

APPLICATION FOR OSHPD	APPROVED	For Office Use Only					
LABORATORY (OPL)			App	lication #	‡	OPL	-0030-15
Name of Approved Agency/Laboratory		City	<u> </u>	County			State
Twining Inc.		Long Beach		Los A	ngeles		CA
APPLICATION TYPE / FEE							
Application is based on:		New Application					newal Fee
, ipplication to bacca offi		(Fees are Nonrefun	dable)		(Fe	es are	Nonrefundable)
☐ DSA-LEA Approved Only		\$250.00			□ \$250	0.00	
☐ Accreditation Only		\$500.00			□ \$25	0.00	
X Both DSA-LEA Approved and Accreditation	Х	\$500.00			□ \$25	0.00	
APPLICANT INFORMATION							
Applicant Name David J. Ryan	Signatur	David J. K	2	l l	Position in the Quality Manage	•	ation roject Engineer
Agency/Laboratory Name Twining Inc	•	- Care gan	gen -		Application Dat 05/27/2015	е	
Phone Number (562)426-3355			E-Mail dryan@tw	vininginc.co	m		
Address of Facility Location (Each facility location require	es separate	e application.)					
Street 3310 E. Airport Way							
City: Long Beach		County Los Angeles			State: CA		Zip Code: 90806
Facility Mailing Address (If different from facility address a	above.)						
Street							
City:					State:		Zip Code:
KEY PERSONNEL (Attach addit	tional pa	nges if needed.)					
Engineering Manager (orequivalent) – Name David J. Ryan			CA Registrat	tion Numbe	Pr.		Expiration Date 09/30/2016
Title in the Organization Quality Manager / Sr. Project Engineer			Phone Numb 662)426-335				
FAX Number (562)426-6424			E-Mail dryan@twini	inginc.com			
Alternate to Engineering Manager (if any) – Name V. Andrew Tan			CA Registrat 64265	tion Numbe	er .	Expira 6/30/2	ation Date 2015
Title in the Organization Engineering Evaluation Service Manager			Phone Numb (562) 426-33				
FAX Number (562)426-6424			E-mail atan@twinin	ginc.com			

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KEY PERSONNEL (Attach additional pages if needed.)		
Laboratory Supervisor – Name Steve Crumb	CA Registration Number (if any)	Expiration Date
Title in the Organization Lab Manager	Phone Number (562) 426-3355	
FAX Number (562)426-6424	E-Mail scrumb@twininginc.com	
Field Supervisor – Name Scott Benson	CA Registration Number (if any)	Expiration Date
Title in the Organization Field Supervisor	Phone Number (562) 426-3355	
FAX Number (562)426-6424	E-mail sbenson@twininginc.com	

ACCREDITATION
This laboratory currently holds accreditation by: (Attach a copy of current accreditation details.)
 □ AASHTO Accreditation Program (AAP) □ National Voluntary Laboratory Accreditation Program (NVLAP) □ International Accreditation Service (IAS) □ American Association of Laboratories Program (A2LA) □ Laboratory Accreditation Program (LAB) □ Construction Materials Engineering Council (CMEC) X Other _AMRL / CalTrans / Dept. of Army-Corps of Engineers / City of Los Angeles Latest Expiration Date (if any)
Latest Expiration Date (ii arry)
Is this laboratory accepted in the Division of the State Architect Laboratory Evaluation and Acceptance Program, DSA-LEA? \square No X Yes Expiration Date: 04/25/2017
Basis for accreditation:
X ISO/IEC 17025: General requirements for competence of testing and calibration laboratories
□ NISTIR 7012: Technical requirements for construction materials testing
X AASHTO R18: Standard Recommended Practice for Establishing and Implementing a Quality System for
Construction Materials Testing Laboratories
X ASTM E 329: Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
X ASTM C 1077: Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction
and Criteria for Laboratory Evaluation X ASTM D 3666: Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous
Paving Materials
X ASTM D 3740: Practice for Evaluation of Agencies Engaged in Testing and/or Inspections of Soils and Rock as Used Engineering Design and Construction
X ASTM C 1093: Practice for Accreditation of Testing Agencies for Unit Masonry
X ASTM E 1212: Practice for Quality Management Systems for Nondestructive Testing (NDT) Agencies
☐ ASTM E 543: Specification for Agencies Performing <i>Nondestructive Testing (NDT)</i>

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STA	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	SOILS AND FOUNDATIONS										
	Tests										
Yes		Standard	Test Procedure	Yes		Standard	Test Procedure				
Χ	a.	ASTM D 2487	Classification of Soils	χ	b.	ASTM D 422	Particle Size Analysts				
Χ	C.	ASTM D 2216	Moisture Content	Χ	d.	ASTM D 4318	Liquid / Plastic Limit				
	e.	ASTM D 2850	Unconsolidated, Undrained Triaxial		f.	ASTM D 4767	Triaxial Compression				
Χ	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)				
Χ	k.	ASTM D 1140	No. 200 Wash	Χ	I.	ASTM D 4829	Expansion Index				
Χ	m.	ASTM D 2419	Sand Equivalent Value	Χ	n.	ASTM D 1557	Soil Compaction – Modified				
Χ	0.	ASTM D 3080	Direct Shear	Χ	p.	ASTM D 6938	Density of Soils – Nuclear Gage				
Χ	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								

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

14/M/M



3		MASONRY						
	Tes	ts						
Yes	Stan	dard/Code Reference	Test Procedure	Yes	Standard/Code Reference		Test Procedure	
Х	a.	ASTM C 140	Dimensions	Χ	b.	ASTM C 140	Compressive Strength	
Χ	C.	ASTM C 140	Absorption	Χ	d.	ASTM C 140	Unit Weight	
Χ	e.	ASTM C 140	Moisture Content	Χ	f.	ASTM C 426	Linear Drying Shrinkage	
Χ	g.	CBC 2105A.2.2.1.4	Mortar Sampling	Χ	h.	CBC 2105A.2.2.1.4	Grout Sampling	
Χ	i.	ASTM C 1314	Prism Compressive Strength	Χ	j.	ASTM C 1019	Grout Compressive Strength	
Χ	k.	ASTM C 780	Mortar Compressive Strength	Χ	I.	ASTM C 39	Core Compressive Strength	
Χ	m.	CBC 2105A.4	Core Shear	Х	n.	ASTM C 1314	Prism Sampling	
Tests th	at are i	n the lab's scope but are	e not listed above should be provid	ded in the	space	(s) below.		
Yes	Stand	dard/Code Reference	Test Procedure	Yes	Sta	ndard/Code Reference	Test Procedure	
Χ	aa.	ICC-ES AC 58	Adhesive Anchors		bb.			
	CC.				dd.			
	ee.				ff.			

4		STEEL							
	Tes	ts							
Yes	Stand	lard/Code Reference	Test Procedure	Yes	Sta	ndard/Code Reference	Test Procedure		
Χ	a.	ASTM A 370	Tension Test	Χ	b.	ASTM A 370	Bend		
	C.	ASTM E 10	Brinell Hardness	Χ	d.	ASTM E 18	Rockwell Hardness		
Χ	e.	ASTM E 190	Guided Bend	Χ	f.	ASTM E 23	Charpy V - Notch		
Χ	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	Χ	j.	ASTM E 165	Liquid Penetrant		
Χ	k.	ASTM E 1444	Magnetic Particle		I.	ASTM E 94	Radiographic		
Χ	m.	ASTM E 164	Ultrasonic	Χ	n.	ASTM E 605	Density of SFRM		
Χ	0.	CBC 2203A.1	Material Identification	Χ	Р	ASTM F606	Bolt Tension Test		
Tests tha	Tests that are in the lab's scope but are not listed above should be provided in the space(s) below.								
Yes	Stand	lard/Code Reference	Test Procedure	Yes	Sta	ndard/Code Reference	Test Procedure		
	aa.	·			bb.				
	CC.	<u> </u>			dd.				
	ee.				ff.				

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5		Wood and Roof Assemblies							
	Tests								
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		
Х	C.	ASTM C 67	Brick and Structural Clay Roof Tiles						
Tests that	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	Stand	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 that	nat 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.			





	List of Attachments Supporting the Testing Agency/Laboratory Approval (Submit Each Attachment as Separate PDF)							
Yes	Enclosure Type							
Х	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							
Х	DSA-LEA Laboratory Qualification as posted at DSA website: https://www.apps.dgs.ca.gov/tracker/ApprovedLabs.aspx							
Х	Latest Copy of DSA 100: LEA Program Application as Submitted to DSA							
Х	Latest copy of DSA 220: LEA Program On-Site Assessment Report							
Х	Latest copy of DSA acceptance (letter) of the Lab. into the LEA program.							
Х	Current Accreditation Certificate(s) including List of Tests for which Laboratory is Accredited							
X	Other (Please Specify):							

OSHPD App	proval	(For Office Use Only)
Signature:	Jap	Approval Date: 08/05/2015
Print Name:	James C. Pan	Approval Expiration Date: 04/25/2017
Title:	District Structural Engineer	
Condition of ap	pproval <i>(if applicable)</i> :	

44/A/W