



## **California Residential Code (CRC) Asphalt Shingle Re-Roof Information**

### **When is a permit required?**

- A re-roofing permit is required when replacing sheathing or when new sheathing is to be installed on the roof (such as solid sheathing over skip sheathing). A permit is required when dry rot repairs reach 32 sq. ft. or more of replaced decking, or any alteration or repairs occurs to the rafters, rafter tails or any structural members except a fascia board.
- A permit is not required for an asphalt shingle reroof when no new sheathing is being installed.
- No more than two (2) layers of roofing are allowed.
- A permit is required when existing solar or solar thermal panels cover the roof and must be removed for the installation of new roofing material before being reinstalled.

### **What inspections are required?**

- Two inspections are required: Nailing (code 116) and Final Inspection (code 599). To schedule, call 408-615-2400. Please make early arrangements; inspection slots may fill up several days in advance.

### **Inspection procedures**

- The customer must provide an OSHA-approved ladder that is sufficiently secured to the structure and extends 3 feet above the roof edge. Post the permit card in a conspicuous place for the inspector.

### **Nailing Inspection**

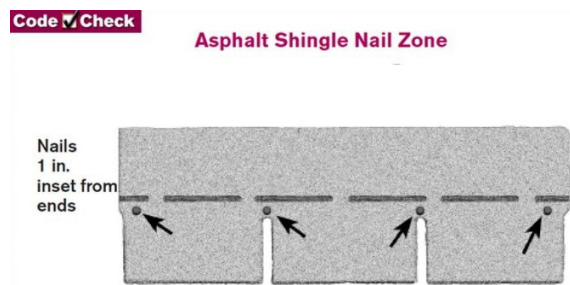
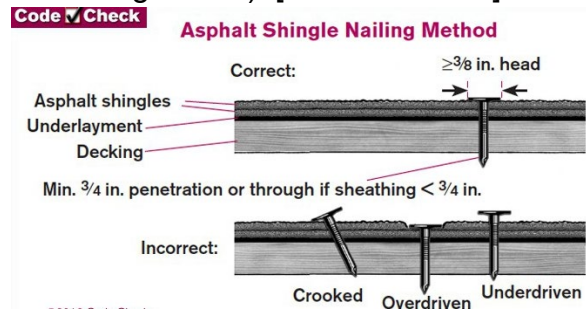
- Plan for the nailing inspection to take place on the day the plywood or OSB sheathing is to be installed. 100% of the plywood or OSB must be installed for this inspection. Do not install paper or shingles prior to this inspection.
- Leave at least 1/8-inch space at all panel edge joints.

- Leave at least 1-inch space around all B vents. Use metal straps to secure the vent and prevent movement. Use flashing appropriately sized for the vent.
- Horizontal edges of plywood over skip sheathing that do not fall on solid backing (sheathing) must be installed using one of the following three methods:
  - H-clips (within 6 inches of each corner and no more than 2 ft. apart) or;
  - Support by solid backing such as wood strips placed underneath the plywood or OSB and between the existing skip sheathing or;
  - Support by spacing blocks the same thickness as the skip sheathing and placed under the plywood or OSB at each rafter. Plywood or OSB shall have a minimum dimension of one foot (vertical edge) by two feet.
- Provide for adequate roof ventilation as required by code. One sq. ft. of opening for each 150 sq. ft. of area being vented. Minimum 50% of vent openings must be located at least 3 ft. above eave.
- Crickets are required on the ridge side of any chimney or penetration wider than 30 inches, except unit skylights installed in accordance with the manufacturer's instructions. [CRC R903.2.2]

Attach plywood to the rafters or ceiling joists as shown in the following table: [CRC R602.3(2)]

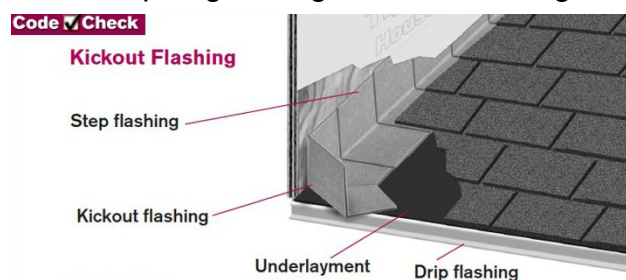
Sheathing Thickness	Fastener and Length	Fastener Spacing (inches): Edge	Fastener Spacing (inches): Intermediate Supports
Up to 1/2 in.	Staple 15 ga. 1¾ in.	4	8
Up to 1/2 in.	Staple 16 ga. 1¾ in. or 0.097 – 0.099 Nail 2¼ in.	3	6
19/32 and 5/8 in.	0.113 Nail 2 in.	3	6
19/32 and 5/8 in.	Staple 15 or 16 ga. 2 in. or 0.097 – 0.099 Nail 2¼ in.	4	8
23/32 and 3/4 in.	Staple 14 or 16 ga. 2 in. or 0.097 – 0.099 Nail 2¼ in.	4	8
23/32 and 3/4 in.	Staple 15 ga. 1¾ in.	3	6
1 in.	0.113 Nail 2¼ in.	3	6
1 in.	Staple 14 or 15 ga. 2¼ in. or 0.097 – 0.099 Nail 2½ in.	4	8

Asphalt shingles must be attached with roofing nails (not staples) with a minimum  $\frac{3}{8}$  in. diameter head and penetrating not less than  $\frac{3}{4}$  in. into roof sheathing (or through for sheathing  $<\frac{3}{4}$  in.). [CRC R905.2.5]



## Final Inspection:

- At final inspection: flashings sealed, collars in place, all debris removed, and all exposed new and replacement wood must be painted.
- A spark arrestor is required on all chimneys. [CRC R1003.9.2]
- Kickout flashings are required where a sloped roof eave intersects a vertical sidewall. [CRC 903.2.1]
- For asphalt shingle roofs, a drip edge is required at eaves and rake edges. The drip edge shall extend  $\frac{1}{4}$  inch below the sheathing and extend up back onto the roof deck not less than two inches. The underlayment shall be installed over the drip edge along eaves and along rake edges. [CRC R905.2.8.5]



## Contact Information

**Permit Center:** 408-615-2420 | **Email:** [permitcenter@santaclaraca.gov](mailto:permitcenter@santaclaraca.gov)

**Building Division:** 408-615-2440 | **Email:** [building@santaclaraca.gov](mailto:building@santaclaraca.gov)