

ASHRAE TC 10.8  
Refrigeration Load Calculation  
2014 Annual (Summer) Meeting Agenda

3:00 P.M.  
 Sunday, June 29, 2014  
 Diamond B (1, Sheraton)  
 [Sheraton is adjacent to the Washington State Convention Center]  
 Seattle, WA

ACTION ITEMS FROM SEATTLE (ANNUAL) 2014 MEETING:

A.	Don Fenton	Add Tobey Fowler as a member	
B.	Don Fenton	Send out Handbook Sections for review for a pro-active start.	
C.	Todd Jekel, Dan Dettmers	See if Jake (intern) can handle the metric conversion of the new example in Chapter 24.	Jake on summer vacation. Will approach this fall.
D.	Todd Jekel	Review with 1.8 the status of the research project they want 10.3 to co-sponsor and see how this may impact 1433.	
E.	Doug Scott	Begin work on updating 1434 WS so it can be re-submitted.	
F.	Dan Dettmers	Continue with TC 10.8 Program development for Chicago.	

1. Introduction of Members and Guests.

Meeting called to order at 4:00 by Don Fenton

Voting members Present: Todd Jekel, Doug Scott, Tom Wolgamot, Dr. S.A. Sherif. 4 Voting

Members of 6 present: Quorum established. Tobey Fowler (Hussmann) is in attendance and has requested to be added as a member.

2. Meeting Minutes

Vote on Meeting Minutes: minutes approved unanimously with the correction that SA Shariff was in attendance.

No corrections or additions made to the agenda.

3. Report on Section Head Meeting.

Everyone needs to be reminded about and familiar with ASHRAE's Ethics Policies.

Remember there is a recurring Outstanding TC Award if we adhere to all deadlines.

There is TC training available for all posts.

The ASHRAE Website continues to evolve and has lots of pertinent information.

Hightower award nominations are due September.

Everyone needs to update their website biography.

Thank you letters to employers are available for the time being donated.

Committee meetings can be held electronically to help advance things without needing to wait for the conferences or if people can't attend the conferences in person.

There is not a Refrigeration Program in Chicago. An explanation has not been given. We really want to plan ahead for the next Chicago meeting in 3 years.

There is a Section 10 Research Meeting to generate research topics and RTARs.

#### 4. Liaison & Subcommittee Reports

##### A. Research Liaison – John Shonder

We need to make sure we get any new research items to John for review before going to RAC. John is our RAC advocate and is able to help advance our items through the committees. John made a general comment that the RTARs need to explain to people who don't have knowledge of the issue why the research is needed.

##### B. Handbook – Todd Jekel

We want to be pro-active with the handbook update. Don will send out the handbook sections for review & comment. We would like to “amp-up” the calculations on cold-storage. In general, equipment in the field seems to be greatly oversized, and as a result is hard to operate & maintain. Accurate calculation examples may help provide better guidance to people.

##### C. Research – Doug Scott

1434 – Doorway Infiltration: This work statement was dropped by RAC due to inactivity. We plan on re-submitting. There was discussion about whether we expect a contractor to find a facility for testing, or if we want to pick one & make it available? Providing a facility will constrain and limit who can cost-effectively do the research. It was discussed that it would be better to have the contractor identify a facility. The study would be in one facility, and then change the doors to see the effect. Will need to clarify who will pay to change out the doors. Base case to be open door, and then modified with strip curtains, rolling door, manually operated door, and air curtain. We need to be careful about testing a product versus a product type. Infiltration is the load mostly commonly gotten wrong, therefore this research is to help supplement. Traffic through the door is a huge variable. The project will use a tracer gas to

determine exfiltration & resulting decay. The test also needs to be able to vary the traffic, so this will require the tests be done off-shift. Would potentially look at doing at multiple locations. Infiltration is most of the latent load, and sensible heat ratio becomes more of an issue. Product turnover is getting higher also, so doors are getting more important. The project will need to use an average velocity & pallet size through the doorway. Traffic rates also need to be determined. Doug to work on updating 1434.

1433 – Effect of Loss of Vapor Barrier: Part of the research could compare installed vapor barrier numbers with published values, and then the deterioration of such over time. A 1.3 multiplier is sometimes used. TC1.8 has a similar RTAR. Todd has requested a copy of what they are doing so we can coordinate efforts, but has not heard back. It was noted the nature of refrigerated facilities are different than other applications due to the continual versus cyclical temperature gradient. It was noted there is great data for insulated containers and what happens to the insulation over time. We are possibly looking at changing this RTAR to be a statistical analysis versus a laboratory study. Doug will review and update 1434 – infiltration, but needs help with 1433. We will wait until we see what TC 1.8 is doing, and then decide. We are concerned about actual installation, penetrations, damage over time, etc. Originally, it was just walls, maybe expand to roofs (discussion followed about confining study to walls for now...).

D. Webmaster – Ryan Hoest

Website is up to date

F. Membership – Don Fenton

Toby will be submitted as a new member. Currently a preliminary member.

Bill Kumpf will remain a corresponding member.

G. ALI Coordinator – Dan Dettmers

Dan will be attending the meeting tomorrow.

H. Programs – Dan Dettmers

For Chicago, will do a workshop on what is Ice Cream, what is refrigeration. Want to make ice cream in the room with liquid nitrogen. Will also coordinate a brewery tour. Will submit a workshop on load calculations with lighting (Doug), infiltration (Don), transmission (Todd).

5. Old Business

A. None

6. New Business

A. None

7. Announcements

A. The next meeting will be in Chicago, IL, January 24-28, 2015.

B. Subsequent meetings are:

Atlanta, GA – June 2015

Orlando, FL – January 2016

St. Louis, MO – June 2016

8. Adjournment

Meeting was adjourned at 4:43.

## SIGN-IN SHEET

TC 10.8                      June 29, 2014

<u>Name</u>	<u>Company</u>	<u>email</u>
Don Cleland	Marquette University	d.cleland@marquette.edu
Todd Jekel	IRC UW MADISON	tjekel@wisc.edu
DOUG SCOTT	VA COUNTERTOPICS	DSCOTT@VACOUNTERTOPICS.COM
TOM WOLGAST	DC ENGINEERING INC	TWOLGAST@DCENGINEERINGINC.COM
John Shonder	ORNL	shonderja@ornl.gov
S.A. Sherif	University of Florida	sasherif@ufl.edu
Kent Perkins	Colmac Coil Mfg	kent.perkins@colmaccoil.com
Tobey Fowler	Hussmann	fowler.tobey@gmail.com
Wm A Krumpf	Campus Engineering, Inc	wkrumpf@campusengineering.com

W  
→  
ing  
umber