

FEDERAL EMERGENCY MANAGEMENT AGENCY  
NATIONAL FLOOD INSURANCE PROGRAM

**FLOODPROOFING CERTIFICATE** -REVISED-  
FOR NON-RESIDENTIAL STRUCTURES PRE-CONSTRUCTION

The floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation; however, a floodproofing design certification is required. This form is to be used for that certification. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or effect the insurance rating unless the community has issued an exception by FEMA to allow floodproofed residential basements. The permitting of a floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

BUILDING OWNER'S NAME <b>PAUL JENSEN</b>	FOR INSURANCE COMPANY USE
	POLICY NUMBER
STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER <b>244 PINE ST. 314 E. Mountain</b>	COMPANY NAIC NUMBER
OTHER DESCRIPTION (Lot and Block Numbers, etc.)	

CITY **FORT COLLINS** STATE **CO** ZIP CODE **80524**

**SECTION I FLOOD INSURANCE RATE MAP (FIRM) INFORMATION**

Provide the following from the proper FIRM:

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM INDEX	FIRM ZONE	BASE FLOOD ELEVATION (in AO Zones, use depth)
<b>080102</b>	<b>0004</b>	<b>C</b>	<b>3-18-96</b>	<b>X-outside 500</b>	<b>NA</b>
<i>Old Town Floodplain</i>	<i>Fig 57</i>	<i>NA</i>	<i>01-1-793</i>	<i>100-4r</i>	<i>4972.9</i>

See also  
Old Town  
Update  
1-29-2001  
Sheet 3

**SECTION II FLOODPROOFING INFORMATION (By a Registered Professional Engineer or Architect)**

**Floodproofing Design Elevation Information:**

Building is floodproofed to an elevation of **4974.4** feet NGVD. (Elevation datum used must be the same as that on the FIRM.)

Height of floodproofing on the building above the lowest adjacent grade is **2.3** feet.

(NOTE: for insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the Base Flood Elevation to receive rating credit. If the building is floodproofed only to the Base Flood Elevation, then the building's insurance rating will result in a higher premium.)

**SECTION III CERTIFICATION (By a Registered Professional Engineer or Architect)**

**Non-Residential Floodproofed Construction Certification:**

I certify that based upon development and/or review of structural design, specifications, and plans for construction that the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

The structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation indicated above, with walls that are substantially impermeable to the passage of water.

All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

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.

CERTIFIER'S NAME <b>DONALD K. BUNDY</b>	LICENSE NUMBER (or Affix Seal) <b>B.1137 (COLO)</b>
TITLE <b>ARCHITECT</b>	COMPANY NAME <b>THE ARCHITECTS' STUDIO</b>
ADDRESS <b>151 W. MOUNTAIN AVE.</b>	CITY STATE ZIP <b>FORT COLLINS CO 80524</b>
SIGNATURE <i>Donald K Bundy</i>	DATE PHONE <b>4/17/01 482-8125</b>

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building owner.



# transmittal

**To:** MARSHA HILMES-ROBINSON      **Date:** Tuesday, April 17, 2001  
 FLOODPLAIN  
 ADMINISTRATOR  
 CITY OF FORT COLLINS

**Project:** THE FORT COLLINS ARMORY      **Re:** Floodplain Use Permit      **Project No.:** 0074

**From:** Don Bundy      **Sent Via:** Deliver      **Fax No.:**  
**No. of Pages:** + cover

**CC:**

**Transmitted:**

**For Your:**

- Drawings and/or Prints
- Specifications
- Shop Drawings
- Samples
- 

- Review and comment
- Use and/or files
- As Requested
- Approval and/or Signature
- 

**Enclosed:**

1	of	1 - Floodplain Use Permit	<b>Date:</b> 4/17/01
1		of 1 - Floodproofing Certificate	4/17/01
1		of 1 - Previous Floodplain Use Permit	10/30/00
1		of 1 - Previous Floodproofing Certificate	10/30/00
1		of 5 - Previous - A1.1, A1.2, A1.3, A2.1, and A3.5 (unchanged)	
1		of 3 - Previous - A4.2, A4.3, and A4.4 (w/ RED LINED revisions)	4/17/01

**Comments:**

I think this covers the required changes based upon the new data (i.e. revised BFE = 4972.9 and revised Floodproofing Elevation = 4974.4).

Please let me know if additional information is required.

Thank you for your help with this.      Don Bundy

By:

C:\Documents and Settings\Don\My Documents\PROJECT FILES - ACTIVE\0074\_The Armory\CORRESPONDANCE\0074\_MHilmes-Robinson 04-17-00.doc

Architecture  
Planning

151 West Mountain Avenue Fort Collins, Colorado 80524 970-482-8125 FAX 970-484-8450

These elevation and floodproofing certificates are available for public inspection pursuant to federal regulation (44 C.F.R. Section 59.22(a)(9)(iii))  
 This unofficial copy was downloaded on Jul-19-2018 from the City of Fort Collins Public Records Website: <http://citydocs.fcgov.com>  
 For additional information or an official copy, please contact City of Fort Collins Utilities 700 Wood Street Fort Collins, CO 80524 USA

THE FORT COLLINS ARMORY  
314 E. MOUNTAIN AVE.  
FORT COLLINS, CO

REVISED 11/10/00

A sign shall be posted on the wall next to each of the 2 building doors where the 'Watergate' system for flood control is to be installed (see drawing sheet A1.2), as follows:

# FLOOD CONTROL

THIS BUILDING HAS FLOOD RESISTANT FEATURES.

FLOOD CONTROL DEVICES ARE TO BE INSTALLED AT THIS LOCATION DURING PERIODS OF FLOOD THREAT TO THIS BUILDING. THESE DEVICES ARE A CRITICAL COMPONENT OF THE FLOOD CONTROL SYSTEM FOR THIS BUILDING.

FLOOD CONTROL DEVICES ARE STORED IN A CLOSET IN PAUL JENSEN DESIGN GROUP'S OFFICES.

INSTRUCTIONS FOR INSTALLATION OF THESE DEVICES ARE ATTACHED TO THE DEVICES.

THE FORT COLLINS ARMORY  
314 E. MOUNTAIN AVE.  
FORT COLLINS, CO

11/10/00

A sign shall be posted on the wall next to the main stair at the each of the 3 levels.

# FLOOD CONTROL

THIS BUILDING HAS FLOOD RESISTANT FEATURES.

FLOOD CONTROL DEVICES ARE TO BE INSTALLED AT 2 ENTRY LOCATIONS DURING PERIODS OF FLOOD THREAT TO THIS BUILDING.

FLOOD CONTROL DEVICES ARE STORED IN A CLOSET IN PAUL JENSEN DESIGN GROUP'S OFFICES.

INSTRUCTIONS FOR INSTALLATION OF THESE DEVICES ARE ATTACHED TO THE DEVICES.

THE FORT COLLINS ARMORY  
314 E. MOUNTAIN AVE.  
FORT COLLINS, CO

REVISED 11/10/00

A sign shall be posted on the wall next to Garden Gate flood control device on the north side of the building(see drawing sheet A1.2), as follows:

# FLOOD CONTROL

THIS BUILDING HAS FLOOD RESISTANT FEATURES.

THIS GATE IS A CRITICAL COMPONENT OF THE FLOOD CONTROL SYSTEM FOR THIS BUILDING.

THIS GATE IS TO BE CLOSED AND LATCHED DURING PERIODS OF FLOOD THREAT TO THIS BUILDING.

THE FORT COLLINS ARMORY  
314 E. MOUNTAIN AVE.  
FORT COLLINS, CO

A sign shall be attached to each of the 'Watergate' flood control devices to be installed, as follows:

### WaterGate™ Installation Instructions

1. Place WaterGate™ into door opening you wish to seal off. The flap of the rubberized pouch is to be located on the flood water side. Place one end of the Gate in the center of the wall bracket on the hinge side of the doorframe. Place the opposite end against the center of the opposite wall bracket on the latch side.
2. Open the flap and remove the wrench handle from its slot inside the pouch.
3. Place one end of the wrench into the hexagon opening in the end of the threaded rod. Turn the wrench so that the Gate begins to expand leaving approx. ½" on each side of the door opening.
4. Ensure the Gate is sitting correctly in the door opening, and then apply downward pressure on the Gate. Continue to apply the downward pressure and turn the wrench handle to expand the Gate until it is firmly into place between the wall brackets.
5. Once in place the foam located on the two ends and bottom of the pouch will compress and form a seal in the imperfections in the doorframe and floor.
6. Once in place remove the wrench handle from the rod and place it back into its slot. Next fold the flap into the rubberized pouch.
7. Turn the eyebolts located on the top of each wall bracket. Turning of the screw gives additional downward pressure on the ends of the WaterGate™.
8. Repeat steps 1 thru 9 for each opening you wish to close off.
9. Once floodwaters have receded, loosen the thumbscrews on the wall bracket. Use the wrench handle to retract the Gate enough that the Gate pulls away from the door opening. Remove the Gate and wipe clean using water and light soap if required.
10. Place wrench handle into its slot. Fold flap back into pouch.
11. Store your WaterGate upside down or flat. (This will ensure the foam does not distort).

**Note:**

- WaterGate™ is designed to expand maximum of 4 inches.
- DO NOT over expand. Excessive expansion could damage the pouch and also the doorframe.
- In cases where there is excessive wear on the foam surfaces a clear silicone caulking should be used.

Castletech Systems Inc.  
PO Box 1734 Stn. Main Brantford, ON, N3T 5V7  
519-751-3599, Fax: 519-751-1737

THE FORT COLLINS ARMORY  
314 E. MOUNTAIN AVE.  
FORT COLLINS, CO

A sign shall be attached to each of the 'Watergate' flood control devices to be installed in the Main Entry openings, as follows:

**WaterGate™  
Mullion and WaterGate  
Installation Instructions**

Before you start to install your WaterGate™ Flood Control Unit make sure that the door opening surfaces have been cleaned and not worn. In case of worn areas additional work should be done to repair. This will ensure a proper seal. Additional sealing or caulking may be required to ensure the doorframe does not leak.

1. Place mullion over the predrilled holes and anchor, insert bolt and tighten with wrench.
2. Once in place insert the your WaterGate Flood Control System as per instruction for Installing your WaterGate.
3. Repeat step 5 for additional WaterGate.
4. Follow the instruction of the Installation of the WaterGate Flood Control System to ensure proper installation of your WaterGate.

**Note:**

- WaterGate™ is designed to expand a maximum of 4 inches.
- DO NOT over expand. Excessive expansion could damage the pouch and also the doorframe.
- In cases where there is excessive wear on the foam surfaces a clear silicone caulking should be used.

Castletech Systems Inc.  
PO Box 1734 Stn. Main Brantford, ON, N3T 5V7  
519-751-3599, Fax: 519-751-1737

**From:** Bob Smith  
**To:** Marsha Hilmes-Robinson  
**Date:** Tue, Sep 12, 2000 7:58 AM  
**Subject:** Re: Armory building

Sounds like a good compromise if they're not interested in waiting and are willing to go with the extra height.

>>> Marsha Hilmes-Robinson 09/11 4:26 PM >>>

Based on the Master Plan, it was approx. 0.6 feet deep. In an analysis that Ayres did upstream for the Tommy Tailgate building, the flow depth at a cross-section downstream of the Armory building was another 0.3 ft higher than the Master plan - so maybe 0.9.

>>> Bob Smith 09/11 1:17 PM >>>

What is the depth with the old mapping?

>>> Marsha Hilmes-Robinson 09/11 12:07 PM >>>

Bob,

The old Armory building on East Mountain is going to be remodeled and substantially improved. They had talked with me a few months ago and we were waiting on the Old Town mapping so they would know how high they had to floodproof. They called to check on the status of the mapping. It will probably be another month till it is completed. In talking with the architect he is looking for some way to be able to proceed sooner. One idea that we came up with is to be conservative and allow them to proceed even though we don't have a new BFE. If we required the floodproofing to be at 3 ft, which is the maximum that the floodproofing would work, then we would be pretty certain to have the necessary freeboard. Does this sound like an acceptable way to allow them to move forward and still meet the floodplain requirements? I feel pretty comfortable with it.

Thanks!  
Marsha

4-19-01

New Floodplain mapping for Old Town showed a lower BFE, The design was modified to reflect this lower BFE. See revised Floodplain use permit

MHR



### Floodplain Use Permit

City of Fort Collins Code, Section 10-37

(Attach application fee of \$25.00. If floodplain analysis required fee is \$325.00)

Permit Modified - see revised permit

PETITIONER NAME: Don Bundy / The Architects' Studio

ADDRESS: 151 W. Mountain Ave. PHONE: 482-8125

OWNER NAME: Paul Jensen

ADDRESS: 244 Pine St. PHONE: 221-4254

CITY: Fort Collins STATE: CO ZIP: 80524

LEGAL ADDRESS AND/OR ADDRESS OF PROPERTY: 314 East Mountain Ave.

DESCRIPTION OF THE PROPOSED PROJECT (CIRCLE ONE): new residential, new commercial, accessory structure, fill, excavation, remodel-commercial, remodel-residential, other \_\_\_\_\_

IS STRUCTURE: \_\_\_\_\_ ELEVATED  FLOODPROOFED

IF FLOODPROOFED DESCRIBE METHOD USED: Refer to drawing sheet A1.2, Project Notes, note #2

EXISTING GROUND ELEV: REAR 4971.48 4971.98 M.S.L. FINISHED GROUND ELEV: SAME M.S.L.  
FRONT

LOWEST FLOOR ELEV (INCLUDING BASEMENT): Basmt. 4969.82, 1st Floor = 4973.23 M.S.L.

Floodproofing Elevation 4975.23

BENCHMARK USED: NGS B.M. E 136 ELEV OF BENCHMARK: 4992.21 M.S.L.

FLOODPLAIN DESIGNATION: \_\_\_\_\_ FEMA  CITY

FLOODPLAIN NAME: Old Town \*FLOODWAY (Y/N): N

FEMA BASE FLOOD ELEVATION (BFE): \_\_\_\_\_ ZONE (CIRCLE ONE): A, AE, AH, AO, X-500, X

MASTER PLAN BFE: 4973.73 (EST) ZONE (CIRCLE ONE): 100-YR, 500-YR, Shallow Flooding

REGULATORY FLOOD ELEVATION (BFE+1.5') 4973.73 (EST) 4975.23 M.S.L. MHR

\*\*VARIANCE FROM CITY CODE: \_\_\_\_\_ YES  NO (if yes, attach variance application with additional \$300 variance fee-City Code, Section 10-38)

COST OF IMPROVEMENT FOR THIS PROJECT: \_\_\_\_\_  
(Submit an itemized cost list of the improvements)

VALUE OF STRUCTURE: \_\_\_\_\_  
(Submit an assessors or appraisers valuation of the structure)

CUMULATIVE VALUE OF SUBSTANTIAL IMPROVEMENTS: \_\_\_\_\_

SIGNATURE OF PETITIONER: [Signature] DATE: 10/30/00

SIGNATURE OF OWNER: [Signature] DATE: 10/30/00

FLOODPLAIN USE PERMIT: APPROVED:  DENIED: \_\_\_\_\_

SIGNATURE OF FLOODPLAIN ADMINISTRATOR: Maisha Khan - Robinson DATE: 11-14-2000

COMMENTS: This was a substantial improvement remodel

\*If property is located in a floodway include technical evaluation that demonstrates "no-rise" City Code 10-55.  
\*\*Variance application can be obtained from Utilities. Variance request requires consideration by Water Board.

FEDERAL EMERGENCY MANAGEMENT AGENCY  
 NATIONAL FLOOD INSURANCE PROGRAM  
**FLOODPROOFING CERTIFICATE**  
 FOR NON-RESIDENTIAL STRUCTURES (PRE-CONSTRUCTION)

O.M.B. No 3067-007  
 Expires May 31, 1999

The floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation; however, a floodproofing design certification is required. This form is to be used for that certification. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or effect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements. The permitting of a floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

BUILDING OWNER'S NAME Paul Jensen	FOR INSURANCE COMPANY USE POLICY NUMBER
STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER 244 Pine St., Fort Collins, CO., 80524	COMPANY NAIC NUMBER
OTHER DESCRIPTION (Lot and Block Numbers, etc.)	
CITY	STATE ZIP CODE

**SECTION I FLOOD INSURANCE RATE MAP (FIRM) INFORMATION**

Provide the following from the proper FIRM:

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM INDEX	FIRM ZONE	BASE FLOOD ELEVATION (in AO Zones, use depth)

**SECTION II FLOODPROOFING INFORMATION (By a Registered Professional Engineer or Architect)**

**Floodproofing Design Elevation Information:**

Building is floodproofed to an elevation of 497.52 feet NGVD. (Elevation datum used must be the same as that on the FIRM.)

Height of floodproofing on the building above the lowest adjacent grade is 3.2 feet.

(NOTE: for insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the Base Flood Elevation to receive rating credit. If the building is floodproofed only to the Base Flood Elevation, then the building's insurance rating will result in a higher premium.)

**SECTION III CERTIFICATION (By a Registered Professional Engineer or Architect)**

**Non-Residential Floodproofed Construction Certification:**

I certify that based upon development and/or review of structural design, specifications, and plans for construction that the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

The structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation indicated above, with walls that are substantially impermeable to the passage of water.

All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

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.

CERTIFIER'S NAME Donald K. Bundy	LICENSE NUMBER (or Affix Seal) <u>B-1137 (color)</u>
TITLE Architect	COMPANY NAME The Architects' Studio, Inc.
ADDRESS 151 W. Mountain Ave.	CITY STATE ZIP Fort Collins CO 80524
SIGNATURE <i>Donald K Bundy</i>	PHONE DATE 970-482-8125 10/30/00

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building owner.