

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expires March 31, 2012

Important: Read the instructions on pages 1-9.

102327

SECTION A - PROPERTY INFORMATION

A1. Building Owner's Name City of Marco Island		For Insurance Company Use: Policy Number	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 415 Lily Court (Tool Shed/Garage)		Company NAIC Number	
City Marco Island State FL ZIP Code 34145			
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Tract G, Marco Beach Unit 25 as recorded in PB 12 Pgs 2-5, Public Records of Collier County, Florida			
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Accessory</u>			
A5. Latitude/Longitude: Lat. <u>N25°55'34.2"</u> Long. <u>W81°42'49.0"</u>		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 <u>1A</u>			
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) <u>0</u> sq ft	a) Square footage of attached garage <u>7356</u> sq ft		
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>0</u>	b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>8</u>		
c) Total net area of flood openings in A8.b <u>0</u> sq in	c) Total net area of flood openings in A9.b <u>3480</u> sq in		
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	d) Engineered flood openings? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7376 # per TB	

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number CITY OF MARCO ISLAND 120426		B2. County Name COLLIER		B3. State FLORIDA	
B4. Map/Panel Number 12021C0812	B5. Suffix G	B6. FIRM Index Date 11/17/2005	B7. FIRM Panel Effective/Revised Date 11/17/2005	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 10.3
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 type="checkbox"/> Other (Describe) _____					
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)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> 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 AC3388 Vertical Datum NGVD 29
Conversion/Comments none

Check the measurement used.

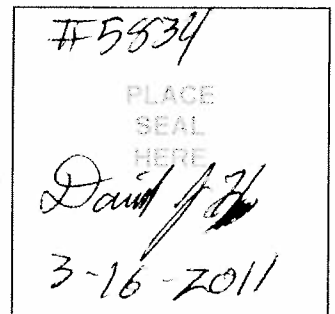
- | | |
|---|---|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor) <u>8.3</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only) |
| b) Top of the next higher floor <u>N.A</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only) |
| c) Bottom of the lowest horizontal structural member (V Zones only) <u>N.A</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only) |
| d) Attached garage (top of slab) <u>N.A</u> | <input checked="" 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) <u>N.A</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only) |
| f) Lowest adjacent (finished) grade next to building (LAG) <u>7.5</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only) |
| g) Highest adjacent (finished) grade next to building (HAG) <u>7.9</u> | <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 <u>N.A</u> | <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.

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 <u>David J. Hyatt, PSM</u>	License Number <u>5834</u>
Title <u>Professional Surveyor & Mapper</u>	Company Name <u>Marco Surveying & Mapping, LLC</u>
Address <u>960 North Collier Boulevard #203</u> City <u>Marco island</u>	State <u>FL</u> ZIP Code <u>34145</u>
Signature <u>David J. Hyatt</u>	Date <u>3/16/2011</u> Telephone <u>239-389-0026</u>



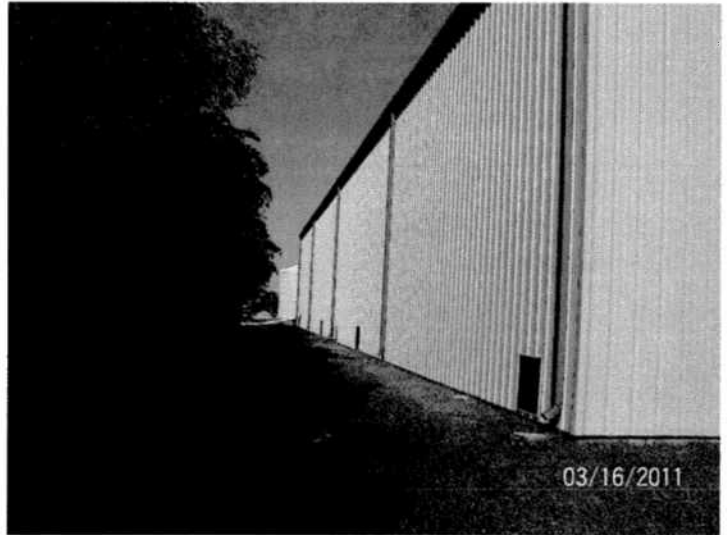
Building Photographs

See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 415 Lily Court (Tool Shed)	For Insurance Company Use: Policy Number
City Marco Island State FL ZIP Code 34145	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, following.	

Front View

Rear View



Certification of Engineered Flood Openings (TB 1 – August 2008)

I do hereby certify that the CRAWLSPACE FEMA FLOOD LOUVER, Patent No. US D583,042 S, dated December 16, 2008 and owned by Crawl Space Door Systems, Inc. properly installed and sized in accordance with Federal Emergency Management Agency's National Flood Program regulations (44 CFR 60.3(c)(5)) and National Flood Insurance Program, Technical Bulletin (TB) 1-August 2008 is designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of floodwater during floods up to and including the base (100-year) flood.

I also do hereby certify that I calculated the Non-Engineered, and Engineered Opening size for each model and size of the Flood Louvers. The results of the calculations are recorded in the table below. The Engineered size opening calculation was performed by using the formula in FEMA Technical Bulletin 1 / August 2008, Openings in Foundation Walls for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program and ASCE/SEI 24-05, Flood Resistance Design and Construction. The Net-Free Air opening size for each model was provided by the manufacturer. I used the formula ($A^0 = 0.033 [1/C] R Ae$) in TB 1 – Aug 2008 to determine the Engineered opening size for each model. I used the following assumptions: A^0 = total net area of openings required (in²); 0.033 = coefficient corresponding to a factor of safety of 5.0 (in² · hr/ft³); c = 0.40 opening coefficient (ASCE 24 Table 2-2 "rectangular, long axis horizontal, short axis vertical unobstructed during design flood"; c = 0.35 opening coefficient square; there is an unobstructed rectangular shape between the louvers); R = 5 ft/hr maximum case rate of rise and fall; and Ae = total enclosed area.

$$A^0/Ae = 0.033[1/C]R = 0.033[1/0.40]5 = 0.4125 \text{ in}^2 \text{ per ft}^2 \text{ enclosed area}$$

$$\text{Example: D0816:} = 95 \text{ in}^2 / 0.4125 \text{ in}^2 \text{ per ft}^2 = 230 \text{ ft}^2$$

Model #	Size (HXW)	Non-Engineered (Sq. Inches)	Net-Free Air (Sq. Inches)	Enclosed Area (Sq. ft)
D0816	8" x 16"	128	95	230
D1220	12" x 20"	240	175	424
D1232	12" x 32"	384	290	703
D1616	16" x 16"	256	200	423
D1624	16" x 24"	384	285	691
D1632	16" x 32"	512	385	933
D2032	20" x 32"	640	505	1,224
D2424	24" x 24"	576	435	922
D2436	24" x 36"	864	665	1,612

Installation Limitations and Instructions

Each individual opening, and any louvers, screens, or other covers, shall be designed to allow automatic entry and exit of floodwaters during design flood or lesser flood conditions; there shall be a minimum of two openings on different sides of each enclosed area; if a structure has more than one enclosed area below the DFE, each area shall have openings; openings shall not be less than 3 inches in any direction in the plane of the wall; the bottom of each required opening shall be no more than 1 ft above the adjacent ground level; the difference between the exterior and interior floodwater levels shall not exceed 1 ft during base flood conditions; in the absence of reliable data on the rates of rise and fall, assume a minimum rate of rise and fall of 5 ft/h; where data or analysis indicates more rapid rates of rise and fall, the total net area of the required opening shall be increased to account for the higher rates of rise and fall.

Signature:  6/30/10

Title: Steve Geci, Pres. Geci & Associates Engineers, Inc.
2950 N 12th Avenue, Pensacola, FL 32503

Type of License: PE

Florida License Number: 33658

