



Green Drain[™]

SPECIFICATIONS PACK

2025 - 2026



Certifications | Accreditations
Product Testing

AMERICAS | EMEA | APAC

Globally Certified

www.greendrains.com



1.25" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD1.25

Specification: Green Drain (model: GD1.25) Waterless Trap Seal for 1.25" Drains.

ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

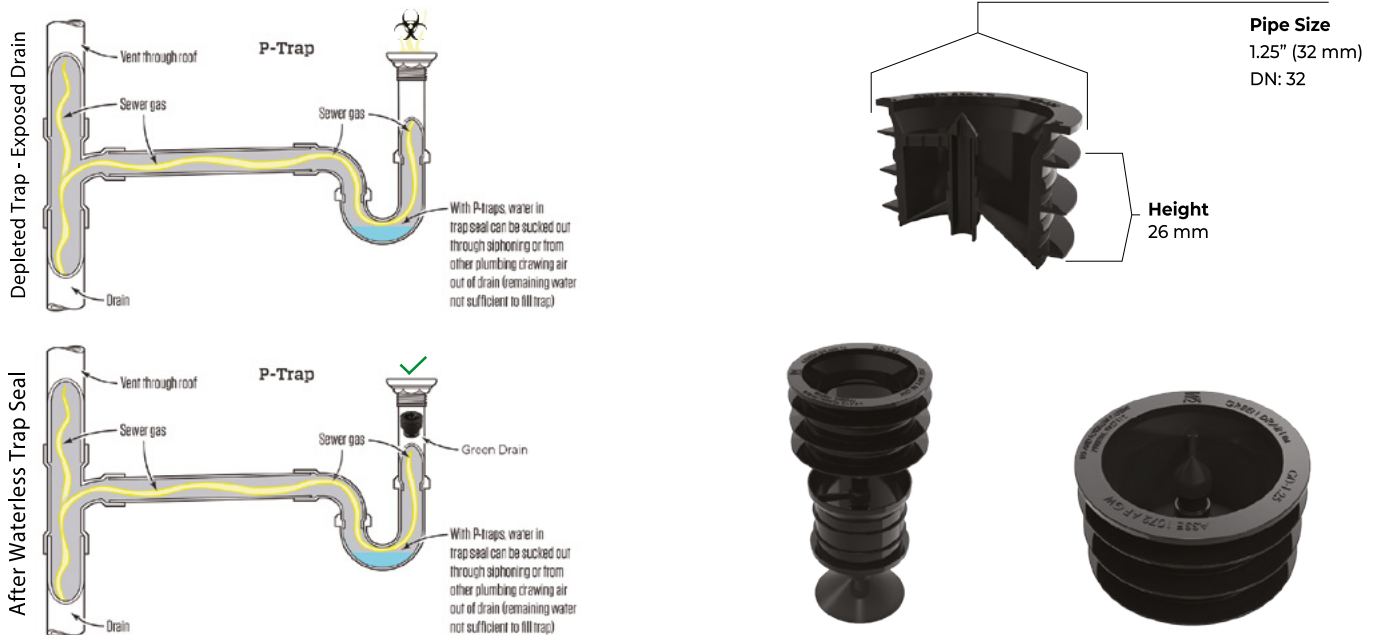
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

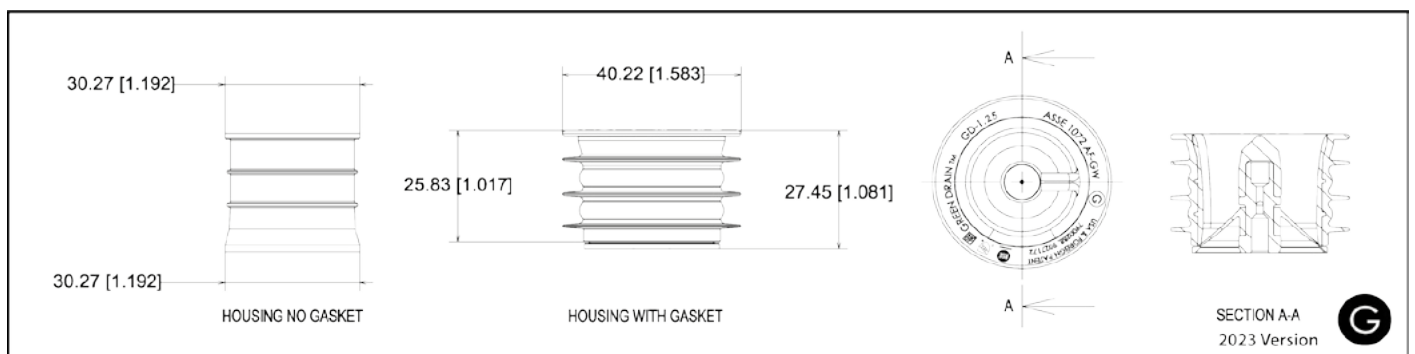
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 7.27 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 29.22 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



1.5" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD15

Specification: Green Drain (model: GD15) Waterless Trap Seal for 1.5" Drains.
ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

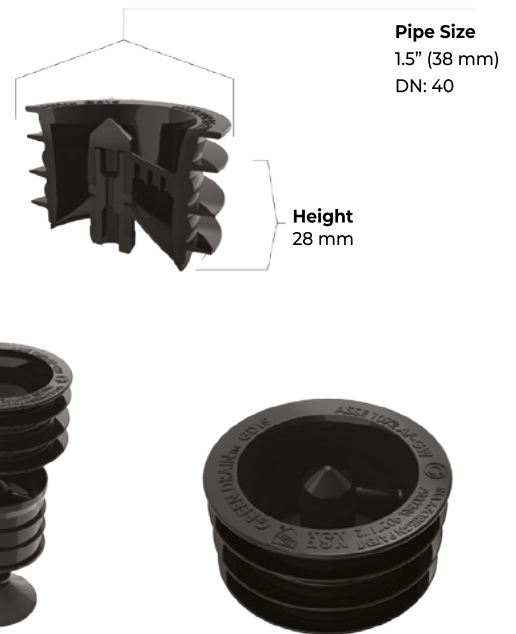
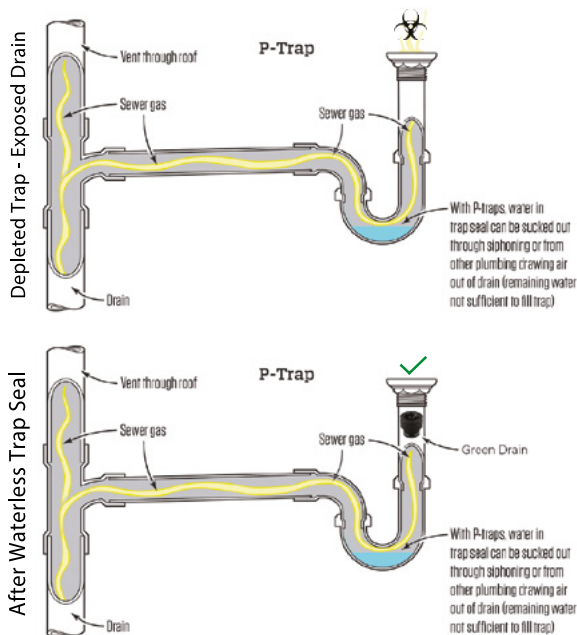
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

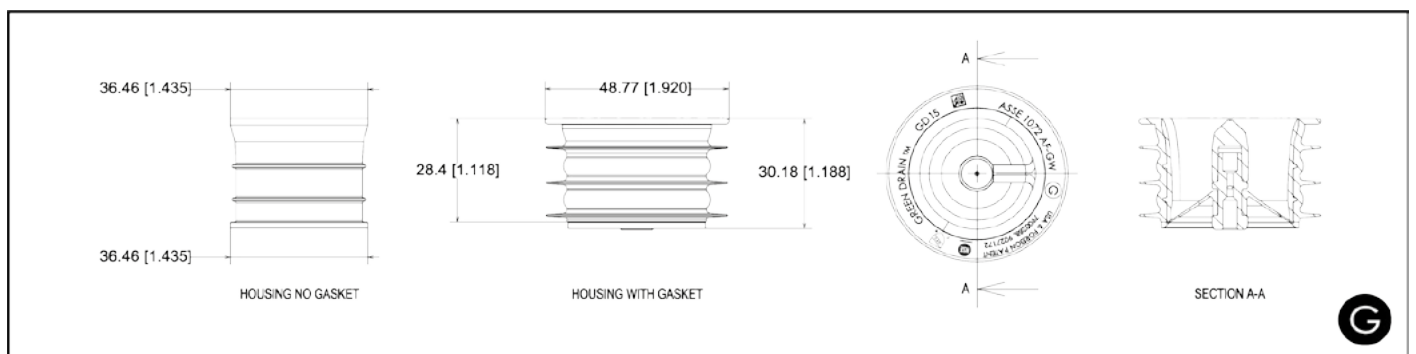
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 24.21 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 51.55 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



2" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD2

Specification: Green Drain (model: GD2) Waterless Trap Seal for 2" Drains.

ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

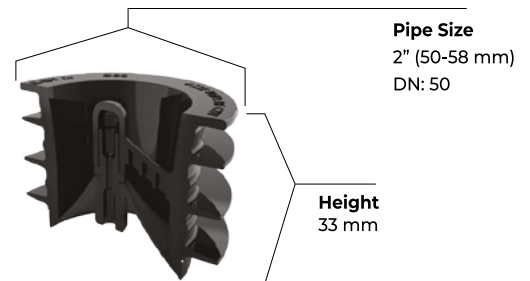
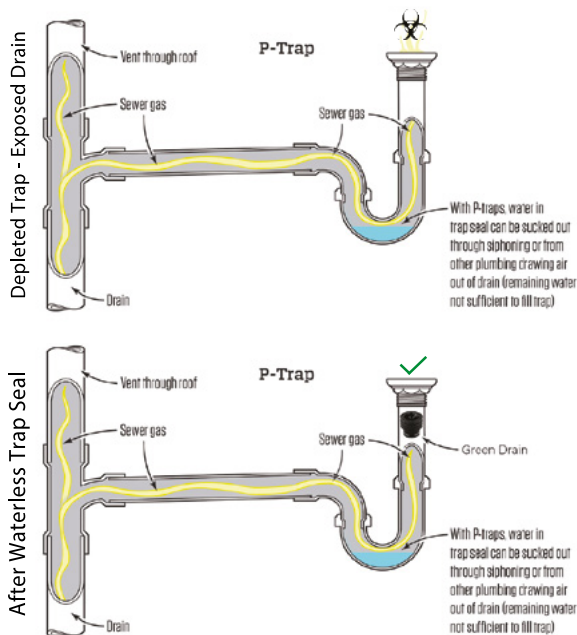
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

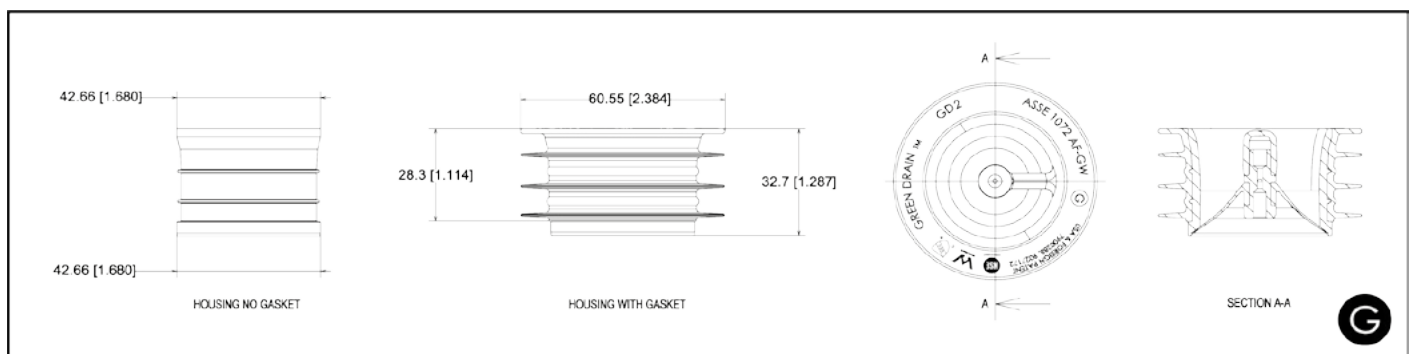
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 35.25 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 82.50 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



2.5" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD25

Specification: Green Drain (model: GD25) Waterless Trap Seal for 2.5" Drains.

ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

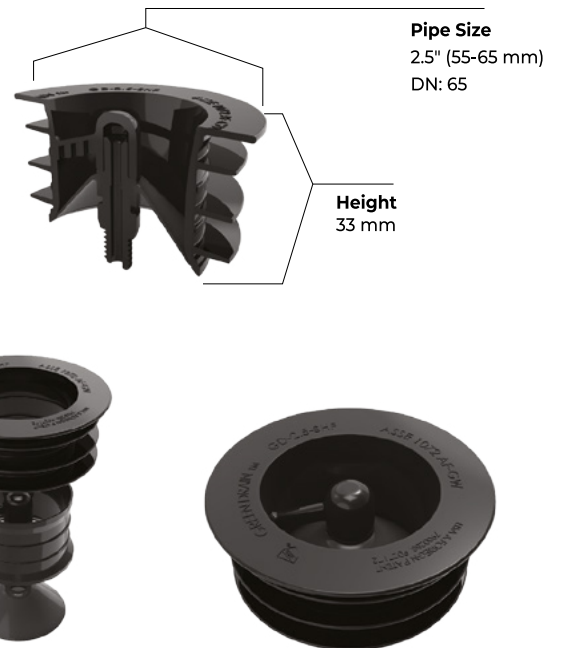
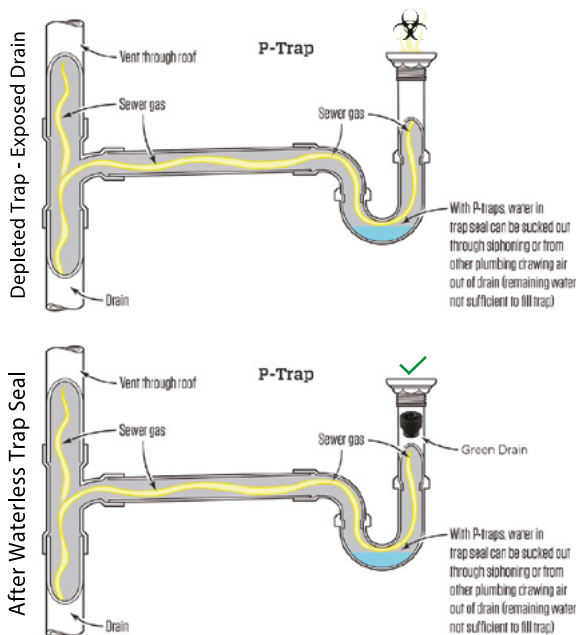
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

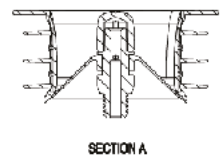
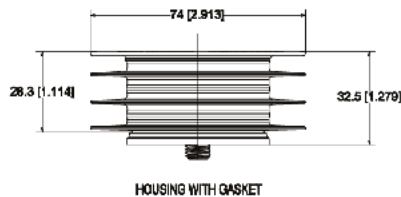
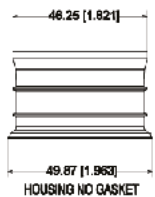
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 33.8 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 72.50 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



3" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD3

Specification: Green Drain (model: GD3) Waterless Trap Seal for 3" Drains.
ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

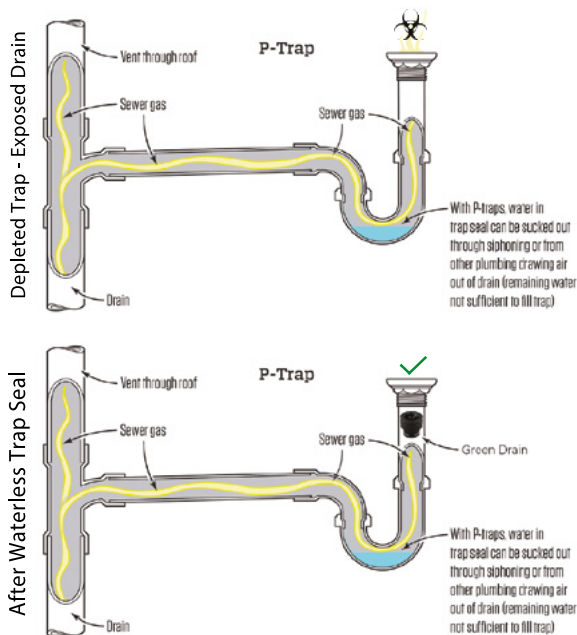
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

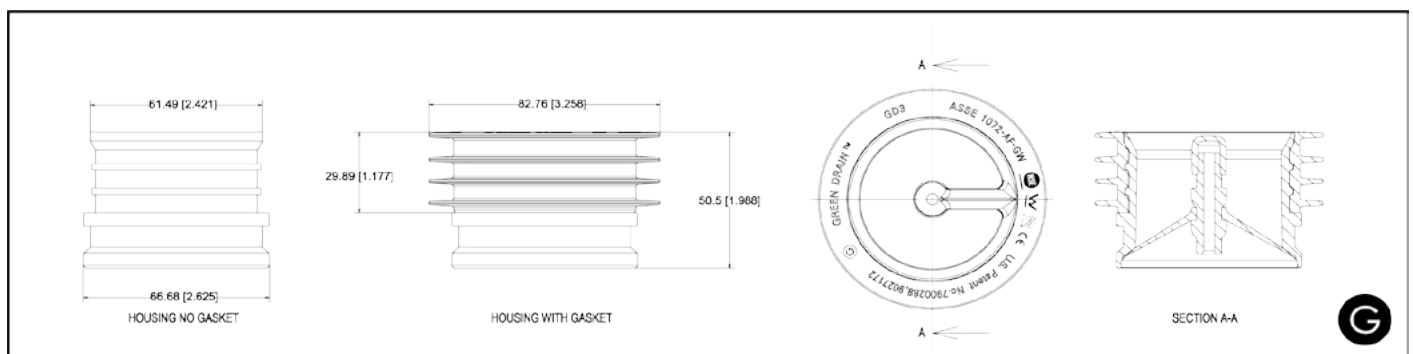
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 40.65 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 105.70 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



3.5" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD35

Specification: Green Drain (model: GD35) Waterless Trap Seal for 3.5" Drains.
ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

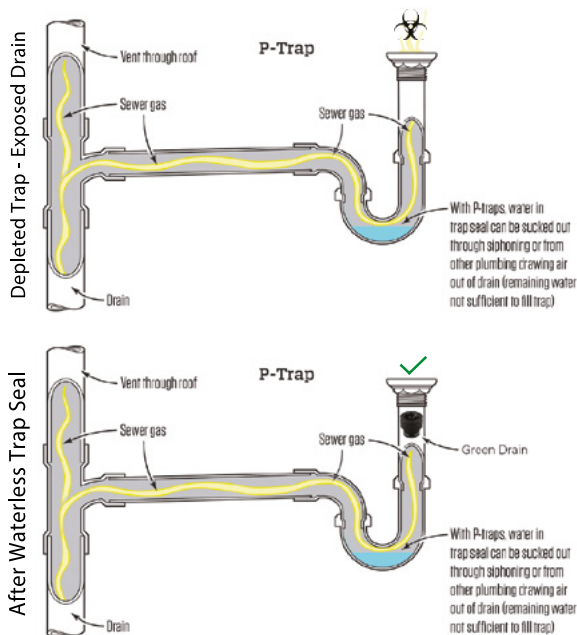
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

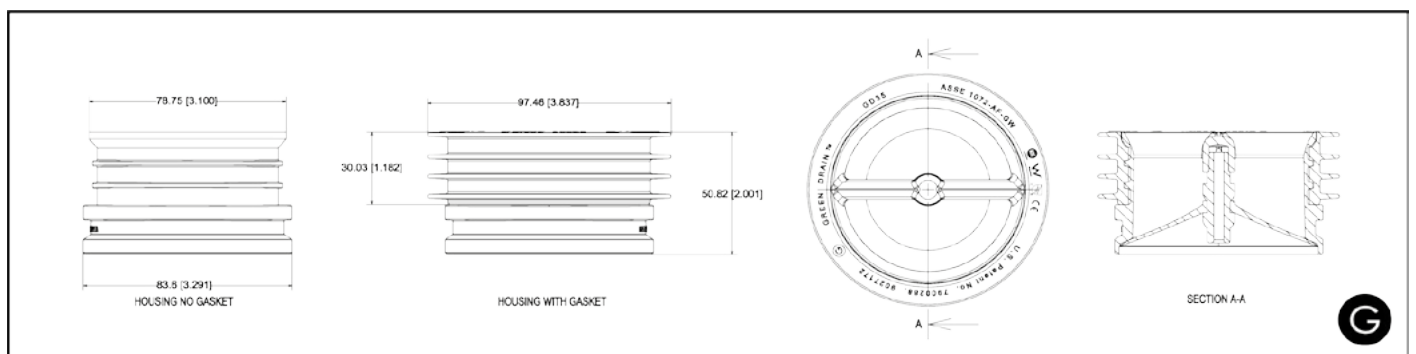
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 121.60 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 323.17 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



3-3.5 EG Green Drain™

Waterless Trap Seal for Floor Drains

Model: GD3-3.5 EG

Specification: Green Drain (model: GD3-3.5 EG) Waterless Trap Seal for GD3-3.5 EG Drains.
ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

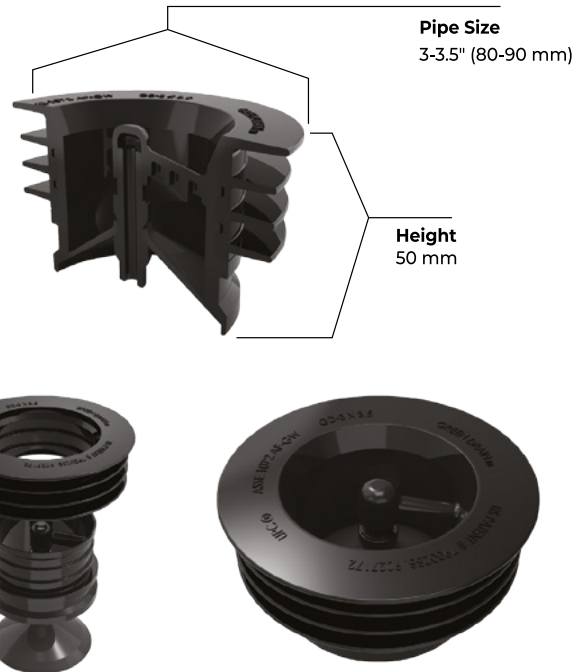
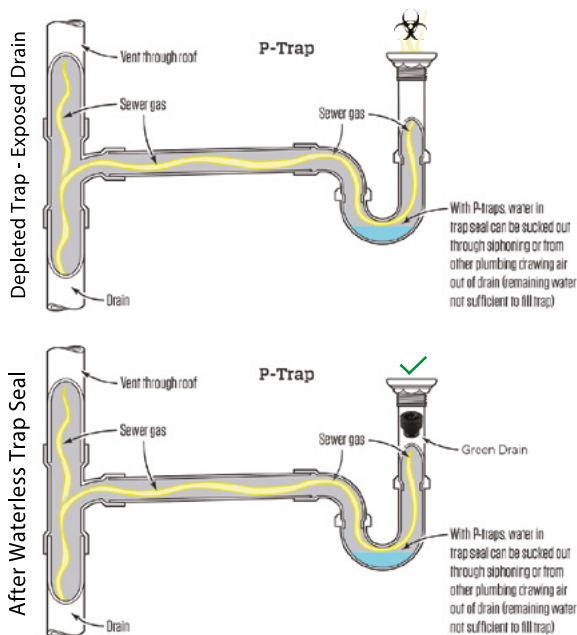
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

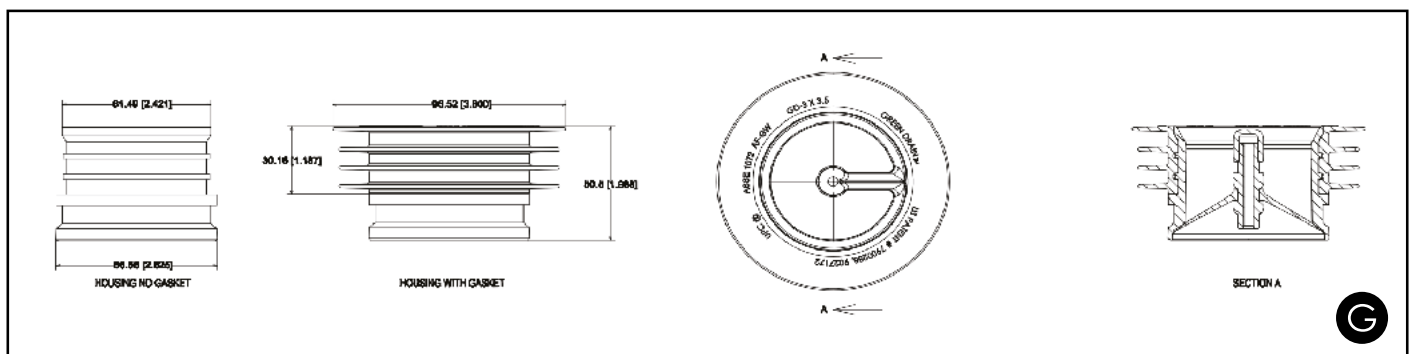
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 40.65 LPM.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 105.70 LPM.



Patent No. 7900288 and 9027172



www.greendrains.com



GD35-4 EG Green Drain™

Waterless Trap Seal for Floor Drains

Model: GD35-4 EG

Specification: Green Drain (model: GD35-4 EG) Waterless Trap Seal for GD35-4 EG Drains.

ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

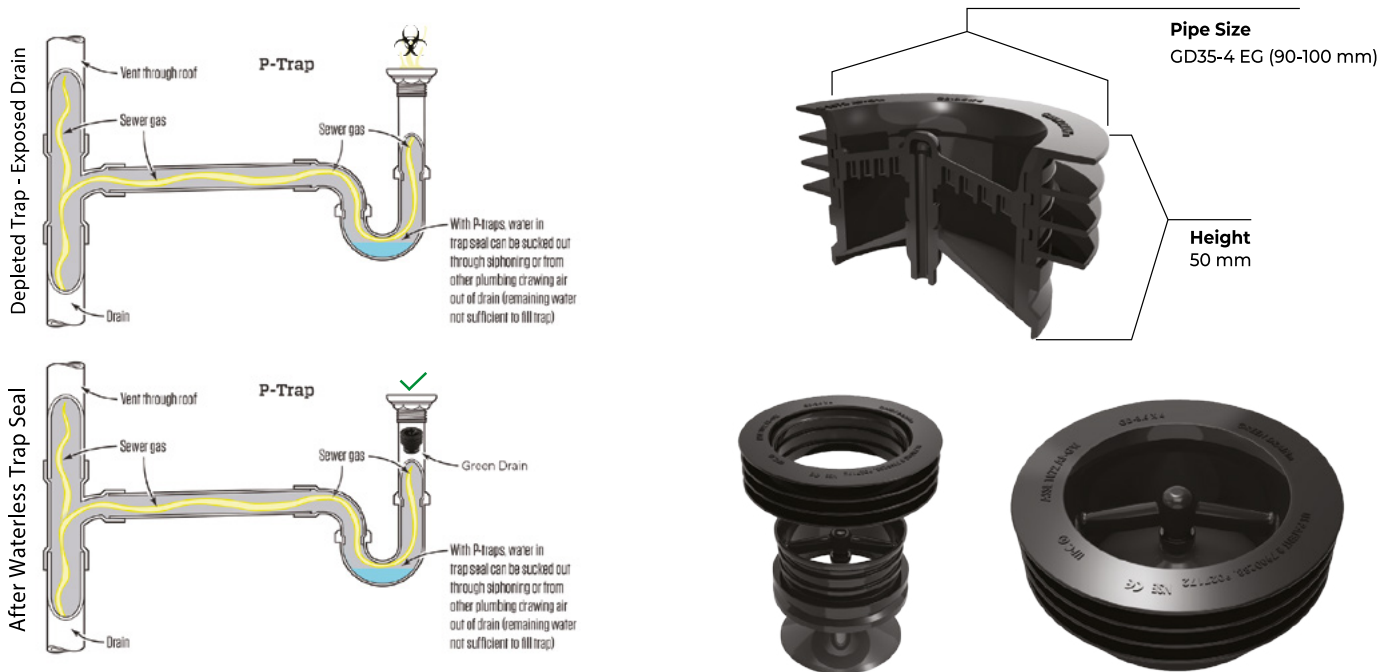
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

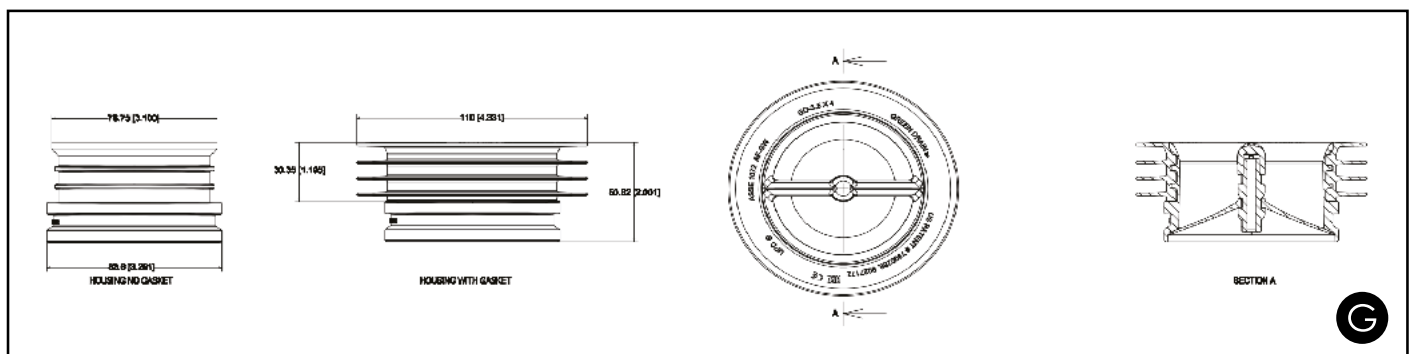
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 121.60 LPM.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 323.17 LPM.



Patent No. 7900288 and 9027172



www.greendrains.com



4" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD4

Specification: Green Drain (model: GD4) Waterless Trap Seal for 4" Drains.

ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

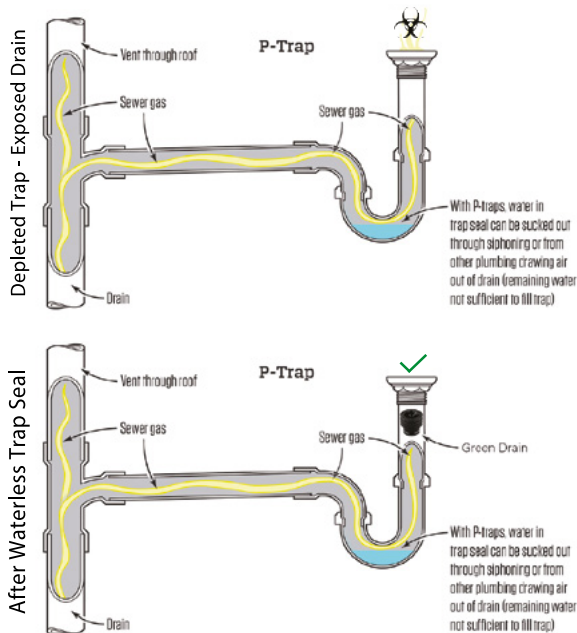
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

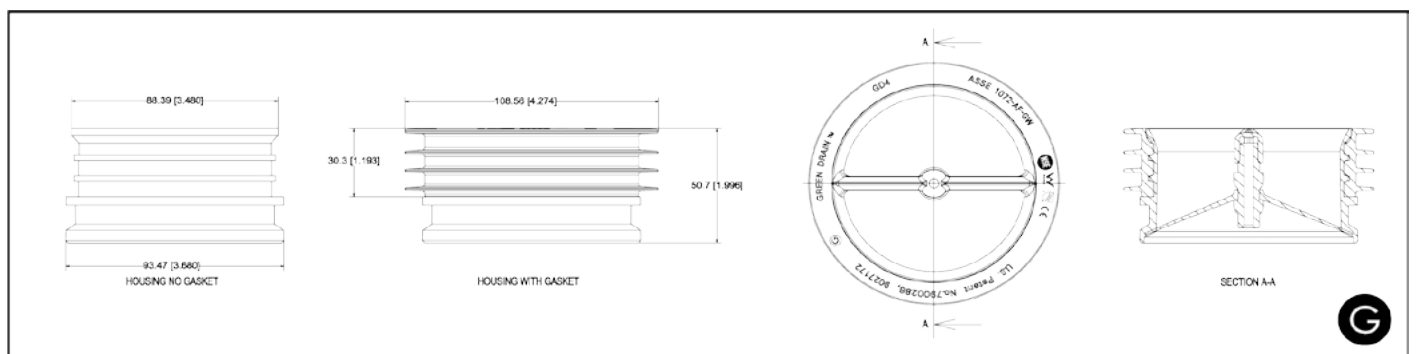
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 218.25 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: ≥ 340.00 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



5" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD5

Specification: Green Drain (model: GD5) Waterless Trap Seal for 5" Drains.

ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

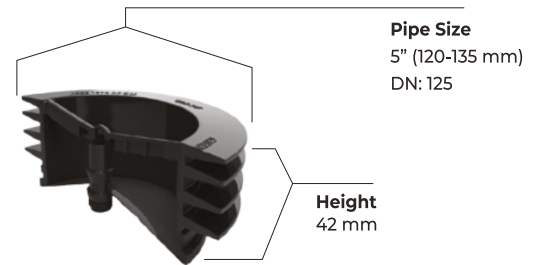
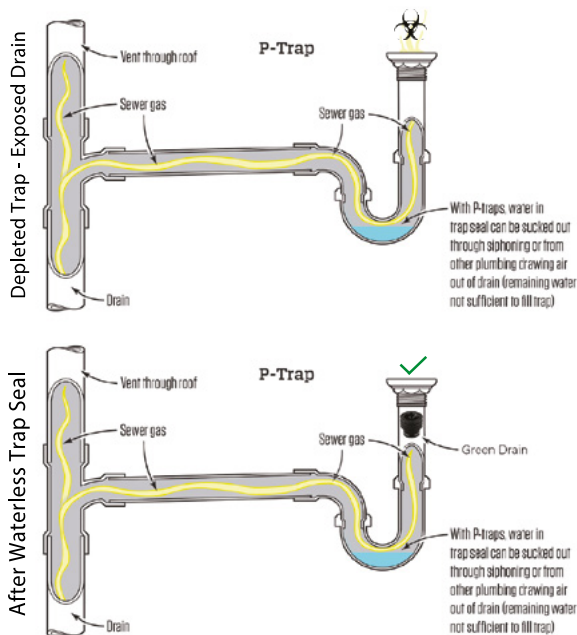
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

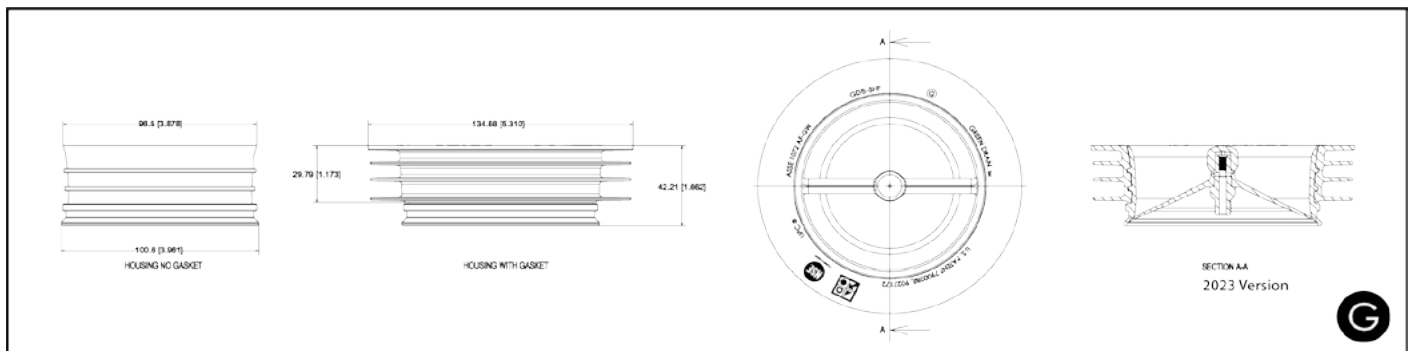
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 270 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: 391 L/M.



Patent No. 7900288 and 9027172



www.greendrains.com



6" Green Drain™

Waterless Trap Seal for Floor Drains

MODEL: GD6

Specification: Green Drain (model: GD5) Waterless Trap Seal for 6" Drains.
ABS Plastic Housing | One-way Silicone Valve | Silicone Gasket

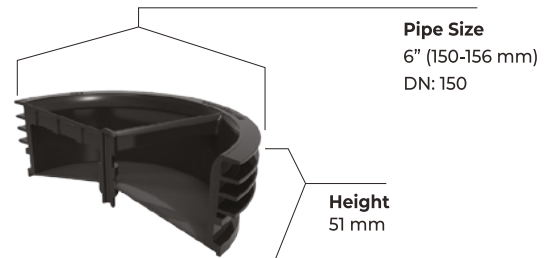
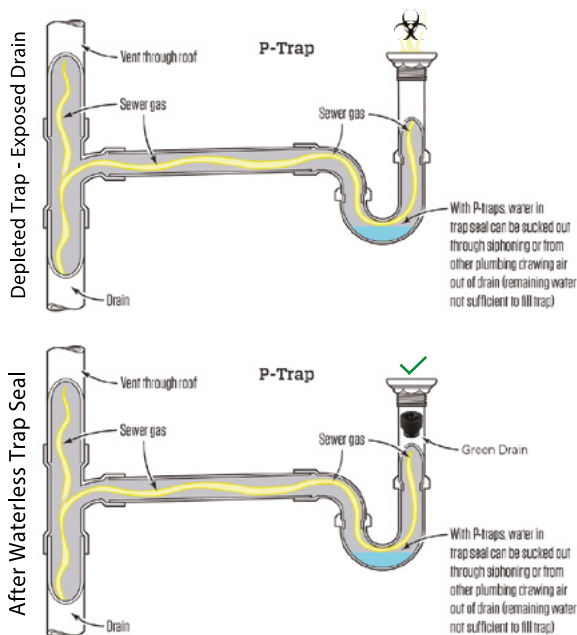
Function: Installs into the outlet of drain bodies, or drain hubs to protect the trap seal from evaporation. It prevents drain odors, sewer gases, or harmful biological aerosols or pathogens from infiltrating your building. Plus, it also helps to keep pests out. Provides waterless trap seal protection equivalent to water based trap primers.

- **New Construction:** Used as a trap primer replacement or in conjunction with a trap primer to provide protection against escaping sewer gases. Eliminates the need to repair/replace trap primers when they fail.
- **Retrofit:** Used in situations where trap primers have failed or where trap primers were never installed.

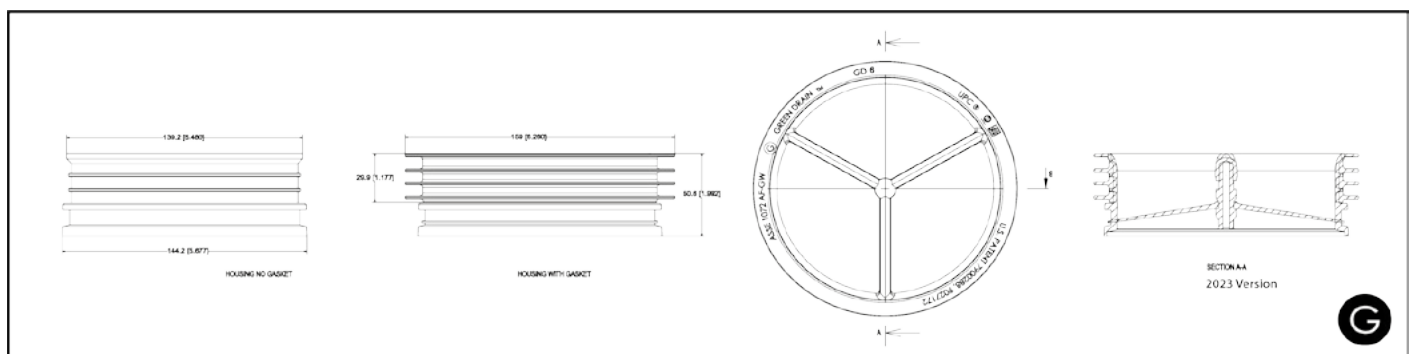
Benefits: Simple to install, eliminates the need for complex, time consuming, and expensive repairs. ECO friendly providing 100% water savings efficiency over traditional methods.

Flow Rates: Test Level C – 120 ± 2 mm for waste outlets and traps for basins, bidets, shower trays and kitchen sinks: 535 L/M.

Flow Rates: Test Level U – 300 ± 2 mm for waste outlets and traps for baths: ≥ 550 .



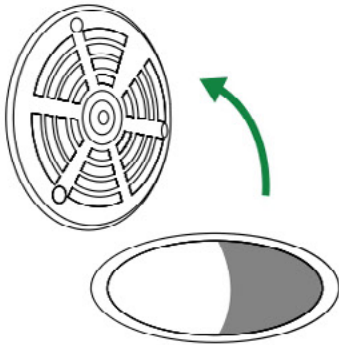
Patent No. 7900288 and 9027172



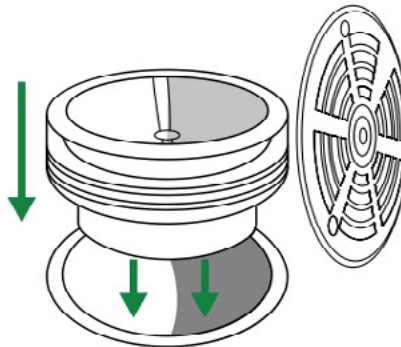
www.greendrains.com

INSTALLATION GUIDE

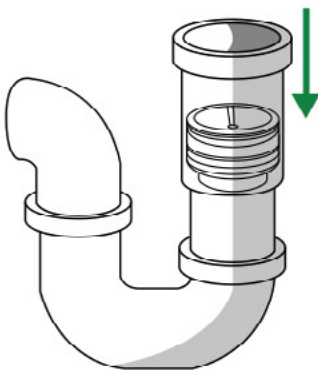
1 Remove Grate



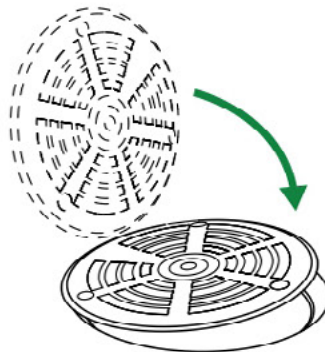
2 Insert Green Drain™



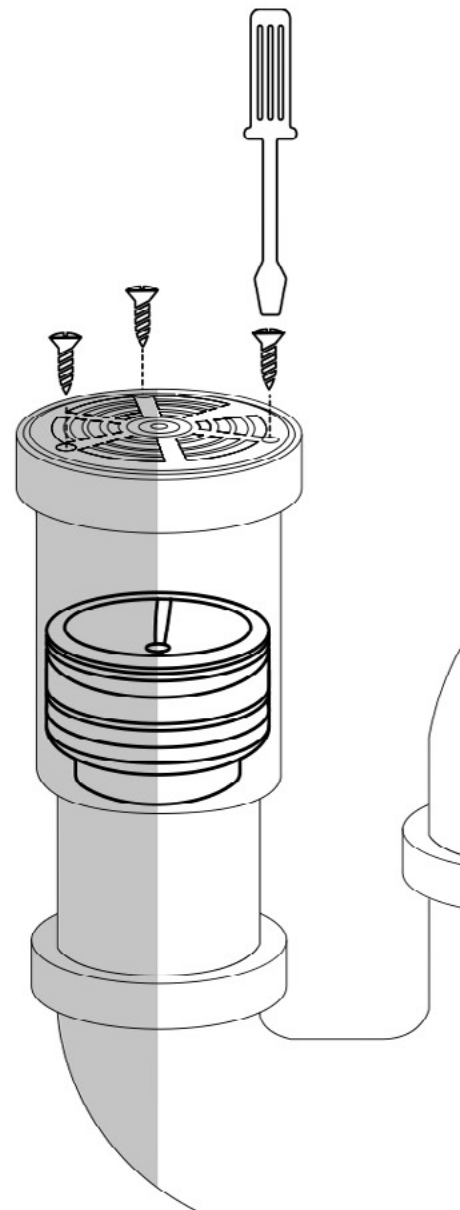
3 Recess 2" to 4" Into The Physical Pipe



4 Close Grate



5 Fasten Screws



Green Drain™ Product SKU's

Item Number	GDSN Level	Brand Name	Product Description	GTIN
GD1.25 (1.25")	Each	Green Drain	Waterless Trap Seal for 1.25" Drains	00860008089885
GD15 (1.5")	Each	Green Drain	Waterless Trap Seal for 1.5" Drains	00860541000323
GD2 (2")	Each	Green Drain	Waterless Trap Seal for 2" Drains	00864833000114
GD2.5	Each	Green Drain	Waterless Trap Seal for 2.5" Drains	00860541000392
GD3 (3")	Each	Green Drain	Waterless Trap Seal for 3" Drains	00864833000121
GD35 (3.5")	Each	Green Drain	Waterless Trap Seal for 3.5" Drains	00864833000138
GD4 (4")	Each	Green Drain	Waterless Trap Seal for 4" Drains	00864833000145
GD5 (5")	Each	Green Drain	Waterless Trap Seal for 5" Drains	00860008089854
GD6 (6")	Each	Green Drain	Waterless Trap Seal for 6" Drains	00860010179901
IN_GD1.25 (1.25")	Inner Pack	Green Drain	1.25" Inner Pack (24 units)	00860541000385
IN_GD15 (1.5")	Inner Pack	Green Drain	1.5" Inner Pack (24 units)	10860541000320
IN_GD2 (2")	Inner Pack	Green Drain	2" Inner Pack (24 units)	00864833000107
IN_2.5 (2.5")	Inner Pack	Green Drain	2.5" Inner Pack (24 units)	10860541000399
IN_GD3 (3")	Inner Pack	Green Drain	3" Inner Pack (24 units)	00864833000152
IN_GD35 (3.5")	Inner Pack	Green Drain	3.5" Inner Pack (24 units)	00864833000169
IN_GD4 (4")	Inner Pack	Green Drain	4" Inner Pack (24 units)	00864833000176
IN_GD5 (5")	Inner Pack	Green Drain	5" Inner Pack (24 units)	00860008089861
IN_GD6 (6")	Inner Pack	Green Drain	6" Inner Pack (24 units)	10860010179908
MC_GD1.25 (1.25")	Case	Green Drain	1.25" Master Case (96 units)	00860008089892
MC_GD15 (1.5")	Case	Green Drain	1.5" Master Case (96 units)	20860541000327
MC_GD2 (2")	Case	Green Drain	2" Master Case (96 units)	00864833000183
MC_2.5 (2.5")	Case	Green Drain	2.5" Master Case (96 units)	20860541000396
MC_GD3 (3")	Case	Green Drain	3" Master Case (96 units)	00864833000190
MC_GD35 (3.5")	Case	Green Drain	3.5" Master Case (96 units)	00860541000309
MC_GD4 (4")	Case	Green Drain	4" Master Case (96 units)	00860541000316
MC_GD5 (5")	Case	Green Drain	5" Master Case (96 units)	00860008089878
MC_GD6 (6")	Case	Green Drain	6" Master Case (96 units)	20860010179905
GD3-3.5" EG	Each	Green Drain	3"-3.5" Extended Gasket (Single)	00860008089809
IN_GD3-3.5" EG	Inner Pack	Green Drain	3"-3.5" Extended Gasket (24 units)	00860008089823
MC_GD3-3.5" EG	Case	Green Drain	3"-3.5" Extended Gasket (96 units)	10860008089806
GD35-4" EG	Each	Green Drain	3.5"-4" Extended Gasket (Single)	00860008089816
GD35-4" EG	Inner Pack	Green Drain	3.5"-4" Extended Gasket (24 units)	10860008089813
GD35-4" EG	Case	Green Drain	3.5"-4" Extended Gasket (96 units)	20860008089810
GD-ET	Each	Green Drain	Green Drain Extraction Tool	00860008089830
GD-MT	Each	Green Drain	Green Drain Measuring Tool	00860010179918



Report number: 1554-15003 | File number: 9301
Segment: Plumbing/Building | AREA: North America

The International Association of Plumbing and Mechanical Officials, or IAPMO, coordinates the development and adaptation of plumbing, mechanical, swimming pool and solar energy codes to meet the specific needs of individual jurisdictions both in the United States and abroad. IAPMO develops and publishes the Uniform Plumbing Code (UPC)

Products are in compliance with the following code(s):
Uniform Plumbing Code (UPC®) and National Plumbing Code of Canada.

Products are in compliance with the following standard(s):
ASSE 1072-2007



Certification No.: IAPMO-WM022837 -I01R00
Product: Floor Drain Trap Seal Protection Devices

IAPMO Oceana Pty Ltd is part of The IAPMO Group, an international plumbing industry based association that tests and certifies products and develops codes and standards that protect more than half the world's population. IAPMO Oceana certifies plumbing and drainage products to use the WaterMark[™] symbol.

IAPMO Oceana is accredited by JAS-ANZ to conduct assessments leading to product certification and has also been approved to grant WaterMark licences.



HACCP | Certificate number: I-PE-891-GRE-RG-01
Segment: Food Safety | AREA: Global

Hazard Analysis and Critical Control Points, or HACCP is a systematic preventive approach to food safety from biological, chemical, and physical hazards in production processes that can cause the finished product to be unsafe and designs measures to reduce these risks to a safe level. In this manner, HACCP attempts to avoid hazards rather than attempting to inspect finished products for the effects of those hazards. The HACCP system can be used at all stages of a food chain, from food production and preparation processes including packaging, distribution, etc. The Food and Drug Administration (FDA) and the United States Department of Agriculture (USDA) require mandatory HACCP programs for juice and meat as an effective approach to food safety and protecting public health.



NSF | National Sanitation Foundation

Certificate #C0571796 - 01 | Certificate #C0571797 - 01

The NSF certification is your key to ensuring that the products you use meet strict standards for public health protection. Choosing a product certified by NSF lets you know the company complies with NSF's strict standards and procedures. From extensive product testing and material analyses to unannounced plant inspections, every aspect of a product's development is thoroughly evaluated before it can earn NSF certification



ICC-ES Report: PMG-1312 | Division 22 00 00-Plumbing Section: 22 13 16-Sanitary Waste and Vent Piping

In Compliance with the International Plumbing Code (IPC), International Residential Code (IRC), Uniform Plumbing Code (UPC), and National Plumbing Code of Canada (NSPC). In Compliance with ASSE 1072-2007, Performance Requirements for Barrier Type Floor Drain Trap Seal Protection Devices, American Society of Sanitary Engineering, CSA B79-2008 (R13), Floor, Area and Shower Drains, and Cleanouts for Residential Construction, ICC-ES LC1015, PMG Listing

Criteria for Elastomeric, Normally Closed, Floor Drain Evaporation Resistant Sealing System.

About the International Code Council

The International Code Council is the leading global source of model codes and standards and building safety solutions that include product evaluation, accreditation, technology, training, and certification. The Code Council's codes, standards, and solutions are used to ensure safe, affordable, and sustainable communities and buildings worldwide.

The International Code Council (ICC) family of solutions includes the ICC Evaluation Service (ICC-ES), S.K. Ghosh Associates, the International Accreditation Service (IAS), General Code, NTA Inc., and Alliance for National & Community Resilience (ANCR), which are dedicated to the construction of safe, sustainable, affordable and resilient structures.



The Safe Drinking Water and Toxic Enforcement Act of 1986

Proposition 65 regulations identify "no significant risk" levels for certain carcinogens.

Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm.

These chemicals can be in the products that Californians purchase, in their homes or workplaces, or that are released into the environment. By requiring that this information be provided, Proposition 65 enables Californians to make informed decisions about their exposures to these chemicals.



Report number: 1554-15003 | File number: 9301 Segment: Plumbing/Building | AREA: North America

Products are in compliance with the following code(s): Uniform Plumbing Code (UPC®) and National Plumbing Code of Canada.

The International Association of Plumbing and Mechanical Officials, or IAPMO, coordinates the development and adaptation of plumbing, mechanical, swimming pool and solar energy codes to meet the specific needs of individual jurisdictions both in the United States and abroad. IAPMO develops and publishes the Uniform Plumbing Code (UPC)



European Technical Assessment: ETA-18/0536
Segment: Plumbing/Building | AREA: Europe/EU/EEA

CE marking is a certification mark that indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area (EEA). The CE marking is recognizable worldwide even to people who are not familiar with the European Economic Area (EEA). The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EC directives.



Report number: VA 2.47/20696 | Segment: Plumbing/Building
AREA: Denmark

Approval of water supply and drainage systems (VA). The VA mark is recognized and respected in the industry. The VA approval includes an assessment of the suitability of water supply and drainage products as construction products. It is also an assessment of whether the products fulfil the Danish requirements defined in the Danish Building Regulation as well as related norms and guidelines. The VA mark is recognized and respected in the industry and a demand by professionals. The VA mark shows that the product fulfils the Danish norms for water supply and drainage systems and can be mounted in accordance with the requirements of the Building Regulation.



License No.: WM-022837
Segment: Plumbing/Building
AREA: Australia

WaterMark is a mandatory Australian national certification scheme required by the Plumbing Regulators and detailed in the Plumbing Code of Australia (PCA). The PCA prescribes the procedures and requirements of the WaterMark Certification Scheme (WMCS), therefore ensuring a uniform national approach to plumbing product certification, with industry and regulatory recognition throughout Australia.



Description: TRAP SEAL DEVICE | Product Name: GREEN DRAIN
Product File No: 20170008 | Trans ID: 2877090

DIVISION OF INDUSTRY SERVICES

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Administrative Code. This approval is valid until the end of January 2022.

IAPMO RESEARCH AND TESTING, INC.

5001 E. Philadelphia Street, Ontario, CA 91761 • Phone (909) 472-4100 • Fax (909) 472-4244 • www.iapmort.org



CERTIFICATE OF LISTING



IAPMO Research and Testing, Inc. is a product certification body in which its product certification system includes inspection and testing of samples taken from the supplier's stock or from the market or a combination of both to verify compliance to the requirements of applicable codes and standards. This activity is coupled with periodic surveillance of the supplier's factory and/or warehouses as well as the assessment of the supplier's Quality Assurance System. This listing is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO Research and Testing, Inc. of the product acceptance by Authorities Having Jurisdiction.

Issued To:

GREEN DRAIN INC

20619 TORRENCE CHAPEL RD SUITE 116-223 CORNELIUS, NC 28031 , United States

Product:

Floor Drain Trap Seal Protection Devices

Products are in compliance with the following code(s):

Uniform Plumbing Code (UPC®)

Products are certified to the following standard(s)

ASSE 1072-2007

File Number: 9301

Effective Date: July 2024

Void After: July 2029*


Chairman, Product Certification Committee




Chief Technical Service Officer

*This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

This listing period is based upon the last date of the month indicated on the Effective Date and Void After Date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of the Product Certification Committee, or any evidence of non-compliance with applicable codes and standards or of inferior workmanship, may be deemed sufficient cause for revocation of this listing. Production of or reference to this form for advertising purposes may be made only by specific written permission of IAPMO Research and Testing, Inc. Any alteration of this certificate could be grounds for revocation of the listing. This document shall be reproduced in its entirety.

IAPMO RESEARCH AND TESTING, INC.

CERTIFICATE OF LISTING



Issued To: GREEN DRAIN INC

Effective Date: July 2024

File Number: 9301

Product: Floor Drain Trap Seal Protection Devices

Void After: July 2029

This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

Identification:

Each device shall be permanently and legibly marked with the manufacturer's name or trademark, Any Floor, Grease Laden Waste (AF-GW). Product shall also bear the cUPC® certification mark. Packaging shall bear the manufacturer's name or trademark, model number or description of the device, AF-GW, and the floor drain size.

Characteristics:

Barrier type floor drain trap seal protection devices. Trap seal device shall not be used in lieu of a trap primer. Product to be installed with other IAPMO R&T listed fittings, in accordance with the manufacturer's instructions, and the requirements of the latest edition of the Uniform Plumbing Code and the National Plumbing Code of Canada.

Products listed on this certificate have been tested by an IAPMO R&T recognized laboratory. This recognition has been granted based upon the laboratory's compliance to the applicable requirements of ISO/IEC 17025.

IAPMO RESEARCH AND TESTING, INC.

CERTIFICATE OF LISTING



Issued To: GREEN DRAIN INC

Effective Date: July 2024

File Number: 9301

Product: Floor Drain Trap Seal Protection Devices

Void After: July 2029

This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

Models

Model Number	Description
GD-1.25	1 1/4" Drain
GD-1.5	1 1/2" Drain
GD-2	2" Drain
GD-3	3" Drain
GD-3.5	3.5" Drain
GD-4	4" Drain
GD-5	5" Drain
GD-6	6" Drain

NSF International

789 N. Dixboro Road, Ann Arbor, MI 48105 USA

RECOGNIZES

Green Drain Inc.

Cornelius, NC

AS COMPLYING WITH NSF/ANSI 2 AND ALL APPLICABLE REQUIREMENTS.
PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE
AUTHORIZED TO BEAR THE NSF MARK.



ISO/IEC 17065
Product Certification Body
#0215

Certification Program
Accredited by the
American National
Standards Institute



Certification Program
Accredited by the
Standards Council
of Canada

This certificate is the property of NSF International and must be returned upon request. This certificate remains valid as long as this client has products in Listing for the referenced standards. For the most current and complete Listing information, please access NSF's website (www.nsf.org).

A handwritten signature in black ink, appearing to read "Amy Wirges".

March 3, 2021

Certificate# C0571796 - 01

Amy Wirges

Senior Managing Director, Product Certification

NSF International

789 N. Dixboro Road, Ann Arbor, MI 48105 USA

RECOGNIZES

Green Drain Inc.

Facility: Guangdong Province, China

AS COMPLYING WITH NSF/ANSI 2 AND ALL APPLICABLE REQUIREMENTS.
PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE
AUTHORIZED TO BEAR THE NSF MARK.



ISO/IEC 17065
Product Certification Body
#0216

Certification Program
Accredited by the
American National
Standards Institute



Certification Program
Accredited by the
Standards Council
of Canada

This certificate is the property of NSF International and must be returned upon request. This certificate remains valid as long as this client has products in Listing for the referenced standards. For the most current and complete Listing information, please access NSF's website (www.nsf.org).

A handwritten signature in black ink, appearing to read "Amy Wirges".

March 3, 2021

Certificate# C0571797 - 01

Amy Wirges

Senior Managing Director, Product Certification



OFFICIAL LISTING

NSF certifies that the products appearing on this Listing conform to the requirements of
NSF/ANSI 2 - Food Equipment

This is the Official Listing recorded on April 2, 2024.

Green Drain Inc.
20619 Torrence Chapel Road
Suite 116-223
Cornelius, NC 28031
866-444-0212

Facility: Guangdong Province, China

COMPONENTS:

Waterless Trap Seal for Floor Drain

GD1.25	GD15	GD2	GD3	GD35	GD4	GD5	GD6
--------	------	-----	-----	------	-----	-----	-----

Note: Additions shall not be made to this document without prior evaluation and acceptance by NSF.

1 of 1

789 N. Dixboro Road, Ann Arbor, Michigan 48105-9723 USA
1-800-NSF-MARK / 734-769-8010
www.nsf.org

C0571796

IAPMO R&T OCEANA

7-11 Fullard Road, Narre Warren, Victoria 3805, Australia



IAPMO R&T Oceana is a product certification body which inspects and arranges for the independent laboratory testing of samples taken from the manufacturer's stock or from the market or a combination of both, to verify compliance of the requirements of applicable Standards and Specifications. This activity is coupled with periodic surveillance of the manufacturer's factory and any major subcontractor's site/s as well as the assessment of the manufacturer's Quality Assurance System. This certification is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO R&T Oceana of the product acceptance by Authorities Having Jurisdiction.

CERTIFICATE OF CONFORMITY

IAPMO R&T Oceana hereby grants to:

Green Drain Inc

15275 Collier Blvd, Suite 201-262, Naples, FL, 34119, United States

the right to use the WaterMark in accordance with the ABCB Manual for the WaterMark Certification Scheme; – Australian Standards; WaterMark Technical Specifications; and the Plumbing Code of Australia; only in respect of the certified product as described in the WaterMark Certificate of Conformity – Schedule of Certified Product (Refer also IAPMO Product Listing Directory). The Certificate is granted subject to the rules governing the WaterMark Certification Scheme and the Terms and Conditions of the Approved User Agreement and IAPMO Oceana's WaterMark Governance Rules.

Evaluated to:

WMTS-522:2018

Barrier type floor drain trap seal protection devices

Manufacturer:

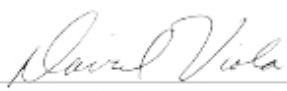
Refer to Licence Holder

Licence No.: WM-022837

First Certified: 30 July 2018

Certification Date: 30 July 2021

Expiry Date: 29 July 2026


CEO, The IAPMO Group

This WaterMark certification is for the period indicated herein and is void after the date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of IAPMO R&T Oceana, or any evidence of non-compliance with applicable Standards, Specifications or of inferior workmanship, may be deemed sufficient cause for revocation of this certification. Reproduction of or reference to this certificate for advertising purposes may be made only by specific written permission of IAPMO R&T Oceana. Any alteration of this certificate could be grounds for revocation of this certification.

"This certificate is issued by a JAS-ANZ accredited Conformity Assessment Body. The ABCB and JAS-ANZ do not in any way warrant, guarantee or represent that the product the subject of this Certificate conforms to the WaterMark Certification Scheme Rules, nor accepts any liability arising out of the use of the product. The ABCB disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this Certificate."



WATERMARK CERTIFICATE OF CONFORMITY
SCHEDULE OF CERTIFIED PRODUCT



Certificate Holder
Green Drain Inc

A.B.N.:
15275 Collier Blvd, Suite 201-262,Naples,FL,34119,United States

Manufacturer
Refer to Licence Holder

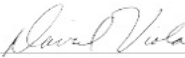
Standard
WMTS-522:2018
Barrier type floor drain trap seal protection devices

Licence No. WM-022837 Certification Date: 30 July 2021 Expiry Date: 29 July 2026 First Certified: 30 July 2018

Brand Name	Model Name	Model ID	Product Type	Product Description	Application	Nominal Size	Material
Green Drain	Green Drain	GD2	Pipes and fittings	Floor drain barrier trap protection device to restrict sewer gases, insects, odours and evaporation from a trap seal. To suit DN 50 AS/NZS 1260 certified pipe.	Floor waste	DN50	ABS
Green Drain	Green Drain	GD3	Pipes and fittings	Floor drain barrier trap protection device to restrict sewer gases, insects, odours and evaporation from a trap seal. To suit DN 80 AS/NZS 1260 certified pipe.	Floor waste	DN80	ABS
Green Drain	Green Drain	GD4	Pipes and fittings	Floor drain barrier trap protection device to restrict sewer gases, insects, odours and evaporation from a trap seal. To suit DN 100 AS/NZS 1260 certified pipe.	Floor waste	DN100	ABS

END RECORD

END RECORD


CEO, The IAPMO Group

HACCP INTERNATIONAL

eliminate the hazard - reduce the risk



This is to certify that

Green Drain Inc

Floor Drain Trap Seals

Food Zone Classification: SSZ (Splash or Spill Zone)

GD125
GD15
GD2
GD3
GD35
GD4
GD5
GD6

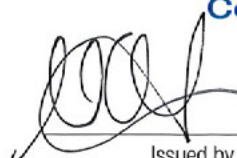
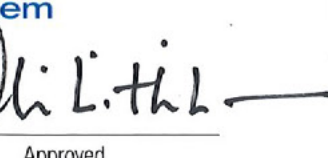
are certified as suitable for use in floor drains
in facilities that operate a

HACCP based Food Safety Programme

noting the conditions of the certification statement

in accordance with the requirements of

**HACCP International's Food Safety
Certification System**

 Issued by
 Approved


5 September 2024

Issue Date

5 September 2026

Expiry Date

This certificate belongs to HACCP International and must be returned upon demand. All products and services to which this certificate refers are evaluated prior to reissue.

HACCP INTERNATIONAL: No. 3 Ridgewest Building, 1 Ridge Street, North Sydney, NSW 2060, Australia
www.haccp-international.com



For certificate verification
and food zone
classification details

Certificate Number

I-PE-891-GRE-RG-04

Certification Statement	I-PE-891-GRE-RG-04
Green Drain Inc	
Certificate Expiry Date	5 September 2026
Floor Drain Trap Seals	
Food Zone Classification: SSZ (Splash or Spill Zone)	
GD125	
GD15	
GD2	
GD3	
GD35	
GD4	
GD5	
GD6	

HACCP International certifies the products listed above as suitable for use in floor drains in food facilities that operate a HACCP based Food Safety Programme.

Licence Commencement	6 September 2024
Certificate Issue Date	5 September 2024 

HACCP International's evaluation and certification is strictly confined to matters of food safety or the operation of a HACCP based Food Safety Programme. Whilst all reasonable care is taken by HACCP International in its evaluation of the product(s) or services(s) described herein, HACCP International does not guarantee that every food safety risk in every application has been identified. No guarantee is offered or implied in the issuing of this statement.

Licence Agreement

Green Drain Inc is licensed to use the HACCP International certification mark, in accordance with HACCP International's Certification Trade Mark Rules and Conditions in All Regions (Global) in respect of the products listed above, for a period of 24 months from the licence commencement date Green Drain Inc is in receipt of the HACCP International Pty Ltd Certification Trade Mark Rules and Conditions v3.0 and agrees to abide by the conditions therein.

Licensee's Signature: _____ Date: _____

Test Report

Report No.: CTT2007011136EN

Page 1 of 1

Sample Received Date: Jul. 08, 2020
Completed Date: Jul. 10, 2020
Report Date: Jul. 10, 2020

The following merchandise was (were) submitted and identified on behalf of the applicant as:

Sample Name: Green Drain Trap Seal 2 inch/3 inch/3.5 inch/4 inch
Model No.: DS GD2/DS GD3/DS GD35/DS
P/O No.: GD4 DS-7433
Sample Quantity: 4
Manufacturer: Green Drain
Exported to: USA
Country of Origin: China

Test Result(s): Please refer to next page(s).

Test Requested and Conclusion(s):

No.	Standard and Requirement	Conclusion(s)
1	Client's requirements (Reference to California Proposition 65) - Lead	PASS
2	Client's requirements (Reference to California Proposition 65) - Phthalates	PASS

Signed for and on Behalf of CTT:

Hilary He

Hilary He
Technical Manager



This test report is issued by the company subject to its General Conditions of Services available on request and accessible at <http://www.cttlab.com/order/201905050400480820.pdf>. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this report refer only to the sample(s) received. Without prior written permission of the company, this test report cannot be reproduced, except in full. Any inquiry about this report, please raise from the date of receipt of the report within 30 days, overdue will not be accept. Items marked with "n" means they are not accredited by CNAS (if with CNAS logo), "s" means the item of subcontractor. All or Part of items of this report are not in the accredited scope of CMA and cannot be as domestic social impartiality proof data.

Dongguan Consumer Testing
Technology Co., Ltd.

No.7, Gongye Beisi Road, Songshanhu High-Tech Industrial Development Park, Dongguan, Guangdong, China.
Tel: 86-0769-8898 9888 Fax: 86-0769-8898 8808 Hot Line: 400 6789 666
Website: <http://www.cttlab.com> Email: enquiry@cttlab.com





**DANISH
TECHNOLOGICAL
INSTITUTE**

Teknologiparken
Kongsvang Allé 29
DK-8000 Aarhus C
+45 72 20 20 00

info@teknologisk.dk
www.teknologisk.dk

Page: 1 of 9
Date: 6 March 2024
Init.: JMOC/ARP/MRI
Appendices: 1

TEST REPORT

TYPE TEST (TT)

REPORT NO.:
226049

Applicant: Green Drain Europe ApS
Birk Centerpark 40
7400 Herning
Denmark

Contact person: Keld Rindom
Email: kr@greendrains.eu

Product: Odour traps, Green Drain models No. GD 1.25, GD 15, GD 2, GD 4, GD 6

Manufacturing and sampling site: Green Drains Inc.
15275 Collier Blvd., Suite 201-262
Naples, FL 34119
USA

Samples: Information about manufacturing site and sampling site was provided by the applicant. Sampling was carried out by the applicant, and the samples were received by DTI on 19 January 2024.

Test period: 1 February - 4 March 2024

Test site: Danish Technological Institute, VA Testing and Inspection (DTI)
Kongsvang Allé 29
DK-8000 Aarhus C, Denmark

Test method: EAD 180020-00-0704:2018 - Waterless odour trap for floor drains

Result: The requirements of the test methods mentioned above were met.

Remark: Reduced test programme compared to the test method.

Terms: Accredited testing was carried out in compliance with international requirements (EN ISO/IEC 17025:2017) and in compliance with Danish Technological Institute's General Terms and Conditions regarding Commissioned Work Accepted by Danish Technological Institute.
The test results apply to the tested products only. This test report may be reproduced in extract only if the Laboratory has approved the extract in writing.

Signature:

Jesper M. Christensen
Jesper Mondrup Christensen
Consultant

Allan R. Pedersen
Allan R. Pedersen
Product Manager



DIGITALLY SIGNED DOCUMENT

6 March 2024

DANISH TECHNOLOGICAL INSTITUTE



 **DANAK**
Test Reg. No. 300

Test methods and requirements in accordance with: EAD 180020-00-0704	Test site	Table No./ Appendix No.	Requirements met		Accredited		Sub-contractor Accreditation No.
			Yes	No	Yes	No	
Identification of the tested components and general information	DTI	Table 1					
2.2.2 Air/Odour tightness	DTI	Table 2	X		X		
2.2.3 Self-cleaning ability	-	Table 3	N/A				
2.2.4 Effectiveness	DTI	Tables 4-5	X		X		
2.2.5 Mechanical resistance to air pressure	DTI	Table 6	X		X		
2.2.6 Heat resistance - thermal behaviour	DTI	Table 7	X		X		
2.2.7 Pull-out resistance from floor drain	DTI	Table 8	X		X		
7 Photos and marking	DTI	Tables 9-10					
Installation manual	-	Appendix 1					

Table 1

Identification of the tested components and general information

Item id.	Photo	Model/Article No.	Dimension	Mounting diameter
1		Green Drain GD 1.25	DN40	Ø31-36 mm
2		Green Drain GD 15	DN40	Ø37-45 mm
3		Green Drain GD 2	DN50	Ø46-55 mm
4		Green Drain GD 4	DN100	Ø95-104 mm
5		Green Drain GD 6	DN150	Ø145-155 mm
6	 	Drain Purus	-	-
7	 	Drain Blücher	-	-
8		Pipe	DN40 ID Ø35.5 mm	-
9		Pipe	DN40 ID Ø40.5 mm (socket)	-

Danish Technological Institute	Test results	Page: 4 of 9
		Report No.: 226049

10		Pipe	DN50 ID Ø50.5 mm (socket)	-
11		Pipe	DN100	-
12		Pipe	DN150	-

Table 2						
2.2.2 – Air/Odour tightness						
Item Id.	Sample No.	Test pressure Pa	Test duration min	Pressure reading after test Pa	Requirements met	
					Yes	No
1	1	200	15	200	X	
2	1	200	15	200	X	
3	1	200	15	200	X	
4	1	200	15	200	X	
5	1	200	15	200	X	
Requirement The pressure shall be at least 180 Pa after the test period.						
Test equipment: 270-A-1783, 270-A-0849						

Danish Technological Institute	Test results	Page: 5 of 9
		Report No.: 226049

Table 3
2.2.3 – Self-cleaning ability
Measured expelled glass beads, gram per l/s
Item id.: - Sample No.: -
Requirements met: -
Test equipment: -

Table 4
2.2.4 – Effectiveness 2.2.4.1 – Access for cleaning
Item id. 1, sample No. 1 Requirements Trapped gullies should have provision for mechanical cleaning of the outlet pipe system leading to and from the gully. The size of the opening shall be at least 32 mm for DN ≤110 and at least 50 mm for DN>110. Assessment The odour trap can be removed in order to clean the outlet/pipe.
Requirements met: Yes
Test equipment: -

Table 5								
2.2.4 – Effectiveness 2.2.4.2 – Water through the grating								
Item	Sample	Mounting position, depth from end	Head of water	Test duration	Measured flow	Required flow	Requirement met	
Id.	No.	mm	mm	min.	l/s	l/s	Yes	No
1 8	1 -	100	20	10	0.17	-	-	-
2 10	1 -	100	20	10	0.41	-	-	-
3 10	1 -	100	20	10	0.88	0.85	X	-
4 11	1 -	100	20	10	2.91	2.60	X	-
5 12	1 -	100	20	10	3.42	-	-	-
Test equipment: 84315, 270-A-2298								

Danish Technological Institute	Test results	Page: 6 of 9
		Report No.: 226049

Table 6					
2.2.5 – Mechanical resistance to air pressure					
Item Id.	Sample No.	Pressure needed for air flow Pa	Requirement, pressure for air flow Pa	Requirement met	
				Yes	No
1 8	1 -	>700	Min. 400	X	
2 9	1 -	>700	Min. 400	X	
3 10	1 -	>700	Min. 400	X	
4 6	1 1	>700	Min. 400	X	
5 12	1 -	460	Min. 400	X	
Test equipment: 270-A-1783, 270-A-2228					

Table 7							
2.2.6 – Heat resistance – thermal behavior							
Item Id.	Sample No.	Number of cycles	Temperature hot water °C	Temperature cold water °C	Water added through	Requirements met	
						Yes	No
4 6	2 1	1500	93	15	Grating	X	
4 7	3 1	1500	93	15	Grating	X	
Requirement There shall be no deformation or change in surface texture that may impair the fitness for use of the gully.							
Test equipment: 270-A-2500, 270-A-2265							

Table 8						
2.2.7 – Pull-out resistance from floor drain						
Item Id.	Sample No.	Min. load kg	Test speed mm/min.	Measured load for movement kg	Requirement met	
					Yes	No
4 6	2 1	-	5	4.2	-	-
4 7	3 1	-	5	3.2	-	-
Test equipment: 84315, 270-A-2298						

Table 9

Photos

Id. 1



Id. 2



Id. 3



Photos

Id. 4



Id. 5

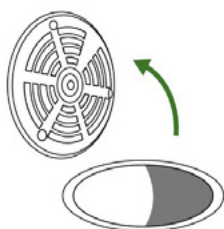


Danish Technological Institute	Test results	Page: 9 of 9
		Report No.: 226049

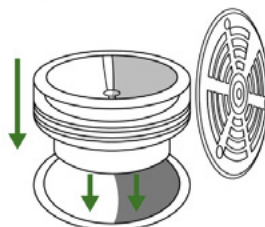
Table 10
7 - Marking
Marking of item id. 1: GREEN DRAIN™ GD-1.25 ASSE 1072 AF-GW USA & FOREIGN PATENT 7900288, 9027172 UPC (logo) Packing: Green Drain™ Waterless Trap Seal for Floor Drains GD1.25 The Green Drain MODEL NO: GD1.25 Pipe size: 1.25" (32 mm) Height: 1.02" (26 mm) 11.4 L/M I 3 GPM Restricts Sewer Gases, Insects, Odors and Evaporation from floor drains Proposition 65 compliant For maximum flow recess 2-4 inches Marking of item id. 2: GREEN DRAIN™ GD15 ASSE 1072 AF-GW USA & FOREIGN PATENT 7900288, 9027172 NSF (logo), UPC (logo) Packing: Green Drain™ Waterless Trap Seal for Floor Drains GD15 The Green Drain MODEL NO: GD15 Pipe Size: 1.5" (38 mm) Height: 1 1/8" (28 mm) 23 L/M I 6 GPM Restricts Sewer Gases, Insects, Odors and Evaporation from floor drains Proposition 65 compliant For maximum flow recess 2-4 inches Marking of item id. 3: GREEN DRAIN™ GD2 ASSE 1072 AF-GW USA & FOREIGN PATENT 7900288, 9027172 NSF (logo), W Water Mark (logo), UPC (logo) Packing: Green Drain™ Waterless Trap Seal for Floor Drains GD2 The Green Drain MODEL NO: GD2 Pipe Size: 2" (50-58 mm) Height: 1.3" (33 mm) 45 L/M I 12 GPM Restricts Sewer Gases, Insects, Odors and Evaporation from floor drains Proposition 65 compliant For maximum flow recess 2-4 inches Marking of item id. 4: GREEN DRAIN™ GD4 ASSE 1072 AF-GW USA & FOREIGN PATENT 7900288, 9027172 NSF (logo), W Water Mark (logo), UPC (logo), CE (logo) Packing: Green Drain™ Waterless Trap Seal for Floor Drains GD4 The Green Drain MODEL NO: GD4 Pipe Size: 4" (102-110 mm) Height: 2" (51 mm) 276.3 L/M I 73 GPM Restricts Sewer Gases, Insects, Odors and Evaporation from floor drains Proposition 65 compliant For maximum flow recess 2-4 inches Marking of item id. 5: GREEN DRAIN™ GD6 ASSE 1072 AF-GW USA & FOREIGN PATENT 7900288, 9027172 UPC (logo) Packing: Green Drain™ Waterless Trap Seal for Floor Drains GD6 The Green Drain MODEL NO: GD6 Pipe Size: 6" (150-156 mm) Height: 2" (51 mm) Restricts Sewer Gases, Insects, Odors and Evaporation from floor drains Proposition 65 compliant For maximum flow recess 2-4 inches

How to Install a Green Drain

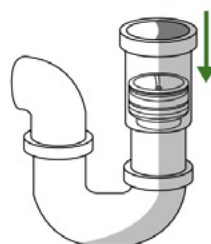
1 Remove Grate



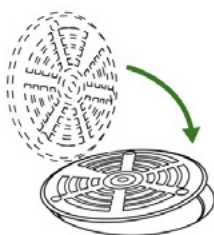
2 Insert Green Drain™



3 Recess 2" to 4" Into The Physical Pipe



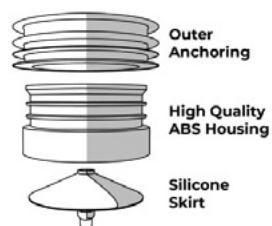
4 Close Grate



5 Fasten Screws



Green Drain™





TEST REPORT

5001 East Philadelphia Street
Ontario, California - USA 91761-2816
Ph: 909.472.4100 | Fax: 909.472.4243
<http://www.iapmortl.org>

Report Number: 1554-15003

Report Issued: June 24, 2015

Project No.: 24772

Client: Green Drain, Inc.
335 North Puente Street # F
Brea, CA 92821

Contact: Ben Wilson

Source of Samples: The samples were shipped to IAPMO R&T Lab from Green Drain, Inc., and received in good condition on April 02, 2015, and May 18, 2015.

Date of Testing: May 18, 2015 to June 23, 2015.

Sample Description: Trap Seal Devices

Models: *GD-102 (2")
GD-103 (3")
GD-103-5 (3.5")
*GD-104 (4")

“*” = tested samples.

Scope of Testing: The purpose of the testing was to determine whether the samples of the Trap Seal Devices met the applicable requirements of ASSE Standard # 1072-2007, “Barrier Type Floor Drain Trap Seal Protection Devices”.

Conclusion: The samples tested of the Trap Seal Devices from Green Drain, Inc., models as shown above, complied with the applicable requirements of ASSE 1072-2007.

By our signatures below, we certify that all the testing and sample preparation for this report was performed under continuous, direct supervision of IAPMO R&T Lab, unless otherwise stated.

Tested By,

Reviewed by,

Frank Lopez, Test Technician

Sean Vuu, P.E., Specialty Projects Manager

All testing and sample preparation for this report was performed under the continuous, direct supervision of IAPMO R&T Lab, unless otherwise stated. The observations, test results and conclusions in this report apply only to the specific samples tested and are not indicative of the quality or performance of similar or identical products. Only the Client shown above is authorized to copy or distribute the report, and then only in its entirety. Any use of the IAPMO R&T Lab name for the sale or advertisement of the tested material, product or service must first be approved in writing by IAPMO R&T Lab.

Primary Standards: ASSE Standard # 1072-2007 / Section tested:

1. General
2. Test Specimens
3. Performance Requirements and Compliance Testing
4. Detailed Requirements

Test Results: All tests and evaluations were conducted per the written procedures specified in the ASSE Standard # 1072-2007.

ASSE Standard # 1072-2007:

1.2 Scope:

1.2.1 Description – FOLLOWED

The devices consisted of a membrane that allowed the flow of drainage to enter the plumbing drainage system. The devices closed when there was no flow.

1.2.2 Size – COMPLIED

The devices were sized according to the outlet sizes of the floor drains (2", 3", 3.5" and 4").

1.2.3 Flow Capacity – COMPLIED

The devices permitted the flows of drainage as stipulated in Table 1 of this standard (refer to section 3.1).

1.2.4 Rating – FOLLOWED

The devices were rated for the type of floor or floor finish in which the floor drain can be installed "AF-GW".

1.3 Construction – COMPLIED

1.3.1 Function: the devices opened when there is a maximum of 4 oz of water on the inlet to the device, and closed when there was no flow of wastewater into the devices (refer to section 3.4).

1.3.2 Evaporation: the devices passed the evaporation test described in Section 3.2 of this standard.

1.3.3 Obstruction of Flow: to prevent the collection of waste solids, the opening passageways in the device did not have any sharp edges or protrusions which would obstruct the flow to the drainage system or result in stoppages. The devices did not obstruct access to the interior of the floor drain trap.

1.3.4 Connections Within Floor Drain: the device connected within a floor drain that conformed to ANSI/ASME A112.6.3.

2.0 Test Specimens:

Report No.: 1554-15003

Page 2 of 5

2.1 Sample Submitted – FOLLOWED

6 devices of each size and model were submitted by the manufacturer.

2.2 Samples Tested – FOLLOWED

1 sample was selected to be tested in order to sections 3.1 through 3.7 and additional 1 sample was selected to be tested to section 3.2, and another 1 sample was selected to be tested to section 3.8 of this standard.

2.3 Drawings – FOLLOWED

Assembly drawings, installation drawings, and other data which were necessary to enable the testing agency to determine compliance with this standard were accompanied assemblies when submitted for examination and performance testing under this standard.

2.4 Rejections – FOLLOWED

Failure of 1 device being tested shall be cause for rejection of that type or model and size.

3.0 Performance Requirements and Compliance Testing

3.1 Flow Test – COMPLIED

When tested to section 3.1.2 of this standard, the trap seals were able to flow at 12 gpm (2") and 73 gpm (4") for 10 minutes without overflowing the open sides of the pans.

3.2 Evaporation Test – COMPLIED

When tested to section 3.2.2 of this standard for 96 hours at 100°F, 20% relative humidity, the weight loss in cylinder A: 70.41g (2"), 269.9g (4"), cylinder B: 2.64g (2"; 3.75% of cylinder A), 7.8g (4"; 2.89% of cylinder A), cylinder C: 1.47 g (2"), 3.3g (4").

3.3 Trap Seal Interference Test – COMPLIED

When tested to section 3.3.2 of this standard, there was no protrusion of the device into the floor drain trap seal.

3.4 Opening Test – COMPLIED

When tested to section 3.4.2 of this standard, the devices started to open at: 1.31g (2"), and 2.2g (4").

3.5 Dirt and Debris Test – COMPLIED

When tested to section 3.5.2 of this standard, and subjected to section 3.2 for 96 hours, the weight loss in cylinder A: 75.42g (2"), 253.3g (4"), cylinder B: 2.53g (2"; 3.35% of cylinder A), 8.4g (4"; 3.32% of cylinder A), cylinder C: 1.44g (2"), 3.0g (4").

3.6 Floor Wax Test – COMPLIED

When tested to section 3.6.2 of this standard at 1 GPM, the devices did not overflow the floor drain top grates.

3.7 Grease Test – COMPLIED

When tested to section 3.7.2 of this standard at 1 GPM, the devices did not overflow the floor drain top grates.

3.8 Life Cycle Test – COMPLIED

After tested to section 3.8.2 of this standard, and subjected to section 3.2 for 96 hours, the weight loss in cylinder A: 77.59g (2”), 290g (4”), cylinder B: 3.2g (2”; 4.12% of cylinder A), 9.7g (4”; 3.34% of cylinder A), cylinder C: 1.73 g (2”), 4.2g (4”).

3.9 Physical Test of Membrane Material – COMPLIED (refer to CRT report no.: 19741-S1).

4.1 Materials - COMPLIED

4.1.1 Dissimilar Metals – NOT APPLICABLE (no metal).

4.1.2 Internal Metallic Parts – NOT APPLICABLE (no metal).

4.1.3 Non-metallic Parts - COMPLIED

Nonmetallic part (rubber & plastic) was designed for the rated operating temperature of the device without change in physical characteristics that would prevent full compliance with all requirements of this standard.

4.2.1 Marking of Devices – COMPLIED

Each device had the following information marked (molded), which is visible:

- a) Trademark “GREEN DRAIN” (per drawings).
- b) Application designation “AF-GW”.

4.2.2 Packaging - COMPLIED

Each device had the following information marked (printed) on the packaging:

- a) Manufacturer’s name “The Green Drain”
- b) Model number
- c) Rating for type of floor “AF-GW”
- d) Floor drain size.

4.3 Installation Instruction - COMPLIED

Instruction for installation of the device “press to install in drain outlet” was printed on the package.



CRT LABORATORIES, INC.

1680 North Main Street, Orange, CA 92867

(714) 283-2032 • Fax (714) 283-1365

www.crtlabs.com • e-mail: crt@labs.com

ASTM Physical & Mechanical • Chemical-Thermal Analysis • IAPMO Cell Class
Geosynthetic Materials • Plumbing & Faucet Assemblies • Resin & Finished Product Testing



TEST REPORT

PAGE 1 OF 2

FOR: IAPMO R & T Lab
5001 E. Philadelphia Street
Ontario, CA 91761
Tel: (909) 472-4143 / Fax: (909) 472-4195
ATTN: Mr. Sean B. Vu

LWR NO: 19741-S1 DATE June 22, 2015

BACKGROUND:

The client submitted one (1) membrane material for testing to ASSE 1072-07 (Table 3). The sample arrived on 05/21/2015 via customer-supplied courier. Visual inspection was performed on 05/21/2015 and no product defects were noted. Testing in accordance with customer-supplied P.O. # 7339 received on 04/02/2015. The following additional information is provided:

CRT order entry log date: 05/21/2015 / **Report due date:** 06/22/2015

Sample ID: Membrane material (silicone) IAPMO Project # 24772

PREPARATION:

Set-up, machining & die punching – CRT methods / ASTM methods
Chemical set-up & preparation – ASSE 1072-07 / CRT methods
Conditioning – ASTM D 618-13, 40 hours in a standard laboratory environment

SPECIFICATION:

ASSE 1072-07(2013) Barrier Type Floor Drain Trap Seal Protection Devices (Section 3.9 / Table-3 Physical Test of Membrane Material):

TEST PROCEDURES:

Ozone resistance – ASTM D 1149-07, ASTM D 518 (method-B) at 104°F (±2°F) for 100h at 150pphm
Water absorption – ASTM D 471-98 for 48 h 158°F (±2°F)
Chemical Reagents – ASTM D 543-06 (72h at 74 ± 3.6°F)
Weather-o-meter (500h) – ASTM G 154-12a (4h Q.U.V. @ 60°C / 4h Condensation @ 50°C), U.V.B. 313 Bulbs
Tensile strength & Elongation – ASTM D 412-06a (Dumb-bell-C)
Split Tear strength – ASTM D 624-00 (Die-C)
Non-brittle Brittleness – ASTM D 2137-11 (3 minutes at -40°F (±2°F))

TEST RESULTS:

The results of testing are shown in the attached data table.

CONCLUSION:

Based on the results obtained, this sample meets the minimum requirements for section 3.9 as described in ASSE 1072-07 (Table-3)...*Complies*

Specimen Retain Bin: BB (30 day hold only unless otherwise specified)

CRT LABORATORIES, INC.

IAPMO R&T ISO 9001:2008 Certified – Registered / ISO-IEC 17025:2005 Accredited

Ken A. Le Jeune
CEO / Laboratory Director

Raul Gonzalez
Laboratory Technician

The liability of CRT Labs with respect to the work and report covered herein, shall in no event exceed the amount of the invoice. We recommend consideration that correlative data be generated by other laboratories in matters of litigation. CRT will retain tested samples for 30 days after testing is completed, unless other arrangements are agreed upon at the time order is placed. This report, whether in whole or in part, any logo, etc., in advertising or publicity must have CRT's written permission prior to use. This test data is for exclusive use of the client to whom it is addressed and results apply only to sample(s) tested and does not apply to similar or identical products. This report shall not be reproduced except in full. Testing performed in accordance with ISO 17025, Form Q.S. 43 (10/05)



CRT LABORATORIES, Inc.

1680 North Main Street, Orange, CA 92867

(714) 283-2032 • Fax (714) 283-1365

www.crtlabs.com • e-mail: crt@crtlabs.com

ASTM Physical & Mechanical • Chemical-Thermal Analysis • IAPMO Cell Class
Geosynthetic Materials • Plumbing & Faucet Assemblies • Resin & Finished Product Testing



TEST REPORT

PAGE 2 OF 2

FOR: IAPMO R & T Lab
5001 E. Philadelphia Street
Ontario, CA 91761
Tel: (909) 472-4143 / Fax: (909) 472-4195
ATTN: Mr. Sean B. Vuu

LWR NO: 19741-S1 DATE: June 22, 2015

TABLE 1

SAMPLE ID: Membrane material (silicone)

TESTING: Conformance to ASSE 1072-07 (Physical Test of Membrane Material)

IAPMO project #: 24772

RESULTS FROM TABLE-3 REQUIREMENTS

ASTM Method	Determination	Test values	Requirements
D 1149-07	(Method-B) Ozone resistance (visual) 150pphm / 40°C / 100h	No cracking or crazing / Pass	No cracking and/or crazing
D 471-06	Water absorption (%)	+ 0.36% / Pass	+ 20%, maximum
D 543-06	Chemical resistance (%) Sulfuric acid 1% (72h @ 23°C)	+ 0.17% / Pass	10%, maximum
D 543-06	Chemical resistance (%) Sodium hydroxide 1% (72h @ 23°C)	+ 0.21% / Pass	10%, maximum
G 154-12a	UV Resistance	Specimens were exposed for 500 h using UVB 313 lamps	
D 412-06a	Initial Tensile strength (Psi)	853	N/A
D 412-06a	Initial Elongation (%)	656	N/A
D 412-06a	Change in Tensile strength (Psi)	(726) -17.49% / Pass	-50%, maximum
D 412-06a	Change in elongation (%)	(552) -15.85% / Pass	-50%, maximum
D 624-00	Split Tear strength at 23°C (kn/m)	23.38 / Pass	0.25 kn/m, minimum
D 2137-11	Brittleness @ -40°C	No brittleness / Pass	No brittleness

...Complies

The liability of CRT Labs with respect to the work and report covered herein, shall in no event exceed the amount of the invoice. We recommend consideration that correlative data be generated by other laboratories in matters of litigation. CRT will retain tested samples for 30 days after testing is completed, unless other arrangements are agreed upon at the time order is placed. This report, whether in whole or in part, any logo, etc., in advertising or publicity must have CRT's written permission prior to use. This test data is for exclusive use of the client to whom it is addressed and results apply only to samples so tested and does not apply to similar or identical products. This report shall not be reproduced except in full. Testing performed in accordance with ISO 17025 Form Q.S. 43 (10/05)

Product Evaluation

Green Drain Inc Floor drain trap seals



Project ID: GRE01

Evaluation Date: August 2018

Hazard Analysis: Karen Constable

Review and Certification Decision: HACCP Australia Technical Panel, Chairperson Martin Stone

Executive Summary

HACCP Australia operates a certification scheme for equipment, materials and services used within the food industry. Certification is offered to suppliers of equipment or materials that make a contribution to food safety and can be used by the food industry without risking the safety of food or the integrity of a food facility's HACCP-based food safety management system.

Green Drain's floor drain trap seals (various sizes) were evaluated for the purposes of product certification by HACCP Australia by performing a risk-based hazard analysis based on the principles of HACCP as described in the Codex Alimentarius of the World Health Organisation. The *HACCP International Food Safety Standard FOOD SAFE PRODUCTS and SERVICES for FOOD BUSINESSES* describes this process and defines requirements for certification.

Evaluation of products and services is strictly confined to characteristics which could have an impact on food safety or on the proper operation of a HACCP based food safety programme. The evaluation does not identify risks to occupational health, legislative or regulatory requirements or quality issues except where such risks could have an impact on food safety. The results of the hazard analysis can be found in Table 1 of this report.

Green Drain's floor drain trap seals are appropriate for use in food facilities that operate in accordance with a HACCP based Food Safety Programme, within the splash and spill zone¹ (SSZ) of the facility.

All such equipment is to be installed, cleaned and replaced in accordance with the manufacturer's instructions and recommendations.

HAZARD ANALYSIS - SUMMARY

Table 1. Hazard Analysis based on HACCP Australia (HA) Criteria; identification of hazards to food safety and means of controlling these hazards. An explanation of the methodology can be found in Appendix A.

HA CRITERIA	HAZARD + CONTROL MEASURES	HAZARDS ADEQUATELY CONTROLLED?
Toxicity	No hazards to food safety from materials of composition.	✓
Ease of cleaning	The trap seals are self-cleaning in the waste-water contact areas. The silicon membrane is very high friction and not expected to collect any debris or grime. The floor drain trap seals are designed and priced to be cheaply replaceable which also prevents buildup of materials that could prove to be a food safety hazard in a food handling facility.	✓
Consequence of error in application	If used in the incorrect application, no direct hazards to food safety would arise.	✓
Consequence of error in use	No hazards identified.	✓
General Food Safety Issues	The floor drain trap seals provide benefits to food safety, notably from preventing drain-breeding flying insects to gain access to drain areas.	✓
Batch / Process Controls	The floor drain trap seals are designed and priced to be cheaply replaceable so in the event of a breakdown or failure of the seal it would be easy to rectify.	✓
Manufacturer's Specifications and Controls	Inconsistent manufacture of the drain seals is unlikely to give rise to hazards to food safety.	✓
Operating Instructions - Packaging Claims	Claims made about the products have been reviewed. Claims have either been verified as being appropriate with respect to food safety and food industry usage and/or identified as being not relevant to the scope of this evaluation.	✓
Direct Contamination of Food	Under intended usage and even under an error scenario, this product is unlikely to result in direct contamination of food; no hazards identified	✓

Suitability for the food industry

The products are suitable for use in the food industry and free from hazards to food safety.

Conclusion and Recommendations

Certification is recommended.

Appendix A

Hazard Analysis Explanation

Hazard Analysis is a system of collecting and evaluating information on food safety hazards associated with the product/service under consideration. From this analysis, the significance of the hazard is determined; those that are deemed to be significant can be addressed in the product evaluation.

Definitions

HA Criteria:

These are the nine standard criteria used by HACCP Australia (HA) in the evaluation of every product and service. Refer to *HACCP International Food Safety Standard FOOD SAFE PRODUCTS and SERVICES for FOOD BUSINESSES*.

Hazard:

A hazard is a biological, chemical or physical agent that may cause a food to be unsafe for consumption. The severity and likelihood of each hazard are plotted on a Significance Matrix which is used to determine if the hazard is significant and whether or not it should be considered as a Critical Control Point.

Control Measures:

Brief summary of how the potential hazard is controlled to minimise the risk to food safety.

Appendix B

Food Zone Definitions

Food Zone	The food zone is any area of a <i>food handling facility</i>, or any part of a food handling device that could come into contact with <i>food</i> in the <i>food product stream</i>. The food zone includes areas from which splashed or spilled food could drip or fall to rejoin the product stream. Equipment and materials that are suitable for the food zone may be designated as <i>primary contact items</i> or <i>secondary contact items</i>.
Food Product Stream	A food product stream is a <i>food</i> product of a liquid or particulate nature, which is moving continuously through a pipeline or aperture, or along a conveyor, or is otherwise part of a food processing or food preparation process. Food in the food product stream is food which is intended to be consumed in the future.
Non-food Zone (NFZ)	Non-food zones are areas of a <i>food handling facility</i> or parts of a <i>food handling device</i> that do not come into direct contact with food of any kind, including food debris, during expected conditions.
Primary Contact Items (FZP)	Primary contact items are devices, materials or equipment which come into contact with <i>food</i> in the <i>food product stream</i> during expected conditions of use.
Secondary Contact Items (FZS)	Secondary contact items are devices, materials, equipment or surfaces in the <i>food zone</i> which come into contact with <i>primary contact items</i> during ordinary expected use. To be classified as a secondary contact item, the item would be expected to touch the <i>food contact surface/s</i> of a primary contact item. Some primary contact items have both food contact surfaces and non-food contact surfaces, such as the inside and the outside of an ice machine.
Splash and Spill Zone (SSZ)	The splash/spill zone is any area in a <i>food handling facility</i>, or any part of a <i>food handling device</i>, which could come into contact with splashed or spilled <i>food</i> that cannot re-enter the <i>food product stream</i>.

HACCP Australia's evaluation and certification is strictly confined to matters of food safety or the operation of a HACCP based food safety programme. Whilst all reasonable care is taken by HACCP Australia in its evaluation of the product(s) or services(s) described herein, HACCP Australia does not guarantee that every food safety risk in every application has been identified. No guarantee is offered or implied in the issuing of this statement.



ETA-Danmark A/S
Göteborg Plads 1
DK-2150 Nordhavn
Tel. +45 72 24 59 00
Fax +45 72 24 59 04
Internet www.etadanmark.dk

Authorised and notified according
to Article 29 of the Regulation (EU)
No 305/2011 of the European
Parliament and of the Council of 9
March 2011

MEMBER OF EOTA



European Technical Assessment ETA-18/0536 of 2019/12/13

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

GREEN DRAIN GD2, GD3, GD35, GD4 and GD5

Product family to which the above construction product belongs:

Waterless odour trap for floor drains

Manufacturer:

Green Drain Europe
Birk Centerpark 40
DK-7400 Herning
Tel. +45 5353 9595
www.greendrains.eu

Manufacturing plant:

Green Drains Inc.
15275 Collier Blvd.
Suite 201-262
Naples, FL 34119
USA

This European Technical Assessment contains:

6 pages including 1 annex which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

European Assessment Document (EAD) no. EAD 180020-00-0704 for Waterless odour trap for floor drains

This version replaces:

The ETA with the same number issued on 2018-08-07

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full (except the confidential Annexes referred to above). However, partial reproduction may be made, with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

ETA based on this EAD, but are to be regarded only as a means for expressing the expected economically reasonable working life of the product.

1 Technical description of product and intended use

Technical description of the product

Green Drain Europe's GREEN DRAIN Waterless odour trap for floor drains.

The waterless odour trap for floor drains consists of a UV-resistant ABS frame, a silicone based sealing collar/membrane and various flexible sealing flanges.

Green Drain Europe's GREEN DRAIN Waterless odour trap for floor drains, comes in 5 different sizes GD2 (50-58mm), GD3 (75-85mm), GD35 (89-100mm) and GD4 (102-110mm) and GD5 (120-135mm).

The different sizes have different drainage capacities. All with height 51 mm to fit into the floor drains.

The waterless floor drain prevents the passage of odours and gasses from the sewerage system without the use of a water-filled trap.

See annex A for drawings

2 Specification of the intended use in accordance with the applicable EAD

The waterless odour trap for floor drains allows the drainage water to flow to the sewerage system while preventing passage of odour and gasses from the sewerage system.

The provisions made in this European Technical Assessment are based on an assumed working life of the waterless odor trap of at least 25 years, when installed in the works.

When assessing the product, the intended use as foreseen by the manufacturer shall be taken into account. The real working life may be, in normal use conditions, considerably longer without major degradation affecting the basic requirements for works.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by EOTA, when drafting this EAD nor by the technical Assessment Body issuing an

3 Performance of the product and references to the methods used for its assessment

Characteristic	Assessment of characteristic
3.2 Safety in case of fire (BWR2)	
Reaction to fire	No performance assessed
3.3 Hygiene, health and the environment (BWR3)	
Air/Odour tightness	Odour tight >400pa
Self-cleaning ability	Selfcleaning.
Effectiveness	
Access for cleaning	Cleanable.
Water through the grating	GD3, GD35, GD4 and GD5: >1,4l/s GD2: >0,8l/s
Heat Resistance – Thermal behavior	Class A.
Mechanical resistance at negative air pressure	Odour tight >400pa
Pull-out resistance from floor drain	GD2, GD3, GD35, GD4 and GD5, can withstand an extraction/pull-out force of 5kn, in both stainless-steel gullies and PP gullies.
3.4 Sustainable use of natural resources (BWR7)	No performance assessed

4 Attestation and verification of constancy of performance (AVCP)

4.1 AVCP system

According to the decision 99/472/EC of the European Commission, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 4.

5 Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking

Issued in Copenhagen on 2019-12-13 by



Thomas Bruun
Managing Director, ETA-Danmark

Annex A: Description of the product



Outer watertight membrane

Gully with trap

Flexible silicone membrane

GREEN DRAIN waterless odour trap for floor drains	Annex A
Description of the product	of European Technical Assessment ETA-18/0536

May 6, 2016
Hohto Shoji Co., Ltd

Green Drain Product Test Report

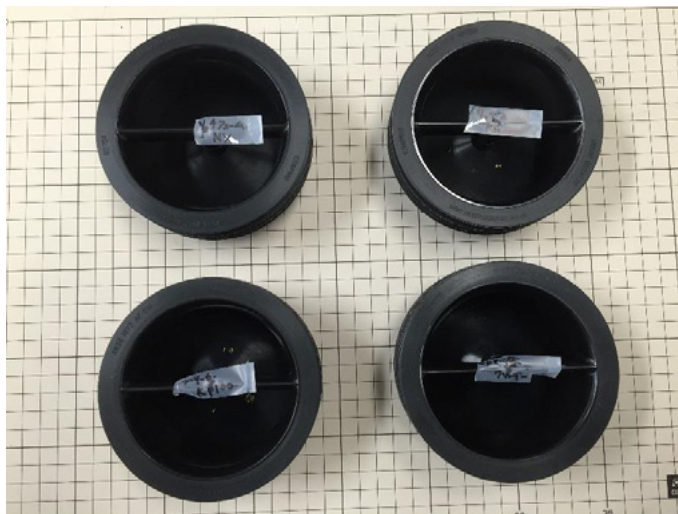
Test House: Tokyo Metropolitan Industrial Technology Research Institute

Testing Method and Results

1. Chemical Resistance Test

Method: Soak Green Drains in four different detergents commonly used by Ikari for 24 hours at 23 degree Celsius (23 ± 2 degree Celsius , humidity $50 \pm 5\%$)

- 1) Rich Foam NX (alkaline cleaner: dilution rate 5 times)
- 2) Rich Foam MF (sodium hypochlorite, alkaline cleaner: dilution rate 5 times)
- 3) Bleaker KT100 (fungicide, alkaline cleaner: dilution rate Undiluted)
- 4) Yudegama Cleaner (acidic cleaner: dilution rate 3 times)



Test Result

All test samples were rinsed with clean water and dried with paper towels then left for 24 hours for natural dry before inspection.

Mass Change Ratio (weight): +0.21%

Visual Inspection: No change in color nor shape. No sign of corrosion

Tactile Impression: No change

Harness Measurement (silicon skirt): No change

2. Thermal Shock Test

Method: Keep Green Drains in thermostat chambers at temperature peak -10 degree Celsius to 100 degree Celsius (process repeated for five times: MIL-STD-202G)



Test Result

Visual Inspection: No change in color nor shape. No sign of corrosion

Tactile Impression: No change

Harness Measurement (silicon skirt): No change



CIPH Information Bulletin—September 2012

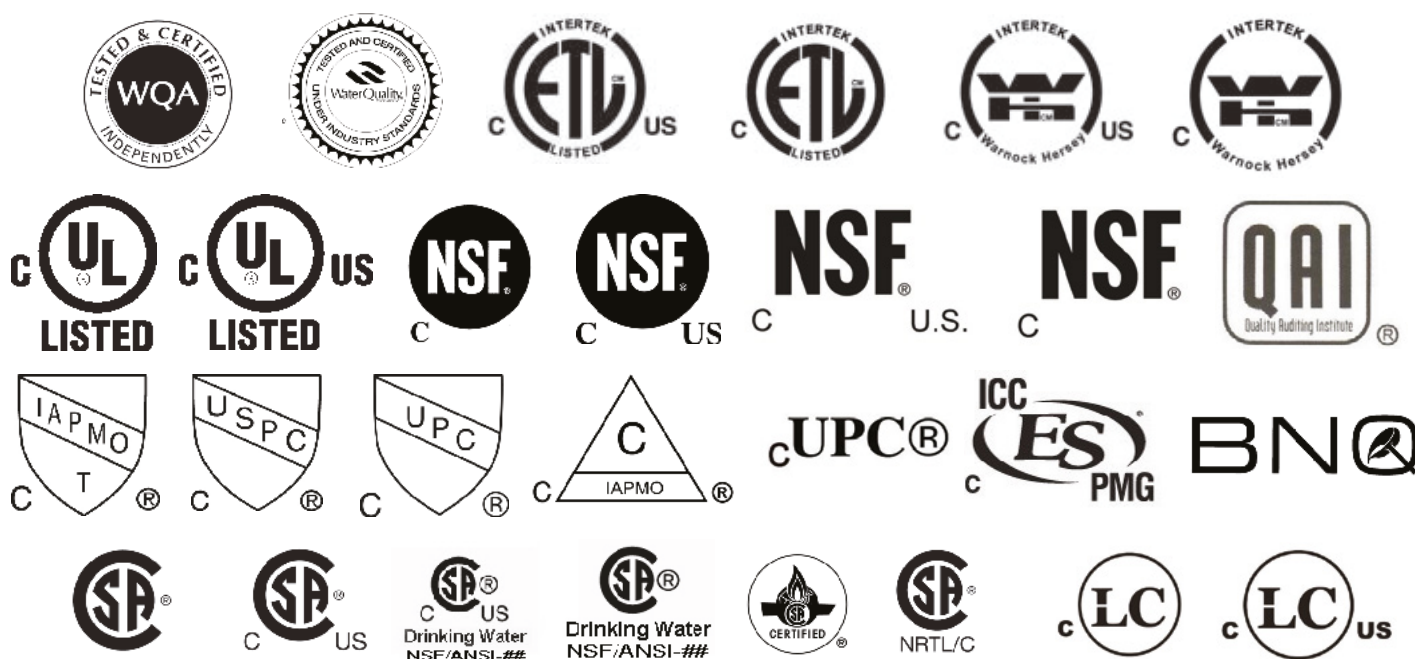
Plumbing Products Certified for Use in Canada

Background

This information bulletin from the Canadian Institute of Plumbing and Heating (CIPH), will aid wholesale distributors, retailers and inspectors to identify plumbing and water treatment products that are currently certified for use in Canada. Products that do not bear one of the following marks may not be appropriate for sale and installation in all jurisdictions and in some cases may create health and safety issues.

How do I know if a product is certified?

There are several certification organizations that are accredited to certify product in North America and the



certifying body is required to ensure their mark is placed on product it certifies. Here are the marks that are currently accepted in Canada:

If I see a mark that I think is questionable, how do I verify if the product is acceptable?

All of the accredited certification organizations in North America have a webpage that can be accessed to verify certified product listings. Organizations approved to certify products in Canada are:

BNQ: http://www-es.criq.qc.ca/pls/owa_es/bnqw_entr_enr.crit_rech?p_lang=en&p_type_bnq=NC

CSA: <http://directories.csa-international.org/>

IAPMO: <http://pld.iapmo.org/>

ICC: http://www.icc-es-pmg.org/Listing_Directory/

Intertek: <http://www.intertek.com/directories/>

LabTest: <http://www.labtestcert.com/labtest/>

NSF: http://www.nsf.org/business/search_listings/

QAI: <http://www.qai.org/listing-directory.html>

UL & ULC: <http://database.ul.com/cgi-bin/XYV/template/LISCANADA/1FRAME/index.html>

Water Quality Association: <http://www.wqa.org/sitelogic.cfm?id=1165§ion=3>

Each organization's scope of accreditation and certification marks can also be accessed at the Standards Council of Canada (SCC): <http://www.scc.ca/en/accreditation/product-process-and-service-certification/directory-of-accredited-clients>



CIPH Information Bulletin—September 2012

Plumbing Products Certified for Use in Canada—FAQ's

What are the advantages to using certified product?

- Certified products have been produced and certified to demonstrated standards of performance;
 - They have been evaluated to ensure they will perform properly (i.e. ensuring the threads are the correct type so you can connect the product easily, as one example);
- They are regularly checked for compliance by accredited certification organizations to ensure products continue to be manufactured in accordance with national standards; and
- Where required, they have been evaluated for toxicological concerns.

What's the harm in stocking and selling uncertified fixtures/fittings?

In Alberta and Quebec, it is illegal to stock and sell unapproved products that are subject to applied standards and is enforceable by law. In other jurisdictions of Canada, it may not be considered illegal to sell the product, but provincial regulations forbid their installation. This means that if you stock and sell these products, you can expect to have a high percentage of them disallowed by provincial/municipal inspectors and returned to you. Also, there is no assurance that uncertified fixtures/fittings meet Canadian recognized standards or where standards do not exist, meet reasonable expectations for performance, health and safety.

What if fixture manufacturer "x" has their product certified, but has not marked the product?

Certified product is required to bear the certification mark. Some fixture manufacturers acknowledge that customers want an aesthetic that is mark-free and choose to mark their product with a permanent adhesive label (which is designed to be removed after inspection and will also self-destruct so that it can not be placed on another product). If an adhesive label is accidentally removed prior to inspection, the inspector has no choice but to assume the product is uncertified and request its removal. Therefore, it is important that contractors and consumers maintain proof of the product certification compliance on the product (in addition to the carton, installation instructions, warranty and homeowners manual and specification sheet) until AFTER inspection.

Myth	Reality
All plumbing product sold through the wholesale chain is suitable for sale and installation.	If a product has a Canadian or a harmonized U.S. - Canadian standard that it can be certified to and it is not certified, it may cause health and safety concerns, including damage to the building it is being installed in. There are certain plumbing products (i.e. certain water treatment devices) that may not have a standard to which it can be certified. These products are an exception to the rule and are permitted for sale and installation.
Installing uncertified plumbing product does not violate any provincial/territorial regulations.	CIPH is not aware of a single jurisdiction in Canada that allows uncertified product to knowingly be installed. Alberta and Quebec also have legislation against the sale of such product (again, noting the exception of products that do not have a standard to be certified to).

Who should I contact if I have further questions on uncertified plumbing product?

If you need to talk to a building official for guidance, CIPH has a list of regulators by region at: <http://www.ciph.com/Downloads/codesAndStandards/cacpRegulators.php> or visit the Standards Council of Canada website at : <http://www.scc.ca/>

Canadian Institute of Plumbing & Heating
295 The West Mall, Suite 504, Toronto, ON M9C 4Z4
info@ciph.com, Fax. 416-695-0450, www.ciph.com, Tel. 1-888-ASK-CIPH (275-2474), 416-695-0447

Frequently Asked Questions

What is the Green Drain? The Green Drain is an environmentally friendly water-free trap seal designed to prevent sewer gases, odors, and pests from entering buildings through floor drains. It uses a flexible silicone membrane that allows water to flow through while sealing off when water flow stops.

How does the Green Drain work? The device has a silicone membrane that opens to let water and debris pass through and closes to prevent the backflow of gases and pests once the water stops flowing.

Why is the Green Drain self-cleaning? The Green Drain's design allows water to rinse the membrane, preventing the buildup of dirt, hair, and grease that is common in traditional trap seals.

Where can the Green Drain be installed? It can be installed in almost all types of floor drains in various settings, including factories, schools, hospitals, restaurants, hotels, public buildings, and residential homes. It is suitable for new buildings and retrofits in older structures.

What sizes are available for the Green Drain? The Green Drain comes in eight sizes to fit different drain diameters:

- GD1.25 (1.25"): DN 32
- GD15 (1.5"): DN 40
- GD2 (2"): DN 50
- GD25 (2.5"): DN 65
- GD3 (3"): DN 80
- GD35 (3.5"): DN 90
- GD4 (4"): DN 100
- GD5 (5"): DN 125
- GD6 (6"): DN 150

Is the Green Drain easy to install? Yes, it can be installed without tools. After removing the drain grating, the Green Drain can be pushed into the pipe to fit snugly. For optimal flow, it is recommended to recess the Green Drain 2-3 inches into the drainpipe.

Can the Green Drain be installed in a shower or bathtub drain? Yes, it can be installed in shower drains by recessing the unit 2-4 inches into the pipe. It can also be installed in bathtub drains, but it is not recommended to replace traditional drain plugs with the Green Drain.

Does the Green Drain replace traditional water trap seals? Yes, it replaces traditional water trap seals and offers several advantages, including improved indoor air quality, prevention of wastewater backflow, and resistance to vacuum in the drainage system.

Can the Green Drain be used with a P-trap in the ground? Yes, the Green Drain can be used alongside a P-trap. It does not contain water and functions effectively in combination with other trap systems. Green Drain can also take the place of a Trap where none have been installed.

Can the Green Drain be installed horizontally and vertically? Yes, the Green Drain works in both horizontal and vertical installations.

What materials is the Green Drain made from? The Green Drain is constructed from UV-resistant ABS plastic with a silicone rubber seal/membrane and features four flexible sealing flanges for easy installation and a perfect fit.

Is the Green Drain approved and tested by accredited institutions? Yes, it has been approved and tested by numerous institutions, including the International Association of Plumbing and Mechanical Officials (IAPMO), American Society of Sanitary Engineering (ASSE), and several international bodies. It meets various standards such as CE, ANSI, HACCP, and NSF.

Does the Green Drain act as a backflow prevention device? No, the Green Drain is not classified as a backflow device, but it can withstand up to 4 lbs. of pressure before the silicone valve inverts.

What are the primary benefits of using the Green Drain? The Green Drain improves indoor air quality, prevents pest infiltration, reduces exposure to hazardous sewer gases, and is eco-friendly by eliminating the need for trap primers and continuous water flow.

This FAQ should cover the essential questions about the Green Drain waterless trap seal device. For more detailed information or additional questions, you may refer to their official website and product documentation.

How do I know if the Green Drain is the right size for my drain? Measure the diameter of your drain opening and compare it with the available sizes of the Green Drain (1.25" to 6"). Ensure that the chosen size fits within the diameter range for a snug fit.

Can the Green Drain handle high flow rates? Yes, the Green Drain is designed to handle high flow rates without impeding water drainage. Specific flow rates can vary by size, but it generally accommodates typical residential and commercial drain flows.

How long does the Green Drain last? The Green Drain is made from durable, UV-resistant materials that ensure a long lifespan. While specific longevity can vary based on usage and environmental conditions, it is designed to provide many years of reliable service.

Can the Green Drain be used in outdoor drains? Yes, the Green Drain can be used in outdoor drains, including those in parking lots, patios, and other exposed areas, as it is made from UV-resistant materials.

Does the Green Drain require any maintenance? Minimal maintenance is required. It is self-cleaning, but periodic inspection and cleaning may be beneficial in environments with heavy debris or grease accumulation.

Is the Green Drain effective against all types of pests? The Green Drain is designed to prevent common pests such as drain flies, cockroaches, and other small insects from entering through the drains. Its one-way valve effectively blocks these pests while allowing water to flow through.

How does the Green Drain improve indoor air quality? By sealing off the drain when water is not flowing, the Green Drain prevents sewer gases and odors from entering the building, thus improving indoor air quality.

Can the Green Drain be used in conjunction with other plumbing devices? Yes, it can be used alongside other plumbing devices such as trap primers and P-traps. It is also compatible with various plumbing systems and codes.

What should I do if the Green Drain becomes clogged? If the Green Drain becomes clogged, remove it from the drain and clean it with water and a mild detergent. Ensure that no debris is blocking the silicone membrane before reinstalling it.

How does the Green Drain help in reducing water usage? The Green Drain eliminates the need for water-filled trap seals, which can dry out and require frequent refilling. This helps conserve water and reduce utility bills.

Can the Green Drain be used in food preparation areas? Yes, the Green Drain is HACCP certified and safe for use in food preparation areas, including kitchens and food processing plants. It helps prevent contamination from sewer gases and pests.

What should I do if the Green Drain does not fit properly? Ensure you have selected the correct size. If it still does not fit, contact customer support for assistance or consider using an adapter to ensure a snug fit.

Does the Green Drain affect the existing plumbing code compliance? The Green Drain is designed to comply with various international plumbing codes. However, it is always advisable to check with local authorities to ensure compliance with specific local codes.

Can the Green Drain be installed in HVAC systems? Yes, the Green Drain can be used in HVAC condensate drains to prevent backflow and block sewer gases and pests.

Is there a warranty for the Green Drain? The Green Drain typically comes with a manufacturer's warranty. Check the specific terms and conditions provided at the time of purchase.

Can the Green Drain stop water from coming back up the drain? No, the Green Drain is designed to prevent foul gases, odors, and pests from entering through the drain. It does not stop water from coming back up the drain; for that, a backflow preventer is required. Green Drain will assist with minor backflow, however, if the pressure is too great, the valve will invert.

Is the Green Drain chemical-resistant? Yes, the Green Drain is made from UV-resistant ABS plastic and a silicone rubber sealing flapper, making it resistant to chemicals and corrosion.

Does the Green Drain require any maintenance? The Green Drain is largely maintenance-free. However, periodic inspection and cleaning might be necessary in environments with heavy debris or grease accumulation to ensure optimal performance.

Can the Green Drain be installed in freezing conditions? The Green Drain is designed to operate effectively in a wide range of temperatures, but it is advisable to check specific product specifications for minimum and maximum operating temperatures.

Does the Green Drain fit standard plumbing sizes? Yes, the Green Drain is available in multiple sizes (1.25", 1.5", 2", 2.5", 3", 3.5", 4", 5", and 6") to fit a variety of standard plumbing sizes.

Can the Green Drain be used in outdoor settings? Yes, the Green Drain can be used in outdoor settings, including parking lots and patios, thanks to its durable and UV-resistant materials.

How does the Green Drain contribute to environmental sustainability? The Green Drain helps reduce water usage by eliminating the need for water-filled trap seals that can dry out and require frequent refilling. It also reduces the need for chemical cleaners, contributing to lower chemical runoff and environmental impact.

Is the Green Drain suitable for commercial kitchens and food processing plants? Yes, the Green Drain is HACCP and NSF certified, making it suitable for use in commercial kitchens, food processing plants, and other environments where food safety is a concern.

How do I remove the Green Drain if needed? To remove the Green Drain, you can use a hook arm close to the spoke and pull up to remove it from the drain. Some models may require a specific tool for removal, otherwise it can be removed by hand.

Can the Green Drain be used in combination with other plumbing devices? Yes, the Green Drain can be used in conjunction with other plumbing devices such as P-traps and trap primers, although it cannot replace a trap primer where one is required by code.

These FAQs should help address some of the more specific and practical concerns that customers might have about the Green Drain waterless trap seal device. For more detailed product information and specifications, refer to the official product documentation and manufacturer's website.

Why is there a hole located on the bottom of the center post of the Green Drain?

The vent hole built into the stem of a Green Drain Trap Seal Protection device serves several important functions that contribute to the effectiveness and reliability of the device. Here's a detailed explanation:

1. **Air Pressure Equalization:** The vent hole helps to balance air pressure within the drain system. As water flows through the Green Drain, the vent hole allows air to escape, preventing a vacuum from forming. This ensures that water can flow smoothly without being slowed down or obstructed by air pressure differences.
2. **Preventing Siphoning:** In plumbing systems, siphoning can occur when negative pressure pulls water out of the trap, breaking the water seal. The vent hole helps to mitigate this risk by allowing air to enter and balance the pressure, maintaining the water seal and preventing sewer gases from escaping through the drain.
3. **Improving Water Flow:** By allowing air to escape and preventing pressure buildup, the vent hole ensures a more consistent and efficient flow of water through the drain. This helps to avoid water backup and potential flooding issues in the area around the drain.
4. **Maintaining Seal Integrity:** The primary purpose of the Green Drain is to prevent sewer gases, odors, and pests from entering the building while allowing water to drain. The vent hole supports this function by ensuring that the device's flexible sealing flaps operate correctly. It prevents the flaps from sticking shut due to pressure differences, thereby maintaining the integrity of the seal.
5. **Facilitating Self-Cleaning:** The continuous flow of water and the balanced air pressure help to flush out any debris or particles that might accumulate in the drain. This self-cleaning mechanism reduces the risk of clogs and ensures that the Green Drain continues to function effectively over time.

In summary, the vent hole in the stem of a Green Drain Trap Seal Protection device plays a crucial role in ensuring proper air pressure balance, preventing siphoning, improving water flow, maintaining seal

integrity, and facilitating self-cleaning. These functions collectively help the device perform its intended role of allowing water drainage while blocking sewer gases, odors, and pests.