

ACI SUB-COMMITTEE 318-J – JOINTS AND CONNECTIONS

ACI Fall Convention

Tuesday, October 27, 2020

4:30 PM – 9:00 PM (ET); Go-to-Meeting phone conference

MINUTES

ATTENDANCE

Members Present: (10)

John Bonacci, Min-Yuan Cheng, Cathy French, Damon Fick, Mary Beth Hueste, Gary Klein, Michael Kreger, Harry Lee, Remy Lequesne, Gustavo Parra

Visitors: (3)

Karl Grassl, Neil Hammill, William Shekarchi

1. Call to order and introductions.

Meeting was called to order at approximately 4:37pm. Self-introductions of those attending followed.

2. Approval of agenda; addition of other items.

A draft agenda had been previously posted to the committee website. A motion by Cathy French, seconded by Gary Klein, was made to approve the meeting agenda. The motion was approved by acclamation.

3. Update of provisions on knee joints – Ballot CJ002a

Remy Lequesne summarized some of the comments and votes. Not all committee members had voted yet - discussion was limited.

4. Update of provisions for minimum joint depth in special moment frames – Ballot CJ003a

Remy Lequesne provided an overview of previous research recommendations for minimum joint depth and the current values included in the proposal. Discussion by committee members followed.

5. Structural integrity reinforcement in two-way slabs – Results from Ballot CJ001a

Mary Beth provided a summary of the structural integrity background. Negative votes and non-editorial comments were discussed. Mary Beth will make revisions based on committee suggestions and will initiate the second ballot for integrity reinforcement.

A 20 minute recess was taken

6. Reorganization of Chapter 15

Cathy French discussed the intent of providing a structure within Chapter 15 that easily enables the addition of future provisions. She referenced the organization of 318-19 for member chapters. After the sections have been relocated and organized, the commentary sections will be updated. John Bonacci, Gary Klein and Gustavo Parra will review Cathy's draft organization, which will be followed by a Committee ballot.

A 5-minute recess was taken.

7. Minimum depth of transverse beams

Min-Yuan Cheng and Gustavo Parra summarized the background of the 75% joint width requirement for beams assumed to provide joint confinement. Discussion by committee members followed. A code change proposal will be submitted to address problems associated with transverse beams that are significantly shallower than the main beams.

8. Future committee endeavors

a. Compression development of hooked and headed bars

Remy Lequesne provided a summary of the development length requirements for hooked and headed bars in compression and the potential for smaller calculated development lengths for the same hooked and headed bars in tension. Committee discussion of Section 18.8.2 followed. Committee noted that John Wallace may have done some relevant tests. Gustavo Parra suggested eliminating the compression development length provision for hooks. Remy will continue to review the provisions and report back to the committee.

b. Hooked versus headed bar development length

Committee discussed the overlap of 318 Sub B's efforts on the development length of hooked and headed bars. Committee agreed that 318 Sub J's scope would be more specific. The beam-column task group, 352 TG2 has discussed this topic as well. Damon Fick will keep Sub-J informed of progress and direction of Sub-B on this topic.

c. Joint deformations

Gustavo Parra summarized discussions he and Mike Kreger had regarding potential code provisions related to joint shear deformations. Committee agreed with Gustavo that adding commentary in Ch. 18 may be the most appropriate avenue at this moment. Committee members discussed the possibility of providing stress limits as a percentage of current strength limits to control joint shear deformations and damage. Mary Beth Hueste suggested reviewing the Committee 369 report for their recommendations.

9. Additional business

None discussed.

10. Adjournment

Gustavo thanked everyone for joining the meeting. A motion to adjourn the meeting by John Bonacci, seconded by Gary Klein, was approved. Meeting was adjourned at 9:05 pm.