# **RESIDENTIAL RENOVATION** 566-568 6TH AVENUE (BLOCK/LOT: 1548/034) SAN FRANCISCO, CALIFORNIA 94118

# **GENERAL BUILDING INFORMATION**

- 1. THE CONTRACTOR SHALL VISIT THE SITE AND BE FULLY COGNIZANT OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING ANY PROPOSITIONS OR BIDS. IF ANY ASBESTOS, KNOWN MATERIALS CONTAINING ASBESTOS OR ANY MATERIALS CLASSIFIED BY THE EPA AS HAZARDOUS MATERIALS ARE DISCOVERED. THEN THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE OWNER, AS REQUIRED, FOR THE REMOVAL OF THESE CONDITIONS, PRIOR TO THE BEGINNING OF THIS PROJECT. IF THE CONTRACTOR PARTICIPATES IN ANY PORTION OF THE REMOVAL PROCESS IN HIS COORDINATION WITH THE OWNER THEN THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A WRITTEN STATEMENT RELEASING THE OWNER OF ANY FUTURE LIABILITY FROM THE CONTRACTOR, HIS EMPLOYEES AND ANY SUBCONTRACTORS HIRED BY THE CONTRACTOR RELATED TO THIS WORK THESE DRAWINGS AND SPECIFICATIONS DO NOT REPRESENT AN ASSESSMEN OF THE PRESENCE OR AN ASSESSMENT OF THE ABSENCE OF ANY TOXIC OR HAZARDOUS MATERIALS ON THIS PROJECT SITE THE OWNERS ARE SOLELY RESPONSIBLE FOR SUCH AN ASSESSMENT AND SHOULD BE CONSULTED FO ANY QUESTIONS THEREIN. IF THE CONTRACTOR DISCOVERS ANY TOXIC OR HAZARDOUS MATERIALS, AS DEFINED BY THE APPROPRIATE GOVERNING AUTHORITIES, IN THE COURSE OF HIS WORK, HE MUST NOTIFY THE OWNERS IN WRITING, AS PER THE GUIDELINES BY ALL GOVERNING AUTHORITIES. THE CONTRACTOR SHALL RESOLVE THE APPLICABLE REGULATIONS AND PROCEDURES WITH THE OWNER AT THE TIME OF DISCOVERY.
- 2. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, LAWS, ORDINANCES AND LOCAL MUNICIPAL REGULATIONS AND AMENDMENTS RELATED TO THIS PROJECT. INCLUDING BUT NOT LIMITED TO STATE OF CALIFORNIA ADMINISTRATIVE CODE TITLE 24; THE 2018 CALIFORNIA BUILDING CODE (CBC) INCLUDING THE HISTORICAL BUILDING CODE; THE LATEST EDITION OF THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS INCLUDING THE FEDERAL FAIR HOUSING ACT; THE 2018 CALIFORNIA FIRE CODE, THE 2018 CALIFORNIA ENERGY CODE. THE 2013 CALIFORNIA ELECTRICAL CODE. THE 2018 CALIFORNIA MECHANICAL CODE. THE 2018 CALIFORNIA PLUMBING CODE, INCLUDING ALL AMENDMENTS AS ADOPTED IN ORDINANCE 1856-2013 THIS PROJECT WILL COMPLY WITH THE 2018 CALIFORNIA ENERGY EFFICIENCY STANDARDS
- THE CONTRACTOR SHALL COORDINATE AND BE RESPONSIBLE FOR ALL WORK BY HIS SUBCONTRACTORS AND THEIR COMPLIANCE WITH ALL THESE GENERAL NOTES. THE CONTRACTOR SHALL IDENTIFY ANY CONFLICTS BETWEEN THE WORKS OF THE SUBCONTRACTORS, AS DIRECTED BY THESE DRAWINGS, DURING THE LAYOUT OF THE AFFECTED TRADES. THE CONTRACTOR SHALL REVIEW THESE CONDITIONS WITH THE ARCHITECT FOR DESIGN CONFORMANCE BEFORE **BEGINNING ANY INSTALLATION.**
- 4. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS AND CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT AT ONCE UPON THE DISCOVERY O ANY CONFLICTS OR DISCREPANCIES BETWEEN THE AFOREMENTIONED AND THE DRAWINGS AND SPECIFICATIONS OF THIS PROJECT. THE CONTRACTOR SHOULD FOLLOW DIMENSIONS AND SHOULD NOT SCALE THESE DRAWINGS. II DIMENSIONS ARE REQUIRED BUT NOT SHOWN. THEN THE CONTRACTOR SHALL REQUEST THE DIMENSIONS FROM THE ARCHITECT BEFORE BUILDING ANY PART OF THE PROJECT, WHICH REQUIRES THE MISSING DIMENSIONS
- ANY CHANGES. ALTERNATIVES OR MODIFICATIONS TO THESE DRAWINGS AND SPECIFICATIONS MUST BE APPROVED IN WRITING BY THE ARCHITECT AND OWNER, AND ONLY WHEN SUCH WRITTEN APPROVAL CLEARLY STATES THE AGREED COST OR CREDIT OF THE CHANGE, ALTERNATIVE OR MODIFICATION TO THIS PROJECT. FOR INFORMATION, DRAWINGS OR OTHER DOCUMENTS, NOT SHOWN OR INCLUDED IN THE PERMIT OR CONSTRUCTION DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR SHALL REQUEST THE MISSING INFORMATION, DRAWINGS OR DOCUMENTS FROM THE ARCHITECT BEFORE STARTING OR PROCEEDING WITH THE CONSTRUCTION AFFECTED BY THE MISSING INFORMATION, DRAWINGS OR DOCUMENTS.
- 6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ALI UTILITY CONNECTIONS, UTILITY COMPANIES REQUIREMENTS AND INCLUDE ANY RELATED COSTS ASSOCIATED WITH THIS RESPONSIBILITY IN THE PROPOSAL OR BID. THE CONTRACTOR IS ALSO RESPONSIBLE FOR WRITING LETTERS OF CONFORMATION REGARDING OPERATIVE AGREEMENTS FOR THIS PROJECT BETWEEN THE CONTRACTOR AND THE LOCAL FIRE DEPARTMENT: THE LOCAL WATER AGENCY: THE LOCAL NATURAL OR PROPANE GAS PROVIDER: TH LOCAL ELECTRICITY PROVIDER; THE LOCAL TELEPHONE SERVICE PROVIDERS; THE LOCAL CABLE TV PROVIDER; THE OWNER'S SECURITY SERVICE PROVIDER AND ANY UNNAMED UTILITY TYPE SERVICE PROVIDER. THE CONTRACTOR SHALL PROVIDE COPIES OF ANY SUCH AGREEMENTS TO THE ARCHITECT AND OWNER. IF REQUIRED OR REQUESTED
- 7. THE CONTRACTOR IS FULLY RESPONSIBLE TO ENACT THE APPROPRIATE SAFETY PRECAUTIONS REQUIRED TO MAINTAIN A SAFE WORKING ENVIRONMENT. THE CONTRACTOR SHALL ALSO INDEMNIFY AND HOLD HARMLESS THE OWNER, THE ARCHITECT, THEIR CONSULTANTS AND EMPLOYEES FROM ANY PROBLEMS, WHICH RESULT FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK RELATED TO THE SAFETY OF THE CONSTRUCTION SITE. THE CONTRACTOR SHALL CARRY THE APPROPRIATE WORKMAN'S COMPENSATION AND LIABILITY INSURANCE, AS REQUIRED BY THE LOCAL GOVERNMENT AGENCY HAVING JURISDICTION FOR THIS ISSUE, AS WELL AS COMPLY WITH THE GENERALLY ACCEPTED INDUSTRY STANDARDS OF PRACTICE FOR A PROJECT OF THIS SCOPE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE OWNER, IF HE WILL BE REQUIRED TO CARRY FIRE INSURANCE OR OTHER TYPES OF INSURANCE, AS WELL AS, MAKING THE OWNER AND/OR THE ARCHITECT ADDITIONALLY INSURED OF THEIR POLICIES FOR THE DURATION OF THE PROJECT. HE SHOULD ALSO ASSIST THE OWNER IN IDENTIFYING THE AMOUNT OF COVERAGE REQUIRED FOR THEIR CO-INSURANCE NEEDS.
- 8. THE CONTRACTOR SHALL MAINTAIN A CLEAN AND ORDERLY JOB SITE ON A DAILY BASIS. THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE SITE WITH MATERIALS OR EQUIPMENT. THE CONTRACTOR SHALL NOT ENDANGER EXISTING STRUCTURES AND ANY NEWLY CONSTRUCTED STRUCTURE BY OVERLOADING THE AFOREMENTIONED WITH MATERIALS OR EQUIPMENT. THE CONTRACTOR SHALL PROTECT ALL EXISTING CONSTRUCTION TO REMAIN AND NEW CONSTRUCTION AFTER IT IS INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY ENCLOSURES OR PROTECTION, AS NEEDED, TO PROTECT THE EXISTING STRUCTURE AND ANY NEWLY CONSTRUCTED STRUCTURES FROM THE ILL EFFECTS OF WEATHER FOR
- THE DURATION OF THE ENTIRE CONSTRUCTION PROCESS. 9. THE CONTRACTOR SHALL WARRANTY ACCORDING TO STATE CONSTRUCTION LAW ALL WORK DONE BY HIM, HIS EMPLOYEES AND HIS SUBCONTRACTORS AGAINST ALL VISIBLE DEFECTS OR ERRORS THAT BECOME APPARENT WITHIN THE FIRST YEAR AFTER THE COMPLETION OF THE PROJECT, AS ACCEPTED BY THE OWNER. THE CONTRACTOR SHALL, ADDITIONALLY, WARRANTY ALL DEFECTS AND ERRORS NOT VISIBLE, BUT CONTAINED WITHIN CONSTRUCTED WORK, FOR A PERIOD OF TEN YEARS FROM THE COMPLETION OF THE PROJECT, ALSO ACCORDING TO STATE CONSTRUCTION LAW. ANY AND ALL DEFECTS AND ERRORS THAT DO BECOME APPARENT SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION AT NO COST TO THE OWNER FOR MATERIALS OR LABOR. ALTERATIONS OR CHANGES TO THIS WARRANTY MUST BE MUTUALLY AGREED TO IN WRITING BY BOTH THE CONTRACTOR AND THE OWNER
- 10. THE CONTRACTOR SHALL ASSUME THAT SITE MEETINGS WITH THE OWNER, THE ARCHITECT AND THE CONTRACTOR PRESENT SHALL BE HELD ONCE EVERY WEEK, UNLESS THEY ARE MUTUALLY CHANGED OR CANCELED. THE CONTRACTOR SHALL KEEP WRITTEN NOTES OF ALL RELEVANT INFORMATION DISCUSSED AT THESE MEETINGS AND PROVIDE COPIES TO THE OWNER AND THE ARCHITECT, UNLESS DIFFERING ARRANGEMENTS ARE RESOLVED WITH THE ARCHITECT AND THE OWNER. THE ARCHITECT SHALL PROVIDE ANY REQUESTED SKETCHES OR ANY REQUESTED INFORMATION THAT IS REQUIRED AND REQUESTED DURING THESE MEETINGS. THE OWNER AND THE CONTRACTOR SHALL ALSO PROVIDE ANY REQUESTED INFORMATION THAT IS REQUIRED DURING THESE MEETINGS.
- 11. THE ARCHITECT OR THE OWNER CAN WRITE AND ISSUE FIELD ORDERS FOR CHANGES TO THE DRAWINGS AND SPECIFICATIONS, AS REQUESTED BY OWNER OR THE CONTRACTOR. IF ADDITIONAL (OR DELETION OF) COST TO THE PROJECT IS REQUIRED, THEN THESE FIELD ORDERS SHALL BECOME THE BASIS OF A CHANGE ORDER.
- 12. THE CONTRACTOR SHALL WRITE AND ISSUE ALL CHANGE ORDERS, WHICH SHALL INCLUDE A COST BREAKDOWN FOR ALL THE WORK DESCRIBED IN SUCH A CHANGE ORDER. ANY CHANGE ORDER WILL NOT BE BINDING TO THE OWNER UNTIL BOTH THE CONTRACTOR AND THE OWNER HAVE SIGNED IT.

# **PROJECT INFORMATION**

**BUILDING INFORMATION:** 

BLOCK:	1548
LUT: (F) & (N) OCCUPANCY:	034 R-3
(E) NUMBER OF STORIES:	3
(N) NUMBER OF STORIES:	4
(E) & (N) TYPE OF CONSTRUCTION:	V-B
(E) & (N) # OF DWELLING UNITS;	2
TOTAL OCCUPANT LOAD:	19 ([1965 SF + 1850 SF] / 200)
ZONING /PLANNING INFORMATION:	
HEIGHT:	40-X
ZONING:	RH-3
AMOUNT OF EXCAVATION:	37.5 CUBIC YARDS
HISTORICAL CLASSIFICATION:	В
CONDITIONED (HABITABLE) AREA:	
(E) 566 6TH AVENUE = 1365 SQ. FT.	
(P) 566 6TH AVENUE = 1965 SQ. FT.	(600 SQ. FT INCREASE)
(E) 568 6TH AVENUE = 1265 SO. FT.	
(P) 568 6TH AVENUE = 1850 SQ. FT.	(585 SQ. FT INCREASE)
APPLICABLE CODES: 2019 CALIEODNIA BLIII DING CODE WITH	
2019 CALIFORNIA FLECTRICAL CODE VI	TH LOCAL AMENDMENTS
2019 CALIFORNIA PLUMBING CODE WIT	H LOCAL AMENDMENTS
2019 GREEN BUILDING CODE WITH LOC	AL AMENDMENTS
2019 CALIFORNIA ENERGY CODE	
2019 CALIFORNIA FIRE CODE WITH LOCA	AL AMENDMENTS
	OF EGRESS FIRE SORINIKI ERS (IF ANIV) AND LIFE SAFETY AT A
MAINTAIN THE REQUIRED SEPARA	TION FIRE RATED CONSTRUCTIONS AND SMOKE BARRIERS
SEAL ALL PENETRATIONS WITH AP	PROVED METHODS AND MATERIALS EQUAL TO EXISTING FI
СПС	

A0.0 -	TITLE SHEET, DRAWING INDEX, GENERAL INFO. SITE PLAN.	$\left\{ \right\}$
A1.1 -	EXISTING/DEMO & PROPOSED GROUND FLOOR PLAN	Ś
A1.2 -	EXISTING/DEMO & PROPOSED SECOND FLOOR PLAN	Ş
A1.3 -	EXISTING/DEMO & PROPOSED THIRD FLOOR PLAN	ξ
A1.4 -	EXISTING/DEMO & PROPOSED ATTIC PLAN	Ś
A1.5 -	EGRESS PLANS	Į
A2.1 -	EXISTING/DEMO & PROPOSED FRONT/REAR ELEVATION	Ş
A2.2 -	EXISTING/DEMO & PROPOSED SIDE (SOUTH) ELEVATION	ł
A2.3 -	EXISTING/DEMO & PROPOSED SIDE (NORTH) ELEVATION	Ş
S1	TITLE SHEET, DRAWING INDEX,	}
	GENERAL BUILDING/STRUCTURAL INFO	}
S2	GROUND FLOOR FOUNDATION & 2ND FLOOR FRAMING PLAN	Ś
S3	THIRD & ATTIC FRAMING PLAN	ξ
S4	ROOF FRAMING PLAN	Ś
S5.1	CONCRETE STRUCTURAL DETAILS	}
S5.2	CONCRETE STRUCTURAL DETAILS	Ş
S6.1	WOOD STRUCTURAL DETAILS	Ś
S6.2	WOOD STRUCTURAL DETAILS	Ş
S6.3	WOOD STRUCTURAL DETAILS	Ś
S6.4	WOOD STRUCTURAL DETAILS	Ş
SSW1	SIMPSON STRONG WALL STRUCTURAL DETAILS	Į
SSW2	SIMPSON STRONG WALL STRUCTURAL DETAILS	Į
T1	TITLE-24 ENERGY REPORT (566 6TH AVENUE)	}
T2	TITLE-24 ENERGY REPORT (568 6TH AVENUE)	}
Т3	TITLE-24 ENERGY REPORT (BUILDING)	Ş
T4	TITLE-24 ENERGY INSPECTIONS	3
T5	S.F. GREEN BUILDING FORM	}
		)

# **SCOPE OF WORK**

REMODEL OF (2) UNITS. ROOMS DOWN OF LOWER UNIT (568 6TH AVE) AT REAR OF GROUND FLOOR

ADD ATTIC HABITABLE SPACE TO UPPER UNIT (566 6TH AVE) WITH DORMERS. KITCHEN/BATHROOM REMODEL FOR BOTH UNITS. GROUND FLOOR INFILL UNDER REAR POPOUT.

BUILDING REQUIRED TO BE FULLY SPRINKLERED PER NFPA13R (UNDER DEFERRED PERMIT)

# **AERIAL VIEW**







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1. ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.

2.1. LIGHTING INTEGRAL TO EXHAUST FANS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 150.0(K). 2.2. EXCEPTION TO SECTION 150.0(K)1F: LIGHTING INSTALLED BY THE MANUFACTURER IN KITCHEN EXHAUST HOODS. 3. INTERIOR LIGHTING SWITCHING DEVICES AND CONTROLS.

3.1. ALL FORWARD PHASE CUT DIMMERS USED WITH LED LIGHT SOURCES SHALL COMPLY WITH NEMA SSL 7A. 3.2. EXHAUST FANS SHALL BE CONTROLLED SEPARATELY FROM LIGHTING SYSTEMS.

3.3. EXCEPTION TO SECTION 150.0(K)2B: LIGHTING INTEGRAL TO AN EXHAUST FAN MAY BE ON THE SAME CONTROL AS THE FAN PROVIDED THE LIGHTING CAN BE TURNED OFF IN ACCORDANCE WITH THE APPLICABLE PROVISIONS IN SECTION 150.0(K)2 WHILE ALLOWING THE FAN TO CONTINUE TO OPERATE.

3.4. LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY TURNED ON AND OFF. EXCEPTION TO SECTION 150.0(K)2C: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL. 3.6. LIGHTING CONTROLS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. 3.7. NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).

3.8. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 110.9. 3.9. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) MAY BE USED TO COMPLY WITH CONTROL REQUIREMENTS IN SECTION 150.0(K) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF THE SPECIFIED CONTROLS IN ACCORDANCE WITH SECTION 110.9, MEETS THE INSTALLATION CERTIFICATE REQUIREMENTS IN SECTION 130.4 MEETS THE EMCS REQUIREMENTS IN SECTION 130.0(E), AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(K)2. 3.10. A MULTISCENE PROGRAMMABLE CONTROLLER MAY BE USED TO COMPLY WITH DIMMER REQUIREMENTS IN SECTION 150.0(K) IF

AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF A DIMMER IN ACCORDANCE WITH SECTION 110.9, AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(K)2. 3.11. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY AN OCCUPANT OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. IF AN

OCCUPANT SENSOR IS INSTALLED, IT SHALL BE INITIALLY CONFIGURED TO MANUAL-ON OPERATION USING THE MANUAL CONTROL REQUIRED UNDER SECTION 150.0(K)2C.

RENOVATION 3.12. LUMINAIRES THAT ARE OR CONTAIN LIGHT SOURCES THAT MEET REFERENCE JOINT APPENDIX JA8 REQUIREMENTS FOR DIMMING, AND THAT ARE NOT CONTROLLED BY OCCUPANCY OR VACANCY SENSORS, SHALL HAVE DIMMING CONTROLS. EXCEPTION 1 TO SECTION 150.0(K)2J: LUMINAIRES IN CLOSETS LESS THAN 70 SQUARE FEET. EXCEPTION 2 TO SECTION 150.0(K)2J: LUMINAIRES IN HALLWAYS. <u>ō</u> ¥ UC F PROPERTY LINE DEMOLITION CALCULATIONS PER SF PLANNING CODE SEC. 311: **INTERIOR WALLS:** Μ TOTAL LINEAR FT OF (E) INTERIOR WALLS = 51'-0"  $\mathbf{>}$ TOTAL LINEAR FT OF (E) INTERIOR WALLS TO BE REMOVED = 4'-0" Ош SIDENTIA % (E) INTERIOR WALL DEMOLITION = 8% ÚΒ **EXTERIOR WALLS:** CIS TOTAL LINEAR FT OF (E) EXTERIOR WALLS = 171'-0" TOTAL LINEAR FT OF (E) EXTERIOR WALLS TO BE REMOVED = 17'-0" % (E) EXTERIOR WALL DEMOLITION = 10% ANG R I RE ш Ö 7 68 BACKYARD S Ń ₹ NO. C84144 ★ Exp. 9/30/23 54'-0" 40'-6" 30'-0" PROPERTY LINE 4.25 SQ. FT. PROVIDED # DATE **ISSUES & REVISIONS** PERMIT SUBMISSION AS 0 08/23/21 REAR YARD AS **REVISION #1** 1 09/02/21 AS 2 09/27/21 RESPONSE TO PC #1 SHEET TITLE: **EXISTING & PROPOSED GROUND FLOOR PLAN** SHEET NUMBER A1.'

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### PLUMBING NOTES:

- PLASTIC PLUMBING PIPE SHALL NOT BE USED FOR THE DOMESTIC WATER SUPPLY OR SANITARY WASTE WITHIN THE BUILDING SHOWER AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH
- PRESSURE BALANCED OR THERMOSTATIC MIXING TYPE CONTROL VALVES. CONTROL VALVES AND SHOWER HEADS SHALL BE LOCATED ON THE
- SIDEWALL OF SHOWER COMPARTMENTS. 4. PROVIDE INSULATION ON ALL NEW DOMESTIC HOT WATER PIPING. INSULATION SHALL BE THE SAME THICKNESS OF THE WATER PIPING UP TO 2" WATER PIPING SIZE.
- MAX. 1.8 GALL./MIN. FOR SHOWER HEAD.
- 6. MAX. 1.2 GALL/MIN. FOR BATHROOM FAUCETS (LAVATORY) MAX. 1.28 GALL/MIN. PER FLUSH FOR NEW TOILETS.
- 8. MAX. WATER FACTOR EQUAL TO OR LESS THAT 6.0 FOR CLOTHES
- WASHERS. 9. 1" INSULATION SHALL BE INSTALLED ON FIRST 5'-0" OF HOT AND COLD
- WATER PIPES AT WATER HEATER 10. SHOWER DOORS SHALL MAINTAIN NOT LESS THAN A 22" UNOBSTRUCTED
- OPENING FOR EGRESS (CPC 408.5) 11. 1.8 GALLONS PER MINUTE FOR KITCHEN FAUCETS, MAXIMUM (CGBC
- 4.303.1.4.4)

A2.1

4 A2.1



3.3.

ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.

LIGHTING INTEGRAL TO EXHAUST FANS. 2.1. LIGHTING INTEGRAL TO EXHAUST FANS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 150.0(K). 2.2. EXCEPTION TO SECTION 150.0(K)1F: LIGHTING INSTALLED BY THE MANUFACTURER IN KITCHEN EXHAUST HOODS. 3. INTERIOR LIGHTING SWITCHING DEVICES AND CONTROLS.

3.1. ALL FORWARD PHASE CUT DIMMERS USED WITH LED LIGHT SOURCES SHALL COMPLY WITH NEMA SSL 7A.

3.2. EXHAUST FANS SHALL BE CONTROLLED SEPARATELY FROM LIGHTING SYSTEMS. EXCEPTION TO SECTION 150.0(K)2B: LIGHTING INTEGRAL TO AN EXHAUST FAN MAY BE ON THE SAME CONTROL AS THE FAN

PROVIDED THE LIGHTING CAN BE TURNED OFF IN ACCORDANCE WITH THE APPLICABLE PROVISIONS IN SECTION 150.0(K)2 WHILE ALLOWING THE FAN TO CONTINUE TO OPERATE. 3.4. LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY

TURNED ON AND OFF. 3.5. EXCEPTION TO SECTION 150.0(K)2C: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL. 3.6. LIGHTING CONTROLS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. 3.7. NO CONTROLS SHALL BYPASS A DIMMER. OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).

3.8. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 110.9. 3.9. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) MAY BE USED TO COMPLY WITH CONTROL REOUIREMENTS IN SECTION 150.0(K) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF THE SPECIFIED CONTROLS IN ACCORDANCE WITH SECTION 110.9, MEETS THE INSTALLATION CERTIFICATE REQUIREMENTS IN SECTION 130.4 MEETS THE EMCS REQUIREMENTS IN SECTION 130.0(E), AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(K)2.

3.10. A MULTISCENE PROGRAMMABLE CONTROLLER MAY BE USED TO COMPLY WITH DIMMER REQUIREMENTS IN SECTION 150.0(K) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF A DIMMER IN ACCORDANCE WITH SECTION 110.9, AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(K)2. 3.11. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES

SHALL BE CONTROLLED BY AN OCCUPANT OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. IF AN OCCUPANT SENSOR IS INSTALLED, IT SHALL BE INITIALLY CONFIGURED TO MANUAL-ON OPERATION USING THE MANUAL CONTROL REQUIRED UNDER SECTION 150.0(K)2C.

3.12. LUMINAIRES THAT ARE OR CONTAIN LIGHT SOURCES THAT MEET REFERENCE JOINT APPENDIX JA8 REQUIREMENTS FOR DIMMING, AND THAT ARE NOT CONTROLLED BY OCCUPANCY OR VACANCY SENSORS, SHALL HAVE DIMMING CONTROLS. 3.12.1. EXCEPTION 1 TO SECTION 150.0(K)2J: LUMINAIRES IN CLOSETS LESS THAN 70 SQUARE FEET.

EXCEPTION 2 TO SECTION 150.0(K)2J: LUMINAIRES IN HALLWAYS.

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54'-0"

3.12.2.

	PROPERTY LI
DEMOLITION CALCULATIONS PER SF PLANNING CODE SEC.	311:
INTERIOR WALLS:	
TOTAL LINEAR FT OF (E) INTERIOR WALLS	= 145'-0"
TOTAL LINEAR FT OF (E) INTERIOR WALLS TO BE REMOVED	= 75'-0"
% (E) INTERIOR WALL DEMOLITION	= 52%
EXTERIOR WALLS:	
TOTAL LINEAR FT OF (E) EXTERIOR WALLS	= 183'-0"
TOTAL LINEAR FT OF (E) EXTERIOR WALLS TO BE REMOVED	= 4'-0"
% (E) EXTERIOR WALL DEMOLITION	= 3%



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ALL (N) WINDOWS TO COMPLY WITH CBC 1015.8
1015.8 WINDOW OPENINGS.

30'-0"

40'-6"

WELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 36 INCHES ABOVE THE FINISHED FLOOR AND MORE THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, SHALL COMPLY WITH ONE OF THE FOLLOWING: 1. OPERABLE WINDOWS WHERE THE TOP OF THE SILL OF THE OPENING IS

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LOCATED MORE THAN 75 FEET (22 860 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW AND THAT ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICES THAT COMPLY WITH ASTM F2006. 2. OPERABLE WINDOWS WHERE THE OPENINGS WILL NOT ALLOW A

- 4-INCH-DIAMETER (102 MM) SPHERE TO PASS THROUGH THE OPENING WHEN THE WINDOW IS IN ITS LARGEST OPENED POSITION.
- 3. OPERABLE WINDOWS WHERE THE OPENINGS ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICES THAT COMPLY WITH ASTM F2090.
- 4. OPERABLE WINDOWS THAT ARE PROVIDED WITH WINDOW OPENING CONTROL DEVICES THAT COMPLY WITH SECTION 1015.8.1.



1. ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.

2.1. LIGHTING INTEGRAL TO EXHAUST FANS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 150.0(K). 2.2. EXCEPTION TO SECTION 150.0(K)1F: LIGHTING INSTALLED BY THE MANUFACTURER IN KITCHEN EXHAUST HOODS.

3. INTERIOR LIGHTING SWITCHING DEVICES AND CONTROLS. 3.1. ALL FORWARD PHASE CUT DIMMERS USED WITH LED LIGHT SOURCES SHALL COMPLY WITH NEMA SSL 7A.

3.2. EXHAUST FANS SHALL BE CONTROLLED SEPARATELY FROM LIGHTING SYSTEMS.

3.3. EXCEPTION TO SECTION 150.0(K)2B: LIGHTING INTEGRAL TO AN EXHAUST FAN MAY BE ON THE SAME CONTROL AS THE FAN PROVIDED THE LIGHTING CAN BE TURNED OFF IN ACCORDANCE WITH THE APPLICABLE PROVISIONS IN SECTION 150.0(K)2 WHILE ALLOWING THE FAN TO CONTINUE TO OPERATE. 3.4. LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY

TURNED ON AND OFF. 3.5. EXCEPTION TO SECTION 150.0(K)2C: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL. 3.6. LIGHTING CONTROLS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. 3.7. NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).

3.8. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 110.9. 3.9. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) MAY BE USED TO COMPLY WITH CONTROL REQUIREMENTS IN SECTION 150.0(K) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF THE SPECIFIED CONTROLS IN ACCORDANCE WITH SECTION 110.9, MEETS THE INSTALLATION CERTIFICATE REQUIREMENTS IN SECTION 130.4 MEETS THE EMCS REQUIREMENTS IN SECTION 130.0(E), AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(K)2. 3.10. A MULTISCENE PROGRAMMABLE CONTROLLER MAY BE USED TO COMPLY WITH DIMMER REQUIREMENTS IN SECTION 150.0(K) IF

AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF A DIMMER IN ACCORDANCE WITH SECTION 110.9, AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(K)2. 3.11. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY AN OCCUPANT OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. IF AN OCCUPANT SENSOR IS INSTALLED, IT SHALL BE INITIALLY CONFIGURED TO MANUAL-ON OPERATION USING THE MANUAL

CONTROL REQUIRED UNDER SECTION 150.0(K)2C. 3.12. LUMINAIRES THAT ARE OR CONTAIN LIGHT SOURCES THAT MEET REFERENCE JOINT APPENDIX JA8 REQUIREMENTS FOR DIMMING, AND THAT ARE NOT CONTROLLED BY OCCUPANCY OR VACANCY SENSORS, SHALL HAVE DIMMING CONTROLS.

3.12.1. EXCEPTION 1 TO SECTION 150.0(K)2J: LUMINAIRES IN CLOSETS LESS THAN 70 SQUARE FEET. EXCEPTION 2 TO SECTION 150.0(K)2J: LUMINAIRES IN HALLWAYS.

40'-6"

30'-0"

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PROPERTY LINE





![](_page_5_Figure_4.jpeg)

![](_page_5_Figure_7.jpeg)

# PROPOSED ATTIC EGRESS PLAN

SCALE: 1/4"=1'-0"

![](_page_5_Picture_10.jpeg)

SHALL NOT EXCEED 5 POUNDS (22 N). THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION. FOR OTHER SWINGING DOORS, AS WELL AS SLIDING AND FOLDING DOORS, THE DOOR LATCH SHALL RELEASE WHEN SUBJECTED TO A 15-POUND (67 N) FORCE. THE DOOR SHALL BE SET IN MOTION WHEN SUBJECTED TO A 30-POUND (133 N) FORCE. THE DOOR SHALL SWING TO A FULL-OPEN POSITION WHEN SUBJECTED TO A 15-POUND (67 N) FORCE.

### 1010.1.9.1 HARDWARE

DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE BY CHAPTER 11 SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.

### 1010.1.9.2 HARDWARE HEIGHT

DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34 INCHES (864 MM) MINIMUM AND 48 INCHES (1219 MM) MAXIMUM ABOVE THE FINISHED FLOOR. LOCKS USED ONLY FOR SECURITY PURPOSES AND NOT USED FOR NORMAL OPERATION ARE PERMITTED AT ANY HEIGHT.

1010.1.9.5 BOLT LOCKS MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS ARE NOT PERMITTED.

### 

#	DATE	<b>ISSUES &amp; REVISIONS</b>	BY
0	08/23/21	PERMIT SUBMISSION	AS
1	09/02/21	REVISION #1	AS
2	09/27/21	RESPONSE TO PC #1	AS

SHEET TITLE:

### EGRESS PLANS

SHEET NUMBER A1.5 ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN

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![](_page_6_Figure_0.jpeg)

### IRUCTU ALTO

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![](_page_6_Figure_4.jpeg)

	#	DATE	<b>ISSUES &amp; REVISIONS</b>	BY
	0	08/23/21	PERMIT SUBMISSION	AS
	1	09/02/21	REVISION #1	AS
	2	09/27/21	RESPONSE TO PC #1	AS
_				

SHEET TITLE:

EXISTING & PROPOSED FRONT & REAR ELEVATIONS

SHEET NUMBER

STRUCTURAL ENGINEER.

![](_page_6_Picture_17.jpeg)

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![](_page_7_Figure_0.jpeg)

		WI	NDOW SCH	EDULE
WINDO W#	ROOM NAME	FLOOR	SIZE	TYPE
W101	BEDROOM #1	FIRST	24x48	EXISTIN
W102	BEDROOM #2	FIRST	30x60	EXISTIN
W103	BEDROOM #2	FIRST	32x68	NEW
W201	BATHROOM	SECOND	24x48	EXISTIN
W202	KITCHEN	SECOND	24x48	EXISTIN
W203	KITCHEN	SECOND	30x60	EXISTIN
W204	KITCHEN	SECOND	36x48	EXISTIN
W205	KITCHEN	SECOND	32x68	NEW
W206	KITCHEN	SECOND	36x48	EXISTIN
W207	FAMILY ROOM	SECOND	36x68	EXISTIN
W208	FAMILY ROOM	SECOND	48x68	EXISTIN
W209	FAMILY ROOM	SECOND	36x68	EXISTIN
W210	OFFICE	SECOND	24x68	EXISTIN
W211	OFFICE	SECOND	30x68	EXISTIN
W212	OFFICE	SECOND	30x68	EXISTIN
W213	DINING ROOM	SECOND	24x68	EXISTIN
W214	LIVING ROOM	SECOND	36x68	EXISTIN
W215	LIVING ROOM	SECOND	48x68	EXISTIN
W216	LIVING ROOM	SECOND	36x68	EXISTIN
W217	LIVING ROOM	SECOND	24x30	EXISTIN
W218	ENTRY	SECOND	24x24	NEW
W301	WALK-IN CLOSET	THIRD	24x48	EXISTIN
W302	MASTER BATHROOM	THIRD	24x48	EXISTIN
W303	MASTER BATHROOM	THIRD	30x60	EXISTIN
W304	MASTER BATHROOM	THIRD	36x48	EXISTIN
W305	VIEWING AREA	SECOND	32x68	NEW
W306	VIEWING AREA	THIRD	36x48	EXISTIN
W307	MASTER BEDROOM	THIRD	36x68	EXISTIN
W308	MASTER BEDROOM	THIRD	48x68	EXISTIN
W309	MASTER BEDROOM	THIRD	36x68	EXISTIN
W310	MASTER BEDROOM	THIRD	24x68	EXISTIN
W311	STAIR	THIRD	30x68	EXISTIN
W312	BATHROOM	THIRD	30x68	EXISTIN
W313	FAMILY ROOM	THIRD	24x68	EXISTIN
W314	BEDROOM #2	THIRD	36x68	EXISTIN
W315	BEDROOM #2	THIRD	48x68	EXISTIN
W316	BEDROOM #2	THIRD	36x68	EXISTIN
W317	BEDROOM #1	THIRD	36x68	EXISTIN
W318	BEDROOM #1	THIRD	36x68	EXISTIN
W319	BEDROOM #1	THIRD	36x68	EXISTIN
W401	BEDROOM #4	FOURTH	24x48	EXISTIN
W402	BEDROOM #5	FOURTH	24x48	FXISTIN

![](_page_7_Figure_2.jpeg)

![](_page_7_Figure_3.jpeg)

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![](_page_7_Figure_7.jpeg)

ALLUMINIUM WINDOW, SEE SCHEDULE

PER CBC 1402A - EXTERIOR OPENINGS (WINDOWS, DOORS, VENTS, ETC.) EXPOSED TO THE WEATHER SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WATERPROOF"

PENETRATION FLASHING MATERIAL MATERIAL FOR FLASHING SHALL BE BARRIER COATED REINFORCED FLASHING MATERIAL ND SHALL PROVIDE FOR 4-HOUR MINIMUM PROTECTION FROM WATER PENETRATION WHEN TESTED IN ACCORDANCE WITH ASTM D-779. FLASHING MATERIAL SHALL CARRY CONTINUOUS IDENTIFICATION. SEALANT SHALL BE BUTYL TO COMPLY WITH DEF. SPEC. TT-S-1657.

### APPLICATION

TO FLASH PENETRATIONS, A STRING OF APPROVED FLASHING MATERIAL AT LEAST NINE INCHES WIDE MUST BE APPLIED IN WEATHERBOARD FLASHING AROUND ALL OPENINGS. APPLY THE FIRST STRIP HORIZONTALLY IMMEDIATELY UNDERNEATH THE SILL, CUT IT SUFFICIENTLY LONG TO EXTEND PAST EACH SIDE OF THE WINDOW, DOOR, OR CENT, SO THAT IT PROJECTS BEYOND THE VERTICAL FLASHING TO BE APPLIED (SEE FIGURE 1). FASTEN THE TOP EDGE OF THE FIRST SEGMENT TO THE WALL, BUT DO NOT SECURE THE BOY AND LOWER EDGE OF THE FIRST HORIZONTAL STRIP, SO THE WEATHER RESISTANT BUILDING PAPER APPLIED LATER MAY BE SLIPPED UP AND UNDERNEATH THE BOTTOM FLASHING IN WEATHERBOARD FASHION. IN THE CASE OF THE LOW-SET WINDOWS, APPLY APPROVED PAPER THE FULL HEIGHT FROM THE BOTTOM OF THE PLATE LINE TO THE BOTTOM OF THE WINDOW SILL WHEN THE WINDOW IS FLASHED. NEXT, APPLY THE TWO VERTICAL SIDE SECTIONS

OF FLASHING. CUT THE SIDE SECTIONS SUFFICIENTLY LONG TO EXTEND THE WIDTH OF THE FLASHING ABOVE THE TOP OF THE WINDOW AND THE SAME DISTANCE BELOW THE WINDOW. APPLY THE SIDE SECTIONS OVER THE BOTTOM STRIP OF FLASHING (SEE FIGURE 2). THE PENETRATING FIXTURE THEN IS INSTALLED BY PRESSING THE NAILING FLANGE POSITIVELY INTO A CONTINUOUS BEAD OF SEALANT WHICH EXTENDS AROUND THE BOTTOM AND VERTICAL PERIMETER OF THE INSERTED FIXTURE. (NOTE: THE CONTINUOUS BEAD OF SEALANT THAT IS APPLIED TO THE UNDERNEATH SIDE OF THE

NAILING FLANGE OF WINDOWS, DOOR AND VENTS IS NOT TO BE CONSTRUED AS A SUBSTITUTE FOR FLASHING. APPLY THE TOP HORIZONTAL SECTION OF FLASHING LAST, OVERLAPPING AND SEALED AGAINST THE FULL HEIGHT OF THE OUTER FACE OF THE TOP NAILING FLANGE WITH A CONTINUOUS BEAD OF SEALANT. CUT THE TOP PIECE OF FLASHING SUFFICIENTLY LONG SO THAT IT WILL EXTEND TO THE OUTER EDGE OF BOTH VERTICAL STRIPS OF SIDE OF FLASHING (SEE

FIGURE 3). INSTALLATION OF EXTERIOR PLASTER WEATHER RESISTANCE PAPER UNDERLAYMENT TO COMPLETE ACCEPTABLE PENETRATION FLASHING. COMMENCE AT THE BOTTOM OF THE WALL AND OVERLAPPING THE WEEP SCREED FLANGE LAY THE APPROVED WEATHER RESISTANT PAPER UP THE WALL, OVERLAPPING 2" MIN. IN WEATHERBOARD FASHION. BE SURE THAT "A" IS PLACED UNDER THE SILL STRIP FLASHING.

 Image: Telephone
 FLASHING DETAILS FOR EXTERIOR OPENINGS

 Image: Scale: N.T.S.
 Scale: N.T.S.

![](_page_7_Figure_16.jpeg)

![](_page_7_Figure_17.jpeg)

![](_page_7_Picture_18.jpeg)

D

- DOOR FRAME IN TYP. COMPENSATING WINDOW RECEPTOR IN CONTINUOUS SEALANT BED - INSECT SCREEN - GLAZING AS SCHEDULED

DETAIL #3

![](_page_7_Figure_20.jpeg)

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0	08/23/21	PERMIT SUBMISSION	AS
1	09/02/21	REVISION #1	AS
2	09/27/21	RESPONSE TO PC #1	AS

SHEET TITLE:

EXISTING & PROPOSED SIDE (SOUTH) ELEVATION

SHEET NUMBER

STRUCTURAL ENGINEER.

![](_page_7_Picture_25.jpeg)

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![](_page_8_Figure_0.jpeg)

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![](_page_8_Figure_3.jpeg)

SHEET NUMBER

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![](_page_8_Picture_5.jpeg)

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# **RESIDENTIAL RENOVATION** 566-568 6TH AVENUE (BLOCK/LOT: 1548/034) SAN FRANCISCO, CALIFORNIA 94118

# **GENERAL BUILDING INFORMATION**

- 1. THE CONTRACTOR SHALL VISIT THE SITE AND BE FULLY COGNIZANT OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING ANY PROPOSITIONS OR BIDS. IF ANY ASBESTOS, KNOWN MATERIALS CONTAINING ASBESTOS OR ANY MATERIALS CLASSIFIED BY THE EPA AS HAZARDOUS MATERIALS ARE DISCOVERED, THEN THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE OWNER, AS REQUIRED, FOR THE REMOVAL OF THESE CONDITIONS, PRIOR TO THE BEGINNING OF THIS PROJECT. IF THE CONTRACTOR PARTICIPATES IN ANY PORTION OF THE REMOVAL PROCESS IN HIS COORDINATION WITH THE OWNER, THEN THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A WRITTEN STATEMENT RELEASING THE OWNER OF ANY FUTURE LIABILITY FROM THE CONTRACTOR, HIS EMPLOYEES AND ANY SUBCONTRACTORS HIRED BY THE CONTRACTOR RELATED TO THIS WORK. THESE DRAWINGS AND SPECIFICATIONS DO NOT REPRESENT AN ASSESSMENT OF THE PRESENCE OR AN ASSESSMENT OF THE ABSENCE OF ANY TOXIC OR HAZARDOUS MATERIALS ON THIS PROJECT SITE. THE OWNERS ARE SOLELY RESPONSIBLE FOR SUCH AN ASSESSMENT AND SHOULD BE CONSULTED FOR ANY QUESTIONS THEREIN. IF THE CONTRACTOR DISCOVERS ANY TOXIC OR HAZARDOUS MATERIALS, AS DEFINED BY THE APPROPRIATE GOVERNING AUTHORITIES, IN THE COURSE OF HIS WORK, HE MUST NOTIFY THE OWNERS IN WRITING, AS PER THE GUIDELINES BY ALL GOVERNING AUTHORITIES. THE CONTRACTOR SHALL RESOLVE THE APPLICABLE REGULATIONS AND PROCEDURES WITH THE OWNER AT THE TIME OF DISCOVERY.
- 2. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, LAWS, ORDINANCES AND LOCAL MUNICIPAL REGULATIONS AND AMENDMENTS RELATED TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO: STATE OF CALIFORNIA ADMINISTRATIVE CODE TITLE 24; THE 2019 CALIFORNIA BUILDING CODE (CBC) INCLUDING THE HISTORICAL BUILDING CODE; THE LATEST EDITION OF THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS INCLUDING THE FEDERAL FAIR HOUSING ACT; THE 2019 CALIFORNIA FIRE CODE, THE 2019 CALIFORNIA ENERGY CODE, THE 2019 CALIFORNIA ELECTRICAL CODE, THE 2019 CALIFORNIA MECHANICAL CODE, THE 2019 CALIFORNIA PLUMBING CODE, INCLUDING ALL AMENDMENTS AS ADOPTED IN ORDINANCE 1856-2019. THIS PROJECT WILL
- COMPLY WITH THE 2019 CALIFORNIA ENERGY EFFICIENCY STANDARDS. THE CONTRACTOR SHALL COORDINATE AND BE RESPONSIBLE FOR ALL WORK BY HIS SUBCONTRACTORS AND THEIR COMPLIANCE WITH ALL THESE GENERAL NOTES. THE CONTRACTOR SHALL IDENTIFY ANY CONFLICTS BETWEEN THE WORKS OF THE SUBCONTRACTORS, AS DIRECTED BY THESE DRAWINGS, DURING THE LAYOUT OF THE AFFECTED TRADES. THE CONTRACTOR SHALL REVIEW THESE CONDITIONS WITH THE ARCHITECT FOR DESIGN CONFORMANCE BEFORE
- **BEGINNING ANY INSTALLATION.** THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS AND CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT AT ONCE UPON THE DISCOVERY OF ANY CONFLICTS OR DISCREPANCIES BETWEEN THE AFOREMENTIONED AND THE DRAWINGS AND SPECIFICATIONS OF THIS PROJECT. THE CONTRACTOR SHOULD FOLLOW DIMENSIONS AND SHOULD NOT SCALE THESE DRAWINGS. IF DIMENSIONS ARE REQUIRED BUT NOT SHOWN, THEN THE CONTRACTOR SHALL REQUEST THE DIMENSIONS FROM THE ARCHITECT BEFORE BUILDING ANY PART OF THE PROJECT, WHICH REQUIRES THE MISSING DIMENSIONS.
- ANY CHANGES, ALTERNATIVES OR MODIFICATIONS TO THESE DRAWINGS AND SPECIFICATIONS MUST BE APPROVED IN WRITING BY THE ARCHITECT AND OWNER, AND ONLY WHEN SUCH WRITTEN APPROVAL CLEARLY STATES THE AGREED COST OR CREDIT OF THE CHANGE, ALTERNATIVE OR MODIFICATION TO THIS PROJECT. FOR INFORMATION, DRAWINGS OR OTHER DOCUMENTS, NOT SHOWN OR INCLUDED IN THE PERMIT OR CONSTRUCTION DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR SHALL REQUEST THE MISSING INFORMATION, DRAWINGS OR DOCUMENTS FROM THE ARCHITECT BEFORE STARTING OR PROCEEDING WITH THE CONSTRUCTION AFFECTED BY THE MISSING INFORMATION, DRAWINGS OR DOCUMENTS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ALL UTILITY CONNECTIONS, UTILITY COMPANIES REQUIREMENTS AND INCLUDE ANY RELATED COSTS ASSOCIATED WITH THIS RESPONSIBILITY IN THE PROPOSAL OR BID. THE CONTRACTOR IS ALSO RESPONSIBLE FOR WRITING LETTERS OF CONFORMATION REGARDING OPERATIVE AGREEMENTS FOR THIS PROJECT BETWEEN THE CONTRACTOR AND THE LOCAL FIRE DEPARTMENT: THE LOCAL WATER AGENCY; THE LOCAL NATURAL OR PROPANE GAS PROVIDER; THE LOCAL ELECTRICITY PROVIDER; THE LOCAL TELEPHONE SERVICE PROVIDERS; THE LOCAL CABLE TV PROVIDER; THE OWNER'S SECURITY SERVICE PROVIDER AND ANY UNNAMED UTILITY TYPE SERVICE PROVIDER. THE CONTRACTOR SHALL PROVIDE COPIES OF ANY SUCH AGREEMENTS TO THE ARCHITECT AND OWNER, IF REQUIRED OR REQUESTED.
- 7. THE CONTRACTOR IS FULLY RESPONSIBLE TO ENACT THE APPROPRIATE SAFETY PRECAUTIONS REQUIRED TO MAINTAIN A SAFE WORKING ENVIRONMENT. THE CONTRACTOR SHALL ALSO INDEMNIFY AND HOLD HARMLESS THE OWNER, THE ARCHITECT, THEIR CONSULTANTS AND EMPLOYEES FROM ANY PROBLEMS, WHICH RESULT FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK RELATED TO THE SAFETY OF THE CONSTRUCTION SITE. THE CONTRACTOR SHALL CARRY THE APPROPRIATE WORKMAN'S COMPENSATION AND LIABILITY INSURANCE, AS REQUIRED BY THE LOCAL GOVERNMENT AGENCY HAVING JURISDICTION FOR THIS ISSUE, AS WELL AS COMPLY WITH THE GENERALLY ACCEPTED INDUSTRY STANDARDS OF PRACTICE FOR A PROJECT OF THIS SCOPE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE OWNER, IF HE WILL BE REQUIRED TO CARRY FIRE INSURANCE OR OTHER TYPES OF INSURANCE, AS WELL AS. MAKING THE OWNER AND/OR THE ARCHITECT ADDITIONALLY INSURED OF THEIR POLICIES FOR THE DURATION OF THE PROJECT. HE SHOULD ALSO ASSIST THE OWNER IN IDENTIFYING THE AMOUNT OF COVERAGE REQUIRED FOR THEIR CO-INSURANCE NEEDS.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN AND ORDERLY JOB SITE ON A DAILY BASIS. THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE SITE WITH MATERIALS OR EQUIPMENT. THE CONTRACTOR SHALL NOT ENDANGER EXISTING STRUCTURES AND ANY NEWLY CONSTRUCTED STRUCTURE BY OVERLOADING THE AFOREMENTIONED WITH MATERIALS OR EQUIPMENT. THE CONTRACTOR SHALL PROTECT ALL EXISTING CONSTRUCTION TO REMAIN AND NEW CONSTRUCTION AFTER IT IS INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY ENCLOSURES OR PROTECTION, AS NEEDED, TO PROTECT THE EXISTING STRUCTURE AND ANY NEWLY CONSTRUCTED STRUCTURES FROM THE ILL EFFECTS OF WEATHER FOR THE DURATION OF THE ENTIRE CONSTRUCTION PROCESS.
- 9. THE CONTRACTOR SHALL WARRANTY ACCORDING TO STATE CONSTRUCTION LAW ALL WORK DONE BY HIM, HIS EMPLOYEES AND HIS SUBCONTRACTORS AGAINST ALL VISIBLE DEFECTS OR ERRORS THAT BECOME APPARENT WITHIN THE FIRST YEAR AFTER THE COMPLETION OF THE PROJECT, AS ACCEPTED BY THE OWNER. THE CONTRACTOR SHALL, ADDITIONALLY, WARRANTY ALL DEFECTS AND ERRORS NOT VISIBLE, BUT CONTAINED WITHIN CONSTRUCTED WORK, FOR A PERIOD OF TEN YEARS FROM THE COMPLETION OF THE PROJECT, ALSO ACCORDING TO STATE CONSTRUCTION LAW. ANY AND ALL DEFECTS AND ERRORS THAT DO BECOME APPARENT SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION AT NO COST TO THE OWNER FOR MATERIALS OR LABOR. ALTERATIONS OR CHANGES TO THIS WARRANTY MUST BE
- MUTUALLY AGREED TO IN WRITING BY BOTH THE CONTRACTOR AND THE OWNER. 10. THE ARCHITECT OR THE OWNER CAN WRITE AND ISSUE FIELD ORDERS FOR CHANGES TO THE DRAWINGS AND SPECIFICATIONS, AS REQUESTED BY OWNER OR THE CONTRACTOR. IF ADDITIONAL (OR DELETION OF) COST TO THE PROJECT IS REQUIRED, THEN THESE FIELD ORDERS SHALL BECOME THE BASIS OF A CHANGE ORDER.
- 11. THE CONTRACTOR SHALL WRITE AND ISSUE ALL CHANGE ORDERS, WHICH SHALL INCLUDE A COST BREAKDOWN FOR ALL THE WORK DESCRIBED IN SUCH A CHANGE ORDER. ANY CHANGE ORDER WILL NOT BE BINDING TO THE OWNER UNTIL BOTH THE CONTRACTOR AND THE OWNER HAVE SIGNED IT.
- 12. DETAILS SHOWN SHALL BE INCORPORATED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS WHETHER SPECIFICALLY CALLED OUT OR NOT.
- 13. SEE DRAWINGS OTHER THAN STRUCTURAL FOR: KINDS OF FLOOR FINISH AND THEIR LOCATION, FOR DEPRESSIONS IN FLOOR SLABS, FOR OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL FEATURES, FOR ROADWAY PAVING, WALKS, RAMPS, STAIRS, CURBS, ETC.
- 14. HOLES AND OPENINGS THROUGH WALLS AND FLOORS FOR DUCTS, PIPING AND VENTILATION SHALL BE CHECKED BY THE CONTRACTOR, WHO SHALL VERIFY SIZES AND LOCATION OF SUCH HOLES OR OPENINGS WITH THE PLUMBING HEATING, VENTILATING AND ELECTRICAL DRAWINGS AND THESE SUB-CONTRACTORS.
- 15. NO PIPES AND DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ARCHITECT.
- 16. NOTE THAT NOT ALL TYP. DETAILS AND OR NOTES APPLY TO EVERY PROJECT.

# **PROJECT INFORMATION**

BUILDING INFORMATION:	
BLOCK:	1548
LOT:	034
(E) & (N) OCCUPANCY:	R-3
(E) NUMBER OF STORIES:	3
(N) NUMBER OF STORIES:	4
(E) & (N) TYPE OF CONSTRUCTION:	V-B
(E) & (N) # OF DWELLING UNITS:	2

APPLICABLE CODES

2019 CALIFORNIA BUILDING CODE WITH LOCAL AMENDMENTS

# SHEET INDEX

S1	TITLE SHEET, DRAWING INDEX, GENERAL BUILDING/STRUCTURAL INFO
S2	GROUND FLOOR FOUNDATION & 2ND FLOOR FRAMING PLAN
<b>S</b> 3	THIRD & ATTIC FRAMING PLAN
S4	ROOF FRAMING PLAN
S5.1	CONCRETE STRUCTURAL DETAILS
S5.2	CONCRETE STRUCTURAL DETAILS
S6.1	WOOD STRUCTURAL DETAILS
S6.2	WOOD STRUCTURAL DETAILS
S6.3	WOOD STRUCTURAL DETAILS
S6.4	WOOD STRUCTURAL DETAILS
SSW1	SIMPSON STRONG WALL STRUCTURAL DETAILS
SSW2	SIMPSON STRONG WALL STRUCTURAL DETAILS

### **SCOPE OF WORK**

REMODEL OF (2) UNITS. ROOMS DOWN OF LOWER UNIT (568 6TH AVE) AT REAR OF GROUND FLOOR . ADD ATTIC HABITABLE SPACE TO UPPER UNIT (566 6TH AVE) WITH DORMERS. KITCHEN/BATHROOM REMODEL FOR BOTH UNITS. GROUND FLOOR INFILL UNDER REAR POPOUT.

					$\subset$	$\rightarrow$		
	DESIGN CR	ITERIA				EXISTING FLOOR / ROOF		BUILDI
A. R	APPLICABLE CODE: CALIFORNIA BUILDING	CODE 2019 & SFBC 2019.						
D.	ROOF: 20 PSF	-				SPECIAL INSPECT	ON	S
	HALLWAYS & CORRIDORS: 80 PSF							יבי זאר
C.	PRIVATE DECK: 1.5xLIVE LO. LATERAL LOADS: SEISMIC DESIGN	AD, OF AREA SERVED				& STRUCT. UBSERVA		
	SITE CLASS 'D', SEISMIC DESIGN CAT MAPPED SPECTRAL ACCELERATIONS	EGORY "D", I=1.0 RISK CATEGORY II	IN AC		ANCE	WITH 2019 CBC CHAPTER 17 SECTION 1704 6	1-1704	6 3 SPI
	$S_{S}$ = 1.528G, $S_{I}$ = 0.617G, $S_{DS}$ = 1.222G, Fa= 1.20. Fv= 1.50	S <sub>D1</sub> = 0.600,	TEST		RE RE	QUIRED FOR THIS CONSTRUCTION. CONTACT	THE EN	GINEER
	REDUNDANCY FACTOR, $\rho = 1.0$	(41)	PERF	ORM S	PECIA	AL INSPECTIONS OTHER THAN STRUCTURAL	BSERV/	ATIONS.
	BASE SHEAR 'V' = 0.099 ( $\Omega$ = 2.5, R=	6.5 Cd = 4.0)	PLEA	SE NO <sup>T</sup>	TIFY F	NGINEER-OF-RECORD AT LEAST 48 HOURS PR	IOR TC	REOUI
D.	LATERAL LOADS: WIND DESIGN			5011		ON		
E.	GEOTECHNICAL CRITERIA	POSURE B	ı. 2.	STEEL	. FRAI	MING		
	SPREAD FOUNDATIONS:		3.	WOO	D FR/	AMING		
	ALLOWABLE BEARING PRESSURE (DL+LL) ALLOWABLE BEARING PRESSURE (TL	= 1500 PSF + SEISMIC/WIND) = 1000 PSF	SPEC TO B	IAL INS	ORM	TONS LISTED ON SPECIAL INSPECTION FORM ( ED BY INDEPENDENT STRUCTURAL INSPECTIO	<u>on she</u> N firm	:ET S1
	**SOIL TO BE COMPACTED TO A MIN AS DETERMINED BY ASTM D-1557 FO	NIMUM OF 90% OF MAXIMUM DRY DENSIFY						
		City and County of San Francisco			E AND	Landon N. Broad	Movor	
		Department of Building Inspection	l.			Tom C. Hui, S.E., C.B.O., D	irector	ŝ
					Iva	Atta	achme	nt A
		SLOPE AND SE	ISMIC	HAZA	RD			
		A COPY OF THIS DOCU	MENT S	HALL	BE SI	JBMITTED WITH THE PERMIT APPLICATION		
		JOB ADDRESS 566-586 6TH AVENUE		A	PPLIC	CATION NO. 2021/0806/5930 ADDENDU	M NO.	
		OWNER NAME HAR KWAN LUK				OWNER PHONE NO. (415) 509-4593		
		1. PROPERTV LOCATIO				2. PROPOSED CONSTRUCTION		
						CONSTRUCTION OF NEW BUILDING OR	YES	NO
		EADTHOUAKE INDUCED LANDSLIDE AD	EA ON			STRUCTURE HAVING OVER 1000 SQFT OF NEW PROJECTED ROOF AREA		X
		THE STATE OF CALIFORNIA DEPARTME	ENT OF	VES	NO	HORIZONTAL OR VERTICAL ADDITIONS HAVING OVER 500 SQFT OF NEW PROJECTED	YES	NO
		GEOLOGY (CDMG) SEISMIC HAZARD Z	ZONES		X	ROOF AREA	YES	NO
		NOVEMBER 17, 2000.	EASED			SHORING		X
						UNDERPINNING	YES	NO X
		2: AVERAGE SLOPE OF PRO	PERTY			GRADING, INCLUDING EXCAVATION OR FILL, OF OVER 50 CUBIC YARDS OF EARTH MATERIAL	YES	NO X
						CONSTRUCTION ACTIVITY LISTED BELOW DETERMINED BY THE BUILDING OFFICIAL		
		PROPERTY EXCEEDING AN AVERAGE SL OF 4H:1V (25%) GRADE	LOPE			THAT MAY HAVE A SUBSTANTIAL IMPACT ON THE SLOPE STABILITY:		
		(APPLICANT WILL NEED TO INCLUDE PLA	NS	YES	NO V	PETAINING WALL	YES	NO
		AND/OR INCLUDE A SURVEY VERIFYING T	ΉE					X
		SLOPE OF THE PROPERTY)				OTHERS:	YES	NO X
		SECTION 4: LICENSED DESIGN F	PROFE	SSION		ERIFICATION AND SIGNATURES	<u> </u>	
		Under penalty of periury. I certify the	at the ir	oforma	tion p	rovided on this form is based on my personal	review	of
		the building and its records, or review my knowledge.	w by otl	ners ad	cting i	under my direct supervision, and is correct to the	ie best	t of
		Prepared by: <u>ALEX SANTOS, ALTC</u> Er	DS ENGI	NEERIN /Archit	NG ect of	Record [Architect/Eng Stamp Here	jineer ∋]	
		415 497-2668	alex@	altose	ngine	er.com		
		Telephone	En	nail				
		Signature		ate				
		Oignature	Da					]
			Те	chnica	al Ser	vices Division		_
		1 Office (4	660 Miss 415) 558	sion Str •6205 –	eet– S FAX (4	an Francisco CA 94103 415) 558-6401 – www.sfdbi.org		

ABBREVIATIONS	N
(A)       ABOVE         A.A.       ANCHOR BOLT         ABV       ABOVE         ADH       ADHESIVE         (@)       AT / ON CENTER         (B)       BELOW         BLW       BELOW         BLW       BELOW         BLW       BELOK         BLW       BELOK         BLW       BELOK         BLW       BELOW         BLW       BELOK         BLW       BELOW         BLW       BELOK         BLW       BELOK         BLW       BELOK         BUNDLING       NA         NOT APPLICABLE         BLK       BLOCK         BLOCK       N.T.S.         NOT TO SCALE         BLK'G       BLOCKING         B.O.       BOTTOM OF         B.O.       BOTTOM OF         B.O.       BOTTOM OF         BTWN       BETWEEN         CL       CENTERLINE         CL       CENTERLINE         CL       CENTERLINE         CL       CENTERLINE         CL       COLCOLUMN         PL       PLATE / PROPERTY LINE         COL	CONCRETE: 1. CONCRETE SHALL BE HARD ROCK CONCRETE (NORMAL WEIGHT) WITH FOLLOWIN COMPRESSIVE STRENGTH PROPERTIES (REACHED AFTER 28 DAYS): SLAB-ON-GRADE: 2500 psi SPREAD FOOTINGS: 3000 psi 2. CONCRETE COMPOSITION: MAX. AGGREGATE SIZE: 3/4" MAX. WATER TO CEMENT RATIO 0.45 MIN. SACKS CEMENTITUOUS MATERIAL / yd <sup>3</sup> 5.0 MAX. SLUMP 4" *CONCRETE MIX DESIGN & TESTING TO MEET REQUIREMENTS OF BUILDING CODE. 3. MINIMUM CONCRETE COVER FOR REINFORCING STEEL: SURFACE CAST AGAINST GROUND 3" FORMED SURFACES BELOW GRADE 2" SURFACES EXPOSED TO EARTH/WEATHER 2" SURFACES NOT EXPOSED TO WEATHER: SLABS/WALLS 1"
CPCOMPLETE PENETRATIONREFREFERENCEDFDOUGLAS FIRS.A.D.SEE ARCHITECTURAL DRAWINGSDIADIAMETERS.S.D.SEE STRUCTURAL DRAWINGSDIAGDIAGNONALS.O.G.SLAB-ON-GRADEDIMDIMENSIONSSSTAINLESS STEEL(E)EXISTINGT&BTOP & BOTTOMEAEACHT&GTOUNGE & GROOVEELELEVATIONTNTOE NAILENEDGE NAILT.P.TOP OFEWEACH WAYTYPTYPICALFFFINISHED FLOORU.O.N.UNLESS OTHER WISE NOTEDFGFOOTINGWPWATERPROOFINGGAGAUGEWWFWELDED WIRE FANBRIC	BEAM/COLUMN (& STIRRUPS)     1-1/2"     4. SLAB-ON-GRADE REQUIREMENTS     VAPOR BARRIER UNDER SLAB TO BE ASTM E1745 CLASS A; 15 MILS MIN.     THICKNESS. "STEGO WRAP VAPOR BARRIER (15MIL)" OR APPROVED EQUIV.      EPOXY ANCHORAGE INTO EXISTING CONCRETE / MASONRY:     1. ADHESIVE ANCHORS IN CONCRETE (REINFORCEMENT DOWEL OR THREADED ROI     SIMPSON SET-3G     HILTI HIT-RE 500-V3     ADHESIVE ANCHOR TENSION LOAD FOR SPECIAL INSPECTION     (FOR HOLDOWN ANCHORS, SEE DETAIL 5/51.1B)
DESIGN SYMBOLS	REBAR / THREADED ROD SIZE     EMBED     TENSION LOAD (CONCRETE)     TENSION LOAD (CMU/MASONRY)       #3 OR 3/8"\$\phi\$     3.5"     2100 #     1600 #
(E) CONC. WALL ABOVE (E) CONC. WALL ABOVE (E) WALL BELOW (E) WALL BELOW	#4 OR 1/2"\$         4.5"         3700 #         1900 #           #5 OR 5/8"\$         6"         5800 #         2800 #           #6 OR 3/4"\$         7"         6900 #         -
Image: Constraint of the second s	2. EXPANSION ANCHORS IN CONCRETE: SIMPSON STRONG BOLT 2 HILTI KWIK BOLT TZ EXPANSION ANCHOR TORQUE LOAD FOR SPECIAL INSPECTION REBAR / THREADED ROD SIZE 3/8"\$\phi 3" 25 FT*# 15 FT*# 1/2"\$\phi 4" 40 FT*# 25 FT*#
T&G PLYWOOD SHEATHING     1     BUILDING ELEVATION TAG       EXISTING FLOOR / ROOF     1     AB       BUILDING SECTION TAG     1	1/2 0     4     40 F1*#     23 F1*#       5/8"0     6"     60 FT*#     35 FT*#       3/4"0     6"     110 FT*#     65 FT*#       3.     SCREW ANCHORS IN CONCRETE: SIMPSON TITEN HD HILTI KWIK HUS-EZ     SIMPSON FITEN HD
<b>SPECIAL INSPECTIONS</b> <b>&amp; STRUCT. OBSERVATIONS</b> CCORDANCE WITH 2019 CBC, CHAPTER 17, SECTION 1704.6.1-1704.6.3, SPECIAL INSPECTIONS AND/OR ING ARE REQUIRED FOR THIS CONSTRUCTION. CONTACT THE ENGINEER-OF-RECORD FOR THE METHODS INSPECTION REQUIREMENTS. THIRD-PARTY STRUCTURAL INSPECTION ENGINEERS SHALL BE HIRED TO FORM SPECIAL INSPECTIONS OTHER THAN STRUCTURAL OBSERVATIONS. INSERVATIONS.	<ul> <li>4. EPOXY ANCHORAGE INSTALLATION REQUIREMENTS:         <ul> <li>PRIOR TO EPOXY, USE COMPRESSED AIR TO BLOW THE DUST OUT OF ANCHOR BOLT HOLES.</li> <li>OVERHEAD ANCHORAGE TO BE PERFORMED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER</li> <li>POURED CONCRETE MUST HAVE 21 DAYS TO CURE, 2500 psi STRENGTH &amp; TEMP MUST BE HIGHER THAN 50° PRIOR TO ANCHORAGE UNLESS APPROVED BY ADHESIVE MANUFACTURE.</li> <li>HOLES FOR ADHESIVE ANCHORS MUST BE DRILLED AND NOT CORED.</li> </ul> </li> <li>REQUIRED SPECIAL INSPECTIONS FOR ADHESIVE ANCHORAGE:         <ul> <li>SILL PLATE ANCHORS: 10% OF ANCHOR BOLTS TO BE TESTED TO TENSION LOAD FOR EA. APPLICATION</li> <li>HOLDOWN ANCHORS: 50% OF HOLDOWN ANCHOR BOLTS TO BE TESTED TC TENSION LOAD FOR EA. APPLICATION AS SPECIFIED ON DETAIL 5/S1.1B.</li> </ul> </li> </ul>

(A)

A.A. ABV ADH

BLW BLDG BLK

BLK'G

BM

B.O.

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		MA	IERIALS			In the local division of the local division of the			
	CONCRETE:		WOOD:			ALTC	S	ENGINEERIN	L NG
ER LUMBER NCRETE	<ol> <li>CONCRETE SHALL BE HARD ROCK CONCRETE (NORMAL WEIGHT) WITH F COMPRESSIVE STRENGTH PROPERTIES (REACHED AFTER 28 DAYS): SLAB-ON-GRADE: 2500 psi SPREAD FOOTINGS: 3000 psi</li> <li>CONCRETE COMPOSITION: MAX. AGGREGATE SIZE: 3/4" MAX. WATER TO CEMENT RATIO 0.45 MIN. SACKS CEMENTITUOUS MATERIAL (vor<sup>3</sup> = 5.0</li> </ol>	OLLOWING	1. FRAMING LUN POST, B JOISTS: STUDS, WALL PI SILL PLA *MOISTURE CO 2 PL VWOOD SH	IBER - DOUGLAS FIR LARCH (UNLESS O EAMS & HEADERS: NO. 1 NO. 1 BLOCKING: NO. 2 LATES / STUDS STUD ITE: NO. 2 (P.T. DNTENT OF LUMBER AT TIME OF INSTA	) ALLATION SHALL NOT EXCEED 19%	ALEX@ALTOSE 1865 GOLDEN ( SAN FRANCISC 415-497-2668	ENGINEE GATE A\ CO, CALI	ER.COM /ENUE #2 FORNIA 94115	
CONCRETE	MAX. SLUMP *CONCRETE MIX DESIGN & TESTING TO MEET REQUIREMENTS OF BUILDIN MINIMUM CONCRETE COVER FOR BEINFORCING STEEL:	NG CODE.	SHEARV RATED 3 ROOF SI	VALL PLYWOOD : 1/2 INCH STRUCTURA 32/16, SEE 6/S1.1A, SHEARWALL SCHEDU	L I, C-D EXTERIOR, APA JLE FOR THICKNESS. -D EXTERIOR APA RATED 32/16				-
D BOARD / LINE HING	SURFACE CAST AGAINST GROUND 3" FORMED SURFACES BELOW GRADE 2"		3. FRAMING HAF	SHEATHING: 3/4 INCH STRUCTURAL II, C RDWARE AND JOIST HANGERS:	C-D EXTERIOR APA RATED 48/24			34)	
D LUMBER D	SURFACES EXPOSED TO EARTH/WEATHER 2" SURFACES NOT EXPOSED TO WEATHER: SLABS/WALLS 1"		AS MAIN SIMPSO DEVICE.	N DESIGNATIONS USED. USE NAILS PER	R I.C.C. APPROVAL FOR EA.			0	
AL DRAWINGS DRAWINGS	4. SLAB-ON-GRADE REQUIREMENTS VAPOR BARRIER UNDER SLAB TO BE ASTM E1745 CLASS A; 15 MILS THICKNESS. "STEGO WRAP VAPOR BARRIER (15MIL)" OR APPROVE	MIN. D EQUIV.	4. COMMON NA SHORT MINIMU NOTED	HALL BE REFIGHTENED PRIOR TO COVI ILS, UNLESS OTHERWISE NOTED.: NAILS MAY BE USED PROVIDED THEY H IM EMBED. ALL NAILING TO BE PER IBC OTHERWISE.	IAVE COMMON CODE SPECIFIED TABLE NO. 2304.9.1 UNLESS			4118 1548	
νe	EPOXY ANCHORAGE INTO EXISTING CONCRETE / MASONR	XY:	5. SILL PLATES: 5/8"¢ A CONCRI EXPOSURE TO WEAT	NCHOR BOLTS WITH 3x3x1/4" WASHER TE AT 7" EMBEDMENT AT 48" SPACING HER:	S, ANCHORS CAST-IN-PLACE IN G, UNLESS OTHERWISE NOTED		lion	VIA 9 OT:	
ISE NOTED	1. ADHESIVE ANCHORS IN CONCRETE (REINFORCEMENT DOWEL OR THRE/ SIMPSON SET-3G HILTI HIT-RE 500-V3	ADED ROD):	ALL PLYWOOD     ALL EXTERIOR T     NATURAL RESIS	SHALL BE OF AN EXTERIOR GRADE. 'IMBER AND GLULAM BEAMS SHALL BE TANCE TO DECAY.	PRESSURE TREATED OR WOOD OF		<b>VA</b>	JL/	
NBRIC	ADHESIVE ANCHOR TENSION LOAD FOR SPECIAL INSPECTION (FOR HOLDOWN ANCHORS, SEE DETAIL 5/S1.1B) REBAR / THREADED EMBED TENSION LOAD TENSION LOAD ROD SIZE (CONCRETE) (CMU/MASONRY)		ALL EXTERIOR H METAL CONNEC GALVANIZED W ALL NAILS & AN DIPERD CALVAN	HANGERS AND OTHER SIMPSON TYPE F CTORS IN CONTACT w/ PRESSURE TREA / MIN. ZINC COATING OF G185. ICHOR BOLTS IN CONTACT w/ PRESSUF	PRODUCTS SHALL BE GALVANIZED. TED WOOD SHALL BE HOT-DIPPED RE TREATED WOOD SHALL BE HOT		ENO	ULIFC OCK	
ST HANGER .N.)	#3 OR 3/8"\$\u03c6       3.5"       2100 #       1600 #         #4 OR 1/2"\$\u03c6       4.5"       3700 #       1900 #         #5 OR 5/8"\$\u03c6       6"       5800 #       2800 #         #6 OB 3/4"\$\u03c6       7"       6900 #       -		REINFORCIN	IG STEEL IN CONCRETE:			<b>NL RI</b>	), CA :: (BL	
BELOW	2. EXPANSION ANCHORS IN CONCRETE:		REBAR THAT IS S	SPECIFIED AT <u>#4 &amp; HIGHER</u> IS REQUIRED	D TO BE ASTM A615, GRADE 60. D TO BE ASTM A615, GRADE 40.		TI∕	U U U U	
ABOVE BELOW)	SIMPSON STRONG BOLT 2 HILTI KWIK BOLT TZ		REINFORCEMEN	T SHALL BE CONTINUOUS UNLESS EXPI	LICITLY NOTED ON PLAN. CONTACT		И Ш	CIS	
ND WOOD POST	REBAR / THREADED ROD SIZE     EMBED     TENSION LOAD (CONCRETE)     TENSION LOAD (CMU/MASONRY)						SID	AVA	
/E / BELOW	3/8"\$\phi\$         3"         25 FT*#         15 FT*#           1/2"\$\phi\$         4"         40 FT*#         25 FT*#           5/8"\$\phi\$         6"         60 FT*#         35 FT*#		STRUCTURAL S DETAILS/WORKMAN SPECIFICATIONS.	TEEL: ISHIP SHALL BE IN ACCORDANCE WITH	HAISC STANDARDS &		RE	FR/ TH	
	3/4"φ         6"         110 FT*#         65 FT*#           3.         SCREW ANCHORS IN CONCRETE:		1. STEEL SECT WIDE F PLATES,	TIONS: LANGE BEAMS & COLUMNS ASTM A99 CHANNELS, ANGLES ASTM A36	92 (F <sub>y</sub> = 60 ksi) 5 (F <sub>y</sub> = 36 ksi)			AN 866	
TION TAG	4. EPOXY ANCHORAGE INSTALLATION REQUIREMENTS:		2. BOLTS / AN BOLTS	ASTM ASC NCHOR RODS: ASTM A30	00, GRADE B (F <sub>y</sub> = 46 ksi) 07, U.O.N.			. S.	
	<ul> <li>PRIOR TO EPOXY, USE COMPRESSED AIR TO BLOW THE DUST OUT C ANCHOR BOLT HOLES.</li> <li>OVERHEAD ANCHORAGE TO BE PERFORMED BY A CERTIFIED ADHES</li> </ul>	DF SIVE	HIGH-S STUD S ANCHO	TRENGTH BOLTS ASTM A32 HEAR CONNECTORS: ASTM A10 IR RODS ASTM F15	25 08 54, GRADE 36			99	
	ANCHOR INSTALLER • POURED CONCRETE MUST HAVE 21 DAYS TO CURE, 2500 psi STREN TEMP MUST BE HIGHER THAN 50° PRIOR TO ANCHORAGE UNLESS	GTH & APPROVED	THREAD 3. WELDING: E-70XX	DED RODS ASTM A36				2	
SPECTIONS AND/OR CORD FOR THE METHODS	BY ADHESIVE MANUFACTURE.     HOLES FOR ADHESIVE ANCHORS MUST BE DRILLED AND NOT CORE     BEOLURED SPECIAL INSPECTIONS FOR ADHESIVE ANCHORAGE:	D.	4. EXPOSURE	AIN. 20 ft*lb @ -20°F TO WEATHER:					-
EERS SHALL BE HIRED TO	SILL PLATE ANCHORS: 10% OF ANCHOR BOLTS TO BE TESTED TO TE LOAD FOR EA. APPLICATION		RICH PF	RIMER. BOLTS, NUTS AND MISCELLANE BE GALVANIZED.	OUS HARDWARE		ALP PROFES	ASTONAL CANAL	
RUCTURAL OBSERVATIONS:	<ul> <li>• HOLDOWN ANCHORS: 50% OF HOLDOWN ANCHOR BOLTS TO BE T TENSION LOAD FOR EA. APPLICATION AS SPECIFIED ON DETAIL 5/S</li> <li>• TENSION TESTS TO BE MAINTAINED FOR A MINIMUM OF TWO MIN</li> <li>• 3RD PARTY TESTING ENGINEER TO RANDOMIZE TEST LOCATIONS</li> </ul>	I.1B. IUTE	5. BOLTING: JOINT T BOLT H DIAMET BOLTED	YPE FOR BOLTED CONNECTIONS SHAL OLES IN STEEL SHALL BE 1/16" LARGER I ER SIZE CONNECTIONS TO HAVE 1-1/2" EDGE &	L BE SNUG-TIGHTENED IN DIAMETER THAN BOLT & END DISTANCE	× REO/S	1 2 2 2 2 2 2 2 2 2 2 2 2 2	4144 30/23 ★	
		1							-
INFORMATION SHEET S-19	9 ATTACHMENT A								
	FOR DBI USE ONLY		SPECIAL IN A COPY OF THIS DOCUME	NSPECTION AND STRUCTUR NT SHALL BE KEPT WITH THE APPRO'	VED STRUCTURAL DRAWING SET				
	ASSIGNMENT OF REVIEW TIER	JOB A	ADDRESS <u>566-586 6TH AVE</u> IER NAME <mark>HAR KWAN LUK</mark>	NUE APPLICATION NO.					
EXEMPTED: Reports	s per Section E and Third Party Peer Review Not Required	Emplo owner furnis	oyment of Special Inspection is r's representative. Special inspe shed to DBI District Inspector p	the direct responsibility of the OWNER, or ctor shall be one of those as prescribed in S rior to start of the work for which the Special	the engineer/architect of record acting as the lec. 1704. Name of special inspector shall be Inspection is required. Structural observation				
If the box in Se are marked "N	ection 1 "Property Location" <u>AND</u> the box in Section 2 "Average Slope of Property" lo" <u>OR</u> if all the boxes in Section 3 "Proposed Construction" are marked "No", reports	design In acc	ner/builder projects, complex and cordance with Chapter 17 (SFBC	high-rise projects, and for projects utilizing ne ), Special Inspection and/or testing is required f	w processes or materials.				
per Section E	and Third Party Peer Review are exempted by the SSPA.	1. 🕅 Cond 2. 🕅 Bolts	crete (Placement & sampling) s installed in concrete	<ol> <li>[] High-strength bolting</li> <li>[] Structural masonry</li> </ol>	<ul><li>18. Bolts Installed in existing concrete or masonry:</li><li>[] Concrete [] Masonry</li></ul>				
□ If the box in s	Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed	<ol> <li>3. [] Spec</li> <li>4. M Rein</li> <li>5. Structu</li> </ol>	ial moment - Resisting concrete frame forcing steel and prestressing tendons- tral welding:	<ol> <li>8. [] Reinforced gypsum concrete</li> <li>9. [] Insulating concrete fill</li> <li>10. [] Sprayed-on fireproofing</li> </ol>	<ol> <li>Pull/torque tests per SFEBC Sec. 507C &amp; 515C</li> <li>19. X Shear walls and floor systems used as shear diaphragms</li> </ol>				
Construction" landslide haza	are marked "Yes" <u>AND</u> the property does not lie within any areas of potential ard, DBI shall require mandatory submittal of reports per Section E only.	A. Peri M Sing	iodic visual inspection gle pass fillet welds 5/16" or smaller el deck	<ol> <li>[] Piling, drilled piers and caissons</li> <li>[] Shotcrete</li> <li>[] Special grading, excavation and filling</li> </ol>	20. X Holdowns 21. Special cases:				
TIER II: Reports per	r Section E and Third Party Peer Review Required	[] Wel [] Colo	ded studs 1 formed studs and joists	(Geo. Engineered) 14. [] Smoke-control system	[] Underpinning:[] Not affecting adjacent property [] Affecting adjacent property: PA				_
☐ If the box in Construction" bazard_DBI s	Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed are marked "Yes" <u>AND</u> the property lies within the areas of potential landslide shall require mandatory submittal of reports per Section F and require the permit	[] Stan [] Reir <b>B. Con</b>	aforcing steel itinuous visual inspection and NDT	<ol> <li>[ ] Demonston</li> <li>[ ] Exterior Facing</li> <li>17. Retrofit of unreinforced masonry buildings:</li> </ol>	<ul><li>[] Others</li><li>22. [] Crane safety (Apply to the operation of tower cranes on high-rise building)</li></ul>	# DATE	IS	SUES & REVISIONS	В
application be Committee, th Committee (S	e subject to a third party peer review. At the discretion of the SSPA Review ne peer review may be followed by the establishment of a Structural Advisory	(Sec [] All ( (ND	ction 1704) other welding )T exception: Fillet weld)	<ol> <li>Testing of mortar quality and shear tests</li> <li>Inspection of repointing operations</li> <li>Installation inspection of new shear bolts</li> </ol>	(Section 1705.22) 23. [] Others: "As recommended by professional of record"	0 08/23/21	PERMIT	SUBMISSION	
If the DBI Pla	an Review Engineer (or the SSPA Review Committee, if established), in their	[] Reir [] Mor [] Othe	nforcing steel; and [] NDT required ment-resisting frames	[] Pre-installation inspection for embedded [] Pull/torque tests per SFBC Sec.1607C & 1615C		2 09/27/21	RESPON	NSE TO PC #1	A
discretion, det the slope stab may require t Advisory Com	ility of the site or creates a potential for earthquake induced landslide hazards, DBI hat the third party peer review be followed by the establishment of a Structural mittee (SAC) and re-assigned the project to Tier III.	24. Structu [] Concret [] Other:	ural observation per Sec. 1704.6 (SFBC e construction	() for the following: [] Foundations [] Masonry construction	XSteel framing	SHEET TITLE:			-
TIER III: Structural	Advisory Committee (SAC) Review	25. Certific 26. [ ] Fire	cauon is required for: [] Glu-lam compositops in high-rise building	ments		STRUCTURAL	TITLE S	HEET	
If the box in S are marked "Y permit applica SEBC Section	ection 1 "Property Location" <u>AND</u> any boxes in Section 3 "Proposed Construction" Yes", DBI shall require mandatory submittal of reports per Section E and require the ation be subject to review by a Structural Advisory Committee (SAC), as defined by a 105A.6.	Pr Re FA	epared by: <u>ALEX SANTOS, A</u> Engineer/Architect of equired information: AX: ()	LTOS ENGINEERING Phone: ( <u>415</u> ) Record 	gineer.com				
Tier assigned by:	Phone: (415)	Review	w by:	Phone: (628) 652-					
Comment:	שטו רומוו הפעופש בווטווופפו		DBI Engineer or Plan Che	*****	****	SHEET NUMBE	R		
		APPR	ROVAL (Based on submitted repo	rts.)			1		
			DATE	DBI Engineer or Plan Checker / Sp	pecial Inspection Services Staff				

1	III: Structural Advisory Committee (SAC) Review
	Advisory Committee (SAC) and re-assigned the project to Tier III.
	may require that the third party peer review be followed by the establishment of a Structura
	the slope stability of the site or creates a potential for earthquake induced landslide hazards, DB

Page | 2

# AATEDIALC

QUESTIONS ABOUT SPECIAL INSPECTION AND STRUCTURAL OBSERVATION SHOULD BE DIRECTED TO: Special Inspection Services (628) 652-3407; or, <u>dbi.specialinspections@sfgov.org</u>

Updated 10/05/2020

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN

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STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED.

STRUCTURAL ENGINEER.

USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE

![](_page_10_Figure_0.jpeg)

SCALE: 1/4"=1'-0"

![](_page_10_Figure_2.jpeg)

SCALE: 1/4"=1'-0"

**EXCAVATION SEQUENCE:** 

- DEMOLISH ALL "A" SECTIONS. EXCAVATE DOWN @ ALL "A" SECTIONS, DO NOT EXCAVATE "B" AND "C" SECTIONS. SEE PLAN FOR SECTIONS.
- INSTALL FOOTING AND WALL REBAR IN ALL "A" SECTIONS w/ HORIZ. REBAR BENT UP @ ENDS PER
- POUR FOOTING AND WALL CONCRETE FOR ALL "A" SECTIONS. LET CONCRETE CURE FOR 3 DAYS.
- DEMOLISH ALL "B" SECTIONS. EXCAVATE DOWN @ ALL "B" SECTIONS, DO NOT EXCAVATE "C" SECTIONS. SEE PLAN FOR SECTIONS.
- BEND HORIZONTAL REBAR ADJACENT TO SECTIONS "B" DOWN AT ALL SECTIONS "A" PER DETAIL 2.
- 6. INSTALL FOOTING AND WALL REBAR IN ALL "B" SECTIONS w/ HORIZONTAL REBAR ADJACENT TO SECTIONS "C" BENT UP @ ENDS PER DETAIL 2.
- POUR FOOTING AND WALL CONCRETE FOR ALL "B" SECTIONS. LET CONCRETE CURE FOR 3 DAYS.
- 8. DEMOLISH ALL "C" SECTIONS. EXCAVATE DOWN @ ALL "C" SECTION, SEE PLAN FOR SECTIONS.
- BEND HORIZONTAL REBAR ADJACENT TO SECTIONS "C" DOWN AT ALL SECTIONS "B" AND "A" PER DETAIL 3.
- 10. INSTALL FOOTING AND WALL REBAR IN ALL "C"
- 11. POUR FOOTING AND WALL CONCRETE FOR ALL "C" SECTIONS. LET CONCRETE CURE FOR 3 DAYS.

6x6 POST

(A) & (B)

(N) 4x4 (A)

w/ HDU5 &

(N) 4x6 (B)

![](_page_10_Figure_17.jpeg)

DETAIL 2 (ELEVATION VIEW)

A

DETAIL 1 (ELEVATION VIEW)

A B

![](_page_10_Figure_18.jpeg)

**♦**N

![](_page_10_Figure_19.jpeg)

PROPERTY LINE

![](_page_10_Figure_20.jpeg)

**EXISTING CONDITIONS VERIFICATION:** - CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PER PLAN. ANY DISCREPANCY MUST BE REPORTED TO ENGINEERING BEFORE PROCESSING WITH WORK

SHEAR WALL NOTE:

- PROVIDE (N) MSTA21 STRAP TIES TO SIDE OF DOUBLE TOP PLATES WHERE SPLICE OCCURS
- EXTEND CLIPS AND BLOCKING ALONG SHEAR WALL LINE FOR FULL LENGTH OR WIDTH OF BUILDING AT ALL SHEARWALLS

FOUNDATION LEGEND:

![](_page_10_Figure_26.jpeg)

![](_page_10_Figure_27.jpeg)

SHEARWALL LEGEND

![](_page_10_Figure_29.jpeg)

# 1865 GOLDEN GATE AVENUE #2 SAN FRANCISCO, CALIFORNIA 94115 415-497-2668

RENOVATION

RESIDENTIAL

ALEX@ALTOSENGINEER.COM

ALTO

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), CALIFORNIA ( (BLOCK / LOT:

SAN FRANCISCO 568 6TH AVENUE

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![](_page_10_Picture_31.jpeg)

#	DATE	<b>ISSUES &amp; REVISIONS</b>	ΒY
0	08/23/21	PERMIT SUBMISSION	AS
1	09/02/21	REVISION #1	AS
2	09/27/21	RESPONSE TO PC #1	AS

SHEET TITLE:

**GROUND FLOOR FOUNDATION PLAN** 

SECOND FLOOR FRAMING PLAN

SHEET NUMBER

![](_page_10_Picture_37.jpeg)

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED. USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.

![](_page_11_Figure_0.jpeg)

ATTIC FLOOR FRAMING PLAN SCALE: 1/4"=1'-0"

![](_page_11_Figure_2.jpeg)

### THIRD FLOOR FRAMING PLAN SCALE: 1/4"=1'-0"

### ALTOS STRUCTUR NGINEERI

ALEX@ALTOSENGINEER.COM 1865 GOLDEN GATE AVENUE #2 SAN FRANCISCO, CALIFORNIA 94115 415-497-2668

![](_page_11_Figure_6.jpeg)

**S**3

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED,

USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE

STRUCTURAL ENGINEER.

BY

AS

AS

AS

(N) OR (E) 2x8/2x10 COLLECTOR (MSTA30 STRAP AT SPLICE) SEE 3 STRAP AT SPLICE), SEE (N) CMSTC16 STRAP w/ 4x6 BLKG AROUND TOP & BOTTOM OF WINDOW 4 OPENING IN SHEAR WALL (CONT. STRAP & BLK FOR 3 BAYS PAST OPENING), SEE WD POST LEGEND (EXAMPLE: AT THIRD FLOOR FRAMING LEVEL) 6x6 POST (A) — 6x6 POST ABOVE (AT 3RD FLOOR LEVEL) 6x6 POST (B) — 6x6 POST BELOW (AT 2ND FLOOR LEVEL) ------ 6x6 POST ABOVE & BELOW 6x6 POST (A) & (B) (AT 3RD & 2ND FLOOR LEVEL) ------ 4x4 POST ABOVE w/ HDU5 (N) 4x4 (A) (AT 3RD FLOOR LEVEL) w/ HDU5 & (N) 4x6 (B) 6x6 POST BELOW AT 2ND FLOOR LEVEL) EXISTING CONDITIONS VERIFICATION: - CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PER PLAN. ANY DISCREPANCY MUST BE REPORTED TO ENGINEERING BEFORE PROCESSING WITH WORK SHEAR WALL NOTE: PROVIDE (N) MSTA21 STRAP TIES TO SIDE OF DOUBLE TOP PLATES WHERE SPLICE OCCURS - EXTEND CLIPS AND BLOCKING ALONG SHEAR WALL LINE FOR FULL LENGTH OR WIDTH OF BUILDING AT ALL SHEARWALLS SHEARWALL LEGEND

MARK

1

2

**♦** N

- SHEARWALL BELOW SHEARWALL

> LENGTH IN FEET - ----\_\_\_\_\_ (N) POST

- SHEARWALL ABOVE

(N) POST (A) w/ HDU

(N) POST (A) w/ HDU

` A 🏊

N) POST

![](_page_12_Figure_0.jpeg)

USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE

STRUCTURAL ENGINEER.

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

PLATE IN (N) CONC. FOOTING	MIN. EMBED. INTO (E) CONC.	MIN. EDGE. INTO (E) CONC.*	EPOXY PULL TEST LOAD FOR ADHESIVE ANCHORS **
1.25"x1.25"x1/4"	10"	3"	6,050#
1.25"x1.25"x1/4"	10"	3"	9,130#
1.25"x1.25"x1/4"	10"	3"	11,290#
1.5"x1.5"x1/4"	10"	5.25"	13,940#
1.75"x1.75"x1/4"	10"	6"	22,350#
1.75"x1.75"x1/4"	12"	6"	28,890#
2"x2"x3/8"	12"	7.5"	-

RESIDENTIAL RENOVATION	SAN FRANCISCO, CALIFORNIA 9 566 - 568 6TH AVENUE (BLOCK / LOT:
ADER M.	SIONAL CAL

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ALTO

415-497-2668

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1865 GOLDEN GATE AVENUE #2

SAN FRANCISCO, CALIFORNIA 94115

![](_page_14_Picture_11.jpeg)

#	# DATE	<b>ISSUES &amp; REVISIONS</b>	BY
(	08/23/21	PERMIT SUBMISSION	AS
1	09/02/21	REVISION #1	AS
2	2 09/27/21	RESPONSE TO PC #1	AS

SHEET TITLE:

CONCRETE STRUCTURAL DETAILS

SHEET NUMBER

![](_page_14_Picture_16.jpeg)

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.

![](_page_15_Figure_0.jpeg)

![](_page_15_Figure_2.jpeg)

![](_page_15_Figure_3.jpeg)

![](_page_16_Figure_0.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_18_Figure_0.jpeg)

		SSWAB 3/	4" ANCHOF	BOLT	SSWAB 1"	ANCHOR E	BOLT
ONCRETE ONDITION	ANCHOR STRENGTH	ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	de (in)
	QTANDADD	8,700	18	6	16,000	27	9
	STANDARD	9,600	20	7	17,100	29	10
RACKED		17,800	29	10	32,100	42	14
	HIGH STRENGTH	19,900	32	11	35,300	45	15
		9,100	16	6	15,700	23	8
	STANDARD	9,600	17	6	17,100	25	9
CRACKED		17,800	25	9	32,500	37	13
	HIGH STRENGTH	19,900	27	9	35,300	39	13
		5,400	12	6	6,800	14	6
	STANDARD	8,300	16	6	11,600	20	7
		9,600	18	6	17,100	26	9
RACKED		11,600	20	7	21,400	30	10
		13,400	22	8	25,800	34	12
	HIGH STRENGTH	17,300	26	9	31,000	38	13
		19,900	29	10	35,300	42	14
		6,800	12	6	6,800	12	6
	STANDARD	8,500	14	6	12,400	18	6
		9,600	16	6	17,100	23	8
CRACKED		12,400	18	6	21,600	26	9
		14,500	20	7	26,700	30	10
	HIGH STRENGTH	16,800	22	8	32,200	34	12
		19,900	25	9	35,300	36	12

E REVISION 009 2006 IBC REV 014 2012 IBC REV 016 2015 IBC REV
NO. DATI 1 9/21/2 2 4/16/2 3 8/08/2(
<b>TRONG-TTE COMPANY, INC.</b> FFICE: LAS POSITAS BLVD. TON, CA 94588 0) 999–5099
MPSON Comg-Tie 5956 W. THERE IS NO EQUAL TEL: (80)
ALL
STEEL STRONG-W ANCHORAGE DETAILS ENGINEERED DESIGNS
Strong-Trie Strong-Trie THEL STRONG-W ANCHORAGE DETAILS ENGINEERED DESIGNS
ANCHORAGE DESIGNS NAME DATE BANCHORAGE DETAILS NAME DATE B-8-2016 SCALE N.T.S. CHECKED SHEET

![](_page_19_Figure_0.jpeg)

CERTIFICATE OF CO Project Name: Resi Calculation Descrip	<b>MPLIANCE</b> dential Building t <b>ion:</b> Title 24 A	g nalysis				Calcul Input	ation Date/Tim File Name: Wo	<b>e:</b> 2021-09- ngNancy566	17T07:35:4 Addition.ril	5-07:00 od19x		CF1R-PRF-01E (Page 1 of 10)		CERTIFICATE OF CO Project Name: Res Calculation Descri	DMPLIANCE idential Buildi ption: Title 24	ng Analysis					Calculation Input File I	n Date/Tii Name: Wi	<b>me:</b> 2021-09-3	17T07:35:4 Addition.rib	-07:00 d19x		CF1R-PR (Page 2	(F-01E of 10)
GENERAL INFORMAT	ION	Project Nam Run Titl	e Residential e Title 24 Ana	Building									6	REQUIRED SPECIAL I The following are fea • New ductwor	EATURES atures that mus	t be installed a han 40 ft. in le	s condition for	r meeting the	modeled er	nergy perf	ormance fo	r this com	puter analysis.					
03	Pro	oject Locatio	n 566 6th Ave	enue		l or		<b>C</b> 1	1 1 1 1	- 2010				Non-standard	duct location (	any location ot	her than attic)											
04		Zip cod	e 94118	CO		05		Sta	ndards Versi	on 2019 on EnergyPr	o 8.2			HERS FEATURE SUM	MARY mmary of the f	atures that m	ust be field-ve	rified by a cer	tified HERS	Rater as a	condition f	or meeting	g the modeled e	energy perfo	mance for this	computer	analysis. Additi	onal
08		Climate Zon	e 3	1.500		09	Front	Orientation (	(deg/ Cardin	al) 270				detail is provided in	the buildng tab	es below. Regi	stered CF2Rs a	and CF3Rs are	required to	be comp	leted in the	HERS Regi	istry	0,1		2		
10		Project Scop	e AdditionAlt	y eration		11		Number or Numbe	of Bedrooi	ms 4				None Cooling System Verif	ications:													
14 /	Addition Cond. Fl	loor Area (ft <sup>:</sup>	²) <sup>598</sup>			15		Nur	mber of Stor	ies 2				None Heating System Veri	fications:													
16	Existing Cond. Fl	loor Area (ft	<sup>2</sup> ) 1365			17	Fe	nestration Av	verage U-fact	or 0.34				None HVAC Distribution Sy	vstem Verificatio	ons:												
18	Total Cond. Fl	oor Area (ft	2) 1963 nt n/a			19		Glazing	Percentage ( ned Floor Ar	%) 17.82% ea n/a				• None Domestic Hot Water	System Verifica	tions:												
22	Is Natural G	Sas Available	? Yes											• None	20													
COMPLIANCE RESULT	s												8	BUILDING - FEATUR		N						-	2.0					
01 Bui	lding Complies w	vith Compute	er Performanc	e										01		02	1.000	03 Number of	Dwalling		04		05	Nur	06 her of Ventils	tion	07	ator
02 Bui	lding does not re	equire field t	esting or HERS	S verification	wn helow									Project Nar	ne Co	onditioned Flo	or Area (ft <sup>2</sup> )	Unit	s	Number	of Bedrooi	ns Ni	umber of Zones	s (	ooling System	s	Heating Syster	ms
													¢.	Residential Bu	ilding	1963	5	1			4		2	i i	0		1	
					ENER	GY USE SUMN	MARY	T						ZONE INFORMATIO	N		1					1	05					
Energ	gy Use (kTDV/ft <sup>2</sup>	-yr)		Standard [	Design		Proposed Desig	n	Compl	iance Margir	n Perce	ent Improvement		01 Zone Name		02 Zone Type	HVA	03 C System Nam	ne Zo	04 one Floor	Area (ft <sup>2</sup> )	Avg	05 . Ceiling Height	Water	06 Heating Syste	m 1 Wat	07 ter Heating Syst	tem 2
	Space Heating Space Cooling			39.08 6.89	8		38.65 6.21			0.43 0.68		1.1 9.9		Third Floor		Conditioned	н	VAC System1		136	5		9.5		DHW Sys 1		N/A	
	IAQ Ventilation			0	1.4.4		0			0		0. 2 01250 Beeb		Fourth Floor		Conditioned	H	VAC System1		59	8		9		DHW Sys 1		N/A	
Self Utili	Water Heating ization/Flexibility	Credit		19.48 n/a	8		19.48 0			0 0		0 n/a			1.2			in .							Rů.			
Com	pliance Energy To	otal		65.45	5		64.34			1.11		1.7																
Registration Number CA Building Energy E	Registration Number:Registration Date/Time:HERS Provider:CA Building Energy Efficiency Standards - 2019 Residential ComplianceReport Version: 2019.1.300 Schema Version: rev 20200901Report Generated: 2021-09-17 07:36:08											Registration Numbe	er: Efficiency Stanc	ards - 2019 Re	sidential Com	pliance		Registrati Report Ve Schema V	ion Date/Tir ersion: 2019 /ersion: rev	ne: ).1.300 20200901			HERS Provide Report Gener	:: ated: 2021-	09-17 07:36:08	3		
CERTIFICATE OF CO Project Name: Resi Calculation Descrip	MPLIANCE dential Building tion: Title 24 A	g nalysis				Calcul Input	ation Date/Tim File Name: Wo	<b>e:</b> 2021-09- ngNancy566	17T07:35:4 Addition.ril	5-07:00 od19x		CF1R-PRF-01E (Page 4 of 10)		CERTIFICATE OF CO Project Name: Res Calculation Descri	OMPLIANCE idential Buildi ption: Title 24	ng Analysis					Calculation Input File I	n Date/Ti Name: W	<b>me:</b> 2021-09- ongNancy566,	17T07:35:4 Addition.rit	-07:00 d19x		CF1R-PR (Page 5	F-01E of 10)
OPAQUE SURFACES -	CATHEDRAL CEIL	LINGS												FENESTRATION / GL 01	AZING 02	03	04	05	06	07	08 09	10	11	12	13	14	15 1	6
01 02	2 03	0	4 05	06	07	08	09	10	11	12	13 Verified	14		Namo	Type	Surface	Orientation	Azimuth	Width	Height	Mult Are	a II-facto	U-factor	SHOC	HGC Ext	erior	Veri Status Exis	fied
Name Zon	ne Construe	ction Azin	nuth Orienta	tion (ft <sup>2</sup> )	Skylight Area (ft <sup>2</sup>	t Roof Rise <sup>2</sup> ) in 12)	(x Roof Reflectance	Roof Emittance	Cool Roof	Status	Existing	Existing Construction		Name	Type	Surface	Orientation	Azimuth	(ft)	(ft)	(ft <sup>2</sup>	) U-racto	or Source	SHGC	ource Sha	ading	Cond	lition
Paof Fourth	R-30 Rod	of No	70 5100		0		0.1	0.95	Ne	Maur	condition			Window (New)	Window	East Wall	Back	90			1 15.3	1 0.34	NFRC	0.34	NFRC Bug	Screen	New n/	a
Rooi	Attic	c 2,		558	U	9	0.1	0.85	NU	IVEW	n/ a			Window 8	Window	Wall		135			1 17	0.99	110.6-A	0.74 1	LO.6-B Bug	Screen E	xisting N <sup>r</sup>	0
ATTIC												_		Window 9 Window 10	Window	South Wall 2 West Wall 2	Right Front	180			1 40 1 8	0.34	NFRC	0.34	NFRC Bug	Screen	New n/	a /a
01		(	)2		03	04 Roof Rise	05 Roof	06 Roof	07 Radiant	08	09	10 Verified Existing		Window 10	Window	North Wall 2	Left	0			1 40	0.34	NFRC	0.34	NFRC Bug	Screen	New n/	/a
Name		Const	ruction		Туре	(x in 12)	Reflectance	Emittance	Barrier	Cool Roof	Status	Condition		Window 12	Window	East Wall 2	Back	90			1 8	0.34	NFRC	0.34	NFRC Bug	Screen	New n/	a
Attic Third Floor		Attic Roof	Third Floor		Ventilated	9	0.1	0.85	No	No	Existing	No	2	OPAQUE SURFACE C	ONSTRUCTION	s												
FENESTRATION / GLA	ZING			r r						Ì	220			01		02	03		0	04		05	06	. 07			38	
01	02	03	04	05	06	07 08	09 10	11	12	13	14 1	5 16 Verified		Construction Na	me Sur	face Type	Constructio	on Type	Fra	ming	To	tal Cavity R-value	Continuou	erior us U-fac	or	Assemb	oly Layers	
Name	Туре	Surface	Orientation	Azimuth	(ft) (	(ft) Mult.	(ft <sup>2</sup> ) U-factor	U-factor Source	SHGC	SHGC E Source S	hading Sta	tus Existing Condition		2	- 								R-value		In	side Finish <sup>.</sup>	Gypsum Board	
Window	Window	South Wall	Right	180		1	40.3 0.99	Table	0.74	Table Bu	g Screen Exis	ting No		Default Wall Prior 197	to Exte	rior Walls	Wood Fram	ed Wall	2x4@1	.6 in . O. C.		R-0	None / Nor	ne 0.30	2 Ca	vity / Frame Exterior F	:: no insul. / 2x4 inish: Wood	ł.
Window 2	Window	Southwest		225		1	17 0.99	Table	0.74	Table Bu	g Screen Exis	ting No													3	Siding/shea	thing/decking	
	Window .	Wall		225			17 0.55	110.6-A Table	0.74 1	.10.6-B	Socreen Exis														In Cavity /	side Finish: Frame: R-1	Gypsum Board 9 in 5-1/2 in. (R	18)/
Window 3	Window	West Wall	Front	270		1	56 0.99	110.6-A	0.74 1	.10.6-B Bu	g Screen Exis	ting No		R-19 Wall	Exte	rior Walls	Wood Fram	ed Wall	2x6 @ 1	6 in . O. C.		R-19	None / No	ne 0.0		2 Exterior F	.x6 inish: Wood	
Window 4	Window	Northwest Wall		315		1	17 0.99	Table 110.6-A	0.74 1	Table 10.6-B	g Screen Exis	ting No		2											3	Siding/shea	thing/decking	
Window 5	Window	North Wall	Left	0		1	20 0.99	Table 110.6-A	0.74 1	Table 10.6-B Bu	g Screen Exis	ting No					Wood Fr	mad							Roofir	ig: Light Ro Roof De	of (Asphalt Shin) ack: Wood	gle)
Window 6	Window	Northeast		45		1	17 0.99	Table	0.74	Table Bu	g Screen Exis	ting No		R-30 Roof No At	tic Cathe	dral Ceilings	Ceilin	ng	2x10@	24 in. O. C		R-30	None / No	ne 0.03	5 C	Siding/shea avity / Fram	thing/decking ne: R-30 / 2x10	
Minday 7	Mindau	Wall	Death				545 0.00	Table	074	Table	- Carrow Dila	No.											2		In	side Finish:	Gypsum Board	
Window 7	window		DALK	90		1	54.5 0.99	110.6-A	0.74 1	.10.6-в	Exis	ing No																
Registration Number CA Building Energy E	r: fficiency Standar	ds - 2019 Re	sidential Comp	pliance	Re Re Sc	Registration Dat Report Version: Ichema Version	te/Time: 2019.1.300 1: rev 20200901			HERS Provid Report Gene	ler: erated: 2021-09	-17 07:36:08		Registration Numbe	er: Efficiency Stanc	ards - 2019 Re	sidential Com	pliance		Registrati Report Ve Schema V	ion Date/Tir ersion: 2019 /ersion: rev	ne: ).1.300 20200901	i		HERS Provide Report Gener	r: ated: 2021-	09-17 07:36:08	3
CERTIFICATE OF CO Project Name: Resi Calculation Descrip	MPLIANCE dential Building tion: Title 24 A	g nalysis				Calcul Input	ation Date/Tim File Name: Wo	e: 2021-09- ngNancy566	17T07:35:4 Addition.ril	5-07:00 od19x		CF1R-PRF-01E (Page 7 of 10)		CERTIFICATE OF CO Project Name: Res Calculation Descri	OMPLIANCE idential Buildi ption: Title 24	ng Analysis					Calculation Input File I	n Date/Ti Name: W	me: 2021-09-: ongNancy566,	17T07:35:4 Addition.rik	-07:00 d19x		CF1R-PR (Page 8	F-01E of 10)
01	1EMS 02	03	T	04	r	05	06		07	08	09	10		SPACE CONDITIONII	NG SYSTEMS	02	1	03	04		05	06	07	04	00	310	,	-+
						Solar Heat	<b>6</b>				Verifie	ed Existing				52		Hontin - M. M	Continue	Init		Distal	Require	ed	Verified	Heat	ing Cool	ing
Name	System Type	Distributio	n Type 🛛 Wa	ter Heater Nar	me (#)	Solar Heating System	Distributio	n HERS V	/erification	Status	Existi Condit	ng Heating		Name		System Ty	/pe	neating Unit Name	Name	Fa	n Name	Name	Thermos Type	stat Stat	is Existing Conditio	Equipr n Cou	nent Equipr nt Cou	nent Int
DHW Sys 1	Domestic Hot Water (DHW)	Standa Distribu Syste	ard tion m	DHW Heater 1	(1)	n/a	None		n/a	Existing	; No	System		HVAC Systen	n1 He	ating and cooli other	ing system	Heating Component 1	Cooling Compone 1	g ent HV	'AC Fan 1	Air Distribut System	ion n/a 1	Exist	ng No	1	1	9
WATER HEATERS								5.00) 						HVAC - HEATING UN	IT TYPES			_										
01 02	. 03	04	05	06	07	08	09 1	.0	11	12	. 13	14		5 	01			02					03			04		
Hort	ing		Tank F	nergy		Tank c	itandby 1et	Hr.		Tank Lor	cation	Verified			Name			System Typ	)e			Numb	er of Units			Heating Eff	iciency	
Name Elem	ent Tank T	ype # of Unit	Vol. Fac	ctor or or or	t Rating In Pilot F	R-value Rec	Loss or Rati	ng or Bra	A Heat Pum and or Mode	or Amb	pient Stat	us Existing Condition		Heating	Component 1			Central gas fur	nace				1			AFUE-	78	
	_				- 75	int/Ext)	,			Sonal				HVAC - COOLING UN	IIT TYPES													
Heater 1 Ga	s Small Sto	orage 1	50 0.	57-EF kB	tu/hr	0	80 n	/a	n/a	n/a	a Exist	ing No		01		)2	03		04		0	5	06	5	07		08	
WATER HEATING - HE		N											~ 7	Name	Syste	n Type	Number of	Units Eff	ficiency EEF	R/CEER	Efficien	cy SEER	Zonally Co	ontrolled	Compres	sor	HERS Verificat	ion
01	02		03		04		05	0	6	07		08		Cooling Component	:1 No C	ooling	1		n/a	Τ	n,	'a	Not Z	onal	Single Sp	eed	n/a	
Name	Pipe Insu	lation	Parallel Pip	oing Com	npact Distrib	oution Comp	act Distribution Type	Recirculatio	on Control	Central Distribu	DHW Sh ution	ower Drain Water Heat Recovery		HVAC - DISTRIBUTIC	N SYSTEMS				10-11-11-1	•					,			
DHW Sys 1 - 1/1	Not Req	uired	Not Requi	red	Not Required	d	None	Not Re	quired	Not Req	quired	Not Required		01	02	03	04 05	06 Duct los	07 ation	08 Surface A	09 Vrea	10	11 1	12 1	14		15 1	.6
																Design						pass	Duct Lu	ERS	Verifie	d Exi	sting	Ducto
														Name	Туре	Type Su	pply Return	Supply	Return S	upply R	leturn D	uct Le	eakage Verifi	ication Sta	us Existin Conditi	g Distri on sys	bution 4(	) ft
														Air				11-00110-001						Air				
														Distributi Con on spac System 1	ditioned e-entirely	Non- Verified	R-6 R-6	Condit ioned Zone	Condit ioned Zone	n/a	n/a By D	No E pass uct sp	xisting Dist (not on Specified) 1-h d	ributi ystem hers- list	ing No ew	ŗ	ı/a n	/a
Registration Number	13				Re	Registration Dat	te/Time:			HERS Provid	ler:			Registration Numbe	er:					Registrati	ion Date/Tir	ne:			HERS Provide	1		
CA Building Energy E	fficiency Standar	ds - 2019 Re	sidential Comp	oliance	R	Report Version:	2019.1.300			Report Gene	erated: 2021-09	-17 07:36:08		CA Building Energy	Efficiency Stand	ards - 2019 Re	sidential Com	pliance		Report Ve	ersion: 2019	.1.300			Report Gener	ated: 2021-	09-17 07:36:0	3

### CERTIFICATE OF COMPLIANCE

Project Name: Residential Building Calculation Description: Title 24 Analysis

OPAQUE SURFAC	ES									
01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Azimuth Orientation		Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
South Wall	Third Floor	Default Wall Prior to 197	180	Right	566.2	40.3	90	none	Existing	No
Southwest Wall	Third Floor	Default Wall Prior to 197	225	n/a	72.2	17	90	none	Existing	No
West Wall	Third Floor	Default Wall Prior to 197	270	Front	164.3	56	90	none	Existing	No
Northwest Wall	Third Floor	Default Wall Prior to 197	315	n/a	72.2	17	90	none	Existing	No
North Wall Third Floo		Default Wall Prior to 197	0	Left	566.2	20	90	none	Existing	No
Northeast Wall	Third Floor	Default Wall Prior to 197	45	n/a	36.4	17	90	none	Existing	No
East Wall	Third Floor	Default Wall Prior to 197	90	Back	227.1	69.6	90	none	Existing	No
Southeast Wall	Third Floor	Default Wall Prior to 197	135	n/a	36.4	17	90	none	Existing	No
South Wall 2	Fourth Floor	R-19 Wall	180	Right	113.7	40	90	none	New	n/a
West Wall 2	Fourth Floor	R-19 Wall	270	Front	101.5	8	90	none	New	n/a
North Wall 2	Fourth Floor	R-19 Wall	0	Left	113.7	40	90	none	New	n/a
East Wall 2	Fourth Floor	R-19 Wall	90	Back	101.5	8	90	none	New	n/a
Roof 2	Third Floor	Default Roof Prior to 197	n/a	n/a	767	n/a	n/a		Existing	No
Raised Floor	Third Floor	Default Floor No Crawlspa	n/a	n/a	100	n/a	n/a		Existing	No
Interior Surface Floor	Third Floor	Default Floor No Crawlspa1	n/a	n/a	1265	n/a	n/a		Existing	No
Interior Surface Floor 2	Fourth Floor	R-O Floor No Crawlspace	n/a	n/a	598	n/a	n/a		New	n/a

### **Registration Number:**

CA Building Energy Efficiency Standards - 2019 Residential Compliance

### CERTIFICATE OF COMPLIANCE

Project Name: Residentia	al Building			Calculation Date/Tin	ne: 2021-09-17T07	7:35:45-07:	00 (Page 6 of 10)
Calculation Description:	Title 24 Analysis			Input File Name: Wo	ngNancy566Addit	ion.ribd19	×
OPAQUE SURFACE CONSTR	UCTIONS						
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
Attic RoofThird Floor	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in . O. C	. R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
Default Roof Prior to 197	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O. C	. R-11	None / None	0.083	Over Ceiling Joists: R-1.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
Default Floor No Crawlspa	Exterior Floors	Wood Framed Floor	2x12 @ 16 in. O. (	C. R-0	None / None	0.24	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12
Default Floor No Crawlspa1	Interior Floors	Wood Framed Floor	2x12 @ 16 in. 0. (	C. R-O	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below Finish: Gypsum Board
R-0 Floor No Crawlspace	Interior Floors	Wood Framed Floor	2x12 @ 16 in. 0. (	C. R-O	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below Finish: Gypsum Board
	E VERIFICATION						
BUILDING ENVELOPE - HER						111	
01		02			03		04

BUILDING ENVELOPE - HERS VERIFICATION			
01	02	03	04
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

**Registration Number:** 

CA Building Energy Efficiency Standards - 2019 Residential Compliance

### CERTIFICATE OF COMPLIANCE

Project Name: Residential Building Calculation Description: Title 24 Analysis

HERS RATER VERIFICATION OF EXISTING CONDITIONS	

### CERTIFICATE OF COMPLIANCE Project Name: Residential Building Calculation Description: Title 24 Analysis DOCUMENTATION AUTHOR'S DECLARATION STATEMENT 1. I certify that this Certificate of Compliance documentation is accurate a Documentation Author Name: **Rick Rocklewitz** Company: NRG Compliance, LP Address: PO Box 3777 City/State/Zip: Santa Rosa, California 95402 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of Calif 1. I am eligible under Division 3 of the Business and Professions Code to I certify that the energy features and performance specifications iden The building design features or system design features identified on the calculations, plans and specifications submitted to the enforcement approximation of the system of Responsible Designer Name: Alex Santos Company: Altos Engineering 1865 Golden Gate Avenue #2 City/State/Zip: San Francisco, CA 94115

### CF1R-PRF-01E (Page 3 of 10)

IALTO

### Calculation Date/Time: 2021-09-17T07:35:45-07:00 Input File Name: WongNancy566Addition.ribd19x

Registration Date/Time: Report Version: 2019.1.300

Schema Version: rev 20200901

HERS Provider:

Report Generated: 2021-09-17 07:36:08

CF1R-PRF-01E

Registration Date/Time: Report Version: 2019.1.300 Schema Version: rev 20200901 HERS Provider:

Report Generated: 2021-09-17 07:36:08

CF1R-PRF-01E (Page 9 of 10)

CF1R-PRF-01E (Page 10 of 10)

	Input File Name: WongNancy566Addition.ribd19x
	<u> </u>
e and complete.	())
	Documentation Author Signature:
	Signature Date: 9/17/2021
	CEA/ HERS Certification Identification (If applicable):
	Phone: 707-237-6957
lifornia: to accept responsil intified on this Cer this Certificate of agency for approv	bility for the building design identified on this Certificate of Compliance. tificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. Compliance are consistent with the information provided on other applicable compliance documents, worksheets, al with this building permit application.
	Responsible Designer Signature:
	Date Signed:
	License:
	Phone: 415-497-2668

Calculation Date/Time: 2021-09-17T07:35:45-07:00

Calculation Date/Time: 2021-09-17T07:35:45-07:00

Input File Name: WongNancy566Addition.ribd19x

	<b>RESIDENTIAL RENOVATIOI</b>	566 - 568 6TH AVENUE (BLOCK / LOT:	
KEG 101	PROFESS PROFESS NDER M. VI VI VI VI VI VI VI VI VI VI VI VI VI	144 144 1/23 TORHIT	_
# DATE 0 08/23/21 1 09/02/21 DRAWN BY: A SHEET TITLE:	ISS PERM REVIS	SUES & REVISIONS AIT SUBMISSION SION #1	

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.

### CERTIFICATE OF COMPLIANCE

02			Run Titl	e Title 24	Analysis	A									
03		P	roject Locatio Cit	n 568 6th V San Fran	Avenue ncisco			05			Sta	ndards Ve	sion 201	9	
06			Zip cod	e 94118				07			So	ftware Ve	rsion Ene	rgyPro 8.2	
10			Building Typ	e 3 e Single fa	amily			09 11		Front O	Number of	(deg/ Card Dwelling I	Inal) 270 Jnits 1		
12		3 997 97	Project Scop	e Addition	nAlteration			13			Numbe	er of Bedro	oms 2		
14	Addit Exist	ion Cond.	Floor Area (ft <sup>4</sup>	) 585 2) 1265				15 17		Fene	estration Av	verage U-fa	actor 0.34	1	
18	To	otal Cond.	Floor Area (ft <sup>2</sup>	2) 1850				19		100000	Glazing	Percentag	e <b>(%)</b> 20.3	33%	
20 22		ADU E	Bedroom Coun Gas Available	nt n/a ? Yes				21		AD	OU Conditio	ned Floor	Area n/a	1	
	ICE RESULTS														
01	Building	; Complies	with Compute	er Perform	ance										
02	Building This bui	does not Iding incor	require field to porates one o	esting or H r more Spe	IERS verifica	ation es shown belo	w								
							INFRCV US	F SUMM							
	Energy Us	e (kTDV/f	t <sup>2</sup> -vr)	0	Star	ndard Design		L JOIVIN	Propose	d Design		Corr	pliance M	largin	Perce
	Spac	ce Heating		-		46.09	2 S		45	.72			0.37		
	Space IAO 1	ce Cooling Ventilation				3.23 0			3.	.49 0			-0.26 0		
	Wat	er Heating				18.05			18	.05			0		
	Self Utilizatio Complian	on/Flexibili ice Energy	ty Credit <b>Total</b>			n/a 67.37			67	0 . <b>26</b>			0 <b>0.11</b>		
Decistratio	an Nissakan						Decistre	tion Det						havidan.	
CA Buildin	ng Energy Efficie	ency Stand	ards - 2019 Re:	sidential Co	ompliance		Report \ Schema	Version: Version	2019.1.3 : rev 2020	00 00901			Report	: Generated: 2	021-09-
CERTIFICA Project Na Calculatio OPAQUE S	ATE OF COMPI ame: Resident on Description URFACES	LIANCE tial Buildin : Title 24	ng Analysis			05		Calcul Input	ation Da File Nam	nte/Time ne: Wong	: 2021-09- 3Nancy568	17T07:41 Addition	:42-07:00 ribd19x	0	
01 Name	e 7,	one	Construct	ion	Azimuth	Orientation	Of Gross Are	a (f+ <sup>2</sup> )	Windo	w and	08 Tilt (de	g) W	09 all Excentio	ons Stat	tus
Interior Su	urface	d Elect	Default Floo	or No	n/-		CI USS ARE	(r - )	Door Ar	rea (ft2)	lue		p	Jul	ting
Floor	r Secon urface		Crawlspa Default Flor	a1 or No	u/a	n/a	585		n/	a 1	n/a			EXIS	ung
Floor	2 Secon	a Floor	Crawlspa	1	n/a	n/a Right	518	, ,	n/	/a	n/a		none	Exis	ting
West Wa	all 3Ga	rage	R-0 Wa		270	Front	179.	9	0	)	90		none	Exis	ting
North Wa	all 3Ga	rage	R-0 Wa		0	Left Back	272		0	)	90		none	Exis	ting ting
ATTIC			ACAS (71117-5575)	<u> </u>			н — ««б		1			1		1102020	
	01		0	2		03		04	05		06	07	08	0	9
N	lame		Const	ruction		Туре	Roo (x	of Rise in 12)	Root Reflecta	f ance Er	Roof nittance	Radiant Barrier	Cool R	oof Sta	tus
Attic_	_Garage	11-	Attic Garag	e Roof Con	15	Ventila	ted	0	0.1		0.85	No	No	Exis	ting
FENESTRAT	TION / GLAZING	G 1	00					[ ar ]	00		7a se ti	-	7 <b>4 4</b>		1~
01	•	U2	US	04	05	U6 Width	Height	80	Area	10	U-factor	12	SHGC	14 Exterior	
Nar	ne	туре	Surface	Urientati	ion Azimu	rtn (ft)	(ft)	Mult.	(ft²)   l	u-tactor	Source	SHGC	Source	Shading	Sta
Wind	dow W ow 2 M	/indow /indow	West Wall East Wall	Front Back	270 90			1	11.3 86.6	0.34 0.34	N FRC	0.4	NFRC	Bug Screen	Ne Ne
Winde	ow 3 W	/indow	South Wall 2	Right	180			1	40.3	0.99	Table	0.74	Table	Bug Screen	Exis
Winde	ow 4 W	/indow	Southwest		225			1	17	0.99	Table	0.74	Table	Bug Screen	Exis
\\/in d	ow 5	/indow	Wall	Front	370			1	47	0.90	110.6-A Table	0.74	110.6-B Table	Bug Scroop	Evie
vvinde		maow	west wall Z	Front	270	·	L		-+/	0.33	110.6-A	0.74	110.6-В	bag screen	EXIS
Registratic	on Number: ng Energy Efficie	ency Stand	ards - 2019 Res	sidential Co	ompliance		Registra Report \ Schema	tion Dat Version: Version	ce/Time: 2019.1.3 : rev 2020	00 00901			HERS P Report	Provider: : Generated: 2	021-09-
	ATE OF COMPL ame: Resident on Description URFACE CONST	LIANCE tial Buildin : Title 24 RUCTIONS	ng Analysis					Calcul: Input	ation Da File Nam	nte/Time ne: Wong	: 2021-09- gNancy568	17T07:41 Addition	:42-07:00 ribd19x	0	
CERTIFICA Project Na Calculatio OPAQUE S	112		UZ		US		04		05 Total C	avity Ir	06 nterior / Ext	terior	0/		08
CERTIFICA Project Na Calculatio OPAQUE SI	LT.	<ul> <li>A 10</li> <li>A 10</li> </ul>	1000		iction Type		Framing		R-val	lue	Continuo R-value	us U-	factor	Ass Floor S	embly
CERTIFICA Project Na Calculatio OPAQUE SI Constru	uction Name	Surf	ior Floors	Wood Fr	amed Floor	2x12 (	@ 16 in. O.	с.	R-0	0	None / No	one O	.196	Siding/s	or Deck sheathir
CERTIFICA Project Na Calculatio OPAQUE SI Constru Defau Cra	uction Name	Inter	ior Floors	Wood Fr	ramed Floor d Framed	2x12 (	@ 16 in. 0.	c.	R-C	0	None / No	ine O	.196	Siding/s Cavity / Fr Ceiling Belov Floor S Floo	or Deck sheathi ame: n v Finish ourface: or Deck
CERTIFICA Project Na Calculatio OPAQUE SU Constru Defau Cra Default	uction Name It Floor No awlspa1 Roof Prior to 197 ENVELOPE - HE	Surf Inter	ior Floors	Wood Fr Wood Co	ramed Floor 1 Framed eiling	2x12 ( 2x4 @	@ 16 in. O.	c.	R-0 R-1	0	None / Nc	one O	.196	Siding/- Cavity / Fr Ceiling Belov Floor S Floor Siding/- Cavity / Ceiling Belov	or Deck sheathin ame: no v Finish Surface: or Deck: sheathin Frame: v Finish
CERTIFICA Project Na Calculatio OPAQUE Si Constru Defau Cra Default 1 BUILDING	It Floor No awlspa1 Roof Prior to 197 ENVELOPE - HE 01	Inter	ior Floors	Wood Fr Wood Ca	amed Floor 1 Framed eiling	2x12 ( 2x4 @	@ 16 in. 0.	c.	R-1	0	None / No	ine 0	.196	Siding/ Cavity / Fr Ceiling Belov Floor S Floo Siding/ Cavity / Ceiling Belov	or Deck sheathin ame: no v Finish Surface: or Deck sheathin Frame: v Finish
CERTIFICA Project Na Calculatio OPAQUE SI Constru Defau Cra Default BUILDING Qual	Int Floor No awlspa1 Roof Prior to 197 ENVELOPE - HE 01 lity Insulation I	Inter Inter	ior Floors	Wood Fr Wood Ca High I	d Framed Floor d Framed eiling R-value Spra	2x12 ( 2x4 @ 2x4 @ 2x4 @ 2x4 @	@ 16 in. O.	c. c.	R-1 Buildin	0 11 g Envelop	None / No None / No e Air Leaka	ine 0 ine 0	.196	Siding/ Cavity / Fr Ceiling Belov Floor S Floor Siding/: Cavity / Ceiling Belov	or Deck sheathin ame: no v Finish Gurface: or Deck sheathin Frame v Finish 04 FM50
CERTIFICA Project Na Calculatio OPAQUE SI Constru Defau Cra Default BUILDING Qual	It Floor No awlspa1 Roof Prior to 197 ENVELOPE - HE 01 lity Insulation I Not Requ	Inter Inter Inter RS VERIFIC	ior Floors ior Ceiling CATION	Wood Fr Wood Ca High I	amed Floor d Framed eiling R-value Spra Not R	2x12 ( 2x4 @ 02 ay Foam Insula equired	@ 16 in. O.	c.	R-0 R-1 Buildin	0 11 g Envelop Not Req	None / No None / No e Air Leaka	ine 0 ine 0	.196	Siding/ Cavity / Fr Ceiling Belov Floor S Siding/: Cavity / Ceiling Belov	or Deck sheathii ame: no v Finish Surface: or Deck sheathii Frame: v Finish 04 FM50 n/a
CERTIFICA Project Na Calculatio OPAQUE SI Constru Defau Cra Default BUILDING Qual WATER HEA	It Floor No awlspa1 Roof Prior to 197 ENVELOPE - HE 01 lity Insulation I Not Requ	Surf	ior Floors ior Ceiling CATION (QII)	Wood Fr Wood Ca	armed Floor d Framed eiling R-value Spra Not R	2x12 ( 2x4 @ 02 equired	@ 16 in. 0. ( @ 16 in. 0. (	C.	R-1 Buildin	0 11 03 g Envelop Not Req 06	None / No None / No ee Air Leaka	ne 0 ne 0 1ge 07	.196	Siding/: Cavity / Fr Ceiling Belov Floor S Floor Siding/: Cavity / Ceiling Belov	or Deck sheathin ame: no v Finish Surface: or Deck sheathin Frame: v Finish 04 FM50 n/a 09
CERTIFICA Project Na Calculatio OPAQUE SI Constru Defau Cra Default BUILDING Qual WATER HEA 01	It Floor No awlspa1 Roof Prior to 197 ENVELOPE - HE 01 lity Insulation I Not Requ ATING SYSTEM: a Sys	Surf Inter I	ior Floors ior Ceiling CATION i (QII) i QII O3 Distributio	Wood Fr Wood Ca High I	armed Floor d Framed eiling R-value Spra Not R	2x12 ( 2x4 @ 02 ay Foam Insula equired 04 ter Name (#)	@ 16 in. 0. ( @ 16 in. 0. ( ation	C.	R-1 Buildin	0 11 03 g Envelop Not Req 06 compact tribution	None / No None / No e Air Leaka uired HERS N	ne 0 ne 0 nge 07 /erification	.196 .069	Cavity / Fr Ceiling Belov Floor S Floor S Gavity / Ceiling Belov	or Deck sheathi ame: n v Finish Gurface: or Deck sheathi Frame v Finish Frame v Finish Frame v Finish Frame v Finish Frame v Finish Frame v Finish Conditi Conditi

### CERTIFICATE OF COMPLIANCE

Project Name: Residential Building Calculation Description: Title 24 Analysis

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis. New ductwork added is less than 40 ft. in length

Non-standard duct location (any location other than attic) HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

**Building-level Verifications:** 

-- None --Cooling System Verifications:

-- None --Heating System Verifications:

-- None --HVAC Distribution System Verifications:

-- None -omestic Hot Water System Verifications:

None	, sterriter in total onst

01	02	02			04	05	06	07	
Project Name	Conditioned Floor A	rea (ft <sup>2</sup> )	Number of Dwelli Units	ng	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems	
Residential Building	1850		1		2	2	0	1	
E INFORMATION 01	02		03		04	05	06	07	
Zone Name	Zone Type	HVA	C System Name	Z	one Floor Area (ft <sup>2</sup> )	Avg. Ceiling Height	Water Heating System 1	Water Heating System	
First Floor	Conditioned	H	VAC System1		585	8.5	DHW Sys 1	N/A	
Second Floor	Conditioned	ed HVAC System1 1265 9.5		9.5	DHW Sys 1	N/A			

**Registration Number:** 

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Registration Date/Time:

Schema Version: rev 20200901

Report Version: 2019.1.300

Calculation Date/Time: 2021-09-17T07:41:42-07:00

Input File Name: WongNancy568Addition.ribd19x

HERS Provider: Report Generated: 2021-09-17 07:42:06

CERTIFICATE OF C	COMPLIANCE																CF1R-PRF-01
Project Name: Re	esidential Bui	lding					Calcu	lation	Date/Tin	ne: 2021	-09-1	7T07:43	1:42-07:00				(Page 5 of 10
Calculation Descr	r <b>iption:</b> Title	24 Analysis					Input	File N	ame: Wo	ongNanc	y568A	ddition	.ribd19x				
FENESTRATION / G	LAZING																
01	02	03	04	05	06	07	08	09	10	11		12	13	14	4	15	16
Name	Туре	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft <sup>2</sup> )	U-facto	r U-fac Sour	tor ce	SHGC	SHGC Source	Exte Shac	rior Jing	Status	Verified Existing Condition
Window 6	Window	Northwest Wall		315			1	17	0.99	Tabl 110.6	e i-A	0.74	Table 110.6-B	Bug So	creen	Existing	No
Window 7	Window	North Wall 2	Left	0			1	20	0.99	Tabl 110.6	e i-A	0.74	Table 110.6-B	Bug So	creen	Existing	No
Window 8	Window	Northeast Wall		45			1	17	0.99	Tabl 110.6	e i-A	0.74	Table 110.6-B	Bug So	creen	Existing	No
Window 9	Window	East Wall 2	Back	90			1	31.8	0.99	Tabl 110.6	e i-A	0.74	Table 110.6-B	Bug So	creen	Existing	No
Window (New)	Window	East Wall 2	Back	90			1	71.1	0.34	NFR	с	0.4	NFRC	Bug So	creen	New	n/a
Window 10	Window	Southeast Wall		135			1	17	0.99	Tabl 110.6	e i-A	0.74	Table 110.6-B	Bug So	creen	Existing	No
OPAQUE DOORS																	
01		02	1	1	03		T		04		r		05			0	6
Name		Side of Bu	uilding	1	Area (ft <sup>2</sup> )			U	-factor			5	itatus		Veri	fied Existi	ng Condition
Door		West W	/all 2		18.8				0.5			E	xisting			N	0
SLAB FLOORS					-r		r		r			r		r		- r	
01	02	03	1	04		05		06		07			08		09		10
Name	Zone	Area (	ft <sup>2</sup> ) Pe	rimeter (ft)	Edg R-va D	e Insul. alue and Depth	Ed R-v	ige Insu /alue ar Depth	nd Car	rpeted Fr	action	н	leated	3	Status	Ve	erified Existing Condition
Slab	First Floo	r 585	i i	104.3	, i	none		0		80%			No		New		n/a
Slab 2	Garage_	604	1	106.3	1	none		0		0%			No		New		n/a

**Registration Number:** 

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Registration Date/Time: Report Version: 2019.1.300 Schema Version: rev 20200901 HERS Provider: Report Generated: 2021-09-17 07:42:06

CERTIFICATE	OF COMPL	LIANCE													CF1R-PRF-01
Project Nam	ne: Resident	tial Building						Calculatio	on Dat	e/Time:	: 2021-09-17TC	7:41:42-0	07:00		(Page 8 of 10
Calculation	Description	: Title 24 Analysi	s					Input File	Name	: Wong	Nancy568Addi	tion.ribd	19x		
WATER HEAT	ERS					-							_		
01	02	03	04	05	06	07	08	0		10	1	1	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulati R-valu (Int/Ex	on Stan e Loss t)	dby : or ery Eff	1st H Rating Flow R	r. s or ate	at Pump ' Model	Tank Locatio or Ambient Condition	n Statu	Verified s Existing Condition
DHW Heater 1	Gas	Small Storage	1	50	0.57-EF	<= 75 kBtu/hr	0	8	D	n/a	n/	a	n/a	Existi	ng No
WATER HEAT	ING - HERS V	ERIFICATION													
01		02		}	03	04	ļ		05		06		07		08
Nam	e	Pipe Insulation		Parall	el Piping	Compact Di	stribution	Compact T	Distrib ype	ution	Recirculation Co	ntrol	Central DHV Distribution	V Sho	wer Drain Water Heat Recovery
DHW Sys	1 - 1/1	Not Required		Not R	equired	Not Red	quired	N	one		Not Require	d	Not Require	d	Not Required
SPACE COND	ITIONING SY	STEMS													
	01		02		03	0	4	05		06	07	08	09	10	11
N	lame	Syst	em Typ	e	Heating Name	Unit Coolin 2 Nai	g Unit ne	Fan Name	Distr	ibution lame	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipmer Count	Cooling t Equipment Count
HVAC	System1	Heating and	l cooling other	g system	Heatin Compon 1	ent Comp 1	ling onent H	IVAC Fan 1	Disti Sys	Air ribution stem 1	n/a	Existing	y No	1	1
HVAC - HEATI	ING UNIT TY	PES													
	01				C	)2				03				04	
	Nam	e			Syster	n Type			N	umber o	f Units		He	ating Efficie	ncy
)	Heating Com	ponent 1			Central g	as furnace				1				AFUE-78	

**Registration Number:** 

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Report Version: 2019.1.300 Schema Version: rev 20200901

Registration Date/Time:

HERS Provider: Report Generated: 2021-09-17 07:42:06

CERTIFICATE OF COMPLIANCE Project Name: Residential Building

CF1R-PRF-01E

(Page 2 of 10)

Calculation Description: Title 24 Analysis

OPAQUE SURFAC	ES									
01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft <sup>2</sup> )	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
South Wall	First Floor	R-19 Wall	180	Right	278.8	0	90	Ex. w/ Siding	New	n/a
West Wall	First Floor	R-19 Wall	270	Front	124.1	11.3	90	Ex. w/ Siding	New	n/a
North Wall	First Floor	R-19 Wall	0	Left	278.8	0	90	Ex. w/ Siding	New	n/a
East Wall	First Floor	R-19 Wall	90	Back	205.4	86.6	90	Ex. w/ Siding	New	n/a
South Wall 2	Second Floor	Default Wall Prior to 197	180	Right	566.4	40.3	90	none	Existing	No
Southwest Wall	Second Floor	Default Wall Prior to 197	225	n/a	35.6	17	90	none	Existing	No
West Wall 2	Second Floor	Default Wall Prior to 197	270	Front	237	65.8	90	none	Existing	No
Northwest Wall	Second Floor	Default Wall Prior to 197	315	n/a	35.6	17	90	none	Existing	No
North Wall 2	Second Floor	Default Wall Prior to 197	0	Left	566.4	20	90	none	Existing	No
Northeast Wall	Second Floor	Default Wall Prior to 197	45	n/a	36.1	17	90	none	Existing	No
East Wall 2	Second Floor	Default Wall Prior to 197	90	Back	233.9	102.9	90	none	Existing	No
Southeast Wall	Second Floor	Default Wall Prior to 197	135	n/a	36.7	17	90	none	Existing	No
Interior Surface Wall	First Floor>>Garag e	R-19 Wall1	n/a	n/a	81	0	n/a		New	n/a
Roof	Garage	R-0 Roof Attic	n/a	n/a	86	n/a	n/a		Existing	No
Raised Floor	Second Floor	Default Floor No Crawlspa	n/a	n/a	162	n/a	n/a		Existing	No
Interior Surface Ceiling	Second Floor	Default Roof Prior to 197	n/a	n/a	1265	n/a	n/a		Existing	No

**Registration Number:** 

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Schema Version: rev 20200901

CERTIFICATE OF COMPLIANCE

Project Name: Residential Building Calculation Description: Title 24 Analysis

OPAQUE SURFACE CONSTR	UCTIONS				50		
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-0 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-O	None / None	0.302	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: Wood Siding/sheathing/decking
R-19 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-19	None / None	0.07	Inside Finish: Gypsum Board Cavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6 Exterior Finish: Wood Siding/sheathing/decking
Default Wall Prior to 197	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.302	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: Wood Siding/sheathing/decking
R-19 Wall1	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-19	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6 Other Side Finish: Gypsum Board
Attic Garage Roof Cons	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-0 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
Default Floor No Crawlspa	Exterior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-O	None / None	0.24	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12

**Registration Number:** CA Building Energy Efficiency Standards - 2019 Residential Compliance

Registration Date/Time: Report Version: 2019.1.300

Schema Version: rev 20200901

CERTIFICATE OF COMPLIANCE Project Name: Residential Building

Calculation Description: Title 24 Analysis

01		02		03		04	4		05		06		07	0	08
Nam	ne	System Type	Nur	nber of U	nits I	Efficiency	EER/CEER	Effi	ciency SEE	R Zon	ally Controlle	d	Mulit-speed Compressor	HERS V	erification
Cooling Corr	nponent 1	No Cooling		1		n/	a		n/a		Not Zonal	9	Single Speed		n/a
HVAC - DIST	RIBUTION SYSTE	MS													
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
			Duct Ins	R-value	Duct Lo	ocation	Surfac	e Area							
Name	Туре	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Duct 40 ft
Air Distributi on System 1	Conditioned space-entirely	Non- y Verified	R-6	R-6	Condit ioned Zone	Condit ioned Zone	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distributi on System 1-hers- dist	Existing + New	No	n/a	n/a

CERTIFI	CATE OF COMPLIANCE
Project	Name: Residential Building
Calculat	tion Description: Title 24 Analysis
DOCUM	ENTATION AUTHOR'S DECLARATION STATEMENT
1. I certif	fy that this Certificate of Compliance documentation is accurate and complete.
Documen	tation Author Name:
	Rick Rocklewitz
Company	
	NRG Compliance, LP
Address:	PO Box 3777
City/State	<sub>/Zip:</sub> Santa Rosa, California 95402
RESPON	SIBLE PERSON'S DECLARATION STATEMENT
I certify th	e following under penalty of perjury, under the laws of the State of California:
1.	I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the Logitify that the analysis features and performance specifications identified on this Certificate of Ce
3.	The building design features on system design features identified on this Certificate of Compliance calculations, plans and specifications submitted to the enforcement agency for approval with this b
Responsit	le Designer Name: Alex Santos
Company	Altos Engineering
Address:	1865 Golden Gate Avenue #2
•	

### Calculation Date/Time: 2021-09-17T07:41:42-07:00 Input File Name: WongNancy568Addition.ribd19x

CF1R-PRF-01E (Page 3 of 10)

Registration Date/Time: Report Version: 2019.1.300

Calculation Date/Time: 2021-09-17T07:41:42-07:00

Input File Name: WongNancy568Addition.ribd19x

HERS Provider: Report Generated: 2021-09-17 07:42:06

CF1R-PRF-01E (Page 6 of 10)

Report Generated: 2021-09-17 07:42:06

CF1R-PRF-01E

(Page 9 o<del>f</del> 10)

HERS Provider:

Calculation Date/Time: 2021-09-17T07:41:42-07:00 Input File Name: WongNancy568Addition.ribd19x

	CF1R-PRF-01E
Calculation Date/Time: 2021-09-17T07:41:42-07:00	(Page 10 of 10)
Input File Name: WongNancy568Addition.ribd19x	
	1
- (1) -	
Documentation Author Signature:	
Signature Date:	
CEA/ HERS Certification Identification (if applicable):	
Phone:	
707-237-6957	
ouilding design identified on this Certificate of Compliance. mpliance conform to the requirements of Title 24, Part 1 and Part 6 of the Califorr are consistent with the information provided on other applicable compliance docu sulding permit application.	ia Code of Regulations. ments, worksheets,
Responsible Designer Signature:	
Date Signed:	
License:	
License: Phone: 415-497-2668	

ALTOS UCTU ALEX@ALTOSENGINEER.COM 1865 GOLDEN GATE AVENUE #2 SAN FRANCISCO, CALIFORNIA 94115 415-497-2668 / 034) 94118 : 1548 / RENOVATION . . ), CALIFORNIA ( (BLOCK / LOT: RESIDENTIAL SAN FRANCISCO 568 6TH AVENUE 566 √ NO. C84144 ĸ∖ Exp. 9/30/23 / One # DATE ISSUES & REVISIONS BY AS 0 08/23/21 PERMIT SUBMISSION AS 1 09/02/21 **REVISION #1** DRAWN BY: A.S. SHEET TITLE: 568 6TH AVENUE: TITLE-24 ENERGY REPORT

**T**2

SHEET NUMBER

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.

Project Na	DENTIA	L MEAS	SURES SU	JMM	ARY							RMS-1
Wong, I	<sub>ime</sub> Vancy Ado	lition		Build	ling Type	⊠ Sing □ Mul	le Fam ti Family	ily ⊡ A y ⊠ B	Addition Alor Existing+ Ad	ie dition/Alteration		Date 9/17/202
Project Ad	ldress			Cali	fornia Ene	ergy Clima	te Zone	Total	Cond. Floor A	rea Addition		# of Units
566 6th	Avenue	San Fran	cisco	C	A Clim	ate Zon	e 03		1,963	598		1
INSUL	ATION			-		Area					_	
Const	ruction	Type		Cav	ity	(#~)	S	pecia	al Featur	es	S	tatus
Floor	Wood Fram	ed w/o Crawl	Space	- no ins	sulation	100					E	xisting
Wall	Wood Fram	ed		- no ins	sulation	526					E	xisting
Wall	Wood Fram	ed		- no ins	sulation	55					E	xisting
Wall	Wood Fram	ed		- no ins	sulation	108					E	xisting
Wall	Wood Fram	ed		- no ins	sulation	55					E	xisting
wall	Wood Fram	ea ed		- no ins	sulation	540					E	xisting
wall	Wood Fram	ea od		- no ins	sulation	19					E	xisting
EENES		N	0.000	- 110 118	sulation	150	4	700/			E	xisuriy
Oriont	ation A	$roa(ft^2)$	Total Area:	350	Glazing	Percenta	ge: 7 Sidof	7.8 %	New/Altered	Average U-Factor:	c	0.34
Diaht (S)	ation P	10.2	0-rac 31	0.74	oven	lang	Sider	1115	AVA	Shaues	5	vietine
Diabt (SW		40.3	0.990	0.74	nono		none		N/A			visting
Front (MA	/	56.0	0.990	0.74	none		none		N/A		-	viotina
Front (MM	1	17.0	0.990	0.74	none		none		N/A		-	vietina
l off (N)		20.0	0.330	0.74	none		none		N/A		F	vistina
left (NF)		17.0	0.990	0.74	none		none		N/A		F	vistina
Roar (F)		54.5	0.000	0.74	none		none		N/A		E	vistina
Rear (F)		23.1	0.340	0.34	none		none		N/A		~	lew
Rear (SE)		17.0	0.990	0.74	none		none		N/A		E	xistina
Riaht (S)		40.0	0.340	0.34	none		none		N/A		٨	lew
Front (W)		8.0	0.340	0.34	none		none		N/A		٨	lew
Left (N)		40.0	0.340	0.34	none		none		N/A		٨	lew
HVAC Qty.	SYSTEN Heating	IS	Min. Eff	Co	oling		Mir	n. Eff	т	hermostat	S	tatus
1	Central Furna	ce	78% AFUE	No	Cooling		14.0	SEER	Set	back	E	Existing
	DISTOID									Duct		
		UTION				_				Duci		
HVAC Locati	on	He	ating	Co	oling	Duc	t Loca	ation		R-Value	S	tatus

Phone in the later			SURES SI		ARY	<b>D</b> 0:	alo Feer'		delition Al-		-
Wong, I	<sup>ime</sup> Vancy A	Addition		Build	ding Type	⊠ Sin ⊡ Mu	gie Fami Iti Family		Existing+ A	ddition	U
Project Ad 566 6th	dress Avenue	e San Franc	cisco	Cali	fornia Ener A Clima	rgy Clima ate Zor	nte Zone 1e 03	Total (	Cond. Floor 1,963	Area	
INSUL	ATION					Area					
Const	ructior	п Туре		Cav	rity	(ft²)	S	pecia	al Featu	res	-
Wall	Wood Fi	ramed		- no ins	sulation	19					_
Root	Wood Fi	ramed Attic		R 11		/6/					_
Demising	Wood Fi	ramed w/o Crawi	Space	- no in:	sulation	1,205					-
Roof	Wood Fi	ramed Rafter		R 30		598	3				
Demising	Wood Fi	ramed w/o Crawl	Space	- no ins	sulation	598					
											-
FENES	STRAT	ION	Total Area:	350	Glazing	Percenta	ge: 1	7.8 %	New/Altered	Avera	ç
Orient	ation	Area(ft²)	U-Fac S	HGC	Overh	lang	Sidef	ins	Exterio	r Sha	3
											-
											-
HVAC Qty.	SYSTI	EMS	Min. Eff	Co	oling		Min	h. Eff		Ther	
HVAC Qty.	SYSTE	EMS	Min. Eff	Со	oling		Min	). Eff		Ther	
HVAC Qty.	SYSTE	EMS g RIBUTION	Min. Eff	Co	oling	Duc	Min	h. Eff	· · · · · · · · · · · · · · · · · · ·	Ther	
HVAC Qty. HVAC Locati	SYSTE Heatin DISTR on	EMS g RIBUTION Hea	Min. Eff	Co	oling	Duc	Min	ation		Ther D R	
HVAC Qty. HVAC Locati WATE Qty.	SYSTE Heatin DISTR on R HEA Type	EMS g BUTION Hea TING	Min. Eff	Co	oling oling Min. I	Duc	Min et Loca	ation		D	
HVAC Qty. HVAC Locati	SYSTE Heatin DISTR on R HEA Type	EMS g RIBUTION Hea TING	Min. Eff	Co	oling oling Min. I	Duc	Min et Loca Distril	ation		D	

RESI	DENTIA	AL MEAS	SURES SL	JWW	ARY					RMS-1
Project Na	ime Vancy Ac	Idition		Build	ling Type	Single Fam Multi Family	ily □ Additio v Ø Existin	n Alone a+ Addition	Alteration	Date 9/17/202
Project Ad	dress	anion		Cali	fornia Ene	rav Climate Zone	, Total Cond.	Floor Area	Addition	# of Units
568 6th	Avenue	San Franc	cisco	C	A Clima	ate Zone 03	1,8	50	585	1
NSUL	ATION					Area		1		
Constr	ruction	Туре		Cav	vity	(ft <sup>2</sup> ) S	pecial Fe	atures		Status
Vall	Wood Frai	ned		R 19	544	279				New
Vall	Wood Frai	ned		R 19		113				New
Vall	Wood Frai	med		R 19		279				New
Vall	Wood Frai	ned		R 19		119				New
Slab	Unheated	Slab-on-Grade		- no ins	sulation	585 Perim	= 104'			New
Demising	Wood Frai	ned		R 19		81				New
loor	Wood Frai	ned w/o Crawl	Space	- no ins	sulation	162				Existing
Vall	Wood Frai	ned		- no ins	sulation	526				Existing
FENES	STRATIC	DN	Total Area:	376	Glazing	Percentage: 2	0.3 % New/A	Itered Averag	e U-Factor:	0.34
Orienta	ation	Area(ft <sup>2</sup> )	U-Fac SI	HGC	Overh	nang Sidef	ins Exte	erior Sha	des	Status
Front (W)	1. v.	11.3	0.340	0.40	none	none	N/A			New
Rear (E)		157.7	0.340	0.40	none	none	N/A			New
Right (S)		40.3	0.990	0.74	none	none	N/A			Existing
Right (SW)	)	17.0	0.990	0.74	none	none	N/A			Existing
Front (W)		47.0	0.990	0.74	none	none	N/A			Existing
ront (NW)	)	17.0	0.990	0.74	none	none	N/A			Existing
.eft (N)		20.0	0.990	0.74	none	none	N/A			Existing
.eft (NE)		17.0	0.990	0.74	none	none	N/A			Existing
Rear (E)		31.8	0.990	0.74	none	none	N/A			Existing
Rear (SE)		17.0	0.990	0.74	none	none	N/A			Existing
HVAC Qty. I	SYSTEI Heating	MS	Min. Eff	Co	oling	Mir	h. Eff	Therr	nostat	Status
1 (	Central Furn	ace	78% AFUE	No	Cooling	14.0	SEER	Setback		Existing
HVAC Locatio	DISTRII on	BUTION Hea	ating	Со	oling	Duct Loca	ation	Di R-	uct Value	Status
-IVAC Sys	tem	Ducteo	1	Duci	ted	Conditioned		6.	0	Altered
HVAC Locatio	DISTRII on	BUTION Hea Ducted	ating	Co	oling	Duct Loca Conditioned	ation	DI R: 6.	uct •Value	St
WATEI Qty.	R HEAT Type	ING	Galle	ons	Min.	Eff Distri	bution			Status

			CONCO O						
Project N	Name	Addition		Build	ing Type 🖬	Single Fam	nily □ Ad	dition Alone	or
Project /	Address	Addition		Califi	ornia Energy	Climate Zone	Total Co	nd Floor Area	011
568 6t	h Avenu	e San Fran	icisco	C	A Climate	Zone 03		1,850	
INSU	LATION				A	'ea			
Cons	truction	n Type		Cav	ity (ft	<sup>2</sup> ) S	pecial	Features	i
Wall	Wood F	ramed		- no ins	ulation	19			
Wall	Wood F	ramed		- no ins	ulation	171			
Door	Opaque	Door		- no ins	ulation	19			
Wall	Wood F	ramed		- no ins	ulation	19			
Wall	Wood F	ramed		- no ins	ulation	546			
Wall	Wood F	ramed		- no ins	ulation	19			
Wall	Wood F	ramed		- no ins	ulation	131			
Wall	Wood F	ramed		- no ins	ulation	20			
FENE	STRAT	ION	Total Area:	376	Glazing Per	centage:	20.3 % Ne	ew/Altered Ave	era
Orien	tation	Area(ft <sup>2</sup> )	U-Fac S	HGC	Overhar	ng Side	fins E	xterior S	ha
HVA0 Qty.	C SYSTI Heatin	EMS	Min. Eff	Cod	oling	Mit	n. Eff	The	<b>&gt;r</b>
HVAC Qty. HVAC Locat	C SYSTI Heatin	EMS g RIBUTION He	Min. Eff	Cod	oling	Min Duct Loc	n. Eff	The	⇒r D R
HVAC Qty. HVAC Locat WATI Qty.	C SYSTI Heatin C DISTR tion ER HEA Type	EMS g RIBUTION He	Min. Eff	Cod	oling l	Min Duct Loc	n. Eff	The	er e

Alteration 9/17/2021 Addition # of Units				
Addition # or Units				
598 1				
Status				
Existing				
Existing				
New			(m)	2019 Low-Rise Residential Mandatory Measures Sum
New		NOT	TE: Low-rise res	sidential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regard
		used (01/2 Build	d. Review the re 2020) Iding Envelope	spective section for more information. "Exceptions may apply.
e U-Factor: 0.34		§ 110	10.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CF when tested per NFRC-400. ASTM E283 or AAMA/WDIMA/CSA 101/I.S.2/A440-2011."
des Status		§ 110	10.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient
		§ 110	10.6(b):	110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped." Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of
		§ 110	10.7. 10.8(a):	gasketed, or weather stripped. Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affail and Services (BHCS)
		§ 110	10.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and and solar reflect
		§ 110 § 110	10.8(i): 10.8(j):	material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool or Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the
		§ 150	50.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Atti access doors must insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. I direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in
		§ 150	50.0(b):	to placing insulation either above or below the roof deck or on top of a drywall ceiling." Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-vali Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or have a U-factor of 0.071 or less. Obaque non-framed assemblies must have an overall assembly U-factor not
		\$ 150	50.0/d):	must meet Tables 150.1-A or B.* Raised-floor Insulation, Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
nostat Status		§ 150	50.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for th facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be proi UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
		§ 150 § 150	50.0(g)1: 50.0(g)2:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the ex Vapor Retarder. In climate zones 14 and 16, a Class 1 or Class II vapor retarder must be installed on the cond insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
ict		§ 150	50.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned sp maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Value Status		Firep	places, Decora 10.5(e)	ative Gas Appliances, and Gas Log Measures: Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
		§ 150	50.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the ent Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at
		§ 150 § 150	50.0(e)2: 50.0(e)3:	and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.* Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Status		Spac	ce Conditionin	ng, Water Heating, and Plumbing System Measures: Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, fauce
		§ 110 § 110	10.0-§ 110.3: 10.2(a):	appliances must be certified by the manufacturer to the California Energy Commission." HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Tab
		§ 110	I0.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementar must have controls that prevent supplementary heater operation when the heating load can be met by the heat of an elementary for a compression because they have the theorem of the supplementary because the supplementary for a compression because the supplementary because the supplementary for a compression because the supplementary because the supplementary because the supplementary because the supplementary because the supplementary because the supplementary be
Page 14 of 18				Compression heating is higher than the cut-off temperature for supplementary heating. Thermostafs. All heating or cooling systems not controlled by a central energy management control system (E
		\$ 110	10.2(c):	setback thermostat." Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops ser meet the singlese value backflow prevention, pump pipting, pump isolation value, and recirculation loops are
			10.0(-)0	S110.3(c)4. Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must
		8 110	10.3(C)6:	bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves an <b>Pilot Lights.</b> Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; househ antiances without an alextical supplicit uptage connection with citize the table to be a set of the table of the table.
RMS-1	RESIDENTIAL MEASURES SUMMARY	RMS-1	50.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the AS Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort Syste
	Build a second			Manual: or the ACCA Manual J using design conditions specified in § 150.0(h)2.
Date Alteration 9/17/2021	Project Name         Building Type         Image: Single Family         Image: Addition Alone           Wong, Nancy Addition         Image: Display and the single Family	Date 9/17/2021	121	annand ar see to a rough and an du annand thanks and a rough the
Alteration Date 9/17/2021 Addition # of Units 585 1	Project Name       Building Type       Single Family       Addition Alone         Wong, Nancy Addition       Image: Comparison of the state of the	Date 9/17/2021 # of Units 1		unanten a statuen unanten en en grandla en energia da en el a sera (den
Alteration Date 9/17/2021 Addition # of Units 585 1 Status	Project Name       Building Type       Single Family       Addition Alone         Wong, Nancy Addition       Image: Multi Family       Existing + Addition/Alteration         Project Address       California Energy Climate Zone       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       CA Climate Zone 03       1,850       585         INSULATION       Area         Construction       Tupe       Cavity       (ft <sup>2</sup> )       Special Eastures	Date 9/17/2021 # of Units 1	<u>@</u>	2019 Low-Rise Residential Mandatory Measures Sum
Alteration Date 9/17/2021 Addition # of Units 585 1 Status Existing	Project Name       Building Type       Building Type       Building Type       Addition Alone         Wong, Nancy Addition       Multi Family       Addition Alone         Project Address       California Energy Climate Zone       Instantion       Addition         568 6th Avenue       San Francisco       CA Climate Zone       Total Cond. Floor Area       Addition         INSULATION       Area         Construction       Type       Cavity       (ft <sup>2</sup> )       Special Features         Demising       Wood Framed Attic       R 11       1,265	Date 9/17/2021 # of Units 1 Status Existing	juirements for	2019 Low-Rise Residential Mandatory Measures Sumi Ventilation and Indoor Air Quality: Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASH
Alteration Date 9/17/2021 Addition # of Units 585 1 Status Existing Existing Existing	Project Name       Building Type       California Energy Climate Zone       Cond. Floor Area       Addition         568 6th Avenue       San Francisco       Cavity       CA Climate Zone 03       1,850       585         INSULATION       Area       Construction Type       Cavity       (ft²)       Special Features         Demising       Wood Framed Attic       R 11       1,265       Image: State	Date       9/17/2021       # of Units       1       Status       Existing       Existing       Existing	(uirements for ) 50.0(0)1:	Zons Low-Rise Residential Mandatory Measures Sumi           Ventilation and Indoor Air Quality:           Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.           Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units must meet the dwelling units.
Alteration Date 9/17/2021 Addition # of Units 585 1 Status Existing Existing Existing Existing	Project Name       Building Type       California Energy Climate Zone       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       CA Climate Zone 0.3       1,850       585         INSULATION       Area       Construction Type       Cavity       (ft²)       Special Features         Demising       Wood Framed Attic       R 11       1,265       Image: State	Date       9/17/2021       # of Units       1       Status       Existing       Existing       Existing       Status	uirements for 50.0(o)1: 50.0(o)1C:	2019 Low-Rise Residential Mandatory Measures Sumi     Ventilation and Indoor Air Quality:     Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASH     and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.     Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilati     determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.     Multifamily Attached Dwelling Units. Multifamily attached dwelling units have mechanical ventilation air      Autorited Dwelling Units.
Alteration Date 9/17/2021 Addition # of Units 585 1 Status Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing	Project Name       Building Type       Building Type       Building Type       Building Type       Image: Construction Alteration         Project Address       California Energy Climate Zone       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       CA Climate Zone 0.3       1,850       585         INSULATION       Area         Construction Type       Cavity       (ft²)       Special Features         Demising       Wood Framed Attic       R 11       1,265         Demising       Wood Framed w/o Crawl Space       - no insulation       518	Date       9/17/2021       # of Units       1       Status       Existing       Existing       Existing       § 150       § 150       § 150       § 150	(uirements for ) 50.0(o)1: 50.0(o)1C: 50.0(o)1E:	Ventilation and Indoor Air Quality:     Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.     Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units of the dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilatid tetermined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.     Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilatid teterm is not used, all units in the building must use the same system type and the dwelling-unit envelope lead (0.2 inch water) per square foot of dwelling units enclose surface area and verified in accordance with Referent
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existi	Project Name       Building Type       California Energy Climate Zone       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       CA Climate Zone 03       1,850       585         INSULATION       Area         Construction Type       Cavity       (ft²)       Special Features         Demising       Wood Framed Attic       R 11       1,265       Emising       Emising       Wood Framed w/o Crawl Space       - no insulation       585         Demising       Wood Framed w/o Crawl Space       - no insulation       518       Emising       Wew/Altered Average U-Factor:         Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:	Date         9/17/2021           # of Units         1           Status         Require           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150	(uirements for ) 50.0(o)1: 50.0(o)1C: 50.0(o)1E: 50.0(o)1E: 50.0(o)1F: 50.0(o)1G:	Ventilation and Indoor Air Quality:           Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.           Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units nust meet the requirements of ASHI determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.           Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system for continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referen Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units envel at a rate equal to or greater than the rate specified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required ai Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHF
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existi	Project Name       Building Type       Id Single Family       Id Addition Alone         Wong, Nancy Addition       Image: Single Family       Id Addition/Alteration         Project Address       California Energy Climate Zone       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       CA Climate Zone 03       1,850       585         INSULATION       Area         Construction Type       Cavity       (ft²)       Special Features         Demising       Wood Framed Attic       R 11       1,265         Demising       Wood Framed w/o Crawl Space       - no insulation       585         Demising       Wood Framed w/o Crawl Space       - no insulation       518         FENESTRATION         Orientation       Area       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft²)       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades	Date         9/17/2021           # of Units         1           Status         Require           Existing         \$ 150           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150	uirements for 1 50.0(0)1: 50.0(0)1C: 50.0(0)1E: 50.0(0)1F: 50.0(0)1G: 50.0(0)2:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality In Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation at accordance with Equation 150.0-B and must be either a balanced system is nor continuous supply or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Muttifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling unitis methal the lowest airflow rate as it relates to the individual unit's minimum required at Kitchen Range Hoods. Kitchen range hoods must be verified in sacordance with Section 7.2 of ASHF         Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hoods 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 a Kitchen range hood 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 a Kitchen range hood must he verified in accordance with Reference Residential Appendix RA3.7 a Kitchen range hood must he verified in accordance with Reference Residential Appendix RA3.7 a Kitchen range hood must he verified in accordance with Reference Residential Appendix
Alteration Date 9/17/2021 Addition # of Units 585 1 Status Existing Ex	Project Name       Building Type       Disligle Pamily       D Addition Alone         Wong, Nancy Addition       Image: Transmitter of the second s	Date         9/17/2021           # of Units         1           Status         Fequ           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           Feque         \$ 150           0.34         \$ 150           Feque         \$ 150           0.34         \$ 150           Feque         \$ 150	juirements for 1           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1F:           50.0(o)1G:           50.0(o)2:           50.0(o)2:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units no other dwelling units, and attached dwelling units, and tatached dwelling units must have mechanical ventilation at accordance with Equation 150.0-B and must be either a balanced system for continuous supply or continuous systems is not used, all units in the building must use the same system type and the dwelling-unit revelope lead (0.2 inch water) per square foot of dwelling unit envelope esurface area and verified in accordance with Referent         Muttifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units erved at a rate equal to or greater than the rate specified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required at Kitchen Range Hoods. Kitchen range hoods must be retrified in accordance w
Alteration Date 9/17/2021 Addition # of Units 585 1 Status Existing Ex	Project Name       Building Type       D Addition Alone         Wong, Nancy Addition       Imaily D Addition/Alteration         Project Address       California Energy Climate Zone 03       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       California Energy Climate Zone 03       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       California Energy Climate Zone 03       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       Cavity       (ft <sup>2</sup> )       Special Features         Demising       Wood Framed Attic       R 11       1,265         Demising       Wood Framed w/o Crawl Space       - no Insulation       585         Demising       Wood Framed w/o Crawl Space       - no Insulation       518         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades	Date         9/17/2021           # of Units         1           Status         Fequ           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           \$ 150         \$ 150           0.34         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150	uirements for           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1F:           50.0(o)1G:           50.0(o)2:           ol and Spa Syst           10.4(a):	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units no other dwelling units, and attached dwelling units no other dwelling units, and attached dwelling units no other dwelling units, and patched Dwelling Units. Single family detached dwelling units, and attached dwelling units no other dwelling units, and specified in § 150.0(o)1.         Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation at accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit revelope leai (0.2) inch water) per square foot of dwelling unit served at a rate equal to or greater than the rate specified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required at Kitchen Range Hoods. Kitchen range hoods must be reated for sound in accordance with Section 7.2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Appendix RA3.7. A kitchen range hoods must be verified in accordance with Reference Residential Appendix Rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHF rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHF         Terrification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of that complex wit
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existi	Project Name       Building Type       Disingle Family       Distingle Family       Disting	Date         9/17/2021           # of Units         1           Status         Require           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           \$ 100         \$ 110           \$ 110         \$ 110	uirements for 1 50.0(o)1: 50.0(o)1C: 50.0(o)1C: 50.0(o)1E: 50.0(o)1F: 50.0(o)1G: 50.0(o)2: 10 and Spa Syst 10.4(a): 10.4(b)1:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASH and Acceptable Indoor Air Quality in Residential Bulldings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units no other dwelling units, and attached dwelling units on other dwelling units, and attached dwelling units and tacceptable Indoor AIr Quality.         Multifamily Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units no other dwelling units, and attached dwelling units and tached dwelling units and tached dwelling units and tacked a system of the guartical ventilation at accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit envelope leak (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference (0.2 inch water) per square foot of dwelling unit served at a rate equal to or greater than the rate specified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required at Kitchen Range Hoods. Kitchen range hoods must be verified in accordance with Reference Residential Appendix Ra3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix Ra4.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix Rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASH for that complex with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that all without adjusting the thermostat setting; a permanent w
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing	Project Name       Building Type       Building Type       Building Type       Building Type       Existing + Addition/Alteration         Project Address       California Energy Climate Zone 03       1,850       585         INSULATION       Area         Construction Type       Cavity       (ft²)       Special Features         Demising       Wood Framed Attic       R 11       1,265         Demising       Wood Framed w/o Crawl Space       - no insulation       585         Demising       Wood Framed w/o Crawl Space       - no insulation       518         FENESTRATION         Orientation       Area       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft²)       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades	Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         \$ 100       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110	juirements for           30.0(o)1:           30.0(o)1C:           30.0(o)1C:           30.0(o)1E:           30.0(o)1F:           30.0(o)1F:           30.0(o)1G:           50.0(o)2:           ol and Spa Syst           10.4(a):           10.4(b)1:           10.4(b)2:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilatio determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.         Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit envelope leak (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referen Multifamily Bullding Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units on airlow for each dwelling units erved at a rate equal to or greater than the rate specified by Equation within 20 percent of the unit with the lowest airlow rate as it relates to the individual unit's minimum required at Kitchen Range Hoods. Kitchen range hoods must be verified in accordance with Appendix RA3.7. A kitchen range hoods must be everified in accordance with Section 7.2 of ASHF         Field Verification and Diagnostic Testing. Dwelling unit ventilation simplement must be certified in accordance with Appendix RA3.7. A kitchen range hoods must be verified in accordance with Appendix RA3.7. A kitchen range hood smust be verified in accordance with Section 7.2 of ASHF         Field Ve
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing	Project Name       Building Type       Building Type       Data Shigle Family	Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110	juirements for           50.0(o)1:           50.0(o)1C:           50.0(o)1C:           50.0(o)1E:           50.0(o)1F:           50.0(o)1F:           50.0(o)1F:           50.0(o)2:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation ai accordance with Equation 150.0-8 and must be either a balanced system to reachanical ventilation ai accordance with Equation 150.0-8 and must be either a balanced system type and the dwelling-unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Mutifamily Building Central Ventilation Systems. Central ventilation aiflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation vitin 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required at the ventiled for sound in accordance with Appendix RA3.7. A kitchen range hoods must be verified in accordance with Reference Mascelinet Measures:         Certrification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix Ras.7. A kitchen range hood 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. A kitchen range hood must be verified in accordance with Reference Residential Appendix Ras.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix Ras.7. A kitchen range hood must be verified in accordance
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All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units in other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilatio determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1.         Mutifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent         Muttifamily Building Central Ventilation Systems. 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A kitchen range hood must be verified in accordance with Reference that ally propol or spa heating system or equipment must be certified</td>	Date         9/17/2021           # of Units         1           Status         Fequ           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           \$ 100         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110	juirements for 1           joi.0(o)1:           joi.0(o)1C:           joi.0(o)1C:           joi.0(o)1E:           joi.0(o)1E:           joi.0(o)1C:           joi.0(o)2:           joi.0(o)2:           joi.0(o)2:           joi.0(a)1G:           joi.0(a)1G:           joi.0(a)1G:           joi.0(a)2:           joi.0(a)2:           joi.0(a)2:           joi.0(a)2:           joi.0(a)2:           joi.0(a)2:           joi.0(a)2:           joi.0(a)2:           joi.0(a)3:           joi.0(b)3:           joi.0(b)2:	Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHI and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units in other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilatio determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1.         Mutifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent         Muttifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units 10 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required al Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHF         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. A kitchen range hood 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. A kitchen range hood must be verified in accordance with Reference that ally propol or spa heating system or equipment must be certified
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing Existing	Project Name       Wong, Nancy Addition         Wong, Nancy Addition       Differential Dividit Family D Existing Addition/Alteration         S68 6th Avenue       San Francisco       California Energy Climate Zone       Total Cond. Floor Area       Addition         S68 6th Avenue       San Francisco       California Energy Climate Zone       Total Cond. Floor Area       Addition         S68 6th Avenue       San Francisco       Cavity       (ft <sup>2</sup> )       Special Features         Demising       Wood Framed Attle       R 11       1,265         Demising       Wood Framed wto Crawl Space       - no insulation       585         Demising       Wood Framed wto Crawl Space       - no insulation       518         FENESTRATION         Orientation       Area       20.3 %       New/Altered Average U-Factor:         Orientation       Area       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area       SHGC       Overhang       Sidefins       Exterior Shades	Date       9/17/2021         # of Units       1         Image: status       Fequ         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 110	uirements for '           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           60.0(o)1C:           60.0(o)1C:           50.0(o)2:           61 and Spa Syst           10.4(a):           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           htting Measures           10.9:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASH and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilatio determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.         Muttifamily Attached Dwelling Units. Mutifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit ervelope lead (0.2 inch water) per square foot of dwelling unit ervelope surface area and verified in accordance with Referen Muttifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling unit envelope surface area and verified in accordance with Referen Muttifamily Building Central Ventilation Systems. Central ventilation airflow must be section 7.2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit envelope surface area and verified in accordance with Appendix RA3.7.A kitchen range hood must be verified in accordance with Appendix RA3.7.A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.A kitchen range hood must be verified in accordance with Appendix RA3.7.A kitchen range hood must be verified in accordance with Appendix RA3.7.A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.A kitchen range hood must be verified in accordance with Reference Residential Appendix Ra4.7.A problement fischer Appendix Ra4.7.PMP
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existi	Freiget Name       Building Type       Disking Framing U Addition Alche         Wong, Nancy Addition       Project Address       California Energy Climate Zone 03       Total Cond. Floor Area       Addition         568 6th Avenue San Francisco       California Energy Climate Zone 03       1,850       585         INSULATION       Area       Construction Type       Cavity (ft <sup>2</sup> )       Special Features         Demising Wood Framed Attic       R 11       1,265       Energising       Demising Wood Framed Attic Space       - no insulation       518         Periodic Market Structure       Special Features       Demising Wood Framed w/o Crawl Space       - no insulation       518         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades	Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 160         0.34       \$ 150         0.34       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 150       \$ 150         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 110         \$ 150       \$ 150         \$ 110       \$ 110         \$ 110       \$ 150         \$ 150       \$ 150         \$ 110       \$ 110         \$ 150       \$ 150         \$ 110       \$ 110         \$ 110       \$ 110         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150 <td>uirements for 1           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1F:           50.0(o)1G:           50.0(o)2:           ol and Spa Syst           10.4(b)1:           10.4(b)1:           10.4(b)3:           10.5:           50.0(p):           hting Measures           10.9:           50.0(k)1A:</td> <td>Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASH and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units and attached dwelling units and attached dwelling units. A couplable spaces, public garages, or commercial spaces must have mechanical ventilation aid accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system hype and the dwelling-unit envelope leak (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Wuttfamily Building Central Ventilation Systems. Central ventilation systems that serve multiped dwelling units in the building must use the same system they rate specified by Equation 150.0-B and must be either a balanced system or continuous supply or continuous day to percent of the unit with the lowest airflow rate as in relates to the individual units minimum required ai (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Muttfamily Building Central Ventilation Systems. Central ventilation airflow for each dwelling unit serve multiped welling units and Acceptable Advisory. The serve multiped dwelling units area equal to or greater than the rate specified to percent of the unit with the lowest airflow rate as in relates to the individual units minimum required ai Kitchen Range Hoods. Kitchen range hood 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. A kitchen range hood must be verified in accordance with Re</td>	uirements for 1           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1F:           50.0(o)1G:           50.0(o)2:           ol and Spa Syst           10.4(b)1:           10.4(b)1:           10.4(b)3:           10.5:           50.0(p):           hting Measures           10.9:           50.0(k)1A:	Ventilation and Indoor Air Quality:         Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASH and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.         Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units and attached dwelling units and attached dwelling units. A couplable spaces, public garages, or commercial spaces must have mechanical ventilation aid accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system hype and the dwelling-unit envelope leak (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Wuttfamily Building Central Ventilation Systems. Central ventilation systems that serve multiped dwelling units in the building must use the same system they rate specified by Equation 150.0-B and must be either a balanced system or continuous supply or continuous day to percent of the unit with the lowest airflow rate as in relates to the individual units minimum required ai (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Muttfamily Building Central Ventilation Systems. Central ventilation airflow for each dwelling unit serve multiped welling units and Acceptable Advisory. The serve multiped dwelling units area equal to or greater than the rate specified to percent of the unit with the lowest airflow rate as in relates to the individual units minimum required ai Kitchen Range Hoods. Kitchen range hood 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. A kitchen range hood must be verified in accordance with Re
Atteration Date 9/17/2021 Addition # of Units 1 Status Existing Existi	Project Name       Building Type       Diskligt Parility       Diskligt Pa	Date       9/17/2021         # of Units       1         1       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 150         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$	juirements for 1           50.0(o)1:           50.0(o)12:           50.0(o)16:           50.0(o)17:           50.0(o)18:           50.0(o)18:           50.0(o)18:           50.0(o)18:           50.0(o)18:           50.0(o)2:           50.0(o)2:           50.0(o)2:           61 and Spa Syst           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           hting Measures           50.0(k)1A:           50.0(k)1B:	2019 Low-Rise Residential Mandatory Measures Summ     2019 Low-Rise Residential Mandatory Measures Summ     2019 Low-Rise Residential Buildings subject to the amendments specified in § 150.0(o)1.     Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units occupiable spaces, public garages, or commercial spaces must have mechanical ventilation and accorptable lndoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.     Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units, and attached dwelling units, and attached dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation at accordance with Equation 150.0-B and must be either a halanced system or continuous supply or continuous a system is not used, all units in the building must use the same system type and the dwelling-unit envelope leak (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference     Mutifamily Altiched Dwelling Units served at a rate equal to or greater than the rate specified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required al Kitchen Range Hoods. Kitchen range hoods 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. A kitchen range hood must be verified in accordance with section 7.2 of ASHE res and Equipment Measures:     Certification and Diagnostic Testing. Dwelling unit ventilation allow finute solar heating.     Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.     Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the p will alway alpungs to be set or programmed to run only during of-peak electric demand periods.
Alteration Date 9/17/2021 Addition 585	Project Name       Building Type       Building Type       Building Type       Building Type       Building Type       California Energy Climate Zone       Total Cond. Floor Area       Addition         568 6th Avenue       San Francisco       California Energy Climate Zone       Total Cond. Floor Area       Addition         INSULLATION       Area       (ft <sup>2</sup> )       Special Features       Energy Climate Zone       Total Cond. Floor Area       Addition         Construction       Type       Cavity       (ft <sup>2</sup> )       Special Features       Energy Climate Zone       Total Cond. Floor Area       Addition         Demising       Wood Framed Attic       R 11       1.265       Energy Climate Zone       Total Cond. Floor Area       Addition         Demising       Wood Framed Wio Crawl Space       - no Insulation       565       Energy Climate Zone       Second State         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         Image:       Image	Date       9/17/2021         # of Units       1         1       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150	uirements for '           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(b)1:           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           hting Measures           50.0(k)1A:           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:	Subset of the second seco
Alteration Date 9/17/2021 Addition 585    Status Existing Existen Existe	Project Name       Building Type       Displer Family       Decising + Addition/Alteration         Words, Nancy Addition       California Energy Climate Zone       Total Cond. Floor Area       Addition/Alteration         568 6th Avenue       San Francisco       California Energy Climate Zone       Total Cond. Floor Area       Addition         INSULATION       Area       Construction Type       Cavity       (ft <sup>2</sup> )       Special Features         Demising       Wood Framed Attic       R 11       1,265       Demising       Wood Framed wito Crew Space       - no Insulation       585         Demising       Wood Framed wito Crew Space       - no Insulation       519       Demising       Wood Framed Vice Crew Space       - no Insulation       519         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         Image: State Construction       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         Image: State Construction       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         Image: State Construction       <	Date         9/17/2021           # of Units         1           Status         Fequ           Existing         \$ 150           Existing         \$ 150           Existing         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           Status         \$ 150           0.34         \$ 150           Status         \$ 100           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 110           \$ 110         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150           \$ 150         \$ 150	uirements for '           50.0(o)1:           50.0(o)1C:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(b)1:           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           hting Measures           10.9:           50.0(k)1A:           50.0(k)1A:           50.0(k)1C:           50.0(k)1D:	Supersonal and indexer and provide the series of the
Alteration Date 9/17/2021 Addition 585   Status Existing	Project Name       Building Type       Displer Faring U Addition/Alternation         Wong, Nancy Addition       California Energy Clinate Zone       Total Cond. Floor Area       Addition/Alternation         568 6th Avenue       San Francisco       California Energy Clinate Zone       Total Cond. Floor Area       Addition/Alternation         1NSULATION       Area       Construction Type       Cavity       (ft <sup>2</sup> )       Special Features         Demising       Wood Framed Wito Crawl Space       - no insulation       585       Demising       Wood Framed Wito Crawl Space       - no insulation       518         Demising       Wood Framed wito Crawl Space       - no insulation       518       Demising       Vood Framed Vice Crawl Space       - no insulation       518         Demising       Wood Framed wito Crawl Space       - no insulation       518       Demising       Vood Framed Vice Crawl Space       - no insulation       518         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         HVAC SYSTEMS       Min. Eff       Cooling       Min. Eff       Thermostat         HVAC DISTRIBUTION       Duct <td>Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150</td> <td>Juirements for 1           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           10.4(a):           10.4(b)3:           10.4(b)3:           10.5:           50.0(p):           htting Measures           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:           50.0(k)1D:           50.0(k)1E:           50.0(k)1E:</td> <td>2019 Low-Rise Residential Mandatory Measures Sumu     Ventilation and Indoor Air Quality:     Requirements for Ventilation and Indoor Air Quality. All dvelling units must meet the requirements of ASH     and Acceptable Indoor Air Quality in Residential Sulidings subject to the amendments specified in § 150.0(e)1.     Single Family Detached Dwelling Units. Single family detached dvelling units and attached dwelling units no other dvelling units, and attached dwelling units and Acceptable May SHIRK 622. Sections 4.1.1 and 4.1.2 and as specified in § 150.0(e)1C.     Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Multifamily Building Central Ventilation afflow must be verified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minirum required a Kitchen Range Hoods. Klichen range hood 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. A kitchen range hood must be verified in accordance dust be certified to have all of that complex with the Applicationes. 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Outdoor pools or spa heating system or equipmen</td>	Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150	Juirements for 1           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           10.4(a):           10.4(b)3:           10.4(b)3:           10.5:           50.0(p):           htting Measures           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:           50.0(k)1D:           50.0(k)1E:           50.0(k)1E:	2019 Low-Rise Residential Mandatory Measures Sumu     Ventilation and Indoor Air Quality:     Requirements for Ventilation and Indoor Air Quality. All dvelling units must meet the requirements of ASH     and Acceptable Indoor Air Quality in Residential Sulidings subject to the amendments specified in § 150.0(e)1.     Single Family Detached Dwelling Units. Single family detached dvelling units and attached dwelling units no other dvelling units, and attached dwelling units and Acceptable May SHIRK 622. Sections 4.1.1 and 4.1.2 and as specified in § 150.0(e)1C.     Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation ai accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous system is not used, all units in the building must use the same system type and the dwelling-unit envelope lead (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Referent Multifamily Building Central Ventilation afflow must be verified by Equation within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minirum required a Kitchen Range Hoods. Klichen range hood 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. A kitchen range hood must be verified in accordance dust be certified to have all of that complex with the Applicationes. The sourd in accordance dust is certified to have all of that complex with the adminost resident system or equipment must be certified to have all of that complex with the Applications; an oregulation; an oregulpment tweater lead in that complex with the Applications; an oregulpment the associate and periods.     Teid Verification and Diagnostic Testing, a permanent weatherproof plate or card with operating instructions; ar resistance healing.     Covers. Outdoor pools or spa heating system or equipmen
Alteration Date 9/17/2021 Addition 585	Proper Name Wong, Nancy Addition       Building Type & Single Family & Addition/Alteretion         Project Address       California Ecorey Climate Zone [Total Cond. Floor Area]       Addition         588 6th Avenue San Francisco       California Ecorey Climate Zone [Total Cond. Floor Area]       Addition         Densing Wood Framed Attic       R 11       1.1       285         Densing Wood Framed Attic       R 11       1.285         Densing Wood Framed Wto Crewl Space       - no Insulation       518         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Alfered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         HVAC SYSTEMS       Min. Eff       Cooling       Min. Eff       Thermostat         HVAC DISTRIBUTION       Heating       Cooling       Duct       R-Value	Date       9/17/2021         # of Units       1         Image: status       Image: status         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 160         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 150       \$ 150         \$ 150       \$ 150         \$ 110       \$ 110         \$ 110       \$ 110         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150	Juirements for           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1E:           50.0(o)1C:           50.0(o)2:           61 and Spa Syst           10.4(b)1:           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           htting Measures           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1E:           50.0(k)1F:           50.0(k)1G:	Perturbation and Indeor Air Quality: Requirements for Ventilation and Indeor Air Quality. All dwelling units must meet the requirements of ASH and Acceptable Indoor Air Quality: Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units and attached dwelling units. Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units and other dwelling units. Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units and other dwelling units. Single Family Detached Dwelling Units. Single Family Detached Dwelling Units. Multifamily Attached Dwelling Units. Single Family Detached Dwelling Units. Wultifamily Attached Dwelling Units. Wultifamily Attached Dwelling Units. Wultifamily Attached Dwelling unit arvelope surface area and verified in accordance with Reference with Reference System Yoe and the dwelling-unit envelope laad (0.2 Inch waler) per square foot of welling unit survelope surface area and verified in accordance with Reference with Section 7. 2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit survelope surface area and verified in accordance with Reference with Section 7. 2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit survelope surface area surface area solution area of a 2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit survelope surface area surface in Section 5 and 7.2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit survelope surface area surface area surface area surface area surface area surface area surface in Section 5 and 7.2 of ASHF Field Verification and Diagnostic Testing. Dwelling unit survelope surface area and with departing instructions; are aristance healeng. Covers. Outdoor pool or spa heating system or equipment must be certified to have all of that complies with Acplance. Chrone Must Applance Arm Counce with Reference area and with operating instructions; are aristance healeng. Piperdix
Atteration Date 9/17/2021 Addition # of Units 1 Status Existing	Project Name       Building Type is Single Family is addition/Alteration         Project Address       California Erency Climate Zone is Total Cond. Flor Area       Addition         588 6th Avenue San Francisco       California Energy Climate Zone is Total Cond. Flor Area       Addition         Construction       Type       Cavity (ft <sup>2</sup> )       Special Features         Dentising Wood Framed Attic       R 11       .285         Dentising Wood Framed Attic       R 11       .285         Dentising Wood Framed with Crewl Space       - no insulation       518         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %         NewlAttered Average U-Factor:       Orientation       Area       Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC Overhang       Sidefins       Exterior Shades         Image: State Climate Cone (ft <sup>2</sup> )       U-Fac       SHGC Overhang       Sidefins       Exterior Shades         Image: State Climate Cone (ft <sup>2</sup> )       U-Fac       SHGC Overhang       Sidefins       Exterior Shades         Image: State Climate Cone (ft <sup>2</sup> )       U-Fac       SHGC Overhang       Sidefins       Exterior Shades         Image: State Climate Cone (ft <sup>2</sup> )       U-Fac       SHGC Overhang       Sidefins       Exterior Shades     <	Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         Status       \$ 110         Status       \$ 110         Status       \$ 150         Status       \$ 150 <td>uirements for           50.0(o)1:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           60.0(o)1:           10.4(a):           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           hting Measures           10.9:           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1F:           50.0(k)1G:           50.0(k)1H:</td> <td>Control of the second sec</td>	uirements for           50.0(o)1:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           60.0(o)1:           10.4(a):           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           hting Measures           10.9:           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1F:           50.0(k)1G:           50.0(k)1H:	Control of the second sec
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existing Existing Existing Existing Existing Existing e U-Factor: 0.34 des Status Addes Status	Project Name       Building Type       Building Table 2 and Table 2 addition Aldree         Project Address       California Energy Climate Zone       Table Cond. Floor Area       Addition         568 8th Avenue       San Francisco       CA Climate Zone 03       1,850       585         INSULATION       Area       Addition       Section 7,850       585         Dentating Wood Framed With Crewt Space       - no Insulation       585       585         Dentating Wood Framed with Crewt Space       - no Insulation       585         Dentating Wood Framed with Crewt Space       - no Insulation       585         Dentating Wood Framed with Crewt Space       - no Insulation       585         FENESTRATION       Total Area:       376       Glading Percentage:       20.3 %       New/Attared Average U-Factor:         Orientation       Area       12       Statemark       Statemark       New/Attared Average U-Factor:         Orientation       Area       17       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         HVAC       SYSTEMS       U-Fac       SHGC       Overhang       Min. Eff       Thermostat         HVAC DISTRIBUTION       Location       Heating       Cooling       Duct       Location       R-Value </td <td>Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         Status       \$ 110         Status       \$ 110         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 150         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150      &lt;</td> <td>Juirements for           j0.0(o)1:           j0.0(o)1C:           j0.4(a):           j0.4(a):           j0.4(b)1:           j0.4(b)2:           j0.4(b)3:           j0.5:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1C:           j0.0(k)1C:           j0.0(k)1C:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:</td> <td>Control of the second sec</td>	Date       9/17/2021         # of Units       1         Status       Fequ         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         Status       \$ 110         Status       \$ 110         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 150         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150      <	Juirements for           j0.0(o)1:           j0.0(o)1C:           j0.4(a):           j0.4(a):           j0.4(b)1:           j0.4(b)2:           j0.4(b)3:           j0.5:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1C:           j0.0(k)1C:           j0.0(k)1C:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1F:	Control of the second sec
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing	Project Name       Building Type       Building Type       Building Type       Building Type       Building Type       Stating - Addition Aldree         Project Address       Calibrate Zone (3)       1,850       S85         S68 6th Avenue       San Francisco       Calibrate Zone (3)       1,850       S85         INSULATION       Area       Construction Type       Cavity (1t <sup>2</sup> )       Special Features         Demising Wood Framed Mito       R 11       1,265         Demising Wood Framed Wio Crawl Space       - no Insulation       518         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         HVAC SYSTEMS       Qty.       Houst Exterior       Shade       Duct       Duct         Location       Heating       Cooling       Duct Location       R-Value         WATER HEATING       Qty.       Type       Gallons       Min. Eff       Distribution	Date       9/17/2021         # of Units       1         £xisting       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150	Juirements for           50.0(o)1:           50.0(o)1C:           50.0(o)2:           60 and Spa Syst           10.4(a):           10.4(b)3:           10.4(b)3:           10.4(b)3:           10.5:           50.0(k)1A:           50.0(k)1A:           50.0(k)1B:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1H:           50.0(k)1H:           50.0(k)1I:           50.0(k)1I:           50.0(k)2A:	Subset of the second s
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing	Project Name       Building Type       Be Setting Particip       Decision Particip         Project Address       California Energy Climate Zone       Total Cord. Floor Area       Addition         S68 6th Avenue       San Francisco       California Energy Climate Zone       Total Cord. Floor Area       Addition         S68 6th Avenue       San Francisco       California Energy Climate Zone       Total Cord. Floor Area       Addition         Domising       Wood Pramed Athle       R 11       1,265       Energian       Floor Area         Demising       Wood Framed Web Crawl Space       - no insulation       585       Energian       Floor Area         Demising       Wood Framed Web Crawl Space       - no insulation       518       Energian       Floor Area         FENESTRATION       Total Area:       376       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area       378       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area       378       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area       378       Glazing Percentage:       20.3 %       New/Altered Average U-Factor:         Orientation       Area <td< td=""><td>Date       9/17/2021         # of Units       1         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         Status       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150      <tr< td=""><td>uirements for           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           ol and Spa Syst           10.4(a):           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           htting Measures           50.0(k)1B:           50.0(k)1B:           50.0(k)1B:           50.0(k)1C:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1H:           50.0(k)1H:           50.0(k)1H:           50.0(k)1L:           50.0(k)2B:           50.0(k)2B:</td><td>Control of the end of the en</td></tr<></td></td<>	Date       9/17/2021         # of Units       1         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         Status       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150 <tr< td=""><td>uirements for           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           ol and Spa Syst           10.4(a):           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           htting Measures           50.0(k)1B:           50.0(k)1B:           50.0(k)1B:           50.0(k)1C:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1H:           50.0(k)1H:           50.0(k)1H:           50.0(k)1L:           50.0(k)2B:           50.0(k)2B:</td><td>Control of the end of the en</td></tr<>	uirements for           50.0(o)1:           50.0(o)1C:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1E:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)1C:           50.0(o)2:           ol and Spa Syst           10.4(a):           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.5:           50.0(p):           htting Measures           50.0(k)1B:           50.0(k)1B:           50.0(k)1B:           50.0(k)1C:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1H:           50.0(k)1H:           50.0(k)1H:           50.0(k)1L:           50.0(k)2B:           50.0(k)2B:	Control of the end of the en
Atteration Date 9/17/2021 Addition # of Units 1 Status Existing	Project Name       Dualing type       List Strating L Addition Address         Wording, Namely Addition       Set Strate	Date       9/17/2021         # of Units       1         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         Status       \$ 150         Status       \$ 150         Status       \$ 150         \$ 100       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150	Juirements for           50.0(o)1:           50.0(o)2:           50.0(o)2:           50.0(o)2:           50.0(o)2:           60.0(o)1:           10.4(b)1:           10.4(b)2:           10.4(b)3:           10.4(b)3:           10.5:           50.0(k)1A:           50.0(k)1A:           50.0(k)1B:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1C:           50.0(k)1H:           50.0(k)1H:           50.0(k)2A:           50.0(k)2A:           50.0(k)2A:           50.0(k)2C:           50.0(k)2D:	Substrate the second s
Atteration Date 9/17/2021 Addition # of Units 1 Status Existing	Project Name       Dealard 198       Stridle Family D Addition/Alteration         Project Address       California Europ Climate Zone [Tatal Cond. Floor Area       Addition         568 bith Avenue San Francisco       CA Climate Zone [Tatal Cond. Floor Area       Addition         568 bith Avenue San Francisco       CA Climate Zone [Tatal Cond. Floor Area       Addition         568 bith Avenue San Francisco       CA Climate Zone [Tatal Cond. Floor Area       Addition         Construction Type       Cavity       (ft)       Special Features         Demising Wood Framed Area       R 11       1,265         Demising Wood Framed Wo Crawl Space       - no Insulation       516         FENESTRATION       Total Area:       376       Claming Percentage:       20.3 %       New/Altered Avenue U-Factor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         HVAC SYSTEMS       U.Y. Heating       Min. Eff       Cooling       Min. Eff       Thermostat         HVAC DISTRIBUTION       Duct       Location       R-Value       Watter HEATING       Min. Eff       Distribution         WATER HEATING       Gallons       Min. Eff       Distribution       EnergyPro 8.2 by EnergySoft       Use Number: 5537       ID: 0016202102	Date       9/17/2021         # of Units       1         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         Status       \$ 110         Status       \$ 110         Status       \$ 150         Status       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 110         \$ 110       \$ 150         \$ 110       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150         \$ 150       \$ 150	uirements for           j0.0(o)12:           j0.1(o)12:           j0.4(a):           j0.4(b)1:           j0.4(b)2:           j0.4(b)3:           j0.0(p):           hting Measures           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1A:           j0.0(k)1B:           j0.0(k)1B:           j0.0(k)1B:           j0.0(k)1C:           j0.0(k)1B:           j0.0(k)1B:           j0.0(k)1B:           j0.0(k)1B:           j0.0(k)1F:           j0.0(k)1F:           j0.0(k)1G:           j0.0(k)1B:           j0.0(k)2B:           j0.0(k)2D:           j0.0(k)2D:           j0.0(k)2E:	Subset of the end of the second seco
Alteration Date 9/17/2021 Addition # of Units 1 Status Existing Existing Existing Existing Existing Existing Existing Existing e U-Factor: 0.34 des Status nostat Status Ict Value Status Status	Project Name       Dealard Park Park U Evaluation Addition         Project Addition       California Exerge Chinals Zee Transition       Addition Addition         Project Addition       California Exerge Chinals Zee Transition       Addition Addition         S05 6th Avenue       San Francisco       CA Climate Zee Transition       Addition         Construction Type       Cavity       (ft <sup>2</sup> )       Special Features       Addition         Demining       Wood Framed Attic       R 11       1.860       See       Demining       See         Demining       Wood Framed with Crawl Space       - no Insulation       565       Demining       Wood Framed with Crawl Space       - no Insulation       578         FENESTRATION       Total Area:       276       Olacing Percentage:       20.3 %       NeukAltered Average LiFedor:         Orientation       Area(ft <sup>2</sup> )       U-Fac       SHGC       Overhang       Sidefins       Exterior Shades         HVAC SYSTEMS       U-Fac       SHGC       Overhang       Min. Eff       Thermostat         HVAC DISTRIBUTION       Duct       Location       R-Value       Uct         WATER HEATING       Gallons       Min. Eff       Distribution       EnergyPro 8.2 by EnergySoft       User Number: 5681       10: 00160202102       Energ	Date       9/17/2021         # of Units       1         Existing       \$ 150         Existing       \$ 150         Existing       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 150         0.34       \$ 150         Status       \$ 110         Status       \$ 110         Status       \$ 150         Status       \$ 150 </td <td>Juirements for 1           30.0(o)1:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(c)1:           30.0(c)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:</td> <td>Subset Section 2. Sec</td>	Juirements for 1           30.0(o)1:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(o)2:           30.0(c)1:           30.0(c)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)1:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:           30.0(k)2:	Subset Section 2. Sec

# ALTOS

ALEX@ALTOSENGINEER.COM 1865 GOLDEN GATE AVENUE #2 SAN FRANCISCO, CALIFORNIA 94115 415-497-2668

UCTU

![](_page_22_Figure_7.jpeg)

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER. City and County of San Francisco **Department of Building Inspection** 

![](_page_23_Picture_1.jpeg)

London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

Attachment RB

NOTICE

### **TITLE-24 LOW-RISE RESIDENTIAL ENERGY/GREEN INSPECTION** REQUIREMENTS (BUILDING)

Please note that Certificates of Installation and/or Acceptance and/or Verification are required for this project, as indicated on this form issued with this permit. Ensuring the accurate completion of this documentation is the direct responsibility of the engineer/architect of record. This documentation is required in addition to the called inspections performed by the Department of Building Inspection.

For questions regarding the details or extent of required documentation or testing, and if there are any field problems regarding documentation or testing, please call your District Building Inspector or 415-558-6570.

Before final building inspection is scheduled, documentation of energy compliance "Certificate of Installation. Acceptance, and Verification" and green building "Attachment E" must be completed and signed by the responsible person in charge. The permit will not be finalized without compliance with the energy inspection requirements.

**Energy Inspection Services Contact Information** 

- 1. Telephone: (415) 558-6132
- (415) 558-6474 2. Fax: 3. Email: dbi.energyinspections@sfgov.org
- 4. In person: 3<sup>rd</sup> floor at 1660 Mission St.

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

Installation, Acceptance, and Verification certificates can be found on the California Energy Commission website at <u>https://www.energy.ca.gov/programs-and-</u> topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

Information Sheet M-06 provides submittal instructions for the Title-24 installation, verification, and acceptance energy certificates and Green Building Attachment E. M-06 may be found on the SFDBI website at http://sfdbi.org/information-sheets

> **Energy Inspection Services** 1660 Mission Street– San Francisco CA 94103

Office (415) 558-6132 – FAX (415) 558-6474 – <u>www.sfgov.org/dbi</u> (website) Revised 1/23/2020

### Attachment RB

Revised 1/23/2020

### TITLE-24 LOW-RISE RESIDENTIAL ENERGY/GREEN INSPECTION (BUILDING) A COPY OF THIS DOCUMENT SHALL BE KEPT WITH THE APPROVED DRAWING SET

APPLICATION NO. <u>2021/0806/5930</u> JOB ADDRESS 566-568 6th AVENUE ADDENDUM NO. ENGINEER/ARCHITECT NAME ALEX SANTOS PHONE NO. 415 497-2668

Ensuring the completion of installation documentation as well as the required acceptance/verification testing is the direct responsibility of the undersigned. Installation documentation must be completed by the contractor performing the installation. Verification testing must be completed by a certified HERS rater. Green Building Attachment E shall be completed as per Administrative Bulletin 093 (AB-093).

In accordance with the requirements of the 2019 California Energy Code, 2019 SFGBC and AB-093, the following documentation is required for the **building** elements in this project: 1. Installation

Mechanical

Addition and Alternation

Framing Stage (IB64)

Insulation Stage (IB65)

CF2R-ADD-02-E Non HERS – Prescriptive Additions Simple (IB53) CF2R-ALT-05-E Non HERS – Prescriptive Alterations Simple (IB54)

X CF2R ENV-01-E Non HERS – Fenestration Installation (IB1)

CF2R ENV-04-E Non HERS – Roofing-Radiant Barrier (IB4)

CF2R ENV-20-H HERS – Building Envelope Air Leakage Test

CF2R-ENV-21-H HERS – Quality Insulation Installation (QII) -

CF2R-ENV-22-H HERS – Quality Insulation Installation (QII) -

CF2R ENV-03-E Non HERS – Insulation Installation (IB3)

Envelope

Solar Readv

(IB68)

Fax:

CF2R-MCH-21-H HERS – Duct Location (IB18) CF2R-MCH-22-H HERS – Space Conditioning System Fan Efficacy (IB59)

CF2R-MCH-02-E Non HERS – Whole house fan (IB13)

CF2R-MCH-01-E Non HERS – Space Conditioning Systems (IB57)

- CF2R-MCH-23-H HERS Space Conditioning System Airflow Rate (IB60)
- CF2R-MCH-24-H HERS Building Envelope Air Leakage Worksheet (IB61) CF2R-MCH-25-H HERS – Refrigerant Charge Verification (IB62)
- CF2R-MCH-25f-E Non HERS Refrigerant Charge Verification New
- Package Unit with Factory Charge (IB26)
- □ CF2R-MCH-26-H HERS Verified EER or SEER (IB27)

CF2R-MCH-20-H HERS – Duct Leakage (IB58)

- □ CF2R-MCH-27-H HERS IAQ (IB63) CF2R-MCH-28-H HERS – Return Duct Design and Air Filter Grille Device
- Sizing According to Tables 150.0-B or C (IB31) CF2R-MCH-29-H HERS – Duct Surface Area Reduction; R-Value; Buried
- Ducts Compliance Credit (IB32) CF2R-SRA-01-E – Solar Ready Buildings – New Constructions
  - CF2R-MCH-30-E HERS Ventilation Cooling Compliance Credit (IB55) CF2R-MCH-31-H HERS – Whole house fan (IB66)
- CF2R-SRA-02-E Minimum Solar Zone Area Worksheet New
  CF2R-MCH-32-H HERS Local Mechanical Exhaust (IB67)

Constructions (IB69) 2. Verification Existing Conditions Mechanical CF3R-MCH-20-H HERS – Duct Leakage Test (VB49) □ CF3R EXC-20-H HERS – HERS Verification of Existing Conditions for Residential Alterations (VB47) CF3R-MCH-21-H HERS – Duct Location (VB12) CF3R-MCH-22-H HERS – Space Conditioning System Fan Efficacy (VB50) Envelope CF3R-MCH-23-H HERS – Space Conditioning System Airflow Rate (VB51) CF3R ENV-20-H HERS – Building Envelope Air Leakage Test CF3R-MCH-24-H HERS – Building Envelope Air Leakage Worksheet CF3R-ENV-21-H HERS – Quality Insulation Installation (QII) -CF3R-MCH-25-H HERS – Refrigerant Charge Verification (VB53) Framing Stage (VB56) □ CF3R-MCH-26-H HERS – Verified EER or SEER (VB21) CF3R-ENV-22-H HERS – Quality Insulation Installation (QII) -CF3R-MCH-27-H HERS - IAQ (VB54) Insulation Stage (VB57) CF3R-MCH-28-H HERS – Return Duct Design and Air Filter Grille Device Sizing According to Tables 150.0-B or C (VB25) CF3R-MCH-29-H HERS – Duct Surface Area Reduction; R-Value; Buried Ducts Compliance Credit (VB27) CF3R-MCH-30-H HERS – Ventilation Cooling Compliance Credit (VB60) 3. Green Building (For New Construction and Major Alterations) CF3R-MCH-31-H HERS - Whole house fan (VB58) □ Green Building Attachment E (GBC1) CF3R-MCH-32-H HERS – Local Mechanical Exhaust (VB59) **Required information:** Prepared by: ALEX SANTOS Date: 04/12/2021 Engineer/Architect of Record Signature Email: alex@altosengineer.com Phone (415) 558-Review by: DBI Engineer or Plan Checker APPROVAL (Based on submitted reports) DATE DBI Building Inspector or Energy Inspection Services Staff QUESTIONS ABOUT TITLE-24 ENERGY INSPECTION SHOULD BE DIRECTED TO: Energy Inspection Services (415) 558-6132; or, <u>dbi.energyinspections@sfgov.org</u>; or FAX (415) 558-6474

City and County of San Francisco **Department of Building Inspection** 

![](_page_23_Picture_39.jpeg)

London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

Attachment RE

### NOTICE

Please note that Certificates of Installation and/or Acceptance and/or Verification are required for this project, as indicated on this form issued with this permit. Ensuring the accurate completion of this documentation is the direct responsibility of the engineer/architect of record. This documentation is required in addition to the called inspections performed by the Department of Building Inspection.

For questions regarding the details or extent of required documentation or testing, and if there are any field problems regarding documentation or testing, please call your District Building Inspector or 415-558-6570.

Before final building inspection is scheduled, documentation of energy compliance "Certificate of Installation, Acceptance, and Verification" must be completed and signed by the responsible person in charge. The permit will not be finalized without compliance with the energy inspection requirements.

**Energy Inspection Services Contact Information** 

- Telephone: (415) 558-6132 (415) 558-6474 Fax:
- 2. Email: 3.
- dbi.energyinspections@sfgov.org In person: 3<sup>rd</sup> floor at 1660 Mission St. 4.

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

Installation, Acceptance, and Verification certificates can be found on the California Energy Commission website at https://www.energy.ca.gov/programs-andtopics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

Information Sheet M-06 provides submittal instructions for the Title-24 installation, verification, and acceptance energy certificates. M-06 may be found on the SFDBI website at http://sfdbi.org/information-sheets.

> **Energy Inspection Services** 1660 Mission Street– San Francisco CA 94103

Office (415) 558-6132 - FAX (415) 558-6474 - www.sfgov.org/dbi (website) Revised 1/23/2020

Attachment RE

TITLE-24 LOW-RISE RESIDENTIAL ENERGY INSPECTION (ELECTRICAL) A COPY OF THIS DOCUMENT SHALL BE KEPT WITH THE APPROVED DRAWING SET

APPLICATION NO. 2021/0806/5930 ADDENDUM NO. \_\_\_\_\_ JOB ADDRESS 566-568 6th AVENUE PHONE NO. <u>415 497-2668</u> ENGINEER/ARCHITECT NAME ALEX SANTOS

Ensuring the completion of installation documentation as well as the required acceptance/verification testing is the direct responsibility of the undersigned. Installation documentation must be completed by the contractor performing the installation. Verification testing must be completed by a certified HERS rater.

In accordance with the requirements of the 2019 California Energy Code, the following documentation is required for the electrical elements in this project:

1. Installation

Flectrical

□ CF2R-LTG-01-E Lighting – Single Family Dwellings (IE1) CF2R-LTG-02-E Lighting – Multi-Family Dwellings (IE2)

□ CF2R-PVB-01-E Photovoltaic Systems (IE18) CF2R-PVB-02-E Battery Storage Systems (IE19)

**Required information** 

Prepared by: ALEX SANTOS Date: 04/12/2021 Engineer/Architect of Record Signature

Email: alex@altosengineer.com

Review by: Phone: (415) 558-DBI Engineer or Plan Checker

APPROVAL (Based on submitted reports)

DATE DBI Electrical Inspector or Energy Inspection Services Staff

QUESTIONS ABOUT TITLE-24 ENERGY INSPECTION SHOULD BE DIRECTED TO: Energy Inspection Services (415) 558-6132; or, <u>dbi.energyinspections@sfgov.org</u>; or FAX (415) 558-6474 City and County of San Francisco **Department of Building Inspection** 

### **TITLE-24 LOW-RISE RESIDENTIAL ENERGY INSPECTION** REQUIREMENTS (PLUMBING)

Please note that Certificates of Installation and/or Acceptance and/or Verification are required for this project, as indicated on this form issued with this permit. Ensuring the accurate completion of this documentation is the direct responsibility of the engineer/architect of record. This documentation is required *in addition to* the called inspections performed by the Department of Building Inspection.

For guestions regarding the details or extent of required documentation or testing, and if there are any field problems regarding documentation or testing, please call your District Building Inspector or 415-558-6570.

Before final building inspection is scheduled, documentation of energy compliance "Certificate of Installation, Acceptance, and Verification" must be completed and signed by the responsible person in charge. The permit will not be finalized without compliance with the energy inspection requirements.

Ι.	Telephone:	(41
2.	Fax:	(41
3.	Email:	db
1.	In person:	3rd

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

Installation, Acceptance, and Verification certificates can be found on the California Energy Commission website at <u>https://www.energy.ca.gov/programs-and-</u> topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

Information Sheet M-06 provides submittal instructions for the Title-24 installation, verification, and acceptance energy certificates. M-06 may be found on the SFDBI website at http://sfdbi.org/information-sheets

### **TITLE-24 LOW-R** A COPY OF THIS

JOB ADDRESS 566-568 6th AV ENGINEER/ARCHITECT NAME

Ensuring the completion of install responsibility of the undersigned installation. Verification testing mu

In accordance with the requireme plumbing work in this project:

### 1. Installation

CF2R-PLB-01-E DHW Non-HERS -CF2R-PLB-02-E DHW Non-HERS -CF2R-PLB-03-E DHW Non-HERS -CF2R-PLB-21-H DHW HERS - HERS CF2R-PLB-22-H DHW HERS - HERS

CF2R-STH-01-E Solar Water Heatin

Mechanical CF2R-MCH-04-E Non HERS - Evap

2. Verification CF3R-PLB-21-H DHW HERS - HERS CF3R-PLB-22-H DHW HERS - HERS

Required information Review b

APPROVAL (Based on submitte

DATE

QUESTIONS ABOUT TITLE-24 ENERGY INSPECTION SHOULD BE DIRECTED TO: Energy Inspection Services (415) 558-6132; or, dbi.energyinspections@sfgov.org; or FAX (415) 558-6474

Revised 1/23/2020

![](_page_23_Picture_96.jpeg)

London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

Attachment RP

# NOTICE

### **Energy Inspection Services Contact Information** 115) 558-6132 15) 558-6474

oi.energyinspections@sfgov.org floor at 1660 Mission St.

Ener	rgy Inspectio	n Services	;
1660 Missio	n Street– San F	rancisco CA	9410

660 Mission Street– San Francisco CA 94103 Office (415) 558-6132 – FAX (415) 558-6474 – <u>www.sfgov.org/dbi</u> (website) Revised 1/23/2020

						Attach	ment RP
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ALEX SANTOS			PHONE NO	). <sup>415</sup>	497-	2668	
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ents of the 2019 C	California Energy	Code, the	e following	docume	entatio	on is requ	ired for the
Multifamily Central H Single Dwelling Unit Pool and Spa Heating	ot Water System Dist Hot Water System Dis g System ( <b>IP7)</b>	ribution (IP6 stribution (IF	6) 25)				
S Multifamily Central S Single Dwelling Un	Hot Water System D hit Hot Water System	istribution <b>(I</b> Distribution	P9) (IP8)				
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porative coolers (IP2)							
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ngineer/Architect of	Record Signature		Date.				
	Email:alex@	altosengin	eer.com				
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Engineer or Plan C	Checker		e. <u>(415)</u>	000-			
d reports)							
DBI Plum	nbing Inspector or E	nergy Ins	pection Ser	vices Sta	ntf		

	<b>RESIDENTIAL RENOVATION</b>	SAN FRANCISCO, CALIFORNIA 94118 5 - 568 6TH AVENUE (BLOCK / LOT: 1548 / 034)
N REGISTER	PROFESS/ DER M. 5 NO. C841 Exp. 9/30, 7/F OF CAL	OVAL CHOMEER 44 1/23 ★ FORMUT

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND MAY NOT BE DUPLICATED. USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF

THE STRUCTURAL ENGINEER.

Revised 1/23/2020

# GS5: San Francisco Green Building Submittal Form for Residential Alteration + Addition Projects

### INSTRUCTIONS:

1. Fill out the project information in the Verification box at the right.

2. Submittal must be a minimum of 11" x 17".

3. This form is for permit applications submitted January 2020 through December 2022.

ENTIAL	TITLE	SOURCE OF REQUIREMENT		DESCI
	GRADING & PAVING	CALGreen 4.106.3	Show how surfa	ace drainage (grading, swales, drains
	RODENT PROOFING	CALGreen 4.406.1	Seal around pip	e, cable, conduit, and other openings
	FIREPLACES & WOODSTOVES	CALGreen 4.503.1	Install only direc	ct-vent or sealed-combustion, EPA Ph
ESIDI	CAPILLARY BREAK, SLAB ON GRADE	CALGreen 4.505.2	Slab on grade for professional.	oundation requiring vapor retarder als
RE	MOISTURE CONTENT	CALGreen 4.505.3	Wall + floor <19	% moisture content before enclosure
ž	BATHROOM EXHAUST	CALGreen 4.506.1	Must be ENER	GY STAR compliant, ducted to buildin
1.00				en al l'un en fin en anagement arrenter na Y anagementer en l'an angementer
	LOW-EMITTING MATERIALS	CALGreen 4.504.2.1-5, SFGBC 4.103.3.2	Use products that comply with the emission limit requiresilient flooring (80% of area), and composite wood	
WATER	INDOOR WATER USE REDUCTION	CALGreen 4.303.1, SF Housing Code sec.12A10	Meet flush/flow (1.8 gpm); wash SF Housing Coo	requirements for: toilets (1.28 gpf); un n fountains (1.8 gpm); metering fauce de sec.12A10.
	WATER-EFFICIENT IRRIGATION	Administrative Code ch.63	If modified lands restrictions by c	scape area is ≥1,000 sq.ft., use low w alculated ETAF of ≤.55 or by prescrip
ENERGY	ENERGY EFFICIENCY	CA Energy Code	Comply with all provisions of the CA Energy Code.	
PARKING	BICYCLE PARKING	Planning Code sec.155.1-2	Provide short- a	and long-term bike parking to meet rea
RESOURCE RECOVERY	RECYCLING BY OCCUPANTS	SF Building Code 106A.3.3, CalGreen 5.410.1, AB-088	Provide adequa	te space and equal access for storag
	CONSTRUCTION & DEMOLITION (C&D) DISCARDS MANAGEMENT	Environment Code ch. 14 SFGBC 4.103.2.3 CalGreen 4.408.2, 4.408.5	Construction Dis See www.dbi.or	scards Management - 100% of mixed g for details.
HVAC	HVAC INSTALLER QUALS	CALGreen 4.702.1	Installers must b	pe trained in best practices.
	HVAC DESIGN	CALGreen 4.507.2	HVAC shall be o	designed to ACCA Manual J, D, and S
GOOD NEIGHBOR	BIRD-SAFE BUILDINGS	Planning Code sec.139	Glass facades a	and bird hazards facing and/or near U
	TOBACCO SMOKE CONTROL	Health Code art.19F	Prohibit smokin	g within 10 feet of building entries, air
POLLUTION PREVENTION	STORMWATER CONTROL PLAN	Public Works Code art.4.2 sec.147	Projects disturb SFPUC Stormw	ing ≥5,000 sq.ft. in combined or sepa ⁄ater Management Requirements.
	CONSTRUCTION SITE RUNOFF	Public Works Code art.4.2 sec.146	Provide a const	ruction site Stormwater Pollution Prev
INDOOR AIR QUALITY	AIR FILTRATION (CONSTRUCTION)	CALGreen 4.504.1	Seal permanent	t HVAC ducts/equipment stored onsite
	Indoor V	Vater Efficiency		
FOR YOUR INFORMATION: INDOOR WATER EFFICIENCY	Each fixture must not exceed FIXTURE TYPE	CALGreen 4.303 maximum flo MAXIMUM FIXTURE FLOW RA	<i>w rates:</i> TE	NOTES:
	Showerheads <sup>2</sup>	1.8 gpm @ 80 psi		1. For dual flush toilets, effective flush is defined as the composite, average
	Lavatory Faucets: residential	1.2 gpm @ 60 psi		volume of two reduced flushes and flush. The referenced standard is As
	Wash Fountains	1.8 gpm / 20 frim space (inches)	60 psil	A112.19.14 and USEPA WaterSens
	Metering Faucets	.20 gallons per cvcle	oo bal	1.28 gal (4.8L)
	Tank-type water closets	1.28 gallons / flush <sup>1</sup> and EPA Wa	aterSense Certified	2. The combined flow rate of all showe in one shower stall shall not exceed
	Flushometer valve water closets	1.28 gallons / flush <sup>1</sup>		maximum flow rate for one showerh the shower shall be designed to allo
	Urinals	Wall mount: 0.125 gallons / flush	I	one showerhead to be in operation (CALGreen 5.303.2.1)

Floor mount: 0.5 gallons / flush

### **CRIPTION OF REQUIREMENT**

s, retention areas) will keep surface water from entering the building

s in exterior walls with cement mortar or DBI-approved similar method

Phase II-compliant appliances.

Iso requires a capillary break such as: 4 inches of base 1/2-inch aggregate under retarder; slab design specified by licensed

ng exterior, and its humidistat shall be capable of adjusting between <50% to >80% (humidistat may be separate component).

uirements of 4.504.2.1-5, 5.504.4.1-6 for adhesives, sealants, paints, coatings, carpet systems including cushions and adhesives, products.

urinals (0.125 gpf wall, 0.5 gpf floor); showerheads (1.8 gpm); lavatories (1.2 gpm private, 0.5 gpm public/common); kitchen fauce ets (0.2 gpc); food waste disposers (1 gpm/8 gpm). Residential major improvement projects must upgrade all non-compliant fixture

water use plants or climate appropriate plants, restrict turf areas and comply with Model Water Efficient Landscape Ordinance otive compliance for projects with ≤2,500 sq.ft. of landscape area.

equirements of SF Planning Code sec.155.1-2.

ge, collection, and loading of compostable, recyclable and landfill materials.

d debris must be taken by a Registered Transporter to a Registered facility and processed for recycling. Demonstrate ≥65% recove

Jrban Bird Refuges may need to treat their glass for opacity.

r intakes, and operable windows and enclosed common areas.

arate sewer areas, or replacing ≥2,500 impervious sq.ft. in separate sewer area, must implement a Stormwater Control Plan meet

evention Plan and implement SFPUC Best Management Practices.

ite before installation.

volume je flush one full	Water Efficiency of Existing Non-Compliant Fixtures All fixtures that are not compliant with the San Francisco Commercial Water Conservation Ordinance that serve or are located within the project area must be replaced with fixtures or fittings meeting the maximum flow rates and standards referenced above. For more information, see the Commercial Water Conservation Program Brochure, available at SFDBI. org.	
se Tank- ation –	NON-COMPLIANT PLUMBING FIXTURES INCLUDE: 1. Any toilet manufactured to use more than 1.6 gallons/flush	
erheads d the nead, or	<ol> <li>Any urinal manufactured to use more than 1 gallon/flush</li> <li>Any showerhead manufactured to have a flow capacity of more than 2.5 gpm</li> <li>Any interior faucet that emits more than 2.2 gpm</li> </ol>	
at a time	Exceptions to this requirement are limited to situations where replacement of fixture(s) would detract from the historic integrity of the building, as determined by the Department of Building Inspection pursuant to San Francisco Building Code Chapter 13A.	

	OTHER RESIDENTIAL	VERIFICATION		
	ALTERATIONS + ADDITIONS	Indicate below who is responsible for ensuring green		
	adds any amount of conditioned	building requirements are met. Projects that increase total conditioned floor area by $\geq 1,000$ sq. ft. are required		
	area, volume, or size	to have a Green Building Compliance Professional of Record as described in Administrative Bulletin 93. For		
	if applicable	projects that increase total conditioned floor area by <1,000 sq. ft., the applicant or design professional may		
	•	sign below, and no license or special qualifications are required. FINAL COMPLIANCE VERIFICATION form		
	•	will be required prior to Certificate of Completion		
	•	Residential Addition & Alterations		
	•	<u>1548/034</u>		
	•	566-568 6th Avenue		
		ADDRESS Residential Dupley (R-2)		
,	•	PRIMARY OCCUPANCY		
		2630 SQ.FT.		
is es per	•	1185 SQ.FT.		
		INCREASE IN CONDITIONED FLOOR AREA		
	•	approved construction documents and construction fulfill the requirements of San Francisco Green Building Code. It		
	•	is my professional opinion that the requirements of the San Francisco Green Building Code will be met. I will notify the Department of Building Inspection if the project will, for any reason, not substantially comply with these requirements, if I am no longer the Green Building Compliance Professional of Record for the project, or if I am otherwise no longer responsible for assuring the compliance of the project with the San Francisco Green Building Code.		
	if applicable			
	•	LICENSED PROFESSIONAL (sign & date)		
very.	•	May be signed by applicant when <1,000 sq. ft. is added. AFFIX STAMP BELOW:		
	•			
	•			
	•			
ing	if project extends outside envelope	Projects that increase total conditioned floor area by ≥1,000 sq.ft.: Green Building Compliance Professional of Record will verify compliance.		
	if project extends outside envelope	John Tao (510)967-1299		
		GREEN BUILDING COMPLIANCE PROFESSIONAL		
	•	(name & contact phone #)		
		FIRM		
1		I am a LEED Accredited Professional		
		Lam a GreenPoint Rater		
		I am an ICC Certified CALGreen Inspector		
		REEN BUILDING COMPLIANCE PROFESSIONAL		
		(sign & date) Signature by a professional holding at least one of		
		the above certifications is required. If the Licensed Professional does not hold a certification for green design and/or inspection, this section may be completed by another party who will verify applicable green building		
		requirements are met.		