

STREET (PER LOT SPECIFIC BUILDING PERMIT APPLICATION)





2022 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

ſ	Y N/A	RESPON.	CHAPTER 3	Y N/A	RESPON.	FOR REFERENCE ONLY: THE FOLLOWING TABLE AND CODE SECTION HAVE BEEN REPRINTED THE CALIFORNIA CODE OF REGULATIONS TITLE 20 (APPLIANCE FEELCIENCY REGULATIONS) SI
┢		PARTY	GREEN BUILDING SECTION 301 GENERAL		PARTY	1605.1 (H)(4) AND SECTION 1605.3 (H)(4)(A).
			301.1 SCOPE. BUILDINGS SHALL BE DESIGNED TO INCLUDE THE GREEN BUILDING MEASURES SPECIFIED AS MANDATORY IN THE APPLICATION CHECKLISTS CONTAINED IN THIS CODE.			STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VA
			VOLUNTARY GREEN BUILDING MEASURES ARE ALSO INCLUDED IN THE APPLICATION CHECKLISTS AND MAY BE INCLUDED IN THE DESIGN AND CONSTRUCTION OF STRUCTURES COVERED BY THIS			MANUFACTURED ON OR AFTER JANUARY 28, 2019
			CODE, BUT ARE NOT REQUIRED UNLESS ADOPTED BY A CITY, COUNTY, OR CITY AND COUNTY AS SPECIFIED IN SECTION 101.7. 301.1.1 ADDITIONS AND ALTERATIONS. [HCD] THE MANDATORY PROVISIONS OF CHAPTER 4			PRODUCT CLASS MAXIMUM FLOW RATE
			SHALL BE APPLIED TO ADDITIONS OR ALTERATIONS OF EXISTING RESIDENTIAL BUILDINGS WHERE THE ADDITION OR ALTERATION INCREASES THE BUILDING'S CONDITIONED AREA,			[SPRAY FORCE IN OUNCE FORCE (02F)] PRODUCT CLASS 1 (≤ 5.0 OZF) 1.00
			AREA OF THE ADDITION OR ALTERATION.			PRODUCT CLASS 2 (> 5.0 OZF AND ≤ 8.0 OZF) 1.20 PRODUCT CLASS 2 (> 8.0 OZF) 1.20
			THE MANDATORY PROVISION OF SECTION 4.106.4.2 MAY APPLY TO ADDITIONS OR ALTERATIONS OF EXISTING PARKING FACILITIES OR THE ADDITION OF NEW PARKING FACILITIES SERVING EXISTING MULTIFAMILY BUILDINGS. SEE SECTION 4.106.4.3 FOR APPLICATION.			TITLE 20 SECTION 1605.3 (H)(4)(A): COMMERCIAL PRERINSE SPRAY VALUES MANUFACTURED C
			NOTE: REPAIRS INCLUDING, BUT NOT LIMITED TO, RESURFACING, RESTRIPING AND REPAIRING OR MAINTAINING EXISTING LIGHTING FIXTURES ARE NOT CONSIDERED ALTERATIONS FOR THE			AFTER JANUARY 1, 2006, SHALL HAVE A MINIMUM SPRAY FORCE OF NOT LESS THAN 4.0 OUNCES-FORCE (OZF)[113 GRAMS-FORCE(GF)]
			PURPOSE OF THIS SECTION. NOTE: ON AND AFTER JANUARY 1, 2014, RESIDENTIAL BUILDINGS UNDERGOING PERMITTED			4.303.2 SUBMETERS FOR MULTIFAMILY BUILDINGS AND DWELLING UNITS IN MIXED-USED RESIDENTIAL/COMMERCIAL BUILDINGS.
			ALTERATIONS, ADDITIONS, OR IMPROVEMENTS SHALL REPLACE NONCOMPLIANT PLUMBING FIXTURES WITH WATER-CONSERVING PLUMBING FIXTURES. PLUMBING FIXTURE REPLACEMENT IS DECURED REFORMED TO ISSUANCE OF A CEPTIFICATE OF FINAL COMPLETION			SUBMETERS SHALL BE INSTALLED TO MEASURE WATER USAGE OF INDIVIDUAL RENTAL DWEL UNITS IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE.
			CERTIFICATE OF OCCUPANCY OR FINAL PERMIT APPROVAL BY THE LOCAL BUILDING DEPARTMENT. SEE CIVIL CODE SECTION 1101.1, ET SEQ., FOR THE DEFINITION OF A		O OR C	4.303.3 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITT SHALL BE INSTALLED IN ACCORDANCE WITH THE <i>CALIFORNIA PLUMBING CODE</i> , AND SHALL M
			NONCOMPLIANT PLUMBING FIXTURE, TYPES OF RESIDENTIAL BUILDINGS AFFECTED AND OTHER IMPORTANT ENACTMENT DATES.			APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE CALIFORNIA PLUMBING CODE NOTE: THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FO
			301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] THE PROVISIONS OF INDIVIDUAL SECTIONS OF CALGREEN MAY APPLY TO EITHER LOW-RISE DESIDENTIAL PLUE DISC DESIDENTIAL PLUE DISCS OF POTUL INDIVIDUAL SECTIONS			
			WILL BE DESIGNATED BY BANNERS TO INDICATE WHERE THE SECTION APPLIES SPECIFICALLY TO LOW-RISE ONLY (LR) OR HIGH-RISE ONLY (HR). WHEN THE SECTION APPLIES TO			FIXTURE TYPE FLOW RATE
			BOTH LOW-RISE AND HIGH-RISE BUILDINGS, NO BANNER WILL BE USED. SECTION 302 MIXED OCCUPANCY BUILDINGS			SHOWER HEADS (RESIDENTIAL)1.8 GMP @ 80 PSILAVATORY FAUCETS (RESIDENTIAL)MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPI
			302.1 MIXED OCCUPANCY BUILDINGS. IN MIXED OCCUPANCY BUILDINGS, EACH			LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS0.5 GPM @ 60 PSIKITCHEN FAUCETS1.8 GPM @ 60 PSI
			APPLICABLE TO EACH SPECIFIC OCCUPANCY. EXCEPTIONS:			METERING FAUCETS 0.2 GAL/CYCLE
			1. [HCD] ACCESSORY STRUCTURES AND ACCESSORY OCCUPANCIES SERVING RESIDENTIAL BUILDINGS SHALL COMPLY WITH CHAPTER 4 AND APPENDIX A4, AS APPLICABLE.			URINALS 0.125 GAL/FLUSH
			THE CALIFORNIA BUILDING CODE, SHALL NOT BE CONSIDERED MIXED OCCUPANCIES. LIVE/WORK UNITS SHALL COMPLY WITH CHAPTER 4 AND APPENDIX A4, AS APPLICABLE.		O OR C	 4.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. RESIDENTIAL DEVELOPMENT COMPLY WITH A LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFO
			DIVISION 4.1 PLANNING AND DESIGN			DEPARTMENT OF WATER RESOURCES' MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MY WHICHEVER IS MORE STRINGENT.
			HCD DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT BSC CALIFORNIA BUILDING STANDARDS COMMISSION			1. THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) IS LOCATED IN THE C CODE REGULATIONS, TITLE 23, CHAPTER 2.7, DIVISION 2. MWELO AND SUPPORTING DOCU
			DSA-SS DIVISION OF THE STATE ARCHITECT, STRUCTURAL SAFETY OSHPD OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT			INCLUDING WATER BUDGET CALCULATOR, ARE AVAILABLE AT: HTTPS://WWW.WATER.CA.G
			LR LOW RISE HR HIGH RISE AA ADDITIONS AND ALTERATIONS			EFFICIENCY
					O OR C	4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 RODENT PROOFING. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGA
						PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MOR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.
			4.102 DEFINITIONS 4.102.1 DEFINITIONS THE FOLLOWING TERMS ARE DEFINED IN CHAPTER 2 (AND ARE INCLUDED HERE FOR REFERENCE)		O OR C	4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLIN
			FRENCH DRAIN. A TRENCH, HOLE OR OTHER DEPRESSED AREA LOOSELY FILLED WITH ROCK, GRAVEL, FRAGMENTS OF BRICK OR SIMILAR PERVIOUS MATERIAL USED TO COLLECT OR CHANNEL DRAINAGE			65 PERCENT OF THE NON-HAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDA WITH EITHER SECTION 4.408.2, 4.408.3 OR 4.408.4, OR MEET A MORE STRINGENT LOCAL CONST
			OR RUNOFF WATER. WATTLES ARE USED TO REDUCE SEDIMENT IN RUNOFF. WATTLES ARE OFTEN			AND DEMOLITION WASTE MANAGEMENT ORDINANCE. EXCEPTIONS: 1. EXCAVATED SOIL AND LAND-CLEARING DEBRIS.
			CONSTRUCTED OF NATURAL PLANT MATERIALS SUCH AS HAY, STRAW OR SIMILAR MATERIAL SHAPED IN THE FORM OF TUBES AND PLACED ON A DOWNFLOW SLOPE. WATTLES ARE ALSO USED FOR PERIMETER AND IN ET CONTROLS			2. ALTERNATE WASTE REDUCTION METHODS DEVELOPED BY WORKING WITH LOCAL AGE DIVERSION OR RECYCLE FACILITIES CAPABLE OF COMPLIANCE WITH THIS ITEM DO NOT E
ļ			4.106 SITE DEVELOPMENT			 THE ENFORCING AGENCY MAY MAKE EXCEPTIONS TO THE REQUIREMENTS OF THIS SE WHEN ISOLATED JOBSITES ARE LOCATED IN AREAS BEYOND THE HAUL BOUNDARIES OF
ľ		OORC	4.106.1 GENERAL. PRESERVATION AND USE OF AVAILABLE NATURAL RESOURCES SHALL BE ACCOMPLISHED THROUGH EVALUATION AND CAREFUL PLANNING TO MINIMIZE NEGATIVE EFFECTS ON THE SITE AND ADJACENT AREAS. PRESERVATION OF SLOPES, MANAGEMENT OF STORM WATER		O OR C	DIVERSION FACILITY.
┟		O OR C	DRAINAGE AND EROSION CONTROLS SHALL COMPLY WITH THIS SECTION. 4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. PROJECTS WHICH			PLAN IN CONFORMANCE WITH ITEMS 1 THROUGH 5. THE CONSTRUCTION WASTE MANAGEMEI SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR
ſ			DISTURB LESS THAN ONE ACRE OF SOIL AND ARE NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION. IN ORDER TO MANAGE STORM WATER DRAINAGE DURING			 IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO BE DIVERTED DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR FUTURE U
			CONSTRUCTION, ONE OR MORE OF THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO PREVENT FLOODING OF ADJACENT PROPERTY, PREVENT EROSION AND RETAIN SOIL RUNOF <mark>F ON THE SITE</mark> .			2. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON (SOURCE SEPARATED) OR BULK MIXED (SINGLE STREAM).
			1. RETENTION BASINS OF SUFFICIENT SIZE SHALL BE UTILIZED TO RETAIN STORM WATER ON THE SITE. 2. WHERE STORM WATER IS CONVEYED TO A PUBLIC DRAINAGE SYSTEM. COLLECTION POINT			 IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASH MATERIAL COLLECTED WILL BE TAKEN. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION
			GUTTER OR SIMILAR DISPOSAL METHOD, WATER SHALL BE FILTERED BY USE OF A BARRIER SYSTEM, WATTLE OR OTHER METHOD APPROVED BY THE ENFORCING AGENCY.			AND DEMOLITION WASTE GENERATED. 5. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME. BUT NOT BY BOTH.
			3. COMPLIANCE WITH A LAWFOLLY ENACTED STORM WATER MANAGEMENT ORDINANCE. NOTE: REFER TO THE STATE WATER RESOURCES CONTROL BOARD FOR PROJECTS WHICH DISTURB ONE ACRE OR MORE OF SOIL, OR ARE PART OF A LARGER COMMON PLAN OF		O OR C	4.408.3 WASTE MANAGEMENT COMPANY. UTILIZE A WASTE MANAGEMENT COMPANY, APPRO
			DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE OF SOIL. (WEBSITE: HTTPS://WWW.WATERBOARDS.CA.GOV/WATER_ISSUES/PROGRAMS/STORMWATER/			OF CONSTRUCTION AND DEMOLITION WASTE MATERIAL DIVERTED FROM THE LANDFILL COMP WITH SECTION 4.408.1.
ŀ		O OR C	CONSTRUCTION.HTML) 4.106.3 GRADING AND PAVING. CONSTRUCTION PLANS SHALL INDICATE HOW THE SITE GRADING OR			NOTE: THE OWNER OR CONTRACTOR MAY MAKE THE DETERMINATION IF THE CONSTRUCT DEMOLITION WASTE MATERIALS WILL BE DIVERTED BY A WASTE MANAGEMENT COMPA
			BUILDINGS. EXAMPLES OF METHODS TO MANAGE SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING TO, THE FOLLOWING:		O OR C	4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. PROJECTS THAT GENERATE A TOTA COMBINED WEIGHT OF CONSTRUCTION AND DEMOLITION WASTE DISPOSED OF IN LANDFILLS, DO NOT EXCEED 2.4 LBS (SO FT, OF THE RUN DNC ADEA SHALL MEET THE MINIMUM RES
			SWALES WATER COLLECTION AND DISPOSAL SYSTEMS FRENCH DRAINS			CONSTRUCTION WASTE REDUCTION REQUIREMENT IN SECTION 4.408.1 4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. PROJECTS THAT GENERATE A TOT
			 WATER RETENTION GARDENS OTHER WATER MEASURES WHICH KEEP SURFACE WATER AWAY FROM BUILDINGS AND AID IN 			WHICH DO NOT EXCEED 2 POUNDS PER SQUARE FOOT OF THE BUILDING AREA, SHALL ME MINIMUM 65% CONSTRUCTION WASTE REDUCTION REQUIREMENT IN SECTION 4.408.1
			GROUNDWATER RECHARGE. EXCEPTION: ADDITIONS AND ALTERATIONS NOT ALTERING THE DRAINAGE PATH.		O OR C	4.408.5 DOCUMENTATION. DOCUMENTATION SHALL BE PROVIDED TO THE ENFORCING AGENC
			4.201 GENERAL			SECTION 4.408.4 NOTES:
			4.201.1 SCOPE. FOR THE PURPOSES OF MANDATORY ENERGY EFFICIENCY STANDARDS IN THIS CODE, THE CALIFORNIA ENERGY COMMISSION WILL CONTINUE TO ADOPT MANDATORY STANDARDS.			1. SAMPLE FORMS FOUND IN "A GUIDE TO THE CALIFORNIA GREEN BUILDING STANDARDS (RESIDENTIAL)" LOCATED AT WWW.HCD.CA.GOV/CALGREEN.HTML MAY BE USED TO ASSIS DOCUMENTING COMPLIANCE WITH THIS SECTION.
			4.303 INDOOR WATER USE			2. MIXED CONSTRUCTION AND DEMOLITION DEBRIS (C & D) PROCESSORS CAN BE LOCAT THE CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLING)
ŀ		O OR C	4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE SECTIONS 4.303.1.1, 4.303.1.2, 4.303.1.3, AND 4.303.4.4,		O OR C	4.410 BUILDING MAINTENANCE AND OPERATION 4.410.1 OPERATION AND MAINTENANCE MANUAL. AT THE TIME OF FINAL INSPECTION, A MANUAL
			NOTE: ALL NONCOMPLIANT PLUMBING FIXTURES IN ANY RESIDENTIAL REAL PROPERTY SHALL BE REPLACED WITH WATER-CONSERVING PLUMBING FIXTURES. PLUMBING FIXTURE REPLACEMENT IS REQUIRED REPORTO ISSUANCE OF A CERTIFICATE OF FINAL COMPLETION. CERTIFICATE OF			COMPACT DISC, WEB-BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE ENFORCING WHICH INCLUDES ALL OF THE FOLLOWING SHALL BE PLACED IN THE BUILDING: 1. DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH T
			OCCUPANCY, OR FINAL PERMIT APPROVAL BY THE LOCAL BUILDING DEPARTMENT. SEE CIVIL CODE SECTION 1101.1, ET SEQ., FOR THE DEFINITION OF A NONCOMPLIANT PLUMBING FIXTURE,			BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE. 2. OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING: A FOUR MENT AND APPLIANCES, INCLUDING, WATCH SAULTON, AND APPLIANCES, INCLUDING, AND APPLIANCES, AND APPLIANCES, INCLUDING, AND APPLIANCES, AND A
			TYPES OF RESIDENTIAL BUILDINGS AFFECTED AND OTHER IMPORTANT ENACTMENT DATES. 4.303.1.1 WATER CLOSETS. THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT			A. EQUIPMENT AND APPLIANCES, INCLUDING WATER-SAVING DEVICES AND SYSTEM SYSTEMS, PHOTOVOLTAIC SYSTEMS, ELECTRIC VEHICLE CHARGERS, WATER-HEATI SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
			EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.			 B. ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS. C. SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS. D. LANDSCAPE IRRIGATION SYSTEMS
			AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSH FOLLETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.			 E. WATER REUSE SYSTEMS. 3. INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON M
			4.303.1.2 URINALS. THE EFFECTIVE FLUSH VOLUME OF WALL MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH. THE EFFECTIVE FLUSH VOLUME OF ALL OTHER URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.			 FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS. PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE AREA.
			4.303.1.3 SHOWERHEADS. 4.303.1.3.1 SINGLE SHOWERHEAD. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT			5. EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INTERIOR RELATIVE HUMIE BETWEEN 30-60 PERCENT AND WHAT METHODS AN OCCUPANT MAY USE TO MAINTAIN TH BELATIVE HUMIDITY LEVEL IN THAT BANGE
			PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.			6. INFORMATION ABOUT WATER-CONSERVING LANDSCAPE AND IRRIGATION DESIGN AND CONTROLLERS WHICH CONSERVE WATER.
			4.303.1.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER . WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL THE SHOWERHEADS AND/OR OTHER SHOWER OLITLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE			DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION. 8. INFORMATION ON REQUIRED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NO
			AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ONLY ALLOW ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME.			 TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC. INFORMATION ABOUT STATE SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE. A COPY OF ALL SPECIAL INSPECTIONS VERIFICATIONS REQUIRED BY THE ENFORCING
			4.303.1.4 FAUCETS.			OR THIS CODE. 11. INFORMATION FROM THE DEPARTMENT OF FORESTRY AND FIRE PROTECTION ON MAI OF DEFENSIBLE SPACE ABOUND PRODUCTION OT MOTOR OF DEFENSION OF MAIL
			4.303.1.4.1 RESIDENTIAL LAVATORY FAUCETS. THE MAXIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT EXCEED 1.2 GALLONS PER MINUTE AT 60 PSI. THE MINIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT BE LESS THAN 0.8 GALLONS PER MINUTE AT 20 PSI.			12. INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFOL
			4.303.1.4.2 LAVATORY FAUCETS IN COMMON AND PUBLIC USE AREAS. THE MAXIMUM FLOW RATE OF			4.410.2 RECYCLING BY OCCUPANTS. WHERE 5 OR MORE MULTIFAMILY DWELLING UNITS ARE CONSTRUCTED ON A BUILDING SITE, PROVIDE READILY ACCESSIBLE AREA(S) THAT SERVES A BUILDINGS ON THE SITE AND ARE IDENTIFIED FOR THE DEPOSITING. STORAGE AND COLLECT
			SLEEPING UNITS) IN RESIDENTIAL BUILDINGS SHALL NOT EXCEED 0.5 GALLONS PER MINUTE AT 60 PSI.			NON-HAZARDOUS MATERIALS FOR RECYCLING, INCLUDING (AT A MINIMUM) PAPER, CORRUGA CARDBOARD, GLASS, PLASTICS, ORGANIC WASTER, AND METALS, OR MEET A LAWFULLY ENAU
			4.303.1.4.3 METERING FAUCETS. METERING FAUCETS WHEN INSTALLED IN RESIDENTIAL BUILDINGS SHALL NOT DELIVER MORE THAN 0.2 GALLONS PER CYCLE.			EXCEPTION: RURAL JURISDICTIONS THAT MEET AND APPLY FOR THE EXEMPTION IN PUBL RESOURCES CODE SECTION 4649.82 (A)(2)(A) ET SEQ. ARE NOTE REQUIRED TO COMPLY V
			4.303.1.4.4 KITCHEN FAUCETS. THE MAXIMUM FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE. BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI. AND MUST			ORGANIC WASTE PORTION OF THIS SECTION.
			DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI. NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE DEDUCTION			
			4.303.1.4.5 PRE-RINSE SPRAY VALVES.			
			WHEN INSTALLED, SHALL MEET THE REQUIREMENTS IN THE CALIFORNIA CODE OF REGULATIONS, TITLE 20 (APPLIANCE EFFICIENCY REGULATIONS), SECTIONS 1605.1 (H)(4) TABLE H-2, SECTION 1605.3 (H)(4)(A), AND SECTION 1607(D)(7) AND SHALL BE EQUIPPED WITH AN INTEGRAL AUTOMATIC SHUTCEE			
			A A A A A A A A A A A A A A A A A A A			

V N/A RESPON. DIVISION 4.5 ENVIRONMENTAL QUALITY TABLE 4.504.3 - VOC CONTENT LIMITS FOR ECTION Y N/A RESPON SECTION 4.501 GENERAL ARCHITECTURAL COATINGS2,3 4.501.1 SCOPE RAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS THE PROVISIONS OF THIS CHAPTER SHALL OUTLINE MEANS OF REDUCING THE QUALITY OF AIR CONTAMINANTS THAT ARE ODOROUS. IRRITATING AND/OR HARMFUL TO THE COMFORT AND WELL COATING CATEGORY VOC LIMIT LUES BEING OF A BUILDING'S INSTALLERS, OCCUPANTS AND NEIGHBORS. SECTION 4.502 DEFINITIONS 5.102.1 DEFINITIONS ONFLAT-HIGH GLOSS COATINGS THE FOLLOWING TERMS ARE DEFINED IN CHAPTER 2 (AND ARE INCLUDED HERE FOR REFERENCE) (GPM) SPECIALTY COATINGS AGRIFIBER PRODUCTS. AGRIFIBER PRODUCTS INCLUDE WHEATBOARD, STRAWBOARD, PANEL UBSTRATES AND DOOR CORES, NOT INCLUDING FURNITURE, FIXTURES AND EQUIPMENT (FF&E) NO UMINUM ROOF COATINGS 400 ONSIDERED BASE BUILDING ELEMENTS. ASEMENT SPECIALTY COATINGS COMPOSITE WOOD PRODUCTS. COMPOSITE WOOD PRODUCTS INCLUDE HARDWOOD PLYWOOD, TUMINOUS ROOF COATINGS ARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD. "COMPOSITE WOOD PRODUCTS" DOES NOT INCLUDE HARDBOARD, STRUCTURAL PLYWOOD, STRUCTURAL PANELS, STRUCTURAL COMPOSITE TUMINOUS ROOF PRIMERS UMBER, ORIENTED STRAND BOARD, GLUED LAMINATED TIMBER, PREFABRICATED WOOD I-JOISTS OR ND BREAKERS FINGER-JOINTED LUMBER, ALL AS SPECIFIED IN CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 17 DNCRETE CURING COMPOUNE SECTION 93120.1 DNCRETE/MASONRY SEALERS DIRECT-VENT APPLIANCE. A FUEL-BURNING APPLIANCE WITH A SEALED COMBUSTION SYSTEM THAT DRAWS ALL AIR FOR COMBUSTION FROM THE OUTSIDE ATMOSPHERE AND DISCHARGES ALL FLUE RIVEWAY SEALERS GASES TO THE OUTSIDE ATMOSPHERE. RY FOG COATINGS LING MAXIMUM INCREMENTAL REACTIVITY (MIR). THE MAXIMUM CHANGE IN WEIGHT OF OZONE FORMED BY AUX FINISHING COATINGS 350 ADDING A COMPOUND TO THE "BASE REACTIVE ORGANIC GAS (ROG) MIXTURE" PER WEIGHT OF RE RESISTIVE COATINGS OMPOUND ADDED, EXPRESSED TO HUNDREDTHS OF A GRAM (G O³/G ROC). FINGS NOTE: MIR VALUES FOR INDIVIDUAL COMPOUNDS AND HYDROCARBON SOLVENTS ARE SPECIFIED IN OOR COATINGS EET THE CCR, TITLE 17, SECTIONS 94700 AND 94701 250 RM-RELEASE COMPOUNDS MOISTURE CONTENT. THE WEIGHT OF THE WATER IN WOOD EXPRESSED IN PERCENTAGE OF THE RAPHIC ARTS COATINGS (SIGN PAIN 500 420 WEIGHT OF THE OVEN-DRY WOOD FOR THE GH TEMPERATURE COATINGS PRODUCT-WEIGHTED MIR (PWMIR). THE SUM OF ALL WEIGHTED-MIR FOR ALL INGREDIENTS IN A DUSTRIAL MAINTENANCE COATINGS PRODUCT SUBJECT TO THIS ARTICLE. THE PWMIR IS THE TOTAL PRODUCT REACTIVITY EXPRESSED W SOLIDS COATINGS HUNDREDTHS OF A GRAM OF OZONE FORMED PER GRAM OF PRODUCT (EXCLUDING CONTAINER AND AGNESITE CEMENT COATINGS PACKAGING) 450 NOTE: PWMIR IS CALCULATED ACCORDING TO EQUATIONS FOUND IN CCR, TITLE 17, SECTION 94521 (A). ASTIC TEXTURE COATINGS REACTIVE ORGANIC COMPOUND (ROC). ANY COMPOUND THAT HAS THE POTENTIAL, ONCE EMITTED, TALLIC PIGMENTED COATINGS CONTRIBUTE TO OZONE FORMATION IN THE TROPOSPHERE LTICOLOR COATINGS 250 VOC. A VOLATILE ORGANIC COMPOUND (VOC) BROADLY DEFINED AS A CHEMICAL COMPOUND BASED RETREATMENT WASH PRIMERS ON CARBON CHAINS OR RINGS WITH VAPOR PRESSURES GREATER THAN 0.1 MILLIMETERS OF RIMERS, SEALERS, & UNDERCOATERS MERCURY AT ROOM TEMPERATURE. THESE COMPOUNDS TYPICALLY CONTAIN HYDROGEN AND MAY EACTIVE PENETRATING SEALERS CONTAIN OXYGEN, NITROGEN AND OTHER ELEMENTS. SEE CCR TITLE 17, SECTION 94508(A) CYCLED COATINGS 4.503 FIREPLACES 4.503.1 GENERAL. ANY INSTALLED GAS FIREPLACE SHALL BE A DIRECT-VENT SEALED-COMBUSTION YPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH U.S. EPA NEW SOURCE UST PREVENTATIVE COATINGS 250 PERFORMANCE STANDARDS (NSPS) EMISSION LIMITS AS APPLICABLE, AND SHALL HAVE A PERMA TS SHAL HELLACS ABEL INDICATING THEY ARE CERTIFIED TO MEET THE EMISSION LIMITS. WOODSTOVES, PELLET TOVES AND FIREPLACES SHALL ALSO COMPLY WITH APPLICABLE LOCAL ORDINANCES 1WELO), 4,504 POLLUTANT CONTROL ECIALTY PRIMERS, SEALERS & UNDERCOATERS 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CALIFORNIA 🖾 🗖 O OR C CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION. DURING STORAGE ON THE CONSTRUCTION UMENTS SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT GOV/ TONE CONSOLIDANTS ND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, VIMMING POOL COATINGS URCE PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUC RAFFIC MARKING COATINGS THE AMOUNT OF WATER, DUST OR DEBRIS WHICH MAY ENTER THE SYSTEM. UB & TILE REFINISH COATINGS 4.504.2 FINISH MATERIAL POLLUTANT CONTROL. FINISH MATERIALS SHALL COMPLY WITH THIS TERPROOFING MEMBRANES 4.504.2.1 ADHESIVES, SEALANTS AND CAULKS. ADHESIVES, SEALANT AND CAULKS USED ON THE OORC OOD COATINGS AINST TH PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS UNLESS MORE 1ASONF OD PRESERVATIVES STRINGENT LOCAL OR REGIONAL AIR POLLUTION OR AIR QUALITY MANAGEMENT DISTRICT RULES C-RICH PRIMERS 1. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALAN GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT MUM (OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE OR SCAOMD RULE 1168 OLUMNS IN THE TABLE VOC LIMITS, AS SHOWN IN TABLE 4.504.1 OR 4.504.2, AS APPLICABLE. SUCH PRODUCTS ALSO VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALLEORNIA AIR RESOURCE RUCTION SHALL COMPLY WITH THE RULE 1168 PROHIBITION ON THE USE OF CERTAIN TOXIC DARD ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE FEB 1 2008 MORE INFORMAT COMPOUNDS (CHLOROFORM, ETHYLENE DICHLORIDE, METHYLENE CHLORIDE S AVAILABLE FROM THE AIR RESOURCES BOARD. PERCHLOROETHYLENE AND TRICLOROETHYLENE), EXCEPT FOR AEROSOL PRODUCTS, AS SPECIFIED IN SUBSECTION 2 BELOW. 2. AEROSOL ADHESIVES, AND SMALLER UNIT SIZES OF ADHESIVES, AND SEALANT OR CAULKING COMPOUNDS (IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH TABLE 4.504.5 - FORMALDEHYDE LIMITS ENCIES IF EXIST OR IMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLIO MORE THAN 1 POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL SECTION PRODUCT CURRENT LIMIT COMPLY WITH STATEWIDE VOC STANDARDS AND OTHER REQUIREMENTS, INCLUDING ΉE PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS, OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94507. 4.504.2.2 PAINTS AND COATINGS. ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH ARDWOOD PLYWOOD VENEER CORE 0.05 ARDWOOD PLYWOOD COMPOSITE CORI 0.05 AGEMEN VOC LIMITS IN TABLE 1 OF THE ARB ARCHITECTURAL SUGGESTED CONTROL MEASURE, AS SHOWN 0.09 PARTICLE BOARD NT PLAN N TABLE 4.504.3, UNLESS MORE STRINGENT LOCAL LIMITS APPLY. THE VOC CONTENT LIMIT FOR MEDIUM DENSITY FIBERBOARD 0.11 COATINGS THAT DO NOT MEET THE DEFINITIONS FOR THE SPECIALTY COATINGS CATEGORIES IN MEDIUM DENSITY FIBERBOARD2 0.13 ISTED IN TABLE 4.504.3 SHALL BE DETERMINED BY CLASSIFYING THE COATING AS A FLAT, NONFLAT OR NONFLAT-HIGH GLOSS COATING, BASED ON ITS GLOSS, AS DEFINED IN SUBSECTIONS 4.21, 4.36, AND 4.37 OF THE 2007 CALIFORNIA AIR RESOURCES BOARD, SUGGESTED CONTROL MEASURE, AND THE CORRESPONDING FLAT, NONFLAT OR NONFLAT-HIGH GLOSS VOC LIMIT IN TABLE 4.504.3 SHALL APPLY. FROM VALUES IN THIS TABLE ARE DERIVE HOSE SPECIFIED BY THE CALLE AIR RESOURC TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333 OR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 🖾 🗖 0 OR C 4.504.2.3 AEROSOL PAINTS AND COATINGS. AEROSOL PAINTS AND COATINGS SHALL MEE THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM). PRODUCT-WEIGHTED MIR LIMITS FOR ROC IN SECTION 94522(A)(2) AND OTHER REQUIREMENTS, 4.504.3 CARPET SYSTEMS. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS AND OZONE DEPLETING SUBSTANCES, IN SECTIONS 94522(E)(1) AND (F)(1) OF CALIFORNIA CODE OF REGULATIONS, TITLI 17, COMMENCING WITH SECTION 94520; AND IN AREAS UNDER THE JURISDICTION OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT ADDITIONALLY COMPLY WITH THE PERCENT VOC BY REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD F<mark>OR T</mark>HE STING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES ING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR WEIGHT OF PRODUCT LIMITS OF REGULATION 8, RULE 49. ALIFORNIA SPECIFICATION 01350) 4.504.2.4 VERIFICATION. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED EE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND AT THE REQUEST OF THE ENFORCING AGENCY. DOCUMENTATION MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING: STINGLABS TPS://WWW.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAO/PAGES/VOC ASPX 1. MANUFACTURER'S PRODUCT SPECIFICATION. FION AN 2. FIELD VERIFICATION OF ON-SITE PRODUCT CONTAINE TABLE 4.504.1 - ADHESIVE VOC LIMIT_{1,2} 4.504.3.1 CARPET CUSHION. ALL CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALI 🔀 🗖 0 0 R MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STA METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM S WAT<mark>ER AN</mark>D LES<mark>S EXEM</mark>PT COMPOUNDS IN GRAMS PER LITER) INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS." VERSION 1.2, JANUARY 201 WHICH (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350) ARCHITECTURAL APPLICATIONS VOC LIMIT SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS DOOR CARPET ADHESIVES AND TESTING LABS. HTTPS://WWW.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAGES/VOC.ASPX. RPET PAD ADHESIVES ET TH UTDOOR CARPET ADHESIVE 4.504.3.2 CARPET ADHESIVE. ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE WOOD FLOORING ADHESIVE 4.504.1. Y WHICH RUBBER FLOOR ADHESIVES 🔀 🗖 0 0 R C .504.4 RESILIENT FLOORING SYSTEMS. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80% O SUBFLOOR ADHESIVES LOOR AREA RECEIVING RESILIENT FLOORING SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA CERAMIC TILE ADHESIVES FPARTMENT OF PUBLIC HEALTH. "STANDARD METHOD FOR THE TESTING AND EVALUATION OF S CODE 50 OLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL **/CT & ASPHALT TILE ADHESIVES** HAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION RYWALL & PANEL ADHESIVES OVE BASE ADHESIVES 70 SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND MULTIPURPOSE CONSTRUCTION ADHESIVE ESTING LABS FRUCTURAL GLAZING ADHESIVES 100 HTTPS://WWW.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/JAQ/PAGES/VOC.ASPX. SINGLE-PLY ROOF MEMBRANE ADHESIVES 🖾 🗖 0 OR C 4.504.5 COMPOSITE WOOD PRODUCTS. HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY 50 THER ADHESIVES NOT LISTED BERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE SPECIALTY APPLICATIONS UILDINGS SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS ONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.), BY OR BEFORE THE DATES C WELDING PECIFIED IN THOSE SECTIONS, AS SHOWN IN TABLE 4,504,5 4.504.5.1 DOCUMENTATION. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE CPVC WELDING 🖾 🗖 O OR C EMS, HVAC PROVIDED AS REQUESTED BY THE ENFORCING AGENCY. DOCUMENTATION SHALL INCLUDE AT ABS WELDING LEAST ONE OF THE FOLLOWING PLASTIC CEMENT WELDING . PRODUCT CERTIFICATIONS AND SPECIFICATIONS. ADHESIVE PRIMER FOR PLASTIC 2. CHAIN OF CUSTODY CERTIFICATIONS. 3. PRODUCT LABELED AND INVOICED AS MEETING THE COMPOSITE WOOD PRODUCTS CONTACT ADHESIVE REGULATION (SEE CCR, TITLE 17, SECTION 93120, ET SEQ.). 4. EXTERIOR GRADE PRODUCTS MARKED AS MEETING THE PS-1 OR PS-2 STANDARDS O SPECIAL PURPOSE CONTACT ADHESIVE METHODS THE ENGINEERED WOOD ASSOCIATION, THE AUSTRALIAN AS/NZS 2269, EUROPEAN 636 3S STRUCTURAL WOOD MEMBER ADHESIVE STANDARDS, AND CANADIAN CSA 0121, CSA 0151, CSA 0153 AND CSA 0325 STANDARDS. OP & TRIM ADHESIVE 5. OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY. SUBSTRATE SPECIFIC APPLICATIONS 4.505 INTERIOR MOISTURE CONTROL 4.505.1 GENERAL. BUILDINGS SHALL MEET OR EXCEED THE PROVISIONS OF THE CALIFORNIA ETAL TO METAL BUILDING STANDARDS CODE. LASTIC FOAMS 4.505.2 CONCRETE SLAB FOUNDATIONS. CONCRETE SLAB FOUNDATIONS REQUIRED TO HAVE A POROUS MATERIAL (EXCEPT WOOD) VAPOR RETARDER BY CALIFORNIA BUILDING CODE, CHAPTER 19, OR CONCRETE SLAB-ON-GROUND FLOORS REQUIRED TO HAVE A VAPOR RETARDER BY THE CALIFORNIA RESIDENTIAL CODE, BERGLASS APTER 5. SHALL ALSO COMPLY WITH THIS SECTION. 1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE 4.505.2.1 CAPILLARY BREAK. A CAPILLARY BREAK SHALL BE INSTALLED IN COMPLIANCE WITH HIGHEST VOC CONTENT SHALL BE ALLOWED. 2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED I T LEAST ONE OF THE FOLLOWIN AGENC A 4-INCH (101.6 MM) THICK BASE OF 1/2 INCH (12.7MM) OR LARGER CLEAN AGGREGATE HIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168. SHALL BE PROVIDED WITH A VAPOR BARRIER IN DIRECT CONTACT WITH CONCRETE AND INTENANCE CONCRETE MIX DESIGN, WHICH WILL ADDRESS BLEEDING, SHRINKAGE, AND CURLING, SHALL BE USED. FOR ADDITIONAL INFORMATION, SEE AMERICAN CONCRETE INSTITUTE, ACI 302.2R-06. TABLE 4.504.2 - SEALANT VOC LIMIT RCEMENTS S WATER AND LESS EX 2. OTHER EQUIVALENT METHODS APPROVED BY THE ENFORCING AGENCY. 3. A SLAB DESIGN SPECIFIED BY A LICENSED DESIGN PROFESSIONAL. **VOC LIMIT** SEALANTS ARCHITECTURAL 4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL NOT BE ARINE DECK ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19 PERCENT MOISTURE CONTENT. MOISTURE ONMEMBRANE ROOF CONTENT SHALL BE VERIFIED IN COMPLIANCE WITH THE FOLLOWING: 1. MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE-TYPE OR VITH THE CONTACT-TYPE MOISTURE METER. EQUIVALENT MOISTURE VERIFICATION METHODS MAY BE SINGLE-PLY ROOF MEMBRANE APPROVED BY THE ENFORCING AGENCY AND SHALL SATISFY REQUIREMENTS FOUND IN SECTION 101.8 OF THIS CODE 2. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2 FEET (610 MM) TO 4 FEET (1219 MM) FROM THE GRADE STAMPED END OF EACH PIECE VERIFIED. SEALANT PRIMERS 3. AT LEAST THREE RANDOM MOISTURE READINGS SHALL BE PERFORMED ON WALL AND LOOR FRAMING WITH DOCUMENTATION ACCEPTABLE TO THE ENFORCING AGENCY PROVIDED NON-POROUS AT THE TIME OF APPROVAL TO ENCLOSE THE WALL AND FLOOR FRAMING. POROUS 775 INSULATION PRODUCTS WHICH ARE VISIBLY WET OR HAVE A HIGH MOISTURE CONTENT SHALL BE MODIFIED BITUMINOUS 500 REPLACED OR ALLOWED TO DRY PRIOR TO ENCLOSURE IN WALL OR FLOOR CAVITIES. MARINE DECK WET-APPLIED INSULATION PRODUCTS SHALL FOLLOW THE MANUFACTURERS' DRYING RECOMMENDATIONS PRIOR TO ENCLOSURE





FLOOR PLAN



GLAZING SCHEDULE:

	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	A OF FRESH
	C 4-0 1-0 0.30 0.23 D 3'-0" 0 0 0.30 0.23 E 0 0 0 0 0 ABBRE VIATIONS TYPE DETAIL OR COMMENT SL = DOUBLE SLIDER 1. GLAZING TYPE MUST MATCH THE EXISTING PRIMARY RESIDENCE GLAZING TYPE. (I.E.)	*
	SH = SINGLE HUNG EXISTING PRIMARY RESIDENCE HAS SINGLE HUNG THEN PROPOSED ADU MUST HAVE FX = FIXED SINGLE HUNG. RT = RECTANGLE TRANSOM 2. AT COMTEMPORARY OPTION ONLY. GLASS CL = CLEAR GLASS FG = FROSTED GLASS FG = FROSTED GLASS	NCOR SEA
	GLAZING NOTES : 1. ALL GLASS AND GLAZING SHALL COMPLY WITH APPLICABLE CODES AND MUST BE LABELED SAFETY GLAZING AT HAZARDOUS LOCATIONS DEFINED AS: GLAZING AT ALL DOORS, BATH & SHOWER ENCLOSURES, GLAZING WITHIN A 24" ARC OF A DOOR EDGE, PANELS OVER (9) SQUARE FEET WITH THE LOWEST EDGE LESS THAN 18" A.F.F. AND HAVING A TOP EDGE GREATER THAN 36" A.F.F., GLAZING LOCATED WITHIN 5'-0" FROM TOP OR BOTTOM OF STAIRWAY WITH BOTTOM EDGE LESS THAN 60" A.F.F.	ORATED OCT.
-0	 ALL EXTERIOR GLAZING SHALL BE DUAL-GLAZED UNLESS OTHERWISE NOTED. UNIT SKYLIGHTS SHALL BE TESTED AND APPROVED BY AN APPROVED INDEPENDENT LABORATORY, AND BEAR A LABEL IDENTIFYING MANUFACTURER, PERFORMANCE GRADE RATING AND APPROVED INSPECTION AGENCY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF AAMAWDMA/CSA010/I.S.2/A440. (R 308.6.9) SKYLIGHTS AND SLOPED GLAZING SHALL COMPLY WITH SECTION (R 308.6) EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS IN ACCORDANCE WITH SECTION R 303.1 OR SHALL BE PROVIDED WITH ARTIFICIAL 	PLANNING AND DEVELOPMENT DEPARTMENT FRESNO CITY HALL
R	 LIGHT THAT IS ADEQUATE TO PROVIDE AN AVERAGE ILLUMINATION OF 6 FOOT-CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL. (R 303.1) GLAZING IN THE FOLLOWING LOCATIONS SHALL BE SAFETY GLAZING CONFORMING TO THE HUMAN IMPACT LOADS OF SECTION R 308.3 (SEE EXCEPTIONS) (R 308.4). A. FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLD DOOR ASSEMBLIES. B. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE. 	2600 FRESNO STREET THIRD FLOOR FRESNO, CA. 93721-3600 559-621-8084 darm.building@fresno.gov
	 C. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS: 1.) EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET. 2.) BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR. 3.) TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR. 4.) ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE GLAZING. D. GLAZING IN RAILINGS. E. GLAZING IN ENCLOSURES FOR OR WALLS FACING HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY 	© 2023 CITY OF FRESNO THESE DRAWINGS, DESIGNS SKETCHES, IDEAS, DOCUMENTS, PLANS, ARRANGEMENTS, AND OTHER INFORMATION CONTAINED THEREIN, ARE THE SOLE AND EXCLUSIVE PROPERTY OF CITY OF FRESNO. THESE DOCUMENTS ARE DELIVERED AND ACCEPTED BY YOU IN TRUST AND ON THE EXPRESS CONDITION THAT NEITHER THESE DOCUMENTS OR THE INFORMATION CONTAINED THEREIN WILL BE THEREIN WILL BE COPIED, REPRODUCED, OR DELIVERED TO OTHERS, EXCEPT AS SPECIFICALLY INSTRUCTED BY CITY OF EPESNO
	ABOVE ANY STANDING OR WALKING SURFACE. F. GLAZING IN WALLS AND FENCE ADJACENT TO INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE AND WITHIN 60 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE WATER'S EDGE. G. GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS. H. GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD.	PROJECT: ACCESSORY
III	DOOR SCHEDULE: SYMBOL WIDTH HEIGHT THICK MATERIAL FINISH TYPE CORE FRAME DETAIL OR COMMENT A 3'-0" 6'-8" •	DWELLING UNIT (TADII-003)
D	F 2'-6" 6'-8" Image: Constant const	PLAN 3
	 EGRESS, EXITS, & STAIRWAY NOTES: THE MEANS OF EGRESS SHALL PROVIDE A CONTINUOUS AND UNOBSTRUCTED PATH OF VERTICAL AND HORIZONTAL EGRESS TRAVEL FROM ALL PORTIONS OF THE DWELLING TO THE EXTERIOR OF THE DWELLING AT THE REQUIRED EGRESS DOOR WITHOUT REQUIRING TRAVEL THROUGH A GARAGE. THE REQUIRED EGRESS DOOR SHALL OPEN DIRECTLY INTO A PUBLIC WAY OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY. (R 311.1) AT LEAST ONE DOOR SHALL BE 36" WIDE BY 80" HIGH. (R 311.2) PROVIDE MINIMUM 32" WIDE DOORS TO ALL INTERIOR ACCESSIBLE ROOMS. (R 311.2) THE ENTRY/EXIT DOOR MUST OPEN OVER A LANDING NOT MORE THAN 1.5" BELOW THE THRESHOLD. EXCEPTION: PROVIDING THE DOOR DOES NOT SWING OVER THE LANDING. LANDING SHALL BE NOT MORE THAN 7.75" BELOW THE THRESHOLD, STORM AND SCREEN DOORS ARE PERMITTED TO SWING OVER ALL EXTERIOR STAIRS AND LANDINGS. (R 311.3.1) ANDING AT A DOOR SHALL HAVE A LENGTH MEASURED IN THE DIRECTION OF TRAVEL OF NO LESS THAN 36" (P 311.3) 	
	 A LANDING SHALL BE PROVIDED AT THE TOP AND BOTTOM OF STAIRWAYS. (R 311.7.6) STAIRWAY DETAILS : A. 7.75" MAXIMUM RISE & MINIMUM 10" RUN. (R 311.7.5) B. MINIMUM 6'-8" HEADROOM CLEARANCE. (R 311.7.2) 	REVISIONS DATE
	 C. MINIMUM 36" CLEAR WIDTH. (R 311.7.1) D. HANDRAILS 34" TO 38" HIGH ABOVE TREAD NOSING (R 311.7.8.1) E. HANDGRIP PORTION OF HANDRAIL SHALL NOT BE LESS THAN 1.25" AND NO MORE THAN 2" CROSS- SECTIONAL DIMENSION HAVING A SMOOTH SURFACE WITH NO SHARP CORNERS. (R 311.7.8.5) 	
	 MAXIMUM 4 CLEAR SPACING OPENING BETWEEN RAILS. (R 312.1.3) ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE ILLUMINATED. (R 303.7) FOR GLASS HANDRAILS AND GUARDS, THE PANELS AND THEIR SUPPORT SYSTEM SHALL BE DESIGNED TO WITHSTAND THE LOADS SPECIFIED IN CHAPTER 16 OF CBC. A SAFETY FACTOR OF FOUR SHALL BE USED. THE MINIMUM NOMINAL THICKNESS OF THE GLASS SHALL BE 1/4 INCH. (CBC 2407) PROVIDE EMERGENCY EGRESS FROM SLEEPING ROOMS AND BASEMENTS. SHOW DETAILS ON PLANS. MINIMUM - 24" CLEAR HEIGHT, 20" CLEAR WIDTH, 5.7 SF MINIMUM AREA (5.0 SF AT GRADE LEVEL) & 44" MAXIMUM TO SILL. (R 310.2.1) ENCLOSED ACCESSIBLE SPACE LINDER STAIR SHALL HAVE WALLS. LINDER-STAIR SUBFACE AND ANY SOFEITS 	
	PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH GYPSUM BOARD. (R302.7)	
	 SHOWER OR TUB: BRAND AND MODEL NUMBER SHALL BE PROVIDED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. FIXTURE MUST MEET FLOW RATE REQUIREMENTS OF THE CGBSC. SEE PLUMBING PLAN FOR ADDITIONAL INFORMATION. WATER CLOSET: BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. FIXTURE MUST MEET FLOW RATE REQUIREMENTS OF THE CGBSC. SEE PLUMBING PLAN FOR 	CITY USE ONLY
	 ADDITIONAL INFORMATION. 3. BATH LAVATORY: BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. FIXTURE MUST MEET FLOW RATE REQUIREMENTS OF THE CGBSC. SEE PLUMBING PLAN FOR ADDITIONAL INFORMATION. 4. KITCHEN SINK: BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO 	
	 INSTALLATION. FIXTURE MUST MEET FLOW RATE REQUIREMENTS OF THE CGBSC. SEE PLUMBING PLAN FOR ADDITIONAL INFORMATION. WATER HEATER: BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. MODEL SELECTED MUST MEET TITLE 24 REQUIREMENTS. SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION. WASHER STACKED UNIT: BRAND NAME AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR 	
	 TO INSTALLATION. VERIFY MODEL'S DIMENSION PRIOR TO INSTALLATION. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION. ELECTRIC RANGE: BRAND NAME AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. VERIFY MODEL'S DIMENSION PRIOR TO INSTALLATION AND COORDINATE WITH CABINET CONTRACTOR'S SHOP DRAWINGS. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION. 	
	 REFRIGERATOR: BRAND NAME AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. VERIFY MODEL'S DIMENSION PRIOR TO INSTALLATION AND COORDINATE WITH CABINET CONTRACTOR'S SHOP DRAWINGS. SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION. HIGH WALL INDOOR UNIT: BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. MODEL SELECTED MUST MEET TITLE 24 REQUIREMENTS. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION. 	
	 GROUND MOUNTED CONDENSING UNIT. BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. MODEL SELECTED MUST MEET TITLE 24 REQUIREMENTS. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION. ATTIC ACCESS: 22"X30" ATTIC ACCESS W/ 30" HEADROOM SHALL BE WEATHER-STRIPPED AND INSULATED EQUIVALENT TO THAT OF THE CEILING AND SHALL BE INSTALLED ON THE ACCESS PANEL. SEE DETAIL X/A.X FOR ADDITIONAL INFORMATION 	r l
	 BASE CABINET: CABINET CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR OWNERS APPROVAL PRIOR TO BUILDING AND INSTALLATION OF CABINET. OVERHEAD CABINET OVER BASE: CABINET CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR OWNERS APPROVAL PRIOR TO BUILDING AND INSTALLATION OF CABINET. OVERHEAD CABINET OVER REFRIGERATOR: CABINET. 	
	APPROVAL PRIOR TO BUILDING AND INSTALLATION OF CABINET. 16. CONCRETE LANDING: 3-1/2" CONCRETE LANDING W/ BROOM FINISH AND SLOPE AWAY FROM BUILDING. SEE FOUNDATION PLAN FOR ADDITIONAL INFORMATION.	FLOOR PLAN (WITH PORCH OPTION)
		JOB# : TADU-003 DATE: 13-Apr-23 SCALE: AS NOTED DRAWN BY: IRG









HEADER/BEAM SCHEDULE:	
SYMBOL HEADER/BEAM SIZE & GRADE	OF FR
H1 6X8 D.F.#2	A UT REC.
H2 4X6 D.F.#2 H3 4X8 D.F.#2	
RB1 6X8 D.F.#2	C Ser O
RB2 6X10 D.F.#2	
ROOF SHEATHING:	
1/2" CDX PLYWOOD(OR 7/16" 24/16 O.S.B.)PSR. 24/00 NAILING (8D COMMONS OR 10D SINKERS) SEE DETAIL	
$\begin{array}{c c} \hline \\ \hline $	
FIELD 12 IN O.C. SHEATHING NOTES:	
 MAXIMUM SIZE OF OPENING IN HORIZONTAL DIAPHRAGM NOT TO EXCEED 24" WITHOUT BLOCKING. PLYWOOD ROOF DIAPHRAGM SHALL BE CONTINUOUS BELOW ALL CALIFORNIA FILL FRAMING. ENTIRE PERIMETER SHALL BE BLOCKED 	0
 PROVIDE 1/8" GAP AT ALL PANEL EDGES. PLYWOOD SHEET USED IN THE CONSTRUCTION OF DIAPHRAGMS SHALL BE NOT LESS THAN 4'X8' IN SIZE. MUNIMUM SIZE SUPERT AT POLINIPARIAD CHANGES IN FRAMING SHALL BE 24" JUNI FOR PLOCKED. 	ATED OCT.
 MILINITUM STALL SHEET AT BOUNDARIES AND CHANGES IN FRAMING SHALL BE 24, UNLESS BLOCKED. B. NAIL SIZE, SPACING, AND TYPE PER ABOVE UNLESS NOTED OTHERWISE. ALL PLYWOOD SHALL BE GRADE-STAMPED A.P.A. AND FOLLOWING MINIMUM GRADES SHALL APPLY TO WOOD 	LDO
STRUCTURAL PANELS UNLESS SHOWN OTHERWISE ON THE DRAWINGS: A. ROOF SHEATHING SHALL BE INTERIOR GRADE WITH EXTERIOR GLUE EXTERIOR OF ALL AND	
B. EXPOSED SHEATHING SHALL BE EXPOSURE FOR CCX EXTERIOR GRADE AT EXPOSED AREA'S WITH EXTERIOR GLUE WALL SHEATHING SHALL BE INTERIOR GRADE WITH EXTERIOR GLUE.	PLANNING AND DEVELOPMEN
WALL LEGEND:	FRESNO CITY HALL
SYMBOL DESCRIPTION	2600 FRESNO STREET
HATCH WALLS: HATCH WALLS DENOTES BEARING WALL. SEE FOUNDATION PLAN FOR ADDITIONAL INFORMATION.	
NON-BEARING WALLS: NON-BEARING WALLS. SEE FLOOR PLANS WALL LEGEND FOR ADDITIONAL INFORMATION.	559-621-8084
WALL FRAMING NOTES: 1. PROVIDE CONTINUOUS STUDS AT ALL LOCATIONS WHERE THERE IS NO LATERAL SUPPORT AT 8' PLATE HEIGHT.	darm.building@fresno.gov
2. FINGER JOINTED STUDS IN STRUCTURAL WALLS(BEARING OR SHEAR) MUST BE GRADE STAMPED BY AN APPROVED ICC INSPECTION AGENCY AND CLEARLY SPECIFIED ON PLANS, AND ARE NOT ALLOWED AT HOLDOWN	
 ALL LUMBER SHALL BE GRADE MARKED, DOUGLAS FIR STANDARD OR BETTER MINIMUM EXCEPT AS NOTED ON PLANS. 	I HESE DRAWINGS, DESIGNS SKETCHES, IDEAS, DOCUMENTS, PLANS, ARRANGEMENTS, AND OTHER INFORMATION CONTAINED THEREIN, ARE TH SOLE AND EXCLUSIVE PROPERTY OF CITY OF FRESNO. THESE DOCUMENT
 ALL COLUMNS TO BE DOUGLAS FIR NO.2 IN COMBUSTIBLE CONSTRUCTION, FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (POTITIVE TO THE PROVIDED TO CUT OFF ALL CONCEALED DRAFT) 	CONDITION THAT NEITHER THESE DOCUMENTS OR THE INFORMATION CONTAINED THEREIN WILL BE THEREIN WILL BE COPIED, REPRODUCED, OF DELIVERED TO OTHERE OF THE OFFICIENT AS OFFICIENT AS OFFICIENTS
AND BETWEEN A TOP STORY AND THE ROOF SPACE. (R 302.11) PROVIDE FIRE BARRIER BETWEEN STORIES, INTERVALS AND AT ALL FLOOR AND CEILING LEVELS.	FRESNO.
6. USE THE FOLLOWING LUMBER GRADES OR BETTER, UNLESS OTHERWISE NOTED: A. SILL PLATES, FOUND. GRD. RWD. OR P.T. DOUG FIR	PROJECT:
B. VERTICAL FRAMING STUDS DOUG. FIR STUD GRADE C. POSTS DOUG FIR STUD OR BETTER D. TOP PLATES DOUG FIR STUD OR BETTER	VULLE VULLE
E. CEILING JOIST DOUG. FIR NO.2 OR BETTER F. RAFTERS, RIDGES, HIPS DOUG. FIR NO.2 OR BETTER	
G. HEADERS DOUG. FIR CONSTRUCTION GRD. OR BETTER H. EXPOSED BEAMS/OUTRIGGERS ARCH. GRD. D.F. (RSN. IF NOTED)	
J. FASCIA WINDOW FRAMES KILN DRIED CLR. HEMLOCK/RSN. FACE K. BRACING, BACKING, PURLING DOUG. FIR STANDARD OR BETTER	
L. SPACED ROOF SHEATHING DOUG. FIR STANDARD OR BETTER M. SOLID "V" RUSTIC EAVES NO.2 OR BETTER, PINE OR BETTER N. 2X6 T&C CEUING NO.1 WHITE EID BESAMM FACE	
 REDWOOD SIDING CEDAR RWD. SQUARE OF "V" GROOVED P. EXTERIOR TRIM CLEAR RWD. OR APPEARANCE GRD. DOUG. FIR OR HEMLOCK. RESAWN FACF 	
Q. DOOR JAMBS, CASINGS, MOULDINGS CLEAR DOUG. FIR OR PINE R. SHELVING 3/4" PLYWOOD WITH HARDWOOD EDGE	
 SILLS, SLEEPERS, PLATES, ETC. ON MASONRY OR CONCRETE. THAT IS IN DIRECT CONTACT WITH EARTH SHALL BE FOUNDATION GRADE & REDWOOD OR PRESSURE TREATED DOUGLAS FIR. THE OPENING AROUND GAS VENTS, DUCTS, PIPES, CHIMNEYS, AND FIREPLACES AT THE CEILING LEVEL SHALL BE 	
FIREBLOCKED WITH NONCOMBUSTIBLE MATERIALS. 9. GREEN VINYL SINKERS DO NOT MEET THE NAILING REQUIREMENTS FOR MOST BOX AND COMMON NAIL	
	- PLAN 3
ROOF VENTILATION CALCULATIONS.	
ROOF AREA OF: GABLE/CRAFTSMAN	_
ATTIC SPACE	—
AREA X 144 SQUARE INCHES REQUIRED 300	
QUANITY SIZE TYPE NET AREA PROVIDED	
3 LOW PROFILE UPPER VENTILATION GALVANIZED LOW PROFILE DORMER 129	
402 UPPER VENTILATION 120	
502 UPPER VENTILATION 150 6 3.1/2"X22.1/2" LOWER VENTILATION GAL VANIZED FAVE VENT (33.SO IN.) 198	_
TOTAL ATTIC VENTILATION 327	-
ROOF AREA OF: GABLE/CRAFTSMAN W/PORCH OPTION	
CALCULATION FACTOR ATTIC SPACE AREA 695	REVISIONS
ATTIC SPACE AREA X 144 SQUARE INCHES REQUIRED 336	NO. DESCRIPTION DATE
OUANITY SIZE TYPE NET AREA	$\frac{1}{1} \int_{1} \left -\text{Truss framing option for gable & Craftsman} \right _{08/22/2}$
4 LOW PROFILE UPPER VENTILATION GALVANIZED LOW PROFILE DORMER 172	
VENT (43 SQ.IN.) 172 40% UPPER VENTILATION 134	-
50% UPPER VENTILATION 168	
50% UPPER VENTILATION 168 6 3 1/2"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198	
6 3 1/2"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION 370	
502 UPPER VENTILATION 168 6 3 1/2"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION 370	
502 UPPER VENTILATION 168 6 3 1/2"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION OTAL ATTIC VENTILATION 370 ROOF TRUSS NOTES: 1. PRE MANUFACTURED ROOF TRUSSES AT 24" O.C. PROVIDE 1X4 HORIZONTAL BRACING AT 10-0" O.C. TO TOP OF BOTTOM CHORD. 2. SEE TRUSS DIAGRAMS ATTACHED FOR ALL HORIZONTAL AND VERTICAL BRACING RECOMENTS AS DED	CITY USE ONLY
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502 UPPER VENTILATION 168 6 3 1/2"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION OTAL ATTIC VENTILATION 370 ROOF TRUSS NOTES: 1. PRE MANUFACTURED ROOF TRUSSES AT 24" O.C. PROVIDE 1X4 HORIZONTAL BRACING AT 10'-0" O.C. TO TOP OF BOTTOM CHORD. 2. SEE TRUSS DIAGRAMS ATTACHED FOR ALL HORIZONTAL AND VERTICAL BRACING REQUIREMENTS AS PER MANUFACTURER RECOMMEND ACTIONS. 3. PROVIDE SOLID BLOCKING AT TRUSS BEARING POINTS. 4. APPROVED TRUSS DRAWING MUST BE ON JOB SITE FOR INSPECTION PURPOSES. 5. ALL TRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION BY AN APPROVED AGENCY.	CITY USE ONLY
502 UPPER VENTILATION 168 6 3 1/2"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION OTAL ATTIC VENTILATION 370 ROOF TRUSSES NOTES: 1. PRE MANUFACTURED ROOF TRUSSES AT 24" O.C. PROVIDE 1X4 HORIZONTAL BRACING AT 10"-0" O.C. TO TOP OF BOTTOM CHORD. SEE TRUSS DIAGRAMS ATTACHED FOR ALL HORIZONTAL AND VERTICAL BRACING REQUIREMENTS AS PER MANUFACTURER RECOMMEND ACTIONS. 3. PROVIDE SOLID BLOCKING AT TRUSS BEARING POINTS. A APPROVED TRUSS DRAWING MUST BE ON JOB SITE FOR INSPECTION PURPOSES. 5. ALL TRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION BY AN APPROVED AGENCY.	CITY USE ONLY
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502 UPPER VENTILATION 168 6 3 1/2*22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION 370 ROODE TRUSSES NOTES: 1. PRE MANUFACTURED ROOF TRUSSES AT 24* O.C. PROVIDE 1X4 HORIZONTAL BRACING REQUIREMENTS AS PER MANUFACTURER RECOMMEND ACTIONS. 2. SEE TRUSS DIAGRAMS ATTACHED FOOR ALL HORIZONTAL AND VERTICAL BRACING REQUIREMENTS AS PER MANUFACTURER RECOMMEND ACTIONS. 2. PROVIDE SOLID BLOCKING AT TRUSS BEARING POINTS. 3. APPROVED TRUSS DEAVING MUSS BEARING POINTS. 3. APPROVED TRUSS DEAVING MUSS BEARING POINTS. 3. ALL TRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION PURPOSES. 5. ALL TRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION BY AN APPROVED AGENCY.	DRAWING TITLE: ROOF FRAMING PLAN & BUILDING SECTIONS FOR
502 UPPER VENTILATION 168 6 3 1/2722 1/2* LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION 370 ROODE TRUSSES NOTES: 1. PRE MANUFACTURED ROOF TRUSSES AT 24* 0.C. PROVIDE 1X4 HORIZONTAL BRACING AT 10*0* 0.C. TO TOP OF BOTTOM CHORD. SET RUSS DIAGRAMS ATTACHED FOR ALL HORIZONTAL AND VERTICAL BRACING REQUIREMENTS AS PER MANUFACTURER RECOMMEND ACTIONS. A PROVIDE SOLID BLOCKING AT TRUSS BEARING POINTS: A APPROVED TRUSS DIAVING MUST BE CON JOB SITE FOR INSPECTION PURPOSES. 3. ALL TRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION BY AN APPROVED AGENCY. PROVIDE SIMPSON' H1 PROVIDE SIMPSON' H1 OUBLE TOP PLATE BOUDE SIMPSON' H1 OUBLE TOP PLATE OUBL	DRAWING TITLE: ROOF FRAMING PLAN & BUILDING SECTIONS FOR GARLE &
502 UPPER VENTILATION 168 6 3 12"X22 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 TOTAL ATTIC VENTILATION 370 REOCONTRUSS NOTES: 1. PRE MANUFACTURED ROOF TRUSSES AT 24" 0.C. PROVIDE 1X4 HORIZONTAL BRACING AT 10*0" O.C. TO TOP OF 000TOM CHORD. SEE TRUSS DIAGRAMS ATTACHED FOR ALL HORIZONTAL AND VERTICAL BRACING REQUIREMENTS AS PER MANUFACTURER RECOMMEND ACTIONS. . PROVIDE SIME SOLD BLOCKING AT TRUSS BEARING POINTS. . PROVIDE SIME SOLD BLOCKING AT TRUSS BEARING POINTS. . APPROVED TRUSS DRAWING MUST BE ON JOB SITE FOR INSPECTION PURPOSES. . ALL TRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION BY AN APPROVED AGENCY.	DRAWING TITLE: ROOF FRAMING PLAN & BUILDING SECTIONS FOR GABLE & CDAETCHANL (TDUC)
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502 UPPER VENTILATION 168 6 31/27321/2* LOWER VENTILATION GALVANIZED BAVE VENT (33 SQ.IN) 199 TOTAL ATTIC VENTILATION 370 RECOVER TRUSSES AT 24* 0.C. PROVIDE 1X4 HORIZONTAL BRACING AT 10*0* 0.C. TO TOP OF BOURD CHORON 1 PRE MANUFACTURED ROOF TRUSSES AT 24* 0.C. PROVIDE 1X4 HORIZONTAL BRACING REQUIREMENTS AS PER MANUFACTURES RECOVER APPROVED SOLID ELOXING AT TRUSS BEARING POINTS. 9 PROVIDE SOLID ELOXING AT TRUSS BEARING POINTS. APPROVED TRUSS DRAMING MUST BE DEARING POINTS. APPROVED TRUSS DRAMING MUST BE DEARING POINTS. APPROVED TRUSS DRAMING MUST BE DEARING POINTS. ALTRUSS MANUFACTURES SHALL HAVE "IN PLANT" INSPECTION BY AN APPROVED AGENCY. INPROVIDE SIMPSON' H1 HURRING CARE PROVIDE SIMPSON' H1 HURRING AND TRUS ETION BY AN APPROVED AGENCY.	DRAWING TITLE: ROOF FRAMING PLAN & BUILDING SECTIONS FOR GABLE & CRAFTSMAN (TRUSS OPTION)
502 UPPER VENTILATION 169 6 3.1/27322.1/2" LOWER VENTILATION GALVANIZED BAVE VENT (33.50,IN) 199 1 OTAL ATTIC VENTILATION 370 REDEMENDEDES Inter MANUFACTURES ROCE TRUSSES AT 24° O.C. PROVIDE 1X4 HORIZONTAL BRACING RAT 10-0° O.C. TO TOP OF COMMUNE TURES REGARDS FOR THE RECOMPRISED AND VERTICAL BRACING REQUIREMENTS AS PER MANUFACTURES REGOLDERS IN 260 TALL BRACING REQUIREMENTS AS PER MANUFACTURES SEARING POINTS. APPROVE SOLID BLOCKING AT TRUSS BEARING POINTS. APPROVED TRUSS DEARING POINTS. APPROVED TRUSS DEARING POINTS. APPROVED TRUSS MANUFACTURES SHALL HAVE 'IN PLANT' INSPECTION BURPOSES. ALT TRUSS MANUFACTURES SHALL HAVE 'IN PLANT' INSPECTION BURPOSED AGENCY. OUBLIE TOP FLAT OUBLIE TOP FLAT OUBLIE TOP FLAT OUBLIE TOP FLATE SIMPSON' ULG-2	DRAWING TITLE: ROOF FRAMING PLAN & BUILDING SECTIONS FOR GABLE & CRAFTSMAN (TRUSS OPTION) JOB# : TADU-003 SHEET NO.
502 UPPER VENTILATION 168 1 31/27/32 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 1 0 31/27/32 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 1 0 0 10/27/32 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 1 0 0 10/27/32 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 1 0 10/27/32 1/2" LOWER VENTILATION GALVANIZED EAVE VENT (33 SQ.IN.) 198 1 10 10/20 CAL DATA LATTIC VENTILATION 10/20 CAL 1 10 10/20 CAL DATA LATTIC VENTILATION 10/20 CAL 1 10 10/20 CAL DATA LATTIC VENTILATION 10/20 CAL 1 10 10/20 CAL DATA LATTIC VENTILATION 10/20 CAL 1 10 10/20 CAL DATA LATTIC VENTILATION 10/20 CAL 10/20 CAL 1 10/20 CAL 10/20 CAL 10/20 CAL 10/20 CAL 10/20 CAL 10/20 CAL 1 10/20 CAL 10/20 CAL 10/20 CAL 10/20 CAL 10/20 CAL	DRAWING TITLE: ROOF FRAMING PLAN & BUILDING SECTIONS FOR GABLE & CRAFTSMAN (TRUSS OPTION) JOBH : TADU-003 DATE: 20-Sep-23 SCALE: AS NOTED

ROUGH CARPENTRY NOTES:

NG LUMBER MAY BE

1/2"Ø X10" A B 'S AT 72" O C 2" MAX FROM ENDS OF EACH

—3 1/2" CONCRETE SLAB W/6X6, 10X10 E.W.W.M. (OPTIONAL) O/2 1/2" SAND O/6 MIL. VISQUENE MIL. VISQUENE (OPTIONAL).

CONST. GRADE OR BETTER (UNLESS OTHERWISE NOTED)

PIECE

2X CRIPPLES -

2X D.F.P.T. SILL

BEARING WALLS MORE THAN 10'-0" IN HT. C. SPACING: STUDS SUPPORTING FLOORS, CEILING, RAFTERS SHALL BE SPACED NOT MORE THAN 16". CRIPPLE WALLS: SHALL BE FRAMED ON STUDS NOT LESS IN SIZE THAN THE STUDDING ABOVE OR SHALL BE FRAMED OF SOLID BLOCKING. WHEN EXCEEDING 4'-0" IN HEIGHT, SUCH WALLS SHALL BE FRAMED OF STUDS HAVING THE SIZE REQUIRED FOR AN E. HEADERS: ALL OPENINGS 4'-0"WIDE OR LESS IN BEARING WALLS SHALL BE PROVIDED WITH HEADERS CONSISTING OF EITHER TWO PIECES OF 2" FRAMING LUMBER PLACED ON EDGE AND SECURELY FASTENED TOGETHER OR 4" LUMBER OF EQUIVALENT CROSS SECTION. ALL OPENING MORE THAN 4'-0"WIDE SHALL BE PROVIDED WITH HEADERS OR LINTELS. EACH END OF A LINTEL OR HEADER SHALL HAVE A LENGTH OF BEARING OF NOT LESS THAN 1 1/2" FOR THE FULL WIDTH OF THE LINTEL. (SEE ROOF RAMING PLAN FOR DETAILS) F. PIPES IN WALLS: STUD PARTITIONS CONTAINING PLUMBING, HEATING, OR OTHER PIPES SHALL BE SO FRAMED AND THE JOISTS UNDERNEATH SO SPACED AS TO GIVE PROPER CLEARANCE FOR THE PIPING. WHERE A PARTITION CONTAINING SUCH PIPIN RUNS PARALLEL TO THE FLOOR JOISTS, THE JOISTS UNDERNEATH SUCH PARTITIONS SHALL BE DOUBLED AND SPACED TO PERMIT THE PASSAGE OF SUCH PIPES AND SHALL BE BRIDGED. WHERE PLUMBING, HEATING OR OTHER PIPES ARE PLACED IN OR PARTLY IN A PARTITION NECESSITATING THE CUTTING OF THE SOLES OR PLATES, A METAL TIE NOT LESS THAN 16 GALVANIZED GAUGE AND 1 1/2" WIDE SHALL BE FASTENED TO EACH PLATE ACROSS AND TO EACH SIDE OF THE OPENING WITH NOT LESS THAN 16d NAILS. BRIDGING: ALL STUD PARTITIONS OR WALLS WITH STUDS HAVING A HEIGHT TO AT LEAST THICKNESS RATIO EXCEEDING 50 SHALL HAVE BRIDGING NOT LESS THAN 2"IN THICKNESS AND OF THE SAME WIDTH AS THE STUDS FITTED SNUGLY AND NAILED HERE TO PROVIDE ADEQUATE LATERAL SUPPORT. A CUTTING AND NOTCHING EXTERIOR WALLS AND BEARING PARTITIONS: ANY WOOD STUD MAY BE CUT OR NOTCH TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH, CUTTING OR NOTCHING OF STUDS TO A DEPTH NOT GREATER THAN 40 PERCENT OF THE WIDTH THE STUD IS PERMITTED IN NONBEARING PARTITIONS SUPPORTING NO LOADS OTHER THAN THE WEIGHT OF I. JOISTS, BEAMS, AND GIRDERS: USE LONGEST PRACTICABLE LENGTHS, PLACE WITH CROWN SIDE UP. WHERE MEMBERS CANTILEVER, PLACE CROWN SIDE DOWN. J. BORED HOLES: A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH MAY BE BORED IN ANY WOOD STUD. BORED HOLES NOT GREATER THAN 60 PERCENT OF THE WIDTH OF THE STUD ARE PERMITTED IN NON BEARING ITIONS OR IN ANY WALL WHERE EACH STUD IS DOUBLED, PROVIDED NOT MORE THAN TWO SUCH SUCCESSIVE DOUBLE STUDS ARE SO BORED. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8" TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF THE STUD AS A CUT OR NOTCH.

TEMPORARY WALL BRACING: FRAMER IS RESPONSIBLE FOR INSTALLING TEMPORARY WALL BRACING TO ADEQUATELY SUPPORT FRAMING DURING CONSTRUCTION. THIS BRACING TO REMAIN IN PLACE UNTIL STRUCTURAL INTEGRITY HAS BEEN 3. FIRE BLOCKS AND DRAFT STOPS: A. IN COMBUSTIBLE CONDUCTION, FIRE BLOCKING AND DRAFTSTOPPING SHALL BE INSTALLED TO CUT OFF ALL CONCEALED DRAFT OPENINGS(BOTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEE A TOP STORY AND ROOF OR ATTIC SPACE, AND SHALL SUBDIVIDE ATTIC SPACES, CONCEALED ROOF SPACES AND FLOOR CEILING ASSEMBLIES. THE INTEGRITY OF ALL FIRE BLOCKS AND DRAFT STOPS SHALL BE MAINTAINED. B. FIRE BLOCKS SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS: IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOO LEVELS AND AT 10'-0" INTERVALS BOTH VERTICAL AND HORIZONTAL. EXCEPTION: FIRE BLOCKS MAY BE OMITTED AT FLOOR AND CEILING LEVELS WHEN APPROVED SMOKE ACTUATED FIL AMPERS ARE INSTALLED AT THESE LEVELS AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.
 AN OPENING AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILINGS AND FLOOR LEVELS, WITH NONCOMBUSTIBLE MATERIALS. OPENING BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY BUILT CHIMNEYS

NDS OF EACH JOIST SHALL HAVE NOT LESS TH<mark>AN 1 1/2</mark>" OF BEARING <mark>ON WO</mark>OD OR METAL, NOR NO LESS THAN 3" ON B. BLOCKING: JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOISTS ARE NAILED TO A HEADER, BAND OR RIM JOIST OR TO AN ADJOINING STUD OR BY OTHER APPROVED MEANS, SOLID BLOCKING SHALL BE NOT LESS THAN 2" NOMINAL IN THICKNESS AND THE FULL DEPTH OF JOIST. C. NOTCHES AND HOLES: NOTCHES ON THE ENDS OF JOISTS SHALL NOT EXCEED ONE FOURTH OF THE JOIST DEPTH. HOLES BORED IN JOISTS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOISTS, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE THIRD THE DEPTH OF THE JOIST, NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT IE SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. APS: JOIST FRAMING FROM OPPOSITE SIDES OF A BEAM, OR PARTITION SHALL BE LAPPED AT LEAST 5" OR THE OPPOSING DIST SHALL BE TIED TOGETHER IN AN APPROVED MANNER. AMING ANCHORS: JOIST FRAMING INTO THE SIDE OF A WOOD GIRDER OR PARTITION SHALL BE SUPPORTED BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2 INCHES BY 2 INCHES. F. FRAMING AROUND OPENINGS: TRIMMER AND HEADER JOISTS WHEN FRAMED AROUND OPENINGS SHALL BE DOUBLED, OR C LUMBER OF EQUIVALENT CROSS SECTION, WHEN THE SPAN OF THE HEADER EXCEEDS 4'-0". THE ENDS OF THE HEADER JOIST MORE THAN 6'-0" LONG SHALL BE SUPPORTED BY FRAMING ANCHORS OR JOIST HANGERS UNLESS BEARING ON A BEAM, PARTITION OR WALL. TAIL JOISTS OVER 12'-0" LONG SHALL BE SUPPORTED AT HEADER BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2"X2 S. SUPPORTING BEARING POSITIONS: BEARING PARTITIONS PERPENDICULAR TO JOIST SHALL NOT BE OFFSET FROM THE SUPPORTING GIRDERS, WALLS OR PARTITIONS MORE THAN THE JOIST DEPTH. JOISTS UNDER THE PARALLEL TO BEARING ARTITIONS SHALL BE DOUBLED. PLYWOOD COMBINATION SUB FLOOR UNDERLAYMENT SHEATHING CONTINUOUS OVER TWO OR MORE SPANS SHALL BE A MINIMUM 5/8" THICK TONGUE AND GROOVE AND HAVE A PANEL IDENTIFICATION INDEX AS REQUIRED FOR THE FLOOR JOIST SPACING (SEE FLOOR FRAMING PLANS) AND SHALL <mark>BE UND</mark>ERLAYMENT GR<mark>ADE, C-</mark>C (PLU<mark>GGED) AND ALL</mark> GRADES OF SANDEL EXTERIOR TYPE PLYWOOD IN GROUP SPECIES OF 1, 2, OR 3. GLUE FOR FLOOR SHEATHING SHALL CONFORM TO AMERICAN PLYWOOD ASSOCIATION SPEC. AFG-01. ACH SHEET OF PLYWOOD SHALL BE IDENTIFIED BY A REGISTERED STAMP OR BRAND OF THE AMERICAN PLYWOOD A. FRAMING RAFTERS: SHALL BE FRAMED DIRECTLY OPPOSITE EACH OTHER AT THE RIDGE. THERE SHALL BE A RIDGE BOARD AT LEAST 2" NOMINAL THICKNESS AT ALL RIDGES AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. AT ALL VALLEYS AND HIPS THERE SHALL BE A SINGLE VALLEY OR HIP RAFTER NOT LESS THEN 2" NOMINAL THICKNESS AND NOT LESS IN DEPTH THE DIT IS DUE TO THE DATE OF THE RAFTER NOT LESS THEN 2" NOMINAL THICKNESS AND NOT LESS IN DEPTH

THEN THE CUT. END OF THE RAFTERS. ERS: SHALL BE NAILED TO ADJACENT CEILING JOISTS TO FORM A CONTINUOUS TIE BETWEEN EXTERIOR WALLS WHEN SUCH JOISTS ARE PARALLEL TO THE RAFTERS. WHERE NOT PARALLEL RAFTERS SHALL BE TIED TO 1"X4" (NOMINAL) MINIMUM SIZE CROSS TIES. RAFTER TIES SHALL BE SPACED NOT MORE THAN 4'-0" ON CENTER. C. PURLINS: TO SUPPORT ROOF LOADS MAY BE INSTALLED TO REDUCE THE SPAN OF RAFTERS WITHIN ALLOW- ABLE LIMITS AND SHALL BE SUPPORTED BY STRUTS TO BEARING WALLS. THE MAXIMUM SPAN OF 2"X4" PURLINS SHALL BE 4'-0". THE MAXIMUM SPAN OF 2"X4" PURLINS SHALL BE 4'-0". THE MAXIMUM SPAN OF THE 2"X6" PURLIN SHALL BE 6'-0" BUT IN NO CASE SHALL THE PURLIN BE SMALLER THAN THE SUPPORTED RAFTER. STRUTS SHALL NOT BE SMALLER THAN 2"X4" MEMBERS. THE UNBRACED LENGTH OF STRUTS SHALL NOT EXCEED 8'-0" AND THE MINIMUM SLOPE OF THE STRUTS SHALL BE NOT LESS THAN 45 DEGREE'S FROM THE HORIZONTAL. CKING RAFTERS MORE THAN 8" IN DEPTH SHALL BE SUPPORTED LATERALLY AT THE ENDS AND AT EACH SUPP SOLID BLOCKING NOT LESS THAN 2" IN THICKNESS AND THE FULL DEPTH OF THE RAFTER UNLESS NAILED TO A HEADER, BANK OR RIM JOIST OR TO AN ADJOINING STUD AND AS REQUIRED BY SECTION 2320.12.8 PREFABRICATED WOOD TRUSSES: A. MANUFACTURER SHALL SUPPLY TO THE DE<mark>SI</mark>GNER AND THE BUILDING DEPARTMENT CALCULATIONS AND SHOP DRAWIN<mark>GS F</mark> ROVAL TO DESIGN LOADS, CONFIGURATION (2 OR 3 POINT BEARING), AND SHEAR TRANSFER, PRIOR TO FABRICATION. AL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED. IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT. IT SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER TO OBTAIN BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PRIOR TO FABRICATIONS. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST LOCAL BUILDING CODE FOR ALL LOADS IMPOSED, INCLUDING TERAL LOADS AND MECHANICAL EQUIPMENT LOADS. ALL CONNECTORS SHALL BE ICC APPROVED AND OF ADEQUATE STRENGTH TO RESIST STRESSES DUE TO LOADING INVOLVED. . DEAD LOAD DEFLECTIONS SHALL BE LIMITED TO L/240.

. CROSS BRIDGING AND/OR BRACING SHALL BE PROVIDED AND DETAILED AS REQUIRED TO ADEQUATELY BRACE ALL TRUSSES SEE STRUCTURAL CALCULATIONS.) TRUSSES STORED PRIOR TO ERECTION SHALL BE PROTECTED FROM THE WEATHER AND HANDLED WITH CARE TO AV IMAGE. NOTIFY TRUSS MANUFACTURER IMMEDIATELY OF ANY DAMAGED TRUSSES. CONTRACTOR SHALL NOT ATTEMPTED TO REPAIR DAMAGED AND/OR BROKEN TRUSSES. RUSS MANUFACTURER SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE PRIOR TO FABRICATION OF TRUSSES. THE GENERAL CONTRACTOR SHALL NOT PERMIT CUTTING, DRILLING, OR ANY OTHER DAMAGE TO TRUSSES FIELD REPAIRS TO DAMAGED TRUSSES BY THE CONTRACTOR SHALL NOT BE MADE WITHOUT PRIOR APPROVAL FROM THE TRUSS MANUFACTURER. . THE CONTRACTOR SHALL INSTALL TEMPORARY HORIZONTAL AND CROSS BRACING TO HOLD TRUSSES PLUMB AND IN SAFE CONDITION UNTIL PERMANENT BRACING IS INSTALLED K. THE GENERAL CONTRACTOR SHALL EXERCISE CARE TO PREVENT OVER STRESSING OF TRUSSES DUE TO CONCENTRATED CONSTRUCTION LOADING 1"X4" OR 1"X6" SPACED: WITH 1"X6" SHIPLAP STARTER BOARD AT ALL EXPOSED EAVES (RESAWN FACE DOWN) SHALL BE STANDARD, 3 COMMON NO. 2, OR CONSTRUCTION COMMON GRADES AND SHALL BE SPACED NOT TO EXCEED 6" CLEAR NOR MORE THAN THE NOMINAL WIDTH OF THE SHEATHING BOARD. B. PLYWOOD SHEATHING IS TO BE CONTINUOUS OVER TWO OR MORE SPANS AND IS TO BE A MINIMUM 1/2" THICK AND HAVE PANEL IDENTIFICATION INDEX AS REQUIRED FOR RAFTER SPACING (SEE ROOF PLANS) ALL PLYWOOD SHALL BE STRUCTURAL I AND II STANDARD SHEATHING, AND C-C GRADES ONLY, WITH EDGES BLOCKED OR UNBLOCKED AS REQUIRED FOR SPAN.

2. EACH SHEET OF PLYWOOD SHALL BE IDENTIFIED BY A REGISTERED STAMP OR BRAND OF THE AMERICAN PLYWOOD 19. ATTIC VENTILATION(WHERE DETERMINED NECESSARY BY THE BUILDING OFFICIAL); A. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN AND SNOW. THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED. EXCEPT THAT THE AREA MAY BE 1/300 PROVIDED 50 PERCENT OF THE REQUIRED VENTILATING. AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3'-0" ABOVE EAVE OR CORNICE VENTS, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. THE OPENING SHALL BE COVERED WITH CORROSION-RESISTANCE ETAL MESH WITH MESH OPENINGS OF 1/4" IN DIMENSION. DO NOT BLOCK VENTS WITH INSULATION. 20. FIREBLOCK CONSTRUCTION: EXCEPT AS PROVIDED IN ITEM D ABOVE, FIRE BLOCKING SHALL CONSIST OF 2" NOMINAL LUMBER OR TWO THICKENS OF 1" NOMINAL LUMBER WITH BROKEN LAP JOINTS OR ONE THICKNESS OF 23/32" WOOD STRUCTURAL PANEL, WITH JOINTS BACKED BY 23/32" WOOD STRUCTURAL PANEL, OR ONE THICKNESS OF 3/4" TYPE 2-M PARTICLE BOARD WITH JOINTS BACKED BY 3/4" **TYPE 2-M PARTICLE BOARD** FIREBOX MAY ALSO BE OF GYPSUM BOARD, GLASS FIBER, MINERAL FIBER OR OTHER APPROVED MATERIALS SECURELY FASTENED IN PLACE. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND TRANSMISSION CONTROL SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER OTHER APPROVED NON RIGID MATERIAL.

FASTENING SCHEDULE: PER CRC TABLE R602.3(1) FOOTNOTES: FOR SI: 1 INCH = 25.4 MM., 1 FOOT = 304.8 MM, 1 MILE PER HOUR = 0.447 M/S; 1 KSI = 6.895 MPa. NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS ARE CARBON STEEL AND SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80 KSI FOR SHANK DIAMETER OF 0.192 INCH (20D COMMON NAIL), 90 KSI FOR SHANK DIAMETERS LARGER THAN 0.1 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 KSI FOR SHANK DIAMETERS OF 0.142 INCH OR LESS. CONNECTIONS USING NAILS AND STAPLES OF OTHER MATERIALS, SUCH AS STAINLESS STEEL, SHALL BE DESIGNED BY ACCEPTED ENGINEERING PRACTICE OR APPROVED UNDER SECTION R104.11.

. RSRS-01 IS A ROOF SHEATHING RING SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM F1667. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR FOUR-FOOT BY 8-FOOT OR 4-FOOT BY 9-FOOT PANELS SHALL BE APPLIED VERTICALLY. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2). FOR WOOD STRUCTURAL PANEL ROOF SHEATHING ATTACHED TO GABLE END ROOF FRAMING AND TO INTERMEDIATE SUPPORTS WITHIN 48 INCHES OF ROOF EDGES AND RIDGES, NAILS SHALL BE SPACED AT 4 INCHES ON CENTER WHERE THE

JLTIMATE DESIGN WIND SPEED IS GREATER THAN 130 MPH IN EXPOSURE B OR GREATER THAN 110 MPH IN EXPOSURE C. GYPSUM SHEATHING SHALL CONFORM TO ASTM C1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C1280 OR GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C208. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBE AND REQUIRED BLOCKING AND AT FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM THE CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH

THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED.

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	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a,b,c}	SPACING AND	LOCATION
	BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES	ROOF 4-8d BOX (2 1/2" × 0.113"); OR 3-8d COMMON (2 1/2" × 0.131"); OR 3-10d BOX (3" × 0.128"); OB	TOEN	JAIL
1	FRAMING BELOW BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP	2-8d COMMON (2 1/2" × 0.131"); OR 2-3" × 0.131" NAILS	EACH END	
	FLATES, TO KAFTER OR TRUSS FLAT BLOCKING TO TRUSS AND WEB FILLER	2-16d COMMON (3 1/2" × 0.162"); OR 3-3" × 0.131" NAILS 4-8d BOX (2 1/2" × 0 113"); OR	END	JAIL
2	CEILING JOISTS TO TOP PLATE	3-8d COMMON (2 1/2" × 0.131"); OR 3-10d BOX (3" × 0.128"); OR 3-3" × 0.131" NAILS	PER JOIST	, TOE NAIL
3	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS [SEE SECTION R802.5.2 AND TABLE R802.5.2(1)]	4-10d BOX (3" × 0.128"); OR 3-16d COMMON (3 1/2" × 0.162"); OR 4-3" × 0.131" NAILS	FACE	NAIL
4	CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTION R802.5.2 AND TABLE R802.5.2(1)]	TABLE R802.5.2(1)	FACE	NAIL
5	COLLAR TIE TO RAFTER, FACE NAIL	4-10d BOX (3" × 0.128"); OR 3-10d COMMON (3" × 0.148"); OR 4-3" × 0.131" NAILS	FACE NAIL E/	ACH RAFTER
6	RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX (3 1/2" × 0.135"); OR 3-10d COMMON (3" × 0.148"); OR 4-10d BOX (3" × 0.128"); OR 4-3" × 0.131" NAIL S	2 TOE NAILS ON TOE NAIL ON OF EACH RAFTER C	ONE SIDE AND 1 POSITE SIDE OF DR TRUSS
		4-16d BOX (3 1/2" × 0.135"); OR 3-10d COMMON (3" × 0.148"); OR 4-10d BOX (3" × 0.128"); OR	TOEN	JAIL
7	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-3" × 0.131" NAILS 3-16d BOX (3 1/2" × 0.135"); OR 2-16d COMMON (3 1/2" × 0.162"); OR	END	NAIL
		3-10d BOX (3" × 0.128"); OR 3-3" × 0.131" NAILS WALL		
8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2"X0.162") 10d BOX (3"X0.128"); OR 3"X0.131 NAILS	24" O.C. F/ 16" O.C. F/	ACE NAIL
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d BOX (3 1/2"X0.135"); OR 3"X0.131 NAILS 16d COMMON (3 1/2"X0.162")	12" O.C. F/ 16" O.C. F/	ACE NAIL
10	BUILT-UP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d COMMON (3 1/2"X0.162") 16 BOX (3 1/2"X0.135") 5-8d BOX (2 1/2" × 0 113"): OR	16" O.C. EAC 12" O.C. EAC	H FACE NAIL H FACE NAIL
11	CONTINUOUS HEADER TO STUD	4-8d COMMON (2 1/2" × 0.131"); OR 4-10d BOX (3" × 0.128") 4-16d BOX (3 1/2"× 0.135"); OR	TOE	NAIL
12	ADJACENT FULL-HEIGHT STUD TO END OF HEADER	3-16d COMMON (3 1/2" × 0.162"); OR 4-10d BOX (3" × 0.128"); OR 4-3" × 0.131" NAILS	END	
13	TOP PLATE TO TOP PLATE	10d BOX (3" × 0.128"); OR 3" × 0.131" NAILS 8.16d COMMON (2.1/2" × 0.402"), OR	16" O.C. F/ 12" O.C. F/	
14	DOUBLE TOP PLATE SPLICE	с-тьа с ОММОN (3 1/2" × 0.162"); OR 12-16d BOX (3 1/2" × 0.135"); OR 12-10d BOX (3" × 0.128"); OR 12-3" × 0,131" NAILS1	FACE NAIL ON EAC JOINT (MINIMUM 2 LENGTH EACH SID	CH SIDE OF END 4" LAP SPLICE DE OF END JOINT)
15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2"X0.162") 16d BOX (3 1/2" × 0.135"); OR 3" × 0.131" NAILS	16" O.C. F/ 12" O.C. F/	ACE NAIL
16	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING	ROOF 3-16d BOX (3 1/2" × 0.135"); OR 2-16d COMMON (3 1/2" × 0.162"); OR	16" 0 0 5	
	(AT BRACED WALL PANEL)	4-3" × 0.131" NAILS 4-8d BOX (2 1/2" × 0.113"); OR 3-16d BOX (3 1/2" × 0.135"); OR 4-8d COMMON (2 1/2" × 0.135"); OR	TOE N	IAIL
17	TOP OR BOTTOM PLATE TO STUD	4-10d BOX (3" × 0.128"); OR 4-3" × 0.131" NAILS 3-16d BOX (3 1/2" × 0.135"); OR	IJEN	
		2-16d COMMON (3 1/2" × 0.162"); OR 3-10d BOX (3" × 0.128"); OR 3-3" × 0.131" NAILS	END	NAIL
18	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3" × 0.128"); OR 2-16d COMMON (3 1/2" × 0.162"); OR 3-3" × 0.131" NAILS	FACE	NAIL
19	1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2 1/2" × 0.113"); OR 2-8d COMMON (2 1/2" × 0.131"); OR 2-10d BOX (3" × 0.128"); OR 2 STAPLES 1 3/4"	FACE	NAIL
20	1"X6" SHEATHING TO EACH BEARING	3-8d BOX (2 1/2" × 0.113"); OR 2-8d COMMON (2 1/2" × 0.131"); OR 2-10d BOX (3" × 0.128"); OR	FACE	NAIL
		2 STAPLES, 1" CROWN, 16 GA., 1 3/4" LONG 3-8d BOX (2 1/2" × 0.113"); OR 3-8d COMMON (2 1/2" × 0.131"); OR 2 10d BOX (2" × 0 120"); OR		
21	1"X8" AND WIDER SHEATHING TO EACH BEARING	3 STAPLES, 1" CROWN, 16 GA., 1 3/4" LONG WIDER THAN 1" × 8" 4-8d BOX (2 1/2" × 0.113"); OR	FACE	NAIL
		3-8d COMMON (2 1/2" × 0.131"); OR 3-10d BOX (3" × 0.128"); OR 4 STAPLES, 1" CROWN, 16 GA., 1 3/4" LONG		
22	JOIST TO SILL, TOP PLATE OR	FLOOR 4-8d BOX (2 1/2" × 0.113"); OR 3-8d COMMON (2 1/2" × 0.131"); OR 2 10d BOX (0" × 0 129"); OB	TOE N	IAIL
00	RIM JOIST, BAND JOIST OR	3-3" × 0.131" NAILS 8d BOX (2 1/2"X0.113") 8d POX (2 1/2"X0.113")	4" O.C. TC	DE NAIL
23	(ROOF APPLICATIONS ALSO)	Od Common (2, 1/2 x0, 13), OR 10d BOX (3"X0,128"); OR 3"X0,131" NAILS 3-8d BOX (2 1/2" * 0.113"); OR	6" O.C. TC	DE NAIL
24	1"X6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON (2 1/2" × 0.131"); OR 3-10d BOX (3" × 0.128"); OR 2 STAPLES, 1" CROWN, 16 GA., 1 3/4" LONG	FACE	NAIL
25 26	2 SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d COMMON (3 1/2" × 0.162") 3-16d BOX (3 1/2"X0.135") OR 2-16d COMMON (3 1/2"X0.162")	BLIND AND AT EACH BEAR	D FACE NAIL
27	BAND OR RIM JOIST TO JOIST	3-16d COMMON (3 1/2"X0.162"); OR 4-10d BOX (3"X0.128"); OR 4-3"X 0.131" NAILS; OR	END	NAIL
		4-3"X14 GA. STAPLES, 7/16" CROWN 20d COMMON (4"X0.192"); OR	NAIL EACH LAYER A	AS FOLLOWS: 32" OTTOM AND
28	BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS	10d BOX (3"X0.128"); OR 3"X0.131" NAILS	24" O.C. FACE NAIL BOTTOM STAGGER SIDES	AT TOP AND ED ON OPPOSITE
		AND: 2-20d COMMON (4"X0.192"); OR 3-10d BOX (3"X0.128"); OR 3-3"X0.131" NAILS	FACE NAIL AT ENDS	S AND AT EACH
29	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-100 BOA (3 1/2 X0.135"); OR 3-16d COMMON (3 1/2"X0.162"); OR 4-10d BOX (3"x0.128"); OR 4-3"X0.131 NAILS	AT EACH JOIST OR NAIL	RAFTER, FACE
30	BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-10d BOX (3" × 0.128"); OR 2-8d COMMON (2 1/2" × 0.131"); OR 2-3" × 0.131" NAILS	EACH END,	
ТЕМ	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER a,b,c	EDGES ^h (INCHES)	INTERMEDIATE SUPPORTS ^{C,0} (INCHES)
WC	DOD STRUCTURAL PANELS, SUBFLC HEATHING TO FRAMING (SEE TABLE	OR, ROOF AND INTERIOR WALL SHEATHING TO FR. R602.3(3) FOR WOOD STRUCTURAL EXTERIOR WA	AMING AND PARTICL LL SHEATHING TO W	E BOARD WALL ALL FRAMING)
31	3/8"-1/2"	DEFORMED (2" × 0.113"× 0.266" HEAD); OR 2 3/8" × 0.113" × 0.266" HEAD NAIL (SUBFLOOR, WALL) 8D COMMON (2 1/2" × 0.124") NAIL (DOOT) 20	6	6 ^f
		Bit Common (2 1/2" × 0.131") NAIL (ROOF); OR RSRS-01 (2 3/8" × 0.113") NAIL (ROOF) ^b 8d COMMON (2-21/2" × 0.131") NAIL (SUBFLOOR, WALL)	6	6 ^f 12
32	19/32"-3/4"	8D COMMON (2 1/2" × 0.131") NAIL (ROOF); OR RSRS-01 (2 3/8" × 0.113") NAIL (ROOF) ^b	6	6 ^f
33	7/8"- 1 1/4"	UEFURMED 2 3/8" × 0.113" × 0.266" HEAD (WALL OR SUBFLOOR) 10d COMMON (3"X0.148") NAIL; OR (2 1/2"x0.131"x0.281" HEAD)DEFORMED NAII	6	12 12
	1/2" STRUCTURAL CELLUI OSIC	OTHER WALL SHEATHING ⁹ 1 1/2" × 0.120" GALVANIZED ROOFING NAIL,7/16" HEAD DIAMETER: OR		
34	FIBERBOARD SHEATHING	1 1/4" LONG 16 GA. STAPLE WITH 7/16" OR 1" CROWN 1 3/4" × 0.120" GALVANIZED ROOFING NAIL, 7/16"	3	6
35	FIBERBOARD SHEATHING	HEAD DIAMETER; OR 1 1/4" LONG 16 GA. STAPLE WITH 7/16" OR 1" CROWN 1 1/2" × 0.120" GALVANIZED ROOFING NAIL. 7/16"	3	6
36	1/2" GYPSUM SHEATHING ^d	HEAD DIAMETER, OR 1 1/4"LONG 16 GA.; STAPLE GALVANIZED, 11/2" LONG; 7/16" OR 1" CROWN OR 1 1/4" SCOEWIG TYPE M OD 0	7	7
37	5/8" GYPSUM SHEATHING ^d	1 3/4" × 0.120" GALVANIZED ROOFING NAIL, 7/16" HEAD DIAMETER, OR 1 1/4" LONG 16 GA.; STAPLE GALVANIZED, 1 1/2" LONG: 7/16" OR	7	7
	WOOD STRUCTUR	1"CROWN OR 1 1/4" SCREWS, TYPE W OR S AL PANELS, COMBINATION SUBFLOOR UNDERLAYM DEFORMED (2"× 0.113") OR	ENT TO FRAMING	
38 39	3/4" AND LESS 7/8" - 1"	DEFORMED (2" × 0.120") NAIL; OR 8d COMMON (2 1/2" × 0.131") NAIL 8d COMMON (2 1/2" × 0.131") NAIL; OR DEFORMED (2" × 0.113") OP	6	12
40	1 1/8" - 1 1/4"	DEFORMED (2 1/2" × 0.120") NAIL 10D COMMON (3" × 0.148") NAIL; OR DEFORMED (2" × 0.113");OR	6	12
		DEFORMED (21/2" × 0.120") NAIL		

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DATE

COLD & HOT DOMESTIC WATER PLAN SCALE:1/4"=1'-0"

SCALE 1/4"=1'-0

COLD PVC WATER, PIPING MAY BE USED FOR COLD WATER DISTRIBUTION SYSTEMS OUTSIDE A BUILDING CPVC WATER PIPING MAY BE USED FOR HOT AND COLD WATER DISTRIBUTION SYSTEMS WITHIN A BUILDING. TYPE 'M' COPPER PIPING MAY BE USED FOR WATER PIPING ABOVE GROUND IN, OR ON, A BUILDING OR UNDERGROUND OUTSIDE OF STRUCTURE. 2. COPPER TUBE FOR WATER PIPING SHALL HAVE A WEIGHT OF NOT LESS THAN THAT OF COPPER WATER TUBE TYPE L. EXCEPTION:TYPE M COPPER TUBING MAY BE USED FOR WATER PIPING WHEN PIPING IS ABOVE GROUND. POLYETHYLENE PIPING SHALL MEET OR EXCEED SPECIFICATIONS AS A PB 2110 MATERIAL PER ASTM 3309, ANSI A 119.2, CSA B137.7-M-1977, CSA B139.8-M-1977; AND SHALL BE OF PIPING MATERIAL AND INSTALLATION SUITABLE FOR ITS INTENDED USE. NO WATER, SOIL OR WASTE PIPE SHALL BE INSTALLED OR PERMITTED OUTSIDE OF A BUILDING OR IN A EXTERIOR WALL, UNLESS WHERE NECESSARY, ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPE FROM FREEZING 5. PIPING SUBJECT TO UNDUE CORROSION, EROSION OR MECHANICAL DAMAGE SHALL BE PROTECTED IN AN APPROVED MANNER. COLD AND HOT WATER PIPING TO FIXTURES SHALL BE THOROUGHLY FLUSHED AND RINSED PRIOR TO PLACING IN SERVICE. HOT AND COLD WATER PIPING SHALL BE INSTALLED A MINIMUM OF 12" APART WHERE PIPING IS PARALLEL. . GAS PIPING FERROUS GAS PIPING INSTALLED UNDERGROUND IN EXTERIOR LOCATIONS SHALL BE PROTECTED FROM CORROSION BY APPROVED COATINGS OR WRAPPING MATERIALS. ALL HORIZONTAL METALLIC PIPING SHALL HAVE AT LEAST 12" OF EARTH COVER PLASTIC PIPING SHALL HAVE AT LEAST 18" OF EARTH COVER. GAS PIPING SHALL BE, GALVANIZED OR BLACK STEEL. PE PIPING MAY BE USED IN EXTERIOR BURIED PIPING GAS PIPING SHALL BE, GALVANIZED OR BLACK STEEL. PE PIPING MAY BE USED IN EXTERIOR BURIED PIPING SYSTEMS. NO GAS PIPING SHALL BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING OR STRUCTURE UNLESS INSTALLED IN A GAS TIGHT CONDUIT, AND ALL EXPOSED GAS PIPING SHALL BE KEPT AT LEAST 6" ABOVE GRADE OR STRUCTURE. AN ACCESSIBLE SHUTOFF VALVE SHALL BE INSTALLED IN THE FUEL SUPPLY PIPING OUTSIDE OF EACH APPLIANCE. SHUT OFF VALVES SHALL ME WITHIN 3' OF THE APPLIANCE. ALL PIPE USED FOR INSTALLATION OF ANY GAS PIPING SHALL BE STANDARD WEIGHT WROUGHT IRON OR STEEL (GALVANIZED OR BLACK), YELLOW BRASS (CONTAINING NOT MORE THAN 75% COPPER) OF IRON PIPE SIZE ALL FITTING USED IN CONNECTION WITH THE ABOVE PIPING SHALL BE OF MALLEABLE IRON OR YELLOW BRASS (CONTAINING NOT MORE THAN 75% COPPER) NO GAS PIPING SHALL BE INSTALLED IN OR ON THE GROUND, UNDER ANY BUILDING OR STRUCTURE. ALL EXPOSED GAS PIPING SHALL SHALL BE KEPT AT LEAST 6" ABOVE GRADE OR STRUCTURE. VENTS SHALL EXTEND NOT LESS THAN 10" THROUGH THE ROOF. THEY SHALL BE GATHERED WHERE POSSIBLE INTO ONE VENTS SHALL EXTEND NOT LESS THAN TO THROUGH THE ROOF. THEY SHALL BE GATHERED WHERE POSSIBLE ONE VENT AS SHOWN. LOCATE ALL VTR'S A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKES. COMBUSTION AIR VENTS AND DUCTS SHALL BE PROVIDED WITH MINIMUM UNOBSTRUCTED COMBUSTION AIR OPENINGS AS REQUIRED BY C.M.C. PIPE HANGERS AND SUPPORTS

HORIZONTAL SUSPENDING PIPING SHALL BE SUPPORTED BY TURNBUCKLES CAPABLE OF SCREW ADJUSTMENT AFTER INSTALLATION. HANGERS SPACING FOR CAST IRON PIPE SHALL NOT BE GREATER THAN 5', FOR OTHER PIPE, NOT GREATER THAN 10'. HANGERS SHALL BE PROVIDED AT AND CHANGES IN DIRECTION HANGER RODS SHALL BE 3/8" FOR PIPE UNDER 3". 1/2" FOR PIPE ABOVE 3". PIPING SHALL BE INSTALLED WITH ADEQUATE PROVISIONS FOR EXPANSION AND CONTRACTION USING SWIN JOINTS, PIPE CLAMPS, ANCHORS AND EXPANSION JOINTS. FITTINGS SHALL BE SPACED SO THAT THEY WILL NO INTERFERE WITH THE SLIDING OF THE PIPES ON THE SUPPORT. ALL PIPING SHALL BE SUPPORTED AT THE MINIMUM INTERVALS SHOWN BEI SUPPORT SPACING

 FLASHING
 OPENING IN THE ROOF FOR VENT PIPES SHALL BE FLASHED SOLDERED WATER-TIGHT. FLASHING FOR PIPE SHALL NOT BE LIGHTER THAN 4 LBS. PER SQ.FT. SHEET LEAD SHALL BE MADE OF TWO PIECES. THE LOWER PIECE SHALL BE AT LEAST 14" SQUARE. THE TOP PIECE SHALL FIT TIGHTLY AND SHALL EXTEND TO THE TOP OF THE PIPE AND TURN DOWN INSIDE THE PIPE AT LEAST 1".
 ALL POOSE DEMETRATIONS WITH PIPES TO BE INSTALLED WITH "DICTATE" PIPE FLASHING INSTALLED AS PER DOWN INSIDE THE PIPE AT LEAST 1". ALL ROOF PENETRATIONS WITH PIPES TO BE INSTALLED WITH "DICTATE" PIPE FLASHING INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS. EACH VENT PIPE OR STACK SHALL EXTEND THROUGH ITS FLASHING AND SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE THE ROOF NOR LESS THAN 1' FROM ANY VERTICAL SURFACE. VENT PIPES OR STACKS SHALL TERMINATE NOT LESS THAN THAN 10' FROM OR AT LEAST 3' ABOVE ANY WINDOW, DOOR OPENINGS, AIR INTAKE OR VENT SHAFT. NOR LESS THAN 3' IN EVERY DIRECTION FROM ANY LOT LINE, ALLEY OR STREET

PLUMBING LEGEND

SYMBOL	ABBREVATION	DESCRIPTION
CW	CW	COLD WATER
-	САР	PIPE CAP
— — HW— —	HW	HOT WATER
SS	W/S	WASTE/SANITARY SEWER
— — v— —	V	VENT
— —o	VTR	VENT THRU ROOF
—— НВ —— 🛚	НВ	HOSE BIBB
G	G	GAS
0	COTG	CLEANOUT TO GRADE
Ŀ	CO, WC <mark>C</mark>	CLEANOUT, WALL CLEANOUT
0	(D), (R)	DROP, RISER
\otimes	SOV	SHUT-OFF VALVE IN BOX
	SOV	SHUT-OFF VALVE
	10 Co. 10	

PLUMBING FIXTURE UNITS

EIVTUDE	WATER		R	EIXTURE	WASTE			
FIXTORE	+	# UNITS TOTAL		FIXTORE	+	UNITS	TOT	FAL
WATER CLOSET 5	1	2.5	2.5	WATER CLOSET	1	3.0	3	3.0
LAVATORY	1	1.0	1.0	LAVATORY	1	1.0	1	1.0
SHOWER/TUB	1	4.0	4.0	SH0WER/TUB	1	2.0	2	2.0
KITCHEN SINK	1	1.5	1.5	KITCHEN SINK	1	2.0	2	2.0
REFRIGERATOR	1	0.5	0.5	REFRIGERATOR	1	0.0	С	0.0
CLOTHES WASHER	1	4.0	4.0	CLOTHES WASHER	1	3.0	3	3.0
HOSE BIBB	1	2.5	2.5	HOSE BIBB	1	0.0	C	0.0
	то		16.0		TC		11	10

DOMESTIC WATER SIZING TABLE

TABLE 610.4 FIXTURE UNIT TABLE FOR DETERMINING WATER PIPE AND METER SIZES METER & BUILDING MAXIMUM ALLOWABLE LENGTH IN FEET STREET SUPPLY & 250 SERVICE, BRANCHES, 40 INCHES INCHES 3/4" 2 1/2" 445 T TIME OF LOT SPECIFIC BUILDING PERMIT APPLICATION DEVELOPMENT LENGTH AND WATER METER SIZE WILL B EVIEWED TO VERIFY DOMESTIC WATER SIZING IS ADEQUATE. THIS PLAN IS DESIGNED WITH ASSUMPTION OF A 1 INC ATER METER. DEVELOPMENT LENGTH OF 150 FT. AND NO CONNECTION/FIXTURE UNITS FROM THE EXISTING PRIMARY ESIDENCE.

CONNECTING TO (E)UTILITIES THE (E)FIXTURE UNITS MUST BE ACCOUNTED FOR WHEN SIZING SYSTEMS AND VERIFY TIONAL DEMANDS WILL NOT AFFECT PRIMARY RESIDENCE NEGATIVELY. PROVIDE WITH LOT SPECIFIC BUILDING

ERMIT APPLICATION. GAS CALCULATIONS: DESCRIPTION BTU/HR CFH TANKLESS WATER HEATER 199,000 182 199,000 182 MOST REMOTE FIXTURE = 175 FEET, MAXIMUM CFI PIPE SIZE(IN.) CFH

AT TIME OF LOT SPECIFIC BUILDING PERMIT APPLICATION DEVELOPMENT LENGTH AND GAS CONNECTIONS WILL BE REVIEWED TO VERIFY GAS SIZING IS ADEQUATE. THIS PLAN IS DESIGNED WITH ASSUMPTION OF A 1 1/4 INCH GAS LINE, DEVELOPMENT LENGTH OF 175 FT, AND NO CONNECTION OF GAS APPLIANCES FROM THE EXISTING PRIMARY ESIDENCE. F CONNECTING TO (E)UTILITIES THE (E)GAS APPLIANCES MUST BE ACCOUNTED FOR WHEN SIZING SYSTEMS AND VERIFY ADDITIONAL DEMANDS WILL NOT AFFECT PRIMARY RESIDENCE NEGATIVELY. PROVIDE WITH LOT SPECIFIC BUILDING RMIT APPLICATION.

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PLUMBING KEY NOTES :	
INTERVALS NOT TO EXCEED 100 FT IN STRAIGHT RUNS AND HORIZONTAL CHANGE IN DIRECTIONS EXCEEDING 135°. SANITARY SEWER CONNECTION TO CITY SERVICES. PER LOT SPECIFIC BUILDING PERMIT APPLICATION MUST OBTAIN PUBLIC UTILITIES APPROVAL FOR ADU TO HAVE DIRECT CONNECTION TO CITY SERVICES. IF CONNECTING TO	NOF FREE
(E)UTILITIES THE (E)FIXTURE UNITS MUST BE ACCOUNTED FOR WHEN SIZING SYSTEMS AND VERIFY ADDITIONAL DEMANDS WILL NOT AFFECT PRIMARY RESIDENCE NEGATIVELY. PROVIDE WITH LOT SPECIFIC BUILDING PERMIT APPLICATION. DOMESTIC WATER MAIN LATERAL BRANCH. DOMESTIC WATER CONNECTION TO (N)WATER METER AND CITY	i refer to
SERVICES. PER LOT SPECIFIC BUILDING PERMIT APPLICATION MUST OBTAIN PUBLIC UTILITIES APPROVAL FOR ADU TO HAVE DIRECT CONNECTION TO CITY SERVICES. IF CONNECTING TO (E)UTILITIES THE (E)FIXTURE UNITS MUST BE ACCOUNTED FOR WHEN SIZING SYSTEMS AND VERIEY ADDITIONAL DEMANDS WILL NOT AFFECT PRIMARY RESIDENCE	*
A Second	
CLOSET. LOW-FLOW WATER CLOSETS TO BE INSTALLED (MAXIMUM 1.28 GALLONS PER FLUSH). BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. DOMESTIC WATER FOR WATER CLOSETS SHALL BE PROVIDED AND TIED INTO PASSIVE PURGE FIRE SPRINKLER	
SHOWER: TILE SHOWER O/FIBER CEMENT OR GLASS MAT GYPSUM BACKER. PROVIDE 22" MINIMUM TEMPERED GLASS ENCLOSURE (HINGED SHOWER DOORS SHALL OPEN OUTWARD). INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE AT THE SHOWERS. THE MINIMUM INSIDE	Po S Ari
DIMENSION OF THE SHOWER SHALL BE 30" IN ANY ONE DIRECTION WITH A MINIMUM OF 1,024 SQUARE INCHES. ALL TUB-SHOWER OPENINGS SHALL BE RODENT PROOF, WITH 1" CEMENT COVERING IN AN APPROVED MANNER. (SEE DETAIL G/P.1) TUB W/SHOWER OPTION: METAL TUB W/TILE SHOWER O/EIBER CEMENT OR GLASS MAT GYPSUM BACKER PROVIDE 22"	PATER OS1.
MINIMUM TEMPERED GLASS ENCLOSURE (HINGED SHOWER DOORS SHALL OPEN OUTWARD). INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE AT THE SHOWERS. ALL TUB-SHOVED OPENINGS SHALL BE RODENT PROOF, WITH 1" CEMENT COVERING IN AN APPROVED MANNER. PROVIDE	TED OC
INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE AT THE SHOWERS AND TUB-SHOWER COMBINATION, CPC 420. BRAND AND MODEL NUMBER SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. HOSE BIBB 3/4" WINON-REMOVABLE TYPE BACK FLOW PREVENTION DEVICE.	PLANNING AND DEVELOPMENT
TANK LESS WATER HEATER, INSTALL PER MANUFACTURERS SPECIFICATIONS. PROVIDE MANUFACTURERS SPECIFICATIONS ON JOB SITE, SO THAT THE BUILDING INSPECTOR MAY VERIFY TANK LESS WATER HEATER CLEARANCES, SEE TITLE 24 REQUIREMENTS AND MECHANICAL NOTES FOR ADDITION INFORMATION. BRAND AND NOTES IN UNDER SUMUTION OF SUBJUTION OF SUBJUTICE TO INSTALLATION.	DÉPARTMENT FRESNO CITY HALL
A. INSTANTANEOUS WATER HEATERS WITH AN INPUT RATING OF 6.8KBTU/HR. (2 KW) OR GREATER NEED AN ISOLATION VALVE ON COLD WATER SUPPLY AND HOT WATER LEAVING WATER HEATER. B. EACH VALVE NEEDS A HOSE BIBB OR OTHER FITTING ALLOWING FOR FLUSHING THE WATER HEATER WHEN THE	2600 FRESNO STREET THIRD FLOOR
VALVES ARE CLOSED. C. A CONDENSATION DRAIN THAT IS NO MORE THAN 2 INCHES HIGHER THAN THE BASE OF THE INSTALLED WATER HEATER, AND ALLOW NATURAL DRAINING WITHOUT PUMP ASSISTANCE. PLIMBING VENTS SHALL TERMINATE 10' MINIMUM AWAY FROM A CLINIT OUTSIDE AIR INTAKES	FRESNO, CA. 93721-3600 559-621-8084
1. A MINIMUM 2'-6" X 2-6" WIDE AND 7'-0" TALL AREA MUST BE MAINTAINED FOR FUTURE INSTALLATION OF HEAT PUMP WATER HEATER. A PLUMBING PERMIT MUST BE OBTAINED AT TIME OF INSTALLATION OF HEAT PUMP WATER HEATER AND MUST BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.	darm.building@fresno.gov
WATER HAMMER ARRESTORS SHALL BE INSTALLED AT THE FOLLOWING QUICK ACTING SHUT-OFF	THESE DRAWINGS, DESIGNS SKETCHES, IDEAS, DOCUMENTS, PLANS, ARRANGEMENTS, AND OTHER INFORMATION CONTAINED THEREIN, ARE THE SOLE AND EXCLUSIVE PROPERTY OF CITY OF FRESNO. THESE DOCUMENTS
VALVES (SOLENOID OPERATED) A. AUTOMATIC WASHER, HOT AND COLD WATER B. ICE MAKER C. DISHWASHER	ARE DELIVERED AND ACCEPTED BY YOU IN TRUST AND ON THE EXPRESS CONDITION THAT NEITHER THESE DOCUMENTS OR THE INFORMATION CONTAINED THEREIN WILL BE THEREIN WILL BE COPIED, REPRODUCED, OR DELIVERED TO OTHERS, EXCEPT AS SPECIFICALLY INSTRUCTED BY CITY OF ERESNO
D. FRONT AND REAR SPRINKLER OUTLETS SHOWER AND TUB/ SHOWER COMBINATION SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVES TYPE	PROJECT:
THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION FOR THE RATED FLOW RATE OF THE INSTALLED SHOWERHEAD. THESE VALVES SHALL BE INSTALLED AT THE POINT OF USE AND IN ACCORDING WITH ASSE 1016 OR ASME A112.18.1/CSAB125.1. ALL PLUMBING CONVEYING OR DISPENSING WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953 FOR	ACCESSORY
LEAD CONTENT. . GALVANIZED MALLEABLE IRON, GALVANIZED WROUGHT IRON, OR GALVANIZED STEEL ARE PROHIBITED MATERIALS FOR WATER SUPPLY AND BUILDING WATER PIPING BOD ON THE UNDER GROUP AND IN BUILDING. CONSUME THE RECEIVED AND MADE IF FOR 45 MINILITES AND WILL DED DIDING IS 20 DE FOR 20 MINILITES	
 DAS LINE PRESSURE LESTING IS NOW 10 PS FOR IS MINOTES AND WELDED PIPING IS 60 PS FOR 30 MINOTES. PLASTIC AND COPPER PIPING RUN THROUGH FRAMING MEMBERS TO WITHIN ONE INCH OF THE EXPOSED FRAMING SHALL BE PROTECTED BY STEEL NAIL PLATES NOT LESS THAN 18 GAUGE. ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED AS SPECIFIED IN CPC SECTION 609.11. IN ADDITION, PIPING 	DWELLING
MUST MEET THE REQUIREMENTS OF CALIFORNIA ENERGY CODE SECTION 150(J)(2)(A) I, II, & III. a) 3/4 INCH TO 1 INCH AND HOT WATER PIPING FROM HEATING SOURCE TO KITCHEN FIXTURES SHALL HAVE A MINIMUM OF 1 INCH THICKNESS INSULATION WALL OR R-VALUE OF 7.7.	UNIT
AT TIME OF LOT SPECIFIC BUILDING APPLICATION, IT WILL BE DETERMINED BY THE CITY OF FRESNO FIRE	$(\mathbf{T} \wedge \mathbf{D} \mathbf{U}_{-} \land \mathbf{O} \mathbf{O})$
approved fire sprinkler plan shall be included in plans prior to permit issuance.	$(\mathbf{I}\mathbf{A}\mathbf{D}\mathbf{U}^{-}\mathbf{U}\mathbf{U}\mathbf{S})$
WORK INCLUDED ALL WORK AND MATERIAL SHALL CONFORM TO LATEST CODES AND ORDINANCES. IT IS THE INTENTION OF THESE PLANS AND SPECIFICATIONS TO COVER ALL THINGS REQUIRED TO PROVIDE COMPLETE AND OPERATIVE SYSTEMS.	PLAN 3
THE CONTRACTOR IS TO FURNISH LABOR MATERIAL, TRANSPORTATION, EQUIPMENT, AND MISCELLANEOUS SERVICES ETC. REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION IS TO BE INCLUDED, WHETHER SPECIALLY SHOWN OR MENTIONED.	
THESE CODES. THESE DRAWINGS ARE DIAGRAMMATIC AND HAVE BEEN PREPARED TO SUGGEST POSSIBLE SIZE, ROUTES, LOCATION AND TERMINATION OF PLUMBING PIPING AND EQUIPMENT AS REQUIRED TO CONFORM TO APPLICABLE CODES, IT IS	
NOT THE INTENTION OF THE PLAN PREPARED TO LIMIT THE METHODOLOGY AND/OR MATERIALS UTILIZED BY THE PLUMBING CONTRACTOR WHEN ALTERNATE METHODOLOGY AND/OR MATERIALS COMPLY WITH ALL CODES AND ORDINANCES GOVERNING THIS JURISDICTION. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND ROLITING OF ALL WASTE VENT WATER GAS AND	
A/C CONDENSATE LINES AND COORDINATE WITH OWNER FOR SERVICES. THE OWNER SHALL COORDINATE ALL SERVICE CONNECTIONS FOR THE WORK WITH APPROPRIATE AGENCIES. OWNER TO PROVIDE WATER, SEWER, AND GAS SERVICE AND HOOK UP TO WITHIN 5 FEET FROM BUILDING.	
OWNER TO DETERMINE WATER, SEWER, AND GAS SUPPLY LINE SIZES IN CONFORMANCE WITH CALIFORNIA PLUMBING CODE AND COORDINATE WITH PLUMBER AS TO ANY VARIATION AND/OR CONFLICT FROM DRAWING. ALL WORK MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED BY THE INSPECTION AUTHORITY. NOTHING IN THESE PLANS IS TO BE TO PERMIT WORK NOT CONFORMING	
TO THESE CODES OR OTHERS APPLICABLE TO THIS PROJECT A. CALIFORNIA PLUMBING CODE 2022 B. CALIFORNIA MECHANICAL CODE 2022 C. CALIFORNIA ENERGY STANDARDS 2022	
. IT IS THE PLUMBING CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING BUT NOT LIMITED TO METER LOCATIONS, LATERAL LOCATIONS/DEPTH AND PROPOSED POINT OF CONNECTIONS.	
 ALL FIXTURES ARE TO BE FURNISHED BY THE PLUMBING CONTRACTOR UNLESS NOTED OTHERWISE ON PLANS. ALL FIXTURES TO BE INSTALLED COMPLETE IN ALL RESPECTS WITH TRIM, SEALS, ETC, AS REQUIRED TO MAKE JOB READY FOR SERVICES AND USE. 	REVISIONSNO.DESCRIPTIONDATE
 ALL FIXTURES TO BE WHITE (UNLESS OTHERWISE NOTED) PLUMBING CONTRACTOR SHALL SUBMIT FIXTURES SPECIFICATIONS FOR OWNERS APPROVAL. ALL PIPING AND EQUIPMENT SHALL COMPLY WITH THE LATEST IAPMO STANDARDS AND ALL APPLICABLE BUILDING CODES LOCAL OR OTHERWISE 	
ALL FIXTURES SHALL BE SECURELY ATTACHED TO SUPPORTING SURFACES AS SPECIFIED AND SHALL BE PLUMBED AND LEVELED. WALL HUNG FIXTURES SHALL BE SECURELY ATTACHED TO WOOD BLOCKING.	
 AIR CHAMBERS SHALL BE PROVIDED FOR FOR EACH FIX TURE AT HOT AND COLD WATER CONNECTIONS. ALL PIPING SHALL BE PRESSURE TESTED TO THE APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND MINIMUM STANDARDS AS FOLLOWS: SANITARY PIPING; MIN. WATER PRESSURE 5 PSI FOR 15 MINUTES WATER PIPING; MIN. WATER PRESSURE 120 PSI FOR 15 MINUTES. 	
 CONNECTIONS BETWEEN COPPER OR BRASS PIPING AND FERROUS MATERIALS SHALL BE MADE WITH APPROVED DIELECTRIC COUPLINGS. PLUMBING CONTRACTOR SHALL REVIEW ALL KITCHEN EQUIPMENT DRAWINGS AND MAKE ALL REQUIRED CONNECTION OF SERVICES TO FACH UNIT. 	
0. CHECK EXISTING PLUMBING SYSTEM WITH REFERENCE TO NEW WORK TO BE DONE. IF CONNECTING NEW PLUMBING TO (E)PLUMBING MAIN BRANCHES THE (E)FIXTURE UNITS MUST BE ACCOUNTED FOR WHEN SIZING SYSTEMS AND VERIFY ADDITIONAL DEMANDS WILL NOT AFFECT PRIMARY RESIDENCE NEGATIVELY. PROVIDE WITH BUILDING	
 RE-ROUTE AND/OR REPLACE PORTIONS (INCLUDING SERVICE) AS NECESSARY. FURNISH AND INSTALL ALL FIXTURES INDICATED, COMPLETE FOR NORMAL OPERATION. INSTALL ANY FIXTURES PROVIDED BY OWNER. 	CITI USE UNLI
 AN APPROVED SEISMIC GAS SHUTOFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWN STREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING. SEPARATE PLUMBING PERMIT IS REQUIRED. PLUMBING FIXTURES ARE REQUIRED TO BE CONNECTED TO A SANITARY SEWER OR TO AN APPROVED SEWAGE 	
DISPOSAL SYSTEM. (R 306.3) 5. KITCHEN SINKS, LAVATORIES, BATHTUBS, SHOWERS, BIDETS, LAUNDRY TUBS AND WASHING MACHINE OUTLETS SHALL BE PROVIDED WITH HOT AND COLD WATER AND CONNECTED TO AN APPROVED WATER SUPPLY. (R 306.4)	
 . EXCAVATING PERFORM NECESSARY EXCAVATIONS AND BACK FILLING FOR INSIDE AND OUTSIDE PLUMBING LINES AND ACCESSORIES. EXCAVATING SHALL BE TRUE TO LINE AND PITCH BACK FILL SHALL BE PLACED LAYERS NOT OVER 8" IN DEPTH. EACH LAYER PROPERLY MOISTENED, SOLIDITY IRON TAMPED, OR OTHERWISE COMPACTED PUDDLING 	
WITH WATER TO ACHIEVE COMPACTION WILL NOT BE PERMITTED. PLUMBING EXCAVATIONS ARE NOT TO BE MADE PARALLEL TO FOOTING BELOW ANGLE OR REPOSE (I.E. BELOW A LINE DRAWN 45° DOWN FROM EACH CORNER OF BOTTOM FOOTING.) NO PLUMBING LINES SHALL BE RUN IN BEARING FOOTING, DRAINAGE PIPE MATERIALS SHALL BE, CAST IRON	
GALVANIZED STEEL, PVC OR ABS SCHEDULE 40 DW PLASTIC PIPE, EXCEPT THAT NO GALVANIZED STEEL PIPE SHALL BE USED UNDERGROUND AND SHALL BE KEPT AT LEAST 6" ABOVE GROUND CHANGES IN DIRECTION OF DRAINAGE PIPING SHALL BE MADE BY THE APPROPRIATE USE OF APPROVED FITTINGS, AND SHALL BE OF THE ANGLES	
SANITARY AND POTABLE WATER PIPING SHALL NOT BE INSTALLED WITHIN THE SAME TRENCH EXCEPT WHEN ALLOWABLE BY THE GOVERNING AUTHORITY. SANITARY PIPING	
 DRAINAGE MINING SHALL BE CAST TRON, SCHEDULE 40 ABS DWV, OR SCHEDULE 40 PVC DWV. CLEAN OUTS ARE REQUIRED ON HORIZONTAL WASTE LINES OVER 5' FROM THE MAIN LINE AND ALL HORIZONTAL SINK AND URINAL WASTES REGARDLESS OF LENGTH. PER CPC WASTE PIPING SHALL BE PITCHED AT A MINIMUM OF 1/4" PER FOOT WHERE POSSIBLE. PIPING GREATER THAN 4 	
INCHES IN DIAMETER ONLY, MAY BE PITCHED AT A MINIMUM OF, 1/8" PER FOOT, AS REQUIRED, WITH THE APPROVAL OF THE ADMINISTRATIVE AUTHORITY. PROVIDE CLEAN OUTS FOR WASTE LINES EXCEEDING 5'-0" FROM THE MAIN. CLEAN OUTS SHALL BE SIZED PER CPC.	
FOR SERVICE AND IS COMPLETE COMPLIANCE WITH ALL GOVERNING CODES, INSTALLATION OF SOIL OR DRAIN PIPES IN FOOD HANDLING ESTABLISHMENTS WILL COMPLY WITH SECTION 318.0 CPC. ALL FLOOR MOUNTED SANITARY CLEANOUTS SHALL HAVE SKID RESISTANT COVER PLATES, BUILDING DRAIN AND	DRAWING TITLE:
VENT PIPING MATERIALS SHALL COMPLY WITH SECTIONS /01.0 AND 903.0 OF THE CALIFORNIA PLUMBING CODE.	PLUMBING PLAN
	AND DETAILS
Land Land Land Land Land Land Land Land	JOB# : TADU-003 SHEET NO.
	DATE: 26-Sep-23

DRAWN BY: IRG

MECHANICAL LEGEND

EXHAUST FAN SCHEDULE:

DESCRIPTION	EF 1	EF 2				
LOCATION	RESTROOM	KITCHEN				
TYPE	CENTRIFUGAL	CENTRIFUGAL				
MOUNTING	CEILING	CEILING				
AMPS	0.30	3.5				
VOLTS/PHASE	115/1	115/1				
CFM	50 MIN.	160 MIN.				
E.S.P. (IN. WC)	0.10	0.30				
DRIVE	DIRECT	DIRECT				
SONES	1.0 MAX.	3.0 MAX.				
OPER. WT. (LBS)	5	20				
MANUFACTURER	OWNER CHOICE ¹	OWNER CHOICE ¹				
MODEL	OWNER CHOICE ¹	OWNER CHOICE ¹				
KEY NOTES	1,3,4	2,5				
BACKDRAFT DAMPER	YES	YES				
BIRD SCREED	YES	YES				
SWITCH WITH LIGHTS CONTROLS YES YES						
1. OWNER CHOICE MUST MEET MINIMUMS AND MAXIMUMS LISTED IN EXHAUST FAN SCHEDULE. KEY NOTES: 1. PROVIDE 4" Ø EXHAUST DUCT RISER UP THRU ROOF W/FLASHING TO ROOF WEATHER CAP.						

PROVIDE 7" Ø EXHAUST DUCT RISER UP THRU ROOF W/FLASHING TO ROOF WEATHER CAP. CONTINUOUS BATHROOM EXHAUST FAN IS USED TO MEET INDOOR AIR QUALITY REQUIREMENTS. TINUOUS MECHANICAL EXHAUST SYSTEMS SHALL OPERATE WITHOUT OCCUPANT INTERVENTION. A READILY ESSIBLE OVERRIDE CONTROL MUST BE PROVIDED. THE OVER RIDE CONTROL FOR THE BUILDING VENTILATION SHALL BE PROPERLY LABELED: "THIS SWITCH CONTROLS THE INDOOR AIR QUALITY VENTILATION FOR THE HOME. LEAVE IT ON UNLESS THE OUTDOOR AIR IS VERY POOR." KITCHEN EXHAUST SHALL MEET MINIMUM CFM OR HAVE A CAPTURE EFFICIENCY RATING OF NO LESS THAN 65%

ENTILATION FOR INDOOR AIR QUALITY NOTES: ALL KITCHENS AND BATHROOMS SHALL HAVE LOCAL EXHAUST SYSTEMS VENTED TO THE OUTDOORS. EACH LOCAL VENTILATION SYSTEM SHALL EITHER BE AN INTERMITTENT OR CONTINUOUS MECHANICAL EXHAUST ALL AIR MOVING EQUIPMENT USED TO MEET LOCAL EXHAUST VENTILATION REQUIREMENTS SHALL BE RATED II A. ALL CONTINUOUSLY OPERATING FANS SHALL BE RATED AT A MINIMUM 1.0 SONE.

 ALL CONTINUOUS LT OPERATING FANS SHALL BE RATED AT A MINIMUM IT. SOINE.
 B. ALL CONTINUOUS LOCAL EXHAUST AIR FLOW RATES SHALL BE A MINIMUM OF 5-AIR CHANGES/ HOUR KITCHEN.
 C. INTERMITTENTLY OPERATED LOCAL EXHAUST FANS SHALL BE RATED AT A MAXIMUM OF 3.0 SONE.
 D. INTERMITTENT LOCAL EXHAUST AIR FLOW RATES SHALL MEET EITHER THE CAPTURE EFFICIENCY (CE) OR THE AIRFLOW RATE SPECIFIED IN TABLE 150.0-G OF THE CALIFORNIA ENERGY CODE.
 INDOOR AIR QUALITY CONTINUOUS EXHAUST VENTILATION SYSTEM REQUIREMENTS (ASHRAE STANDARD) AT LEAST ONE MECHANICAL VENTILATION SYSTEM IN THE BUILDING MUST BE DESIGNATED FOR USE IN COMPLIANCI WITH THE INDOOR AIR QUALITY - BUILDING VENTILATION REQUIREMENT. ALTERNATIVELY, THE SUM OF THE RATED AIRFLOW FROM MULTIPLE FANS CAN BE UTILIZED TO MEET THE REQUIRED INDOOR AIR QUALITY BUILDING VENTILATION AIRFLOW. THE SYSTEM(S) MUST DELIVER CONTINUOUS VENTILATION AIRFLOW AT A RATE GREATER THAN OR EQUAL TO THE RATE SPECIFIED IN THE ENERGY DOCUMENTATION. SEE ENERGY DOCUMENTATION FOR INDOOR AIR QUALITY REQUIRED CFM AIRFLOW.

ENERGY NOTES AFTER INSTALLING WATER HEATING SYSTEMS, FENESTRATION, AND HVAC EQUIPMENT, THE INSTALLER SHALL

SUBMIT THE INSTALLATION CERTIFICATE" (CF-2R FORM), COMPLETED AND SIGNED BY THE INSTALLER, LISTING THE EQUIPMENT INSTALLED, (MANUFACTURER, MODEL, AND EFFICIENCIES, U-VALUES AND SHGC-VALUES, ETC.) AND THA IT MEETS OR EXCEEDS THE REQUIREMENTS OF THE ENERGY DOCUMENTATION. (CEES SECTION 10-103(A)(3)) (REGISTERED COPIES SHALL BE PROVIDED WHEN HERS VERIFICATION IS REQUIRED.) "REGISTERED" COPIES OF THE CF-2R AND CF-3R FORMS SHALL BE SUBMITTED PRIOR TO PRIOR TO FINAL

- INSPECTION, SIGNED BY CERTIFIED BY THE INSTALLER(S) FOR THE CF-2R FORM, AND THE HERS RATER, FOR FIELD VERIFICATION AND DIAGNOSTIC TESTING ON THE CF-3R FORM. (CEES 10-103(A)(3) AND 10-103(A)(5)) PROVIDE SPECIAL INSPECTION FOR FIELD VERIFICATION AND DIAGNOSTIC TESTING PERFORMED BY A THIRD PARTY CERTIFIED HERS RATER FOR THE FOLLOWING: A) QUALITY INSULATION INSTALLATION (QII)
- INDOOR AIR QUALITY VENTILATION KITCHEN RANGE HOOD VERIFIED EER **ERIFIED SEER**
- VERIFIED REFRIGERANT CHARG AIRFLOW IN HABITABLE ROOMS (SC3.1.4.1.7) VERIFIED HSPF

I) VERIFIED HEAT PUMP RATED HEATING CAPACITY J) WALL-MOUNTED THERMOSTAT IN ZONES GREATER THAN 150 SQ. FT. DUCTLESS INDOOR UNIT LOCATED ENTIRELY IN CONDITIONED SPACE.

ENERGY EFFICIENCY REQUIREMENTS :

DESCRIPTION	EFFICIENCY REQUIRED PER TITLE 24
STANDARD DESIGN PV CAPACITY	CONTEMPORARY: 2.46 kWdc MIN GABLE/CRAFTSMAN: 2.41 kWdc MIN.
ROOFING COOL ROOF	ROOF REFLECTANCE: 0.30 - ROOF EMITTANCE: 0.75
FENESTRATION/GLAZING	U-FACTOR: 0.30 - SHGC: 0.23
INSULATION	WALL: R-21 - ROOF: R-30 - FLOOR:N/A
TANKLESS WATER HEATER	UEF: 0.90
MECHANICAL UNIT	HSPF: 9.5 - SEER: 16.0 - EER: 13.0
INDOOR AIR QUALITY	CFM: 41 MINIMUM

CEILING EXHAUST FAN MOUNTING

() MECHANICAL KEY NOTES

MECHANICAL NOTES GENERAL NOTES: AIR INLETS THAT ARE PART OF THE VENTILATION DESIGN SHALL BE LOCATED A MINIMUM OF 10 FEET FROM KNOWN

RNISH LABOR MATERIAL,

HEADROOM AND PASSAGEWAYS.

SHALL BE BOUND, INDEXED, AND TABBED.

DISTRIBUTION OF HEATING AND COOLING.

SOURCES OF CONTAMINATION SUCH AS STACK, VENT, EXHAUST HOOD OR VEHICLE EXHAUST. IR CONDITIONING EQUIPMENT DESIGNED TO BE IN A FIXED POSITION SHALL BE SECURELY FASTENED, PER 4. MANUFACTURERS INSTALLATION INSTRUCTIONS. INSTALLATION INSTRUCTIONS SHALL BE PROVIDED TO THE FIELD ALL WORK AND MATERIAL SHALL CONFORM TO LATEST CODES AND ORDINANCES. IT IS THE INTENTION OF THESE

A<mark>NS AND</mark> SPECIFICATION<mark>S TO COVER ALL THINGS</mark> REQUIRED TO PROVIDE COMPLETE AND OPERATIVE SYSTEMS. E CONTRACTOR IS TO FURNISH LABOR MATERIAL, COMPLETE AND OPERATIVE SYSTEMS. THE CONTRACTOR IS T , TRANSPORTATION, EQUIPMENT, AND MISCELLANEOUS SERVICES ETC. REQUIRED TO COMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION IS TO BE INCLUDED, WHETHER SPECIALLY SHOWN OR MENTIONED. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. THESE DRAWINGS ARE DIAGRAMMATIC REPRESENTATION OF WORK TO BE ACCOMPLISHED AND AS SUCH ARE NOT TENDED TO SHOW ALL REQUIRED OFFSETS OF PIPING AND DUCK WORK. THE CONTRACTOR SHALL INSTALL

AND EQUIPMENT SO AS TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTION AND MAINTAIN THE PLANS AND SPECIFICATIONS ARE INTENDED TO BE USED AS A CONSTRUCTION GUIDELINE ONLY AND NOT THE OTAL INSTRUMENT OF CONTRACT DOCUMENTS. IT IS NOT THE INTENTION OF ANY CONSTRUCTION PLANS TO DIVIDE WORK AMONG DIFFERENT TRADES. VERIFY SCOPE OF WORK WITH CONTRACTOR WHO IS SUPERVISING THE JOB. THE CITY OF FRESNO WILL PROVIDE INTERPRETATION OF THE CONSTRUCTION DOCUMENTS, BUT THE SUPERVISION IS UNDER THE RESPONSIBILITY OF THE CONTRACTOR. SUBMITTALS: CONTRACTOR SHALL SUBMIT A COPY OF EQUIPMENT BROCHURES FOR EACH ITEM FURNISHED. DATA SHALL INCLUDE MANUFACTURES APPROVED INSTALLATION INSTRUCTIONS. SUBMITTALS SHALL BE COMPLETE AND

TEST AND ADJUSTMENTS: CONTRACTOR SHALL TEST ALL EQUIPMENT PER MANUFACTURERS INSTRUCTIONS, SYSTEM SHALL BE FREE OF OBJECTIONABLE NOISE AND VIBRATION. SYSTEM SHALL BE BALANCED FOR EVEN

DPERATING INSTRUCTIONS: CONTRACTORS SHALL PROVIDE OWNER WITH 2 COPIES OF OPERATING AND MAINTENANCE INSTRUCTIONS, MANUFACTURERS EXTEND WARRANTIES, AND CONTRACTORS WRITTEN WARRANTIE ALL BOUND, INDEXED AND TABBED. MAINTENANCE INSTRUCTIONS SHALL INCLUDE MAINTENANCE WHICH IS EQUIRED TO KEEP EQUIPMENT OPERATING AT MAXIMUM EFFICIENCY. WARRANTY: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE F FINAL ACCEPTANCE OR FROM DATE OF OF OWNERS SUBSTANTIAL USAGE OR OCCUPANCY, WHICH EVER IS EA<mark>RLIER.</mark> DAM<mark>AGE DUE TO</mark> VOLTAGE FLUCTUA<mark>TION, F</mark>IRE, ACTS O**F THE ELEMENTS, ACTS OF THE OWNER OR OTHE**F ARTIES, IMPROPER MAINTENANCE OR NEGLECT ARE SPECIFICALLY EXCLUDED FROM THE GUARANTEE. ALL EPAIRS SHALL BE PERFORMED DURING NORMAL WORKING HOURS AND SHALL BE MADE PROMPTLY AFTER NOTICE

DF FAILURE. IF OWNER REQUEST THAT WORK BE PERFORMED ON OVERTIME, OWNER SHALL PAY THE DIFFERENCE BETWEEN REGULAR AND OVERTIME LABOR AT STANDARD BILLING RATES. ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS AMENDED AND ADOPTED BY THE INSPECTION AUTHORITY. NOTHING IN THESE IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHERS APPLICABLE TO THIS PROJECT.

CALIFORNIA BUILDING CODE CALIFORNIA PLUMBING CODE CALIFORNIA MECHANICAL CODE CALIFORNIA ELECTRICAL CODE NONRESIDENTIAL CEC ENERGY STANDARDS 202 IECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL EQUIPMENT DUCTS, GRILLS, REGISTERS, CONTROLS, THERMOSTATS AND CONDENSATE LINES NECESSARY TO COMPLETE THE JOB, CONTRACTOR SHALL CHALK MARK HIGH AND LOW VOLTAGE ELECTRICAL CONDUIT POINTS OF PENETRATION TO MATCH AIR CONDITIONING UNIT REQUIREMENTS ON THE SHEATHING, WHEN FLASHING IS INSTALLED ON SHEATHING BEFORE ROOFING IS STARTED,

CONTRACTOR SHALL ALSO MARK THE GAS AND CONDENSATE PIPING POINTS OF PENETRATION OF THE ROOF HEATHING. CONTRACTOR SHALL START, TEST AND ADJUST ALL SY<mark>STEMS</mark> FOR THE P<mark>ROPER WORKING OF THE SYSTEMS TO THE</mark> SATISFACTION OF THE OWNER AND TENANT, CONTRACTOR SHALL BE RESPONSIBLE FOR THE INITIAL START UP FOR A PERIOD ONE YEAR FROM THE DATE OF ISSUANCE OF THE CERTIFICATE OF OCCUPANCY. QUIPMENT AND MATERIALS AIR CONDITIONING UNIT MOUNTING AT ALL FRAMES SHALL BE BOLTED OR LAG SCREWED TO STRUCTURAL MEMBERS AT EACH CORNER WITH MINIMUM 3/8"X3" PENETRATION INTO SOLID WOOD. A.C. UNIT SHALL BE BOLTED TO THE SUPPORT FRAME WITH 3/8" MINIMUM BOLTS AT EACH CORNER. ELECTRICAL VOLTAGE: AIR CONDITIONING CONTRACTOR SHALL CONFIRM ALL SYSTEM VOLTAGES BEFORE BIDDING AND ORDERING EQUIPMENT AND ALLOW FOR BUCK AND BOOST TRANSFORMERS ON EACH PHASE IF REQUIRED.

PLUMBING CONTRACTOR: GAS, WATER AND CONDENSATE PIPING INCLUDING FINAL CONNECTIONS WITH SHUT-OFF VALVE ELECTRICAL CONTRACTOR: ALL POWER AND CONTROL. PROVIDE W/P OUTLET WITHIN 25' FROM EQUIPMENT AND QUICK DISCONNECT. NO FIELD SUPPLIED ELECTRICAL DEVICE SHALL BE MOUNTED ON AIR CONDITIONING UNITS AND NO RIDGE ELECTRICAL CONNECTIONS SHALL BE MADE.

TO AN APPROVED LOCATION. BY THE MANUFACTURER THE MECHANICAL CONTRACTOR SHALL PROVIDE THE OWNER COPIES OF OPERATION, MAINTENANCE AND PREVENTIVE MAINTENANCE MANUALS FOR EACH MODEL AND TYPE OF MECHANICAL EQUIPMENT.

CONDUIT, WIRING DISCONNECTS AND FINAL CONNECTIONS, UNLESS OTHERWISE NOTED ON MECHANICAL PLAN. NO FIELD SUPPLIED ELECTRICAL DEVICE SHALL BE MOUNTED ON AIR CONDITIONING UNITS AND NO RIDGE ELECTRICAL CONNECTIONS SHALL BE MADE. ALL AIR CONDITIONERS TO BE EQUIPPED WITH AN APPROVED CONDENSATE DRAIN. RUN IN AN APPROVED MANNER ALL EQUIPMENT SHALL COMPLY WITH THE CALIFORNIA ENERGY COMMISSION STANDARD, AND SHALL BE CERTIFIED EQUIPMENT INDICATED ON THESE DRAWINGS ARE SHOWN IN APPROXIMATE LOCATIONS, THE CONTRACTOR SHALL

FIELD VERIFY ALL EXISTING CONDITIONS AND EQUIPMENT LOCATIONS. EXCAVATION, CUTTING, AND FITTING PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE OWNER AND EXCEED NOTCHING REQUIREMENTS SERVICED IN STRUCTURAL DRAWINGS

				DESCRIPTION
	/		OUTDOOR	OCATION
			HEAT PUMP	
			GROUND	IOUNTING
			208/230-1-60 ²	OLTS/PHASE/CYCLE
			30 ²	ICA
			45 ²	10CP
		1	ROTARY INVERTER	YPE
			OWNER CHOICE ¹	IANUFACTURER
			OWNER CHOICE ¹	IODEL
STALLATION.	TIONS PRIOR TO INS	ACTURER'S SPECIFICA	EMANDS WITH MANUF,	VERIFY ELECTRICAL LOADS DE
			INDOOR	
		7	HIGH WALL	QUIPMENT
			WALL	NOUNTING
			0.83 MIN.	COOLING SYSTEM TONS
			333 CFM MIN.	IRFLOW
			12,000 BTU/HR	COOLING RATED CAPACITY
			16.0 MIN.	SEER
			13.0 MIN.	ER
			12,000 BTU/HR	EATING RATED CAPACITY(47° F)
			7,400 BTU/HR	EATING RATED CAPACITY(17° F)
			9.5 MIN.	ISPF
			208/230-1-60 ²	OLTS/PHASE/CYCLE
			0.3125 ²	ICA
			OWNER CHOICE ¹	IANUFACTURER
			OWNER CHOICE ¹	NODEL
JLE.	NICAL UNIT SCHEDUL	JMS LISTED IN MECHA	IINIMUMS AND MAXIMU	OWNER CHOICE MUST MEET M

00 C 00 0 P 0 RATED OCT. PLANNING AND DEVELOPMENT DÉPARTMENT FRESNO CITY HALL 2600 FRESNO STREET THIRD FLOOR FRESNO, CA. 93721-3600 559-621-8084 darm.building@fresno.gov (C) 2023 CITY OF FRESNO THESE DRAWINGS, DESIGNS SKETCHES, IDEAS, DOCUMENTS, PLANS, ARRANGEMENTS, AND OTHER INFORMATION CONTAINED THEREIN, ARE THE SOLE AND EXCLUSIVE PROPERTY OF CITY OF FRESNO. THESE DOCUMENTS ARE DELIVERED AND ACCEPTED BY YOU IN TRUST AND ON THE EXPRESS CONDITION THAT NEITHER THESE DOCUMENTS OR THE INFORMATION CONTAINED THEREIN WILL BE THEREIN WILL BE COPIED, REPRODUCED, OR DELIVERED TO OTHERS, EXCEPT AS SPECIFICALLY INSTRUCTED BY CITY OF FRESNO. PROJECT: ACCESSORY DWELLING

Z

UNIT (**TADU-003**) PLAN 3

REVISIONS DESCRIPTION DATE NO.

CITY USE ONLY

TITLE

DRAWN BY: IRG

MECHANICAL PLAN AND DETAILS JOB# : TADU-003 SHEET NO. DATE: 13-Jul-23 **M**. SCALE: AS NOTED

CF1R-PRF-01E 2023-04-11T15:44:00-07:00 (Page 2 of 12) 003 CONTEMPORARY.ribd22x	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PER Project Name: TADU-003 CONTEMPORARY Calculation Description: Title 24 Analysis	FORMANCE COMPLIANCE METH	OD Calculation Date/Time: Input File Name: TADU-	2023-04-11T15:44:00-07:00 003 CONTEMPORARY,ribd22:		CF1R-PRF-01E (Page 3 of 12)	CERTIFICATE Project Nam Calculation /
Compliance Margins	Energy Use SUMMARY Energy Use Standard Design Source Energy (EDR1) (kBtu/ft ² -yr	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Com pliance Margin (EDR1)	Compliance Margin (EDR2)	Energy
(EDR1) (EDR2efficiency) (EDR2total)	Space Heating 2.18 Space Cooling 3.4	16.04 70.99	2.28 3.07	17.1 68.13	-0.1	-1.06	Space Cr
2 1.8 1.2	IAQ Ventilation 0.5 Water Heating 12.11	5.37	0.5	5.37 47.14	0.95	0 3.83	Water H
2.4 4 2.6 2.4 3.1 2.1	Self Utilization/Flexibility Credit			0		0	Utilization// Cred
23 2.5 1.6	North Facing Efficiency Compliance Total	143.37	- 17.01	137.74	1.18	5.63	Efficiency Co Tota
R	Space Heating 2.18 Space Cooling 3.4	16.04 70,99	2.27 2.84	16.69	-0.09 0.56	-0.65 9.12	Space C
Road hour limits are not exceeded	tAQ Ventilation 0.5 Water Heating 12.11	5.37	0.5	5.37	0.95	0	IAQ Vent Water H
	Self Utilization/Flexibility Credit			0		0	Sel Utilization/i Crea
	East Facing Efficiency Compliance Total 18,19	143.37	16.77	131.07	1.42	12.3	West Facing Complian
			-				
5:39 CalCERTS inc, Report Generated: 2023-04-11 15:44:52	CA Building Energy Efficiency Standards - 2022 Resider	cooo Nitial Compliance R	2023-04-12 13: 2023-04-12 13: 2035-04-12 13: 2035-0	55:39 Report (Senerated: 2023-04-1	CalCERTS inc. 11 15:44:52	CA Building t
CF1R-PRF-01E (Page 6 of 12) CP3: 00-07:00 (Page 6 of 12)	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PER Project Name: TADU-003 CONTEMPORARY	FORMANCE COMPLIANCE METH	OD Calculation Date/Time:	2023-04-11T15:44:00-07:00		CF1R-PRF-01E (Page 7 of 12)	CERTIFICATE Project Nam
	ZONE INFORMATION		M L				FENESTRATIO
08 09 10 11 12 th Tilt Array Angle Tilt: (x in Input Inverter Eff. Annual Solar Access	Zone Name Zone Type HVAC Zone 1 Conditioned	HVAC System Name Zon Mechanical Unit1	e Floor Area (ft ²) Avg. Cei	ling Height Water Heating	System 1	Status New	01 Name
70 n/a n/a <=7:12 96 98	OPAQUE SURFACES		· · · · ·				Window 40! Window 30
analysis,	01 02 Name Zone	03 04 Construction Azim	05 uth Orientation	06 Gross Area (ft ²) Window Area	07 w and Door ea (ft2)	08 Tilt (deg)	French Doc 3068
	Front Wall HVAC - Zone 1 Left Wall HVAC - Zone 1	R-21 Wall 0 R-21 Wall 270	Front Right	248	49 56	90 90	Window 40 2
modeled energy performance for this computer analysis. Additional	Right Wall HVAC - Zone 1 Root Attic HVAC - Zone 1	R-21 Wall 90 R-30 Roof Attic n/2	Left n/a	200	24 n/a	90. n/a	Window 402 Window 402
	OPAQUE SURFACES - CATHEDRAL CEILINGS 01 02 03	04 05	06 07	08 09	10	11	Window 40: 2
	Name Zone Construction	Azimuth Orientation	Area (ft ²) Skylight Area (ft ²)	Roof Rise (x In 12) Roof Reflectance	e Roof Emittance	Cool Roof	Window 40 Window 40
	Roof Cathedral HVAC - Zone 1 Attic	0 Front	445 0	2 0.3	0.75	Yes	4 SLAB FLOORS
05 06 07	01 02 Name Construction	03 04 Type Roof Rise	05 (x in 12) Roof Reflectance	06 Roof Emittance Radia	07 nt Barrier	08 Cool Roof	01
er of Zones Number of Ventilation Number of Water Cooling Systems Heating Systems	Attic HVAC - Zone 1 Attic RoofHVAC - Zone 1	Ventilated 2	0.3	0.75	No	Yes	Slab-on-G
		- 0					
5:39 HERS Provider: OniCERTS inc. Report Generated: 2023-04-11 15:44:52	Registration Number: 223-Pot0043647A-000-000-0000000 CA Building Energy Efficiency Standards - 2022 Resider	coto ntial Compliance Re	egistration Date/Time: 2023-04-12 13: eport Version: 2022.0.000	55:39 HERS Pr Report (ovider: Senerated: 2023-04-1	CalCERTS inc. 11 15:44:52	Registration I
		×	hema Version; rev 20220901				
CF1R-PRF-01E (Page 10 of 12)	CERTIFICATE OF COMPLIANCE - RESIDENTIAL PER Project Name: TADU 003 CONTEMPORARY	FORMANCE COMPLIANCE METH	OD Calculation Date/Time:	2023-04-11T15:44:00-07:00		CF1R-PRF-01E (Page 11 of 12)	CERTIFICATE Project Nam
03 CONTEMPORARY hbd22x	Calculation Description: Title 24 Analysis	-	Input File Name: TADU-	003 CONTEMPORARY_ribd22	x		Calculation D
07 08 09 Compact HEBS Varification Water Heater	01 02 03	04 05 06 Heating	07 08 09 Cooling	10 11	12	13	1. I certify tha Documentation Isaac Gar;
Distribution HERS verification Name (#) None n/a DHW Heater 1 (1)	Name System Type Number of Units	Efficiency HSPF / HSPF2 / Type COP Cap 47	Cap 17 Efficiency SEER Type SEER	/ EER / Zonally Controlled Controlled	Type HER	5 Verification	Company: City of Fre
	Heat Pump System 1 VCHP-ductless I	HSPF 9.5 36000	22200 EERSEER 16	13 Not Zonal	Single Heat Speed 1-h	Pump System iers-htpump	2600 Fresi City/State/Zip:
09 10 11 12 13 Tank Insulation Standby Loss 1st Hr. Rating Tank Tank	HVAC HEAT PUMPS - HERS VERIFICATION 01 02 03	04	05 06	07	08	09	RESPONSIBLE
Pliot R-value (Int/Ext) OF Recovery Eff or Flow Rate Location	Name Verified Airflow Airflow	Target Verified EER/EER2	Verified Verified Refrig SEER/SEER2 Charge	erant Verified V HSPF/HSPF2	Cap 47	Verified Heating Cap 17	1. ian 2. ice 3. The
00000 0 n/a n/a	1-hers-htpump 100 Required 0	N - HERS VERIFICATION	Academicat	Tes	10	103	Responsible Der Isaac Gara
5 06 07	01. 02 Certified	03 04 Airflow to Ductless Units	05 06 Wall Mount	07 08 Low Leakage Minimum Ducts in Airflow pe	09 Certified	10 Indoor Fan not	Company: City of Fre Address:
istribution pe Recirculation Control Shower Drain Water Heat Recovery ne Not Required Not Required	Name Low-Static VCHP System Heat Pump System 1 Not required	Required Required	Thermostal & amp; Pressure Drop Rating Required Not required	Conditioned RA3.3 and Space SC3.3.3.4.1	d Not required	Running Continuously Not required	2600 Fresi City/state/Zip Fresho, C
07 00 00	INDOOR AIR QUALITY (IAQ) FANS	Incluieu		I morrequite	I		
ent Fan Name Distribution Name Required Thermostat Type	01 02 03 Dwelling Unit Airflow (CFM) Fan Eff	icacy IAQ Fan Type	05 06 Includes IAQ Recove Heat/Energy	07 ry includes Fault	08 ERS Verification	09 Status	
n/a n/a Setback	SFam IAQVentRpt 41 0.3	5 Exhaust	Recovery? Effectiveness	No	Yes		Digitally signe
							megistration P

ELECTRICAL LEGEND :	ELECTRICAL NOTES :
SYMBOL DESCRIPTION SYMBOL DESCRIPTION	 GENERAL REQUIREMENT. 1. CHECK EXISTING SYSTEM WITH REFERENCE TO NEW WORK TO BE DONE. RE-ROUTE AND /OR REPLACE PORTIONS (INCLUDING SERVICE) AS NECESSARY. 2. FURNISH AND INSTALL ALL OUTLETS, SWITCHES, FIXTURES AND EQUIPMENT INDICATED, INCLUDING LIGHT
Image: Single Pole switch w/ Dimmer Image: Single Pole switch w/ Dimmer Image: Single Pole switch w/ OVER RIDE Image: Single Pole switch w/ OVER RIDE Image: Single Pole switch w/ OVER RIDE Image: Single Pole switch w/ OVER RIDE	BULBS, AND INSTALL ANY FIXTURES AND EQUIPMENT FORNISHED BY OWNER. 3. NON-METALLIC SHEATHED CABLE SHALL BE CONCEALED OR PROTECTED. 4. ALL FIXTURES, DEVICES AND EQUIPMENT SHALL COMPLY WITH APPLICABLE REGULATIONS. SERVICE PANEL
69 ^S VACANCY SENSOR SWITCH CINCOL DUPLEX OUTLET W/GOUND FAULT CIRCUIT INTERRUPTER WALL MOUNTED FIXTURE(LED) W/MOTION DOOR BELL BUTTON	 5. SHORT CIRCUIT CURRENT CALCULATIONS MUST BE PROVIDED FROM UTILITY COMPANY INDICATING THE MAXIMUM SHORT CIRCUIT CURRENT AVAILABLE AT THE TERMINALS OF MAIN SERVICE. THE CALCULATIONS MUST BE PROVIDED TO THIS OFFICE PRIOR TO THE SERVICE BEING ENERGIZED. ALL EQUIPMENT INSTALLED MUST BE RATED AT OR ABOVE THE AVAILABLE INTERRUPTING CURRENT.
SENSOR & INTEGRAL PHOTO CONTROL B CHIME ASSEMBLY WALL MOUNTED LIGHT STRIP FIXTURE D THERMOSTAT	6. A GROUNDING ELECTRODE COMPLYING WITH SECTION 250-BO(C) OF THE CEC MUST BE PROVIDED FOR GROUNDING OF THE MAIN SERVICE.[CEC250-24] IF A PERIMETER FOOTING IS TO BE POURED, THE ELECTRODE MUST BE A CONCRETE-ENCASED ELECTRODE COMPLYING WITH CEC SECTION 250-18(C).IF GROUND RODS ARE TO BE USED FOR GROUNDING SERVICES IN EXCESS OF 400 AMPS A MINIMUM OF TWO RODS, SPACED AT LEAST
p GARAGE DOOR SENSOR Image: Celling Mounted Fixture Recessed p GARAGE DOOR OPENER Image: Celling Mounted Fixture Recessed p GARAGE DOOR OPENER Image: Celling Mounted Fixture Recessed p GARAGE DOOR OPENER Image: Celling Mounted Fixture Recessed p GARAGE DOOR OPENER Image: Celling Mounted Fixture Recessed p GARAGE DOOR OPENER Image: Celling Mounted Fixture Recessed p GARAGE DOOR OPENER	 SIX FT. APART, SHALL BE USED.[CEC250-84] THE WORKING CLEARANCE REQUIRED BY SECTION 110-16 OF THE CEC MUST BE PERMANENTLY DELINEATED ON THE FLOOR IN FRONT OF ALL ELECTRICAL PANELS LOCATED IN STORAGE OR PROCESSING AREAS WITH THE WORDING "NO STORAGE IN THIS AREA"
CEILING FAN W/LIGHT (LED) (SEPARATE SWITCH FOR FAN) HIGH W/A 1/4" STROKE MOUNTED ON A CONTRASTING BACKGROUND CLEARLY VISIBLE FROM THE STREET (ILLUMINATED UNITED ON A CONTRASTING BACKGROUND CLEARLY VISIBLE FROM THE STREET (ILLUMINATED	 8. PERMANENTLY LABEL EACH DISCONNECT, CLEARLY IDENTIFY THE CIRCUITRY THAT IS CONTROLLED BY THE DISCONNECT. 9. HOOD FAN AND MICROWAVE/HOOD FAN COMBINATION UNITS SHALL HAVE IT'S OWN SEPARATE 20 AMP CIRCUIT.
SD SMOKE ALARM. SEE ELECTRICAL NOTES NUMBER 42 FOR SPECIFICATIONS. Image: Construct of the second	 E. 10. CENTRAL HEATING EQUIPMENT REQUIRES INDIVIDUAL BRANCH CIRCUITS. E. 11. PROVIDE A DESIGNATED 20 AMP CIRCUITS FOR THE LAUNDRY ROOM. 12. UNDERGROUND GAS PIPES SHALL NOT BE USED AS A GROUNDING ELECTRODE PER CEC 250-52(a). 13. KITCHEN COUNTERS SHALL BE EQUIPPED WITH TWO OR MORE 20-AMP CIRCUITS FOR SMALL APPLIANCES.
CARBON MONOXIDE ALARM. SEE ELECTRICAL NOTES NUMBER 43 FOR SPECIFICATIONS.	 14. ELECTRIC READY ITEMS REQUIRE BREAKER SPACE AND LABELING IN PANEL. 15. A TYPE 2 SURGE PROTECTION DEVICE (SPD) SHALL BE INSTALLED IN ACCORDANCE WITH ITEMS A THROUGH D BELOW: A. TYPE 2 SPD SHALL BE CONNECTED ANYWHERE ON THE LOAD SIDE OF A SERVICE DISCONNECT OVER CURRENT
AC COMBINER FOR PHOTOVOLTAIC SYSTEM. SEE PHOTOVOLTAIC PLANS.	DEVICE. THE SERVICE OVERCURRENT DEVICE SHALL BE AN INTEGRAL PART OF THE SERVICE DISCONNECTING MEANS OR SHALL BE LOCATED IMMEDIATELY ADJACENT THERETO. WHERE FUSES ARE USED AS THE SERVICE OVERCURRENT DEVICE, THE DISCONNECTING MEANS SHALL BE LOCATED AHEAD OF THE SUPPLY SIDE OF THE FUSES.
SYMBOL W/DESCRIPTION FOR DEDICATED OUTLET ABOVE CABINET	 B. TYPE 2 SPD SHALL BE CONNECT AT THE BUILDING OR STRUCTURE ANYWHERE ON THE LOAD SIDE OF THE FIRS OVERCURRENT DEVICE AT THE BUILDING OR STRUCTURE. C. THE SPD SHALL BE CONNECTED ON THE LOAD SIDE OF THE FIRST OVERCURRENT DEVICE IN A SEPARATELY DERIVED SYSTEM.
FOR HOOD/MICROWAVE DEDICATED BRANCH CIRCUITS FOR ENERGY STORAGE SYSTEM	 D. ANY SPD MUST BE CERTIFIED BY THE UNDERWRITERS LABORATORIES (UL) RECEPTACLES: 16. ALL 120-VOLT, SINGLE PHASE, 15 AND 20 AMP BRANCH CIRCUITS SUPPLYING RECEPTACLES INSTALLED IN DWELLING UNIT KITCHEN, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS,
FUNCTION FOR ENERGY STORAGE SYSTEM READY REQUIREMENTS.	BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER (AFCI), COMBINATION TYPE INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. THIS INCLUDES LIGHTS, RECEPTACLES, FANS, AND SMOKE DETECTORS. EXCEPTION 1: WHERE RMC, IMC, EMT, OR STEEL ARMORED CABLE, TYPE AC, MEETING
DESCRIPTION OF COLOR LOAD PER ELECTRICAL LOAD MEASUREME	THE REQUIREMENTS OF CEC 250.118 USING METAL OUTLET AND JUNCTION BOXES IS INSTALLED FOR THE PORTION OF THE BRANCH CIRCUIT BETWEEN THE BRANCH CIRCUIT OVER CURRENT DEVICE AND THE FIRST RECEPTACLE, IT SHALL BE PERMITTED TO INSTALL A COMBINATION AFCI AT THE FIRST OUTLET TO PROVIDE PROTECTION FOR THE REMAINING PORTION OF THE BRANCH CIRCUIT.
ELECTRICAL LOAD SQ.FT. IOTAL FOR GENERAL LIGHTING OF POWE GENERAL LIGHTING 625 3 1,875 WATTS	 17. ALL REQUIRED 125-VOLT, 15 AND 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. 18. PROVIDE GROUND-FAULT-CIRCUIT-INTERRUPTERS (GFI) PROTECTION FOR ALL 125-VOLT, SINGLE PHASE, 15-AND 20- AMP BATHROOM LAUNDRY, GARAGE AND EXTERIOR RECEPTACLES, COUNTERTOP RECEPTACLES, WITHIN
DESCRIPTION OF ELECTRICAL LOAD OF QUANTITY LOAD PER APPLIANCE APPLIANCE APPLIANCE OF POWE	 6'-0" OF ALL SINK LOCATIONS, AND ALL KITCHEN RECEPTACLES. 19. AT LEAST ONE LIGHT OUTLET (WALL SWITCH CONTROLLED) SHALL BE INSTALLED ON THE EXTERIOR SIDE OF OUTDOOR ENTRANCES AND EXITS. [NEC 210-70(A)]
SMALL APPLIANCE13,0003,000WATTSCLOTHES WASHER11,2001,200WATTS	A. RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN A FACE UP POSITION IN THE WORK SURFACE. B. RECEPTACLE OUTLETS SHALL BE LOCATED ABOVE, BUT NOT MORE THAN 20 INCHES ABOVE THE COUNTERTOP C. RECEPTACLE OUTLETS SHALL BE PERMITTED TO BE MOUNTED NOT MORE THAN 12 INCH BELOW THE
DOUBLE OVEN 0 8,000 0 WATTS RANGE/OVEN 1 9,000 9,000 WATTS WATER HEATER 0 4,500 0 WATTS	D. ON ISLAND AND PENINSULAR COUNTERTOP DOES NOT EXTEND MORE THAN 6 INCH BEYOND ITS SUPPORT BAS D. ON ISLAND AND PENINSULAR COUNTERTOPS, RECEPTACLES MAY BE MOUNTED A MAXIMUM 12 INCH BELOW COUNTERTOP PROVIDED THERE ARE NO BACKSLASHES ON DIVIDERS AND NO MEANS TO MOUNT WITHIN 18 INC ABOVE COUNTERTOP, SUCH AS AN OVERHEAD CABINET.
DISHWASHER 0 1,800 0 WATTS DRYER 1 5,000 5,000 WATTS MISCELLANEOUS 0 0 0 WATTS	 ALL 120 VOLT WEATHERPROOF RECEPTACLE SHALL BE G.F.C.I. TYPE, PROVIDE WEATHER- PROOF RECEPTACLE WITHIN 25 FT. OF ALL HVAC UNITS. BATHROOM RECEPTACLES ARE TO BE SUPPLIED BY AT LEAST ONE 20-AMP BRANCH CIRCUIT, THE CIRCUIT SHALL HAVE NO OTHER OUTLETS.
SUBTOTAL 20,075 WATTS FIRST 10,000 WATTS AT 100% 10,000 WATTS	 A 4-WIRE GROUNDED BRANCH CIRCUIT IS REQUIRED FOR ALL 240 VOLTS CIRCUITS SERVING COOKING EQUIPMENT AND CLOTHES DRYERS. ALL RECEPTACLE OUTLET BOXES IN FIRE RESISTIVE ASSEMBLIES SHALL BE MADE OF STEEL AND A MAXIMUM OF 16 SO IN BE SEPARATED BY A MINIMUM OF 24" HORIZONTALLY, ALL PENETRATIONS SHALL BE FIRE STOPPED.
SUBTOTAL-FIRST 10,000 WATTS AT 1002 10,075 WATTS (SUBTOTAL-FIRST 10,000 WATTS AT 1002 4,030 WATTS 1002)X0.40 = REMAINING WATTS AT 402 4,030 WATTS	WITH AN APPROVED LISTED SYSTEM. LIGHTING. 23. ALL PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LUMINAIRES IN ACCORDANCE WITH TABLE 150.0-A OF THE CEC. A SCHEDULE OF ALL INTERIOR LUMINARIES AND LAMPS INSTALLED MUST BE
REMAINING WATTS AT 40% + 10,000 WATTS = SUBTOTAL GENERAL LOADS	DELIVERED TO THE HOMEOWNER AFTER FINAL INSPECTION (TITLE 24 CALIFORNIA CODE OF REGULATIONS, PART 1, 10-103(B)3). IN ADDITION TO A COMPLETE LIST OF INSTALLED LIGHTING SYSTEMS, THE LIGHTING SCHEDULE SHOULD INCLUDE ALL NECESSARY SYSTEM INFORMATION FOR REGULAR OPERATIONS AND MAINTENANCE, AND REFERENCES TO SUPPORT FUTURE UPGRADES TO THE LIGHTING SYSTEM.
MECHANICAL UNIT AT 125% 1 9,000 9,000 WATTS EV POWER SUPPLY AT 100% 0 9,600 0 WATTS	24. LED LIGHTING USED IN RESIDENTIAL LIGHTING MUST BE CERTIFIED BY THE ENERGY COMMISSION BY THE MANUFACTURER IN ACCORDANCE WITH REFERENCE JOINT APPENDIX JA-8. LED LIGHTING NOT CERTIFIED SHALL BE CLASSIFIED AS "LOW EFFICACY". 25. LIGHTING AND CONTROLS SHALL CONFORM TO 2022 BUILDING ENERGY EFFICIENCY STANDARDS
TOTAL WATTAGE 23,105 WATTS TOTAL WATTAGE/240 VOLTS = 96 AMPS SERVICE RATING 96 AMPS	 26. EIGHT ENERGY STANDARDS REQUIRE VACANCY SENSORS TO CONTROL AT LEAST ONE LUMINAIRE IN THE FOLLOWING ROOM TYPES. BATHROOMS, UTILITY/LAUNDRY ROOMS AND GARAGES. 27. ALL 3 WAY, AND OTHER LIGHTING CIRCUITS CONTROLLED BY MORE THAN ONE SWITCH. A LIGHTING CIRCUIT CONTROL FOR YAGANCY SENSOR LASS PEEN.
PROPOSED 200 AMP MAIN ELECTRICAL SERVICE W/METER. PROVIDE MINIMUM 225 BUSBAR RATING PER CEC SECTION 150.0(s). SINGLE PHASE SERVICE PROVIDE 2- 3/0 CU-THWN AND 1-#6 CU-THWN GROUND CONDUCTORS II 2" CONDUIT CONNECTION TO UTILITY COMPANY'S SERVICE WILL BE VERIFIED AT TIME OF LOT SPECIFIC BUILDIN	INSTALLED TO COMPLY WITH 150.0(k) SHALL MEET ALL OF THE FOLLOWING CONDITIONS: A. NO CONTROLS SHALL BYPASS THE DIMMER OR VACANCY SENSOR FUNCTION. B. THE DIMMER OR VACANCY SENSOR SHALL BE CERTIFIED TO THE ENERGY COMMISSION THAT IT COMPLIES WITH
IF OVERHEAD OR UNDERGROUND SERVICE FEEDER WILL BE INSTALLED.	 28. ENCLOSED LUMINARIES: MAY ONLY CONTAIN LIGHT SOURCES THAT ARE MARKED "JA8-2019-E" AND MUST MEET HIGH-EFFICACY REQUIREMENTS OF JA8. 29. INTERIOR SWITCHES AND CONTROLS: NO CONTROL MUST BYPASS A DIMMER OR VACANCY SENSOR FUNCTION IF
	 AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) MAY BE USED TO COMPLY WITH DIMMER AND VACANCY SENSOR REQUIREMENTS IN ACCORDANCE WITH SECTION 150(K)(2)(G&H) LUMINARIES SHALL BE SWITCHED WITH READILY ACCESSIBLE CONTROLS THAT PERMIT LUMINARIES TO BE
	 SWITCHED ON AND OFF. 32. FIXTURES USED TO MEET HIGH-EFFICACY LIGHTING REQUIREMENTS SHALL NOT CONTAIN MEDIUM-BASE INCANDESCENT LAMP SOCKETS. 33. RECESSED DOWN LIGHT LUMINARIES IN CEILINGS. LUMINARIES RECESSED INTO CEILING MUST NOT CONTAIN
SERVICE ENTRANCE CONDUIT SIZE MAXIMUM MAST HEIGHT ABOVE ROOF-WITHOUT BRACING	SCREW BASE SOCKETS AND MUST MEET THE FOLLOWING REQUIREMENTS. A. BE DEFINED IN SECTION 100.1 FOR ZERO CLEARANCE INSULATION CONTACT. B. HAVE A LABEL THAT CERTIFIED IT IS AIRTIGHT WITH AIR LEAKAGE LESS THAN 2.0 CFM AT 75 PASCALS, BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING.
Image: Second	 G. HAVE ALL AIR LEAKS PATHS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SEALED WITH A GASKET O CAULK. D. ALLOW BALLAST OR DRIVER MAINTENANCE AND REPLACEMENT TO BE READILY ACCESSIBLE FROM BELOW THE CEILING FOR LUMINARIES WITH HARDWIRED BALLASTS OR DRIVERS.
CLAMPS GRAD CLAMPS FURNISHED AND INSTALLED BY PG&E. CLAMPS 2" 3" 54" LARGER LARGER 78" PERISCOPES OVER 30" ABOVE ROOF SHALL BE ADEQUATELY, BRACED BY	 E. CONTAIN LIGHT SOURCES THAT COMPLY WITH JA8 ELECTRONIC BALLAST: BALLASTS FOR FLUORESCENT LAMP 13 LAMP WATTS AND GREATER SHALL BE ELECTRONIC WITH AN OUTPUT FREQUENCY >20 kHZ. 34. NO PARTS OF CORD CONNECTED FIXTURES, HANGING FIXTURES, LIGHTING TRACK, PENDANTS, OR CEILING SUSPENDED (PADDLE) FANS SHALL BE LOCATED WITHIN A ZONE MEASURED 3 FT. HORIZONTALLY AND 8 FEET
2-GALVANIZED BRACES AT APPROXIMATELY 90 DEGREE SPREAE 3/4" PIPE OR 1 1/4" X 1/8" ANGLE MIN.	 VERTICALLY FROM THE TOP OF THE BATHTUB RIM OR SHOWER STALL THRESHOLD. THIS ZONE IS ALL ENCOMPASSING AND INCLUDES THE ZONE DIRECTLY OVER THE TUB OR SHOWER STALL. 35. LIGHTING FIXTURES IN CLOTHES CLOSETS TO COMPLY WITH CEC 410.2 AND 410.16. 36. LIGHT FIXTURES INSTALLED ON THE EXTERIOR OF THE BUILDING OR WITHIN TUB AND/OR SHOWER ENCLOSURES.
FLASHING	 MUST BE LISTED FOR DAMP LOCATIONS. 37. BLANK ELECTRICAL BOXES: THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 5 FEET ABOVE THE FINISHED FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF BEDROOMS - THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER VACANCY SENSOR
2X4 BLOCKING BETWEEN RAFTERS SOLIDLY INSTALLED	CONTROL, OR FAN SPEED CONTROL. 38. AT EVERY RECEPTACLES USED EXCLUSIVELY FOR LIGHTING THE BOX SHALL BE DESIGNED OR INSTALLED SO THAT A LUMINARIES OR LAMP HOLDER MAY BE ATTACHED. BOXES SHALL BE REQUIRED TO SUPPORT A LUMINARE WEIGHING A MINIMUM OF 50 J BS. A LUMINARE THAT WEIGHS MORE THAN 50 J BS. SHALL BE
	SUPPORTED INDEPENDENTLY OF THE RECEPTACLES BOX, UNLESS THE RECEPTACLES BOX IS LISTED AND MARKED ON THE INTERIOR OF THE BOX TO INDICATE THE MAXIMUM WEIGHT THE BOX SHALL BE PERMITTED TO SUPPORT.
SUPPORT, A HEAVY DUTY PIPES STRAP SECURED BY (MIN. SIZE) 3/8" BOLTS OR 3/8" BY 3" LAS SCREWS IS REQUIRED AT THE	SHALL BE HIGH-EFFICACY, CONTROLLED BY AN MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE THE ON, AND AN AUTOMATIC CONTROL TYPE SENSOR: (SECTION 150.0(K)(3) OF THE CEC STANDARDS.
CONDUCTORS EXTENDED 18" FROM WEATHERHEAD (SEE ABOVE FOR ENLARGE VIEW)	
	CEILING FRAMING MEMBER
2" RIGID CONDUIT RAINTIGHT CONNECTORS AND	2X BLOCKING AS REQUIRED FOR FIXTURE SUPPORT 3-16D AT EACH END
EQUIPMENT WHEN EXPOSED TO WEATHER SURFACE OR FLUSH MOUNTED	
COMBINATION METER SOCKET AND 200 AMP SERVICE EQUIPMENT (MAY CONSIST OF SOCKET AND SEPARATE CIRCUIT BREAKER CABINET IF DESIRED)	
NO. 4 COPPER GROUND WIRE (MUST E RIGID CONDUIT IF RUN BELOW GROUN BOND TO 10' MINIMUM METAL COLD	E IN FINISH CEILING
WATER PIPE LOCATED IN GROUND	HIZ A 3-1/2 FAIN READ S.W.S. WITH WASHER, (2) AT EACH END LIGHTING FIXTURE TO BE
#4 X 20' REBAR IN FOOTING (UFER) (ON EXISTING RESIDENCE CHANGE THAT U THE WATER SYSTEM AS THE ONLY	AN CEILING CEILING
GROUNDING METHOD A SUPPLEMENT/ 5/8"X8' GROUND ROP SHALL BE INSTAL	B LIGHT FIXTURE

DLAR PH		ROJECT DE			I OF	FREC
ING MATERIAL DING STORIES: JND SNOW LOAD:	COMPOSITION SHINGLE	ARRAY # 1	ROOF TILT: S AZIMUTH: 15 DC STC RATI	bee PV PLAN 50° TO 270° NG: 2.70 kW	al al	Jer 1
RRAY WEIGHT SURE CATEGORY:	339.5 LBS C				*	
SOLAR COMPON	E OF SOLAR PHO			ENTS		
O INVERTERS	LO Q.PEAK DUO BLK I ENPHASE IQ8PLU	NIL-G TU+385 OR EQUAL JS-72-2-US OR EQUAL N/A	7 7 N/A		C S	
ING ATTACMENT ING RAIL RAL REQUIREME	IRONRIDGE F IRONRIDGE	LASTIVUE OR EQUAL	PER PLAN (4) 14'-0" EACH	1	R	
TILITY SHALL BE N 10.2 APPROVAL: AL ECOGNIZED TESTI	OTIFIED BEFORE ACTIVATION OF F L ELECTRICAL EQUIPMENT SHALL NG LABORATORY ACCREDITED BY	⊃V SYSTEM. . BE LABELED, LISTED, C ′ THE UNITED STATES C	OR CERTIFIED BY A NATIO DCCUPATIONAL SAFETY H	NALLY IEALTH	Op.	
DMINISTRATION. ONTRACTOR SHAL ONTRACTOR SHAL	LI FIELD VERIFY ALL DIMENSIONS	PRIOR TO INITIATING CO	ONSTRUCTION. NTS PRIOR TO INITIATING		ATE	DOCI
LL EQUIPMENT AN ONNECTIONS, ETC UALIFIED PERSON	D ASSOCIATED CONNECTIONS OF C. AND ALL ASSOCIATED WIRING AI NEL (CEC 690.4(E)).	INVERTERS, MODULES	5, PV SOURCE CIRCUITS, E S SHALL BE INSTALLED OI	BATTER NLY BY		
HE CONTRACTOR	OR OWNER MUST PROVIDE ROOF DERS MUST BE OSHA APPROVED, N RITS INTENDED USE	ACCESS (LADDER TO R MINIMUM TYPE I WITH A	ROOF) FOR THE ALL REQU 250 LB RATING, IN GOOD		PLANNING AND DEPA	DEVELOPME
WELLING AS PER T EDROOM, AND AT I ETROFITTED OUTS	THE 2019 CRC. THESE SMOKE ALAR LEAST ONE ON EACH FLOOR OF TI SIDE EACH BEDROOM AND AT LEAS	RMS ARE REQUIRED TO HE HOUSE. CARBON MC ST ONE ON EACH FLOOI) BE IN ALL BEDROOMS, O DNOXIDE ALARMS ARE RE R OF THE HOUSE. THESE	UTSIDE EACH QUIRED TO BE ALARMS MAY	FRESNO	CITY HALL
E SOLELY BATTER ALL AND CEILING	Y OPE <mark>RATED</mark> IF THE PHOTOVOLTA FINISH <mark>ES INS</mark> IDE THE HOME; OTHE (CRC R314, R315)	NIC PROJECT DOES NOT ERWISE, THE ALARMS M				FLOOR
MOKE AND CARBO ISPECTED BY THE ONTRACTOR SHAL	IN MONOXIDE ALARMS ARE REQUI INSPECTOR IN THE FIELD. L VERIFY THAT THE ROOF STRUC PENETRATE A MINIMUM 2" INTO S	TURE WILL WITHSTAND	אס א אז א אחט 315 TO BE VE THE ADDITIONAL LOADS. RAL MEMBERS אחס פאסי		559-6	21-8084
ANUFACTURER RE N ACCESS POINT S	ECOMMENDATIONS FOR FASTENEI SHALL BE PROVIDED THAT DOES N RS ARE LOCATED AT STRONG POIN	RS INTO ENGINEERED S IOT PLACE THE GROUN NTS OF BUILDING CONS	TRUCTURAL MEMBERS. D LADDER OVER OPENING TRUCTION AND IN LOCAT	GS SUCH AS TONS WHERE		OF FRESNO
HE ACCESS POINT CRC R331.4.2) /HERE DC CONDUC	DOES NOT CONFLICT WITH OVER	HEAD OBSTRUCTIONS	SUCH AS TREE LIMBS, WI	RES, OR SIGNS.	THESE DRAWINGS, DESIGNS SKE ARRANGEMENTS, AND OTHER INFOF SOLE AND EXCLUSIVE PROPERTY OI ARE DELIVERED AND ACCEPTED R	ICHES, IDEAS, DOCUMENTS, PLAI MATION CONTAINED THEREIN, AI CITY OF FRESNO. THESE DOCU YOU IN TRUST AND ON THE EXP
HALL NOT BE INST. ODULES AND EQU LUMBING AND MEC UILDING PLUMPIN	ALLED WITHIN 10" OF THE ROOF D IPMEN <mark>T. (CEC 690.31</mark> (E)(1)) CHAN <mark>ICAL VENTS THROUGH THE R</mark> G. O <mark>R MECHANICAL VENTS TO BE</mark>	COVERED ORSTRUCT	DERED BY SOLAR MODULED OR ROLLED APOLIND	ו אז עם IHE PV ES - NO SOLAR	CONDITION THAT NEITHER THESE CONTAINED THEREIN WILL BE THER DELIVERED TO OTHERS, EXCEPT AS	EDOCUMENTS OR THE INFORMAT EIN WILL BE COPIED, REPRODUCI SPECIFICALLY INSTRUCTED BY C ESNO.
ODULES. LL FIELD-INSTALLE IRECTLY OR BY DI	ED JUNCTION, PULL, AND OUTLET E SPLACEMENT OF A MODULE SECU	BOXES LOCATED BEHIN RED BY REMOVABLE FA	ID MODULES SHALL BE AC	CESSIBLE	PROJECT:	
SOL BOL GAUGE & TYPI	R PHOTOVOLT	AIC WIRING	SCHEDULE CONDUIT SIZE & TYPE	QUANTITY	ACCE	SSOR
12 AWG Q-CABLE 10 AWG	6 AWG BARE COPPER 8 AWG	10.0	FREE AIR	2		
THWN 2 AWG THWN	THWN 8 AWG THWN	10.0	3/4" EMI	3	DWE	LLING
WIRING MATERIA	NOTES. LS SHALL COMPLY WITH MAXIMUN V; WIRE SHALL BE WET RATED AT	A CONTINUOUS CURREN 90°C.	NT OUTPUT AT 25°C AND I	MAXIMUM		TIL
EXPOSED PHOTO PHOTOVOLTAIC S SHALL BE PERMI	OVOLTAIC SYSTEM CONDUCTORS SYSTEM CONDUCTORS SHALL BE ITTED BY SEPARATE COLOR-CODIN	ON THE ROOF WILL BE I IDENTIFIED AND GROUP IG, MARKING TAPE, TAG	USE-2 OR PV TYPE WIRE. PED. THE MEANS OF IDEN GGING OR OTHER APPROV	TIFICATION		
LOCATIONS. (CEC WHERE CONDUC	C314.15) TORS ARE INSTALLED UNDERGRC	OUND, SECTION 300.5 OF	F THE CEC MUST BE FOLL	OWED TO		J-003
ALL METALLIC RA 250.96) WHERE SIZES OF	ACEWAYS AND EQUIPMENT SHALL	BE BONDED AND ELEC	TRICALLY CONTINUOUS. (CEC 250.90, OR SHALL SIZE		
THEM ACCORDIN						
REMOVAL OF A U CONNECTION BE	G TO APPLICABLE CODES. TILITY-INTERACTIVE INVERTER OF TWEEN THE GROUNDING ELECTRO	R OTHER EQUIPMENT SI	HALL NOT DISCONNECT T THE PV SOURCE AND/OR	HE BUILDING OUTPUT	PLA	
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PHOTOVOLTAIC MODULE SPECIFICATION

Q CELLS

HE MOST THOROUGH TESTING PROGRAMME IN THE INDUSTR

sive quality programme in the industry; The new "Quality Controlled PV" of

he independent certification institute TÜV Rheinland.

NNOVATIVE ALL-WEATHER TECHNOLOGY

ow-light and temperature behavior.

EXTREME WEATHER RATING

A RELIABLE INVESTMENT

linear performance warranty2.

APT test conditions according to IEC/TS 62804-1:201

See data sheet on rear for further information.

URING HIGH PERFORMANCE

High-tech aluminum alloy frame, certified for

high snow (5400 Pa) and wind loads (4000 Pa).

Inclusive 25-year product warranty and 25-year

Optimal yields, whatever the weather with excellent

Long-term yield security with Anti LID Technology, Anti PID

echnology¹, Hot-Spot Protect and Traceable Quality Tra.Q

Q CELLS is the first solar module manufacturer to pass the most comprehen

Q.PEAK DUO BLK ML-G10+ 385-405 **ENDURING HIGH** PERFORMANCE EUPD RESEARCH TOP BRAND PV MODULES BURDHE 2021 25 Warranty BREAKING THE 20% EFFICIENCY BARRIER ann Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.9%.

THE IDEAL SOLUTION FOR: Rooftop arrays on residential buildings

Engineered in Germany

Format	74.Din × 41_Lin × 1.26 in (including frame) (1879mm × 1045mm × 32mm)		16.0° G879-
Neight	48.5lbs (22.0kg)		
ront Cover	0.13in (3.2mm) thermelly pre-stressed giass with anti-reflection technology	+	C.
ack Cover	Composite film		
1107110	Black anodized aluminum		
that .	6 × 22 monocrystalline Q.ANTUM solar half cells		(
unction Box	2 09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass clodes		n #8.2" (1250 ove)
sible	4mm² Solar cable; (+) ≥49.2 in (1250 mm), (-) ≥49.2 in (1250 mm)		
Innoclar	Staubli MC4; IP68		mand data (DR 196) a

OTTER OLAGO				385	390	395	400	405
MINIMUM PERFORMANCE AT	STANDARD TEST	T CONDITI	ONS, STC/ (POWER	TOLERANCE +	5 W / -0 W)			
Power at MPP1		Page	[W]	385	390	395	400	405
Short Circuit Gurrent		he	[A]	1104	11.07	11.10	11.14	11 17
Copen Circuit Voltage		Voc	[V]	45 19	45.23	45.27	45.30	45.34
Current at MPP		form	[A]	10,59	10,65	10.71	10.77	10.83
Voltage at MPP		View	[V]	36.36	36.62	36.88	37.13	37.39
Efficiency ²		n	[%]	≥19.6	≥19.9	≥20.1	≥20.4	≥20.6
MINIMUM PERFORMANCE AT	NORMAL OPERA	TINGCOM	DITIONS, NMOT					
Powei at MPP		Pour	[W]	288.8	292.6	296.3	300.1	303.B
E Short Circuit Current		lsc.	(A)	8.90	8.92	8.95	8.97	9.00
Dpen Circuit Voltage		Voc	IV1	42.62	42.65	42.69	42.72	42.76
S Gurrant at MPP		liver-	[A]	8.35	8.41	8.46	8.51	8.57
Voltage at MPP		Vare	[V]	34,59	34.81	35.03	35,25	35.46
Measurement tolerances Pum ±3%	Class Voc ±5% at ST	C 1000W/r	m ² ,25±2°C,AM15 a	cording to IEC 60	904-3 • 1800 W/m², NMOT,	spectrum AM 1	5	
CELLS DEDEODMANICE WAL								
BOLLS BOLLS		At least 9 first year degradat of nomini least 861 25 years. All data v os. Full W	18 % of nominal power Thereafter max. 0.5 % Ion per year. At least 9 al power up to 3.0 year & of nominal power up within measurement to) arranties in accordance	during 11 100 3.5% s At 10 seranc- e with #0	RMANCE AT LOW IRRAI	DIANCE		
		At least 9 first year degradat of nomini least 865 25 years. All data v os. Full w the warra sales org country.	18 % of nominal power Thereafter max. 0.5 % ton por year. At (east 9 al power up to 10 year & of nominal power up within measurement to) arranties in accordance inty terms of the Q CE anisation of your respe	during 3.5% se At 10 evance- e with LLS rective	RMANCE AT LOW IRRAL	BRO LOOK	onditions in	
The second secon	RRANTY	At least 9 first year degradat of nomini least 863 25 years. All data v os. Full w the wara sales org country.	18% of nominal power Thereafter max. 0.5% ton por year. At least 9 al power up to 10 year & of nominal power up within measurement to) arranties in accordance inty terms of the Q CE anisation of your respe	during 114 3.5% 100 10 eranc- e with 10 LLS ictive Typical	RMANCE AT LOW IRRAL	NOR LOOK	onditions in	
The second secon	RRANTY Barrier Barrier Bar	At least 9 first year degradat of nomini least 85 25 25 years. All data v os Full w the warre sales org country.	18% of nominal power Thereafter max. 0.5% ton por year. At least 9 al power up to 10 year & of nominal power up vithin measurement to arrantise in accordanc inty terms of the Q CE ansiation of your respe	PERFO during 119 3.5% 100 100 erranc- e with evite to be with evite to be with evite to be with evite to be be to be	RMANCE AT LOW IRRAL	BOIANCE	onditions in	-0.27
The second secon	RRANTY Barrier Barrier	At least 9 first year degradat of nomini least 85 25 years. All data v os Full w the warre sales org country.	18% of nominal power Thereafter max. 0.5% ton por year. At least 9 al power up to 10 year % of nominal power up within measurement to) arrantise in accordance ansiation of the Q CE ansiation of your respe- (K) +0.04 (K) -0.34	PERFO during 119 3.5% 190 8 At 10 emanc- e with e LLS compare Temperature Nominal Mod	RMANCE AT LOW IRRAL	BOILANCE	onditions in (%/K) VFI	-0.27 109±5.4 (43±3*0)
Temperature Coefficient of P ₁	RRANTY B B B B B B B B B B B B B B B B B B B	At least 9 linet year degradat definition least 85 25 years. All data v os Full w the warm sales org county. α [%, γ [%,	IB % of nominal power Thereafter max. 0.5% ton per year. At least 9 al power up to 10 year % of nominal power up vithin measurement to) arrantes in accordanc inty terms of the Q CE anniation of your respec- nisation of your respec- (K) +0.04 (K) -0.34	Comparing Compar	RMANCE AT LOW IRRAL	DIANCE 900 1000 BIOLOGIC PRIVAT OWN Imadiance C C 1000W/m²γ β ture NMOT	onditions in (%/K) (%/	-0.27 109±5(4 (43±3*C)
Temperature Coefficient of P ₂	RRANTY B B C C C C C C C C C C C C C C C C C C	At least 9 linet year degradat of nomini least 861 25 years. All data y os. Full w the ware sales org county. a [%/ y [%]	IB % of nominal power Thereafter max. 0.5 % ion por year. As (east 9 al power up to 10 year % of nominal power up within measurement to) arranties in accordance annuation of your respe- (K) +0.04 (K) -0.34 PROPERTIES F	PERFO during 11 119 3.5% se At 10 erranc- e with 10 turing 100 erranc- e with 10 Typical 10 compare Temperature Nominal Mod	RMANCE AT LOW IRRAU	DIANCE B00 L000 B00 L00	0nd/5gne in (%/K) [%F]	-0.27 109±5;4 (43±3*C)
TEMPERATURE COEFFICIENT Temperature Coefficient of P _i Maximum System Voltage V _{int}	RRANTY B B C C C C C C C C C C C C C C C C C	At least 9 linet year degradat of nomini least 865 25 years. All data y os. Full w the warre sales org county. a [%/ y [%/ 10	IB % of nominal power Thereafter max. 0.5 % ion por year. As (east 9 an power up to 10 year & of nominal power up within measurement to) arranties in accordance annuation of your respe- (K) +0.04 (K) -0.34 PROPERTIES F 000 (IEC)/1000 (UL)	PERFO during 11 119 3.5% s At 10 erranc- e with 10 turs compare Temperature Nominal Mod OR SYSTEM PV module c	RMANCE AT LOW IRRAL and the performance under the service of the	DIANCE B00 L000 B00 L00	0nd/5gns in .[%/K] .[%F]	-0.27 109±5(4 (43±3*C) Čless II
Temperature Coefficient of P _i Temperature Coefficient of P _i Maximum System Voltage V _{ins}	IV]	At least 9 linet year degradat of nomini least 85 25 years. All data y os. Full w the warre sales org county. y (%) y (%)	IB % of nominal power Thereafter max. 0.5 % Ion por year. As least 9 al power up to 10 year % of nominal power up within measurement to) arranties in accordance answation of your respective (K) +0.04 (K) -0.34 PROPERTIES F 000 (IEC)/1000 (UL) 20	PERFO during 11 119 3.5% se At 10 errance e with re- compare Temperature Nominal More COR SYSTEM PV module c Fire Rating b	RMANCE AT LOW IRRAL and the performance under face to STC conditions (25 % Coefficient of V _{db} duie Operating Temperat DESIGN Insulfication area on ANSI / UL 61730	BRO LOOK BRO	0nd/5gns (n .[%/K] .[%F]	-0.27 109±5;4 (43±3°C) Cless // TYPE 2
Temperature Coefficient of P _i Temperature Coefficient of P _i Maximum System Voltage V _{init}	IV] [bs/ft ⁻]	At least 9 linet year degradat of nomini least 85 25 years. All data y os. Full w the warrs sales org county. 9 (%) y (%) 10 10 75 (36	IB % of nominal power Thereafter max. 0.5 % Ion por year. As (east 9 an power up to 10 year % of nominal power up within measurement to) arranties in accordance answation of your respective (K) +0.04 (K) -0.34 PROPERTIES F D00 (IEC)/1000 (UL) 20 IOO Pa) /55 (2660 Pa)	PERFO during 11 19 3.5% 10 8 At 10 evitor e with 10 compari- Temperature Nominal More OR SYSTEM PV module c Fire Rating b Permitted Mo	RMANCE AT LOW IRRAL and the performance under face to STC conditions (25 % Coefficient of V _{db} duie Operating Temperat DESIGN Insulfication area on ANSI / UL 61730 oduie Temperature	BRO LOOK BRO LOOK BRO LOOK BROWSTOWNAY BRUTE NMAT	0nd/5gns (n .(%/K) [%F]	-0.27 109±5,4 (43±3°C) Class // TYPE 2 40°FF up to +185°F,
Internet in the second	IV] [bs/ft ⁻]	At least 9 linet year degradat of nomini least 85 25 years. All data y os. Full w the warrs sales org county. 9 (%) y (%) 10 10 10 113 (54	18 % of nominal power Thereafter max. 0.5 % ton por year. At least 9 ton por year. At least 9 an power up to 10 year an power up to 10 year an of nominal power up attranties in accordance ansation of your respective (K) +0.04 (K) +0.04 (K) -0.34 PROPERTIES F 000 (IEC)/1000 (UL) 20 (00Pa) / 55 (2660 Pa) 00Pa) / 84 (4000 Pa)	PERFO during 35% s At 10 eranc- e with LLS retive Typical compari- Temperature Nominal More OR SYSTEM PV module c Fire Rating b Permitted Mison Continuo	RMANCE AT LOW IRRAL and the performance under face to STC conditions (25 % Coefficient of V _{db} dule Operating Temperat DESIGN Insulfication aread on ANSI / UL 61730 odule Temperature os Dury	BOIANCE BOO LOOK BOO LOOK BIOLUNGT DENET OWE IMAGE BIOLUNGT DENET OWE IMAGE BIOLUNGT DENET	0n0/50ns (n .(%/K) [*F]	-0.27 109±5,4 (43±3°C) Cless // TYPE 2 -40°F up to +185°F, 40°C up to +185°F,

UL 61/30. CE-compliant. Quality Controlled PV - TUV Reamand,	•							2	13'D	40'HC	
ISC 61215-2016, ISC 61730-2016, U.S. Filant No. 9,893,215 (low only), ISCPV Certification ongoing	C Caritied US	CE		Horizontal packaging	76.4 in 1940 mm	43.3 in 1100 mm	48.0in 1220mm	1656lbs 751kg	24 pallets	24 pailets	32 modules
			Is musicity								

Hanwha Q CELLS America Inc 30 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

1885

DATE

PV.2

RACKING RAIL AND ATTACHMENT SPECIFICATION

LAT CONCEALED PENDENT

SPRINKLER

* FRESNO FD APPROVED EQUIVALENT SPRINKLERS MAY BE USED

SENJU

SS8261

3.7

162°

WHITE

1/2"

GYP. BOARD/

ACOUST. TILES.

ACCORDANCE WITH 2022 NFPA 13D.

- SPRINKLER OMMITTED PER 2022 NFPA 13D, SECTION 8.3.4 1/2" NPT CAPPED CONNECTION FOR PASSIVE PURGE PER NFPA 13D 7.8.3.PLUMBING CONTRACTOR TO MAKE THE
- CONTRACTOR TO PROVIDE A MINIMUM 2'-0" HORIZONTAL
- FOR SIZE OF LEAD-IN PROVIDE SPARE HEAD CABINET IN CLOSET OR OTHER APPROVED LOCATION. SEE NOTE C ON THIS SHEET.

GENERAL NOTES

- THE FIRE PROTECTION SYSTEM IS ON A DEFFERED APPROVAL BASIS. THE SUCCESSF C-16 LICENSED CONTRACTOR SHALL COORDINATE WITH MECHANICAL ENGINEER & ARCHITECT, DESIGN AND INSTALL FIRE SPRINKLER SYSTEM FOR ALL CONCEALED AN UNCONCEALED AREAS OF THE BUILDINGS AS REQUIRED.
- CONTRACTOR SHALL INSTALL, ROUTE AND SUPPORT AUTOMATIC SPRINKLER SYSTEM PER REQUIREMENTS OF THE CURRENT NATIONAL FIRE PROTECTION ASSOCIATION CODE (NFPA), 2022 NFPA 13D, CALIFORNIA BUILDING CODE / CALIFORNIA FIRE CODE (CBC/CFC) CHAPTER 9, CALIFORNIA MECHANICAL CODE (CMC) AND INSURANCES UNDER WRITER'S REQUIREMENTS.
- THE DESIGN COORDINATION AND APPROVALS OF ALL MAINS AND BRANCHES LINES SERVE SPRINKLERS SHALL BE DONE BY A LICENSED FIRE PROTECTION CONTRACTOR
- SUBMIT SHOP DRAWINGS FOR APPROVAL. SHOP DRAWINGS SHALL BE APPROVED BY THE CITY OF FRESNO PLAN CHECK DEPARTMENT PRIOR TO COMMENCING.
- LOCATION OF SPRINKLER HEADS SHALL BE DONE BY THE FIRE PROTECTION CONTRACTOR USING THE CRITERIA AS NOTED BELOW:
- IN LOCATIONS WITH SUSPENDED CEILING, THE SPRINKLER HEADS SHALL BE LOCATED IN THE CENTER OF THE INDIVIDUAL CEILING TILES. THE SPRINKLEF HEADS PATTERN SHALL BE SYMMETRICAL ABOUT ROOM CENTER LINES AS MUCH AS POSSIBLE.
- B. IN LOCATIONS WITH PLASTERED OR GYPSUM BOARD CEILINGS, THE SPRINK HEAD PATTERN SHALL BE SYMMETRICAL ABOUT ROOM CENTER LINES AS M AS POSSIBLE.
- C. FOR LOCATIONS OF CEILING TILES, DIFFUSERS AND LIGHTS, SEE ARCHITECTURAL REFLECTED CEILING PLANS.
- ALL NEW EQUIPMENT AND MATERIAL TO BE INSTALLED AS PART OF NEW CONSTRUCTION SHALL BEAR AN UNDERWRITERS LABORATORIES LABEL (UL), AN INSTALLED IN SUCH A MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED
- NO HOLES SHALL BE DRILLED OR CUT IN OR THROUGH ANY STRUCTURAL ELEMENT WITHOUT WRITTEN APPROVAL OF THE ARCHITECT AND THE STRUCTURAL ENGINEER
- SLEEVE AND GROUT ALL PIPE PENETRATIONS THROUGH FLOORS OR WALLS UNL PENETRATION IS FIRE RATED. WHEN PENETRATING A FIRE RATED FLOOR OR WALL, U SLEEVE WITH 1" MIN. ANNULAR SPACE AROUND PIPE O.D. FILL ANNULAR SPACE WITH FIBERGLASS FILL TO 1" FROM END OF SLEEVE. ADD APPROVED FIRE PROOF SEALAN FOR THE HOUR RATING OF THE FLOOR OR WALL PENETRATION IN THE REMAINING SPACE.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED TEMPORARY AND PERMANENT PERMITS, INCLUDING LICENSES, CERTIFICATES, INSPECTIONS AND TEST
- 10. ALL PIPE PENETRATION THRU WALLS, RATED OR OTHERWISE SHALL BE COVERED WIT A SPLIT ESCUTCHEON PLATE.
- . FIELD OBSERVATION AND SUPPORT SERVICES PERFORMED BY THE ENGINEER PRIOR TO, DURING, OR AFTER CONSTRUCTION IS PERFORMED FOR THE PURPOSE OF CHIEVING QUALITY CONTROL AND SHALL NOT BE CONSTRUED AS SUPERVI<mark>SION</mark> OF ONSTRUCTION.
- PHASING: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH GENERAL CONTRACTOR CONSTRUCTION SCHEDULE AND BASED UPON MINIMIZING DISRUPTI TO EXISTING OPERATION. PHASING SHALL BE APPROVED BY ARCHITECT PRIOR TO CONSTRUCTION OR DEMOLITION.
- ALL DEMOLISHED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTO WHO SHALL BE RESPONSIBLE FOR PROMPT DAILY REMOVAL FROM THE SITE. THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE RESULTING FROM THE WORK AT THE CONCLUSION OF THE DAY'S CONSTRUCTION. THE AREA OF THE SITE SHALL BE LEFT BROOM CLEAN. IF NOT, UPON NOTIFICATION, THE GENERAL CONTRACTOR WILL PERFORM ALL NECESSARY CLEAN-UP WORK AND BACK CHARGE THE SUB CONTRACTOR FOR THE EXPENSE THUS INCURRED.
- ALL DEVICES AND COMPONENTS TO BE EITHER LISTED BY A NATIONALLY RECOGNIZE TESTING LABORATORY FOR FIRE PROTECTION SERVICE OR APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- . FITTINGS FOR HOLE-CUT CONNECTIONS, SUCH AS VICTAULIC "HOOKER" OR EQUIVALENT, ARE NOT ACCEPTABLE AND SHALL NOT BE USED.
- 16. ALL CONTROL VALVES AND DRAIN VALVES SHALL HAVE A SIGN AFFIXED FOR IDENTIFICATION.
- ALL ABOVE GROUND PIPING SHALL COMPLY WITH THE MATERIALS LISTED PER NFPA Ed. 2022 TABLE 5.2.2.
- 18. ALL FITTING MATERIALS SHALL COMPLY WITH THE MATERIALS LISTED PER NFPA 13D E 2022 TABLE 5.2.5.
- 19. ALL TOILETS SHALL BE EQUIPPED WITH A PASSIVE PURGE.
- 20. OBTAIN PERMIT FROM THE FIRE PREVENTION DIVISION FOR THE INSTALLATION OR MODIFICATION OF FIRE SPRINKLER SYSTEM.
- A COPY OF THE APPROVED PLAN SET SHALL BE ON SITE DURING ANY FIRE DEPARTMENT INSPECTION.
- 22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE WORK AVAILABLE FOR INSPECTION. MATERIALS FOR THE BUILDING WATER PIPING AND BUILDING SUPPLY PIPING SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS REFERENCED IN CALIFORNIA
- PLUMBING CODE, TABLE 604.1. GALVANIZED MALLEABLE IRON, GALVANIZED WROUGHT IRON OR GALVANIZED STEEL ARE PROHIBITED MATERIALS FOR USE BOTH UNDERGROUND AND IN BUILDINGS.

HYDRAULIC CALCULATIONS SHALL NOT BE REQUIRED PER FRESNO FIRE DEPARTMENT IF THE ACTUAL WATER SUPPLY IS GREATER OR EQUAL TO THE WATER SUPPLY DATA SHOWN ON THIS SHEET.

SHEET INDEX

-	DOILDING	
L	BUILDING DESIGN I	NFORMATION: DCCUPANCY=R3
	-CONSTRU	JCTION TYPE= TYPE V-B
	-BUILL -BUI	ILDING AREA = 625 SF
	-GOVERNING	à FIRE CODE= 2022 CFC
	SPRINKLER DESI	GN CRITERIA -
h	-CLASSIFICATION OF (-DESI	OCCUPANCY= RESIDENTIAL IGN DENSITY= 0.05 GPM/SQ.FT.
	-DEFLECTC	DR DISTANCE= 2 IN. MAX
	-HE	AD SPACING = 14 FT. MAX
	ABBREVIA	TIONS
	ABBREVIATION DESC	RIPTION
	AFF ABOV	E FINISHING FLOOR
	BFV BUTT (E) EXIST	ERFLY VALVE TING
D	FH FIRE I	HYDRANT
H	PIV POST	
	PVC POLY	VINYL CHLORIDE
	UG UNDE W WATE	ERGROUND ER SERVICE PIPING
	PC PLUN	IBING CONTRACTOR
	IN THE EVENT ABBREV REFERENCE WILL BE N	VIATIONS NOT MENTIONED HEREIN ARE USED, MADE TO ANSI Y1.1, MILITARY STANDARD
	ABBREVIATIONS, AND	OTHER STANDARD INDUSTRY CONVENTIONS.
	LEGEND	
Ξ	SYMBOL	DESCRIPTION NOTE CALLOUT
	$\langle \cdot \rangle$	NODE USED IN CALCULATION
I		SECTION CALLOUT
	[11'-0"]	CEILING HEIGHT
	X	PIPE TAG -NUMBER ON TOP DENOTES PIPE DIAMETER (IN)
	A-A	-NUMBER ON BOTTOM DENOTES PIPE LENGTH (FT-IN
S	⊱ F	NEW PIPE
	∠ F	EXISTING PIPE
	<u> </u>	DEMOLISHED PIPE/EQUIPMENT
	8	RISER
)		PENDENT SPRINKLER
		PIPE HANGER
		ELBOW FACING AWAY FROM VIEWER
5	0	ELBOW FACING TOWARD VIEWER
	~ ~ ~ ~	TEE FACING AWAY FROM VIEWER
П		TEE FACING TOWARD VIEWER
<i>'</i>		

SPRINKLERS FROM EDGE OF SOURCE TO FROM EDGE OF SOURCE ORDINARY TEMPERATURE TO INTERMEDIATE SPRINKLER TEMPERATURE SPRINKLER SIDE OF OPEN OR 12 RECESSED FIREPLACE FRONT OF RECESSED FIREPLACE 36 COAL- OR WOOD-BURNING 42 12 STOVE KITCHEN RANGE 18 WALL OVEN 18 HOT AIR FLUES 18 JNINSULATED HEAT 18 DUCTS UNINSULATED HOT 12 WATER PIPES SIDE OF CEILING- OR WALL-MOUNTED HOT 24 12 AIR DIFFUSERS FRONT OF WALL-MOUNTED HOT 18 36 AIR DIFFUSERS HOT WATER HEATER OR FURNANCE LIGHT FIXTURE 0 W-250 W 250 W-499 W 12

SCALE: AS NOTED

DRAWN BY: IRG

NOTES

 I
 SPRINKLERS OMMITTED PER 2022 NFPA 13D, SECTION 8.3.5.

 I
 SPRINKLERS OMMITTED PER 2022 NFPA 13D, SECTION 8.3.4.

CONDITIONS OF FFD APPROVAL:

NO FINAL WILL BE GRANTED UNLESS WORK IS IN COMPLETE CONFORMANCE WITH ALL APPLICABLE LAWS, CODES, ORDINANCES, STANDARDS AND POLICIES.

FFD WILL NOT FINAL ANY BUILDING WITHOUT APPROVED PLANS WHICH REFLECT THE ACTUAL SYSTEM INSTALLATION IF FIELD CHANGES BECOME NECESSARY, NEW ADDENDUM PLANS MUST BE SUBMITTED, REVIEWED AND APPROVED PRIOR TO FFD ISSUING A BUILDING FINAL. IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT ADDENDUM PLANS AND OBTAIN APPROVAL FOR CHANGES PRIOR TO REQUESTING A FINAL INSPECTION (CFC 105.4.5).

A COMPLETE, FULL SIZED, PHYSICAL COPY OF ALL PLAN DOCUMENTS (INCL. CALCS, MANF. SHEETS, ETC. SHALL BE MAINTAINED ON SITE AT ALL TIMES.

IT IS THE CONTRACTOR'S OBLIGATION TO COMPLY WITH ALL FFD CONDITIONS OF APPROVAL & APPLICABLE LAWS, CODES, ORDINANCES AND ADOPTED REFERENCED STANDARDS PRIOR TO REQUESTING A FIRE FINAL.

THIS SITE PLAN IS SHOWN FOR REFERENCE ONLY. REFER TO SHEET T.1 FOR THIS SCOPE OF WORK

CONNECTION TO CITY WATER SERVICE

NO SCALE

5

3

TABLE 1 - PIPE SIZE FOR RISER LEAD-IN. RISER AND COMMON SUPPLY PIPE

COLUMN A (IN.) (SEE NOTE 4)	COLUMN B (IN.) (SEE NOTE 5)
1-1/4"	1-1/4"
1-1/4"	1-1/2"
1-1/2"	2"

CONDITIONS OF FFD APPROVAL:

NO FINAL WILL BE GRANTED UNLESS WORK IS IN COMPLETE CONFORMANCE WITH ALL APPLICABLE LAW CODES, ORDINANCES, STANDARDS AND POLICIES.

FFD WILL NOT FINAL ANY BUILDING WITHOUT APPROVED PLANS WHICH REFLECT THE ACTUAL SYSTEM INSTALLATION IF FIELD CHANGES BECOME NECESSARY, NEW ADDENDUM PLANS MUST BE SUBMITTED, REVIEWED AND APPROVED PRIOR TO FFD ISSUING A BUILDING FINAL. IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT ADDENDUM PLANS AND OBTAIN APPROVAL FOR CHANGES PRIOR TO REQUESTING A FINAL INSPECTION (CFC 105.4.5).

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IT IS THE CONTRACTOR'S OBLIGATION TO COMPLY WITH ALL FFD CONDITIONS OF APPROVAL & APPLICABLE LAWS, CODES, ORDINANCES AND ADOPTED REFERENCED STANDARDS PRIOR TO REQUESTING A FIRE FINAL.

PIPING PER PLAI

NO SCALE

NOT USED

HARDENED HEX HEAD SELF THREADING SCREW IS FURNISHED WITH THE HANGER AND IS 1/4" X 1" TEKS TYPE.

- SPRINKLER PIPE PER PLANS -

PIPE HANGER SPACING

MAX. SPACING

6'-0"

6'-6"

-7**'**-0"

8'-0"

CPVC SINGLE FASTENER STRAP

PIPE SIZE

1/4".....

1/2"..

GENERAL NOTE: NFPA 13D 2022 TABLE 8.2.5.3.2 POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTIONS TO DISCHARGE (RESIDENTIAL UPRIGHT AND PENDENT)

NOTES

1 SPRINKLER PIPE DROP.

2 PENDENT SPRINKLER HEAD.

3 OBSTRUCTION.

4 UPRIGHT SPRINKLER HEAD.

CPVC PIPE HANGER DETAIL - UP TO 2"

NO SCALE

NO SCALE

OBSTRUCTION TABLE FOR RESIDENTIAL SPRINKLERS

