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





# **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.

	SEC	TION A - PROPERTY	Y INFOR	MATION		FOR INSU	RANCE COMPANY USE	
A1. Building Owner's Name					Policy Num	ber		
CK CARR BROTHERS 2, LLC								
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.							IAIC Number:	
129 MARBLEHEA	129 MARBLEHEAD DRIVE							
City				State		ZIP Code		
				South C	arolina	29566		
A3. Property Desc UNIT 28 CAPE CC	D COTTAGE	nd Block Numbers, 1 ES @ MARKER 350	ax Parcel	Number, Le	gal Description, e	tc.)		
A4. Building Use (	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENTIAL							
A5. Latitude/Longi	tude: Lat. 3	3D51'10.991"	Long. 78	8D39'25.085'	Horizonta	al Datum: 🔄 NAD	1927 🛛 NAD 1983	
A6. Attach at leas	t 2 photograp	hs of the building if th	e Certific	ate is being u	used to obtain floo	od insurance.		
A7. Building Diagr	am Number	6						
A8. For a building	with a crawls	pace or enclosure(s):						
a) Square foo	tage of crawl	space or enclosure(s	)		1144.00 sq ft			
b) Number of	permanent flo	ood openings in the c	rawlspace	e or enclosur	e(s) within 1.0 foo	t above adjacent gr	ade 6	
c) Total net ar	ea of flood o	penings in A8.b	1	230.00 sq ir	ı			
d) Engineered	l flood openir	ngs? 🖂 Yes 🔲 I	No					
A9 For a building y	with an attack	ned garage						
a) Square foo	hane of attack			N/A sa f	•			
b) Number of	nermanent fl	and openings in the ai	ttached a	arade within	1 0 foot above ad	iscent grade NVA		
a) Total pot ar			liacheù y					
				N/A SC	110			
d) Engineered	l flood openin	igs? [] Yes []]	No					
	SE	ECTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM) INI	ORMATION		
B1. NFIP Commur HORRY COUNTY	iity Name & ( 450104	Community Number		B2. County HORRY CO	Name DUNTY		B3. State South Carolina	
B4 Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIF Effe Re	RM Panel ective/ vised Date	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, us	Elevation(s) Be Base Flood Depth)	
45051C0606	к	12-16-2021	12-16-2	2021	AE	10		
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:								
B11. Indicate elev	ation datum (	used for BFE in Item I	B9: 🗌 N	IGVD 1929	× NAVD 1988	Other/Source:		
B12. Is the buildin	g located in a	a Coastal Barrier Res	ources S	ystem (CBRS	6) area or Otherwi	se Protected Area (	OPA)? 🗌 Yes 🔀 No	
Designation	Date: N/A		CBRS	ΟΡΑ				

×			127368 1.18-20, PMI
ELEVATION CERTIFICATE	Expiration Date: November 30, 2022		
IMPORTANT: In these spaces, copy the o	corresponding information from S	ection A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Un 129 MARBLEHEAD DRIVE	it, Suite, and/or Bldg. No.) or P.O. Ro	oute and Box No.	Policy Number:
City LITTLE RIVER	State ZI South Carolina 29	P Code 566	Company NAIC Number
SECTION C -	BUILDING ELEVATION INFORM	TION (SURVEY	REQUIRED)
C1. Building elevations are based on: *A new Elevation Certificate will be re	Construction Drawings* Buequired when construction of the buil	uilding Under Const ding is complete.	truction* [X] Finished Construction
C2. Elevations – Zones A1–A30, AE, AH Complete Items C2.a–h below accor Benchmark Utilized: <u>SC VRS</u>	, A (with BFE), VE, V1–V30, V (with ding to the building diagram specifie Vertical Datur	BFE), AR, AR/A, A d in Item A7. In Pue n: NAVD 88	R/AE, AR/A1–A30, AR/AH, AR/AO. erto Rico only. enter meters.
Indicate elevation datum used for the	e elevations in items a) through h) be	low	
🗌 NGVD 1929 🖂 NAVD 19	988 Other/Source:		
Datum used for building elevations m	nust be the same as that used for the	BFE.	
			Check the measurement used
a) I op of bottom floor (including bas	sement, crawlspace, or enclosure floo	or)	
b) Top of the next higher floor			20.5 X reet meters
c) Bottom of the lowest horizontal st	ructural member (V Zones only)		N/A feet meters
<ul> <li>d) Attached garage (top of slab)</li> <li>e) Lowest elevation of machinery or</li> </ul>	equipment servicing the building		N/A X feet meters
(Describe type of equipment and	location in Comments)		11.9 X feet meters
t) Lowest adjacent (finished) grade	next to building (LAG)		
g) Highest adjacent (finished) grade	next to building (HAG)		10.2 × feet meters
<ul> <li>h) Lowest adjacent grade at lowest structural support</li> </ul>	elevation of deck or stairs, including		N/A ifeet imeters
SECTION D -	- SURVEYOR, ENGINEER, OR AI	RCHITECT CERT	IFICATION
This certification is to be signed and seal I certify that the information on this Certifi statement may be punishable by fine or i	ed by a land surveyor, engineer, or a cate represents my best efforts to ini mprisonment under 18 U.S. Code, Si	rchitect authorized terpret the data ava tection 1001.	by law to certify elevation information. ailable. I understand that any false
Were latitude and longitude in Section A	provided by a licensed land surveyor	? 🛛 Yes 🗌 No	Check here if attachments.
Certifier's Name JACQUES J. BONNETT	License Number 21431		ROLINA
Title PLS			
Company Name SITE SURVEYING, LLC			No seal and
Address 111 WHITE OAK FOREST PL			Here o
City CONWAY	State South Carolina	ZIP Code 29527	ACQUES JULY
Signature	Date 01-14-2022	Telephone (843) 397-8000	Ext.
Copy all pages of this Elevation Certificate	and all attachments for (1) community	official, (2) insurand	ce agent/company, and (3) building owner.
Comments (including type of equipment a LOWEST MACHINERY IS THE ELEVAT VENT SEE ATTACHED SHEET THE NE INCHES OF OPENING TO MATCH ENG FLOOR IS AN ENCLOSED GARAGE ON UNIT PLATFORM IS ELEVATIONS 14.5 TO NGVD 1929.	and location, per C2(e), if applicable) OR MECHANICAL PLATFORM. FL ET ARE OF OPENINGS IS 630 SQU INEERED RELIEF AREA OF OPEN I FOUNDATION AND FRAMING CO 7'. HOUSE PERMITED UNDER OLI	OOD VENTS ARE ARE INCHES. TH INGS. THIS UNIT NSIDERED SHEA D MAP BFE AE12 I	ENGINEERED FOR 205 SQ FT PER E COUNTY MAKES ME PUT SQUARE IS NOT ON PILES, BUT BOTTOM R WALLS BY HORRY COUNTY. AC NGVD 1929. ADD 1.04' TO CONVERT

				12736
ELEVATION CERTIFICATE			OMB No. 1660-0 Expiration Date:	008 <b>RMLC</b> November 30, 2022
MPORTANT: In these spaces, copy the correspon	FOR INSURAN	CE COMPANY USE		
Building Street Address (including Apt., Unit, Suite, a 129 MARBLEHEAD DRIVE	and/or Bldg. No.) or P.	O. Route and Box N	No. Policy Number:	
City LITTLE RIVER	State South Carolina	ZIP Code 29566	Company NAIC	Number
SECTION E – BUILDING E FOR ZO	ELEVATION INFORI	MATION (SURVEY A (WITHOUT BFE	(NOT REQUIRED)	
For Zones AO and A (without BFE), complete Items complete Sections A, B, and C. For Items E1–E4, use enter meters.	E1–E5. If the Certifica e natural grade, if avai	te is intended to sup lable. Check the me	pport a LOMA or LOMR- easurement used. In Pue	F request, erto Rico only,
E1. Provide elevation information for the following a the highest adjacent grade (HAG) and the lowes	nd check the appropri st adjacent grade (LAC	ate boxes to show v G).	whether the elevation is a	above or below
crawlspace, or enclosure) is		feet	meters above or	below the HAG.
<ul> <li>b) Lop of bottom floor (including basement, crawlspace, or enclosure) is</li> </ul>		feet	] meters 🔲 above or	below the LAG.
E2. For Building Diagrams 6–9 with permanent floor	d openings provided ir	n Section A Items 8	and/or 9 (see pages 1-2	of Instructions),
the diagrams) of the building is		feet	meters above or	below the HAG.
E3 Attached garage (top of slab) is		feet	] meters 🗌 above or	below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is		feet	] meters 🗌 above or	below the HAG.
E5. Zone AO only: If no flood depth number is availa floodplain management ordinance?	able, is the top of the t	oottom floor elevate n. The local official	d in accordance with the I must certify this informa	community's ation in Section G.
SECTION F - PROPERTY O	WNER (OR OWNER	SREPRESENTATI	VE) CERTIFICATION	
The property owner or owner's authorized represent community-issued BFE) or Zone AO must sign here.	ative who completes S The statements in Se	Sections A, B, and E ections A, B, and E a	F for Zone A (without a F are correct to the best of	EMA-issued or my knowledge.
Property Owner or Owner's Authorized Representati	ve's Name			
Address	Cit	у	State	ZIP Code
Signature	Da	te	Telephone	
Comments				
Connected				
	•			
				and if allochanges
			Check h	ere if attachments.

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ORTANT: In these spaces, copy the corresponding information from Section A.       FOR INSURANCE COMPARY USE         Ording Street Address (including Apt. Unit, Suite, and/or Bidg, No.) or P.O. Route and Box No.       Palicy Number.         MARBLEHEAD DRIVE       State       ZIP Code       Company NAIC Number.         TLE RIVER       South Carolina.       25656       Company NAIC Number.         SECTION G - COMMUNITY INFORMATION (OPTIONAL)       SECTION G - COMMUNITY INFORMATION (OPTIONAL)         Items A. B. Clore) and G of this Evaluation Entrinse: the applicable items and sign below. Check the measurement of items A. B. Clore) and G of this Evaluatore and the community is floodplain management ordinance can complete the applicable items and sign below. Check the measurement of items A. B. Clore and Check the measurement of an anomality is and sign below. Check the measurement of items A. B. Clore and Check the items and the of the elevation of the accumentation that has been signed and sealed by a liceased surveyor.         Implementation in Section C was taken from other occumentation that has been signed and sealed by a liceased surveyor.         Implementation information (fiction of the cocumentation information. (Infiduate the source and date of the elevation data in the Comments area below.)         Implementation and the off occumentation information. Infinitation. (Infiduate the source and date of the elevation data in the Comments area below.)       Community information (Items G4–G10) is provided for community floodplain management purposes.         Permit Number       G5. Date Permit Issued       G6. Date Certificate of Complainte i	LEVATION CERTIFICATE			OMB No. 1660-0008
ding Street Address (including Apt. Unit. Suite, and/or Bidg No.) or P.O. Route and Box No.       Policy Number         MARBLEHAD DRVE       State       ZIP Code       Company NAIC Number         It.R. RIVER       South Carolina       29566       Company NAIC Number         SECTION G - COMMUNITY INFORMATION (OPTIONAL)       Section G - COMMUNITY INFORMATION (OPTIONAL)       Extended of the southorized by law or ordinance to administer the community's flootplain management ordinance can complete the applicable item(s) and sign below. Check the measurement id in terms GA-G10 in PrestRick to only, enter meters.         Im the information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments are below)         Im the following information (Items G4-G10) is provided for community floodplain management purposes.         Permit Number       G5. Date Permit (asued       G6. Date Certificate of Compliance/Occupancy Issued         This permit has been issued for:       Image: Image	MPORTANT: In these spaces, copy the co	FOR INSURANCE COMPANY USE		
State       ZIP Code       Company NAIC Number         SECTION G - COMMUNITY INFORMATION (OPTIONAL)           Index of final who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete the applicable tern(s) and sign below. Check the measurement of interms of a complete the applicable tern(s) and sign below. Check the measurement of a term of the information in Section C was taken from other documentation flat has been signed and sealed by a locesed surveyor. engineer or archited who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)         A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or 2000 AQ. <ul> <li>The following information (Items G4–G10) is provided for community floodplain management purposes.</li> <li>Permit Number</li> <li>G5. Date Permit Issued</li> <li>G6. Date Certificate of Compliance/Cocupancy Issued</li> <li>This permit has been issued for:</li> <li>New Construction</li> <li>Substantial improvement</li> <li>Elevation of as built lowest floor (including basement) freet</li> <li>meters</li> <li>Datum</li> <li>O community's design flood elevation.</li> <li>feet</li> <li>meters</li> <li>Datum</li> <li>a cone AO) depth of flooding at the building site:</li> <li>genere Title</li> <li>mmunity Name</li> <li>Telephone</li> <li>mmunity is design flood elevation.</li> <li>genere</li> <li>genere</li> <li>genere</li> <li>genere</li> <li>genere</li> <li>genere</li> <li>gene</li> <li>genere</li> <li>genere</li></ul>	Building Street Address (including Apt., Unit, 29 MARBLEHEAD DRIVE	Suite, and/or Bldg. No.) or F	P.O. Route and Box No.	Policy Number:
SECTION G - COMMUNITY INFORMATION (OPTIONAL)         Iccal official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete tors A, B, C (or E), and G of the Elevation Circuit Case Complete the applicable item(s) and sign below. Check the measurement did in items CB-G10. In Puerto Rico only, enter meters.         In the information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)         A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or 20ne AQ         The following information (Items G4–G10) is provided for community floodplain management purposes.         Permit Number       G5. Date Permit Issued       G6. Date Certificate of Compliance/Occupancy Issued         This permit has been issued for:       New Construction       Substantial Improvement         Elevation of as-built lowest floor (including basement)       Ifeet I meters Datum       Immunity's design flood elevation         Q: Community's design flood elevation       Title       Immeters       Datum         Imments (including type of equipment and location. per C2(e). If applicable)       Title	City LITTLE RIVER	State South Carolina	ZIP Code 29566	Company NAIC Number
Elscal official who is authorized by law or ordinance to administer the computer the applicable terms) and sign below. Check the measurement of the terms is all officials. Complete the applicable terms) and sign below. Check the measurement of the terms or and terms of the else terms or and terms of the else terms or addition of the else terms of the else terms or addition of the else terms of terms of the else terms of the else terms of terms of the else terms of t	SECI	TION G - COMMUNITY INF	ORMATION (OPTIONA	L)
□       The information in Section C was taken from other documentation that has been signed and sealed by a locensed surveyor, engineer or archited who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)         □       A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.         □       The following information (Items G4–G10) is provided for community floodplain management purposes.         Permit Number       G5. Date Permit Issued       G6. Date Certificate of Completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.         □       This permit has been issued for:       □ New Construction □ Substantial Improvement         Elevation of as-built lowest floor (including basement)       □ feet □ meters □ Datum         □       feet □ meters □ Datum         □       Community's design flood elevation:         □       feet □ meters □ Datum         □       feet □ meters □ Datum         □       Community's design flood elevation:         □       feet □ meters □ Datum         □ <td>The local official who is authorized by law or Sections A, B, C (or E), and G of this Elevati used in Items G8–G10. In Puerto Rico only,</td> <td>ordinance to administer the on Certificate. Complete the enter meters.</td> <td>community's floodplain applicable item(s) and</td> <td>management ordinance can complete sign below. Check the measurement</td>	The local official who is authorized by law or Sections A, B, C (or E), and G of this Elevati used in Items G8–G10. In Puerto Rico only,	ordinance to administer the on Certificate. Complete the enter meters.	community's floodplain applicable item(s) and	management ordinance can complete sign below. Check the measurement
A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.         The following information (Items G4–G10) is provided for community floodplain management purposes.         Permit Number       G5. Date Permit Issued       G6. Date Certificate of Compliance/Occupancy Issued         This permit has been issued for:       New Construction       Substantial Improvement         Elevation of as-built lowest floor (including basement)       if efet imaters       Datum         BFE or (in Zone AO) depth of flooding at the building site:       if feet imaters       Datum         D Community's design flood elevation:       Title         mmunity Name       Telephone         nature       Date	G1. The information in Section C was t engineer, or architect who is autho data in the Comments area below.	aken from other documentat rized by law to certify elevat )	ion that has been signe ion information. (Indicat	ed and sealed by a licensed surveyor, te the source and date of the elevation
The following information (Items G4–G10) is provided for community floodplain management purposes         Permit Number       G5. Date Permit Issued       G6. Date Certificate of Compliance/Occupancy Issued         This permit has been issued for:       New Construction       Substantial Improvement         Elevation of as-built lowest floor (including basement)       Image: fleet	G2. A community official completed Se or Zone AO.	ction E for a building located	f in Zone A (without a F	EMA-issued or community-issued BFE)
Permit Number       G5. Date Permit Issued       G6. Date Certificate of Compliance/Occupancy Issued         This permit has been issued for:       New Construction       Substantial Improvement         Elevation of as-built lowest floor (including basement)       Feet       meters       Datum         BFE or (in Zone AO) depth of flooding at the building site:       Feet       meters       Datum         D Community's design flood elevation:       Feet       meters       Datum         cal Official's Name       Title         mmunity Name       Telephone         nature       Date	G3. The following information (Items G	4–G10) is provided for comr	nunity floodplain manag	gement purposes.
This permit has been issued for:       New Construction       Substantial Improvement         Elevation of as-built lowest floor (including basement)       if eet imaters       Datum         of the building:       if eet imaters       Datum         BFE or (in Zone AO) depth of flooding at the building site:       if eet imaters       Datum         0       Community's design flood elevation:       if eet imaters       Datum         1ail Official's Name       Title         mmunity Name       Telephone         nature       Date	G4. Permit Number	G5. Date Permit Issued	G	<ol> <li>Date Certificate of Compliance/Occupancy Issued</li> </ol>
Elevation of as-built lowest floor (including basement)       image: feet image: batum image: b	G7. This permit has been issued for:	New Construction	ubstantial Improvement	t
BFE or (in Zone AO) depth of flooding at the building site:	G8. Elevation of as-built lowest floor (includ of the building:	ing basement)		feet 🗌 meters Datum
O Community's design flood elevation:  I feet I meters Datum  I tite  I munity Name I tite I feet I meters Datum I feet I feet I meters I feet I meters I feet I	G9. BFE or (in Zone AO) depth of flooding	at the building site:		feet 🗌 meters Datum
al Official's Name Title  mmunity Name Telephone  nature Date  mments (including type of equipment and location, per C2(e), if applicable)	G10. Community's design flood elevation:			feet meters Datum
mmunity Name Telephone nature Date mments (including type of equipment and location, per C2(e), if applicable)	Local Official's Name	٦	Fitle	
nature Date mments (including type of equipment and location, per C2(e), if applicable)	Community Name	٦	Telephone	
mments (including type of equipment and location, per C2(e), if applicable)	Signature	[	Date	
	Comments (including type of equipment and	location, per C2(e), if application	able)	
Check here if attachments				Check here if attachments

## **ELEVATION CERTIFICATE**

### **BUILDING PHOTOGRAPHS**

See Instructions for Item A6.

AMLEUR 2Z OMB No. 1660-0008 Expiration Date: November 30, 2022

127368 1-18-2022

IMPORTANT: In these spaces, copy the correspo	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, Suite, 129 MARBLEHEAD DRIVE	Policy Number:		
City	State	ZIP Code	Company NAIC Number
LITTLE RIVER	South Carolina	29566	

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 FRONT

Photo Two Caption BACK

Photo Two

Clear Photo One

### **ELEVATION CERTIFICATE**

### **BUILDING PHOTOGRAPHS**

Continuation Page

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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 Four Caption FLOOD VENT

Photo Four

Clear Photo Four

# Certification of Engineered Flood Openings

## In accordance with the Code of Federal Regulations for the National Flood Insurance Program

I hereby certify that the Crawl Space Door Systems flood vents 816CS, 1220CS, 1232CS, 1616CS, 1624CS, 1632CS, 2032CS, 2424CS, and 2436CS are designed are designed in accordance with the requirements of the Code of Federal Regulations for the National Flood Insurance Program (NFIP) to provide automatic equalization of hydrostatic flood forces by allowing for the entry and exit of floodwaters, when properly installed and sized as set forth below. Vent opening measurements were measured and certified by Mr. Christopher Mark Loney, Virginia P.E. NO. 029000. Detailed calculations were prepared as outlined In "Review of certification of Engineered Flood Openings," prepared by Dr. Georg Reichard, Associate Professor of Building Construction, Virginia Tech (available upon request from Crawl Space Door Systems, Inc. billy@crawlspacedoors.com)

# **Design Characteristics**

Section 2.6.2.2 of ASCE/SEI 24-05 provides an equation to determine the required <u>net area</u> of engineered openings (A<sub>o</sub>) for a given <u>enclosed area</u> (A<sub>e</sub>). This equation is based on the hydraulic formula for the flow rate across sharp edged orifices. I have utilized this equation to calculate 1) the restricted flow rate through the main frame opening in case the louver is blown out during a flood event; 2) the flow rate through the individual openings between louver blades; and 3) the flow rate through projected openings between louver blades following hydraulic short-tube theory. The maximum total enclosed area (A<sub>e</sub>) that can be serviced by a single vent has then been determined by utilizing the lowest flow rate of the three assessed scenarios for each vent and is listed in Table 1.

These values are based on the following assumptions:

- In absence of reliable data, the rates of rise and fall have been assumed at a minimum rate of 5 feet/hour;
- The (maximum) difference between the exterior and interior floodwater levels shall not exceed 1 foot during base flood conditions;
- A factor of safety of 5 has been assumed, which is consistent with design practices related to protection of life and property;
- The net area of openings (A<sub>o</sub>) as provided by the manufacturer.

### **Installation Requirements and Limitations**

This certification will be voided if the following installation requirements and limitations are not enforced:

- There shall be a minimum of two openings on different sides of each enclosed area subject to flooding;
- The bottom of all openings shall be no higher than one foot given net area above the higher of the interior or exterior grade that is immediately under each opening;
- No temporary (e.g. during cold weather) or permanent solid cover may be placed into or over the flood vent that would block the automatic entry or exit of floodwaters at any time;
- Where data or analyses indicate more rapid rates of rise and fall, the required number of openings shall be increased to account for those different conditions. The number or size of the openings may be decreased if data or analyses indicate rates of rise and fall are less than 5 feet per hour.

Certifyi	ng Design Professional	TH CARO	
Name	Frederick Allen House	Title President	
Company	House Engineering P.C.	P.C.	
Address	PO Box 466, Kitty Hawk, NC 27949	No. 3900	_
License	South Carolina	License No. 26841	
Signature	Rent altone, P.E.	Date: 11/17/2017	

# Identification of the Building and Installed Flood Vents (By Others)

The flood vent models marked in Table 1\*) are being installed at the following building: Building Address

ing 2012

*)	Model	H x W [in]	A <sub>o</sub> [in <sup>2</sup> ]	A <sub>e</sub> [ft <sup>2</sup> ]
Ø	816CS	8 x 16	105	205
	1220CS	12 x 20	235	500
	1232CS	12 x 32	305	645
	1616CS	16 x 16	180	395
	1624CS	16 x 24	310	670
	1632CS	16 x 32	405	835
	2032CS	20 x 32	630	1240
	2424CS	24 x 24	570	1230
	2436CS	24 x 36	850	1765

**Table 1** Maximum total <u>enclosed area</u> (A<sub>e</sub>) that can be serviced by each individual model based on the given <u>net area</u> of engineered openings (A<sub>o</sub>)

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RMLEV.22