

(1) TYPE OF REQUEST

Special Safety Consideration(s) Warrant an Alternate:

Venting Systems: Air Admittance Valve

# Commonwealth of Massachusetts Division of Occupational Licensure Board of Examiners of Plumbers & Gas Fitters

1000 Washington Street, Suite 710 - Boston, Massachusetts 02118

# SPECIAL PERMISSION PLUMBING REQUEST APPLICATION FORM

\$86.00 application fee per job – Check payable to Commonwealth of Massachusetts

Design

**Automatic Vent** 

Method

Combination Waste & Vent

Product

System

Water Recycling Systems:	Waste-Water Treatment	Black Water	Gray Water	Rain-Water			
(2) APPLICANT INFOR	MATION						
Name:	Te	Telephone:		FAX:			
Address:	City/	/Town:	State:	ZIP:			
A copy of this request, to inclu	de all documentation was give	en to the <b>Plumbing Insp</b>	ector on	(mmddyy)			
I hereby certify that the information entered on this application request, to include supporting documentation, is true and accurate and is in compliance with Chapter 142 of the General Laws and 248 CMR Massachusetts State Plumbing Code as amended.							
Authorized Signature		Title/Pos	ition				
Email:			Date:	(mmddyy)			

PHONE: 616 727-9952 FAX: 617 727-6095 www.mass.gov/dpl/boards/pl

Part (3) INSTALLING CONTRACTOR INFORMATION								
This information is not available at this time	<b>e</b> :							
Name:	Telephone:		_ FAX:					
Address:	City/Town:		State:	ZIP:				
Part (4) INSTALLATION INFORMATION								
Use Occupancy: Commercial Indust	rial Institutional R	esidential	Other					
Company/Name:		_ Telephone:						
Installation Address:	City/Town:		ZIP: _					
Equipment to be installed:								
Additional Equipment Information Attached	:							
Reason(s) for this request:								
(5) FOR OFFICE USE ONLY								
Request for Special Permission is hereby:	granted denied Da	ate		_ (mmddyy)				
Reason(s) for denial:								
Authorized Signature								

### **SPECIAL PERMISSION REQUEST - GENERAL NOTES**

To obtain Special-permission an applicant shall:

- 1. Include \$86.00 non-refundable application fee. Make check payable to the Commonwealth of Massachusetts.
- 2. In some cases two or more boxes may be selected in Item (1) [i.e Gray Water Automatic Vent In such cases only one application fee will be assessed].
- 3. Submit the completed special-permission request application form to the Board office.
- 4. At the Board's request, appear at a Board meeting to discuss the special permission request.
- 5. Submit a set of construction documents stamped by a Massachusetts Registered P.E.
- 6. Provide detail information and documentation for equipment, materials and operation of system, etc.
- 7. Provide manufacturer installation and operation manuals and any other relevant documentation.
- 8. Part (5) of this application, is reserved for official Board use only.
- 9. The Board will not process incomplete applications.
- 10. For assistance, call the Plumbing Board office at (617) 727-0801
- 11. Please read the following requirement(s) applicable to the type of request made.

Definition: <u>Special-permission</u>. Explicit permission from the Board that is required before installing certain products, materials, or systems because the products, materials, or systems raise special safety considerations.

Definition: <u>Variance</u>. Authorization from the Board to install or retain a plumbing or gas fitting product, system, device or fixture because the product, device, or fixture <u>deviates</u> form the requirements in 248 CMR and because the applicant has established the existence of an undue hardship resulting from being required to comply with the requirements of 248 CMR.

# SPECIAL PERMISSION REQUEST - SPECIFIC INSTALLATION NOTES

### Water Recycling Systems - Gray Water - Black Water - Onsite Waste Water Treatment - Rain Water

- 1. If applicable, the applicant must comply with the requirements of 310 CMR 15.00.
- 2. The water recycling system shall include the assembly of all piping, valves, pumps, meters and retaining tanks for the installation at exterior or interior water recycling and reclamation system locations that shall include but not limited to collection point and points of use for dedicated gray water, black water or, onsite wastewater treatment systems.
- 3. The potable water system must be protected with a Board product approved high hazard backflow device or, properly air-gapped at the point of connection.
- 4. The piping shall be installed in compliance with 248 CMR 10.00 or by methods approved by the Board.
- 5. The owner of the recycling equipment shall comply with the operation and maintenance manual scheduling supplied by the manufacturer.
- 6. The **potable** water system piping shall be painted as follows:
  - a. Paint 3" wide bands of green at intervals of not more than 10' and at points where the piping penetrates through walls, floors and roofs.
  - b. The painted bands shall be applied to the piping on both sides of the walls and above and below the floor or roof penetrations.
- 7. The **dedicated** gray or black water system piping shall be painted as follows:
  - a. The piping shall be painted purple.
  - b. The piping shall be completely colored throughout its entire length.
  - c. The piping shall be labeled "Caution Gray Water System" at every 10'.
  - d. The piping shall be painted at the start and end of all piping branches.
  - e. The paint shall be applied on both sides of the walls and above and below the floor or roof penetrations.
  - f. The piping shall be painted at termination points other than the actual fixture.

### **Combination Waste and Vent System**

A combination waste and vent system shall not be used unless no other system is possible or practicable and only after the Board approves the Special permission request in compliance with 248 CMR 3.04.

- 1. When Special permission is granted, the following requirements shall be met:
  - a. The system is limited to the installation of floor drains and sinks.
  - b. It shall consist of a wet vented installation of waste piping in which fixture drains are not individually vent.
  - **c.** Every drainage pipe in a combination waste and vent system shall be not less than two pipe sizes larger than the size required in 248 CMR 10.15

### Single Stack Sanitary Drainage System

248 CMR 10.06(2)(t) Single Stack Sanitary Drainage System ("So-Vent").

An engineered single stack system employing the use of aerator & de-aereator fittings designed in compliance with Cast Iron So-Vent Design Manual #802 & ANSI standard ASME/ANSI B16.45-87 for cast iron systems or ASSE-1043, ASTM D-2665 & NSF-14 Test and Design for PVC systems may be used in buildings provided the following requirements are satisfied.

- 1, Every such system shall be:
  - a. Designed or engineered by a qualified person.
  - b. So-Vent systems shall bear the stamp of a Massachusetts registered professional engineer.
  - c. Drains with 1/8" pitch per foot are exempt from the water saving fixture unit Table.
  - d. Installation shall not commence until the Board approves the Special Permission request.
- 2. Piping material shall be Type K, L, M, DWV hard drawn copper tubing, cast iron or PVC.
- 3. All fittings shall be made of cast brass, drawn wrought copper, cast iron or PVC and must be of DWV design.
- 4. No part of the copper and no-hub system receive the waste from urinals.
- 5. Any change in redesign in the So-Vent system shall be subject to the requirements of 248 CMR 10.06(2)(t).
- 6. All PVC pipe and fittings shall comply with 248 CMR 10.06(2)(o). PVC stack size shall be a maximum of 4"
- 7. Every So-Vent system shall have at least one full size vent stack that meets the following requirements:
  - a. The diameter of the full size vent stack is no smaller than 3".
  - b. The vent stack shall run undiminished in size from the base of the soil or waste stack to a point of 18" to 24" above the roof or reconnect to a stack vent installed in compliance with 248 CMR 10.16(5)(b).
  - c. All main vents or vent stacks shall connect full size at their base to the drainage of the building or to the main soil or waste pipe, at or below the lowest fixture branch.
  - d. If the roof area is used for gardening, a parking deck, observation deck or similar purposes, the vent shall extend no less than 8' above the roof and be increased on pipe diameter.
  - e. Increaser The change in diameter of a vent terminal shall be made by the use of an increaser, and occur no less than one foot below the roof surface.
- 8. Laundries in multi-story buildings:
  - a. No washing machine shall connect to a So-Vent <u>system</u>. Washing machines shall connect to an independent laundry stack.
  - b. The independent laundry stacks shall connect to an independent laundry main drain.
  - c. The independent laundry main drain shall connect to the building drain a minimum of 40 pipe diameters upstream and downstream of any soil or waste stack.
  - d. A suds relief vent shall connect to the laundry main drain a minimum of 40 pipe diameters downstream from the base of the laundry stack. The suds relief vent shall connect to a vent a minimum of two branch intervals above the base of the laundry stack. (See 248 CMR 10.22, Figure 19)
  - e. Deviation from the above will require a variance in accordance with 248 CMR 3.04(2).

### **Automatic Vent Fittings:**

- 1. Automatic vent fittings are not permitted except:
- 2. Special permission in compliance with 248 CMR 3.04(3) has been granted by the Board.
- 3. The automatic vent fitting shall be installed in the vertical position not less than 6" above the crown of the trap it serves.
- 4. The piping distance from the trap outlet to the automatic vent fitting shall not be more than 12".
- 5. The tailpiece from the fixture trap shall not be longer than 12".
- 6. The automatic vent fitting shall be installed on the run of a T-Y in the vertical or branch of a T-Y in the horizontal with the T-Y installed so the direction of flow is with the flow of waste.
- 7. The automatic vent fitting shall be installed in allocation readily accessible for inspection and replacement.
- 8. The automatic vent fitting shall never be installed in a concealed location.

## Air Admittance Valves:

- 1. Air admittance valves are not permitted, except:
- 2. Special permission in compliance with 248 CMR 3.04(3) has been granted by the Board.
- 3. An individual vent, branch vent, wet vent, circuit vent, vent stack or stack vent shall be permitted to terminate with a connection to an air admittance valve.
- 4. Air admittance valves shall be installed in accordance with the manufacturer's installation instructions.