information or other preferences.

Notice regarding unresolved objections: While each committee seeks to resolve objections, please notify the committee responsible for an action or inaction if you desire to recirculate any unresolved objections to the committee for further consideration. Notice of right to appeal. (See Bylaws for the AARST Consortium on National Radon Standards - Operating Procedures for Appeals available at www.radonstandards.us, Standards Forum, Bylaws): (2.1) Persons or representatives who have materially affected interests and who have been or will be adversely affected by any substantive or procedural action or inaction by AARST Consortium on National Radon Standards committee(s), committee participant(s), or AARST have the right to appeal; (3.1) Appeals shall first be directed to the committee responsible for the action or inaction.

Contact information:

AARST Consortium on National Radon Standards.
Email: standards@aarst.org

Website: www.radonstandards.us
527 N Justice Street, Hendersonville, NC 28739



Introduction For Reviewers

Two additional public review items.

As a result of additional work, the following additional improvements are proposed.

7.5.1 *Fan design*

9.4.3 *System equipment* (Labeling)

These standards are under review for harmonization in accordance with AARST’s continuous maintenance procedures. Most proposed revisions for Sections 7, 8 and 9 were publicly reviewed recently regarding harmonized replacement of content for Sections 7, 8 and 9 in: SGM-SF 2017 Soil Gas Mitigation Standards in Existing Homes; RMS-MF 2018 Radon Mitigation Standards for Multifamily Buildings; and Radon Mitigation Standards for Schools and Large Buildings.

Currently published versions of these standards are available to review and purchase at www.standards.aarst.org.



Introduction and rationale for changes in 7.5.1

Work both in committee and resulting from public review produced these improvements in clarity on safety requirements.

7.5 ASD Fan Installation Requirements

7.5.1 Fan design

ASD fans chosen shall be:

ASD fans chosen shall be:

- a) designed for *continuous duty* ~~over a durable life span~~;
- b) designed or otherwise sealed to reduce the potential for leakage of water and soil gas;
- c) designed to allow rainwater or condensation from within ASD piping to pass through or around the fan when activated; and
- d) listed by the manufacturer as appropriate for the class of contaminants being extracted and as manufactured with features that meet minimum safety standards¹, to include:
 1. Thermal protection integral to the fan that prevents dangerous overheating of the motor;
 2. Protection against electrical shock for fans mounted both on the interior and exterior of buildings that may include a fan installed in a weatherproof protective housing that results in a code compliant configuration; and
 3. Other features that result in a safe fan installation, such as specified by codes where evaluations of chemicals in soil have indicated that gasses passing through the fan is corrosive or could result in a fire, explosion or serious personal injury.

Note—Fan models that are listed by the manufacturer as having ASD as one of their intended uses can aid in confidence when choosing products designed for ASD mitigation.

¹ As a point of reference, UL 507 Standard for Safety for Electrical Fans published by Underwriters Laboratories Inc., Northbrook, Illinois. ulstandards.ul.com

Introduction and rationale for changes in Section 9.4.3 (Labels)

The proposed revision below corrects a wider scope intended and addresses flexibility needed when control settings and instructions are too extensive for fitting on labels.

9.4.3 System equipment

System equipment shall be marked or identified with a label title that portrays the system purpose, such as "Radon Reduction System" or "Soil Gas Control System." The labeling shall also comply with requirements in a), b) and c) of this Section 9.4.3.

a) Mechanical Equipment

ASD fans and other system air handling and mechanical equipment shall be labeled.

b) System Monitors

The system monitoring device(s) shall be provided a label in close proximity to the mechanism, such as a primary label or other label, that includes:

1. Information on how to interpret the monitor; and
2. What to do if a monitor indicates fan failure or degraded fan performance; and

c) System Controls

9/20-2 Two additionally proposed revisions to AARST SGM-SF 2017, RMS-MF 2018 and RMS-LB 2018

Where systems include controls for any mechanical equipment, including dampers, system controls shall have a label on or in close proximity to the control mechanism. ~~General~~ Instructions for operation and control settings that existed at the time *mitigation* goals were achieved shall be marked or labeled on the equipment.

Exception: Where situations or detailed settings or instructions needed cause such a label to be impractical:

1. This information shall be provided in documentation provided to the client; and
2. The required label shall identify where this information, specific to the installation, can be found, such as "Radon (or Soil Gas) Mitigation System. See system specific instructions in the OM&M manual."

9.4.3—System control labels

~~Where systems include controls for any mechanical equipment, system controls **shall** have a label on or in close proximity to the control mechanism. In addition to a label title that portrays the system purpose, the label **shall** describe the purpose of the control(s) and general instructions for operation. System control settings **shall** be clearly marked to indicate the settings that existed at the time *mitigation* goals were achieved.~~