

IAPMO IGC 339-2016

# Diverting Roof Vent Terminals



# ***IAPMO Standard***

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# IAPMO IGC 339-2016

## Diverting Roof Vent Terminals

### 1 Scope

#### 1.1 Scope

**1.1.1** This Standard covers NPS 1-1/2 and NPS 2 diverting roof vent terminals intended for installation under solar panels to divert the outlet termination point of roof vent pipe or stack in residential and commercial buildings' DWV systems, and specifies requirements for materials, physical characteristics, performance testing, and markings.

**1.1.2** Diverting roof vent terminals covered by this Standard help to:

- (a) protect the roof vent pipe or stack when a solar panel is to be placed over the vent; and
- (b) provide equivalent performance to a vent terminating at least 6 inches above the roof.

#### 1.2 Alternative Materials

The requirements of this Standard are not intended to prevent the use of alternative materials or methods of construction provided such alternatives meet the intent and requirements of this Standard.

#### 1.3 Terminology

In this Standard,

- (a) "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy to comply with the Standard;
- (b) "should" is used to express a recommendation, but not a requirement;
- (c) "may" is used to express an option or something permissible within the scope of the Standard; and
- (d) "can" is used to express a possibility or a capability.

Notes accompanying sections of the Standard do not specify requirements or alternative requirements; their purpose is to separate explanatory or informative material from the text. Notes to tables and figures are considered part of the table or figure and can be written as requirements.

#### 1.4 Units of Measurement

SI units are the primary units of record in global commerce. In this Standard, the inch/pound units are shown in parentheses. The values stated in each measurement system are equivalent in application, but each unit system is to be used independently. All references to gallons are to U.S. gallons.

#### 1.5 Amendments

Proposals for amendments to this Standard will be processed in accordance with the standards-writing procedures of IAPMO.

## 1.6 Patents

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## 2 Reference Publications

This Standard refers to the following publications and, where such reference is made, it shall be to the current edition of those publications, including all amendments published thereto.

ASTM D1784	Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds
ASTM D2122	Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
ASTM D2235	Solvent cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings
ASTM D2564	Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems
ASTM D2661	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D2665	Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D3311	Specification for Drain, Waste, and Vent (DWV) Plastic Fittings Patterns
ASTM D3965	Standard Classification System and Basis for Specifications for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Materials for Pipe and Fittings
ASTM F656	Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
IAPMO PS 64	Roof Pipe Flashings

## 3 Abbreviations

The following abbreviations apply in this Standard:

<b>ABS</b>	— acrylonitrile-butadiene-styrene
<b>DWV</b>	— drainage, waste, and vent
<b>NPS</b>	— nominal pipe size
<b>PVC</b>	— polyvinylchloride

## 4 General Requirements

#### 4.1 General

Diverting roof vent terminals typically consist of a

- (a) Flanged diverting vent fitting with elastomeric gasket and corrosion resistant screws
- (b) Roof flange
- (c) Connection DWV fittings to redirect vent outlet

**Note:** A typical diverting roof vent terminal is illustrated in Figures 1a and 1b.

#### 4.2 Compatibility and Dimensions

##### 4.2.1 Compatibility with Pipe and Tubing

Diverting roof vent terminals shall be compatible with the piping materials for which they are designed. All piping material(s) with which the diverting roof vent terminals are designed to connect shall be identified in the installation instructions (see Section 6.3).

##### 4.2.2 Dimensions and Tolerances

Dimensions and tolerances of diverting roof vent terminals shall:

- (a) Be determined in accordance with ASTM D2122;
- (b) Comply with the geometries and laying lengths specified in ASTM D3311;
- (c) Comply with the dimensions specified in ASTM D2661 for ABS fittings; and,
- (d) Comply with the dimensions specified in ASTM D2665 for PVC fittings.

#### 4.3 Components and Connections

##### 4.3.1 Roof Flashing and Elastomeric Gasket

The roof flashing and elastomeric gasket for the diverting roof vent terminals shall comply with IAPMO PS 64.

##### 4.3.2 Plastic Material

Plastic material used to manufacture diverting roof vent terminals shall be:

- (a) ABS compounds that comply with or exceed the properties of cell classification 42222 as specified in ASTM D3965;
- (b) PVC compounds that comply with or exceed the properties of cell classification 12344 as specified in ASTM D1784.

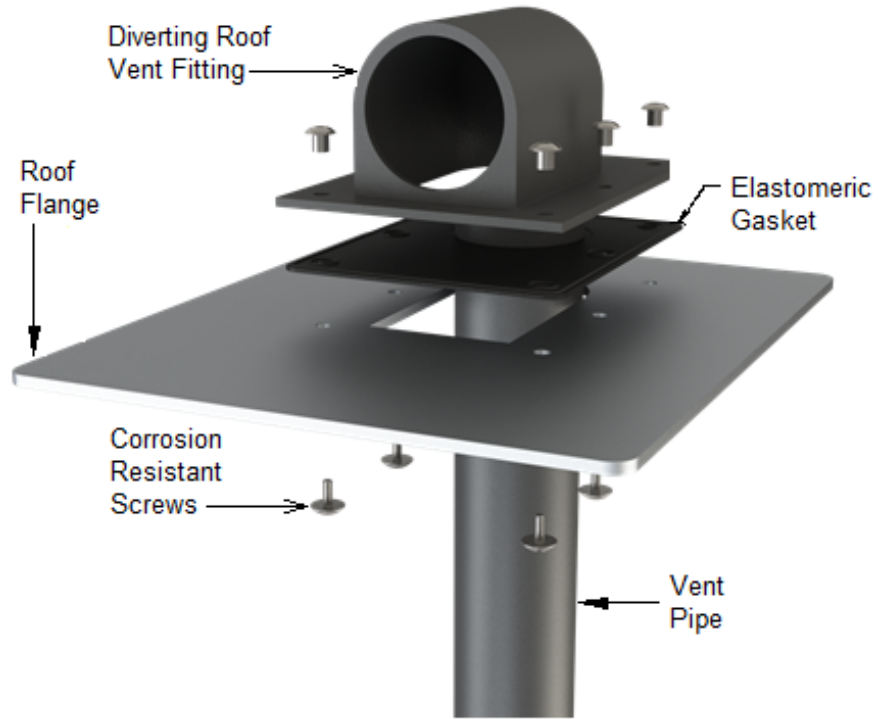
##### 4.3.3 Workmanship

Diverting vent terminals shall be free from visible cracks, gouges, foreign inclusions, blisters, unintended holes and voids, or other injurious defects visible to normal or corrected-to-normal vision that would impair their performance in service or their integrity. In addition, the chemical composition of polymeric materials used to manufacture any roof flashing shall be homogeneous throughout.

##### 4.3.4 Solvent Cement & Primer

- (a) Solvent cement shall meet the requirements of ASTM D2235 for joining ABS pipe and fittings,
- (b) Primer shall meet the requirements of ASTM F656 and solvent cement shall meet the requirements of ASTM D2564 for joining PVC pipe and fittings.





**Figure 1a**  
**Typical Diverting Roof Vent Terminal**  
(See Section 4.1)



**Figure 1b**  
**Typical Diverting Roof Vent Terminal Assembled**  
(See Section 4.1)

