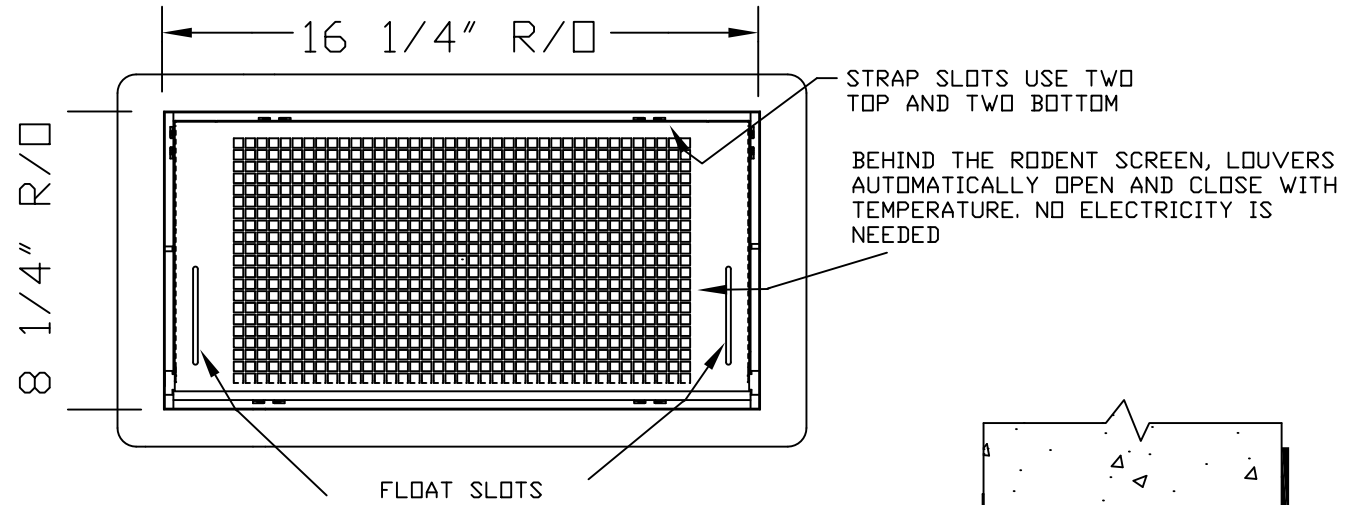




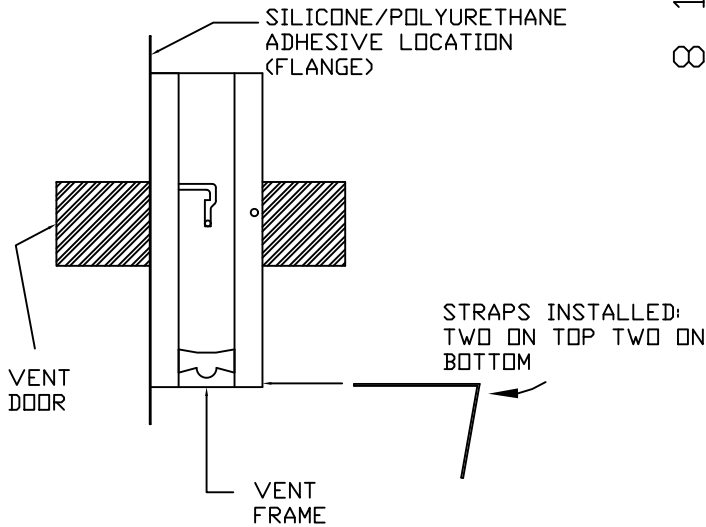
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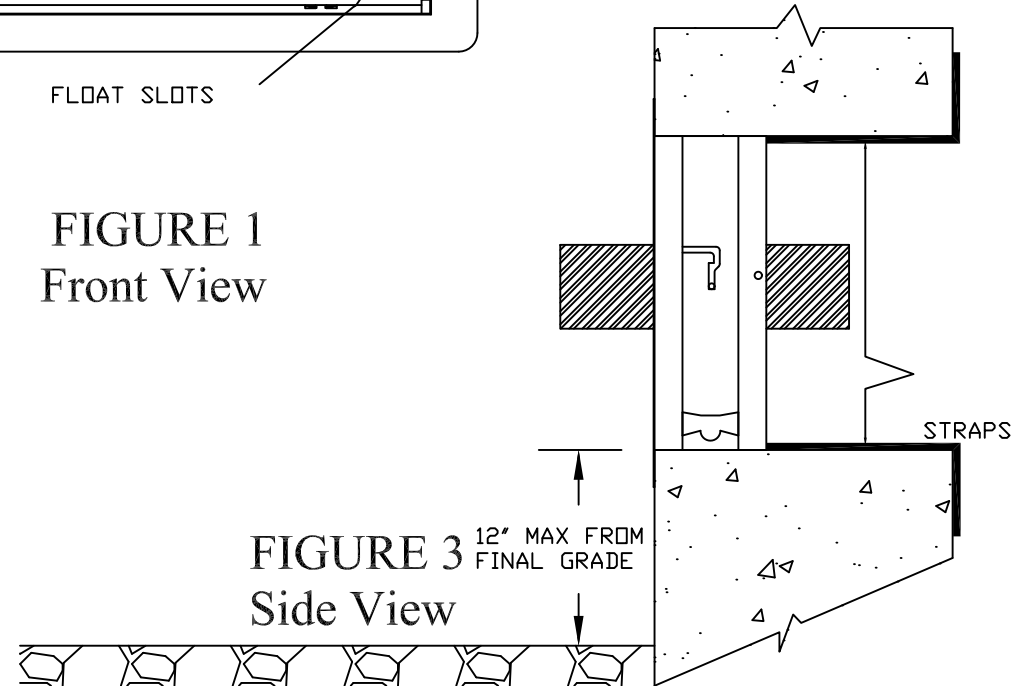
**DETAIL DIAGRAM**  
**MODEL 1540-510**  
**DUAL FUNCTION FLOOD AND VENTILATION VENT**



**FIGURE 1**  
Front View



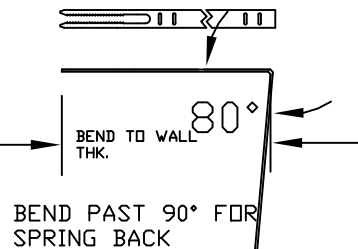
**FIGURE 2**  
Side View




**FIGURE 3**  
Side View

**STRAP DETAIL.**

TEETH MUST CLICK IN TIGHT TO INSURE SECURE INSTALLATION.



TOLERANCES UNLESS OTHERWISE SPECIFIED .XX +/-0.06 .XXX +/-0.03 .XXX +/-0.005	 <b>SMART VENT®</b> 877-441-8368 WWW.SMARTVENT.COM		SMART VENT Foundation Flood Vents 450 AndBro Dr. Suite 2B Pitman NJ 08071	
			DUAL FUNCTION FLOOD AND VENTILATION VENT MODEL 1540-510	
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			SHEET 1 OF 2	



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# INSTALLATION INSTRUCTIONS

## & DETAILS

MODEL 1540-510

DUAL FUNCTION FLOOD AND VENTILATION VENT

REV. 5-15-09

### INSTALLATION INSTRUCTIONS

1. Remove vent door from vent frame. (Turn upside down, rotate bottom of door outward and slide out)
2. Prepare a CLEAN 16.25" wide by 8.25" high rough opening (approx. 1 block wide X 1 block high) for each vent. Ensure the bottom of the rough opening is no more than 12" above the finished grade.
3. Apply a bead of silicone or polyurethane adhesive around the back of the flange on the vent frame. (FIG. 2)
4. Bend the 4 steel straps to the thickness of the wall measuring from the end with the teeth (see STRAP DETAIL)
5. Insert the top straps into the top two strap slots about two clicks.
6. Insert the vent frame in the cut opening. The bent strap ends go in then up behind the inside of the wall.  
Push the frame tight against the face of the wall. Ensure the frame is flush and square in the opening. (FIG. 3)
7. Reach through the vent opening and click the two straps in while holding the front of the vent against the wall face. The sharp point of the straps should not extend past the front of the vent face. Install the two remaining bottom straps.
8. Re-check that frame is square and slots are clear of debris, and caulk.
9. Install the door into frame by grasping the bottom of door (with float pins down) and front (small screen in front). Slide door into frame and rotate until it is latched.
10. To open the door insert two credit cards into the float slots as shown in the diagram. This will unlatch the door for removal and cleaning.

### DETAILED SPECIFICATIONS:

MATERIAL: STAINLESS STEEL

OPERATION FLOOD: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION  
VENT REMAINS CLOSED AND LOCKED UNTIL ACTIVATED

OPERATION AIR: AUTOMATIC LOUVERS FULLY OPEN AT 75 DEG. FULLY CLOSED AT 35 DEG. NO POWER REQUIRED

### INSTALLATION:

SECURED W/ 4 STAINLESS STEEL STRAPS SUPPLIED

HYDROSTATIC RELIEF: 200 Sq. Ft per Vent

VENTILATION: 51 Sq. In. per Vent NOTE: VAPOR BARRIER ALLOWS FOR REDUCED VENTILATION

REQUIREMENTS FLOOD: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED ON AT LEAST TWO DIFFERENT WALLS

COLORS: STAINLESS (STANDARD)

EXTERIOR POWDER COATED WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)

MEETS THE REQUIREMENTS FOR ENGINEERED OPENINGS AS SET FORTH BY:

FEMA, NFIP, ICC, & ASCE

SUPPORTIVE DOCUMENTS, TB 1-08, 44CFR 60.3(C)(5), ASCE 24-05

ICC EVALUATION # ESR-2074



## **MATERIAL REVIEW & MAINTENANCE INSTRUCTIONS**

### **Objective:**

When we set out to design our flood vent products, a comprehensive study was conducted to determine the most important design attributes that would be needed to insure that our customers received the best product available. Because our company started on the shores of the East Coast of New Jersey, everyone placed durability as their number one concern.

### **Durability:**

After extensive research, including review of many less expensive materials, we choose to make the bulk of the components for our vents from stainless steel. Salt will pit stainless steel unless it is rinsed with water. We recommend that the vent be washed with fresh water twice a year. Any red rust or minor surface pitting can be removed with “commercial de-rusting solutions.”

The mechanism that operates the automatic louvers on models 1540-510, 1540-511, 1540-514 and 1540-550 is also entirely made from stainless steel, and water rinsing will reduce corrosion and dirt build-up. Prior to final inspection and testing, the louver mechanism is lubricated with a dry film lubricant. This over the counter lubricant should be applied at minimum one time per year, or when needed. Rinse the louver mechanism, let dry, then spray all of the moving parts. Note: Wet lubricants or grease will allow dirt and sand to accumulate on the moving parts. Use only dry film lubricants.

The bi-metal coil is made from highly engineered materials. The composite contains a large portion of Nickel and the finished coil is secondarily heat-treated, which forms a protective barrier to protect it from the elements. A squirt of dry film lubricant into the coil chamber during maintenance will extend its life.

The floats are manufactured from engineered plastics. An ultra-violet inhibitor was blended into the raw material before molding to insure that the sun does not degrade the functional or dimensional characteristics of the material. Insert a thin blade or a credit card into each side of the vent door’s float slot, and the door will easily push open. Rinse the float cavity, then apply a small amount of dry film lubricant on the float, where it contacts the frame.

Like any product, the care one gives will determine its life. We have used the best American materials, along with the best engineering and manufacturing professionals to build our products. With just a little care, your vents will function carefree for many years.

