



Flat Roof Ventilation

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

9.19.1.1. Required Venting

(1) Except where it can be shown to be unnecessary, where insulation is installed between a ceiling and the underside of the roof sheathing, a space shall be provided between the insulation and the sheathing, and vents shall be installed to permit the movement of air from the space to the exterior. (See Note A-9.19.1.1.(1))

9.19.1.2. Vent Requirements

(2) Where the roof slope is less than 1 in 6 or in roofs that are constructed with roof joists, the unobstructed vent area shall be not less than 1/150 of the insulated ceiling area.

(3) Required vents may be roof type, eave type, gable-end type or any combination thereof, and shall be distributed

(a) uniformly on opposite sides of the building,

(b) with not less than 25% of the required openings located at the top of the space, and

(c) with not less than 25% of the required openings located at the bottom of the space.

(4) Except where each roof joist space referred to in Sentence (2) is separately vented, roof joist spaces shall be interconnected by installing purlins not less than 38 mm (1½ in) by 38 mm (1½ in) on the top of the roof joists.

(5) Vents shall comply with CAN3-A93-M, “Natural Airflow Ventilation for Buildings.”

9.19.1.3. Clearances

(1) Except as provided in Sentence (2), where venting is provided to a roof joist space, not less than 63 mm (2½ in) of space shall be provided between the top of the insulation and the underside of the roof sheathing.



(3) Ceiling insulation shall be installed in a manner that will not restrict the free flow of air through roof vents or through any portion of the attic or roof space.

OBJECTIVE

Cross purlins, as described in Sentence (4) are required to ensure adequate ventilation throughout roofs without attic spaces. This commonly includes flat roofs and cathedral ceilings.

In locations where each roof joist space is separately vented cross purlins are not required.

Placement of ventilation openings is required to be not less than 25% at the top of the space and 25% at the bottom of the space.

