

Draft Committee Road Map

TC 2.4 Particulate Contaminants/Removal Equipment

TC 2.4 Scope:

Technical Committee 2.4 is concerned with the nature of particulate contaminants, both solid and liquid; the measurement of their properties; their effects on living things and materials; both solid and liquid; the means of removing unwanted particulate contaminants from gases; and the evaluation of the effectiveness, energy usage, and economy of such purification equipment. The TC is concerned with the effects of particulate contaminants on the quality of air supplied to and exhaust from enclosed spaces, and with the sources of particulate contaminant pollution within such spaces. The scope of TC 2.4 does not include purely physiological or toxicological aspects of particulate pollution, which are the province of TC 2.1 and TC 2.2.

The Road Map is intended to be a long-term plan for TC 2.4, a view of where we would like to be in five to ten years from now, taking into account the TC's scope shown above. It should cover what we would like to achieve between now and then, and how we aim to get there. At the moment it is heavy on short-term activities and governance items, and needs more input on longer-term possibilities.

TC 2.4 Committee

- The TC should set up a liaison system with other TCs to reduce incidence of inaccurate pronouncements made on particulate contaminants and filters. People assigned to be liaisons with other TCs should get on the roster of the other TC to ensure they receive information, and should provide a report to TC 2.4 either at the meeting or in a report that can be included with the meeting minutes;
- TC 2.4 also needs to take an active liaison role with SSPC 62.2, SSPC 52.2 GPC 35, and EHC.
- The TC should also have a liaison with ISO TC 142 Filtration committee and with the working groups with ties to particle filtration: WG 3 Particle Filtration, WG 12 Sustainability;
- It may be useful to appoint a leader to co-ordinate liaison activities.
- The TC should ensure that all Sub-committees have a Vice Chair in place as well as a Chair. This will ensure back-up for the Chair and assist succession planning;
- Individual TC members should not be Chair of more than one Sub-committee;
- The TC should encourage Sub-committees to hold a telecom or webinar between meetings to enable them to meet submission deadlines or deal with anticipated long discussions;
- The TC should encourage attendance at the TC meeting by contacting the host Chapter, and advertizing at the Winter Meeting Show if possible;

- To encourage attendance at Sub-committee meetings, the TC Chair should include a “hot topic” for each Sub-committee in the events calendar circulated before the meeting;
- TC 2.4 members should present programs about what the TC does at their local ASHRAE Chapter meetings. To facilitate this, the TC should take steps to prepare a short presentation that members can use;
- TC 2.4 should become involved in studying the particle aspects of environmental/climatic change and the impact these particle changes on the indoor environment and on filtration equipment. This might include appointing a liaison to TC 2.5 (Global climate change);
- To help completion of action items, place a list of them at the beginning of the Minutes.

Planning Subcommittee

- Continue to update the Road Map on an annual basis;
- Provide a verbal report on the Road Map to the TC annually (at the Summer Meeting?)

Membership Subcommittee

Overall the TC does not have a problem attracting new members. However, for the future health of the committee, we should focus on key groups as follows:

- The TC needs to attract younger members. We should continue/expand current activities aimed at achieving this, namely:
 - Getting involved with YEA. The TC should appoint a YEA liaison;
 - Having greeters circulate before TC meetings (3-4 people designated, but everyone should think about doing it);
 - Mentoring potential new members;
 - Talking to young people at local Chapter meetings
 - Using social media such as Twitter to communicate.
- We need more end user members (installers, operators etc.) to keep the TC current with technology and industry changes and needs.

The TC should retain academics as members because they can provide valuable contributions to research and publications.

Membership is now responsible for ASHRAE awards. This is an area where the TC has not done a good job in the past. We need to be more active in nominating deserving TC members.

Research Subcommittee

The Sub-committee should continue to serve, as a springboard for the TC’s Programs and Publications activities.

Research directions that have been brought up in meetings lately and are in the process of being turned into active research projects include:

- Residential air-cleaning, such the real impact of high efficiency filtration in homes
- New loading dust development to support GPC 35;
- Energy implications of using filtration in commercial buildings
- Removal of viruses by HVAC filters and energy/removal tradeoffs
- Using low cost particle sensors to control particle levels in buildings actively

Standards Subcommittee

The Standards Subcommittee should prepare its own Road Map and integrate this with the TC's one once a year.

Future standards activity should include:

- Extending filter performance test methods to smaller particles (this is under way in ISO TC 142);
- Developing performance test methods for residential filters;
- Considering alignment of Standard 52.2 with the current 16890 suite of ISO standards;
- Improving and verifying repeatability of Standard 52.2;
- Moving Standard 52.2 into closer alignment with real life applications (what is real life?).

Program Subcommittee

- Get more young members involved;
- Submit more technical and conference Program papers;
- Develop a plan for getting more seminars and workshops accepted for the winter and summer meetings;
- Consider providing speaker notes for seminar speakers to improve speaker ratings;
- Put seminar slides on the TC 2.4 website;
- The Sub-committee maintains a short-term list of topics of interest that current members can present. It should give thought to developing a list of potential topics for five years on.

Publications Subcommittee

- Get more young members involved;
- Publish more technical and conference papers (see above);
- Finalize the IAQ conference series CD.

Web Activities

The TC website will continue to be hosted by NAFA after Al Veeck retires. Another contact for posting to the site will be appointed.

- Post details of all past filtration-related research on the TC 2.4 web site. This will be a major factor in providing continuity on committee direction;

- Post the Road Map on TC 2.4's website
- Find out whether there is a hits counter on the website which could provide usage information.

Handbook

- The Sub-committee should continue to update and improve Chapter 29 in the HVAC System Handbook "Air Cleaners for Particulate Contaminants"
- The Sub-committee should continue to contribute to updating and improving Chapter 11 in the Fundamentals Handbook "Air Contaminants".