SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 2658
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TTY: Contact Through Relay

Scott Walker, Governor
Dave Ross, Secretary

December 11, 2013 **REVISED COPY**

IPS CORPORATION
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STUDOR, INC
IPS CORP.
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Re: Description: AIR ADMITTANCE VALVES, ALTERNATE PLUMBING SYSTEM
Manufacturer: STUDOR, INC
Product Name: MINI-VENT
Model Number(s): FITS 1-1/2" AND 2" PIPE
Product File No: 20110038

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an alternate approval to s. SPS 382.31 (3) (a) based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of February 2016.

This alternate approval is contingent upon compliance with the following stipulation(s):

- Prior to testing an Air Admittance Valve (AAV), the test device (manometers, joints and test stands) shall be calibrated with a minimum 6 - inch piece of pipe with a solvent welded cap connected to the testing device.

- The AAV shall be tested prior to or after installation using the following test:

  The AAV shall be subjected to a pressure equal to 1 inch of water column. After observing for 1 minute, if the pressure falls .5 of an inch or less, it will be considered a passing AAV.

- AAVs that fail the test shall be marked with an "X" and shall be returned to the distributor's representative with a completed copy of the report form made available by the Department of Safety and Professional Services. The original of the report will be sent by the installer/contractor to the Department at least semi-annually. The valve will be replaced by the distributor under warranty.

- AAVs that have failed the test and have been returned will be subject to re-testing by _____or its designee, conducted under observation by NSF International, at the manufacturing facility.

- The AAV must be installed in accordance with the manufacturer's printed instructions, system approval, plan approval, and Wis. Adm. Code. If there is a conflict between the manufacturer's instructions and the plan approval, system approval or Wis. Adm. Code, the Wis. Adm. Code plan approval and system approval will take precedence.

- The AAV must be installed in the vertical position (plus or minus 15 degrees from plumb).

- The vent system being served by the AAV may have horizontal offsets located less than 36 inches above the floor on which the fixtures are installed providing the vent does not connect to another vent.

- The AAV may serve a pumped-discharge type clothes washer standpipe when the fixture drain downstream of the point of vent is at least 3 inch diameter.

- The AAV must be located:
  - a minimum of 4 inches above the top of the horizontal pipe being served (see note a),
  - no more than 20 inches below the flood rim of any fixture served by this product (see note a),
  - at least 6 inches above insulation materials (see note a),
  - in an accessible area,
  - within a ventilated space that allows air to enter the product and has an opening with an area of at least one-inch to the building air or outside air,
  - in accordance with s. SPS 382.31 (9), Wis. Adm. Code,
  - with at least one open air vent located downstream of all air admittance valves extending to outside atmosphere, and
  - with a 3 inch or larger vent installed to the atmosphere in all systems that include air admittance valves installation

Note a: The distance is measured from termination of the vent pipe to the point noted in the stipulation.

- Branches which have fixtures served by the AAV must comply with all of the following:
  - When connected to a stack which has four (4) or more branch intervals above the branch connection, the branch must be provided with a relief vent located between most downstream fixture and the stack, and
  - The branch must not connect to any horizontal drain within 20 pipe diameters downstream of the base of a two- inch or larger drain stack.

- This product must be located and the system sized in accordance with Table 1.

Studor Mini-Vent
Table 1

Maximum Drainage Fixture Units Served (see note a)	Maximum Developed Distance of Vent to Connection of Air Admittance Valve		
	1-1/4" Vent Diameter	1-1/2" Vent Diameter	2" Vent Diameter
1	35	NL (see note b)	NL
3	28	140	NL
6	NP (see note c)	100	200
20	NP	60 (see note d)	110
160	NP	NP	25

Notes: a: Drainage Fixture Units based on ch. SPS 382, Wis. Adm. Code
b: NL means no limit
c: NP means not permitted
d: Not more than two (2) water closets or similar type fixtures of four (4) or more drainage fixture units.

- The AAV may only serve as a termination point for a:
  - branch vent,
  - circuit vent,
  - common vent,
  - individual vent,
  - wet vent or
  - combination drain and vent system.

- The AAV may not be located in any of the following areas:
  - an enclosed stairwell,
  - an area subject to positive pressure conditions for more than 12 continuous hours,
  - an area utilized as supply or return air plenum,
  - a pit, vault or depression which is below the adjacent grade or floor level, or
  - an area that subjects the valve to conditions with grease or other materials which could cause fouling of the valve's seal.

- The AAV may not serve as a vent termination point for any of the following:
  - vents installed to relief positive pressures,
  - vents serving chemical waste system,
  - vents serving POWTS holding tank or POWTS treatment tank,
  - a stack vent serving two (2) or more branch intervals,
  - a vent stack that is required in accordance with s. SPS 382.31 (4) (a),
  - a vent serving a sump, or
  - a vent system serving Bio Safety Lab (BSL) 3 or 4 laboratories.

- This AAV may not be located within the same room or enclosure as a:
  - Bio Safety Lab (BSL) 3 and 4 laboratory,
  - health care facility as defined is s. SPS 381.01 (116), Wis. Adm. Code,
  - restaurant kitchen licensed by the state or local department of health,
  - residential bedroom or
  - daycare

- Notice to Owner:
  When an AAV is installed in a building, the owner shall be provided with a copy of the manufacture's written AAV description by the contractor.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

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