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ICC-ES Evaluation Report

ESR-3851

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Issued 09/2018
This report is subject to renewal 09/2019.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

CRAWL SPACE DOOR SYSTEMS, INC.

EVALUATION SUBJECT:

CRAWL SPACE DOOR SYSTEMS FLOOD VENT



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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018 and 2015 *International Building Code*®
- 2018 and 2015 *International Residential Code*®

Properties evaluated:

- Physical operation
- Water flow
- Weathering

2.0 USES

Crawl Space Door Systems flood vent is used to provide for the equalization of hydrostatic flood forces on exterior walls.

3.0 DESCRIPTION

3.1 General:

Crawl Space Door Systems flood vent is an engineered mechanically operated flood vent. Upon contact with flood water, the flood vent automatically opens and allows flood water to enter and exit enclosed areas. The vents are constructed of general purpose ABS SP-9010 plastic. The vent has a faux louver with either a solid plastic plate or wire mesh attached to the back of the louver. The louver is dislodged from the vent upon contact with flood waters. See Figure 1 for illustrations of the flood vent.

3.2 Engineered Opening:

The Crawl Space Door Systems static flood vent complies with the design principle noted in Section 2.7.2.2 of ASCE/SEI 24 for a rate of rise and fall of 5 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24-14, the flood vent must be installed in accordance with Section 4.0 of this report.

4.0 DESIGN AND INSTALLATION

The Crawl Space Door Systems flood vent is designed to be installed into walls or doors of existing or new

construction from the exterior side. Installation of the vent must be in accordance with the manufacturer's instructions, the applicable code and this report. In order to comply with the engineered opening design principle noted in Sections 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14, the vent must be installed as follows:

- With a minimum of two openings; one on different sides of each enclosed area.
- With a minimum of one vent for the square footage of enclosed area noted in Table 1.
- Below the base flood elevation.
- With the bottom of the vent located a maximum of 12 inches (305 mm) above grade.

5.0 CONDITIONS OF USE

The Crawl Space Door Systems flood vent described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The Crawl Space Door Systems flood vent must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions. In the event of a conflict, the instructions in this report govern.
- 5.2 Use of Crawl Space Door Systems flood vent as under-floor space ventilation is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (Editorially revised October 2017).

7.0 IDENTIFICATION

- 7.1 The Crawl Space Door Systems flood vent recognized in this report must be identified by a label bearing the manufacturer's name (Crawl Space Door Systems), the model number, and the evaluation report number (ESR-3851).
- 7.2 The report holder's contact information is the following:

CRAWL SPACE DOOR SYSTEMS, INC.
3669 SEA GULL BLUFF DRIVE
VIRGINIA BEACH, VIRGINIA 23455
(757) 363-0005
www.crawlspacedoors.com

TABLE 1—CRAWL SPACE DOOR SYSTEMS FLOOD VENT

| MODEL | OVERALL VENT SIZE (Width x Height x Depth) (in) | ROUGH OPENING SIZE (Width x Height) (in) | ENCLOSED AREA COVERAGE (ft ²) |
|---------|---|--|---|
| CSBA816 | 18 ¹ / ₄ x 10 ¹ / ₂ x 1 ³ / ₄ | 16 x 8 ¹ / ₄ | 305 |

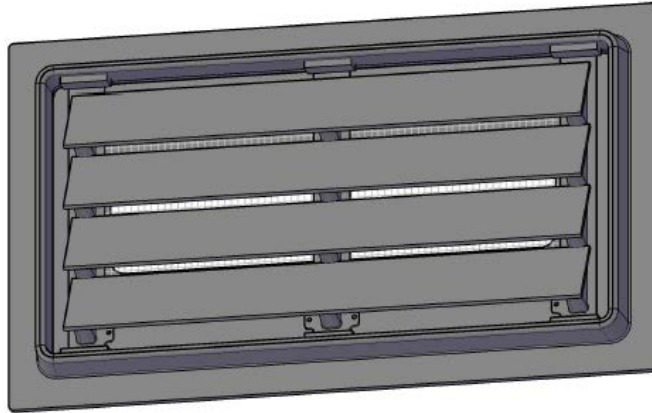


FIGURE 1—CRAWL SPACE DOOR SYSTEMS FLOOD VENT

ICC-ES Evaluation Report

ESR-3851 FBC Supplement

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1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Crawl Space Door Systems flood vent, recognized in ICC-ES master evaluation report ESR-3851, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2017 *Florida Building Code—Building*
- 2017 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Crawl Space Door Systems flood vent, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3851, complies with the *Florida Building Code—Building* and *Florida Building Code—Residential*, provided the design and installation are in accordance with the 2015 *International Building Code*® provisions noted in the master report.

Use of the Crawl Space Door Systems flood vent has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the 2017 *Florida Building Code—Building* and *Florida Building Code—Residential*.

For products falling under Florida Rule 9N-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, issued September 2018.