SECTION 10235

FOUNDATION FLOOD VENTS

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* USA Flood Air Vents; Flood Air Vents flood relief systems product.
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This section is based on the products of USA Flood Air Vents, which is located at:
63 Putnam St.
Suite 202
Saratoga Springs, NY 12866
Phone: 631-269-1872
Fax: 516-209-3479
Web: www.usafloodairvents.com
[Click Here] for additional information
The right vent for your project depends on installation. For block wall or concrete installations, choose STANDARD vent. And within Standard vents, if you want air flow, then choose the Standard vent with perforated door. For stud wall or door installation, select RETROFIT vent.
USA Foundation Flood Vents were designed and constructed to meet FEDERAL, STATE and LOCAL code guidelines published by:
\* FEMA (Federal Emergency Management Administration)
\* NFIP (National Flood Insurance Program)
I\* CC (International Code Council) AC-364
At greater than 250 square feet of flood coverage, each of our standard flood vents COVERS up to 25 percent MORE AREA than competitive vents

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Flood vents.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03300 - Cast in place concrete: Concrete Forming and Accessories.
		2. Section 04090 - Masonry Accessories.
		3. Section 04800 - Masonry Assemblies.
		4. Section 06100 - Rough Carpentry: Wood Frames and Framing.
		5. Section 07900 - Joint Sealers.
		6. Section 08360 - Overhead Doors.
		7. Section 10700 - Exterior Specialties.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASCE/SEI 24-14, Flood Resistant Design and Construction.
		2. FEMA, 44-CFR, Part 59-60 and 60.3 National Flood Insurance Program (NFIP).
		3. FEMA/FIA-TB 1-2008, Openings in Foundation Walls and Walls of Enclosures for Buildings Located in Special Flood Hazard Areas.
		4. International Code Council ICC-ES Acceptance Criteria for Automatic Foundation Flood Vents (AC-364). October 2007
		5. Federal Emergency Management Association's MEMO W-08086, October 2008
	1. DESIGN / PERFORMANCE REQUIREMENTS
		1. USA Flood Vents are Engineered Openings comply with the following:
			1. Certifications:
				1. International Code Council - Evaluation Service Report (ESR-3907) including Florida Building Code Supplement.
			2. Compliance:
				1. Intertek/ATI CCRR-0239 Certification: Meets requirements of the ICC-ES-AC364 CCRR-239.
				2. FEMA Technical Bulletin 1: Openings in Foundation Walls and Walls of Enclosures (TB-1).
				3. NFIP Bulletin W-08086.
				4. NFIP Flood Insurance Manual.
				5. American Society of Civil Engineers: Flood Resistant Design and Construction (ASCE 24-14).
				6. International Residential Codes (IRC)
				7. International Building Codes (IBC)
	2. SUBMITTALS
		1. Submit under provisions of Section 01300.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.
		3. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
		4. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
		5. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic checking and adjustment and periodic cleaning and maintenance of all components.
	3. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum 5 years documented experience.
		2. Installer Qualifications: Installer with experience on projects of a similar size and scope with similar installation conditions.
	4. DELIVERY, STORAGE, AND HANDLING
		1. Deliver and store materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
		2. Store products in clean, dry area indoors until ready for installation. Store materials in accordance with manufacturer's instructions.
		3. Protect materials and finish from damage during handling and installation.
	5. SEQUENCING
		1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
		2. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
	6. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
	7. WARRANTY
		1. Limited Lifetime warranty for manufactured defects excluding finish.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: USA Flood Air Vents, which is located at: 63 Putnam St. Suite 202; Saratoga Springs, NY 12866; Tel: 631-269-1872; Fax: 516-209-3479; Email: [request info (info@usafloodairvents.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=USA+Flood+Air+Vents&coid=50069&rep=&fax=516-209-3479&message=RE:%20Spec%20Question%20(10235usa):%20%20&mf=); Web: [www.usafloodairvents.com](http://www.usafloodairvents.com)

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01600.

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraphs as required and applicable to project requirements. Select the type and the model required and delete those not required..

* 1. FOUNDATION FLOOD VENTS
		1. General: Operation of vent is based on hydrostatic pressure.
			1. Engineered openings are designed to provide the equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters.
			2. A minimum of two bi-directional vents are required for enclosed flood exposed area and should be installed on opposite or adjacent walls.
			3. Frames are designed for installation in masonry, concrete, or framed walls, stud walls, garage doors and metal panels.
		2. Block Wall Standard Flood Vent: Flood only vents.
			1. FOSS Model:
				1. Material: 18 Gauge (.048 inch thick) 316 stainless steel vent frame and door.
				2. Rough Opening: 8 inches H by 16 inches W.
				3. Outer Frame: 10 inches H by 18 inches W.
				4. Inner Frame: 7-1/2 inches inches H by 15-7/8 inches W.
				5. Flood Coverage: 252 sq.ft. minimum.
				6. Air Ventilation: NA
			2. FOAL Model:
				1. Material: .050 inch thick, 5052-H32 aluminum vent frame and door.
				2. Rough Opening: 8 inches H by 16 inches W.
				3. Outer Frame: 10 inches H by 18 inches W.
				4. Inner Frame: 7-1/2 inches inches H by 15-7/8 inches W.
				5. Flood Coverage: 252 sq.ft. minimum.
				6. Air Ventilation: NA
				7. Powder-Coat Finish with Color as follows:

\*\* NOTE TO SPECIFIER \*\* Select color required and delete those not required, Check with Factory for availability of other colors.

White Color.

Gray Color.

Black Color.

Custom colors as selected by the Architect.

* + 1. Block Wall Standard Flood and Air Vent:
			1. FASS Model:
				1. Material: 18 Gauge (.048 inch thick) 316 stainless steel vent frame and 14 Gauge (.074 inch thick) 316 stainless steel vent door.
				2. Rough Opening: 8 inches H by 16 inches W.
				3. Outer Frame: 10 inches H by 18 inches W.
				4. Inner Frame: 7-1/2 inches H by 15-7/8 inches W.
				5. Flood Coverage: 252 sq.ft. minimum.
				6. Air Ventilation: Stainless steel perforated door provides 28 sq. inches of net free free area.
			2. FAAL Model:
				1. Material: .050 inch thick, 5052-H32 aluminum vent frame and .080 inch thick, 5052-H32 aluminum vent door.
				2. Rough Opening: 8 inches H by 16 inches W.
				3. Outer Frame: 10 inches H by 18 inches W.
				4. Inner Frame: 7-1/2 inches H by 15-7/8 inches W.
				5. Flood Coverage: 252 sq.ft. minimum.
				6. Air Ventilation: Aluminum perforated door provides 37 sq. inches of net free area.
				7. Powder-Coat Finish with Color as follows:

\*\* NOTE TO SPECIFIER \*\* Select color required and delete those not required, Check with Factory for availability of other colors.

White Color.

Gray Color.

Black Color.

* + 1. Aluminum Wall Retrofit Flood and Air Vent:
			1. ROAL Model:
				1. Material: Marine grade material fabrication.

18 Gauge (.048 inch thick) .050 inch 5052-H32 aluminum vent frame.

14 Gauge (.074 inch thick) .080 inch 5052-H32 aluminum vent door

* + - * 1. Rough Opening: 8-1/4 inches by 14-1/2 inches
				2. Outer Frame: 10 inches by 16-3/8 inches
				3. Outer Frame: 7-15/16 inches by 14-1/4 inches
				4. Coverage Per Vent: 224 square feet (enclosed area)
			1. Powder-Coat Finish with Color as follows:

\*\* NOTE TO SPECIFIER \*\* Select color required and delete those not required, Check with Factory for availability of other colors.

White Color.

Gray Color.

Black Color.

\*\* NOTE TO SPECIFIER \*\* Select the accessories required from the following paragraphs and delete those not required.

* + 1. Accessories:
			1. Fasteners:
				1. Stainless Steel concrete anchors, four for each vent, at masonry or concrete openings.
				2. Stainless Steel screws, four for each vent, wood framed openings.
			2. Sealant: Sashco Lexcel elastic sealant for wood, masonry or concrete surfaces.
			3. Winter Covers: For use with Flood and Air vents over cold winter months. Covers keep the cold air out of the crawl space or foundation, and helps prevent pipes from freezing.

\*\* NOTE TO SPECIFIER \*\* Select the color required from the following paragraphs and delete those not required.

* + - * 1. White
				2. Black
				3. Gray
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly prepared.
		2. Verify vent locations are ready to receive work, and dimensions are as indicated or as instructed by the manufacturer.
		3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Review and coordinate with the Drawings, and related items that are to be embedded in concrete and masonry.
		3. Verify that no obstructions exist that will interfere with the proper operation of the vents.
		4. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions.
		2. Install vents in at least two different walls spaced evenly around foundation perimeter, and located a maximum of 12 inches above grade to bottom of vent.
		3. Install vents plumb, level, square, true to line, and rigid.
		4. Attach vents securely in place using fasteners supplied or approved by manufacturer.
		5. Separate incompatible materials to prevent galvanic corrosion.

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraph as required to suit the project conditions and delete those not applicable.

* + 1. Install one single flood vent for every 200 sq. ft. of enclosed space below floodplain.
		2. Install one single flood vent for every \_\_\_\_\_\_\_sq. ft. of enclosed space below the floodplain.
		3. Adjust flood vents for proper operation.
	1. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.
	2. SCHEDULES

\*\* NOTE TO SPECIFIER \*\* Retain Paragraph below if required to suit project requirements. Identify products by name on the Drawings or use this paragraph to define the location of each type of material to be used. The following are some examples of schedule references. Edit as required to suit project or delete and identify products on the Drawings.

* + 1. :
		2. :

END OF SECTION