



Building Division
201 SE 3rd STREET (Second Floor)
OCALA, FL 34471
Phone: (352) 629-8421

Re-Roof Inspection Procedure

There are three (3) INSPECTION TYPES for site-built single family residential structure Re-Roofs or one (1) Final Inspection if submitting the Roofing Affidavit. This does not limit the NUMBER OF INSPECTIONS to three as the variable conditions such as weather or the size of the roof can limit the amount of work which can be done for any given time period.

Option 1 - Inspection Types, Components Inspected:

1. Sheathing, Deck and Fastener Inspection. The condition of the existing and any replaced plywood or deck boards along with the fastener type and spacing are inspected for code compliance.
2. Water Barrier and Metal Inspection. The water barrier, drip edge, flashing, and valley metal along with fasteners for these components are inspected for code compliance.
3. Final Inspection. The roof and all related components are inspected at this point for completion and code compliance. All construction debris is removed from the roof and surrounding area.

Option 2 - Inspection Types, Components Inspected, Commercial & Residential Re-Roofs:

1. Reroofing being done on the weekend or holiday, or in case of severe weather, or the building inspector cannot get to the job site, a Final Inspection only will be required once the Roofing Affidavit and required photos are submitted by email in digital PDF format only, the affidavit is reviewed by the inspector and approved or rejected where required, see Scheduling Inspections note 2. The roof and all related components are inspected at this point for completion and code compliance. All construction debris is removed from the roof and surrounding area.

Scheduling Inspections:

1. If a Roofing Affidavit is not submitted, the contractor shall call in the 3 minimum inspections listed above. A two (2) hour window (time frame) will be required for the inspection requested. Work on the area to be inspected should not proceed until the inspection has been done and approved by the inspector. In the event of rain, a Roofing Affidavit accompanied with pictures can be accepted. Pictures must accurately show the entire area requested for inspection with a reference point specifically indicating the permitted job. Nail spacing in pictures should be clear and accurately depicted; this can be done by holding a tape measure next to a row of nails in the plywood or boards. The lap joints of the water barrier should also be clearly depicted in all pictures to be used with a Roofing Affidavit. If the inspector fails to arrive within the two (2) hour window (time frame) requested work may continue ONLY AFTER the scheduled time has expired, a Roofing Affidavit and pictures will be required for this situation as well.
2. When approved by the Building Division, a Roofing Affidavit with photos shall be submitted in PDF format to the Building Division by email prior to scheduling a Final Inspection for commercial or residential Re-Roofs. A Final Inspection is the only inspection required for commercial or residential Re-Roofs if submitting a Roofing

Affidavit. This process is not intended to delete the required inspections. This process does not apply to new construction.

Metal Roof-Over Inspections shall consist of a Framing/Purlin Inspection and a Final Inspection. All manufacturers' specifications for Purlin attachment to framing and panel attachment to Purlin information must be on the job for all inspections.

1. Framing/Purlin Inspection. Purlins are installed with proper fasteners and fastener spacing to frame members.
2. Final Inspection. All roof panels are installed with proper fasteners and fastener spacing to Purlins. All construction debris is removed from the roof and surrounding area.

Roof Recovering. A recovered roof is a roof having new roofing material installed over existing roof material and shall not be installed without first removing existing roof coverings where any of the following conditions occur:

1. When the old roofing is, water soaked, or deteriorated to the point that it is not suitable as a base for additional roofing.
2. When blisters exist in any roofing, unless blisters are cut or scraped and nailed down before applying additional roofing.
3. When the existing roof surface is gravel or the like, the gravel shall be thoroughly removed and approved base material installed before applying additional roofing.
4. When existing roof is slate or the like.
5. When sheathing or supports are deteriorated to the point that the roof structural system is not substantial enough to support recovering.
6. When the existing roof has two (2) or more applications of any type roofing material. Conformance with this item shall make replacement mandatory.

All roofing work must comply with the Hurricane Mitigation Retrofit Manual, Florida Building Code for Existing Buildings, Chapter 7; the Florida Building Code Residential, Chapter 9; and the Florida Building Code Chapter 15.

NOTICE

A Sheathing Nailing Inspection is required unless a Roofing Affidavit is completed by a licensed contractor and submitted to the Building Division by email prior to the Final Inspection.

**CONTRACTOR MUST PROVIDE
ACCESS TO ROOFS**

**See Attached:
Florida Building Code
SECTION R908
EXISTING ROOFING**

or TAS 107 and the required classification from Table R905.2.6.1.

R905.17 Photovoltaic systems. Rooftop mounted photovoltaic systems shall be designed in accordance with this section.

R905.17.1 Wind resistance. Rooftop mounted photovoltaic systems shall be designed for wind loads for component and cladding in accordance with Chapter 16 of the *Florida Building Code, Building* using an effective wind area based on the dimensions of a single unit frame.

R905.17.2 Fire classification. Rooftop mounted photovoltaic systems shall have the same fire classification as required for the roof assembly by Section R902.

R905.17.3 Installation. Rooftop mounted photovoltaic systems shall be installed in accordance with the manufacturer's installation instructions.

R905.17.4 Photovoltaic panels and modules. Photovoltaic panels and modules mounted on top of a roof shall be listed and labeled in accordance with UL 1703 and shall be installed in accordance with the manufacturer's installation instructions.

**SECTION R906
ROOF INSULATION**

R906.1 General. The use of above-deck thermal insulation shall be permitted provided such insulation is covered with an *approved* roof covering and complies with FM 4450 or UL 1256.

R906.2 Material standards. Above-deck thermal insulation board shall comply with the standards in Table R906.2.

**TABLE R906.2
MATERIAL STANDARDS FOR ROOF INSULATION**

| | |
|-------------------------------|-----------------------------------|
| Cellular glass board | ASTM C552 |
| Composite boards | ASTM C1289, Type III, IV, V or VI |
| Expanded polystyrene | ASTM C578 |
| Extruded polystyrene board | ASTM C578 |
| Perlite board | ASTM C728 |
| Polyisocyanurate board | ASTM C1289, Type I or II |
| Wood fiberboard | ASTM C208 |
| Fiber-reinforced gypsum board | ASTM C1278 |
| Glass-faced gypsum board | ASTM C1177 |

**SECTION R907
ROOFTOP-MOUNTED PHOTOVOLTAIC SYSTEMS**

R907.1 Rooftop-mounted photovoltaic systems. Reserved.

R907.2 Wind resistance. Reserved.

R907.3 Fire classification. Reserved.

R907.4 Installation. Reserved.

R907.5 Photovoltaic panels and modules. Reserved.

**SECTION R908
EXISTING ROOFING**

R908.1 General. Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of this chapter.

Exception: Reroofing 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 R905 for roofs that provide positive roof drainage.

R908.1.1 Not more than 25 percent of the total roof area or roof section of any existing building or structure shall be repaired, replaced or recovered in any 12-month period unless the entire existing roofing system or roof section is replaced to conform to the requirements of this code.

R908.2 Structural and construction loads. The 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 roof covering system.

R908.3 Recovering versus replacement. New roof coverings shall not be installed without first removing all existing layers of roof coverings where any of the following conditions occur:

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 shingle or shake, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.
4. When blisters exist in any roofing, unless blisters are cut or scraped open and remaining materials secured down before applying additional roofing.
5. Where the existing roof is to be used for attachment for a new roof system and compliance with the securement provisions of Section R905 cannot be met.

Exceptions:

1. 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.
2. Reserved.
3. The application of new protective coating over existing spray polyurethane foam roofing systems shall be permitted without tear-off of existing roof coverings.
4. Reserved.
5. Roof coating. Application of elastomeric and/or maintenance coating systems over existing asphalt shingles shall be in accordance with the shingle manufacturer's approved installation instructions.

R908.3.1 Roof re-cover. Reserved.

R908.3.1.1 Roof re-cover not allowed. Reserved.

R908.4 Roof re-covering. Reserved.

R908.5 Reinstallation of materials. Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Any existing flashings, edgings, outlets, vents or similar devices that are a part of the assembly shall be replaced where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled.

R908.6 Flashings. Flashings shall be reconstructed in accordance with *approved* manufacturer’s installation instructions or in compliance with RAS 111. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

R908.7 Wind mitigation. When a roof covering on an existing site-built single-family residential structure is removed and replaced, the following procedures shall be permitted to be performed by the roofing contractor:

- (a) Roof-decking attachment shall be as required by Section R908.7.1.
- (b) A secondary water barrier shall be provided as required by Section R908.7.2.

Exception: Single family residential structures permitted subject to the *Florida Building Code* are not required to comply with this section.

R908.7.1 Roof decking attachment for site-built single-family residential structures. For site-built single-family residential structures the fastening shall be in accordance with Section R908.7.1.1 or R908.7.1.2 as appropriate for the existing construction. 8d nails shall be a minimum of 0.113 inch (2.9 mm) in diameter and shall be a minimum of 2¹/₄ inch (57 mm) long to qualify for the provisions of this section for existing nails regardless of head shape or head diameter.

R908.7.1.1 Roof decking consisting of sawn lumber or wood planks up to 12 inches wide and secured with at least two nails (minimum size 8d) to each roof framing member it crosses shall be deemed to be sufficiently connected. Sawn lumber or wood plank decking secured with smaller fasteners than 8d nails or with fewer than two nails (minimum size 8d) to each framing member it crosses shall be deemed sufficiently connected if fasteners are added such that two clipped head, round head, or ring shank nails (minimum size 8d) are in place on each framing member it crosses.

R908.7.1.2 For roof decking consisting of wood structural panels, fasteners and spacing required in columns 3 and 4 of Table R908.7.1.2 are deemed to comply with the indicated design wind speed range. Wood structural panel connections retrofitted with a two part urethane based closed cell adhesive sprayed onto the joint between the sheathing and framing members are deemed to comply provided testing using the manufacturer’s recommended application on panels connected with 6d smooth shank nails at no more than a 6-inch

edge and 12-inch field spacing demonstrate an uplift resistance of a minimum of 200 psf.

Supplemental fasteners as required by Table R908.7.1.2 shall be ASTM F1667 classification RSR5-01 ring shank nails with the following minimum dimensions:

1. 0.113-inch nominal shank diameter.
2. Ring diameter a minimum of 0.012-inch greater than shank diameter.
3. 16 to 20 rings per inch.
4. A minimum 0.280-inch full round head diameter.
5. Ring shank to extend a minimum of 1¹/₂ inches from the tip of the nail.
6. Minimum 2¹/₄ inch nail length.

**TABLE R908.7.1.2
SUPPLEMENT FASTENERS AT PANEL EDGES AND
INTERMEDIATE FRAMING**

| EXISTING FASTENERS | EXISTING SPACING | V _{asd} 110 MPH OR LESS SUPPLEMENTAL FASTENER SPACING SHALL BE NO GREATER THAN | V _{asd} GREATER THAN 110 MPH SUPPLEMENTAL FASTENER SPACING SHALL BE NO GREATER THAN |
|---|----------------------------|--|---|
| Staples or 6d | Any | 6 inches o.c. ^b | 6 inches o.c. ^b |
| 8d clipped head, round head, smooth or ring shank | 6 inches o.c. or less | None necessary | None necessary |
| 8d clipped head, round head, smooth or ring shank | Greater than 6 inches o.c. | 6 inches o.c. ^a | 6 inches o.c. ^a |

For SI: 1 inch = 25.4 mm.

- a. Maximum spacing determined based on existing fasteners and supplemental fasteners.
- b. Maximum spacing determined based on supplemental fasteners only.
- c. V_{asd} shall be determined in accordance with Section 1609.3.1 of the *Florida Building Code, Building* or Section R301.2.1.3 of the *Florida Building Code, Residential*.

R908.7.2 Roof secondary water barrier for site-built single family residential structures. A secondary water barrier shall be installed using one of the following methods when roof covering is removed and replaced.

1. In HVHZ regions:
 - a) All joints in structural panel roof sheathing or decking shall be covered with a minimum 4 inch (102 mm) wide strip of self-adhering polymer modified bitumen tape applied directly to the sheathing or decking. The deck and self-adhering polymer modified bitumen tape shall be covered with one of the underlayment systems approved for the particular roof covering to be applied to the roof.
 - b) The entire roof deck shall be covered with an approved asphalt impregnated 30# felt underlayment or approved synthetic underlayment installed with nails and tin-tabs in accordance

with Section 1518.2, 1518.3 or 1518.4 of the *Florida Building Code, Building*. (No additional underlayment shall be required over the top of this sheet.) The synthetic underlayment shall be fastened in accordance with the manufacturer's recommendations.

2. Outside the High-Velocity Hurricane Zone:

- a) Underlayment shall comply with Section R905.1.1 of the *Florida Building Code, Residential*.

Exceptions:

1. Roof slopes < 2:12 having a continuous roof system shall be deemed to comply with Section R908.7.2 requirements for a secondary water barrier.
2. Clay and concrete tile roof systems installed as required by the *Florida Building Code, Residential* are deemed to comply with the requirements of Section R908.7.2 for Secondary Water Barriers.

R908.8 When a roof covering on an existing site-built-single-family residential structure is removed and replaced on a building that is located in the wind-borne debris region as defined in the *Florida Building Code, Building* and that has an insured value of \$300,000 or more or, if the building is uninsured or for which documentation of insured value is not presented, has a just valuation for the structure for purposes of ad valorem taxation of \$300,000 or more:

- (a) Roof to wall connections shall be improved as required by Section R908.8.1
- (b) Mandated retrofits of the roof-to-wall connection shall not be required beyond a 15 percent increase in the cost of re-roofing.

Exception: Single-family residential structures permitted subject to the *Florida Building Code* are not required to comply with this section.

R908.8.1 Roof-to-wall connections for site-built single-family residential structures. Where required by Section R908.8, the intersection of roof framing with the wall below shall provide sufficient resistance to meet the uplift loads specified in Table R908.8.1 either because of existing conditions or through retrofit measures. As an alternative to an engineered design, the prescriptive retrofit solutions provided in Sections R908.8.1.1 through R908.8.1.7 shall be accepted as meeting the mandated roof-to-wall retrofit requirements.

Exceptions:

1. Where it can be demonstrated (by code adoption date documentation and permit issuance date) that roof-to-wall connections and/or roof-to-foundation continuous load path requirements were required at the time of original construction.
2. Roof-to-wall connections shall not be required unless evaluation and installation of connections at gable ends or all corners can be completed for 15 percent of the cost of roof replacement.

R908.8.1.1 Access for retrofitting roof to wall connections. These provisions are not intended to limit the means for gaining access to the structural elements of the roof and wall for the purposes of retrofitting the connection. The retrofit of roof to wall connections can be made by access through the area under the eave, from above through the roof, or from the interior of the house. Methods for above access include removal of roof panels or sections thereof or removal of portions of roof paneling at selected locations large enough for access, viewing, and installing the retrofit connectors and fasteners.

Where panels or sections are removed, the removed portions shall not be reused. New paneling shall be used and fastened as in new construction.

Holes shall be deemed adequately repaired if a patch of paneling is installed with no gap greater than $\frac{1}{2}$ inch (13 mm) between the patch and the existing sheathing and if the patch is supported using one of the following methods.

- a) Solid $1\frac{1}{2}$ -inch lumber shall fully support the patch and shall be secured to the existing sheathing with #8 by $1\frac{1}{4}$ -inch screws spaced a minimum of 3 inches (76 mm) around the perimeter with screws a minimum of $\frac{3}{4}$ inch from the near edge of the hole. The patch shall be secured to the lumber with #8 \times $1\frac{1}{4}$ -inch-screws spaced on a grid no greater than 6 inches by 6 inches (152 mm \times 152 mm) with no fewer than 2 screws.
- b) Holes that extend horizontally from roof framing member to adjacent roofing framing member that are less than or equal to 7 inches (178 mm) wide along the slope of the roof shall be supported by a minimum of 2 \times 4 lumber whose face is attached to each roofing framing members using a minimum of 2 each 3-inch (76 mm) long fasteners (#8 screws or 10d common nails) connecting the two. The patch shall have attached to its bottom, running horizontally, a minimum 2 \times 4 either flat wise or on edge secured with #8 \times $1\frac{1}{4}$ inch screws a maximum of 4 inches (102 mm) on center and no more distant from the end of the added lumber than 3 inches (76 mm). The patch shall be secured with two #8 \times $1\frac{1}{4}$ -inch screws to each support member.

R908.8.1.2 Partially inaccessible straps. Where part of a strap is inaccessible, if the portion of the strap that is observed is fastened in compliance with these requirements, the inaccessible portion of the strap shall be presumed to comply with these requirements.

R908.8.1.3 Prescriptive method for gable roofs on a wood frame wall. The anchorage of each of the exposed rafters or truss within 6 feet (1829 mm) of the corner along the exterior wall on each side of each gable end shall be inspected. Wherever a strap is missing or an existing strap has fewer than four fasteners on each end, approved straps, ties or right angle brackets with a minimum uplift capacity of 500 pounds (740 kg)

shall be installed that connect each rafter or truss to the top plate below. Adding fasteners to existing straps shall be allowed in lieu of adding a new strap provided the strap is manufactured to accommodate at least 4 fasteners at each end. Wherever access makes it possible (without damage of the wall or soffit finishes), both top plate members shall be connected to the stud below using a stud to plate connector with a minimum uplift capacity of 500 pounds (740 kg). Use of straps that connect directly from the rafter or truss to the wall stud below shall be allowed as an alternate provided the two members align with no more than 1 1/2 inches (38 mm) offset.

R908.8.1.4 Prescriptive method for gable roofs on a masonry wall. The anchorage of each of the exposed rafters or trusses within 6 feet (1829 mm) of the corner along the exterior wall on each side of each gable end shall be inspected. Wherever a strap is missing or an existing strap has fewer than four fasteners on each end, approved straps, ties or right angle gusset brackets with a minimum uplift capacity of 500 pounds (740 kg) shall be installed that connect each rafter or truss to the top plate below or directly to the masonry wall using approved masonry screws of a length and diameter rec-

ommended by the manufacturer. In the absence of manufacturer’s recommendations, screws shall provide at least a 2 1/2-inch (64 mm) embedment into the concrete or masonry. When the straps or right angle gusset brackets are attached to a wood sill plate, the sill plate shall be anchored to the concrete masonry wall below. This anchorage shall be accomplished by installing 1/4-inch diameter masonry screws, each with supplementary 1/4-inch washer, having sufficient length to develop a 2 1/2-inch (64 mm) embedment into the concrete and masonry. These screws shall be installed within 4 inches (102 mm) of the truss or rafter on both sides of each interior rafter or truss and on the accessible wall side of the gable end truss or rafter.

R908.8.1.5 Prescriptive method for hip roofs on a wood frame wall. Unless it is possible to verify through nondestructive inspection or from plans prepared by a design professional that the roof structure is anchored at least as well as outlined below, access shall be provided at a minimum to the hip rafter (commonly known as a “king jack”), to the hip girder and at each corner of the hip roof. The hip rafter (commonly known as a “king jack”), the hip girder and the rafters/trusses adjacent to the hip girder that are not anchored with a

TABLE R908.8.1
REQUIRED UPLIFT CAPACITIES FOR ROOF-TO-WALL CONNECTIONS^{a, b} (POUNDS PER LINEAR FOOT)

| | Ultimate Design Wind Speed, V_{ult} | Roof Span (feet) | | | | | | | Overhangs |
|--|---------------------------------------|------------------|---------|---------|---------|---------|---------|---------|-----------|
| | | 12 | 20 | 24 | 28 | 32 | 36 | 40 | |
| Within 6 feet of building corner | 85 | -69.85 | -116.42 | -139.70 | -162.99 | -186.27 | -209.55 | -232.84 | -27 |
| | 90 | -82.67 | -137.78 | -165.34 | -192.90 | -220.45 | -248.01 | -275.57 | -30.3 |
| | 100 | -110.51 | -184.18 | -221.01 | -257.85 | -294.68 | -331.52 | -368.36 | -37.4 |
| | 110 | -141.27 | -235.45 | -282.55 | -329.64 | -376.73 | -423.82 | -470.91 | -45.3 |
| | 120 | -174.97 | -291.62 | -349.94 | -408.26 | -466.59 | -524.91 | -583.23 | -53.9 |
| | 130 | -211.60 | -352.66 | -423.19 | -493.72 | -564.26 | -634.79 | -705.32 | -63.2 |
| | 140 | -251.15 | -418.59 | -502.31 | -586.02 | -669.74 | -753.46 | -837.18 | -73.3 |
| | 150 | -293.64 | -489.40 | -587.28 | -685.16 | -783.04 | -880.92 | -978.80 | -84.2 |
| Greater than 6 feet from building corner | 85 | -39.10 | -65.17 | -78.20 | -91.24 | -104.27 | -117.30 | -130.34 | -27 |
| | 90 | -48.20 | -80.33 | -96.39 | -112.46 | -128.52 | -144.59 | -160.66 | -30.3 |
| | 100 | -67.95 | -113.24 | -135.89 | -158.54 | -181.19 | -203.84 | -226.49 | -37.4 |
| | 110 | -89.78 | -149.63 | -179.55 | -209.48 | -239.40 | -269.33 | -299.25 | -45.3 |
| | 120 | -113.68 | -189.47 | -227.37 | -265.26 | -303.16 | -341.05 | -378.94 | -53.9 |
| | 130 | -139.67 | -232.78 | -279.34 | -325.90 | -372.45 | -419.01 | -465.57 | -63.2 |
| | 140 | -167.74 | -279.56 | -335.47 | -391.38 | -447.29 | -503.21 | -559.12 | -73.3 |
| | 150 | -197.88 | -329.80 | -395.76 | -461.72 | -527.68 | -593.64 | -659.60 | -84.2 |
| | 170 | -264.41 | -440.68 | -528.81 | -616.95 | -705.08 | -793.22 | -881.35 | -108 |

For SI: 1 foot = 304.8mm; 1 pound per linear foot = 1.488 kg/m; 1 mile per hour = 0.305 m/s.

- a. The uplift loads are pounds per lineal foot of building length. For roof uplift connections multiply by 1.33 for framing spaced 16 inches on center and multiply by 2 for framing spaced 24 inches on center.
- b. The uplift loads do not account for the effects of overhangs. The magnitude of the above loads shall be increased by adding the overhang loads found in the table. The overhang loads are also based on framing spaced 12 inches on center. The overhang loads given shall be multiplied by the overhang projection and added to the roof uplift value in the table.
- c. For Ultimate Design Wind Speeds, V_{ult} , greater than 170 mph, wind uplift forces shall be determined in accordance with *Florida Building Code, Residential* Section R301.2.1.1 or ASCE 7.
- d. Ultimate Design Wind Speeds determined from Figure 1609.3(1) in the *Florida Building Code, Building* or Figure R301.2(4) in the *Florida Building Code, Residential*.

strap having at least four fasteners on each end, shall be connected to the top plate below using a strap or a right angle gusset bracket having a minimum uplift capacity of 500 pounds (740 kg). Adding fasteners to existing straps shall be allowed in lieu of adding a new strap provided the strap is manufactured to accommodate at least four fasteners at each end. Wherever access makes it possible (without damage of the wall or soffit finishes), both top plate members shall be connected to the stud below using a stud to plate connector with a minimum uplift capacity of 500 pounds (740 kg). Use of straps that connect directly from the hip rafter, hip girder or adjacent rafters/trusses to the wall stud below shall be allowed as an alternate provided the two members align with no more than 1¹/₂ inch (38 mm) offset.

R908.8.1.6 Prescriptive method for hip roofs on a masonry wall. Unless it is possible to verify through nondestructive inspection or from plans prepared by a design professional that the roof structure is anchored at least as well as outlined below, access shall be provided at a minimum to the hip rafter (commonly known as a “king jack”), to the hip girder and at each corner of the hip roof. The hip rafter (commonly known as a “king jack”), the hip girder and the rafters/trusses adjacent to the hip girder that are not anchored with a strap having at least four fasteners on each end, shall be connected to the concrete masonry wall below using approved straps or right angle gusset brackets with a minimum uplift capacity of 500 pounds (740 kg). Adding fasteners to existing straps shall be allowed in lieu of adding a new strap provided the strap is manufactured to accommodate at least four fasteners at each end. The straps or right angle gusset brackets shall be installed such that they connect each rafter or truss to the top plate below or directly to the masonry wall using approved masonry screws of a length and diameter recommended by the manufacturer. In the absence of manufacturer’s recommendations, screws shall pro-

vide at least 2¹/₂-inches (64 mm) embedment into the concrete or masonry. When the straps or right angle gusset brackets are attached to a wood sill plate, the sill plate shall be anchored to the concrete masonry wall below. This anchorage shall be accomplished by installing 1/4-inch (6 mm) diameter masonry screws, each with supplementary 1/4-inch (6 mm) washer, with sufficient length to develop a 2¹/₂-inch (64 mm) embedment into the concrete and masonry. These screws shall be installed within 4 inches (102 mm) of the truss or rafter on both sides of each interior rafter or truss and on the accessible wall side of the gable end truss or rafter.

R908.8.1.7 Priorities for mandated roof-to-wall retrofit expenditures. Priority shall be given to connecting the exterior corners of roofs to walls where the spans of the roofing members are greatest. For houses with both hip and gable roof ends, the priority shall be to retrofit the gable end roof-to-wall connections unless the width of the hip end is more than 1.5 times greater than the width of the gable end. When considering priorities for houses with both hip and gable roof ends, and the 15 percent of the cost of roof replacement is sufficient to complete all of the prioritized elements pursuant to this section, but is not sufficient to complete all of the non-prioritized elements, then no portion of complete retrofit of the non-prioritized element is required.

SECTION R909 ROOFTOP-MOUNTED PHOTOVOLTAIC PANEL SYSTEMS

R909.1 General. Reserved.

R909.2 Structural requirements. Reserved.

R909.3 Installation. Reserved.