

May 28, 2015 Four Points by Sheraton 5115 Hopyard Road Pleasanton, CA 94588

Minutes - General Business Meeting

- 1. Call to Order Ross Esfandiari
 - a. Time
 - The meeting was called to order at 3:19 p.m. by President Ross Esfandiari.
 - b. Self-introductions
 - The following members and guests were in attendance:

Jim Auser (BSK Associates)
Jim Backman (Consolidated Engineering Labs)
Dave Chippero (Testing Engineers, Inc.)
Cliff Craig (Structure Materials Group)

Miki Craig (CCTIA Staff)

Terry Egland (Testing Engineers, Inc.) Osama El-Fiky (Signet Testing Labs)

Jeff Enzler (OSHPD)

Ross Esfandiari (RES Engineers, Inc.)

Mark Hahle (Ninyo & Moore)

Abdel Khelifa (Apex Testing Labs)

Ryan Merrell (Neil O. Anderson/Terracon)

James Peters (Construction Testing Services)

Tim Rodriguez (BSK Associates)

Troy Schiess (Neil O. Anderson/Terracon)

August Smarkel (Mid Pacific Engineering, Inc.)
Dan Smith (Mid Pacific Engineering, Inc.)

Colin Stock (Neil O. Anderson/Terracon)

Daniel Ventura (Construction Testing Services)

- 2. Program Jeff Enzler, District Structural Engineer, OSHPD Inspection Services Unit, Sacramento Team
 - a. OSHPD Preapproved Laboratory Program (handout)
 - President Esfandiari introduced the guest speaker, Jeff Enzler. Unfortunately, Mr. Enzler's supervisor, Gerard Zelnik, the Regional Compliance Officer, was not able to attend due to a recent surgery. Mr. Enzler offered a brief description of OSHPD's Inspection Services Unit, whose primary purpose is to coordinate operations in the field.
 - OSHPD established its Preapproved Laboratory program about a year ago. It is completely voluntary, but will get your firm's name published on OSHPD's website. Applicant agencies must be accredited to ISO 17025 or be LEA. The entire program is based on Policy and Intent (PIN) 58.
 - The program was established to satisfy the code requirement of "testing shall be performed by an approved agency".
 - Mr. Enzler had initially hoped the program would be identical to DSA's LEA program, but hospitals have a shake table test requirement for almost all installed equipment. The person in charge of that program thought this program should cover both types of testing shake testing and materials testing. The combination is causing some confusion in the program's application process, as well as the interpretation of the requirements.
 - OSHPD has updated its Testing, Inspection and Observation (TIO) form and Verified Compliance Report form to align with its approved laboratory requirements.
 - Non US labs may participate in OPL, but must meet all program requirements, including reports being prepared by a licensed California engineer. Reports must be published in English.
 - PIN 58 contains a list of acceptable accreditation programs equivalent to ISO 17025. Most agencies are accredited through AASHTO or AMRL due to LEA requirements. OPL is limited to structural testing only no special inspections or non-structural tests are addressed. The program may include specials inspections and non-structural testing in the future.
 - The application filing fee is \$500, which must be paid by credit card. All documents must be submitted electronically.
 - A question and answer period followed Mr. Enzler's presentation. The following is an exchange between Member Terry Egland and Mr. Enzler:
 - Q PIN 58 appears to be written to facilitate the testing for "Certificate of Compliance" of equipment/components as noted in CBC Section 1705A.12.4.



- A True... I [Enzler] have argued for separation of the "Certificate of Compliance" testing requirements from the "construction materials" requirements, but to no avail.
- Q-PIN~58, last part of paragraph 4 states "the architect **and** structural engineer", where the code states "the architect **or** structural engineer". [emphasis added]
- A The statute (Health and Safety Code Section 129805) states:

"129805. (a) All plans and specifications shall be prepared under the responsible charge of an architect or structural engineer, or both. A structural engineer shall prepare the structural design and shall sign plans and specifications related thereto. Administration of the work of construction shall be under the responsible charge of the architect and structural engineer..." (emphasis added)

There is some concern that some structural engineers are not reviewing lab reports and/or observing/administering construction. We [OSHPD] did propose a Code change to correct CAC Section 7-141(a) to match the statute, but we will have to wait until 2016 to see if it gets adopted.

- Q PIN 58, near the bottom of page 2, states "ISO 17025 requires that accreditation bodies be qualified to ISO 17011". My [Egland] review of ISO 17025:2005 found the following: "If a laboratory whishes accreditation for part or all of its testing and calibration activities, it should select an accreditation body that operates in accordance with ISO 17011." It seems your [OSHPD] statement infers accreditation with the use of the word "qualified". This might cause problems with the next point.
- A Good point... I [Enzler] will raise this point with the authors of the PIN.
- Q PIN 58, Item 12, page 5, states that a lab qualifying to the DSA-LEA program satisfies OSHPD OPL. The LEA program uses AMRL as the accrediting body and as of 2012 they were not accredited to ISO 17011. You [OSHPD] might consider not requiring ISO 17011 but first check with AMRL. A quick check of their website yields no information.
- A Our [OSHPD] intent is to accept accreditation to ISO 17011 or equivalent... I [Enzler] will raise this point with the PIN authors.
- **Q** CBC Section 1705A.12.4 requires that active or energized equipment and components be certified **exclusively** on the basis of approved shake table tests in accordance with ICC-ES AC 156. An "AC" like an ASTM standard are copyrighted but unlike an ASTM standard the AC is the property of ICC and used solely by ICC and its subsidiaries. In the past there has been some legal fighting between IAPMO and ICC over the infringement of copyrights. I [Egland] believe it would be prudent to verify that other accrediting bodies can accredit a laboratory to AC159. It could be possible that the fighting was over product evaluation/accreditation and not laboratory accreditation.
- A "Exclusively" as used in this section is meant to exclude analysis and prior experience as a basis for certification of equipment/components. It is not necessarily meant to apply to ICC-ES AC 156 (as I [Enzler] understand it). I [Enzler] believe OSHPD would accept certification to an equivalent IAPMO Acceptance criteria... Again, I [Enzler] will ask the authors...
- Q PIN 58, top of page 3, lists ICC-ES as an accreditation body. ICC-ES evaluates products, I [Egland] believe you [OSHPD] should use IAS which is a subsidiary of ICC. You [OSHPD] do mention IAS later but the use of ICC-ES seems inappropriate.
- A-I [Enzler] will pass this along to the authors.
- Q Jeff [Enzler], as I [Egland] first stated, this program is for testing equipment and components. What you're [OSHPD] defining is a "Product Testing/Evaluation Laboratory" which operates very differently from a Construction Material Testing Laboratory.
- A-I [Enzler] agree that it is a bit confusing. I [Enzler] will pass this along to the authors.



3. Approval of Minutes

- a. April 23, 2015
 - The minutes were approved as submitted.
- Financial Report
 - a. Income Statement (handout)
 - Executive Secretary Miki Craig provided a copy of the Income Statement through April 30, 2015, evidencing receipts totaling \$12,350.00 and expenses of \$1,915.18, leaving net reserves of \$10,434.82.
 - b. Balance of Account
 - The balance of the checking account is \$19,795.85.

5. Committee Reports

- a. ICC/Local Jurisdictions Miki Craig, Chair
 - Executive Secretary Craig reported ICC is accepting applications for the Professional Development Council through June 1, 2015. The PDC is the governance committee overseeing ICC's national certification examinations and educational programs.
- b. ASTM Jeffry Cannon, Chair
 - Member Terry Egland reported there is an E329 ballot item addressing remote labs, which may be certified under an existing accredited lab facility if it is under the same key management elements (responsible engineer, SQM, etc.). A third party audit of the facility would still be required. He was of the opinion that this item would most likely be approved. How it will be interpreted by accrediting bodies will be another matter, as most require individual accreditations.
- c. SEAONC COA Ross Esfandiari, Chair
 - President Esfandiari reported the committee is close to finalizing the update of the special inspection and structural observation guideline. The wood framing guide is also near completion, with the committee collecting final illustrations and pictures. Both documents need to go the SEAONC Board for final review and approval prior to publication.
- d. DSA Chair TBD
 - President Esfandiari is still seeking a volunteer to chair this committee.
- e. Caltrans Jim Backman, Chair
 - Executive Secretary Craig reported the three California chapters of ACI continue their attempts to develop and training and certification program to become the selected concrete field testing certifier under Caltrans' proposed Joint Training Program.
- f. Membership Jim Backman/Mike Parker, Co-Chairs
 - No report
- g. Newsletter Miki Craig, Editor
 - No report
- h. Standard of Practice Miki Craig, Chair
 - No report
- i. Education Elizabeth Clarke, Chair
 - No report
- j. FAQ's Terry Egland, Chair
 - No report
- k. Programs Elizabeth Clarke, Chair
 - Member Terry Egland indicated he would contact CQA committee member Tim Hart to determine his interest in presenting on the new structural wood framing guideline.
 - CEUs will be awarded to interested attendees of the July presentation on shotcrete.



• Executive Secretary Craig was directed to inquire if Kurt Siggard would be interested in address the Council on the upcoming code changes for masonry.

6. Old Business

- a. June Meeting with DSA
 - Attendees were reminding the June meeting would be held one week earlier than the Council's usual schedule June 18th. Guest speakers will be State Architect, Chet Widom, and LEA Coordinator, Eric France. The event will be held at the Four Points by Sheraton Sacramento International Airport on Duckhorn Drive in Sacramento. The meeting will start at noon, and lunch will be provided.
- b. 2016 CCTIA Annual Business Meeting
 - Executive Secretary Craig reported on the proposal she received from Caesars Entertainment. The lower priced facilities (Harrah's, Flamingo) did not interest those in attendance. Of the two mid-price facilities, Bally's did not garner much interest, so The Linq was selected. The rates and terms are similar to those the Council has paid in the past at Planet Hollywood and Paris. The facility is directly on the strip, providing easy access to other facilities and attractions. The resort features full casino gaming, assorted restaurant, numerous bars, and the newly constructed High Roller a ferris wheel type attraction with enclosed cars large enough for groups, providing amazing views of the Las Vegas skyline and surrounding area.
 - Executive Secretary Craig was instructed to complete negotiations and sign a contract with Caesars Entertainment for the 2016 Annual Business meeting to be held February 5^{th} and 6^{th} at The Ling.

7. New Business

- a. ICC Educational Development Committee
 - Member Terry Egland reported he is one of eight people serving on this committee, which will be holding a conference call on June 9th. The primary subject will be whether the ICC certification exams should replace the paper plans with digital drawings. Most attendees felt the use of paper plans should be continued as it is still the predominant method actually used in the field. It was suggested a minor increase in exam fees to the participant in order to cover ICC's additional costs might be acceptable.
 - Member Egland also reported ICC will no longer provide the book of compiled ASTM standards used in construction, due to the exorbitant fees ASTM is charging for licensing. It was noted that ASTM is publishing its own version of the book, at a cost of \$1,300! ACI also has a document that contains many of the concrete standards, but it is missing the rebar standards. ICC's Doug Hatch wanted to know if the Council thought ICC's Concrete Manual would be a good substitute. Attendees present felt it would be acceptable.

8. Adjournment

- a. Time
 - There being no further business, the meeting was adjourned at 5:44 p.m. by President Ross Esfandiari.
- b. Next meeting
 - The next meeting will be held June 18, 2015, at the Four Points by Sheraton in Sacramento.

Respectfully submitted, Miki Craig Executive Secretary



- Executive Secretary Craig reported negotiations to develop one statewide program for the ACI Field Testing Technician Grade 1 certification continues between the three California ACI Chapters. They are very close to reaching a consensus in preparation for submitting a joint proposal to Caltrans.
- f. Membership Jim Backman/Mike Parker, Co-Chairs
 - No report
- g. Newsletter Miki Craig, Editor
 - · No report
- h. Standard of Practice Miki Craig, Chair
 - · No report
- i. Education Elizabeth Clarke, Chair
 - No report
- j. FAQ's Terry Egland, Chair
 - · No report
- k. Programs Elizabeth Clarke, Chair
 - Mr. Oscar Duckworth, American Shotcrete Association Education Committee Chair, will be the guest speaker next month.
- 6. Old Business
 - a. 2016 CCTIA Annual Business Meeting
 - No report
- 7. New Business
 - a. None
- 8. Adjournment
 - a. Time
 - There being no further business, the meeting was adjourned at 2:07 p.m. by President Ross Esfandiari.
 - b. Next meeting
 - The next meeting will be held July 23, 2015, at the Four Points by Sheraton in Pleasanton.

Respectfully submitted, Miki Craig Executive Secretary

OSHPD Preapproved Laboratory (OPL)

OSHPD Preapproved Laboratory (OPL) is a Voluntary Program to Approve Testing Agency/Laboratory for Structural Tests.

Statewide Health Planning and Development OSHPD

Facilities Development Division

The Building Department for California's Hospitals





Scope of OSHPD Preapproved Laboratory (OPM) Program

- OSHPD Preapproved Laboratory (OPL) Program is limited to:
- Laboratories Accredited to ISO 17025 or Equivalent,
- Laboratories Approved under the California Division of State Architect (DSA) Laboratory Evaluation and Acceptance (LEA) Program.





Basis of OSHPD Preapproved Laboratory (OPL)

OSHPD Preapproved Laboratory (OPL) Program is based on PIN 58: http://oshpd.ca.gov/FDD/Regulations/PINs/58.pdf





Minimum Requirements for OPL

 Accreditation in Accordance with ISO 17025 or Equivalent,

and/or

DSA-LEA Approval.





Is the OPL Program Limited to Structural Tests Only?

· Yes!





Are the Mill Certs still Acceptable, where Specifically Permitted by CBSC?

· Yes!





Are the Special Inspection Agencies Approved through OPL Program?

Noi

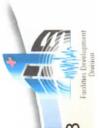




OPL Submittal Requirements

- Completed application in word format with signature attached.
- Application or Renewal filing fee.
- For credit card, use payment form at webpage below: AD 367%20Facilities%20Development%20Division%2 http://oshpd.ca.gov/FDD/Forms/eSPForms/OSH-0Payment%20Form.pdf
- Supporting documents to verify accreditation or DSA-EA approval (see application for details).
- All documents shall be submitted electronically to OPL@ OSHPD.CA.GOV. 4





Information about OPL Program **OSHPD** Contact for Additional

James Pan Ph. 213-897-4073 E-mail:OPL@OSHPD.CA.GOV





Where Do I Find a Current List of OPLs and OPL **Application Form?**

OSHPD website:

http://www.oshpd.ca.gov/FDD/Pre-Approval/index.html





Category Summary

Date Range

Custom Dates (1/1/2015 - 4/30/2015)

Accounts

All Accounts

Catenories

Dues & Initiation Revenues, Dues & Initiation Revenues:2010 Annual Dues, and 56 more

Tags

All Tags

Type

Summary for all categories

▼ Money In		\$12,350.00
Dues & Initiation Revenues		\$12,350.00
2015 Annual Dues		\$12,350.00
▼ Money Out		-\$1,915.18
Meeting Expenses		-\$1,915.18
2015 ABM		-\$127.00
2015 General Meetings		-\$1,788.18
	Money In:	\$12,350.00
	Money Out:	-\$1,915.18
	Net Total:	\$10,434.82

▼ Other Transactions

Neutral (Category total is zero)

Taxes and Licenses

\$0.00



APPLICATION FOR OSHPD PREAPPROVED			For Office Use Only					
LABORATORY (OPL)			Application #			OPL -		
Name of Approved Agency/Laboratory	City		County			State		
APPLICATION TYPE / FEE				TV T				
Application is based on:		New Applicatio (Fees are Nonrefu			(Fe		newal Fee e Nonrefundable)	
☐ DSA-LEA Approved Only		\$250.00			□ \$250		,	
☐ Accreditation Only		\$500.00			□ \$25	0.00		
☐ Both DSA-LEA Approved and Accreditation		\$500.00			□ \$25	0.00		
APPLICANT INFORMATION								
Applicant Name	Signatu	re			Position in the	Organiz	ation	
Agency/Laboratory Name					Application Da	te		
Phone Number			E-Mail					
Address of Facility Location (Each facility location requi	ires separat	e application.)						
Street								
City:		County			State:		Zip Code:	
Facility Mailing Address (If different from facility address	above.)							
Street								
City:					State:		Zip Code:	
KEY PERSONNEL (Attach add	itional pa	ages if needed.)						
Engineering Manager (or equivalent) - Name			CA Registra	tion Numbe	r		Expiration Date	
Title in the Organization			Phone Number					
FAX Number			E-Mail					
Alternate to Engineering Manager (if any) - Name			CA Registration Number Expiration Date				ation Date	
Title in the Organization			Phone Num	ber				
FAX Number			E-mail					





[&]quot;Access to Safe Quality Healthcare Environments that Meet



KEY PERSONNEL (Attach additional pages if needed.)						
Laboratory Supervisor – Name	CA Registration Number (if any)	Expiration Date				
Title in the Organization	Phone Number					
FAX Number	E-Mail					
Field Supervisor Name	CA Registration Number (if any)	Expiration Date				
Title in the Organization	Phone Number					
FAX Number	E-mail					
	L-man					
ACCREDITATION						
This laboratory currently holds accreditation by: (Attach a copy	of current accreditation detail	(s.)				
☐ International Accreditation Service (IAS) ☐ Americ	al Voluntary Laboratory Accre can Association of Laboratorie ruction Materials Engineering	s Program (A2LA)				
Latest Expiration Date (if any)						
Is this laboratory accepted in the Division of the State Archite DSA-LEA? No Yes Expiration Date:		Acceptance Program,				
Basis for accreditation:						
 □ ISO/IEC 17025: General requirements for competence of testing and calibration laboratories □ NISTIR 7012: Technical requirements for construction materials testing □ AASHTO R18: Standard Recommended Practice for Establishing and Implementing a Quality System for Construction Materials Testing Laboratories □ ASTM E 329: Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction 						
and Criteria for Laboratory Evaluation						
Paving Materials	☐ ASTM D 3740: Practice for Evaluation of Agencies Engaged in Testing and/or Inspections of Soils and Rock					
☐ ASTM C 1093: Practice for Accreditation of Testing Ag	gencies for Unit Masonry					
ASTM E 1212: Practice for Quality Management Systems for <i>Nondestructive Testing (NDT)</i> Agencies ASTM E 543: Specification for Agencies Performing Nondestructive Testing (NDT)						





[&]quot;Access to Safe Quality Healthcare Environments that Meet



STANDARDS									
By checking "yes" in Tables 1 through 6 below, the applicant verifies that the laboratory has the equipment and qualified personnel to perform the indicated testing. ONLY mark tests that are listed in accreditation certificate or DSA-LEA.									
1	1 SOILS AND FOUNDATIONS								
	Tes	sts							
Yes		Standard	Test Procedure	Yes		Standard	Test Procedure		
	a.	ASTM D 2487	Classification of Soils		b.	ASTM D 422	Particle Size Analysts		
	C.	ASTM D 2216	Moisture Content		d.	ASTM D 4318	Liquid / Plastic Limit		
	e.	ASTM D 2850	Unconsolidated, Undrained Triaxial		f.	ASTM D 4767	Triaxial Compression		
	g.	ASTM D 2166	Unconfined Compressive Strength		h.	ASTM D 7012	Triaxial Compressive Strength of Rock Core Specimens		
	i.	ASTM D 5778	Friction Cone and Pizocone Penetration Test		j.	ASTM D 3441	Cone Penetration Test (CPT)		
	k.	ASTM D 1140	No. 200 Wash		I.	ASTM D 4829	Expansion Index		
	m.	ASTM D 2419	Sand Equivalent Value		n.	ASTM D 1557	Soil Compaction – Modified		
	0.	ASTM D 3080	Direct Shear		p.	ASTM D 6938	Density of Soils – Nuclear Gage		
	q.	ASTM D 1556	Density of Soils – Sand Cone		r.	ASTM D 1143	Deep Foundations – Static Compression		
	S.	ASTM D 4945	Deep Foundations – Dynamic Testing		t.	ASTM D 3689	Deep Foundations – Axial Tension		
	u.	ASTM D 3966	Deep Foundations –Lateral Loads						
		90							
Tests th	at are	in the lab's scope	but are not listed above should be provide	ed in the	spac	e(s) below.			
Yes		Standard	Test Procedure	Yes		Standard	Test Procedure		
	aa.				bb.				
	CC.				dd.				
	ee.				ff.				







2	CONCRETE							
	Tests							
Yes		Standard	Test Procedure	Yes		Standard	Test Procedure	
	a.	ASTM D 75	Sampling Aggregate		b.	ASTM C 702	Reducing Aggregate Samples	
	C.	ASTM C 40	Organic Impurities		d.	ASTM C 29	Unit Weight / Voids	
	e.	ASTM C 88	Sodium Sulfate Soundness		f.	ASTM C 566	Moisture Content	
	g.	ASTM C 142	Clay / Friable Particles		h.	ASTM C 127	Specific Gravity - Coarse	
	i.	ASTM C 128	Specific Gravity - Fine		j.	ASTM C 117	No. 200 Wash	
	k.	ASTM C 136	Sieve Analysis Course / Fine		I.	ASTM C 131	Degradation of Aggregate	
	m.	ASTM 2419	Sand Equivalent Value		n.	ASTM C 31, C 172, CBC 1905A.1.2	Concrete Sampling - Field	
	0.	ASTM C 192	Making / Curing Specimens - Lab		p.	ASTM C 173	Air Content (V)	
	q.	ASTM C 1602	Water		r.	ASTM C1604	Shotcrete Core	
	S.	ACI 355.2	Mechanical Anchors		t.	ASTM C 231	Air Content (P)	
	u.	ASTM C 143	Slump		٧.	ASTM C 1064	Temperature	
	w.	ASTM C 617	Capping Concrete Specimens		X.	ASTM C 1231	Unbonded Caps	
	y.	ASTM C 39	Compressive Strength		Z.	ASTM C 157	Length Change	
	aa.	ASTM C 78	Flexural Strength		bb.	ASTM C 496	Splitting Tensile	
	CC.	ASTM C 42	Drilled Cores / Beams		dd.	ASTM C 138	Weight / Yield / Air Content	
	ee.	ASTM C 495	Lightweight Concrete		ff.	ASTM C 567	Density of Lightweight Aggregate	
	gg.	ASTM E 488	Strength of Anchors		hh.	ACI 355.4	Adhesive Anchors	
	ii.	ACI 374.1	Moment Frames		jj.	ASTM C 1260	Alkali Reactivity of Aggregate	
	kk.	ASTM C 1293	Length Change due to Alkali-Silica Reaction		II.	ACI ITG-5.1	Post-Tensioned Precast Special Walls	
	mm.	ASTM C42	Concrete Core		nn.	ASTM D3039	Tensile Strength of FRP	
	00.	ASTM D4541	Pull of Strength of FRP		pp.	ASTM A1034	Rebar Mechanical Splices	
Tests th	nat are	in the lab's scope l	but are not listed above should be provide	ed in the	space	e(s) below.		
Yes		Standard	Test Procedure	Yes		Standard	Test Procedure	
	aa.				bb.			
	cc.				dd.			
	ee.				ff.			







3	MASONRY							
	Tes	ts						
Yes	Stand	lard/Code Reference	Test Procedure	Yes	Star	ndard/Code Reference	Test Procedure	
	a.	ASTM C 140	Dimensions		b.	ASTM C 140	Compressive Strength	
	C.	ASTM C 140	Absorption		d.	ASTM C 140	Unit Weight	
	e.	ASTM C 140	Moisture Content		f.	ASTM C 426	Linear Drying Shrinkage	
	g.	CBC 2105A.2.2.1.4	Mortar Sampling		h.	CBC 2105A.2.2.1.4	Grout Sampling	
	i.	ASTM C 1314	Prism Compressive Strength		j.	ASTM C 1019	Grout Compressive Strength	
	k.	ASTM C 780	Mortar Compressive Strength		I.	ASTM C 39	Core Compressive Strength	
	m.	CBC 2105A.4	Core Shear		n.	ASTM C 1314	Prism Sampling	
							, ,	
Tests the	at are ii	n the lab's scope but are	e not listed above should be provi	ded in the	space	e(s) below.		
Yes	Stand	lard/Code Reference	Test Procedure	Yes	Sta	ndard/Code Reference	Test Procedure	
	aa.				bb.			
	cc.				dd.			
	ee.				ff.			

4			STE	EL.			
	Tes	its					
Yes	Stan	dard/Code Reference	Test Procedure	Yes	Sta	indard/Code Reference	Test Procedure
	a.	ASTM A 370	Tension Test		b.	ASTM A 370	Bend
	C.	ASTM E 10	Brinell Hardness		d.	ASTM E 18	Rockwell Hardness
	e.	ASTM E 190	Guided Bend		f.	ASTM E 23	Charpy V - Notch
	g.	ASTM A 90	Weight of Coating		h.	AISC 341 Section K2	Beam to Column Moment & EBF Connections Cyclic Tests
	i.	AISC 341 Section K3	BRBF Cyclic Tests		j.	ASTM E 165	Liquid Penetrant
	k.	ASTM E 1444	Magnetic Particle		l.	ASTM E 94	Radiographic
	m.	ASTM E 164	Ultrasonic		n.	ASTM E 605	Density of SFRM
	0.	CBC 2203A.1	Material Identification		Р	ASTM F606	Bolt Tension Test
Tests th	at are ii	n the lab's scope but are	not listed above should be prov	ided in the	space	(s) below.	
Yes	Stan	dard/Code Reference	Test Procedure	Yes	Sta	indard/Code Reference	Test Procedure
	aa.				bb.		
	CC.				dd.		
	ee.				ff.		





OSHPD



5	Wood and Roof Assemblies						
	Tes	its					
Yes		Standard	Test Procedure	Yes		Standard	Test Procedure
	a.	ASTM D 3617	Analysis of Built-Up Roof Systems		b.	ASTM D 4442	Moisture Content of Wood
	c.	ASTM C 67	Brick and Structural Clay Roof Tiles				
Tests that	ests that are in the lab's scope but are not listed above should be provided in the space(s) below.						
	aa.				bb.		
	cc.				dd.		
	ee.				ff.		

6	COMPONENT, ASSEMBLY AND PROTOTYPE TESTING							
	Tes	ts						
Yes	Stan	dard/Code Reference	Test Procedure	Yes	Sta	ndard/Code Reference	Test Procedure	
	a.	AAMA 501.4	Static Test for Curtain Wall and Storefront Systems		b.	ICC-ES AC 156	Shake Table Test	
	c.	AAMA 501.6	Dynamic Test for Curtain Wall and Storefront Systems		d.	FM 1950	Seismic Sway Brace Testing	
Tests the	at are ii	the lab's scope but are	not listed above should be provid	ed in the	space	(s) below.		
	aa.				bb.			
	CC.				dd.			
	ee.				ff.			



OSHPD



List of Attachments Supporting the Testing Agency/Laboratory Approval (Submit Each Attachment as Separate PDF)						
Yes	Enclosure Type					
	OSHPD Facilities Development Division (FDD) Payment Form (OSH-AD-367): http://www.oshpd.ca.gov/FDD/Forms/eSPForms/OSH-AD_367%20Facilities%20Development%20Division%20Payment%20Form.pdf					
	DSA-LEA Laboratory Qualification as posted at DSA website: https://www.apps.dgs.ca.gov/tracker/ApprovedLabs.aspx					
	Latest Copy of DSA 100: LEA Program Application as Submitted to DSA					
	Latest copy of DSA 220: LEA Program On-Site Assessment Report					
	Latest copy of DSA acceptance (letter) of the Lab. into the LEA program.					
	Current Accreditation Certificate(s) including List of Tests for which Laboratory is Accredited					
	Other (Please Specify):					

OSHPD Approval	(For Office Use Only)
Signature:	Approval Date:
Print Name:	Approval Expiration Date:
Title:	
Condition of approval (if applicable):	





INSTRUCTIONS FOR APPLYING TO THE OSHPD PREAPPROVED LABORATORY (OPL) PROGRAM

Required Prior Approval or Accreditation

Prior to providing structural testing services on OSHPD projects a laboratory shall have either:

- · Approval in the OSHPD Preapproved Laboratory (OPL) Program; or
- Evidence of laboratory's accreditation or acceptance in DSA-LEA program as, described in OSHPD Policy Intent Notice (PIN) 58 - Approved Testing Agency/Laboratory for Structural Tests, shall be submitted on a project-by-project basis.

Application

To apply for acceptance in the OPL Program, this application (in Microsoft Word format with signature embedded) along with all supporting documents shall be submitted to:

OPL@OSHPD.CA.GOV by e-mail or equivalent. No hard copy application shall be accepted.

Acceptance

To be considered for acceptance in the OPL Program, a complete submittal shall include the applicable items listed below. OSHPD reserves the right to reject incomplete submissions.

Approval

Approval shall be valid for up to six years, but not exceeding the approval expiration date by California Division of State Architect (DSA) Laboratory Evaluation and Acceptance (LEA) or accreditation bodies, as applicable.

Adverse Action or Removal of Tests

Any adverse action or removal of tests by accreditation bodies or DSA-LEA shall be a cause for removal of labs or tests from the OPL Program. Duty to inform the OPL Administrator when any such adverse action is taken is the responsibility of the laboratory approved in the OPL Program. Test results from laboratories where an adverse action is taken and the OPL Administrator has not been informed prior to performing the tests will be rejected by OSHPD and additional tests will be required to be performed by the owner. OSHPD will not be responsible for any additional costs incurred by the owner for the additional tests, or recovery of costs by the owner from the offending lab.

In addition, detection of potential anomalies by a lab or change of primary lab personnel that may impact health and safety of OSHPD regulated facilities shall be a cause for removal from OPL Program.



OSHPD

"Access to Safe Quality Healthcare Environments that Meet



Verification

In addition to being on the OPL list, the architect or engineer in responsible charge shall verify that an approved agency is independent and acceptable as required by Title 24, Part 1, California Administrative Code (CAC) Section 7-141 on a project-by-project basis. This verification is performed through the project's Testing, Inspection, and Observation (TIO) Program.

ITEMS REQUIRED

Application and Fee:

A completed OPL Application Form (OSH-FD OPL 100), necessary supporting documents and the appropriate fee. The fee may be either in the form of a check payable to OSHPD or by credit card (preferred method) using the form at webpage below:

http://oshpd.ca.gov/FDD/Forms/eSPForms/OSH-AD 367%20Facilities%20Development%20Division%20Payment%20Form.pdf

If the firm has more than one facility or location, which will provide testing services for OSHPD regulated facilities, each location shall submit a separate OPL Application package and fee to be included and listed in the OPL Program.

An OPL number shall not be assigned until a completed application and application fee is received.

Supporting Documents:

- Evidence of Laboratory Accreditation: A copy of current accreditation certificate including scope of accreditation (a listing of tests for which lab is accredited) issued by an accreditation body in accordance with OSHPD PIN 58. Expiration date for accreditation, if any, shall be clearly indicated.
- If application is based on DSA-LEA approval, the following additional documents shall be provided:
 - Copy of Laboratory Qualification posted at DSA-LEA website
 - Latest copy of submitted DSA-100 application
 - DSA-LEA Program Latest copy of Lab Assessment Report (DSA 220)
 - Latest copy of DSA Acceptance (letter) of the Lab into the LEA Program.

Contact:

If you have any questions, comments or suggestions please contact:

James Pan

OPL Program Administrator

Phone: (213) 897-4073

E-mail: OPL @OSHPD.CA.GOV.

OSHPD

"Access to Safe Quality Healthcare Environments that Meet

Please see section-by-section application instructions below.

SECTION-BY-SECTION INSTRUCTIONS

Application Type / Fee

Indicate the type of application (new or renewal). Laboratories which are currently accepted in the Division of the State Architect Laboratory Evaluation and Acceptance (DSA-LEA) program are charged \$250.00. Laboratories which are accredited by other entities are charged a \$500.00 fee. Facilities that have both DSA-LEA and accreditation are charged \$500.00. Renewal fee is \$250.00. All fees submitted shall be nonrefundable.

Applicant information

Enter both the physical and mailing address of the actual testing facility, not the headquarters or administrative facility.

Key Personnel

Individuals who perform more than one function shall be fully qualified for each role.

ENGINEERING MANAGER and ALTERNATE -- Engineering Manager, however named, shall:

- be an employee or owner of the laboratory and working at the facility;
- · hold a management position in the company;
- not be employed by any other laboratory that provides testing or special inspection services; and
- have overall responsibility for technical operations and the quality system and its implementation.

LABORATORY SUPERVISOR - Laboratory Supervisor(s), however named, shall:

- be an employee of the laboratory;
- be responsible for the daily operation of the materials testing laboratory and supervision of technicians including, but not limited to, their training and oversight of equipment; and
- maintain the skills and training to oversee the activities of the laboratory.

FIELD SUPERVISOR - Field Supervisor(s), however named, shall:

- · be an employee of the laboratory;
- · be responsible for the daily operation of field technicians; and
- be responsible for supervision of field technicians including but not limited to supervision of field sampling, testing, scheduling, training and report review.

Accreditation

Indicate the name of all applicable accreditation bodies.

"Access to Safe Quality Healthcare Environments that Meet

OSHPD

Instructions Page 3 of 4



Facilities Development Division Office of Statewide Health Planning and Development 400 R Street, Suite 200 • Sacramento, CA 95811 • (916) 440-8300 700 N. Alameda Street, Suite 2-500 • Los Angeles, CA 90012 • (213) 897-0166

POLICY INTENT NOTICE (PIN)

SUBJECT

Approved Testing Agency/Laboratory for Structural Tests

PIN: 58

Effective: 7/20/2014



PURPOSE

2013 California Building Code (CBC) Section 1703A.4 requires that test reports based on tests conducted by <u>approved testing agency</u> (ies) in accordance with <u>appropriate</u> <u>reference standards</u> be provided for the building official to determine that construction materials meet the applicable code requirements. CBC Chapter 35 adopts International Standards Organization (ISO) Accreditation Standard 17025 (ISO 17025) as one of the reference standards for accreditation of the laboratories (labs). Therefore, an Approved Testing Agency is any laboratory (lab) or testing agency (the words lab and testing agency are used interchangeably in this PIN) accredited under the ISO 17025 for specific tests listed in the scope of the accreditation.

CBC Section 1704A.2.1 permits registered design professionals to act as an approved agency and their personnel are permitted to act as special inspectors, provided they qualify as special inspectors. Special inspectors often perform field tests and provide test reports for tests normally not performed by labs (e. g. Concrete/Masonry post-installed anchor bolt tests, pile tests, structural sealant glazing tests, steel non-destructive tests, masonry core tests, material tests for seismic compliance verification, etc.).

CBC Section 1705A.12.4 requires that all tests for special seismic certification be performed by an independent lab having accreditation to ISO 17025 or shall be under the responsible charge of an independent California licensed engineer. Test reports are required to be reviewed and accepted by an independent California licensed structural engineer.

California Health and Safety Code (H&SC) Section 129805 and 2013 California Administrative Code (CAC) Section 7-141 requires that administration of the work of construction shall be under the responsible charge of the architect and structural engineer.

CAC Section 7-149 requires that the architect or engineer in responsible charge to establish and administer the testing program.

Some labs are ISO 17025 accredited for specific tests, hence they are approved by OSHPD, after submittal of required documentation. Many of the tests that are performed in field, in general, are not in the scope of lab's ISO 17025 accreditation. Some health facility owners and manufacturers perform tests in their own labs under the responsible charge of a California licensed engineer. Some labs are accredited to standards that are often the derivatives of and equivalent to ISO 17025 and would like to be considered as approved.

5 1 110

This Policy Intent Notice (PIN) provides a summary of the processes and procedures for the OSHPD acceptance of test reports and testing labs to be considered as approved.

BACKGROUND

ISO/IEC 17025 is the standard adopted in the CBC for establishing an approved testing agency for all tests:

 ISO/IEC 17025: General requirements for competence of testing and calibration laboratories.

Some Construction Materials Testing (CMT) labs accredited to NISTIR 7012 or AASHTO R18, which are accreditation standards for CMT labs equivalent to ISO 17025, would like to be considered as approved testing agencies by OSHPD:

- NISTIR 7012: Technical requirements for construction materials testing.
- AASHTO R18: Standard Recommended Practice for Establishing and Implementing a Quality System for Construction Materials Testing Laboratories.

As an option, a laboratory may also obtain accreditation for one or more of the following construction materials engineering standards:

- ASTM E329: Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
- ASTM C1077: Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
- ASTM D3666: Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials.
- ASTM D3740: Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soils and Rock as Used in Engineering Design and Construction.
- ASTM C1093: Practice for Accreditation of Testing Agencies for Unit Masonry.
- ASTM E1212: Practice for Quality Management Systems for Nondestructive Testing (NDT) Agencies.
- ASTM E543: Specification for Agencies Performing Nondestructive Testing (NDT).

Accreditation may be for one or more tests in each area. Either a comprehensive accreditation to ISO/IEC 17025, AASHTO R18 or NISTIR 7012 can be obtained that may include accreditation to the individual engineering quality standards or individual accreditation to the engineering quality standards ASTM E329, ASTM C1077, ASTM D3666, ASTM D3740, ASTM C1093, ASTM E1212 and ASTM E543 can be obtained from an accreditation body.

ISO 17025 requires that accreditation bodies be qualified to ISO 17011:

• ISO 17011: Conformity assessments – General requirements for accreditation bodies accrediting conformity assessment bodies.

0 (40 Bill 60

In general, OSHPD accepts evaluation/listing by various organizations such as the International Code Council-Evaluation service (ICC-ES), International Association of Plumbing and Mechanical Officials-Evaluation Service (IAPMO-ES), Factory Mutual Approvals (FM Approvals), Underwriters Laboratory Listings (UL listing), etc., when associated acceptance criteria are adopted in the 2013 California Building Standards Code (CBSC). All of these organizations require that testing be performed in labs accredited to ISO 17025 or equivalent.

OSHPD often receives requests to consider test reports from foreign labs that are accredited by an accreditation body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA).

In addition, OSHPD is often asked whether OSHPD accepts labs approved under the California Division of State Architect (DSA) Laboratory Evaluation and Acceptance (LEA) program.

To address questions about <u>appropriate reference standards</u> for <u>approved testing</u> <u>agency or Lab</u>, this policy intent notice has compiled the various requirements in the CBC and current OSHPD practice into this single resource document. This PIN will also create OSHPD Preapproved Laboratory (OPL) program for testing agencies/labs.

POLICY

- All tests shall be performed by an <u>independent approved testing</u> <u>agency</u>/laboratory (Lab) or shall be under the responsible charge of an independent California licensed engineer in accordance with CBC Sections 1703A.4, 1704A.2.1, 1705A.12.4 and CAC Sections 7-141 & 7-149. Test reports shall be signed by lab's authorized representative or engineer in charge.
- 2. When testing is performed under the responsible charge of an independent California licensed engineer, and not in a lab accredited under ISO 17025 or equivalent, engineer shall have qualification and experience for specific tests, as determined by the Office. Calibration requirements for such tests shall meet the applicable test standards and ISO 17025 Section 5.6.1.
- 3. Test reports are required to be reviewed and accepted by an independent California licensed structural engineer in accordance with CBC Sections 1703A.2, 1703A.4, 1704A.2.4, 1705A.12.4 and CAC Sections 7-141 & 7-149.
- 4. For a testing agency/laboratory to be considered <u>independent</u>, it should be able to demonstrate that it is impartial and that it and its personnel are free from any undue commercial, financial and other pressures which might influence their technical judgment in accordance with ISO 17025 Section 4.1.4. The independent testing agency/laboratory should not engage in any activities that may endanger

0 (10 Bill 50

- the trust in its independence of judgment and integrity in relation to its testing or calibration activities.
- 5. All laboratories accredited in accordance with ISO 17025 are considered to be <u>approved testing agencies</u> or labs for the tests in the scope of accreditation in accordance with CBC Section 1703A.4 and Chapter 35.
- Construction Material Testing (CMT) laboratories accredited using any one of the following standards, which are equivalent to (and often are derivatives of) ISO 17025, in addition to or in-lieu of accreditation to ISO 17025 shall be considered approved testing agencies or labs for the scope of testing for which they are accredited.
 - NISTIR 7012: Technical requirements for construction materials testing.
 - AASHTO R18: Standard Recommended Practice for Establishing and Implementing a Quality System for Construction Materials Testing Laboratories.
 - ASTM E329: Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
 - ASTM C1077: Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
 - ASTM D3666: Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials.
 - ASTM D3740: Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soils and Rock as Used in Engineering Design and Construction.
 - ASTM C1093: Practice for Accreditation of Testing Agencies for Unit Masonry.
 - ASTM E1212: Practice for Quality Management Systems for Nondestructive Testing (NDT) Agencies.
 - ASTM E543: Specification for Agencies Performing Nondestructive Testing (NDT).
- 7. An approved testing agency/lab shall be objective, competent and independent from the contractor responsible for the work being inspected. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed as required by the CBC Section 1703A.1.1.
- 8. The architect or engineer in responsible charge shall verify that approved agency is independent and acceptable as required by CAC Section 7-141.
- 9. Laboratory accreditation bodies shall conform to ISO 17011, as required by ISO 17025. The scope of the laboratory's accreditation shall include the specific type of testing covered in the test report. The laboratory's accreditation certificate shall be provided to OSHPD to show that the laboratory is accredited for the testing reported.

D / //0

- 10. Labs accredited (for the tests to be performed) by the following accreditation bodies or other accreditation bodies that are signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) are acceptable:
 - Laboratory Accreditation Bureau (LAB).

http://www.l-a-b.com/content/directory-accredited-labs

International Accreditation Service (IAS).

http://www.iasonline.org/Testing Laboratories/TL.html

AASHTO Accreditation Program (AAP).

http://www.amrl.net/amrlsitefinity/default/aap/r18labs.aspx

American Association for Laboratory Accreditation (A2LA).

https://www.a2la.org/dirsearchnew/newsearch.cfm

National Voluntary Laboratory Accreditation Program (NVLAP).

http://ts.nist.gov/standards/scopes/programs.htm

Construction Materials Engineering Council (CMEC).

https://search.cmec.org/fmi/webd/#CMEC&lay=IWP%20Start%20Page&viewstyle=form&record=1&mode=browse

11. Tests performed in a foreign lab with accreditation in accordance with ISO 17025 (for the tests to be performed) by an accreditation body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) are acceptable. Test reports shall be available in English and shall conform to the CBSC and applicable test standards. Test reports shall be reviewed and accepted by an independent California licensed structural engineer.

All foreign labs shall satisfy requirements in this item, irrespective of any other provisions in this PIN.

12. California Division of State Architect (DSA) Laboratory Evaluation and Acceptance (LEA) program's approval of laboratory is primarily based on ASTM E329/AASHTO accreditation of labs. As such testing labs in DSA-LEA program, in general, satisfy the accreditation requirements in the CBC. Hence labs approved under the DSA-LEA program are considered approved labs for OSHPD for the scope of tests listed there in.

https://www.apps.dgs.ca.gov/tracker/ApprovedLabs.aspx

E (10

- 13. Testing at the owner's or manufacturer's facility will be accepted if it is performed under the responsible charge of an independent California licensed engineer, not permanently employed by the owner/manufacturer, who shall witness the test and sign the report. Test reports shall be reviewed and accepted by an independent California licensed structural engineer in accordance with CAC Sections 7-141 & 7-149.
- 14. When a Testing Agency/Lab subcontracts tests and calibrations to other testing labs, those testing labs shall also be subjected to the same accreditation requirements as the approved Testing Agency/Lab as required by ISO 17025 Section 4.5
- 15. The testing laboratory shall have the testing apparatus and equipment capacity necessary to perform the tests in accordance with the applicable test standards in accordance with CBC Section 1703A.1.2 and ISO 17025 Section 5.5.
- 16. Sampling and evaluation of tests required by approved construction documents, CBSC or its reference standards shall be in accordance with applicable test standards for specific tests. Sampling and evaluation of test results shall be in accordance with ASCE 7-10 Section 1.3, when not addressed otherwise in the CBSC or its referenced test standards. Test results shall include a description or pictures of the failure mode(s) for each test specimen. The reports shall state definitely whether the material tested complies with the approved construction documents in accordance with CAC Section 7-149.
- 17. Written evidence verifying independence and approval of testing agency or lab shall be submitted to OSHPD along with Testing, Inspection, and Observation (TIO) program required by CAC Section 7-141 and CBC Section 1703A.1.1.

Alternatively, Testing Agencies/Labs can apply for pre-approval under the OSHPD Preapproved Laboratory (OPL) program based on their accreditation or DSA-LEA approval as follows:

- a. Laboratories approved under the DSA-LEA program can submit a completed application in word format (with signature embedded) along with:
 - i. \$250.00 new application fee or renewal fee.
 - ii. DSA-LEA approval must be current and shall have one-to-one correspondence for test scope to be approved.
- b. Laboratories accredited by accreditation bodies (qualified under ISO 17011) can submit a completed application in word format (with signature embedded) along with:
 - i. \$500.00 new application fee or \$250.00 renewal fee.
 - ii. Accreditation shall be based on one or more of the standards listed in Item # 6 above.
 - iii. Accreditation must be current and shall have one-to-one correspondence for test scope to be approved.

0 110 BILLE

POLICY INTENT NOTICE (PIN)

- c. All fees submitted shall be non-refundable.
- d. Approval shall be valid for up to six years, but not exceeding the approval expiration date by DSA-LEA or accreditation bodies, as applicable.
- e. All submittal shall be electronic (e-mail or equivalent).
- f. List of OSHPD pre-approved labs will be posted at OSHPD website.
- g. Any adverse action or removal of tests by accreditation bodies or DSA-LEA shall be a cause for removal of labs or tests from the OPL program. In addition, detection of potential anomalies by a lab or change of primary lab personnel that may impact health and safety of OSHPD regulated facilities shall be a cause for removal from OPL program.

Original signed	7/20/14	
Paul Coleman	Date	

7 (10

Appendix A - Code Sections

California Health and Safety Code (HS & C) Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 (HSSA 83)

§129805. Preparation of plans and specifications; oversight by architect or engineer; administration of construction work; exempt projects

(a) All plans and specifications shall be prepared under the responsible charge of an architect or a structural engineer, or both. A structural engineer shall prepare the structural design and shall sign plans and specifications related thereto. Administration of the work of construction shall be under the responsible charge of the architect <u>and</u> structural engineer, except that where plans and specifications for alterations or repairs do not affect architectural or structural conditions, the plans and specifications may be prepared under the responsible charge of, and work of construction may be administered by, a professional engineer duly qualified to perform the services and holding a valid certificate under Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code for performance of services in that branch of engineering in which the plans, specifications, and estimates and work of construction are applicable.

THE CALIFORNIA ADMINISTRATIVE CODE, 2013

ARTICLE 4 CONSTRUCTION

7-141. Administration of Construction.

- (a) The administration of the work of construction shall be under the responsible charge of an architect or structural engineer. Where neither structural nor architectural elements are substantially involved, a mechanical or electrical engineer registered in the branch of engineering most applicable to the project may be in responsible charge of the administration of the work of construction.
- (d) The architect or engineer in responsible charge of the work shall prepare a testing, inspection and observation program which shall be submitted to the Office for approval prior to the issuance of the building permit.
- (e) The testing program shall identify materials and tests to be performed on the project. The firm(s) and/or individual(s) to perform each of the required tests shall also be identified. The testing program shall include, at a minimum, those tests required by applicable sections of the California Building Standards Code.

7-149. Tests.

- (a) Pursuant to Section 7-141, the architect or engineer in responsible charge shall establish and administer the testing program. Where job conditions warrant, the architect or engineer may waive certain specified tests contingent upon the approval of the Office. The Office shall be notified as to the disposition of materials noted on laboratory reports. One copy of all test reports shall be forwarded to the Office by the testing agency. The reports shall state definitely whether the material tested complies with the approved contract documents.
- (b) The governing board or authority of a health facility shall select a qualified person or testing laboratory as the testing agency to conduct the tests. The selected person or testing laboratory must be approved by the architect or engineer in responsible charge. The governing board or authority shall pay for all tests.

7-151. Verified Compliance Reports.

- (a) In accordance with Section 7-151(e), or when required by the Office, the architect(s), engineer(s), inspector(s) of record, special inspector(s) and contractor or owner/builder shall each submit to the Office a verified compliance report, with their signature and based on their own personal knowledge, as defined by this section. The report shall:
 - Verify that the work during the period, or a portion of the work, covered by the report
 has been performed and materials used and installed are in accordance with the
 approved construction documents.
 - 2. Set forth detailed statements of fact as are required by the Office.
- (b) The term "personal knowledge," as used in this section and as applied to the licensed architect or engineer or both, means personal knowledge that is obtained by periodic visits to the project site, of reasonable frequency, for the purpose of general observation of the work. It also includes knowledge that is obtained from the reporting of others as to the progress of the work, testing of materials, and inspection and supervision of the work that is performed between the periodic visits of the architect or the engineer. Reasonable diligence shall be exercised in obtaining the facts.
- (e) Verified compliance reports shall be submitted to the Office at the intervals or stages of the work as stated in the approved testing, inspection and observation program. In no case, shall the submittal of verified compliance reports be less than:
 - 1. One copy prepared and signed by each required participant or discipline at the completion of the work.
 - 2. One copy prepared and signed by any participant or discipline at any time a special verified compliance report is required by the Office.

D 0 (40

(f). The architect or engineer in responsible charge of the work shall be responsible for ensuring all required verified compliance reports are submitted to the Office.

THE CALIFORNIA BUILDING CODE, 2013

CHAPTER 2 DEFINITIONS

SECTION 202 - DEFINITIONS

APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been *approved*.

CHAPTER 17A SPECIAL INSPECTIONS AND TESTS

SECTION 1701A - GENERAL

1701A.4 Special inspectors. [OSHPD 1 and 4] In addition to the inspector(s) of record required by the California Administrative Code (CCR, Title 24, Part 1), Section 7-144, the owner shall employ one or more special inspectors who shall provide inspections during construction on the types of work listed under Chapters 17A, I8A, 19A, 20, 21A, 22A, 23, 25, 34A, and noted in the Test, Inspection, and Observation (TIO) program required by Sections 7-141, 7-145 and 7-149, of the California Administrative Code. Test, Inspection and Observation (TIO) program shall satisfy requirements of Sections 1704A.2.3 and 1704A.5.

SECTION 1703A - APPROVALS

- **1703A.1.1 Independence.** An approved agency shall be objective, competent and independent from the contractor responsible for the work being inspected. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed.
- **1703A.1.2 Equipment.** An approved agency shall have adequate equipment to perform required tests. The equipment shall be periodically calibrated.

POLICY INTENT NOTICE (PIN)

1703A.1.3 Personnel. An approved agency shall employ experienced personnel educated in conducting, supervising and evaluating tests and/or inspections.

1703A.2 Written approval. Any material, appliance, equipment, system or method of construction meeting the requirements of this code shall be approved in writing after satisfactory completion of the required tests and submission of required test reports.

1703A.4 Performance. Specific information consisting of test reports conducted by an approved testing agency in accordance with the appropriate referenced standards, or other such information as necessary, shall be provided for the building official to determine that the material meets the applicable code requirements.

1704A.2.1 Special inspector qualifications. The special inspector shall provide written documentation to the building official demonstrating his or her competence and relevant experience or training. Experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of special inspection activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this code.

The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as the special inspector for the work designed by them, provided they qualify as special inspectors.

1705A.12.4 Special seismic certification.

All tests shall be performed by an independent laboratory having accreditation to the International Standards Organization (ISO) accreditation standard 17025 or shall be under the responsible charge of an independent California licensed engineer. Test reports shall be reviewed and accepted by an independent California licensed structural engineer.

CHAPTER 35 REFERENCED STANDARDS

14 C40

ISO	International Organization for Standardization ISO Central Secretariat 1 ch, de la Voie-Creuse, Case Postale 56 CH-1211 Geneva 20, Switzerland	
Standard reference number	Title	Referenced in code section number
	11.00	occion number
ISO 17025-05	General requirement for competence of testing and calibration laboratories.	1705A.12.4

ASCE STANDARD ASCE/SEI 7-10

American Society of Civil Engineers Minimum Design Loads for Buildings and Other Structures

1.3 BASIC REQUIREMENTS

- 1.3.1.3.2 Testing. Testing used to substantiate the performance capability of structural and nonstructural components and their connections under load shall accurately represent the materials, configuration, construction, loading intensity, and boundary conditions anticipated in the structure. Where an approved industry standard or practice that governs the testing of similar components exists, the test program and determination of design values from the test program shall be in accordance with those industry standards and practices. Where such standards or practices do not exist, specimens shall be constructed to a scale similar to that of the intended application unless it can be demonstrated that scale effects are not significant to the indicated performance. Evaluation of test results shall be made on the basis of the values obtained from not less than 3 tests, provided that the deviation of any value obtained from any single test does not vary from the average value for all tests by more than 15%. If such deviation from the average value for any test exceeds 15%, then additional tests shall be performed until the deviation of any test from the average value does not exceed 15% or a minimum of 6 tests have been performed. No test shall be eliminated unless a rationale for its exclusion is given. Test reports shall document the location, the time and date of the test, the characteristics of the tested specimen, the laboratory facilities, the test configuration, the applied loading and deformation under load, and the occurrence of any damage sustained by the specimen, together with the loading and deformation at which such damage occurred.
- **1.3.1.3.3 Documentation.** The procedures used to demonstrate compliance with this section and the results of analysis and testing shall be documented in one or more reports submitted to the authority having jurisdiction and to an independent peer review.

10 (10

ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories

4.1.4 If the laboratory is part of an organization performing activities other than testing and/or calibration, the responsibilities of key personnel in the organization that have an involvement or influence on the testing and/or calibration activities of the laboratory shall be defined in order to identify potential conflicts of interest.

NOTE 1: Where a laboratory is part of a larger organization, the organizational arrangements should be such that departments having conflicting interests, such as production, commercial marketing or financing do not adversely influence the laboratory's compliance with the requirements of this International Standard.

NOTE 2: If the laboratory wishes to be recognized as a third-party laboratory, it should be able to demonstrate that it is impartial and that it and its personnel are free from any undue commercial, financial and other pressures which might influence their technical judgment. The third-party testing or calibration laboratory should not engage in any activities that may endanger the trust in its independence of judgment and integrity in relation to its testing or calibration activities.

4.5 Subcontracting of tests and calibrations

- **4.5.1** When a laboratory subcontracts work, whether because of unforeseen reasons (e.g. workload, need for further expertise or temporary incapacity) or on a continuing basis (e.g. through permanent subcontracting, agency or franchising arrangements), this work shall be placed with a competent subcontractor. A competent subcontractor is one that, for example, complies with this International Standard for the work in question.
- **4.5.2** The laboratory shall advise the customer of the arrangement in writing and, when appropriate, gain the approval of the customer, preferably in writing.
- **4.5.3** The laboratory is responsible to the customer for the subcontractor's work, except in the case where the customer or a regulatory authority specifies which subcontractor is to be used.
- **4.5.4** The laboratory shall maintain a register of all subcontractors that it uses for tests and/or calibrations and a record of the evidence of compliance with this International Standard for the work in question.

5.5 Equipment

- **5.5.1** The laboratory shall be furnished with all items of sampling, measurement and test equipment required for the correct performance of the tests and/or calibrations (including sampling, preparation of test and/or calibration items, processing and analysis of test and/or calibration data). In those cases where the laboratory needs to use equipment outside its permanent control, it shall ensure that the requirements of this International Standard are met.
- **5.5.2** Equipment and its software used for testing, calibration and sampling shall be capable of achieving the accuracy required and shall comply with specifications relevant to the tests and/or calibrations concerned. Calibration programs shall be established for key quantities or values of the instruments where these properties have a significant effect on the results. Before being placed into service, equipment (including that used for sampling) shall be calibrated or checked to establish that it meets the laboratory's specification requirements and complies with the relevant standard specifications. It shall be checked and/or calibrated before use (see 5.6).
- **5.5.3** Equipment shall be operated by authorized personnel. Up-to-date instructions on the use and maintenance of equipment (including any relevant manuals provided by the manufacturer of the equipment) shall be readily available for use by the appropriate laboratory personnel.
- **5.5.4** Each item of equipment and its software used for testing and calibration and significant to the result shall, when practicable, be uniquely identified.
- **5.5.5** Records shall be maintained of each item of equipment and its software significant to the tests and/or calibrations performed. The records shall include at least the following:
 - a) the identity of the item of equipment and its software:
 - b) the manufacturer's name, type identification, and serial number or other unique identification;
 - c) checks that equipment complies with the specification (see 5.5.2);
 - d) the current location, where appropriate;
 - e) the manufacturer's instructions, if available, or reference to their location;
 - f) dates, results and copies of reports and certificates of all calibrations, adjustments, acceptance and the due date of next calibration;
 - g) the maintenance plan, where appropriate, and maintenance carried out to date;
 - h) any damage, malfunction, modification or repair to the equipment.
- **5.5.6** The laboratory shall have procedures for safe handling, transport, storage, use and planned maintenance of measuring equipment to ensure proper functioning and in order to prevent contamination or deterioration.

NOTE: Additional procedures may be necessary when measuring equipment is used outside the permanent laboratory for tests, calibrations or sampling.

5.5.7 Equipment that has been subjected to overloading or mishandling, gives suspect results, or has been shown to be defective or outside specified limits, shall be taken out of service. It shall be isolated to prevent its use or clearly labelled or marked as being out of service until it has been repaired and shown by calibration or test to perform correctly. The laboratory shall

examine the effect of the defect or departure from specified limits on previous tests and/or calibrations and shall institute the "Control of nonconforming work" procedure (see 4.9).

- **5.5.8** Whenever practicable, all equipment under the control of the laboratory and requiring calibration shall be labelled, coded or otherwise identified to indicate the status of calibration, including the date when last calibrated and the date or expiration criteria when recalibration is due.
- **5.5.9** When, for whatever reason, equipment goes outside the direct control of the laboratory, the laboratory shall ensure that the function and calibration status of the equipment are checked and shown to be satisfactory before the equipment is returned to service.
- **5.5.10** When intermediate checks are needed to maintain confidence in the calibration status of the equipment, these checks shall be carried out according to a defined procedure.
- **5.5.11** Where calibrations give rise to a set of correction factors, the laboratory shall have procedures to ensure that copies (e.g. in computer software) are correctly updated.
- **5.5.12** Test and calibration equipment, including both hardware and software, shall be safeguarded from adjustments which would invalidate the test and/or calibration results.

5.6 Measurement traceability

5.6.1 General

All equipment used for tests and/or calibrations, including equipment for subsidiary measurements (e.g. for environmental conditions) having a significant effect on the accuracy or validity of the result of the test, calibration or sampling shall be calibrated before being put into service. The laboratory shall have an established program and procedure for the calibration of its equipment.

NOTE: Such a program should include a system for selecting, using, calibrating, checking, controlling and maintaining measurement standards, reference materials used as measurement standards, and measuring and test equipment used to perform tests and calibrations.

D 15 110

Appendix B- Frequently Asked Questions

1. Is the verified compliance report(s) in accordance with CAC Section 7-151(b) adequate for structural engineer's acceptance of test reports?

Yes.

2. Are the mill certs still acceptable, where <u>specifically permitted</u> by the CBSC?

Yes. PIN did not change any specific acceptance criteria in the California Building Standards Code (CBSC).

3. Do the requirements in the PIN apply to all engineering and architectural disciplines?

No. PIN is limited to structural testing only.

4. Do the requirements in the PIN apply to special inspection agencies?

No. Scope of the PIN only covers testing agencies/labs.

- 10 (10

OSHPD Preapproved Laboratory (OPL) Program* Approved Testing Agencies/Laboratories for Structural Tests

Show All entries Search:

OSHPD Preapproved Laboratory (OPL)Number	Approved Laboratory Name	City	County	State (Use Country Name for non- US Labs)	ZIP Code	Approval Expiration Date	Comments
OPL-0001-14	Dynamic Certification Laboratories (DCL)	Sparks	Washoe	Nevada	89431	07/01/2015	See Attachment
OPL-0002-14	СНЈ	Colton	San Bernardino	California	92324	02/23/2017	See Attachment
OPL-0003-14	СНЈ	Victorville	San Bernardino	California	92392	03/30/2016	See Attachment
OPL-0004-14	Caltech Labs	Brea	Orange	California	92821	03/25/2018	See Attachment
OPL-0005-14	Applied Technical Services (ATS)	Marietta	Cobb	Georgia	30062	01/31/2016	See Attachment
OPL-0006-14	Consolidated Engineering Laboratories (CEL)	Oakland	Alameda	California	94606	10/16/2015	See Attachment
OPL-0007-14	Construction Testing & Engineering, Inc. (CTE)	Escondido	San Diego	California	92026	02/05/2016	See Attachment
OPL-0008-14	CTE South, Inc.	Oxnard	Ventura	California	93033	07/15/2017	See Attachment
OPL-0009-14	CTE South, Inc.	Riverside	Riverside	California	92518	06/18/2015	See Attachment
OPL-0010-14	American Engineering Laboratories, Inc.	La Habra	Orange	California	90631	10/20/2016	See Attachment
OPL-0011-14	United Inspection & Testing	Moreno Valley	Riverside	California	92553	09/10/2017	See Attachment
OPL-0012-14	CEL CONSOLIDATE	Windsor	Sonoma	California	95492	07/11/2017	See Attachment

	(CLL)						
OPL-0013-14	BSK Associates	Livermore	Alameda	California	94551	10/28/2016	See Attachment
OPL-0014-14	DC Inspections, Inc.	Bakersfield	Kern	California	93308	07/14/2016	See Attachment
OPL-0015-14	Smith-Emery Laboratories	Los Angeles	Los Angeles	California	90021	08/20/2017	See Attachment
OPL-0016-15	BSK Associates	Bakersfield	Kern	California	93301	04/25/2017	See Attachment
OPL-0018-14	Consolidated Engineering Laboratories (CEL)	North Highlands	Sacramento	California	95660	11/01/2018	See Attachment
OPL-0019-14	Certified Inspection Labs	South El Monte	Los Angeles	California	91733	12/19/2017	See Attachment

Showing 1 to 18 of 18 entries

^{*}See Poicy Intent Notice 58 (PIN 58).