



The Subcommittee on Evaluation has reviewed the data submitted for compliance with the *Standard Building Code*® and the *International One and Two Family Dwelling Code* and submits to the Building Official or other authority having jurisdiction the following report. The Subcommittee on Evaluation, ICC-ES and its staff are not responsible for any errors or omissions to any documents, calculations, drawings, specifications, tests or summaries prepared and submitted by the design professional or preparer of record that are listed in the Substantiating Data Section of this report. Portions of this report were previously included in Evaluation Reports #9650.

REPORT NO.: 9650A

EXPIRES See the current EVALUATION REPORT INDEX

CATEGORY: ROOF COVERINGS AND ROOF DECK CONSTRUCTION

SUBMITTED BY:

O'HAGIN MANUFACTURING, LLC

1.0 PRODUCT TRADE NAME

O'Hagin Cloaked Vent Tile (Aluminum, Galvanized Steel, or Copper)

2.0 SCOPE OF EVALUATION

- 2.1 Ventilation Openings
- 2.2 Roof Covering Fire Classification

3.0 USES

O'Hagin Cloaked Vent Tiles are installed on the slope of concrete or clay tile roofs to provide attic ventilation for wood framed roof construction.

4.0 DESCRIPTION

4.1 General:

O'Hagin Cloaked Vent Tiles are manufactured from either 0.032 Aluminum, 26 Ga galvanized steel or 16 oz copper. The vent system consists of two vents - a Primary Vent sub flashing that is installed over openings cut in the roof deck and a Secondary Vent that is installed over the Primary Vent and takes the place of two field tiles. The Primary Vent is screened with galvanized #4 mesh wire insect screen. The Secondary Vent is painted to match the surrounding tiles.

4.2 Models and Net Free Area

4.2.1 Secondary Vents

- Model No.: 50046-S; Net Free Area = 97.50 sq. in.
- Model No.: 50044-M; Net Free Area = 86.25 sq. in.
- Model No.: 50043 Flat; Net Free Area = 98.75 sq. in.

4.2.2 Primary Vent:

Primary Vent (Sub Flashing); Net Free Area = 118 sq. in.

5.0 INSTALLATION

5.1 General

O'Hagin Cloaked Vent Tiles are installed in accordance with the manufacturer's published installation instructions and this report.

The number of O'Hagin Cloaked Vent Tiles installed must provide the net free ventilation area required under Section 2309.7 of the *Standard Building Code*®.

The manufacturer's published installation instructions and this report shall be strictly adhered to and a copy of these instructions shall be available at all times on the job site during installation.

The instructions within this report govern if there are any conflicts between the manufacturer's instructions and this report.

5.2 Roof Covering Fire Classification

O'Hagin Cloaked Vent Tile Systems are installed with concrete or clay tile roofs classified as Class A Roof Coverings.

5.3 Fastening

5.3.1 Minimum 1/2-inch-thick plywood sheathing roof decking: The Primary Vent is installed on 1/2-inch-thick solid plywood roof decking using roofing cement and 1 1/2-inch-by-3/8-inch-diameter head by 1/8-inch-diameter shank corrosion resistant roofing nails spaced 4 inches on center around perimeter. The Secondary Vents are installed over the Primary Vents as follows:

Models 5 0044-M and 50046-S: Installed using two 1 1/2-inch-by-3/8-inch-diameter head by 1/8-inch-diameter shank corrosion resistant roofing nails at the top of the vent and an O'Hagin Wind Clip installed at the bottom of the vent. The Wind Clip hooks under the preceding course tile and is adjustable for head lap.

Model 50043 Flat: Installed using two 1 1/2-inch-by-3/8-inch-diameter head by 1/8-inch-diameter shank corrosion

resistant roofing nails at the top of the vent and an O'HAGIN Wind Clip installed at the bottom of the vent. The Wind Clip hooks under the preceding course tile and is adjustable for head lap.

5.3.2 Minimum $\frac{5}{8}$ -inch-thick plywood sheathing roof decking: The Primary Vent is installed on $\frac{5}{8}$ -inch-thick solid plywood roof decking using 12 – 1-inch-by- $\frac{3}{8}$ -inch-diameter head by $\frac{1}{8}$ -inch-diameter shank electro galvanized roofing nails spaced 5 $\frac{1}{2}$ inches on center along the long side of the vent and 4 $\frac{1}{2}$ inches along the short side of the vent. The Secondary Vents are installed over the Primary Vents as follows:

Models 50046-S: Installed using two (2) 1-inch-by- $\frac{3}{8}$ -inch-diameter head by $\frac{1}{8}$ -inch-diameter shank electro galvanized roofing nails at the top of the vent and two (2) O'Hagin Wind Clip installed at the bottom of the vent. The Wind Clip hooks under the preceding course tile and is adjustable for head lap.

Models 50044-M: Installed using four (4) 1-inch-by- $\frac{3}{8}$ -inch-diameter head by $\frac{1}{8}$ -inch-diameter shank electro galvanized roofing nails at the top of the vent and one (1) O'Hagin Wind Clip installed at the bottom of the vent. The Wind Clip hooks under the preceding course tile and is adjustable for head lap.

Model 50043 Flat: Installed using five (5) 1-inch-by- $\frac{3}{8}$ -inch-diameter head by $\frac{1}{8}$ -inch-diameter shank electro galvanized roofing nails at the top of the vent and an O'Hagin Wind Clip installed at the bottom of the vent. The Wind Clip hooks under the preceding course tile and is adjustable for head lap.

5.4 Wind Uplift:

Wind uplift resistance is outside the scope of this evaluation report. The wind uplift shall be limited to the uplift capacity of the concrete and clay tile roof assemblies that the O'Hagin vents are installed with.

Documentation shall be submitted substantiating the wind uplift capacity of the O'Hagin vents with the concrete and clay roof tiles specified for the building under construction. The documentation shall be submitted to the building official when applying for a permit.

6.0 SUBSTANTIATING DATA

- 6.1 Manufacturer's descriptive literature, specifications, engineering drawings, installation instructions, and material mill order certificates.
- 6.2 Net area calculations for vents used with concrete tile roofs, Columbia Research & Testing, March 20, 1995, signed and sealed by Thomas M. Mannatt, R.C.E.
- 6.3 Test report on fastenings for wind uplift resistance under ASTM E330, RADCO, Test Report RAD-1714, Project C-6065, Lab TL-1272, May 1996, signed by Sanjay "Jay" Mishra and Michael L. Ziemann, P.E.
- 6.4 Test report on fastenings for wind uplift under ASTM E330, National Certified Testing Laboratories, Report No. NCTL-210-2078-1,2,3, 09-30-98, signed by Michael E. Lane, signed and sealed by Barry D. Portnoy, P.E.

7.0 CODE REFERENCES

Standard Building Code® - 1999 Edition

Section 103.7 Alternate Materials and Methods
Chapter 15 Roof Assemblies and Rooftop Structures

Section 1503	Weather Protection
Section 1504	Performance Requirements
Section 1505	Fire Classification
Section 1506	Materials
Section 1507	Roof Coverings with Slopes 2:12 or Greater
Section 1508	Roof Coverings with Slopes Less Than 2:12
Section 2309.7	Ventilation of Attic Space
<i>International One and Two Family Dwelling Code – 1998 Edition</i>	
Section 108	Alternate Materials and Systems
Section 806	Roof Ventilation
Chapter 9	Roof Coverings
Section 906	Tile, Clay or Concrete Shingles

8.0 COMMITTEE FINDINGS

The Subcommittee on Evaluation in review of the data submitted finds that, in their opinion, the O'Hagin Cloaked Vent Tiles as described in this report conform with or are suitable alternates to that specified in the *Standard Building Code*® and the International One and Two Family Dwelling Code or Supplements thereto.

9.0 LIMITATIONS

- 9.1 This Legacy Evaluation Report and the installation instructions, when required by the building official, shall be submitted at the time of permit application.
- 9.2 The vents shall be used only on wood framed roofs for buildings of Type V and VI Construction.
- 9.3 The vents shall not be used in fire resistance rated roof ceiling assemblies unless test reports from an approved testing laboratory are submitted to the building official.
- 9.4 The number of vents installed must provide the net free ventilation area required under Section 2309.7 of the *Standard Building Code*® or Section 806 of the *International One and Two Family Dwelling Code*.
- 9.5 The vents were not evaluated for wind uplift pressure see Section 5.4 above.

10.0 IDENTIFICATION

10.1 Each package of O'Hagin Cloaked Vent Tiles covered by this report shall be labeled with the manufacturer's name and/or trademark, the SBCCI Public Safety Testing and Evaluation Services Inc. Seal or initials (SBCCI PST & ESI), and the number of this report for field identification.

10.2 The report holder's contact information is the following:

**O'HAGIN MANUFACTURING, LLC
210 CLASSIC COURT, SUITE 100
ROHNERT PARK, CALIFORNIA 94928**

11.0 PERIOD OF ISSUANCE

SEE THE CURRENT EVALUATION REPORT INDEX FOR STATUS OF THIS LEGACY EVALUATION REPORT.