Eave Vents and Attic Ventilation

09-01

Eave Vent Policy Effective 02-04-09

This policy is only applicable to plan review and construction projects under OSFM jurisdiction. When enforcing California Building Code (CBC) Chapter 7A "Materials and Construction Methods for Exterior Wildfire Exposure" and related sections, local jurisdictions and other enforcing agencies may or may not adopt similar methods for administering current code requirements, for determining equivalent alternate methods of construction, and for approving specific product use. OSFM "CBC Ch7A Compliance Policies" address those aspects of OSFM plan review that are not clearly addressed by existing regulation and typically indicate acceptable methods of achieving compliance with applicable codes and regulations. CBC Ch7A Compliance Policies are intended as guidelines for use by OSFM staff. They are provided to design professionals statewide as a resource to promote more uniform plan review and construction of projects within the jurisdiction of OSFM. Other methods proposed by design professionals will, however, be considered. References to the CBC refer to the code in effect on the date of policy issuance or revision, Ch7A refers to CBC Chapter 7A "Materials and Construction Methods for Exterior Wildfire Exposure," and "code" refers to the California Building Code and all parts or related provisions of California Code of Regulations Title 24.

Issue: The location and type of vents for attic ventilation is regulated by Ch7A without specifying methods to achieve required attic ventilation. In addition, Ch7A provides for the use of special eave vents as an exception allowing for placement of vents in eaves, but no method of special eave vent acceptance is specified.

Code Section(s) at Issue: 2007 CBC Section704A.2 Attic Ventilation:

704A.2.1 General. When required by Chapter 15, roof and attic vents shall resist the intrusion of flame and embers into the attic area of the structure, or shall be protected by corrosion-resistant, noncombustible wire mesh with 1/4-inch (6mm) openings or its equivalent.

704A.2.2 Eave or cornice vents. Vents shall not be installed in eaves and cornices.

Exception: Eave and cornice vents may be used provided they resist the intrusion of flame and burning embers into the attic area of the structure.

Resolution: There are several options available which either fully comply with the code, or are considered by OSFM as providing acceptable compliance with the code including the following:

- 1. Required attic ventilation may be achieved by <u>relocating intake vents</u> from the underside of eaves or in the frieze blocks between rafter tails to the roof deck (e.g. ventilation through the field of roof shingles located on the lower portion of the roof above or near the exterior wall). Any <u>non-combustible</u> & <u>non-corrosive</u> attic vent installed on the roof or as a gable vent with <u>openings between ½-inch and ½-inch</u> in size fully complies with the code. This does not apply to vents installed in eaves and cornices which are prohibited by Section 704A.2.2 (see next option #2).
- 2. Vents may only be installed in eaves and cornices as allowed for by the exception to Section 704A.2.2 with the use of specialized <u>eave vents</u> which resist the intrusion of flame and burning embers as approved by the enforcing agency. (For OSFM accepted vents see CBC Ch7A COMPLIANCE POLICIES titled "Products Accepted for Use:...").
- 3. Subject to approval of the enforcing agency, the need for attic <u>ventilation may be eliminated</u> through various construction and design methods such as "open eave" design which eliminates the need for soffit area ventilation.

For Further information please Contact:

Ethan Foote, Assistant Chief for Wildland-Urban Interface Building Standards Code Development & Analysis Division

<u>CAL FIRE</u>, <u>Office of the State Fire Marshal</u> <u>ethan.foote@fire.ca.gov</u> 707-576-2996

Approving Authority:

Tonya Hoover, Assistant State Fire Marshal