

Technical Bulletin No. 0061

Non-vented Soffit Retrofitted with After-Market Vents



LP® SmartSide® and LP® SmartSide® ExpertFinish® non-vented soffit may be fitted with after-market soffit vents. Install vents according to the manufacturer's requirements. LP assumes no liability for water penetration, or any other issues associated with modifications to non-vented soffit products. LP makes no warranties or representations about the compatibility or performance of the after-market soffit vents in conjunction with the LP SmartSide and LP SmartSide ExpertFinish non-vented soffit.

Converting non-vented LP SmartSide and LP SmartSide ExpertFinish soffit can be accomplished with after-market ventilation products. There are many soffit ventilation products on the market, some are available with insect screening, most are available in three or four colors.

The three most common types are:

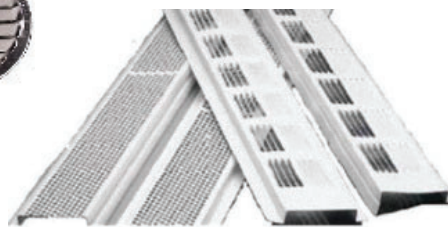
1. Round soffit vents

- Sizes vary from 1.5 inch (38 mm) in width and larger



2. Continuous soffit vents

- Usually 8 feet or longer
- 2.6 inches (66 mm) by 97 inch (2 464 mm)



3. Rectangular soffit vents

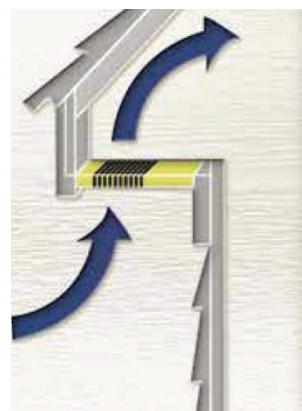
- 4.0 inches (102 mm) by 16 inches (406 mm)



After-market **soffit ventilation openings** need to meet minimum and maximum size requirements in the I-Codes; or the opening need to be covered with a Code approved screening product. This requirement is intended to prevent the entry of birds, squirrels, rodents, snakes, and other similar creatures.

2021 IRC, Section R806.1, or 2021 IBC, Section 1202.2.2

- Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum.
- Ventilation opening having a least dimension larger than 1/4 inch (6.4 mm) shall be provided with resistant wire cloth screening, corrosion hardware cloth, perforated vinyl 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.



After-market **soffit ventilation** needs to provide a **minimum net free ventilation area** per the requirements in the I-Codes.

2021 IRC, Section R806.2, or 2021 IBC, Section 1202.2.1

The minimum net free ventilation area shall be 1/150 of the area of the vented space.

Exception: The minimum net free area shall be 1/300 of the vented space provided both 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. Not less than 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 not more than 3 feet (914 mm) below the ridge or the highest point of the space, measured vertically. The balance of the required ventilation provided shall be located in the bottom one-third of the attic space. Where the location of wall or roof framing members conflict 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.

Accordingly:

- To meet the **1/150** requirement, a minimum net free area of ventilation area of **960 square inches** is required for each 1,000 square feet of ceiling area.
- To meet the **1/300** requirement, a minimum net free area of ventilation area of **480 square inches** is required for each 1,000 square feet of ceiling area.

Net free ventilation area refers to the clear open area of a vent, considering the restrictions of the vent screening itself and the dimensions of the vent slots. Information on the actual net free area of ventilation provided by each soffit vent can be obtained from the product manufacturer to verify compliance with the I-Codes.