

ASHRAE, INC.
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TC/TG/TRG MINUTES COVER SHEET

(Minutes of TC/TG/TRG Meetings are to be distributed to those listed below within 60 days after the meeting.)
 These minutes were approved by letter ballot circulated on the 19th of March 2015 and ending on June 1st 2015.

TC/TG/TRG NO.: **TC 1.12**

TC/TG/TRG TITLE: **Moisture Management in Buildings**

DATE OF MEETING: **June 28, 2014, 1pm to 3pm.**

LOCATION: **Sheraton Seattle Downtown**

MEMBERS PRESENT	TERM EXPIRES 6-30	MEMBERS ABSENT	TERM EXPIRES 6-30	EX-OFFICIO MEMBERS
Theresa Weston	2017	Quinn Hart	2016	Victor Penar
Ray Patenaude	2016	Achilles Karagiozis	2013	
Hugo Hens	2018	Paul Shipp	2013	
Steven Cornick	2015	Lan Chi Nguyen Thi	2013	
Fitsum Tariku	2017	George DuBose	2015	
Stan Gatland	2016	Florian Antreter	2016	
Norm Nelson	2016	Mikael Salonvaara	2016	
Lan Chi Nguyen	2015			
Alex McGowan	2015			
Lew Harriman III	2018			
Christy Cronin	2018			
CORRESPONDING MEMBERS PRESENT		CORRESPONDING MEMBERS ABSENT (CONTINUED)		ADDITIONAL ATTENDANCE
Hartwig Künzel		Wahid Maref		John G. Davis
Gordon Hart		Larry Elkin		Ed Light
Andre Desjarlais		Jeff Traylor		Carl Grimes
Anton TenWolde		Michael Hayes		Dane Christensen
Manfred Kehrer		Dale Herron		John L. Harrod
Hugo Hens		Gil Avery		Donald Snell
Mika Salonvaara		Albert Pucino		
Ron Bailey		Carl Lawson		
Holly Bailey		Mark Lawton		
Diana Fislser		Neil Leslie		
William Chadwick		Him Ly		
Louis Kelter		John Murphy		
		Leonard Damiano		
CORRESPONDING MEMBERS ABSENT		Claudio Darras		ADDITIONAL DISTRIBUTION
Rodney Lewis		Doug Bibee	Section head	Victor Penar
Mark M. Anderson		Elia Sterling	TAC Chair	William McQuade
Davidge Warfield		Dwight Heberer (prov. CM)	Liasons	Heather Platt
Bede Welford		Christine Maurer (prov. CM)	Standards	Arthur Giesler
Joseph Griner, III		Manfred Gerber	Research	Mike Vaughn

Fiona Aldous		Sam Glass	Staff	Alexander Weiss
Marcus Bianchi			Chapter TT	
Stephen Barefoot			ALI/PDC	Donald Brandt
Jim Cummings			Special Pubs	Francis Mills

Unapproved

TC 1.12 Moisture Management in Buildings

June 28, 2014, 1pm to 3pm.

Sheraton Downtown Seattle, WA

1. Call to order – Steve Cornick, Chair

Chair called meeting to order and read the TC 1.12 scope statement.

2. Self-Introduction of members and guests – Steve Cornick

Those present introduced themselves. Eight voting members were present. Quorum was established.

3. Roster Review – Steve Cornick

Steve Cornick stated that no members would be rolling off, but that Raoul Webb has passed away. Several committee members praised Raoul's work and dedication to ASHRAE, stating that he would be missed and encouraging other members to honour his memory with service to the committee. The Chair made note of the following other changes: Sam Glass and Lew Harriman are rolling on as voting members, Ray Patenaude is taking over as Program Chair, Christy Cronin is the Secretary and is rolling on as a voting member, Sam Taylor is a new corresponding member, and Paul Lebbin is a provisional corresponding member.

4. Review Agenda

No additions were made to the agenda. Teri Weston moved to approve the agenda. Ray Patenaude seconded. *Agenda approved via voice vote; all were in favour.*

5. Approval of minutes from New York January 2014 meeting – Steve Cornick

No comments were offered regarding the meeting minutes. Alex McGowan moved to approve the minutes with minor editorial changes. Ray Patenaude seconded. *Minutes approved (7 approved, chair not voting).*

6. Chairman's Report – Steve Cornick

The Chair stated that he had nothing to report as the Chairman's Meeting was scheduled for the following day.

7. Research – Steve Cornick

- a. *Damp Building Measurement Criteria and Inspection Protocol – Lew Harriman.* The Technical Activities Committee (TAC) accepted the request to create a Multidisciplinary Task Group (MTG). Lew Harriman is the chairman of the MTG and he is generating a list of nominees for the committee as well as some advisers. The committee should be established by the Chicago ASHRAE meeting.
- b. *ASHRAE Design Guide for Dedicated Outdoor - Air Systems (1712-RP) – Lew Harriman.* TC 8.10 (TC 1.12 cosponsors this project.) Lew Harriman stated that Sustainable Engineering Group LLC was selected as the contractor performing the field investigations. There will be a PMS meeting held by phone prior to the Chicago ASHRAE meeting.
- c. *WS 1566 Water vapour evaporation rates from swimming pools.* TC 8.10 (TC 1.12 cosponsor). No progress to report. Steve Cornick stated that he would contact the chair to see if any progress had been made.
- d. *RTAR XXX Development of a method to determine whole home dehumidification capacity requirements.* TC 1.12 (TC 8.10 cosponsor). Sam Glass is the lead, but was not in attendance. Steve Cornick stated that Lew Harriman and Sam Glass are soliciting industry support (including financial support) for this research prior to presenting to RAC. The RTAR will be updated accordingly.
- e. *RTAR XXX Modeling Water Vapor Permeation in Pipe Insulation.* TC 1.8 (TC 1.12 cosponsor). Manfred Kehrer had requested co-sponsorship from 1.12 and the Research Subcommittee was in favour. However, the lead TC has not yet voted on this RTAR. Steve Cornick moved to cosponsor

- this RTAR, provided 1.8 approves it as well. No second was necessary. *Co-sponsorship approved (7 approved, 0 opposed, chair not voting).*
- f. *TC 4.4 1718-RTAR: Development of a method to determine the moisture transport properties of a roof shingle system under real conditions* – Manfred Kehrer TC 4.4 (Cosponsored by TC 1.12 and SSPC 160). Research liaison suggested finding co-funding or reducing budget and scope. Kehrer reduced budget from \$220k to \$160k and duration from 36 months to 24 months and eliminated aging effects from scope. Submitted to RAC May 15, 2014.
 - g. Status update on potential new RTARs:
 - i. *Techniques for Limiting Indoor Dampness and Microbial Growth During Unoccupied Hours and In Buildings That are Seasonally Occupied* – Lew Harriman. Lew Harriman offered to consider this research and determine if it was one topic or two and in what format the results would be best presented. Steve Cornick, Ray Patenaude and Ed Light offered to work with Lew Harriman and produce a scope for the RTAR (or two RTARs) by the Chicago meeting.
 - ii. *Humidity Loads Generated in Non-residential Buildings* – Theresa Weston, Sam Glass. No progress was made since the last meeting.
 - iii. *Techniques for Limiting Indoor Dampness and Microbial Growth in Heritage and Special-purpose Buildings* – Steve Cornick. No progress was made since the last meeting.
 - iv. *Water Activity & Mould* – Ed Light proposed an RTAR regarding the field instrumentation of water activity. Research has shown that elevated water activity can be present where moisture readings have shown dryness (after earlier measured moisture). Ed Light will prepare an RTAR for the Chicago meeting.
- 8. Handbook – Hugo Hens**
- a. Handbook of Fundamentals chapter. Hugo Hens stated that he had not received any comments for the 6th version of the drafted chapter apart from his own. The 7th version is available on the Google Groups site. Steve Cornick presented a timeline with deadlines listed in order for this chapter to be approved as an addition to the 2017 Handbook. The vote of approval must take place by the Summer 2016 meeting. Steve Cornick presented the one-page summary document to be given to the Handbook committee for consideration. The document was read aloud and comments were requested. Steve Cornick moved that the committee approve the outline. Alex McGowan seconded the motion. *Outline approved (7 in approved, 0 opposed, chair not voting).*
 - b. Applications Handbook chapter. Lew Harriman stated that the chapter had been submitted and favourably received by the Handbook editor. It will be the subject of a formal vote by the Handbook Committee during the Summer 2014 meeting and will be published next year.
- 9. Program – Ray Patenaude**
- a. Seattle:
 - i. Workshop I – Development of an ASHRAE Energy Guideline for the Retrofit of Historical Buildings is on Sunday at 8am.
 - ii. Seminar 18 (Intermediate) New U.S. Environmental Protection Agency Guidance for Moisture and Humidity Control in Buildings – Monday at 11am. Ray Patenaude stated that this topic has received a lot of attention and encouraged the committee to attend.
 - b. Chicago: Ray Patenaude requested that proposed program summaries be submitted to the CDC committee by August 11, 2014. Proposed programs should relate to one of the 8 tracks, which he read aloud. Ray Patenaude reminded the committee that in addition to a synopsis, list of proposed speakers and their biographies, learning objectives with 8 questions related to the learning objectives are also required.
 - i. Seminar on tools and techniques for assessing dampness in buildings. Steve Cornick will chair this session and will be assisted by Ed Light and Lew Harriman.
 - ii. None of your Damp Business – a forum on establishing a dampness protocol for buildings to be chaired by George Dubose.
 - iii. Miscellaneous conference papers by Hugo Hens
 - c. Atlanta:

- i. Moisture management guidance from ASHRAE. A program on the applications and fundamentals chapter. Lew Harriman, Hugo Hens, and Norm Nelson to collaborate on this.
 - ii. Program on managing construction moisture to be chaired by Ed Light
- d. Orlando:
- i. A forum on building physics and moisture management – a collaboration between Ray Patenaude and Richard Rooley of TC 1.7.

10. Special Publication “Techniques for Minimizing Construction Moisture Problems.” Paul Shipp, Ed Light, and Lew Harriman are looking in to getting approval from the ASHRAE Publications Council to begin this work. Ed Light is researching existing publications by contractors associations for reference. In response to questions from Lan Chi Nguyen, Ed Light stated that the EPA guidelines are not specific or detailed enough to guide complex construction projects. Ed Light is to produce a proposal for this work.

11. Old Business – Steve Cornick

There was no old business to report

12. New Business – Lew Harriman

No new business to report.

13. Mini-Presentation – Presenter David Arnold was absent and no presentation took place.

14. Adjourn – Alex McGowan moved to adjourn the meeting at 3pm.

Next meeting: Chicago, Saturday January 24, 2015 - 13:00 – 15:30

Action items as of June 2013

WHO	ITEM	DEADLINE
Cornick	Send version 7 of draft Handbook chapter to committee via email as a Word document	
Cornick	Send approved one-pager Handbook chapter summary to Mark Owen	
All	Send appropriate material for the Handbook chapter to Hugo. Provide comments/revisions to version 7 of the chapter.	
McGowan	Format version 7 of draft Handbook chapter after comments have been received	
Harriman	Develop RTAR “ <i>Techniques for Limiting Indoor Dampness and Microbial Growth During Unoccupied Hours and In Buildings That are Seasonally Occupied</i> ”	
Shipp, Light	Develop RTAR “ <i>Techniques for Minimizing Construction Moisture Problems</i> ”	
Weston	Develop RTAR “ <i>Humidity Loads Generated in Non-residential Buildings</i> ”	
Light	Develop RTAR on water activity and field instrumentation	
Cornick	Develop RTAR “ <i>Techniques for Limiting Indoor Dampness and Microbial Growth in Heritage and Special-purpose Buildings</i> ”	
Cornick	Chairman’s Report: post update from section head	
Cornick	Contact Chair of 8.10 for a status report on WS 1566 Water vapour evaporation rates from swimming pools.	
Glass and Bloemer	Update draft of RTAR “ <i>Development of a method to determine whole home dehumidification capacity requirements</i> ”	Chicago meeting
Harriman, Light,	Draft RTAR (or two separate RTARs) on Techniques for Limiting	Chicago meeting

Patenaude	Indoor Dampness and Microbial Growth During Unoccupied Hours and In Buildings That are Seasonally Occupied	
Harriman, Hens, Nelson	Develop program on Moisture management guidance from ASHRAE.	Atlanta meeting
Light	Develop program on managing construction moisture	Atlanta meeting
Patenaude	Develop program (a forum) on building physics and moisture management	Orlando meeting
Ship, Light, Harriman	Develop special publication on minimizing construction moisture	

Minutes prepared by C. Cronin

Unapproved