Campus: UCSF Building Name: Aldea San Miguel Community Center



UNIVERSITY OF CALIFORNIA

Date: 8/16/2019

### FORM 1 CERTIFICATE OF SEISMIC PERFORMANCE LEVEL

Campus-Acquired or Leased Facility

BUILDING DATA

CAAN ID: 3250

Auxiliary Building ID: NA

Building Name: Aldea San Miguel Commuity Center Address: 155 Johnstone Dr. Site location coordinates: Latitude 37.8370 Longitudinal -122.1940

#### UCOP SEISMIC PERFORMANCE LEVEL (OR "RATING"): III

ASCE 41-17 Model Building Type:

- a. Longitudinal Direction: W1a and S1: Multistory Wood Light Frame and Steel Moment Frame
- b. Transverse Direction: W1a and S1: Multistory Wood Light Frame and Steel Moment Frame

Gross Square Footage: 2,807 Number of stories *above* grade: 2 Number of basement stories *below* grade: 0

Year Original Building was Constructed: 2011 Original Building Design Code & Year: CBC-2007 Retrofit Building Design Code & Code (if applicable): NA

#### SITE INFORMATION

Site Class: CBasis: (Gong Neishi Gong (GNG), 11/16/2009, S1.1)Geologic Hazards:Fault Rupture: NoLiquefaction: NoLandslide: NoBasis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)Basis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)Basis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)Basis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)

#### ATTACHMENT

Original Structural Drawings: (Aldea Center on Mount Sutro, Gong Neishi Gong (GNG), 11/16/2009, S1.1) or Seismic Evaluation: (NA) Retrofit Structural Drawings: (NA) Campus: UCSF Building Name: Aldea San Miguel Community Center

CAAN ID: 3250 Auxiliary Building ID: NA



#### **CERTIFICATION & PRESUMPTIVE RATING VERIFICATION STATEMENT**

I, Maryann T. Phipps, a California-licensed structural engineer, am responsible for the completion of this certificate, and I have no ownership interest in the property identified above. My scope of review to support the completion of this certificate included both of the following ("No" responses must include an explanation):

OF

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CALIFORNIA

- a) the review of structural drawings indicating that they are as-built or record drawings, or that they otherwise are the basis for the construction of the building: ☑ Yes □ No
- b) visiting the building to verify the observable existing conditions are reasonably consistent with those shown on the structural drawings: ☑ Yes □ No

Based on my review, I have verified that the UCOP Seismic Performance Level (SPL) is presumptively permitted by the following UC Seismic Program Guidebook provision (choose one of the following):

☑ 1) Contract documents indicate that the original design and construction of the aforementioned building is in accordance with the benchmark design code year (or later) building code seismic design provisions for UBC or IBC listed in Table 1 below.

□ 2) The existing SPL rating is based on an acceptable basis of seismic evaluation completed in 2006 or later.

□ 3) Contract documents indicate that a comprehensive<sup>1</sup> building seismic retrofit design was fullyconstructed with an engineered design based on the 1997 UBC/1998 *or later* CBC, and (choose one of the following):

□ the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1E (or BSE-R) and BSE-2E (or BSE-C) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 CBC *or later* for EXISTING buildings, and is presumptively assigned an SPL rating of IV.

□ the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1 (or BSE-1N) and BSE-2 (or BSE-2N) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 *or later* CBC for NEW buildings, and is presumptively assigned an SPL rating of III.

□ the retrofit project was not completed by the UC campus following UC policies, and is presumptively assigned an SPL rating of IV.

<sup>&</sup>lt;sup>1</sup> A comprehensive retrofit addresses the entire building structural system as indicated by the associated seismic evaluation, as opposed to addressing selective portions of the structural system.

Campus: UCSF Building Name: Aldea San Miguel **Community Center** CAAN ID: 3250

Auxiliary Building ID: NA



### UNIVERSITY OF CALIFORNIA

Date: 8/16/2019

#### **CERTIFICATION SIGNATURE**

Maryann T. Phipps

Print Name

President

6/30/2020

License Expiration Date

Title

AFFIX SEAL HERE

S2995

CA Professional Registration No.

Uann V Signature

8/16/2019

Date



Estructure, (510) 235-3116, 1144 65th St Suite A, Oakland Firm Name, Phone Number, and Address

Campus: UCSF Building Name: Aldea San Miguel Community Center



### UNIVERSITY OF CALIFORNIA

CAAN ID: 3250 Auxiliary Building ID: NA

#### Table 1: Benchmark Building Codes and Standards

	Building Seismic Design Provisions			
Building Type <sup><i>a,b</i></sup>	UBC	IBC		
Wood frame, wood shear panels (Types W1 and W2)	1976	2000		
Wood frame, wood shear panels (Type W1a)	1976	2000		
Steel moment-resisting frame (Types S1 and S1a)	1997	2000		
Steel concentrically braced frame (Types S2 and S2a)	1997	2000		
Steel eccentrically braced frame (Types S2 and S2a)	1988 <sup><i>g</i></sup>	2000		
Buckling-restrained braced frame (Types S2 and S2a)	f	2006		
Metal building frames (Type S3)	f	2000		
Steel frame with concrete shear walls (Type S4)	1994	2000		
Steel frame with URM infill (Types S5 and S5a)	f	2000		
Steel plate shear wall (Type S6)	f	2006		
Cold-formed steel light-frame construction—shear wall system (Type CFS1)	1997 <sup><i>h</i></sup>	2000		
Cold-formed steel light-frame construction—strap-braced wall system (Type CFS2)	f	2003		
Reinforced concrete moment-resisting frame (Type C1) <sup>/</sup>	1994	2000		
Reinforced concrete shear walls (Types C2 and C2a)	1994	2000		
Concrete frame with URM infill (Types C3 and C3a)	f	f		
Tilt-up concrete (Types PC1 and PC1a)	1997	2000		
Precast concrete frame (Types PC2 and PC2a)	f	2000		
Reinforced masonry (Type RM1)	1997	2000		
Reinforced masonry (Type RM2)	1994	2000		
Unreinforced masonry (Type URM)	f	f		
Unreinforced masonry (Type URMa)	f	f		
Seismic isolation or passive dissipation	1991	2000		

Note: This table has been adapted from ASCE 41-17 Table 3-2. Benchmark Building Codes and Standards for Life Safety Structural Performed at BSE-1E. Note: UBC = Uniform Building Code. IBC = International Building Code.

<sup>a</sup> Building type refers to one of the common building types defined in Table 3-1 of ASCE 41-17.

<sup>b</sup> Buildings on hillside sites shall not be considered Benchmark Buildings.

<sup>c</sup> not used

<sup>d</sup> not used

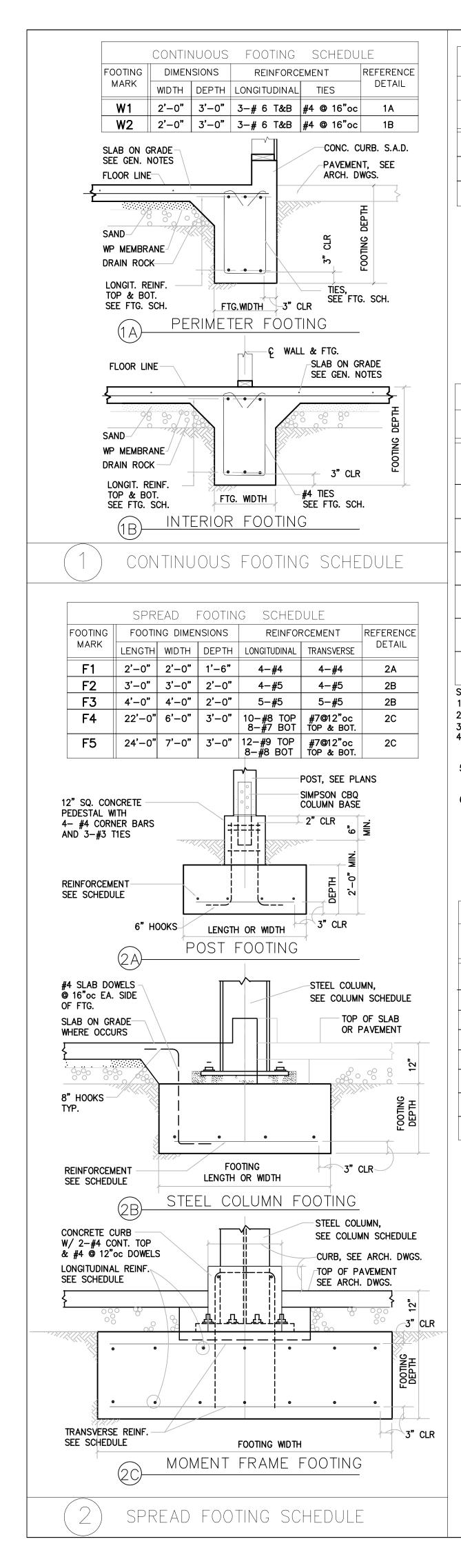
<sup>e</sup> not used

<sup>f</sup> No benchmark year; buildings shall be evaluated in accordance with Section III.J.

<sup>g</sup> Steel eccentrically braced frames with links adjacent to columns shall comply with the 1994 UBC Emergency Provisions, published September/October 1994, or subsequent requirements.

 $^{\it h}$  Cold-formed steel shear walls with wood structural panels only.

<sup>i</sup> Flat slab concrete moment frames shall not be considered Benchmark Buildings.



R C	) O F A	N D F	LOOR	S Н Е А	ΤΗΙΝ	G S C H	H E D	ULE				1
L	EVEL	PLYWOOD SH	HEATHING (	)	NAILI	NG (2)					GENERAI	<u> </u>
		THICKNESS	MINIMUM ID. INDEX	BOUNDAR BN (3)		DGE NAIL N (4)	FIELD FN	) NAIL (5)	GΕ	NERAL		
CAN	OPY ROOF	5/8" T&G	32/16	8d @	6"cc 8	d <b>@</b> 6"cc	8d (	@ 12"cc		NG TO ALL STRUCTURAL FEATURES UNLES		
TYP.	ROOF	5/8" T&G	32/16	8d @	4"cc 8	d @ 6"cc	8d (	@ 12"cc	1. C	ODES & COMPLIANCE ALL WORK SHALL BE PERFORMED IN APPLICABLE CODES, LAWS AND REGI	N COMPLETE COMPLIANCE WITH ALL	
	FLOOR	1-1/8"T&(	G 60/32	10d @	4"cc 10	d @ 6"cc	10d @	@ 10"cc	2 5	HAVING JURISDICTION OVER THE WO	RK.	
	EATHING NO	TES: OOD CDX EXT	FRIOR TYPF		FMARKED (F	PS-1)				A. SEE DRAWINGS OTHER THAN STRUCTU AND THEIR LOCATION,FOR DEPRESSION		
2.	LAY PANE	ELS WITH LON	NG SIDE PEF	RPENDICULAF	R TO FRAMI	NG. STAGGE		ELS.		FEATURES, FOR ROADWAY PAVING, W B. HOLES AND OPENINGS THROUGH W	IALKS, RAMPS, STAIRS, CURBS,ETC. ALLS AND FLOORS FOR DUCTS, PIPING	
3.	USE COMM	ON WIRE NAI	LS, TYPICAL	LY, UNLESS	OTHERWISE	NOTED ON		S.			D BY THE CONTRACTOR WHO SHALL CH HOLES OR OPENINGS WITH THE AND ELECTRICAL DRAWINGS.	
4.	PROVIDE B	OUNDARY NA	LING AT C	ontinuous f	PANEL JOIN	TS, AROUND			3. 1	N T E N T: IF CERTAIN FEATURES ARE NOT FUL	LY SHOWN OR CALLED FOR ON THE	2
5.	LINES.	DGE NAILING						WALL		DRAWINGS OR SPECIFICATIONS, THEIF		
6.	PROVIDE F	IELD NAILING	AT ALL IN	FERMEDIATE	BEARINGS.				4. C	ISCREPANCIES: THE CONTRACTOR SHALL USE STRUC	CTURAL DRAWINGS AND OTHER DRAWINGS PANCIES UNCOVERED SHALL BE	3
		SHEA	AR W	ALL	S C H E	DULE				REPORTED BEFORE PROCEEDING N ADJUSTMENT CAN BE MADE.		3
SHE		WALL	NAILING A	T TOP CO	ONNECTION	SILL PLAT				N S P E C T I O N: A. PROVIDE CONTINUOUS "SPECIAL IN BUILDING CODES FOR THE FOLLOW		:
										– CONCRETE & REINFORCII – STRUCTURAL STEEL WEL	NG STEEL	
		2" PLYWOOD	10d @ 6"		N A34 @ 3 maximum	SDS 1/4x4 <sup>-</sup> @ 12" oc		/4" A.B. 4'-0"oc		- WELDING OF MOMENT-RE - HIGH STRENGTH BOLTING	ESISTING STEEL FRAMES G (A325X BOLTS)	
E	3 15/3	2"PLYWOOD	10d @ 4"		N A34 @ 'cc max	SDS 1/4x4 <sup>-</sup> @ 9" oc		/4" A.B. 2'-8"oc			NSPECTION REQUIREMENTS' ON S1.1	
	c 15/3	2" PLYWOOD	10d @ 3"	cc SIMPSO 7"cc n		SDS 1/4x4 <sup>-</sup> @ 6 1/2"				C. THE INSPECTOR SHALL NOTIFY THE OF ANY CONSTRUCTION WHICH IS CONTRACT DOCUMENTS.		
	0 15/3	2" PLYWOOD	10d @ 2"	cc SIMPSO	N A34 @	SDS 1/4x4 <sup>-</sup>	/2 3,	/4" A.B.	   D F	SIGN DATA:		
F	E 15/3	2" PLYWOOD	10d @ 4"		'cc max	@ 5 1/2" SDS 1/4x4			1.	ESIGN CODE		
	(Bot	th Sides)		4 1/2"	'cc max	<b>@</b> 4 1/2"	oc @	1'-4"oc	2. L	LIFORNIA BUILDING CODE, 2007 EDITIC IVE LOADS OORS:		
F		2" PLYWOOD th Sides)	10d @ 3"		N A34 @ 'cc max	SDS 1/4x4 @ 3 1/2"				TYPICAL FLOORS DECKS & WALKWAYS		
		2"PLYWOOD th Sides)	10d @ 2"		N A34 @ "cc max.	SDS 1/4x4 <sup>-</sup> @ 2 1/2"			RC	OFS: FLAT ROOF		
1. ALL		'CDX' GRAD		R TYPE, APA	TRADEMARK	ED (PS-1)	•		3. 1	SLOPED ROOF		
<ol> <li>BLOCK ALL PLYWOOD EDGE JOINTS.</li> <li>ALL INTERMEDIATE PLYWOOD NAILING SHALL BE AT 12"cc.</li> <li>NO PLYWOOD EDGE NAILING SHALL BE LESS THAN 1/2" FROM PANEL JOINT.</li> </ol>						PANEL JOIN		WIND ZONE WIND EXPOSURE	85 MPH "B"			
AL PE	L SHINERS NETRATE PL	to be remo' .Ywood.	VED AND RE	E-DRIVEN.	NÁIL HEADS	SHALL NOT			EG	SEISMIC FORCES IUIVALENT LATERAL FORCE PROCEDURE: (		
TO AN	FALL ON D D NAILS SH	S ARE APPLII IFFERENT FR/ ALL BE STAG	AMING MEME GERED.	BERS, FRAMIN	NG SHALL B	E 3-INCH N	OM. OF	r Thicker		OBAL COORDINATES: 37.837 -122.194 A. SEISMIC INFORMATION	LATITUDE LONGITUDE	
LE	SS THAN A	MEMBERS RE SINGLE 3-IN	ІСН NOM. М	IEMBER. N	AILS SHALL	BE STAGGE	RED.			SITE SOIL CLASSIFICATION 0.2 SEC. SPECTRAL RESPONSE ACCELE	SSC = 'C' ERATION Ss = 161.8 %	
AN	d shall be	LL PLATES A	TREATED.	(SEE CARPEN	NTRY NOTE	NO. 10).		KER		1.0 SEC. SPECTRAL RESPONSE ACCELE RESPONSE MODIFICATION FACTOR		
9. 'SE	S' SCREWS	ON SILL PLAT FOR SILL PL OR COLLEC	ATE ATTACH	IMENT MUST	BE INSTALL	•		er of the		DAMPED 0.2 SEC. SPECTRAL RESP. AC DAMPED 1.0 SEC. SPECTRAL RESP. AC	CCEL. Sds = 107.8 %	
										OVERSTRENGTH FACTOR SEISMIC DESIGN CATEGORY	Omega= 3.0 SDC = 'E'	
			DLD-D ST SIZE		SCHE Teners				E	3. SEISMIC FORCES RESPONSE COEFFICIENT	Cs = 0.166	
	(1		thickness)		POST			OLT (1) Concrete			Rho = $1.3$ = Cs x W = $0.166 \times W$	
1			3"	22 — 16d			-			UNDATIONS	= 0.7(Rho)(Cs)xW= 0.151 x W	
2			3" 3"		/4"x2.5"scre /4"x2.5"scre			SSTBL 20		REFERENCE:		
4			1/2"		/4"x2.5"scre			SSTBL 24		GEOTECHNICAL INVESTIGATION BY RU DATED JULY 18, 2009 (REPORT #20		
5			1/2"	20-SDS 1/				SSTBL 28	2. \$	SPREAD FOOTING FOU THE BUILDING IS SUPPORTED ON A S		
7			1/2"	30-SDS 1/ 30-SDS 1/	/4"x2.5"scre			SB 1"x30" SB 1"x30"		SYSTEM. ALL FOOTINGS SHOULD EXT THE LOWEST ADJACENT ROUGH GRAD	END AT LEAST 24 INCHES BELOW DE AND SHALL BEAR ON COMPETENT	
8			1/2"		/4 x2.5 scre /4"x2.5"scre			-SB 1"x30		UNDISTURBED NATIVE SOIL OR ON CO MAXIMUM ALLOWABLE DESIGN SOIL	BEARING PRESSURE:	
HOLD	 Down Note	S:								DEAD + LIVE LOADS DEAD + LIVE + (WIND OR SEISMIC		
S 2. AL	TRONG-TIE L BOLTS AF	TYPES INDICA CO. USE SI RE ASTM A30	MPSON HOL 7.	D-DOWNS O	R APPROVE	D EQUAL.			3. 5	SUPERVISION AND AC CONFORM WITH THE RECOMMENDATIO THE REPORT IS ISSUED WITH BIDDING	INS OF THE GEOTECHNICAL REPORT.	
C	ISTANCE, PO	MANUFACTURE DST SIZE, EM NYLON LOCH	BEDMENT L	ENGTH, ETC.							TABILITY OF SOIL CONDITIONS SHALL	
	HE ANCHOR	Bolts. Hold-down	DETAILS ON	I SHEET S1.	2					THE UNIVERSITY'S REPRESENTATIVE S PRIOR TO PLACEMENT OF ANY FILL	SHALL INSPECT ALL EXCAVATIONS	
Γ									S T	RUCTURAL ST	EEL	
-		STUD	WAL	LSC	HEDU	LE		_	1.	M A T E R I A L S: STRUCTURAL STEEL	- ASTM A502 CRADE 50	
-								_		STEEL TUBES PIPE	- ASTM A500, GRADE B, $Fy = 46$ KS - ASTM A53, GRADE B, $Fy = 35$ KSI	1
	LEVE	L	E	XTERIOR WALLS	INTERIOR BEARING WALLS		ON			BOLTS ANCHOR BOLTS ANCHOR BOLTS (MOMENT FRAME)	- ASTM A307, HOOK 7 DIA. MINIMUM	
		_EVEL							2.	FABRICATION AND ER A. COMPLY WITH AMERICAN INSTITUT	ECTION:	
				2 x 6	2 x 4		4			"SPECIFICATIONS FOR DESIGN, FA STRUCTURAL STEEL FOR BUILDING	BRICATION AND ERECTION OF	
	2ND FL	LOOR LEVEL		2 x 6	3 x 4		4			B. COMPLY WITH AISC "SEISMIC DESI OF THE MOMENT FRAMES AND FO		
	1ST FL	OOR LEVEL								COLLECTOR ELEMENTS.		

200F				S Н Е А Т Н I			DULE			GENERA
LEVEL		OD SHEAT	. ,		NAILING (					
	THICKI		NIMUM . INDEX	BOUNDARY NAIL BN (3)	EDGE N EN (4)		TELD NAIL N (5)		NERAL	
ANOPY RO	DOF 5/8"	T&G	32/16	8d @ 6"cc	8d @	6"cc	8d @ 12"cc		ODES & COMPLIANCE:	OTHERWISE SHOWN OR NOTED.
YP. ROOF	5/8"	T&G	32/16	8d @ 4"cc	8d @	6"cc	8d @ 12"cc	1. 0	ALL WORK SHALL BE PERFORMED IN C APPLICABLE CODES, LAWS AND REGULA	
YP. FLOOR	R 1–1/8	3" T&G	60/32	10d @ 4"cc	10d @	6"cc 10	Od @ 10"cc	2 R	HAVING JURISDICTION OVER THE WORK.	
2. LAY BLOC	PANELS WIT K ALL PANE	TH LONG S IL EDGE JO	ide Perpi Dints . ((	APA TRADEMARKE ENDICULAR TO FR DMIT BLOCKING A	Raming. T T&G PL	STAGGER I YWOOD)		A.	SEE DRAWINGS OTHER THAN STRUCTURA AND THEIR LOCATION,FOR DEPRESSIONS IN WALLS AND FLOORS REQUIRED BY FEATURES, FOR ROADWAY PAVING, WALL HOLES AND OPENINGS THROUGH WALL AND VENTILATION SHALL BE CHECKED VERIFY SIZES AND LOCATION OF SUCH	AL FOR: KINDS OF FLOOR FINISH 5 IN FLOOR SLABS,FOR OPENINGS ARCHITECTURAL AND MECHANICAL KS, RAMPS, STAIRS, CURBS,ETC. S AND FLOORS FOR DUCTS, PIPING BY THE CONTRACTOR WHO SHAL
GLUE	PLYWOOD 1	TO FRAMIN	g prior	', UNLESS OTHER' TO NAILING AT A ITINUOUS PANEL	LL FLOOR	S.		3. IN	PLUMBING, HEATING, VENTILATING AN	
of di Lines 5. provi	IAPHRAGM, / S. IDE EDGE N/	AND ALON	G CONTIN	UOUS JOISTS ANE 1000 PANEL EDGE RMEDIATE BEARIN	) blockin Es.			4. D	IF CERTAIN FEATURES ARE NOT FULLY DRAWINGS OR SPECIFICATIONS, THEIR C SAME CHARACTER AS FOR SIMILAR CC CALLED FOR. S C R E P A N C I E S: THE CONTRACTOR SHALL USE STRUCTU	CONSTRUCTION SHALL BE OF THE DNDITIONS THAT ARE SHOWN OF RAL DRAWINGS AND OTHER DRAWIN
	S I	HEAR	W A	LL SCH	H E D U	LE			FOR INDIVIDUAL ITEMS. DISCREPAN REPORTED BEFORE PROCEEDING WITI ADJUSTMENT CAN BE MADE.	ICIES UNCOVERED SHALL BE H THE WORK, SO THAT PROP
SHEAR	WALL	NAI	LING AT	TOP CONNECT	ION SILI	_ PLATE C	CONNECTION		N S P E C T I O N: PROVIDE CONTINUOUS "SPECIAL INSPI	ECTION" IN ACCORDANCE WITH T
LL MARK	SHEATHIN	IG EDG	E BEARIN	GS INTERIOR WAL	LS UPP	ER LEVEL	FOUNDTION		BUILDING CODES FOR THE FOLLOWING - CONCRETE & REINFORCING	
	15/32" PLY	WOOD 10	d @ 6" c	c SIMPSON A34 12"cc maximu		/4x4 1/2 2"oc			<ul> <li>STRUCTURAL STEEL WELDIN</li> <li>WELDING OF MOMENT-RESI</li> </ul>	STING STEEL FRAMES
B	15/32" PLY	WOOD 10	-	c SIMPSON A34			@ 4'-0"oc	B.	- HIGH STRENGTH BOLTING ( ADDITIONAL INSPECTION REQUIREMEN	•
				9 1/2"cc max		" oc	@ 2'-8"oc	C.	SEE 'SPECIAL CONSTRUCTION INSF THE INSPECTOR SHALL NOTIFY THE U	JNIVERSITY'S REPRESENTATIVE
	15/32"PLY	WOOD 10	d @ 3" co	c SIMPSON A34 7"cc max		/4x4 1/2 1/2" oc			OF ANY CONSTRUCTION WHICH IS NO CONTRACT DOCUMENTS.	)T IN CONFORMANCE WITH THE
	15/32" PLY	WOOD 10	d @ 2" co	c SIMPSON A34 5 1/2"cc max		/4x4 1/2 1/2" oc			SIGN DATA:	
E ·	15/32"PLY (Both Side		d @ 4" co	c SIMPSON A34 4 1/2"cc max		/4x4 1/2 1/2" oc		CAL	SIGN CODE FORNIA BUILDING CODE, 2007 EDITION	
F	15/32" PLY	WOOD 100	d @ 3" co	SIMPSON A34	SDS 1	/4x4 1/2	3/4" A.B.		/E LOADS DRS: TYPICAL FLOORS	100 PSF
G	(Both Sides 15/32" PLY		d @ 2" co	3 1/2"cc max c SIMPSON A34	SDS 1	1/2" oc /4x4 1/2		ROO		
NR WALL N		,		2 3/4"cc ma		•	@ 1'-0"oc		FLAT ROOF	
BLOCK AL	L PLYWOOD	EDGE JOIN	NTS.	TYPE, APA TRADEN	MARKED (F	PS-1).		3. WI	ND LOADS WIND ZONE WIND EXPOSURE	
ALL SHIN PENETRAT WHERE P TO FALL	ERS TO BE TE PLYWOOD PANELS ARE	REMOVED APPLIED C NT FRAMIN	AND RE- IN BOTH I G MEMBEF	ESS THAN 1/2" F DRIVEN. NAIL HE FACES OF A WALL RS, FRAMING SHAI	ADS SHAL	l not Joints sh		EQU GLO		
LESS THA FOUNDATIC AND SHAL FOR FOUN 'SDS' SCF	an a single on sill pla ll be press idation sill rews for s	: 3-INCH TES AT AL SURE TREA . PLATE BO SILL PLATE	NOM. MEN L SHEAR ITED. (SE DLTING RE ATTACHMI	NAILING FROM AI MBER. NAILS SH WALLS SHALL BE EE CARPENTRY NO QUIREMENTS, SEE ENT MUST BE INS LOW THE WALL.	HALL BE S 3—INCH I DTE NO. 1 DETAIL 1	STAGGERED NOM. OR <sup>-</sup> 0). 4/ S1.2	Thicker	A.	SEISMIC INFORMATION SITE SOIL CLASSIFICATION 0.2 SEC. SPECTRAL RESPONSE ACCELERA 1.0 SEC. SPECTRAL RESPONSE ACCELERA RESPONSE MODIFICATION FACTOR DAMPED 0.2 SEC. SPECTRAL RESP. ACCE DAMPED 1.0 SEC. SPECTRAL RESP. ACCE	TION S1 = 82.0 % R = 6.5 L. Sds = 107.8 % L. Sd1 = 71.0 %
									OVERSTRENGTH FACTOR SEISMIC DESIGN CATEGORY	Omega= 3.0 SDC = 'E'
MARK	TYPE	POST S		OWN SCI			R BOLT (1)	В.	SEISMIC FORCES RESPONSE COEFFICIENT	Cs = 0.166
		(min.thick		TO POST		Framing			REDUNDANCY COEFFICIENT SEISMIC BASE SHEAR V =	
1	MST-37	3"		22 — 16d nails					、	0.7(Rho)(Cs)xW= 0.151 x W
2	HDU-2	3"		6-SDS 1/4"x2.5		•			UNDATIONS	
3	HDU-4	3"		0-SDS 1/4"x2.5		•		1. K	E F E R E N C E: GEOTECHNICAL INVESTIGATION BY RUTH	ERFORD & CHEKENE
4	HDU-5 HDU-8	3 1/2 5 1/2		4-SDS 1/4"x2.5' 20-SDS 1/4"x2.5'		5/8" BOLT 7/8" BOLT		2 5	DATED JULY 18, 2009 (REPORT #2009 PREAD FOOTING FOUN	•
6	HDU-11	5 1/2		50-SDS 1/4"x2.5'		1" BOLI		2. 0	THE BUILDING IS SUPPORTED ON A SPRI SYSTEM. ALL FOOTINGS SHOULD EXTEN	EAD FOOTING TYPE FOUNDATION
7	HDU-11	7 1/4		50-SDS 1/4"x2.5'		1" BOL1	Г ЅВ 1"х30"		THE LOWEST ADJACENT ROUGH GRADE UNDISTURBED NATIVE SOIL OR ON COMP	AND SHALL BEAR ON COMPETENT
	2-HDU-11	9 1/2	." 6	50-SDS 1/4"x2.5	"screws		2-SB 1"x30"		MAXIMUM ALLOWABLE DESIGN SOIL B	EARING PRESSURE:
STRONG ALL BOL FOLLOW DISTANC USE A S THE ANO	OWN TYPES —TIE CO. U TS ARE ASTI ALL MANUFA E, POST SIZ	JSE SIMPS M A307. ACTURER'S ZE, EMBEDI I LOCKING S.	on Hold- Recomme Ment Len Nut Or	A THREADED ADH	ROVED EQU END	JAL.		3. S	DEAD + LIVE LOADS DEAD + LIVE + (WIND OR SEISMIC) - CONFORM WITH THE RECOMMENDATIONS THE REPORT IS ISSUED WITH BIDDING D ALL DETERMINATIONS OF THE ACCEPTAL BE MADE BY THE UNIVERSITY'S REPRESE THE UNIVERSITY'S REPRESENTATIVE SHA PRIOR TO PLACEMENT OF ANY FILL MAT	4,000 PSF E P T A N C E: OF THE GEOTECHNICAL REPORT. OCUMENTS. BILITY OF SOIL CONDITIONS SHALL SENTATIVE. ALL INSPECT ALL EXCAVATIONS
	S T I			SCHED				1. M	RUCTURAL STE ATERIALS: STRUCTURAL STEEL	ASTM A592, GRADE 50
	LEVEL			LOCATI TERIOR INTEF WALLS BEAF WAL	RIOR NO RING F	DN-STRU PARTITION WALLS			STEEL TUBES A PIPE A BOLTS A ANCHOR BOLTS A ANCHOR BOLTS (MOMENT FRAME) A	ASTM A53, GRADE B, Fy = 35 K ASTM A307 & A325X ASTM A307, HOOK 7 DIA. MINIMU
RO	OF LEVEL-							2. F	A B R I C A T I O N A N D E R E A. COMPLY WITH AMERICAN INSTITUTE "SPECIFICATIONS FOR DESIGN, FABR	C T I O N: OF STEEL CONSTRUCTION (AISC)
2N	D FLOOR	LEVEL			x 4	2 x 4			STRUCTURAL STEEL FOR BUILDINGS" B. COMPLY WITH AISC "SEISMIC DESIGN	', LATEST EDITION. MANUAL" FOR THE FABRICATION
15	T FLOOR L	_EVEL		2 x 6 3 :	x 4	2 x 4		_	OF THE MOMENT FRAMES AND FOR COLLECTOR ELEMENTS.	WELDING OF DRAGS AND
	ALL NOTES		I	I			]		E L D I N G: A. COMPLY WITH AMERICAN WELDING SO CODE-STEEL" (ANSI/AWS D1.1)	CIETY "STRUCTURAL WELDING

2. ALL STUDS ARE SPACED AT 16" o.c. UNLESS OTHERWISE NOTED.

3. SEE FRAMING PLANS AND ARCHITECTURAL DRAWINGS FOR

2x6 STUD WALLS AND FURRED WALL LOCATIONS.

## GENERAL

CERTIFIED WELDERS.

B. COMPLY WITH AWS D1.8 FOR THE WELDING OF THE MOMENT FRAMES.

C. USE "E70" OR EQUAL ELECTRODES. ALL WELDING TO BE BY

5.

6.

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11.

12.

13.

# STRUCTURAL

STRUCTURAL
<u>ARPENTRY</u>
R O U G H S A W N L U M B E R: ALL FRAMING LUMBER SHALL BE DOUGLAS FIR LARCH (COAST R AND MARKED IN ACCORDANCE WITH THE STANDARD GRADING RU OF THE WEST COAST LUMBER INSPECTION BUREAU. POST & BEAMS NO. 1 GRADE JOISTS & RAFTERS NO. 2 GRADE STUDS STANDARD & BET OTHER MEMBERS NO. 2 GRADE MOISTURE CONTENT SHALL NOT EXCEED 19% AT TIME OF CLOSU BY TESTING. MOISTURE CONTENT OF STUD WALL FRAMING AT SHEAR WALLS S
EXCEED 19% AT TIME OF FABRICATION (TIME WHEN PLYWOOD SH IS NAILED TO STUD WALL FRAMING.) A M I N A T E D S T R A N D L U M B E R:
MICRO-LAM (LSL) AND PARALLAM (PSL) MEMBERS ARE "ILEVEL" PROD MANUFACTURED BY WEYERHAEUSER CO., GEORGIA-PACIFIC CORP. ORMIN. ALLOWABLE DESIGN PROPERTIES:MICRO-LAMPARBENDING
MODULUS OF ELASTICITY E = 1,700,000 2,000,000 F A B R I C A T E D S T R U C T U R A L A S S E M B L I I A. ROOF JOISTS SHALL BE "I" SHAPED MEMBERS BY "ILEVEL" AS MA BY WEYERHAEUSER CO., GEORGIA-PACIFIC CORP. OR EQUAL. (TJI/L65 TAPERED SERIES AT ROOF JOISTS)
B. AT ROOF JOISTS, PROVIDE PREFAB VENTILATION HOLES IN TOP OF WEBS SPACED AT 12" CENTERS.
C. PROVIDE SPECIAL MEMBERS, SUCH AS AT OPENINGS, AS NECESSA PROVIDE CONNECTIONS TO SUPPORTING STRUCTURE. INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. P L Y W O O D:
<ul> <li>A. USE DOUGLAS FIR PLYWOOD IN CONFORMANCE WITH THE U.S STANDARD PS-1.</li> <li>B. FOR PLYWOOD GRADE AND THICKNESS, SEE FLOOR AND ROOM</li> </ul>
AND/OR SHEAR WALL SCHEDULES.
<ul> <li>A. PROVIDE FULL BEARING AT SUPPORTS, 2" SOLID BLOCKING A UNDER PARTITIONS AT ANGLE TO JOISTS.</li> <li>B. PROVIDE SOLID BLOCKING AT MIDSPAN FOR SPANS 8 FT. TO FOR GREATER SPANS SPACING SHALL NOT EXCEED 8'-O". FOR ROOF AND CEILING JOISTS 8 INCHES AND UNDER IN DE AND FOR FLOOR JOISTS WHERE GYP.BD. CEILING FRAMING IS DIRECTLY TO UNDERSIDE OF JOISTS.</li> <li>C. USE DOUBLE JOISTS UNDER ALL PARTITIONS PARALLEL TO J</li> </ul>
S T R U C T U R A L S T U D W A L L S: A. USE SINGLE BOTTOM PLATE AND DOUBLE TOP PLATE UNLES NOTED OR SHOWN. STAGGER JOINTS IN UPPER AND LOWER TOP PLATES NOT LESS THAN 4'-0". SPLICE TOP PLATES AS PLATE SPLICE DETAIL ON TYPICAL DETAIL SHEET S1.2.
<ul> <li>B. PROVIDE ONE ROW OF SOLID BLOCKING AT MID-HEIGHT FOR HIGH AND TALLER.</li> <li>C. BOLT SILL PLATE TO CONCRETE AS PER SHEAR WALL SCHEL BOLT SHALL BE WITHIN 5" OF EACH END OF EACH PIECE O</li> </ul>
PROVIDE 2 BOLTS MINIMUM PER PIECE. S H E A T H I N G: A. PROVIDE FULL BEARING AT ALL EDGES. IN GENERAL, ABUT
CENTERLINE OF BEARING. STAGGER PANELS. B. NAIL AS PER FLOOR AND ROOF SHEATHING AND/OR SHEAR B O L T S: A. BOLT HOLES 1/16" OVERSIZE. THREADS SHALL NOT BEAR O
<ul> <li>STEEL.</li> <li>B. USE STANDARD STEEL WASHERS AGAINST WOOD.</li> <li>C. USE PLATE WASHERS 3"x3"x 1/4" AT FOUNDATION ANCHO STUD WALL SILL PLATES.</li> </ul>
<ul> <li>S C R E W S:</li> <li>A. (WOOD OR LAG) SCREWS SHALL BE SCREWED AND NOT DRIV</li> <li>B. IN PLACING SCREWS, THE HOLES SHALL BE BORED TO THE AND DEPTH OF THE SCREW SHANK. THE HOLES FOR THE OF THE SCREWS SHALL BE BORED WITH A BIT NOT LARGER DIAMETER OF THE BASE OF THE THREAD.</li> </ul>
W O O D P R E S E R V A T I V E: ALL WOOD FRAMING IN CONTACT WITH CONCRETE AND/OR EXPOS OR PROLONGED DAMPNESS SHALL BE TREATED IN ACCORDANCE SPECIFICATIONS OR SHALL BE WOOD OF NATURAL RESISTANCE T M E T A L F R A M I N G D E V I C E S:
IN GENERAL AS MANUFACTURED BY SIMPSON STRONG-TIE COMP KC METAL PRODUCTS, INC., OR EQUAL
<ul> <li>N A I L I N G:</li> <li>A. USE COMMON WIRE NAILS UNLESS OTHERWISE NOTED.</li> <li>B. NAIL AS PER C.B.C. TABLE NO. 2304.9.1 'FASTENING SCHEDU GREATER NUMBER OF NAILS ARE REQUIRED BY THE DRAWIN</li> <li>C. IN GENERAL, PROVIDE NOT LESS THAN 2 NAILS FOR EACH F BEARING (2-8d FOR 1x MEMBERS, 2-16d FOR 2x MEMBERS) MEMBERS). PREBORE WHERE NAILING TENDS TO SPLIT WOO SPLIT MEMBERS.</li> </ul>
<ul> <li>F A S T E N E R F I N I S H (CBC 2304.9.5)</li> <li>A. FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED AND TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GA THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL ACCORDANCE WITH ASTM A153.</li> <li>B. FASTENERS OTHER THAN NAILS, TIMBERS, RIVETS, WOOD SC HAD COPEWE CHART OF DEDMITTED TO DE MECHANICALLY DE DEDMITTED. TO DE MECHANICALLY DE DEDMITTED.</li> </ul>
LAG SCREWS SHALL BE PERMITTED TO BE MECHANICALLY DI ZINC COATED STEEL WITH COATING WEIGHTS NOT LESS THAN IN ACCORDANCE WITH ASTM B695, CLASS 55.

NOTE	ES	KODAMA
	CONCRETE	
F REGION), GRADED RULES NUMBER 16	<ol> <li>C A S T – I N – P L A C E C O N C R E T E:         <ul> <li>A. ALL CONCRETE UNLESS OTHERWISE NOTED SHALL BE REGULAR WEIGHT HARD ROCK TYPE (150#/CF). AGGREGATES SHALL CONFORM TO ASTM C-33 WITH A PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN .055% CONFORM TO AMERICAN CONCRETE INSTITUTE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301-LATEST EDITION).</li> </ul> </li> </ol>	Architects and Planners 619 Sansome Street San Francisco, Ca. 94111 (415) 296.1144 tel. (415) 296.1133 fax www.kodamadiseno.com
ETTER	USE MIXES WITH MAXIMUM AGGREGATE SIZE APPROPRIATE FOR FORM AND REBAR CLEARANCES TO BE ENCOUNTERED (SEE ACI) B. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM ULTIMATE COMPRESSIVE	
SURE AS SHOWN S SHALL NOT	STRENGTH AT 28 DAYS (f'c ): FOUNDATIONS, GRADE BEAMS, WALLS f'c = 4,000 PSI SLAB ON GRADE AND ALL OTHER CONCRETE f'c = 3,000 PSI	GONG • NEISHI • GONG
SHALL NOT SHEAR SHEATHING	TOPPING & FILL (LT. WT. CONCRETE) $$ f'c = 2,000 PSI C. MAXIMUM SLUMP: 4 INCHES	Structural Engineering 2790 Carisbrook Drive
RODUCTS AS R EQUAL.	<ul> <li>D. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II, LOW ALKALI.</li> <li>E. NO CALCIUM CHLORIDE PERMITTED IN ANY CONCRETE.</li> <li>F. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER PLACEMENT. ALTERNATE METHODS WILL BE APPROVED</li> </ul>	Oakland, CA. 94611 (510) 655 – 2929 gngengineers@mindspring.com consultant
PARALLAM ,900 PSI 290 PSI	IF SATISFACTORY PERFORMANCE CAN BE ASSURED. G. SUBMIT FOR REVIEW CONCRETE MIX DESIGNS AND STRENGTH DATA WITH	CUNSULIANT
750 PSI 000 PSI	CONTRACTOR'S APPROVAL INDICATED PRIOR TO ANY CONCRETE PLACEMENT. H. ALL CONCRETE SHALL BE REINFORCED UNLESS SPECIFICALLY MARKED "NOT REINFORCED".	
I E S: MANUFACTURED	<ul> <li>2. S T E E L R E I N F O R C E M E N T:</li> <li>A. USE ASTM 615 GRADE 40 FOR #4 AND SMALLER BARS. USE ASTM 615 GRADE 60 FOR #5 AND LARGER BARS.</li> <li>B. ALL REINFORCEMENT SHALL BE CONTINUOUS. STAGGER SPLICES WHERE</li> </ul>	
OF JOIST	POSSIBLE. LAPS FOR SPLICES SHALL BE AS PER THE LAP SPLICE SCHEDULE SHOWN ON TYPICAL DETAIL SHEET S1.2. C. HOLD REINFORCEMENT IN ITS TRUE HORIZONTAL AND VERTICAL POSITION WITH DEVICES SUFFICIENTLY NUMEROUS TO PREVENT DISPLACEMENT OF DARS DURING CONCRETE DIACEMENT.	
SSARY. L IN	BARS DURING CONCRETE PLACEMENT. D. SUBMIT FOR REVIEW SHOP DRAWINGS FOR ALL REINFORCEMENT WITH CONTRACTOR'S APPROVAL INDICATED ON EACH SHEET PRIOR TO FABRICATION.	
U.S. COMMERCIAL	3. MIN. CONCRETE PROTECTION FOR REINF.: FOOTINGS, PIERS	SIGNATURE SEAL
ROOF SHEATHING	2 INCHES @ FACE AGAINST GROUND WALLS	
IG AT SUPPORTS	SLABS 1 INCH 4. EMBEDDED DOWELS AND BOLTS: A. HOLES FOR DOWELS AND BOLTS TO BE EMBEDDED INTO EXISTING CONCRETE SHALL BE 1/8 INCHES LARGER THAN BAR DIAMETER. DRILL HOLES WITH	
TO 16 FT. ". OMIT BLOCKING DEPTH	A ROTARY DRILL. SEE PLANS AND DETAILS FOR DEPTHS OF EMBEDMENT AND SPACING. B. EMBED DOWELS AND BOLTS IN HOLES WITH EPOXY GROUT BY SIMPSON STRONG-TIE COMPANY, USP STRUCTURAL CONNECTORS OR EQUAL.	
G IS ATTACHED 0 JOISTS.	USE SIMPSON "SET" EPOXY FOR HORIZONTAL AND VERTICAL APPLICATIONS. INSTALL AS PER MANUFACTURERS RECOMMENDATIONS. 5. C O N S T R U C T I O N J O I N T S:	<b>EDTE</b> tro A Francisco <sup>mia 94131</sup>
ESS OTHERWISE	<ul> <li>A. FOR CONSTRUCTION JOINTS IN GENERAL, SEE CONSTRUCTION JOINT DETAILS SHOWN ON TYPICAL DETAIL SHEET S1.2.</li> <li>B. THOROUGHLY SANDBLAST WITH COARSE SILICA SAND ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS TO CLEAN AND ROUGHEN THE ENTIRE</li> </ul>	
NER MEMBERS OF AS PER TOP	SURFACE OF THE JOINT, EXPOSING CLEAN COARSE AGGREGATE SOLIDLY EMBEDDED IN MORTAR MIX. C. JUST PRIOR TO DEPOSITING CONCRETE, THE SURFACE OF THE CONSTRUC-	
OR WALLS 10 FT. HEDULE. ONE	TION JOINT SHALL BE THOROUGHLY CLEANED AND WETTED. 6. S L A B O N G R A D E: A. ALL SLABS ON GRADE SHALL BE NOT LESS THAN 5" THICK, REINFORCED	<b>ba</b> unt S alifornia, S an Francisco,
E OF PLATE.	WITH #4 @ 16"cc EACH WAY IN CENTER OF SLAB. REINFORCEMENT SHALL BE SUPPORTED ON PRE-CAST CONCRETE BLOCKS 3"x 3"x 2-1/2 " THICK SPACED ON 4'-0"cc EACH WAY.	
UTT AT	B. PROVIDE SLAB CONTROL JOINTS TO ENCLOSE APPROXIMATE SQUARE AREAS NOT EXCEEDING 400 SQ. FT. LOCATE UNDER PARTITIONS WHEREVER POSSIBLE.	
AR WALL SCHEDULES.	C. UNDERLAY INTERIOR SLABS WITH 2 INCHES SAND ON 10 MIL. VAPOR MEMBRANE OVER 4 INCHES OF CLEAN, FREE-DRAINING BASE ROCK.	phone Drive, Johnstone Drive, San Fr
	SPECIAL CONSTRUCTION INSPECTION REQUIREMENTS	for Uni 155 Ju
HOR BOLTS FOR	FOUNDATION / SOILS INSPECTIONS	
DRIVEN INTO PLACE. IE SAME DIAMETER	THE UNIVERSITY'S REPRESENTATIVE SHALL PERFORM THE FOLLOWING INSPECTIONS:	
E THREADED PORTION ER THAN THE	<ol> <li>SITE GRADING, INCLUDING SUBGRADE PREPARATION AND RETAINING WALL BACKFILL.</li> <li>PIER BORINGS AND FOUNDATION EXCAVATIONS.</li> </ol>	
POSED TO WEATHER	3. UTILITY TRENCH BACKFILLS 4. DRAINAGE INSTALLATIONS.	RECORD DRAWINGS
CE WITH AWPA E TO DECAY.	5. ANY SPECIAL FIELD TESTING.	UCSF PROJ. NO. M7450
MPANY,	<u>STRUCTURAL INSPECTIONS:</u> A SPECIAL INSPECTOR EMPLOYED BY THE UNIVERSITY SHALL PERFORM THE FOLLOWING INSPECTIONS:	FILE NO. 11245
IEDULE', UNLESS A	1. PLACEMENT OF REINFORCING INTO GRADE BEAMS, FOOTINGS, PIERS, WALLS, COLUMNS AND SUPPORTED CONCRETE FRAMING.	
WINGS. H PIECE AT EACH ERS, 2-20d FOR 3x	2. HORIZONTAL PLYWOOD DIAPHRAGMS : INCLUDING SHEATHING NAILING, CHORDS, COLLECTORS, TIES, STRAPS, ETC.	GENERAL
OOD. REPLACE	3. VERTICAL PLYWOOD SHEAR WALLS: INCLUDING SHEATHING NAILING, SILL BOLTING OR NAILING, CLIPS, HOLD-DOWNS, WALL STRAPS, ETC.	STRUCTURAL
ND FIRE-RETARDANT	4. FIELD WELDING AND FULL PENETRATION WELDS (FIELD OR SHOP) & ALL SHOP WELDS UNLESS DONE IN AN APPROVED FABRICATOR'S SHOP.	NOTES & SCHEDULES
GALVANIZED STEEL. ALL BE IN	<ol> <li>WELDING OF MOMENT-RESISTING STEEL FRAMES</li> <li>HIGH STRENGTH BOLTING (A325X BOLTS)</li> <li>INSTALLATION OF REBAR AND BOLTS GROUTED INTO EXISTING CONCRETE.</li> </ol>	
SCREWS AND DEPOSITED	STRUCTURAL OBSERVATIONS:	
HAN G185,	THE UNIVERSITY'S REPRESENTATIVE SHALL PERFORM PERIODIC SITE VISITS AS REQUIRED TO OBSERVE CONSTRUCTION OF THE FOLLOWING ITEMS:	
	1. REINFORCEMENT PLACEMENT IN FOUNDATIONS, WALLS, COLUMNS AND SUPPORTED CONCRETE FRAMING.	
	2. ROUGH CARPENTRY FRAMING. 3. HORIZONTAL PLYWOOD DIAPHRAGMS .	
	4. VERTICAL PLYWOOD SHEAR WALL SYSTEM. 5. STRUCTURAL STEEL FRAMING AND MOMENT FRAMES.	
	THE UNIVERSITY'S REPRESENTATIVE SHALL SUBMIT A STATEMENT IN WRITING TO THE UNIVERSITY THAT THEY HAVE PERFORMED THE SITE VISITS AS REQUIRED	11/16/09         100% CONST. DOCS.         BG         RYG           9/11/09         95% CONST. DOCS.         BG         RYG
	BY THE CBC TO OBSERVE THE CONSTRUCTION AND SHALL INCLUDE WHETHER OR NOT ANY OBSERVED DEFICIENCIES HAVE BEEN CORRECTED TO CONFORM	7/20/09     DSA Permit Submittal     BG     RYG       5/15/09     PERMIT SET     BG     RYG
	TO THE APPROVED PLANS AND SPECIFICATIONS, OR TO REVISED DETAILS APPROVED BY THE UNIVERSITY. LETTERS SHALL BE SUBMITTED FOR OBSERVATION OF THE FOUNDATION AND FRAMING CONSTRUCTION AND FOR	No.DATEDESCRIPTIONBYCKDSCALENONESHEET
	FINAL CERTIFICATION OF COMPLETION.	KD PROJ. NO. 2.0809 51.1