Town of Fort Myers Beach

Alan Mandel, Mayor | Joe Kosinski, Vice Mayor | Dan Andre, Council Member | Jo List, Council Member | Bob Raymond, Council Member

MEMO OF REVIEW FOR CORRECTNESS AND COMPLETION

In accordance with this community's participation in the National Flood Insurance Program's Community Rating System, all FEMA Elevation Certificates must be correct and complete. The attached Certificate has some incorrect items which are noted here.

SECTION A - PROPERTY INFORMATION	For Insurance Company Use:
A1. Building Owner's Name	Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.	Company NAIC Number
City State ZIP Code	

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) _____

A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: ☐ NAD 1927 ☐ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number _____

A8. For a building with a crawl space or enclosure(s), provide
- a) Square footage of crawl space or enclosure(s) _____ sq ft
- b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade _____
- c) Total net area of flood openings in A8.b _____ sq in

A9. For a building with an attached garage, provide:
- a) Square footage of attached garage _____ sq ft
- b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____
- c) Total net area of flood openings in A9.b _____ sq in

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
TOWN OF FORT MYERS BEACH		

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.
☐ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other (Describe) _____

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☐ NAVD 1988 ☐ Other (Describe) _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☐ No
Designation Date _____ ☐ CBRS ☐ OPA

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-g below according to the building diagram specified in Item A7.
Benchmark Utilized _____ Vertical Datum _____
Conversion/Comments _____

COMMENTS: NEED ENGINEERED VENT INFO

Date of Review: _____ **Community Official:** _____

All elevation certificates shall be maintained by the community and copies with the attached memo made available upon request.

2525 Estero Boulevard • Fort Myers Beach, Florida 33931
Telephone 239-765-0202 • Facsimile 239-765-0909
Website www.FortMyersBeachFL.gov

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

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008
Expires March 31, 2012

SECTION A - PROPERTY INFORMATION

For Insurance Company Use:
Policy Number
Company NAIC Number

A1. Building Owner's Name THOMAS H. SCHULTZ & MARTHA SCHULTZ

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
8371 LAGOON ROAD
City FORT MYERS BEACH State FL ZIP Code 33931

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
LOT 3, LAGUNA SHORES #2

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) RESIDENCE

A5. Latitude/Longitude: Lat. 26:24:23N Long. 81:53:20W Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 6

A8. For a building with a crawlspace or enclosure(s):
- a) Square footage of crawlspace or enclosure(s) 140 sq ft
- b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 5
- c) Total net area of flood openings in A8.b 250 sq in
- d) Engineered flood openings? ☒ Yes ☐ No

A9. For a building with an attached garage:
- a) Square footage of attached garage NA sq ft
- b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 0
- c) Total net area of flood openings in A9.b 0 sq in
- d) Engineered flood openings? ☐ Yes ☒ No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
CITY OF FORT MYERS BEACH 120673	LEE	FL

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
12071C0569F	F	8-28-2008	8-28-2008	VE	ELEVATION 13'

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other (Describe) _____

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other (Describe) _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
Designation Date _____ ☐ CBRS ☐ OPA

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☒ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. Use the same datum as the BFE.
Benchmark Utilized AD1362 Vertical Datum NAVD 1983
Conversion/Comments ___

			Check the measurement used.
a)	Top of bottom floor (including basement, crawlspace, or enclosure floor)	6.4	☒ feet ☐ meters (Puerto Rico only)
b)	Top of the next higher floor	15.0	☒ feet ☐ meters (Puerto Rico only)
c)	Bottom of the lowest horizontal structural member (V Zones only)	14.0	☐ feet ☐ meters (Puerto Rico only)
d)	Attached garage (top of slab)	N.A	☒ feet ☐ meters (Puerto Rico only)
e)	Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	14.7	☒ feet ☐ meters (Puerto Rico only)
f)	Lowest adjacent (finished) grade next to building (LAG)	5.2	☒ feet ☐ meters (Puerto Rico only)
g)	Highest adjacent (finished) grade next to building (HAG)	5.7	☒ feet ☐ meters (Puerto Rico only)
h)	Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	5.2	☒ feet ☐ meters (Puerto Rico only)

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

☒ Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor? ☒ Yes ☐ No

Certifier's Name L.LARRY GARDNER License Number 4294

Title PRESIDENT Company Name ATTORNEY'S REAL ESTATE LAND SURVEYING,INC

Address 1930 PARK MEADOW DR City FT. MYERS State FL ZIP Code 33907

Signature Date 10-20-2010 Telephone 239 277 7330

IMPORTANT: In these spaces, copy the corresponding information from Section A.	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 8371 LAGOON ROAD	Policy Number
City FORT MYERS BEACH State FL ZIP Code 33931	Company NAIC Number

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

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

Comments THE LOWEST EQUIPMENT IS THE AIR CONDITIONER PAD. THE GROUND LEVEL IS SURROUNDED BY BREAKAWAY WALLS AND IS OPEN AND NOT CLOSED.

Signature

Date 10-20-2010

☐ Check here if attachments

SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).
a) Top of bottom floor (including basement, crawlspace, or enclosure) is N.A ☒ feet ☐ meters ☒ above or ☐ below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is N.A ☒ feet ☐ meters ☒ above or ☐ below the LAG.

E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8-9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is N.A ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is N.A ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is N.A ☒ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, and E are correct to the best of my knowledge.*

Property Owner's or Owner's Authorized Representative's Name

Address | City | State | ZIP Code

Signature | Date | Telephone

Comments

☐ Check here if attachments

SECTION G - COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8 and G9.

G1. ☐ 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.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued

G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____.____ ☐ feet ☐ meters (PR) Datum _____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____.____ ☐ feet ☐ meters (PR) Datum _____

G10. Community's design flood elevation _____.____ ☐ feet ☐ meters (PR) Datum _____

Local Official's Name | Title

Community Name | Telephone

Signature | Date

Comments

☐ Check here if attachments

Building Photographs

See Instructions for Item A6.

	For Insurance Company Use:
Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. LAGOON ROAD	Policy Number
City FORT MYERS BEACH State FL ZIP Code 33931	Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two 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." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.

Front view-

REAR VIEW

V-Zone Building Design and Performance Certificate

For new Construction and substantial improvements in Coastal High Hazard Areas

(To be completed by a Licensed Professional Engineer or Architect, authorized to certify such information by State)

Section 1: Structure Location and Ownership Information

Structure Owner TOM & MARTY SCHULTZ

Mailing Address P.O. BOX 131

City DE FOREST State WI Zip Code 53532

Structure Location 8371 LAGOON RD, FT. MYERS BEACH, FL. 33931

Latitude 26.406403 Longitude 81.888767 County LEE

Other Legal Description LAGUNA SHORES UNIT 2 PB 9 PG. 84 LOT 3

Section 2: Flood Insurance Rate Map (FIRM) Data

NOTE: This Certificate is NOT a substitute for an Elevation Certificate.

Community Name FT. MYERS BEACH Community ID Number 120673 FIRM Panel Number 0567

Panel Suffix F FIRM Zone VE-EL13 Date of FIRM Panel 8/28/2008 Date of Index 8/28/2008

Located within the Coastal Barriers Resource Act (CBRA) Zone or Otherwise Protected Areas: Yes ___ / No X ___ /

Section 3: Elevation Information

Record elevations to one tenth of a foot.

Check one: New Building X / Substantial Improvement ___ /

Date of Construction 10/1/09

Elevation of the bottom of the Lowest Horizontal Structural Member..... 14 feet

Base Flood Elevation (BFE)..... 13 feet

Elevation of Lowest Adjacent Grade (LAG)..... 4.2 feet

Elevation of Highest Adjacent Grade (HAG)..... 5.8 feet

Foundation type: Pilings ___ / Columns X /

Foundation Description: PAD FTG'S & PIN FTG'S

Elevation at Bottom of Foundation ..... .66 feet

Depth of scour/erosion used for foundation design..... 2.32 feet

Embedment depth of pilings or foundation below LAG..... 5 feet

Datum used: NGVD 29 ___ / NAVD 88 X / other ___

Section 4: V Zone Certifying Statement

I certify that I have developed or reviewed the structural design, plans, and specifications for construction and that the proposed design and methods of construction are in accordance with accepted standards of engineering practice for meeting the following provisions:

1. The bottom of the lowest horizontal structural member of the lowest floor (excluding pilings or columns) is elevated to above the BFE; and

2. The pile or column foundation and structure attached thereto are anchored to resist floatation, collapse, lateral movement, or other structural damage from the effects of wind and water loads acting simultaneously on all structure components. Water loading values used are those associated with the base flood. Wind loading values used are those required by the applicable state or local building standards. The scour and erosion at the foundation have been estimated for conditions associated with the base flood, including wave action.

Section 5: Breakaway Walls Certifying Statement

I certify that I have developed or reviewed the structural design, plans, and specifications for construction and that the proposed design and methods of construction are in accordance with accepted standards of engineering practice for meeting the following provisions:

1. Breakaway walls will collapse from a water load less than that which would occur during the base flood.

2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural).

3. The space below the lowest floor is designed to be used solely for parking of vehicles, building access, and/or storage.

4. The wind loading values used shall be those required by applicable State or local standards.

Section 6: Certification

Check one: Sections 4 and 5 X / **Section 4 only** ___ / **Section 5 only** ___ /

Name (please print) ANDREW L. CALVETTI

Title PROF. ENGR/OWNER License number 33472

Phone Number 239-332-1777 EMAIL alcengrg@aol.com

Company ANDREW L. CALVETTI, P.E.

Address 12995 S. CLEVELAND AVE #PBS-2

City FT. MYERS State FLA. Zip Code 33907

Certifying professional's seal, signature, license number and date

9-2-09

V-Zone Building Design and Performance Certificate

For new Construction and substantial improvements in Coastal High Hazard Areas

(To be completed by a Licensed Professional Engineer or Architect, authorized to certify such information by State)

Section 1: Structure Location and Ownership Information

Structure Owner TOM & MARTY SCHULTZ

Mailing Address P.O. BOX 131

City DE FOREST State WI Zip Code 53532

Structure Location 8371 LAGOON RD, FT. MYERS BEACH, FL. 33931

Latitude 26.406403 Longitude 81.888767 County LEE

Other Legal Description LAGUNA SHORES UNIT 2 PB 9 PG. 84 LOT 3

Section 2: Flood Insurance Rate Map (FIRM) Data

NOTE: This Certificate is NOT a substitute for an Elevation Certificate.

Community Name FT. MYERS BEACH Community ID Number 120673 FIRM Panel Number 0567

Panel Suffix F FIRM Zone VE-13 Date of FIRM Panel 8/28/2008 Date of Index 8/28/2008

Located within the Coastal Barriers Resource Act (CBRA) Zone or Otherwise Protected Areas: Yes ___ / No X ___ /

Section 3: Elevation Information

Record elevations to one tenth of a foot.

Check one: New Building X / Substantial Improvement ___ /

Date of Construction 10/1/09

Elevation of the bottom of the Lowest Horizontal Structural Member..... 14 feet

Base Flood Elevation (BFE)..... 13 feet

Elevation of Lowest Adjacent Grade (LAG)..... 4.2 feet

Elevation of Highest Adjacent Grade (HAG)..... 5.8 feet

Foundation type: Pilings ___ / Columns X /

Foundation Description: PAD FTG'S & PIN FTG'S

Elevation at Bottom of Foundation ..... .66 feet

Depth of scour/erosion used for foundation design..... 2.32 feet

Embedment depth of pilings or foundation below LAG..... 5 feet

Datum used: NGVD 29 ___ / NAVD 88 X / other ___

Section 4: V Zone Certifying Statement

I certify that I have developed or reviewed the structural design, plans, and specifications for construction and that the proposed design and methods of construction are in accordance with accepted standards of engineering practice for meeting the following provisions:

1. The bottom of the lowest horizontal structural member of the lowest floor (excluding pilings or columns) is elevated to above the BFE; and

2. The pile or column foundation and structure attached thereto are anchored to resist floatation, collapse, lateral movement, or other structural damage from the effects of wind and water loads acting simultaneously on all structure components. Water loading values used are those associated with the base flood. Wind loading values used are those required by the applicable state or local building standards. The scour and erosion at the foundation have been estimated for conditions associated with the base flood, including wave action.

Section 5: Breakaway Walls Certifying Statement

I certify that I have developed or reviewed the structural design, plans, and specifications for construction and that the proposed design and methods of construction are in accordance with accepted standards of engineering practice for meeting the following provisions:

1. Breakaway walls will collapse from a water load less than that which would occur during the base flood.

2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural).

3. The space below the lowest floor is designed to be used solely for parking of vehicles, building access, and/or storage.

4. The wind loading values used shall be those required by applicable State or local standards.

Section 6: Certification

Check one: Sections 4 and 5 X / **Section 4 only** ___/ **Section 5 only** ___/

Name (please print) ANDREW L. CALVETTI

Title PROF. ENGR/OWNER License number 33472

Phone Number 239-332-1777 EMAIL alcengrg@aol.com

Company ANDREW L. CALVETTI, P.E.

Address 12995 S. CLEVELAND AVE #PBS-2

City FT. MYERS State FLA. Zip Code 33907

Certifying professional's seal, signature, license number and date

9-2-09

ENGINEERING "NO-IMPACT" CERTIFICATION

This is to certify that I am duly qualified engineer licensed to practice in the State of Florida. It is to further certify that the attached technical data

supports the fact that proposed SCHULTZ RESIDENCE
(Name of Development)
will not impact the 100-year flood elevations, floodway elevations and

floodway widths on BUCCANEER LAGOON
(Name of Water-body)
at published sections in the Flood Insurance Study for Town of Fort

Myer Beach, dated 8-28-2008 and will not impact the

100-year flood elevations, floodway elevations, and floodway widths at

unpublished cross-sections in the vicinity of the proposed development.

9.2.09
(Date)

(Signature)

SEAL:

prof. ENGR, CONSULTANT/OWNER
(Title)

12995 S. CLEVELAND AVE #PBS-2
(Address)
FT. MYERS, FLA. 33907

ICC-ES Evaluation Report

ESR-2074*

Reissued December 1, 2012
This report is subject to renewal February 1, 2015.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMARTVENT PRODUCTS, INC.
430 ANDBRO DRIVE, UNIT 1
PITMAN, NEW JERSEY 08071
(877) 441-8368
www.smartvent.com
info@smartvent.com

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: FLOODVENT™ MODEL #1540-520; FLOODVENT™ STACKING MODEL #1540-521; SMARTVENT™ MODEL #1540-510; SMARTVENT™ STACKING MODEL #1540-511; WOOD WALL FLOOD MODEL #1540-570; WOOD WALL FLOOD OVERHEAD DOOR MODEL #1540-574; FLOODVENT™ OVERHEAD DOOR MODEL #1540-524; SMARTVENT™ OVERHEAD DOOR MODEL #1540-514

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2009 and 2006 *International Building Code®* (IBC)
- 2009 and 2006 *International Residential Code®* (IRC)

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are automatic foundation flood vents (AFFVs) employed to equalize hydrostatic pressure on nonfire-resistance-rated foundation walls, rolling-type overhead doors and building walls subject to rising or falling flood waters. The Smart Vent® units are intended for use where flood hazard areas have been established in accordance with IBC Section 1612.3 or IRC Section R3222.1. Certain models also allow natural ventilation in accordance with Section 1203 of the IBC or Section 408.1 of the IRC.

3.0 DESCRIPTION

3.1 General:

When subjected to pressure from rising water, the Smart Vent® AFFVs disengage, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The AFFV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to unlatch, allowing the plate to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

3.2 Engineered Opening:

The AFFVs comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent AFFVs must be installed in accordance with Section 4.0.

3.3 Model Sizes:

The FloodVENT™ Model #1540-520, SmartVENT™ Model #1540-510, FloodVENT™ Overhead Door Model #1540-524, and SmartVENT™ Overhead Door Model #1540-514 units measure $15^3/_4$ inches wide by $7^3/_4$ inches high (400 by 196.9 mm). The Wood Wall Flood Model #1540-570 and Wood Wall Flood Overhead Door Model #1540-574 units measure 14 inches wide by $8^3/_4$ inches high (355.6 by 222.25 mm). The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units measure 16 inches wide by 16 inches high (406.4 by 406.4 mm).

3.4 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with $^1/_4$-inch-by-$^1/_4$-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm^2) of net free area to supply natural ventilation. The SmartVENT™ Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm^2) of net free area to supply natural ventilation. Other AFFVs recognized in this report do not offer natural ventilation.

4.0 INSTALLATION

SmartVENT® and FloodVENT™ are designed to be installed into walls or overhead 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. The mounting straps allow mounting in wood, masonry and

concrete walls up to 12 inches (305 mm) thick. In order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24, the Smart Vent® AFFVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one AFFV for every 200 square feet (18.6 m^2) of enclosed area, except that the SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 must be installed with a minimum of one AFFV for every 400 square feet (37.2 m^2) of enclosed area.
- Below the base flood elevation.
- With the bottom of the AFFV located a maximum of 12 inches (305.4 mm) above grade.

5.0 CONDITIONS OF USE

The Smart Vent® AFFVs 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 Smart Vent® AFFVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern.

5.2 The Smart Vent® AFFVs 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.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Automatic Foundation Flood Vents (AC364), dated October 2007.

7.0 IDENTIFICATION

The Smart VENT® models recognized in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).