



THE TEST REPORT

A Newsletter of the California Council of Testing and Inspection Agencies

PRESIDENT'S CORNER –

By Elizabeth Levi

October 2007

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We are almost through the third quarter of the year and the association has been quite busy with the different agenda items we continued and started at the beginning of the year.

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The Standards of Practice Committee for CCTIA were asked by the a group of Joint Committee members representing six Bay Area Jurisdictions to assist them with review of their Inspection and Testing Requirements. We were all able to come together and work out the different issues on each side and help create what the jurisdictions will be requiring. My gratitude and thanks to the many members who sent in their comments as well as my fellow Committee members; Jim Backman (CEL), Miki Craig (DCI), Terry Egland (TEI), Dan Infrerra (Kleinfelder), and David Chippero (Terrasearch). We will be receiving an advance copy of the Special Inspector Program that will

most likely commence in a few months.

We are moving forward with our Continuing Education Classes and are planning to hold two of them by the end of year. Greg Ruf of Krazan is leading this Committee with assistance from Miki Craig, Jeffrey Cannon and I. As soon as the course content is determined, we will get the information out to the Industry. These classes will be very important to those renewing their certifications and also aid in financing the ASFE RO for our organization.

We were quite successful with our Southern California Industry meeting in Ontario, CA this past April. It was one of the largest meetings we have had this year with over 35 attendees. Our guest speaker was Eric France, with the Division of the State Architect. He brought a very informative program which sparked interest for a future Southern California DSA Roundtable for further clarification. Our next Southern California venue will be in San Diego at the Island Palm Hotel (Shelter Island) on October 26, 2007. With still so many issues surrounding them with DSA Requirements, we have asked Eric France to come back and speak to us. The Association needs to hear more from the South and the issues that are affecting them so that we can tackle them in numbers.

Have you read our FAQ's? If not, you are missing some great information. Our very own Terry Egland with a host of several members put together a question and answer page with different topics for our industry. All FAQ's are posted on our website and can be found easily for reference. These FAQ's are well read

within the industry by many Structural Engineers, Architects, and City Building Inspectors/Officials.

Don't forget, the Annual Business Meeting is approaching and we will be at the Treasure Island Hotel & Casino in Las Vegas, NV. We have planned a great event for you and look forward to seeing all of you there. Please plan on playing golf with us on the Friday! Bill Cale (CTS) will be setting up the golf package for us and is sure to be a fun time.

We all owe a huge thank you to Michael Parker (TEI) who continues to do a fantastic job with the newsletter. Please remember to get articles into Michael so that we can continue to publish quarterly. We need your news items to notify the membership!

We have a lot of work to accomplish together with all the different issues currently surrounding the California Construction Inspection and Testing industry. Acting collectively, I believe CCTIA can improve our Professional image. We not only have the expertise and experience through our own firms, but the strength that comes from bringing that together through membership standing together. Please continue to bring your ideas and concepts to our meetings so that we can work together to better our industry.

We're on the Web!
<http://www.cctia.org>

Tribute to Gary Balbi

By Robert Tadlock—Principal, Matriscope



On Tuesday evening, June 26, 2007, Mr. Gary C. Balbi, a long time member of our quality assurance family, and my business partner at MatriScope Engineering Laboratories, passed away. Gary was an active member in the American Concrete Institute (ACI), past President of the Association of Northern California Testing and Inspection Agencies (ANCTIA) presently known as the California Council of Testing and Inspection Agencies (CCTIA), as well as a past President of the Fairfield Lyons Club where he has remained an active member since 1986.

Gary started his career in the geotechnical and material testing industry with R. W. Brandy Engineers performing field soils and asphalt testing at the Stockton Metropolitan Airport and Sacramento International Airport. In 1969 he joined Ed and Jim Kleinfelder as one of their first employees to work at the newly founded Kleinfelder & Associates. Seeing an eager learner and dedicated employee in Gary he was swiftly nominated to assist with the new international airport located in Riyadh, Saudi Arabia. In Riyadh he worked side by side with Rick Toy (Kleinfelder, Stockton) performing laboratory and field testing

related to the new airports geotechnical investigation. After serving sufficient time in the 115° desert heat he passed the rains on to Ray Costa (Kleinfelder, Sacramento) and headed back to California where he managed numerous start up offices for the rapidly expanding Kleinfelder.

In 1982 Gary and Phillip Chang started Balbi & Chang Associates and BNC Testing Labs in Fairfield. They serviced many of the local commercial, residential and public works developments in the ever expanding Fairfield/Vacaville region until 1998. In 2000 Gary joined the Sacramento office of Smith Emery as Vice President of Construction Services. Ultimately founding the new enterprise of MatriScope in September of 2003.

Gary has had a long career in our industry mentoring many technicians in the “old-school” ways of engineering and testing. In the past few years as Gary’s business partner, I found him to be a joy to work with and a counter balance to the high energy and demanding business of construction. Gary touched many lives during his career and was always available to council a person through their own struggles while never complaining of his own recovery from bladder cancer which started in 2000. The sadness we feel after learning of Gary’s passing has been replaced with the happy memories of working with a great friend and mentor.

FAQ: What Variations Can Be Developed From a WPS?

Question: Does a PQR for a butt joint qualify a WPS for a T or corner joint with the same weld size? Also, does a PQR for a groove weld qualify a WPS for a fillet weld of the same size?

Dan Watanabe manages the Metallurgical Laboratory for Testing Engineers, Inc. He can be reached at DanW@Testing-Engineers.com

Answer: Yes, WPS qualification of a complete joint penetration (CJP) groove weld (butt joint) qualifies tee and corner (CJP & PJP) joints within the limits of the qualified WPS, it also qualifies fillet welds within the limits of AWS D1.1 Table 4.1 & 4.2 Note 4. Most fillet welds are afforded pre-qualified status per AWS D1.1 Section 3.9

Got a question?

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

When responding to frequently asked questions, the apparent code answer is not always what the inquirer may be seeking. When reviewing and approving welding procedure specifications, the Engineer has the authority to “relax” code requirements or enforce more stringent requirements. In this case, it is possible that the project team was looking for a more comprehensive analysis due to a critical connection required by their design. Following is an interpretation of the code with that thought in mind.

For a complete joint penetration (CJP) groove weld, at first glance, yes. AWS D1.1-06, Section 4.9.1.1 Corner or T-Joints states “Test

specimens for groove welds in corner or T-joints shall be butt joints having the same groove configuration as the corner or T-joint to be used on construction....”

However, AWS D1.1-06, Table 4.3, Note 2. states “If a PJP bevel- or J-groove weld is to be used for T-joints or double-bevel- or double-J-groove weld is to be used for corner joints, the butt joint shall have a temporary restrictive plate in the plane of the square face to simulate a T-joint configuration.”

Welding Procedure Specifications (WPSs) requiring qualification by test, resulting in Performance Qualification Test Records (PQRs), are typically done to qualify an unproven joint configuration, base metal, weld metal combination. The ability of a/welder to accomplish a sound weld during construction using this type of WPS is very important.

It is recommended that WPSs that are not pre-qualified for T-joints and/or corner joints with J-grooves or double-bevel groove or double-J-groove, whether CJP or PJP, be qualified using a temporary restrictive plate, prior to approval by the Engineer.

2.Yes. AWS D1.1-06, Table 4.2, Note 4. states “CJP groove weld qualification on any thickness or diameter shall qualify any size fillet or PJP groove weld for any thickness.”

Dave Palfini is a principle at Testing Engineers, Inc. and a ASNT Level III and AWS – Senior CWI. He can be reached at DPalfini@Testing-Engineers.com



FAQ: Specified Epoxy or Equal

Question: On this project the Structural Engineer has specified a brand name epoxy or APPROVED EQUAL but the contractor wants to use a different brand “the equal”. What constitutes an equivalent epoxy?

Answer: Let’s talk about the different types of adhesives first. There are 2 primary types of adhesives: pure epoxies, which depend on the physical mixing of the 2 parts (resin & hardener) and vinyl esters & acrylics, which depend on a polymeric chemical reaction between 2 parts (resin & initiator). There are fast set & standard (slower) set versions of epoxies. The vinyl esters & acrylics typically gain strength quickly & can have load applied accordingly. Acrylics work well at low temperatures. Some products do not have good long term creep performance, which is an issue when constant loads are applied.

The application drives what is specified.

The chemical formulations provide the performance characteristics and they can **vary greatly**. So it’s not just a matter of load-carrying capacity when looking to determine an “equal” or “equivalent” epoxy. The application drives what is specified. In some cases it may not make any difference which product is used (e.g. a hold down inside a wall). In others it is critical (e.g. a suspended ceiling). Therefore the issue of “or equal” for adhesives is something that only the specifier (project engineer)

who knows what is needed for the specific application, can answer.

It should also be noted that when a specification included on Approved (Building Department approved) plans includes an allowance of an “approved equal” or “approved equivalent” the responsible design professional must provide the Approval. Where the plans include a simple allowance of an “equal” or “equivalent” the responsible design professional should be requested to provide their approval for a proposed substitution based on the variable performance characteristics of the numerous epoxies available as discussed above.

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GOT A QUESTION?

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

DSA Advisory Board Testing and Inspection Committee Activities

By Dan Cherrier—BSK & Associates, Inc.

Change happens very slowly in DSA circles. Unfortunately, two of the committee members that might have voted our way at the September 13, 2007 meeting were absent, while some of the most vocal industry opposition members were present. As industry’s representative, I have learned it requires posturing and positioning to effect change, rather than a more direct approach. This is especially true when dealing with the full Advisory Board. The current motion regarding modifying the Code section requiring using “all means necessary” for welding inspection is a good start.

Conversely, however, the Committee is growing tired of the rhetoric pertaining to the LEA labs being held to a higher standard than the independent inspectors. Additionally, the only support we had for changing the welding inspector qualifications was from Dennis Shallenberger. Unfortunately, as Chair of the Committee, he is not entitled to a vote.

Last January, I addressed these three issues on behalf of the industry at the open hearings of the Building Standards Commission (BSC). There was discussion on all of them, but especially the requirement of AWS CWI certification for welding inspectors, as it gives one organization a monopoly.

The Commission requested a report back from Chip Smith by the end of the year.

Public comment concerning the lack of progress by DSA and the impact some of these issues have on our industry was offered at the BSC’s meeting on September 20th. I commented on the double standard for LEA labs, and the welding inspector qualifications, but not on the “all means necessary” language as that may work itself out. All it will take is one telephone call from the BSC to the State Architect to get these issues back on track.



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NRMCA Launches Self-Consolidating Concrete Website



The National Ready Mixed Concrete Association (NRMCA) has launched a new website, www.selfconsolidatingconcrete.org, to support the growing interest in high-performance, self-consolidating concrete. Self-consolidating concrete, also known as self-compacting concrete is a highly flowable, non-segregating concrete that can spread into place, fill formwork and encapsulate even the most congested reinforcement, all without any mechanical vibration.



It is a concrete mixture that can be placed purely by means of its own weight with little or no vibration. Adjustments to traditional mix design and the use of superplasticizers creates flowing concrete that meets performance requirements. SCC's unique properties give it significant economic, constructability, aesthetic and engineering advantages.

Southern California Report

I have been speaking to many Representatives from the Southern California Region for CCTIA as well as some non-members, and the topic that is coming up is always DSA Regulations. CCTIA is working diligently with the DSA folks to find an open forum to discuss the inconsistencies happening in the field between labs, inspection staff and Project Inspectors. Our upcoming San Diego meeting on 10/26/07 will try to focus on some possible solutions as well as the efforts being made by all in the industry to create a more workable program. We are seeking involvement from the local DSA staff as well as from our own Industry Experts.

Specifically, for work on DSA projects in Southern California, most Project Inspectors hired by the School Districts, believe that the Testing Laboratory is a laboratory only. Samples are transported by the Project Inspector to the Laboratory and none of the onsite testing work is borne by the Lab itself.

Although this is not what DSA wants or expects, there is a significant amount of projects that go in this manner without DSA's knowledge or supervision.

Many of the labs are not receiving support from the School District's themselves as the cost of retaining our services seem expensive to the Owner. Education and compliance of our services to the District(s) often seem futile as some of the Project Inspectors are allowed to dictate what Testing Lab will be assigned.

It is our goal through CCTIA to bring a Round Table together with DSA District Staff, Testing Industry representatives, and LEA Program Managers to produce an effective working relationship in Southern California for DSA Projects. We must be part of the solution to be effective producing qualified and quality observations and testing. We must hold accountable those that are working outside the regulatory compliance for DSA to manage quality control.

Please plan to join us in San Diego at the Best Western Island Palms on Shelter Island on October 26, 2007 for more on this topic.