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 (CBC) and California Residential Code (CRC).

**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 9 in 2019 CRC and Chapter 15 of the 2019 CBC, and/or other approved third party testing / listing agencies for proprietary systems under the current code cycle. If you have any questions, please ask the building counter staff or call 714-536-5241.

**ALLOWABLE OVERLAYMENTS**

An overlayment is a new roof system over the existing roof system.

- **Asphalt Shingles:** Not more than one (1) overlay of wood shingles may be applied over existing asphalt shingles.
- **Wood Shingles:** Not more than one (1) overlay of wood shingles may be applied over existing wood shingles.
- **Wood Shakes:** Not more than one (1) overlay of wood shakes may be applied over an existing asphalt shingle or wood shingle roof. New roof covering may not be applied over an existing shake roof except as approved by the building official.
- **Tile:** Tile roofs may be applied over existing roof coverings when the installation is substantiated by an engineering analysis and approved by the building official.
- **Metal roofing:** Metal roofing may be applied over existing roof covering when approved by the building official and in compliance with R907.3 exception 1 & 2.

**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 allowable overlayments.
Tile and other heavy reroof materials when heavier than existing roofing:

1. **Materials lighter than Six (6) pounds per square foot:**
   a) List current ICC Evaluation Service Research report number for proprietary materials.

   No Structural justification is required.

2. **Six (6) pounds per square foot or heavier materials:**
   a) List current ICC Evaluation Services Research report number for proprietary materials.
   b) Structural justification is needed as noted below:
      i) Conventionally framed structures using materials weighing 9 pounds or less per square foot may use standard tables and details as published by an approved manufacturer.
      ii) Non-conventional framed structures (i.e.: trusses) using materials weighing 9 pounds or less per square foot need structural roof calculations prepared by a State licensed Civil or Structural Engineer or Architect.
      iii) All materials that weigh over 9 pounds per square foot require structural calculations. 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 (see diagram on page 6) to include structural sections and details.

**INSPECTIONS**

Inspections need to be requested in advance prior to the date of inspection. The following inspections are required for reroofing in order to verify compliance with minimum construction standards.

- **Pre-roof or tear-off** - All materials to be removed, the sheathing exposed and all rotted or deteriorated wood replaced.
- **Sheathing** - If new sheathing is installed, the material and nailing need to be inspected.
- **Final** - To be made when the job is complete.

**Access**

In gated communities, the contractor or owner need to notify the gate attendant that an inspection has been requested prior to the inspectors arrival. If there is no gate attendant, the access code needs to be provided. Access to private
yards needs to be authorized in writing by the owner or tenant by leaving a note at the main entry door. Inspectors cannot enter yards with dogs 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**

When the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the combustible concealed space needs to be filled with materials listed for fire blocks.

**MATERIAL REQUIREMENTS**

Roofing materials need to be installed in accordance with the manufacturers installation instructions. Materials listed in an ICC Evaluation Service Research report need to be installed in accordance with the conditions of the report. Roofing materials and their fastenings must conform to the applicable standards listed in Chapter 44, 2019 CRC and Chapter 35, 2019 CBC.

**Roof Sheathing**

Roof sheathing needs to comply with CRC R803.1, R905.2, R905.3.1, R905.4.2, R905.5.1, R905.6.1, R905.7.1, R905.8.1, and R905.10.1 or with CBC 2304.7 and Table 2304.7 (1)-(4). 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.

**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. 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**

When reroofing without removal of existing roof coverings is permitted by the building official and the conditions listed in CRC R907.3 (1)-(3), including exceptions (1)-(4) or in CBC 1510.3 (1)-(3), including exceptions (1)-(4), have been met, the reroofing needs to be accomplished as follows:

**Over gravel-surface:** Clean off loose gravel, repair blisters, buckles and other irregularities and install a minimum 3/8” insulation board over the existing roof. Alternatively, on nailable decks only, all gravel shall be spudded off and blisters, buckles and other irregularities repaired. A rosin-sized or other dry sheet shall be installed and a base sheet mechanically fastened in place. A new roof conforming to Chapter 9 CRC or Chapter 15 CBC shall then be applied.

**Over smooth or cap sheet surface:** Repair blisters, buckles and other irregularities. In the case of non-nailable decks, a base sheet shall be spot cemented to the existing roof. In the case of nailable decks, a base sheet shall be nailed in place. In cases where residual materials may cause the new base sheet to adhere to the old roof, a rosin-sized or other dry sheet shall be installed under the base sheet. A new roof conforming to Chapter 9 CRC or Chapter 15 CBC shall then be applied.

**Asphalt shingles**

Asphalt shingles applied over wood shingles need to have an overlay underlayment of not less than Type 30 non-perforated felt.

**Wood shingles**

Wood shingles need to be fire retardant and labeled as a minimum of Class "C" roofing assembly.

**Wood shakes**

Wood shakes need to be fire retardant and labeled as a minimum of Class "C" roofing assembly. Wood shakes applied over asphalt shingle or wood shingle roofs need one layer of 18 inch, Type 30 non-perforated felt interlaced between each layer of shakes.

**Clay and concrete tile**

Solid sheathing, installed over existing spaced sheathing, as a deck for tile roofs need to have joint breaks occur on or near rafters and need corner support to eliminate tears in the underlayment.

Plan check requirements should be reviewed for tile roof installations utilizing materials weighing \textit{six (6)} pounds per square foot or greater.

- Tile roofs need to have an underlayment of not less than one layer of heavy-duty or Type 30 felt.
- 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 eve perimeter. Other voids need to be filled or stopped in an approved manner.

\textbf{Metal roofing}

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 Chapter 9 CRC or Chapter 15 CBC.

\textbf{Spray polyurethane foam roofs}

When in conformance with the criteria listed in Chapter 9 CRC or Chapter 15 CBC and approved by the building official, 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 Chapter 9 CRC or Chapter 15 CBC.