

MEDICINE CABINET (CUSTOM

MATCH EXISTING

ME

EXT

FAU

EXTERIOR

FORCED AIR UNIT

	MIR MISC	MIRROR MISCELLANEOUS	T¢G T⁄R	TONGUE AND GROOVE
	MM	MICROWAVE	TB	TOWEL BAR
	(N)	NEW	TBD	TO BE DETERMINED
	PA	PLANTER AREA	TC	TRASH COMPACTOR
	PAN.	PANTRY	TD	TRENCH / TROUGH DRAIN
	PKT	POCKET DOOR	TH	TOWEL HOOK
	PL	PROPERTY LINE	TOC	TOP OF CURB
	PLT HT	PLATE HEIGHT	TN	TOE NICHE
CK SHAFT)	RAG	RETURN AIR GRILL	TP	TOILET PAPER HOLDER
RRUPTER	REF	REFRIGERATOR	TPM	TOILET PAPER / MAGAZINE
	RHD	RECESSED HOSE DIDD	TUB	SOAKING TUB
	RNG			TANKLESS WATER HEATER
		DOUBLE GHELE AND BOLE IN CLOGET		INDER EL OOR ACCESS
	SC.	SHOWER CONTROLS		UNDER I LOOR ACCESS
	SHR	SHAMPOO RECESS		
	SHWR	SHOWER		VERIEY IN FIELD
	SK	SKYLIGHT	VS	VEGETABLE SINK
	SL	SLOPE	ND	WARMING DRAWER
	SR	SOAP RECESS	W/D	WASHER / DRYER
	55	SERVICE SINK	MH	MATER HEATER
	ST	"SOLA-TUBE" SKYLIGHT	W.I.C.	MALK IN CLOSET
	STK	STACK	MM	MATER METER
	SUB FLR	SUB FLOOR	MND	WINDOW
BUILD)	SYSB	SIDE YARD SETBACK	NRB	WEATHER RESISTIVE BARRI
	Т	TOILET	N	MIUTH

		1		+	
	LEGAL OWNER	LEGAL DAT	A	<u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	C C
AT THE TIME OF	GIBSON, RICHARD & RANDI 5727 E. OCEAN BLVD., LONG BEACH CALIFORNIA 90803	CITY: LONG E COUNTY: LOS AN APN: 7245-0	BEACH IGELES 16-038		4 2 2 0
AS SHALL BE FREE OF WEEDS DINGS OR	DESIGN DATA				
IGATED AREAS. CE WALLS, R OR CIVIL	CODE: 2019 CRC, 2019 CEC, 2019 CA ENERGY COD LONG BEACH CITY OR	2019 CPC, 2019 CM PE, 2019 CALGREEN DINANCE	С, ,	350N 1 E OC	
VAL OF THE LY INTERFERE CATED ON MY NABLY INTERFERE	<u>HEIGHT LIMIT:</u> 32' MID POINT 35' PEAK	ZONE: OCCUPANCY: USE:	R-2-I R-3 DUPLEX	の旧 5-5727	
.DER(S) OF THE	FLOOD ZONE: ZONE AF	CONSTRUCTION TY SPRINKLERS:	Ϋ́E: V-B NO		
	CURB FACE TO			ш Ш	
	PROPERTY LINE: 8' @ OCE 5' @ 58TH ALLEY WIDTH: 10'	AN BLVD. HPL			
	SQUARE FOOTAGE	CALCULATIO	NS		0803 1
ALKWAY	<u>EXISTING SQUARE FOOTAGE</u> FIRST FLOOR UNIT: SECOND FLOOR UNIT:		1098 SF 1098 SF	s s	ects.cor
	TOTAL LIVABLE: GARAGE: TOTAL STRUCTURAL:		2196 SF 443 SF 2639 SF		ch . c tearchit
BALCONY ABOVE	NON LIVABLE SECOND FLOOR DECK:		512 SF		jeannet
2ND FLOOR DECK	LOT SIZE: (PER SURVEY)		2399.7 SF		. lor
EXPANSION 47 SF	AREA OF REMODEL FIRST FLOOR: SECOND FLOOR: TOTAL:		1,098 SF 1,098 SF 2,196 SF	an	avenue 139
	<u>AREA REMOVED</u> SECOND FLOOR DECK:		85 SF		dondo 2/987.91
581 1911	<u>AREA ADDED TO DWELLING</u> SECOND FLOOR: DECKS	<u>-</u>	174 SF 118 SF		296 re 56
	NEW TOTAL SQUARE FOOTA FIRST FLOOR:	<u>GE:</u>	1098 SF		
	TOTAL LIVABLE: GARAGE		2370 SF 443 SF		
	DECKS TOTAL STRUCTURAL:		601 SF 3414 SF	Z	
	LOT SIZE: TOTAL BUILDING AREA:		2400 SF 2370 SF	р Г	
	FLOOR TO AREA RATIO: MAXIMUM LOT COVERAGE: OPEN SPACE PROVIDED:		N/A N/A 1755 SF	ШЦ	-
	(34% > - (4%) REQUIRE	PF WORK		0)	-
	REMODEL BOTTOM UNIT (57:	25) KITCHEN, DINING	, LIVING		-
t	SF FOR MASTER BEDROOM CLOSET SPACE. EXPAND 2N	EXPANSION AND NE D FLOOR FRONT B	EW ALCONY	REVISIONS:	
r S	DECK BY 47 SF AND REAR I TOP UNIT FRONT ACCESS ST RAILS ONLY.	DECK BY 71 SF. RES AIRS, NEW TREADS	AND	NO. DESCRIPTION	
_	VICINITY MAP				
	E Anaheim St E ASTSIDE E 10th St	an St E Athenton St Buyers	Rossmoor	PC#: DB:	
	E PARK E 7th St E 4th St ARK	BIXBY HILLS		JOB#: 2021.	.10.76
: KACK	FF HEIGHTS Eard St BELMONT Adway JFF PARK EBroadway EDcean Bird EUVINGADO DT - 2014 St EDcean ST EDCE	MARINA AACURICA 2nd St	LEISURE WORL	LUSED ARC LUSED ARC S. JEAN JEAN C 30598	ANTE OT
	BELMONT SHORE NAPLES	ALAMITOS BAY Se MARINA CENTER Grove Park BRINGEROPT	al Beach National Wildlife Refuge Temporarity closed	OF CALIF	
		Seal Beach	- 7. 72 · ·	A1.1	
IER			n (DATE:12/20/	[′] 2022



			Legend		
			Description	Quantity	Unit
			Change side of door swing	2	Count
CLEAP LINE BY UNDER STATES AND			Concrete area to be redone	194	sf
Benow Base freeded marks a fuel of a local set of the local set of a local s	_1		Gut plumbing fixtures only in preparation for rennovation	5	Count
Barrow da kay sin of railso Alter in the series Alter in the se			Remove & save freestanding fireplace & flue	1	Count
			Remove & save stair railing	30.74	ft
COTES Control Status and and a status and a stat			Remove & save stairs	16	Count
			Remove base/upper cabinets from dining room	14.20	ft
CONSTRUCTION OF THE C			Remove battern closet drawers	4	
Professional control cont			Remove policin closel drawers	14.10	IL Count
PERSONAL CLUMES IMPLED COLORS PERSONAL PE	4		Remove closet shelving	4	ff
		**	Remove existing balcony railing	23.21	ft
Important	OTES		Remove existing balcony	39	sf
The Direct Direct Processing Tell Rely Use Proceeds of the Nume existing both more 2 Comment PERASE ATT-THE CLENT FOR ANY MATERIAS TO Permone existing partition wall 150/2 1 Permone existing wall calibration 150/7 1 Permone existing wall calibra	L POPLORN CEILINGS WHERE OCCURS		Remove existing base cabinets, countertop	41.97	ft
TEP. ASSEX NTH THE CLENT POR ANY MATERIALS TO PARSEX ATTI THE CLENT POR ANY MATERIALS TO PARSEX ATTI THE CLENT POR ANY MATERIALS TO PARSEX PARSEX PARSEX TO PARSEX PARS	THE DEMOLITION PROCESS THE RE-USE PEOPLE C		Remove existing bath tub	2	Count
Normality for the second solution of the sec	TED. COORDINATE ALL MATERIALS THROUGH THE I		Remove existing electric meters	2	Count
A Remove existing patition value 1 Count Remove existing patition value 0 122 aff Remove existing patition value 0 Count 122 aff Remove existing patition value 0 Count 2 Count Remove existing stating water before 2 Count 2 Count Remove existing water before 2 Count 0			Remove existing flooring	1,750	sf
Performe existing particular value 190,12 st 4 Performe existing part cord 22 st 9 Performe existing value calendars 35,74 t 4 Performe existing value calendars 34,75 t 4 Performe existing value ca			Remove existing mailbox	1	Count
		/	Remove existing partition wall	180.12	ft
A Renove existing start trading 21.98 Renove existing start trading Activity start reads Activity Renove existing start trading Renove existing start trading Renove traditions Renove		1	Remove existing patio roof	122	sf
Remove existing windows 44 Count Remove existing windows 44 Count Remove existing windows 44 Count Remove existing windows 74 Count Remove lithors applances 74 Count Remove lithors appla			Remove existing stair railing	21.58	ft
Provide dialog window			Remove existing wall achinete	0 35 70	Count
In the second standard door is a count of the model of the second pice is a count of the model of the second pice is a count of the second pice is a c			Remove existing window	44	
Nervour His Theoretic) & exposed pps 2 Court Remove Interior adding door 2 Court Remove Interior			Remove garage overhead door	2	
• Remove interior aliding dor 2 Count • Remove interior aliding dor 7 Count • Remove pata cover pata 6 Count • Remove align interior dor 2 Count • Remove align interior dor 10 Count • Remove align interior 10 Count • Remove align interior 10 Count • Remove all healter 1 Count • Remove align healter 1 Count • Remove align healter 1 Count • Remove align healter 1 <t< th=""><th></th><th></th><th>Remove HB (hosebib) & exposed pipe</th><th>1</th><th>Count</th></t<>			Remove HB (hosebib) & exposed pipe	1	Count
			Remove interior sliding door	2	Count
Prove bow wait S159 ft Count S150 ft Count			Remove kitchen appliances	7	Count
			Remove low wall	53.59	ft
Prese A Remove particle pittatives 2.3.6 N A Remove single exterior door 3.1 Count A Remove single exterior door 1.0 Count B Remove wall feator 2.2 Count B Remove wall feator 1.0 Count B Replace wall feator<			Remove patio cover post	6	Count
Remove plumbing fatures 2 Count Remove single attribution door 3. Count Remove single attribution door 10 Count Remove wall header 2. Count Remove wall header 2. Count Reporter wall header 2. Count Reporter wall header 2. Count Reporter wall header 1. Count Reporter wall header Reporter wall heade		/	Remove patio enclosure	22.35	ft
Net			Remove plumbing fixtures	2	Count
			Remove single exterior door	3	Count
Revise water heater Replace water heater Replace water heater Replace water heater Replace water heater Replace water heater Revision 6. Revision 6. Revi			Remove single interior door	10	Count
			Remove wall neater	2	Count
Replace water heater			Renair surface & prepare for tile	14	sf
Replace water heater			Replace wall heater	1	Count
			Replace water heater	1	Count
DING , 4 A30.23 A3.1 DATE: 12/20/2022				aw copyright and other property rights in these plans. These plans are not to be modified or reproduced, in any form whatsoever, nor are they to be assigned to another party, without first obtaining written	
DATE:12/20/2022	PING * \$		A30.23 RENEWAL DATE A30.23 RENEWAL DATE A3.1	tte Architects, Inc. expressly reserves its common	
			DATE:12/20/2022		

	Legend			
	Description	Quantity	Unit	
/	3" x 6" balcony curb	27.26	ft	
/	12" wide bookshelf	6.70	ft	
	30" range w/ hood above	1	Count	
	36" referigerator	1	Count	
/	Art	5.39	ft	
/	Base cabinet, 2'-0" wide	13.00	ft	
1	Base moulding	256.53	ft	
	Bath vanity, 3'-0" x 2'-0"	1	Count	
	Bath vanity, 6'-5" x 2'-0"	1	Count	
/	Built-in cabinet, 1'-6" wide	1.50	ft	
/	Built-in cabinet, 1'-10" wide	1.08	ft	
1	Built-in closet shelving, 2'-0" wide	12.63	ft	
	Dish sink w/ garbage disposer	1	Count	
	Dishwasher	1	Count	
	Double shelf & pole in closet	18.61	ft	
	Elastomeric deck flooring	391	sf	7
1	Electric fireplace, 2'-0" wide	6.58	ft	7
*****	Exterior guardrail, 42" high	28.56	ft	
	Exterior stairs including framing, 3'-0" wide	6	Count	
/	Exterior wall, 2 x 6	56.62	ft	7
	Floor drain	1	Count	
/	Furring wall, 1 x 3	25.15	ft	
/	Furring wall, 2 x 4	6.57	ft	
	Install existing stairs to new location	16	Count	
/	Interior wall, 2 x 4	42.88	ft	
/	Interior wall, 2 x 6	15.71	ft	+36" /\ALL
	Kitchen countertop w/ 4" backsplash	63	sf	
	Kitchen furnace	1	Count	DN 16R@7 3/8"
	Kitchen island Size: 5'-10" x 5'-0"	1	Count	
	Lavatory/sink	3	Count	D IN WALL BELOW 7
	LVP flooring	904	sf	FOR DECK DRAIN
	Microwave	1	Count	
	Mirror	2	Count	HB HB ROUGH-IN
	Overflow for planter scupper	1	Count	42" PONY
/	Planter enclosure	44.86	ft	WALL POTTED PLANTS
	Planter system	61	sf	
/	Pony wall, 2 x 6	59.23	ft	
	Shampoo recess	2	Count	A11.1 DECK (13)
	Shower controls	3	Count	ELASTOMERIC FLR (MAINTAIN EXISTING GARAGE
/	Shower glass wall w/ door	10.99	ft	2% ROOF FRAMING, UTILIZE RIP 15 15 STRIPS TO ACHIEVE SLOPE) 15
/	Stair guardrail, 42" high	39.69	ft	
e e e e e e e e e e e e e e e e e e e	Stair handrail	39.09	ft	
	Tile flooring @ balcony	96	sf	PLANTER SCUPPER
	Tile flooring @ stair landing	16	sf	PLANTER DRAINAGE
	Tile flooring	141	sf	
	Toilet paper holder	1	Count	24 PA - 2% SL
/	Trench/trough drain	8.97	ft	
	Tub/shower Size: 30" x 60"	1	Count	22 42" PONY WALL
	TV	1	Count	
/	Upper cabinet, 1'-2" wide	5.90	ft	
/	Wall tile	75.70	ft	WATERPROOF FORMED FIBERGLASS
	Washer/Dryer	2	Count	ENCLOSURE INSIDE FRAMING, SLOPE TO DRAINS, IRRIGATION DRIP SYSTEM
	WIC vanity, 4'-0" x 1'-6"	1	Count	(INSTALLED BY OWNER).

SECOND FLOOR PLAN

ROOF: VENT CALCULATIONS

AREA OF ROOF:

VENTING AREA REQUIRED:

O'HAGIN VENT (COMP/SLATE/SHINGLE:) (1) VENT = 72 SQ. IN.

UNDER EAVE VENT 24 SQ. IN. OF VENTILATION

VENTING AREA PROVIDED:

230 SQ. FT. 175 / 300 = 0.58 SQ. FT. = 84 SQ. IN. (2) VENT = 144 SQ. IN.

(2) VENT = 48 SQ. IN.

192 SQ. IN. > 84 SQ.IN REQD.

	Legend							
	Description	Quantity	Unit					
*****	Deck to wall flashing	78.17	ft					
/	Gutter	17.35	ft					
/	Rake assembly 6/D3	26.73	ft					
/	Ridge 3/D3	8.68	ft					
	Roof cricket	2	Count					
	Roof vent	2	Count					
	Roofing [4:12]	227	sf					
/	Skylight flashing 1,2/D3	37.76	ft					

	Legend						
	Description	Quantity	Unit				
	6" tall "Deep ribbon" Address number by Westonletter - Black anodized color finish	1	Count				
/	Belly band trim	62.48	ft				
/	Door trim	114.29	ft				
	Rectangle	1	Count				
/	Self-adhered flexible flashing around window sill	24.45	ft				
/	Self-adhered strip flashing around window head/jamb	56.69	ft				
	Siding 3/D1	450	sf				
	Stucco 1/D1	506	sf				
/	Window trim	71.20	ft				

	Legend						
	Description	Quantity	Unit				
/	Belly band trim	20.20	ft				
/	Door trim	35.53	ft				
/	Existing stucco to receive new light 30/30 sand finish & color on top of existing	1,304	sf				
/	Self-adhered flexible flashing around window sill	44.43	ft				
/	Self-adhered strip flashing around window head/jamb	118.88	ft				
	Siding 3/D1	19	sf				
	Stucco 1/D1	313	sf				

ELECTR				┝╺┫	Ш	∩ I	m		
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GUBPANEI					$\left \begin{array}{c} \overline{D} \\ \overline{D} \end{array} \right $		<u>ס</u>		
SMOKE + CARBON MONOXIDE					Ш	Ψ Z Z			
DETECTOR						ΰŐ			
5" LED RECESSED LIGHT	BAFFLE FOR FLAT (CE	ILING		6	0 –	U IL		
					м М	Ш		2	
5" LED TRACK LIGHT						2	thorized h	2	
5" RECESSED LED LIGHT	TRIM + HOUSING FOR	R /	NET LOCATIONS			5		2	
		BI	ECINEN			Ц П	from suc		
4 RECESSED LED ART LIGHT			e gimdal			Ĩ		ב ב ב ב	
RECESSED EXHAUST FAN						in	vi claims		
							from ar	2	
RECESSED EXHAUST FAN +							untatives services		
WALL SCONCE	FIXTURE PROVIDED	B		-				2	
	FIXTURE PROVIDED	B						5	
CEILING FAN	FIXTURE PROVIDED	B	Y OWNER				90 com		
LED GARAGE LED LIGHT	(2) 4' T8 LED LAMP	-				S	a .	3	
STRIP CLOSET LED LIGHT	(1) 4' T8 LED LAMP					н О	. C.	2	
SECURITY/FLOOD LIGHT	WITH MOTION SENSC	2R					earc	5	
	GFCI PLUG STRIP AT		REAR OF UPPER			Ψ_{\pm}	eac nett		
WIREMOLD PLUG STRIP	MATCH CABS	1 0	V CNTR; COLOR TO				g b ean	2	
	(ORDER TO MATCH	0	R PAINT)			$\mathbb{O}^{\mathbb{Z}}$	j		
LOW PROFILE LED TAPE LIGHT	COVE UNDER CABIN	IET IMI	M/ REMOTE MER SWITCH			⊆ <			
LED STEP LIGHT	STAINLESS STEEL FI	INIS	5Н				U C C I I C C I I C C I I C C I I C C I C C I C C I C C I C C I C C I C		
LED LANDSCAPE LIGHT						Π	/en		
EXTERIOR UP LIGHT							139	5	
EXISTING OUTLET						Ţ	37.9	2	
DUPLEX OUTLET	AT BED WALLS, LIVI ROOM, SEE OWNER	ING FC	5 ROOM & FAM. OR ADDITIONAL				2/98	2	
	LOCATIONS.						56 56		
FOURPLEX OUTLET							296		
DUPLEX / QUAD USB OUTLET				-					
RECESSED DUPLEX OUTLET								2	
HOUDAY OUT ET		= _				_	ission ission		
WATERPROOF OUTLET		_/``				Ŋ	itten ber		
	BEHIND W/D, REF, R	۲N	5, BEDROOM			₹	aining wr	ັກ 	
240V OUTLET	WALLS, & SOFA'S PE		PLAN. SEE OWNER			7	first obts		
SWITCH			AICNJ.			<u>بد</u>	without		
3-WAY SWITCH						₹	er bartv	5	
4-WAY SMITCH						$\overline{\mathcal{O}}$	to anoth	2	
DIMMER SWITCH						Ŕ	ssined	5	
VACANCY SENSOR SWITCH						5			
						Щ	r are the	2	
FAN/LIGHT TIMER SWITCH						山	ever no		
DOOR BELL									
DOOR CHIME					Legen	d			
DATA COAX POWER -			Description	ob		u		Quantity	
RECESSED QUAD	CONFIRM HEIGHT W		26 Electric: 3-Way Switch					2	Count
THERMOSTAT			26 Electric: 4-Way Switch 26 Electric: 4" Recessed LED Lie	aht				3	Count
			26 Electric: 5" Recessed LED Lig	ght Wa	aterproo	f		8	Count
			26 Electric: 5" Recessed LED Lig 26 Electric: 200 Amp Electric Pa	ght Inles				103 2	Count
VOLUME CONTROLS			26 Electric: 240V Outlet					3	Count
DATA MEDIA CENTER			26 Electric: Ceiling Smoke + Car	rbon M	lonoxide	e Detector		6	Count
GARAGE DOOR BUTTON			26 Electric: Data, Coax, Power - 26 Electric: Dimmer Switch	Reces	ssed Qu	lad		4 21	Count
DOOR ACTIVATED LIGHT			26 Electric: Duplex Outlet					51	Count
			26 Electric: Duplex USB Outlet 26 Electric: Electrical Subpanels	;				5 2	Count
CAL NOTES			26 Electric: Exterior up Light	tob				7	Count
CAL NOTES			26 Electric: GFCI Duplex Outlet					17	Count
. 200 AMP SERVICE PANEL AND 1 L PLAN.	00 AMP SUB PANELS		26 Electric: Holiday Outlet 26 Electric: Landscape Light					1 22	Count
IS W/IN 6' OF WATER SHALL BE G	FI.		26 Electric: LED Landscape Ligh	nt				1	Count
DM AND KITCHEN LIGHTS TO BE C TO HAVE SURGE PROTECTOR.	IN TIMER SMITCH.		26 Electric: Low Profile LED Tap 26 Electric: Network (Cat 7) Tele	e Lign ephone	t & Cab	le Jack Fou	rplex Receptacle	13.58	π Count
TE LOCATION OF HOLIDAY OUTLE	TS W/ OWNER.		26 Electric: Pendant Light	utlet				6	Count
RATION SYSTEM AT ALL KITCHEN	I SINKS.		26 Electric: Recessed Duplex US	SB Ou	tlet			13	Count
ABLE TELEVISION OUTLET TO ALL	_ TVS.		26 Electric: Recessed Exhaust F 26 Electric: Security Camera	an				6 3	Count Count
CLENCUL JUNCE I NOTLOTOR.			26 Electric: Security Flood Light					4	Count
			26 Electric: Switch 26 Electric: Vacancy Sensor Swi	itch				20 5	Count
			26 Electric: Wall Sconce Waterp 26 Electric: Wall Sconce	oroof				1	Count
			26 Electric: Waterproof Outlet					9	Count
			26 Electric: Wiremold Plug Strip 26 Electric: WP GFCI Duplex Ou	utlet				13.59 2	Count

	Legend							
	Description	Quantity	Unit					
<	2 x 6 slats to ceiling, 4'-10"H	15	Count					
	Attic Access, 2'-6" x 2'-0"	1	Count					
	Drywall ceiling	478	sf					
	IPE wood siding @ ceiling	64	sf					
/	Linear soffit vent	18.74	ft					
	Stucco @ ceiling	370	sf					

REFLECTED CEILING NOTES

ALL CEILING HEIGHTS ARE MEASURED FROM FINISH FLOOR TO FINISH CEILING. ALL CEILING HEIGHTS TO REMAIN EXISTING U.N.O. 3. FIRST FLOOR AND SECOND FLOOR HALL CEILING HEIGHTS TO BE RAISED. SEE PLANS FOR CEILING HEIGHTS. 4. ALL SLOPING CEILINGS SHALL HAVE A PITCH TO MATCH ROOF. U.N.O.

GIBSON RESIDENCE	5725-5727 E OCEAN BLVD. LONG BEACH	CALIFORNIA 90803	representatives, from any claims arising from such unauthorized re-use.
	Jeannette Architects	296 redondo avenue . long beach . ca . 90803 562/987.9139 jeannettearchitects.com	he event of ANY unauthorized use of these plans, the client agrees to hold harmless, indemnify and defend Jeannette Architects, Inc. and it's
REV NO. D	REFLECTED CEILING		ot to be modified or reproduced, in any form whatsoever, nor are they to be assigned to another party, without first obtaining written permission and consent. In
PC# DB: JOB: JC- JC- JC- JC- JC- JC- JC- JC- JC- JC-	#: 202 SED A SED A S. JE C 305S RENEWAL D C 305S C 4.30.22	CI/JL 21.10.76 RCALLED ATE DE TE	xpressly reserves its common law copyright and other property rights in these plans. These plans are not
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<u>FLASHING AND</u> MATERPROOFING

ALL PRODUCTS LISTED BELOW SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS SO AS NOT TO VOID WARRANTIES.

AIR AND WEATHER RESISTIVE BARRIER, SHEET APPLIED (MALLS, ABOVE GRADE): DUPONT TYVEK HOMEWRAP (ICC ESR-2375) OR ARCHITECT APPROVED EQUAL. - INSTALLATION: PROVIDE TWO LAYERS COMPRISING OF (1) BASE LAYER AIR AND WEATHER RESISTIVE BARRIER APPLIED TO FRAMING/SHEATHING AND (1) TOP LAYER 'GRADE D' BUILDING PAPER.

SELF-ADHERED STRIP FLASHING (DOOR/WINDOW HEADS AND JAMBS AND MISC WALL FLASHING): DUPONT STRAIGHTFLASH OR ARCHITECT APPROVED EQUAL. MUST BE 100% BUTYL

RAINSCREEN AIR AND WEATHER RESISTIVE BARRIER: "REVEAL SHIELD SA SELF-ADHERED" BY VAPROSHIELD. USE WITH "REVEAL FLASHING SA SELF-ADHERED" STRIP FLASHING. ALL MATERIAL TO BE BLACK IN COLOR UNDER RAINSCREEN. (ICC-ES AC 38 AND CLASS A FIRE RATED)

SELF-ADHERED FLEXIBLE FLASHING (WINDOW SILL): DUPONT FLEXWRAP NF OR ARCHITECT APPROVED EQUAL. MUST BE 100% BUTYL

ROOFING UNDERLAYMENT (TYP ROOFING EX: ASPHALT SHINGLE ROOF): 15LB FELT PAPER

<u>ROOF SELF-ADHERED STRIP FLASHING (ASPHALT</u> <u>SHINGLE ROOF)</u>: GRACE ICE AND WATER (ICC ESR-1677) OR ARCHITECT APPROVED EQUAL. MUST BE 100% BUTYL

SLAB ON GRADE BELOW GRADE HORIZONTAL AND VERTICAL WATERPROOFING: GRACE PREPRUFE OR ARCHITECT APPROVED EQUAL.

SLAB ON GRADE DAYLIGHT FOUNDATION AND THROUGH MALL MATERPROOFING: AQUAFIN 2K OR ARCHITECT APPROVED EQUAL.

DECK WATERPROOFING UNDER TILE/STONE: CIM 1000 90MIL (ANSI 118.10-199) OR ARCHITECT APPROVED EQUAL

ELASTOMERIC DECK COATING: AQUAFIN 2K OVER CIM 1000 (ANSI 118.10-199) OR ARCHITECT APPROVED EQUAL. COLOR FOR AQUAFIN 2K BY OWNER/ARCHITECT.

FLASHING: ALL TO BE 24 GAUGE GALVANIZED FLASHING OR 316 GRADE STAINLESS STEEL ATTACHED WITH COMPATIBLE FASTENERS (VERIFY COMPATIBILITY W/ ADJACENT MATERIAL)

s representatives. from any claims arising from such unauthorized re-use.	authorized use of these plans. the client agrees to hold harmless, indemnify and defend Jeannette Architects. Inc. and it	duced, in any form whatsoever: nor are they to be assigned to another party, without first obtaining written permission and consent. In the event of	1 other procerty rights in these plans. These plans are not to be modified or repro	Architects. Inc. expressiv reserves its common law copyright and	C) Jeannette
CALIFORNIA 90803	londo avenue. long beach. ca. 90803 /987.9139 jeannettearchitects.com _		DATE CI/JL 21.10.76	RCLIIIECT 98 FTTE DATE OP	0/2022
5725-5727 E OCEAN BLVD. LONG BEACH	Jeannette Architects	ARCHITECTURAL DFTAIL S	ESCRIPTION #: 202	SED AA RENE S. JE, C 3059 A 30.23 RENEWAL DA OF CAL	E:12/20
GIBSON RESIDENCE		REVI	PC#: DB: JOB	LIGIN JEEC EN	
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	Legend					
	Description	Quantity	Unit			
~	14" velux sun tunnel rigid skylight, fixed Size: 1'-2" x 1'-2"	1	Count			
~	Exterior double sliding door Size: 12'-4" x 7'-8"	1	Count			
~	Exterior garage door Size: 9'-0" x 7'-0"	2	Count			
~	Exterior single swing door Size: 3'-0" x 6'-8"	2	Count			
~	Exterior single swing door w/ operational window Size: 2'-8" x 6'-8"	1	Count			
~	Exterior single swing door, frosted Size: 3'-0" x 6'-8"	1	Count			
~	Interior double sliding door Size: 4'-7" x 6'-8"	1	Count			
~	Interior double sliding door Size: 8'-0" x 6'-8"	1	Count			
~	Interior double sliding door Size: 8'-10" x 6'-8"	1	Count			
~	Interior single folding door Size: 2'-8" x 6'-8"	1	Count			
~	Interior single pocket door Size: 2'-7" x 6'-8"	1	Count			
~	Interior single pocket door Size: 2'-8" x 6'-8"	4	Count			
~	Interior single swing door Size: 2'-4" x 6'-8"	4	Count			
~	Interior single swing door Size: 2'-8" x 6'-8"	5	Count			
~	Interior single swing door w/ operational window Size: 2'-8" x 6'-8"	1	Count			
	Velux skylight, fixed Size: 6'-0" x 2'-0"	2	Count			
~	Window Casement Size: 1'-10" x 1'-10"	1	Count			
~	Window Casement Size: 2'-4" x 2'-4"	4	Count			
~	Window Casement Size: 2'-4" x 4'-0"	1	Count			
~	Window Casement Size: 2'-4" x 4'-6"	2	Count			
~	Window Casement Size: 2'-6" x 2'-6"	1	Count			
~	Window Casement Size: 2'-6" x 4'-0"	3	Count			
~	Window Fixed Size: 2'-4" x 2'-2"	2	Count			
~	Window Fixed Size: 3'-6" x 2'-6"	1	Count			
~	Window Fixed Size: 3'-8" x 2'-4"	1	Count			
~	Window Fixed Size: 4'-2" x 2'-4"	1	Count			
~	Window Fixed Size: 5'-0" x 3'-0"	1	Count			
~	Window Fixed Size: 5'-4" x 2'-4"	1	Count			
~	Window Fixed Size: 6'-2" x 1'-10"	1	Count			
~	Window Fixed Size: 6'-6" x 2'-4"	2	Count			
~	Window Fixed Size: 6'-6" x 4'-0"	1	Count			
~	Window Fixed Size: 8'-6" x 1'-7"	1	Count			
~	Window Fixed Size: 9'-8" x 1'-7"	1	Count			
~	Window Sliding Size: 2'-10" x 2'-0"	1	Count			
~	Window Sliding Size: 7'-8" x 4'-0"	1	Count			

	Direct SL - SLIDING SN - SHING SEC - SECTIONAL MSL - MULTI-SLIDE T6 - TEMPERED GLAZING PKT - POCKET DIMENSIONS WIDTH OPR LOCATION NOTES U-FACTOR SHGC TG 3 - 0" 6 - b" 5W AT ENTRANCE	GIBSON RESIDENCE 5725-5727 E OCEAN BLVD. LONG BEACH CALIFORNIA 90803
	2010 2 - 0 0 0 0 0 0 0 2010 2 - 4 0 0 0 0 0 2011 2 - 4 0 0 0 0 0 2011 2 - 4 0 0 0 0 0 2011 0 0 0 0 0 0 2011 0 0 0 0 0 0 2011 0 0 0 0 0 0 2011 0 0 0 0 0 0 2011 0 0 0 0 0 0 2011 0 0 0 0 0 0 2011 0 0 0 0 0 0 0 2011 0 0 0 0 0 0 0 2011 0 0 0 0 0 0 0 0 2011 0 0 0 0 0 0 0 0 0 2011 0 0 0 0 0 0 0 0 0 0 <	EDULES - DOOR / MINDOM Jeannette A R C H I T E C T S A R C H I T E C T S A R C H I T E C T S 562/987.9139 296 redondo avenue . long beach . ca . 90803 562/987.9139 jeannettearchitects.com
ROYC		J REVISIONS: NO. DESCRIPTION DATE DB: CI/JL JOB#: 2021.10.76 V

FOUNDATION:	<u>ST/</u>	AIRS
AND/OR 16"X24" FOR THRU FLOOR ACCESS. MUST BE UNOBSTRUCTED BY PIPES, DUCTS AND SIMILAR CONSTRUCTION. ALL UNDER FLOOR ACCESS AND OPENINGS SHALL BE EFFECTIVELY SCREENED OR	1.	
COVERED. PROVIDE 12" CLEARANCE UNDER FLOOR AT GIRDERS AND 18" CLEARANCE UNDER FLOOR JOISTS AT RAISED WOOD FLOORS.		
2. PROVIDE PROPER & ADEQUATE ACCESS UNDER FLOOR THRU TO ALL NEW & EXISTING SPACES AS REQUIRED PER CODE.		
 AT CRAWL SPACE OPENINGS PROVIDE (1) SF. / 150 SF. OF UNDER FLOOR AREA. FOR FLOOD VENTS SEE ADDED REQUIREMENTS FOR OPENINGS IN GENERAL NOTES DIVISION 8. WHENEVER SULFATE RESISTANCE IS REQUIRED PER SOILS REPORT, CONCRETE MIX SHOULD BE IN 		
ACCORDANCE WITH CURRENT CRC. 5. SOILS ENGINEER SHALL FIELD VERIFY AND PROVIDE WRITTEN REPORT OF % MAX. DENSITY AND SOIL	2.	SPIR
BEARING COMPACTION @ MIN. 90 PRESSURE PRIOR TO ANY CONCRETE POUR. SEE GENERAL NOTES. 6. CONTINUOUS SPECIAL DEPUTY INSPECTION IS REQUIRED FOR ALL ANCHOR BOLT AND HOLD-DOWN EPOXY RETROFITTING.		
FRAMING:	З.	MINE
 ALL BEDROOMS SHALL HAVE MINIMUM ONE EGRESS WINDOW OR DOOR WITH ACCESSIBLE OPENING OF 24" MIN. HIGH, 20" MIN. WIDE, # 5.7 SF MIN AREA. (5.0 SF AT GRADE FLOOR) SILL TO BE NO HIGHER THAN 44" A F F 		
2. VERTICAL EGRESS: FOR HABITABLE LEVELS MORE THAN (1) STORY ABOVE OR BELOW THE LEVEL OF AN EGRESS DOOR, THE MAXIMUM TRAVEL DISTANCE FROM ANY OCCUPIED POINT TO A STAIRWAY OR RAMP THAT PROVIDES EGRESS FOR SUCH HABITABLE LEVEL SHALL NOT EXCEED 50 FEET		
3. ATTIC SPACE (OVER 30" HEADROOM) MUST HAVE AN ACCESS OPENING OF 22"X30" MIN. CLEAR. IF MECHANICAL EQUIPMENT IS LOCATED IN THE ATTIC THE OPENING SIZE MUST ALLOW FOR ACCESS AND		
 4. SHOWERS SHALL BE CAPABLE OF ENCOMPASSING A 30" MIN. CIRCLE - FINISH TO FINISH AT FLOOR LEVEL. 5. SITE FABRICATED FIREPLACES SHALL MAINTAIN A 2" MIN. CLEARANCE FROM CHIMNEY FLUES AND FIREBOX TO ALL COMPLICITIES E MATERIAL 6 		
6. PREFABRICATED FIREPLACE BOXES SHALL MAINTAIN CLEARANCES TO FRAMING PER MANUFACTURER'S INSTALLATION SPECS. CONTINUOUS SPECIAL DEPUTY INSPECTION IS REQUIRED FOR ALL FIELD WELDING AND		
ANCHOR BOLT AND HOLD-DOWN EPOXY RETROFITTING. 1. DRAFT STOPS SHALL BE PROVIDED WITHIN A CONCEALED FLOOR/CEILING ASSEMBLY FORMED OF	4.	HANI MIDT
COMBUSTIBLE CONSTRUCTION, INCLUDING WITHIN ATTICS, OVERHANGS. 3. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19 PERCENT	_	A HA HANI
MOISTURE CONTENT. MOISTURE CONTENT SHALL BE VERIFIED IN COMPLIANCE WITH THE FOLLOWING: A. MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE-TYPE OR CONTACT-TYPE MOISTURE VETER	Э.	GUAF MEZZ AL I
MOISTURE METER. B. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2 FEET TO 4 FEET FROM THE GRADE STAMPED END OF FACH RIFCE TO BE VERIFIED.		TOP
C. AT LEAST (3) RANDOM MOISTURE READING SHALL BE PERFORMED ON WALL AND ENCLOSURE OF WALL AND FLOOR FRAMING.	<u>RA</u> 1.	
DOORS AND WINDOWS	2.	RATE
ALL DOORS TO EXTERIOR MUST HAVE AN EXTERIOR LANDING: LENGTH SHALL BE 36" MINIMUM IN DIRECTION		
HAVEL, MIDTH OF THE LANDING SHALL BE EQUAL TO MIDTH OF THE DOOR OPENING AND SHALL HAVE A MINIMUM 2% SLOPE AWAY FROM THE BUILDING. EXTERIOR LANDINGS SHALL BE NO MORE THAN 1-1/2" LOWER THAN TOP OF DOOR THRESHOLD. EXCEPTION: FOR DOORS THAT ARE NOT A PART OF THE REQUIRED MEANS OF EGRESS AND WHEN THE DOOR DOES NOT SWING OVER THE LANDING (EXCLUDING	З.	RATE
A. EXTERIOR DOORS CAN STEP DOWN TO THE LANDING MAX INCHES PER CODE FROM TOP OF		
B. A LANDING IS NOT REQUIRED WHERE STAIRWAY OF TWO OR FEWER RISERS IS LOCATED ON THE	RC	OF.
2. EGRESS DOORS SHALL COMPLY WITH THE FOLLOWING:	1. 2	<u>A</u> MII UNVF
A MINIMUM CLEAR WIDTH OF 32". B. SHALL BE READILY OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL	۷.	REQ DIRE
KNOWLEDGE OR EFFORT. C. DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL BE A MIN.	З.	ALL EXCE
34" TO MAX. 48" HEIGHT ABOVE THE FLOOR. D. MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS ARE NOT PERMITTED ON DOORS RE-	4.	ALL FL <i>O</i> (
QUIRED FOR EGRESS. B. TEMPERED GLAZING SHALL OCCUR: A. GLAZING IN INDIVIDUAL FIXED OR OPERABLE PANELS THAT MEET ALL OF THE FOLLOWING CON-	5.	TILE FLAN
DITIONS: • EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET: AND	ME	<u>CHA</u>
 EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR; AND EXPOSED TOP EDGE GREATER THAN 36 INCHES ABOVE FLOOR; AND 	1.	HVA(REQ
 ONE OR MORE WALKING SURFACE(S) WITHIN 36 INCHES (914 MM) HORIZONTALLY OF THE PLANE OF THE GLAZING. 	∠.	
 B. SWING, SLIDING DOORS, OR BIFOLD DOORS. C. GLAZING ADJACENT TO STAIRWAYS, LANDINGS, AND RAMPS WITHIN 36" HORIZONTALLY OF A 	З.	A PE
WALKING SURFACE WHEN EXPOSED SURFACE OF THE GLAZING IS LESS THEN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.	4.	DRY
U. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN 24" OF EITHER SIDE OF THE PLANE OF THE DOOR IN A CLOSED ROSITION AND WHOSE ROTTON EDGE IS LESS THEN 60" AROME THE SUCCE OF MANY K	<u>EL</u> E 1	ECTR
ING SURFACE. F GLAZING AD LACENT TO THE LANDING AT THE ROTTOM OF A GTAIDWAY WHERE THE GLAZING IG	2.	OPEN
LESS THAN 36 INCHES ABOVE THE LANDING AT THE BOTTOM OF A STAIRWAT WHERE THE GLAZING IS 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS		OR N WIRE
F. GLAZING IN ENCLOSURES FOR OR WALLS FACING HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, AND SHOWERS WHERE BOTTOM EDGE OF GLAZING IS LESS THEN 60" MEA-		LOC, LEVE
SURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE. G. ALL GLAZING IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE. IN- CLUDED ARE STRUCTURAL BALLISTER PANELS AND NONSTRUCTURAL INFILL PANELS.		OPEN
H. CONTRACTOR & GLAZING RELATED DISCIPLINES ARE RESPONSIBLE FOR ORDERING SAFETY GLASS IN DOORS & WINDOWS WHERE APPLICABLE BASED ON CONDITIONS SET FORTH IN THESE		ROC SHAL
PLANS AND GLAZING CHAPTER IN THE CURRENT BUILDING CODE. AT REQUIRED LOCATIONS TEMPERED GLAZING (TG) TO BE ETCHED ON THE GLASS. LIGHT AND VENTILATION (ALL HABITABLE ROOMS): SHALL HAVE A GLAZING AREA PER CODE FOR NATURAL LIGHT. THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4% OF THE FLOOR AREA BEING VENTILATED	З.	ATTIC ARCI EXH4 FAN
A. EXCEPTION (1): NATURAL VENTILATION IS NOT REQUIRED IF THE MECHANICAL VENTILATION SYS- TEM IS CAPABLE OF SUPPLYING THE MINIMUM OUTDOOR VENTILATION AIR PER CODE AND WHEN EMERGENCY EGRESS IS NOT REQUIRED	4.	MANI PERI ALL
B = EXCEPTION (2). NATIRAL LIGHT IG NOT REQUIRED MILEN THE AROVE EXCEPTION HAG REEN CAT	5.	PRO
ISFIED AND ARTIFICIAL LIGHT IS NOT REQUIRED THE ADOVE EXCEPTION HAS BEEN SAT- ISFIED AND ARTIFICIAL LIGHT IS CAPABLE OF PRODUCING THE MIN. FOOT CANDLES ABOVE THE ELOOR REPLOIDE	6.	SUPF PR/)
 INCLUDE TO RECOVE LIGHT IS NOT REQUIRED WHEN THE ADOVE EXCEPTION HAS BEEN SATE ISFIED AND ARTIFICIAL LIGHT IS CAPABLE OF PRODUCING THE MIN. FOOT CANDLES ABOVE THE FLOOR PER CODE. ALL BEDROOMS SHALL HAVE MIN. ONE EGRESS WINDOW OR DOOR WITH ACCESSIBLE OPENING OF 24" MIN. HIGH 20" MIN WIDE # 5.7 SE MIN AREA (5.0 SE AT GRADE EL OOR) SHILL TO BE NO HIGHER THAN 44" A EE 	6. 7.	SUPF PRO 210.8 PRO
 D. EXCLINENT (2). NATIONAL LIGHT IS NOT REQUIRED WHEN THE ABOVE EXCEPTION HAS BEEN SATIONAL SET OF AND ARTIFICIAL LIGHT IS NOT REQUIRED WHEN THE ABOVE EXCEPTION HAS BEEN SATIONAL ISFIED AND ARTIFICIAL LIGHT IS NOT REQUIRED WITH ADDIVE EXCEPTION HAS BEEN SATIONAL ISFIED AND ARTIFICIAL LIGHT IS NOT REQUIRES ABOVE THE FLOOR PER CODE. ALL BEDROOMS SHALL HAVE MIN. ONE EGRESS WINDOW OR DOOR WITH ACCESSIBLE OPENING OF 24" MIN. HIGH, 20" MIN. WIDE, \$ 5.7 SF MIN AREA. (5.0 SF AT GRADE FLOOR) SILL TO BE NO HIGHER THAN 44" A.F.F. WINDOWS WITH DIRECT ACCESS TO POOLS WITHOUT INTERVENING ENCLOSURES SHALL BE EQUIPPED WITH EXIT ALARMS. 	6. 7. 8.	SUPF PRO 210.8 PRO NO C ALL

HANDRAILS, AND GUARDS:

- CAL STAIRWAYS TO BE: (PER CURRENT CRC CODES)
- MAX. 7-3/4" " RISE AND 10" MIN. RUN. A
- MIN. 6'-8" VERTICAL HEADROOM AT TREAD NOSING. MIN. 36" CLEAR WIDTH
- HANDRAILS 34" TO 38" HIGH ABOVE TREAD NOSING D.
- HANDGRIP PORTION OF HANDRAIL SHALL NOT BE LESS THAN 1-1/4" NO MORE THAN 2" CROSS-E. SECTION.
- INTERMEDIATE RAILS AT 4" MAX CLEAR SPACE BETWEEN EACH. WALKING SURFACE OF TREADS AND LANDINGS OF STAIRWAY SHALL BE SLOPED NO STEEPER G. THAN 2% SLOPE.
- RAL STAIRS (PER CURRENT CODES):
- MIN. 6-3/4" TREAD DEPTH AT THE WALKLINE, ALL TREADS SHALL BE IDENTICAL A
- MAX. 9-1/2" RISE.
- 6'-6" MIN. HEADROOM ABOVE TREAD NOSING. C.
- MIN 26" CLEAR WIDTH AT AND BELOW THE HANDRAIL D. THE WALKLINE RADIUS IS NOT GREATER THAN 24-1/2"
- DER STAIRS (PER CURRENT CODES):
- A. MIN. 10" TREAD DEPTH MEASURED BETWEEN THE VERTICAL PLANES OF THE FOREMOST PRO-JECTION OF ADJACENT TREADS AT THE INTERSECTIONS WITH THE WALKLINE.
- MIN 6" TREAD DEPTH AT ANY POINT WITHIN THE CLEAR WIDTH OF THE STAIR. В.
- WITHIN ANY FLIGHT OF STAIRS, THE LARGEST WINDER TREAD DEPTH AT THE WALKLINE SHALL С.
- NOT EXCEED THE SMALLEST WINDER TREAD BY MORE THAN 3/8". CONSISTENTLY SHAPED WINDERS AT THE WALKLINE SHALL BE ALLOWED WITHIN THE SAME D. FLIGHT OF STAIRS AS RECTANGULAR TREADS AND DO NOT HAVE TO BE WITHIN 3/8" OF THE
- RECTANGULAR TREAD DEPTH. E. WALKLINE ACROSS WINDER TREADS SHALL BE CONCENTRIC TO THE CURVED DIRECTION OF TRAVEL THROUGH THE TURN AND LOCATED 12" FROM THE SIDE WHERE THE WINDERS ARE NAR-ROWER. THE 12" DIMENSION SHALL BE MEASURED FROM THE WIDEST POINT OF THE CLEAR STAIR MIDTH AT THE WALKING SURFACE OF THE WINDER. IF WINDERS ARE ADJACENT WITHIN THE FLIGHT, THE POINT OF THE WIDEST CLEAR STAIR WIDTH OF THE ADJACENT WINDERS SHALL BE USED.

DRAILS SHALL NOT PROJECT MORE THAN 4-1/2" ON EITHER SIDE OF THE STAIRWAY. THE MINIMUM TH OF THE STAIRMAY AT AND BELOM THE HANDRAIL HEIGHT SHALL NOT BE LESS THAN 31-1/2" WHEN ANDRAIL IS INSTALLED ON ONE SIDE AND 27" WHEN HANDRAILS ARE PROVIDED ON BOTH SIDES. DRAIL ENDS SHALL BE RETURNED OR TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. RDRAILS (PER CURR<mark>ENT CRC) SHALL BE</mark> LOCATED ALONG OPEN-SID<mark>ED WALKING</mark> SURFACES

- ZANINES, STAIRWAYS, RAMPS, AND LANDINGS THAT ARE 30" ABOVE THE FLOOR OR GRADE BELOW. GUARDS WHOSE TOP RAIL SERVE AS A HAND RAIL SHALL BE 34" MIN. TO 38" MAX. GUARDS WHOSE
- ' RAIL DOE<mark>S</mark> NOT SERVE A<mark>S A HA</mark>NDRAIL SHALL HAVE A HEIGHT OF +42".

ASSEMBLIES:

EAVES WITHIN 5' FROM PROPERTY LINE SHALL BE 1-HOUR CONSTRUCTION.

- ED WALL ASSEMBLIES IN SPRINKLERED DWELLINGS:
- A. WALLS O'-3' FROM THE PROPERTY LINE REQUIRES 1-HOUR RATED WALLS WITH NO OPENINGS. WALLS GREATER OR EQUAL TO 3' FROM THE PROPERTY LINE REQUIRES O-HOUR RATED WALLS В. / OPENINGS.

ED WALL ASSEMBLIES IN NON-SPRINKLERED DWELLINGS: (FOR ALL NEW CONSTRUCTION ONLY) A. WALLS O'-3' FROM THE PROPERTY LINE REQUIRES 1-HOUR RATED WALLS WITH NO OPENINGS

- WALLS 3'-5' FROM THE PROPERTY LINE REQUIRES 1-HOUR RATED WALLS AND 25% MAX В. OPENINGS.
- WALLS GREATER OR EQUAL TO 5' FROM THE PROPERTY LINE REQUIRES O-HOUR RATED WALLS С. / OPENINGS.

INIMUM OF 1" AIRSPACE SHALL BE PROVIDED BETWEEN INSULATION AND ROOF SHEATHING. ENTED ATTIC AND UNVENTED ENCLOSED RAFTER ASSEMBLES SHALL BE ASSEMBLED PER CRC R806.5 RUIREMENTS. NO RADIANT BARRIER ON PLYWOOD SHEATHING IF INSULATION IS SPECIFIED TO BE IN ECT CONTACT.

- CHIMNEYS ARE TO BE EQUIPPED WITH APPROVED SPARK ARRESTORS OR WIRE MESH SCREENING NOT EEDING 1/2" IN ANY DIMENSION.
- BUILT-UP FLAT ROOF AREAS SHALL BE A MINIMUM SLOPE 1/4" PER FOOT, CONDUCT 24 HOUR MIN OD TESTING PER CURRENT ASTM STANDARDS. ROOFS SHALL BE FIRE STOPPED AT EAVE ENDS WITH GROUT / CONCRETE TO PREVENT ENTRY OF MES OR EMBERS UNDER THE TILE.

NICAL:

C CONTRACTOR TO SIZE ALL DUCTS AND REGISTERS PER CURRENT CODES AND CA T24 WIREMENTS.

- IC ACCESS AND BELOW RAISED FLOOR ACCESS OPENINGS (WHERE MECHANICAL EQUIPMENT IS ATED) SHALL HAVE OPENING ACCESS PER CURRENT C.M.C. PROVIDE 1/2" PLYWOOD. WALKING ACCESS RE APPLICABLE.
- ERMANENT ELECTRICAL OUTLET AND A LIGHTING FIXTURE CONTROLLED BY A SWITCH SHALL BE ATED IN THE ATTIC / BELOW FLOOR FAU. PER CURRENT C.M.C.
- 'ER VENT SHALL NOT EXCEED 14' IN LENGTH WITH MAXIMUM TWO 90 DEGREE ELBOWS.

RICAL:

VIDE AN EXTRA 20'-0" LONG #4 BAR 3" FROM BOTTOM OF FOOTING TURNED UP THROUGH PLATE FOR IN GROUND AT ELECTRICAL PANEL.

DKE / CARBON MONOXIDE DETECTORS: INSTALL IN AREAS OF NEW OR REMODELED AREAS, WHICH MAY MAY NOT INCLUDE EXISTING BEDROOMS OR LIVABLE SPACES. CONTRACTOR SHALL VERIFY THAT HARD ED DETECTORS W/ BATTERY BACK-UPS EXIST IN EACH SLEEPING ROOM AND AT A POINT CENTRALLY ATED IN THE CORRIDOR OR AREA GIVING ACCESS TO EACH SLEEPING AREA. A DETECTOR SHALL BE ATED AT EACH STORY AND BASEMENT, ON THE UPPER LEVEL OF SPLIT LEVEL STORIES AND BOTH ELS IF SLEEPING AREA IS ON LOWER LEVEL. A DETECTOR SHALL BE LOCATED IN CLOSE PROXIMITY TO STAIRWAY WHEN SLEEPING ROOMS ARE ON THE UPPER LEVEL. WHERE THE CEILING HEIGHT OF A ROOM INS TO THE HALLWAY SERVING THE BEDROOMS EXCEEDS THAT OF THE HALLWAY BY 24 INCHES OR LE, DETECTORS SHALL BE INSTALLED IN THE HALLWAY AND NEAR THE HIGH POINT OF THE ADJOINING DM. DETECTORS SHALL BE INTERCONNECTED TO SOUND AT THE SAME TIME. IN NEW HOMES DETECTORS LL BE HARD WIRED WITH BATTERY BACK-UP. AN EXISTING HOME CAN BE SOLELY BATTERY OPERATED RE NO REMOVAL OF FINISHES HAS OCCURRED AND THE EXISTING DWELLING IS WITHOUT AN ACCESSIBLE C ABOVE. ALL DETECTOR LOCATIONS TO CONFORM TO CURRENT CRC AND NFPA REQUIREMENTS, CHITECT SHALL BE NOTIFIED OF ANY RELOCATION OR ADDITIONAL UNITS THAT MAY BE REQUIRED. AUST FAN MUST BE VENTED TO THE OUTSIDE AND PROVIDE 5 AIR EXCHANGES PER HOUR. AN EXHAUST WITH AN INTEGRAL LIGHTING SYSTEM SHALL BE USED ONLY WHEN THE LIGHTING SYSTEM CAN BE UALLY TURNED ON AND OFF WHILE ALLOWING THE FAN TO CONTINUE TO OPERATE FOR AN EXTENDED IOD OF TIME (PER CURRENT CEC).

RECESSED LIGHTS TO BE IC RATED AND AIR TIGHT.

VIDE A.F.C.I. PROTECTION TO 120-VOLT, SINGLE PHASE, 15- AND 20- AMPERE BRANCH CIRCUITS PLYING OUTLETS OR DEVICES INSTALLED IN AREAS INDICATED IN CEC 210.12. DVIDE G.F.C.I. PROTECTION TO 125 VOLT, 15 AND 20 AMP RECEPTACLES IN AREAS INDICATED IN CEC

VIDE BATHROOM A MINIMUM OF (1) 20-AMP CIRCUIT RECEPTACLE OUTLET. SUCH CIRCUIT SHALL HAVE OTHER OUTLETS. THIS CIRCUIT MAY SERVE MORE THAN ONE BATHROOM (PER CURRENT CEC). OUTDOOR LIGHTING MUST BE HIGH EFFICACY. LIGHTING MOUNTED TO ANY BUILDING ON THE LOT T BE CONTROLLED BY ONE OF THE FOLLOWING COMBINATIONS: PHOTOCELL AND MOTION SENSOR, TOCELL AND TIME SWITCH, ASTRONOMICAL TIME CLOCK, OR ASTRONOMICAL TIME CLOCK, DOES NOT ALLOW THE LUMINAIRE TO BE ON DURING THE DAY, AND MAY BE PROGRAMMED TO AUTOMATICALLY TURN

LIGHTING OFF AT NIGHT

PLUMBING:

- MUST BE ADAPTED FOR LOW WATER CONSUMPTION.
- 4
- 5.
 - URINALS:

T $| \rangle$ ĬŽ () () 「口」」 PROVIDE AT WATER HEATERS A T = TEMPERATURE AND P = PRESSURE VALVE TO DISCHARGE TO THE \cap EXTERIOR THROUGH AN APPROVED DRAIN LINE WHERE APPLICABLE. (PER CURRENT CPC) σ 2. TOILETS MUST BE INSTALLED TO ALLOW FOR A 15" MIN. CLEAR SPACE FROM CENTER LINE OF TOILETS TO AN ES ANY OBSTRUCTION ON EACH SIDE. TOILETS MUST HAVE 24" MIN. CLEAR IN FRONT OF UNIT. U PROVIDE ULTRA FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION. EXISTING SHOWER HEADS & TOILETS N N N SHOWERS AND SHOWER-TUBS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE Z BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. FIXTURE FLOW RATES, ALSO CONFIRM WITH SPECIFIC CALGREEN REQUIREMENTS FOR THIS JOB. IF ∎ () |Ш DISCREPANCIES OCCUR BETWEEN CODES, MOST RESTRICTIVE SHALL PREVAIL. • WATER CLOSETS: ≤ 1.28 GPM \leq 0.125 GAL/FLUSH らう SINGLE SHOWER HEADS: < 1.8 GPM @ 80 PSI MULTIPLE SHOWER HEADS: COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GPM @80 PSI OR ONLY ONE SHOWER OUTLET IS TO BE IN OPERATION AT A TIME LAVATORY FAUCETS: MAX 1.2 GPM @ 60 PSI / MIN. 0.8 GPM @ 20 PSI KITCHEN SINK FAUCETS: ≤ 1.8 GPM @ 60 PSI: TEMPORARY INCREASE TO 2.2 GPM ALLOWED BUT SHALL DEFAULT TO 1.8 GPM **O** S ()+ က $\mathbf{D}^{\mathbf{A}}$ O <u></u> S . $\overline{\mathbb{Q}}$ T S T 11 REVISION: REVISION: REVISION: REVISION: PC#: DB: JOB#: 2021.10.76 **R**1.

DATE: 12/20/2022

EROSION CONTROL BMPS

SCHEDULING CALTRANS / SECTION 3 / SS-01

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS FROM CONSTRUCTION SITES BY SEQUENCING THE CONSTRUCTION PROJECT TO REDUCE THE AMOUNT AND DURATION OF SOIL EXPOSURE.

> • PRACTICE EROSION & SEDIMENT CONTROL YEAR ROUND. CLOSE & STABILIZE OPEN TRENCHES AS SOON AS POSSIBLE.

STREET SMEEPING CALTRANS / SECTION 4 / SC-07

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS FROM CONSTRUCTION SITES BY USING DUST CONTROL MEASURES TO STABILIZE SOIL FROM WIND EROSION, AND REDUCE DUST GENERATED BY CONSTRUCTION ACTIVITIES.

STREET SWEEPING OF ADJACENT PUBLIC RIGHT-OF-WAY.

STABILIZED CONSTRUCTION ENTRANCE

CALTRANS / SECTION 6 / TC-01 PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS FROM CONSTRUCTION SITES BY REDUCING THE AMOUNT OF SEDIMENT, DUST, & MUD TRACKED OFF-SITE FROM CONSTRUCTION TRAFFIC.

CONSTRUCT ON LEVEL GROUND WHERE POSSIBLE

SAND BAG BARRIER CALTRANS / SECTION 4 / SC-08

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS FROM CONSTRUCTION SITES BY STACKING SAND BAGS ALONG A LEVEL CONTOUR CREATING A BARRIER WHICH DETAINS SEDIMENT LADEN WATER PROMOTING SEDIMENTATION. USE ALONG THE PERIMETER OF THE SITE AND AROUND CATCH BASIN INLETS TO STORM DRAINS TO CREATE A TEMPORARY SEDIMENT TRAP.

- USE SAND BAGS LARGE ENOUGH TO WITHSTAND FLOODING.
- INSPECT SAND BAGS AFTER EACH RAIN.
- REMOVE SEDIMENT BEHIND SAND BAGS. RESHAPE OR REPLACE DAMAGED SAND BAGS.

ADDITIONAL STANDARDS:

MATERIAL USE STANDARDS:

CLEANUP SPILLS. STANDARDS:

STANDARDS:

STANDARDS:

CALTRANS / SECTION 7 / NS-01 STANDARDS:

STANDARDS:

CONSTRUCTION ACTIVITY BMPS

CLEAN SITE MEASURES

- EATING ON SITE SHALL TAKE PLACE OUTSIDE THE BUILDING. ANY FOOD OR DRINK WITHIN THE BUILDING SHALL BE CLEANED UP AND DISPOSED OF IMMEDIATELY.
- NO SMOKING WITHIN THE HOME. •
- SWEEP UP JOB SITE DAILY.
- VACUUM ALL STUD BAYS AND SUB FLOOR BEFORE INSULATING, THEN AGAIN BEFORE INSTALLING DRYWALL.

WATER CONSERVATION

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS FROM CONSTRUCTION SITES BY USING CONSTRUCTION WATER THAT DOES NOT CAUSE EROSION OR WASH MATERIALS OFF-SITE.

- DISCOURAGE WASHING OF EQUIPMENT ON SITE. •
- AVOID USING WATER TO CLEAN CONSTRUCTION AREAS. SWEEP PAVED AREAS WHERE STANDARD • PRACTICAL.
- DIRECT CONSTRUCTION WATER RUN-OFF TO AREAS WHERE IT CAN SOAK INTO THE • GROUND.
- APPLY WATER FOR DUST CONTROL MODERATELY SO RUN-OFF DOES NOT OCCUR.

MATERIAL DELIVERY AND STORAGE CALTRANS / SECTION 8 / WM-01

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS DURING THE DELIVERY AND STORAGE PROCESS BY MINIMIZING THE CONTACT OF MATERIALS WITH RUN-OFF.

- DESIGNATED STORAGE AREAS AT THE PROJECT SITE.
- PREVENT SPILLS OR LEAKAGE OF LIQUID MATERIALS FROM CONTAMINATING SOIL . OR SOAKING INTO THE GROUND BY PLACING STORAGE AREAS ON IMPERVIOUS SURFACES. DO NOT STORE HAZARDOUS CHEMICALS, DRUMS, OR BAGGED MATERIALS DIRECTLY ON THE GROUND.
- PROVIDE CURBS OR DIKES AROUND THE PERIMETER OF MATERIAL STORAGE AREAS. • MINIMIZE HAZARDOUS MATERIAL STORAGE ON SITE. .
- KEEP HAZARDOUS MATERIALS IN THEIR ORIGINAL CONTAINERS AND KEEP THEM WELL • LABELED.
- KEEP AMPLE SUPPLY OF APPROPRIATE SPILL CLEAN UP MATERIAL NEAR STORAGE AREAS.

CONTAIN AND CLEAN UP ANY SPILL IMMEDIATELY •

SOURCE PRODUCTS CLOSE TO PROJECT SITE TO MINIMIZE TRAVEL/ DELIVERY • IMPACT.

CALTRANS / SECTION 8 / MM-02

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS BY PROPERLY STORING AND UTILIZING MATERIALS.

- USE MATERIALS ONLY WHERE AND WHEN NEEDED TO COMPLETE THE CONSTRUCTION • ACTIVITY. LAYOUT AND CUTTING PROCEDURES SHOULD BE EXECUTED TO MINIMIZE WASTE MATERIALS.
- FOLLOW MANUFACTURER'S INSTRUCTIONS REGARDING THE PREPARATION, USE, AND • DISPOSAL OF MATERIALS.
- AVOID EXPOSING APPLIED MATERIALS TO RAINFALL AND RUN-OFF UNLESS
- SUFFICIENT TIME HAS BEEN ALLOWED FOR THEM TO DRY. DON'T PURCHASE MORE MATERIAL THAN WILL BE USED ON SITE.

ADDITIONAL STANDARDS: ٠

LOOK FOR MATERIALS & FINISHES WITH POST-CONSUMER & POST-INDUSTRIAL RECYCLED CONTENT.

USE STANDARD HEIGHT CEILINGS (8' OR 9') & STANDARD LENGTH / WIDTH MATERIAL • MODULES TO SAVE ON CUT-OFF WASTE.

SPILL PREVENTION AND CONTROL CALTRANS / SECTION 8 / WM-04

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS FROM SPILLS BY PREVENTING, CONTAINING AND

- HOLD REGULAR MEETINGS TO DISCUSS AND REINFORCE APPROPRIATE DISPOSAL • PROCEDURES.
- USE ABSORBENT MATERIALS ON SMALL SPILLS RATHER THEN HOSING DOWN OR BURYING THE SPILL.
- FOR SIGNIFICANT OR HAZARDOUS SPILLS THAT CANNOT BE CONTROLLED BY PERSONNEL IN THE IMMEDIATE VICINITY NOTIFY THE LOCAL EMERGENCY RESPONSE BY CALLING 911.

SOLID WASTE MANAGEMENT CALTRANS / SECTION 8 / WM-05

PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS AS A RESULT OF THE CREATION, STOCKPILING AND REMOVAL OF LITTER AND OTHER CONSTRUCTION WASTE.

- COLLECT SITE TRASH REGULARLY, DAILY DURING RAINY AND WINDY CONDITIONS. • KEEP SOLID MATERIALS SHIELDED BY EITHER A COVERED DUMPSTER OR OTHER • ENCLOSED TRASH CONTAINER THAT LIMITS CONTACT WITH RAIN, RUN-OFF, AND SCATTERING DUE TO WINDS.
- RECYCLE EVERY POSSIBLE MATERIAL. CONTRACTOR TO FURNISH RECYCLING BIN • FOR SUCH USE AND NOTIFY ALL PERSONS WORKING ON SITE THAT RECYCLING IS MANDATORY FOR THIS PROJECT SITE.
- MAKE SURE THAT TOXIC WASTES AND CHEMICALS ARE NOT DISPOSED OF IN DUMPSTERS DESIGNED FOR CONSTRUCTION DEBRIS.

HAZARDOUS WASTE MANAGEMENT

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PURPOSE: TO REDUCE THE DISCHARGE OF POLLUTANTS BY THE PROPER STORAGE AND DISPOSAL OF WASTE.

- SITES WITH EXISTING STRUCTURES MAY CONTAIN WASTE WHICH MUST BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS WHICH INCLUDE SANDBLASTING GRIT MIXED WITH LEAD, CADMIUM, OR CHROMIUM BASED PAINTS AND ASBESTOS.
- MAJOR CONTAMINATION, LARGE SPILLS, AND OTHER SERIOUS HAZARDOUS WASTE INCIDENTS REQUIRE IMMEDIATE RESPONSE FROM SPECIALISTS.
- KEEP LIQUID OR SEMI-LIQUID HAZARDOUS WASTE IN APPROPRIATE CONTAINERS AND • UNDER COVER.
- CLEARLY MARK ON ALL HAZARDOUS WASTE CONTAINERS WHICH MATERIALS ARE ACCEPTABLE FOR THE CONTAINER. •
 - PLACE HAZARDOUS WASTE CONTAINERS IN SECONDARY CONTAINMENT. MAKE SURE THAT TOXIC WASTES AND CHEMICALS ARE NOT DISPOSED OF IN DUMPSTERS DESIGNED FOR CONSTRUCTION DEBRIS.

THE SITE AND BUILDING SHALL BE TESTED FOR HAZARDOUS MATERIALS INCLUDING,

BUT THER ELEC CON ADD DISP SEPA ARR/ THE SHAL

CONCRETE WASTE MANAGEMENT CALTRANS / SECTION 8 / WM-08 PURPOSE: TO REDUCE THE DISCH IMPLEMENTING APPROPRIATE WA

PRACTICES.		
STANDARDS:		
	•	DO NO
		STORM
	•	SHOVE
	•	DESIGN
		CONCE
	•	WASHC

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VOLL ONCE

VEHICLE AND EQUIPMENT MAINTEN CALTRANS / SECTION 7 / NS-10 PURPOSE: TO REDUCE THE DISCH BY CONDUCTING THESE ACTIVITIE STANDARDS:

•	LOCAT
•	USE BE
•	DO NC
•	DO NC

"AS THE ARCHITECT/ENGINEER (BMPS) TO EFFECTIVELY I ON STORM WATER QUALIT MUST BE INSTALLED, MC SELECTED FOR IMPLEME

BUT NOT LIMITED TO LEAD PAINT, ASBESTOS, MERCURY (FLUORESCENT LIGHT BULBS, THERMOSTATS, ELECTRONIC SWITCHES, AND OTHER PRODUCTS), BATTERIES, OR ELECTRONICS OF ANY KIND AND ABATED, REMOVED, AND DISPOSED OF PROPERLY. CONTACT THE CALFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL FOR ADDITIONAL INFORMATION. DISPOSE TREATED WOOD (PDTF, WOLMANIZED & OTHER TREATED WOOD) SEPARARTELY. NOTIFY THE REFUSE CENTER FOR DIVERSION OF SUCH MATERIAL TO ARRANGE FOR THE DELIVERY TO A REGULATED TREATED WOOD LANDFILL THE SITE SHALL BE TESTED FOR RADON. PROPER VENTING BELOW THE FOUNDATION SHALL BE PROVIDED TO DIVERT RADON FROM THE INTERIOR ENVIRONMENT OF THE FINISHED PRODUCT PER DIVISION 1.	ON RESIDENCE OCEAN BLVD. LONG BEACH FORNIA 90803
4-03 DISCHARGE OF PORTLAND CEMENT, CONCRETE SLURRIES AND ASPHALT BY E WASH-OUT PROCEDURES, SLURRY CONTAINMENT, HOUSEKEEPING AND DISPOSAL DO NOT ALLOW SLURRY RESIDUE FROM WET CORING OR SAW-CUTTING TO ENTER STORM DRAINS. SHOVEL OR VACUUM SLURRY RESIDUE AND DISPOSE IN A TEMPORARY PIT. DESIGNATE AREAS TO BE USED FOR WASHOUT OF VEHICLES TRANSPORTING CONCRETE. WASHOUT AREAS SHALL HAVE A TEMPORARY PIT OR BERMED AREA OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE. ONCE THE CONCRETE WASTES ARE MASHED INTO THE DESIGNATED AREAS AND ALLOWED TO HARDEN, THE CONCRETE CAN BE PROPERLY DISPOSED. NINTENANCE HO DISCHARGE OF POLLUTANTS AS A RESULT OF VEHICLE AND EQUIPMENT MAINTENANCE INTERSOFT-SITE OR IN A DESIGNATED AREA. LOCATE ON PAVED SURFACES WHERE FRACTICAL. USE BERMS TO PROTECT MAINTENANCE AREAS FROM RUN-ON. DO NOT DUMP FUELS AND LUBRICANTS ONTO THE GROUND. DO NOT PLACE USED OIL IN A DUMPSTER OR POUR INTO A STORM DRAIN.	Called Called Performance BID Called Performance BID Called Performance Performance Called 296 redondo avenue Iong beach ca Called 297.29139 jeannettearchitects.com CALl
	Adm whatsoever, nor are they to be assigned to another party, without first obtaining witten permission and cons
BEST MANAGEMENT PRACTICES NEER OF RECORD, I HAVE SELECTED APPROPRIATE BEST MANAGEMENT PRACTICES ELY MINIMIZE THE NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES WALITY. THE PROJECT OWNER AND CONTRACTOR ARE AWARE THAT SELECTED BMPS O, MONITORED AND MAINTAINED TO ENSURE THEIR EFFECTIVENESS. THE BMPS NOT LEMENTATION ARE REDUNDANT OR DEEMED NOT APPLICABLE TO THE PROPOSED CONSTRUCTION ACTIVITIES." SEE STAMP FOR SIGNATURE, LICENSE #, & EXPIRATION	REVISION: REVISION: REVISION: REVISION: PC#: DB: CI/JL JOB#: 2021.10.76 JOB#: 2021.10.76 JOB#: 2021.10.76
	R2.1

DATE: 12/20/2022

City of Long Beach Department of Development Services BUILDING AND SAFETY BUREAU 2019 California Green Building Standards Code Residential Measures

FEATURE OR MEASURES		VERIFICATIONS: SPECIFY VERIFICATION METHOD		
		Installer or	Third	
PLANNING AND DESIGN				
Site Development				
4.106.2 A plan is developed and implemented to manage storm water drainage during construction.				
4.106.3 Construction plan shall indicate how site grading, or a drainage system will manage all surface water flows to keep water from entering buildings.				
4.106.4 Electric Vehicle (EV) charging for new construction. Install electric vehicle supply equipment (EVSE) in accordance with the California Electrical Code, Article 625.				
4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.				
 Por each dwening unit, install a listed faceway to accommodate a dedicated 208/240-volt branch circuit. Identification. The service panel or sub panel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination shall be permanently and visibly marked as "EV CAPABLE" 				
 4.106.4.2 (LBMC 18.47.020) New multifamily dwellings. If residential parking is available, 1. 25 percent of the total number of residential parking spaces on a building site, provided for all types of parking facilities, shall be EV spaces capable of supporting future EVSE. 2. 5 percent of the total number of the total number of residential parking spaces on a building site, provided for all types of parking facilities, shall be EVCS. 				
4.106.4.3 (LBMC 18.47.030) New Hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE and EVCS based on Table 4.106.4.3.1.				
ENERGY EFFICIENCY				
4.201.1 Building meets or exceeds the requirements of the California Building Energy Efficiency Standards,				
WATER EFFICIENCY AND CONSERVATION				
Indoor Water Use				
4.303.1 Plumbing fixtures (water closet and urinals) and fittings (faucet and shower heads) installed in residential buildings shall comply with the prescriptive requirements of Section 4.303.1.1 through 4.303.1.4.				
4.303.2 Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the California Plumbing Code, and shall meet the applicable referenced standards referenced in Table1701.1 of the California Plumbing Code.				

Outdoor Water Use

4.304.1 Residential developments shall comply with a local water efficient landscape CALGreen- Residential Standards Code v1.0 Page 1 of 3 www.longbeach.gov/lbds

Updated 1/1/20

	N. I.	N.	
ordinance or the current California Department of Water Resource's Model Efficient Landscape Ordinance (MWELO), whichever is more stringent.	Water		
MATERIAL CONVSERVATION AND RESOURCE EFFICIENCY	1.4		
Enhanced Durability and Reduc <mark>ed Maintenance</mark>			
4.406.1 Annular spaces around pipes, electrical cables, conduits or other open plates at exterior walls shall be protected against the passage of rodents by such openings with cement mortar, concrete masonry or similar method accept the enforcing agency.	ings in closing able to		
Construction Waste Reduction, Disposal and Recycling			
4.408.1. (LBMC 18.47.040) The construction meeting the threshold of S LBMC18.67.020 shall comply with LBMC Chapter 18.67			
Building Maintenance and Operation			
4.410.1 An operation and maintenance manual shall be provided to the to occupant or owner.			
4.410.2 Recycling by Occupants. Where 5 or more or more multifamily dwellin are constructed on a building site, provide recycling areas or meet a lawfully e local recycling ordinance, if more restrictive.	g units nacted		
ENVIRONMENTAL QUALITY			
Fireplaces			
4.503.1 Any installed gas fireplace shall be a direct-vent sealed-combustion typ installed woodstove or pellet stove shall comply with US EPA New Source Perfor Standards (NSPS) emission limits as applicable. Woodstoves, pellet stove fireplaces shall also comply with applicable local ordinances.	be. Any mance es and		
Pollutant Control			
4.504.1 Duct openings and other related air distribution component openings s covered during construction.	hall be		
4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and othe compound limits.	er toxic		
4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits.			
4.504.2.3 Aerosol paints and coatings shall be compliant with product weighte limits for ROC and other toxic compounds.			
4.504.2.4 Documentation shall be provided to verify that compliant VOC limi materials have been used.	t finish		
4.504.3 Carpet and carpet systems shall be compliant with VOC limits.			
4.504.4 80 percent of floor area receiving resilient flooring shall comply with the emission limits defined in the Collaborative for High Performance Schools (CHPS Performance Products Database or be certified under the Resilient Floor Constitute (RFCI) Floor Score Program; or meet California Dept of Public "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Er from Indoor Sources Using Environmental Chambers", Version 1.1, February 201 known as Specification 01350.)	vOC- S) High overing Health, nission 0 (also		
4.504.5 Particleboard, medium density fiberboard (MDF) and hardwood plywoo in interior finish systems shall comply with low formaldehyde emission standards.			
limits have been met.			

Indoor Air Quality and Exhaust		
4.506.1 Exhaust fans which terminate outside the building are provided in every bathroom.		
 4.507.2. Duct systems are sized, designed, and equipment is selected using the following methods: Establish heat loss and heat gain values according to ANSI/ ACCA 2 Manual J-2011 or equivalent. Size duct systems according to ANSI/ ACCA 1 Manual D-2014 or equivalent. Select heating and cooling equipment according to ANSI/ ACCA 3 Manual S-2014 or equivalent. 		
INSTALLER AND SPECIAL INSPECTOR		
Qualifications		
702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.		
702.2 Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.		
Verifications		
703.1 Verification of compliance with this code may include construction documents, plans, specifications of builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.		

Interior Moisture Control

4.505.2 Vapor retarder and capillary break is installed at slab-on-grade foundations.		
4.505.3 Moisture content of building materials used in wall and floor framing is checked before enclosure.		
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Updated 1/1/20

CALGreen- Non-Residential Standards Code dv1.0 Page 3 of 3 www.longbeach.gov/lbds

Updated 1/1/20

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Jeannette Architects	296 redondo avenue Iong beach ca 90803 562/987.9139 jeannettearchitects.com
CAL-GREEN MANDATORY	MEASURES
REVISION: REVISION: REVISION: REVISION: PC#: DB: JOB#: 20	CI/JL 221.10.76
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[DIVISION 1] GENERAL REQUIREMENTS

1A GENERAL REQUIREMENTS

- THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS OF PLANS FOR BID PURPOSES PRIOR TO ISSUANCE OF THE BUILDING PERMIT. THE ONLY ACCEPTABLE PLANS FOR CONSTRUCTION ARE THOSE THAT ARE STAMPED AND APPROVED BY THE BUILDING DEPARTMENT
- 2. ALL COMMUNICATIONS FROM THE ARCHITECT AND OWNER AND THE APPROVED BUILDING PERMIT SET SHALL BE MAINTAINED IN A SAFE PLACE AT THE JOB SITE.
- DISCREPANCIES, ERRORS, OMISSIONS, AMBIGUITIES CONFLICTS, ETC, APPEARING IN THE DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION BY THE CONTRACTOR BEFORE FINAL BID SUBMISSION.
- 4. VERIFY ALL DIMENSIONS AND CONDITIONS ON JOB SITE PRIOR TO START OF ALL WORK. WORKING DIMENSIONS SHALL NOT BE SCALED FROM
- DRAWINGS. LARGER SCALE DETAIL DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS. ALL ASTM DESIGNATIONS SHALL MEET THE CURRENT 6.
- REQUIREMENTS. THESE DOCUMENTS ARE TO BE GOVERNED AT ALL TIMES BY APPLICABLE PROVISIONS OF THE STATE, FEDERAL, AND
- LOCAL LAMS. 8. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF FEDERAL, STATE AND LOCAL LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST
- STRINGENT SHALL GOVERN. APPROVALS FROM AGENCIES:
 - A. APPROVAL OF THE INSPECTOR DOES NOT ACKNOWLEDGE COMPLIANCE TO THE PLANS. QUESTIONS MUST BE REFERRED TO THE ARCHITECT FOR INTERPRETATION AND CLARIFICATION.
 - APPROVAL OF PLANS BY THE BUILDING/PLANNING DEPARTMENT DOES NOT ACKNOWLEDGE COMPLIANCE TO LOCAL, FEDERAL, AND STATE CODES. AN INSPECTOR MAY REQUEST FIELD CHANGES INCONSISTENT WITH THE PLANS. CONTRACTOR MUST BRING SUCH INCONSISTENCIES TO THE ATTENTION OF THE ARCHITECT
- 10. CONTRACTOR SHALL CONSULT ALL REPRESENTATIVES OF CITY OR COUNTY GAS, WATER, POWER, PHONE AND CABLE COMPANIES, CONCERNING AVAILABLE FACILITIES BEFORE STARTING WORK OR CONNECTING UTILITIES TO ENSURE THEY ARE AVAILABLE
- THE TERM CONTRACTOR AND SUB-CONTRACTOR ARE USED 11. INTERCHANGEABLY THROUGHOUT THE PLANS.
- 12. ALL SUB-CONTRACTORS ARE SUBJECT TO THE GENERAL NOTES AND SPECIFICATIONS. THE GENERAL CONTRACTOR IS TO SUBMIT A LIST OF SUB-CONTRACTORS FOR THE EXECUTION OF THE WORK.
- 13. SUB-CONTRACTORS SHALL, AT ALL TIMES, KEEP WORKMAN'S COMPENSATION INSURANCE IN FULL FORCE AND EFFECT.
- 14. SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THEIR WORK UNTIL WORK HAS BEEN COMPLETED AND ACCEPTED AND ALSO FOR HIS/HER OWN MATERIALS. SUB-CONTRACTOR SHALL KEEP THE PREMISES CLEAN OF RUBBISH CAUSED BY THEIR WORK.
- 15. CHANGES REQUESTED BY AN INSPECTOR, OTHER GOVERNMENT OFFICIAL. OR THE OWNER TO THE PLANS OR THE BUILT CONDITIONS MUST HAVE ARCHITECT'S APPROVAL PRIOR TO IMPLEMENTATION.
- 16. THE ARCHITECT'S REVIEW OF SHOP DRAWINGS SHALL NOT RELIEVE THE GENERAL CONTRACTOR(S) OR SUB-CONTRACTOR(S) FROM RESPONSIBILITY FOR DEVIATIONS FROM DRAWINGS OR SPECIFICATIONS UNLESS HE OR SHE HAS, IN WRITING, CALLED THE ARCHITECT'S ATTENTION TO SUCH DEVIATION AT THE TIME OF SUBMITTAL, AND THEY HAVE BEEN SUBSEQUENTLY REVIEWED BY THE ARCHITECT: NOR SHALL REVIEW RELIEVE HIM OR HER FROM RESPONSIBILITY FOR ERRORS OF ANY SORT IN SHOP DRAWINGS.
- 17. ALL BIDS MUST BE BASED STRICTLY ON MATERIALS SPECIFIED OR ARCHITECT APPROVED EQUAL. SUBSTITUTIONS OF ANY OTHER MATERIALS WHICH THE CONTRACTOR CONSIDERS EQUIVALENT IN QUALITY MUST BE SO STATED IN THEIR BID, ADDING OR DEDUCTING AS THE CASE MAY BE. NO SUBSTITUTIONS WILL BE ALLOWED, EXCEPT AS APPROVED BY THE ARCHITECT OR CLIENT IN WRITING.
- 18. BIDDERS SHALL STATE IN THEIR PROPOSALS THE ESTIMATED NUMBER OF CALENDAR DAYS ESTIMATED TO COMPLETE THE 2. WORK OF THE CONTRACT.
- THE CONTRACTOR SHALL SUBMIT HIS BID IN THE FOLLOWING MANNER:
- LINE ITEM BID USING ARCHITECTS BID LIST. A. B REQUESTED SUBSTITUTIONS AND BACK UP INFORMATION.
- INCLUDE IN THE BID THE ALLOWANCES INDICATED IN PLANS FOLLOWED BY THE LETTER "A".
- D. THE ARCHITECT MAY SUBMIT PLANS, AND PAY THE BUILDING DEPARTMENT FOR PLAN CHECK. CONTRACTOR OR OWNER SHALL PAY PERMIT & OTHER FEES. (OWNER TO REIMBURSE THE ARCHITECT / CONTRACTOR FOR FEES PAID).
- POWER, WATER, SEWER, GAS AND OTHER CONSTRUCTION SERVICES SHALL BE PROVIDED AND PAID FOR BY THE GENERAL CONTRACTOR.
- ALL OTHER FEES AND ASSESSMENTS SHALL BE PAID BY THE CONTRACTOR
- ALL BIDS ARE DUE IN THE OFFICE OF THE ARCHITECT G. ON DATE SPECIFIED.
- 20. IF PLANS APPEAR OR BECOME DIFFERENT THAN CONDITIONS IN THE FIELD, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO CONTINUING WORK. IF WORK CONTINUES WITHOUT PROPER RESOLUTION BY ANY PARTY,

IT WILL BE THE RESPONSIBILITY OF THE CONTRACT RESOLVE SUCH ISSUES AT THE CONTRACTOR OR CONTRACTOR'S EXPENSE.

- WHERE DISCREPANCIES OCCUR BETWEEN THE DRAWINGS AND 21. SPECIFICATIONS, SUBMIT AN RFI TO PROJECT ENGINEER/ ARCHITECT.
- 22. FINISH FLOOR HEIGHTS, CEILING HEIGHT, ROOF RIDGE HEIGHTS, PLATE HEIGHTS, AND ALL OTHER ELEVATIONS CRITICAL TO LIMITS SET FORTH IN THE PLANS OR CODES SHALL BE FIELD VERIFIED FOR ACCURACY PRIOR TO COMMENCING THE NEXT STEP OF CONSTRUCTION. NOTIFY THE ARCHITECT IF HEIGHTS ARE NOT AS SPECIFIED IN THE PLANS.
- 23. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING. SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 24. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT CONSTRUCTION SHALL CONFORM TO THE MOST RECENT VERSION OF THE APPLICABLE CODE OF REGULATIONS FOR PROTECTION OF PEDESTRIANS DURING CONSTRUCTION AND/OR DEMOLITION.
- 25. ALL EXPOSED REBAR SHALL HAVE REBAR CAPS PLACED FOR THE PROTECTION OF WORKERS AND PEDESTRIANS.
- 26. THE BUILDING SHALL CONFORM TO TITLE 24 STATE ENERGY CODES PER THE APPROVED PLANS AND CALCULATIONS MHEN AVAILABLE.
- 27. THE IMPROVEMENTS SHALL BE INSURED BY THE OWNER AGAINST LOSS DURING THE PROGRESS OF THE WORK. CONTRACTOR SHALL INFORM THE OWNER OF THE VALUE OF MATERIALS AS THE JOB PROGRESSES.
- ALL MATERIALS SHALL BE OF THE BEST QUALITY UNLESS 28. NOTED OTHERWISE. ALL INSTALLATIONS SHALL BE PERFORMED IN THE BEST POSSIBLE MANNER BY SKILLED LABOR.
- 29. ALL WORK SHALL BE COMPLETED AS CUSTOMARY IN THE TRADE AND BE SAFE FOR ALL WORKERS.
- 30. ALL INSTALLERS ARE TO BE CERTIFIED BY MANUFACTURER FOR THE APPLICATION OF THE PRODUCTS USED FOR THIS PROJECT.
- 31. CONTRACTOR SHALL GUARANTEE ALL SYSTEMS ARE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. WORK REQUIRED TO RESOLVE DIFFICULTIES SHALL BE PAID FOR BY THE CONTRACTOR PARTS AND LABOR INCLUDED.
- 32. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED FINISH MATERIAL AND OWNER'S PROPERTY/BELONGINGS ON SITE AND/OR STRUCTURAL MEMBERS AS REQUIRED AND AS CONFIRMED BY THE BUILDING INSPECTOR AND ARCHITECT.
- 33. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY FACILITIES; ERECT AND MAINTAIN, FOR THE DURATION OF CONSTRUCTION AND IN AS EXPEDITIOUS A METHOD AS POSSIBLE. THE FOLLOWING:
 - TEMPORARY TOILET FACILITIES ON SITE A.
 - B. PROVIDE TEMPORARY ELECTRICITY AND WATER FOR THE EXPRESS PURPOSE OF THE CONSTRUCTION AND AT THE EXPENSE OF THE CONTRACTOR.
 - C. PROVIDE, FOR GENERAL PURPOSE FIELD COORDINATION, LAND LINE OR CELLULAR TELEPHONE NUMBER.
 - D. PROTECTIVE CONSTRUCTION FENCE
- 34. IF THE OWNER IS TO LIVE IN HOME DURING CONSTRUCTION, DISCUSS LOGISTICS RELATIVE TO UTILITIES & HOURS OF WORK PRIOR TO START OF CONSTRUCTION.
- 35. CONTRACTOR SHALL REVIEW ALL DETAILS AND SHALL CONSTRUCT THE DETAILS AS SHOWN WHERE THEY APPLY. IF CONTRACTOR WISHES TO PROVIDE ALTERNATIVE METHODS, THOSE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- PRIOR TO INSTALLING LANDSCAPING AND PRIOR TO 36. OWNER'S MOVE IN, CONTRACTOR SHALL TENT THE BUILDING FOR TERMITE PROTECTION. THIS SHALL BE PART OF THE INITIAL BID.
- 37 ROOFING SYSTEMS, MATERIALS, APPLICATIONS, SPECIFICATIONS AND DETAILS CONTAINED IN THESE PLANS AND NOTES, AND IN THE MANUFACTURER'S SPECIFICATIONS SHALL BE STRICTLY ADHERED TO.

RADON VENTING (IF APPLICABLE)

- ACTIVE SUB-SLAB (OR) SUB-MEMBRANE DEPRESSURIZATION SYSTEM:
- IF RADON VENTING REQUIRED, GENERAL CONTRACTOR SHALL HIRE A QUALIFIED INSTALLER & COORDINATE FROM FOUNDATION TO ROOF. ALL MECHANICS & METHODS SHALL BE IN COMPLIANCE WITH THE MOST CURRENT STANDARDS OF 4. THE TRADE.
- PROVIDE A VISIBLE OR AUDIBLE SYSTEM FAILURE WARNING DEVICE (ALARM) TO ALERT THE OWNER IF THERE IS A SYSTEM FAILURE: LOCATION AGREED UPON WITH THE OWNER IN THE FIELD.
- TEST RADON VENTING SYSTEM PRIOR TO CLOSING UP WALLS З. & AT COMPLETION OF CONSTRUCTION. PROVIDE OWNER WRITTEN RESULTS OF TESTS. FOR TESTING GUIDELINES AND METHODS OR FOR GENERAL RADON QUESTIONS, CONTACT THE NATION SAFETY COUNCIL AT 800.55-RADON, OR THE STATE RADON CONTACTS AT 800.745.7236.

FLOOD ZONE (IF APPLICABLE)

- A FINAL FLOOD ELEVATION CERTIFICATE EXECUTED BY A LICENSED SURVEYOR OR CIVIL ENGINEER MUST BE FURNISHED TO THE CITY INSPECTOR PRIOR TO THE APPROVAL OF THE LOWEST FLOOR FRAMING.
- ALL NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS SHALL BE ADEQUATELY ANCHORED TO PREVENT FLOATATION, COLLAPSE OR LATERAL MOVEMENT OF THE STRUCTURE RESULTING FROM HYDRODYNAMIC AND HYDROSTATIC LOADS, INCLUDING THE EFFECTS OF BUOYANCY.
- ALL NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS SHALL BE CONSTRUCTED WITH MATERIALS AND UTILITY EQUIPMENT RESISTANT TO FLOOD DAMAGE.

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4. ELECTRICAL, HEATING, VENTILATION, PLUMBING, AIR CONDITIONING EQUIPMENT AND OTHER SERVICES SHALL BE DESIGNED AND/OR LOCATED SO AS TO PREVENT WATER FROM ENTERING OR ACCUMULATING WITHIN THE

COMPONENTS DURING CONDITIONS OF FLOODING. 5. FLOOD VENTS SHALL BE USED FOR ANY ENCLOSED AREAS BELOW FLOOD PLAIN, INCLUDING CRAWL SPACE AND GARAGES. BOTTOM OF VENTS TO BE LOCATED WITHIN 12" OR LESS ABOVE ADJACENT FINISHED GROUND LEVEL (INTERIOR AND EXTERIOR). PROVIDE FLOOD VENT OPENINGS OF (1) SQUARE INCH PER EACH SQUARE FOOT OF ENCLOSED AREAS AND PROVIDE SCREEN COVERS THAT ALLOW FOR AUTOMATIC FLOW OF FLOOD WATERS. SEE DIVISION 8D.

THE FINISHED GROUND LEVEL OF THE UNDER-FLOOR SPACE SHALL BE EQUAL TO OR HIGHER THAN THE OUTSIDE FINISHED GROUND LEVEL ON AT LEAST ONE SIDE OF THE HOME. CRAWL SPACE SHALL BE SLOPED UP TO EACH VENT & NO LOWER THAN EXISTING GRADE.

ALL NEW FIRST FLOOR FRAMING TO BE FLOOD-RESISTANT. ALL NEW FRAMING TO BE PTDF, CEDAR, OR REDWOOD (OR OTHER FLOOD-RESISTANT MATERIAL APPROVED BY FEMA, VERIFY WITH STRUCTURAL ENGINEER)

[DIV/IGION 2]
SITE WORK

2A SITE PLAN CONTRACTOR SHALL CALL "DIGALERT" PRIOR TO ANY WORK ON SITE TO VERIFY THE LOCATION OF UTILITIES ON SITE. CONTRACTOR SHALL OBTAIN A SEPARATE PERMIT FOR ALL GARDEN WALLS, RETAINING WALLS, FENCES, POOLS AND SPAS AND THEIR EQUIPMENT, TRASH ENCLOSURES, AND PLANTERS AS REQUIRED BY LOCAL CITY OR COUNTY AGENCIES. FIELD INSPECTORS SHALL REVIEW AND APPROVE FUTURE З. UNDER GROUND UTILITY REQUIREMENTS PRIOR TO CONCRETE PLACEMENT AS REQUIRED BY LOCAL CITY OR COUNTY AGENCIES. REFER TO STREET IMPROVEMENT PLANS BY CIVIL ENGINEER FOR ADDITIONAL INFORMATION AS REQUIRED / AVAILABLE. CONTRACTOR SHALL REVIEW SOILS REPORT PRIOR TO BIDDING AND ABIDE BY ALL RECOMMENDATIONS GIVEN

THEREIN. IT IS CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY FROM ARCHITECT. IF NO REPORT AVAILABLE, REVIEW PLANS AND ASSUME CODE MINIMUMS. PEDESTRIAN SLABS = 3" THICK MINIMUM. DRIVING SLABS = 5" 6.

THICK MINIMUM. COMPACT GROUND BELOW AS CUSTOMARY. WIRE ALL J-BOXES IN PLANTER AREAS TO 24 HOUR. DAY TIME CLOCK IN GARAGE OR MECHANICAL AREA. SEE ELECTRICAL PLAN FOR LOCATION IF APPLICABLE.

REVIEW WITH LOCAL JURISDICTION FOR REQUIREMENT OF NEW SEWER LATERAL AND/OR NEW WATER METER PRIOR TO SUBMITTING BID. INCLUDE THOSE COSTS IN CONSTRUCTION BID.

UPGRADE GAS SUPPLY & METER AS REQUIRED FOR NEW 9 WATER HEATING SYSTEM.

10. CONTRACTOR AND PLUMBER SHALL VERIFY WITH CITY OR COUNTY, REQUIREMENT TO UPGRADE WATER METER SIZE. EXISTING IRRIGATION LINES THAT CONFLICT WITH NEW STRUCTURE(S) TO BE RELOCATED AND/OR RE-RUN.

28 GRADING AND EARTHWORK

ALL GRADING AND EARTHWORK SHALL BE PERFORMED IN COMPLIANCE WITH LOCAL GRADING CODES AND ORDINANCES. SEE SOILS AND GEOLOGICAL REPORT (IF AVAILABLE) FOR RECOMMENDED SOIL BEARING PRESSURE,

FOUNDATION MATERIAL, SITE GRADING IF AVAILABLE, AND GRADING PLAN FOR SPECIFIC GRADING AND EARTHWORK REQUIREMENTS. INCLUDE RECOMMENDATIONS IN BID. 2. GRADING CONTRACTOR TO EXAMINE SITE PRIOR TO BIDDING 2D DEMOLITION TO CONFIRM THE ESTABLISHMENT OF FINISH GRADES

AND DRAIN LINES AS SHOWN ON PLAN. ANY UNUSUAL OR CONFLICTING CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT.

3. FILL AND FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY APPROVED SOILS / STRUCTURAL ENGINEER. SUBMIT REPORT TO THE CITY / COUNTY IF REQUIRED

SHOULD ANY LOOSE FILL, EXPANSIVE SOIL, GROUND WATER OR OTHER ADVERSE CONDITIONS BE ENCOUNTERED DURING THE EXCAVATION FOR NEW FOUNDATIONS, ALL WORK SHALL CEASE IMMEDIATELY AND THE SOILS ENGINEER AND/OR THE 3. ARCHITECT SHALL BE NOTIFIED.

ALL BACKFILLING SHALL ONLY BE DONE WITH CLEAN MATERIAL, CLEAN PEA GRAVEL OR APPROPRIATE SAND AND COMPACTED IN ACCORDANCE WITH APPROPRIATE TESTING DESIGNATION. FLOODING NOT PERMITTED. USE LIGHTWEIGHT TAMPERS TO COMPACT THE SOIL BEHIND WALLS UNLESS SOILS REPORT STATES OTHERWISE.

ALL AREAS TO RECEIVE CONCRETE SLAB SHALL BE THOROUGHLY AND MECHANICALLY COMPACTED TO MINIMUM DENSITY REQUIRED BY CODE AND/OR SOILS REPORT AND WHERE REQUIRED. TESTED BY SOILS ENGINEER.

7 CARE SHALL BE TAKEN NOT TO OVER EXCAVATE FOUNDATIONS AT LOWER ELEVATIONS. PREVENT DISTURBING 6. SOIL AROUND FOOTING AT HIGHER ELEVATIONS. 8.

APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING. SHORING AND EROSION CONTROL DEVICES SHALL BE INCLUDED IN CONTRACTOR'S FEE.

THE SITE PREPARATION FOR THE CONSTRUCTION SHALL INCLUDE THE REMOVAL OF ALL RUBBISH, BROKEN CONCRETE, TREE AND TREE TRUNKS REQUESTED FOR REMOVAL, AND ANY OTHER DEBRIS THAT WOULD BE DETRIMENTAL TO THE FOUNDATION OF ANY STRUCTURE.

- 10. ALL EXCAVATION IN EXCESS OF FIVE (5) FEET, SHAL MADE AT A 2 HORIZONTAL TO 1 VERTICAL SLOPE O RECOMMENDATION OF THE SOILS ENGINEER
- 11. AFTER GRADING AND PRIOR TO PLACING BASE COL TREAT ALL AREAS BENEATH PAVING WITH WEED KILL ENSURE PROTECTION AGAINST DAMAGE TO LIFE ANI PROPERTY.

12. EXCAVATIONS GREATER THAN 5 FEET DEEP AND WI OF THE PROPERTY LINE: CONTRACTOR SHALL CONT ADJACENT NEIGHBOR IN WRITING 10 DAYS PRIOR TO EXCAVATION. 13.

EXCAVATE TO REQUIRED DIMENSIONS AND DEPTHS INDICATED, CUT SQUARE AND SMOOTH WITH LEVEL, FIRM BOTTOMS. OVER EXCAVATIONS CAUSED THRC CONTRACTOR'S ERROR TO GREATER DEPTH THAN SHALL BE FILLED AT CONTRACTOR'S EXPENSE. SEE FOUNDATION PLAN AND/OR SOILS REPORT (IF AVAI FOR SOIL BEARING VALUE.

COUNTY/CITY GRADING ENGINEER SHALL BE CONTA PRIOR TO START OF GRADING TO SCHEDULE A PRE GRADING MEETING IF REQ'D.

REFER TO THE SITE, LANDSCAPE, AND/OR GRADING FOR ADDITIONAL CONCRETE WORK @ SIDEWALKS, S BLOCK WALLS, PLANTERS, ETC.

IT SHALL BE THE GENERAL CONTRACTOR'S RESPON TO HAVE GRADING, COMPACTION, BACK FILLING, FC AND UTILITY INSPECTIONS COMPLETED PRIOR TO BE THE NEXT PHASE OF CONSTRUCTION.

ALL EXPOSED CONCRETE SHALL MATCH EXISTING O LIGHT SANDBLASTED FINISH U.N.O.

2C FOUNDATIONS

15

ALL EXCAVATING AND BACKFILLING SHALL COMPLY MOST CURRENT APPLICABLE CODE OF REGULATION RECOMMENDED BY THE SOILS REPORT WHEN AVAIL

- RETAINING WALLS WHICH ARE SUPPORTING BUILDING SHALL BE BACKFILLED PRIOR TO BUILDING CONSTR BACKFILL BEHIND A RETAINING WALL SHALL NOT BE
- UNTIL THE CONCRETE OR MASONRY OBTAINS ITS DE STRENGTH OR IS PROPERLY SHORED. COORDINATING SOILS INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND FEES FO SUCH SHALL BE PAID BY THE OWNER. SPECIFIC TIME
- INSPECTION SHALL BE VERIFIED AND ADHERED TO B ON SOILS ENGINEER'S REQUIREMENTS WHEN AVAILAE ESTIMATED COSTS TO OWNER SHALL BE INCLUDED BID.
- IN CASES WHERE THE WATER TABLE IS WITHIN 2'-O" C THE BOTTOM OF SLAB, INSTALL SUB-DRAIN SYSTEM GRAVEL BED. WATERPROOF SLAB WITH BELOW GRA WATERPROOFING ABOVE THE GRAVEL BASE.
- ALL WATER SHALL BE REMOVED FROM FOUNDATION 6. EXCAVATIONS PRIOR TO PLACING CONCRETE, CARE BE TAKEN SO AS NOT TO DRY OUT UNDERLYING NAT SOIL.
- DISCREPANCIES AND/OR CONFLICTS WITH THE FOUN SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION (ARCHITECT OR STRUCTURAL ENGINEER
- CONTRACTOR TO CONTACT SOILS ENGINEER AND / 8. STRUCTURAL ENGINEER FOR TRENCH / PAD REVIEW APPROVAL OF STEEL & SOIL PRIOR TO CITY INSPEC POURING OF ANY CONCRETE ON SITE.
- CONTRACTOR SHALL CONTACT ARCHITECT AND STR ENGINEER 72 HOURS PRIOR TO FOOTING POUR AND POUR.
- 10. CONCRETE SLABS SHALL BE PER STRUCTURAL. SLA MIL, MIN, VAPOR BARRIER O/ HEAVY FILTER FABRIC CLEAN AGGREGATE ROCK FILL (1/2" ROCK OR LAR U.N.O. - REFER TO SOILS REPORT AND STRUCTURAL ENGINEERING PLANS. IF DISCREPANCIES OCCUR BET DOCUMENTS, MOST RESTRICTIVE SHALL PREVAIL.
- RETROFIT/ DESIGN CRAWL SPACE FOR MOISTURE C

- PRIOR TO ANY DEMOLITION, DISCUSS WITH OWNER 1 OPTION OF SAVING ANY EXISTING FIXTURES, FAUCET ELECTRICAL FIXTURES, CABINETS, DOORS, WINDOWS FOR PERSONAL USE OR DONATION.
- THE ARCHITECT AND ARCHITECT'S CONSULTANTS AR RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HAI REMOVAL, OR DISPOSAL OF HAZARDOUS MATERIAL PERSONS EXPOSED TO HAZARDOUS MATERIALS IN A FORM AT THE PROJECT SITE. VISIT THE EPA WEBSITE EPA.GOV FOR MORE INFORMATION.
- DEMO MAY BE REQUIRED IN OTHER AREAS OF HOM! ON NEW STRUCTURAL LAYOUT. CHECK ENTIRE SET OF PLANS AND DETERMINE AREAS REQUIRED FOR EFFIC CONSTRUCTION AND COMPLETION OF WORK
- IF ANY DEMO IS REQUIRED BEYOND WHAT IS INDICAT IN PLANS (INCLUDING BUT NOT LIMITED TO REMOVAL WALLS, INTERIOR/EXTERIOR FINISH, AND FOUNDATIC ARCHITECT SHALL BE INFORMED PRIOR TO ANY REI IF THIS PROJECT IS DEFINED AS A REMODEL, IN NO SHOULD THE SCOPE OF DEMOLITION EXCEED THAT I ALLOWED BY LOCAL JURISDICTION.
- CONTACT ARCHITECT FOR ANY QUESTIONS PRIOR T 5. DEMOLITION START.
- PRIOR TO DEMOLITION, CAP OFF ALL NECESSARY E UTILITIES IN A SAFE MANNER BASED ON SCOPE OF V
- COMPLETELY SEAL OFF ALL SUPPLY AND RETURN G PRIOR TO ANY DEMOLITION FOR ALL REMODELS.
- SHORE UP ANY SECOND FLOOR AREAS, FLOORS, W 8. PRIOR TO DEMOLISHING FIRST FLOOR BEARING WA REQUIRED FOR SAFE CONDITIONS.
- ALL FLOORING AND OTHER MATERIALS, PRODUCTS APPLIANCES, ETC. THAT ARE TO REMAIN SHALL BE PROPERLY COVERED AND PROTECTED FROM CONSTRUCTION AND WEATHER DAMAGE. ANY DAMA
- CAUSED FROM NEGLECT SHALL BE THE CONTRACTOR

L BE R AT THE	10.	RESPONSIBILITY. ARCHITECT SHALL BE INFORMED OF ANY NON-PLANNED DAMAGE TO WALLS, FLOOR, AND FINISHES DUE TO DEMO,	
JRSE, LER. D	11.	GENERAL CONSTRUCTION, TERMITE & WATER DAMAGE. PRIOR TO DEMO AND/OR CUTTING OF CONCRETE FLOOR SLABS & FOUNDATIONS, CONTRACTOR TO VERIFY ALL	
THIN 3' TACT D		SYSTEMS IN SAID SLABS & FOUNDATIONS INCLUDING BUT NOT LIMITED TO RADIANT HEATING, PLUMBING, ELECTRICAL, MECHANICAL SYSTEMS, SLAB TENSIONING CABLES, ETC.	RES ONG NDNG
	[D	IVISION 3]	Z Ŏ Ă Ō
UGH REQUIRED	CC	ONCRETE	ALI BG
_ABLE)	ЗA	CONCRETE	
STED -	1.	PRIOR TO PLACING CONCRETE, REINFORCING STEEL AND OTHER EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION AS SHOWN ON THE DRAWINGS.	
PLAN TEPS,	2.	NO PIPES OR SLEEVES SHALL BE PLACED IN CONCRETE UNLESS SPECIFICALLY DETAILED & APPROVED BY	175
51BILITY 20TING	З.	ALL PIPES AND CONDUITS PASSING THROUGH CONCRETE FLOORS SHALL BE SLEEVED WITH ABS PIPES NOT TO	l m
GINNING R HAVE A		ARCHITECTURAL DETAILS. CONCRETE FLOORS TO RECEIVE WATERPROOFING: GANGED PIPES/CONDUITS MAY BE HOUSED	0803 1
	4.	IN COMMON SLEEVE. PROVIDE 4" MINIMUM SPACING BETWEEN. PROVIDE CONCRETE PAD UNDER AC CONDENSERS PER MFG. RECOMMENDATIONS.	S A 9 ects.co
WITH THE	5.	ARCHITECT SHALL PROVIDE CONTROL/EXPANSION JOINT LAYOUT FOR FINISH SLABS. CONTRACTOR SHALL REQUEST	C T C
ABLE. MALLS	6.	LAYOUT AND NOT POUR WITHOUT ARCHITECT'S LAYOUT. LOCATION OF HOLD DOWNS & "POSTS ABOVE" ARE APPROXIMATE ONLY, IT IS THE RESPONSIBILITY OF THE	each ⊢⊤ ⊓
UCTION. PLACED SIGNED		GENERAL CONTRACTOR, THE FRAMING CONTRACTOR AND CONCRETE CONTRACTOR TO PLACE THESE ANCHORS IN THE	D jear p
	٦.	EXACT LOCATION. WHENEVER SULFATE RESISTANCE IS REQUIRED PER SOILS REPORT, CONCRETE MIX SHOULD BE IN ACCORDANCE WITH	
)R 5 OF BASED		THE MOST CURRENT VERSION OF THE APPLICABLE CODE OF REGULATIONS.	
BLE. N THE	පි.	CONCRETE MIX SHALL CONTAIN 30% RECYCLED FLY ASH OR SLAG.	-139 0 ave
F N	3B 1.	CONCRETE REINFORCEMENT ALL REINFORCING, ANCHOR BOLTS, AND INSETS SHALL BE	buob 987.9
	2	PLACED ACCURATELY AND SECURED IN PLACE PRIOR TO PLACING CONCRETE OR GROUTING MASONRY. FABRICATION ERECTION AND PLACEMENT SHALL CONFORM	96 re 562
SHALL URAL	۷.	TO THE LATEST CONCRETE REINFORCING STEEL INSTITUTE MANUAL OF STANDARD PRACTICE.	У — — — — — — — — — — — — — — — — — — —
DATION DF THE	З.	EXCEPT WHERE GREATER DIMENSIONS ARE INDICATED, PROVIDE THE FOLLOWING MINIMUM CONCRETE COVERING FOR REINFORCEMENT STEEL: REFER TO CURRENT	
OR		APPLICABLE CODE FOR OTHER CATEGORIES. E. BELOW GRADE - UNFORMED	Ŋ
¢ TION ∉		G. FOOTING BOTTOM	
LUCTURAL SLAB	4.	WEATHER1" CLEAR I. WALL PANELS	
3		APPROVED BY STRUCTURAL ENGINEER.	
GER), MEEN	3C 1.	GROUT STANDARD & HIGH LIFT GROUTING SHALL BE PER THE MOST CURRENT APPLICABLE CODE TEST INSPECT AND APPLY	
ONTROL.		ADMIXTURES AS REQUIRED BASED ON CONDITIONS. VERIFY WITH STRUCTURAL ENGINEER.	Ц Ц
ΗE		N/GON 1	ហី
Э, , ЕТС.	M	ASONRY	
E NOT IDLING,	4A	MORTAR AND GROUT	
S OR NY AT WWW	1.	MORTAR: SHALL CONFORM TO APPLICABLE REQUIREMENTS IN THE MOST CURRENT APPLICABLE CODE.	REVISION: REVISION:
BASED	2. 4R	LINIT MASONRY	REVISION:
= CIENT	н р 1.	CONCRETE BLOCK (CMU): ALL UNITS TYPE N/1500 PSI, SOLID GROUTED WHERE RETAINING. STORE UNITS UNDER COVER AT	REVISION:
ED OF		JOB SITE. GROUT & REBAR PER STRUCTURAL.	DB: CI/JL
NS, ETC.) 10VAL. CASE	[D	IVISION 5]	JOB#: 2021.10.76
	ME	ETALS	SED ARCA
XISTING	5A	STRUCTURAL METAL FRAMING	$ \begin{array}{c} $
IORK. RILLS	Ι.	ALL STRUCTURAL STEEL SHALL CONFORM TO THE MOST CURRENT ASTM STANDARDS AND SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC SPECIFICATION	0, 4.30,23 .S
alls Ls as	2.	AND CODE OF STANDARD PRACTICE AS AMENDED. ALL STRUCTURAL STEEL SHALL HAVE MINIMUM ONE SHOP	FILTENEWALDATE OF CALIFOR
		UNLESS OTHERWISE SPECIFIED. RE-PRIMER FIELD CUTS IMMEDIATELY.	
SE	З.	STRUCTURAL STEEL SHOP DRAWINGS MAY BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW PRIOR	R4.1
IR'S		IU FADRICATION AND ERECTION. GENERAL CONTRACTOR	DATE: 12/20/2022

HOLDS RESPONSIBILITY AND LIABILITY IF NOT PROVIDED. WEEK REQUIRED FOR REVIEW.

- 4. ALL ENDS OF STEEL COLUMN SHALL BE SQUARE CUT AND
- PROPERLY FINISHED UNLESS OTHERWISE DETAILED. SEPARATE AND ISOLATE DISSIMILAR METALS TO PREVENT GALVANIC CORROSION.

5B WELDING

- ALL FIELD AND SHOP WELDS SHALL BE GROUND SMOOTH. PRIMED AND PRIMED IMMEDIATELY
- 2. ALL WELDING SHALL BE ELECTRIC ARC WELD PERFORMED BY OPERATORS CERTIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY AND THE PREVAILING LOCAL BUILDING CODE FOR THE TYPE OF WELDING TO BE PERFORMED, AND AS APPROVED BY THE GOVERNING DEPARTMENT OF THE LOCAL OFFICE OF BUILDING AND SAFETY
- CONTINUOUS INSPECTION OF ALL STRUCTURAL WELDING BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED AND PAID FOR BY THE GENERAL CONTRACTOR, OR PERFORMED IN A LICENSED FABRICATING SHOP BY CERTIFIED WELDERS. SUBMIT REPORTS TO CITY/COUNTY INSPECTIONS & STRUCTURAL ENGINEER AS NECESSARY.
- 5C SHEET METAL AND MISCELLANEOUS METALS ALL SHEET METAL TO BE 316 GRADE STAINLESS STEEL UNLESS OTHERWISE NOTED. ALL GALVANIZED METALS SHALL
- BE ETCHED, PRIMED AND PAINTED, 2. TUB ACCESS PANEL TO BE GALVANIZED SHEET METAL DOOR SIZED MIN. 12" X 14". APPLY FINISH TO MATCH ADJACENT WALL MATERIAL
- METAL LADDERS SHALL BE FABRICATED AND INSTALLED AS INDICATED AND IN COMPLIANCE WITH CURRENT CODE. PRIME AND PAINT TO MATCH SURROUNDING WALLS.
- METAL STAIR: MANUFACTURER TO SUBMIT SHOP DRAWINGS AND CALCULATIONS TO ARCHITECT FOR REVIEW AND BUILDING DEPARTMENT FOR APPROVAL.
- 5. ALL MISCELLANEOUS METALS AND NAILS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED UNLESS NOTED 25 OTHERWISE.

[DIVISION 6] CARPENTRY

- 6A WOOD FRAMING AND ROUGH CARPENTRY ALL STRUCTURAL LUMBER AND PLYWOOD SHALL BE GRADED IN ACCORDANCE WITH AMERICAN PLYWOOD ASSOCIATION GRADING RULES AND VISIBILITY STAMPED ON
- FIELD MATERIALS. 2. WOOD BEARING ON OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED DOUGLAS FIR (WEST COAST) OR FOUNDATION GRADE REDWOOD.
- UNLESS NOTED OTHERWISE IN STRUCTURAL PLANS, ALL 3. STRUCTURAL LUMBER SHALL BE DOUGLAS FIR (WEST COAST) OF THE FOLLOWING GRADE:
 - STUDDING AND PLATES. NO. 2 WCDF A
 - 2 X HORIZONTAL FRAMING MEMBERS (UNLESS NOTED OTHERWISE) .. NO. 2 WCDF
 - HORIZONTAL BEAMS, HEADERS AND OTHER 4 X OR LARGER MEMBERS. . NO. 1 WCDF
- OSB SHEATHING IS NOT ACCEPTABLE AT ANY EXTERIOR 4 HORIZONTAL CONDITIONS OR ANY AREA EXPOSED TO WEATHER DURING THE CONSTRUCTION PROCESS. CDX SHEATHING IS NOT ACCEPTABLE IN ANY EXTERIOR HORIZONTAL CONDITIONS AND IS ONLY ACCEPTABLE IN VERTICAL APPLICATIONS WHERE THE AREA WILL NOT BE PERMANENTLY EXPOSED TO WEATHER.
- 5. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER, TERMITE OR OTHER DAMAGE SHALL NOT BE INSTALLED.
- 6. ALL BOLTS THROUGH WOOD SHALL BE MACHINE BOLTS. PROVIDE STANDARD WASHERS UNDER ALL NUTS. SEE STRUCTURAL.
- NAILS FOR PLYWOOD SHALL BE STANDARD PLYWOOD NAILS. NAILS FOR METAL HANGERS, FRAMING ANCHORS AND FASTENERS SHALL BE MANUFACTURED SPECIFICALLY FOR THIS PURPOSE.
- HANGERS, CONNECTORS, ANCHORS, AND OTHER FRAMING FASTENERS SHALL BE MANUFACTURED BY "SIMPSON", OR APPROVED EQUAL OF THE SIZES AND TYPES INDICATED.
- 9. ALL WOOD FRAMING, INCLUDING NAILING, SHALL COMPLY WITH THE MOST CURRENT APPLICABLE CODES, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE HEREIN INDICATED.
- 10. ALL EXPOSED FRAMING SHALL BE KILN DRIED TO REDUCE SAPPING AND HAVE A DESIGN GRADE APPEARANCE.
- 11. FRAMING SHALL BE DONE IN A PROFESSIONAL MANNER BY SKILLED CRAFTSMEN. ALL NAILING SHALL CONFORM TO THE MOST CURRENT APPLICABLE CODE. GAPS BETWEEN FRAMING MEMBERS IS NOT ACCEPTABLE AND MUST BE FIXED PRIOR TO FINAL FRAMING.
- 12. EXTERIOR WALL FRAMING SHALL BE 2 X 6 STUDS AT 16" ON CENTER PROVIDE DOUBLE 2 X 6 TOP PLATE WITH MINIMUM 48" LAP SPLICE, UNLESS OTHERWISE NOTED.
- 13. ALL NEW INTERIOR WALLS SHALL BE 2 X 4 STUDS UNLESS OTHERWISE NOTED. ALL WALLS SURROUNDING BATHROOMS TO BE 2X6. FURR OUT EXISTING 2X4 PLUMBING WALLS TO 2X6 AS NEEDED FOR PLUMBING, NEW CONSTRUCTION AND CODE REQUIREMENTS.
- 14. PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL BEARING WALLS OR SOLID DOUBLE BLOCKING UNDER ALL PERPENDICULAR BEARING WALLS.
- 15. WHERE MULTI-JOIST (2 OR MORE) OCCUR. SUPPORT EACH END WITH EQUIVALENT NUMBER OF 2X STUDS UNLESS OTHERWISE NOTED.
- 16. PROVIDE MULTIPLE STUD BEARING (MSB) AT EACH END OF

BEAMS. BELOW 4X BEAMS, PROVIDE (2) 2X STUDS MINIMUM AT EACH END AND BELOW 6X BEAMS PROVIDE (3) 2X STUDS MINIMUM, ETC. ALL GLULAM BEAMS SHALL BE STRUCTURAL GRADE UNLESS

- 17. EXPOSED, THEN APPEARANCE GRADE.
- 18. FIRE BLOCKING MUST BE PROVIDED IN ACCORDANCE WITH CURRENT CRC IN THE FOLLOWING LOCATIONS:
 - A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS, AT 10-FOOT INTERVALS ALONG THE LENGTH OF THE WALL.
 - IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALL UNDER THE STAIRS IS UNFINISHED.
 - C. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS FIREPLACES, AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS WITH NONCOMBUSTIBLE MATERIALS.
- 19. ALL SHEAR WALL PLYWOOD SHALL EXTEND FROM BOTTOM OF SILL PLATE TO TOP OF TOP PLATE OR ROOF PLATE LINE. WHICHEVER IS GREATER. SOLID BLOCK ALL JOINTS.
- 20. CONTRACTOR SHALL VERIFY ALL OPENINGS THROUGHOUT CONSTRUCTION WITH THE HEATING, PLUMBING AND ELECTRICAL SUB-CONTRACTORS FOR SIZE AND LOCATION. ANY CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT
- 21 WHERE TOP PLATES OR SILL PLATES ARE CUT FOR PIPES A METAL TIE MINIMUM.058 THICK AND 1 1/2" WIDE SHALL BE FASTENED TO EACH PLATE ACROSS AND TO EACH SIDE OF THE OPENING WITH NOT LESS THAN 6-16d NAILS.
- ALL ROOF SHEATHING SHALL BE PER STRUCTURAL PLANS. 22. ALL NEW PLYWOOD ROOF SHEATHING SHALL HAVE RADIANT
- BARRIER FOIL BACKING AND BE INSTALLED FOIL SIDE DOWN. 23. RADIANT BARRIER FOIL ON ROOF, SOUTH, & WEST WALL PLYWOOD SUBSTRATES AS WELL
- ROOF SHEATHING (UNLESS NOTED OTHERWISE), SHALL BE 5/8" THICK EXTERIOR GRADE PLYWOOD (APPEARANCE GRADE AT EXPOSED CONDITIONS). BLOCK AT ALL EDGES. ROOF SHEATHING AND VERTICAL SHEAR PANELS TO BE APPROVED BY INSPECTOR PRIOR TO COVERING OR
- ROOFING. 26. ALL ROOF SHEATHING SHALL MATCH EXISTING WHEN APPLICABLE. IF DISCREPANCIES ARISE BETWEEN EXISTING CONDITIONS AND THOSE SET FORTH IN THE PLANS, CONSULT - 8.
- W/ STRUCTURAL ENGINEER PRIOR CONTINUING WORK 27. SOFFITED AREAS ARE FURRED CEILINGS WITH 2"X JOISTS AT 16" ON CENTER MAXIMUM- REFER TO PLANS FOR FINISHED CEILING HEIGHT.
- 28. ALL STAIRS SHALL RECEIVE A MINIMUM OF (3) 2 X 12 STRINGERS BELOW 2X TREADS. UNLESS OTHERWISE NOTED. ALL FLOOR SHEATHING SHALL BE SCREWED & GLUED TO 29.
- FLOOR. USE ONLY CODE APPROVED MATERIALS. SEE STRUCTURAL FOR SIZING AND SPACING OF FASTENERS. 30. FLOOR SHALL REMAIN FLUSH AT ALL INTERIOR MATERIAL
- CHANGES. ADJUST SUB FLOOR TO ACCOMMODATE. CONTACT 12. ARCHITECT/STRUCTURAL ENGINEER IF NECESSARY.
- ALL FLOOR SHEATHING SHALL BE PER STRUCTURAL PLANS, 31. ALL INTERIOR AND EXTERIOR WALL PLANES TO BE FLUSH AND PLUMB. WHERE STRUCTURAL PLYWOOD SHEAR PANELS OCCUR, FURR-OUT / SHIM ALONG ENTIRE LENGTH OF WALL TO BE FLUSH OR CONTINUE SHEAR PANEL. NO JOGS IN WALL FINISHES ALLOWED.
- 32. ALL FLOOR SHEATHING SHALL MATCH EXISTING WHEN APPLICABLE. CONSULT STRUCTURAL ENGINEER IF CONFLICTS ARISE.
- INTERIOR DOOR JAMBS SHOULD BE AT LEAST 8" FROM ADJACENT WALL TO ALLOW ADEQUATE SPACE FOR CASING SURROUND. NOTIFY ARCHITECT IF THIS CANNOT BE 🦊 ACCOMPLISHED.
- 34. PROVIDE 2X12 SOLID BLOCKING AT ALL AREAS WHICH ARE TO RECEIVE MISC. ACCESSORIES; IE.: TOWEL BARS, HANDRAILS, WALL AND CEILING LAMPS, FANS, ETC. TOWEL BARS @ 48" A.F.F. VERIFY HEIGHT AND LOCATION W/ OWNER PRIOR TO CLOSING UP WALLS.
- 35. PROVIDE ADEQUATE FRAMING PER ELEVATOR MFR. VERIFY HOISTWAY DIMENSIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY THE ARCHITECT AND 36. THE STRUCTURAL ENGINEER WHEN THE FRAMING IS APPROXIMATELY 50% COMPLETE AND AGAIN PRIOR TO CALLING FOR FINAL FRAMING INSPECTION.
- 37. BRING TO THE ATTENTION OF THE ARCHITECT DURING THE FRAMING STAGES, WINDOW AND DOOR HEADER HEIGHTS THAT DO NOT ALIGN DUE TO FINISH TRIM OF UNITS. VERIFY ALL WINDOW HEADS AND MATCH EXISTING FOR NEW OPENINGS, UNO.
- 38. FOR NEW HOME CONSTRUCTION: BORA-CARE TERMITICIDE, INSECTICIDE AND FUNGICIDE TREATMENT SHALL BE PROVIDED FOR TERMITE CONTROL. COMPLY WITH BORA-CARE'S PRODUCT LITERATURE, TECHNICAL BULLETINS AND U.S. EPA REGISTERED LABEL.

6B FINISH CARPENTRY

- BID SHALL INCLUDE ALL INTERIOR WOOD FINISH, DOORS, CABINET WORK, TRIM AND CASING, AND EXTERIOR FINISH WOODS AS DETAILED ON PLANS.
- ALL HANDRAILS SHALL BE AS DETAILED WITH HEIGHT PER THE MOST APPLICABLE CODE.
- CLOSET SHELF & POLES; CONFIRM WITH OWNER THE USE OF DOUBLE OR SINGLE SHELF & POLE TO BE USED IN CLOSETS WHERE APPLICABLE & IF CLOSET ORGANIZER SYSTEMS MAY BE PREFERABLE PRIOR TO INSTALLATION
- CONFIRM FINAL PROFILE, PAINT / STAIN FINISHES AND COLORS CONTRACTOR TO PROVIDE INTERIOR MOLDING SAMPLES TO OWNER FOR APPROVAL PRIOR TO INSTALLATION.
- CROWN & BASE MOLDING SHALL MATCH EXISTING OR PER DETAILS UNLESS INTERIOR DESIGNER IS INVOLVED. MOLDING SHALL BE MITERED OR CONTINUOUS FROM CORNER TO

DIVISION 7

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OWNER.

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CORNER - NO BUTT JOINTS ALLOWED. WINDOW & DOOR CASING SHALL MATCH EXISTING OR AS DEFINED IN THE PLANS UNLESS SPECIFIED BY INTERIOR DESIGNER.

ALL FLASHING, GUTTERS, DOWNSPOUTS AND THE LIKE, SHALL

PLANS. IN THE ABSENCE OF SPECIFIC SIZES FOR GUTTERS

FOR ADEQUATE DRAINAGE AND IN COMPLIANCE WITH LOCAL

VENTILATION AND AIR CONDITIONING VENTS, DUCTS, PIPES

ALL FLASHING & VENTS THROUGH ROOF SHALL BE PAINTED

VERTICAL WALL PENETRATION FLASHING AND CAP FLASHING

ROOF MATERIAL SHALL BE CLASS "A" FIRE RATED MINIMUM.

WITH EXTERIOR GRADE PAINT TO MATCH ROOF COLOR/

EXPOSED BEAMS (INCLUDING TRELLIS BEAMS) TO HAVE

THAT IS PAINTED TO MATCH FINISH COLOR OF BEAMS.

DRAINAGE SYSTEM AND/OR TO BE USED AS IRRIGATION

ALL FLAT ROOF AREAS SHALL RECEIVE FIRE RETARDANT

10-YEAR BONDED, BUILT UP ROOFING AND COMPLY WITH

THE MOST CURRENT APPLICABLE CODE OF REGULATIONS

MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE

ALL ROOF DRAINS WITHIN HOUSE SHALL BE 3" DIAMETER ABS

I.D. OVERFLOWS MAY BE 2" DIA. P.V.C. INSULATE ALL PIPES

ALL SLOPING ROOF MATERIALS SHALL BE PER EXTERIOR

ELEVATIONS/ROOF PLAN. INSTALL PER MANUFACTURER'S

VERIFY PITCH OF EXISTING ROOF SLOPE IN FIELD BEFORE

10. ALL SLOPING ROOFS SHALL RECEIVE (2) LAYERS #15 FELT

NEW SLOPES TO MATCH ACTUAL ROOF PITCH IN FIELD.

PROTECTION OF OPENINGS: ANY OPENINGS INTO ATTICS

WITH CORROSION RESISTANT WIRE MESH NOT LESS THAN

WHERE SUCH OPENING ARE EQUIPPED BY SASH OR DOOR.

ALL ROOF JACKS AND VENT STACKS/PENETRATIONS

THROUGH THE ROOF SHALL OCCUR IN THE TOP 24" TO

AND CLEAR OF POTENTIAL SOLAR PANEL LOCATIONS.

16. INSTALL FLASHING AND COUNTER FLASHING AT ALL ROOF TO

CONSULT ARCHITECT IF ANY WILL NOT MEET THOSE

PROVIDE 2" CONTINUOUS SCREENED VENTS ON ALL

17. WOOD BEAMS, OUTLOOKERS, PROJECTIONS, ETC., FROM

FLASHED WITH GALVANIZED SHEET METAL FLASHING,

MANUFACTURER'S INSTRUCTIONS SO AS NOT TO VOID WARRANTIES.

COMPOSITION ASPHALT SHINGLES: COMPOSITION SHINGLES BY

ALL GUTTERS, COLLECTION BOXES, AND DOWNSPOUTS SHALL

ALL DOWNSPOUTS IN WALLS TO BE ABS WRAPPED IN LOWRY'S

ALL CONCEALED ROOF DRAINS SHALL BE ABS WRAPPED W/

LINES SHALL PENETRATE FOUNDATION AND CONNECT TO SITE

ACOUSTICAL SOUND DEADENING PIPE WRAP PUTTY TAPE -

GAF (OR EQUAL), 50 YEAR CLASS 'A' RATING, ICC-ES ESR-1475,

BE BONDERIZED GALVANIZED METAL, PAINTED, STYLE PER EAVE

DETAILS / MATCH EXISTING IF POSSIBLE. VERIFY WITH ARCHITECT/

WRAPPED TO FULLY ENCASE ENTIRE LENGTH OF PIPE (2-LAYERS).

LOWRY'S ACOUSTICAL PIPE WRAP WITH OVERFLOW. ROOF DRAIN

WATERPROOFING FLASHING AND CAULKED.

ALL PRODUCTS LISTED BELOW SHALL BE INSTALLED PER

FLOORS, OR OTHER ENCLOSED AREAS SHALL BE COVERED

1/8" AND NO GREATER THAN 1/4" IN ANY DIMENSION EXCEPT

RIDGES AND BE OUT OF VIEW OF THE "FRONT" OF THE HOME

PROVIDE ATTIC VENTILATION PER MOST CURRENT

WITH SPECIFICATION EQUIVALENT TO CONGLASS ND-34,

HOT MOPPED BETWEEN LAYERS IN ACCORDANCE WITH

MANUFACTURER'S SPECIFICATION.

RECOMMENDATIONS.

FRAMING.

APPROVED PRODUCTS:

WWW.HALOWRY.COM

UNLESS OTHERWISE NOTED.

W/ LOWRY'S PIPE WRAP PUTTY JACKET.

APPLICABLE CODE OF REGULATIONS.

REQUIREMENTS PRIOR TO PLACING.

SOFFITED OR ENCLOSED EAVES.

VERTICAL SURFACE CONDITIONS.

ALWAYS "COOL ROOFING" IF AVAILABLE.

DRAINAGE SYSTEM. SEE NOTE ABOVE.

INSTALL GUTTERS & DOWNSPOUTS TO THE INTO SITE

AND OTHER ITEMS PENETRATIONG ROOF SHALL BE FLASHED

BE AS INDICATED AND LOCATED WHERE SHOWN IN THE

OR DOWNSPOUTS, OR BOTH, PROVIDE SIZES REQUIRED

CODES OR BUILDING OFFICIAL. SLOPE GUTTER TO THE

AS REQUIRED BY LOCAL CODE AND IN ACCORDANCE

WITH ROOFING MANUFACTURER'S SPECIFICATIONS AND

RECOMMENDED FLASHING DETAILS TO PROVIDE A

WEATHERPROOF NON-LEAKING INSTALLATION.

ELECTRICAL CONDUITS, PLUMBING, VENTS, HEATING,

THERMAL AND MOISTURE

7A ROOFING + ROOF FLASHING MAT

PROTECTION

NEAREST DOWNSPOUT.

MATERIAL.

COMPLETELY WATERPROOF, WEATHER TIGHT ASSEN 4. CAULK ALL DOOR AND WINDOW HEAD, JAMBS AND PRIOR TO APPLICATION OF FINAL FINISH MATERIALS

CAULK ALL WALL JOINTS BEHIND DRYWALL.

7C TERMITE PROTECTION

INSTALL TERMITE SHIELDS TO PROVIDE A PHYSICAL BETWEEN THE FRAMING AND THE FOUNDATION. SEE 1 SHALL BE CORROSION-RESISTANT. A

- B SHALL BE SINGLE-LEG AT SLAB CONDITIONS C DOUBLE-LEG AT FOUNDATION STEM WALLS AN
- C. SHALL BE BETWEEN FOUNDATION STEM WALLS PIERS AND WALL FRAMING OR POST SHALL EXTEND TO THE EXTERIOR AND NOT LE D.
- I LINEAR INCH BEY*O*ND WALL FINISH. JOINTS IN THE TERMITE SHIELD SHALL BE PERN
- E. FUSED WITH SOLDER (OR EQUIVALENT) OR SHA OVERLAPPED A MINIMUM OF 6 LINEAR INCHES SHALL BE SEALED WITH A RUBBERIZED ASPHA MEMBRANE NOT LESS THAN 6 LINEAR INCHES A
- PENETRATIONS THROUGH THE TERMITE SHIELD BE SEALED.

7D THERMAL PROTECTION

- PROVIDE INSULATION PER T24 REPORT OR IF NO T2 REPORT EXISTS, PROVIDE PER PRESCRIPTIVE METH PROVIDE R-12 INSULATION BLANKET AT TANK WATER HEATERS AND HOT WATER STORAGE EQUIPMENT.
- INSTALL INSULATION AT ALL STUD AND/OR JOIST BA

WHERE WASTE OR DRAIN LINES OCCUR. REPLACE AND ADD NEW INSULATION IN CAVITY WHER FINISH IS REMOVED FROM WALLS AND CEILINGS DUP CONSTRUCTION.

APPROVED PRODUCTS:

- SPRAY FOAM INSULATION: (R-6 OR HIGHER): USE ON BLOWING AGENT. (OPEN -OR- CLOSED) CELLED SPR INSULATION (CLASS 1 BUILDING MATERIAL). THE INSUL USED ON SITE SHOULD BE NON OFF-GASSING, NO DI DIISOCYANATE, OR MDI. OPEN SPRAY FOAM INSULA SHALL BE 100% WATER-BLOWN, NOT FLOUROCARBO CLOSED SPRAY FOAM INSULATION SHALL BE SPRAY AN AGENT WITH A GREENHOUSE WARMING POTENTIAL OF 1 OR LESS. SPRAY FOAM INSULATION TO BE INST AT WALL, ROOF (U.N.O.).
- HYBRID SPRAY FOAM INSULATION: CLOSED AND OF 2. CELLED SPRAY INSULATION (CLASS 1 BUILDING MATE USE 3" MIN. OF CLOSED CELL FOAM AT R-9.75 ALLO INSTALLER TO REMOVE EXCESS MATERIAL TO BE FL TO FRAMING BAY, THE INSULATION USED ON SITE SH BE NON-OFF-GASSING; NO DIPHENYL-DIISOCYANATE MDI. HYBRID SPRAY FOAM INSULATION TO BE INSTA VAULTED CEILING WITH EXPOSED FRAMING. (U.N.O.)
- З. BATT INSULATION: KNAUF ECOBATT INSULATION SEE KNAUFNORTHAMERICA.COM (ASTM C 665, TYPE I, CL BUILDING MATERIAL). NO GAPS AGAINST WALL STUD AROUND UTILITY BOXES/EQUIPMENT. FOR ROOF ASS PROVIDE 1" MINIMUM AIR SPACE BETWEEN INSULATIO SHEATHING.
- **RIGID INSULATION: RMAX THERMASHEATH-3 INSULATI** ROOF ASSEMBLIES: APPLIED DIRECTLY (TO UNDERS OR - ABOVE) ROOF SHEATHING (NO AIR SPACE OR REQUIRED FOR FULLY FILLED BAY). USE SPRAY FOA SEAL UNDERSIDE OF ROOF SHEATHING. EVERY BOA BE SEALED AT THE PERIMETER WITH FOAM. INSTALL MANUFACTURER SPECS.
- SOUND CONTROL INSULATION: UNO, FILL STUD BAY C PER MANUFACTURER'S RECOMMENTAIONS. IF SPRAY ON PROJECT, USE SPRAY FOAM. OTHERWISE USE RC SOUND'N SAFE. ROOMS TO RECEIVE SOUND PROTEC ALL LAUNDRY & BATHROOMS. OTHERS PER PLAN.

EXTERIOR WALLS OR ROOF SURFACES SHALL BE PROPERLY 7F BELOW GRADE WATERPROOFING

APPROVED PRODUCTS: BLINDSIDE WATERPROOFING:

- COMPOSITE SHEET MEMBRANE DESIGNED TO A. WITHSTAND THE FORCE OF SHOTCRETE APPLIC UTILIZING A POST-INJECTED HYDROPHILIC MET ACRYLATE GROUT DESIGNED TO CREATE A FU BONDED, HOMOGENOUS WATERPROOFING MEN SYSTEM.
- GROUT PORTS ARE INSTALLED PRIOR TO SHO B. APPLICATION TO ENABLE GROUT INJECTION, W OCCURS AFTER SHOTCRETE PLACEMENT. THIS INJECTED GROUT FILLS AND SEALS THE SYSTE PROVIDING A CONTINUOUS WATERPROOFING E THAT IS FULLY-BONDED WITH THE SHOTCRETE

BENTONITE WATERPROOFING SYSTEM UTILIZING A SE SEAM INSTALLATION USED IN TANDEM WITH INJECTAE WATERSTOP SYSTEMS AT ALL COLD AND EXPANSIO MEP CONDUITS, TIE-BACK LOCATIONS AND CONCRE JOINTS.

- HIGH COMPRESSIVE STRENGTH, PREFABRICATED DE COMPOSITE SYSTEM(S) CAPABLE OF DELIVERING W SUB-SURFACE COLLECTION SYSTEMS (I.E. PREFABRI PERIMETER DRAINAGE OR "FRENCH" DRAIN SYSTEM
- TERMINATION BARS, SEALANTS AND TRANSITIONAL PRODUCTS AS REQUIRED BY THE MANUFACTURER (S CONCRETE ACCESSORIES (DOBIES, CHAIRS, ALL-THI TIES, ETC.) AS APPROVED BY THE WATERPROOFING

MEMBRANE MANUFACTURER(S). INSTALLATION:

TIMBER LAGGING SYSTEMS ARE TO BE INSTALLED I SUCH A MANNER AS TO PREVENT DEFLECTION IN AN DIRECTION GREATER THAN 1/2". GAPS IN THE TIMBE LAGGING MUST BE COVERED WITH PLYWOOD OR GR PER MANUFACTURER'S RECOMMENDATIONS. TIMBER LAGGING SYSTEMS MUST BE REVIEWED AND APPRO BY WATERPROOFING SYSTEM MANUFACTURER PRIO

78 JOINT PROTECTION CAULKING AT GLAZING, STOREFRONT, SKYLIGHT, AND PANEL JOINTS SHALL BE G.E. SILICONE SEALANT OR APPROVED EQUAL. COLOR: CLEAR IF AT PAINTED SURFACE OR COLOR TO MATCH ADJACENT SURFACE. CAULKING AT ROOF DRAINS AND FLASHING TO BE ONE PART POLYSULFIDE POLYMER SEALANT.

3. ALL OPENINGS SHALL BE PROPERLY CAULKED OR SILICONE SEALED AND FLASHED AS NECESSARY TO ENSURE

1BLY. SILLS 9.	2.	COMMENCEMENT OF WORK. ALL MEP CONDUITS, RAKERS, WHALERS, ALL-THREAD, AND OTHER COMPONENTS THAT PENETRATE THE WATERPROOFING SYSTEM MUST BE IN PLACE PRIOR TO COMMENCEMENT OF WORK TO ENSURE THE DETAILING OF THESE COMPONENTS IS ACCOUNTED FOR DURING THE INSTALLATION OF THE		DENCE BLVD. BEACH 90803
BARRIER DETAILS.	З.	WATERPROOFING SYSTEM(S). SYSTEM MUST BE INSTALLED PER MANUFACTURER'S DETAILS AND PUBLISHED INSTALLATION INSTRUCTIONS IN ORDER TO PROVIDE FOR A LEAK-ERFE SYSTEM AND WARRANTY		N N N N N N N N N N N N N N N N N N N
DR D PIERS. OR	QUAL MATE 1.	LITY ASSURANCE: ERPROOFING MANUFACTURER: 20 YEARS EXPERIENCE MANUFACTURING COMPONENTS		
SS THAN	2	SIMILAR TO OR EXCEEDING THE REQUIREMENTS OF THIS PROJECT IN THE UNITED STATES.		
ANENTLY	∠. 3.	REQUIRED MATERIALS WITHOUT CAUSING DELAYS IN WORK.		
AND LT SHEET NIDTH. SHALL		REQUIRED BY THE SPECIFICATIONS. SALES PERSONNEL ARE NOT AUTHORIZED TO CONDUCT REVIEWS OF INSTALLATIONS OR PROVIDE DETAILS, REMEDIAL PROCEDURES OR OTHER CORRESPONDENCE RELATED TO THIS SCOPE OF WORK UNLESS CLEARED TO DO SO IN WRITING BY AN OFFICER OF THEIR FIRM.		125-125-51 The and a from any claims arising
24 OD. R	4.	ALL PHASES OF INSTALLATION MUST BE REVIEWED BY A THIRD PARTY INSPECTION FIRM AS WELL AS AN APPROVED TECHNICAL SERVICE REPRESENTATIVE OF THE MANUFACTURER PRIOR TO THE INSTALLATION OF ANY OVERBURDEN. SUBMIT INSPECTION REPORTS TO THE OWNER		0803 m finers Inc and if's remeas
	5.	& ARCHITECT. ALL WATERPROOFING MEMBRANES, SEAMS, AND		
RING		TRANSITIONS MUST BE TESTED BY AN APPROVED THIRD PARTY TESTING AUTHORITY FOR WATERPROOFING INTEGRITY WITH A WRITTEN REPORT PRIOR TO OVERBURDEN		СТS • Ca
	INSPI	APPLICATION. ECTIONS:		
LY HPD RAY _ATION	1.	ONE FULL TIME INSPECTOR TO VALIDATE THAT EACH STAGE OF INSTALLATION HAS BEEN COMPLETED PER MANUFACTURERS' PUBLISHED GUIDELINES AND IN		D C H I C H I jeann
PHENYL TION ONS	2.	ACCORDANCE WITH WARRANTY REQUIREMENTS. FINAL INSPECTION BY A MANUFACTURER'S CERTIFIED, THIRD-		
ED MITH L (GMP)	З.	PARTY INSPECTION AGENCY. MANUFACTURER SITE VISITATIONS AND INSPECTIONS AS REQUIRED TO OBTAIN THE SPECIFIED WARRANTY TERM.		
	MARI 1.	RANTY: NO APPLICATOR OR INSTALLER SHALL USE PRODUCTS IN		
EN_ ERIAL). DWING LUSH OULD E, OR	2.	SUCH A WAY AS TO VOID THE MANUFACTURER'S WARRANTY. ALL MANUFACTURER'S WARRANTIES SHALL BE A MINIMUM OF 10 YEARS, MATERIAL AND LABOR, FROM THE DATE OF BUILDING OCCUPANCY. TWENTY YEAR WARRANTY PREFERED. (ALL WARRANTIES TO INCLUDE MATERIALS AND LABOR).		6 redondo 562/987.91
LLED AT	7G 1.	ABOVE GRADE WATERPROOFING TWO-COMPONENT ASPHALT-EXTENDED POLYURETHANE	-	
ANN. ASS A S OR		THAT COMBINES BOTH THE WATER IMPERMEABILITY CHARACTERISTICS OF ASPHALT WITH THE TOUGH FLEXIBILITY OF A URETHANE. THIS PRODUCT TYPE SHALL BE INSTALLED		
ON. FOR	2.	AT A MINIMUM 90 MIL DRY-FILM MATERIAL THICKNESS. ONE-PART, 100% SOLIDS, HOT-APPLIED, RUBBERIZED ASPHALT WATERPROOFING MEMBRANE DESIGNED SPECIFICALLY FOR APPLICATIONS TO THE TOP LEVEL OF		N Statement of the stat
VENTING M TO RD TO PER		STRUCTURES, INCLUDING APPLICATIONS SUCH AS ROOF DECKS. THIS PRODUCT SHALL BE INSTALLED AT 215 MILS THICKNESS AND FULLY REINFORCED WITH NON-WOVEN, SPUNBOND POLYESTER FABRIC.		
ZAVITY FOAM DCKWOOL STIONS:	З.	ONE PART, MOISTURE CURING, HIGH-SOLIDS, VOC-COMPLIANT MODIFIED POLYURETHANE WATERPROOFING MEMBRANE THAT MAY BE APPLIED TO "GREEN" CONCRETE. THIS PRODUCT TYPE SHALL BE INSTALLED AT A 120 MIL DRY FILM THICKNESS AND BE FULLY REINFORCED WITH NON-WOVEN,		
	4.	SPUNBOND POLYESTER FABRIC. HIGH COMPRESSIVE STRENGTH, PREFABRICATED DRAINAGE COMPOSITE SYSTEM(S) CAPABLE OF DELIVERING WATER TO DUAL-STAGE AREA DRAINS AND PERIMETER COLLECTION SYSTEMS.		и В С С С С С С С С С С С С С С С С С С
CATION	5.	INSTALL TERMINATION BARS, COMPATIBLE SEALANTS AND TRANSITIONAL DETAILING PRODUCTS AS REQUIRED BY THE MANUEACTURER(S)		
HYL LLY	INST/	ALLATION:		
MBRANE TCRETE HICH	1.	OF 28 DAYS TO REDUCE THE LIKELIHOOD OF SUBSTRATE OUTGASSING, RESULTING IN BLISTERS AND/OR PINHOLING OF THE FLUID-APPLIED MEMBRANE SYSTEMS. ALTERNATIVELY, MANUFACTURER APPROVED, 100% SOLIDS MOISTURE	-	
M BARRIER		MITIGATING EPOXY PRIMERS MAY BE USED TO ACCELERATE APPLICATION OF THE WATERPROOFING MEMBRANE TO LESS THAN THE 28 DAYS NORMALLY REQUIRED.	-	
EALED 3LE	2.	ALL MEP CONDUITS, DRAINS, FLASHINGS AND SCUPPERS MUST BE IN PLACE PRIOR TO COMMENCEMENT OF WORK TO ENSURE THE DETAILING OF THESE COMPONENTS IS		PC#:
N JOINTS, TE LIFT	a	ACCOUNTED FOR DURING THE INSTALLATION OF THE WATERPROOFING SYSTEM(S).		DB: CI/JL
RAINAGE ATER TO	<u>ی</u> .	AND PUBLISHED INSTALLED FER MANUFACTURER'S DETAILS AND PUBLISHED INSTALLATION INSTRUCTIONS IN ORDER TO PROVIDE FOR A LEAK-FREE SYSTEM.	-	
S). DETAILING	4. ⁻ i	THE SUBSTRATE FINISH PROFILE ASSEMBPLY MUST BE RECOGNIZED & APPROVED BY THE MANUFACTURER FOR PROPER ADHESION.		SED ARCHIA
). READ,	5. QUAL	ROOT PROTECTION IS REQUIRED IN PLANTERS FOR AGGRESSIVE LANDSCAPING. LITY ASSURANCE: SEE SECTION 7F		STATE RENEWAL DATE
N Y	7H 1 PAR	FLASHING AND SHEET METAL AMETERS: ALLATION PER ASTM 2112 TESTED TO 6 PSE WATER INTRUSION		FOF CALIFOT
ROUTED VED	RESI AN IN RESI	STANCE. MANUFACTURED AND TESTED FENESTRATION WITH TEGRAL FIN DESIGNED TO WITHSTAND 6 PSF OF WATER STANCE.		R4.2
R TO				DATE: 12/20/2022

FLASHING

- A. PEEL AND STICK MUST BE ON A SOLID SUBSTRATE AND 6. REQUIRE COMPRESSION. NON-ADHESIVE/NON SELF SEALING MATERIAL IS NOT ALLOWED.
- PEEL AND STICK MUST BE BUTYL (NO HYBRIDS) OR: В. LIQUID WEATHER BARRIER OR FLASHING MATERIAL ARE C.
- APPROVED IF THEY CONTAIN MORE THAN 95% SOLIDS. D. IF PRIMER IS RECOMMENDED BUT NOT REQUIRED
- EITHER APPLY PRIMER OR PERFORM A PULL TEST & PROVIDE WRITTEN REPORT TO OWNER OR ARCHITECT.
- E. IF PRIMER IS REQUIRED THEN IT MUST BE APPLIED. ALL SEALANTS MUST BE DESIGNED FOR THE SPECIFIC F SUBSTRATE ON WHICH THEY ARE TO BE APPLIED.
- (BEDDING SEALANTS VS. JOINT SEALANTS) 2. SILL PANS ARE REQUIRED WITH AN INTERIOR DAM. SEE
- METALS SECTION FOR MATERIAL.
- 3. FINNED WINDOWS TESTED AND CERTIFIED BY AN INDEPENDENT ACCREDITED LABORATORY.
- INSTALLATION:
- ROUGH OPENINGS TO BE FRAMED APPROXIMATELY 1 (ONE) INCH LARGER THAN THE FRAME SIZE OF THE FENESTRATION. ROUGH OPENING CLEARANCES SHALL NOT BE LESS THAN 1/4" DUE TO SEALING GEOMETRY REQUIREMENTS.
- METAL PANS ARE REQUIRED FOR ALL WINDOWS AND DOORS. ALL SILL PANS SHALL BE SET IN A BED OF SEALANT, AND BE COVERED AND ISOLATED FROM DIFFERENT METALS. SEE METALS SECTION FOR MATERIAL.
- FENESTRATION TO BE INSTALLED BEFORE WATER RESISTIVE BARRIER (MRB).
- FENESTRATION IS TO BE INSTALLED WITH A THREE-SEAL 4. SYSTEM:
 - A. FENESTRATION MUST BE INTEGRATED (SEALED AIR AND WATER TIGHT) TO THE WRB
 - FENESTRATION MUST BE INTEGRATED (SEALED AIR AND 1. B. WATER TIGHT) WITHIN ONE INCH OF THE INTERIOR OF THE ROUGH OPENING WITH A CONTINUOUS BACKER ROD 2. AND SEALANT (UP TO 1/2" GAP) OR CLOSE CELL FOAM FROM 1/2" TO 1" GAP.
 - FENESTRATION MUST BE INTEGRATED (SEALED AIR AND 3. C. WATER TIGHT) TO THE CLADDING SYSTEM WITH BACKER ROD AND SEALANT.
- 5. INSTALLATION OF UNITS CONSTITUTES VERIFICATION AND ACCEPTANCE OF EXISTING CONDITIONS & NEW CONDITIONS AND AS DESCRIBED ABOVE.
- ACCURATELY FIT, ALIGN, SECURELY FASTEN (PER MANUFACTURE REQUIREMENT) AND INSTALL FREE FROM
- DISTORTION OR DEFECTS. 7. ALL PAN SYSTEMS TO BE SOLDERED OR WELDED, NO FASTENERS OR CAULKING ALLOWED.
- QUALITY ASSURANCE:
- FENESTRATION MANUFACTURER:
- 1. (7) YEARS EXPERIENCE MANUFACTURING COMPONENTS SIMILAR TO OR EXCEEDING REQUIREMENTS OF PROJECT IN
- THE US. ALL FENESTRATION TO BE 6 PSF WATER RESISTIVE RATING
- OR BETTER HAVING SUFFICIENT CAPACITY TO PRODUCE AND DELIVER
- REQUIRED MATERIALS WITHOUT CAUSING DELAY IN WORK. LICENSED PROFESSIONAL: A PROFESSIONAL EXPERIENCED IN FENESTRATION DESIGN, AND LICENSED AT THE STATE IN WHICH THE PROJECT IS LOCATED.

INSPECTIONS:

- ONE PART-TIME INSPECTOR TO VALIDATE EACH OPERATION 1
- IS COMPLETED CORRECTLY
- 2. FINAL INSPECTION BY AN INDEPENDENT CERTIFIED PARTY 3. MANUFACTURER INSPECTIONS AS REQUIRED BY WARRANTY OF PRODUCTS
- INTEGRATION INTEGRITY TESTS:
- MOCKUP
- WATER TEST THE MOCKUP 2.
- ADHESION TEST 3
- 4. RANDOM WATER TEST DURING INSTALLATION OF EACH FRAME 2. AND INSTALLATION CONDITION
- WARRANTY:
- NO APPLICATOR OR INSTALLER SHALL USE PRODUCTS IN
- SUCH A WAY AS TO VOID THE MANUFACTURER'S WARRANTY 3. 2. ALL MANUFACTURER'S WARRANTIES SHALL BE A MINIMUM OF 10 YEARS FROM DATE OF OCCUPANCY OR A STANDARD
- 15 YEAR WARRANTY (MATERIALS AND LABOR, WATERTIGHT WARRANTY) **REFERENCES**:

WINDOW AND DOOR INSTALLATION MUST CONFORM TO THE

- FOLLOWING REFERENCES: ALL FENESTRATION MANUFACTURER'S INSTALLATION
- RECOMMENDATIONS & REQUIREMENTS.
- 2. APPLICABLE INDUSTRY STANDARD AS WELL AS ASTM 2112-07 3. APPLICABLE AAMA STANDARDS
- 4. LOCAL AND STATE BUILDING CODES AND REQUIREMENTS

7J WEATHER BARRIER

- SHEET GOOD MATERIAL MUST BE INSTALLED PER
- MANUFACTURER'S RECOGNIZED INSTALLATION DETAILS.
- 2. SEE FLASHING & SHEET METAL SECTION. 3. EXTERIOR MATERIALS TO BE LONG-LASTING/ DURABLE & TAKE
- PAINT OR STAIN WELL. 4. FOR RAINSCREENS: WEATHER RESISTIVE BARRIER TO BE
- BLACK IN COLOR AND BY VAPROSHIELD. WRB INSTALLATION:
- 1. FOLLOW MANUFACTURER'S MANDATORY REQUIREMENTS AND OPTIONAL RECOMMENDATIONS
- NO SEAMS WITHIN TWO FEET (2') OF INSIDE AND OUTSIDE CORNERS
- NO SEAMS WITHIN TWO FEET (2') OF FENESTRATION
- 4. VERTICAL AND HORIZONTAL OVERLAPS TO BE A MINIMUM OF SIX INCHES (6") AND TAPED OR SEALED IN A WATERTIGHT MANNER
- 5. ALL TERMINATION MUST BE INTEGRATED AND SEALED (WATERTIGHT) PER MANUFACTURER'S DETAILED

INSTRUCTIONS.

- ACCURATELY FIT, ALIGN, SECURELY FASTEN (PER MANUFACTURER'S REQUIREMENT) AND INSTALL FREE DISTORTION OR DEFECTS.
- ALL TRANSITIONS ARE TO BE SHINGLED FOR WATER 7. AND SEALED (WATERTIGHT) FOR WIND LOADS, OR CAPACITY.
- 8. ALL WRB TERMINATIONS TO INCLUDE EFFECTIVE WE INSTALLATION TO AVOID SUBMERGED CONDITIONS.
- ALL WRB PENETRATIONS MUST BE REPAIRED BY TH AWARDED WRB CERTIFIED INSTALLER.
- 10. ANY TRADE DAMAGE MUST BE INSPECTED & REPAIR THE AWARDED WRB CERTIFIED INSTALLER. QUALITY ASSURANCE: SEE SECTION 7H

MOCK-UP:

(PORTION OF THE ACTUAL CONSTRUCTION MAY BE USED MOCK-UP DEMONSTRATION)

- INSTALL MOCK-UP USING APPROVED WEATHER BARI ASSEMBLY WITH FENESTRATION INCLUDING FASTENE FLASHING, TAPE AND RELATED ACCESSORIES PER MANUFACTURER'S CURRENT PRINTED INSTRUCTIONS RECOMMENDATIONS.
 - A. MOCK-UP SIZE: (10 FEET BY 10 FEET).
 - B. MOCK-UP SUBSTRATE: MATCH WALL ASSEMBL CONSTRUCTION, INCLUDING WINDOW AND UTILI PENETRATIONS; AND ANY OTHER TYPICAL EXP DETAILS.
- C. MOCK-UP MAY REMAIN AS PART OF THE WOR CONTACT MANUFACTURER'S DESIGNATED REPRESE 2. PRIOR TO WEATHER BARRIER ASSEMBLY INSTALLA TO PERFORM REQUIRED MOCK-UP VISUAL INSPECTION ANALYSIS AS REQUIRED FOR WARRANTY.
- DELIVERY, STORAGE AND HANDLING:
- REFER TO WRB MANUFACTURER'S INSTRUCTIONS AN RECOMMENDATIONS.
- DELIVER WEATHER BARRIER MATERIALS AND COMF IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMA CONTAINERS WITH IDENTIFICATION LABELS INTACT.
- STORE WEATHER BARRIER MATERIALS AS RECOMM MEATHER BARRIER MANUFACTURER.
- SCHEDULING:
- REVIEW REQUIREMENTS FOR SEQUENCING OF INSTAL OF WEATHER BARRIER ASSEMBLY WITH UTILITIES. INSTALLATION OF WINDOWS, DOORS, LOUVERS AND FLASHINGS TO PROVIDE A WEATHER-TIGHT BARRIER ASSEMBLY.
- THE WRB MUST BE COVERED BY THE CLADDING WIT MANUFACTURER'S SPECIFIED TIMEFRAME FOR UV & EXPOSURE.
- WARRANTY: SEE SECTION 7F.
- **REFERENCES**:
- ASTM INTERNATIONAL
- A. ASTM C920: STANDARD SPECIFICATION FOR ELASTOMERIC JOINT SEALANTS. ASTM C1193; STANDARD GUIDE FOR USE OF JO B.
- SEALANTS.
- C. ASTM D882; TEST METHOD FOR TENSILE PROP OF THIN PLASTIC SHEETING.
- D. ASTM D1117; STANDARD GUIDE FOR EVALUATIN MOVEN FABRICS.
- E. ASTM E84; TEST METHOD FOR SURFACE BURN CHARACTERISTICS OF BUILDING MATERIALS.
- F. ASTM E96; TEST METHOD FOR WATER VAPOR TRANSMISSION OF MATERIALS.
- G. ASTM E1677; SPECIFICATION FOR AIR RETARD MATERIAL OR SYSTEM FOR FRAMED BUILDING
- H. ASTM E2178; TEST METHOD FOR AIR PERMEA BUILDING MATERIALS.
- ASTM E2357; STANDARD TEST METHOD FOR DETERMINING AIR LEAKAGE OF AIR BARRIER
- ASSEMBLIES. AATCC - AMERICAN ASSOCIATION OF TEXTILE CHEM
- COLORISTS A. TEST METHOD 127 WATER RESISTANCE: HYDRO PRESSURE TEST.
- TAPPI
- B. TEST METHOD T-410; GRAMS OF PAPER AND PAPERBOARD (WEIGHT PER UNIT AREA)
- TEST METHOD T-460; AIR RESISTANCE (GURLEY HIL 4 METHOD)

[DIVISION 8]

OPENINGS + GLAZING

GENERAL:

- ALL DOORS & WINDOWS TO HAVE A COASTAL PACK REDUCE RUST & DAMAGE FROM COASTAL ELEMENT 2. ALL EXTERIOR DOORS & OPERABLE WINDOWS TO H
- SCREENS TBD BY OWNER. REFER TO SCHEDULE FO ADDITIONAL INFO. CONTRACTOR TO VERIFY ALL EXTERIOR DOOR \$7
- HARDWARE OPTIONS, INCLUDING OPERABILITY, WITH PRIOR TO PLACING ORDER.
- ALL DOOR & WINDOW SIZES TO BE FIELD VERIFIED F TO PLACING ORDER. ARCHITECT/ OWNER SHALL CAP RESPONSIBILITY FOR DOORS THAT DO NOT FIT IN JA
- CONTRACTOR TO VERIFY IF URBAN FIRE CODE GLA REQUIREMENTS ARE NEEDED PRIOR TO FINAL ORD DOORS.

2. ALL DOORS SHALL HAVE FLAT TOPS U.N.O.

8A DOORS AND FRAMES

INSTRUCTIONS.	З.	ALL DOORS UNDER 7'-O" HIGH SHALL HAVE 3 HINGES. DOORS	SUN TUNNEL TZR BY VELUX, SEE MMM.VELUXUSA.COM OR
MANUFACTURER'S REQUIREMENT) AND INSTALL FREE FROM		BE SELECTED BY THE ARCHITECT. OWNER. OR INTERIOR	RT-R-AMER-TEST-2847 BY INTERTEK.
DISTORTION OR DEFECTS.		DESIGNER.	
ALL TRANSITIONS ARE TO BE SHINGLED FOR WATERSHED	4.	STEEL DOORS SHALL BE RIGID AND SHALL NOT HAVE ANY	VELUX: (ER-0199) OR ARCHITECT APPROVED EQUAL.
AND SEALED (WATERTIGHT) FOR WIND LOADS, OR DRAINAGE	5	ALL EXTERIOR DOORS SHALL BE DETERMINED BY OWNER	
ALL WRB TERMINATIONS TO INCLUDE EFFECTIVE WEEP	6.	ALL EXTERIOR DOOR FRAMES TO BE MOOD.	DE VENID 1 PROVIDE PROPER # ADEQUATE ACCESS UNDER ELC
INSTALLATION TO AVOID SUBMERGED CONDITIONS.	7.	ALL EXTERIOR DOORS SHALL BE FULLY WEATHER STRIPPED,	ALL NEW & EXISTING SPACES AS REQUIRED BY CODE
ALL WRB PENETRATIONS MUST BE REPAIRED BY THE		FLASHED, AND WEATHER TIGHT. PROVIDE SELF-ADHERED ELASHING AROUND ENTIRE EXTERIOR OPENINGS - SEE DOOR	2. FOUNDATION VENTS (FV): PROVIDE (1) SF. / 150 SF.
ANY TRADE DAMAGE MUST BE INSPECTED & REPAIRED BY		DETAILS.	UNDER FLOOR AREA. USE GALVANIZED VENTS BETM
THE AWARDED WRB CERTIFIED INSTALLER.	8.	ALL EXTERIOR OUT SWINGING DOORS SHALL HAVE NON-	VENT CALCS FOR SIZING. SEE PLANS FOR FV SYMB
LITY ASSURANCE: SEE SECTION 7H	a	REMOVABLE PIN HINGES.	VENT / SCREEN TO MATCH ADJACENT WALL COLOR
ZR-UP: RTION OF THE ACTUAL CONSTRUCTION MAY BE USED AS A	9.	NO DOUBLE RETED DEADBOLTS ALLONED AT EXTERIOR	3. GARAGE VENTS (GV): PROVIDE 14" X 8" GALVANIZE
IK-UP DEMONSTRATION)	10.	DOORS WITH DIRECT ACCESS TO POOLS WITHOUT	PAINT VENT / SCREEN TO MATCH AD IACENT FINISH
INSTALL MOCK-UP USING APPROVED WEATHER BARRIER		INTERVENING ENCLOSURES SHALL BE EQUIPPED WITH EXIT	(INT. / EXT.).
FLASHING TAPE AND RELATED ACCESSORIES PER	11.	ALARMS. PASSAGE DOOR FROM GARAGE TO HOME TO BE FULL	FLOOD VENTS:
MANUFACTURER'S CURRENT PRINTED INSTRUCTIONS AND		WEATHERSTRIPPED AND SEALED TO FULLY PROTECT HOME	1. FLOOD VENTS: SMART VENT ENGINEERED FLOOD C
RECOMMENDATIONS.		FROM TOXINS. DOOR TO BE 20 MINUTE RATED AND EQUIPPED	OF ENCLOSED SPACE. SEE WWW.SMARTVENT.COM.
A. MOCK-UP SIZE: (10 FEET BY 10 FEET).	10	WITH A SELF-CLOSING AND SELF-LATCHING MECHANISM.	2. IN COASTAL & FLOOR HAZARD AREAS, ALL EXISTING
CONSTRUCTION. INCLUDING WINDOW AND UTILITY	۱∠.	STYLE) WITH INSULATED CORE.	TO BE PROTECTED BY A SEALER. THOMPSON WATE
PENETRATIONS; AND ANY OTHER TYPICAL EXPECTED	13.	GARA <mark>GE DOO</mark> R TO RECEIVE QUIET GLIDE OR SIMILAR	APPLIED BELOW FLOOD PLAIN PER MANUFACTURER
DETAILS.		HARDWARE TO REDUCE NOISE. DOORS TO BE FULL	AND INSTRUCTIONS.
C. MOCK-UP MAY REMAIN AS PART OF THE WORK.	14	MEATHERSTRIPPED ON ALL SIDES.	3. ALL NEW HARDWARE TO BE STAINLESS STEEL. (OR (
PRIOR TO WEATHER BARRIER ASSEMBLY INSTALLATION	ı т .	FRAMING STAGES TO CONFIRM ADEQUATE BLOCKING AND	FLOOD-RESISTANT MATERIAL APPROVED BY FEMA
TO PERFORM REQUIRED MOCK-UP VISUAL INSPECTION AND 🥖		CLEAR <mark>ANCE</mark> S FOR GARAGE DOOR PRIOR TO FINISH.	1. ALL ROOF JACKS AND VENT STACTS/PENETRATION
ANALYSIS AS REQUIRED FOR WARRANTY.	15.	ALL INTERIOR DOORS TO BE SOLID CORE, WOOD U.N.O.	THROUGH THE ROOF SHALL OCCUR IN THE TOP 24"
REER TO WRB MANUFACTURER'S INSTRUCTIONS AND	16.	INTERIOR DOOR HARDWARE SELECTIONS	RIDGES AND BE OUT OF VIEW OF THE "FRONT" OF T
RECOMMENDATIONS.	17.	ATTIC ACCESS DOORS TO BE WIND-LOCK STEALTH	HOME, CONSULT ARCHITECT IF ANY WILL NOT MEET
DELIVER WEATHER BARRIER MATERIALS AND COMPONENTS		FIBERGLASS ACCESS DOOR WITH GASKET SEAL. PAINT TO	REQUIREMENTS FRICK TO FLACING.
IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED	10	MATCH ADJACENT SURFACE.	APPROVED PRODUCTS:
STORE WEATHER BARRIER MATERIALS AS RECOMMENDED BY	10.	DOORS OF FIREPLACES SHALL RECEIVE BIFOLD GLASS	
WEATHER BARRIER MANUFACTURER.		CLEAR TEMPERED GLASS U.N.O.	(ASPHALT SHINGLE ROOFS)
			O'HAGIN
REVIEW REQUIREMENTS FOR SEQUENCING OF INSTALLATION	8B	GLASS AND GLAZING	72.0 SQ. IN. NET FREE VENT AREA (N.F.V.A.)
INSTALLATION OF WINDOWS, DOORS, LOUVERS AND	1.	ALL GLASS AND GLAZING SHALL COMPLY WITH THE MOST	ORDER PREFINISHED COLOR OR PAINT TO MACH ROOF (
FLASHINGS TO PROVIDE A WEATHER-TIGHT BARRIER		SHALL BE LOW-E. INTERIOR SHALL BE CLEAR U.N.O.	FABRICATED VENTS IN WALLS>
	2.	OBTAIN GLASS SIZE BY FIELD MEASUREMENTS. ALL	LOUVERED WALL VENT
MANUFACTURER'S SPECIFIED TIMEERAME FOR UV & OTHER		RESPONSIBILITY FOR CORRECT GLASS SIZES AND	FOR NET FREE VENT AREA (N.F.Y.A.) IS DEPENDENT ON SI
EXPOSURE.		GLASS AND WINDOWS	TO ROOF VENT CALCULATIONS.
RANTY: SEE SECTION 7F.	З.	MIRRORS TO BE 1/4" THICK POLISHED PLATE GLASS WITH	FREE VENTED AREA (N.F.V.A.)
ASTM INTERNATIONAL		"BEST QUALITY" FASTENERS.	
A. ASTM C920: STANDARD SPECIFICATION FOR	4.	ALL WINDOWS TO BE PER CODE.	<pre><fabricated eaves="" in="" vents=""></fabricated></pre>
ELASTOMERIC JOINT SEALANTS.		A. EXTERIOR: 1/4 THICK DUAL GLAZED AS NOTED ON SCHEDULE. INTERIOR: 1/4" THICK	13 SQ. IN. NET FREE VENT AREA (N.F.V.A.)
B. ASTM C1193; STANDARD GUIDE FOR USE OF JOINT		B. SAUNAS AND STEAM ROOMS: 7/16" THICK PPG CLEAR	
C. ASTM D882: TEST METHOD FOR TENSILE PROPERTIES	-	TEMPERED INSULATING GLASS.	EAVE VENTS INTEGRATED AT MALL AT EAVE
OF THIN PLASTIC SHEETING.	5.	ALL MANUFACTURED WINDOWS AND SLIDING GLASS	CALMETAL PRODUCTS
D. ASTM D1117; STANDARD GUIDE FOR EVALUATING NON-		APPROPRIATE TESTING NUMBERS AND SHALL BE LABELED	ASTM A653/A653M, ASTM D-2092-95
MOVEN FABRICS.		AND CERTIFIED AS BEING IN COMPLIANCE WITH STATE TITLE	14"x3" = 33 SQ. IN.
CHARACTERISTICS OF BUILDING MATERIALS.		24 ENERGY LAWS IF THE JOB IS IN CALIFORNIA. REFER	22"x3" = 52 SQ. IN.
F. ASTM E96; TEST METHOD FOR WATER VAPOR		COFFEIGIENT (SHGC) AND OTHER CODE COMPLIANCE	$22 \times 3.5 = 61 5 Q$. IN $22'' \times 5 5'' = 96 5 Q$ IN
		MEASURES IF AVAILABLE.	NET FREE VENT AREA (N.F.V.A.)
G. ASTM E1677; SPECIFICATION FOR AIR RETARDER MATERIAL OR SYSTEM FOR FRAMED BUILDING WALLS	6.	BATHROOM, WATER CLOSET COMPARTMENTS AND OTHER	
H. ASTM E2178; TEST METHOD FOR AIR PERMEANCE OF		SIMILAR ROOMS SHALL BE PROVIDED WITH AGGREGATE	CONTINUOUS VENT
BUILDING MATERIALS.		EXCEPTION (1): PROVIDE A MECHANICAL VENTILATION	DCI PRODUCTS
		SYSTEM EXHAUSTED TO THE OUTSIDE CAPABLE OF	ICC-ES EVALUATED REPORT ESR:2484
ASSEMBLIES.		PROVIDING VENTILATION PER C.R.C. CODE, FOR	9.0 SQ. IN. NET FREE VENT AREA (N.F.V.A.)
AATCC - AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND	7	ALL SHOWER LOCATIONS SHALL RECEIVE CLEAR	
	1.	FRAMELESS 3/8" TEMPERED GLASS (SHATTER-RESISTANT),	[DIVISION 9]
A. TEST METHOD 127 WATER RESISTANCE: HTDROSTATIC PRESSURE TEST		"SHOWERGUARD GLASS" BY GUARDIAN. ENCLOSURES SHALL	EINIGHEG.
TAPPI		BE 84" TALL U.N.O.	
B. TEST METHOD T-410; GRAMS OF PAPER AND	80	WINDOWS AND ERAMES	
TEST METHOD T-460: AIR RESISTANCE (GURLEY HILL	00		GENERAL:
METHOD)	1.	ALL WINDOWS SHALL BE FACTORY SEALED OR SEALED	T. ALL RAN MATERIALS, STONE, NOOD, TILE, ETC. SHA PROFESSIONALLY SEALED ON ALL SIDES PROTECT
		WITHIN 24 HOURS OF DELIVERY TO SITE. (REFER TO SECTION	WARRANTEED.
	2	ALL WINDOWS SHALL BE FULLY WEATHER STRIPPED	2. ALL INTERIOR FINISHES (CABINETS, CARPET, DRYWA
V V S ON 8		FLASHED, AND WEATHER TIGHT. PROVIDE SELF-ADHERED	INSULATION, PAINT, STAIN, ADHESIVES, SEALANTS, AI
		FLASHING AROUND ENTIRE EXTERIOR OPENINGS - SEE	VOC, NO ADDED UREA FORMALDEHYDE, AND ZERO
ENINGS + GLAZING	3		HAZARDOUS AIR POLLUTANTS). ANY DEVIATION WIL
	0.	TBD.	WRITTEN APPROVAL FROM THE CLIENT PRIOR TO US
NERAL:	4.	ALL EXTERIOR WINDOWS - FRAMES TO BE VINYL. ALL	3. CARPETS SHALL HAVE GREEN GUARD, CRI. OR OTH
ALL DOORS & WINDOWS TO HAVE A COASTAL PACKAGE TO		OR ALLIMINUM FRAME(S)	CERTIFICATION.
ALL EXTERIOR DOORS & OPERABLE WINDOWS TO HAVE	5.	WINDOWS AT SHOWERS / WET ROOMS TO BE MADE OF NON-	4. INSTALL NON ABSORBANT BACKER + FULL WATERPE
SCREENS TBD BY OWNER. REFER TO SCHEDULE FOR		ROTTING MATERIALS, OR IF WOOD, PAINTED WITH MARINE	AS CUSTOMART IN THE TRADE BEHIND AND AROUND
ADDITIONAL INFO.	6	GRADE PAINT OR STAIN. SEE DIVISION 9, PAINT.	5. IF VESSEL SINK IS TO BE USED AT LAV LOCATION, A
HARDWARE OPTIONS INCLUDING OPERABILITY WITH CLIENT	0.	INCLUDING OPERABILITY, WITH CLIENT PRIOR TO PLACING	HEIGHT OF COUNTER ON WHICH VESSEL RESTS SUCH
PRIOR TO PLACING ORDER.		ORDER. REFER TO EXTERIOR ELEVATIONS FOR WINDOW	KIM OF THE VESSEL SITS AT +36" ABOVE FINISH FLC
ALL DOOR & WINDOW SIZES TO BE FIELD VERIFIED PRIOR		STYLES, OPERABILITY, AND CONFIGURATION OF BREAK-UPS.	94 ATH AND PI AGTER.
TO PLACING ORDER. ARCHITECT/ OWNER SHALL CARRY NO			1. LATH AND PLASTER SHALL BE APPLIED IN ACCORD
CONTRACTOR TO VERIFY IF URBAN FIRE CODE GLAZING	8D	SKYLIGHTS	THE CURRENT APPLICABLE CODE OF REGULATIONS.
REQUIREMENTS ARE NEEDED PRIOR TO FINAL ORDER OF	1.	INSTALL PER MANUFACTURER'S RECOMMENDATIONS.	2. EXTERIOR PLASTER AND STUCCO SHALL BE MULTI-C
DOORS.	⊿. n	WATER TEST ENTIRE SKYLIGHT AFTER INGTALL ATION	APPLICATION WITH METAL LATH, FASTENERS, SUPPO
		SKYLIGHTS SHALL BE AS NOTED ON PLAN.	PLANS.
DUURD AND FRAMED	4.	ALL SKYLIGHTS TO BE CURB MOUNTED U.N.O. & HAVE LOW-E	3. FINAL COLOR COAT SHALL BE PER PLANS AND CON
STAIN GRADE DOORS SHALL BE AS SPECIFIED IN THE PLANS.		PLUS 100% UV PROTECTIVE GLAZING.	WITH ARCHITECT AND OWNER PRIOR TO PURCHASE.
PROTECTED IMMEDIATELY UPON DELIVERY AND SEALED	APP	ROVED PRODUCTS:	CONTROL JOINTS EVERY 144 SF TO MINIMIZE CRACH
MITHIN 24 HOURS OF DELIVERY TO SITE.	TUBL	JLAR DAYLIGHTING DEVICE: RESIDENTIAL SERIES; 14"	5. NEW SMOOTH STUCCO INSTALLATION:

RCH. 24 RO.		 A. APPLY WEATHER RESISTIVE BARRIER OVER SHEATHING B. APPLY GRADE 'D' BUILDING PAPER C. APPLY "STRUCTALATH" BY STRUCTA WIRE CORP. AND FASTEN TO STUDS PER MAUNFACTURER'S RECOMMENDATIONS. (NO STAPLES). D. APPLY 3/8" SCRATCH / 3/8" BROWN COATS WITH 		IDENCE BLVD. BEACH 90803
OR TO		 FIBERGLASS FIBERS MIXED IN EACH COAT. E. APPLY SELF ADHESIVE FIBERGLASS MESH ROLL (36" WIDTH MINIMUM) OVER BROWN COAT. F. APPLY 1/8" ELASTOMERIC FINISH COAT WITH INTEGRAL 		N N N N N N N N N N N N N N N N N N N
EEN DATION DL. PAINT	6.	COLOR. NON-SMOOTH STUCCO INSTALLATION: A. COLOR COAT FOUNDATION BELOW SCREED & PAINT TO MATCH		
D DYMBOL. 1ATERIAL	7	 B. NO LATH FASTENERS THROUGH HORIZONTAL SURFACES, WIRE-TIE CONTROL JOINT & CORNER-AIDE ACCESSORIES AT HORIZONTAL. RESURFACE STUCCO INSTALLATION: 		の 「 し し し し し し し し し し し し し
PENINGS R 200 SF	1.	 A. SANDBLAST EXISTING STUCCO FINISH COAT. B. SURFACE TO BE CLEANED AND FREE OF DUST AND DEBRIS. C. APPLY SELE ADHESIVE EIBERGLASS MESH ROLL (36" 		
FRAMING RSEAL M) TO BE		 D. APPLY 1/8" ELASTOMERIC FINISH COAT WITH INTEGRAL COLOR. 		U I representatives, fro
SPECS	an			
OTHER 5	- ID 1.	ALL DRYWALL ON PROJECT TO BE 5/8" THICK, U.N.O. EXCEPTION: DRYWALL TO MATCH EXISTING WHERE CEILING/ WALL PLANE TO CONTINUE AND NOT REPLACING EXISTING DRYWALL; AND WHERE IT DOES NOT NEED TO BE A RATED		. 9080 cts.com
Г <i>О</i>		WALL ASSEMBLY.		
HE HOSE	2.	UNDERSIDE OF STAIRS & GARAGES ADJACENT TO LIVING SPACE OR SHARED ATTIC SPACE SHALL HAVE (1) LAYER 5/8"		yand defei
		GYP. BD. AT WALLS (INCLUDING INDIVIDUAL POSTS) AND (1) LAYER 5/8" TYPE "X" GYP. BD. AT CEILING, PER CURRENT CODE. FIRE RATED WALL TO CONTINUE TO UNDERSIDE OF ATTIC SHEATHING. ANY ACCESS OPENING THROUGH FIRE		C H I T C H I T jeannette
	З.	RATED WALL IN ATTIC SHALL BE FIRE-RATED. DRYWALL TO HAVE SMOOTH TEXTURE. ALL CORNERS AND EDGES OF DRYWALL SHALL HAVE SOLARE CORNERS		
OLOR.	4.	ALL INTERIOR WALLS AND CEILINGS OF ELEVATOR SHAFTS SHALL BE LINED WITH 1 LAYER OF 5/8" TYPE "X" "QUIETROCK"		the client a
	5.	GYP. BD. ALL DRYWALL SHALL BE SCREWED (NO NAILS) TO STUDS		
ZE, REFER		ACCORDING TO MOST CURRENT CODE REQUIREMENTS FOR THE TYPES AND THICKNESS BEING USED. ALL DRYWALL		T. 913; . 913; . 13
NET		APPLICATIONS TO BE INSPECTED AND APPROVED PRIOR TO TAPING.		endor
	BEAL APPF	DEX PAPER-FACED METAL CORNER BEAD BY USG OR ARCH. ROVED EQUAL. TILE MORK:		u permission and conse
	1.	MATERIALS: GROUT: A. NON SANDED PRE-MIXED GROUT. REFER TO MOST CURRENT APPROVED TESTING NUMBERS		t obtaining writter
		 B. USE ONLY EPOXY GROUT MATERIAL. C. NON SANDED GROUT MAY BE USED W/ WRITTEN APPROVAL BY OWNER, ARCHITECT OR DESIGNER. TIL F. 		ler party, without firs
		A. COLOR AND SIZE TO BE SELECTED BY ARCHITECT AND OWNER.		
	2. 3.	REFER TO SECTION 7G FOR WATERPROOFING. FLOOR TILES TO BE SET IN 3/4" THICK MORTAR BED OVER EXTERIOR GRADE PLYWOOD SHEATHING, WITH WIRE FABRIC IN MORTAR BED.		e they to be assign
	4.	EXTERIOR TILES AT DECKS OVER APPROVED FLUID-APPLIED WATERPROOFING.		
	5.	TILE TO BE APPLIED IN ACCORDANCE WITH C.B.C. AND SET WITH FLEXIBLE WATERPROOF GROUT.		form whatso
L BE	D.	A. SHALL NOT BE INSTALLED OVER HARD RUBBER FLOAT B. MUST BE INSTALLED OVER FLEXIBLE THIN SET		uced, in any
בµ ≉ ו		C. MUST INSTALL 100% SILICONE EXPANSION JOINTS AND BACKER ROD AT ALL CORNERS.		
L OR NO	7.	TILE BACKING ASSEMBLY: PROVIDE A NON-ABSORBANT WALL (TILE OR APPROVED EQUAL) UP TO THE CEILING AT SHOWERS,		
HAPS (REQUIRE		U.N.O. MATERIALS OTHER THAN STRUCTURAL ELEMENTS TO BE MOISTURE RESISTANT. GREENBOARD IS NOT PERMITTED AT		
E OF ANY R	8.	BOARD. TILE SHALL BE INSTALLED OVER <u>SCHLUTER KERDI.</u> ALL SHOWER, TUB, TILE, AND STONE TO WALL CONDITIONS - ALL HORIZONTAL SURFACES MEETING VERTICAL SURFACES	-	REVISION: PC#:
00FING TUBS	a	SHALL BE CAULKED WITH COLOR MATCHED CAULKING, NOT GROUTED. FINAL THE LAYOUT TO BE DETERMINED PRIOR TO		DB: CI/JT
DJUST THAT THE OR.	1.	INSTALLATION. DETAILED PLAN SHALL BE SUBMITTED TO ARCHITECT. ALIGN ALL ELEMENTS IN TILE WALLS (SHAMPOO/ SOAP RECESS, FAUCETS), ETC. WITH GROUT LINES OR IN MIDSPAN OF FULL TILE.		JOB#: 2021.10.76
NCE WITH	9D 1.	PAINTING AND FINISHING VERIFY FINAL TEXTURE/ COLOR SELECTIONS PRIOR TO		S. JEANNETTE
OAT RTS	2.	APPLICATION W/ ARCHITECT, OWNER OR INT. DESIGNER. PRIME, THEN PAINT ALL EXTERIOR WALLS, STEEL DOORS,		CALL AND AND ATE
DTED ON		ROOF VENTILATORS & JACKS, SHEET METAL WORK, LADDERS, AND OTHER EXPOSED MATERIALS TO MATCH ADJACENT MATERIAL EXCEPT PRE-FINISHED ITEMS SUCH AS		OF CALIFOR
	З.	ALUMINUM DOORS/ WINDOWS ETC. EXTERIOR COLORS AND STAINS SHALL BE AS SELECTED BY		s, Inc. expré
LING.	4.	ARCHITECT & CONFIRMED W/ OWNER. THE PAINTING SUB-CONTRACTOR SHALL APPROVE THE CONDITION OF ALL SUBFACES BEFORE CONVENCING MORE		R4.3
		CUMMENCING ALL JUNI AULJ DEFURE COMMENCING MURR.		DATE: 12/20/2022

AFTER APPROVAL OF SURFACES, THE PAINTING SUB-CONTRACTOR SHALL PATCH & FILL AND AS REQUIRED ALL NEW SURFACES SHALL BE SEALED IMMEDIATELY. ALL PAINT SURFACES TO RECEIVE PROPER PRIMER THEN

THREE COATS PAINT MINIMUM. EXTERIOR PLASTER AND STUCCO TO BE COLOR COATED. THREE COATS MINIMUM STAIN OR PAINT AS SELECTED BY OWNER FOR ALL INTERIOR 24. ALL T&G BOARD MUST BE CLEAR GRAIN - NO KNOTS. CEDAR SURFACES. CABINETS SHALL BE HAVE 4 COATS PAINT OR STAIN AND LACQUERED.

INTERIOR PREPARATION - SANDED AND HOLES FILLED

PAINT - 1 COAT SEALER

- 1 COAT PRIMER
- 2 COATS FINISH COLOR
- PREPARATION SANDED AND BLEMISHES REMOVED STAIN -1 COAT STAIN CONTROLLER
 - 1 COAT STAIN
- 2 COATS LACQUER FINISH

EXTERIOR: ENAMELS -KITCHEN, BATHROOMS, GARAGE, CABINETRY FLAT

- WALLS AND CEILINGS IN ALL OTHER ROOMS. 6. PRIME SURFACES AS REQUIRED. STEEL SHALL BE SHOP
- PRIMED
- SURFACE TEXTURES SHALL BE APPLIED AS NOTED ON PLANS.

9E FLOORING

- ALL FLOORING AND OTHER MATERIALS THAT ARE TO REMAIN PER PLANS SHALL BE PROPERLY COVERED AND PROTECTED FROM CONSTRUCTION DAMAGE AND WEATHER DAMAGE. ALL NEW EXPOSED CONCRETE WITHIN HOME TO BE COVERED AND PROTECTED AFTER POUR THROUGH FINISH STAGES.
- ALL FLOOR MATERIAL CHANGES SHALL OCCUR HIDDEN UNDER DOORS WHERE POSSIBLE. IF NO DOOR EXISTS, CENTER IN JAMB.

[D|V|S|ON 10]SPECIALITIES:

10A FIREPLACES:

- ONLY USE T-24 APPROVED GAS ONLY, DIRECT VENT UNITS, U.N.O.
- NEW WOOD BURNING FIREPLACES ARE NOT LEGALLY ALLOWED IN CALIFORNIA PER AQMD.

[DIVISION 11] N/A

[D|V|S|ON 12]

CASEWORK:

- IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SIZE OF OPENINGS WHERE CABINETS ARE TO BE LOCATED IN THE FIELD.
- 2. DOOR & DRAWER STYLES TO BE CHOSEN BY OWNER/ ARCHITECT/ OR MATCH EXISTING IF REMODEL.
- ALL CABINETRY SHALL MEET WOODWORK INSTITUTE OF CALIFORNIA REQUIREMENTS, UNLESS OTHERWISE NOTED. VERIFY ALL CABINETRY LAYOUTS W/ CLIENT AND ALL
- FINISHED DIMENSIONS PRIOR TO FABRICATION.
- VERIFY ALL APPLIANCE AND FIXTURE SIZES AND INSTALLATION REQUIREMENTS PRIOR TO CONSTRUCTING CABINETS.
- SEE ELECTRICAL PLAN FOR ANY LIGHTING AND OUTLETS ASSOCIATED WITH CABINETS. PROVIDE SHORTENED DRAWER AT LOCATIONS WHERE ELECTRICAL RECEPTACLES ARE PLANNED.
- PARTICLE BOARD SHALL NOT BE USED IN ANY PART OF THE CABINETRY UNLESS LOW/NO VOC AND FORMALDEHYDE FREE, AND HAS BEEN APPROVED BY THE ARCHITECT.
- FLAT SLAB CABINET DOORS AND DRAWERS SHALL HAVE A NO VOC CORE & BE UREA-FORMALDEHYDE-FREE WITH WOOD VENEER FINISH PER PLAN OR ARCHITECT APPROVED EQUAL. PAINT GRADE CABINETRY SHALL BE MADE FROM A NON-TOXIC/VOC MATERIAL WITH PAINTABLE FINISH AS APPROVED BY DESIGNER OR ARCHITECT.
- ALL CABINET INTERIORS AND SHELVES SHALL BE NO OR EXTREMLY LOW VOC MDF WITH WOOD VENEER FINISH OR ARCHITECT APPROVED EQUAL
- 10. CABINET DRAWER INTERIOR BOXES SHALL BE 7-LAYER PLYWOOD WITH DOVETAIL JOINTS.
- 11. GLASS PANELS IN CABINET DOORS & SHELVES SHALL BE CLEAR AND TEMPERED. 12. ALL CABINET HEIGHTS SHALL BE MEASURED FROM THE
- FINISHED FLOOR SURFACES
- 13. ALL UPPER CABINETS SHALL BE 15" INTERIOR CLEAR DEEP MINIMUM WITH CABINETRY CROWN. UPPER CABINETS ABOVE WASHER AND DRYER TO BE 20" DEEP. UPPER CABINET SHELVES SHALL BE ADJUSTABLE. ALL LOWER CABINETS SHALL BE 24" DEEP.
- 14. ALL CABINETS SHALL MAINTAIN SPACE FOR CABINET CROWN TO FULLY TERMINATE INTO ADJACENT WALL & CEILING.
- 15. TYPICAL TOESPACES SHALL BE 4" HIGH AND 3" DEEP. AT CABINETS WHERE TOESPACE VENTS OR HEATERS ARE PROVIDED ALLOW 5" HIGH TOESPACE.
- 16. MOLD DETERRENT: VACUUM OUT ALL ENCLOSED TOE KICKS AND OTHER ENCLOSED AREAS OF CABINETS PRIOR TO FINAL INSTALL
- CABINETRY LACQUER SHALL BE GREENGUARD CERTIFIED 17. 18. PROVIDE ROLL OUT SHELVES BELOW ALL SINKS
- ALL CABINETS SHALL HAVE "BLUM" HINGES. 19.
- 20. ALL CABINET DRAWERS SHALL HAVE FULL EXTENSION ROLLING HARDWARE BY "ACCURIDE MANUFACTURING" OR ARCHITECT APPROVED EQUAL.

21. ALL DRAWERS AND DOORS SHALL HAVE SOFT CLOSE ACTION HINGES AND GLIDES

- 22. USE SUGATSUNE "MC-37" TOUCH LATCHES FOR ALL DOORS INCLUDING CABINET DOORS, THAT DO NOT USE PULLS. WWW. SUGATSUNE.COM.
- 23. ALL SHELVES SHALL BE ADJUSTABLE.
- OR SPRUCE WOOD MAY BE USED. PINE SHALL NOT BE USED. 25. SEE INTERIORS FOR ADDITIONAL INFORMATION IF AVAILABLE. 1.

[DIVISION 13] N/A [DIVISION 14] N/A [DIVISION 15] N/A [DIVISION 16] N/A [D|V|S|ON 17]

SPECIAL INSPECTION

17A SPECIAL INSPECTION

- SPECIAL INSPECTIONS REQUIRED BY THE STRUCTURAL ENGINEER SHALL BE CARRIED OUT AS OUTLINED IN THE ENGINEERING PLANS. IN THE ABSENCE OF SUCH DIRECTION, INSPECTIONS SHALL BE CARRIED OUT AS REQUIRED BY THE LOCAL CITY REQUIREMENTS. DEPUTY INSPECTIONS SHALL BE CARRIED OUT AS REQUIRED BY THE ENGINEERING PLANS AND 8. THE LOCAL CITY REQUIREMENTS. ALL INSPECTIONS SHALL BE
- IN ACCORDANCE WITH THE MOST CURRENT BUILDING CODE. THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER, THE ENGINEER OF RECORD, OR AN OWNER'S AGENT, NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK.
- ADDITIONAL GENERAL CONTRACTOR RESPONSIBILITIES: GENERAL CONTRACTOR SHALL PROVIDE HISTORICAL FRAMING DOCUMENTATION TO THE CLIENT IN THE FORM OF VIDEO & DIGITAL STILL PHOTOGRAPHY. DOCUMENTATION SHALL INCLUDE ENTIRE ROUGH FRAMING, AS WELL AS MECHANICAL, PLUMBING, AND ELECTRICAL INSTALLATION PRIOR TO INSULATING AND WRAPPING / DRYWALL
- GENERAL CONTRACTOR SHALL CERTIFY TO THE CLIENT IN WRITING THAT ALL ELECTRICAL WIRING AND PLUMBING SYSTEMS HAVE BEEN TESTED AND FOUND TO BE OPERATIONAL AND FREE OF DEFECTS, BOTH BEFORE AND AFTER DRYWALL INSTALLATION.

[DIVISION 18] N/A

[DIVISION 19] N/A

[DIVISION 20] N/A

[D|V|S|ON 21]

FIRE SUPPRESSION

- FIRE SPRINKLER SYSTEM:
 - A. ALL NEW CONSTRUCTION OF ANY DWELLING UNIT, AND ALL RENOVATIONS TO EXISTING DWELLING UNITS OBSERVED AS BEING "NEW CONSTRUCTION" BY THE LOCAL JURISDICTION, SHALL HAVE A FIRE SPRINKLER SYSTEM INSTALLED. FIRE SPRINKLER LAYOUT MUST BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION ARCHITECT WILL CHECK FOR ALIGNMENT, CENTERING
 - BETWEEN CEILING FIXTURES, AND DESIGN INTENT ONLY B. FIRE SPRINKLER DESIGN SHALL CONFORM TO NFPA AND CRC REGULATIONS AND BE UNDER A SEPARATE, DEFERRED SUBMITTAL AND SHALL BE APPROVED BY
 - THE CITY/AGENCIES PRIOR TO INSTALLATION. ALL FIRE SPRINKLER HEADS SHALL BE FLUSH MOUNT DO NOT PAINT
 - D. SPRINKLER MAIN CONTROL VALVES TO BE LOCATED IN GARAGE AND FINISHED WITH 1X2 HARD TRIM AND EQUIPPED WITH A TOUCH LATCH WOOD DOOR PANEL.
 - E. THE NATIONAL FIRE SPRINKLER ASSOCIATION RECOMMENDS PROVIDING MIN. 18 INCHES OF CLEARANCE BELOW FIRE SPRINKLER HEADS.
 - DO NOT HANG ANYTHING FROM ANY PART OF A FIRE F SUPPRESSION SYSTEM.
 - G. ALL SPRINKLER HEADS SHALL ALIGN WITH CEILING FIXTURES AND/OR VENT GRILLS WITHIN A SPACE AND ADJACENT SPACES WHERE APPLICABLE. IF NEEDED, MODIFY FRAMING TO OBTAIN PROPER ALIGNMENT GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR RELOCATION AND PATCH/PAINT OF INAPPROPRIATELY PLACED DEVICES IF NOTICED IN A LATER STAGE OF CONSTRUCTION. CONTACT ARCHITECT WITH ANY DISCREPANCIES AT ROUGH FRAMING.
 - O. WATER METER TO BE UPGRADED TO THE MINIMUM SIZE

REQUIRED FOR SPRINKLER SYSTEM

[DIVISION 22] PLUMBING

- ALL WORK AND MATERIALS TO CONFORM TO ALL REQUIREMENTS OF LOCAL PLUMBING AND BUILDING CODES. PLUMBING CONTRACTOR SHALL SUBMIT WASTE, WATER, AND GAS LAYOUTS IF REQUIRED BY THE LOCAL BUILDING DEPARTMENT.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS OF UTILITIES TO ALL EQUIPMENT. SCOPE OF WORK:
 - THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, FIXTURES, AND SERVICES NECESSARY FOR THE EXECUTION AND COMPLETION OF ALL PLUMBING WORK AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. FOR SUCH EQUIPMENT THAT MAY BE PROVIDED BY SEPARATE CONTRACTOR,
 - PLUMBER SHALL COORDINATE, INSTALL AND SERVICE. THE CONTRACTOR SHALL PROVIDE ALL GAS LINES AND FINAL CONNECTIONS AND TESTING AS REQUIRED. THE CONTRACTOR SHALL PROVIDE NECESSARY CONDENSATE DRAINS FROM ALL EQUIPMENT TO
 - APPROPRIATE WASTE SYSTEM. ALL OWNER SELECTED / PURCHASED FIXTURES TO BE INSTALLED BY THE PLUMBER
- ALL MATERIALS AND EQUIPMENT FOR PLUMBING SYSTEMS SHALL BE OF NEW STOCK. ALL MATERIALS, EQUIPMENT, APPARATUS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIAL
- PLUMBER SHALL REVIEW LOCATION OF SUPPLY AND MASTE LINE<mark>S WITH CONT</mark>RACTOR PRIOR TO INSTALLATION NON-TREATED WATER SHALL BE PROVIDED TO ALL EXTERIOR OUTLETS.
- IT IS THE GOAL OF THE PLUMBING AND WASTE SYSTEM TO BE SILENT. CONTRACTOR SHALL PLACE PIPES, USE EQUIPMENT AND OTHER APPARATUS AND PARTS, INSULATE AS NECESSARY TO ACHIEVE THIS GOAL
- ALL WATER SUPPLY LINES TO THE HOUSE SHALL BE 1-1/2" MIN. UPGRADE WATER METER AT STREET / ALLEY IF REQUIRED FOR NEW WATER HEATER
- 10. SEWER LATERAL SHALL BE ABS BELOW GRADE OF THE APPROPRIATE SIZE PER C.P.C. INSTALL NEW CITY LATERAL IF REQUIRED BY LOCAL CITY ORDINANCES. VERIFY NECESSITY DURING BID PROCESS. COST OF REPLACEMENT SHALL BE CONTRACTOR'S RESPONSIBILITY IF NOT INCLUDED IN THE APPROVED BID.
- USE ONLY U.S. MADE CAST IRON & FITTINGS IF REQUIRED FOR 11. RETURN PIPES WITH "SEAM UP".
- 12. ALL COPPER ON JOB SHALL BE TYPE "K" 13. RUN MAIN TRUNK LINES AT HEIGHTS CLOSEST TO FAUCET +30"
- 14. ALL COPPER LINES SHALL BE SOLDERED, NO JOINTS ARE PERMITTED BELOW ANY SLAB AREAS. FOR NEW CONSTRUCTION, WATER LINES TO AND IN BUILDING
 - TO BUILDING 1-1/2" DIAMETER MINIMUM
 - TO WATER HEATER 1" DIAMETER MINIMUM TO ALL WET AREAS 3/4" DIAMETER MINIMUM
 - D TO ALL BATHTUB FIXTURES 3/4" DIAMETER MINIMUM. FIXTURE LINES SHALL BE PER MANUFACTURER'S
- RECOMMENDATIONS. 16. FOR REMODELS: GENERAL CONTRACTOR SHALL PROVIDE A ROTO-ROOTER SERVICE FOR THE ENTIRE WASTE SYSTEM PRIOR TO THE OWNER MOVING IN.
- ROOF DRAIN LINES SHALL BE ABS AND INSULATED, OVER 17. FLOW PIPING CAN BE SCHEDULE 40 PVC 2" MIN. 18. ALL WATER HEATERS SHALL SIT IN "SMITTY" PANS WITH 1" O.D P.V.C. DRAIN LINE TO OUTSIDE PER C.P.C., AND SHALL REST UPON AN 18" HIGH PLATFORM, WITH SEISMIC TIES TO WALL
- U.N.O. CONTRACTOR SHALL INSTALL ALL FIXTURES AND FAUCETS -19. EVEN IF PROVIDED BY OWNER
- 20. VERIFY FINAL FIXTURE SELECTION AND COLOR WITH OWNER PRIOR TO PLACING ORDER
- 21. HAIR-CATCHERS SHALL BE INSTALLED IN ALL SHOWER DRAINS.
- 22. ALL WATER LINES TO BE COPPER OR PEX. ALL WATER LINES (HOT & COLD) SHALL BE INSULATED ALONG THEIR FULL LENGTH.
- 23. NEW WATER HEATERS TO BE TANKLESS WATER HEATER W/ RECIRCULATION PUMP, LOCATED PER PLANS. PLUMBER TO REVIEW SPECIFIC NEEDS W/ CLIENT PRIOR TO PURCHASE OF UNIT.
- 24. GAS METER TO HAVE INSTALLED AN "EARTHQUAKE GAS SHUT-OFF VALVE."
- 25. ALL PLUMBING VENT LINES AND WASTE LINES FROM FLOORS ABOVE GRADE LEVEL AND ALL PLUMBING/WET WALLS ADJACENT TO SLEEPING SPACES SHALL BE ABS PIPES WITH LOWRY'S ACOUSTICAL PIPE WRAP TAPE PUTTY WRAP - WRAPPED TO FULLY ENCASE ENTIRE LENGTH OF PIPE (2-LAYERS ON WASTE LINES AND 1-LAYER ON VENT LINES). MMM.HALOWRY.COM
- 26. WASHING MACHINE AND WATER HEATERS (LOCATED AT INTERIOR SPACES) SHALL HAVE A WATER SHUT OFF VALVE WITH LEAK SENSOR AT FLOOR.
- SOUND ATTENUATION / PIPE ANCHORING DEVICES: DEVICES 27. SHALL ANCHOR TO STUDS/BLOCKING: USE ACOUSTO-CLAMP HIGH-EAR ACOUSTO-CLAMP, ACOUSTO-PAD, ACOUSTO-LATOR & ACOUSTO-KIT FOR ALL ATTACHMENTS BY LSP PRODUCTS GROUP: 800/854.3215 THESE UNITS ARE BLUE/ ORANGE POLY DEVICES. NO STANDARD "WHITE" PLASTIC UNITS SHALL BE ACCEPTED. IAMPO COMPLIANCE #2139 28. ON-DEMAND RECIRCULATION PUMP ON HOT WATER SUPPLY SYSTEM: INSULATE ALL NEW HOT WATER LINES CONTROLLED BY MOTION SENSORS @ ALL BATHROOMS & BUTTON CONTROL BELOW SINK @ KITCHEN. MOTION SENSOR OR

BUTTON LOCATED IN:

- BATHR*OO*MS A. B. KITCHEN/ WET BARS
- CONTACT INFORMATION:
- ACT, INC. METLUND SYSTEMS
 - 3176 PULLMAN ST. STE 119, COSTA MESA, CA 92626 800/638.5863, 714/688.1200

DIVISION 23

MECHANICAL

HVAC SUB-CONTRACTOR SHALL COORDINATE THE SIZING OF ALL DUCTWORK & VERIFY THE SPACE ALLOCATED IN THE PLANS W/ THE CONTRACTOR PRIOR TO CONSTRUCTION OF AREAS INCLUDING, BUT NOT LIMITED TO UNDER FLOOR, ATTIC \$/OR SOFFITS.

- HVAC SYSTEMS SHALL CONFORM TO ALL APPLICABLE SECTIONS C.R.C., C.M.C., UNIFORM FIRE CODE, STATE TITLE 24 REQUIREMENTS AND ALL LOCAL CODES AND ORDINANCES ALONG WITH MANUAL J & D REQUIREMENTS FOR NEW HOMES AND REMODELS PER CODE REQUIREMENTS 2. ALL HEATING, COOLING, VENTILATING SYSTEMS AND APPLIANCES SHALL COMPLY WITH THE MOST CURRENT
- CALIFORNIA MECHANICAL CODE. HVAC CONTRACTOR TO PROPERLY SIZE THE HEATER/ AC SYSTEM WITH MAKE / MODEL OF UNITS (BASED ON LOAD
- CALCULATIONS, GLAZING, & INSULATION, ETC ...) AT EACH SPACE TO BE HEATED/COOLED AND VERIFY SELECTION WITH OWNER PRIOR TO ORDER.
- CONTRACTOR SHALL INSTALL ALL MECHANICAL EQUIPMENT IN ACCORDANCE W/ RECOMMENDATIONS OF THE MANUFACTURER - EVEN IF PROVIDED BY OWNER.
- THE LOCATIONS OF DUCTS, PIPING, APPARATUS AND 5. EQUIPMENT INDICATED ON THE DRAWINGS ARE APPROXIMATE. INSTALL ALL PIPING AND EQUIPMENT IN THE SPACE ALLOTTED IN A MANNER TO AVOID ALL OBSTRUCTIONS. COORDINATE WITH FRAMING, ELECTRICAL AND PLUMBING CONTRACTORS PROVIDE CLEARANCE FOR WORKING SPACE IN FRONT OF HVAC UNIT PER CODE, MANUFACTURERS SPECIFICATIONS AND
- CURRENT C.M.C IT IS THE INTENT OF THESE SPECIFICATIONS AND DESIGN CONDITIONS THAT THE ENTIRE SYSTEM, INCLUDING EQUIPMENT, AIR DUCTS AND ALL OTHER PARTS SHALL BE NOISELESS, AND FREE OF VIBRATION TRANSMISSION. ALL WORK REQUIRED TO ACCOMPLISH THESE ENDS SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL COST INCLUDED BUT NOT LIMITED TO VIBRATION ISOLATORS UNDER EQUIPMENT.
- HVAC CONTRACTOR TO SIZE ALL DUCTS & VERIFY DESIGN FOR EFFICIENCY PRIOR TO START OF WORK. THE TITLE-24 COMPLIANCE REPORT IS FOR COMPLIANCE PURPOSES ONLY THE HVAC CONTRACTOR WHO INSTALLS THE EQUIPMENT (AS APPROVED EXHAUST FAN: WELL AS THE HERS RATER) IS RESPONSIBLE FOR FILLING OUT THE APPROPRIATE COMPLIANCE FORMS. CONTACT ARCHITECT FOR ANY RECOMMENDED ADJUSTMENTS FROM PLANS.
- CONTRACTOR SHALL VERIFY ADEQUATE DUCT CLEARANCES PRIOR TO INSTALLATION.
- 10. DUCTS PASSING THROUGH THE CEILING SHALL COMPLY WITH THE MOST CURRENT C.R.C.
- 11. ALL DUCT WORK SHALL BE INSULATED AND HELD THE MINIMUM DISTANCE REQUIRED BY CODE OFF ANY DIRT. LOCATE DUCTS IN CONDITIONED SPACE WHENEVER POSSIBLE. 12
- 13. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION: AT THE TIME OF DEMO, ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR EQUIVALENT METHODS TO ELIMINATE DUST OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM.
- ALL MECHANICAL DUCTS TO BE RIGID, WHERE POSSIBLE. AT ATTIC INSTALLATION DUCTS TO LAY AT CEILING FRAMING AND BE WRAPPED WITH INSULATION PER T24 REPORT.
- DUCT FROM RETURN AIR GRILLE TO AIR HANDLER (FAU) 15. SHALL BE FELT-LINED AND 12' MINIMUM IN LENGTH WITH (3) BENDS
- PAINT INSIDE OF DUCTS BEHIND GRILLE, SUPPLY, AND 16. RETURN W/ NON TOXIC FLAT BLACK PAINT.
- PROVIDE TRANSFER / JUMPER DUCTS FOR PRESSURE 17. BALANCING AS NEEDED FOR PROPER PERFORMANCE 18. TEST HOME FOR AIR LEAKS VIA BLOWER DOOR TESTING;
- PROVIDE DOCUMENTATION TO OWNER USE MASTIC TAPE FOR DUCT SEALING TO PROVIDE
- DURABILITY OVER TIME. 20. SEAL DUCT CHASES, SUPPLY AND RETURN GRILLE OPENINGS AFTER INSTALLATION TO PREVENT DUST AND WASTE FROM ENTERING.
- 21. CLEAN AND VACUUM DUCT LINES PRIOR TO OCCUPANCY. 22. AIR FILTRATION SHALL BE PROVIDED WITH ELECTROSTATIC AIR FILTRATION OR HEPA FILTRATION. MERV RATING TO BE PER CURRENT CODE.
- PROVIDE FOR ENHANCED OUTDOOR AIR VENTILATION PER 23. LEED EQ 4.2.
- NEW FRESH AIR MAKEUP SYSTEM TO BE INTEGRATED INTO 24. THE HVAC SYSTEM.
- MECHANICAL SYSTEM SHALL BE EQUIPPED WITH AIR 25. CONDITIONING, ELECTROSTATIC FILTER UNLESS OTHERWISE NOTED. A.C. CONDENSER LOCATION SHALL BE REVIEWED WITH ARCHITECT, PROVIDE CONDENSATE DRAIN LINES PER
- THE MOST CURRENT APPLICABLE CODE OF REGULATIONS. ALL AIR CONDITIONING UNITS AND HEAT PUMPS SHALL USE 26. NON TOXIC REFRIGERANT.
- 27. HEIGHT OF ALL SUPPLY AIR REGISTERS SHALL BE AS NOTED ON THE MECHANICAL PLAN. THE MEASUREMENT SHALL BE TAKEN FROM THE FINISH FLOOR DIRECTLY BELOW THAT

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- AND SCHEDULES OR ARCHITECT APPROVED EQUAL.
 8. ALL ELECTRICALLY GENERATED FIXTURES, OUTLETS, EQUIPMENT OR DEVICES INSTALLED BY THIS CONTRACTOR OR OTHERS SHALL BE FULLY CONNECTED TO PROPER ELECTRICAL SOURCE AND LEFT IN OPERATING CONDITION.
 9. WALL SWITCHES TO BE 42" ABOVE FLOOR TO CENTER OF
- 9. WALL SMITCHES TO BE 42 ABOVE FLOOR TO CEI SMITCH PLATE. VERIFY W/ OWNER.
- 10. ALL LIGHT SWITCHES, DUPLEX OUTLETS, TV CABLE JACKS, AND TELEPHONE JACKS SHALL MATCH EXISTING COLOR AND STYLES IF EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE. DIMMERS SHALL BE OF THE SLIDE TYPE AND MATCH EXISTING.
- ALL LIGHT FIXTURES SHALL HAVE DIMMER SMITCHES.
 SMITCHES FOR CEILING FANS WITH LIGHT KITS SHALL HAVE FULL DIMMER & SPEED/DIRECTION CONTROL.
- 13. EXISTING ELECTRICAL OUTLETS MAY EXIST IN PROXIMITY OF PROPOSED OUTLETS. VERIFY EXISTING OUTLET LOCATIONS PRIOR TO INSTALLATION OF NEW ONES NEARBY.
- 14. ALL OUTLETS LOCATED AT EXTERIOR OF BUILDING TO BE GROUNDED TYPE AND WATERPROOF + 18" ABOVE FINISH SURFACE.
- 15. ALL OUTLETS SHALL BE INSTALLED VERTICALLY AT 12"+ TO CENTERLINE ABOVE FLOOR, AND BE OF GROUNDED TYPE, UNLESS NOTED OTHERWISE.
- 16. RECESSED OUTLETS TO BE TAMPER RESISTANT, INSTALLED AT LOCATIONS PER PLAN (INSTALLED BEHIND FURNITURE, REFRIGERATOR AND TV LOCATIONS). VERIFY ADDITIONAL LOCATIONS WITH CLIENT IN FIELD PRIOR TO INSTALLATION.
- 17. VERIFY LOCATION OF FLOOR OUTLETS, PHONE JACKS, ETC. WITH OWNER AND ARCHITECT IN FIELD. EXISTING OUTLET AND SWITCH COVERS SHALL BE REPLACED TO MATCH NEW COVERS, COORDINATE QUANTITIES PRIOR TO ORDERING.
- 18. HOLIDAY LIGHT OUTLETS SHALL BE UNDER EAVES AND HIDDEN WHERE POSSIBLE. TIE RECEPTACLE INTO TIMECLOCK SWITCH THROUGH DAMP AND WET CONDUIT FEED - SEE PLAN.
- CONTACT ARCHITECT WHEN ELECTRICAL BOXES & LIGHTS ARE SET FOR FINAL REVIEW PRIOR TO RUNNING LINES.
 PROVIDE A 24" MINIMUM SEPARATION BETWEEN ALL
- ELECTRICAL WIRING AND TELEPHONE, CABLE, T.V., INTERCOM, SECURITY, SOUND SYSTEM AND COMPUTER NETWORK WIRING.
- 21. VERIFY EXACT SPEAKER LOCATIONS W/ OWNER PRIOR TO SETTING MUD RINGS.
- 22. WIRE ALL SECURITY LIGHTS TO SECURITY LIGHT SWITCHES.
 23. CONTRACTOR SHALL COORDINATE INSTALLATION OF SECURITY SYSTEM. COMPANY TO BE SELECTED BY OWNER OR CONNECT TO EXISTING SYSTEM.
- 24. PROVIDE MAXIMUM WATT LIGHT BULBS AS SPECIFIED ON FIXTURE OR AS NOTED ON LIGHTING SCHEDULE. LIGHTING FIXTURE SPECIFICATIONS SHALL PREVAIL.
- 25. REFER TO SITE PLANS/LANDSCAPE PLANS FOR ADDITIONAL LIGHTING AND POWER REQUIREMENTS.
- 26. ALL LANDSCAPE LIGHTING AND J-BOXES SHALL BE WIRED TO TIME CLOCK IN GARAGE OR MECHANICAL AREA. SEE PLAN FOR LOCATION.
- 27. SOLAR EQUIPMENT WILL REQUIRE SEPARATE PERMITS. CONTRACTOR TO OBTAIN.
- 28. SOLAR PHOTOVOLTAICS RUN (2) 3/4 CONDUITS FROM ELECTRICAL METER TO INVERTER OR ROOF LOCATIONS (SEE ELEC. PLAN) AND (2) 1/2 CONDUITS FROM INVERTER TO ATTIC. CONDUITS TO BE HARD PVC. INVERTER MAY BE INSTALLED LATER.
- 29. ALIGNMENT: ALL OUTLETS AND SMITCHES IN PROXIMITY OF EACH OTHER AND ALONG ADJACENT WALLS SHALL BE ALIGNED WITH EACH OTHER HAVING THE SAME DIMENSION VERTICALLY FROM FINISH FLOOR TO TOP OF DEVICE. ALL LIGHT FIXTURES, HVAC SUPPLY AND RETURN REGISTERS, SMOKE DETECTORS, AND OTHER CEILING MOUNTED DEVICES SHALL ALIGN WITH EACH OTHER WITHIN A SPACE AND ADJACENT SPACES WHERE APPLICABLE. IF NEEDED, ADJUST / MODIFY FRAMING TO OBTAIN PROPER ALIGNMENT. GENERAL CONTRACTOR AND SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION AND PATCH/PAINT OF INAPPROPRIATELY PLACED DEVICES IF NOTICED IN A LATER STAGE OF CONSTRUCTION. CONTACT ARCHITECT WITH ANY DISCREPANCIES AT ROUGH-IN STAGE.
- 30. VERIFY ALL TRIM SELECTIONS AND COLOR FOR RECESSED LIGHTS W/ OWNER/ARCHITECT PRIOR TO ORDER. TRIM COLOR TO BE BASED ON ADJACENT CEILING FINISH.
- 31. WHEN SKYLIGHTS ARE TO BE OPERABLE OR WITH OTHER POWER ELEMENTS, ELECTRICAL POWER IS TO BE RAN ACCORDINGLY PER MANUFACTURER'S INSTRUCTIONS.
- 32. GARAGE LIGHTS SHALL BE ON MOTION SENSOR SWITCH AND REMAIN ON FOR FIVE MINUTES THEREAFTER.
- 33. GARAGE DOORS TO BE INSTALLED WITH A SHUT OFF (KILL) SWITCH.
- 34. GARAGES TO HAVE INSTALLED (2) OUTLETS FOR FUTURE
- ELECTRIC VEHICLE CAR CHARGERS (LOCATION PER PLANS). 35. GARAGE: IF NO DRYWALL SPECIFIED, PROVIDE ELECTRICAL IN FLEX CONDUIT.

APPROVED PRODUCTS:

- 1. NEW WHOLE HOUSE SURGE PROTECTOR BY LEVITON "51120" SERIES.
- 2. SMOKE / CARBON MONOXIDE DETECTORS: KIDDE TALKING ALARM; MODEL: COMBINATION CO AND SMOKE ALARM (MODEL KN-COSM-IB)
- 3. DIMMER SWITCHES TO BE LUTRON C.L DIMMER SWITCH. VERIFY TRIM STYLE WITH OWNER PRIOR TO ORDER WWW. LUTRON.COM
- 4. EXHAUST FAN / LIGHT TIMER SWITCH SHALL BE A MAESTRO ECO-TIMER SWITCH BY LUTRON, MODEL NUMBER MA-T530G, COLOR TO BE SPECIFIED BY OWNER. WHEN FAN IS SWITCHED WITH A LIGHT, THE FAN/LIGHT CONTROL MODEL IS TO BE USED.
- ALL NETWORK DATA LINES TO BE CAT 7.
 ALL NEW LED RECESSED LIGHT FIXTURES TO HAVE <u>2700K OR</u> <u>3000K</u> COLOR TEMP (TBD BY OWNER), AND 1000 LUMENS OUTPUT. VERIFY TRIM KIT WITH OWNER/ARCHITECT BASED ON CEILING FINISH. ALL HOUSING FIXTURES TO BE IC-RATED ON

DIMMABLE SWITCH. JACKSHAFT GARAGE DOOR OPENER SHALL HAVE A REMOTE

- LIGHT THAT ACTIVATES WHEN GARAGE DOOR OPENS.
 8. AT WASHING MACHINE AND WATER HEATERS (LOCATED AT THE INTERIOR SPACES) INSTALL A WATER SHUT OFF VALVE
- WITH A LEAK SENSOR.
 9. PROVIDE OUTLET BOX (GRAY BOX) AT ALL WASHER AND DRYER LOCATIONS. OUTLET BOX MUST INCLUDE INTEGRATED VALVE AND HAMMER ARRESTOR, BUILT-IN TEST CAP, EASY TURN VALVES, COLOR CODED HOT AND COLD HANDLES, AND FACTORY ASSEMBLED DRAIN FUNNEL. ALSO PROVIDE CONDENSATE PIPE STAND WHEN HVAC UNIT IS LOCATED NEAR WASHER AND DRYER. GRAY BOX SHALL BE EASILY ACCESSIBLE IN CASE OF EMERGENCY & W/ EQUIPMENT IN PLACE. DO NOT INSTALL BEHIND STACKED WASHER AND DRYER.
- 10. TIMER SMITCH (LOCATION PER PLANS) TO BE BY HONEYWELL WITH SOLAR TIME TABLE & PROGRAMMABLE TIMER SMITCH.
- 11. USB CHARGER / RECEPTACLE (CATALOGUE #T5632) BY LEVITON. ONE DUPLEX USB CHARGER / RECEPTACLE LOCATION PER PLAN. IF SHOWN AS A 4-PLEX OUTLET, MULTI-GANG IN A 4-PLEX WALL PLATE WITH A STANDARD DUPLEX RECEPTACLE. VERIFY FINISH COLOR WITH OWNER.
- 12. LIGHTS IN STRIP CLOSETS TO USE A 4' TO STYLE LED LIGHT FIXTURE MOUNTED ON THE INSIDE ON THE WALL ABOVE THE CLOSET OPENING.
- 13. DATA/MEDIA CENTER TO HAVE ENCLOSURE WITH TWO (2) QUADS, COVER TO MATCH COLOR OF ADJACENT WALL. SIZE
- TO FIT WIDTH OF STUD BAY, HEIGHT APPROXIMATELY 30". 14. APPLIANCES TO BE ENERGY STAR COMPLIANT/ HIGH EFFICIENCY.

[DIVISION 32] EXTERIOR IMPROVEMENTS

32A LANDSCAPE/ HARDSCAPE

- 1. PLANT TREES WITH NON-INVASIVE ROOTS NEAR HOME TO SHADE WALLS & WINDOWS.
- 2. USE PEA GRAVEL TO PROMOTE GOOD PERCOLATION OF WATER INTO SOIL.
- USE PERVIOUS CONCRETE WHERE POSSIBLE.
 APPLY XERISCAPE/ DROUGHT TOLERANT/ LOW
- APPLY XERISCAPE/ DROUGHT TOLERANT/ LOW WATER PLANTING CONCEPTS IN LANDSCAPE DESIGN.
 FAUX GRASS/ TURF TO BE USED AS AN ALTERNATIVE FOR
- GRASS. VERIFY W/ OWNER. 6. INVASIVE PLANTS TO RECEIVE ROOT BARRIERS.
- LANDSCAPE IRRIGATION:
 A. PROVIDE IRRIGATION CONTROL WITH RAIN SENSOR.
 B. PROVIDE DRIP SYSTEM FOR WATER DISTRIBUTION.
 C. CONSIDER BELOW-GRADE DRIP DISTRIBUTION IN AREAS
- MITH NATURAL GRASS.
- D. RAIN WATER HARVESTING RAINWATERHOG.COM
 E. GRAY WATER RECLAMATION CONFIRM IF ALLOWED IN JURISDICTION.

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 The building design features of calculations, plans and specific 	or system design features iden ications submitted to the enfo	tified on this Certificate of Compliand rcement agency for approval with thi	e are consistent with the information provided on other applicable compliance documents, worksheets, building permit application.
Responsible Designer Name: Jeff Jeannette			Responsible Designer Signature: Jeff Jeannette
^{Company:} Jeannette Architects Inc.		HERSI	Date Signed: 2022-12-19 16:00:55
Address: 296 Redondo Ave.			License: C30598
City/State/Zip: Long Beach, CA 90803			Phone: 562-987-9139

CA Building Energy Efficiency Standards - 2019 Residential Compliance

2022-12-19 16:00:55 Report Version: 2019.2.000 Schema Version: rev 20200901

Report Generated: 2022-11-30 10:02:48

2019 Low-Rise Residential Mandatory Measures Summary

NOTE: Low-rise re used. Review the (01/2020)	sidential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach respective section for more information. *Exceptions may apply.
Building Envelop	e Measures:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
8 110 6(b) [,]	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, asketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHCS)
§ 110.8(a):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Deco	rative Gas Appliances, and Gas Log Measures:
§ 110.5(e)	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioni	ng, Water Heating, and Plumbing System Measures:
§ 110.0-§ 110.3:	Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission."
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating."
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.*
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

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§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans M	Aeasures:
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ½ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be \geq 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.45 watts per CFM for gas furnace air handlers and \leq 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow \geq 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*

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Requirements fo	or Ventilation and Indoor Air Quality:
150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
150.0(o)1C:	Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
150.0(o)1E:	Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
150.0(o)1F:	Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
150.0(o)1G:	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2. Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
ool and Spa Sv	stems and Equipment Measures:
3 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
3 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
ighting Measur	es:
110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A.
150.0(k)1B:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
3 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
150.0(k)1D:	Electronic Ballasts for Fluorescent Lamps. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
3 150.0(k)1E:	Night Lights, Step Lights, and Path Lights. Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
150.0(k)1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
150.0(k)1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
150.0(k)1I:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
3 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
150.0(k)2B:	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.
150.0(k)2C:	turned ON and OFF.*
150.0(k)2D:	Interior Switches and Controls. Controls and equipment must be installed in accordance with manufacturer's instructions.
150.0(k)2E:	Interior Switches and Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).

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§ 110.10(e)2:

2019 Low-Rise Residential Mandatory Measures Summary or Switches and Controls. An energy management control system (EMCS) may be used to comply with control requirements if it: des functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the equirements of § 130.0(e); and meets all other requirements in § 150.0(k)2. Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it des the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2. or Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must ntrolled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be configured to manual-on operation using the manual control required under Section 150.0(k)2C. Switches and Controls. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for g, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.* r Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems. ential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other is on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either (k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS. ntial Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, ies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or e applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0. Alential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots roots with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with opplicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0. Ily illuminated address signs. Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of s determined according to § 130.0(c). lential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the able requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0. Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that g must be comply with Table 150.0-A and be controlled by an occupant sensor. r Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior n area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in ilding must: ly with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ing installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least ent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress. Family Residences. Single family residences located in subdivisions with 10 or more single family residences and where the tion for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e). ise Multifamily Buildings. Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the ements of § 110.10(b) through § 110.10(d). um Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, y, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by urisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with as greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building e a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of ding, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the g project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone ment is applicable to the entire building, including mixed occupancy.* a. All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north. . The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof d equipment.* g. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the , measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of arest point of the solar zone, measured in the vertical plane.* ral Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof bad and roof live load must be clearly indicated on the construction documents. nnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a y reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family nces and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system. mentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through 10(c) must be provided to the occupant. Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps. Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

Sheer Energy

3053 E. Nugent Street Lancaster CA 93535-2689

v/f : 661.946.1741 sheerenergy@verizon.net

www.sheerenergycalcs.com

Client Name and Address Jeannette Architects 209 Redondo Avenue Long Beach CA 90803 562.987.9139

Project:

Gibson Duplex 5725 E. Ocean Blvd. Long Beach CA 90803

1	2022-11.	30	1
No.	Date		Rev/Issue
Projec	t	She	et
20.	22-1012		
Date 20	022-11.30		<i>T24.2</i>
Scale	T.S. 0.92		

ERTIFIC	ATE OF COMPLIANCE						CF1R-PRF-01E		CERTIFICATE OF COM
roject N	lame: Unit 5727_Duplex_Gibson		Calculatio	on Date/Time: 2022-12-19T1	6:22:48-07:	:00	(Page 1 of 11)		Project Name: Unit 57
Calculati	on Description: Title 24 Analysis		Input File	Name: 2022-1012 Jeannette	e - 5727 E O	cean Blvd v3.rib	d19x		Calculation Description
GENERAL	INFORMATION								REQUIRED SPECIAL FEAT
01	Project Name	Unit 5727_Duplex_Gibson							The following are featur
02	Run Title	Title 24 Analysis							Window overhan
03	Project Location	5727 E. Ocean Blvd.							
04	City	Long Beach	05	Standard	s Version 20	019			The fellowing is a survey
06	Zip code	90803	07	Softwar	e Version Er	nergyPro 8.3			detail is provided in the
08	Climate Zone	6	09	Front Orientation (deg/	Cardinal) 13	35			Building-level Verificatio
10	Building Type	Single family	11	Number of Dwel	ling Units 1				Kitchen range hor
12	Project Scope	AdditionAlteration	13	Number of E	Bedrooms 2				Cooling System Verificat None
14	Addition Cond. Floor Area (ft ²)	172.89	15	Number	of Stories 1				Heating System Verificat
16	Existing Cond. Floor Area (ft ²)	1098	17	Fenestration Average	e U-factor 0.	.29			HVAC Distribution Syste
18	Total Cond. Floor Area (ft ²)	1270.89	19	Glazing Perce	ntage (%) 2	5.63%			None Domestic Hot Water Sys
20	ADU Bedroom Count	n/a	21	ADU Conditioned F	loor Area n	/a			 – None –
22	Is Natural Gas Available?	Yes		NINC					
		<u>a esuce</u>		en inte					BUILDING - FEATURES I
OMPLIA	NCE RESULTS	<u>NHERS</u>	2 <u>R C</u>) VI D E R					01
01	Building Complies with Computer	Performance							Project Name
02	This building incorporates features	s that require field testing and/or verificati	on by a certif	fied HERS rater under the super	vision of a Cl	EC-approved HERS	S provider.		Unit 5727 Duploy Gi
03	This building incorporates one or r	nore Special Features shown below							
		FNFRGY	ISF SUMMAR	2V				1	ZONE INFORMATION
						I			01
	Energy Use (kTDV/ft ² -yr)	Standard Design	Pro	oposed Design	Compliance	Margin	Percent Improvement		Zone Name
	Space Heating	4.63		5.25	-0.62	2	-13.4		Unit 5727
	Space Cooling	18.63		20.09	-1.46	5	-7.8		Addition
	IAQ Ventilation	0		0	0		40.5		Addition
	Water Heating	16.65		14.42	2.23	i	13.4		
		n/a		0	0		n/a		
	compliance energy lotal	22.21		55.70	0.15	,	0.4	1	

222-P010230978B-000-000-0000000-0000 CA Building Energy Efficiency Standards - 2019 Residential Compliance

2022-12-19 16:02:21 Report Version: 2019.2.000 Schema Version: rev 20200901

CalCERTS inc. Report Generated: 2022-12-19 15:23:20

culation I	Description:	Title 24 Ana	lysis					Input	File Na	ame: 202	22-1012 Jea	nnette - 57	27 E Oce	an Blvd v3.rib	d19x	(
PAQUE SUR	FACES - CATH	EDRAL CEILIN	GS													
01	02	03		04 05	0	6	07	08		09	10	11	12	13		14
Name	Zone	Constructi	Construction Azimuth Orientation Area Sky (ft ²) Are						(x Re	Roof flectance	Roof Emittance	Cool Roof	Statu	Verifie Is Existir Conditi	ed ng ion	Existing Construction
Roof_NE	Unit 5727	R-30 Roof At	tic1 4	15 Righ	t 25.	47 2	5.37	4		0.1	0.85	No	Altere	ed No		
loof_Deck	Garage	R-0 Roof N Attic	lo	0 n/a	436	.73	0	0.3		0.1	0.85	No	Existi	ng No		
ГТІС																
01	L			02		03		04	0)5	06	07	08	09)	10
Nar	ne		Cons	truction		Тур	e	Roof Rise (x in 12)	Refle	oof ctance	Roof Emittance	Radiant Barrier	Cool Re	oof Stat	us	Verified Existing Condition
Attic Un	it 5727		Attic Roo	ofUnit 5727		Ventila	ted	4	0).1	0.85	No	No	Exist	ing	No
Attic Ad	dition	بەر بەر	Attic Ro	ofAddition	\sim	Ventila	ited		0	.1	0.85	Yes	No	Net	w	n/a
NESTRATIO																
THE TRACE			1 10 -	AT T					^	\sum						
01		02	03	04		06	k 07		09		112		13	14	15	16
01 Name	T	02 Type S	03 urface	04 Orientation	-05 Azimuth	06 Width (ft)	07 Heigh (ft)	D 08 It Mult.	09 Area (ft ²)	U-facto	r U-factor Source	SHGC	13 SHGC Source	14 Exterior Shading	15 Status	16 Verified Existing Condition
01 Name Window	R Wi	02 Type S indow M	03 urface E Wall	04 Orientation Right	L05 Azimuth 45	06 Width (ft)	07 Heigh (ft)	08 It Mult.	09 Area (ft ²) 12.42	U -factor 0.28	r U-factor Source	12 SHGC 0.22	13 SHGC Source NFRC	14 Exterior Shading Bug Screen	15 Status Altered	16 Verified Existing Condition
01 Name Window Window	R Wi S Wi	02 Type S indow M indow M	03 urface E Wall E Wall	04 Orientation Right Right	O5 Azimuth 45 45	06 Width (ft)	07 Heigh (ft)	08 It Mult. 1 1	(09) Area (ft ²) 12.42 5.43	0.28 0.27	r U-factor Source NFRC NFRC	12 SHGC 0.22 0.18	13 SHGC Source NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen	15 Status Altered	16 Verified Existing Condition No No
01 Name Window Window	R Wi S Wi	02 īype S indow M indow M	03 urface E Wall E Wall E Wall	04 Orientation Right Right Right	Azimuth 45 45 45	Width (ft)	07 Heigh (ft)	08 Nult. 1 1 1	09 Area (ft ²) 12.42 5.43 10.11	10 U-factor 0.28 0.27 0.28	Image: 10 state r U-factor Source NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.22	13 SHGC Source NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen	15 Status Altered Altered	16 Verified Existing Condition No No No No No
01 Name Window Window Window 1 Window 1	R Wi S Wi r_V Wi	02 Sype S indow M indow M indow M	03 urface E Wall E Wall E Wall E Wall	04 Orientation Right Right Right Right	O5 Azimuth 45 45 45 45	Vidth (ft)	07 Heigh (ft)	08 It Mult. 1 1 1 1 1 1 1 1	09 Area (ft ²) 12.42 5.43 10.11 20.97	U-facto 0.28 0.27 0.28 0.27	J1 J-factor Source NFRC NFRC NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.22 0.18 0.22	13 SHGC Source NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered	16 Verified Existing Condition No No No No No No No No No
01 Name Window Window Window U Window U Window	R Wi S Wi	02 Fype S indow N indow N indow N indow S	03 urface E Wall E Wall E Wall E Wall W Wall	04 Orientation Right Right Right Right Right	Azimuth 45 45 45 45 45 45 45	Width (ft)	07 Heigh (ft)	08 It Mult. 1 1 1 1 1 1 1 1 1 1	09 Area (ft ²) 12.42 5.43 10.11 20.97 10	U-facto 0.28 0.27 0.28 0.27 0.27	Image: 10 state r U-factor Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.22 0.18 0.18 0.18	13 SHGC Source NFRC NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered Altered	16 Verified Existing Condition No
01 Name Window Window 1 Window U Window Window	R Wi S Wi	02 S Type S Indow M Indow M Indow M Indow S Indow S	03 urface E Wall E Wall E Wall E Wall N Wall	04 Orientation Right Right Right Right Right Right	Azimuth 45 45 45 45 45 45 45 45	Vidth (ft)	Heigh (ft)	08 Mult. 1 1 1 1 1 1 1 1 1 1 1 1 1	(09) Area (ft ²) 12.42 5.43 10.11 20.97 10 15.15	U-factor 0.28 0.27 0.28 0.27 0.28 0.27 0.27 0.28	r U-factor Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.22 0.18 0.18 0.18 0.22	13 SHGC Source NFRC NFRC NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered Altered Altered	16 Verified Existing Condition No
01 Name Window Window Window U Window Window Window	R Wi S Wi	02 S iype S indow M indow M indow M indow S indow S indow S	03 urface E Wall E Wall E Wall E Wall W Wall W Wall	04 Orientation Right Right Right Right Right Right Right	Azimuth 45 45 45 45 45 45 45 45 45 45	Width (ft)	07 Heigh (ft)	08 It Mult. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(09) Area (ft ²) 12.42 5.43 10.11 20.97 10 15.15 5.43	U-facto 0.28 0.27 0.28 0.27 0.27 0.27 0.28 0.27	Image: 10 state r U-factor Source NFRC NFRC	12 SHGC 0.22 0.18 0.22 0.18 0.18 0.18 0.22 0.18 0.18 0.21	13 SHGC Source NFRC NFRC NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered Altered Altered	16 Verified Existing Condition No
01 Name Window Window 1 Window U Window Window Window Window	R Wi S Wi	02 S Type S Indow M Indow M Indow M Indow S Indow S Indow S Indow S	03 urface E Wall E Wall E Wall E Wall N Wall N Wall N Wall	04 Orientation Right Right Right Right Right Right Right Right	Azimuth 45 45 45 45 45 45 45 45	Width (ft)	07 Heigh (ft)	08 It Mult. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(09) Area (ft ²) 12.42 5.43 10.11 20.97 10 15.15 5.43 8.75	U-facto 0.28 0.27 0.28 0.27 0.27 0.28 0.27 0.28 0.27 0.28	r U-factor Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18 0.22	13 SHGC Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered Altered Altered Altered Altered	16 Verified Existing Condition No
01 Name Window Window Window U Window Window Window Window Window	R Wi S Wi	02 S indow N indow N indow N indow S indow S indow S indow S indow S indow S	03 urface E Wall E Wall E Wall K Wall W Wall W Wall W Wall W Wall	04 Orientation Right Right Right Right Right Right Right Right Right	Azimuth 45 45 45 45 45 45 45 45	Vidth (ft)	07 Heigh (ft)	08 It Mult. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	09 Area (ft ²) 12.42 5.43 10.11 20.97 10 15.15 5.43 8.75 6.25	U-facto 0.28 0.27 0.28 0.27 0.27 0.28 0.27 0.28 0.27 0.28 0.27	r U-factor Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18 0.22 0.18	13 SHGC Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered Altered Altered Altered Altered Altered Altered	16 Verified Existing Condition No No
01 Name Window Window 1 Window U Window Window	R Wi S Wi 'V Wi 'W Wi M Wi N Wi	02 S Type S Indow M Indow M Indow M Indow S Indow S	03 urface E Wall E Wall E Wall E Wall W Wall	04 Orientation Right Right Right Right Right Right	Azimuth 45 45 45 45 45 45 45 45	Width (ft)	07 Heigh (ft)	08 It Mult. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(09) Area (ft ²) 12.42 5.43 10.11 20.97 10 15.15	U-factor 0.28 0.27 0.28 0.27 0.27 0.27 0.28	r U-factor Source NFRC NFRC NFRC NFRC NFRC NFRC NFRC	12 SHGC 0.22 0.18 0.18 0.18 0.22	13 SHGC Source NFRC NFRC NFRC NFRC NFRC	14 Exterior Shading Bug Screen Bug Screen Bug Screen Bug Screen Bug Screen	15 Status Altered Altered Altered Altered Altered	16 Verified Existing Condition No

CERTIFICATE OF COMPLI	IANCE						CF1R-PRF-01E
Project Name: Unit 5727	7_Duplex_Gibson		Calcul	ation Date/Tir	ne: 2022-12-19T1	6:22:48-07	:00 (Page 7 of 11)
Calculation Description:	Title 24 Analysis		Input	File Name: 202	22-1012 Jeannette	- 5727 E O	cean Blvd v3.ribd19x
OPAQUE SURFACE CONSTR	RUCTIONS						
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-30 Roof Attic1	Cathedral Ceilings	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.042	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x4 Inside Finish: Gypsum Board
R-0 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.277	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Other Side Finish: Gypsum Board
Attic RoofUnit 5727	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. 0. C.	R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
Attic RoofAddition	Attic Roofs	Wood Framed Ceiling	2x4@24 in. 0. C. R	0 R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
(N) R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
R-19 Floor No Crawlspace	Exterior Floors	Wood Framed Floor	2x10 @ 16 in. O. C.	R-19	None / None	0.047	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x10

CalCERTS inc.

IFICATE OF COMPLIAN	VCE					CF1R-PRF-01E
ect Name: Unit 5727_C	Duplex_Gibson		Calculation Da	ate/Time: 2022-12-19T1	6:22:48-07:00	(Page 2 of 11)
Ilation Description: Tit	tle 24 Analysis		Input File Nan	ne: 2022-1012 Jeannett	e - 5727 E Ocean Blvd v3.	ribd19x
IRED SPECIAL FEATURES						
ollowing are features tha	t must be installed as condition	ion for meeting the modeled er	nergy performance for th	is computer analysis.		
Window overhangs and	l/or fins					
FEATURE SUMIMARY						
blowing is a summary of I is provided in the buildn	the features that must be fiel ng tables below. Registered CF	eld-verified by a certified HERS CF2Rs and CF3Rs are required to	Rater as a condition for n be completed in the HEI	neeting the modeled energ RS Registry	gy performance for this com	puter analysis. Additional
ing-level Verifications: Kitchen range hood ng System Verifications: None ng System Verifications: None Distribution System Veri None estic Hot Water System V None	ifications: /erifications:					
		- Call		S IIA/A		
DING - FEATURES INFORM	MATION					
01	02				06	07
Project Name	Conditioned Floor Area (†	(ft ²) Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
it 5727_Duplex_Gibson	1270.89	1	2	2	0	1
	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name Zo	one Floor Area (ft ²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
Unit 5727	Conditioned	Wall Furnace1	1098	8.25	DHW Sys 1	N/A
Addition	Conditioned	Wall Furnace1	172.89	8.25	DHW Sys 1	N/A
stration Number: 222-P01	0230978B-000-000-0000000-0000	10	Registration Date/Time: 207	22-12-19 16:02:21	HERS Provider:	CalCERTS inc.
Addition	Conditioned Conditioned	Wall Furnace1 Wall Furnace1	1098 172.89 Registration Date/Time: 202	8.25	DHW Sys 1 DHW Sys 1 HERS Provider:	N/A N/A CalCE

CalCERTS inc. 2022-12-19 16:02:21 Report Version: 2019.2.000 Report Generated: 2022-12-19 15:23:20 Schema Version: rev 20200901

CERTIFICATE OF CO	MPLIANCE															CF1R-PRF-01E
Project Name: Unit	5727_Duple	ex_Gibson					Calcul	ation I	Date/Tim	e: 202	2-12-19T	16:22:48	-07:00			(Page 5 of 11)
Calculation Descript	tion: Title 2	4 Analysis					Input	File Na	me: 2022	2-1012	2 Jeannet	te - 5727	E Ocean	Blvd v3.	ribd19x	
FENESTRATION / GLA	ZING															
01	02	03	04	05	06	07	08	09	10	1	1 :	12	13	14	15	16
Name	Туре	Surface	Orientatio	on Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft ²)	U-factor	U-fa Sou	ctor rce SH	IGC So	HGC burce	Exterior Shading	Status	Verified Existing Condition
Window X	Window	NE Wall 2	2 Right	45			1	9.72	<mark>0</mark> .28	NF	RC 0	.22 N	IFRC E	Bug Scree	n New	n/a
Window Y	Window	NE Wall 2	2 Right	45			1	5.43	<mark>0</mark> .27	NF	RC 0	.18 N	IFRC E	Bug Scree	n New	n/a
Window L	Window	SW Wall	2 Left	225			1	10	0.27	NF	RC 0	.18 N	IFRC E	Bug Scree	n New	n/a
Window Z	Window	NW Wall	2 Left	225			1	15	0.28	NF	RC 0	.22	IFRC E	Bug Scree	n New	n/a
Door 13 >25% Gl	Window	NW Wall	2 Left	225			1	17.81	0.33	NF	RC 0	.27 N	IFRC E	Bug Scree	n New	n/a
Door 14	Window	NW Wall	2 Left	225			1	53.36	<mark>0</mark> .28	NF	RC 0	.22 N	IFRC	Bug Scree	n New	n/a
Skylights_Z3_Z4_Z5	Skylight	Roof_NE	Right	45			1	25.37	<mark>0</mark> .38	NF	RC 0	.25 N	IFRC	None	New	n/a
		}	A						_							
OFAQUE DOURS			07		02			1	04		1	05	-			
01		Cide of	Duilding		03		$\left \right\rangle$		04		ha	05			Constituent Trainet	o na Canditian
Name		Side o	Building		Area (ft ²)			U-	factor			Statu	IS		erified Existi	ng Condition
Door 24		SM	Wall		20				0.2			New	/		n/	a
Doors 2_3		SW	Wall 3 🔪		126			\smile	1	9		Altere	ed		Ne	0
Ex Door		SE	Wall 2		17.81				0.5			Existir	ng		No	0
OVERHANGS AND FIN	IS		_						-							
01	02	03	04 0	5 06	07	08	09		10	11	12	13	14	15	16	17
		, i i i i i i i i i i i i i i i i i i i	verhang		Left Fin Right Fin											
Window	Depth	Dist Up	Left Rig Extent Ext	sht ent Flap Ht.	Depth	Тор Up	Dist	L Bo	t Up De	epth	Тор Uр	Dist R	Bot Up	Status	Verified Existing Condition	Existing Construction
Door 25	2.75	0.58	3.75 3.	75 0	0	0	0		0	0	0	0	0	Alte red	No	

Registration Numbe	er: 222-P010230978E Efficiency Standard	3-000-000-0000 ds - 2019 Res	0000-0000 sidential) Compliance	_	Registration Date/Time: 2022-12-19 16:02:21 Report Version: 2019.2.000 Schema Version: rev 20200901							HERS Provider: CalCERTS inc. Report Generated: 2022-12-19 15:23:20				
CERTIFICATE OF CO Project Name: Uni Calculation Descri OPAQUE SURFACE C	OMPLIANCE it 5727_Duplex_q ption: Title 24 A CONSTRUCTIONS	Gibson nalysis				Calcula Input F	tion Date/Tir ile Name: 202	ne: 20 22-101)22-12-19T16 12 Jeannette	5:22:4 - 572	48-07:0 27 E Oce	0 ean Blvd vi	C (I 3.ribd19x	F1R-PRF-01E Page 8 of 11)			
01	0)2		03		04	05		06	0	7		08				
Construction Nar	me Surfac	е Туре	Const	ruction Type	Fr	aming	Total Cavity R-value	Interi Co	ior / Exterior ontinuous R-value	U-fa	ictor	4	Assembly Layer	rs			
R-0 Floor No Crawls	space Interio	r Floors	Wood	Framed Floor	2x12 @	16 in. O. C.	R-O	No	one / None	0.1	196	Floo Sidir Cavity , Ceiling Be	or Surface: Carp Floor Deck: Woo ng/sheathing/de / Frame: no insu elow Finish: Gyp	eted od ecking II. / 2x12 sum Board			
BUILDING ENVELOP	E - HERS VERIFICA		\			-											
	01			02				03	_				04				
Quality Insula	tion Installation (QII)	Hig	h R-value Spray	Foam Insulat	ion	Building Enve	lope A	ir Leakage				CFM50				
No	t Required			Not Req	uired		Not R	Require	ed				n/a				
	CTT1 40	\overline{H}					HS-		$\overline{\mathbf{n}}$								
WATER HEATING SYS	STEMS									-		08	00	10			
Name	System Type	Distributio	n Type	Water Heater	RS Name (#)	Solar Heating System	Compac Distributi	t ion	HERS Verifica	ation	s	tatus	Verified Existing Condition	Existing Water Heating System			
DHW Sys 1	Domestic Hot Water (DHW)	Standa Distribu Syster	ird tion m	DHW Heat	er 1 (1)	n/a	None		n/a		A	tered	No				

Registration Number: 222-P010230978B-000-000-0000000-0000 CA Building Energy Efficiency Standards - 2019 Residential Compliance

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Registration Date/Time: 2022-12-19 16:02:21 Report Version: 2019.2.000 Schema Version: rev 20200901

HERS Provider:

Report Generated: 2

	CalCERTS inc.	
2022-12-19	15:23:20	

Registration Number:
222-P010230978B-000-000-0000000-0000
CA Building Energy Efficiency Standards - 2019 Residential Compliance

CERTIFICATE OF COMPLIANCE
Project Name: Unit 5727_Duplex_Gibson
Calculation Description: Title 24 Analysis
OPAQUE SURFACES

	ERTIFICATE OF COM roject Name: Unit 5 alculation Description	MPLIANCE 5727_Duplex_ tion: Title 24 A	_Gibson Analysis			Calcul Input	ation Date/Tir File Name: 20	ne: 2022-12-19T1 22-1012 Jeannette	.6:22:48-07:00 e - 5727 E Oce	0 ean Blvd v3.ribd	CF1R-PRF-01E (Page 3 of 11) L9x	
	PAQUE SURFACES	02	03	04	05	06	07	08	09	10	11	Sheer Energy
Note of the state of	Name	Zone	Construction	Azimuth	Orientation (Gross Area (ft ²)	Window and Door Area (ft2	Tilt (deg)	Wall Exception	ions Status	Verified Existing Condition	
	NE Wall U	Unit 5727 Unit 5727	R-15 Wall R-15 Wall	45	Right Right	383.18 383.18	48.93 65.58	90	none	Altered Altered	No No	3053 E. Nugent Street
	SE Wall U	Unit 5727 Unit 5727	R-15 Wall R-15 Wall	135 315	Front Back	221 18.45	94.5711 0	90	none	Altered	No	Lancaster CA 93535-268
	NE Wall 2 A	Addition	(N) R-15 Wall	45	Right	59.85	15.15	90	Extension	New	n/a	
List Andam The second state	SW Wall 2 A NW Wall 2 A	Addition Addition	(N) R-15 Wall R-15 Wa <mark>ll w/R</mark> -4	225	Left Left	59.85 196.6	10 86.17	90	Extension	n New New	n/a n/a	
	all @ Addition 5727	Unit 2>>Addition	R-0 Wall	n/a	n/a	165	0	n/a		Existing	No	v/f:661.946.1741
	Roof_NE 2 U	Unit 5727	R-30 Roof Attic	n/a n/a	n/a	523.63	n/a	n/a		Altered	No	sheerenergy@verizon.net
	Roof_NE 3 A	Addition	(N) R-30 Roof Att	ic n/a	n/a	86.44	n/a	n/a		New	n/a	
	Roof_SW 2 A	Addition	(N) R-30 Roof Att R-19 Floor No	ic n/a	e n/a	86.44	O n/a			New	n/a	www.sheerenergycalcs.com
	Floor @ Unit	Addition	Crawlspace R-0 Floor No	n/a	n/a	172.89	nya	n/a		- New	n/a	
	5725 U	Garage	Crawlspace Gar R-0 Wall	n/a 45	n/a Right	205.07	n/a 0	90	none	Existing	NO	
	SW Wall 3	_Garage	Gar_R-0 Wall	225	Left	205.07	126	90	none	Existing	No	
<text><text><text><text><text></text></text></text></text></text>	NW Wall 3	_Garage	Gar_R-0 Wall	315	Back	185	0	90	none	Existing	No	
<text></text>	egistration Number: 2 2 A Building Energy Effi	: 222-P010230978 fficiency Standar	B-000-000-0000000 rds - 2019 Resider	0000 Itial Compliance		Registration Da Report Version: Schema Versior	te/Time: 2022-12-19 2019.2.000 1: rev 20200901	9 16:02:21	HERS P Report	Provider: t Generated: 2022	CalCERTS inc. -12-19 15:23:20 CF1R-PRF-01E	
n n <td>oject Name: Unit 5 Iculation Description</td> <td>5727_Duplex_ tion: Title 24 A</td> <td>_Gibson Analysis</td> <td></td> <td></td> <td>Calcul Input</td> <td>ation Date/Tir File Name: 20</td> <td>ne: 2022-12-19T1 22-1012 Jeannette</td> <td>.6:22:48-07:00 e - 5727 E Oce</td> <td>0 ean Blvd v3.ribd</td> <td>(Page 6 of 11)</td> <td></td>	oject Name: Unit 5 Iculation Description	5727_Duplex_ tion: Title 24 A	_Gibson Analysis			Calcul Input	ation Date/Tir File Name: 20	ne: 2022-12-19T1 22-1012 Jeannette	.6:22:48-07:00 e - 5727 E Oce	0 ean Blvd v3.ribd	(Page 6 of 11)	
Note of the set	01	02	03	04	05		06	07	08	09	10	
Note of the deside of	Name	Zone	Area (ft ²)	Perimeter (f	t) Edge li R-value	nsul. Edg and R-v th	ge Insul. alue and Ca Depth	rpeted Fraction	Heated	Status	Verified Existing Condition	
Nume Num< Num< Num< <t< td=""><td>ilab-on-Grade</td><td>Garage</td><td>443.33</td><td>84.34</td><td>nor</td><td>ie i</td><td>0</td><td>0%</td><td>No</td><td>Existing</td><td>No</td><td></td></t<>	ilab-on-Grade	Garage	443.33	84.34	nor	ie i	0	0%	No	Existing	No	
n n	QUE SURFACE CON	NSTRUCTIONS										
ματο τροιο το	01		02	03	(04	05	06	07		08	Client Name and Address
	Construction Name	e Surfa	ce Type	onstruction Type	Fra	ming	Total Cavity R-value	Continuous R-value	U-factor	Assem	bly Layers	Jeannette Architects
Control Losses No. Description of the set of th										Inside Finish	: Gypsum Board	209 Redondo Avenue
101 With 101 With With With With With With With With	Gar_R-0 Wall	Exteri	or Walls W	ood Framed Wall	2x4 @ 1	6 in. 0. C.	R-O	None / None	0.361	Cavity / Fram Exterior Finis	e: no insul. / 2x4 h: 3 Coat Stucco	Long Beach CA 90803
	R-15 Wall	Exteri	ior Walls	ood Framed Wall	2x4@1	6 in. O. C.	R-15	None / None	0.095	Inside Finish Cavity / Fra	: Gypsum Board me: R-15 / 2x4	562.987.9139
No. Description Description <thdescription< th=""> <thdes< td=""><td></td><td></td><td></td><td></td><td>EKJ</td><td>PR</td><td></td><td>DEK</td><td></td><td>Exterior Finis</td><td>h: 3 Coat Stucco</td><td></td></thdes<></thdescription<>					EKJ	PR		DEK		Exterior Finis	h: 3 Coat Stucco	
Note whete Lower retrete Note and the determine the data of	(N) R-15 Wall	Exteri	ior Walls W	ood Framed Wall	2x4 @ 1	.6 in. O. C.	R-15	None / None	0.095	Cavity / Fra Exterior Finis	me: R-15 / 2x4 h: 3 Coat Stucco	
Rescue tools Descrive volati volati france Volation Volation <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Inside Finish</td> <td>: Gypsum Board</td> <td></td>										Inside Finish	: Gypsum Board	
андиальной приними саманальной приними самана	R-15 Wall w/R-4	Exteri	ior Walls W	ood Framed Wall	2x4 @ 1	.6 in. O. C.	R-15	None / R-4	0.064	Cavity / Fra Sheathing / Insul	me: R-15 / 2x4 ation: R-4 Sheathing	Project:
Note the first the first call call call call call call call cal										Exterior Finis	h: 3 Coat Stucco	Gibson Duplex
	R-O Roof No Attic	Cathedr	ral Ceilings	Wood Framed Ceiling	2x4 @ 1	.6 in. O. C.	R-0	None / None	0.484	Roof D Siding/she Cavity / Fram Inside Finish	eck: Wood athing/decking e: no insul. / 2x4 : Gypsum Board	5727 E. Ocean Blvd. Long Beach CA 90803
TREMATING 01 02 03 04 05 06 07 08 09 10 11 12 13 144 Name 0 04 05 06 07 08 09 10 11 12 13 144 Name 0 0.5 0.5 0.0 0.5 0.0 0.5 0.0 0.5 0.0 0.5 0.0	gistration Number: 2 Building Energy Effi RTIFICATE OF COM ject Name: Unit 5	: 222-P010230978 ficiency Standar MPLIANCE 5727_Duplex_ tion: Title 24 A	B-000-000-0000000 rds - 2019 Resider _Gibson Analysis	0000 ntial Compliance		Registration Da Report Version: Schema Versior Calcul	te/Time: 2022-12-19 2019.2.000 1: rev 20200901 ation Date/Tir File Name: 20	ne: 2022-12-19T1	HERS F Report 	Provider: t Generated: 2022 0 2an Blvd v3.ribd	CalCERTS inc. -12-19 15:23:20 CF1R-PRF-01E (Page 9 of 11)	
01 02 03 04 05 06 07 08 09 10 11 12 13 14 Name feeting Type Tank Type of Units feeting (gain) Tank Entropy Tank Name Standy (gain) Tank Entropy Tank Name Standy (gain) Tank Entropy Tank Name Standy (gain) Tank Entropy Tank Name Standy (gain) Tank Entropy Name Not Required <	FER HEATERS									/ /]	
Name Testing	01 02	03	04	05 06	07	08	09	10 1:	1	12	13 14	
Type Link (ed) Efficiency Investigation Provider Condition Condition DHW Ges Consumer 1 0 0.95-UEF 62:200 0 n/a n/a n/a n/a Attered No DHW Ges Consumer 0 0.95-UEF 62:200 0 n/a n/a n/a n/a Attered No TER HATING - HER VERHIGHTION Texter Total Control 0:1 0:2 0:3 0:4 0:5 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:6 0:7 0:7 0:6 0:7 0:7 0:6 0:7 0:7 0:6 0:7 0:7 0:6 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7 0:7	Name Elemen	ng ent Tank T	ype # of v	ank Energy ol. Factor or	Input Rating	Tank Insulation	Standby 1s Loss or Rat	st Hr. Sing or Decide	at Pump Tar	nk Location r Ambient	Verified Status Existing	
Definition Ges Onstantaneous 1 0 0.96-UE Keillul/hr 0 n/a n/a n/a n/a Altered No SER MEATING - HERS VERHEATION 0 0.4 0.5 0.6 0.7 0.8 0.9 0.1 1 1 2.0222-12.19 1 No. Date Rev/Issue T2.0222-10.12 No. Date T2.0222-10.12 Date T2.0222-10.12 Date T2.0222-10.12 Date T2.4.1 T2.4.1 T2.4.1 T2.4.1 T2.4.1 T2.4.1 T2.4.1	Туре	e		al) Efficiency	JUIPIIUT	(Int/Ext)	covery Eff Flor	w Rate	(Condition	Condition	
TER HEATING - HERS SERIFICATION OI OI OI OI OI OI Name Pipe Insulation Parallel Piping Compact Distribution Compact Distribution Control Distribution Contr	DHW Gas	Consu Instanta	mer 1 neous 1	0 0.96-UEF	<= 200 kBtu/hr	0	n/a	n/a n/	′a	n/a A	ltered No	
Ol O2 O3 O4 O5 O6 O7 O8 Name Pipe Insulation Parallel Piping Compact Distribution Rediculation Control Distribution Shower Drain Water Heast Recovery OL O2 O3 O4 O5 O6 O7 O8 DHW Sys 1-1/1 Not Required Not Required None Mot Required Not Required Not Required Not Required Not Required O1 O2 O3 O4 O5 O6 O7 O8 O9 10 11 Name System Type Heating Unit Other Configure Verified Heating Equipment Condition Cooling Count Verified No 1 1 Wall Furnace1 Heating Other O2 O3 O4 O5 O6 O7 O8 O9 10 11 Name System Type Heating Omponent 1 Configure Invia Setback Altered No 1 1 O1 O2 O3 O4 Altered No 1 1 Date	FER HEATING - HERS	RS VERIFICATIO	N		I				1	!		
Name Pipe Insulation Parallel Piping Compact Distribution Control Nuk System Type Not Required Not Required </td <td>01</td> <td>02</td> <td></td> <td>03</td> <td>04</td> <td></td> <td>05</td> <td>06</td> <td>-</td> <td>07</td> <td>08</td> <td></td>	01	02		03	04		05	06	-	07	08	
UTIW Sty 5-1-1/2 NOT Required NOT Required NOT Required Not Required Not Required Not Required I 20222-12.19 I CE CONDITIONING SYSTEMS Image: System Type Heating Unit Cooling Unit Fan Name Oistribution Required Not Required I No. Date Rev/Issue Wall Furnace1 Heating and cooling system Heating Cooling Unit Fan Name Distribution Name To /// Status Status Existing Equipment Cooling Project Sheet Wall Furnace1 Heating and cooling system Heating Cooling HVAC Fan 1 n/a Setback Altered No 1 1 Date T2022-1012 Date T244.1 Name System Type Number of Units Heating Efficiency Bate 20222-12.19 Scale T244.1 Mater Name System Type Number of Units Heating Efficiency Scale N.T.S. 0.92 T24.1	Name	Pipe Insu	ulation P	arallel Piping	Compact Distr	ibution Comp	Type	Recirculation Co	ontrol Ce Di	istribution	Heat Recovery	
Name O2 O3 O4 O5 O6 O7 O8 O9 10 11 Name System Type Heating Unit Name Cooling Unit Name Fan Name Distribution Name Thermostal Status Existing Existing Cooling Cooling Count O. Date Rev/Issue Wall Furnace1 Heating and cooling system other Cooling Unit 1 Cooling Unit Name N/A Setback Altered No 1 1 Date Rev/Issue AC-HEATING UNIT TYPES 03 04 03 04 1 1 Date T244.1 Mane System Type Number of Units Heating Efficiency Date Sheet T244.1 Bitration Number: Besitration Date/Time: HEES Provider N.T.S. 0.92 N.T.S. 0.92 N.T.S. 0.92 N.T.S. 0.92	инw Sys 1 - 1/1	Not Req		Not Required	Not Requi		None	Not Required	a Na	ot Required	Not Required	1 2022-12.19 1
Name System Type Heating Unit Name Fan Name Distribution Thermostat Type Status Cooling Existing Heating Equipment Cooling Cooling Equipment Count Project Sheet Wall Furnace1 Heating and cooling system other Heating Cooling Cooling Image: Cooling Cooling Cooling Image: Cooling Cooling Cooling Image: Cooling Cooling Cooling Fan Name Setback Altered No 1 1 AC-HEATING UNIT TYPES Image: Cooling 03 04 Image: Cooling Date Date Date Date Date Name System Type Number of Units Heating Efficiency AFUE-68 Scale N.T.S. 0.922 N.T.S. 0.922	ACE CONDITIONING	SYSTEMS	02	03		05	06-	07	08	09 1	0 11	No. Date Rev/Issue
Name Name Name Name Name Status Existing Equipment Equipment Count	BJ		Surt	Heating	Init Cooling L	Jnit	Distributi	on Required		Verified Hea	ting Cooling	Project Sheet
Wall Furnace1 Heating and cooling system Heating Component Cooling HVAC Fan 1 n/a Setback Altered No 1 1 AC-HEATING UNIT TYPES Old Old Old Old Old Old Old Date	Name		system Type	Name	Name	Fan Nan	Name	Thermostat Type	Status C	Existing Equip Condition Con	unt Count	
AC-HEATING UNIT TYPES AC-HEATING UNIT TYPES Date O1 O2 O3 O4 Name System Type Number of Units Heating Efficiency Heating Component 1 Gas wall furnace 1 AFUE-68	Wall Furnace1	Heat	ting and cooling sy other	vstem Heating Compone	g Cooling ent Compone	g ent HVAC Far	n 1 n/a	Setback	Altered	No	. 1	2022-1012
AC-HEATING UNIT TYPES O1 O2 O3 O4 Name System Type Number of Units Heating Efficiency Heating Component 1 Gas wall furnace 1 AFUE-68			Junci	1	1							Date 72.4.1
Vi Vi Vi Name System Type Number of Units Heating Efficiency Heating Component 1 Gas wall furnace 1 AFUE-68	AC - HEATING UNIT	TYPES			2			03				2022-12.19
Heating Component 1 Gas wall furnace 1 AFUE-68 gistration Number: Registration Date/Time: HERS Provider:	Na	Jame		0: System	r Type		Numbe	er of Units		04 Heating El	ficiency	
zistration Number: HERS Provider: N.T.S. 0.92	Heating Co	Component 1	_	Gas wall	furnace			1		AFUE	-68	Scale
ristration Number: HERS Provider: HERS Provider: N.T.S. 0.92												
	gistration Numbers	:				Registration Do	te/Time·		HEDC	Provider:		N.T.S. 0.92

Report Generated: 2022-12-19 15:23:20

Report Version: 2019.2.000

Schema Version: rev 20200901

roject Name: Unit 5 alculation Descript	5727_Duplex_ tion: Title 24 /	_Gibson Analysis			Calcul Input	ation Date/Tim File Name: 202	e: 2022-12-19T1 2-1012 Jeannette	6:22:48-07:00 e - 5727 E Oce	an Blvd v3.ribd19	(Page 3 of 11)		
PAQUE SURFACES											Sheer Energy	
01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Gross Area (ft ²)	07 Window and	08 Tilt (deg)	09 Wall Exception	10 ons Status	11 Verified Existing		
NE Wall U	Unit 5727	R-15 Wall	45	Right	383.18	48.93	90	none	Altered	No	3053 E. Nuaent Street	
SW Wall L	Unit 5727 Unit 5727	R-15 Wall R-15 Wall	45 135	Right Front	383.18 221	65.58 94.5711	90	none	Altered	No	Cancaster CA 93535-268	
IW Wall L	Unit 5727 Addition	R-15 Wall (N) R-15 Wall	315 45	Back Right	18.45 59.85	0	90 90	none Extension	Altered	No n/a		
W Wall 2	Addition	(N) R-15 Wall	225	Left	59.85	10	90	Extension	New	n/a		
W Wall 2	Addition Unit	R-15 Wall w/R-4	225	Left n/a	196.6	86.17	90 n/a	none	Existing	n/a No	v/f : 661.946.1741	
oof_NE 2 U	27>>Addition Unit 5727	R-30 Roof Attic	n/a	n/a	523.63	n/a	n/a		Altered	No	sheerenerav@verizon.net	
toof_SW L	Unit 5727	R-30 Roof Attic	n/a	n/a	549	n/a	n/a		Altered	No n/a		
oof_SW 2	Addition	(N) R-30 Roof Atti	c n/a	n/a S	86.44	O n/a	D n/a R		New	n/a	www.sheereneravcalcs.con	
ised Floor	Addition	R-19 Floor No Crawlspace	n/a	n/a	172.89	n/a	n/a		New	n/a	www.sneerenergycuics.com	
or @ Unit 5725	Unit 5727	R-0 Floor No Crawlspace	n/a	n/a	1098	n/a	n/a		Existing	No		
IE Wall 3 W Wall 3	_Garage _Garage	Gar_R-0 Wall Gar_R-0 Wall	45 225	Right Left	205.07 205.07	0 126	90	none	Existing	No No		
E Wall 2	Garage	Gar_R-0 Wall	135	Front	185	17.81	90	none	Existing	No		
gistration Number: Building Energy Eff	: 222-P010230978 fficiency Standa	8-000-000-0000000-0 rds - 2019 Residen	0000 tial Compliance		Registration Da Report Version: Schema Versior	te/Time: 2022-12-19 1 2019.2.000 1: rev 20200901	16:02:21	HERS P	rovider: Generated: 2022-1	CalCERTS inc. 2-19 15:23:20		
ect Name: Unit 5 ulation Descript FLOORS	5727_Duplex_ tion: Title 24 /	_Gibson Analysis			Calcul Input	ation Date/Tim File Name: 202	e: 2022-12-19T1 2-1012 Jeannette	6:22:48-07:00 e - 5727 E Oce	an Blvd v3.ribd19	(Page 6 of 11)		
01	02	03	04	0	5	06	07	08	09	10		
Name	Zone	Area (ft ²)	Perimeter (ft) Edge I R-valu Der	e and R-v oth	ge Insul. alue and Carr Depth	peted Fraction	Heated	Status	Verified Existing Condition		
b-on-Grade	Garage	443.33	84.34	no	ne	0	0%	No	Existing	No		
QUE SURFACE CON	NSTRUCTIONS											
01		02	03		04	05	06 Interior / Exterior	07	0	8	Client Name and Address	
onstruction Name	ie Surfa	ace Type	nstruction Type	Fra	aming	R-value	Continuous R-value	U-factor	Assembl	y Layers	Jeannette Architects	
Gar_R-0 Wall	Exter	ior Walls Wo	od Framed Wall	2x4 @	16 in. O. C.	R-0	None / None	0.361	Inside Finish: G Cavity / Frame:	Sypsum Board no insul. / 2x4	209 Reaonao Avenue	
		NA	T C			IS.	hĉ		Exterior Finish:	3 Coat Stucco	Long Beach (A 90803	
R-15 Wall	Exter	ior Walls Wo	ood Framed Wall	2x4@:	16 in. O. C.	0 ^{R-15}	None / None	0.095	Cavity / Fram Exterior Finish:	e: R-15 / 2x4 3 Coat Stucco	502.987.9159	
	Evtor	ior Walls	ad Framed Wall	2,4,0,7	16 in 0 0	P 15	None / None	0.005	Inside Finish: G	Sypsum Board		
	Exter		oo Framed Wan	2x4 @ .	16 m. O. C.	K-12	None / None	0.095	Exterior Finish:	3 Coat Stucco		
R-15 Wall w/R-4	Exter	ior Walls Wo	ood Framed Wall	2x4 @ :	16 in. O. C.	R-15	None / R-4	0.064	Inside Finish: C Cavity / Fram Sheathing / Insulat Exterior Finish:	Gypsum Board e: R-15 / 2x4 ion: R-4 Sheathing 3 Coat Stucco	Project: Gibson Duplex	
- <mark>0 Roof</mark> No Attic	pof No Attic Cathedral Ceilings Wood Framed 2x4 @ 16 i		16 in. O. C.	R-O	None / None	0.484	Roofing: Light Roof Roof Dec Siding/sheath Cavity / Frame: Inside Finish: C	f (Asphalt Shingle) k: Wood ning/decking no insul. / 2x4 Sypsum Board	5727 E. Ocean Blvd. Long Beach CA 90803			
istration Number: Building Energy Eff FIFICATE OF CON ect Name: Unit S ulation Descript	: 222-P010230978 fficiency Standa MPLIANCE 5727_Duplex_ tion: Title 24 <i>f</i>	3B-000-000-0000000-(rds - 2019 Residen _Gibson Analysis	0000 tial Compliance		Registration Da Report Version: Schema Versior Calcul Input	te/Time: 2022-12-19 2019.2.000 1: rev 20200901 ation Date/Tim File Name: 2022	16:02:21 e: 2022-12-19T1(2-1012 Jeannette	HERS P Report 6:22:48-07:00 e - 5727 E Oce	rovider: Generated: 2022-1 an Blvd v3.ribd19	CalCERTS inc. 2-19 15:23:20 CF1R-PRF-01E (Page 9 of 11)		
ER HEATERS							1	1	I			
01 02	03	04 0	5 06	07	08 Tank	09 1	0 11	۱ 	12 1	3 14		
ame Heatir Eleme Type	ent Tank 1	Type # of Units (gr	Energy ol. Factor or al) Efficiency	Input Rating or Pilot <= 200	Insulation R-value (Int/Ext)	andby 1st Loss or Ratin covery Eff Flow	Rate NEEA Hea	at Pump Tan Model C	K Location Ambient Sta	verified Existing Condition		
ater 1 Gas	Instanta	neous 1 0	0.96-UEF	kBtu/hr	U	n/d N,	n/a	a	n/a Alte	NO NO		
ER HEATING - HER 01 Name	RS VERIFICATIO	N 2 ulation Pa	03 arallel Piping	04 Compact Dist	ribution Comp	05 act Distribution Type	06 Recirculation Co	ntrol Cer	07 htral DHW S	08 hower Drain Water Heat Recovery		
HW Sys 1 - 1/1	Not Rec	luired N	ot Required	Not Requ	ired	None	Not Required	d Not	t Required	Not Required	1 2022-12.19 1	
E CONDITIONING 01	G SYSTEMS	02	03			06	P P Required	08	09 10 /erified Heatir	11 ng Cooling	No. Date Rev/Issue	
Name		System Type	Name	Name	Fan Nan	Name	" Thermostat Type	Status E	xisting Equipm ondition Coun	ent Equipment t Count	Froject Sheet	
Wall Furnace1	1 Heat	ting and cooling sys other	stem Heatin Compon 1	g Coolin ent Compon 1	ent HVAC Far	n1 n/a	Setback	Altered	No 1	1	Date 724 1	
C - HEATING UNIT	T TYPES			2			13				2022-12.19	
N	Name		Syster	n Type		Number	of Units		Heating Effic	iency		
Heating C	Component 1		Gas wal	furnace			1		AFUE-6	8	Scale	
stration Number:	:				Registration Da	te/Time:		HERS P	rovider:		N.T.S. 0.92	

roject Name: Un	nit 5727_Duple	ex_Gibson 1 Analysis			Calcul Input	ation Date/Tim File Name: 2022	e: 2022-12-19T16 2-1012 Jeannette	6:22:48-07:00 - 5727 E Ocea	an Blvd v3.ribd19	(Page 3 of 11)			
PAQUE SURFACES	5	Anarysis			mput		2 IOI2 Scametic				Sheer F.neray		
01 Name	02 Zone	03 Constructio	04 Azimuth	05 Orientation Gr	06	07 Window and	08 Tilt (deg)	09 Wall Exception	10 ns Status	11 Verified Existing			
NE Wall	Unit 5727	R-15 Wall	45	Right	383.18	Door Area (ft2) 48.93	90	none	Altered	Condition No	3053 F. Nudent Street		
SW Wall	Unit 5727 Unit 5727	R-15 Wall R-15 Wall	45 135	Right Front	383.18 221	65.58 94.5711	90 90	none	Altered	No	$\int \frac{1}{2} \int $		
NW Wall	Unit 5727	R-15 Wall	315	Back	18.45	0	90	none	Altered	No	Lancaster (A 95555-200		
IE Wall 2 W Wall 2	Addition Addition	(N) R-15 Wa (N) R-15 Wa	all 45 all 225	Right Left	59.85 59.85	15.15 10	90 90	Extension Extension	New	n/a n/a			
W Wall 2	Addition Unit	R-15 Wall w/	'R-4 225	Left	196.6	86.17	90	none	New	n/a	v/f:661.946.1741		
@ Addition 5	5727>>Addition	R-0 Wall	n/a,	n/a	165	0	n/a		Existing	No	sheerenergy@verizon net		
loof_SW	Unit 5727	R-30 Roof At	ttic n/a	n/a	549	n/a	n/a		Altered	No	sheerenergy@verizon.net		
oof_NE 3 oof_SW 2	Addition Addition	(N) R-30 Roof (N) R-30 Roof	Attic n/a Attic n/a	n/a	86.44	n/a n/a	D n/a R		New	n/a n/a			
ised Floor	Addition	R-19 Floor N Crawlspace	No n/a	n/a	172.89	n/a	n/a		New	n/a	www.sheerenergycalcs.con		
or @ Unit 5725	Unit 5727	R-0 Floor N Crawlspace	lo n/a	n/a	1098	n/a	n/a		Existing	No			
IE Wall 3	Garage	Gar_R-0 Wa	all 45 all 225	Right	205.07	0	90	none	Existing	No			
E Wall 2	Garage	Gar_R-0 Wa	all 135	Front	185	17.81	90	none	Existing	No			
istration Numb Building Energy	per: 222-P0102309 y Efficiency Stand	178B-000-000-00000 dards - 2019 Resid	000-0000 dential Compliance	R S	egistration Da eport Version: chema Versior	te/Time: 2022-12-19 1 2019.2.000 1: rev 20200901	16:02:21	HERS Pi Report	ovider: Generated: 2022-1	CalCERTS inc. 2-19 15:23:20			
'IFICATE OF C ect Name: Un ulation Descri	COMPLIANCE nit 5727_Duple ription: Title 24	ex_Gibson 1 Analysis			Calcul Input	ation Date/Tim File Name: 202	e: 2022-12-19T1(2-1012 Jeannette	6:22:48-07:00 2 - 5727 E Ocea	an Blvd v3.ribd19	CF1R-PRF-01E (Page 6 of 11) X			
FLOORS	00					06	07	00	00	10			
01	02	03	04	Edge Ins	ul. Eda	06 ge Insul.	07	08	09	10 Verified Existing			
Name	Zone	Area (ft	²) Perimeter (ft) R-value a Depth	and R-v	alue and Carp Depth	peted Fraction	Heated	Status	Condition			
-on-Grade	Garage	443.33	8 84.34	none		0	0%	No	Existing	No			
UE SURFACE	CONSTRUCTION	IS 02	02	04	1	05	06	07	01	2	Client Name and Address		
nstruction Na	ame Sur	rface Type	Construction Type	Fram	ing	Total Cavity	Interior / Exterior	Ul-factor	Assembly	v Lavers	Jeannette Architects		
	ame Sur	nace type	construction type	Flair	ung	R-value	R-value	U-lactor	Assembl		209 Redondo Avenue		
Gar_R-0 Wall	l Exte	erior Walls	Wood Framed Wall	2x4 @ 16	in. O. C.	R-0	None / None	0.361	Inside Finish: G Cavity / Frame: Exterior Finish:	iypsum Board no insul. / 2x4 3 Coat Stucco	Cona Beach CA 90803		
							INC		Inside Finish: G	iypsum Board	562.987.9139		
R-15 Wall	Exte	erior Walls	Wood Framed Wall	2x4@16	in. 0. C.	O R-15	None / None	0.095	Cavity / Fram Exterior Finish:	e: R-15 / 2x4 3 Coat Stucco			
(N) R-15 Wall	l Exte	erior Walls	Wood Framed Wall	2x4 @ 16	in. O. C.	R-15	None / None	0.095	Inside Finish: G Cavity / Fram	iypsum Board e: R-15 / 2x4			
									Exterior Finish:	3 Coat Stucco			
-15 Wall w/R·	-4 Exte	erior Walls	Wood Framed Wall	2x4 @ 16	in. O. C.	R-15	None / R-4	0.064	Cavity / Fram Sheathing / Insulat	e: R-15 / 2x4 ion: R-4 Sheathing	Project:		
									Exterior Finish:	3 Coat Stucco	Gibson Duplex		
-0 Roof No At	tic Cathe	edral Ceilings	Wood Framed	2x4 @ 16	in. O. C.	R-0	None / None	0.484	Roof Dec Siding/sheath	k: Wood hing/decking	5727 E. Ocean Blvd.		
		-	Celling						Cavity / Frame: Inside Finish: G	no insul. / 2x4 iypsum Board	Long Beach CA 90803		
stration Numb uilding Energy IFICATE OF C ct Name: Un lation Descri	eer: 222-P0102309 y Efficiency Stand COMPLIANCE hit 5727_Duple iption: Title 24	178B-000-000-00000 dards - 2019 Resid ex_Gibson 4 Analysis	000-0000 dential Compliance	F R S	Registration Da Report Version: chema Versior Calcul Input	te/Time: 2022-12-19 1 2019.2.000 a: rev 20200901 ation Date/Tim File Name: 2022	e: 2022-12-19T16 2-1012 Jeannette	HERS Pr Report 6:22:48-07:00 2 - 5727 E Ocea	ovider: Generated: 2022-1 an Blvd v3.ribd19	CalCERTS inc. 2-19 15:23:20 CF1R-PRF-01E (Page 9 of 11) X			
R HEATERS	02	03 04	05 06	07	08	09 -	0 4-		12 -	3 14			
- () He:	ating	04	Tank Energy		Tank d	itandby 1e+	- 11 Hr	Tan	Location	Verified			
me Elei Ti	ment Tank ype	k Type # of Units	Vol. Factor or (gal) Efficiency	or Pilot	R-value Int/Ext)	Loss or Ratin covery Eff Flow	ng or Brand or	Model Co	Ambient Sta ondition	tus Existing Condition			
IW G	Gas Cons	sumer 1	0 0.96-UEF	<= 200 kBtu/br	0	n/a n,	/a n/a	a	n/a Alte	ered No			
01 Name	Pipe In	02 Insulation	03 Parallel Piping	04 Compact Distrib	oution Comp	05 act Distribution Type	06 Recirculation Con	ntrol Cer Dis	07 tral DHW Si tribution	08 hower Drain Water Heat Recovery			
IW Sys 1 - 1/1	L Not R	equired	Not Required	Not Require	d	None	Not Required	d Not	Required	Not Required	1 2022-12.19 1		
CONDITIONI	ING SYSTEMS	02			05	06	07~	08	09 10	11	No. Date Rev/Issu		
Nerra		Sustan T	e Heating U	Jnit Cooling Un	it Can No.	Distributio	n Required	Statur -	erified Heatin	ng Cooling	Project Sheet		
Name Wall Furper	ce1 He	system Type	g system Compon	g Cooling ent Component	Han Nan	Name	Setback	Altered	No 1	t Count	2022-1012		
unide		other		1		iya	JEIDAUK	ereu		· ·	Date T71		
- HEATING UI				2			2				2022-12 19		
	01 Name		0 Syster	2 n Type		0 Number	of Units		04 Heating Effic	iency			
Heatin	ng Component 1		Gas wal	furnace		:	1		AFUE-68	3	Scale		
tration Numb	ber:			P	egistration Da	te/Time		HERS P	ovider		$\mid \mathcal{N}.T.S. 0.92 \mid$		

Project Name: Unit 5 Calculation Description	IPLIANCE 727_Duplex_Gibson on: Title 24 Analysis			Calculation Input File I	n Date/Tim Name: 202	e: 2022-12-19T16:22:4 2-1012 Jeannette - 572	48-07:00 27 E Ocean B	3lvd v3.ribo	CF1R-PRF-01 (Page 10 of 11) d19x	
IVAC - COOLING UNIT	/AC - COOLING UNIT TYPES						_		_	
01	02	03	04	4 0		06	0	7	08	
Name	System Type	System Type Number of Units Efficiency EER/		Efficien	cy SEER	Zonally Controlled	Mulit-9 Compr	speed ressor	HERS Verification	
ooling Component 1 No Cooling 1			n/a	n,	/a	Not Zonal	Single	Speed	n/a	
VAC - FAN SYSTEMS										
	01		02			03			04	
	Name		Туре			Fan Power (Watts/CFM)			Name	
	HVAC Fan 1	\land	HVAC Fan			0.58			n/a	
			dille ers p	K I R O		INC. DER				
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2019 Low-Rise Residential Mandatory Measures Summary

Building Envelope Measures: § 110.6(a)1: Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when leated per NFRC-400, ASTM E283 or AAMA/WDM/CSA 101.8.2/A440-2011. § 110.6(a)1: Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a). § 110.6(a)5: Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a). § 110.7: gasketed, or weather stripped. § 110.8(a): Insulation Certification by Manufacturers. Insulation must be cartified by the Department of Consumer Affairs, Bureau of Household C and Services (BHGS). § 110.8(a): Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g). § 110.8(b): Insulation Requirements of § 110.8(f) and be labeled per § 10-113 when the installation of a cool roof is specified on the CFT § 110.8(b): § 150.0(a): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consume Affairs Sont must nee exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Aftice access doors must have permanently attach the insulation. Minimum R-22 insulation and extilization as specified in § 110.7, including but not to pack and radian barriers. The altic access must be gasketed to prevent air leakage. Insulation to be advected by the observent air leakage. Insulation to the stale stale floor of 0.054 or less in a r
Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/VDDM/CSA 1011.5.2/A40-2011.* § 110.6(a): Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a). § 110.6(b): Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tabi 110.6-A, 110.6-B, or VAA.5 for exterior doors. They must be caulked and/or weather-stripped.* § 110.7: gasketed, or weather stripped. § 110.8(a): Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household C and Services (BHGS). § 110.8(a): Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g). § 110.8(a): Insulation Requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CFT § 110.8(a): Roofing Products Solar Reflectance and Thermal Emittance. The thema eeiling, or the weighted average U-factor of 0.05 or less in a rafter roof alteration. Attic access doors must have permanently attacht insulation Minimum R-22 insulation in wood-frame ceiling, or the weighted average U-factor or 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attacht insulation must meet the analytice. The attack access doors must have permanently attacht insulation must meet the analytice reguired density of the labeled R-value. § 150.0(c):
§ 110.8(a)5: Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a). § 110.6(b): Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tab 110.6-A, 110.6-B, or A4.5 for exterior doors. They must be called and/or weather-stripped. § 110.7(b): Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulk gasketed, or weather stripped. § 110.8(a): Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household C and Services (BHGS). § 110.8(a): Insulation Certification by Manufacturers. Insulation must be certified by the Department of § 10.8(g). § 110.8(b): Insulation Requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool rooi is specified on the CF1 § 110.8(c): Roofing Products Solar Reflectance and releater and the requirements of § 10.0(c) and be labeled per §10-113 when the installation of a cool rooi is specified on the CF1 § 110.8(c): Roofing Products Solar Reflectance and thereage U-factor root of a cool rooi is specified on the CF1 § 110.8(c): Roofing Products Solar Reflectance and thereage U-factor root at a cool rooi is specified on the CF1 § 110.8(c): Roofing Products Solar Reflectance and thereage U-factor of a transface of 0.05 or less and be cretified to the Department of Consume Ceiling and Raf
Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tabl 110.6-A, 110.6-B, or UAA.5 for exterior doors. They must be caulked and/or weather-stripped. § 110.7: Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulk gasketed, or weather stripped. § 110.8(a): Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household C and Services (BHGS). § 110.8(a): Insulation Certification by Manufacturers. Insulation must be insulated per the requirements of § 110.8(g). § 110.8(b): Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.13(b) and be labeled per § 10.113 when the insulation of a cool roof is specified on the CF1 § 110.8(b): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or the siglation of a cool roof in specified on the CF1 § 150.0(a): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or the weighted average U-factor must not exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attach insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must here insulation and and exterior of 0.071 or less. Opaque using which is sseed to limit, infinitation and septiding is 110.7, including but not in bacing insulation. Minimum R-13 insulation must meet t
 Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulik gated, or weather stripped. Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household C and Services (BHGS). Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g). Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance of 0.05 or less and be certified to the Department of Services (BHGS). Radiant Barrier. When requirements of § 110.8(i) and be labeled per § 10-113 when the insulation of a cool roof is specified on the CFI § 110.8(i): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Celling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame celling; or the weighted average U-factor rot coles or less in a rafter roof alteration. Attic access doors must have permanently attacht insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed retro to 10.07 or less. Opaque non-framed assemblies must have an overall assembly U-factor rot exceeding 0.102. Masonry must meet Tables 150.1. A or 8." S 150.0(g): Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value. Wall Insulation. Slab edge insulation must meet all of the following: have a u-factor." S 150.0(g): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor." S 150.0(g): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor." S 150.0(g): Raised-f
§ 110.8(a): Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household C and Services (BHGS). § 110.8(g): Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g). § 110.8(g): Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per § 10-113 when the installation of a cool roof is specified on the CF1 § 110.8(i). Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance of 0.05 or less and be certified to the Department of Consume Affairs, Bureau of Household C defined and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attacht direct contact with a continuous roof or ceiling which is seelad to limit infiltration and scifilation as specified in § 110.7, including but not it to placing insulation either above or below the roof deck or on top of a drywall ceiling. § 150.0(c): Loose-fill Insulation. Loose fill insulation in zx4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framits and U-factor of 0.102 or less, or R-20 in 2x6 inch wood framits and U-factor. § 150.0(f): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.* § 150.0(g): Raised-floor Insulation. Minimum R-19 insulation in raised wood frame
§ 110.8(g): Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g). § 110.8(i): Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per § 10-113 when the installation of a cool roof is specified on the CF1 § 110.8(i): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consume Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attacht insulation using adhesive or mechanical fasteners. The attic access doors must have permanently attacht direct contact with a continuous roof or ceiling which is sealed to limit infiltration as specified in § 110.7, including but not 1 to placing insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value. Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framed floor or 0.037 maximum U-factor." § 150.0(c): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor." § 150.0(g): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor." § 150.0(g): Siab Edge Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor."
Roofing Products Solar Reflectance and Thermal Emiltance. The thermal emiltance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1 § 110.8(i): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consume Celling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Aftic access doors must have permanently attacht insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not 1 to placing insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value. § 150.0(b): Loose-fill Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.071 or less. 0 (-071 or less.) Opaque non-framed assemblies must have an overall assembly U-factor net exceeding 0.102. Masonry must meet Tables 150.1-A or B.* § 150.0(c): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.* § 150.0(g): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.* § 150.0(g): Raised-floor Insulation. Minimum R-19 insulation in alseed wood framed floor or unverted at the solar or Class I vapor retarder. In all the aport is a part or part permean
§ 110.8(j): Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consume Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attach insulation using achesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not it to placing insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value. § 150.0(b): Loose-fill Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood fra have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry must meet Tables 150.1-A or B.* § 150.0(c): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.* § 150.0(g): Raised-floor Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical dama UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g). Yapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class I vapor retarder. This requirement als
 Ceiling and Karter Root Insulation. Minimum R-22 insulation in wood-frame ceiling; of the weighted average U-factor fust not exceed of Minimum R-19 or weighted average U-factor 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attach insulation using achesive or mechanical fasteners. The attic access sources the gasketed to prevent air leakage. Insulation must be installed direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not it to placing insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value. Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing wall or have a U-factor not exceeding 0.102. Masonry must meet Tables 150.1-A or B." § 150.0(c): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor." § 150.0(f): Raised-floor Insulation. Minimum R-19 insulation must meet all of the following: have a water absorption rate, for the insulation material alone facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical dama UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g). § 150.0(g)1: Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder must be installed on the conditioned space or outdoors must have maximum U-factor of 0.58; or the weighted average U-factor of all flenestration must not exceed 0.58." Fireplaces, Decorative Gas Appliances, and Gas Log Measures: § 110.5(e) Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor freplaces. § 150.0(e)1: Closable Do
§ 150.0(b): Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value. § 150.0(c): Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood fra have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry must meet Tables 150.1-A or B.* § 150.0(c): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.* Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical dama UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g). § 150.0(g)1: Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation. § 150.0(g)2: insulation Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must hav maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.* Fireplaces, Decorative Gas Appliances, and Gas Log Measures: § 110.5(e) Pilot Light. Continuously burning pilot lights
Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood fra § 150.0(c): have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry must meet Tables 150.1-A or B.* § 150.0(d): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.* Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical dama UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g). § 150.0(g)1: Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d). § 150.0(g)2: insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation. § 150.0(q): Fenestration Products. Fenestration, including skylights, separating conditioned space form unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.* Fireplaces, Decorative Gas Appliances, and Gas Log Measures: § 110.5(e) § 110.0(e)1: Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass do
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§ 150.0(e)3: Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioning, Water Heating, and Plumbing System Measures:
\$ 110.0-\$ 110.3: Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission."
§ 110.2(a): HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b): Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heat must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating.
Solution in the statistic in the st
Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units § 110.3(c)4: meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6: Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5: Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (ex appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa h
 Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

2019 Low-Rise Residential Mandatory Measures Summary

CA Building Energy Efficiency Standards - 2019 Residential Compliance

§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the
§ 150.0(j)1:	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans M	leasures:
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be \geq 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.45 watts per CFM for gas furnace air handlers and \leq 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow \geq 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*

CERTIFICATE OF COMPLIANCE	CF1R-PRF-01E
Project Name: Unit 5727_Duplex_Gibson	Calculation Date/Time: 2022-12-19T16:22:48-07:00 (Page 11 of 11)
Calculation Description: Title 24 Analysis	Input File Name: 2022-1012 Jeannette - 5727 E Ocean Blvd v3.ribd19x
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Kim Hogan	them my Hoyan
Company:	Signature Date:
Sheer Energy / Kim M Hogan	2022-12-19 15:32:30
Address:	CEA/ HERS Certification Identification (If applicable):
3053 E. Nugent Street	R19-09-30025 CERTIFIED ENERgy ANALYST
City/State/Zip:	Phone:
Lancaster, CA 93535	661-946-1741
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
3. The building design features or system design features identified on this Certificate of Compliance calculations, plans and specifications submitted to the enforcement agency for approval with the Responsible Designer Name: Jeff Jeannette	ce are consistent with the information provided on other applicable compliance documents, worksheets, is building permit application. Responsible Designer Signature: Jeff Jeannette
Jeannette Architects Inc.	Date Signed: 2022-12-19 16:02:21
Address: 296 Redondo Ave.	License: C30598
City/State/Zip: Long Beach, CA 90803	Phone: 562-987-9139
Digitally signed by CalCERTS. This digital signature is provided in order to secure the content of the Registration Provider responsibility for the accuracy of the information.	his registered document, and in no way implies
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Report Version: 2019.2.000 Schema Version: rev 20200901

Requirements for	or Ventilation and Indoor Air Quality:
§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance
§ 150.0(o)1G:	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa S	vstems and Equipment Measures:
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
; 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
3 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measu	res:
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	Electronic Ballasts for Fluorescent Lamps. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	Night Lights, Step Lights, and Path Lights. Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)11:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit not more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
150.0(k)2B:	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.
§ 150.0(k)2C:	Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
§ 150.0(k)2D:	Interior Switches and Controls. Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	Interior Switches and Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	Interior Switches and Controls. Lighting controls must comply with the applicable requirements of § 110.9.

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§ 150.0(k)2G:

2019 Low-Rise Residential Mandatory Measures Summary Interior Switches and Controls. An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the Frequirements of § 130.0(e); and meets all other requirements in § 150.0(k)2. or Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it des the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2. or Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must ntrolled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be configured to manual-on operation using the manual control required under Section 150.0(k)2C. r Switches and Controls. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for ng, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.* r Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems. ential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other gs on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either 0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS. ntial Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, ies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or e applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0. Adential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots roots with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with opplicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0. Ily illuminated address signs. Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of as determined according to § 130.0(c). lential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the able requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0. Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior n area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that g must be comply with Table 150.0-A and be controlled by an occupant sensor. r Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior n area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in ilding must: ply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least ent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress. Family Residences. Single family residences located in subdivisions with 10 or more single family residences and where the tion for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e). ise Multifamily Buildings. Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the ements of § 110.10(b) through § 110.10(d). um Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, y, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by urisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with eas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building ve a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of ding, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the g project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone ment is applicable to the entire building, including mixed occupancy.* a. All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north. g. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof d equipment.* g. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the , measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of arest point of the solar zone, measured in the vertical plane.* ural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof ad and roof live load must be clearly indicated on the construction documents. nnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a y reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family nces and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system. mentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through 10(c) must be provided to the occupant. Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps. Ectrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit § 110.10(e)2: breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

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A TITLE POLICY WAS NOT PROVIDED TO DENN ENGINEERS AT THE TIME OF THIS SURVEY. THEREFORE, DENN ENGINEERS DOES NOT GUARANTEE THE LEGAL DESCRIPTION OF THIS PROPERTY SURVEYED NOR DOES IT REFLECT OR DELINEATE ANY EASEMENTS THAT MAY BE ON SAID PROPERTY.

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PLAN	STANDARDS standards / definitions
BFW	BALLOON FRAMED WALL: USE 2x DF#2 STUDS FULL HEIGHT FLOOR TO FLOOR, OR FLOOR TO ROOF (AS PER PLAN CONDITION). THE INTRODUCTION OF ARBITRATION TOP PLATES AT A HEIGHT IN A WALL WHERE BRACING BY PERPENDICULAR FRAMING IS NOT PRESENT CONSTITUTES AN UNSTABLE CONDITION.
	EXTERIOR WALLS: (NON BEARING CONDITIONS) 2x4 @ 16" 0.C. == 10'-0" MAXIMUM HEIGHT (2) $2x4 @ 16" 0.C. == 13'-0" MAXIMUM HEIGHT$ 2x6 @ 16" 0.C. == 16'-0" MAXIMUM HEIGHT (2) $2x6 @ 16" 0.C. == 20'-6" MAXIMUM HEIGHT$
	INTERIOR WALLS: $2 \times 4 \odot 16$ "0.C. == 13'-6" MAXIMUM HEIGHT
C.F.	CALIFORNIA FRAMING AS NOTED ON PLANS. CONSISTS OF FALSE FRAMING OVER STRUCTURAL ROOF. ROOF KICKERS SHALL BE ADDED SO AS TO NOT EXCEED A MAXIMUM SPAN OF 8'-0" WITH 2x6 R.R. @ 24" O.C. ALL PLYWOOD SHEATHING AND SHEAR TRANSFERS DETAILS SHALL OCCUR AT THE LOWER STRUCTURAL RAFTERS, U.O.N. ON THE PLANS OR DETAILS. SIMILAR SHEATHING RECOMMENDATIONS APPLY WITH THE USE OF RIP STRIPS, SLEEPERS OR ANY DOUBLE JOIST SYSTEMS. RIDGE BOARD TO BE 2" DEEPER THAN RAFTERS.
C.J.	CEILING JOISTS: UNLESS NOTED OTHERWISE ON PLAN, USE 2x FRAMING MEMBERS AT SOFFITED AREAS MAXIMUM SPANS ARE AS FOLLOWS: $2x6 DF#2 \oplus 16" 0.C. == 13'-0"$ $2x6 DF#2 \oplus 12" 0.C. == 15'-0"$ $2x8 DF#2 \oplus 16" 0.C. == 14'-0"$ $2x8 DF#2 \oplus 12" 0.C. == 16'-0"$ $2x10 DF#2 \oplus 16" 0.C. == 14'-6"$ $2x10 DF#2 \oplus 12" 0.C. == 17'-0"$
D.F.	SPECIFIES DOUGLAS FIR FOR GRADE: UNLESS OTHERWISE NOTED, ALL 8x, 6x, 4x14, AND LARGER SHALL BE D.F. #1 AND BETTER. ALL 2x, 4x12, AND SMALLER SHALL BE D.F. #2, UNLESS NOTED OTHERWISE PER FRAMING PLAN.
D.S.	DRAG STRUT: MULTI ROOF OR FLOOR JOISTS OR SOLID MEMBER. NAIL SHEATHING TO THIS MEMBER WITH 8d/10d AT 6" O.C., U.O.N.
EA.	EACH END
E.S. E.W.	EACH SIDE (E.S. OR E/S) EACH WAY (E.A. OR E/A)
F.H.	FULL HEIGHT
HG.R	APPROVED HANGER, CAPACITY OF HANGER MUST EXCEED APPLIED LOAD AT CONNECTION.
K.S.	KING STUD: THE FIRST FULL HEIGHT STUD LOCATED IMMEDIATELY ADJACENT TO A HEADER.
K.P.	KING POST: A POST LESS THAN A STORY IN HEIGHT, GENERALLY BEARING UPON ANOTHER HEADER TO BEAM.
LUS PA	PROVIDE SIMPSON LUS HANGER, U.N.O., AT FLUSH END.
R.BD.	RIDGE (R.B.): USUALLY A SINGLE 2x WHICH IS A COMPRESSION MEMBER ONLY. RIDGE BOARDS ARE ONE SIZE LARGER THAN THE RAFTERS WHICH FRAME INTO THEM. ROOF RAFTER SPACING MUST BE THE SAME AT EACH SIDE OF THE BOARD AND MUST BE DIRECTLY OPPOSING.
R.BM.	RIDGE BEAM: A VERTICAL LOAD CARRYING MEMBER WITH POSTS AT EACH END. RAFTERS AT EACH SIDE NEED NOT BE OPPOSING.
R.J.	ROOF JOISTS (R.J. OR R/J): SPECIFIED IN AREAS WITH VAULTED CEILINGS.
R.R.	ROOF RAFTERS (R.R. OR R/R): SPECIFIED IN AREAS WHERE THERE ARE CEILING JOISTS AND THEREFORE THE RAFTERS DO NOT CARRY ANY DRYWALL OR PLASTER CEILING.
T.I.	TENSION TIES: USED TO TIE OPPOSING RAFTERS AT THEIR HEELS (ENDS). CAN NEVER BE USED TO SUPPORT A DRYWALL CEILING (A TENSION ONLY MEMBER). MUST BE PLACE IN THE LOWER THIRD OF THE RAFTER SPAN.
GLB. U.O.N	TYPICAL = PROVIDE THE SAME DETAIL AT SIMILAR CONDITION WHERE OCCURS. . UNLESS OTHERWISE NOTED.
WASI 1. W/ TF 6	 HER SCHEDULE ASHERS SHALL BE USED UNDER HEADS AND NUTS OF ALL BOLTS BEARING ON WOOD. IE WASHERS LISTED BELOW SHALL BE USED IN THE FOLLOWING LOCATIONS: A. SOLE PLATES TO FOUNDATIONS. B. WOOD LEDGERS AND CAPS TO CONCRETE AND MASONRY WALLS. C. AGAINST THE 2X MEMBER WHEN 2X MEMBER IS BOLTED AGAINST A HEAVIER MEMBER. D. STANDARD CUT WASHERS MAY BE USED ELSEWHERE, UNLESS OTHERWISE NOTED ON THE DRAWING.
	BOLT STEEL PLATE WASHER <u>SIZE</u> <u>SQUARE</u>
	$1/2^{-1}$ $3^{-1} \times 3^{-1} \times 1/4^{-1}$ IHK. $5/8^{-1}$ $3^{-1} \times 3^{-1} \times 1/4^{-1}$ THK. $3/4^{-1}$ $3^{-1} \times 3^{-1} \times 5/16^{-1}$ THK.
	7/8" 3" x 3" x 5/16" THK. 1" 3.5" x 3.5" x 3/8" THK.
ENGI 1. l	NEERED LUMBER LATERAL SUPPORT IS REQUIRED AT ALL BEARING POINTS AND ALONG COMPRESSION EDGE AT
2. 4. 1 5. 1 6. 4	INTERVALS OF 24" O.C. OR CLOSER. ALLOWABLE DESIGN STRESSES: PARALLAM (PSL): $Fb= 2900$ PSI, $Fv= 290$ PSI, $E= 2,000,000$ PSI TIMBERSTRAND (LSL): $Fb= 2325$ PSI, $Fv= 310$ PSI, $E= 1,550,000$ PSI MICROLLAM (LVL): $Fb= 2600$ PSI, $Fv= 285$ PSI, $E= 1,900,000$ PSI BEARING LENGTH SHOULD NEVER BE LESS THAN 1 1/2" AT ENDS, 3 1/2" AT INTERMEDIATE SUPPORTS. BEARING ACROSS THE FULL WIDTH OF THE BEAM IS REQUIRED. DO NOT OVERHANG SEAT CUTS ON PARALLAM PSL BEAMS BEYOND INSIDE FACE OF SUPPORT MEMBER. NOTCHING FOR UNIFORMLY LOADED BEAMS ONLY: 2" DIAMETER HOLES MAXIMUM WITHIN THE MIDDLE 1/3 OF THE SPAN AND WITHIN THE MIDDLE 1/3 OF THE DEPTH ADDITIONAL HOLES WITHIN THE SAME REGION MUST BE A MINIMUM DISTANCE OF TWICE THE LARGEST HOLE DIAMETER. RECTANGULAR HOLES ARE NOT ALLOWED. NO NOTCHING IS ALLOWED IN CANTILEVER MEMBERS WITHOUT PRIOR APPROVAL. APPROVED BY ICC EVALUATION SERVICE REPORT ESR-1387
7.) (8. /	WHERE MEMBERS QUALIFY AS REPETITIVE MEMBERS AN ALLOWABLE BENDING STRESS INCREASE OF 4% IS PERMITTED. ALL LUMBERS SHALL BEAR A LABEL STATING THE MANUFACTURER'S NAME AND PLANT NUMBER.
9. /	THE ICC EVALUATION SERVICE REPORT NUMBER, AND THE LABEL OF THE PFS CORPORATION (NER-QA251). WHEN REQUESTED A COMPLETE SET OF CALCULATIONS SHALL BE PREPARED BY THE
10. 11.	MANUFACTURER UNDER THE SUPERVISION OF A CIVIL OR STRUCTURAL ENGINEER. SHOP DRAWINGS WHEN REQUESTED SHALL BE PROVIDED BY THE MANUFACTURER. THE MANUFACTURER SHALL NOT PROCEED WITH THE FABRICATION AND/OR CUTTING UNTIL THE SHOP DRAWING AND DESIGN CALCULATIONS HAVE BEEN APPROVED BY THE E.O.R ADHESIVES USED IN THE MANUFACTURING OF THE LUMBERS SHALL BE OF THE WATERPROOF TYPE CONFORMING TO THE REQUIREMENTS OF ASTM D-2559

STRUCT	URAL OB	SERVATIO	N IS REQUIRED		
1. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE					
APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT THE COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE					
RES	SPONSIBILI ACCORDA	ITY FOR THE NCE WITH T	INSPECTION REQUIRED BY CBC. STRUCTURAL OBSERVATION SHALL BE PROVIDED HE 2019 EDITION OF THE CALIFORNIA BUILDING CODE (CBC) SECTION 1710		
2. WHI SHA	ERE STRU ALL BE C	JCTURAL OB OMPLETED,	SERVATION IS REQUIRED, A "STRUCTURAL OBSERVATION DESIGNATION" FORM SIGNED AND SUBMITTED TO THE DEPARTMENT OF DEVELOPMENT SERVICES"		
STR	RUCTURAL	OBSERVATION OBSERVATION	OREAD NAMING THE STRUCTURAL OBSERVER WHO IS TO PERFORM THE REQUIRED ON AND DESCRIBING THE STAGES OF CONSTRUCTION AND FREQUENCY AT WHICH ON IS TO OCCUR.		
3. THE DEF	OWNER	SHALL EMP CBC SECTIO	LOY A STRUCTURAL OBSERVER TO PERFORM STRUCTURAL OBSERVATIONS AS N 1704. THE STRUCTURAL OBSERVER SHOULD BE ONE OF THE FOLLOWING		
IND	IVIDUALS:	REGISTERE	D DESIGN PROFESSIONAL RESPONSIBLE FOR THE STRUCTURAL DESIGN, OR		
4 PRF	B. A F RESPONS	IBLE FOR TI	DESIGN PROFESSIONAL DESIGNATED BY THE REGISTERED DESIGN PROFESSIONAL TE STRUCTURAL DESIGN. TING:		
	A. PRI	OR TO CONS	ALL COORDINATE AND PRESIDE OVER A PRE-CONSTRUCTION MEETING WITH THE		
	REGISTER	ED DESIGN UCTURAL OE	PROFESSIONAL RESPONSIBLE FOR THE STRUCTURAL DESIGN (IF DIFFERENT THAN SERVER), OWNER, CONTRACTORS, AFFECTED SUBCONTRACTORS, REGISTERED		
	DEPUTY I B. THE	INSPECTORS	AND THE BUILDING INSPECTOR.		
	OF THE	S AND CONI STRUCTURE	VECTIONS THAT AFFECT THE VERTICAL AND LATERAL FORCE-RESISTING SYSTEMS AND TO REVIEW THE SCHEDULING OF REQUIRED STRUCTURAL OBSERVATIONS.		
	PRE-CON	ISTRUCTION	MEETING AND NAME OF THE DESIGNATED STRUCTURAL OBSERVER TO PERFORM ISERVATION PROGRAM.		
	D. ADE DIFFEREN	DITIONAL CO	INSTRUCTION MEETINGS MAY BE REQUIRED AT DIFFERENT STAGES AND/OFOR		
5. THE OBS	E STRUCT	ural obsef N report"	VER SHALL COMPLETE, SIGN, WET STAMP AND SUBMIT A "STRUCTURAL FORM AFTER EACH SITE VISIT REQUIRING STRUCTURAL OBSERVATION.		
6. OBS	SERVATION ERE THE	N SCHEDULE	: _ OBSERVATION IS REQUIRED, THE STRUCTURAL OBSERVER SHALL PERFORM SITE 		
COF	RECTION	OF DEFICIE	NCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED.		
FOL	LOWING S CONSTRU	STRUCTURAL	ELEMENTS AND THEIR CONNECTIONS AT THE SCHEDULED INTERVALS OR STAGES		
(PLFAS	SF SPFC	IFY OR CH	STRUCTURAL OBSERVATION		
STRUC WHEN	TURAL C	DBSERVATIC RUCTURAL	N AND IDENTIFY THE SCHEDULED INTERVAL OR STAGE OF CONSTRUCTION OBSERVATION WILL BE PERFORMED.)		
ТҮРЕ			AL ELEMENTS OR SCHEDULED INTERVAL OR STAGE OF		
z	⊠ F00	TING, STE	A WALL PRIOR TO POURING CONCRETE		
IDATIC	🗆 MAT	FOUNDATI	ON, PRESTRESSED CONC. SLAB		
FOUN		SSON, PILE	, GRADE BEAM		
		ER:	AD, ANCHOR PRIOR TO POURING CONCRETE		
		ICRETE			
ALLS		SONRY			
×		DD SHEAR	WALL PANEL PRIOR TO COVERING UP		
		EL CANTILE	VER COLUMN		
S.	🗆 STE	EL BRACED	FRAME		
FRAMI		ICRETE MO	MENT FRAME		
		ER: BEAMS	& JOIST w/ CONNECTION PRIOR TO COVERING UP		
AS OF)		ICRETE			
HRAG) R/RO		EL DECK			
DIAP (FLOC		ER:			
7. OBS	SERVED D	EFICIENCIES			
	A. OBS	RUCTURAL C	CIENCIES BY THE STRUCTURAL OBSERVER SHALL BE REPORTED IN WRITING ON BSERVATION REPORT" FORM TO THE OWNER, REGISTERED DESIGN PROFESSIONAL		
	CONTRAC	TORS, AFFE	TED SUBCONTRACTORS, REGISTERED DEPUTY INSPECTOR AND THE BUILDING		
	B. THE STRUCTU	CONTRACT	OR SHALL RESOLVE ALL IDENTIFIED DEFICIENCIES TO THE SATISFACTION OF THE ER AND BUILDING INSPECTOR PRIOR TO REQUESTING THE NEXT INSPECTION.		
	C. AT BUILDING	THE CONCL INSPECTOR	JSION OF THE PROJECT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE A FINAL WRITTEN STATEMENT ON THE "STRUCTURAL OBSERVATION REPORT" FORM		
	BEST OF	THE STRUC	S HAVE BEEN MADE AND REPORT THAT ALL OBSERVED DEFICIENCIES, TO THE TURAL OBSERVER'S KNOWLEDGE, HAS BEEN RESOLVED AND THAT THE CENERALLY CONFORMS TO THE APPROVED CONSTRUCTION DOCUMENTS		
	3110010	IVAL STOTEM			
			ЭПЕАК WA		
		CA	LIFORNIA BUILDING CODE (2019)		
SAM		SULVD	WALL SHEATHING (1)		
8	7	90	© 6" O.C. TOP & BOTTOM & E.N. & F.N. (PER SECT. 2306.4.5)		
10		280	15/32" STR I PLYWD BLKD w/ 8d @ 6" O.C. E.N. & 12" O.C. F.N.		
		340	15/32" STR I PLYWD BLKD w/ 10d @ 6" O.C. E.N. & 12" O.C. F.N.		
	⊥ (1,4)	470	15/32" STP DIXWD DIKD w/ 84 @ 4" OC EN & 12" OC EN		
<u>/12\</u>	<u>(14)</u>	430	13/32 SIR I FEIWD BERD W/ 60 9 4 0.0. E.N. & 12 0.0. F.N.		
/13		510	15/32" STR I PLYWD BLKD w/ 10d @ 4" O.C. E.N. & 12" O.C. F.N.		
14	(1,4) _	665	15/32" STR I PLYWD BLKD w/ 10d @ 3" O.C. E.N. & 12" O.C. F.N.		
15	(1,4)	870	15/32" STR I PLYWD BLKD w/ 10d @ 2" O.C. E.N. & 12" O.C. F.N.		
A. AL	L EXTER	IOR WALL 1	O BE SECURED WITH 5/8" DIA. X 16" A.B.'s AT 72" O.C.		
WI WA	th 7" 0 Asher ui	F EMBEDME NDER NUT	NT, UNLESS OTHERWISE NOTED, AND WITH MINIMUM $3^{\circ}x3^{\circ}x1/4^{\circ}$ THK. PLATE AT EACH BOLT.		
B. AL EQ	L INTERI	OR WALLS T, AT 36"	WITH SHOT PINS; RAMSET #1506 (ICC-ES, ESR #1799), OR O.C. AT BEARING WALLS AND 48" O.C. AT NON-BEARING WALLS,		
UN C. CO	UNLESS OTHERWISE NOTED. C. CODE MINIMUM (2) ANCHOR BOLTS PER PANEL.				
D. CO WA). CODE MINIMUM 16d SOLE PLATE NAILS AT 16" O.C. TYPICAL AT ALL SECOND FLOOR WALLS (U.N.O.).				
E. WH F. AL	. WHERE DOUBLE 2x SOLE PLATES ARE USED, PROVIDE PROGRESSIVE NAILING. . ALL NAILS ARE COMMON NAILS.				
G. TABLE FOR USE WITH STUDS AT 16" O.C. MAXIMUM. H. ALL LAG BOLTS (LB) TO BE 8" LONG INSTALLED WITH PILOT HOLE AND WRENCH.					
J. 5/8" DIA. A.B. MAY BE REPLACED BY 5/8" DIA. THREADED RODS BY 5" EMBED. WITH SIMPSON SET-XP EPOXY, ICC-ES, ESR 2508, (OR EQUIVALENT) AT THE					
SA 3"	SAME SPACING, WITH SPECIAL INSPECTION. EACH BOLT SHALL HAVE MIN. 3"X3"X1/4" THK. SQUARE WASHER.				
K. FR SH	AMING M IEAR WAI	EMBERS OF _L.	BLOCKING SHALL BE PROVIDED AT ALL EDGES OF ALL PLYWOOD SHEETS IN		
<u>(E)</u> RO	OF PLYW	OOD DIAGE	HRAGM (SHEATHING):		
USE SUP	. 1/2"S PPORTED	EDGES ANI	SHEATHING, MIN. PANEL INDEX NUMBER (24/0), WITH 8d NAILS AT 6" O.C. BOUNDARIES; AT 12" O.C. IN THE FIELD (UNBLOCKED U.O.N.). FACE GRAIN		
or (E) FL(<u>00R</u> 0R	DECK PLYV	/OOD_DIAPHRAGM_(SHEATHING):		
USE	5/8" S	STRUCTURAL GROOVE, W	SHEATHING, OR PLYWOOD SIDING, MIN. PANEL INDEX NUMBER (32/16), ITH SIMPSON "WSNTL3S (LARR# 25661, ICC-ES ESR# 1472)" (OR		
EQU	IVALENT)) SCREW A' U.O.N.).	0 U.C. SUPPORTED EDGES AND BOUNDARIES; AT 10" O.C. IN THE FIELD APPLY 'LOCTITE PL' CONSTRUCTION ADHESIVE TO ALL JOISTS PRIOR TO FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS		

	STRUCTURAL OBSERVATION IS REQUIRED (CONT.)	FASTER
CTIONS OF THE NCE TO THE THE COMPLETION	8. WHEN THE OWNER ELECTS TO CHANGE THE STRUCTURAL OBSERVER, THE OWNER SHALL: A. NOTIFY THE BUILDING INSPECTOR IN WRITING AND RECEIVE APPROVAL BEFORE REQUESTING THE NEXT	DESCRIPTION OF BUIL
THE ALL BE PROVIDED CTION 1710	B. CALL FOR A NEW PRE-CONSTRUCTION MEETING AND NOTIFY TO THE BUILDING INSPECTOR IN WRITING THAT THE MEETING WAS CONDUCTED, AND C. FURNISH THE NEW STRUCTURAL OBSERVER WITH COPIES OF ALL PREVIOUS STRUCTURAL OBSERVATION	1. BLOCKING BETWEEN CE RAFTERS OR TRUSSES T OTHER FRAMING BELOV
tion" form Services' RM THE REQUIRED JENCY AT WHICH	REPORTS. D. HE NEW STRUCTURAL OBSERVER SHALL APPROVE THE CORRECTION OF ALL DEFICIENCIES IDENTIFIED IN THE PREVIOUS REPORTS UNLESS OTHERWISE APPROVED BY THE BUILDING INSPECTOR.	BLOCKING BETWEEN RA NOT AT THE WALL TOP F RAFTER OR TRUSS
VATIONS AS FOLLOWING	STRUCTURAL LUMBER	FLAT BLOCKING TO TRU FILLER
ESIGN, OR	(ALL LUMBER TO BE DOUGLAS FIR LARCH OR NORTH-COMPLY WITH DOC PS20)	2. CEILING JOISTS TO TOP
PROFESSIONAL /NER'S	1. ALL STRUCTURAL WOOD MEMBERS SHALL BE IN THE BEST SELECTION OF DOUGLAS FIR PER WCLIB GRADING RULE #17. UNLESS NOTED OTHER-WISE. EACH PIECE OF LUMBER SHALL BE GRADE MARKED, AND COMPLY WITH THE FOLLOWING:	3. CEILING JOISTS NOT AT RAFTER, LAPS OVER PAR (SEE SECTION 2308.7.3.1
eting with the Different than Registered	 A. 2X STUDS, D.F. NO. 2 U.N.O. B. POSTS, 10' AND SHORTER, D.F. NO. 2 U.N.O. C. 2X AND 4X R/J, C/J, F/J, BEAMS AND HEADERS 	4. CEILING JOIST ATTACHE RAFTER (HEEL JOINT) (SEE SECTION 2308.7.3.1
R STRUCTURAL ISTING SYSTEMS	Fv=180psi / E=1600000psi D.F. NO. 1 Fb=1000psi	5. COLLAR TIE TO RAFTER
THE R TO PERFORM	Fv=180psi / E=1700000psi D.F. NO. 1 OR BETTER Fb=1150psi / Fv=180psi / E=1800000psi D. 6X AND WIDER BEAMS AND HEADERS	6. RAFTER OR ROOF TRUS (SEE SECTION 2308.7.5,
AND/OFOR CTURAL ION.	D.F. NO.1 Fb=1350psi / Fv=170psi / E=1600000psi D.F.S.S. Fb=1600psi / Fv=170psi / E=1600000psi 2. ALL STRUCTURAL PLYWOOD SHALL BE APA GRADE STAMPED, WITH EXTERIOR GLUE AND AS SPECIFIED BY THE AMERICAN PLYWOOD ASSOCIATION, UNLESS NOTED OTHERWISE ON PLANS.	7. ROOF RAFTERS TO RIDG RAFTERS; OR ROOF RAF RIDGE BEAM
L PERFORM SITE THAT ALLOW FOR WORK INVOLVED. N FOR THE VALS OR STAGES	3. SILLS AND PLATES RESTING IN CONCRETE OR MASONRY SHALL BE PRESSURE TREATED DOUGLAS FIR. BOLTS SHALL BE 5/8 INCH MINIMUM DIAMETER EMBEDDED AT LEAST 7 INCHES INTO THE CONCRETE OR MASONRY AND SPACED NOT MORE THAN 6 FEET APART. THERE SHALL BE A MINIMUM OF 2 BOLTS PER PIECE WITH 1 BOLT LOCATED WITHIN 12 INCHES OF EACH END OF EACH PIECE.	8. STUD TO STUD (NOT AT PANELS)
	 PREDRILL ALL HOLES FOR 20d NAILS AND LARGER AND FOR LAG BOLTS. DOUBLE TOP PLATES ON ALL EXTERIOR AND BEARING PARTITIONS (NOT OTHERWISE DETAILED) SHALL LAP 4'-0" MINIMUM AT SPLICES AND HAVE 8- 16d MINIMUM THRU EACH SIDE OF 	9. STUD TO STUD AND ABL INTERSECTING WALL CO BRACED WALL PANELS)
	SPLICE PLATES. 6. BOLTS, HEADS AND NUTS BEARING ON WOOD SHALL HAVE METAL WASHERS (SEE SCHEDULE). BOLT HOLES IN WOOD SHALL BE DRILLED 1/32" TO 1/16" DIAMETER LARGER THAN	10. BUILT-UP HEADER (2" TO
STAGE OF	NOMINAL BOLT DIAMETER. 7. LAG BOLTS SHALL HAVE LEAD HOLES BORED BEFORE DRIVING. HOLE DIAMETER TO BE AS	11. CONTINUOUS HEADER T
RETE	FOLLOWS: A. SHANK PORTION – SAME DIAMETER AND LENGTH AS SHANK B. THREAD PORTION – .60 TO .75 DIAMETER OF THREAD AND SAME LENGTH.	12. TOP PLATE TO TOP PLAT
DETE	8. ALL WOOD EXPOSED TO WEATHER OR MOISTURE SHALL BE PRESSURE TREATED DOUGLAS FIR.	13. TOP PLATE TO TOP PLAT
REIE	WELDING 1. WELDING SHALL BE EITHER THE SHIELDED OR SUBMERGED ARC PROCESS AND PERFORMED BY CERTIFIED WELDERS WITH APPROVED ELECTRODES AS QUALIFIED IN THE "QUALIFICATIONS"	14. BOTTOM PLATE TO JOIS JOIST OR BLOCKING (NO PANJELS)
	PROCEDURES" OF THE AMERICAN WELDING SOCIETY LATEST EDITION. WELDING SHALL BE PERFORMED BY APPROVED LICENSED FABRICATORS. ALL STRUCTURAL FIELD WELDING SHALL HAVE CONTINUOUS INSPECTION BY REGISTERED DEPUTY INSPECTOR.	15. BOTTOM PLATE TO JOIS JOIST OR BLOCKING AT PANELS
	2. LOW HYDROGEN WELDING RODS SHALL BE USED IN WELDING REINFORCING BARS AND BOLTS. 3. ELECTRODES USED SHALL BE MATCHED WITH BASE METALS AS PER AWS RECOMMENDATIONS.	
	STRUCTURAL STEEL	16. STUD TO TOP OR BOTTO
_	 ALL STRUCTURAL STEEL WORK SHALL BE DESIGNED, FABRICATED AND ERECTED TO AITC SPECIFICATIONS AND STANDARD PRACTICES FOR BUILDINGS. STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A-36. 	17. TOP PLATES, LAPS AT C INTERSECTIONS
	 STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A-53 GRADE "B". STRUCTURAL STEEL TUBE SHALL CONFORM TO ASTM A-500 GRADE "B". PAINT ONE COAT OF RUST INHIBITIVE PAINT AND TWO COATS IN EXPOSED AREAS. 	18. 1" BRACE TO EACH STUE
_	6. A LICENSED FABRICATOR APPROVED BY THE BUILDING DEPARTMENT SHALL FURNISH SHOP DRAWINGS FOR APPROVAL BY ENGINEER PRIOR TO FABRICATIONS OF STRUCTURAL STEEL MEMBERS HOLES FOR BOLTS AND OR RIVETS SHALL NOT BE CUT WITH A TORCH	19. 1" x 6" SHEATHING TO EA 20. 1" x 8" AND WIDER SHEAT
	7. BOLT HOLES FOR STEEL CONNECTIONS SHALL BE 1/16" LARGER IN DIAMETER THAN NORMAL BOLT SIZE. BOLTS FOR COLUMN BASE PLATES AT FOUNDATIONS MAY BE 3/16" MAXIMUM LARGER IN DIAMETER THAN ANCHOR BOLTS.	21. JOIST TO SILL, TOP PLAT
IN WRITING ON N PROFESSIONAL DBSERVER), HE BUILDING	 ALL CONNECTIONS NOT DETAILED ON PLANS SHALL BE DETAILED BY STEEL FABRICATOR AND SHALL BE SUBMITTED ON SHOP DRAWINGS FOR APPROVAL BY ENGINEER. BOLTS SHALL BE ASTM A-307 UNLESS NOTED OTHERWISE. 	22. RIM JOIST, BAND JOIST, TOP PLATE, SILL OR OTH BELOW
		23. 1" x 6" SUBFLOOR OR LE

AT THE SUMENTS. **AR WALL SCHEDULE**

	SILL CONNECTION (2,3)		TOP ANCHORAGE (2,3)		27
	CONCRETE & MASONRY	WOOD	SIMPSON A35		28
APLES . 2306.4.5)	5/8" AB @ 72" O.C.	16d @ 16" O.C.	24" O.C.		29
k 12" O.C. F.N.	5/8" AB @ 48" O.C.	16d @ 6" O.C.	24" O.C.		
& 12" O.C. F.N.	5/8" AB @ 32" O.C.	1/4" SDS @ 14" O.C.	24" O.C.		
k 12" O.C. F.N.	5/8" AB @ 32" O.C.	1/4" SDS @ 11" O.C.	16" O.C.		30
& 12" O.C. F.N.	5/8" AB @ 24" O.C.	1/4" SDS @ 9" O.C	16" O.C.		
& 12" O.C. F.N.	5/8" AB @ 16" O.C.	1/4" SDS @ 7" 0.C	12" O.C.		
& 12" O.C. F.N.	5/8" AB @ 16" O.C.	1/4" SDS @ 5" O.C	8" O.C.		31
C. L. L. AL 43"x1/4" THK PLATE HAVE AN	L PLYWOOD PANEL SHALL	BE MANUFACTURED USING EX O ON THE 2019 CBC.	(TERIOR GLUE /	AND SHALL	32
M. WOOD ST	RUCTURAL PANELS SHALL	COMPLY WITH PS1 AND/OR F	PS2.		33
WALLS, 1. WHERE SI TOGETHER ERAMING	HEAR DESIGN VALUES EXC R IN ACCORDANCE WITH AF	EED 350 PLF, USE 3x STUDS & PA NDS TO TRANSFER TI PAL JOINTS AND STUL PLATE	OR (2) 2x ST HE DESIGN SHE	UDS FASTENED AR VALUE BETWEEN	34
FLOOR ALL CASE	ES.	DOTH SIDES OF WALL AND		DE STAGGERED IN	35
0.C. ON	EITHER SIDE, PANEL JOINT	S SHALL BE OFFSET TO FALL	ON DIFFERENT	FRAMING	36
NAILS ON 3. WHERE S	I EACH SIDE SHALL BE ST. HEAR MATERIAL IS INSTALL	AGGERED. ED ON BOTH SIDES. THE SPA	ACING FOR THE	ABOVE TOP	37
CH. ANCHORA PLANS.	GE AND SILL CONNECTION	SHALL BE HALF SHOWN. UN	LESS OTHERWIS	E NOTED ON	38
AT THE 4. CITY APP Sheathin	ROVED DEPUTY INSPECTOR IG IS 4" OR LESS ON CEN	IS REQUIRED WHERE THE FA	STENER SPACIN	G OF THE	39
5. FASTENER PLYWOOD SHEETS IN FIRE-RET	RS AND CONNECTORS IN CO ARDANT-TREATED WOOD (I	DNTACT WITH PRESERVATIVE- .E. ANCHOR BOLTS, NAILS, SO	TREATED AND CREWS, ETC.) S	SHALL BE IN	
ACCORDA	NCE WITH PER CBC-2019	SECTION 2304.9.5.		_	40
d NAILS AT 6" O.C. * V	VOOD STRUCTURAL PANELS	S SHALL COMPLY WITH DOC	PS1 AND/OR	DOC PS2.	41
J.O.N.). FACE GRAIN * A	ALL PLYWOOD PANEL SHAL DR EXTERIOR) AND SHALL	L BE MANUFACTURED USING HAVE AN APPROVED ICC-E	S EXTERIOR GL	JE (EXPOSURE 1 HE 2019 CBC.	а
	JSE DOUBLE FLOOR JOIST AT FLOOR LEVELS, USE SI	S BELOW ALL PARALLEL WA	LLS U.N.O. ICULAR SHEAR\	WALLS AND	k
יאסבת (32/10), L 72)" (OR * / O C IN THE FIELD * /	ALL BEAMS SUPPORTING S	HAGH END OF THE SHEARM HEARWALLS MUST BE STRAF LEVEL MUST BE CONNECTE	PED TO THE V	VALLS BELOW. BELOW WITH A	c
ISTS PRIOR TO	HOLDOWN TO THE LOWER	LEVEL OR TO THE FOUNDAT	TION.		c

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DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	ABLE 2304.1
BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR	ROOF 3 - 8d COMMON (2-1/2" x 0.131"); OR 3 - 10d BOX (3" x 0.128"); OR 3 - 3" x 0.131" NAILS; OR	EACH END, T
BLOCKING BETWEEN RAFTERS OR TRUSS	3 - 3" 14 GAGE STAPLES, 7/16" CROWN 2 - 8d COMMON (2-1/2" × 0.131"); OR 2 - 3" × 0.131" NAILS; OR 2 - 3" 14 GAGE STAPLES	EACH END, T
NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2 - 16d COMMON (3-1/2" x 0.162"); OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3-1/2" x 0.162") @ 6" O.C. 3 - 3" x 0.131" NAILS @ 6" O.C. 3 - 3" 14 GAGE STAPLES @ 6" O.C. 3 - 84 COMMON (21/2" x 0.131"): OB	FACE NAIL
CEILING JOISTS TO TOP PLATE	3 - 10d BOX (3" × 0.128"); OR 3 - 3" × 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, 7/16" CROWN 2 - 454 COMMON (4 1/0" × 0.160"); OR	EACH JOIST,
CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	3 - 16d COMMON (3-1/2" x 0.162"); OH 4 - 10d BOX (3" x 0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	PER TABLE 2308.7.3.1	FACE NAIL
COLLAR TIE TO RAFTER	4 - 10d BOX (3" x 0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION 2308.7.5, TABLE 2308.7.5)	3 - 10d COMMON (3" x 0.148"); OR 3 - 16d BOX (3-1/2" x 0.135"); OR 4 - 10d BOX (3" x 0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
	2 - 16d COMMON (3-1/2" x 0.162"); OR 3 - 10d BOX (3" x 0.128"); OR 3 - 3" x 0.131" NAILS; OR - 20" to 0.000 CARDUSE 21(50" CDOMN	END NAIL
ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	3 - 3 14 GAGE STAPLES, //16 CROWN 3 - 10d COMMON (3" x 0.148"); OR 4 - 16d BOX (3-1/2" x 0.135"); OR 4 - 10d BOX (3" x 0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" x 0.131" NAILS; OR	TOENAIL
STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3-1/2" x 0.162") 10d BOX (3" x 0.128"); OR 2" x 0.131" NAU S. OR	24" O.C. FACE
STUD TO STUD AND ABUTTING STUDS AT	3 - 3" 14 GAGE STAPLES, 7/16" CROWN 16d COMMON (3-1/2" x 0.162"); OR	16" O.C. FACE
INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d BOX (3-1/2" x 0.135"); OR 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE
BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON (3-1/2" x 0.162"); OR 16d BOX (3-1/2" x 0.135")	16" O.C. EACH
CONTINUOUS HEADER TO STUD	4 - 8d COMMON (2-1/2" x 0.131"); OR 4 - 10d BOX (3" x 0.128") 16d COMMON (3-1/2" x 0.162"); OR	TOENAIL
. TOP PLATE TO TOP PLATE	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE
. TOP PLATE TO TOP PLATE, AT END JOINTS	8 - 16d COMMON (3-1/2" x 0.162"); OR 12 - 10d BOX (3" x 0.128"); OR 12 - 3" x 0.131" NAILS; OR 12 - 3" 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE O NAIL (MINIMU LENGTH EAC
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACE WALL PANELS)	16d COMMON (3-1/2" x 0.162"); OR 16d BOX (3-1/2" x 0.135"); OR 3" x 0.131" NAIL S: OR	16" O.C. FACE
BOTTOM PLATE TO JOIST, RIM JOIST, BAND	3" 14 GAGE STAPLES, 7/16" CROWN 2 - 16d COMMON (3-1/2" x 0.162"); OR 3 - 16d BOX (3-1/2" x 0.135"); OR	16" O C FACE
PANELS	4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/16" CROWN 4 - 8d COMMON (2-1/2" x 0.131"); OR 4 - 10d BOX (3" x 0.128"); OR	
STUD TO TOP OR BOTTOM PLATE	4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/16" CROWN 2 - 16d COMMON (3-1/2" x 0.162"); OR 3 - 16d ROX (6"+ 0.100"); OR	TOENAIL
	3 - 3" x 0.131" NAILS; OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, 7/16" CROWN 2 - 16d COMMON (3-1/2" x 0.162"); OR	END NAIL
. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3 - 10d BOX (3" x 0.128"); OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, 7/16" CROWN 2 - 8d COMMON (2-1/2" x 0.131"); OR	FACE NAIL
. 1" BRACE TO EACH STUD AND PLATE	2 - 10d BOX (3" x 0.128"); OR 2 - 3" x 0.131" NAILS; OR 2 - 3" 14 GAGE STAPLES, 7/16" CROWN 3 - 84 COMMON (2.1/2" x 0.131"); OR	FACE NAIL
1" x 6" SHEATHING TO EACH BEARING 1" x 8" AND WIDER SHEATHING TO EACH BEARING	3 - 10d BOX (3" x 0.128") 3 - 8d COMMON (2-1/2" x 0.131"); OR 3 - 10d BOX (3" x 0.128")	FACE NAIL
. JOIST TO SILL, TOP PLATE, OR GIRDER	FLOOR 3 - 8d COMMON (2-1/2" × 0.131"); OR 3 - 10d BOX (3" × 0.128"); OR 3 - 3" × 0.131" NAILS; OR	TOENAIL
. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING	3 - 3" 14 GAGE STAPLES, 7/16" CROWN 8d COMMON (2-1/2" x 0.131"); OR 10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS: OR	6" O.C., TOEN
LOW	3" 14 GAGE STAPLES, 7/16" CROWN 2 - 8d COMMON (2-1/2" x 0.131"); OR 2 - 10d BOX (3" x 0.128")	FACE NAIL
2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM - FLOOR & BOOE)	2 - 16d COMMON (3-1/2" x 0.162") 2 - 16d COMMON (3-1/2" x 0.162")	FACE NAIL
10 Mar 10	20d COMMON (4" x 0.192")	32" O.C., FAC BOTTOM STA OPPOSITE SI
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN 2. 2004 COMMON. (4" x 0.102"); OP	24" O.C., FAC BOTTOM STA OPPOSITE SI
	3 - 10d BOX (3" x 0.128"); OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT NAIL
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3 - 16d COMMON (3-1/2" x 0.162"); OR 4 - 10d BOX (3" x 0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST (
. JOIST TO BAND JOIST OR RIM JOIST	3 - 16d COMMON (3-1/2" x 0.162"); OR 4 - 10d BOX (3" x 0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" t4 GAGE STAPLES, 7/16" CROWN	END NAIL
. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2 - 8d COMMON (2-1/2" x 0.131"); OR 2 - 10d BOX (3" x 0.128"); OR 2 - 3" x 0.131" NAILS; OR 2 - 3" t 0.026 TABLES 2/16" CDOWN	EACH END, T
WOOD STRUCTU FR	IRAL PANELS (WSP), SUBFLOOR, ROOF, AND INTERIOR AMING AND PRACTICEBOARD WALL SHEATHING TO FR	WALL SHEATHING " AMING " EDGES N
	6d COMMON OR DEFORMED (2" x 0.113") (SUBFLOOR AND WALL)	(INCHES) 6
3/8" - 1/2"	OR RSRS-01 (2-3/8" x 0.113") NAIL (ROOF) ^d 2-3/8 x 0.113" NAIL (SUBFLOOR AND WALL)	6
. 5/0 - 1/2	1-3/4" 16 GAGE STAPLE, 7/16" CROWN (SUBFLOOR AND WALL) 2-3/8 × 0.113" NAIL (ROOF)	4
	1-3/4" 16 GAGE STAPLE, 7/16" CROWN (ROOF) 8d COMMON (2-1/2" x 0.131"); OR	3
. 19/32" - 3/4"	6d DEFORMED (2" x 0.113") (SUBFLOOR AND WALL) 8d COMMON OR DEFORMED (2-1/2" x 0.131")(ROOF) OR RSRS-01 (2-3/8" x 0.113") NAIL (ROOF)	6
" 7/8" - 1-1/4"	(2-3/8" x 0.113") NAIL; OR 2" 16 GAGE STAPLES, 7/16" CROWN 10d COMMON (3" x 0.148"); OR 8d DEFORMED (1-1/2" x 0.131")	6
. 1/2" FIBERBOARD SHEATHING	OTHER EXTERIOR WALL SHEATHING 1-1/2" GALVANIZED ROOFING NAIL (7/16" HEAD DIAMETER); OR	3
. 25/32" FIBERBOARD SHEATHING ^b	1-1/4" 16 GAGE STAPLE WITH 7/16" OR 1" CROWN 1-3/4" GALVANIZED ROOFING NAIL (7/16" DIAMETER HEAD); OR 1-1/2" 16 GAGE STAPLE WITH 7/16" OP 4" OP ON N	3
WOOD STRUC	TURAL PANELS, COMBINATION SUBFLOOR UNDERLAYI 8d COMMON (2-1/2" x 0.131"); OR 6d DEFORMED (2" x 0.113")	MENT TO FRAMING
. 7/8" - 1"	8d COMMON (2-1/2" x 0.131"); OR 8d DEFORMED (2-1/2" x 0.131") 10d COMMON (3" x 0.148"); OR	6
	8d DEFORMED (2-1/2" x 0.131") PANEL SIDING TO FRAMING 6d CORROSION-RESISTANT SIDING (4.7/0" - 0.100" - 0.5	
. 1/2" OR LESS	(1-7/8" x 0.106"); OR 6d CORROSION-RESISTANT CASING (2" x 0.099") 8d CORROSION-RESISTANT SIDING (2-3/8" x 0.128); OR	6
ι. υ/σ	8D CORROSION-RESISTANT CASING (2-1/2" x 0.113) INTERIOR PANELLING	6
. 1/4" . 3/8"	4d CASING (1-1/2" x 0.080"); OR 4d FINISH (1-1/2" x 0.072") 6d CASING (2" x 0.099"); OR 6d FINISH (PANEL SUPPORTS AT 24 INCHES)	6
FOR SI: 1 INCH = 25.4 mm A. NAILS SPACED AT 6 INCHES AT INTERI	MEDIATE SUPPORTS WHERE SPANS ARE 48" C	
WALL SHEATHING ARE PERMITTED TO SPACING SHALL BE 6 INCHES ON CEN SUPPORTS FOR NONSTRINCTION AND	BE COMMON, BOX OR CASING. TER ON THE EDGES AND 12 INCHES ON CENT PLICATIONS PANEL SUPPOPTS AT 16 MOUTO	
IN THE LONG DIRECTION OF THE PANE WHERE A RAFTER IS FASTENED TO AN AND THE CEILING JOIST IS FASTENED	EL, UNLESS OTHERWISE MARKED). ADJACENT PARALLEL CEILING JOIST IN ACCU TO THE TOP PLATE IN ACCORDANCE WITH TH	ORDANCE WITH
TOENAILS IN THE RAFTER SHALL BE P . RSRS-01 IS A ROOF SHEATHING RING	ERMITTED TO BE REDUCED BY ONE NAIL. SHANK NAIL MEETING THE SPECIFICATIONS II	N ASTM F1667

	GENERAL CONDITIONS	
2304.10.1 - 2019 CBC	1. GENERAL CONTRACTOR SHALL VISIT THE BUILDING SITE AND SHALL VERIFY ALL CONDITIONS AND	PROFESS/04
SPACING AND LOCATION	DIMENSIONS PRIOR TO STARTING ANY WORK AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK AND MATERIALS, INCLUDING THOSE FURNISHED BY SUB-CONTRACTORS. ENGINEERS	AL HOBA
CH END, TOENAIL	SMALL BE NUTIFIED IMMEDIATELY OF ANY DISCREPANCIES. 2. ALL ASTM, ACI AND AITC DESIGNATIONS SHALL BE AMENDED TO MOST RECENT DATE, UNLESS NOTED OTHERWISE	No. 4124 FI
CH END, TOENAIL	 GENERAL DETAILS ON THIS SHEET SHALL BE USED WHERE APPLICABLE, UNLESS OTHERWISE NOTED. 	" Noballah Tarke
D NAIL	4. ALL OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE	Exp. 3/31/24
	PROCEEDING WITH ANY WORK IN QUESTION. 5. CONTRACTOR SHALL PROVIDE SAFE AND ADEQUATE TEMPORARY ERECTION BRACING ON ALL	OF CALIFORN
	REMOVED UNTIL THE ELEMENT SUPPORTED IS CAPABLE OF SUPPORTING ITS DESIGN LOADING.	
CH JOIST, TOENAIL	AND ALL LOCAL CODE REQUIREMENTS. 7. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON	
CE NAIL	THE STRUCTURAL DRAWINGS. 8. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR MOULDS, ORNAMENTS,	
CE NAIL	GROOVES, CLIPS, GROUNDS, DROPPED SLABS, CURBS, ETC., NOT SHOWN ON STRUCTURAL DRAWINGS.	
	CODE: 2019 CALIFORNIA BUILDING CODE AS AMENDED TO DATE.	
	GRAVITY LOADS: (E) ROOF : DL= 19 PSF, LL= 20 PSF (PITCH = 4:12) DECK : DL= 33 PSF, LL= 60 PSF	
PENAIL	FLOOR : DL= 33 PSD, LL= 40 PSF	
	LATERAL LOADS: WIND: EXPOSURE B, ALLOWABLE & BASIC DESIGN WIND SPEED = 75MPH & 95MPH SEISMIC: SOIL SITE CLASS = D	
D NAIL	$S_{1} = 0.555a$, $F_{v} = 1.75$, $S_{01} = 0.646$	
DENAIL	SEISMIC DESIGN CATEGORY = D RESPONSE MODIFICATION COEFFICIENT, R=6.5	MA PA 52) BA
O.C. FACE NAIL	RISK CATEGORY = D, IMPORTANCE FACTOR, I=1 SEISMIC RESPONSE COEFFICIENT(S), Cs=0.1884	
O.C. FACE NAIL	BASIC SEISMIC-FORCE-RESISTING SYSTEM(S): 1 - BEARING WALL SYSTEM-LIGHT FRAME (WOOD) WALLS SUFATUED WITH WOOD STRUCTURAL RANFLS RATED FOR	
	SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE ANALYSIS PROCEDURE USED:	THIS SHEET OF PLAN IS THE SOLE PROPERTY OF
O.C. FACE NAIL	- EQUIVALENT LATERAL FORCE PROCEDURE REDUNDANCY FACTOR USED, $\rho = 1.3$	LANDMARK STRUCTURE, INC., AND MAY NOT BE CHANGED, REPRODUCED, OR USED WITHOUT WRITTEN CONSENT. THE BUILDING OFFICIALS
O.C. EACH EDGE, FACE NAIL	THE DESIGN LOAD BEARING VALUE OF SOILS = 1000 PSF	SHALL NOT ACCEPT THIS PLAN UNLESS WET- STAMPED BY THE ENGINEER OF RECORD. THIS PLAN IS PROVIDED TO THE OWNER SHOWN FOR THE
	O. CUNTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTION" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE CALLEODNIA DIMUNION CODE INSPECTORS AND	PURPOSE OF ASSISTING WITH THE CONSTRUCTION OF THE PROJECT AT THE ADDRESS SHOWN. DRAWINGS ON THIS SHEET SHALL NOT BE SCALED.
O.C. FACE NAIL	THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER	
	FOUNDATION DESIGN IS BASED ON CRC 2019	
CH SIDE OF END JOINT, FACE IL (MINIMUM 24" LAP SPLICE NGTH EACH SIDE OF END JOINT)	REPORT BY:	
O.C. FACE NAIL	ON THE JOB SITE AT ALL TIMES.	
' O.C. FACE NAIL	2. ALL EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE SOLLS ENGINEER OR INSPECTOR	
O.C. FACE NAIL	PRIOR TO POURING FOOTINGS. 4. FOOTINGS SHALL BE POURED AGAINST FIRM UNDISTURBED NATURAL SOIL OR ENGINEERED.	
DENAIL	COMPACTED FILL, AS REQUIRED BY SOILS ENGINEER. 5. FILL AT RAMP WALLS AND RETAINING WALLS SHALL BE OF CLEAN NON-EXPANSIVE MATERIAL	AN 808
	FREE OF ORGANICS AND PLACED UNDER CONTROLLED COMPACTION TO 90% OF MAXIMUM DENSITY, U.N.O.	
ID NAIL	6. ROOF AND AREA RUNOFF, AND AREA DRAINAGE SHALL BE DIRECTED AWAY FROM BUILDING. 7. ALL WATER SHALL BE REMOVED FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING OF	С Э С
CE NAIL	CONCRETE. 8. PROVIDE ADEQUATE DRAINAGE BEHIND ALL RETAINING WALLS AWAY FROM BUILDING.	ACI ACI
CE NAIL	9. HOLD DOWNS: BOLT HOLES SHALL BE 1/16" (MAX.) OVERSIZED @ THE CONNECTORS OF THE HOLD DOWNS	
CE NAIL	TO THE POST. "INSPECTOR TO VERIFY". HOLD DOWN CONNECTORS SHALL BE TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING. USE 4×4 POST AT ALL HD-A LOCATIONS U.O.N.	NG 25-
CE NAIL	10. FASTENERS AND CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD (I.E. ANCHOR BOLTS, NAILS, SCREWS, ETC.) SHALL BE IN	
	ACCORDANCE WITH PER CBC-2019 SECTION 2304.10.5.	
JENAIL	1. CONCRETE USED IN THE WORK SHALL HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AT AGE 28 DAYS:	
O.C., TOENAIL	LOCATION IN ULTIMATE	
CE NAIL	A. SLAB ON GRADE 2500 psi B. WALL FOOTINGS 2500 psi	
CE NAIL CH BEARING, FACE NAIL	C. COLUMN FOOTINGS	
" O.C., FACE NAIL AT TOP AND DTTOM STAGGERED ON	2. ALL CONCRETE SHALL BE STONE CONCRETE UTILIZING AGGREGATE CONFORMING TO ASTM C.3.3. CEMENT SHALL BE TYPE I OR IL CONFORMING TO ASTM C150 MAXIMUM	
" O.C., FACE NAIL AT TOP AND TTOM STAGGERED ON POSITE SIDES	WATER-CEMENT RATIO SHALL BE 0.5 BY WEIGHT. 3. REINFORCING STEEL SHALL HAVE MINIMUM PROTECTIVE CONCRETE COVERING AS FOLLOWS.	90
IDS AND AT EACH SPLICE, FACE	UNLESS SPECIFICALLY DETAILED: CONCRETE CAST AGAINST AND EXPOSED TO EARTH	
uL	FORMED SURFACES EXPOSED TO WEATHER OR EARTH A. #5 BAR OR SMALLER AND WIRE MESH	
CH JOIST OR RAFTER, FACE NAIL	B. #6 TO #18 BARS	
ID NAIL	A. SLABS, WALLS AND JOISTS	MO 5- 5
CH END, TOENAIL	4. BEFORE CONCRETE IS PLACED, THE CONTRACTOR SHALL COORDINATE AND CHECK WITH	
IEATHING TO	ALL INADES TO ENSURE THE TROTER TEACEMENT OF ALL OF LININGS. SELEVES. INSTITUS.	PR0J
	CURBS, DEPRESSIONS, ETC., RELATING TO THE WORK, AS SHOWN IN THE DRAWINGS. ANY CHANGE OR DISCREPANCY SHALL BE APPROVED BY THE STRUCTURAL ENGINEER AND	PROJ
Ges Intermediate supports (HES) (Inches)	CURBS, DEPRESSIONS, ETC., RELATING TO THE WORK, AS SHOWN IN THE DRAWINGS. ANY CHANGE OR DISCREPANCY SHALL BE APPROVED BY THE STRUCTURAL ENGINEER AND THE LOCAL BUILDING AGENCY PRIOR TO PLACING OF CONCRETE. 5. ALL CONCRETE WITH A COMPRESSIVE STRENGTH IN EXCESS OF 2500 psi AT 28 DAYS	PROJ 572 LON
GES INTERMEDIATE SUPPORTS (INCHES) 6 12 6 12	 CURBS, DEPRESSIONS, ETC., RELATING TO THE WORK, AS SHOWN IN THE DRAWINGS. ANY CHANGE OR DISCREPANCY SHALL BE APPROVED BY THE STRUCTURAL ENGINEER AND THE LOCAL BUILDING AGENCY PRIOR TO PLACING OF CONCRETE. 5. ALL CONCRETE WITH A COMPRESSIVE STRENGTH IN EXCESS OF 2500 psi AT 28 DAYS SHALL BE PLACED UNDER THE SUPERVISION OF A DEPUTY INSPECTOR LICENSED BY THE LOCAL BUILDING OFFICIAL. 	DTES REI 572
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Pad B reinf. w/ (4) #4 EW Size: 2'-6" x 2'-6" x 24" Pad C reinf. w/ (4) #4 EW Size: 3'-0" x 3'-0" x 24" Pad E reinf. w/ (6) #4 EW Size: 4'-0" x 4'-0" x 24"

HDU2

HDU5

Sawcut existing slab and provide new slab after addition of footing Thickened edge

20.00 ft

(1)

- * TYPICAL ANCHOR BOLT SPACING, U.N.O. (PROVIDE MIN. EDGE DISTANCE OF $1\frac{7}{8}$ " FOR $\frac{5}{8}$ " ϕ A.B)
- $\langle A \rangle$ 5/8" dia. Anchor bolts at 72" o/c by 7" embed.
- $\langle B \rangle$ 5/8" dia. Anchor bolts at 32" o/c by 7" embed.
- <C> 5/8" dia. Anchor bolts at 24" o/c by 7" embed.
- $\langle D \rangle$ 5/8" dia. Anchor bolts at 16" o/c by 7" embed.
- $\langle E \rangle$ 5/8" dia. Anchor bolts at 12" o/c by 7" embed.
- $\langle F \rangle$ 5/8" dia. Anchor bolts at 8" 0/C by 7" embed.
- $\langle G \rangle$ (2) 5/8" DIA. ANCHOR BOLTS PER PANEL.
- $\langle H \rangle$ (3) 5/8" DIA. ANCHOR BOLTS PER PANEL.

—(A)

(C)

_____ D`

- * WHERE PLYWOOD SHEATHING IS REQUIRED ON BOTH SIDES, THE ANCHOR BOLT SPACING SHALL BE HALF THE DISTANCE INDICATED ABOVE.
- CONCRETE (f'c=2500 PSI) SLABS SHALL BE 5" NOMINAL THICKNESS WITH #4 BARS AT 12" O.C. EACH WAY AT MIDPOINT ON 10 MIL VISQUEEN VAPOR BARRIER ON 4" CLEAN AGGREGATE ROCK FILL (1/2" ROCK OR LARGER), U.N.O.. IF DISCREPANCIES OCCUR BETWEEN ARCHITECTURAL AND STRUCTURAL FOUNDATION DESIGN, THE MOST RESTRICTIVE WILL PREVAIL.
- ALL HOLDOWN ANCHORS AND ANCHOR BOLTS SHALL BE TIED IN PLACE PRIOR TO CALLING FOR FOUNDATION INSPECTION.
- FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD. FIELD-CUT ENDS, NOTCHES AND DRILLED HOLES OF PRESERVATIVE-TREATED WOOD SHALL BE FIELD-TREATED PER AWPA M4.
- — ANCHOR BOLTS IN CONTACT WITH PRESSURE TREATED SILL PLATE SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.
- IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED.

THE FOLLOWING APPLIES TO ALL SHEAR WALLS WITH SHEAR VALUES USING ALLOWABLE STRESS DESIGN (ASD) THAT EXCEED 350 PLF OR LOAD AND RESISTANCE FACTOR DESIGN (LRFD) EXCEED 500 PLF. THESE WALLS SHALL BE CLEARLY IDENTIFIED ON THE PLANS AND PROVIDED WITH THE FOLLOWINGS:

- A. 3x STUDS AND BLOCKS FOR ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS.
- B. 1/2" EDGE DISTANCE FROM THE PANEL EDGES AND 3/8" FROM THE EDGE OF THE CONNECTING MEMBERS.
- C. ALL WOOD STRUCTURAL PANEL JOINT AND SILL PLATE NAILING SHALL BE STAGGERED AT ALL PANEL EDGES.

FOUNDATION	LEGEND

: NEW FOUNDATION ______

_____ EXISTING FOUNDATION

Second Se

EXISTING WALL

PROFESS/OWA/ PROFESS/OWA/ No. 4124 PROFESS/OWA/ No. 4124 PROFESS/OWA/ No. 4124 PROFESS/OWA/ No. 4124 PROFESS/OWA/ PROFESS/ PR					
LANDMARK STRUCTURES, INC. 2600 E. PACIFIC COAST HWY. STE 170 Long Beach, CA 90804 TEL: (562) 498 9377 FAX: (562) 498 9377					
LANDI CHAN WRITI STAMF IS PRC PURPC OF TH DRAW	WARK STRUCTI GED, REPROD EN CONSENT. L NOT ACCEP PED BY THE ENG DVIDED TO THE DSE OF ASSISTIN IE PROJECT A INGS ON THIS S	JRE, INC., AND JUCED, OR US THE BUILDIN THIS PLAN U INEER OF RECO E OWNER SHC NG WITH THE CC NG WITH THE CC TTHE ADDRI HEET SHALL NO	MAY NOT BE ED WITHOUT IG OFFICIALS NLESS WET- RD. THIS PLAN WN FOR THE DWN FOR THE DNSTRUCTION ESS SHOWN. DT BE SCALED.		
OWNER:	RICHARD & RANDI GIRSON		5725-5727 E. OCEAN BLVD. Long Beach, ca 90803		
PROJECT / ADDRESS:	REMODEL AT:		5725-5727 E. OCEAN BLVD. Long Beach, ca 90803		
SHEET TITLE:	FOUNDATION PLAN				
	RE Date	VISIONS No.	BY		
JOB ISSUE DEC BLOC	No.: D date D 15, 2022 K name	shi S	722-4855 EET		

SCALE: AS SHOWN

HB

ANDGRIP BY RCHITECT	FRAMING NOTES	280	ESSION
	 SEE SHEET SN FOR GENERAL NOTES SEE SHEETS SD0 THROUGH SD2 FOR TYPICAL DETAILS. 	GISTER MARTIN	HOBA
A	 USE D.F. #1 FOR 6x OR GREATER MEMBER. SEE STRUCTURAL NOTE FOR SHEAR WALL SCHEDULE w/ SILL CONNECTION AND TOP 	₩ Xoba	llahīareē (p. 3/31/24 VCTURA▼
	ANCHORAGE. • STUDS: FOR EXTERIOR WALLS: 2x4 @ 16" O.C. D.F.#2 U.N.O.	ATE OF	CALIFORM
	FOR INTERIOR WALLS: 2x4 @ 16" O.C. D.F.#2 U.N.O. FOR PLUMBING WALLS: 2x6 @ 16" O.C. D.F.#2 U.N.O. • FILL ALL HOLES FOR STRAPS & HANGERS.		NC.
A NDGRIP-BAR BY	• ALL UPPER STORY POSTS SHALL BE SUPPORTED BY BEAMS OR LOWER POST WITH A FULL DEPTH 4x BLOCK BETWEEN FLOOR JOIST.		RES, I W. STE
CH.	 ALL EXPOSED WOOD OR WOOD THAT CONTACT w/ CONCRETE SHALL BE PRESSURE TREATED. PROVIDE DOUBLE JOIST BELOW PARALLEL UPPER STORY PARTITION WALLS. 		(UCTU АST HV 804 7
R.=46ksi STEEL BE HANDRAIL POST	 INSTALL SHEAR PANEL PRIOR FRAMING PERPENDICULAR WALL. SHEAR PANEL SHALL NOT DISCONTINUE REFER TO DETAIL 6 SDO 		K STR K STR IFIC CO CA 903 16(98 937
	1 THE FOLLOWING APPLIES TO ALL SHEAR THAT WALLS WITH A SHEAR VALUES USING ALLOWABLE STRESS DESIGN (ASD) EXCEED 350 PLF OR LOAD AND RESISTANCE FACTOR		DMAF D E. PAC Beach, (562) 4 (562) 4
	DESIGN (LRFD) EXCEED 500 PLF. THESE WALLS SHALL BE CLEARLY IDENTIFIED ON THE PLANS AND PROVIDED WITH THE FOLLOWINGS: A. 3x STUDS AND BLOCKS FOR ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM		Land Land Land Land Land Land Land Land
	ABUTTING PANELS. B. 1/2" EDGE DISTANCE FROM THE PANEL EDGES AND 3/8" FROM THE EDGE OF THE CONNECTING MEMBERS.	THIS SHEET OF PLAN LANDMARK STRUCTU CHANGED, REPRODU WRITTEN CONSENT. SHALL NOT ACCEPT STAMPED BY THE ENGIN	IS THE SOLE PROPERTY OF RE, INC., AND MAY NOT BE JCED, OR USED WITHOUT THE BUILDING OFFICIALS THIS PLAN UNLESS WET- JEER OF RECORD. THIS PLAN
	C. ALL WOOD STRUCTURAL PANEL JOINT AND SILL PLATE NAILING SHALL BE STAGGERED AT ALL PANEL EDGES.	IS PROVIDED TO THE PURPOSE OF ASSISTIN OF THE PROJECT AT DRAWINGS ON THIS SH	OWNER SHOWN FOR THE G WITH THE CONSTRUCTION THE ADDRESS SHOWN. IEET SHALL NOT BE SCALED.
	2 PROVIDE (#) 16d NAILS AT EACH SIDE OF TOP PLATE SPLICE (U.O.N), SEE DETAIL 7 SDO		
A	3 PROVIDE SIMP. "ST22" STRAP AT EACH SIDE OF TOP PLATE SPLICE (U.O.N), SEE DETAIL 7 SDO		Ŀ
		ION	N BLV 803
		& RA	OCEA CA 90
			727 E. Each,
		VNER: ICH/ IBSQ	725-5 [.] Jng Bi
2x6 DECK JOISTS C. w/ RIP STRIPS ARCHITECTURE			E 2:
2			
			LVD.
C			EAN B 90803
		RESS: LAT	E. 0C H, CA
		IODE	-5727 Beac
		PROJEC	5725 Long
	FRAMING SYMBOLS	PLAN	
	└────└──└──└──└──└──└──└──└──└──└──└──└	I SNIN	
	JOISTS PER PLAN	TTLE:	
	(ROO	
	⊗ VERTICAL KICKER	REV	ISIONS No. by
	DIAGONAL KICKER		
	DESIGNATES SHEARWALL		
	AWP = ALIGN WITH POST ABOVE B.N. = BOUNDARY NAILING		
	C.J. = CEILING JOIST D.B. = DROP BEAM D.S. = DRAG STRUT EILIGH DETING	JOB NO.:	722-4855 Sufet
E	F.B. = FLUSH BEAM F.H. = FULL HEIGHT LSL = LAMINATED STRAND LUMBER; (i.e. TIMBERSTRAND) PA = POST ABOVE	DEC 15, 2022 BLOCK NAME	JULIC I
3 	PSL = PARALLEL STRAND LUMBER; (i.e. PARALLAM) R.R. = ROOF RAFTER		52
= 1'-0" 1		SCALE: AS SHOWN	

	Legend		
	Description	Quantity	Unit
/	(2) 2x6 R.J./ D.S. w/ 8d @ 6" O.C.	25.84	ft
/	Beam: 2x10 Ridge Board	7.22	ft
/	Beam: 3-1/2"x14" 2.0E PSL	12.75	ft
/	Beam: 4x6	18.25	ft
/	Beam: 4x8	50.63	ft
/	Beam: 4x10	8.36	ft
/	Beam: 4x12 DF#1	20.97	ft
/	Beam: 4x12 DF#1 Ridge Board	15.65	ft
/	Beam: 6x8	25.45	ft
/	Beam: 8x14 DF#1	19.21	ft
/	Blocking	6.93	ft
/	Header: 4x4	4.67	ft
/	Header: 4x6	27.85	ft
/	Header: 4x8	18.96	ft
	HUS	1	Count
/	Kicker: 2x4 kickers @ 48" O.C. (3'-6" L)	63.90	ft
	LUS	12	Count
	MST48	12	Count
	MSTC48B3	3	Count
	MSTC66B3	4	Count
	MSTC66B32	1	Count
	MSTC663B3	1	Count
	Post: 4x4	23	Count
	Post: 4x6	5	Count
	Post: 4x8	2	Count
/	Roof Rafter: 2x8 Roof Rafters @ 24" O.C. (13'-5" L)	17.93	ft
	Shear wall 10	46.10	ft
	Shear wall 11	27.30	ft
	Shear wall 13	3.17	ft

	FRAMING NOTES	POFFSSIO
	 SEE SHEET SN FOR GENERAL NOTES SEE SHEETS SD0 THROUGH SD2 FOR TYPICAL DETAILS. 	No. 4124 75 Hoballah Taret
	 USE D.F. #1 FOR 6X OR GREATER MEMBER. SEE STRUCTURAL NOTE FOR SHEAR WALL SCHEDULE w/ SILL CONNECTION AND TOP ANCHORAGE. STUDS: 	Exp. 3/31/24 Free OF CALIFORNIE
	 FOR EXTERIOR WALLS: 2x6 @ 16" O.C. D.F.#2 U.N.O. FOR INTERIOR WALLS: 2x4 @ 16" O.C. D.F.#2 U.N.O. FOR PLUMBING WALLS: 2x6 @ 16" O.C. D.F.#2 U.N.O. FILL ALL HOLES FOR STRAPS & HANGERS. 	
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	 INSTALL SHEAR PANEL PRIOR FRAMING PERPENDICULAR WALL. SHEAR PANEL SHALL NOT DISCONTINUE REFER TO DETAIL 6 SD0 	ARK STRU ARK STRU ACIFIC COA ch, CA 908(ch, CA 908(ch, CA 908(ch, CA 908(ch, CA 908(
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	ABUTTING PANELS. B. 1/2" EDGE DISTANCE FROM THE PANEL EDGES AND 3/8" FROM THE EDGE OF THE CONNECTING MEMBERS. C. ALL WOOD STRUCTURAL PANEL JOINT AND SILL PLATE NAILING SHALL BE STAGGERED AT ALL PANEL EDGES.	LANDMARK STRUCTURE, INC., AND MAY NOT BE CHANGED, REPRODUCED, OR USED WITHOUT WRITTEN CONSENT. THE BUILDING OFFICIALS SHALL NOT ACCEPT THIS PLAN UNLESS WET- STAMPED BY THE ENGINEER OF RECORD. THIS PLAN IS PROVIDED TO THE OWNER SHOWN FOR THE PURPOSE OF ASSISTING WITH THE CONSTRUCTION OF THE PROJECT AT THE ADDRESS SHOWN. DRAWINGS ON THIS SHEET SHALL NOT BE SCALED.
	2 PROVIDE (#) 16d NAILS AT EACH SIDE OF TOP PLATE SPLICE (U.O.N), SEE DETAIL 7 SDO	
— (A)	3 PROVIDE SIMP. "ST22" STRAP AT EACH SIDE OF TOP PLATE SPLICE (U.O.N), SEE DETAIL 7 SDO	IDI 1 BLVD. 303
		& RAN OCEAN CA 908
		ARD ON 5727 E. BEACH,
		OWNER: RICH GIBS 5725- LONG
		EAN BL 90803
		RESS: ELAT H, CA
D		ROJECT / ADD REMODE
	FRAMING SYMBOLS	
	USE "X" TYPE HANGER.	
	JOISTS PER PLAN	
	≪ → RAFTERS PER PLAN ⊗ VERTICAL KICKER	REVISIONS
	DIAGONAL KICKER	DATE NO. BY
	DESIGNATES SHEARWALL	
	AWP = ALIGN WITH POST ABOVE B.N. = BOUNDARY NAILING	
	C.J. = CEILING JOIST D.B. = DROP BEAM D.S. = DRAG STRUT F.B. = FLUSH BEAM	JOB NO.: 722-4855 ISSUED DATE SHEET
	F.H. = FULL HEIGHT LSL = LAMINATED STRAND LUMBER; (i.e. TIMBERSTRAND) PA = POST ABOVE PSL = PARALLEL STRAND LUMBER: (i.e. PARALLAM)	DEC 15, 2022 BLOCK NAME
-0" 1	R.R. = ROOF RAFTER	SCALE: AS SHOWN

