



For SI: 1 inch = 25.4 mm.

FIGURE R803.2.3.1  
ROOF SHEATHING NAILING ZONES

4. Where roof diaphragm requirements necessitate a closer fastener spacing.

**SECTION R804  
STEEL ROOF FRAMING  
RESERVED**

**SECTION R805  
CEILING FINISHES**

**R805.1 Ceiling installation.** Ceilings shall be installed in accordance with the requirements for interior wall finishes as provided in Section R702.

**SECTION R806  
ROOF VENTILATION**

**R806.1 Ventilation required.** Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of  $1/16$  inch (1.6 mm) minimum and  $1/4$  inch (6.4 mm) maximum. Ventilation openings having a least dimension larger than  $1/4$  inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, or similar material with openings having a least dimension of  $1/16$  inch (1.6 mm) minimum and  $1/4$  inch (6.4 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802.1.8. Required ventilation openings shall open directly to the outside air.

**Exception:** Attic ventilation shall not be required when determined not necessary by the code official due to atmospheric or climatic conditions.

**R806.2 Minimum vent area.** The minimum net free ventilating area shall be  $1/150$  of the area of the vented space.

**Exception:** The minimum net free ventilation area shall be  $1/300$  of the vented space provided one or more of the following conditions are met:

1. In Climate Zones 6, 7 and 8, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
2. 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 attic or rafter space. Upper ventilators shall be located no more than 3 feet (914 mm) below the ridge or highest point of the space, measured vertically, with the balance of the required ventilation provided by eave or cornice vents. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3 feet (914 mm) below the ridge or highest point of the space shall be permitted.

**R806.3 Vent and insulation clearance.** Where eave or cornice vents are installed, insulation shall not block the free flow of air. A minimum of a 1-inch (25 mm) space shall be provided between the insulation and the roof sheathing and at the location of the vent.

**R806.4 Installation and weather protection.** Ventilators shall be installed in accordance with manufacturer's installation instructions. Installation of ventilators in roof systems shall be in accordance with the requirements of Section R903.