

November 20, 2006

STUDOR INC.
JACK BEUSCHEL
11256 47TH ST.N
CLEARWATER FL 33762

Re: Description: AIR ADMITTANCE VALVES, ALTERNATE PLUMBING SYSTEM
Manufacturer: STUDOR INC.
Product Name: CHEM-VENT AIR ADMITTANCE VALVE
Model Number(s): 1 1/2" or 2"
Product File No: 20060149

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of November 2011.

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

- This product 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.
- This product must hold a pressure equal to one-inch water column for five minutes after the product is installed or immediately prior to installation.
- This product must be installed in the vertical position (plus or minus 15 degrees from plumb).
- The vent system being served by this product 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.
- Branches which have fixtures served by this product 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 (2) inch or larger drain stack.
- This product may be located:
 - inside a building,
 - under the overhang of a building,
 - less than 10 feet from an air intake,
 - less than 5 feet from a power exhaust vent,
 - less than 10 feet horizontally from and less than 2 feet above roof scuttles, doors, and openable windows,
 - less than 7 feet above a roof or the surrounding grade of an earth covered roof, however not less than 8 inches, and
 - less than 10 feet horizontally from a lot line.

- This product 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, and
 - in accordance with s. Comm 82.31 (9), Wis. Adm. Code.

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

- This product may only serve as a termination point for a:
 - branch vent,
 - circuit vent,
 - common vent,
 - individual vent, or
 - wet vent.

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

Studor Chem-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

Notes: a: Drainage Fixture Units based on ch. Comm 82, Wis. Adm. Code
 b: NL means no limit
 c: NP means not permitted

- This product 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 subjected to temperatures less than -40 degrees F or greater than 150 degrees F.

- This product may not serve as a vent termination point for any of the following.
 - Vents installed to relieve positive pressures,
 - 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. Comm 82.31 (4) (a),
 - a vent serving a sump, or
 - in applications where vented fumes are required to pass through biological and/or chemical filters before being released to the atmosphere.

- The manufacturer of this product has indicated to this department the material's suitability for the concentrations chemicals involved at the temperatures listed below.

CHEMICAL / MAXIMUM TEMP. in FAHRENHEIT

Acetaldehyde / 70 F
Acetamide / 70 F
Acetic Acid, 10% / 180 F
Acetic Acid, 20% / 180 F
Acetic Acid, 50% / 180 F
Acetic Acid, 80% / 70 F
Acetic Acid, Glacial / 70 F
Acetone / 70 F
Acetophenone / 70 F
Acetylene / 70 F
Adipic 105 Acid / 150 F
Alcohol Allyl / 70 F
Alcohol Amyl / 70 F
Alcohol Benzyl / 150 F
Alcohol, Butyl, Primary / 180 F
Alcohol, Butyl, Secondary / 180 F
Alcohol, Diacetone / 70 F
Alcohol, Ethyl / 180 F
Alcohol, Isopropyl / 70 F
Alcohol, Methyl / 180 F
Alcohol, Propyl / 70 F
Alum / 180 F
Alum, Ammonium / 180 F
Alum, Potassium / 180 F
Aluminum Chloride / 180 F
Aluminum Fluoride / 180 F
Aluminum Hydroxide / 180 F
Aluminum Nitrate / 180 F
Aluminum Sulfate / 180 F
Aluminum Phosphate / 180 F
Ammonia Gas, Dry / 150 F
Ammonia, Aqua, 10% / 150 F
Ammonia, Liquid / 150 F
Ammonium, Acetate / 150 F
Ammonium Carbonate / 180 F
Ammonium Chloride / 150 F
Ammonium Fluoride, 10% / 180 F
Ammonium Hydroxide / 180 F
Ammonium Nitrate / 180 F
Ammonium Phosphate / 180 F
Ammonium Sulfate / 180 F
Ammonium Sulfide / 180 F
Aniline / 150 F
Antimony Trichloride / 70 F
Arsenic Acid / 70 F
Barium Carbonate / 180 F
Barium Chloride / 180 F
Barium Hydroxide, 10% / 180 F
Barium Sulfate / 180 F
Barium Sulfide / 180 F
Beer / 180 F
Beet Sugar Liquors / 180 F
Benzaldehyde, 10% / 70 F
Benzyl Alcohol / 70 F
Bleach, 12.5%, Active Cl₂ / 70 F

Borax / 70 F
Boric Acid / 180 F
Brine Acid / 150 F
Butyl Alcohol / 70 F
Butyric Acid, 25% / 70 F
Calcium Carbonate / 180 F
Calcium Chloride / 180 F
Calcium Hydroxide, 50% / 180 F
Calcium Hypochlorite / 70 F
Calcium Nitrate / 180 F
Calcium Sulfate / 180 F
Cane Sugar Liquors / 180 F
Carbon Dioxide, Dry / 70 F
Carbon Monoxide / 150 F
Carbonic Acid / 180 F
Castor Oil / 70 F
Cellosolve / 70 F
Chloracetic Acid, Conc. / 70 F
Citric Acid / 150 F
Coconut Oil / 70 F
Copper Carbonate / 180 F
Copper Chloride / 150 F
Copper Cyanide / 150 F
Copper Fluoride / 150 F
Copper Nitrate / 150 F
Copper Salts / 150 F
Copper Sulfate / 150 F
Cottonseed Oil / 70 F
Cupric Sulfate / 70 F
Cyclohexanone / 70 F
Detergents / 150 F
Detergent Solution (Heavy Duty) / 150 F
Diacetone Alcohol / 70 F
Dimethylamine / 70 F
Dioxane / 70 F
Disodium Phosphate / 180 F
Ethyl Acetate / 70 F
Ethyl Alcohol / 150 F
Ethylene Chlorhydrin / 70 F
Ethylene Diamine / 70 F
Ethylene Glycol / 150 F
Ferric Chloride / 180 F
Ferric Nitrate / 180 F
Ferric Sulfate / 180 F
Ferrous Nitrate / 180 F
Ferrous Sulfate / 180 F
Fluoboric Acid / 70 F
Fluosilicic Acid / 70 F
Formaldehyde, 35% / 150 F
Formaldehyde, 37% / 70 F
Formaldehyde, 50% / 70 F
Formic Acid (Anhydrous) / 150 F
Formic Acid / 150 F
Freon F-12 / 70 F
Freon F-22 / 70 F
Gallic Acid / 70 F
Gelatin / 180 F
Glucose / 180 F
Glue / 70 F

Glycerine, Glycerol / 180 F
Glycols / 70 F
Green Liquor / 150 F
Hexane / 70 F
Hydrobromic Acid, 20% / 150 F
Hydrobromic Acid, 50% / 70 F
Hydrochloric Acid, 20% / 70 F
Hydrocyanic Acid / 150 F
Hydrocyanic Acid, 10% / 70 F
Hydrofluoric Acid, Dilute / 70 F
Hydrofluoric Acid, 30% / 70 F
Hydrofluoric Acid, 40% / 70 F
Hydrofluoric Acid, 50% / 70 F
Hydrofluosilicic Acid / 70 F
Hydrogen / 70 F
Hydrogen Sulfide Dry / 150 F
Hydrogen Sulfide Ag Sol / 70 F
Hypochlorous Acid, 10% / 70 F
Hypochlorous Acid, 50% / 70 F
Iodine Solution, 10% / 70 F
Isopropyl Alcohol / 180 F
Lactic Acid, 25% / 70 F
Lead Acetate / 180 F
Lime Sulfur / 150 F
Linoleic Acid / 180 F
Lye / 70 F
Magnesium Carbonate / 150 F
Magnesium Chloride / 180 F
Maleic Acid / 70 F
Malic Acid / 70 F
Mercuric Chloride / 180 F
Mercuric Cyanide / 180 F
Mercury / 150 F
Methyl Cellosolve / 70 F
Methyl Ethyl Ketone / 70 F
Methyl Isobutyl Ketone / 70 F
Methyl Salicylate / 70 F
Milk / 180 F
Molasses / 150 F
Monothanolamine / 70 F
Nickel Chloride / 180 F
Nickel Nitrate / 180 F
Nickel Salt / 180 F
Nickel Sulfate / 180 F
Nitric Acid, 10% / 70 F
Nitric Acid, 30% / 70 F
Oxalic Acid, 50% / 150 F
Perchloric Acid, 10% / 70 F
Perchloric Acid, 70% / 70 F
Phosphoric Acid, 10% / 180 F
Phosphoric Acid, 50% / 180 F
Phosphoric Acid, 85% / 70 F
Phosphorus, Pentoxide / 70 F
Picric Acid / 70 F
Plating Solutions, Brass / 150 F
Plating Solutions, Cadmium / 150 F
Plating Solutions, Chrome / 150 F
Plating Solutions, Copper / 150 F
Plating Solutions, Gold / 150 F

Plating Solutions, Lead / 150 F
Plating Solutions, Nickel / 150 F
Plating Solutions, Silver / 150 F
Plating Solutions, Tin / 150 F
Plating Solutions, Zinc / 150 F
Polyvinyl Acetate / 70 F
Potassium Aluminm Sulfate / 180 F
Potassium Borate / 70 F
Potassium Bromate / 70 F
Potassium Bromide / 180 F
Potassium Carbonate / 180 F
Potassium Chlorate, Aqueous / 70 F
Potassium Chloride / 180 F
Potassium Chlorate / 70 F
Potassium Cyanide / 180 F
Potassium Dichromate / 180 F
Potassium Ferricyanide / 70 F
Potassium Ferrocyanide / 180 F
Potassium Hydroxide / 180 F
Potassium Hydroxide, 25% / 180 F
Potassium Iodide / 70 F
Potassium Nitrate / 150 F
Potassium Perchlorate / 70 F
Potassium Permanganate, 10% / 150 F
Potassium Permanganate, 25% / 70 F
Potassium Persulfate / 150 F
Potassium Sulfate / 180 F
Propyl Alcohol / 70 F
Pyridine / 70 F
Silicone Oil / 150 F
Silver Cyanide / 180 F
Silver Nitrate / 180 F
Soaps / 150 F
Soap Solutions / 180 F
Sodium Acetate / 180 F
Sodium Benzoate / 180 F
Sodium Bicarbonate / 180 F
Sodium Bisulfate / 180 F
Sodium Bisulfite / 180 F
Sodium Borate / 70 F
Sodium Bromide / 180 F
Sodium Carbonate / 180 F
Sodium Chlorate / 70 F
Sodium Chloride / 180 F
Sodium Chlorite / 150 F
Sodium Cyanide / 180 F
Sodium Hydroxide, 15% / 180 F
Sodium Hydroxide, 30% / 180 F
Sodium Hydroxide, 50% / 70 F
Sodium Hypochlorite / 70 F
Sodium Metaphosphate / 150 F
Sodium Nitrate / 180 F
Sodium Perborate / 180 F
Sodium Peroxide / 180 F
Sodium Phosphate, Alkaline / 180 F
Sodium Phosphate, Acid / 180 F
Sodium Phosphate, Neutral / 180 F
Sodium Silicate / 180 F
Sodium Sulfate / 180 F

Sodium Sulfide / 180 F
Sodium Sulfite / 180 F
Sodium Thiosulfate / 180 F
Stannic Chloride / 150 F
Stannous Chloride / 180 F
Stearic Acid / 70 F
Sulfite Liquors / 70 F
Sulfur Dioxide, Dry / 70 F
Sulfur Dioxide, Wet / 70 F
Sulfuric Acid, 10% / 70 F
Sulfuric Acid, 30% / 70 F
Sulfuric Acid, 50% / 70 F
Sulfurous Acid / 70 F
Tannic Acid / 180 F
Tartaric Acid / 70 F
Tributyl Phosphate / 70 F
Trichloroacetic Acid / 70 F
Triethanolamine / 70 F
Urea / 180 F
Urine / 180 F
Vinegar / 150 F
Vinegar, White / 150 F
Water / 180 F
Water, Demineralized / 150 F
Water, Distilled or Fresh / 180 F
Water, Potable / 180 F
Water, Sale / 180 F
Water, Sea / 180 F
Whiskey / 150 F
Wines / 150 F
Zinc Chloride / 180 F
Zinc Nitrate / 180 F
Zinc Sulfate / 180 F

- This product may only serve chemical waste systems installed in educational facilities that serve up to and including 12th grade.
- When the chemical waste drain system discharges into a dilution or neutralizing basin through a submerged inlet, a chemical waste vent extending to atmosphere must connect to the chemical drain system downstream of all fixtures served by the chemical waste drain system. The vent must be sized based on the number of drainage fixture units discharging in to the basin.

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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