

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

# ELEVATION CERTIFICATE

OMB No. 1660-0008  
 Expires March 31, 2012

Important: Read the instructions on pages 1-9.

SECTION A - PROPERTY INFORMATION			For Insurance Company Use:
A1. Building Owner's Name <b>ROOSEVELT RANCH, LLC</b>		Policy Number	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>37400 COUNTY ROAD 12</b>		Company NAIC Number	
City <b>ZAMORA</b>	State <b>CA</b>	ZIP Code <b>95698</b>	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) <b>ASSESSOR'S PARCEL NUMBER: 055-070-003</b>			
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <b>RESIDENTIAL (CABIN #5)</b>			
A5. Latitude/Longitude: Lat. <b>38°48'44.21"</b> Long. <b>-121°48'43.95"</b>		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <b>8</b>			
A8. For a building with a crawlspace or enclosure(s):		A9. For a building with an attached garage:	
a) Square footage of crawlspace or enclosure(s) <b>608</b> sq ft		a) Square footage of attached garage <b>N/A</b> sq ft	
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <b>4</b>		b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <b>N/A</b>	
c) Total net area of flood openings in A8.b <b>800</b> sq in		c) Total net area of flood openings in A9.b <b>N/A</b> sq in	
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number <b>YOLO COUNTY UNINCORPORATED 060423</b>		B2. County Name <b>YOLO</b>		B3. State <b>CA</b>	
B4. Map/Panel Number <b>060423 0300</b>	B5. Suffix <b>C</b>	B6. FIRM Index Date <b>04/02/02</b>	B7. FIRM Panel Effective/Revised Date <b>04/02/02</b>	B8. Flood Zone(s) <b>A</b>	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) <b>41.2 (SEE SECTION D)</b>
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9. <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input checked="" type="checkbox"/> Other (Describe) <b>(SEE SECTION D)</b>					
B11. Indicate elevation datum used for BFE in Item B9: <input checked="" type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe)					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> 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 <b>ASSUMED @ INTERSECTION OF CR 12 &amp; CR 97</b> Vertical Datum <b>N.G.V.D. 1929</b> Conversion/Comments <b>SEE SECTION D</b>	
Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor) <b>40.04</b> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
b) Top of the next higher floor <b>43.26</b> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
c) Bottom of the lowest horizontal structural member (V Zones only) <b>N/A</b> <input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
d) Attached garage (top of slab) <b>N/A</b> <input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <b>42.90</b> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
f) Lowest adjacent (finished) grade next to building (LAG) <b>39.83</b> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
g) Highest adjacent (finished) grade next to building (HAG) <b>40.04</b> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)	
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <b>40.50</b> <input checked="" type="checkbox"/> feet <input type="checkbox"/> 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.			
<input checked="" type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Certifier's Name <b>TODD C. TOMMERAASON</b>	License Number <b>R.C.E. 59277</b>		
Title <b>PRINCIPAL/SR. CIVIL ENGINEER</b>	Company Name <b>LAUGENOUR AND MEIKLE</b>		
Address <b>608 COURT STREET</b>	City <b>WOODLAND</b>	State <b>CA</b>	ZIP Code <b>95695</b>
Signature <i>Todd C</i>	Date <b>08/27/2010</b>	Telephone <b>(530)662-1755</b>	



<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>37400 COUNTY ROAD 12 (CABIN #5)</b>			Policy Number
City <b>LAMORA</b>	State <b>CA</b>	ZIP Code <b>95698</b>	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 **B.F.E. TAKEN FROM CLOMR-F COMMENT DOCUMENT FOR CASE NO. 09-09-2361C. SEE ATTACHED ICC-ES EVALUATION REPORT (ESR-2074) FOR SMARTVENT MODEL #1540-510. THE BENCHMARK WAS ASSUMED FROM THE INTERSECTION OF CR12 & CR97 SHOWN TO BE ELEVATION 34 (NGVD 29) ON EL DORADO BEND USGS QUAD MAP. LOWEST MACHINERY IS BOTTOM OF AIR CONDITIONING UNIT.**

Signature *Todd C. H.* Date **08/27/2010**  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 0.00  feet  meters  above or  below the HAG.  
 b) Top of bottom floor (including basement, crawlspace, or enclosure) is 0.21  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 3.22  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 2.86  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  
**TODD C. TOMMERAASON/LAUGENOUR AND MEIKLE**

Address **608 COURT STREET** City **WOODLAND** State **CA** ZIP Code **95695**

Signature *Todd C. H.* Date **08/27/2010** Telephone **(530)662-1755**

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 <b>209-0622</b>	G5. Date Permit Issued <b>9/17/2009</b>	G6. Date Certificate Of Compliance/Occupancy Issued <b>10/14/2010</b>
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- G7. This permit has been issued for:  New Construction  Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building 40.4  feet  meters (PR) Datum \_\_\_\_\_
- G9. BFE or (in Zone AO) depth of flooding at the building site 41.2  feet  meters (PR) Datum \_\_\_\_\_
- G10. Community's design flood elevation \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_

Local Official's Name **LOWELL BUTLER** Title **BUILDING OFFICIAL**

Community Name **YOLO COUNTY** Telephone **530-666-8803**

Signature *Lowell Butler* Date **9-22-10**

Comments

Check here if attachments

# Building Photographs

See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>37400 COUNTY ROAD 12 (CABIN #5)</b>			For Insurance Company Use: Policy Number
City <b>ZAMORA</b>	State <b>CA</b>	ZIP Code <b>95698</b>	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



CABIN #5

# Building Photographs

Continuation Page

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>37400 COUNTY ROAD 12 (CABIN #5)</b>			For Insurance Company Use: Policy Number
City <b>ZAMORA</b>	State <b>CA</b>	ZIP Code <b>95698</b>	Company NAIC Number

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."

## SIDE VIEW



CABIN #5

# Building Photographs

Continuation Page

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. <b>37400 COUNTY ROAD 12 (CABIN #5)</b>			For Insurance Company Use: Policy Number
City <b>ZAMORA</b>	State <b>CA</b>	ZIP Code <b>95698</b>	Company NAIC Number

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."

## REAR VIEW



CABIN #5

**ICC-ES Evaluation Report****ESR-2074**

Reissued February 1, 2009

This report is subject to re-examination in two years.

[www.icc-es.org](http://www.icc-es.org) | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 10—SPECIALTIES  
Section: 10230—Vents

## REPORT HOLDER:

SMART VENT® , INC.  
450 ANDBRO DRIVE, SUITE 2B  
PITMAN, NEW JERSEY 08071  
(856) 307-1468  
[www.smartvent.com](http://www.smartvent.com)  
[eval@smartvent.com](mailto:eval@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:

- 2006 *International Building Code*® (IBC)
- 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. 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, and each opening provides 76 square inches (49 032 mm<sup>2</sup>) of net free area for flood mitigation in the open position. The SmartVENT™ Stacking Model #1540-511 and FloodVENT™ Stacking Model #1540-521 units each contain two vertically arranged openings per unit, providing 152 square inches (98 064 mm<sup>2</sup>) of net free area for flood mitigation in the open position.

## 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<sup>3</sup>/<sub>4</sub> inches wide by 7<sup>3</sup>/<sub>4</sub> 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<sup>3</sup>/<sub>4</sub> 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<sup>2</sup>) 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<sup>2</sup>) 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<sup>®</sup> 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<sup>2</sup>) of enclosed area, except that the SmartVENT<sup>™</sup> Stacking Model #1540-511 and FloodVENT<sup>™</sup> Stacking Model #1540-521 must be installed with a minimum of one AFFV for every 400 square feet (37.2 m<sup>2</sup>) 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> models recognized in this report must be identified by a label bearing the manufacturer's name (Smart Vent, Inc.); the model number, and the evaluation report number (ESR-2074).