



American Concrete Institute

AGENDA

Committee 130 Sustainability of Concrete

Mission:

Develop and report on information on the sustainability of concrete

Convention Venue
Las Vegas, Nevada

Tuesday, October 16, 2018
11:00 AM – 2:00 PM
Brasilia 1 & 4 – Rio Hotel

VOTING MEMBERS IN ATTENDANCE

Sean Monkman, Chair
Alec Zimmer, Secretary

James Aldred, Khaled Awad, Julie Buffenbarger, Barry Descheneaux, Kimberly Kramer,
Emily Lorenz, Charles Nmai, Larry Rowland, Nicholas Popoff, Koji Sakai, Peter Taylor

ASSOCIATE MEMBERS IN ATTENDANCE

Matthew Dalkie, Stephen Wilcox,

GUESTS

Payam Vosoughi, Md. Mizanun Rahman, Allen Scarborough, Nima Farzadnia,
Amal Jayapalan, John Ries, Kelly Dudley (ACI Staff), Steve Szoke (ACI Staff)

MINUTES PREPARED BY

Alec Zimmer

- 1 CALL TO ORDER AND INTRODUCTIONS
 - Meeting called to order at 11:05 am by the chair
 - Members and visitors introduced themselves
 - At time of call-to-order, 10 voting members were present.

- 2 APPROVAL OF MINUTES – SALT LATE CITY AND WEB MEETING

- Minutes of the Spring 2018 meetings at Salt Lake City are in process. Monkman will check with John Kevern, the previous secretary, to confirm that the minutes have been posted.
- Monkman will bundle the meeting minutes from Salt Lake City and the web meeting held on April 27, 2018 into a single letter ballot for approval by the committee.

3 MEMBERSHIP REVIEW

- This meeting is the first for Monkman as Chair and Zimmer as Secretary. Kevin McDonald remains Vice Chair, Tracy Marcotte remains TAC liaison, and Kelly Dudley remains ACI staff liaison.
- The committee currently has 29 voting member. The quorum for voting is 12.
- The committee thanks the following individuals who have recently left the committee for their service to the committee: James Hicks, Christian Meyer, Lionel Lemay, Jeffery West, Thomas Adams, and Matthew Offenber.

4 MEETING TIMES

- Monkman raised the issue of adjusting the committee's meeting time or times to have more voting members in regular attendance.
- The current meeting times are Mondays from 2pm to 5pm and Tuesday from 11 am to 1 pm. At this convention, Monkman cancelled the Monday meeting to facilitate two technical sessions as discussed below.
- Dalkie reported that the Tuesday meeting conflicts with the newly formed Committee 242 on Alternative Cements.
- Taylor has a conflict with another committee he chairs at noon on Tuesdays.
- Sakai questioned whether the committee should reduce to a single meeting going forward.
- Buffenbarger stated that historically most voting members have been able to attend the Monday meeting but suggested keeping Tuesday timeslot to accommodate resolution of negatives generated by the upcoming TAC review.
- Monkman stated that he intends to retain the second meeting time for at least the next Convention.
- Aldred suggested better communication with the voting members to assure having a quorum at certain times.
- Szoke indicated that the meeting room size is larger than required for committee business and that the committee should look to downsize for future meetings.
- Monkman suggested holding the sustainability forum or technical sessions in one of the two ACI 130 meeting timeslots to bolster attendance.
- Monkman will send poll to determine best meeting times for committee members

5 TECHNICAL AFFAIRS COMMITTEE (TAC) UPDATE

- ACI is planning new document development web pages to make access to committee work product easier and offer transparency on the history of document development. The web pages will be available in Spring 2019 prior to the next Convention in Quebec.
- TAC is encouraging committees to keep documents current and is open to committee proposals as to how best to do this. (There are no overarching requirements.)

- TAC has expressed its willingness to review portions of documents piecemeal to shorten the review process. The “door is open” to spin off smaller documents such as chapters of the 130 Guide for TAC review prior to completion of the main document.
- Committees will be able to make incremental changes to published documents to keep them current. This process allows more flexibility in making minor changes.

6 REVIEW OF SUBCOMMITTEES

- The subcommittees remain unchanged. Monkman has not yet dismissed any subcommittees.
- Buffenbarger suggested restructuring subcommittees such that each chapter of the document has a subcommittee responsible for its maintenance.
- Subcommittees are currently as follows:
 - 130A Materials – Doug Hooton, Chair. Subcommittee did not meet at this Convention but will meet in Quebec in 2019. ACI 130R Report on the Role of Materials on Sustainable Concrete Construction is in the copy editing stage. The subcommittee will start making updates to 130R as soon as it is published to meet the five-year renewal cycle.
 - 130B Production/Transport/Construction – Kevin McDonald, Chair. The subcommittee is inactive. The subcommittee completed Chapter 3 in 2012.
 - 130C Structures in Service – Tracy Marcotte, Chair. The subcommittee is inactive. The subcommittee completed Chapter 4 in 2015.
 - 130D Rating Systems/Sustainability Tools – Julie Buffenbarger, Chair. The subcommittee is inactive. The subcommittee prepared the Addendum on Ratings Systems, and it is mostly up-to-date.
 - 130E Design/Specifications/Codes/Regulations – Chair position is currently open. The Chair defaulted to Monkman upon James Hicks’ resignation as chair. The subcommittee completed Chapter 2 in 2013.
 - 130F Social Issues – Lawrence Novak, Chair. The subcommittee is inactive. The content this subcommittee prepared was moved into the appropriate portions of other chapters.
 - 130G Education – Kimberly Kramer, Chair. The subcommittee’s Tuesday 7:30 meeting time conflicts with Committee C601E. The subcommittee organized two well-attended technical sessions at the current Convention. It would be helpful to increase membership to organize additional technical sessions and mini-sessions and shift the meeting time.
 - 130H Climate Change Impacts on the Sustainability of Concrete –Nemkumar Banthia has resigned as chair. Julie Buffenbarger is recrafting the committee to focus on resilience to climate change.
 - 130L Liaison Committee, Laurent Barcelo, Chair. Subcommittee Secretary Zimmer reported that the subcommittee did not meet at the current Convention as Barcelo was unable to attend. Buffenbarger indicated that ACI and its analog in the Russian Federation have recently made some agreements that will likely make this subcommittee more active.

7 STATUS OF DOCUMENTS

- 130R Report on the Role of Materials on Sustainable Concrete Construction
 - Review of balloted new material in Section 5.3 on Environmental Impacts of Admixtures
 - Monkman and Buffenbarger are addressing comments from ACI copy editing staff
 - 130 Main Document
 - Chapter 1 - Introduction (Buffenbarger– document is 75% complete but is being recrafted and updated to include references to 2018 IPCC report. Will send for ballot before end of 2018)
 - Chapter 2 - Design (completed in 2013 – to be sent to TAC as soon as possible)
 - Chapter 3 - Construction (completed in 2013 - – to be sent to TAC as soon as possible)
 - Chapter 4 - Use Phase (completed in 2015 – to be sent to TAC as soon as possible)
 - Chapter 5 - End of Service Life (Azarijafari, Buffenbarger – currently in balloting)
 - Chapter 6 - Conclusion (Chrzanowski, Buffenbarger - update ready to reballot after Chrzanowski makes small editorial changes. Will send for reballot before the end of 2018)
 - Glossary (Buffenbarger - update ready to reballot after Buffenbarger updates terms related alternative cements)
 - Monkman plans to send individual chapters of the 130 Main Document to TAC for review.
 - Rowland agreed with Monkman’s chapter-by-chapter approach and believes that it is the most efficient way to achieve TAC review and get the document published.
- 8 SPECIAL PUBLICATION CO-SPONSORED WITH COMMITTEE 224 – CRACKING
- Kramer has been coordinating efforts with Committee 224.
 - Sponsored Technical Session titled “Cracking and Durability in Sustainable Concretes in Anaheim in Fall 2017.
 - Papers went out for review in May 2018, and reviews are now complete.
- 9 CONCRETE RESEARCH COUNCIL (CRC) GRANT
- Committee 130 received three proposals seeking support for submission to the CRC.
 - CRC considered 34 proposals of which 15 were structural and 19 were for materials.
 - CRC selected one of the three proposals Committee 130 sponsored for funding.
- 10 SESSIONS OF INTEREST SPONSORED BY COMMITTEE 130
- Committee 130 sponsored the 11th Sustainability Forum on Sunday, October 14, 2018 from 7:30 to 11:30. Koji Sakai organized the forum and reported on it to the committee. The theme of the forum was “We are Getting into a New Stage!” and addressed how to incorporate sustainability into codes. Sakai will prepare a written summary for distribution to the committee.
 - Sakai reported that 81 speakers have presented over the course of the 11 Forums.
 - Sakai mentioned that he has decided to conclude the Forum at this Convention.
 - Rowland acknowledged Sakai’s tremendous contributions to ACI and to Committee

130 via the Forum over the years. He noted that sustainability is coming through code developments although it is a slow process.

- Buffenbarger stated that the ongoing push to include sustainability requirements in building codes is in process and that ACI Committee 130 will serve as a resource for code-writing committees.
- Kramer summarized two two-hour technical sessions sponsored by Committee 130 on Role of Materials in Sustainable Concrete Construction on Monday, October 15, 2018. Both sessions had good attendance; the second session was standing room only. Each session had five speakers. Despite some technical issues and one presenter who was not able to attend, the presentations were thorough though accessible. These sessions will be good templates for future conventions. The committee should consider mini-sessions in the future as well.

11 NEW BUSINESS

- Tech Note on Resilience: Buffenbarger will craft the outline for a 3,500 word Tech Note on resilient design with concrete and make the case why concrete is a resilient choice.

12 WORKING SESSION

- The Committee did not have a quorum of 12 voting members during the meeting despite having adequate numbers in attendance at the Convention.
- Discussion of new text for 130R – Section 5.3 Environmental Impact of Admixtures:
 - TAC comments on Section 5.3 on environmental impacts of admixtures required recrafting of this portion of the document due to the development of Environmental Product Declarations. Charles Nmai and a colleague prepared new text for Section 5.3. The text was included in a one-month ballot that closed earlier in October.
 - Lorenz withdrew several negative comments after reclassifying comments as editorial.
 - Zimmer withdrew several negative comments upon discussion with the committee.
 - All negatives were resolved. Refer to attached ballot comment summary.
- End of Service Life Chapter
 - Resolution of negatives from Ballot 3 that closed in Spring 2018.
 - Committee members in attendance prepared resolution to Lorenz's negative #4, page #2, line 25 as follows:
 - "Concrete is a durable construction material, and many owners specify design services lives of up to 100 years. There are examples of structures with design service lives of 1,000 years."
 - Buffenbarger will provide a reference for this statement.

13 ADJOURNMENT

- Monkman adjourned the meeting at 2:00 pm.