

**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS**

**IAPMO GUIDE CRITERIA
FOR**

**ODOR REMOVING AIR FILTERS FOR
TERMINAL VENT PIPES**

IGC 209-2008 (R2014)

1. PURPOSE

- 1.1** The purpose of this standard is to establish an acceptable standard for odor removing air filters for terminal vent pipes. Its purpose is to serve as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors and users; to promote an understanding regarding materials, manufacture and installation and to provide for identifying air filtration devices that conform to this standard.
- 1.2** The provisions of this standard are not intended to prevent the use of any alternate material or method of construction, provided any such alternate meets the intent and requirements of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard covers definitions, general and testing requirements, and requirements for installation instructions and markings for odor removing air filters for terminal vent pipes.
- 2.2** Odor removing filters may be an individual filter or an integrated filter in a device designed for connection to a common vent pipe size in accordance with local code. The device shall have a provision for securing to vent pipe and can be installed and replaced without damage to the vent pipe.

3. REFERENCE STANDARDS

- 3.1** All standards referenced herein shall be the current edition of that standard as published.

ASME B1.20.1	Pipe Threads, General Purpose, Inch
ASSE 1050	Stack Air Admittance Valves for Sanitary Drainage Systems
ASTM D 2661	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D 2665	Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM E 679	Determination of Odor and Taste Threshold by a Forced Choice Ascending Concentration Odor Intensity

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4. DEFINITIONS

- 4.1 Odor Removing Air Filters for Terminal Vent Pipes.** Integral or replaceable air filters that are meant to reduce or remove odors from emissions through a vent pipe.

5. GENERAL REQUIREMENTS

- 5.1 Filter Body.** The body of filter shall comply with the requirements of ASTM 2661 for ABS material or ASTM D 2665 for PVC material.
- 5.2 Socket Connections.** Socket connections shall comply with the dimensional (letters A, B, and C) requirements in Table A1.1 of ASTM D 2661 for ABS material or Table 1 of ASTM D 2665 for PVC material.
- 5.3 Threads.** Plastic taper pipe threaded connections shall comply with the requirements of ASTM F 1498. Metallic threads shall comply with the requirements of ASME B1.20.1.
- 5.4 Opening.** The diameter of a filter shall not be less than 1 ½ inches nor less than ½ the diameter of the vent to which it is connected.
- 5.5 Activated Carbon.** The carbon or charcoal material shall comply with one of the following specifications for either Type 1 or Type 2:

Type 1 (carbon or charcoal):

<u>Property</u>	<u>Value</u>	<u>ASTM Test</u>
Iodine No., mg/g	1050 min	ASTM D 4607
Butane Activity, wt%	23.3 min	ASTM D 5742
Moisture, wt%, as packed	2 max	ASTM D 2867
Hardness No.	93 min	ASTM D 3802
A.D. g/cc	0.44 min	ASTM D 2854

Type 2 (catalytic activated carbon):

<u>Property</u>	<u>Value</u>	<u>ASTM Test</u>
H ₂ S Breakthrough Capacity, g H ₂ S/mL GAC	.2 min	ASTM D 6646
CCl ₄ Activity, wt%	30 min	ASTM D 3467
Iodine Number, mg/g	550 min	ASTM D 4607
Moisture Weight as packed, wt%	3 max	ASTM D 2854