

# ACI COMMITTEE 132: RESPONSIBILITY IN CONCRETE CONSTRUCTION

Sunday, 5:00–8:00 pm.

28 March 2021

Virtual Meeting

Kevin MacDonald called the meeting to order at 5:10 pm.

## **Attendance:**

**Members:** Kevin MacDonald, Julie Buffenbarger, Dave VanOcker, Jeff Coleman, Michelle Wilson, Calvin McCall, Cecil Jones, Caz Bojnacki, Colin Lobo, John Vaughn, Ned Cleland, Jim Harris, Jim Casilio, William Klorman, Mike Schneider, Woody Vogt, Boyd Clark, Tim Folks (TAC contact)

**Associate Member:** Todd Olheiser

**Visitors:** Kerry Sutton (Staff); Samhar Hoz (ICC)

**Excused Absences:** Lauren McCauley

**Unexcused Absences:** Dennis Ahal, Bev Garnant, Mohammad Iqbal, Thomas Malerk, Murray, Joe Sanders, Eldon Tipping, Amy Trygestad, and Benjamin Tymann

## **Minutes of the Last Meeting:**

The meeting was called to order at 5:08 by Kevin MacDonald. Unfortunately, there were insufficient voting members to approve the minutes from Las Vegas.

Minutes were taken at the Fall virtual meeting and posted. Motion to approve, Bill Klorman, first, Mike Schneider seconded. All voting members approved the minutes.

## **New Business:**

### **1) Addition of Voting Members**

Michelle Wilson and Ned Cleland were added as Voting Members.

## **Old Business:**

### **1) Documents**

#### **a) Tech Note: Curing of Cylinders**

The Technote is unfinished at this time. Also, approval of the Technote must be completed by TAC. So, Kevin will clean up the administrative side by writing to TAC for the Technote creation.

#### **b) Responsibility in Repair.**

The ballot for this document recently closed.

Item #	Affirmative	Affirmative with Comments	Negative	Abstain	Not Returned	The 1/2 Rule	The 2/3 Rule
1	5	2	1	2	13	Item Does Not Meet	Item Meets

The ballot did not meet the 1/2 rule, so it does not pass.

VanOcker stated that the suggested comments would be reviewed and included in the document and a new ballot sent to members. Van Ocker thanked the following submitters to the Responsibility in Repair document, including Gene Stevens (JM Harris), Pete Barlow (Contec Services), Larry Church (Desman), and Keith Kestner (CVM Engineers)

**c) Update to Existing Guide**

The existing guide is due for a rewrite. Committee will address several areas, including items from 318, 301, etc.

- i) Should it be sent to other committees, or should it be written without feedback from 301 and 318?
  - (1) Does anyone have examples of issues with problems from 132R-14
  - (2) Buffenbarger stated that there is insufficient awareness of the document, and it should be referenced in other ACI documents.
- ii) Chapter 14 – Jeff Coleman Coleman
  - (1) 5.1 and 5.6 do cover what the license design professional should do.
  - (2) Specify.....as such
  - (3) Prescriptive or performance criteria?
  - (4) What should be added?
  - (5) What should be in the project documents? Provide a list of items that should be included.
  - (6) Some are obvious, and others not obvious. May provide some clarification to the design profession.
  - (7) Blanket statements need to be removed from specifications. E.g., All concrete should be air entrained except those noted.....
- iii) Checklist – Michelle Wilson will cross-reference between 318 and 301. What is required? For example – exposure class. If it is not clear, who is responsible if the document does not show enough detail or comply with conditions?

**Comments and Discussion from Committee:**

Coleman - If there is no exposure classification, then there is no exposure classification. It is written clearly in 301. If there is nothing stated in the specification by the designer, then the contractor does not have to comply with exposure. If not stated, then it is not an obligation.

McCall - The engineer is responsible for developing documents that meet the local Code. When the engineer does not do that, and an issue occurs, then who is accountable? Contractors build structures to fulfill the contract. The specification is to meet the Code; what if it is more restrictive? We need to focus on responsibility.

In the IBC, 106.1.1 states, "Construction documents shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed and show in detail that it will conform

to the provisions of this code and relevant laws, ordinances, rules, and regulations, as determined by the building official." Contractors have a legal right to assume that contract documents contain all applicable Code requirements. Therefore, contractors satisfy the Code by building in accordance with the contract documents."

Jim Harris - The committee should reread 318, refer back to this document, and then speak to TAC on these issues. This should also be done with upcoming Structural Codes 319, 320, 321, and forthcoming codes and see what is lacking in these documents.

Wilson and McCall –Exposure is not silent in 301. Then what happens in practice? 4.2.2.6b in 301 mandatory requirements. Exposure class for concrete materials. If you do not see anything designated, then default to S0. No requirements. If not defined, then there is nothing that requires sulfate conditions.

- i. Another scenario was also presented that creates confusion in the contract documents that include the EOR and GC. For example, if Contract documents state to design in accordance with 318, then the engineer of record is saying to design to 318 to the specialty engineer. Also, for durability, if the chapter related to pre-stress, tells him explicitly what to do.
  - a. What is written to those specialty engineers? And does instruct what to do? If then it goes to design-build, then it becomes the contractor's responsibility. A specialty engineer, subcontractor, etc., is responsible for what he agreed to do. If no exposure criteria, then who is responsible....design in accordance to 318. But most of the time, it says to construct to 301.
- ii. At the close of the discussion, EOR must identify exposure conditions as an obligation under 318. It is not always straightforward, and it should, however, not create a construction issue. Identification of exposure conditions will help with the parallel to Chapter 26. The contractor is not always provided enough time nor the authority to correct issues. You cannot accept responsibility without authority!

Boyd and Ned's suggestion – Helpful to have a convention workshop to discuss this issue. A session for 318 and 301 and a panel discussion or workshop for an upcoming convention. Speakers and discussion. This topic is a critical matter.

## **New Business:**

- 1) Todd Olheiser, Colorado R/M association, discussed quality issues in testing related to cylinder strength for acceptance. In many cases, the standards are not followed, and this translates to low concrete cylinder strengths. Colorado R/M has collected 15,000 data points on cylinder testing. The most significant problem is the initial curing of the cylinders. Olheiser commented that there should be a tracking mechanism or a formalized process in the field that would allow others to download information on testing firms, etc.

Olheiser and others look to make a tracking network to compare to a national average or see the testing firm's track record. Olhesier suggested that this tracking may be rolled out into other states and provinces, creating a more extensive database.

The need for this database is in response to the R/M producer's need to prove innocence and defend strengths. In addition, Olheiser views this tracking as a way to improve the industry, track the responsibility of testing firms, and eliminate some of the testing issues in the future.

- 2) The spring 2021 meeting is Kevin MacDonald's last meeting as chair of 132. The committee graciously thanked Kevin for his excellent work on the committee.
- 3) Jim Casilio will be the new chair of 132. Jim posed several open discussion questions to the committee to consider.
  - a. How can we harmonize the differences across ACI documents?
    - i. ACI 311, ACI 301, ACI 318
    - ii. Ideas on how to harmonize documents.
  - b. What should we do to address responsibilities?
    - a. A Panel discussion is a great start
    - b. What others things shall we do?
  - c. Buffenbarger will remain as secretary.
  - d. Draft Tech Note – Who is responsible for curing cylinders? The TechNote will be moved forward.
  - e. VanOcker draft – does address some of the items discussed today.
  - i. Bev Garnet will be stepping down as a member of the committee as she will be retiring. Associate member – Chad Hensley. Has agreed to join the committee.
  - ii. Jim will review the membership. Move non-participating members off the committee or elevate associate members to voting members. The membership also needs to be rebalanced. For example, VanOcker and Cleland are both engineers.

MacDonald thanked the committee members for their participation during his chairmanship.

Coleman motioned for adjournment at 6:20 pm and was seconded by all.