

# ROOF AND SITE PLAN:

# PROJECT INFORMATION:

# CITY OF COSTA MESA



## RESIDENTIAL RE-ROOF STANDARD

### PERMIT LIMITATIONS:

- THIS PERMIT IS FOR THE TEAR-OFF AND REPLACEMENT, REPAIR OF, OR OVERLAY OF AN EXISTING ROOF FOR A SINGLE-FAMILY DETACHED DWELLING AND THEIR ASSOCIATED ACCESSORY STRUCTURES ONLY.
- THIS PERMIT IS VALID FOR ALL ROOFING MATERIALS WEIGHING 6 LBS PER SQUARE FOOT OR LESS.
- ROOFING WITH THIS PERMIT MAY ONLY BE INSTALLED ON PREVIOUSLY PERMITTED AND ROOFED STRUCTURES ON THE SAME PARCEL AS THE PRIMARY DWELLING LISTED.
- THIS PERMIT AND CITY STANDARD PLANS SHALL NOT BE USED FOR WORK BEYOND THE SCOPE OF THE RE-ROOF (E.G. ANY SOLAR WORK, NEW SKYLIGHTS, OR STRUCTURAL REPAIRS AND MODIFICATIONS BEYOND REPLACING ROOF SHEATHING, ETC. ANY ADDITIONAL WORK WILL REQUIRE A SEPARATE APPLICATION AND PERMIT TO BE SUBMITTED).

FOR OFFICE USE ONLY:

PERMIT #:

ISSUED:

PROJECT NAME:  
PROJECT ADDRESS:  
COSTA MESA, CA

### CITY REQUIREMENTS:

- JOB PLACARD SHALL BE POSTED ON THE SITE, IN A LOCATION READILY VISIBLE FROM THE STREET.
- ALL COMPANIES & CONTRACTORS WORKING OR OPERATING WITHIN THE CITY OF COSTA MESA MUST HAVE A VALID CITY OF COSTA MESA BUSINESS LICENSE. (BUSINESS LICENSES CAN BE APPLIED FOR ONLINE WITH TESSA)
- OVERSIZED LOAD PERMITS ARE REQUIRED FOR:
  - SINGLE TRUCKS EXCEEDING 8'-6" W X 40' L X 14'
  - COMBINATION TRUCKS EXCEEDING 8'-6" W X 75' L X 14'
- (OVERSIZED LOAD PERMITS CAN BE APPLIED FOR ONLINE WITH TESSA)
- A PRELIMINARY PUBLIC WORKS INSPECTION IS REQUIRED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- A FINAL PUBLIC WORKS INSPECTION IS REQUIRED IMMEDIATELY PRIOR TO THE FINAL BUILDING INSPECTION.
- ANY DAMAGE TO THE EXISTING PUBLIC IMPROVEMENTS (E.G. SIDEWALKS, CURB & GUTTER, STREET PAVING, LANDSCAPING, ETC.) THAT OCCURRED TO THE AREA SURROUNDING THE SITE DURING THE COURSE OF CONSTRUCTION SHALL BE REPAIRED PER THE CITY STANDARDS AT THE PROPERTY OWNERS EXPENSE.
- AN ENCROACHMENT PERMIT IS REQUIRED FOR ANY AND ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY (SEPARATE APPLICATION REQUIRED)

#### CONSTRUCTION WORKING HOURS:

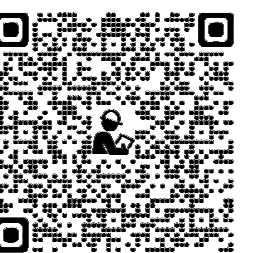
- MONDAY THROUGH FRIDAY, 7AM TO 7PM
- SATURDAYS, 9AM THROUGH 6PM
- CONSTRUCTION WORK IS NOT ALLOWED ON SUNDAYS OR THE FOLLOWING SPECIFIED FEDERAL HOLIDAYS: NEW YEARS DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY.
- VIOLATORS WILL BE CITED AND POTENTIALLY FINED.

### INSPECTIONS:

- 2 - CONSULT - PRE-CONSTRUCTION MEETING (PUBLIC WORKS)
- 66 - STRUC - ROOF SHEATHING
- 344 - SMOKE & CO DETECTORS (PHYSICAL INSPECTION REQUIRED)\*
- 350 - CERT - WASTE HAULER\*
- 420 - ROOF - FINAL RE-ROOF

\* AFTER BOOKING THIS INSPECTION, LOG INTO TESSA TO UPLOAD THE SUPPORTING DOCUMENTATION TO THIS INSPECTION ITEM BEFORE THE INSPECTOR ARRIVES.

TO BOOK AND INSPECTION, VIEW THE INSPECTION SCHEDULE, OR SEE INSPECTION RESULTS, VISIT TESSA



FORM NUMBER:  
**CBRR-1**

(RELEASE: 09-2024)

#### ALL MATERIALS, EQUIPMENT, INSTALLATION, AND WORK SHALL COMPLY WITH THE LATEST VERSION OF THE:

- 2022 CALIFORNIA BUILDING CODE (CBC)
- 2022 CALIFORNIA RESIDENTIAL CODE (CRC)
- 2022 CALIFORNIA MECHANICAL CODE (CMC)
- 2022 CALIFORNIA ELECTRICAL CODE (CEC)
- 2022 CALIFORNIA PLUMBING CODE (CPC)
- CALIFORNIA FIRE CODE (CFC)
- CALIFORNIA ENERGY CODE (T24)
- CALIFORNIA GREEN CODE (CALGREEN)
- CITY OF COSTA MESA MUNICIPAL CODE.

THE CITY OF COSTA MESA IS SEISMICALLY CLASSIFIED AS EITHER CATEGORY D OR E, BASED ON SOIL TYPE.

THE CITY OF COSTA MESA IS NOT WITHIN A SPECIAL WIND REGION PER ASCE 7 MAPPING.

- BASIC WIND SPEED: COSTA MESA FALLS INTO A 110-115 MPH WIND SPEED ZONE FOR RISK CATEGORY II STRUCTURES.
- WIND EXPOSURE CATEGORIES: MOST OF COSTA MESA FALLS WITHIN EXPOSURE B OR C BASED ON SITE SURROUNDINGS (URBAN/SUBURBAN VERSUS OPEN TERRAIN).

#### SCOPE OF WORK:

TO USING THIS FORM, PLEASE CONFIRM THAT THE PROJECT SCOPE DOES NOT INCLUDE ANY OF THE FOLLOWING:

- FRAMING ALTERATIONS
- CHANGE IN ROOFING MATERIAL
- INCREASE IN WEIGHT OF ROOFING MATERIAL
- MORE THAN 1 LAYER OF LAYOVER (NEW ON TOP OF EXISTING)
- CHANGE IN ROOF SLOPE

IF ANY OF THE BOXES ABOVE ARE CHECKED, THIS FORM CANNOT BE USED.

CONFIRM THAT STRUCTURE TO BE REROOFED IS FULLY PERMITTED

PERMITTED  UNPERMITTED

IF UNPERMITTED, THIS FORM CANNOT BE USED.

AREA OF ROOF TO BE REPLACED: \_\_\_\_\_ S.F.

EXISTING ROOF MATERIAL: \_\_\_\_\_

NEW ROOF MATERIAL: \_\_\_\_\_

WHAT STRUCTURE IS BEING REROOFED? (CHECK ALL THAT APPLY)

HOUSE  DETACHED GARAGE  COVERED PATIO

ACCESSORY STRUCTURE

WHAT IS THE SLOPE OF THE ROOF TO BE REPLACED?

LESS THAN 2:12  MORE THAN 2:12

NEW ROOF SRI: \_\_\_\_\_ COLOR: \_\_\_\_\_

NOTE: ROOFS EQUAL OR LESS THAN 2:12 SLOPE MUST HAVE AN SRI OF 75 OR GREATER, ROOFS STEEPER THAN 2:12 SLOPE MUST HAVE AN SRI OF 14 OR GREATER.

ROOFING CLASS: \_\_\_\_\_

MUST BE CLASS B OR BETTER

HOW MANY SQUARES OF ROOFING ARE BEING REPLACED? (1 SQUARE = 100 SF)

\_\_\_\_\_ / 100 SF = \_\_\_\_\_ SQUARES

#### ROOF VENTILATION CALCULATIONS

FOR ROOF AREAS WITH ATTIC SPACE, IF ALL OF THE FOLLOWING APPLY, USE THE BALANCED VENTILATION CALCULATION:

- AT LEAST 40% BUT NOT MORE THAN 50% OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC (NO MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT).
- THE BALANCE OF THE VENTILATION IS PROVIDED BY EAVE OR SOFFIT VENTS.
- A VAPOR BARRIER IS INSTALLED ON THE WARM-IN-WINTER SIDE OF THE ATTIC INSULATION.

BALANCED VENTILATION CALCULATION:

FLOOR AREA OF ATTIC: \_\_\_\_\_ SF

AREA / 300 = \_\_\_\_\_ SF OF REQUIRED VENT AREA

VENT AREA X 144 = \_\_\_\_\_ SQ. IN. NET FREE AREA (NFA)

IF ALL THE ABOVE CONDITIONS CANNOT BE MET, USE THE UN-BALANCED VENTILATION CALCULATION

UN-BALANCED VENTILATION CALCULATION:

FLOOR AREA OF ATTIC: \_\_\_\_\_ SF

AREA / 150 = \_\_\_\_\_ SF OF REQUIRED VENT AREA

VENT AREA X 144 = \_\_\_\_\_ SQ. IN. NET FREE AREA (NFA)

TOTAL NFA FOR ATTIC SPACE = \_\_\_\_\_ SQ IN.

DESCRIBE HOW THE FREE AREA FOR VENTILATION IS PROVIDED:

VAULTED CEILING AREAS WITHOUT ATTICS: WHERE THE CEILING AND ROOF ARE ONE ASSEMBLY WITH NO ATTIC SPACE, USE AREA BETWEEN ROOF FRAMING MEMBERS DIVIDED BY 150 TO CALCULATE REQUIRED VENTILATION

WIDTH BETWEEN ROOF FRAMING (1 BAY): \_\_\_\_\_ FEET (ASSUME 2 FEET IF UNKNOWN)

LONGEST LENGTH: \_\_\_\_\_ FEET

AREA PER BAY = \_\_\_\_\_ SF

\_\_\_\_\_ / 150 = \_\_\_\_\_ SQ FT NFA

\_\_\_\_\_ SQ FT NFA x 144 = \_\_\_\_\_ SQ IN NFA

TOTAL NFA FOR EACH BAY SPACE = \_\_\_\_\_ SQ IN.

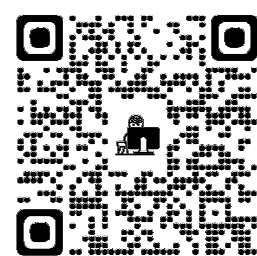
DESCRIBE THE VENT TYPES AND SIZES TO BE USED:

### RE-ROOF REQUIREMENTS:

- GENERAL REQUIREMENTS:
  - ALL ROOF MATERIALS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS (CRC R905.1, CBC 1504.1)
  - ALL ROOF MATERIALS SHALL BE LISTED, CONFORM TO RECOGNIZED TESTING STANDARDS, AND SHALL BEAR IDENTIFICATION AND TESTING AGENCY LABELS. (CRC R902.1, R905.2.4, CBC 1505.1.1, 1504.3 - 1504.4, UL 790 OR ASTM E 108.)
  - ROOF MATERIALS SHALL BE INSTALLED TO RESIST DESIGN WIND LOADS. COSTA MESA FALLS INTO A 110-115 MPH WIND SPEED ZONE FOR RISK CATEGORY II (INCLUDES RESIDENTIAL) STRUCTURES.
  - EXISTING FINISHES OR CONDITIONS THAT ARE DAMAGED AND/OR REMOVED, AS A RESULT OF WORK REQUIRED TO BE DONE UNDER THIS PROJECT SCOPE, SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AND FINISHED TO MATCH ADJACENT SURFACES.
  - FOR ADDITIONAL INFORMATION ON ROOFING STANDARDS SEE CRC R905.2 - R905.16. AND CRC R908 FOR RE-ROOFING.
- RE-ROOFING REQUIREMENTS
  - MATERIALS AND INSTALLATION METHODS USED FOR RECOVERING OR REPLACING AN EXISTING ROOF SHALL HAVE THE SAME REQUIREMENTS AS FOR NEW ROOFS, WITH EXCEPTIONS AS LISTED BELOW. (CRC R908.1, CBC 1511.1)
    - ROOFS WITH A SLOPE LESS THAN 2% SHALL BE ACCEPTABLE WHERE POSITIVE ROOF DRAINAGE IS INSTALLED.
    - SECONDARY DRAINS (AKA EMERGENCY OVERFLOWS) SHALL NOT BE REQUIRED FOR RECOVERING A ROOF WITH EXISTING POSITIVE DRAINAGE.
  - ALL OLD ROOFING MATERIAL SHALL BE REMOVED TO THE ROOF SHEATHING. (CRC R908.3, CBC 1511.3)
    - EXCEPTION FOR ROOFING OVERLAYS (AKA ROOF RECOVER REQUIREMENTS):
      - WHERE THE NEW ROOF COVERING IS INSTALLED IN ACCORDANCE WITH THE ROOF COVERING MANUFACTURERS APPROVED INSTRUCTIONS
      - COMPLETE AND SEPARATE ROOFING SYSTEMS, SUCH AS STANDING SEAM METAL ROOF SYSTEMS, THAT ARE DESIGNED TO TRANSMIT THE ROOF LOADS DIRECTLY TO THE BUILDING'S STRUCTURAL SYSTEM AND DO NOT RELY ON EXISTING ROOFS AND ROOF COVERINGS FOR SUPPORT, SHALL NOT REQUIRE THE REMOVAL OF EXISTING ROOF COVERINGS.
    - METAL PANEL, METAL SHINGLE AND CONCRETE AND CLAY TILE ROOF COVERINGS SHALL BE PERMITTED TO BE INSTALLED OVER EXISTING WOOD SHAKE ROOFS WHERE APPLIED IN ACCORDANCE WITH SECTION R908.4.
    - THE APPLICATION OF A NEW PROTECTIVE ROOF COATING OVER AN EXISTING PROTECTIVE ROOF COATING, METAL ROOF PANEL, METAL ROOF SHINGLE, MINERAL SURFACED ROLL ROOFING, BUILT-UP ROOF, MODIFIED BITUMEN ROOFING, THERMOSET AND THERMOPLASTIC SINGLE-PLY ROOFING AND SPRAY POLYURETHANE FOAM ROOFING SYSTEM SHALL BE PERMITTED WITHOUT TEAR-OFF OF EXISTING ROOF COVERINGS.
    - STRUCTURAL COMPONENTS SHALL BE RATED FOR THE ADDED WEIGHT OF OVERLAYS AND EQUIPMENT DURING INSTALLATION. (CRC R908.2, CBC 1511.2)
      - NEW PROTECTIVE COAT OVER OLD FOAM SHALL NOT REQUIRE OLD FOAM TEAR-OFF. (CRC R908.3.1, CBC 1511.3.1)
  - A ROOF RECOVER SHALL NOT BE PERMITTED WHERE ANY OF THE FOLLOWING CONDITIONS OCCUR: (R908.3.1.1)
    - WHERE THE EXISTING ROOF OR ROOF COVERING IS WATER SOAKED OR HAS DETERIORATED TO THE POINT THAT THE EXISTING ROOF OR ROOF COVERING IS NOT ADEQUATE AS A BASE FOR ADDITIONAL ROOFING.
    - WHERE THE EXISTING ROOF COVERING IS SLATE, CLAY, CEMENT OR ASBESTOS-CEMENT TILE.
    - WHERE THE EXISTING ROOF HAS TWO OR MORE APPLICATIONS OF ANY TYPE OF ROOF COVERING.
- WHEN NEW COVERING OVER WOOD SHINGLE OR SHAKE ROOF CREATES A COMBUSTIBLE CONCEALED SPACE, THE EXISTING SURFACE SHALL BE COVERED WITH GYPSUM BOARD, MINERAL FIBER, OR GLASS FIBER (FIRE BLOCKING). (CRC R908.4, CBC 1511.4)
- ROOF FIRE CLASSIFICATIONS
  - ROOFING SHALL HAVE A FIRE CLASSIFICATION OF CLASS A OR CLASS B. (CRC R902.1, CBC 1505.1)
  - BUILDING-INTEGRATED PHOTOVOLTAIC SHINGLES OR ROOF-MOUNTED PV PANELS SHALL BE CLASS A LISTED IF LOCATED LESS THAN 3 FT. FROM LOT LINE. (CRC R902.3, CBC 1505.8)
  - THE FOLLOWING ROOFS ARE CONSIDERED CLASS A WITHOUT TESTING LABELS (CRC R902.1, CBC 1505.1.1):
    - COVERINGS OF BRICK, MASONRY, OR EXPOSED CONCRETE.
    - METAL TILE, OR SLATE INSTALLED OVER NON-COMBUSTIBLE DECKS.
    - 16 OZ. PER SQ. FT. COPPER SHEETS OVER COMBUSTIBLE DECKS.
    - SLATE OVER UNDERLAYMENT OVER COMBUSTIBLE DECKS.
  - FIRE-RETARDANT TREATED PLYWOOD SHEATHING SHALL BEAR APPROPRIATE TESTING AGENCY LABEL WITH FIRE CLASS, MANUFACTURER, AND TESTING AGENCY NAME AND LISTING NUMBER ON EACH BUNDLE. (CRC R902.2, CBC 1505.6)

### SITE PLAN CHECKLIST:

- A DIMENSIONED (OR SCALED) DRAWING THAT INCLUDES THE FOLLOWING:
  - DRAW THE PROPERTY LINES WITH DIMENSIONS (LOT WIDTH X DEPTH)
  - SHOW ALL BUILDINGS ON THE PROPERTY. THIS INCLUDES THE HOUSE AND OTHER ABOVE GRADE STRUCTURES LIKE: PATIO COVERS, TRASH ENCLOSURES, BBQ, FIRE PITS, ETC.
  - SHOW POOLS, SPAS, AND OTHER DECORATIVE WATER FEATURES.
  - SHOW ALL EASEMENTS & SETBACKS FROM ULTIMATE PROPERTY LINES AND THE DISTANCES BETWEEN BUILDINGS AND OTHER STRUCTURES.
  - SHOW DRIVEWAYS
  - SHOW STREETS, WITH STREET NAMES, AND SIDEWALKS ADJACENT TO THE PROPERTY
  - SHOW ORIENTATION WITH A NORTH ARROW
  - SHOW FENCE LOCATIONS WITH HEIGHTS AND TYPE (WOOD, VINYL, BLOCK WALL)
  - SHOW OVERHANG DIMENSIONS



### WARNINGS & DISCLOSURES:

THE CITY OF COSTA MESA PROVIDES THESE STANDARD PLANS FOR A LIMITED NUMBER OF PERMITS AND A NARROWLY DEFINED SCOPE OF WORK. BY USING THESE STANDARDS, THE PERMIT HOLDER AGREES TO THE FOLLOWING TERMS:

- THE PLANS MUST BE SUBMITTED EXACTLY AS PROVIDED BY THE CITY, WITHOUT ALTERATION OR MODIFICATION. ANY UNAUTHORIZED CHANGES, INCOMPLETE SECTIONS, OR DOCTORED INFORMATION INVALIDATE THE PLANS & PERMIT.
- THESE PLANS MAY ONLY BE USED FOR THE SPECIFIC PROJECT AND SCOPE ASSOCIATED WITH THE CURRENT PERMIT APPLICATION. USE FOR ANY OTHER PURPOSE, INCLUDING PROJECTS OUTSIDE OF COSTA MESA, IS PROHIBITED.
- ALL INTELLECTUAL PROPERTY RELATED TO THESE PLANS REMAINS THE PROPERTY OF THE CITY OF COSTA MESA.
- FAILURE TO ADHERE TO THE PROVIDED STANDARDS, OR SUBMISSION OF INCOMPLETE OR INCORRECT INFORMATION, WILL RESULT IN DELAYS; AND MAY REQUIRE ADDITIONAL DOCUMENTATION, SUBMITTAL OF NEW APPLICATION(S), VOIDING OF THE PERMIT, AND/OR LEAD TO CODE ENFORCEMENT ACTIONS, INCLUDING CITATIONS AND FINES.

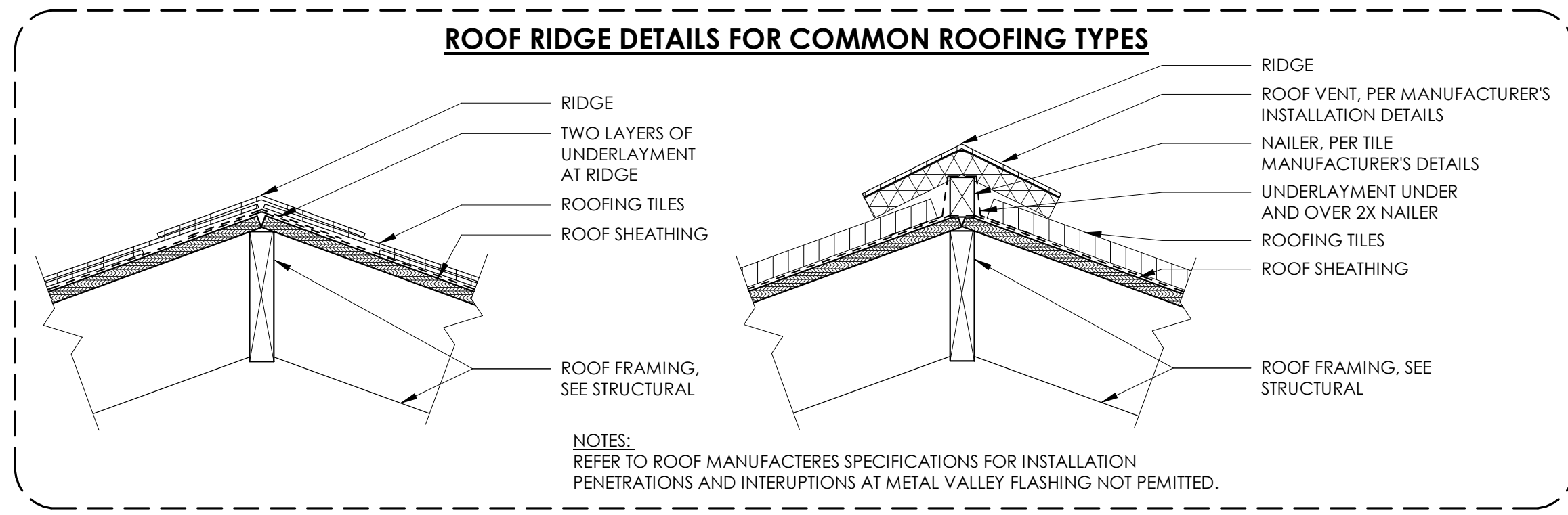
BY PROCEEDING, THE APPLICANT ACKNOWLEDGES THESE TERMS AND AGREES TO COMPLY FULLY WITH THE CITY OF COSTA MESA'S RESIDENTIAL RE-ROOF STANDARD DETAILS, SPECIFICATIONS, LIMITATIONS, AND REQUIREMENTS.

SIGNATURE: \_\_\_\_\_



# STANDARD ROOFING DETAILS

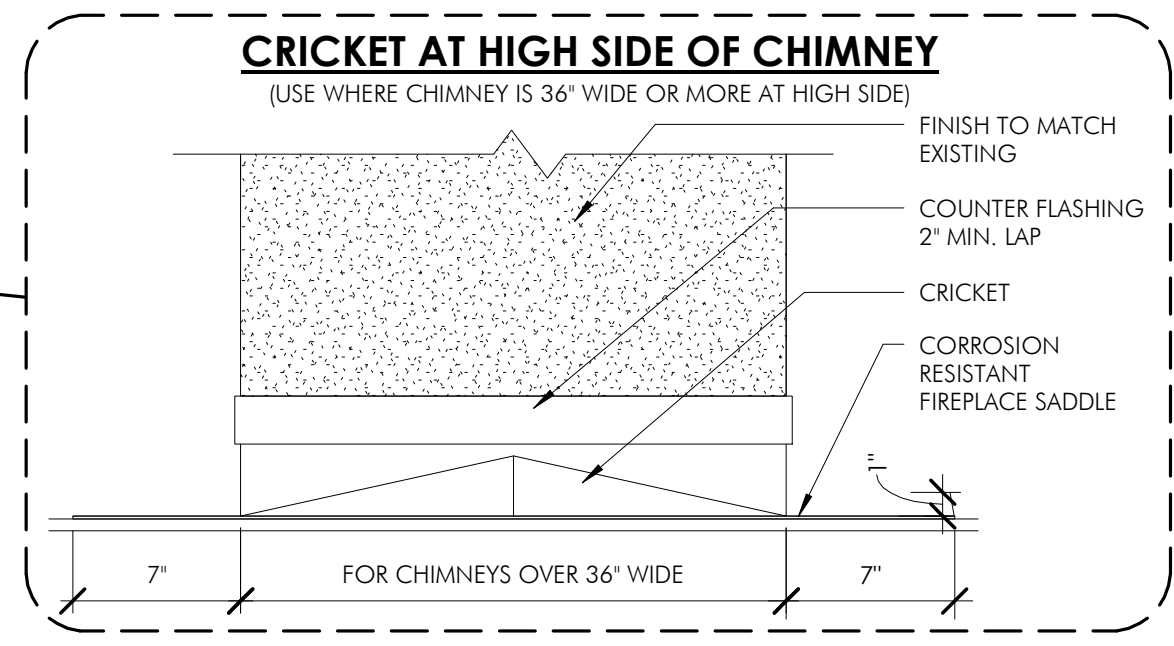
## ROOF RIDGE DETAILS FOR COMMON ROOFING TYPES



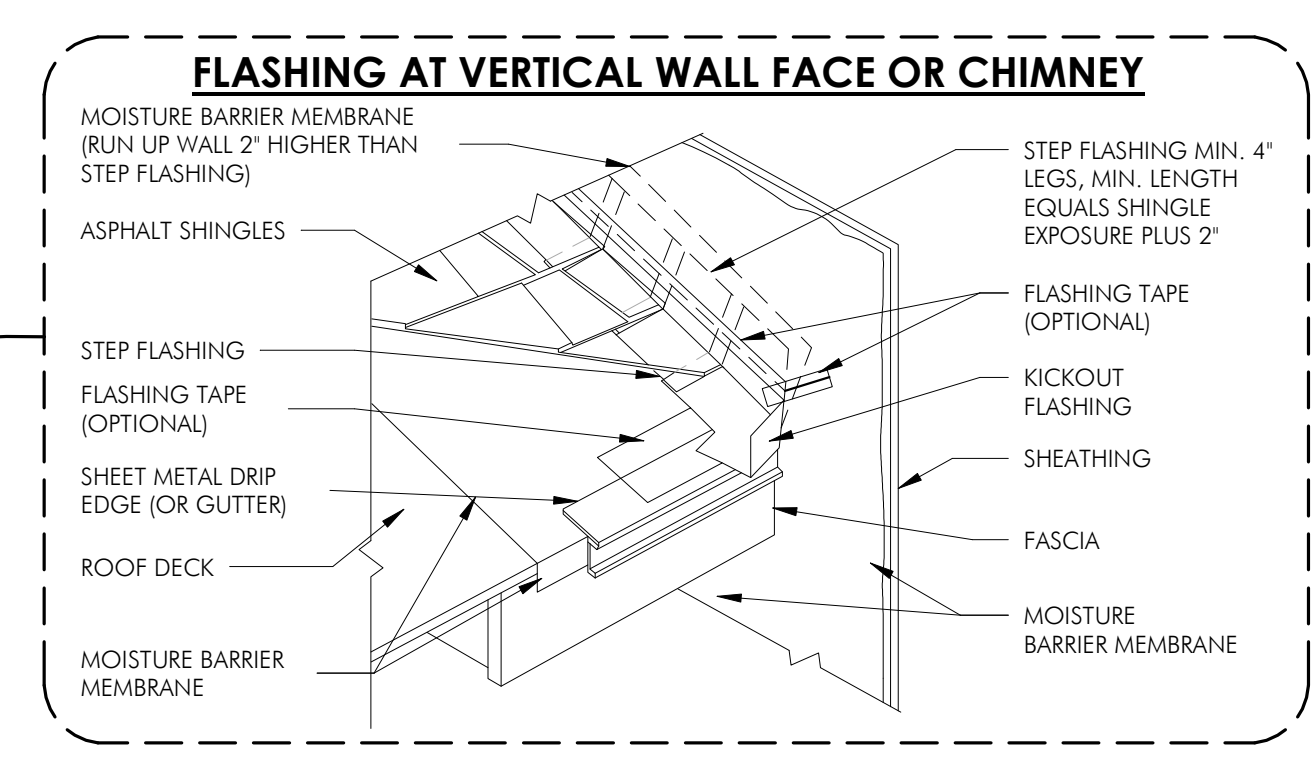
NOTES:  
REFER TO ROOF MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION PENETRATIONS AND INTERRUPTIONS AT METAL VALLEY FLASHING NOT PERMITTED.

- ROOF VALLEY:** THE AREA WHERE TWO ROOF PLANES JOIN TOGETHER AT THEIR SLOPING EDGES
- ROOF RIDGE:** HIGH EDGE OF ROOF PLANE
- ROOF EAVE:** LOW EDGE OF ROOF PLANE
- PLUMBING VENT:** AN AIR RELIEF PIPE FOR PLUMBING, TO ALLOW FOR EASE OF DRAINAGE TO THE SEWER SYSTEM
- ROOFING MEMBRANE:** LAYERS OF MOISTURE BARRIER FELT (OR EQUIVALENT, SUCH AS TYVEK) THAT PREVENT WATER INTRUSION INTO THE ROOFING SYSTEM
- HIGH SLOPE ROOF:** ANY ROOF WITH A SLOPE EQUAL OR GREATER THAN 2:12 (2 INCHES OF RISE FOR EVERY 12 INCHES OF HORIZONTAL RUN DISTANCE)
- ROOF RAKE:** FLAT FACE OF ROOF EDGE WHEN ROOF IS GABLED
- GABLE AREA:** THE TRIANGULAR VERTICAL FACE OF EXTERIOR WALL CREATED ABOVE AN INTERIOR HORIZONTAL CEILING PLANE AND THE SLOPING ADJACENT ROOF PLANES
- CEILING PLANE:** LINE OF CEILING PLANE INSIDE RESIDENCE, WHICH ACTS AS THE BOTTOM FLOOR OF THE ATTIC SPACE
- GABLE VENT:** LOUVER PROVIDED IN THE GABLE AREA TO VENTILATE THE ATTIC SPACE
- FASCIA BOARD:** THE WOOD TRIM PIECE THAT FINISHES OFF A ROOF EDGE; ALL FLASHINGS SHALL GO OVER THE TOP OF THE FASCIA BOARD FOR PROPER WATER PROOFING
- LOW-SLOPE ROOF:** ANY ROOF WITH A SLOPE LESS THAN 2:12 (2 INCHES OF RISE FOR EVERY 12 INCHES OF HORIZONTAL RUN DISTANCE). OFTEN OCCURS AS AREA ROOF OVER ADDITIONS MADE TO THE EAVE SIDE OF A HOUSE, OR FOR COVERED PATIOS, CARPORTS AND GARAGES.

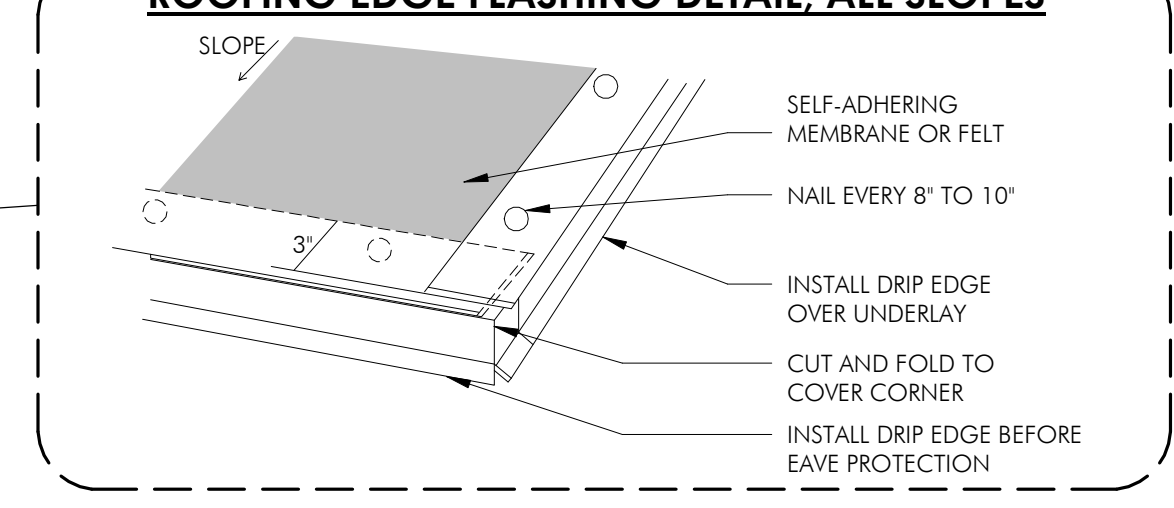
## CRICKET AT HIGH SIDE OF CHIMNEY



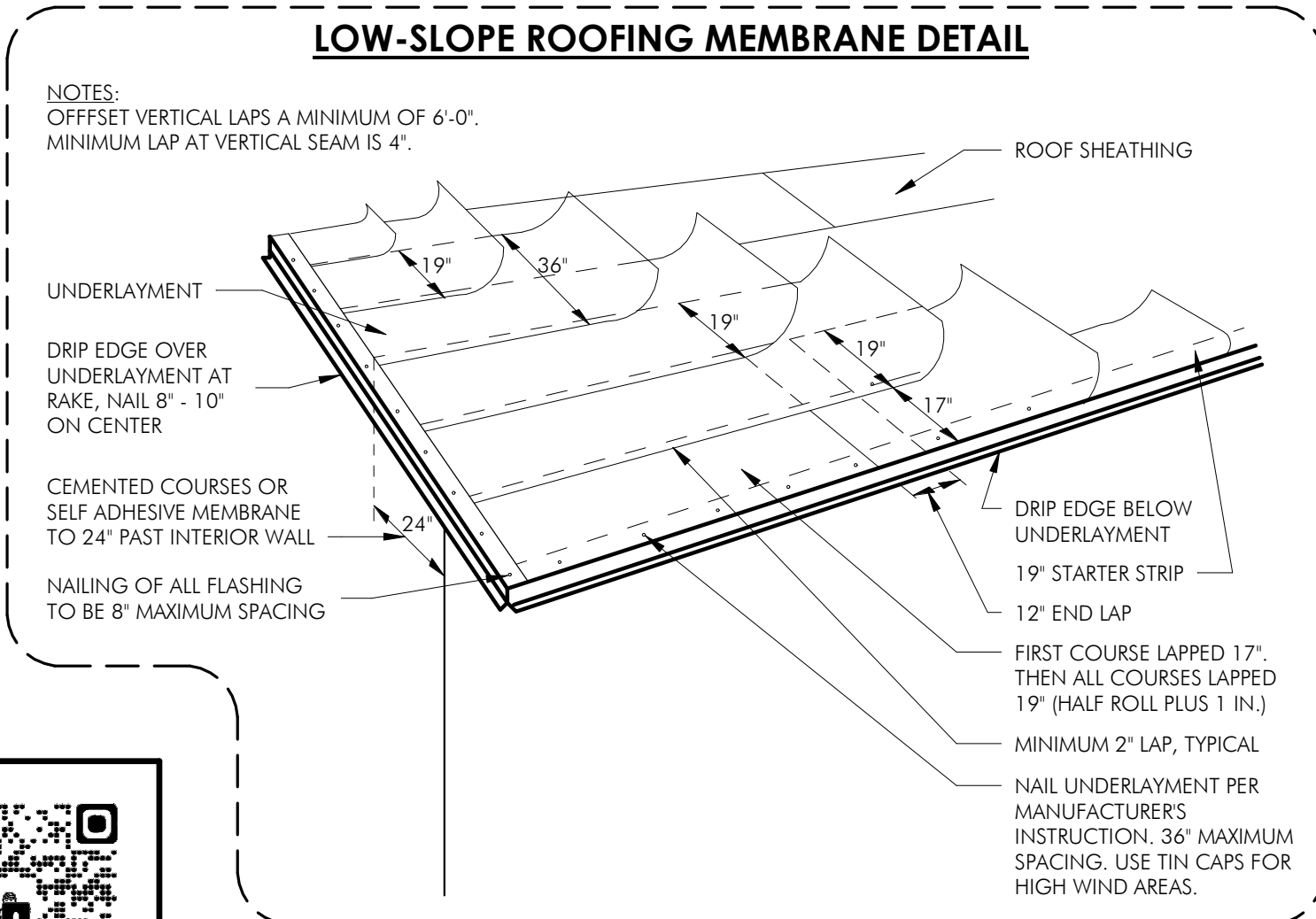
## FLASHING AT VERTICAL WALL FACE OR CHIMNEY



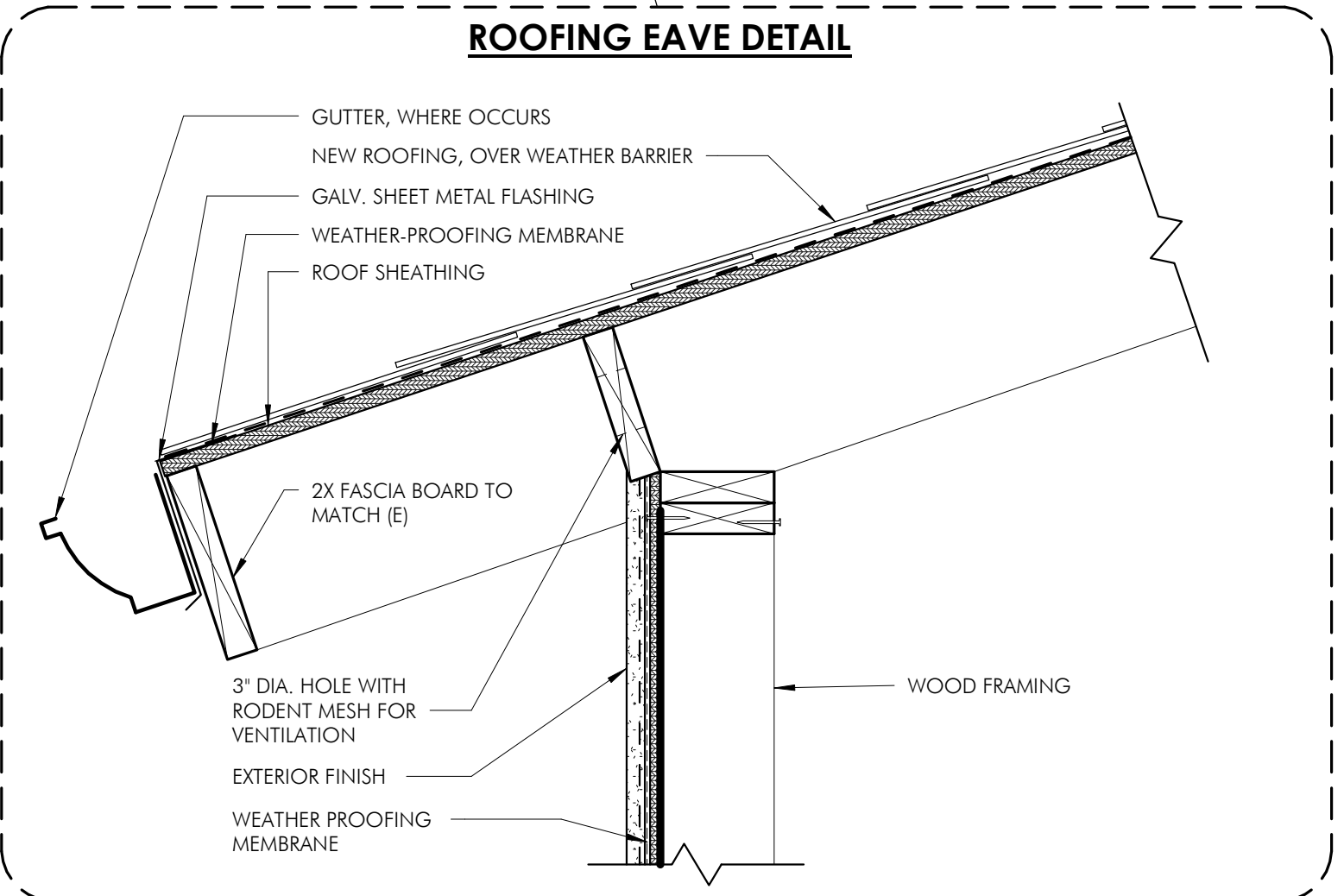
## ROOFING EDGE FLASHING DETAIL, ALL SLOPES



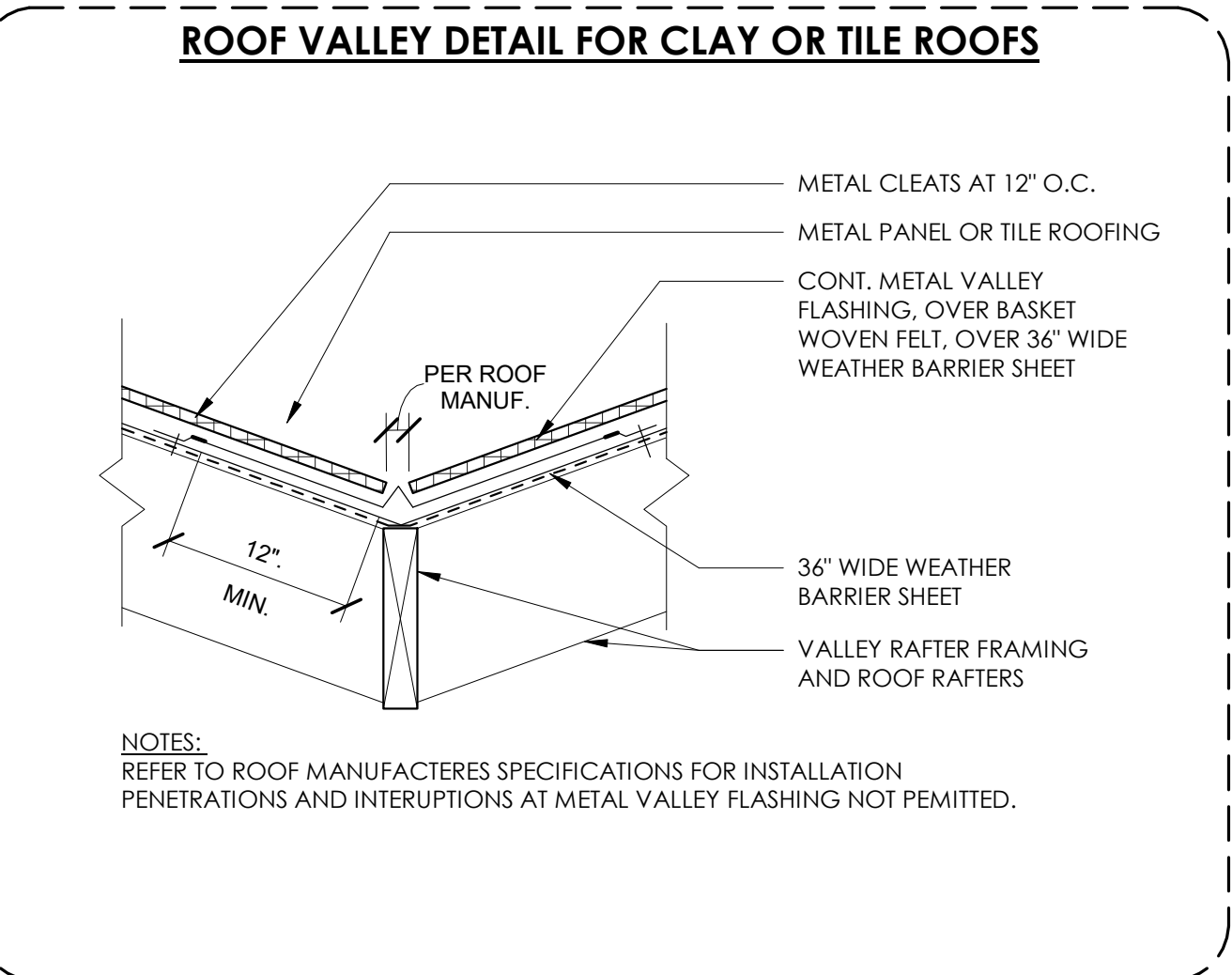
## LOW-SLOPE ROOFING MEMBRANE DETAIL



## ROOFING EAVE DETAIL



## ROOF VALLEY DETAIL FOR CLAY OR TILE ROOFS



NOTES:  
REFER TO ROOF MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION PENETRATIONS AND INTERRUPTIONS AT METAL VALLEY FLASHING NOT PERMITTED.

# RE-ROOF REQUIREMENTS:

- SHEATHING:
  - ALL MISSING, ROTTEN, TERMITE EATEN, OR OTHERWISE DAMAGED SHEATHING SHALL BE REPLACED.
  - MINIMUM SHEATHING THICKNESS SHALL BE 1/2".
  - SHEATHING NAILING SHALL BE AT 6" ON CENTER AT PERIMETER AND ALONG INNER FRAMING MEMBERS, AND 12" ON CENTER IN FIELD AREAS.
  - GAPS IN EXISTING SPACED SHEATHING SHALL NOT EXCEED A 1/4" OR THAT PERMISSIBLE UNDER THE SHINGLE MANUFACTURER'S INSTALLATION INSTRUCTIONS. GAPS LARGER THAN PERMITTED SHALL BE FILLED WITH SOLID SHEATHING MATERIAL COVERED WITH TIN SHINGLES.
  - A RADIANT BARRIER IS REQUIRED WHEN THE ROOF IS VENTILATED WITH A MINIMUM 1-INCH AIR GAP BETWEEN THE ROOFING MATERIAL AND THE DECK (TITLE 24, PART 6, SECTION 150.1(C)2).
- UNDERLAYMENT:
  - UNDERLAYMENT SHALL BE REQUIRED FOR ALL ROOFING TYPES (ASPHALT SHINGLES, MINERAL-SURFACED ROLL ROOFING, SLATE SHINGLES, TILE, METAL ROOF PANELS/SHINGLES, AND PV SHINGLES CRC R905.1.1, CBC 1507.2.8).
  - UNDERLAYMENT ON ROOFS WITH SLOPES BETWEEN 2 AND 4 IN 12 SHALL BE APPLIED IN 2 LAYERS WITH EACH LAYER OVERLAPPING THE PREVIOUS SHEETS BY 19 INCHES. END LAPS SHALL BE A MINIMUM OF 4 INCHES AND OFFSET BY 6 FEET. (CRC TABLE R905.1.1(2)).
  - UNDERLAYMENT ON ROOFS WITH SLOPES IN EXCESS OF 4 IN 12 MAY BE APPLIED IN A SINGLE LAYER WITH 4" HORIZONTAL OVERLAPS AND 12" END LAPS.
  - UNDERLAYMENT SHALL BE ATTACHED WITH CORROSION RESISTANT FASTENERS IN A GRID PATTERN OF 12 INCHES BETWEEN SIDE LAPS WITH 4-INCH SPACING AT SIDE AND END LAPS. (CRC 2022 TABLE R905.1.1(3)).
  - UNDERLAYMENT SHALL BE INSTALLED OVER DRIP EDGE AT EAVES AND UNDER DRIP EDGE AT RAKE. (CRC R905.2.8.5, CBC 1507.2.8.5)
  - SELF-ADHERING MODIFIED BITUMEN UNDERLAYMENT OR SELF-ADHERING STRIPS SHALL BE ALLOWED WHEN INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. (CRC R905.1.1, CBC 1507.1.1.1)
- FLASHINGS:
  - METAL FLASHING CORROSION RESISTANCE SHALL BE PROVIDED UTILIZING A MINIMUM 26-GAUGE GALVANIZED STEEL. (CRC R903.2.1, CBC 1503.2.1)
  - FLASHING SHALL BE REQUIRED AT WALL AND ROOF INTERSECTIONS, CHANGES OF ROOF SLOPE OR DIRECTION, AND AROUND ROOF OPENINGS AND PENETRATIONS. (CRC R903.2.1, CBC 1503.2.1)
  - FLASHING SHALL BE INSTALLED TO PREVENT MOISTURE FROM ENTERING THE ROOF AND WALLS. (CRC R903.2, CBC 1503.2)
  - SIDEWALL FLASHING SHALL BE CONTINUOUS OR STEPPED, AND A MINIMUM 4 INCHES HIGH AND WIDE. (CRC R905.2.8.3, CBC 1507.2.8.3)
  - VERTICAL LEG OF FLASHING SHALL BE CONTINUOUS UNDER SIDING. (CRC R905.2.8.3, CBC 1507.2.8.3)
  - COUNTERFLASHING SHALL BE INSTALLED IF THE SIDEWALL IS ANCHORED MASONRY VENEER. (CRC R905.2.8.3, CBC 1507.2.8.3)
  - SIDEWALL FLASHINGS SHALL TERMINATE IN KICKOUT FLASHING. (CRC R903.2.1, CBC 1503.2.1)
  - KICKOUT FLASHING SHALL BE REQUIRED TO DIVERT WATER AWAY FROM WHERE THE EAVE OF A ROOF INTERSECTS A VERTICAL SIDEWALL OR CHIMNEY. (CRC R903.2.1, CBC 1503.2.1)
  - RUSTED OR DAMAGED FLASHINGS SHALL BE REPLACED. (CRC R908.5, CBC 1511.5)
  - FLASHINGS SHALL BE PRIMED PRIOR TO THE APPLICATION OF BITUMINOUS MATERIALS. (CRC R908.6, CBC 1511.6)
  - CRICKETS SHALL BE REQUIRED ON RIDGE SIDE OF PENETRATIONS GREATER THAN 30 INCHES WIDE. (CRC R903.2.2, CBC 1503.2.2)
  - WHERE LIT SKYLIGHTS OCCUR, SKYLIGHTS SHALL BE INSTALLED AND FLASHED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. (CRC R903.2.2, CBC 1505.1.3)
  - A DRIP EDGE SHALL BE PROVIDED AT EAVES AND RAKE EDGES OF ROOFING MATERIAL TO PREVENT WATER INFILTRATIONS. ADJACENT SEGMENTS OF DRIP EDGE SHALL BE OVERLAPPED NOT LESS THAN 2 INCHES. DRIP EDGES SHALL EXTEND NOT LESS THAN 1/4 INCH BELOW THE ROOF SHEATHING AND EXTEND UP BACK ONTO THE ROOF DECK NOT LESS THAN 2 INCHES. DRIP EDGES SHALL BE MECHANICALLY FASTENED TO THE ROOF DECK AT NO MORE THAN 12 INCHES ON CENTER WITH FASTENERS AS SPECIFIED IN SECTION R905. UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE ALONG EAVES AND UNDER THE DRIP EDGE ALONG RAKE EDGES. (CRC R905)
  - PIPE JACK FLASHINGS SHALL BE INSTALLED AT ALL THROUGH ROOF PENETRATIONS.
- ROOF DRAINS, OVERFLOW DRAINS AND SCUPPERS
  - ROOF DRAINS SHALL BE AT LOW POINT OF EACH ROOF UNLESS DESIGNED TO RUN OVER EDGES, SUCH AS TO GUTTER OR GROUND BELOW. (CRC R903.4, CBC 1503.4)
  - WHERE ROOF DESIGN HAS POTENTIAL TO TRAP WATER, SUCH AS BUT NOT LIMITED TO, NEAR-FLAT ROOFS WITH PARAPETS, OVERFLOW DRAIN INLETS SHALL BE 2 INCHES ABOVE LOW POINTS. (CRC R903.4.1, CBC 1503.4.1)
  - OVERFLOW DRAINAGE MAY BE ACCOMPLISHED UTILIZING A MINIMUM OF 4-INCH HIGH SCUPPER LOCATED WITHIN PARAPET WALL. SCUPPER SHALL BE 3 TIMES AS WIDE AS DRAIN OPENING. (CRC R903.4.1, CBC 1503.4.1)
  - OVERFLOW DRAINS SHALL DISCHARGE SEPARATELY FROM MAIN ROOF DRAINS. (CRC R903.4.1, CBC 1503.4.1)
  - ROOF DRAIN SHALL BE SIZED BASED ON 2 IN/100.021 GAL PER HOUR ACCORDING TO THE 1-HOUR MAX RAINFALL RATES FOR THE COSTA MESA VICINITY. (CRC TABLE D101.1)
- ROOF MATERIAL REQUIREMENTS:
  - ALL ROOFING MATERIALS SHALL BE COMPATIBLE WITH EACH OTHER AND WITH THE BUILDING OR STRUCTURE TO WHICH THE MATERIALS ARE APPLIED.
  - ROOF COVERINGS SHALL MEET OR EXCEED THE PRESCRIPTIVE REQUIREMENTS FOR AGED SOLAR REFLECTANCE AND THERMAL EMITTANCE OR A MINIMUM SRI (SOLAR REFLECTANCE INDEX).
    - ROOFS WITH LOW SLOPES ( $\leq 2:12$ ) SHALL HAVE AN SRI OF AT LEAST 75.
    - ROOFS WITH STEEP SLOPES ( $> 2:12$ ) SHALL HAVE AN SRI OF AT LEAST 16.
  - COOL ROOFS ARE REQUIRED FOR NEW CONSTRUCTION, ADDITIONS, AND ALTERATIONS. (CALGREEN CODE, SECTION 4.106.5, TITLE 24, PART 6, SECTION 150.1(C)11).
  - ROOFING SHALL ONLY BE FASTENED TO SOLIDLY SHEATHED DECKS UNLESS OTHERWISE PERMITTED BY THE ROOFING MANUFACTURER. (CRC R905, CBC 1507)
  - FASTENERS FOR ROOFING MATERIAL SHALL MEET OR EXCEED THE ROOFING MANUFACTURER'S MINIMUM INSTALLATION REQUIREMENTS AND BE GALVANIZED STEEL, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12-GAUGE 0.105 INCH (3 MM) SHANK WITH A MINIMUM 3/8-INCH-DIAMETER (9.5 MM) HEAD, COMPLYING WITH ASTM F1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIALS AND NOT LESS THAN 3/4 INCH (19.1 MM) INTO THE ROOF SHEATHING, WHERE THE ROOF SHEATHING SHALL BE LESS THAN 3/4 INCH (19.1 MM) THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING. (CRC R905.2.5, CBC 1507.2.5)
  - WHEN UTILIZED, BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS OR MINERAL-SURFACED ROLL ROOFING WEIGHING NOT LESS THAN 77 POUNDS PER 100 SQUARE FEET (4 KG/M<sup>2</sup>).
  - WHEN UTILIZED, CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS.
  - INSTALL VALLEY LININGS BEFORE APPLYING ROOFING MATERIAL.
  - COMPOSITION (ASPHALT) SHINGLES:
    - INSTALL A MINIMUM OF 4 FASTENERS PER STRIP SHINGLE AND 2 FASTENERS PER INDIVIDUAL SHINGLE. (CRC R905.2.6, CBC 1507.2.6)
    - ASPHALT SHINGLE BASE FLASHING SHALL BE CORROSION-RESISTANT METAL OR MINERAL-SURFACE ROOFING MATERIAL. (CRC R905.2.8.1, CBC 1507.2.8.1)
    - OPEN VALLEYS SHALL BE CORROSION-RESISTANT METAL OR 2 PLYS OF MINERAL-SURFACE ROLL ROOFING; BOTTOM PLY SHALL BE 18 INCHES WIDE AND TOP PLY SHALL BE 36 INCHES WIDE. (CRC R905.2.8.2, CBC 1507.2.8.2)
    - CLOSED VALLEYS SHALL BE 1 PLY OF 36-INCH MINERAL-SURFACE ROLL ROOFING OR SELF-ADHERING MODIFIED BITUMEN UNDERLAYMENT. (CRC R905.2.8.2, CBC 1507.2.8.2)
  - CONCRETE AND CLAY TILE
    - VALLEY FLASHING SHALL BE A MINIMUM OF 11 INCHES IN WIDTH EACH WAY FROM THE CENTERLINE. (CRC R905.3.8, CBC 1507.3.8)
    - PERIMETER FASTENING SHALL BE A MINIMUM 3 TILE COURSES AND A MINIMUM OF 3 FEET FROM EITHER SIDE OF HIPS & RIDGES AND EDGES OF EAVES & RAKES. (CRC R905.3.6, CBC 1507.3.6)
    - FIELD TILE FASTENERS SHALL NOT BE REQUIRED IF BATTENS ARE USED AND THE SLOPE IS LESS THAN 5:12. (CRC R905.3.7, CBC 1507.3.7)
    - A MINIMUM OF 1 FASTENER PER TILE SHALL BE REQUIRED IF NO BATTENS ARE USED. (CRC R905.3.7, CBC 1507.3.7)
    - LIGHTWEIGHT TILES SHALL HAVE AT LEAST 1 FASTENER PER TILE IF THE WEIGHT IS LESS THAN 9 POUNDS PER SQUARE FOOT, REGARDLESS OF ROOF SLOPE. (CRC R905.3.7, CBC 1507.3.7)
    - IF SPACED SHEATHING IS USED, AT LEAST ONE 1 FASTENER PER TILE SHALL BE INSTALLED FOR SLOPES  $\geq 12:12$ . (CRC R905.3.7, CBC 1507.3.7)
    - FASTENERS MAY BE LOCATED AT EVERY OTHER ROW IF SPACED SHEATHING IS BETWEEN 5:12 &  $< 12:12$  SLOPE AS AN ALTERNATE FASTENING OPTION. (CRC R905.3.7, CBC 1507.3.7)
  - METAL ROOF SHINGLES
    - VALLEY FLASHING MATERIAL SHALL BE THE SAME CORROSION-RESISTANT MATERIAL AS THE SHINGLES. (CRC R905.4.6, CBC 1507.4.6)
    - VALLEY FLASHING SHALL BE INSTALLED A MINIMUM OF 8 INCHES FROM THE CENTERLINE WITH SPLASH DIVERTER REQUIRED; LAPS SHALL BE A MINIMUM OF 4 INCHES, WITH A MINIMUM OF 36 INCHES OF UNDERLAYMENT BELOW THE VALLEY. (CRC R905.4.6, CBC 1507.4.6)
  - METAL ROOF PANELS
    - ROOFING MATERIAL SHALL BE APPLIED TO SOLID OR SPACED SHEATHING OR SPACED SUPPORTS. (CRC R905.10.1, CBC 1507.10.1)
    - THE MINIMUM REQUIRED SLOPE FOR LAPPED NON-SOLDERED SEAM WITHOUT LAP SEALANT SHALL BE 3:12 SLOPE. (CRC R905.10.2, CBC 1507.10.2)
    - THE MINIMUM SLOPE FOR LAPPED NON-SOLDERED SEAM WITH LAP SEALANT SHALL BE 1/2:12 SLOPE (4%). (CRC R905.10.2, CBC 1507.10.2)
    - THE MINIMUM SLOPE FOR STANDING-SEAM SYSTEMS SHALL BE 1/2:12 SLOPE (2%). (CRC R905.10.2, CBC 1507.10.2)
    - ROOFS THAT INCLUDE STRUCTURAL SUPPORTING MEMBERS SHALL COMPLY WITH THE CALIFORNIA BUILDING CODE (CBC). (CRC R905.10.3, CBC 1507.10.3)
  - SLATE SHINGLES
    - HEAD LAP SHALL BE A MINIMUM OF 4 INCHES IF SLOPE IS LESS THAN 8:12; 3 INCHES IF SLOPE IS BETWEEN 8:12 AND 20:12; AND 2 INCHES IF SLOPE IS 20:12 OR GREATER. (CRC R905.6.5, CBC 1507.6.5)
    - FLASHING SHALL BE SHEET METAL WITH ZINC COATING MINIMUM G90. (CRC R905.6.6, CBC 1507.6.6)
    - VALLEY FLASHING SHALL BE A MINIMUM OF 15 INCHES WIDE. (CRC R905.6.6, CBC 1507.6.6)
  - FOR ADDITIONAL INFORMATION ON THE FOLLOWING ROOFING TYPES SEE CRC 905, CBC 1507
    - MODIFIED BITUMEN ROOFING
    - THERMOSET SINGLE PLY (EPDM)
    - THERMOPLASTIC SINGLE PLY ROOFING (TPO)
    - SPRAYED POLYURETHANE FOAM ROOFING
    - PV SHINGLES
    - BUILT-UP ROOFS (BUR)
    - BUILDING-INTEGRATED PV PANELS (MUST BE CLASS A & LABELED TO UL 7103 OR BOTH UL 61730-1 & -2)

RESIDENTIAL RE-ROOF STANDARD

FOR OFFICE USE ONLY:

PERMIT #:

ISSUED:

PROJECT NAME:  
PROJECT ADDRESS:  
COSTA MESA, CA

OWNER INFO:

PHONE:

EMAIL:

CONTRACTOR INFO:

PHONE:

EMAIL:

LICENSE:      EXPIRATION:

PLAN PREPARER INFO:

PHONE:

EMAIL:

EMERGENCY CONTACT INFO:

PHONE:

ROLE/RELATION TO PROPERTY:

TENANT INFO (IF APPLICABLE):

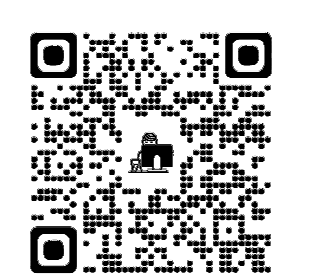
PHONE:

EMAIL:



FORM NUMBER:  
**CBRR-2**

(RELEASE: 09-2024)

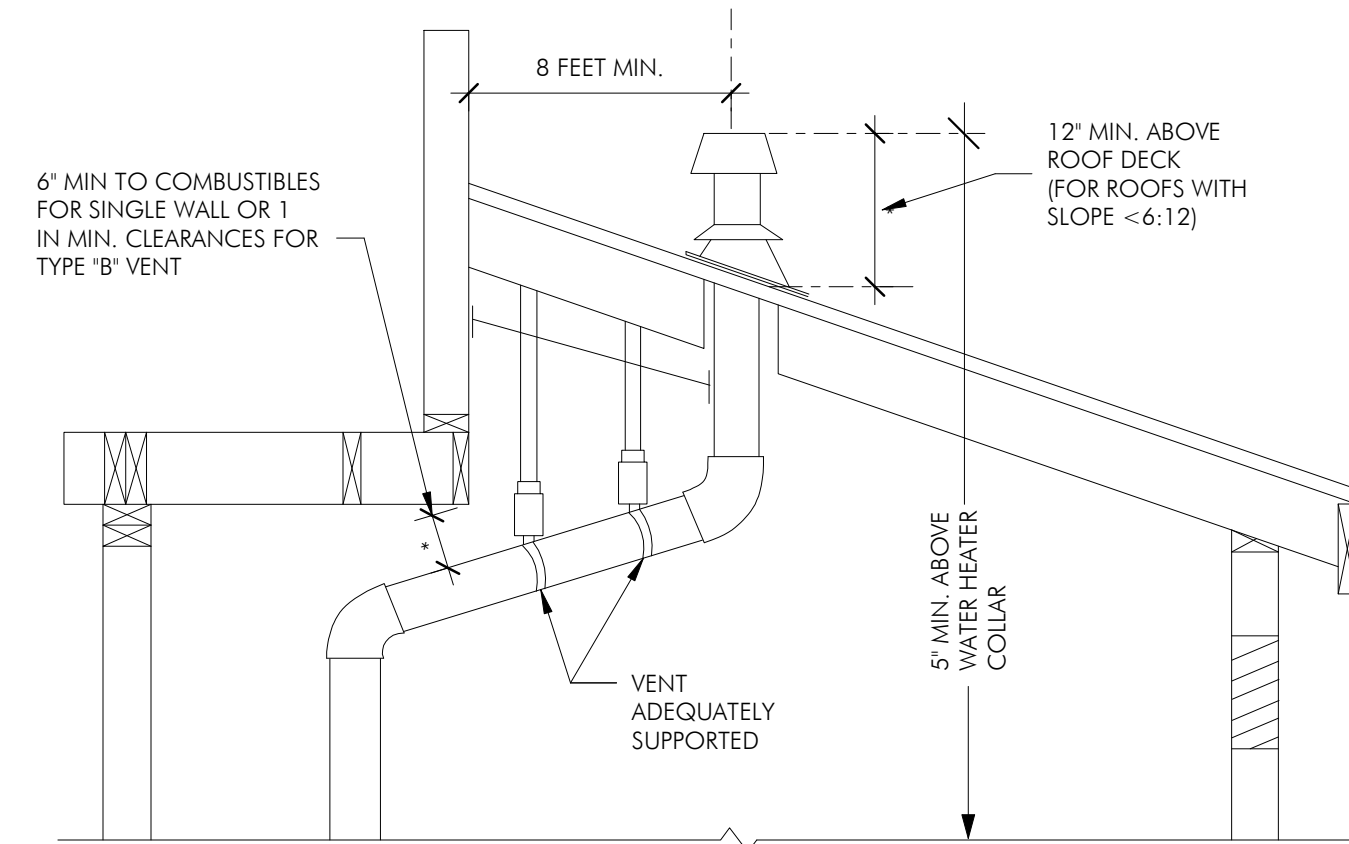


**MANUFACTURER'S INFORMATION:**

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

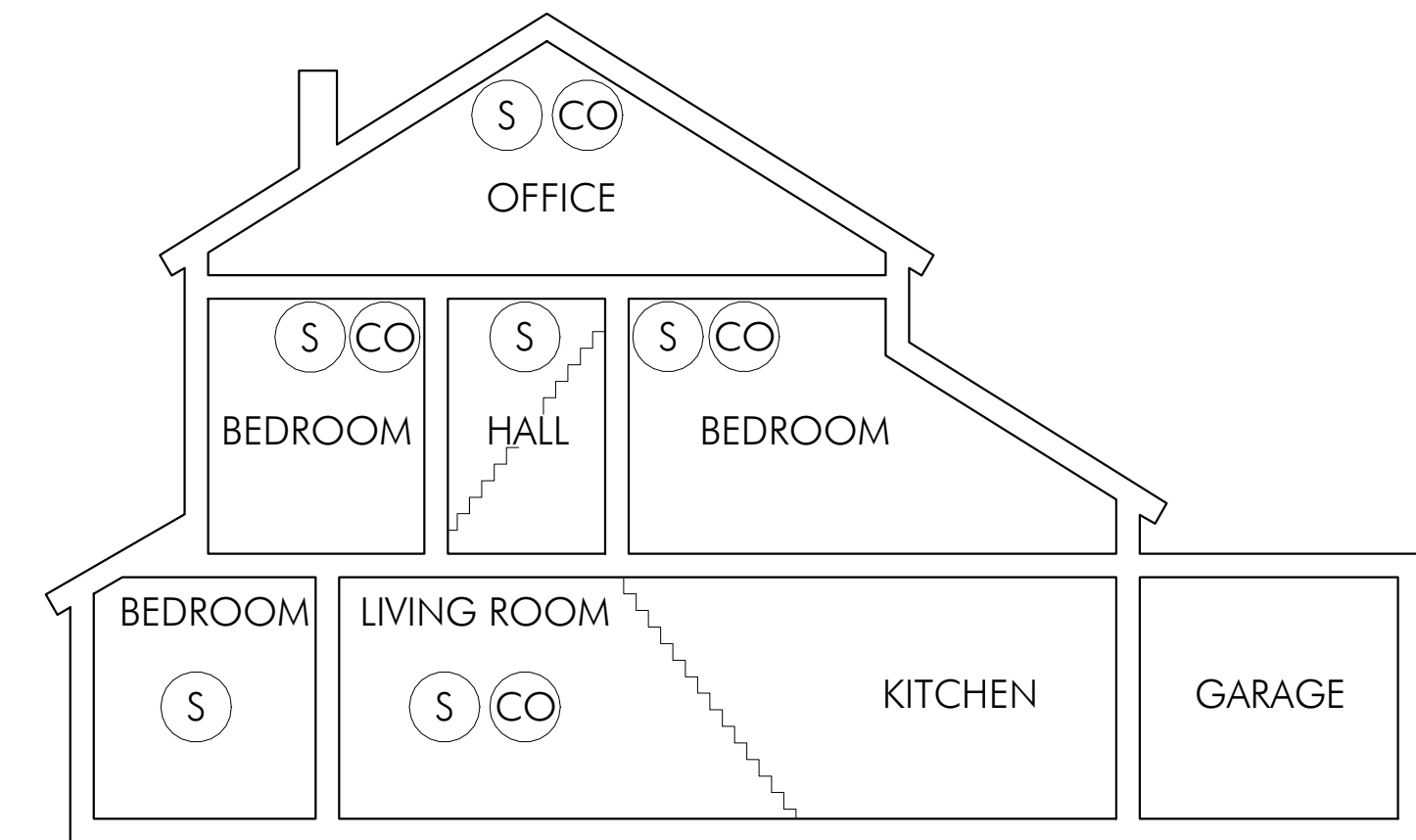
**VENT CLEARANCE DETAIL:**



**MANUFACTURER'S INFORMATION:**

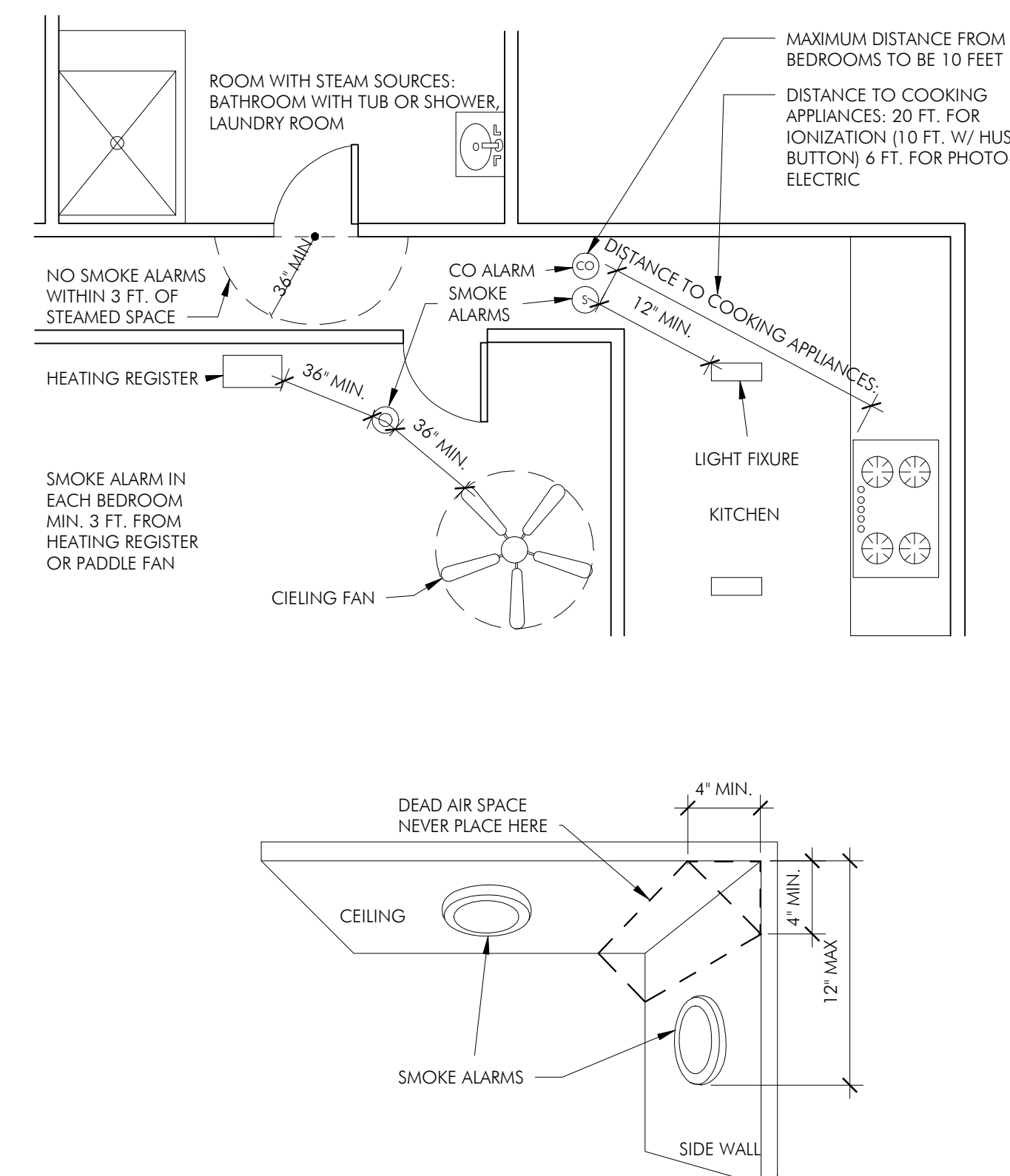
CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

**SMOKE & CO DETECTOR REQ'D LOCATIONS:**



- S SMOKE AND FIRE ALARM**  
PER CRC R314.3, SMOKE DETECTORS ARE REQUIRED:  
  - INSIDE EACH SLEEPING ROOM (BEDROOM), HALLWAYS OR CORRIDORS IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
  - ON EACH STORY OF THE DWELLING UNIT (INCLUDING BASEMENTS AND HABITABLE ATTICS). THIS INCLUDES STORIES WITHOUT BEDROOMS.
  - IN SPLIT-LEVEL HOMES, IF A LEVEL IS WITHIN 10 FEET OF ANOTHER LEVEL AND DOESN'T HAVE AN INTERVENING DOOR, ONE SMOKE DETECTOR MAY COVER BOTH.
- CO CARBON MONOXIDE ALARM**  
PER CRC R315.3, IN ANY DWELLING UNIT THAT CONTAINS A FUEL-BURNING APPLIANCE (E.G., GAS FURNACE, GAS STOVE, OR FIREPLACE) OR AN ATTACHED GARAGE, CARBON MONOXIDE DETECTORS ARE REQUIRED IN THE FOLLOWING LOCATIONS:  
  - OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
  - IN EVERY BEDROOM OR SLEEPING UNIT WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN THE ROOM.
  - ON EVERY LEVEL OF THE DWELLING UNIT, INCLUDING BASEMENTS AND HABITABLE ATTICS.

**DETECTOR PLACEMENT DETAILS:**



**RE-ROOF REQUIREMENTS:**

58. MINIMUM SLOPES (CRC R905, CBC 1507)
    - a. ASPHALT SHINGLES -- 2:12. DOUBLE UNDERLAYMENT IS REQUIRED IF THE SLOPE IS LESS THAN 4 IN:12.
    - b. CONCRETE AND CLAY TILE -- 2 1/2:12. DOUBLE UNDERLAYMENT IS REQUIRED IF THE SLOPE IS LESS THAN 4:12.
    - c. SLATE SHINGLES -- 4:12
    - d. WOOD SHAKE & SHINGLES -- 3:12
    - e. METAL ROOF SHINGLES -- PER MANUFACTURERS SPECS
    - f. METAL ROOF PANELS
      - LAPPED NON-SOLDERED SEAM WITHOUT LAP SEALANT SHALL BE 3:12.
      - LAPPED NON-SOLDERED SEAM WITH LAP SEALANT SHALL BE 1/2:12.
      - STANDING-SEAM SYSTEMS SHALL BE 1/2:12.
    - g. MINERAL-SURFACED ROLL ROOFING -- 1:12
    - h. MODIFIED BITUMEN ROOFING -- 1/2:12
    - i. BUILT-UP ROOFS (BUR)
      - MINIMUM ROOF SLOPE SHALL BE 1/4:12
      - COAL-TAR MINIMUM ROOF SLOPE SHALL BE 1/8:12
    - j. THERMOSET SINGLE PLY (EPDM) & THERMOPLASTIC SINGLE-PLY ROOFING (TPO) -- 1/4:12
    - k. SPRAYED POLYURETHANE FOAM ROOFING -- 1/2:12
    - l. LIQUID APPLIED ROOFING -- 1/4:12
    - m. PV SHINGLES & BUILDING INTEGRATED PV PANELS -- 2:12
  59. ATTIC VENTILATION
    - a. CROSS VENTILATION SHALL BE REQUIRED FOR EACH ENCLOSED ATTIC AND RAFTER BAY. (CRC R806.1, CBC 1203.2)
    - b. THE NET OPENING AREA FOR EACH ATTIC AND RAFTER BAY SHALL HAVE A MINIMUM NET OPENING AREA OF 1/150TH OF THE VENTED AREA, EXCEPTIONS MAY APPLY. AN ALLOWABLE REDUCTION TO 1/300TH SHALL BE ALLOWED IF 40%-50% OF VENTS ARE IN THE UPPER HALF OF THE ATTIC OR RAFTER BAY, AND MAXIMUM OF 3 FT. BELOW RIDGE. WHEN TAKING THE REDUCTION, A CLASS I OR II VAPOR BARRIER SHALL BE REQUIRED. (CRC R806.2, CBC 1203.2.1)
    - c. VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES BY A CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, PERFORATED VINYL OR SIMILAR MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF MESH SHALL BE A MINIMUM 1/16 INCH TO A MAXIMUM OF 1/4 INCH. (CRC R806.1, CBC 1203.2.1.3)
    - d. THERE SHALL BE A MINIMUM CLEARANCE OF 1 INCH BETWEEN INSULATION AND SHEATHING. (CRC R806.3, CBC 1203.2.1.3)
    - e. WHERE VENTILATION METHOD IS BY RIDGE VENT OR ATTIC VENT, INSULATION SHALL BE HELD BACK TO ALLOW A 1-INCH AIR SPACE. USE Baffles WITH LOOSE INSULATION. (CRC R806.1, CBC 1203.2.1.3)
  60. UNVENTED ATTICS AND UNVENTED ENCLOSED ROOF FRAMING ASSEMBLIES
    - a. ATTIC SPACES CREATED BY CEILINGS THAT ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS AND STRUCTURAL ROOF SHEATHING APPLIED DIRECTLY TO THE TOP OF THE ROOF FRAMING MEMBERS/RAFTERS SHALL BE BUILT AND INSULATED PER CRC R806.5 OR CBC 1203.3
  61. INSULATION REQUIREMENTS
    - a. WHEN REPLACING A ROOF, THE NEW ROOF ASSEMBLY SHALL MEET CURRENT INSULATION REQUIREMENTS (E.G., ADDING RIGID INSULATION ABOVE THE DECK). (TITLE 24, PART 6, SECTION 150.0(A) AND 150.1(C1))
    - b. ROOFING SYSTEMS SHALL COMPLY WITH THE PRESCRIPTIVE INSULATION REQUIREMENTS TO ACHIEVE MINIMUM R-VALUE OF R-22 FOR ATTIC AND ROOF DECK INSULATION. (TITLE 24, PART 6, SECTIONS 150.0(A) AND 150.2(B)(1))
  62. SMOKE AND CARBON MONOXIDE ALARMS:
    - a. SMOKE AND CARBON MONOXIDE DETECTORS BE STAMPED/MARKED WITH A MANUFACTURER'S DATE AND INSTALLATION DATE.
    - b. DETECTORS >10 YEARS OLD SHALL BE REPLACED.
    - c. SMOKE ALARMS
      1. GENERAL REQUIREMENTS
        - ALL SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND BE LISTED AS UL 217. (CBC 907.2.11, CRC R314.1.1)
        - SMOKE ALARMS SHALL BE PHOTOELECTRIC, IONIZATION, OR BOTH. PHOTOELECTRIC TECHNOLOGY SHALL BE RECOMMENDED. (CRC R314.1.1)
        - COMBINATION SMOKE AND CO ALARMS SHALL ALSO BE LISTED AS UL 2034. (CBC 907.2.11.3, CRC R314.1.1.2)
      2. SMOKE ALARMS SHALL BE LOCATED IN THE FOLLOWING REQUIRED LOCATIONS:
        - EACH SLEEPING ROOM. (CBC 907.2.11.2, CRC R314.3.1)
        - IN THE IMMEDIATE VICINITY OUTSIDE EACH SLEEPING ROOM (LESS THAN 10' FROM THE DOOR). (CBC 907.2.11.2.2, CRC R314.3)
        - AT LEAST ONE SMOKE ALARM SHALL BE INSTALLED ON EACH STORY, INCLUDING BASEMENTS AND HABITABLE ATTICS. (CBC 907.2.11.2.3, CRC R314.3.1)
        - ONE ADDITIONAL SMOKE ALARM SHALL BE INSTALLED IN A ROOM OPEN TO A HALLWAY SERVING BEDROOMS WHERE CEILING HEIGHT EXCEEDS THAT OF THE HALLWAY BY 24 INCHES OR MORE. (CRC R314.3)
      3. HORIZONTAL DISTANCES FROM COOKING APPLIANCES
        - SMOKE ALARMS SHALL BE LOCATED BETWEEN 10 FT. MINIMUM AND 20 FT. MAXIMUM FROM COOKING APPLIANCES. SMOKE ALARMS SHALL HAVE A HUSH BUTTON AND EITHER (1) BE PHOTOELECTRIC OR (2) LISTED FOR RESISTANCE TO COMMON NUISANCE SOURCES FOR COOKING. (CRC R314.3.3)
      4. ADDITIONAL REQUIRED LOCATIONS (PER NFPA 72)
        - FOR FLOORS GREATER THAN 1,000 SQ. FT., THE MAXIMUM TRAVEL DISTANCE TO A SMOKE ALARM SHALL BE 30 FT. (CBC 907.2.11.2.2)
        - WHERE CEILINGS ARE SLOPED OR PEAKED, SMOKE ALARM SHALL BE INSTALLED WITHIN 36 INCHES HORIZONTALLY OF THE HIGH SIDE OF A PEAKED CEILING WITH A RISE GREATER THAN 1:8, AND WITH 4 INCHES FROM THE PEAK. (CRC R314.3.1)
        - WHERE SMOKE ALARMS ARE WALL MOUNTED, THE SMOKE ALARMS SHALL BE A MAXIMUM OF 12 INCHES BELOW THE CEILING. (CRC R314.3.1)
        - WHERE STAIRS LEAD TO OCCUPIABLE LEVELS, THE SMOKE ALARM SHALL BE LOCATED SO DOORS DO NOT PREVENT SMOKE RISING IN THE STAIRWAY FROM BEING DETECTED. (CRC R314.3.1)
        - WHEN LOCATED IN COFFERED CEILINGS, THE SMOKE ALARM SHALL BE LOCATED ON THE HIGHEST PORTION OR SLOPED PORTION OF THE CEILING, WITH A MAXIMUM OF 12" DOWN FROM HIGHEST POINT. (CRC R314.3.1)
    - d. RESTRICTED LOCATIONS:
      - SMOKE ALARMS SHALL NOT BE ALLOWED IN GARAGES, UNFINISHED ATTICS, OR SPACES WHERE TEMPERATURES CAN BE BELOW 40°F OR ABOVE 100°F. (CRC R314.3.3)
      - SMOKE ALARMS SHALL NOT BE MOUNTED WITHIN 3 FEET OF A DOOR LEADING TO A ROOM WITH STEAM. (E.G. BATHROOMS WITH TUBS, SHOWERS, OR ANY OTHER FEATURE THAT GENERATES STEAM). (CBC 907.2.11.2.2, CRC R314.3)
      - SMOKE ALARMS SHALL NOT BE MOUNTED WITHIN 3 FT. OF ANY FROM SUPPLY REGISTERS FOR HEATING AND/OR COOLING SYSTEMS, THE EDGE OF A CEILING FAN BLADES ALSO SHALL BE OUTSIDE DIRECT AIR FLOW FROM REGISTERS. (CRC R314.3.3)
  63. CARBON MONOXIDE (CO) ALARMS
    - a. GENERAL REQUIREMENTS
      - CO ALARMS SHALL COMPLY WITH UL 2034. COMBINATION SMOKE/CO ALARMS SHALL ALSO MEET UL 217 & UL 2034 STANDARDS. (CBC 915.1.1, CRC R315.1)
      - CO ALARMS SHALL BE INSTALLED IN DWELLINGS WITH FUEL-FIRED APPLIANCES OR ATTACHED GARAGES. (CBC 915.1.2, CRC R315.2.1)
      - CO ALARMS SHALL BE PLACED OUTSIDE EACH SEPARATE SLEEPING AREA AND IN BEDROOMS WITH A FUEL-BURNING APPLIANCE. (CBC 915.1.2, CRC R315.2.2)
    - b. POWER SOURCES & INTERCONNECTION (SMOKE AND CO)
      - ALL ALARMS SHALL BE INTERCONNECTED SO THE ACTIVATION OF ONE SHALL TRIGGER ALL ALARMS. WIRELESS CONNECTION SHALL BE ALLOWED. (CBC 907.2.11.4, CRC R314.4 & R315.5)
      - THE POWER SOURCE SHALL BE FROM THE BUILDING WIRING WITH A BATTERY BACKUP.
      - BATTERY-ONLY OPTIONS ARE ACCEPTABLE FOR ADDITIONS, ALTERATIONS, AND REPAIRS ONLY WHEN THERE IS NO ATTIC ACCESS AND THE DRYWALL IS NOT DISTURBED. (CBC 907.2.11.5, CRC R314.6 & R315.6)
      - BATTERY POWERED DETECTORS MUST CONTAIN A NON-USER SERVICEABLE 10-YEAR SEALED BATTERY.
64. GAS VENT TERMINATIONS
  - a. GAS VENTS SHALL EXTEND ABOVE ROOF EXCEPT FOR DIRECT VENT APPLIANCES, APPLIANCES WITH INTEGRAL VENTS, AND MECHANICAL DRAFT APPLIANCES INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS (CPC 802.6.2, CMC 802.6.2)
  - b. FLASHING SHALL BE PROVIDED AT ROOF OR WALL VENT PENETRATION (CPC 802.6.1(6), CMC 802.6.1(6))
  - c. ALL GAS VENTS SHALL EXTEND THROUGH THE ROOF FLASHING, ROOF JACK, OR ROOF THIMBLE AND TERMINATE WITH A LISTED CAP OR LISTED ROOF ASSEMBLY. (CPC 802.6.1(6), CMC 802.6.1(6))
  - d. TYPE B OR L VENT TERMINATION SHALL BE A MINIMUM OF 5 FT. VERTICAL ABOVE DRAFT HOOD OR FLUE COLLAR (CPC 802.6.1, CMC 802.6.1)
  - e. VENTS GREATER THAN 12 IN. IN DIAMETER SHALL BE A MINIMUM OF 2 FT. ABOVE THE ROOF (CPC 802.6.2(1B), CMC 802.6.2(1B))
  - f. VENT SHALL TERMINATE A MINIMUM OF 3 FT. ABOVE FORCED AIR INLET LOCATED WITHIN 10 FT. OF VENT (CPC 802.6.1(7), CMC 802.6.1(7))

**RESIDENTIAL RE-ROOF STANDARD**

FOR OFFICE USE ONLY:  
PERMIT #:  
ISSUED:

**PROJECT NAME:  
PROJECT ADDRESS:**  
COSTA MESA, CA

**OWNER INFO**  
NAME:

PHONE:

EMAIL:

**CONTRACTOR INFO**  
NAME:

PHONE:

EMAIL:

LICENSE: EXPIRATION:

**PLAN PREPARER INFO**  
NAME:

PHONE:

EMAIL:

**EMERGENCY CONTACT INFO**  
NAME:

PHONE:

ROLE/RELATION TO PROPERTY:

**TENANT INFO (IF APPLICABLE)**  
NAME:

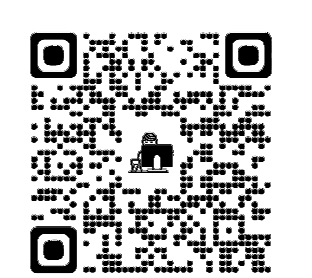
PHONE:

EMAIL:



**FORM NUMBER:  
CBRR-3**

(RELEASE: 09-2024)



**MANUFACTURER'S INFORMATION:**

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

**MANUFACTURER'S INFORMATION:**

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

**MANUFACTURER'S INFORMATION:**

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

**MANUFACTURER'S INFORMATION:**

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

CLICK HERE TO  
UPLOAD AN IMAGE  
INTO THIS PDF

**RESIDENTIAL RE-ROOF  
STANDARD**

FOR OFFICE USE ONLY:  
PERMIT #:  
ISSUED:

**PROJECT NAME:**  
**PROJECT ADDRESS:** COSTA MESA, CA

**OWNER INFO**  
NAME:  
PHONE:  
EMAIL:

**CONTRACTOR INFO**  
NAME:  
PHONE:  
EMAIL:  
LICENSE:      EXPIRATION:

**PLAN PREPARER INFO**  
NAME:  
PHONE:  
EMAIL:

**EMERGENCY CONTACT INFO**  
NAME:  
PHONE:  
ROLE/RELATION TO PROPERTY:

**TENANT INFO (IF APPLICABLE)**  
NAME:  
PHONE:  
EMAIL:



**FORM NUMBER:  
CBRR-4**  
(RELEASE: 09-2024)

