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

	SF				inity Official, (z) insurance a	geni/company, and (3) building ow	
SECTION A - PROPERTY INFORMATION A1. Building Owner's Name						FOR INSURANCE COMPANY USE		
MOX Properties LLC					Policy Number:			
				Company NAIC Number:				
1000 Dickinson M	lobile Home	Park Lot 123						
City Charleston	Charleston				ZIP Code			
	cription (Lot	and Block Numbers,	Tay Parce		-	tion stal	25306	
Lot 123 Dickinson	Mobile Hom	ie Park		er Number, L	egai Descrip	lion, etc.)		
		ential, Non-Residential	l, Additio	n, Accessory	, etc.) Re	sidential		
A5. Latitude/Long	itude: Lat.	38-19'-53.07"	Long. 8	31-27'-23.43"	Ho	rizontal Datum	: NAD 1927 X NAD 1983	
A6. Attach at leas	t 2 photogra	phs of the building if t	he Certifi	cate is being	used to obta	in flood insura	ince.	
A7. Building Diag	ram Number	66						
A8. For a building	with a crawl	space or enclosure(s)	:					
a) Square foo	otage of craw	rlspace or enclosure(s	3)		1152.00 sq	ft		
b) Number of	permanent fi	ood openings in the c	rawlspac				adiacent grade 2	
		penings in A8.b		1152.00 sqi			20,000111 g1000 2	
d) Engineere								
			NO					
	A9. For a building with an attached garage:							
a) Square foo	tage of attacl	ned garage		0.00 sq f	t			
b) Number of	permanent fl	ood openings in the a	ttached g	arage within	1.0 foot abo	ve adjacent gr	ade 0	
c) Total net ar	ea of flood o	penings in A9.b		0.00 sc	ı in			
d) Engineered	flood openir	ngs? ☐ Yes 🖂 I	No					
·····								
		CTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM	I) INFORMAT	ION	
B1. NFIP Community Name & Community Number Kanawha County 540070			B2. County Name			B3. State		
Ranawna County 5	40070			Kanawha			West Virginia	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date		RM Panel ective/	B8. Flood Zone(s)	B9. Ba	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)	
54039C0455	E	02-06-2008	Rev 02-06-2	vised Date 2008	AE	727.2		
D40 1 11 1 11		_	L		<u> </u>			
		Base Flood Elevation Community Deteri				tered in Item I	39:	
	, [2] i i i i i i		mmed [_] Other/sou				
B11. Indicate eleva	ition datum u	sed for BFE in Item B	9: 🔲 N	GVD 1929	⊠ NAVD 19	88 🗌 Othe	er/Source:	
B12. Is the building	located in a	Coastal Barrier Reso	urces Sy	stem (CBRS)) area or Oth	erwise Protect	ed Area (OPA)? Yes No	
Designation D				□ ОРА			(30.7)	
	-							

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding	FOR INSURA	NCE COMPANY USI			
lding Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 129 Cinco Mobile Home Park				Policy Number	**************************************
	est Virginia	P Code	1	Company NA	IC Number
SECTION E - BUILDING ELEV FOR ZONE A	/ATION INFORMATI NO AND ZONE A (W	ION (SUR	VEY NOT R	EQUIRED)	
For Zones AO and A (without BFE), complete Items E1–E complete Sections A, B,and C. For Items E1–E4, use natuenter meters.	5 If the Certificate in	intended to		OMA or LOM ent used. In F	R-F request, Puerto Rico only,
 E1. Provide elevation information for the following and ch the highest adjacent grade (HAG) and the lowest adja a) Top of bottom floor (including basement, 	eck the appropriate beacent grade (LAG).	oxes to she	ow whether t	he elevation i	s above or below
crawlspace, or enclosure) is b) Top of bottom floor (including basement,		feet	meters	☐ above o	r Delow the HAG.
crawlspace, or enclosure) is			meters		r Delow the LAG.
E2. For Building Diagrams 6–9 with permanent flood oper the next higher floor (elevation C2.b in the diagrams) of the building is	nings provided in Sect				
E3. Attached garage (top of slab) is			meters meters		below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is					below the HAG.
E5. Zone AO only: If no flood depth number is available, is floodplain management ordinance? Yes No	the top of the bottom Unknown. Th	Aces ele.	meters ated in accor	1 111 11	below the HAG. e community's nation in Section G.
SECTION F - PROPERTY OWNER					
The property owner or owner's authorized representative w	tha associates Costinu	- 4 5			EMA-issued or
community-issued BFE) or Zone AO must sign here. The si Property Owner or Owner's Authorized Representative's Na Kevin Schafer	tatements in Sections	A, B, and	E are correc	t to the best o	f my knowledge.
Address	City	······································	State		710.0-1-
749 Divide Ridge Road	Given			Virginia	ZIP Code 25245
Signature ksvin schafer	Date 03-11-202	<u>?</u> 1	Teleph (304)	none 746-4734	
Comments				······································	
See attached map for Bench Mark Elevations to obtain Finis	shed Floor Elevations.				
					1
					1
					re if attachments.

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the correspond	FOR INSURANCE COMPANY USE				
Building Street Address (including Apt., Unit, Suite, and 1000 Dickinson Mobile Home Park Lot 123	Policy Number:				
City S Charleston	Company NAIC Number				
SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)					
C1. Building elevations are based on: Construct *A new Elevation Certificate will be required when C2. Elevations – Zones A1–A30, AE, AH, A (with BFE Complete Items C2.a–h below according to the benchmark Utilized: GPS Observation Indicate elevation datum used for the elevations in NGVD 1929 NAVD 1988 Other Datum used for building elevations must be the said Top of bottom floor (including basement, crawled) Top of the next higher floor c) Bottom of the lowest horizontal structural memical Attached garage (top of slab) e) Lowest elevation of machinery or equipment see (Describe type of equipment and location in Confidence of the confid	ction Drawings* Both construction of the build construction of the build construction of the build construction of the build construction of the building diagram specifies. Wertical Daturn items a) through h) be car/Source:ame as that used for the space, or enclosure flood ber (V Zones only) dervicing the building comments) and (LAG) and (HAG)	uilding Under Construding is complete. BFE), AR, AR/A, AR/A in Item A7. In Puert 1988 dow. BFE.	Check the measurement used. 720.0 feet meters feet meters feet meters feet meters 729.2 feet meters		
structural support			720.0 feet meters		
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION					
This certification is to be signed and sealed by a land so I certify that the information on this Certificate represent statement may be punishable by fine or imprisonment to Were latitude and longitude in Section A provided by a	is my best efforts to inte inder 18 U.S. Code, Sei	rpret the data availab ction 1001.	law to certify elevation information. ble. I understand that any false Check here if attachments.		
Certifier's Name Kevin Schafer	License Number 923				
Title Professional Surveyor Company Name Design Tech Inc Address 749 Divide Ridge Road City Given	State West Virginia	ZIP Code 25245	D. School A. L. Control of the Contr		
Signature And State of the Stat	Date 03-11-2021	Telephone (304) 746-4734	Ext.		
Copy all pages of this Elevation Certificate and all attachme		• •	gent/company, and (3) building owner		
Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner. Comments (including type of equipment and location, per C2(e), if applicable) Skirting framed with metal studs, lathe, foam board insulation and stucco on the exterior. (2) Model CSBA816 Breakaway 24" X 24" Flood vents installed					

ELEVATION CERTIFICATE

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

				Expiration Date	e: November 30, 2022
IMPORTANT: In these spaces, copy the corresponding information from Section A.					NCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or 1000 Dickinson Mobile Home Park Lot 123	Bldg. No.) or P.C	. Route and E	Box No.	Policy Number	
City Stat Charleston Wes	e st Virginia	ZIP Code 25306		Company NAI	C Number
SECTION E - BUILDING ELEV	_	ATION (SLIP	VEY NOT BFE)	REQUIRED)	
For Zones AO and A (without BFE), complete Items E1–E5 complete Sections A, B,and C. For Items E1–E4, use naturenter meters.	1641-0-116			LOMA or LOMP nent used. In Pu	R-F request, uerto Rico only,
 E1. Provide elevation information for the following and che the highest adjacent grade (HAG) and the lowest adjacent a) Top of bottom floor (including basement, 	ck the appropriate cent grade (LAG).	e boxes to sho	ow whether	the elevation is	above or below
crawlspace, or enclosure) is b) Top of bottom floor (including basement		feet	meters	above or	below the HAG.
crawlspace, or enclosure) is			meters		below the LAG.
E2. For Building Diagrams 6–9 with permanent flood opening the next higher floor (elevation C2.b in the diagrams) of the building is	ngs provided in S	Name of the last o			
E3. Attached garage (top of slab) is			meters		below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is		□ leet	meters	☐ above or	below the HAG.
E5. Zone AO only: If no flood depth number is available, is a floodplain management ordinance?	the top of the half	feet	meters	above or	below the HAG.
floodplain management ordinance? Yes No	Unknown.	The local office	ial must ce	rdance with the rtify this informa	e community's ation in Section G.
SECTION F - PROPERTY OWNER	OR OWNER'S R	EPRESENTA	TIVE) CER	TIFICATION	
The property owner or owner's authorized representative wh community-issued BFE) or Zone AO must sign here. The sta	o completes Sect	ions A, B, and	E for Zone	A (without a F	EMA-issued or
Property Owner or Owner's Authorized Representative's Nar Kevin Schafer	ne	, b, and	L are correc	to the best of	my knowledge.
Address	City		State		710.0 . 1
749 Divide Ridge Road Signature	Given			Virginia	ZIP Code 25245
Km () Stall	Date 03-11-	2021	Telep (304)	hone 746-4734	
Comments /					
				Check here	e if attachments.



ICC-ES Evaluation Report

ESR-3851

Reissued September 2020 Revised January 2021 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 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 × 10 ¹ / ₂ × 1 ³ / ₄	16 x 8 ¹ / ₄	305
ICCINSULATED	$18^{1}/_{4} \times 10^{1}/_{2} \times 1^{3}/_{4}$	15³/ ₄ × 8	300
ICCSTACKED2	30 x 30 x 2 ³ / ₄	24 x 24	610
ICCSTACKED4	40 ¹ / ₂ × 24 ³ / ₄ × 2 ³ / ₄	35 ¹ / ₄ x 19 ¹ / ₂	1,220

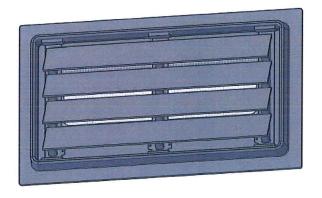


FIGURE 1—CRAWL SPACE DOOR SYSTEMS FLOOD VENT

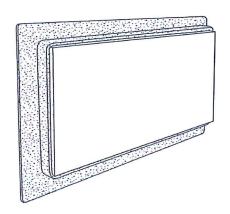


FIGURE 2—FLOOD VENT INSULATED KIT



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.

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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 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.

