AGENDA – FALL 2015 MEETING
Joint ASCE/ACI Committee 445 – SHEAR AND TORSION
DENVER, CO; November 7-11, 2015

Meetings
445 Shear & Torsion (Mon 2:00p-6:00p, PLAZA BALLROOM F)
445-0A Shear & Torsion-Strut & Tie (Sun 9:30a-12:30p, TOWER COURT D)
445-0B Shear & Torsion-Seismic Shear (Sun 9:30a-11:30a, PLAZA COURT 7)
445-0C Shear & Torsion-Punching Shear (Sun 1:00p-3:00p, DIRECTOR’S ROW)
445-0D Shear & Torsion-Shear Databases (Sun 2:00p-5:00p, DENVER)
445-0E Shear & Torsion-Torsion (Sun 12:30p-2:00p, DENVER)
318-0E Section and Member Strength (Tue 8:00a-12:30a, MAJESTIC BALLROOM)
318 Structural Concrete Building Code (Wed 8:00a-6:00p, PLAZA BALLROOM E)

1. Call to order – welcome (Belarbi)
2. Attendees self-introduction: name and affiliation (Group)
3. Approval of the agenda (Belarbi)
4. Approval of meeting minutes of Spring 2015, Kansas City KS (Belarbi)
5. 445 membership overview (Belarbi)
6. Update on one-way shear design proposals
   ✓ Chair’s report (Belarbi)
   ✓ Design database and design examples (Kuchma)
   ✓ Actions items and next steps (Belarbi, Sanders: 318E Chair)
7. Subcommittee reports and on-going 445 activities (Sub-Committee Chairs)
   ✓ 445-A Strut and Tie (Sanders)
   ✓ 445-B Seismic Shear (Pujol)
   ✓ 445-C Slab Shear (Ospina)
   ✓ 445-D Beam Database (Reineck)
   ✓ 445-E Torsion (Greene)
   ✓ Ad hoc committee on prestressed concrete shear issues (Matamoros)
8. Future technical sessions (Group and Sub-committee Chairs)
   ✓ Spring 2016 (Milwaukee, WI)
   ✓ Fall 2016 (Philadelphia, PA)
   ✓ Spring 2017 (Detroit, MI)
   ✓ Fall 2017 (Anaheim, CA)
   ✓ Spring 2018 (Salt Lake City, UT)
   ✓ Fall 2018 (Las Vegas, NV)
9. Technical presentations (7 mns for presentations and 2 mns for Q/A)
   1. “Challenges and uncertainty treatment in predicting shear strength by numerical analysis” Cervenka, J.
   2. “Shear design of partially prestressed concrete beams considering the variation of the neutral axis depth” Cladera B. A., Mari, A.R., Bairán, J., Ribas, C., Oller, E.
   3. “Shear friction of lightweight aggregate concrete” Sneed, L.H.
   5. “Results of shear strength Prediction Contest of 4000 mm deep slab strip” Collins, M.P., Quach, P.T., and Bentz, E.C.
10. New business (Open)
   a. Liaison reports- ACI committees
11. Next meeting and wrap-up (Belarbi)
12. Adjourn (Belarbi)
Recent Developments in Two-Way Slabs: Design, Analysis, Construction, and Evaluation
Sunday, November 8, 2015 1:00 PM - 3:00 PM, GOVERNOR'S SQUARE 11

1. Application of a Novel Shear Reinforcing Assembly for Slab-Column Connections,
   **Trevor Hrynk** (University of Texas at Austin)
2. Punching Shear Design Method of KCI 2012 Code,
   **Honggun Park** (Seoul National University)
3. The Critical Shear Crack Theory for Punching Shear Design,
   **Aurelio Muttoni** (EPFL)
4. Shear and Punching Strength of Reinforced Concrete Slabs with Truncated Pyramid Voids,
   **Dario Coronelli** (Politecnico Di Milano)
5. Boundary Condition Effects on Static Response of Ultra-High-Performance Concrete (UHPC) Slabs,
   **Bradley Foust**
6. Application of Modified Bond Model to Capacity of Ruytenschildt Bridge,
   **Eva Lantsoght** (Universidad San Francisco de Quito)
7. Punching Shear Systems for Flat Slabs-Evaluation of Tests and Comparison with Codes,
   **Dominik Kueres**
8. Inclined Stud Shear Reinforcement in Two-Way Slabs,
   **Walter Dilger**
AGENDA for ACI Subcommittee 445A Strut and Tie Models
Sunday, November 08, 2015, 9:30 AM to 12:30 PM MST, Tower Court D

445-Shear and Torsion- Monday, November 9, 2015, 2:00 PM - 6:00 PM MST, Plaza Ballroom F

1. Introductions
2. Approval of Agenda
3. Review and Approval of Minutes from Spring Meeting in Kansas City

4. STM Document – Plan to send Chapters 1 to 7 out for ballot after Denver
   a. Chapter 3 – Design Procedure (Brown, Barnes, Ramirez)
   b. Chapter 4 – Design Strength of Ties, Struts and Nodes (Tuchscherer, Anderson)
   c. Chapter 5 – Modeling and Design Consideration (Kuchma, Sanders, Brena, Habel)
   d. Chapter 6 – Serviceability Considerations (Roberts-Wollmann, Huizinga)
   e. Chapter 7 - Implementation of STM Design and Construction Details (Anderson, Klein, Yanez)
   f. Chapter 1 – Introduction (Mitchell/Bayrak)
   g. Chapter 2- Definitions and Notations (Lubell, Novak)
   h. Chapter 8 – Other STM Design Specifications, Codes and Guide Documents (Reineck, Kuchma, Mitchell)
   i. Next Step and Schedule

5. 318 Ballots
   a. CE010 – Curved Bar Node – Klein (318 Main Committee)
   b. CE040 - Prestressed Ties in Strut and Tie Models – Klein (318E Ballot)
   c. CE050 - Minimum Angle in STM –Klein (318 Main Committee)
   d. CE055 - STM - Model to Method – Novak (318 Main Committee)

6. Enhancement to 318
   a. Development of Tie Force within Nodal Zone (CE030?) - Klein
   b. Shear Friction (CE060?) - Klein
   c. Equation for Minimum Strut Reinforcement (CE050?) - Klein
   d. Evaluation of phi factors for strut-and-tie method (STM) - Sanders
   e. Efficiency Factors for STM - Kuchma
   f. Bottle shaped structures, fan shaped struts - Klein
   g. Stress within the Node - Klein
   h. Partial-width Bearing Areas - Klein
   i. Impact of Seismic Loading on STM - Sanders
   j. Buckling Concerns for Struts, limit on aspect ratio Novak
   k. Simplification of the STM - Sanders

7. New/Other Business
8. Adjournment
ACI 445C - Punching Shear
2015 Fall Meeting – Denver
Sunday, November 8, 2015
Sheraton Denver Downtown
Room: Director’s Row F
1:00 pm to 3:00 pm

AGENDA
[Please mark attendance sheet]

1. Welcome, Introductions

2. Announcements

3. Approval of Agenda

4. Approval of Kansas City (Spring 2015) Meeting Minutes

5. Presentations and Discussions:
   - ACI 318E Punching Shear Code Change Proposal (Ballot CE 020) (Ospina and Hawkins)
   - Joint ACI / fib Collaborative Punching Shear Databank Development Effort (Ospina)
   - Joint ACI/fib Punching Shear International Symposium (Ospina)

6. Other Business

7. Next Meeting (Milwaukee, April 17, 2016)

8. Adjournment
ACI-DAfStb-Group "Shear databases" / ACI Subcommittee 445-D
Invitation to the meeting at the ACI Fall Convention in Denver
Sunday, 8 November 2015, 14:00 - 17:00 h (2:00 to 5:00 pm)
room: Denver (please check)

Agenda

1. Welcome

2. Approval of agenda

3. Approval of minutes of the last meeting

4. Report on databases as DAfStb Heft 617
   - presentation of report (Reineck)
   - foreword

5. Revision of databases
   5.1 State of vuct-RC-2015
   - report on state (Reineck)
   - tests by Shioya (Bentz)
   5.2 State of vsw-RC-2015

6. Databases for shear tests on lightweight concrete beams (Reineck; Greene)

7. Criteria
   - Limit for ratio diaa/bw (continuation of discussion, see minutes Washington)

8. Next meeting Sunday 14 to 17 h (2 to 5 pm)

9. Membership

10. Other topics