127348 11-3-21 Christongun

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

4-21

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

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

| NAME OF A DESCRIPTION O           |  | TION A - PROPERT  | YINFORMATION  |  | FOR INSURANCE COMPANY  |
|--|--|---|---|--|--|
| <ol> <li>Building Own<br/>CK CARR BROT</li> </ol>  | ner's Name<br>HERS 2, LLC  |   |   |  | Policy Number:   |
| 2. Building Stre<br>Box No.<br>244 GLOUCEST  | eet Address (in<br>ER WAY  | cluding Apt., Unit, Su  | ite, and/or Bldg. No.)  | or P.O. Route and  | Company NAIC Number  |
| City   |  |   | State   |  | ZIP Code   |
| LITTLE RIVE  | R  |   | South C   | arolina  | 29566  |
| A3. Property Des<br>JNIT 1 CAPE CO   | scription (Lot a   | and Block Numbers, T<br>S @ MARKER 350  | Tax Parcel Number, Le   | egal Description, e  | tc.)   |
| 4. Building Use  | e (e.g., Resider   | ntial, Non-Residentia   | I, Addition, Accessory,   | etc.) RESIDEN  | NTIAL  |
| 5. Latitude/Lon  | gitude: Lat. 3   | 3D51'13.649"  | Long. 78D39'24.106  | Horizonta  | al Datum: 🗌 NAD 1927 🔀 NAD 198   |
| 6. Attach at lea   | ist 2 photograp  | ohs of the building if t  | he Certificate is being   | used to obtain floo  | d insurance  |
| 7 Building Dia   | aram Number  | 6   |   |  |  |
| P. For a buildin   |  |   |   |  |  |
| No. For a buildin  | g with a crawis  | space or enclosure(s  | ).  |  |  |
| a) Square to   | potage of craw   | ispace or enclosure(s   | 5)  | 1144.00 sq ft  |  |
| b) Number o  | f permanent fl   | ood openings in the o   | crawlspace or enclosu   | re(s) within 1.0 foo   | t above adjacent grade 6   |
| c) Total net   | area of flood o  | penings in A8.b   | 1230.00 sq i  | n  |  |
| d) Engineen  | ed flood openi   | ngs? Xyes   | No  |  |  |
|  | and the second second second   |   | 110   |  |  |
|  |  |   |   |  |  |
| 9. For a building  | g with an attac  | hed garage:   |   |  |  |
| <ul><li>A9. For a building</li><li>a) Square for</li></ul>   | g with an attac  | hed garage:<br>hed garage   | N/A sq  | t  |  |
| <ul><li>N9. For a building</li><li>a) Square fo</li><li>b) Number o</li></ul>  | g with an attac<br>otage of attact<br>f permanent fl   | hed garage:<br>hed garage<br>ood openings in the a  | N/A sq attached garage within   | ft<br>1.0 foot above ad  | jacent grade N/A   |
| <ul> <li>A9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total part i</li> </ul>   | g with an attack<br>otage of attack<br>if permanent file   | hed garage:<br>hed garage<br>ood openings in the a  | N/A sq<br>attached garage within  | ft<br>1.0 foot above ad  | jacent grade N/A   |
| <ul> <li>A9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fl<br>area of flood o  | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b   | N/A sq<br>attached garage within<br>N/A se  | ft<br>1.0 foot above ad<br>q in  | jacent grade N/A   |
| <ul> <li>49. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fil<br>area of flood op<br>ed flood openir   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs? Yes X   | N/A sq<br>attached garage within<br>N/A so<br>No  | ft<br>1.0 foot above ad<br>q in  | jacent grade N/A   |
| <ul> <li>N9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineered</li> </ul>   | g with an attact<br>otage of attact<br>of permanent fl<br>area of flood o<br>ed flood openir   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs?   | N/A sq attached garage within N/A sq N/A sq   | ft<br>1.0 foot above ad<br>q in  | jacent grade N/A   |
| <ul> <li>A9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fl<br>area of flood o<br>ed flood openir<br>SI   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>mgs? Yes X<br>ECTION B – FLOOD   | N/A sq<br>attached garage within<br>N/A so<br>No  | ft<br>1.0 foot above ad<br>g in<br>MAP (FIRM) INF  | jacent grade N/A   |
| <ul> <li>A9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineeree</li> <li>31. NFIP Communication</li> </ul>   | g with an attack<br>otage of attack<br>of permanent fil-<br>area of flood o<br>ed flood openir<br>SI<br>unity Name & (<br>X 450104   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs? Yes X<br>ECTION B - FLOOD<br>Community Number   | N/A sq<br>attached garage within<br>N/A so<br>No<br>INSURANCE RATE<br>B2. County  | ft<br>1.0 foot above ad<br>a in<br>MAP (FIRM) INF<br>Name  | FORMATION  |
| <ul> <li>A9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineeree</li> <li>31. NFIP Communication</li> <li>40 COUNTY</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fl<br>area of flood op<br>ed flood openir<br>SI<br>unity Name & O<br>Y 450104  | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9.b<br>mgs? Yes X<br>ECTION B - FLOOD<br>Community Number   | N/A sq<br>attached garage within<br>N/A so<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co  | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY  | FORMATION<br>B3. State<br>South Carolina   |
| <ul> <li>49. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineeree</li> <li>31. NFIP Communication</li> <li>40 RRY COUNT</li> <li>4. Map/Panel</li> </ul>   | g with an attack<br>otage of attack<br>of permanent fil<br>area of flood op<br>ed flood openin<br>SI<br>unity Name & (<br>Y 450104<br>B5. Suffix   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index   | N/A sq<br>attached garage within<br>N/A so<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel  | ft<br>1.0 foot above ad<br>a in<br>MAP (FIRM) INF<br>Name<br>OUNTY<br>B8. Flood  | FORMATION B3. State South Carolina B9. Base Flood Elevation(s)   |
| <ul> <li>A9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineeree</li> <li>31. NFIP Commutor</li> <li>4. Map/Panel Number</li> </ul>   | g with an attact<br>otage of attact<br>of permanent fluarea of flood openin<br>ed flood openin<br>SI<br>unity Name & O<br>Y 450104<br>B5. Suffix   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date   | N/A sq<br>attached garage within<br>N/A so<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date  | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY<br>B8. Flood<br>Zone(s)  | FORMATION<br>B3. State<br>South Carolina<br>B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth  |
| <ul> <li>9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> <li>1. NFIP Commu<br/>IORRY COUNT</li> <li>Map/Panel<br/>Number</li> <li>051C0581</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fli-<br>area of flood op<br>ed flood openir<br>SI<br>unity Name & (<br>Y 450104<br>B5. Suffix<br>H   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9.b<br>mgs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date<br>09-17-2003   | N/A sq<br>attached garage within<br>N/A sv<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date<br>08-23-1999  | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY<br>B8. Flood<br>Zone(s)<br>AE  | FORMATION<br>B3. State<br>South Carolina<br>B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth<br>12  |
| <ul> <li>9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineeree</li> <li>11. NFIP Communication</li> <li>i10. Indicate the FIS Proj</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fluarea of flood openin<br>ed flood openin<br>SI<br>unity Name & Q<br>Y 450104<br>B5. Suffix<br>H<br>e source of the<br>file [X] FIRM  | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>mgs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date<br>09-17-2003<br>Base Flood Elevatio<br>Community Dete  | N/A sq<br>attached garage within<br>N/A sq<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date<br>08-23-1999  | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY<br>B8. Flood<br>Zone(s)<br>AE<br>Bood depth entered<br>urce:                                       | FORMATION         B3. State<br>South Carolina         B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth<br>12         d in Item B9:  |
| <ul> <li>49. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> <li>31. NFIP Communication</li> <li></li></ul> | g with an attact<br>otage of attact<br>of permanent fli-<br>area of flood openir<br>ed flood openir<br>SI<br>unity Name & Q<br>Y 450104<br>B5. Suffix<br>H<br>e source of the<br>file $\boxtimes$ FIRM   | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9.b<br>mgs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date<br>09-17-2003<br>Base Flood Elevatio<br>Community Dete  | N/A sq<br>attached garage within<br>N/A sv<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date<br>08-23-1999<br>n (BFE) data or base for<br>ermined _ Other/So                                      | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY<br>B8. Flood<br>Zone(s)<br>AE<br>flood depth entered<br>urce:                                      | FORMATION         B3. State<br>South Carolina         B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth<br>12         d in Item B9:  |
| <ul> <li>49. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> <li>31. NFIP Communication</li> <li></li></ul> | g with an attack<br>otage of attack<br>of permanent fil<br>area of flood openin<br>ed flood openin<br>Si<br>unity Name & G<br>Y 450104<br>B5. Suffix<br>H<br>B5. Suffix<br>H<br>e source of the<br>file $\boxtimes$ FIRM                       | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date<br>09-17-2003<br>Base Flood Elevatio<br>Community Dete<br>used for BFE in Item                          | N/A sq<br>attached garage within<br>N/A sq<br>No<br>DINSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date<br>08-23-1999<br>n (BFE) data or base formined Other/So<br>B9: X NGVD 1929                          | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY<br>B8. Flood<br>Zone(s)<br>AE<br>B0od depth entered<br>urce:<br>NAVD 1988                          | FORMATION         B3. State<br>South Carolina         B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth<br>12         d in Item B9:         Other/Source:  |
| <ul> <li>9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> <li>91. NFIP Communication</li> <li>91. Indicate elements</li> <li>91. Indicate elements</li> </ul>   | g with an attact<br>otage of attact<br>of permanent fluarea of flood openin<br>ed flood openin<br>SI<br>unity Name & G<br>Y 450104<br>B5. Suffix<br>H<br>e source of the<br>file $\boxtimes$ FIRM  | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9.b<br>ngs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date<br>09-17-2003<br>Base Flood Elevatio<br>Community Dete<br>used for BFE in Item                          | N/A sq<br>attached garage within<br>N/A so<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date<br>08-23-1999<br>n (BFE) data or base for<br>ermined Other/So<br>B9: X NGVD 1929                     | t<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>DUNTY<br>B8. Flood<br>Zone(s)<br>AE<br>flood depth entered<br>urce:<br>NAVD 1988                          | FORMATION         B3. State<br>South Carolina         B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth<br>12         d in Item B9:         Other/Source:  |
| <ul> <li>9. For a building</li> <li>a) Square fo</li> <li>b) Number o</li> <li>c) Total net a</li> <li>d) Engineere</li> <li>10. NFIP Communication</li> <li>Map/Panel Number</li> <li>051C0581</li> <li>10. Indicate the Direct Profession</li> <li>11. Indicate ele</li> <li>12. Is the building</li> </ul>  | g with an attact<br>otage of attact<br>of permanent fli-<br>area of flood openin<br>ed flood openin<br>SI<br>unity Name & G<br>Y 450104<br>B5. Suffix<br>H<br>e source of the<br>file $\boxtimes$ FIRM<br>avation datum in<br>ing located in a | hed garage:<br>hed garage<br>ood openings in the a<br>penings in A9 b<br>ngs? Yes X<br>ECTION B - FLOOD<br>Community Number<br>B6. FIRM Index<br>Date<br>09-17-2003<br>Base Flood Elevatio<br>Community Dete<br>used for BFE in Item<br>a Coastal Barrier Res | N/A sq<br>attached garage within<br>N/A sv<br>No<br>INSURANCE RATE<br>B2. County<br>HORRY Co<br>B7. FIRM Panel<br>Effective/<br>Revised Date<br>08-23-1999<br>n (BFE) data or base formined _ Other/So<br>B9: X NGVD 1929<br>sources System (CBR: | ft<br>1.0 foot above ad<br>a in<br><b>MAP (FIRM) INF</b><br>Name<br>OUNTY<br>B8. Flood<br>Zone(s)<br>AE<br>flood depth entered<br>urce:<br>NAVD 1988<br>S) area or Otherwite | FORMATION         B3. State<br>South Carolina         B9. Base Flood Elevation(s)<br>(Zone AO, use Base Flood Depth<br>12         d in Item B9:         Other/Source:         se Protected Area (OPA)?         Yes |

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

|   |  |   |  |                                | Expiration Date: November 30, 202      |  |  |
|---|--|---|--|--------------------------------|--|--|--|
| MPORTANT: In these spaces, copy the corresponding information from Section A. |  |   |  |                                | FOR INSURANCE COMPANY US               |  |  |
| uilding Street Ad<br>44 GLOUCESTI   | ddress (including Apt., Unit, Suite, and/o<br>ER WAY   | r Bldg. No.) or P.C   | ). Route and Box No.   | Policy                         | Number:                                |  |  |
| ity   | Sta  | ate   | ZIP Code   | Compa                          | any NAIC I                             | Number   |  |
| TTLE RIVER  | So   | uth Carolina  | 29566  |                                |  |  |  |
|   | SECTION C - BUILDING EI  | EVATION INFO  | RMATION (SURVEY  | REQUIRE                        | ED)                                    |  |  |
| C1. Building ele<br>*A new Ele  | evations are based on:  Construct<br>vation Certificate will be required when  | on Drawings*  | Building Under Cons<br>building is complete.   | truction*                      | X Finis                                | ned Construction   |  |
| C2. Elevations<br>Complete I  | - Zones A1-A30, AE, AH, A (with BFE)<br>tems C2.a-h below according to the but   | , VE, V1–V30, V (v<br>Iding diagram spec  | vith BFE), AR, AR/A, A<br>cified in Item A7. In Pu                                       | R/AE, AR                       | A1-A30, Annly, enter                   | AR/AH, AR/AO.<br>meters.                                 |  |
| Benchmark   | Utilized: SC VRS   | Vertical D  | atum: NGVD 1929  |                                |  |  |  |
| Indicate ele  | vation datum used for the elevations in  | items a) through h  | ) below.   |                                |  |  |  |
|   | IGVD 1929 NAVD 1988 Other  | Source:   |  |                                |  |  |  |
| Datum use   | d for building elevations must be the sar  | ne as that used for   | the BFE  | Ch                             | eck the me                             | asurement used   |  |
| a) Top of t   | ottom floor (including basement, crawls  | pace, or enclosure  | floor)   | 10.2                           | 🔀 feet                                 | meters   |  |
| b) Top of t   | he pext higher floor   |   |  | 20.6                           | × feet                                 | meters   |  |
| c) Rottom   | of the lowest horizontal structural moment   | or (V Zanas only)   |  | N/A                            | feet                                   | meters   |  |
| d) Attache  | d aaraaa (top of slab)   | er (v zones only)   |  | N/A                            | x feet                                 | meters   |  |
| d) Attache  | d garage (top of slab)   |   |  | 000                            |  |  |  |
| e) Lowest<br>(Descrit   | elevation of machinery or equipment se<br>be type of equipment and location in Col   | rvicing the building<br>mments)   |  | 13.8                           | 🔀 feet                                 | meters   |  |
| f) Lowest   | adjacent (finished) grade next to buildin  | g (LAG)   |  | 9.4                            | i feet                                 | meters   |  |
| a) Highest  | adjacent (finished) grade next to buildir  | ng (HAG)  |  | 9.7                            | × feet                                 | meters   |  |
| h) Lowest   | adjacent grade at lowest elevation of de   | ock or stairs includ  | ina  |                                |  |  |  |
| structur  | al support   | Sector Stans, molda   |  | N/A                            | feet                                   | meters   |  |
|   | SECTION D - SURVEYOR   | R, ENGINEER, OF   | ARCHITECT CERT   | IFICATIO                       | N                                      |  |  |
| This certification<br>certify that the<br>statement may<br>Were latitude an   | n is to be signed and sealed by a land su<br>information on this Certificate represent<br>the punishable by fine or imprisonment u<br>and longitude in Section A provided by a   | urveyor, engineer,<br>Is my best efforts to<br>inder 18 U.S. Code<br>licensed land surve    | or architect authorized<br>o interpret the data ave<br>o, Section 1001.<br>ayor? XYes No | by law to<br>ailable. I un     | certify elev<br>nderstand<br>Check her | ation informatior<br>that any false<br>e if attachments. |  |
| Certifier's Name<br>IACQUES J. BO   | ONNETT   | License Numbe<br>21431  | er   |                                |  | Mun.   |  |
| Title<br>PLS  |  |   |  |                                | 1111 CA                                | NDS  |  |
| Company Name  |  |   | _  |                                | Sar                                    | ace  |  |
| SITE SURVEYI  | NG, LLC  |   |  | Ē                              | 2 22 2                                 | AM 9   |  |
| Address   | K FOREST PL  | 4   |  | 1111                           | PAGFE                                  | lere   |  |
| City<br>CONWAY  |  | State<br>South Carolina   | ZIP Code<br>29527  |                                | ACO                                    | UES J BOIN   |  |
| Signature   | And  | Date<br>10-29-2021  | Telephone<br>(843) 319-8169  | Ext.                           |  |  |  |
| Copy all pages of   | this Elevation Certificate and all attachm   | ents for (1) commu  | nity official, (2) insurand  | ce agent/co                    | mpany, an                              | d (3) building own                                       |  |
| Comments (incl<br>OWEST MACH<br>SHEET. THE NI<br>TO MATCH ENG<br>GARAGE ON F  | uding type of equipment and location, pr<br>INERY WILL BE AC UNIT. FLOOD VE<br>ET ARE OF OPENINGS IS 630 SQUAR<br>GINEERED RELIEF AREA OF OPENIN<br>OUNDATION AND FRAMING CONSID | er C2(e), if applicat<br>ENTS ARE ENGIN<br>E INCHES THE<br>GS THIS UNIT IS<br>ERED SHEAR WA | DIE)<br>EERED FOR 205 SQ<br>COUNTY MAKES ME<br>S NOT ON PILES, BUT<br>LLS BY HORRY COU   | FT PER VI<br>PUT SQU<br>BOTTOM | ENT SEE /<br>ARE INCH<br>I FLOOR I     | ATTACHED<br>ES OF OPENIN<br>S AN ENCLOSE                 |  |
|   |  |   |  |                                |  |  |  |

| ELEVATION   | CERTIFICATE   | Ex  | Expiration Date: November 30, 2022 |  |  |
|---|---|---|------------------------------------|--|--|
| MPORTANT: In  | these spaces, copy the corresponding information f  | from Section A.                                 | FC                                 | OR INSURANCE COMPANY US                                    |  |
| Building Street A<br>244 GLOUCEST                     | ddress (including Apt., Unit, Suite, and/or Bldg. No.) or<br>TER WAY  | P.O. Route and Box                              | No. Po                             | blicy Number:  |  |
| City  | State   | ZIP Code  | Co                                 | ompany NAIC Number   |  |
| LITTLE RIVER  | South Carolina  | 29566   |                                    |  |  |
|   | SECTION E – BUILDING ELEVATION INFO<br>FOR ZONE AO AND ZONE   | RMATION (SURVE<br>E A (WITHOUT BF               | Y NOT RE                           | QUIRED)  |  |
| For Zones AO and<br>complete Section<br>enter meters. | nd A (without BFE), complete Items E1–E5. If the Certific<br>ns A, B,and C. For Items E1–E4, use natural grade, if av   | cate is intended to so<br>vailable. Check the n | upport a LC<br>neasuremen          | MA or LOMR-F request,<br>nt used. In Puerto Rico only,     |  |
| E1. Provide elements<br>the highest<br>a) Top of b    | vation information for the following and check the approp<br>adjacent grade (HAG) and the lowest adjacent grade (Li<br>ottom floor (including basement,         | oriate boxes to show<br>AG).                    | whether th                         | e elevation is above or below                              |  |
| crawlspi  | ace, or enclosure) is   | feet  | meters                             | above or below the HAG                                     |  |
| b) Top of b<br>crawlspi                               | ottom floor (including basement,<br>ace, or enclosure) is   | [] feet   | meters                             | above or below the LAG                                     |  |
|   |   |   |                                    |  |  |
| E2. For Building<br>the next hig<br>the diagram       | Diagrams 6–9 with permanent flood openings provided<br>her floor (elevation C2.b in<br>is) of the building is   | in Section A Items 8                            | and/or 9 (                         | see pages 1–2 of Instructions),                            |  |
| 52 Alleshad   |   |   |                                    |  |  |
| E3. Attached ga                                       | arage (top of slab) is  | feet [  | meters                             | above or below the HAG                                     |  |
| E4. Top of platfi<br>servicing the                    | orm of machinery and/or equipment   | feet [  | meters                             | above or below the HAG                                     |  |
| The property ow<br>community-issue<br>Property Owner  | ner or owner's authorized representative who completes<br>ad BFE) or Zone AO must sign here. The statements in 3<br>or Owner's Authorized Representative's Name | s Sections A, B, and<br>Sections A, B, and E    | E for Zone<br>are correc           | A (without a FEMA-issued or t to the best of my knowledge. |  |
|   |   |   |                                    |  |  |
| Address   | c   | City  | State                              | ZIP Code   |  |
| Signature   | C   | Date  | Telep                              | hone   |  |
| Comments  |   |   |                                    |  |  |
|   |   |   |                                    |  |  |

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

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| ELEVATION CERTIFICATE   |   |   | OMB No. 1660-0008<br>Expiration Date: November 30, 2022                           |
|---|---|---|---|
| MPORTANT: In these spaces, copy the   | corresponding information f   | rom Section A.                                      | FOR INSURANCE COMPANY USE   |
| Building Street Address (including Apt., U<br>244 GLOUCESTER WAY  | nit, Suite, and/or Bldg. No.) or F  | P.O. Route and Box No                               | Policy Number:  |
|   | State<br>South Carolina   | ZIP Code<br>29566                                   | Company NAIC Number   |
| SI  | ECTION G - COMMUNITY INF  | ORMATION (OPTION                                    | AL)   |
| The local official who is authorized by law<br>Sections A, B, C (or E), and G of this Ele-<br>used in Items G8–G10. In Puerto Rico or   | or ordinance to administer the vation Certificate. Complete the<br>ily, enter meters. | community's floodplair<br>applicable item(s) and    | n management ordinance can complete<br>I sign below. Check the measurement        |
| 31. The information in Section C was<br>engineer, or architect who is au<br>data in the Comments area below   | as taken from other documental<br>thorized by law to certify elevat<br>ow.)           | tion that has been sign<br>ion information. (Indica | ed and sealed by a licensed surveyor,<br>ite the source and date of the elevation |
| 32. A community official completed<br>or Zone AO.   | Section E for a building located  | d in Zone A (without a I                            | FEMA-issued or community-issued BFE)  |
| G3. The following information (Item   | s G4–G10) is provided for comr  | munity floodplain mana                              | gement purposes.  |
| G4. Permit Number   | G5. Date Permit Issued  | 0   | G6. Date Certificate of<br>Compliance/Occupancy Issued                            |
| <ul> <li>G8. Elevation of as-built lowest floor (incode of the building:</li> <li>G9. BFE or (in Zone AO) depth of floodi</li> <li>G10. Community's design flood elevation</li> </ul> | ng at the building site:  |   | feet in meters Datum<br>feet in meters Datum<br>feet in meters Datum              |
| ocal Official's Name  | I   | Title   |   |
| Community Name  | 1   | relephone   |   |
| Signature   | C   | Date  |   |
| Comments (including type of equipment a   | nd location, per C2(e), if application  | able)   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   | Check here if attachments.  |

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### **BUILDING PHOTOGRAPHS**

See Instructions for Item A6.

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

| IMPORTANT: In these spaces, cop                            | FOR INSURANCE COMPANY USE |                   |                     |
|--|---------------------------|-------------------|---------------------|
| Building Street Address (including A<br>244 GLOUCESTER WAY | Policy Number:            |                   |                     |
| City<br>LITTLE RIVER                                       | State<br>South Carolina   | ZIP Code<br>29566 | 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 FRONT

**ELEVATION CERTIFICATE** 

Clear Photo One



Photo Two Caption BACK

Photo Two

Clear Photo Two

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

Replaces all previous editions.

## **BUILDING PHOTOGRAPHS**

OMB No. 1660-0008

| Continuation  | Page   | OMB No. 1660-0008<br>Expiration Date: November 30, 2022   |
|---|--|---|
| PORTANT: In these spaces, copy the corresponding information from Section A.  |  |   |
| , Unit, Suite, and/or Bldg. No ) or F   | O. Route and Box No.   | Policy Number:  |
| State<br>South Carolina   | ZIP Code   | Company NAIC Number   |
| Mill Britter (Ir & W)<br>Mill Britter (Ir Reduced Aver) | FLOOD PROTECT  | "Left Side View." When applicable,<br>nts, as indicated in Section A8.  |
| Ninstali<br>Mounted<br>on Any Surface<br>ons and Mounting Hardware Included<br>if durable ABS/PVC (No Rust or Rot)<br>Incedoors.com • info@ crawlspacedo<br>Photo Three   | AND A CONTRACT OF  | E :<br>see Requires<br>ents.<br>benings<br>d and certified<br>encours as<br>movements.<br>after Air How<br>Efford Protectings<br>   |
| Bar and a star bar at a   | A CONTRACTOR OF THE OWNER  | Clear Photo Thr   |
|   |  |   |
|   |  |   |
|   | Install<br>State<br>South Carolina<br>State<br>South Carolina<br>Will fit on the preceding page, at<br>"Rear View"; and, if required,<br>in with representative examples of<br>CECMORERED<br>(FEMA COOP<br>Marked<br>on Any Surface<br>The The Chard Asser<br>Marked<br>on Any Surface<br>Technology of the Market<br>Marked<br>State<br>Carolina<br>Market<br>Market<br>Market<br>State<br>State<br>South Carolina<br>Market<br>State<br>State<br>South Carolina<br>Market<br>Market<br>State<br>State<br>South Carolina<br>Market<br>State<br>Market<br>State<br>State<br>State<br>South Carolina<br>Market<br>State<br>Market<br>State<br>Market<br>Market<br>State<br>Market<br>State<br>State<br>State<br>State<br>South Carolina<br>Market<br>State<br>Market<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>State<br>Sta | EDUCIDING<br>Continuation Page<br>the corresponding information from Section A.<br>. (Init, Suite, and/or Bidg. No.) or P.O. Route and Box No.<br>. State ZIP Code<br>South Carolina 29566<br>will fit on the preceding page, affix the additional photog<br>"Rear View", and, if required, "Right Side View" and<br>on with representative examples of the flood openings or ver<br><b>CEGENE COMPLIANT</b><br>. Unit Suite, and/or Bidg. No.) or P.O. Route and Box No.<br> |

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

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Replaces all previous editions

Clear Photo Four

# 127348

# 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.

| Certifying Design Professional |                                  | WHITH CARO   |  |  |
|--------------------------------|----------------------------------|--|--|--|
| Nome                           | Frederick Allen House            | Title President  |  |  |
| Company                        | House Engineering P.C.           | P.C. P.C. South So |  |  |
| Address                        | PO Box 466, Kitty Hawk, NC 27949 | No. 3900   |  |  |
| License                        | South Carolina                   | License No. 26841  |  |  |
| Signature                      | Rent altons P.E.                 | Dote: 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

| •) | Model  | H x W<br>[in] | A <sub>o</sub><br>[in <sup>2</sup> ] | Ae<br>[ft <sup>2</sup> ] |
|----|--------|---------------|--------------------------------------|--------------------------|
| Ø  | 816CS  | 8 x 16        | 105                                  | 205                      |
|    | 1220CS | 12 x 20       | 235                                  | 500                      |
|    | 1232C5 | 12 x 32       | 305                                  | 645                      |
|    | 1616CS | 16 x 15       | 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</u> <u>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>e</sub>)

Ver. 2.0

Spring 2012