



CITY OF COVINGTON
 Permit Services
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 Covington, WA 98042

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NON-RESIDENTIAL RE-ROOF

Checklist:

- Complete building permit application and pay permit fee
- Describe the scope of work in detail: _____

- Tear off: Washington State Energy Code insulation requirements apply.
- Provide copy of contractor's current registration card showing licensure in the State of Washington.
- Overlay: Engineer's Certification required
- Estimated valuation: \$_____
- Number of roofing squares: _____
- Building use: _____

ENGINEER'S CERTIFICATION FOR A SINGLE OVERLAY

Maximum two (2) roofs. Three (3) roofs not allowed.

I, _____ hereby certify that the roof structure located at
 _____, meets the following requirements:

- The roof structure is sufficient to sustain the weight of the additional dead load of the new roofing based on the design values contained in the 2006 International Building Code.
- The roof deck is structurally sound.
- Roof drains and drainage are sufficient to prevent extensive accumulation of water.
- The existing roofing is securely attached to the deck.
- The existing insulation is not water soaked.
- The fire-retardant requirements are maintained.

Signed _____
 Washington State Registered Professional

Date _____

Affix Seal _____
 State of Washington

RE-ROOFING GUIDELINES PER 2006 INTERNATIONAL BUILDING CODE

Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of the 2006 IBC Section 1510 as follows:

Exception: Re-roofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage.

- Structural roof 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 conditions occur:
 - (a) 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.
 - (b) Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.
 - (c) Where the existing roof has two or more applications of any type of roof covering.

Exceptions:

- 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 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 when applied in accordance with Section 1510.4.
 - 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.
- Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other approved materials securely fastened in place.
- Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars and metal counterflashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled.
- Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

Adding Roofing Layer:

The building official may allow existing roof coverings to remain when an inspection report and/or analysis prepared by a Washington State structural engineer is submitted to Permit Services and verifies all of the following:

1. The roof structure is sufficient to sustain the weight of the additional dead load of the new roofing based on the design values contained in the 2006 International Building Code (IBC).
2. The roof deck is structurally sound.
3. Roof drains and drainage are sufficient to prevent extensive accumulation of water.
4. The existing roofing is securely attached to the deck.
5. Existing insulation is not water-soaked.
6. Fire-retardant requirements are maintained.

No roof shall have in any combination more than that allowed in the 2006 IBC Section 1510. Roofing conforming to IBC Section 1507 overlaid on existing roofing shall comply with the provisions of IBC Section 1510.3 and the manufacturer's installation requirements as an overlay when approved by the building official.

Tear-off and reroof:

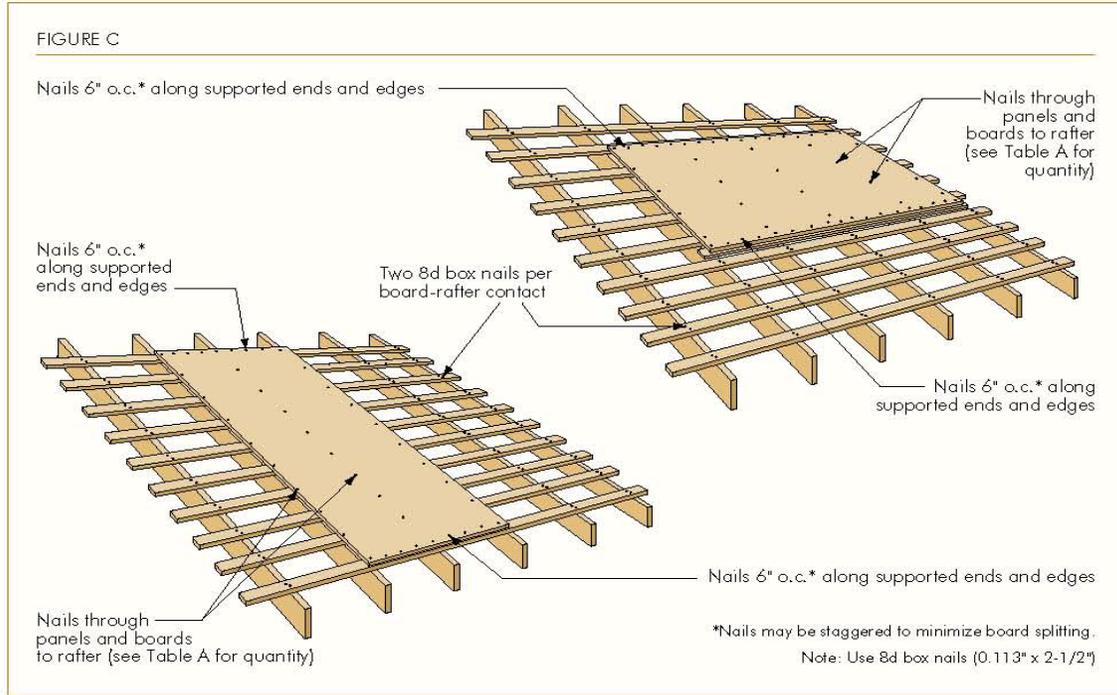
Per section 1132.1 of the Washington State Nonresidential Energy Code, installation of insulation and inspection of the deck are required if the roofing is torn down to the bare deck. Per Section 1310.2, the insulation requirements are:

1. $U=0.10$ maximum for the roof assembly, or
2. Continuous R-9 insulation installed entirely outside of the roof structure, or
3. R-11 insulation installed inside or within a wood roof structure, or
4. R-10 insulation installed inside or within a metal roof structure.

A final inspection and approval shall be obtained from the building official when the reroofing is complete.

PANELS ATTACHED TO ROOF FRAMING (THROUGH SPACED BOARDS)

Panels up to 3/4-inch thick may be attached to framing through spaced boards using 8d box nails (0.113 x 2-1/2 inches) with quantity as shown in Table A and illustrated in Figure C. Nail panels to framing at all spaced-board crossings, as shown in Figure C. Nails along edges continuously supported by boards should be spaced 6 inches o.c. Panel edges should not be cantilevered. It may be necessary to add additional boards or move existing boards to support panel edges.



PANELS ATTACHED DIRECTLY TO SPACED BOARDS

When panels are attached to spaced boards without regard to framing, the existing boards may need additional fastening prior to attaching the panels. Two 8d box nails (0.113 x 2-1/2 inches) are required for each spaced board at each rafter or truss support.

Attach panels, either parallel or perpendicular to the boards, with 6d box nails (0.099 x 2 inches) spaced according to Table B. Configurations that leave panel ends or edges continuously unsupported (cantilevered) should be avoided. Additional boards may be required (Figure D).

Note: Although not a code requirement, panel spacing is an **APA RECOMMENDATION** to provide installers with a means of minimizing the potential for panel buckling, which can lead to an unsightly appearance and customer complaints. Panel buckling may be an aesthetic or serviceability issue but is not a structural deficiency. There is no reason to expect this recommended space to be maintained once the panels become acclimated. Gaps that were initially present may have closed due to normal moisture-related expansion. If the flatness of the panels is acceptable, APA generally recommends that any finish roofing be installed as planned regardless of whether gaps are present.

