

# CALIFORNIA COUNCIL OF TESTING AND INSPECTION AGENCIES

February 26, 2015 Four Points by Sheraton 5115 Hopyard Road Pleasanton, CA 94588

# Minutes - General Business Meeting

- 1. Call to Order Elizabeth Clarke
  - a. Time
    - The meeting was called to order at 3:12 p.m. by President Elizabeth Clarke.
  - b. Self-introductions
    - The following members were in attendance:

Jim Backman (Consolidated Engineering Labs)
Tim Casey (Construction Testing Services)
Dave Chippero (Testing Engineers, Inc.)
Elizabeth Clarke (Structure Materials Group)
Cliff Craig (Structure Materials Group)
Miki Craig (CCTIA)

Terry Egland (Testing Engineers, Inc.)
Ross Esfandiari (RES Engineers, Inc.)
Julia Moriarty (ENGEO Incorporated)
Dennis Ness (BSK Associates)
Tim Rodriguez (BSK Associates)
Mike Zell (Inspection Services, Inc.)

### 2. Installation of Officers - Elizabeth Clarke

a. Retiring President Elizabeth Clarke thanked the chairs and members who served on various committees last year and acknowledged the service of the officers and directors. She then introduced the newly elected 2015 officers and directors who were present, and presented the Council gavel and block to President Esfandiari as a symbol of his new office.

President: Vice President: Ross Esfandiari Tim Rodriguez

Secretary/Treasurer:

Mike Zell

Directors:

Jim Backman

Dave Chippero

Tim Casey

Director Mark Hahle was not in attendance. Elizabeth Clarke will serve on the Executive Board as Past President.

- b. Newly installed President Ross Esfandiari thanked Elizabeth Clarke for her service as president, and presented her with a commemorative plaque. He went on to thank the membership for electing him to serve this year. President Esfandiari noted the organization needed to work harder on participation and membership. He thought committee work had been excellent, and said he is seeking a new DSA liaison, possibly someone from the Sacramento area.
- 3. Approval of Minutes
  - a. December 28, 2014
    - The minutes were approved as corrected.
- 4. Financial Report
  - a. Income Statement (handout)
    - Executive Secretary Miki Craig provided a copy of the Income Statement for the fiscal year ended December 31, 2014. CCTIA took in \$17,560.00 in revenues, had expenses totaling \$16,211.47, leaving net reserves of \$1,348.53.
    - Executive Secretary Craig provided a copy of the Income Statement for January 2015, evidencing receipts totaling \$10,400.00 and expenses of \$127.00, leaving net reserves of \$10,273.00.
  - b. Balance of Account
    - The balance of the checking account is \$19,634.03.

# CALIFORNIA COUNCIL OF TESTING AND INSPECTION AGENCIES



### c. 2015 Dues Statements

- Executive Secretary Craig reported statements were mailed to twenty-four current members and one withdrawn member. To date, eighteen firms have paid. Emails have been transmitted to those members who have not yet renewed.
- d. Status of 2014 Federal & State Tax Returns
  - Executive Secretary Craig reported both returns have been filed.
- e. Status of Annual Statement of Non-Profit Corporation
  - Executive Secretary Craig reported she would file the statement following today's installation of officers.

## 5. Committee Reports

- a. ICC/Local Jurisdictions Miki Craig, Chair
  - · No report
- b. ASTM Jeffry Cannon, Chair
  - Member Terry Egland reported there is yet another ballot for E329. The C-9 committee is having trouble defining who exactly should be accredited now that all references have been converted to agencies. The situation is similar to the old SIC Committee dilemma of how to recognize an agency without a laboratory.
- c. SEAONC CQA Ross Esfandiari, Chair
  - Member Terry Egland reported he had sent out a draft copy of the guideline for wood inspection to most CCTIA members but has not received any comments back. CQA member Tim Hart has been giving a program based on the guide, which might be beneficial to do for CCTIA members. He is not sure when the document will be published, perhaps within the next six months. The building code is vague on inspection requirements, and this document explains the pertinent details. Member Egland recently received a T&I sheet from Menlo Park that clearly detailed the wood inspections that would be required.
  - Member Egland went to report the special inspection guideline is still in progress. It has been cumbersome to complete as so much of the pertinent information is no longer in the code, but included in a multitude of reference documents. As with the other disciplines in Chapter 17, the masonry table will be removed in the 2015 IBC, and will be referenced in TMS documents.
- d. DSA Chair TBD (attachment subsequent to meeting)
  - Member Terry Egland reported there is a new Form 291 on DSA's website, which he does not particularly like.

<u>Executive Secretary's Note</u>: A copy of the referenced DSA-291 was downloaded for inclusion with the meeting minutes. Upon researching, it was confirmed the new form (rev. 10-27-14) is identical to the draft form (rev. XX-XX-14) presented by State Architect Chet Widom at CCTIA's September meeting held in Los Angeles.

- e. Caltrans Jim Backman, Chair
  - · No report
- f. Membership Jim Backman/Mike Parker, Co-Chairs
  - In conjunction with the discussion regarding outstanding membership renewals, Member Cliff Craig opined CCTIA should be able to identify the value of the organization by use of the blue book. It should be noted that the Council has been around a long time, and has been effective on behalf of the industry.
  - Executive Secretary Craig reported CCTIA lost eight members in 2014, and may potentially be losing six more this year. A lengthy discussion ensued on what could be done to interest membership and meeting attendance. Suggestions culminated in the formation of a new committee on programs, which Past President Elizabeth Clarke will Chair. President Ross Esfandiari and Member Cliff Craig will assist.
- g. Newsletter Miki Craig, Editor
  - The Executive Board will make a decision as to the value of continuing to publish a newsletter.

# CALIFORNIA COUNCIL OF TESTING AND INSPECTION AGENCIES



## h. Standard of Practice - Miki Craig, Chair

- It was suggested the Executive Board also evaluate the necessity of this committee.
- Member Cliff Craig commented CCTIA's blue book may have effectively been replaced by ICC's Special Inspection Manual as the standard of practice for our industry. ICC's publication addresses the responsibilities of the Structural Engineer, Architect, contractor, special inspection agency, and jurisdiction, so there is not much to be improved upon. He does not feel CCTIA should continue to publish its guideline. Secretary/Treasurer Mike Zell inquired if CCTIA should endorse ICC's manual. It was noted this organization has never endorsed an outside organization's publication.
- The Standard of Practice Committee was tasked with obtaining and evaluating copies of all available publications addressing the standard of practice for CoMET, and offer its recommendation to the membership.
- i. Education Elizabeth Clarke, Chair
  - Past President Clarke asked if there was still interest in hosting educational programs for CEUs. Upon confirmation, she stated she would work on the logistics and provide dates, proctors, and locations at next month's meeting.
  - Vice President Tim Rodriguez noted ICC's requirements for CEU's have changed, and the entire renewal process is now being done online no paper applications. It was also noted that ICC is now randomly checking to verify CEU's.
  - A discussion was held on the feasibility of holding webinars in lieu of the classroom setting. The difficulty of being able to confirm an attendee was actually sitting at the computer paying attention was noted.
  - Finally, it was decided to present CEU's for meetings that have topical guest speakers. Executive Secretary Craig will develop a database to track attendees and subject matter for CEU verification. She will also assist in contacting potential speakers.
- j. FAQ's Terry Egland, Chair
  - · No report

#### 6. Old Business

- a. Bay Area Architect's Continuing Complaints
  - President Esfandiari noted that Randy Collins is again complaining to SEAONC's CQA Committee that he is finding it necessary to "beg" for copies of reports from the testing agencies. President Esfandiari had replied it might have something to do with his name being omitted from the distribution list during the project set up process especially on small projects. It was noted that in this particular case, the "offending" agency was not a CCTIA member.
- b. Calibration of Impact Guns
  - In a follow up to an item originally discussed at the December meeting, Member Terry Egland reported DSA's Eric France has taken a firm stand on this issue, and the testing agency is definitely NOT required to calibrate the contractor's impact guns for the installation of screw anchors. He recommends contacting Mr. France if there is any more trouble in this regard.

### 7. New Business

- a. DSA Proposed Changes to the 2016 CBC (handout)
  - Member Terry Egland provided copies of DSA's "Draft Proposed Modifications to Part 1 & 2 Related to Testing and Inspection". He has been asked to sit on a task force to review and make recommendations. It was noted in the December meeting that DSA appeared to be seeking to remove many outdated tests and/or inspections during the next code cycle. This document demonstrates that DSA does not want to give away all the tests, but appears to be willing to modify them. Members are asked to send comments to Member Egland as soon as possible in order to be included in the task force's discussion.

# Category Summary

Date Range:

Custom Dates (1/1/2014 - 12/31/2014)

Accounts:

All Accounts

Categories:

All Categories

Tags:

All Tags

Type:

Summary for all categories

	Curimary	or all categories			
					Show Memo/Notes
•	Money In				\$17,560.00
	Dues & Initiation Rev	renues			\$15,600.00
	2014 Annual Dues				\$15,600.00
	Meeting Revenues				\$1,960.00
	2014 ABM Registra	tions			\$900.00
	2014 ABM Sponsor	rships			\$700.00
	2014 Mtg Registrati	lons			\$360.00
*	Money Out				-\$16,211.47
	Executive Secretary	Services			-\$500.00
	12/15/2014	B of A Checking 74215	Michelle Craig		-\$500.00
	Meeting Expenses				-\$14,348.27
	2014 ABM				-\$2,018.49
	2014 General Meeti	ings			-\$10,797.03
	2015 ABM				-\$1,532.75
	Office Supplies				-\$1,004.81
	Postage				-\$49.00
	Stationary & Printing				-\$169.99
	Taxes and Licenses				-\$20.00
	Website				-\$119.40
	Email- Website Hos	sting Services			-\$119.40
	12/15/2014	B of A Checking 74215	Michelle Craig		-\$119.40
				Money In:	\$17,560.00
				Money Out:	-\$16,211.47
				Net Total:	\$1,348.53

# Category Summary

Date Range: Custom Dates (1/1/2015 - 1/31/2015)

Accounts: All Accounts

Categories: Dues & Initiation Revenues, Dues & Initiation Revenues:2010 Annual Dues, and 55 more

Tags: All Tags

Type: Summary for all categories

				Show Memo/Notes
Money In				\$10,400.00
Dues & Initiation Rever	nues			\$10,400.00
2015 Annual Dues				\$10,400.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
1/29/2015	B of A Checking 74215	Deposit		\$650.00
Money Out				-\$127.00
Meeting Expenses				-\$127.00
2015 ABM				-\$127.00
			Money In:	\$10,400.00
			Money Out:	-\$127.00
			Net Total:	\$10,273.00



# LABORATORY OF RECORD VERIFIED REPORT

This form shall be completed by the Engineering Manager of the Laboratory of Record (LOR) approved by the DSA Laboratory Evaluation and Acceptance (LEA) program, in accordance with California Code of Regulations (CCR), Title 24, Part 1, Section 4-335/336 and DSA Procedure PR 13-01. The completed form shall be submitted to the design professional in general responsible charge, DSA, the project inspector and the school board.

Scho	ool District/Owner:		DSA File #:
Proie	ect Name/School:		DSA App. #: -
	of Report:	Number of Attached Pages: (If none, enter zero.)	DSA 152 Card #(s):
the co	onstruction documents, duly approved	ments, referred to below, are those portions of by the DSA, that contain information related to Safety, and Accessibility portions of the project	List all inspection card numbers for which this verified report applies.
сом	PLETE SECTIONS 1, 2, 3 & 4 AND	PROVIDE ALL REQUIRED DOCUMENTAT	ON
1.	NAME OF LABORATORY:		LEA #:
2.	REASON FOR FILING THIS VERIF	TED REPORT: (Check applicable box)	
		cted form DSA 152 Inspection Card <b>Section</b> additional information and instructions.	Numbers)
	Final Verified Report: (Conclusion	n of structural testing/special inspection progr	am)
	Construction work suspended f	or more than one month	
	Termination of laboratory service	es prior to completion of testing/inspectio	n program
	DSA Request dated:		
3.	SCOPE OF LABORATORY OF RE	CORD WORK: (Check applicable box)	
O	Testing Only Verified Report: The subcontracted LEA laboratories. For Tests Only.	nis report covers structural/material tests perfo for this scope, the term tests/inspections as us	armed by this laboratory and any of its sed in this document is defined as "Structural
O	Combined Verified Report: This and any of its subcontracted LEA "Structural Tests and Special Insp		ecial inspections performed by this laboratory pections as used in this document is defined as
4.	CERTIFICATIONS: (Complete A t	hrough J by checking the boxes and providing	all required documentation)
A.		ivil engineer charged with engineering manag and 4-335.1 of Part 1, Title 24, CCR (2013 CE	erial responsibility for the laboratory of record 3C).
В	tests/inspections program, incl	irements of Sections 4-335 and 4-335.1 of Pa uding verification of qualifications/certifications s and including quality control program/proce	rt 1, Title 24, CCR (2013 CBC) to conduct the s and direct supervision of all personnel dures and records retention.
C.	☐ I have personally reviewed the construction documents.	tests/inspections requirements (including the	approved DSA Form 103) of the DSA-approved
D.	Tests/inspections covered by taboratory or have been subco	his report are within the scope of services aut ntracted to another LEA laboratory approved l	horized by the DSA LEA Program for this by DSA to perform such services.
E.	structural testing services exce Verified Reports, qualified and inspection services.	tified technicians under my supervision condu- ept as authorized and approved by DSA, per C appropriately certified special inspectors under ubcontracted special inspection services, I have equirements of ASTM E 329.	BC Section 4-335(c) and, for Combined er my supervision conducted all special
F.	☐ I have reviewed all tests/inspe performed by this laboratory's	ctions reports conducted by this laboratory an subcontractor(s).	d any tests/inspections reports for work

Submit completed form to the DSA Regional Office with construction oversight authority for the project.

# LABORATORY OF RECORD VERIFIED REPORT

		ate of Report:		DSA App. #	#	-
G.	It is my professional opinion that: (Check of	only one box.)				
	For this Interim Verified Report: all test with the above noted DSA 152 inspecti DSA-approved construction documents	s/inspections required on card section numbe				
	For this Interim Verified Report: there wattach to this report). All other tests/ins above noted DSA 152 inspection card approved construction documents.	pections required by th	e DSA-approv	ed construction	document	s, associated with the
	For this Verified Report: all tests/insper accordance with the requirements of the				ocuments v	vere performed in
	For this Verified Report: there were received this report). All other tests/inspections accordance with the requirements of the	required by the DSA-ap	proved const	ruction docume		
H.	It is my professional opinion that: (Check of					
	Tests/inspections results verify that the		in compliance	with the DSA-a	pproved co	nstruction documents
	and any noncompliance issues have be					
	There are noncompliant tests/inspection	ons results that have no	t been resolv	ed (List on form	DSA 211 8	and attach to this
	report). All other tests/inspections resu					
	construction documents and any noncor	npliance issues have b	een resolved.			
1.	All applicable reports pertinent to servi	ces provided by this la	boratory have	been filed as re	equired by \$	Sections 4-335 and 4-
J.	Records of all tests/inspections for this Final Verified Report from this laborato responsible charge and DSA upon req	ry for this project, and				
I dec	lare under penalty of perjury that I prepared	this report and that all	statements ar	re true.		
Signa	ature					
- 3	Engineering Mana	ger of Lab				
Engir	neering Manager Name:					
Emai	l:					
Phon	e Number:					
Addr	ess:					
City:		State:	Zip:		(Affix	Seal Here.)

Engineering Manager must affix Civil Engineering License Seal on this form.

Submit completed form to the DSA Regional Office with construction oversight authority for the project.

# Draft Proposed Modifications to Part 1 & 2 Related to Testing and Inspection

4-335(d) Test reporting requirements

- (d) Test reporting requirements.
  - The laboratory of record shall complete detailed test reports outlining all structural material tests. Report format shall be as prescribed by DSA.
  - 2. Reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or nonconforming.
  - The reports shall clearly state that the material or materials were sampled and tested in accordance with the requirements of these regulations and the approved plans and specifications. Reports shall also clearly state whether or not the material or materials tested met the requirements of the DSA approved documents.
  - All reports of tests performed on-site shall be submitted to the project inspector within one day of when on the day the tests were performed.
  - Within 44-7 days of the date of any material test, the laboratory of record shall submit all such test reports to the design professional in general responsible charge, the structural engineer, the project inspector, and the school district. DSAmay request test reports as proof of compliance\_DSA electronic distribution system.
  - Reports of material tests not conforming with the requirements of the DSA
    approved documents shall be forwarded immediately to DSA, the designprofessional in general responsible charge, the structural engineer, the projectinspector, and the school district the DSA electronic distribution system.

4-335(f)1.A Special inspectors employed by the laboratory of record ...

A. Special inspectors employed by laboratory of record.

Assignment to a project: Special inspectors employed by the laboratory of record, assigned by and under the supervision of the laboratory's engineering manager do not require DSA project specific approval. —,, shall be reported on a Special Inspector Identification form prescribed by DSA. The form shall be completed and signed by the engineering manager prior to commencing special inspection work. Copies shall be sent to DSA, the design professional(s) and the project inspector. Any changes or substitutions in special inspectors during the course of work will require submission of a revised form to DSA, the design professional(s) and the project inspector.

**Supervision:** Supervision of special inspectors employed by the laboratory of record shall be provided by the engineering manager, whose supervision duties shall include but are not limited to the following tasks:

- (i) Providing oversight and responsible control of special inspection services and associated report documents.
- Verifying that special inspectors meet all employment requirements and possess the training, education, technical knowledge, experience, and/or certifications necessary to perform the duties assigned. The engineering manager shall also ensure that records of relevant certifications, qualifications, training, and experience of inspection personnel, are maintained at the laboratory facility, and made available upon request to DSA.

# **CHAPTER 17A - SPECIAL INSPECTIONS AND TESTS**

1705A.3.3 1705A.3.2 Batch plant inspection. Except as provided in this under Section 1705A.3.3, the quality and quantity of materials used in transit-mixed concrete and in batched aggregates shall be continuously inspected by an approved special inspector at the location where materials are measured.

1705A.3.3.1 Waiver of continuous batch plant inspection. Continuous batch plant inspection may be waived by the registered design professional, subject to approval by the enforcement agency under either of the following conditions:

- 1. The concrete plant complies fully with the requirements of ASTM C 94, Sections <u>9 8</u> and <u>10 9</u>, and has a current certificate from the National Ready Mixed Concrete Association or another agency acceptable to the enforcement agency. The certification shall indicate that the plant has automatic batching and recording capabilities.
- 2. For single-story light-framed construction (without basement or retaining wall higher than 6' in height measured from bottom of footing to top of wall) —buildings and isolated foundations supporting equipment only, where deep foundation elements are not used.,—where the specified compressive strength f'c of the concrete delivered to the jobsite is 3,500 psi (24.13 MPa) and where the f'c used in design is not greater than 3,000 psi (20.68 MPa).

When continuous batch plant inspection is waived, the following periodic inspection requirements shall apply and shall be described in the construction documents:

- Qualified technician of the <u>approved</u> testing laboratory shall check the first batch at the start of the day to verify materials and proportions conform to the approved mix designs.
- 2. <u>A L-licensed weighmaster shall</u> to positively identify <u>quantity of materials</u> as to quantity and certify to-each load by a batch ticket.
- 3. Batch tickets, including material quantities and weights shall accompany the load, shall be transmitted to the inspector of record by a truck driver with load identified thereon. The load shall not be placed without a batch ticket identifying the mix. The inspector will keep a daily record of placements, identifying each truck, its load, and time of receipt, and approximate location of deposit in the structure and will transmit a copy of the daily record to the enforcement agency.

<u>1705A.3.3.2</u> <u>Batch plant inspection not required. [DSA-SS, DSA-SS/CC]</u> Batch plant inspection is not required for any of the following conditions, provided the licensed weighmaster and batch ticket requirements of Section 1705A.3.3.1 are provided:

- 1. Non-structural site flatwork
- 2. Non-building structures
- 3. Miscellaneous non-structural concrete elements
- 4. Single-story relocatable buildings less than 2160 square feet.

# CHAPTER 19A - CONCRETE

1903A.8 1903A.8 Welding of reinforcing bars - Modify ACI 318 Section 3.5.2 26.6.4.1(b) by adding the following:

If mill test reports are not available, chemical analysis shall be made of bars representative of the bars to be welded. Bars with a carbon equivalent (C.E.) above 0.75 shall not be welded. Welding shall not be done on or within two bar diameters of any bent portion of a bar that has been bent cold. Welding of crossing bars shall not be permitted for assembly of reinforcement unless authorized by the structural engineer and approved by the enforcement agency per approved procedures.

Shop fusion welded stirrup/tie cage assemblies consisting of low-alloy steel reinforcing stirrups/ties conforming to ASTM A706 and longitudinal holding wires, conforming to ASTM A1064 shall be permitted. The fusion welds shall be made by machines using electric resistance welds. Tack welding of primary reinforcing bars together or to stirrups/ties is not permitted. Fusion welding of holding wires shall not occur on a portion of a reinforcing bar that is or will be bent.

1910A.2 1913A.2 Tests of reinforcing bars. Where The following samples shall be are taken from bundles as delivered from the mill, with the bundles identified as to heat number and provided the mill analyses accompany the report, one tensile test and one bend test shall be made from a specimen from each 10 tons (9080 kg) or fraction thereof of each size of reinforcing steel.

Where positive identification of the heat number cannot be made or where random samples are to be taken, one series of tests shall be made from each 2 1/2 tons (2270 kg) or fraction thereof of each size of reinforcing steel.

Tests of reinforcing bars may be waived by the structural engineer with the approval of the Building Official for one-story buildings or non-building structures provided certified mill test reports are provided for each shipment of such reinforcement.

<u>1910A.6.2</u> <u>1910A.6.5</u> <u>1913A.7.5</u> <u>Testing Procedure.</u> The test procedure shall be as permitted by an approved test report using criteria adopted in this code. <u>All ether postinstalled anchors shall be tension tested.</u>

<u>Exception:</u> Torque controlled post installed <u>expansion</u> anchors <u>and screw type anchors</u> shall be permitted to be tested using <u>a specified</u> torque based on <u>an</u> approved test report using criteria adopted in this code. <del>All other post installed anchors shall be tension tested.</del>

<u>Alternatively, the Mm</u>anufacturer's recommendation for testing may be approved by the enforcement agency based on an approved test report using criteria adopted in this code.

Two options for testing screw anchors, with differences highlighted.

Option 1:

1910A.6.5 1910A.6.4 1913A.7.4 Test Acceptance Criteria. Acceptance criteria for postinstalled anchors shall be based on an approved test report using criteria adopted in this code. Field tests shall satisfy the following minimum requirements.

## 1. Hydraulic Ram Method:

Anchors tested with a hydraulic jack or spring loaded devices shall maintain the test load for a minimum of 15 seconds and shall exhibit no discernable movement during the tension test, e.g., as evidenced by loosening of the washer under the nut.

For adhesive anchors, where other than bond is being tested, the testing device shall not restrict the concrete shear cone type failure mechanism from occurring.

## 2. Torque Wrench Method:

Torque controlled post installed A anchors tested with a calibrated torque wrench shall must attain the specified torque within ½ turn of the nut; or one-quarter (1/4) turn of the nut for a 3/8 in. sleeve anchor only.

### Exceptions:

- a. Wedge or Sleeve type:
  One-quarter (1/4) turn of the nut for a 3/8 in. sleeve anchor only.
- b. Throaded Type:
  One-quarter (1/4) turn of the screw after initial seating of the screw head.

## Option 2:

1910A.6.5 1910A.6.4 1913A.7.4 Test Acceptance Criteria. Acceptance criteria for postinstalled anchors shall be based on <u>an</u> approved test report using criteria adopted in this code. Field tests shall satisfy the following minimum requirements.

### 1. Hydraulic Ram Method:

Anchors tested with a hydraulic jack or spring loaded devices shall maintain the test load for a minimum of 15 seconds and shall exhibit no discernable movement during the tension test, e.g., as evidenced by loosening of the washer under the nut.

For adhesive anchors, where other than bond is being tested, the testing device shall not restrict the concrete shear cone type failure mechanism from occurring.

## 2. Torque Wrench Method:

Torque controlled post installed expansion-A anchors tested with a calibrated torque wrench shall must attain the specified torque within ½ turn of the nut; or one-quarter (1/4) turn of the nut for a 3/8 in. sleeve anchor only.

## Exceptions:

- a. Wedge or Sleeve type:
  One-quarter (1/4) turn of the nut for a 3/8 in. sleeve anchor only.
- b.—Threaded ‡type: anchors tested with a calibrated torque wrench shall attain the specified torque within Oone-quarter (1/4) turn of the screw after initial seating of the screw head.

# **CHAPTER 21A - MASONRY**

2105A.3 2105A.2.2.1.4 [DSA-SS] Tests of masonry grout Mortar and grout tests. These tests are to establish whether the masonry grout materials components meet the specified component strengths requirements. At the beginning of all masonry work, at least one test-sample of the mortar and grout shall be taken on three successive working days and at least at one-week intervals thereafter. Samples of grout shall be taken for each mix design and each day grout is placed. Grout specimens shall be sampled and tested in accordance with the requirements of ASTM C1019 and They shall meet the minimum strength requirement given in Sections 2103A.8 2103A.9 and 2103A.12 2103A.13 for mortar and grout respectively. Additional samples shall be taken whenever any change in materials, mix design or job conditions occur, or whenever in the judgment of the architect, structural engineer or the enforcement agency such tests are necessary to determine the quality of the material.

Exception:

When the prism test method of Section 2105A.2.2.2 is used during construction, the tests in this section are not required.

Test specimens for mortar and grout shall be made as set forth in ASTM C 1586 and ASTM C 1019.

2105A.5 [DSA-SS] Masonry core testing. Not less than two cores shall be taken from each building for each 5,000 square feet (465 m2) of the greater of the masonry wall area or the floorarea or fraction thereof. The architect or structural engineer in responsible charge of the project or his/her representative or the inspector of record shall select the areas for sampling. The inspector of record shall observe the coring of the masonry walls. Cores test samples shall be a comply with the following:

1. Cored between 7 to 14 days after grouting of the selected area.

2. A minimum of 3-3/4 inches (9576mm) in nominal diameter.

 Sampled and shall be taken in such a manner as to exclude any masonry unit webs, mortar joints, and or reinforcing steel.

If vertical reinfercing steel is placed such that cores will include reinfercing steel, core testing may be waived by the design professional in responsible charge, as approved by the enforcement agency. The inspector of record shall observe the coring of the masonry walls.

Visual examination of all cores shall be made by a laboratory acceptable to the building official and the condition of the cores reported as required by the California Administrative Code. All cores taken shall be tested in shear 28 days after grouting of the sample area using a shear test apparatus acceptable to the enforcement agency. Core samples shall not be soaked before testing. The shear test shall test both joints between the grout core and the outside wythes or face shell of the masonry. Shear testing apparatus shall be of a design approved by the enforcement agency. Core samples shall not be soaked before testing. The average unit shear on the cross section of all the cores shall not be less than 2.5 √f 'm psi.

All cores shall be submitted to the laboratory, acceptable to the building official, for examination, regardless of whether the outside wythe or face shells separated during the cutting

operation. The laboratory shall report the location where each core was taken, the findings of their visual examination of each core, and the results of the shear tests.

Core sampling and shear testing may be waived by the design professional in responsible charge, as approved by the enforcement agency, for any of the following cases:

1. If vertical reinforcing steel is placed such that cores will include reinforcing steel.

2. An alternate method of evaluation and/or non-destructive testing, including a detailed description of proposed evaluation criteria, frequency and sample locations, is submitted to the enforcement agency for review and approval. Core sampling and shear testing may be required if voids or delamination are detected through this alternative method.

# Core sampling and shear testing is not required for any of the following cases:

1. Freestanding site walls or fences of any height.

2. Retaining walls less than 4 feet above the top of the foundation with level backfill and not supporting a surcharge.

3. Nonbearing non-shear walls as classified as nonparticipating masonry elements in accordance with TMS 402 of any height.



DATE	LOCATION	BOOKED
January 17, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	Cancelled
February 26, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	٨
March 26, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	٨
April 23, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	٨
May 28, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	^
June 25, 2015	Four Points by Sheraton, 4900 Duckhorn Drive, Sacramento 95834	
July 23, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	٨
August 27, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	٨
September 25, 2015	Four Points by Sheraton LAX, 9750 Airport Blvd., Los Angeles 90045	
October 22, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	^
November 19, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	٨
December 17, 2015	Four Points by Sheraton, 5115 Hopyard Road, Pleasanton 94588	>
January ?, 2016 (ABM)		

Note:

World of Concrete, Las Vegas, February 2-5, 2016 Super Bowl L, Santa Clara, February 7, 2016 Pro Bowl, Honolulu, January 31, 2016