

# THE FIRST STATE WATERMARK



## Delaware's Floodplain Management Newsletter

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### HYDROSTATIC VENTING REQUIREMENTS

National Flood Insurance Program (NFIP) regulations require that enclosed areas below the Base Flood Elevation have permanent openings designed to "automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters." In other words, prevent floodwaters from building up on the outside of walls, exerting pressure and leading to the failure of the wall.

The NFIP regulations go on to specify two ways of meeting this requirement:

- 1) The design for meeting this requirement may be certified by a registered professional engineer or architect, or;
- 2) The enclosure must contain openings with bottoms no higher than 12 inches above grade, which allow the automatic entry and exit of floodwaters. The total area of the openings must equal at least one square inch for every square foot of flood-prone enclosure.



Hydrostatic vent

As the picture above shows, louvers, screening or other coverings are allowable provided that they permit the automatic entry

and exit of floodwaters. FEMA does not specify particular brands or designs for meeting these requirements. It is up to local code enforcement officials to determine upon inspection that these requirements have been met. It is illegal for compliant venting to be subsequently modified so as to render the enclosure improperly vented.

FEMA has published a Technical Bulletin "1-93 Openings in Foundation Walls" which explains the science behind the venting criteria and provides guidance for enforcing these regulations. Copies of this bulletin may be obtained by contacting the DNREC Division of Soil and Water Conservation at (302) 739-4411 or by accessing FEMA's Website at <http://www.fema.gov/mit/techbul.htm>

### ELEVATING FLOODPRONE RESIDENTIAL STRUCTURES: Lessons Learned

The Federal Emergency Management Agency makes several grant programs available for protecting severely flood-prone buildings from further flood damage. Several communities have taken advantage of these grants and elevated homes which frequently experience flood damage. Funding for these projects has typically come from a combination of sources: FEMA, the property owner, the National Flood Insurance Program and local communities.

As of this writing, ten homes in Kent and Sussex County have been elevated. What follows is a summary of these projects:

Number of homes lifted:	10
Average cost per home:	\$40,200
Average length of project:	27 months

Average length of construction: 4.3 months



This house in Kent County was elevated and moved further landward from the Delaware Bay

One area where improvement is needed is the length of time needed to initiate construction. On average, a contract to lift the floodprone houses was signed almost two years after the money became available.

These delays in reaching the construction phase were caused by a variety of factors. In most cases, significant delays were caused by the following challenges:

Contractual/Legal Issues. Communities typically used legal services in three instances. First, to establish an escrow agreement wherein the homeowners placed their 25% cost share in an account “up-front” ensuring financial participation by the property owner. Second, in contracting with a design engineer to investigate the houses and develop specifications and bidding documents. Lastly, after bidding to enter into a contract with the selected construction firm.

Property Owner Coordination. Lifting a cherished home is a major undertaking and property owners often place tremendous constraints on quick implementation. Communities have had success by being attentive to homeowner concerns but at the same being clear that these projects are solely intended to reduce flood damage. Co-mingling houselifting with improvements/additions can significantly delay both the design and construction phases.

Financial Planning. Despite the best efforts of everyone, the average FEMA funded houselifting project in Delaware has experienced a cost overrun of about 20% above the estimated cost in FEMA’s grant application. This typically leads to property owner drop-out and requires FEMA to do a re-evaluation of the project.



This house in South Bethany, seen here as it is being lifted off its old pilings, has sustained \$88,680 in insured flood damage since 1985.

## **LETTER OF DETERMINATION REVIEW: Do you really need a Letter of Map Amendment?**

Letters of Map Amendment (LOMAs) are used to correct a Flood Insurance Rate Map error. Most commonly, this is used when a building, which is shown in the floodplain, is actually on sufficiently high ground that the base flood would not be expected to reach the foundation of the building. Frequently, an elevation survey is needed to determine whether a building qualifies for such a LOMA.

In some instances the homeowner may feel that their lending institution has made an incorrect zone determination. In many cases, these situations arise when the property is only partially within a special flood hazard area

(floodplain). Property owners may believe that their lending institution has incorrectly determined that the collateral for the loan (usually the primary building) is located in the floodplain.

Subsections (a) and (b) of Section 102 of the Flood Disaster Protection Act of 1973, as amended by the National Flood Insurance Reform Act of 1994, provides for a request to FEMA for review of a lender's determination that a building or a manufactured home securing a loan is in an SFHA. Under this rule, the request for a determination review must be submitted to FEMA within 45 days of the lender's notification to the borrower that flood insurance is required, and FEMA must complete its review within 45 days of receiving the request.

If FEMA determines that the building or manufactured home is not in an SFHA, the lender has no obligation under the 1973 Act, as amended, to require the borrower to purchase flood insurance. Borrowers who have already purchased flood insurance as a result of the lender's determination that was submitted for review are thus relieved from the statutory requirement to have flood insurance. If the lender does not choose to go beyond the statutory requirement and impose a requirement for flood insurance as a business practice, it is appropriate to refund the premium in such cases.

**Policy Statement:** A new refund reason has been added for cancellation based on the determination, resulting from FEMA's review of a lender's determination of whether a building or manufactured home is located in an SFHA, that flood insurance is not required.

When a request for review is filed with the FEMA under Section 102 (e) (3) of the Flood Disaster Protection Act of 1973, as amended by Section 524 of the National Flood Insurance Reform Act of 1994, and the outcome of FEMA's review is that a building or manufactured home is not in an SFHA, and therefore flood insurance is not required, the NFIP policy may be canceled back to the effective date. If the insured submits a copy of FEMA's letter of determination review and a statement by the lender that it is not requiring flood insurance, a full refund, including the

expense constant and Federal policy fee, will be made, providing no claim has been paid or is pending. If a claim has been paid or is pending, no refund is allowed.

## Upcoming Events

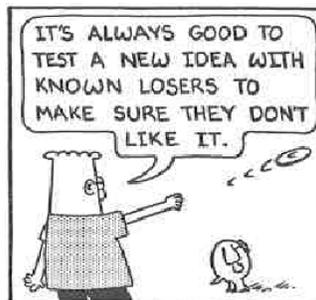
June 3-8, 2001. 25<sup>th</sup> Annual Conference of the Association of State Floodplain Managers. Charlotte, North Carolina

October 7, 2001. Coast Day, College of Marine Studies, University of Delaware, Lewes, DE

October 30,31. FEMA Coastal Construction Manual two day course. Rehoboth Beach, DE (tentative)

For information about these or other events or training opportunities please contact Michael S. Powell, Delaware National Flood Insurance Program Coordinator.

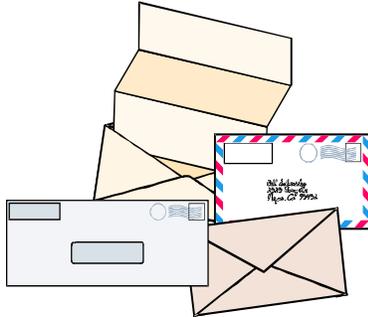
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