

Meeting Minutes  
 ASHRAE 2018 Winter Meeting – Chicago,IL  
**TC 7.1 Integrated Building Design**

**Scope:**

TC 7.1 is concerned with facilitating interaction among all building disciplines, from earliest concept development throughout the building life cycle, in order to achieve integration of design efforts and operation of the total building.

**Subcommittee Meetings:**

Research –Program-Handbook WEB meetings prior to Chicago Conference

**Chicago programs**

TC 7.1 co-sponsored **Seminar 18** Building-Integrated Photovoltaic Systems: Enabling Net-Zero Energy Performance and Beyond Monday January 22 9:00AM-9:30AM; **Seminar 32** The Art and Science of Delivering Healthy, Productive and Effective Buildings, Monday January 22 2:15PM-3:45PM; **Panel 1** Integrated Design and Delivery: Spirit of a New World or a Fantasy? Wednesday January 24 11:00AM-12:30PM

**Main Committee Meeting:** Monday, January 22, 2018 8:15-10:30 am Dearborn 1 Palmer House

A. Call to Order – Tardif – 8:16 am

B. Roll Call -Tardif

C. Introductions-Attendees

Name	Affiliation
Joseph Chin	Western Allied Mechanical
David Allen	Allen Consulting
Amisha Pope	Dialog
Locke Hutson	JLL
Paulo Presotto	SPM Engenharia
Mitchell Swann	MDC Systems
Nusrat Jung	VTT, Finland
Joe Furman	Automated Logic
Marianna Vallejo	Jacobs
Aru Sau	Albert Kahn Association
Kevin Amende	Montana State

Name	Affiliation
Catherine Tinkler	Enhanced Professional Services
David Quirk	DLB
Travis Potter	University of Texas at Austin
Elyse Malherek	TWG
Rahman Azari	IIT
Frank Niu	Trane
Dan Karnes	Leo A Daly
Adrian Wallace	ICI
Walter Lenzi	WBR Lenzi Brasil Chapter
Suzanne Levisieur	Haddad Engineering

Chair Opening remarks –

ASHRAE Code of Ethics <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

125<sup>th</sup> ASHRAE anniversary is coming up

Reminder that TC 7.1 subcommittees meet online only

D. Review of Agenda - Tardif

E. Approval of Minutes from Annual Meeting 2017 Long Beach, CA – Tardif

Motion: Jason Atkisson Second: Mitchell Swann **Vote: 7-0-0 Minutes approved.**

F. Roster Review- Tardif

7 voting members. See following proposed changes.

David Allen giving up handbook chair and vice chair. Adding as non-quorum voting member.

Elyse Malherek would be chair in Houston.

Russell Taylor moves to vice chair.

Rachel Romero added as voting member.

Lianne Cokerton added as non-quorum voting and handbook subcommittee chair.

Joseph Furman to be incoming secretary.

### **Intro to IBD**

David Allen provided 5 minute primer.

In order to understand an integrated project, it's important to know what not integrated means: sequential or silo management. It's called silo management because you have entities to carry out project that remain within their own functional silo. It's depicting tall walls around each specialty in isolation. When done, they toss stuff over to the next silo. (Architect, structural, mechanical etc.) In theory each specialty does a perfect job, but that's not reality. The person in the next silo says 'wait a minute I can't work with this' and it's tossed back. At the end, they toss to contractor where very little feedback from the design team is obtained. The contractor looks for ways to keep cost down to get profit and make it constructible. Ultimately this process leads to projects that take longer, cost more, lose performance, and a project that doesn't fit the initial needs.

An integrated design we can compare to King Arthur. Consensus is the ruler of the round table. Arthur is facilitator. Every significant function is at the table from the beginning. The "knights" address high level questions. 'What are the expectations for performance?' 'What do they need to make best possible use of space?' Design and construction representatives there making decisions, working elbow to elbow. The constructability issues are dealt with. It theoretically ends in a better project. Cost are more upfront, but better project in the end with less obstacles along the way.

Now to the sports comparison... Integrated design is like Football. Everyone has a job, they work together, and the whole team wins or loses together.

David stressed that our Handbook gives those instructions on how to run an integrated building design.

There are differences between Integrated Building Design and IPD, but our handbook guidance should help in either case. It's what we think is a good guideline for those experience. But ultimately it's up to every team to adapt to the project.

Use a cross functional team. Building operators should be involved from the beginning. They would play a role in commissioning and for the first year. Make sure these folks can keep the building running the way it was intended. If the owner isn't on board to be a member of the team, it's going to be an uphill battle. There are many obstacles in having a cross functional team for the first time. There is a change in shape of cost curve, but ultimately we hope to see a cut in change orders percentage.

How do we foster collaborative behavior? Very little incentive to help out others

## G. Subcommittee Reports

1. Handbook – David Allen: 90% done with major changes. The committee will spend the next few weeks cleaning up redundancies. Draft to be sent to TC for review before the next meeting.
2. Research – Russell Taylor: No meetings since Long Beach. No active research or RTARs. We'd like to make a change. Before Houston have a couple phone calls. Mitchell. 7.2 is interested for cost schedule satisfaction between design bid build, and design build. Maybe we slide in there IBD/IPD. You can get info from DBIA, but they're super biased. Include 2.8? Call in February and April.
3. Programs – Rachel Romero: Subcommittee met at end of November. 3 programs in Chicago, 2 cosponsorships.
4. Special Publications – Gullledge – Not present
5. Webmaster – Malherek
  - Website up-to-date
  - Basecamp is up and running for committee and subcommittee use

## H. Old Business

1. TC 7.1 Liaisons to Other Committees:
  - a. BIM MTG – Malherek BIM Guide for Owners  
(<https://www.nibs.org/general/custom.asp?page=nbgo>) Elyse Malherek was voted to continue as BIM MTG liaison to 6-0-1
  - b. SPC 209 – Dobbs Energy Simulation aided design
  - c. Section 9: TC7.1 liaisons to the indicated TC of Section 9:
    - TC9.1 – Large Building Air Conditioning Systems – Rachel Romero -NONE
    - TC9.2 – Industrial Air Conditioning -NONE
    - TC9.4 – Justice Facilities - LeViseur -NONE
    - TC9.6 - Healthcare Facilities - Austin - Working on standard 170 and working hard on handbook chapter
    - TC9.7 – Educational facilities - Atkinson (LeViseur as back-up) Educational facilities –Meet from 1-3 on Sundays
    - TC9.8 – Large Building Air Conditioning Applications - Austin
    - TC9.9 – Data Centers - NONE
    - TC9.10 – Laboratory Systems - Atkinson - Nothing affecting this committee.
    - TC9.11 – Clean Spaces - Mitchell – New clean room design guide out.
    - TC9.12 – NONE
  - d. MTG-OBB-Tardif – New handbook chapter
2. ALI IBD Course – Gullledge ALI IBD course for NAVFAC in Norfolk on 12/6. More courses around the US in 2018.

## I. New Business

- 1650 Training requirement. We are conducting facility manage surveys for client building operations. Gain insight into O&M to operate high performance buildings. From TC7.3. Michel to send out link to committee. **MICHEL ADD LINK**

- 125<sup>th</sup> anniversary. Should we create committee to highlight how awesome we are? Call to paper. No obligation but we can highlight who we are and what we do. It's for Atlanta and Kansas City meetings.
- Remote participation meeting. Maybe we could get more people. We'll get feedback from 16 TCs for best implementation. Mike Vaughn will set up WebEx for non-meeting meetings. There is a general push for less meetings at the meeting.
- Research or program: How to virtually locate a crossfunctional team
- 2.8: New Green Guide in the bookstore.
- Came up at 7.2. Discussion at board level training on the technician side. Ad hoc committee about it. Effective building operations maintenance. We could obviously be involved. Want handbook chapter on design build.
- Standalone document on design. What does it mean when you say open book, what's two step design build. ABA probably has stuff, but they are contracts only. AIA has a guideline on IPD. CMAA have IPD. ASHRAE could/should weigh in. Maybe have a forum to get feedback. Need lots of sponsors for this. Revisit in Atlanta for bigger crowd.
- Identify MTG for IBD. Jason or Mitchell to bring to TAC.
- Joseph Furman incoming secretary.

**J. Next Meeting:** Monday, June 25, 2018, Houston, TX Adjourn 9:41