This guideline is developed by the Tri-Chapter Uniform Code Committee and is intended to enhance regional consistency in application and enforcement of the Building Code. Please verify acceptance of this guideline with your local building department prior to its application.

ISSUES:

1. 2016 CBC 1203.2 (CRC R806) does not specifically require ventilation (soffit vents) for enclosed exterior balconies, decks, exterior exit stairways or ramps. Should ventilation for enclosed exterior elements be required similar to those for attic or rafter spaces?

2. Should soffit vents be allowed in exterior balconies and similar elements when the fire protection of the balcony and similar elements is required either due to the type of construction or proximity of the line used to determine the fire separation distance?

PROPOSED GUIDELINE:

Soffit vents are essential in preventing accumulation of moisture in enclosed balconies and similar exterior elements. Trapped moisture can lead to dry rot and damage to structural elements. Where the current code does not provide specific ventilation requirements, the requirements in CBC Section 1203.2 (CRC R806) for attic and rafter spaces should be used to provide minimum ventilation, cross-ventilation, and other ventilation alternatives for these enclosed spaces. Two continuous soffit vents with removable cover are highly recommended to provide cross ventilation for these areas and would also provide the opportunity for future maintenance inspections of structural elements.

As stated in Section 1406.3, Exception 3, balconies and similar elements on buildings of Type III, IV and V construction are permitted to be of Type V construction, and are not required to have fire-resistance rating where sprinkler protection is extended to these areas. Therefore, soffit vents can be installed under the conditions without compromising code requirements.

Soffit vents shall not be located within 5 feet of the line used to determine the fire separation distance in accordance with Section 705.2.3.

It is left to each enforcing agency to review applicable code sections and make the determination if soffit vents are permissible for buildings where sprinkler protection is not extended to these areas.
CODE REFERENCE(S): 2016 CBC & CRC

CBC 1203.2 Ventilation required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof framing members shall have cross ventilation for each separate space by ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. An airspace of not less than 1 inch shall be provided between the insulation and the roof sheathing. The net free ventilating area shall not be less than 1/150 of the area of the space ventilated. Ventilators shall be installed in accordance with manufacturer’s installation instructions.

Exception: The net free cross-ventilation area shall be permitted to be reduced to 1/300 provided both of the following conditions are met:

1. In Climate Zones 14 and 16, 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 venting area is provided by ventilators located in the upper portion of the attic or rafter space. Upper ventilators shall be located not more than 3 feet (914 mm) below the ridge or highest point of the space, measured vertically, with the balance of the 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.

1203.2.1 Openings into attic. Exterior openings into the attic space of any building intended for human occupancy shall be protected to prevent the entry of birds, squirrels, rodents, snakes and other similar creatures. Openings for ventilation having a least dimension of not less than 1/16 inch and not more than ¼ inch shall be permitted. Openings for ventilation having a least dimension larger than ¼ inch shall be provided with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material with openings having a least dimension of not less than 1/16 inch and not more than ¼ inch. Where combustion air is obtained from an attic area, it shall be in accordance with Chapter 7 of the California Mechanical Code.

CRC R806 Similar to CBC 1203.2