

The purpose of this document is to provide the basic installation instructions/criteria, and proper use/maintenance of the UniGuard waterless valve.

1. Overview

- a. UniGuard is a low-profile, waterless drain valve that is used in place of the standard water seal p-trap to protect all living spaces from foul odors and harmful sewer gasses of the RV drain system.
- b. UniGuard eliminates the need for additional venting typically required by a conventional water seal trap (e.g. air admittance valve or plumbed in with a holding tank vent through the roof).
 - i. All other plumbing/venting requirements still apply (see the plumbing section in the NFPA 1192 and/or CSA Z-240).
- c. UniGuard is only intended to be used as a waterless drain valve. It is not intended to be used as a backflow preventer.

2. General Installation

- a. UniGuard can be installed vertically, horizontally, or any combination in between.
- b. Due to the unique design of the UniGuard, there is no need for a certain installation orientation in the horizontal position as long as UniGuard is installed with the correct direction of flow (see directional indicator on the body of the UniGuard).
- c. When installed horizontally directly off any fixture, the 87.5-degree elbow must be used to maintain the needed 1/4" per foot of slope.
- d. UniGuard must be installed no further than 6' away from the fixture(s) it's servicing and a minimum of 12" away from holding tank(s).
- e. UniGuard must always be installed in an accessible location for inspection, repair or removal.
- f. The outlet end of the UniGuard is not to be used as a "slip-joint" connection. Only use one of the recommended female adapter/washer combinations listed below.
- g. Be sure to install the necessary warning label directly on the UniGuard or adjacent to the fixture it services. See section 7.4.4.12 of the NFPA 1192 for more information.

3. Adapters/fittings recommended and available for proper installation of the UniGuard valve

- a. UniGuard Valve Assembly – LSB # 65UGV1
- b. UniGuard Straight Adapter Coupling (1-1/2" or 1-3/4" O.D. Slip Joint) – LSB # 65UGA3
- c. UniGuard Elbow (Direct Connect 1-1/2", 87.5 -degree) – LSB # 65UGA2
- d. Male threaded adapter (1-1/2" x Spigot Solvent Weld) – LSB # 632801
- e. Male threaded adapter (1-1/2" x Hub Solvent Weld) - LSB # 632871
- f. Female threaded swivel adapter (1-1/2" x Spigot Solvent Weld) – LSB # 633215

- g. Female threaded swivel adapter (1-1/2" x Hub Solvent Weld) – LSB # 633217
- h. Female threaded adapter (1-1/2" x Hub Solvent Weld) – LSB # 632891
- i. Black Flat Rubber Washer (1-1/2") – LSB # 34JN341057
- j. 1 1/2" Slip-Joint Washer – LSB # 6550918TPRU
- k. 1 1/2" X 1 1/4" Reducing Slip Joint Washer – LSB # 651765TPRU

4. Installation Method

- a. At the inlet end of the UniGuard valve, a connection can be made using the recommended UniGuard direct connect Elbow, UniGuard Straight Adapter Coupling or one of various male threaded adapters.
- b. At the outlet end of the UniGuard valve, a connection can be made to plastic tubular pipe using the recommended female threaded adapters.
- c. Do not use joint compounds or chemical sealants on any of the connections going into the UniGuard valve body.
- d. A PTFE based thread seal tape is acceptable if needed.

5. Connections to Plastic Tubular Pipe

- a. Threaded connections can be made to the inlet or outlet of the UniGuard valve (65UGV1).
- b. For all installations, orient the UniGuard valve for the correct direction of flow which is clearly marked on the UniGuard body.
- c. If using the recommended UniGuard elbow (65UGA2) or straight adapter coupling fitting (65UGA3), use the recommended flat rubber washer (34JN341057) and thread the elbow or straight adapter to the inlet of the UniGuard body hand tight until snug. **DO NOT OVERTIGHTEN.**
- d. If solvent welding a plastic tubular pipe connection to the UniGuard valve, use the recommended male or female adapter fittings as specified with the UniGuard body to make the appropriate connection.
- e. Using the recommended flat rubber washer(34JN341057), thread the recommended male or female adapter fittings onto the end(s) of the UniGuard body hand tight until snug. **DO NOT OVERTIGHTEN.**
- f. Cut the plastic tubular pipe to the proper length to full adapter fitting socket depth using an appropriate plastic tubular pipe cutter.

- g. Remove any loose material or debris from the inside and outside of the end of the plastic tubular pipe. Remove any burrs or sharp edges from the inside or the outside of the end of the pipe.
- h. Following the installation instructions of the solvent cement manufacturer, solvent weld the plastic tubular pipe into the recommended adapter(s). **DO NOT ALLOW EXCESS GLUE TO FLOW INTO THE UNIGUARD VALVE BODY.**

6. Multiple Fixture Installations

- a. The following fixtures are considered acceptable for multiple fixture installation (maximum of 2 fixtures on a single UniGuard).
 - i. Example: Single bowl sinks, double bowl sinks, showers, and bathtubs
- b. The following fixtures are not considered acceptable for multiple fixture installations and must be installed with their own UniGuard
 - i. Washing machine discharge drains, dishwasher discharge drains, and/or any type of bilge/sump/macerator pump.

7. Maintenance

- a. Unlike conventional water seal traps, UniGuard does not need to be blown out or “winterized” before storage during cold months.
- b. If “blowing out” the RV drain system seems necessary, do not exceed 25 PSI as damage to the UniGuard’s interior components may occur.
- c. UniGuard must always be installed in an accessible location for inspection and repair.
- d. If it is necessary to use a mechanical drain cleaning device or “snake”, be sure to remove the UniGuard as damage to the interior components may occur. See the warning label mandated by the NFPA 1192 Standard for Recreational Vehicles (Section 7.4.4.12).
- e. The UniGuard is resistant to all standard, caustic based drain cleaners. If the use of an acid-based drain cleaner with more than 10% concentration is needed, UniGuard needs to be removed beforehand.

Utopia’s manufacturer is certified to ISO 9001-2015 which requires a documented continuous improvement program, and therefore reserves the right to modify or amend the specification of their products without notice. All information in this publication is given in good faith, and believed to be correct at the time it was printed. However no responsibility can be accepted for any errors, omissions or incorrect assumptions. This product is not suitable for use as a backflow preventer and users should satisfy themselves that this product is appropriate for the purpose and application intended.

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3. Adapters/fittings recommended and available for proper installation of the UniGuard valve

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- b. UniGuard Straight Adapter Coupling (1-½" or 1-¾" O.D. Slip Joint) – LSB # 65UGA3
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- i. Black Flat Rubber Washer (1-1/2") – LSB # 34JN341057
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- f. Cut the plastic tubular pipe to the proper length to full adapter fitting socket depth using an appropriate plastic tubular pipe cutter.
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