



FEMA

NOV 21 2003

Michael Graham
General Manager, SmartVENT
200 Warrick Avenue
Glassboro, NJ 080208

Dear Mr. Graham:

I am writing in response to your letter of August 11, 2003 to Paul Tertell, an engineer on my staff. Your letter concerns the use of engineered openings in foundation walls in Special Flood Hazard Areas and the use of the SmartVENT product. Your letter states that there is a lack of awareness that flood openings can be engineered and certified. In addition, you make specific suggestions concerning: 1) the elevation certificate, 2) NFIP Insurance Agents Manual, and 3) a Broadcast Advisory to NFIP Stakeholders. Enclosed in your letter is an evaluation report, NER-624, that addresses the flood vents that your company manufactures. With the transition to the International Building Codes, the International Code Council (ICC) Evaluation Services now issues evaluation reports. NER-624 is a legacy report from the transition from the National Evaluation Service to the ICC Evaluation Service.

Concerning your suggestions about increasing the awareness of engineering openings, FEMA will consider your suggestions, but may determine that another course of action is more appropriate. We will keep you apprised as to our decision in this matter but please understand that we are prohibited from promoting or helping to market specific products. However, I would like to discuss the information you have provided about the SmartVENT products.

Evaluation reports are often used by building officials as evidence of the compliance of a specific product or material with the requirements of a model building code or standard. As with all evaluation reports, the local building official, or the authority having jurisdiction, makes the final determination as to the appropriateness and acceptability of using the material or product in a specific application.

Communities that participate in the National Flood Insurance Program (NFIP) must adopt and enforce ordinances that meet or exceed requirements described in 44 CFR. The NFIP regulations require that all enclosures below the Base Flood Elevation (BFE) in A zones be designed to allow for the automatic equalization of hydrostatic forces during a flood event. Section 60.3(c)(5) of the NFIP regulations states that a community shall:

Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are used solely for parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

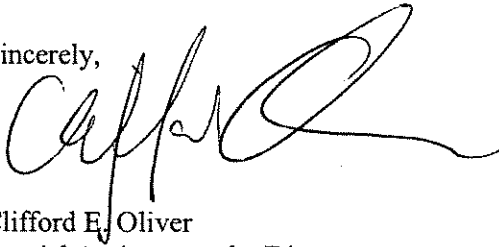
More detailed guidance on meeting this requirement is provided in FEMA NFIP Technical Bulletin 1-93, Openings in Foundation Walls.

The Federal Emergency Management Agency (FEMA) has determined that this evaluation report, NER-624, is sufficient to demonstrate the following:

If determined appropriate by the authority having jurisdiction and when used under the conditions of use described in NER-624, the two products, Model #1540-520 and #1540-510, meet the minimum NFIP floodplain management requirements (CFR 60.3 (c)(5)) with respect to flood openings for enclosed areas for the purpose of equalizing hydrostatic pressure resulting from flooding. Specifically, the jurisdiction may use this report to determine that the flood flow rate permits one vent to vent up to 200 square feet of enclosed area. This acceptance, on the part of FEMA in no way alters other conditions required for flood openings as called for in the NFIP regulations, local floodplain ordinances and building codes, as well as applicable national standards (such as ASCE 24-98), and model building codes, such as the International Code Council Building Code Series. These requirements include, but are not limited to, having at least two flood opening vents for every enclosed area and placing the bottom of such vents no more than 12 inches above grade.

Thank you for sending us information concerning this new evaluation report and for your commitment to developing products intended to reduce future exposure to flood damage.

Sincerely,



Clifford E. Oliver
Special Assistant to the Director
Mitigation Division

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