110103

S.I. V-ZONE DESIGN CERTIFICATE

PRE-CONSTRUCTION_____ AS-BUILT_____

Name of Property Owner_____ Permit #_____
Street Address (property) _____TMS#_____
City_____ State_____ Zip Code_____
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FLOOD INSURANCE RATE MAP INFORMATION

Community # **455418** Map & Panel #_____ Suffix K
Firm Index Date _**Jan.29,2021**

ELEVATION INFORMATION

Required Base Flood Elevation (BFE) _____Ft.
Finished first floor _____Ft.
Bottom of lowest horizontal structural member_____Ft.
Elevation of slab below Base Flood Elevation_____Ft.
Lowest Elevation of mechanical/electrical equipment _____Ft.
Elevation of lowest adjacent grade_____Ft. Highest adjacent grade_____Ft.
Elevation of existing grade (Measured at center of structure) _____Ft. *
Elevation of highest roof ridge _____Ft.
Datum used: NGVD29 _____ NAVD88 _____

***** ***This elevation must be determined before construction plans are submitted. Building official will determine existing grade using an existing topographic survey supplied by the applicant.***

STRUCTURAL INFORMATION

Building code used to develop and/or review structure_____
Basic wind speed_____ Exposure category_____

Seismic design category **D2**

Certifiers name_____
Signature_____ Seal

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V-ZONE CERTIFICATION STATEMENT

NOTE: Certificate must be signed and sealed by a registered professional engineer or architect.

I certify that based upon development and/or review of structural design specifications and plans for construction including consideration of the hydrostatic, hydrodynamic, impact and wind loading involved, the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

1. The finished first floor and all mechanical equipment are elevated to or above the base flood elevation.
2. The pile or column foundation and structure is anchored to prevent flotation, or collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values are those associated with the base flood. Wind loading values are those required by the International Residential Code 2018 Edition as adopted by the Town of Sullivan's Island. The potential for scour has been considered for conditions associated with the base flood. The calculated scour depth for this property is _____ feet.

For "As Built" certifications, I am certifying that the construction has been done in accordance with the design parameters indicated above.

Certifiers Name _____

Signature_____ SEAL

S.I. V-ZONE BREAKAWAY WALL CERTIFICATION
PRE-CONSTRUCTION_____ AS-BUILT_____

Name of Property Owner _____ Permit #_____
Street Address_____ TMS #_____
City _____State _____ Zip Code _____

BREAKAWAY WALL CERTIFICATION STATEMENT

I certify that I have developed or reviewed the design, plans and specifications for construction of the breakaway walls for the structure noted above. The design and methods of construction are in accordance with meeting the accepted standards of practice with the following provisions:

1. Breakaway walls have a design safe loading resistance of not less than ____lbs. and no more than _____lbs.
2. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood.
3. The elevated portion of the structure and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the combined effects of wind and water loads acting simultaneously on all building components, structural and non-structural. Wind loading values used shall be those stated in International Residential Code 2018 Edition. Water loading values shall be those associated with the base flood.

Solid Breakaway spaces are limited to 200 square feet <u>total</u> with vents equaling one inch of vent per square foot of floor space. No heated or cooled spaces are allowed below BFE.

Certifier's Name: _____
Company Name _____
Certifier's Address _____
City_____ State ____ Zip_____ **Seal:**
Zip Code_____
Telephone _____
Email _____
License # _____

Signature _____ Date_____

110103

S. I. V-ZONE CERTIFICATION

_____ _____

PRE-CONSTRUCTION_____ AS-BUILT_____

NOTES

Signature_____ Date_____

S.I. V-ZONE CERTIFICATION INFORMATEION AND REQUIRED DOCUMENTATION

1: All solid walls below Base Flood Elevation must be constructed of a breakaway design certified by a certified design professional, be of class 4 or 5 materials and must have hydrostatic vents to allow the free flow of water into and out of the enclosed area. Vents must equal one square inch of clear opening for every square inch of floor space and be no more than 12 inches above grade. **Total enclosed space may be no more than 200 sq. ft. of solid breakaway walls.** The remaining area below the structure may be enclosed by lattice of an open design and it must be designed to breakaway and must be certified by a design professional. No electric wires and/or boxes, no plumbing pipes or fixtures, no mechanical ducts, equipment, refrigerant lines or structural components may be on or impede the breakaway capacity of the breakaway walls or lattice.
2: C**ertifications must appear on the plans as well as all breakaway wall sections reflecting what is to be built.** Both lattice and solid breakaway wall must be submitted.

Note:
1: A certificate of occupancy will not be issued without an AS_BUILT certification. Please advise the owner or builder that an inspection or inspections of the strapping, framing, foundation will need to be performed by the design professional in order for the design professional to sign off on the AS-Built certificate.
2: All provided documentation must have original seals and signatures.
3: It is understood that some information on these forms must be verified or derived from information provide by a surveyor. Attach a copy of any documentation used or reference this information in the note section of this document.