



Wildland-Urban Interface Area Construction

1. Roof covering for structures located within a State or Local Agency Very-High Fire Hazard Severity Zone pursuant to CRC Section R337.10 is to be a fire-retardant Class A roof covering. Roof covering for structures in the Montecito Fire Protection District is to be fire-retardant Class A roof covering. Provide listing report number of approved Class A roofing on plans. [CRC R337.10; Montecito Fire Protection District Ordinance]
2. Where the roofing profile has an airspace under the roof covering, installed over a combustible deck, a 72 pound cap sheet complying with ASTM D3909 Standard Specifications for "Asphalt Rolled Roofing (Glass Felt) Surfaced with Mineral Granules," shall be installed over the roof deck. Bird stops shall be used at the eaves when the profile fits, to prevent debris at eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers. (Exception: Cap sheet is not required when no less than 1 inch of mineral wool board or other noncombustible material is located between the roofing material and wood framing or deck.)

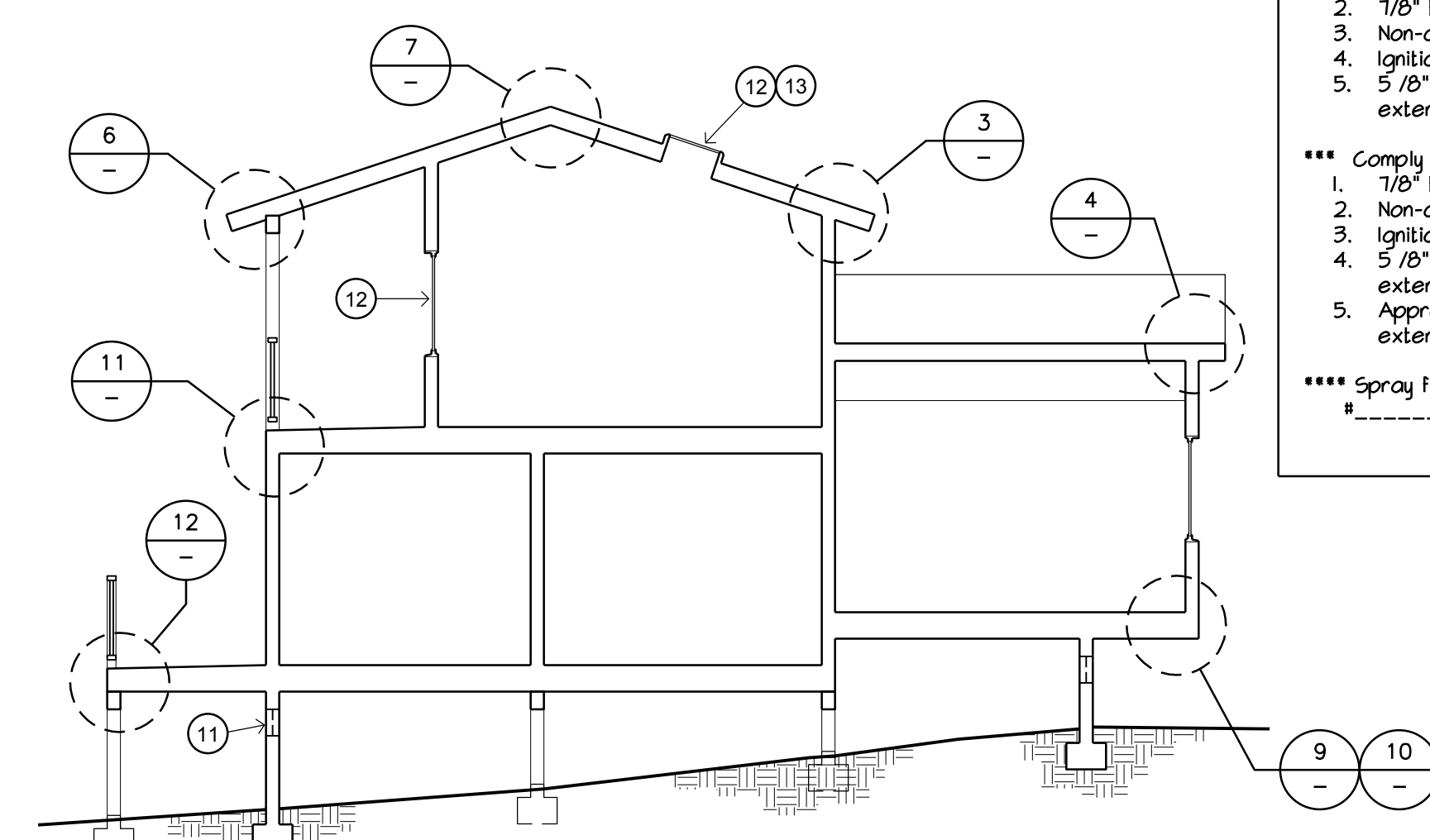
Alternatively, a Class A fire rated roof underlayment, tested in accordance with ASTM E1008, shall be permitted to be used. If the sheathing consists of exterior fire-retardant-treated wood, the underlayment shall not be required to comply with a Class A classification. Bird stops shall be used at the eaves when the profile fits, to prevent debris at eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.
3. When provided, valley flashings subject to CRC Section R337 are not to be less than 26 galvanized sheet gauge corrosion resistant metal installed over a minimum 36" wide underlayment consisting of one layer of minimum 72 pound mineral surfaced non-perforated cap sheet complying with ASTM D3909 installed over the combustible decking. [CRC R337.5.3]
4. Roof gutters subject to CRC Section R337 to be provided with means to prevent the accumulation of leaves and debris in the gutter. [CRC R337.5.4]
5. Except for minimum 2x solid wood rafters, minimum 2x solid blocking between rafters, fascia and architectural trim, the exposed roof deck on the underside of eaves shall consist of non-combustible material, ignition-resistant material as defined in CRC Section R337.2, one layer of 5/8 inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck, or minimum 2x T&G decking without any concealed space above. Alternatively, the underside of the eave shall be constructed as the exterior portion of an approved 1-hour fire resistive wall assembly on the exterior side. These provisions do not apply to a gable end overhangs except at the lower end of the rafter tails (the portion in line with the eave). [CRC R337.7.4]
6. Except for gable end overhangs beyond the exterior wall (other than at the lower end of the rafter tails), fascia and architectural trim, the exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside or sloping rafter tails with an exterior covering applied to the underside of the rafter tails shall be non-combustible material, shall be ignition-resistant material as defined in CRC Section R337.2, shall have a minimum of one layer of 5/8 inch Type X gypsum sheathing beneath the exterior covering on the underside of the eave or shall be constructed as an approved 1-hour fire resistive wall assembly on the exterior side. [CRC R337.7.5]
7. Except for architectural trim, the exposed underside of exterior porch ceilings shall be non-combustible material, shall be ignition-resistant material as defined in CRC Section R337.2, shall have a minimum of one layer of 5/8 inch Type X gypsum sheathing beneath the exterior covering on the underside of the ceiling or shall be constructed as an approved 1-hour fire resistive wall assembly on the exterior side. [CRC R337.7.6]
8. Except for architectural trim, the exposed underside of cantilevered floor projections where a floor assembly extends over an exterior wall shall be non-combustible material, shall be ignition-resistant material as defined in CRC Section R337.2, shall have a minimum of one layer of 5/8 inch Type X gypsum sheathing beneath the exterior covering on the underside of the floor projection or shall be constructed as an approved 1-hour fire resistive wall assembly on the exterior side. [CRC R337.7.7]
9. The underfloor area of elevated or overhanging buildings shall be enclosed to grade in accordance with the requirements of CRC R337.7.3 or the exposed underfloor shall be non-combustible material, shall be ignition-resistant material as defined in CRC Section R337.2, shall have a minimum of one layer of 5/8 inch Type X gypsum sheathing beneath the exterior covering, or shall be constructed as an approved 1-hour fire resistive wall assembly on the exterior side. (Exception: Structural columns and beams, constructed with lumber with the smallest nominal dimension of 4" do not require protection.) [CRC R337.7.8]
10. Exterior walls are to be approved noncombustible material, ignition-resistant material as defined in CRC Section R337.2, shall be minimum 4x T&G or spliced planks, shall have a minimum of one layer of 5/8 inch Type X gypsum sheathing beneath the exterior covering, or shall be constructed as an approved 1-hour fire resistive wall assembly on the exterior side. Approved exterior wall materials shall extend from the top of the foundation to the 2x minimum blocking between rafters at the eaves or to the bottom of the enclosure in the case of boxed or enclosed eaves. [CRC R337.7.3]
11. Ventilation openings for gable end vents, ridge ends, underfloor crawl spaces and all other ventilation vents that mount in a vertical wall shall be fully covered with Wildland Flame and Ember resistant (WUI) vents approved and listed by the California State Fire Marshal, or WUI vents listed to ASTM E2886. [CRC R337.8]
12. Exterior glazing (exterior windows, exterior glazed doors, glazed openings within exterior doors, glazed openings within exterior garage doors, exterior structural glass veneer, skylights, vents) subject to CRC Section R337 are to be multi-pane glazing with a minimum of one tempered pane, or glass block units, or have a fire resistance rating of not less than 20 minutes when tested in accordance with ASTM 257, or conform to the performance requirements of SFM 12-7A-2. [CRC 337.8]
13. Operable skylights shall be protected by a noncombustible mesh screen with maximum opening not to exceed 1/8 inch. [CRC R337.8.2.2]
14. Exterior doors shall comply with one of the following: 1. Exterior surface or cladding shall be of non-combustible or ignition resistant material or, 2. Shall be constructed of solid core wood that comply with the following: stile and rails shall not be less than 1-3/8 inches thick, raised panels shall not be less than 1-1/4 inches thick, except for the exterior perimeter of the raised panel that may taper to a tongue not less than 3/8 inch thick. 3. Shall have a fire resistance rating of not less than 20 minutes when tested according to NFPA 252. 4. Shall be tested to the performance requirements of SFM Standard 12-7A-1. [CRC R337.8.3]
15. Perimeter gap at exterior garage doors shall not exceed 1/8" to prevent intrusion of embers. Gaps between the doors and door openings shall be provided with weather stripping products meeting ASTM D638 and exhibit a V-2 or better flammability rating when tested to UL 94 standard, shall be designed with door overlaps onto jambs and headers, or shall have door jambs and headers covered with metal flashing. [CRC R337.8.4]
16. Pursuant to CRC R337.9, decking surfaces, stair treads, risers, and landings of decks, porches and balconies where any portion of such surface is within 10 feet of the structure shall be constructed of 1) ignition-resistant material that complies with the performance requirements of both SFM Standard 12-7A-4 and Standard 12-7A-5, 2) exterior fire retardant treated wood, 3) non-combustible material, or 4) any material that complies with the performance requirements of SFM Standard 12-7A-4A when adjacent exterior wall covering is also either non-combustible or ignition-resistant material (wall material may be of any material that otherwise complies with CRC R337 when the decking surface material complies with the performance requirements of ASTM E-84 with a Class B flame spread rating). [CRC R337.9]
17. Patio covers, carports, gazebos and similar structures which are attached or where any portion of such structure is within 50 feet of a dwelling (R-3 occupancy) shall be constructed of non-combustible materials, ignition-resistant materials, or shall comply with the exterior covering requirements of CRC Section R337.7. [CRC R337.10.2]
18. Trellises, arbors, and similar structures which are attached or where any portion of such structure is within 50 feet of a dwelling (R-3 occupancy) shall be constructed of non-combustible materials, ignition-resistant materials, or heavy timber construction as defined in CRC. [CRC R337.10.2]
19. For buildings located in any Fire Hazard Severity Zone or Wildland-Urban Interface area, attic ventilation is to be provided per CRC Section R806 and must comply with the requirements of CRC Section R337.6. Net free ventilated area is to be a minimum of 1/150 of the area of space ventilated. Area may be 1/300 when at least 40 percent and not more than 50 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet below the ridge with the balance of the required ventilation provided by eave, cornice or other roof vents located in the bottom third of the attic space.

Ridge vents, when covered by noncombustible wire mesh per CRC R337.6.2, may be of combustible construction. All other types of attic vents must be of non-combustible construction and must be corrosion resistant. The opening size in any ventilation device or material (such as wire mesh) is to have a minimum opening size of 1/16 inch and maximum opening size not to exceed 1/8 inch.

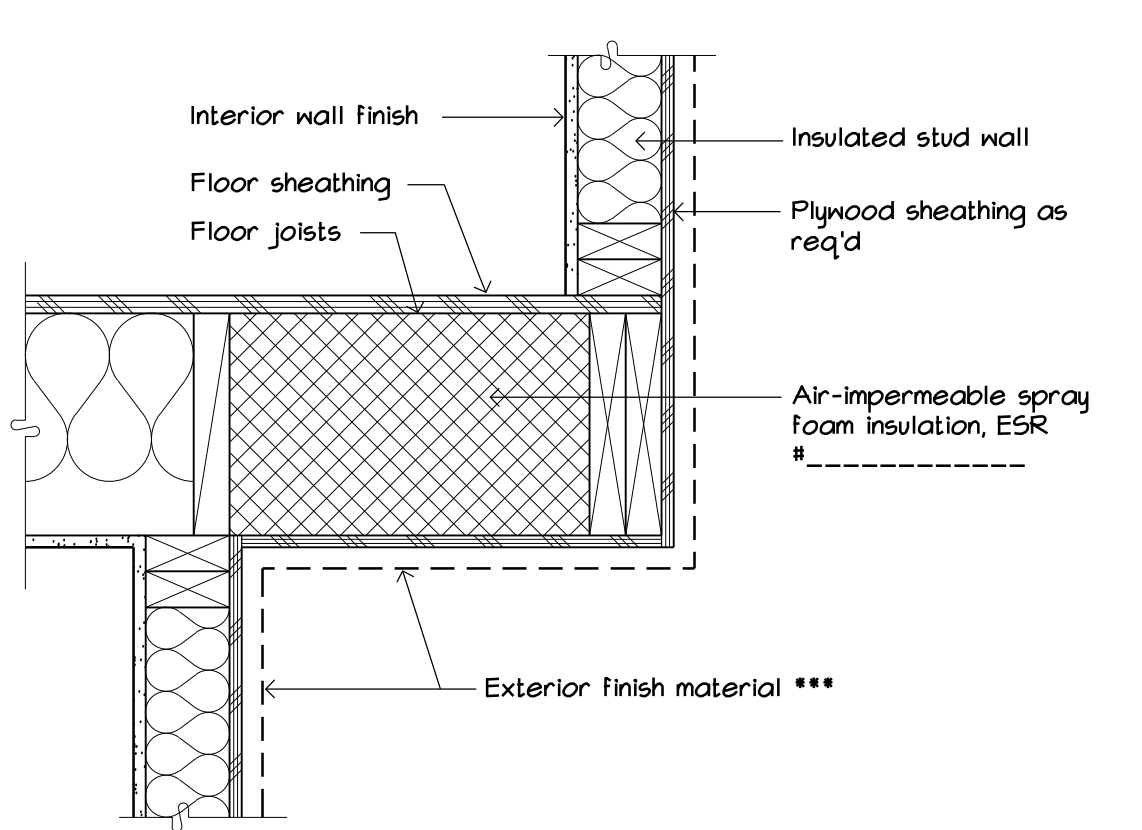
Vents shall not be installed on the underside of eaves and cornices, exceptions:
1) Wildland Flame and Ember Resistant (WUI) vents approved and listed by the California State Fire Marshal, or WUI vents listed to ASTM E2886 by complying with all the following requirements:
1.1 There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
1.2 There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
1.3 The maximum temperature of the unexposed side of the vent shall not exceed 662 degrees F.
2) The enforcing authority may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.
3) Vents shall be permitted to be installed on the underside of eaves and cornices in accordance with all of the following conditions:
3.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the CBC (NFPA 13).
3.2 The exterior wall covering and exposed underside of the eave are of noncombustible material, or ignition resistant materials as determined in accordance with SFM Standard 12-7A-5 Ignition Resistant Material and the vent is located more than 12 feet from the ground or walking surface of a deck, porch, patio or similar surface. [C337.6.3]
20. Unvented attic assemblies can be approved provided the unvented attic space is completely contained within the building thermal envelope and no interior vapor retarder is installed on the ceiling side of the unvented attic assembly. Insulation shall be applied in direct contact with the underside of the structural roof sheathing and shall either be installed in an air-impermeable product or shall have a layer of air-impermeable product entirely in direct contact with the underside of the structural roof sheathing for proper condensation control with the balance of the insulation being air-impermeable below it. (Note: Air-permeable insulation alone may be applied directly below the structural sheathing when rigid insulation with an R-value of R-5 minimum is installed directly above the structural roof sheathing for condensation control) [CRC R806.5]

FOOTNOTES:

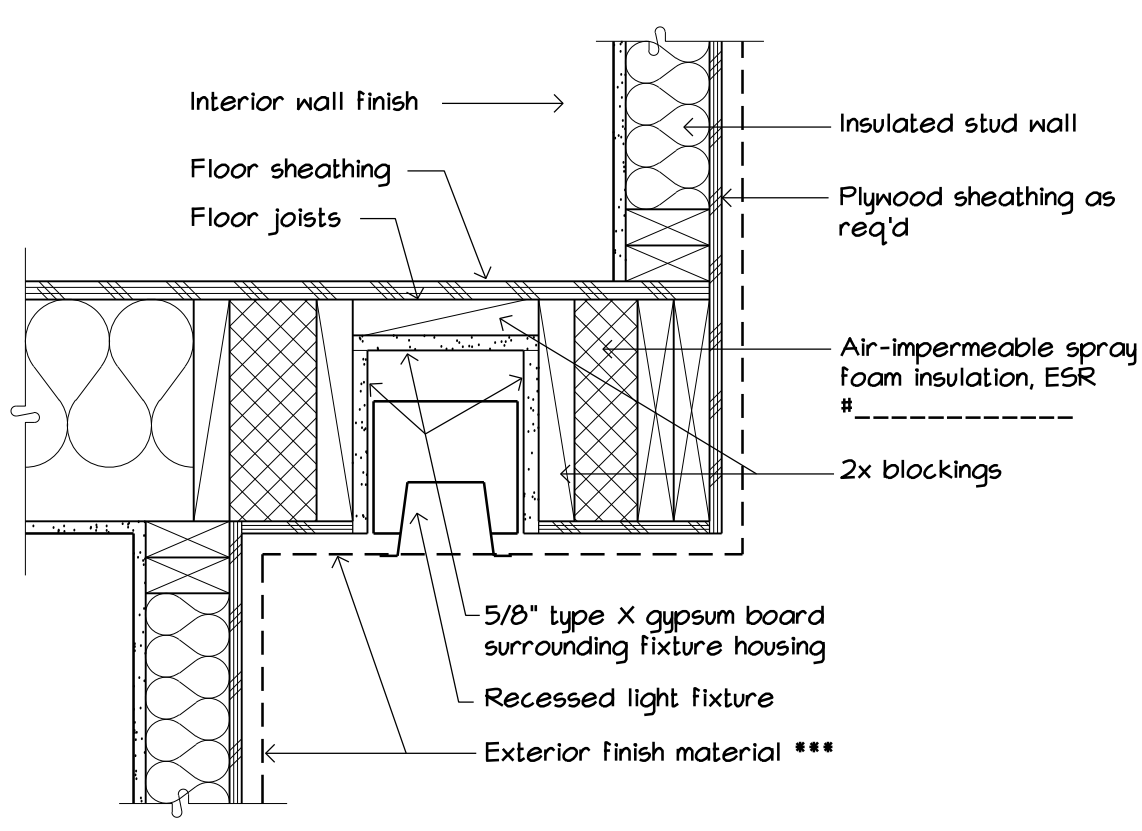
- Class A roof approved listing # _____
- Comply with one of the following:
 1. Min. 2x T&G decking
 2. 7/8" Exterior plaster
 3. Non-combustible, SFM listing # _____
 4. Ignition-resistant, SFM listing # _____
 5. 5/8" Type 'X' gypsum sheathing underneath any exterior covering
- Comply with one of the following:
 1. 7/8" Exterior plaster
 2. Non-combustible, SFM listing # _____
 3. Ignition-resistant, SFM listing # _____
 4. 5/8" Type 'X' gypsum sheathing underneath any exterior covering
 5. Approved 1-hour fire-resistive wall assembly on the exterior side.
- Spray foam insulation approved listing # _____



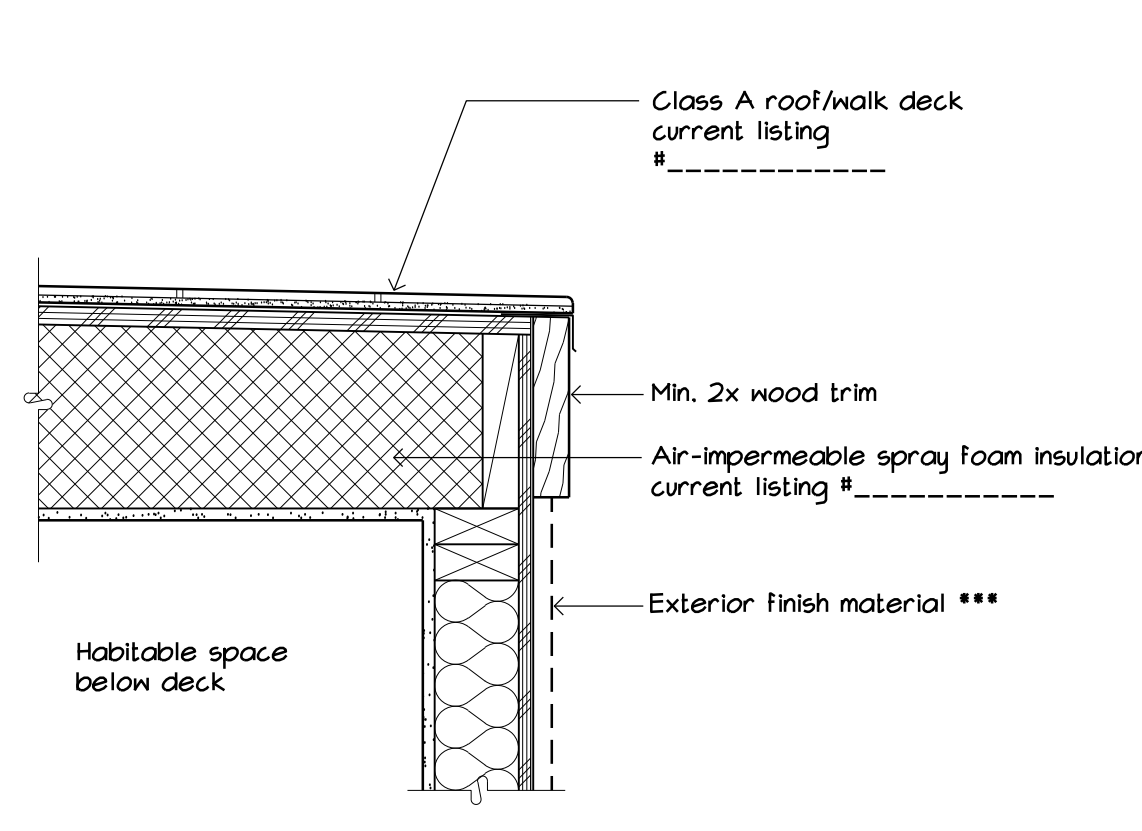
Schematic Section For Reference Only



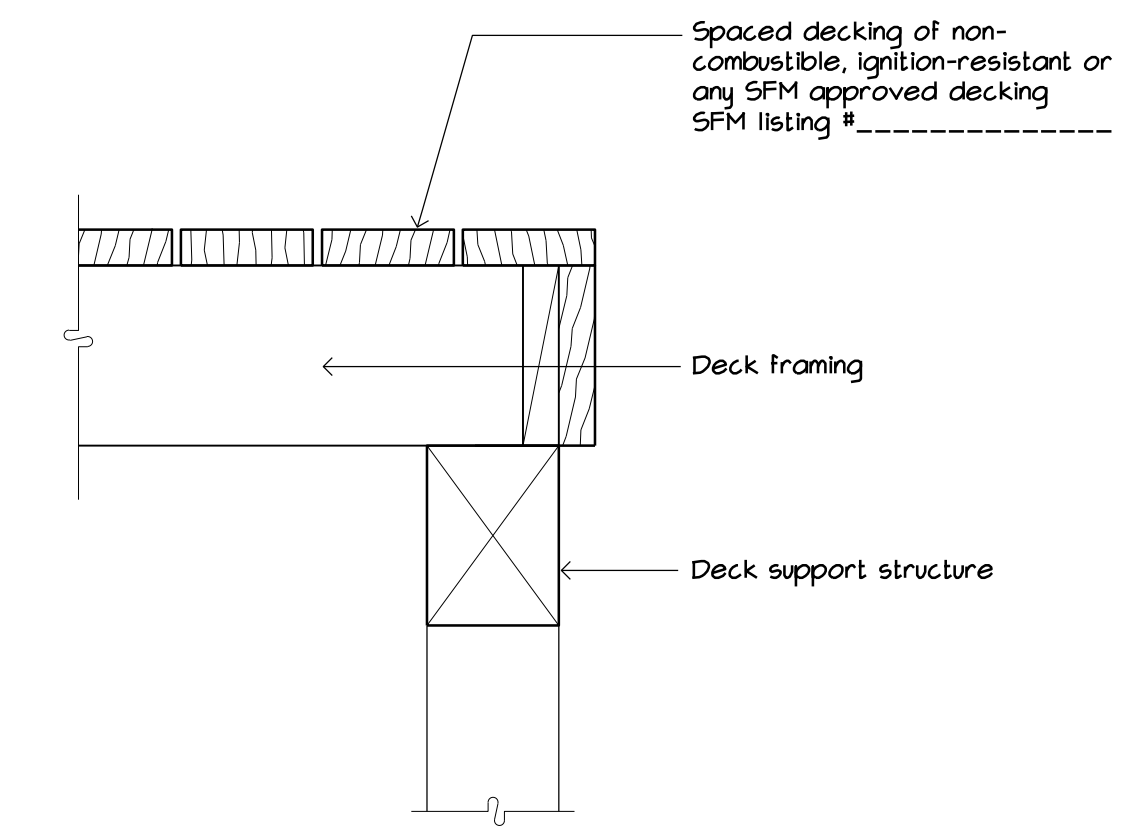
9 Floor Projection Detail
SCALE : NONE



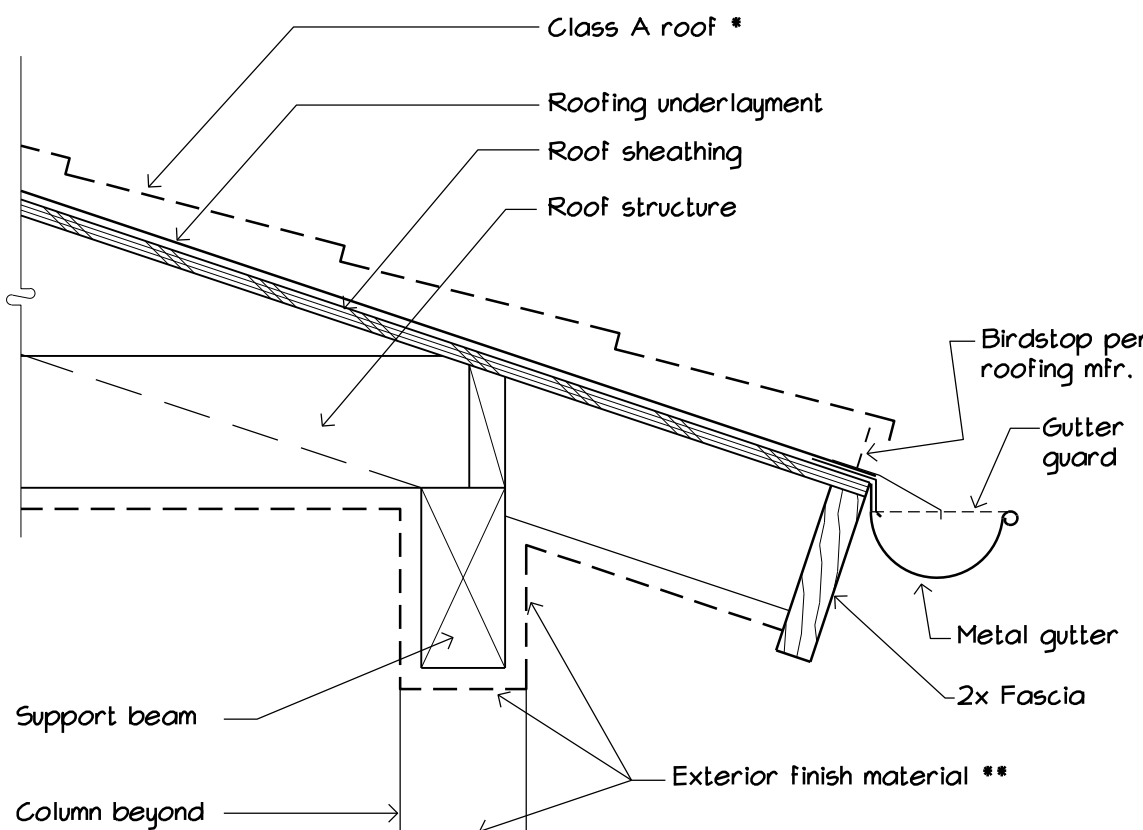
10 Floor Projection With Light
SCALE : NONE



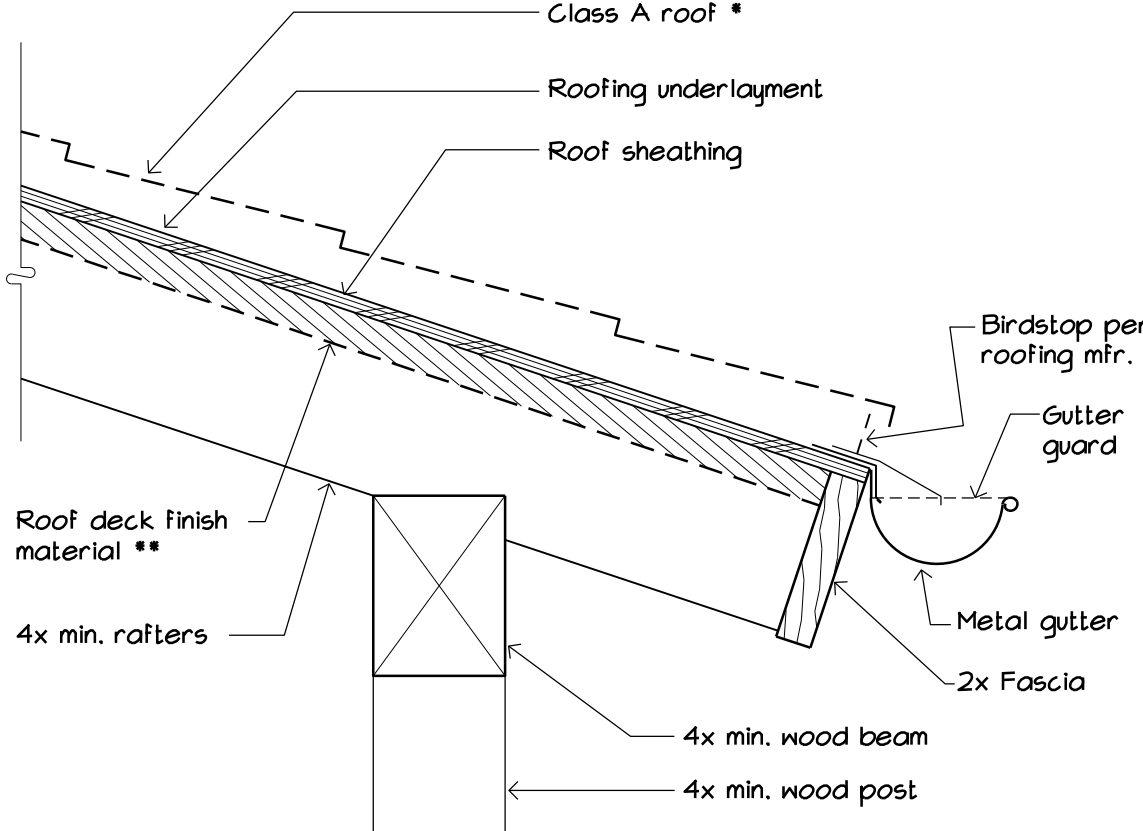
11 Deck Detail
SCALE : NONE



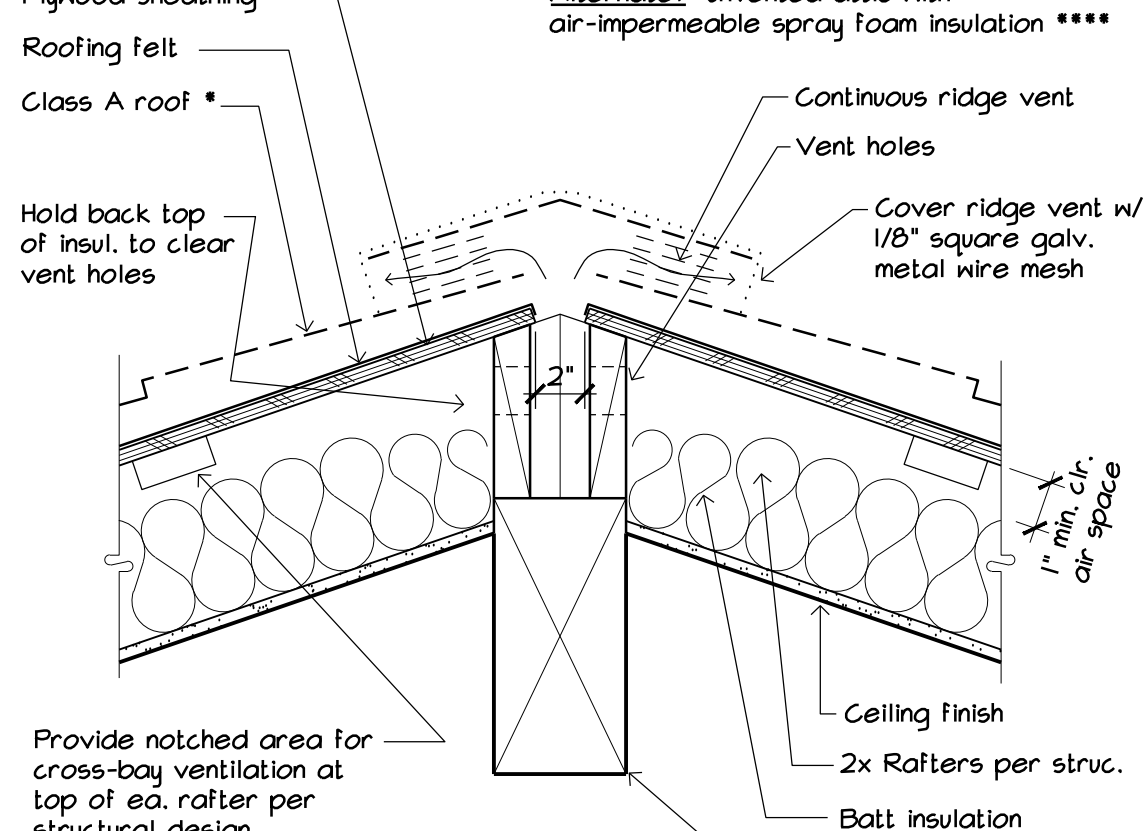
12 Deck Detail
SCALE : NONE



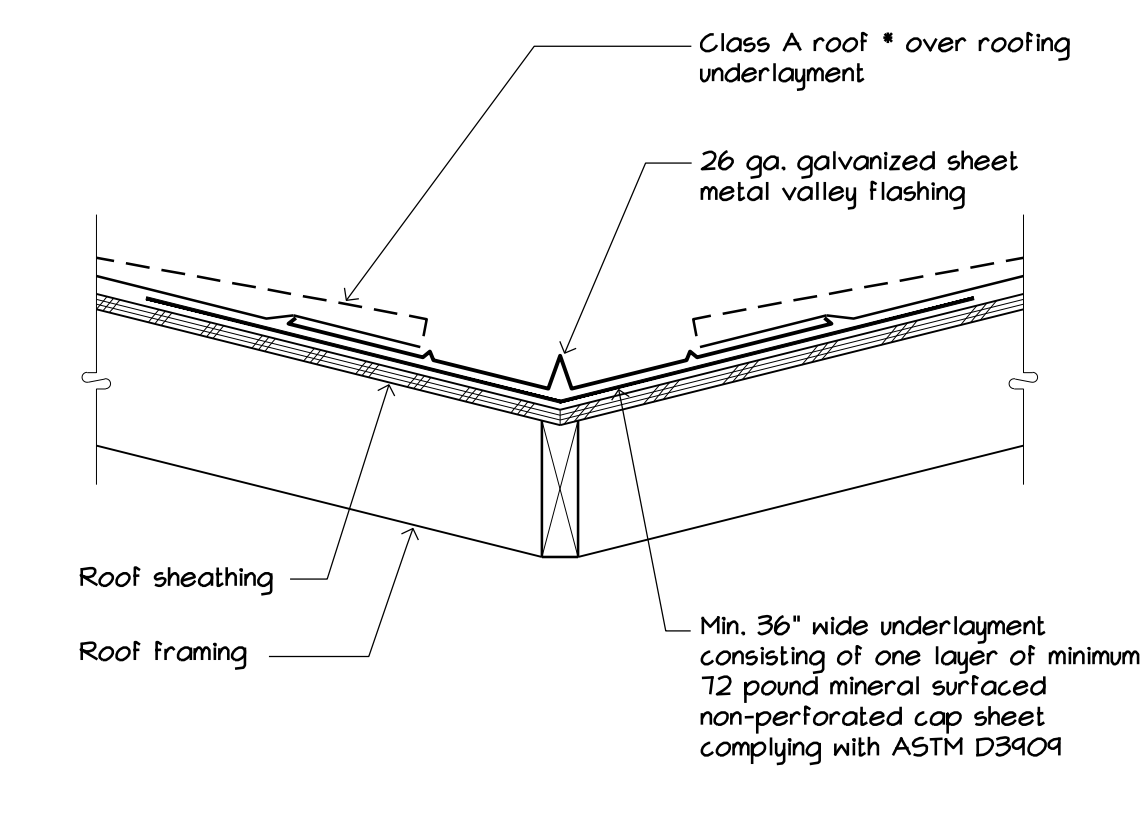
5 Eave @ Porch - Boxed-In Soffit
SCALE : NONE



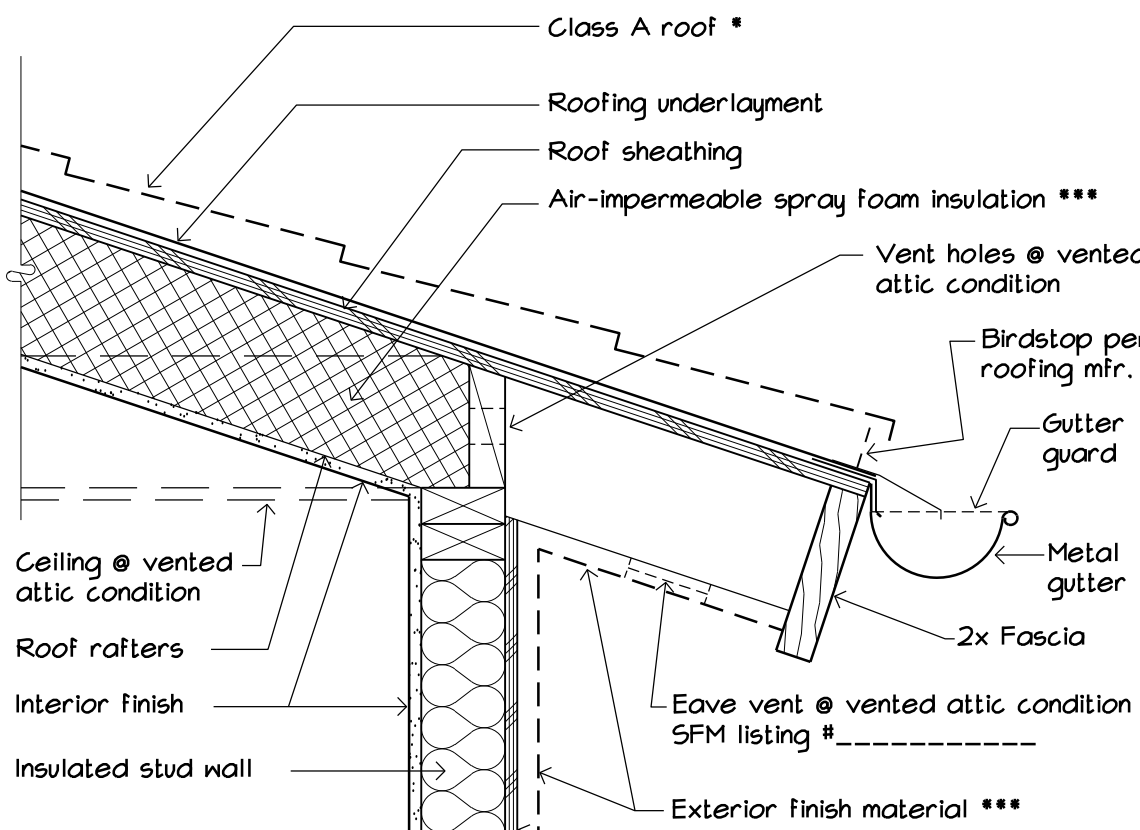
6 Eave @ Porch - Open Beam
SCALE : NONE



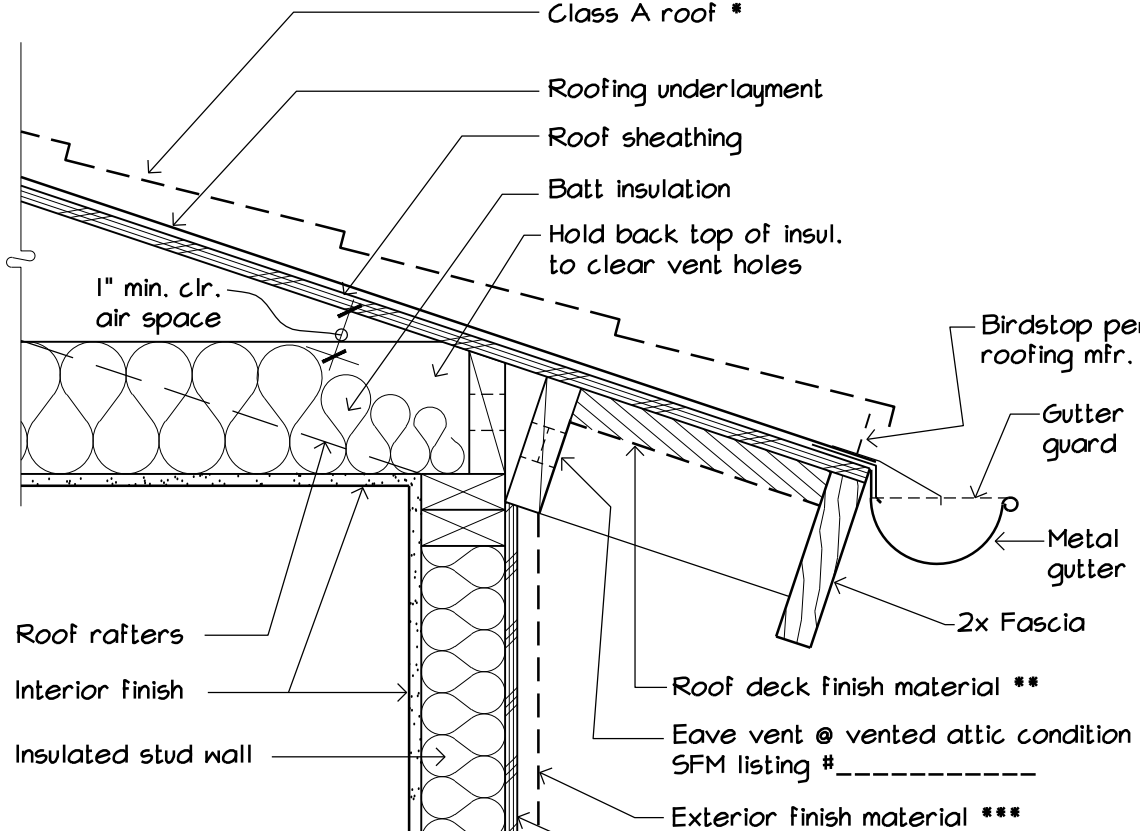
7 Vented Ridge Detail
SCALE : NONE



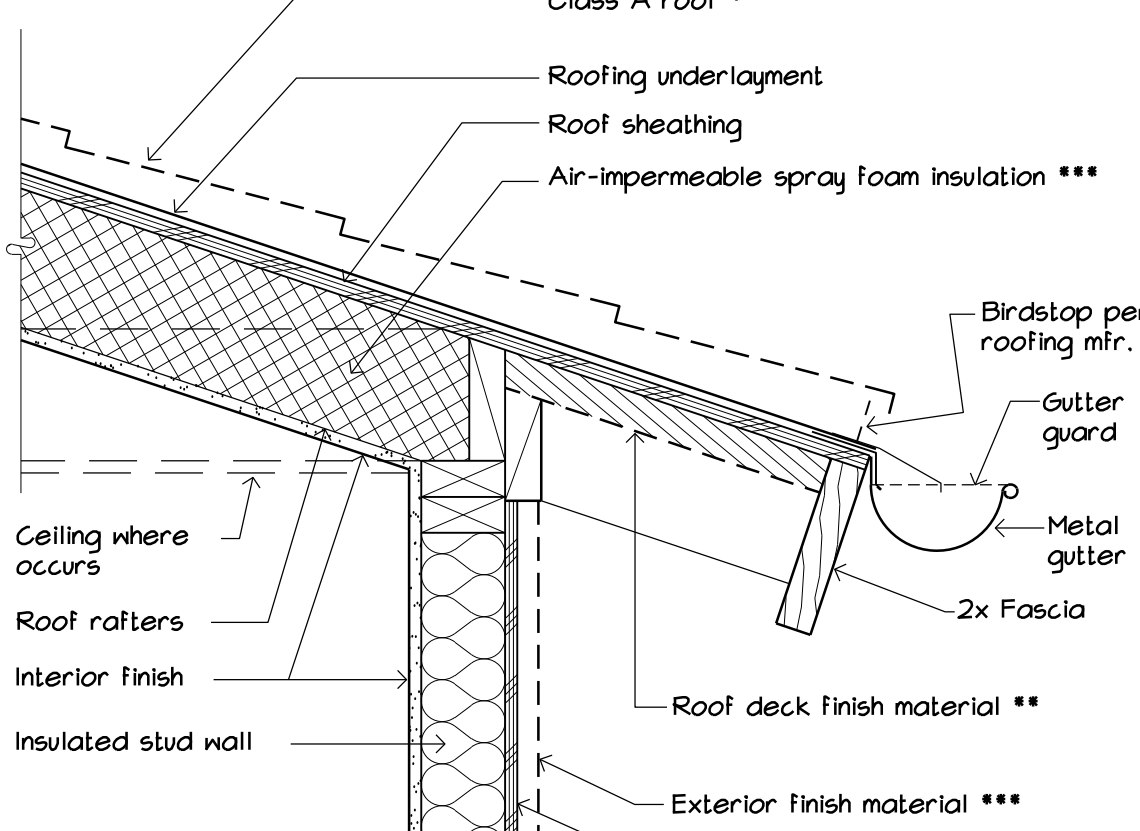
8 Valley Detail
SCALE : NONE



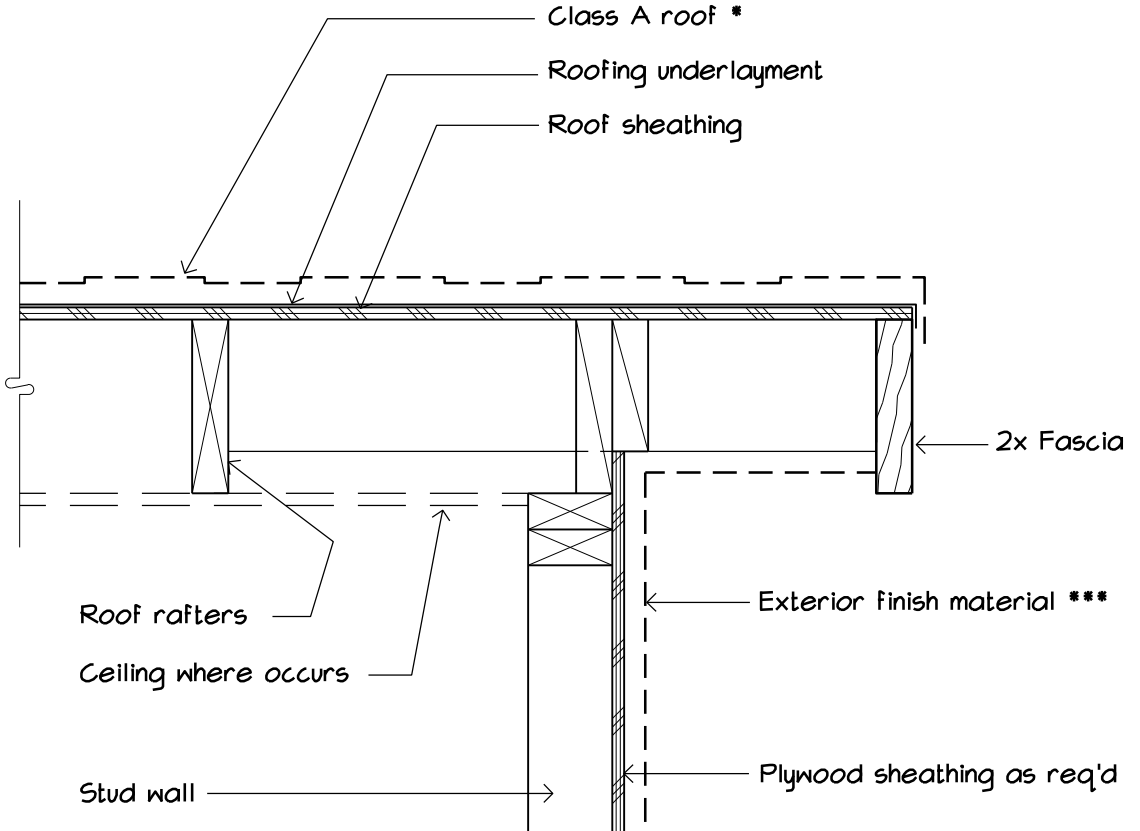
1 Eave Detail
SCALE : NONE



2 Eave Detail - Vented Attic
SCALE : NONE



3 Eave Detail - Unvented Attic
SCALE : NONE



4 Rake Detail
SCALE : NONE