



## City of Huntington Beach

Department of Planning & Building

### **REROOFING REQUIREMENTS**

2000 Main Street, Huntington Beach, CA 92648

Office: (714) 536 - 5241 Fax: (714) 374 - 1647

This bulletin provides information pertaining to re-roofing requirements within the City of Huntington Beach. Its objective is to provide a permit, plan check and inspection process that meet the minimum provisions of the current California Building Code.

#### **GENERAL REQUIREMENTS**

A building permit is required for all reroofing except for repairs totaling less than 100 square feet.

Reroofing is required to comply with Chapter 15 of the 2007 California Building Code (CBC), ICC Evaluation Service Reports systems and/or other approved third party listing agencies for proprietary. If you have any questions, please ask the building counter staff or call (714) 536-5241.

#### **RE-ROOFING vs. REPLACEMENT (Section CBC 1510)**

Structural roof load components shall be capable of supporting the roof-covering system and the material and equipment loads that will be encountered during installation of the system.

New roof coverings shall not be installed without first removing all existing layers of roof coverings where any of the following occurs:

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.
2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.

#### **EXCEPTIONS:**

- a. 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 that do not rely on existing roof's and roof coverings for support, shall not require the removal of existing roof coverings.
- b. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1510.4. (*Note: this application must be listed in the manufacturer's specifications.*)
- c. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.

## **PLAN CHECK REQUIREMENTS**

Submittal of a plan for review is not required for reroofing with asphalt shingles, wood shingles, wood shakes or built-up roofs when in conformance with the criteria indicated under the section for Re-Roofing vs. Replacement.

### **Tile and other heavy reroof materials when heavier than existing roofing:**

1. Six (6) pounds per square foot and lighter materials:
  - a) List current ICC evaluation service report number for proprietary materials.
  - b) No Structural justification is required.
2. Over Six (6) pounds or less than Nine (9) pounds per square foot materials:
  - a) List current ICC evaluation service report number for proprietary materials.
  - b) Structural calculation is required by a licensed California State Civil, Structural or Architect and shall reflect all vertical loads analysis.
  - c) Provide a complete basic framing plan to include structural sections and details.
3. Over Nine (9) pounds per square foot material:
  - a) List current ICC evaluation service report number for proprietary materials.
  - b) Structural calculation is required by a licensed California State Civil, Structural or Architect. The structural calculations need to address vertical loading to roof framing members and affected floor framing members. In addition, the structural calculations need to include an analysis of the lateral resisting elements of the structure.
  - c) Provide a complete basic framing plan to include structural sections and details.

## **INSPECTIONS**

Inspections can be made on our automated system by calling (714) 536-5241 or in person at our counter located on the 3<sup>rd</sup> floor of city hall. The following inspections are required for reroofing in order to verify compliance with minimum construction standards.

- 1) **Pre-roof or tear-off** (*code # 105 located on job card*) - All materials to be removed, the sheathing exposed and all rotted or deteriorated wood replaced. If new sheathing is installed or if the existing sheathing is used, the material and nailing need to be inspected.
- 2) **Framing** (*code # 106 located on job card*) – May be required for re-roofing of tiles over 6 psf.
- 3) **Final** (*code # 112 located on job card*) - To be made when the job is complete.

## **Access**

In gated communities, the contractor or owner needs to notify the gate attendant that an inspection has been requested prior to the inspectors' arrival. If a gate attendant is not present, an access code, if required, is needed prior to inspection. Access to a private

yard requires written authorization by the owner or tenant by leaving a note at the main entry door. Inspectors can not enter yards where dogs are present.

### **Ladders**

All ladders need to have a minimum duty rating of 250 pounds, be OSHA approved and extend three (3) feet above the roof. Hinged or stack ladders are limited to one story roofs and they need to be assembled. Ladders for one story roofs may be laid on the ground at the point they will be utilized. Ladders for two story roofs need to be erected and in place. Ladders for roofs over two stories need to be tied and secured to prevent displacement.

### **Excessive Ponding**

Ponding of water on roofs leads to premature failure of the roofing material and should be avoided. Prior to removing existing roofing material, the contractor or owner should view the roof for evidence of ponding such as water stains or deteriorated material. Material specifications should be reviewed for allowable ponding; however, as a rule of thumb, ponding generally is considered excessive if the depth exceeds 1/4 inch or covers more than 100 square feet. Excessive ponding may be remedied by building up the low area or by installing auxiliary roof drains. If you are unsure if the roof exhibits excessive ponding, ask your building inspector prior to proceeding with your project.

### **Combustible concealed space**

Where the application of a new roof covering over wood shingle or shake roofs create a combustible concealed space, the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other approved material securely fastened in place per 2007 CBC Section 1510.4.

### **MATERIAL REQUIREMENTS**

Roofing materials need to be installed in accordance with the manufacturer's installation instructions. Materials listed with an ICC evaluation service report need to be installed in accordance with the conditions of the report. Roofing materials and their fastenings must comply with section 1506 and 1507 of CBC and shall conform to all applicable standards referenced in chapter 15.

### **Roof Sheathing**

Roof sheathing needs to comply with CBC Tables 2304.7(1) and 2304.7(2) for lumber roof sheathing; 2304.7(2) for sheathing lumber—minimum grade requirements: board grade, 2304.7(3) for allowable spans and loads for wood structural panel sheathing and single-floor grades continuous over two or more spans with strength axis perpendicular to supports, and 2304.7 (5) for allowable load (PSF) for wood structural panel roof sheathing continuous over two or more spans and strength axis parallel to supports. When structural panels are installed over spaced sheathing, the panels shall be supported at corners and edges where differential deflection can cause tears in the underlayment.

### **Flashing**

Rusted or damaged flashing, vent caps and metal edgings need to be replaced with new materials as necessary. Valley flashing may not be less than 0.016 inch (No. 28 galvanized sheet gage) corrosion-resistant metal. At the juncture of the roof and vertical surfaces, flashing and counter-flashing may not be less than 0.019 inch (No. 26 galvanized sheet gage) corrosion-resistant metal. Equivalent material may be submitted

to the building official for approval. For other approved flashing for asphalt roof, see Table 1507.2.9.2. For other approved flashing for metal roof, see Table 1507.4.3(1).  
(Note: Flashing is to be sealed to shingles at transitions with a bead of mastic located at top and bottom of roof.)

### **Fasteners**

Nails or staples need to be corrosion-resistant and comply with the minimum gage and head or crown width for the roofing material utilized. Fasteners need to be long enough to penetrate the roof sheathing 3/4 inch or the thickness of the sheathing whichever is less per 1507.2.6, 1507.3.6, 1507.5.5, 1507.8.5, and 1507.9.6. When asphalt shingles are applied over wood shingles, 1 1/2 inch staples may be used provided all curled and raised wood shingles are first nailed down to provide a flat surface.

### **Built-up roofs**

Re-roofing without removal of existing roof coverings is permitted provided it meets the provisions of section 1507.10, table 1507.10.2 and 1510.3.

### **Asphalt shingles**

Asphalt shingles applied over wood shingles require an overlay underlayment of not less than ASTM D 226, Type 1 (15 LB), ASTM D 4869, Type 1, or ASTM 6757, non-perforated felt. Single layer may be provided for slopes from 2:12 or greater. For slopes from 2:12 to 4:12, double layer is required.

### **Wood shingles**

Wood shingles need to be fire retardant and labeled as a minimum of Class "C" roofing assembly. Wood shingles shall be installed only on slopes of 3:12 or greater.

### **Wood shakes**

Wood shakes need to be fire retardant and labeled as a minimum of Class "C" roofing assembly. Wood shakes shall be installed only on slopes of 3:12 or greater. Wood shakes are not permitted to be applied over an existing roof per Section 1510.3 of the 2007 CBC.

### **Clay and concrete tile**

Joints in lumber sheathing shall occur over supports unless approved end-matched lumber is used, in which case each piece shall bear on at least two supports per 2308.10.8.1 of the 2007 CBC.

Plan check requirements should be reviewed for tile roof installations utilizing materials weighing in excess of six (6) pounds.

- Tile roofs, unless otherwise noted, required underlayment shall conform to: ASTM D 226, Type 2 (30 LB); ASTM D 2626; or ASTM 6380, Class M mineral-surfaced rolled roofing. See 1507.3.3.1 for Low-slope roofs. For low slope roofs of 2-1/2:12 to 4:12, a double layer underlayment is required. For high slope roofs of 4:12 or greater, see section 1507.3.3.2.
- Where required, wood batten strips of 1x2 inch wood need to be nailed to the roof sheathing over the underlayment. Standard four foot battens require a 1/2" end space for drainage. Eight foot battens need a minimum 1/8 inch riser at each rafter.

- Wire for attaching slate shingles and clay or concrete tiles needs to be of copper, brass or stainless steel capable of supporting four times the weight of the tile.
- Approved vent flashing needs to conform to tile shape and bird stops need to be installed at the eave perimeter. Other voids need to be filled or stopped in an approved manner

### **Metal Roof Panels**

Reroofing with metal roofing needs to be in accordance with the original manufacturer's specifications or when the original manufacturer's specifications are no longer available as required by Section 1504 of the 2007 CBC.

### **Spray polyurethane foam roofs**

When in conformance with the criteria listed in Section 1507.14 of the 2007 CBC, spray-applied polyurethane foam may be applied directly to an existing built-up roofing system when the completed assembly is a Class A, B, or C roof covering that meets the criteria in Section 2603.4.1.5 of the 2007 CBC.