



February 2020

500 Distribution Parkway
Collierville, TN 38017

Guide Specification

Specifier Notes: This guide specification is written in Construction Specifications Institute (CSI) 3-Part Format in accordance with *The CSI Construction Specifications Practice Guide, MasterFormat, SectionFormat, and PageFormat*.

This Section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the Project and local building code. Coordinate this Section with Conditions of the Contract, Division 01, other specification sections, and the Drawings. Delete all Specifier Notes after editing this Section.

Section numbers and titles are based on *CSI MasterFormat 2018 Edition*.

SECTION 22 13 16.16

COMBINATION DRAINAGE AND VENT SYSTEMS

Specifier Notes: This Section covers ProVent Systems Inc. "ProVent Single Stack Venting" a PVC plumbing single combination waste and vent method that vents all the fixture branches through its stack and base vent fittings. Consult ProVent Systems Inc. for assistance in editing this Section as required for the Project.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. PVC plumbing combination stack vent drainage and base vent systems.

1.2 RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required for the Project. Limit the list to sections with specific information that the reader might expect to find in this Section, but is specified elsewhere.

- A. Section 22 05 00 – Common Work Results for Plumbing.
- B. Section 22 13 16 – Sanitary Waste and Vent Piping.

1.3 DEFINITIONS

- A. DWV Plumbing Stack: Combination drain, waste, and vent plumbing stack vent and base vent fittings.

1.4 REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this Section, complete with designations and titles. Delete reference standards from the following list not used in the edited Section.

- A. ASTM International (ASTM) (www.astm.org):
 - 1. ASTM D 2564 – Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems.
 - 2. ASTM D 2665 – Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings.
- B. ICC Evaluation Service (www.icc-es-pmg.org):
 - 1. ICC-ES Product Certificate PMG-1238 – EZ-Flex Couplings and Expansion Couplings.
 - 2. ICC-ES Product Certificate PMG-1286 – ProVent Specialized Fittings.
- C. International Association of Plumbing and Mechanical Officials (IAPMO) (www.iapmo.org):
 - 1. IAPMO IGC 67 – Specialized ABS and PVC Fittings.
 - 2. IAPMO IGC 359 – Flexible Expansion Couplings for DWV Stack Applications.

1.5 PREINSTALLATION MEETINGS

Specifier Notes: Edit the Preinstallation Meetings article as required for the Project. Delete this article if not required.

- A. Convene preinstallation meeting [1 week] [2 weeks] before start of installation of combination stack vent drainage and base vent systems.
- B. Require attendance of parties directly affecting Work of this Section, including Contractor, Architect, installer, and manufacturer's representative.
- C. Review the Following:
 - 1. Materials.

2. Installation.
3. Field quality control.
4. Protection.
5. Coordination with other Work.

1.6 SUBMITTALS

Specifier Notes: Edit the Submittals article as required for the Project. Delete submittals not required.

- A. Submittals: Comply with Division 01.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- D. Test Reports: Submit manufacturer's test reports from testing performed by qualified, independent testing laboratories.
- E. Manufacturer's Project References: Submit manufacturer's list of 10 successfully completed specialized plumbing fitting projects of similar size and scope to this Project, including project name and location, name of architect, and type and quantity of specialized plumbing fittings furnished.
- F. Warranty Documentation: Submit manufacturer's standard warranty.

1.7 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer regularly engaged in the manufacturing of specialized plumbing fittings for a minimum of 5 years.
- B. Installer's Qualifications:
 1. Installer regularly engaged in installation of plumbing piping for a minimum of 5 years.
 2. Use qualified persons trained for installation of DWV plumbing stacks.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
 1. Store and handle materials in accordance with manufacturer's instructions.
 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
 3. Store materials in clean, dry area indoors.
 4. Do not store materials directly on floor.
 5. Store materials out of direct sunlight.
 6. Protect materials during storage, handling, and installation to prevent damage.

1.9 WARRANTY

- A. Warranty Period: 1 year.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: ProVent Systems Inc., 1355 Capital Circle, Lawrenceville, Georgia 30043. Toll Free 800-262-5355. Phone 770-339-1782. Fax 770-339-1784. www.proventsistemas.com. info@proventsistemas.com.

Specifier Notes: Specify if substitutions will be permitted.

- B. Substitutions: [Not permitted] [Comply with Division 01].
- C. Single Source: Provide materials from single manufacturer.

2.2 COMBINATION DRAINAGE AND VENT SYSTEMS

- A. PVC Plumbing Combination Stack Drainage and Vent Systems: "ProVent Single Stack Venting".
1. Compliance:
 - a. ASTM D 2665.
 - b. IAPMO IGC 67.
 2. Identification: Permanently mark fittings with manufacturer's name or manufacturer's registered trademark, model number, nominal pipe size, pipe materials for which fitting is designed, and ICC-ES PMG listing mark.
 3. Specialized Fittings:
 - a. 3-inch "ProSeal" PVC closet flange with built-in rubber seal.
 - b. 3-inch "ProVent StackVent" stack fitting P3542-S.
 - c. 4-inch "ProVent StackVent" stack fitting P4542-S.
 - d. 3-inch by 2-inch "ProVent" PVC double wye fitting P35392.
 - e. 4-inch by 3-inch "ProVent BaseVent" fitting P4542-B.
 - f. 3-inch by 2-inch "ProVent BaseVent" fitting P3542-B.
 - g. 4-inch "ProSet" closet stub sleeve P4544H.
 - h. 3-inch "ProSet" closet stub sleeve P3544H.
 4. Flexible Expansion Couplings: 3-inch and 4-inch "ProVent EZ Flex Mechanical Coupling" P35470-D and P45470-D.
 - a. Compliance:
 - 1) IAPMO IGC 359.
 - 2) ICC-ES-PMG-1238.

Specifier Notes: Specify nominal size of the flexible expansion couplings.

- b. Nominal Size: [3 inches] [4 inches].
- c. Components:

- 1) Rigid Material: Schedule 20 PVC, ASTM D 2665.
 - 2) Flexible Material: Sanoprene.
 - 3) Clamps: Worm-driven, Type 301 stainless steel bands.
 - d. Flexible Coupling Expansion/Contraction:
 - 1) Expansion: Maximum 3/4 inch.
 - 2) Contraction: Maximum 1/2 inch.
5. PVC Primer and Cement: ASTM D 2564.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas and piping to receive combination stack vent drainage and base vent systems.
- B. Examine drop ceilings for unacceptable conditions.
- C. Notify Architect of conditions that would adversely affect installation or subsequent use.
- D. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION

- A. Install combination stack vent drainage and base vent systems in accordance with manufacturer's instructions.
- B. Install combination stack vent drainage and base vent systems at locations indicated on the Drawings.
- C. Install combination stack vent drainage and base vent systems to be free of leaks.
- D. Install plumbing piping as specified in Sections 22 05 00 and 22 13 16.

3.3 FIELD QUALITY CONTROL

Specifier Notes: Edit the Field Quality Control article as required for the Project. Delete this article if not required.

- A. Field Tests and Inspections: Field test and inspect installed combination stack vent drainage and base vent systems in accordance with local building code requirements.

3.4 PROTECTION

- A. Protect installed combination stack vent drainage and base vent systems from damage until Substantial Completion.

END OF SECTION