

318 Sub D – Members
ACI 318 Fall Convention
Philadelphia Marriott Downtown
Philadelphia, PA

Tuesday, October 25, 2016

Franklin 10

1:30 PM – 6:00 PM

Minutes

1. Call to order and welcome

Robert Frosch called the meeting to order and invited each of the members and visitors to introduce themselves.

Members in attendance:

Frosch (chair), Bertero, Correal, Decker, Dolan, Hube, Mlakar, Novak, Poston, Roberts-Wollmann, and Stark

Members with regrets:

Wood

Visitors in attendance:

Jack Moehle, Greg Zeisler, Mehrdad Sasani, Dan Mullins, Robert Esplin, H.S. Lew, Koray Tureyen, Frunalvo Galvs

2. Approval of Minutes

Larry Novak motioned and Carin Roberts-Wollmann seconded that the minutes of the Spring 2016 meeting be approved. The committee approved the minutes by unanimous voice vote.

3. Voting Procedures

Robert Frosch explained to the committee how voting should occur using the ACI website. When a member votes “Negative” (N) or “Affirmative with Comment,” (A/C) they should attach the voting template file when the first (N) or (A/C) vote is cast. The website will not allow attachment of a file for an affirmative vote. Therefore, the first opportunity to attach the file is when a (N) or (A/C) vote is cast. Once this file is attached, no additional attachments are needed for subsequent (N) or (A/C) votes as all comments are included in the attached file.

4. Main Committee Ballots

a. LB16-1

i. CD003 – Reinforcement detailing in walls

This change proposal was approved by the main committee at the Spring 2016 meeting.

ii. CD004- Voids in slabs

This change proposal was approved by the main committee at the Spring 2016 meeting.

b. LB16-3

i. CD005 – Transverse Reinforcement in Wide Beams (Dolan)

The comment and negatives on this change proposal were reviewed. Based on the discussion, it was decided to find Roger Becker's negative that prestressed should be exempted non-persuasive. It was felt that this provisions should be applicable to prestressed beams. Furthermore, it was decided to change the column label for the Table to read "Required V_s ." rather than " $V_{s,required}$ " to address comments by Wight and Wood. Larry Novak motioned and Roberto Stark seconded to approved the revised proposal. The motion was approved unanimously by voice vote and will be presented to the main committee for approval.

ii. CD006 – Composite Columns (Decker)

All negatives (with the exception of Sharon Wood's) have been withdrawn. Sharon Wood was unable to review resolution of her negatives but will do so before the main committee meeting. Larry Novak motioned and Carin Roberts-Wollmann seconded to approved the revised change proposal. The motion was approved unanimously by voice vote and will be presented to the main committee for approval.

iii. CD009 – Require Six Bars in Columns with Circular Bar Patterns (Dolan)

Based upon comments on LB16-3 and discussion within Sub D, Charlie Dolan motioned and Carin Roberts-Wollmann seconded to withdraw this proposal. Four bars have been used for years with no apparent negative ramifications. Increasing to require six bars can also be overly restrictive for small circular columns. The motion to withdraw was approved unanimously by voice vote.

iv. CD012 – Plain Concrete Footings (Mlakar)

Based upon comments from LB16-3 and discussion within Sub D, Paul Mlakar motioned and Juan Correal seconded to withdraw this proposal. The commenters provided good points regarding maintaining this requirement in the plain concrete chapter. The motion to withdraw was approved unanimously by voice vote.

v. CD013 – Plain Concrete Opening Reinforcement (Mlakar)

Due to a negative from Loring Wyllie with respect to calculating development length for #5 bars in plain concrete walls, the committee modified the language to maintain this requirement in lieu of calculation. However, an option was added to allow alternative development in cases where sufficient space is not available such as at corners of edges of walls. Paul Mlakar motioned and Randy Poston seconded to approve the revised change proposal. The motion was approved by 10 Yes, 0 No, and 1 Abstain. This change proposal will be presented to the main committee for approval.

5. Sub Committee Ballots

a. LB16D-1

i. CD007 – Two-way Slabs with Stirrups (Poston)

Randy Poston reviewed the proposal following the last meeting. After the review, he determined that no changes were needed and Fig. R8.7.6d was appropriate. Therefore, he recommended that the proposal be withdrawn. The committee agreed with this recommendation.

b. LB16D-3

i. CD010 – Structural Integrity of One-Way Slabs (Dolan)

Charlie Dolan and the committee discussed the negative votes on this item. Larry Novak brought up the point that as worded, this could be complicated rebar to place. The committee decided to remove the top bar reinforcement requirement and focus on requiring one-quarter of the bottom bars as continuity reinforcement. Larry Novak motioned and Carin Roberts-Wollmann seconded to approve the revised proposal. *The motion was approved unanimously by voice vote and will be submitted for the next main committee ballot.*

ii. CD015 – Change Maximum Yield Stress for Table 8.3.1.1 (Decker)

There was good discussion regarding the need to delete the rows of the table for Grade 40 and 75 as these Grade bars are not used and considering changes in ASTM to Grade 80. Considering potential code changes with respect to the use of higher strength reinforcement and the potential for changes to the minimum slab thickness tables, the committee decided to table this change proposal at this time and potentially address with a more holistic change.

iii. CD016 – Eliminate 0.004 Minimum Longitudinal Bar Strain Limit (Decker)

To resolve a negative by Sharon Wood, the wording of the Table was slightly modified. Additionally, Curt Decker will work to better explain in the background the effects of the change. *It is expected that this change proposal will be finalized following the meeting and submitted for main committee balloting.*

iv. CD017 – Clarify Bent Bar Provisions for Two-Way Slabs (Decker)

Based upon the comments and discussion, the decision was made to not alter the wording of the current bent bar provisions and to leave the current reference to ACI 318-82 in place. The change proposal was withdrawn.

v. CD018 – Change Notation for Width of Column Face Through which Reinforcement Passes (Decker)

This change proposal had two comments which were corrected. The comments were related to the reason for change and background and did not affect the change proposal itself. *This change proposal will be submitted to the main committee for the next ballot.*

c. LB16D-4

i. CD019 - Cutoff Point of Reinforcement (Hube)

A minor amendment was made to this change proposal. Randy Poston motioned and Charlie Dolan seconded to approve the revised version. This motion was approved unanimously by voice vote. *This change proposal will be submitted to the main committee for the next ballot.*

ii. CD020 – Minimum Thickness of One-Way Slabs Made of LWC (Hube)

The committee discussed the negative votes from the ballot. Larry Novak pointed out that the “1.09” multiplier came from ACI 213, “Guide for Structural Lightweight Aggregate Concrete.” Making the minor modification from 1.09 to 1.10 would put ACI 318 out of synch with ACI 213. Considering that this change proposal is also regarding the minimum thickness table, the committee decided to withdraw this change proposal and develop more holistic changes to the minimum thickness tables.

d. LB16D-5

i. CD021 – Shells (Dolan)

Charlie Dolan discussed with the committee the several comments received for this ballot item. Charlie is providing ACI Committee 334 a two-week period of review to submit their comments. *He will adjust the document as necessary based on the 334 comments and reballoon within Sub D.*

ii. CD022 – Reconfigure Layout of Maximum Span Ratio Requirement for Two-Way Slabs (Decker)

After a discussion of negative votes, the committee decided that this change proposal should be withdrawn. The main issue is that the change provided a general definition of the geometry of a two-way slab that can be limiting, especially considering non-rectangular geometries. *Curt Decker and Matias Hube will investigate further based on this discussion and may propose a new change proposal.*

iii. CD023 – Clarify Minimum Slab Thickness Requirement from 8.3.2.1 (Decker)

After a discussion of the negatives, Randy Poston motioned and Matias Hube seconded to approve the revised change proposal. Larry Novak commented that the current wording of the provision may be correct whereas the minimum values are not modified. Overall, the committee felt that the minimum values should be modified along with the results of the equations. The motion was approved by a vote 10 Yes, 0 No, and 1 Abstain. *This change proposal will be submitted to the main committee for the next ballot.*

6. Discussion Items

a. CD001 – Minimum Depth Tables (Poston)

Overall, it is felt that changes need to be made to the minimum depth tables and as a minimum, limitations on their applicability should be provided in the Code. Randy

Poston will provide a presentation to the main committee regarding two-way slab deflections in an effort to gain direction regarding changes to the minimum thickness tables and the Code deflections limits.

b. Unify Design Procedures for Nonprestressed/Prestressed (Roberts-Wollmann)

Carin Roberts-Wollmann will continue to work on this issue and report back to the committee.

c. Equivalent Frame / Direct Design Methods

Robert Frosch led a discussion on the possibility of eliminating the Equivalent Frame and Direct Design Method from ACI 318. Overall, the subcommittee was supportive regarding the deletion of these methods.

d. Outstanding Issues

The following issues on the agenda were not addressed due to time limitations and will most likely be discussed during an upcoming teleconference at a date to be determined: Minimum Flexural Reinforcement, Confinement in Tops of Columns and Pedestals, Retaining Walls, and Slender Columns.

7. Adjournment

The meeting was adjourned at 6:00 pm.