Minutes - General Business Meeting

1. Call to Order – Ross Esfandiari
   a. Time
      • The meeting was called to order at 3:17 p.m. by President Ross Esfandiari.
   b. Self-introductions
      • The following members and guests were in attendance:

      Masoud Abolhassani (MatriScope Engrg. Labs)  
      Tim Casey (Construction Testing Services)  
      Dave Chippero (Testing Engineers, Inc.)  
      Miki Craig (CCTIA Staff)  
      Terry Eglund (Testing Engineers, Inc.)  
      Osama El-Fiky (Signet Testing Labs)  
      Ross Esfandiari (RES Engineers, Inc.)  
      Steve Lee (MatriScope Engineering Labs)  
      David Ryan (Twining, Inc.)  
      Troy Schiess (Neil O. Anderson/Terracon)  
      Augie Smarkel (Mid Pacific Engineering)  
      Colin Stock (Neil O. Anderson/Terracon)  
      Chris Zynda (JJ Albanese, Inc.)

2. Program – Chris Zynda, JJ Albanese, Inc. (0.2 CEUs)
   a. Roundtable Discussion – Shotcrete Compliance and Testing
      • President Esfandiari introduced today’s Guest Speaker, Chris Zynda. Mr. Zynda has been in the shotcrete industry for 40 years, starting as a laborer and working his way up. He has held a seat on ACI’s 506 and 660 committees for more than 40 years as well. He is the director for all ACI shotcrete nozzleman certifications in the State of California and Northern Nevada. Mr. Zynda is the President of the Shotcrete Concrete Contractors Association in California. His experience goes back to the days when a shotcrete cylinder was actually shot into hardware cloth. He noted there had been major changes in ACI 506 recently, and his purpose would like to update CCTIA members on what was coming, especially as most project specifications had not caught up with those changes yet.
      • While shotcrete is a useful construction tool, it has many quality control issues. Mr. Zynda reviewed applicable reference documents appropriate for project specifications – updated to ACI 506.2-13.
      • Preconstruction panels are taken based on the most congested and/or complicated area(s). Once cores are removed, the cores are then measured for visual evaluation. The same flaw size in a small core should be evaluated very differently from a large core. There is no specific formula to use as a multiplier for this type of evaluation during grading. The process is very subjective.
      • ACI 506R-05 states core grading is only intended for use in qualifying shotcrete nozzlemen, not to evaluate shotcrete construction.
      • Per ACI 506.2-13, preconstruction test panels are for the evaluation by the project architect or engineer prior to shotcrete placement. Once the panels are cored, the cores should be provided to the design professional for evaluation. If the first panel fails, a second panel may be prepared. If the second panel fails, an alternate construction configuration is recommended.
      • The design professional should evaluate all shotcrete cores based on ACI CP-60, the study guide for the shotcrete nozzleman certification program. The grading system is contained within it, which is the same layout as the superseded ACI 506-95.
      • CBC Section 1910 addresses shotcrete construction, and contains certain exemptions for prequalification test panels. ASTM is considering increasing test panel size to 24”x24”x5.5” (current minimum is 18”x18” due to aggregate size).
      • ACI is considering a shotcrete special inspector certification. It was suggested it would not be appropriate for ACI to certify an inspector, as they have typically concentrated on testing technicians. A better approach if
there is a problem with the quality of special inspectors would be to collaborate with ICC, as shotcrete inspection is a part of ICC’s Reinforced Concrete Special Inspector certification.

- A question was raised as to why the test panel coring location must be at least the core diameter plus one inch from the edge. Mr. Zynda responded this is a leftover from the old gunite days, and the requirement in no way intimates the edges of the panel and/or wall being constructed is questionable.
- It was commented that when there is a shotcrete compression test failure, the design engineer does not buy off on the “85% rule”, creating the problem of how to obtain 3 more cores. Based on the current ASTM standard, there is insufficient area remaining to take additional cores from the same panel.
- Mr. Zynda is supportive of using cylinders during construction, but admits there are problems. The shotcreting process removes almost all the air during placement, thereby increasing compressive strength. Casting a cylinder would allow the air to remain in the material, reducing the compressive strength by 200 psi or more.
- A member noted preconstruction panels are frequently used to also qualify the shotcrete mix. Because of this, many engineers are requesting additional cores from the panel for compression testing. Mr. Zynda opined this could be done, but should only apply to one panel per nozzleman in order to comply with ASTM’s core spacing requirements.

3. Approval of Minutes
      • The minutes were approved as submitted.

   a. Income Statement (handout)
      • Executive Secretary Miki Craig provided a copy of the Income Statement through July 31, 2015, evidencing receipts totaling $13,685.00 and expenses of $5,457.25, leaving net reserves of $8,227.75.
   b. Balance of Account
      • The balance of the checking account at July 31st was $17,588.78.

5. Committee Reports
   a. ICC/Local Jurisdictions – Miki Craig, Chair
      • No activity – drop from agenda
   b. ASTM – Jeffry Cannon, Chair
      • No report
   c. SEAONC CQA – Ross Esfandiar, Chair
      • Member Terry Egland reported the Special Inspection and Structural Observation guideline has been updated to the 2013 CBC, and has been submitted to the SEAONC Board of Directors for review and final approval prior to publication. The structural wood inspection guideline is undergoing grammatical check now, and should go to Board in late September. He noted there would be seminars on both guidelines in the near future.
      • The CQA is looking for new assignments, and would appreciate any suggestions the CCTIA membership might have.
   d. DSA – Augie Smarkel, Liaison
      • Liaison Augie Smarkel reported he had spoken with Eric France regarding how he could best serve both organizations. Mr. France suggested the best thing would be to track the Building Standards Commission activity pertaining to code changes, and to follow up on comments regarding the LEA fee increase.
e. Caltrans – Jim Backman, Chair
   • No activity – drop from agenda
f. Membership – Jim Backman/Mike Parker, Co-Chairs
   • No activity
g. Newsletter – Miki Craig, Editor
   • No activity – drop from agenda
h. Standard of Practice – Miki Craig, Chair
   • No activity – drop from agenda
i. Education – Elizabeth Clarke, Chair
   • No report
j. FAQ’s – Terry Egland, Chair (handout)
   • Chair Terry Egland noted he was jump starting the program with CQA once again, and would like to
     collaborate with CCTIA. He provided a copy of a draft FAQ he is working on, entitled “Prequalified Column
     Splice”. Comments should be directed to Chair Egland, and would be greatly appreciated.
   • President Esfandiari described a recent project where the batch plant in San Francisco used recycled water
     in the mix, which resulted in early setting, causing large voids. He suggested this practice may be something
     the concrete industry needs to address. Chair Egland suggested he submit the question about proper usage as
     an FAQ for committee action.
k. Programs – Elizabeth Clarke, Chair
   • Next month’s guests will be Chet Widom, State Architect, and Doug Humphrey, DSA Regional Manager in
     Southern California.

6. Old Business
a. City of Berkeley Task Force re New Ordinance for Inspecting Elevated Exterior Appurtenances (Balconies,
   Walkways, Handrails, Staircases) – Terry Egland
   • Member Egland reported this issue has become a political hot potato. There still needs to be clarification
   from the State as to who may conduct the inspections. The City of Berkeley currently maintains a contractor,
   licensed pest control person, architect, or professional engineer may inspect and pass judgment as to whether
   the structure is safe or not. The issue should be coming on the Board of Registered Professional Engineers
   and Land Surveyors’ agenda in the near future. The theory is that the problem is a waterproofing issue, rather
   than a structural one. The City of Berkeley is looking to the structural engineers on the committee to write the
   inspection guideline. Member Egland believes most of the inspections will be done by the pest control people,
   as they are the ones willing to do it at the cheapest price. Berkeley used the same program as San Francisco,
   with the exception of requiring inspections every three years rather than every five. Concrete structures are
   exempt; wood and steel are not. All R-1 and R-2 occupancies must have an initial inspection by January 2016.

7. New Business
a. AMRL Laboratory Accreditation to ASTM E329 – Miki Craig
   • Executive Secretary reported on her recent phone call from Eric France, where he indicated AMRL is
     investigating the feasibility of providing an accreditation component for ASTM E329 relating to special
     inspectors. The proposal sounded very similar to IAS’s and A2LA’s accreditation programs, and would be
     made available as an add-on to AASHTO. Member Terry Egland volunteered to represent CCTIA on AMRL’s
     exploratory committee, if and when one was created.
8. Adjournment
   a. Time
      • There being no further business, the meeting was adjourned at 5:42 p.m. by President Esfandiari.
   b. Next meeting
      • The next meeting will be held September 25, 2015, at the Four Points by Sheraton LAX in Los Angeles.

Respectfully submitted,
Miki Craig
Executive Secretary
## CCTIA
### Operating Statement

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<td>Dues &amp; Initiation Revenues</td>
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<td><strong>Total Revenues</strong></td>
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| **Expenses**         |             |             |
| Education Programs   |             |             |
| Executive Secretary Services | 500         |             |
| Hemsley Award Expenses | 200         |             |
| ABM Expenses         | 127.00      | 9,500       |
| General Meetings     | 5,330.25    | 10,500      |
| Newsletter           | 500         |             |
| Office Supplies      | 500         |             |
| Postage              | 500         |             |
| S I Guidelines       |             |             |
| Stationary & Printing| 250         |             |
| Taxes & Licenses     | 20          |             |
| Website              | 120         |             |
| **Total Expenses**   | 5,457.25    | 22,590      |

**Net Reserves/Losses**

$8,227.75  $4,690

Year-to-Date Through
July 31, 2015
PREQUALIFIED COLUMN SPLICe

Q

Does anyone have an opinion on whether this would be a pre-qualified joint per AWS D1.1? Note there is only an access hole in the top tier column, and thus the backing bar does not actually lap past the joint. D1.1 is silent on the actual width of backing. All of the pre-qualified joints with backing show the backing lapping past the joint in butt joints, but no minimum dimension is ever shown or discussed. In a Tee joint the backing of course stops right at the edge of the joint, but there is continuous base metal along that edge in that case. In the configuration shown, except at the column web there is nothing behind the intersection of the corners of the backing and the bottom tier flange.

Submitted by Art Dell S.E. in San Francisco, California

Response Submitted by Ross Esfandari, P.E.

A

No, the detail is not pre-qualified as per AWS D1.1 Table 3.4. A butt joint (B U4a) needs the back-up bar to overlap the flanges at least 1/8", as there needs a bit of a meat to prevent the weld burning through the backing. Thus you should have a weld (rat) access hole on both sides.

Alternatively you can run an 1/8" fillet along the bottom of the back-up bar reinforcing it, so it'll have a little meat for melt through.

The detail as drawn is notorious for UT failure, at the discussed area.

Ross Esfandari is owner of RES Engineers, Inc., a registered engineer in California and AWS Certified Welding Inspector. He can be reached at RossE@RES Engineers.com

Response Submitted by Dan Watanabe, CWI

A

I agree the referenced joint would not be pre-qualified. To support the welding operation without excessive edge melting I would recommend a larger overlap, 1/4" to 3/8", to ensure adequate edge distance. As suggested above, the joint could be back-gouged and a reinforcing fillet added. If there were adequate access an alternate joint detail would be a pre-qualified B-U4b.

Dan Watanabe is Division Manager at Testing Engineers, Inc., and AWS Certified Welding Inspector. He can be reached at DanW@Testing-Engineers.com

Got a question?
Send it to Q&A, SEAONC/CCTIA, 2811 Teagarden St. San Leandro, Ca.94577 or email terry@testing-engineers.com

This is the author's opinion, not necessarily that of CCTIA
To read more or respond, go to www.CCTIA.org