U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program

OMB No. 1660-0008 Expiration Date: November 30, 2022

ELEVATION CERTIFICATE Important: Follow the instructions on pages 1–9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

	SECTION A - PROPER	TY INFO				arance e		JRANCE COMPANY U	
A1. Building Owner's Name					Policy Nur		-		
rommy E. Smith II									
DOX 110,	1				Company	NAIC Number:			
1495 Dry Branch Road City		**************************************							
Dry Branch					ZIP Code 25061		T		
A3. Property Description (Parcel of land on Dry Bran	Lot and Block Numbers, ch (DB 2927, P 882 & Ca	Tax Parc	el Number, L	egal Des	cription, e	tc.)	20001		\dashv
Parcel of land on Dry Branch (DB 2927, P 882 & Cabin Creek District TM 44, P 18.1) A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential									
A5. Latitude/Longitude: Lat. 38.188632N. Long. 81.442780W. Residential Horizontal Datum: NAD 1927 NAD 1983								.	
A6. Attach at least 2 photo					Honzonta	ai Datum	1: [] NAD	1927 🗵 NAD 1983	
A7. Building Diagram Num		ne cenn	icate is being	used to	obtain floc	od insura	ance.		
A8. For a building with a c	***************************************	١٠							
	crawlspace or enclosure(s			2480.00	sa ft				
	nt flood openings in the o					t ahaya	adinoont an		
c) Total net area of flo	od openings in A8.b		2496.00 sqi		11.0 100	Labove	aujacent gn	ade 3	
c) Total net area of flood openings in A8.b 2496.00 sq in d) Engineered flood openings? Yes No									
A9. For a building with an attached garage:									
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 0 c) Total net area of flood openings in A9.b 0.00 sg in								۱	
c) Total net area of flood openings in A9.b									
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION									4
B1. NFIP Community Name & Community Number B2. County Name B3. State								\dashv	
Kanawha County, WV / 540	070		Kanawha					West Virginia	
B4. Map/Panel B5. Sur Number B5. Sur 54039C0604 E	B6. FIRM Index Date 02-06-2008	Eff	RM Panel ective/ vised Date 2008	B8. Flo Zone(s		B9. Ba (Zd	ase Flood El one AO, use	I levation(s) e Base Flood Depth)	
		<u></u>		<u> </u>		l			_
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: [FIS Profile FIRM Community Determined Other/Source: USACE determination									
						minatio	n		ı
B11. Indicate elevation datu	m used for BFE in Item E	39: 🔲 N	GVD 1929	⊠ NAVI) 1988 [Othe	er/Source:_		
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No									
Designation Date: CBRS OPA									
EMA Form 086-0-33 (12/19)	R	Replaces	all previous e	ditions.				Form Page 1 of	6

ELEVATION CERTIFICATE

OMB No. 1660-0008

IMPORTANT 1			Expiration Date: November 30, 2023			
IMPORTANT: In these spaces, copy the corres	FOR INSURANCE COMPANY USE					
Building Street Address (including Apt., Unit, Suit 1495 Dry Branch Road	Policy Number:					
City Dry Branch		IP Code 5061	Company NAIC Number			
SECTION C - BUILD	DING ELEVATION INFORM	ATION (SURVEY R	(EQUIRED)			
04 5 ""	onstruction Drawings* B d when construction of the builth BFE), VE, V1–V30, V (with the building diagram specifie site Vertical Daturtions in items a) through h) be Other/Source: the same as that used for the crawlspace, or enclosure flood member (V Zones only) The the servicing the building in Comments) building (LAG)	uilding Under Constr Iding is complete. BFE), AR, AR/A, AR d in Item A7. In Puer m: NAVD88 low.	Check the measurement used. 796.7 feet meters N/A feet meters			
			799.5 X feet meters			
h) Lowest adjacent grade at lowest elevation structural support			N/A feet meters			
SECTION D - SURV	EYOR, ENGINEER, OR AR	CHITECT CERTIFI	CATION			
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001. Were latitude and longitude in Section A provided by a licensed land surveyor? Yes No Check here if attachments.						
Certifier's Name	License Number					
William R. Gunnoe, RPS Title Registered Professional Surveyor Company Name Gunnoe Surveying & Mapping Address P.O. Box 1172 City Clendenin	State West Virginia	ZIP Code 25045	NO 8011 ** NO 8011 ** Here Onat Sure of the sure of			
Signature William R. Summe	Date 03-11-2021	Telephone	Ext.			
Copy all pages of this Elevation Certificate and all att	achments for (1) community of	(304) 548-5324				
Comments (including type of equipment and location New home has been set in accordance with the he	on per C2(e) if applicable)					
EMA Form 086-0-33 (12/19)	Replaces all previous edition	ns.	Form Page 2 of 6			

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, conv the correspond	ling information fro	m Soction A	редоставлений применений	e. November 30, 2022		
IMPORTANT: In these spaces, copy the corresponding information from Section A. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Policy Number:						
1495 Dry Branch Road			Policy Number	1.		
I Day Day at	State West Virginia	ZIP Code	Company NAI	C Number		
-		25061				
SECTION E – BUILDING EL FOR ZONI	E AO AND ZONE A	(WITHOUT BFE)	OT REQUIRED)			
For Zones AO and A (without BFE), complete Items E1 complete Sections A, B,and C. For Items E1–E4, use n enter meters.	atural grade, if availa	ible. Check the meas	urement used. In F	uerto Rico only,		
 E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG). a) Top of bottom floor (including basement, 						
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		feet	eters 🔲 above o	r 🔲 below the HAG.		
crawlspace, or enclosure) is				r 🔲 below the LAG.		
E2. For Building Diagrams 6–9 with permanent flood of the next higher floor (elevation C2.b in	penings provided in t	Section A Items 8 and	Vor 9 (see pages 1-	-2 of Instructions),		
the diagrams) of the building is E3. Attached garage (top of slab) is		feet _ me		r Delow the HAG.		
E4. Top of platform of machinery and/or equipment	***************************************	feet me	etersabove o	r below the HAG.		
servicing the building is		feet _ me		r ☐ below the HAG.		
E5. Zone AO only: If no flood depth number is available floodplain management ordinance? Yes	e, is the top of the bo No Unknown.	ttom floor elevated in The local official mu	accordance with the st certify this inform	ne community's nation in Section G.		
SECTION F - PROPERTY OWN	IER (OR OWNER'S	REPRESENTATIVE)	CERTIFICATION			
The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.						
Property Owner's Authorized Representative's Name						
Address	City		State	ZIP Code		
Signature	Date		Telephone			
Comments						
	· · · · · · · · · · · · · · · · · · ·		Check h	ere if attachments.		
EMA Form 086-0-33 (12/19)	niaces all nrevious e	diti		F 5 0 1		

ELEVATION CERTIFICATE

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMP	ORTANT: In these spaces, copy the co	Expiration Date: November 30, 202	
1 000	ding offeet Address (including Apt. Unit	THE	
	o Dry Dianor Road	5, 5	and Box No. Policy Number:
City	Branch	State ZIP Cod	le Company NAIC Number
		West Virginia 25061	
_	SECT	ION G - COMMUNITY INFORMATION	(OPTIONAL)
Sect used	o in items G8–G10. In Puerto Rico only, e	enter meters.	s floodplain management ordinance can complete em(s) and sign below. Check the measurement
G1.	data in the Comments area below.)	, and the state of	been signed and sealed by a licensed surveyor, on. (Indicate the source and date of the elevation
G2.	A community official completed Sector Zone AO.	tion E for a building located in Zone A (v	without a FEMA-issued or community-issued BFE)
G3.		—G10) is provided for community floodpl	ain management purposes.
G4. F	Permit Number	G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued
	This permit has been issued for:	New Construction Substantial Imp	rovement
G8. Elevation of as-built lowest floor (including basement) of the building:			feet metersDatum
69. E	BFE or (in Zone AO) depth of flooding at t	the building site:	feet meters Datum
	Community's design flood elevation:		Datum
ocal (Official's Name	Title	
ommi	unity Name	Telephone	
ignatu	ıre	Date	
omme	ents (including type of equipment and loca	ation, per C2(e), if applicable)	
		(),	
			1
	orm 086-0-33 (12/19)		☐ Check here if attachments.

BUILDING PHOTOGRAPHS

ELEVATION CERTIFICATE

See Instructions for Item A6.

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.

1495 Dry Branch Road

City
Dry Branch

State
West Virginia

25061

Expiration Date: November 30, 2022

FOR INSURANCE COMPANY USE
Policy Number:

Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.



Photo One Caption Right front

Photo One

Clear Photo One



Photo Two Caption Right rear

Photo Two

FEMA Form 086-0-33 (12/19)

Replaces all previous editions.

Clear Photo Two
Form Page 5 of 6

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008 Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A. FOR INSURANCE COMPANY USE Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Policy Number: 1495 Dry Branch Road City State ZIP Code Company NAIC Number Dry Branch West Virginia

25061

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.



Photo Three Caption Left rear

ELEVATION CERTIFICATE





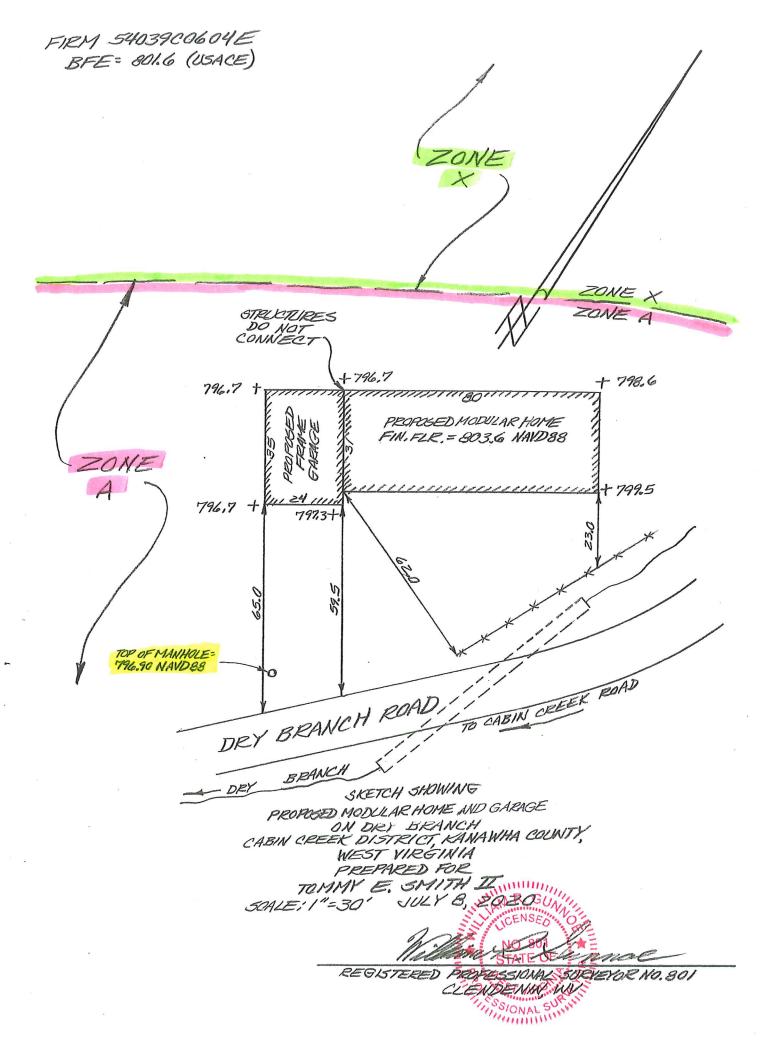
Photo Four Caption Left front

Clear Photo Four

FEMA Form 086-0-33 (12/19)

Replaces all previous editions.

Form Page 6 of 6





ICC-ES Evaluation Report

ESR-3851

Reissued September 2020 Revised January 2021 This report is subject to renewal September 2022.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

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 MODEL #CSBA816 CRAWL SPACE STACKED MODELS: #ICCSTACKED2; #ICCSTACKED4 FLOOD VENT INSULATED KIT #ICCINSULATED

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 vents are used to provide for the equalization of hydrostatic flood forces on exterior walls.

3.0 DESCRIPTIONS

3.1 General:

Crawl Space Door Systems flood vents are engineered mechanically operated flood vents. Upon contact with flood water, the flood vents automatically open and allow flood water to enter and exit enclosed areas. The vents are constructed of general purpose ABS SP-9010 plastic. The Crawl Space Flood Vent Model #CSBA816 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 an illustration of the flood vent Model #CSBA816.

The Flood Vent Insulated Kit Model #ICCINSULATED is constructed of general purpose ABS SP-9010 plastic. The vent frame opening is filled with a 2-inch thick (51 mm) extruded polystyrene Styrofoam™ Brand Scoreboard Foam Insulation Board (ESR-2142). The insulation board is dislodged from the vent upon contact with flood waters,

allowing flood waters to enter and exit enclosed areas. See Figure 2 for an illustration of the Flood Vent Insulated Kit Model #ICCINSULATED.

The Crawl Space Stacked Model #ICCSTACKED2 contains two vertically arranged Crawl Space Flood Vents (Model #CSBA816) in one assembly. The Crawl Space Stacked Model #ICCSTACKED4 contains four Crawl Space Flood Vents (Model #CSBA816) in one assembly, with two sets of side by side flood vents vertically arranged.

3.2 Engineered Opening:

The Crawl Space Door Systems static flood vents comply 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 vents must be installed in accordance with Section 4.0 of this report.

3.3 Ventilation:

The Crawl Space Flood Vent Model #CSBA816 and Crawl Stacked Models #ICCSTACKED2 #ICCSTACKED4 are available covered with metal wire mesh with 0.108 inch by 0.108 inch (2.74 mm by 2.74 mm) openings. The mesh is covered by a faux louver with 11/16 inch (17.5 mm) vertical clearance between each blade. The Crawl Space Flood Vent Model #CSBA816 provides 11 square inches (7097 mm²) of net free area to supply natural ventilation when equipped with wire mesh. The Crawl Space Stacked Models #ICCSTACKED2 and #ICCSTACKED4 supply 22 square inches (14,194 mm²) and 44 square inches (28,388 mm²), respectively, of net free area to supply natural ventilation when equipped with wire mesh. The Crawl Space Flood Vent Model #CSBA816 covered with a solid plastic plate, Crawl Space Stacked Models #ICCSTACKED2 and #ICCSTACKED4 covered with a solid plastic plate, and the Flood Vent Insulated Kit Model #ICCINSULATED do not offer natural ventilation.

4.0 DESIGN AND INSTALLATION

The Crawl Space Door Systems flood vents are designed to be installed into walls or doors of existing or new construction from the exterior side. Installation of the vents 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 vents described in this report comply with, or are suitable alternatives 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 vents 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 The Crawl Space Door Systems flood vents must not be used in the place of "breakaway walls" in coastal high hazard areas but are permitted for use in conjunction with breakaway walls in other areas.
- 5.3 The Crawl Space Door Systems flood vents are manufactured under a quality control system with inspections by ICC-ES.

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 vents 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 VENTS

MODEL	OVERALL VENT SIZE (Width x Height x Depth) (in)	ROUGH OPENING SIZE (Width x Height) (in)	ENCLOSED AREA COVERAGE (ft²)
CSBA816	$18^{1}/_{4} \times 10^{1}/_{2} \times 1^{3}/_{4}$	16 x 8 ¹ / ₄	305
ICCINSULATED	18 ¹ / ₄ x 10 ¹ / ₂ x 1 ³ / ₄	15³/ ₄ x 8	300
ICCSTACKED2	30 x 30 x 2 ³ / ₄	24 x 24	610
ICCSTACKED4	$40^{1}/_{2} \times 24^{3}/_{4} \times 2^{3}/_{4}$	35 ¹ / ₄ x 19 ¹ / ₂	1,220

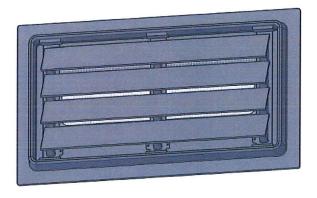


FIGURE 1—CRAWL SPACE DOOR SYSTEMS FLOOD VENT

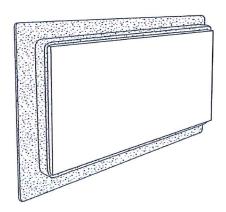


FIGURE 2—FLOOD VENT INSULATED KIT



ICC-ES Evaluation Report

ESR-3851 CBC and CRC Supplement

Issued September 2020 Revised December 2020

This report is subject to renewal September 2022.

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A Subsidiary of the International Code Council®

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 #CSBA816
CRAWL SPACE STACKED MODELS #ICCSTACKED2; #ICCSTACKED4
FLOOD VENT INSULATED KIT #ICCINSULATED

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Crawl Space Door Systems flood vents, described in ICC-ES evaluation report <u>ESR-3851</u>, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

■ 2019 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2019 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Crawl Space Door Systems flood vents, described in Sections 2.0 through 7.0 of the evaluation report <u>ESR-3851</u>, comply with CBC Chapter 12, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12 and 16, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Crawl Space Door Systems flood vents, described in Sections 2.0 through 7.0 of the evaluation report <u>ESR-3851</u>, comply with 2019 CRC, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued September 2020 and revised January 2021.





ICC-ES Evaluation Report

ESR-3851 FBC and FRC Supplement

Reissued September 2020 Revised January 2021

This report is subject to renewal September 2022.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

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 #CSBA816 CRAWL SPACE STACKED MODELS #ICCSTACKED2; #ICCSTACKED4 FLOOD VENT INSULATED KIT #ICCINSULATED

1.0 REPORT PURPOSE AND SCOPE

Purpose:

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

Applicable code editions:

- 2020 Florida Building Code—Building
- 2020 Florida Building Code—Residential

2.0 CONCLUSIONS

The Crawl Space Door Systems flood vents, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-3851. comply with the Florida Building Code—Building and Florida Building Code—Residential, provided the design requirements are determined in accordance with the Florida Building Code—Building and Florida Building Code—Residential, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-3851 for the 2018 International Building Code® meet the requirements of the he Florida Building Code—Building and Florida Building Code—Residential, as applicable,

Use of the Crawl Space Door Systems flood vents has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the 2020 Florida Building Code—Building and Florida Building Code—Residential.

For products falling under Florida Rule 61G20-3, 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 evaluation report, reissued September 2020 and revised January 2021.

