

# **ICC-ES PMG Product Certificate**



## **PMG-1717**

Effective Date: June 2024

This listing is subject to re-examination in one year.

PRODUCT CERTIFICATION SCC Accrecited CB-P/S IN

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A Subsidiary of the International Code Council®

CSI: DIVISION: 22 00 00—PLUMBING

Section: 22 13 19.36—Air Admittance Valves

## Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: Ragnar Air Admittance Valves

Listee: Ragnar Manufacturing

P.O. Box 3211 Nampa, ID 83653 www.ragnarmfg.com

### Compliance with the following codes:

2024, 2021, 2018, 2015, 2012 and 2009 International Plumbing Code® (IPC) 2024, 2021, 2018, 2015, 2012 and 2009 International Residential Code® (IRC) 2020, 2015, 2010 and 2005 National Plumbing Code of Canada® (NPC)\*

#### Compliance with the following standards:

ASSE 1051-2021, Performance Requirements for Individual and Branch Type Air Admittance Valves (AAV's) for Sanitary Drainage Systems

NSF/ANSI 14-2023, Plastics Piping System Components and Related Materials NSF/ANSI 24-2020, Plumbing System Components for Recreational Vehicles CSA Z240 RV Series-2023 – Recreational Vehicles

# Identification:

The Ragnar Air Admittance Valves (AAVs) described in this report must be marked with the model number of the product, the manufacturer's name or trademark, and ICC-ES PMG listing mark.

#### Installation:

The Ragnar Air Admittance Valves must be used and installed with the requirements of IPC Chapter 9, IRC Chapter 31 and Clause 2.2.10.16 of the NPC, as applicable, and the manufacturer's published installation instructions.



<sup>\*</sup> National Plumbing Code of Canada is a copyrighted publication of the National Research Council Canada

A minimum of one vent must terminate in the open air outdoors for each building drain when air admittance valves are installed. The Ragnar AAVs which are used as a vent termination for individual vents and branch vents. AAV must be in a ventilated location.

The AAV shall be installed in the vertical upright position and shall not to exceed 15 degrees. AAVs must be installed within four branch intervals and be installed at least 4" above the horizontal drain trap.

The AAV or adapter shall be carefully glued (for solvent weld units) to the pipe using only approved cement. Ensure that no cement drips inside of the AAV unit.

The adapter to the AAV shall be sealed with an O-ring.

The AVV is not to be used on a chemical waste system, relief vent, or in a return air plenum. Installation of the Ragnar Air Admittance Valves to vent a special waste or chemical waste system is outside the scope of this listing.

#### Models:

All Adapters for the following part numbers are in compliance with the material and dimensional requirements within ASTM D 2661, ASTM D 2665, CSA B181.1 and CSA B181.2.

Model RM and Part Number Descriptions:

**RM 6: Solvent Weld Part Numbers 201A & 201P.** Solvent weld attachment allows for installation directly to 11/2-inch or 2- inch male pipe connection. 201A is for ABS and 201P is for PVC.

RM 6: Threaded Connection Part Numbers 211A & 211P. Threaded Adapter attachment allows for installation directly to 11/2-inch or 2-inch male pipe connection. 211A

RM 20: Solvent Weld Part Numbers 202A & 202P. Solvent weld attachment allows for installation directly to 11/2-inch or 2- inch male pipe connection. 202A is for ABS and 202P is for PVC.

RM 20: Threaded Connection Part Numbers 212A & 212P. Threaded Adapter attachment allows for installation directly to 11/2-inch or 2-inch male pipe connection.

RM 6-4": Threaded Connection 4" long adapter 241A & 241P. Threaded attachment intended for installation to 11/2-inch or 2- inch DWV. 241A is for ABS and 241P is for PVC. 4"

RM 6-6": Threaded Connection 6" long adapter 261A & 261P. Threaded attachment intended for installation to 11/2-inch or 2- inch DWV. 261A is for ABS and 261P is for PVC. 6"

The AAV were found to function at temperatures from -40.0°F to 150.0°F (-40.0°C to 65.6°C).

### Conditions of Listing:

- 1. Each Ragnar AAV must be located a minimum of 4 inches (102 mm) above the horizontal branch drain or fixture drain being vented.
- Each Ragnar AAV must be accessible for service, repair, and replacement.
- 3. The Ragnar AAVs must be installed within the maximum developed length of the vent and a minimum of 6-inches (152.4 mm) above insulation materials. The AAV's must not be installed in a supply or return air plenum of an HVAC system or in areas where temperatures exceed 150 °F (66 °C).
- 4. The Ragnar AAVs must be installed in the vertical upright position. The maximum offset from the vertical upright position must not exceed 15 degrees (0.083  $\pi$  rad) from plumb.
- 5. The Ragnar AAVs must be installed after the drainage system has been pressure tested.
- 6. The Ragnar AAVs are under a quality control program with annual surveillance inspection by ICC-ES.