

**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS**

**IAPMO GUIDE CRITERIA
for
FLOOR DRAIN GAS TRAPS**

IGC 144-2001a

1. PURPOSE

- 1.1** The purpose of this interim guidance criteria is to establish a generally acceptable criteria for floor drain gas traps. Its purpose is to serve as a guide for producers, distributors, architects, engineers, contractors, inspectors, and users; to promote understanding regarding materials, manufacture and installation; and to provide for identifying floor drain gas traps that conform with this interim guidance criteria.
- 1.2** The provisions of this interim guidance criteria are not intended to prevent the use of any alternate material or method of construction, provided any such alternative meets the requirements of this interim guidance criteria.

2. SCOPE

- 2.1** This interim guide criteria covers definitions, materials, dimensions, tolerances and method of marking or identifying floor drain gas traps intended for use in floor drain systems.
- 2.2** The floor drain gas traps covered by this interim guide criteria are intended for use on either metallic or plastic floor drain systems.

3. GENERAL REQUIREMENTS

- 3.1** Floor drain gas traps shall accommodate a range of floor drain systems according to the manufacturer's instructions.
- 3.2** Floor drain gas traps shall seal against the throat of the floor drain and prevent sewer gas from passing up through the floor drain while allowing waste water to drain.
- 3.3** The net area of the floor drain shall be used for system sizing.

4. MATERIALS

- 4.1** Floor drain gas traps are manufactured with a flexible diaphragm.
 - 4.1.1** The diaphragm material shall comply with the requirements of Table 1.
 - 4.1.2** The diaphragm material shall also comply with requirements of Table 2.

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5. TEST METHODS

- 5.1** Back Pressure Test. A pressure equal to 2 inches of water shall be applied to the gas side of the integral floor drain gas trap. The integral floor drain gas trap shall hold this water without leaks for 24 hrs.
- 5.2** Cycle Drain Test. In order to test the memory of the diaphragm, a drain test shall be conducted for 300 cycles. One cycle consists of water draining through the product for 5 minutes and then 5 minutes without draining. The unit shall then pass the requirements of section 5.1 this standard.

Table 1

Property	Conditions	ASTM Test Method	Requirements
Ozone Resistance	72 hrs @ 104° F (40°C) & 25 pphm ozone	D 1149	No visible cracks
Water Absorption	48 hrs @ 158° F (70°C)	D 471	Max weight gain of 20%
Chemical Reagents	Complete immersion for 72 hrs	D 543	Gain in weight no greater than 10%, No weight loss
Weather-o-meter	One cycle 4 hrs UV* @ 140°F (60°C) 4 hrs Condensation @ 122°F (50°C) 500 hrs	G 53	Max. 50% loss in tensile strength and ultimate elongation

* The lamps shall be UV-B lamps with peak emissions at 313 Nm.

Table 2

Property	Conditions	ASTM Test Method	Requirements
Split Tear	Die C Sample	D 624	Min. 0.25 kn/m Min. 0.17 kn/m (Silicone rubber)
Low Temp. Brittleness	Non-brittle 3 minutes	D 2137 Method A	Non-brittle at -40°F (-40°C)