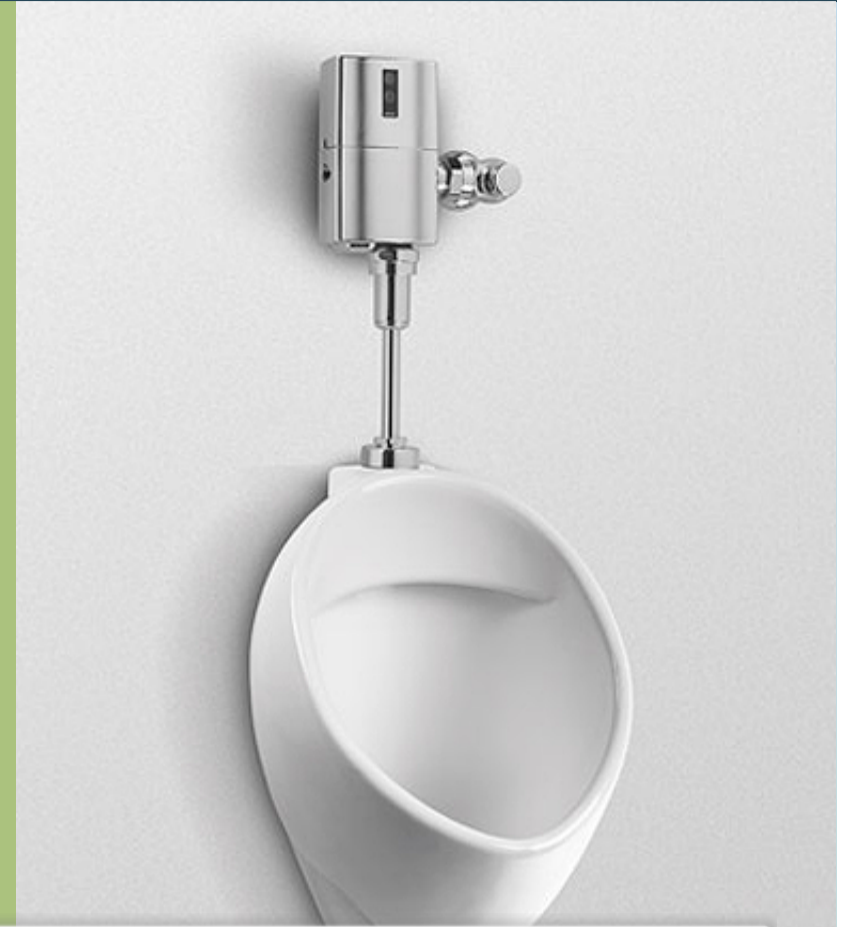


TOTO®

Small Profile High-Efficiency Urinal

UT105U(V)(G)

The organically shaped, ADA compliant TOTO 0.125gpf urinal features a compact design that occupies less wall space than traditional urinals. TOTO HEU's are engineered to work with the EcoPower® flush valves, offering the ultimate in water conservation and flushing performance. Using only one pint of water per flush when paired with a TOTO EcoPower 0.125gpf flush valve, the urinal saves 88% more water than a 1.0gpf urinal. The urinal is available in top spud and back spud installation options.



Performance Dashboard

Features & functionality

- 0.125gpf when paired with a TOTO 0.125gpf EcoPower® flush valve
- Washout flush action with 3/4" top or back spud inlet
- Compact urinal with concealed integral trap
- Complete with low profile dome strainer
- Wall-mounted
- ADA compliant

Visit TOTO for more product specifications:
[UT105U\(V\)\(G\)](#), [UT105U](#), [UT105UG](#), [UT105UV](#)

CSI MasterFormat™ #22 42 13.16

Environmental performance

Improved by:

- Saves 88% more water than standard 1.0gpf urinal
- Upcycling of post industrial porcelain waste into ceramic floor tile

Certifications & rating systems:

- WaterSense® certified
- Declare™ label

[See LCA results & interpretation](#)



WATERSENSE®

- Promotes water efficiency and enhances the market for water-efficient products, programs, and practices.
- The WaterSense label helps consumers identify water-efficient products and programs.
- Products with the WaterSense label will perform well, help save money, and encourage innovation in manufacturing.



SM Transparency Report™ + Material Health Overview

VERIFICATION

LCA

3rd party verified



Self-declared

Transparency Report

Certified



Self-declared

Material evaluation

3rd party verified

Self-declared



Validity: 08/16/17 – 08/16/22
TOT – 10/18/14 – 007

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LCA & material health results & interpretation

Small Profile High-Efficiency Urinal UT105U(V)(G)

Life cycle assessment

Material health

Scope and summary

- Cradle to grave Cradle to gate with options Cradle to gate

Functional unit

10 years of use of a urinal in an average U.S. commercial environment.

One urinal in an average U.S. commercial environment. The period of 10 years is modeled as the period of application based on the average technical lifespan for commercial applications. The economical lifespan of commercial applications can be longer or lower due to aesthetic replacements or more intense use. The implication is that the LCA model assumes that the application ends at year 10 and that the materials will be treated in an end-of-life scenario.

Default use phase scenario

10 years of service in an average U.S. commercial environment with 0.125 gallon/use and 18 uses/day during 260 days/year resulting in 5,850 gallons of water.

What's causing the greatest impacts

All lifecycle stages

The production stage is dominating all impact categories.

Results show that the use stage is less dominant than the production stage, yet it is still significant in most of the impact categories. This is mostly due to the embedded energy arising from acquisition, treatment and distribution of the water used during the operation of the product (4-26%). The contributions covered under the construction/installation stage are mostly associated with the product delivery to the market. The recovery stage includes recycling benefits by preventing the need to produce primary materials. Recycling is a relevant factor for some of the impact categories, offsetting a portion of the impacts caused by production. Additionally, the delivery of the product to the construction/installation site as well as the processes for dismantling the product and final waste treatment during the end of life stage are slightly relevant in the global warming impact category.

Production stage

The ceramic parts dominate all impact categories except for eutrophication, non-carcinogenics and carcinogenics.

The brass parts together with the turning brass process have dominating contributions to the eutrophication, non-carcinogenics and carcinogenics impact categories. The remaining parts and processes contribute between 2% and 32% of the overall impacts in the rest of the categories

Sensitivity analysis

There are no sensitivity results that lead to variations greater than 10% in the LCA results.

TOTO PeoplePlanetWater. programs improving environmental performance

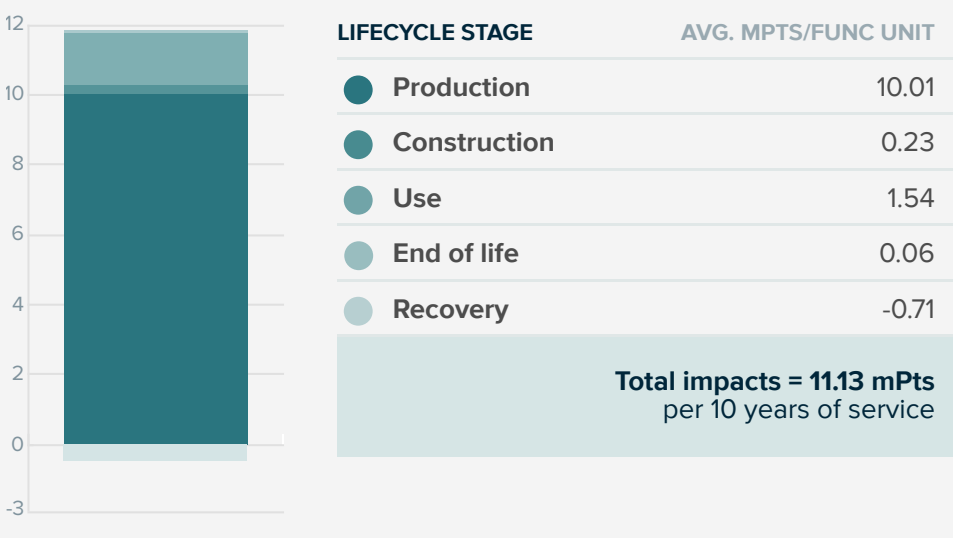
- Dual-Max®, E-Max®, Tornado Flush™, 1G®, and EcoPower® reduce water consumption in the use phase
- Energy efficiency programs optimize the firing process
- 50% electricity from renewable energy
- 100% of post-industrial ceramic waste is recycled

See how we make it greener

Material composition greater than 1% by weight

PART	MATERIAL	AVG. % WT.
Ceramic	Ceramic	83%
Packaging	Corrugated Board	11%
Flange, spud, nut & hanger	Brass	5%
	Other	1%

Total impacts by life cycle stages [mPts/func unit]



LCA results

LIFECYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
Information modules: Included Excluded*	A1 Raw Materials	A4 Transportation/Delivery	B1 Use	C1 Deconstruction/Demolition	D1 Recycling
*Installation and deconstruction/demolition are mostly manual. The toilets and/or urinals should not need repair, maintenance or replacement during the modeled life time.	A2 Transportation	A5 Construction/Installation	B2 Maintenance	C2 Transportation	D2 Recovery
Operational energy use is irrelevant to the life cycle of the modeled product.	A3 Manufacturing		B3 Repair	C3 Waste processing	D3 Reuse
Reuse and energy recovery are not modeled for toilets and/or urinals.			B4 Replacement	C4 Disposal	
			B5 Refurbishment		
			B6 Operational energy use		
			B7 Operational water use		

SM 2013 Learn about SM Single Score results

Impacts per 10 years of service	10.01 mPts	0.23 mPts	1.54 mPts	0.06 mPts	-0.71 mPts
Materials or processes contributing >20% to total impacts in each lifecycle stage	Ceramic parts production together with brass parts and injection molding process.	Transportation of the product to installation site or consumer and disposal of packaging.	Volume of water use during the operation of the product and the embedded energy use (such as electricity) in the water used.	Transport to waste processing, waste processing and disposal of material flows transported to a landfill.	Plastic and metal components' recycling processes.

TRACI

LIFECYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY	
Ecological damage						
Impact Category	Unit					
Acidification	kg SO ₂ eq	8.50E-01	1.54E-02	1.34E-01	3.29E-03	-2.55E-022
Ecotoxicity	CTU _e	1.59E+02	5.77E+00	1.23E+01	7.63E-01	-9.01E+00
Eutrophication	kg N eq	1.74E-01	2.23E-03	1.13E-02	3.08E-04	-7.59E-03
Global warming	kg CO ₂ eq	8.60E+01	3.42E+00	1.99E+01	1.50E+00	6.44E-01
Ozone depletion	kg CFC-11 eq	3.58E-06	3.71E-09	8.39E-07	5.75E-08	-1.73E-07
Human health damage						
Impact Category	Unit					
Carcinogenics	CTU _h	1.31E-06	3.14E-08	4.21E-07	7.95E-09	-1.23E-07
Non-carcinogenics	CTU _h	4.54E-05	3.01E-07	1.87E-06	5.58E-08	-5.99E-06
Respiratory effects	kg PM _{2.5} eq	6.18E-02	2.91E-04	8.88E-03	2.59E-04	-3.22E-03
Smog	kg O ₃ eq	4.37E+00	4.29E-01	9.27E-01	8.63E-02	-3.05E-01
Resources depletion						
Impact Category	Unit					
Fossil fuel depletion	MJ surplus	1.65E+02	4.10E+00	1.35E+01	9.86E-01	-2.23E+00

References

LCA Background Report

TOTO Sanitary Ceramic Products LCA Background Report (public version), TOTO 2014

SM Transparency Report Framework

Part A: Part A: LCA Calculation Rules and Background Report Requirements (Draft V2) (based on ISO14040-44, ISO14025 and EN15804)

Part B: Product Group Definition – Commercial Urinal

SM Transparency Reports enable purchasers and users to compare the environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. SM Transparency Reports of products that comply with the same Product Group Definition (PGD) and include the same life cycle stages, but are made by different manufacturers, may not sufficiently align to support direct comparisons. They therefore, cannot be used as comparative assertions unless the conditions defined in ISO 14025 Section 6.7.2. 'Requirements for Comparability' are satisfied.

Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved life-cycle environmental performance.

LEED BD+C: New Construction | v4 - LEED v4

MR Building product disclosure and optimization

Environmental product declarations

SM Transparency Report product credit values:

<input type="radio"/> LCA self-declared, Report self-declared	0 product
<input type="radio"/> LCA verified, Report self-declared	1/4 product
<input checked="" type="radio"/> LCA verified, Report certified	1 product

Green Globes for New Construction and Sustainable Interiors

NC 3.5.1.2 Path B: Prescriptive Path from Building Core | NC 3.5.2.2 and SI 4.1.1 Path B: Prescriptive Path for Interior Fit-outs

SM Transparency Report™ + Material Health Overview

VERIFICATION	LCA
3rd party verified	<input checked="" type="checkbox"/> NSF
Self-declared	
Transparency Report	
Certified	<input checked="" type="checkbox"/> NSF
Self-declared	
Material evaluation	
3rd party verified	
Self-declared	<input checked="" type="checkbox"/>

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LCA & material health results & interpretation

Small Profile High-Efficiency Urinal UT105U(V)(G)

Life cycle assessment

Material health

Evaluation program: Declare

Declare labels are issued to products disclosing ingredient inventory, sourcing and end of life options. Declare labels are based on the Manufacturers Guide to Declare, administered by the International Living Future Institute.

How it works

Material ingredients are inventoried and screened against the **Living Building Challenge** (LBC) Red List which represents the 'worst in class' materials, chemicals, and elements known to pose serious risks to human health and the greater ecosystem.

The Declare product database and label are used to select products that meet the Living Building Challenge's stringent materials requirements, streamlining the materials specification and certification process.

Assessment scope and results

Content inventory: All ingredients identified by name and CAS #
Inventory threshold: 100 ppm

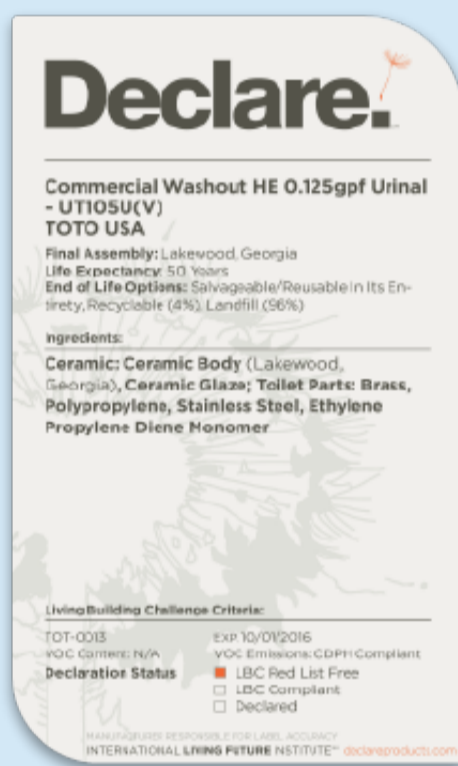
Declaration status:

The Declare product database and label are used to select products that meet the LBC's stringent materials requirements, streamlining the materials specification and certification process.

- LBC Red List Free ?
- LBC Compliant ?
- Declared ?



● Small Profile High-Efficiency Urinal



Click on each label to see the full declaration

How this rating was achieved

Declare level

'Red List Free' is awarded to products when no materials on the Living Building Challenge's Red List are in the product. The LBC Red List represents the "worst in class" materials, chemicals, and elements known to pose serious risks to human health and the greater ecosystem.

What's in the product and why

Manufacturing in the United States means that robust human labor, safety and environmental rules and regulations were followed. In addition, local sourcing of raw materials means that less smog and air pollution are generated as a result of transport. The ceramic body and glaze makes up ~94% of the total mass of the urinal. Therefore, manufacturing and transportation of the ceramic create the greatest human health impacts when compared to the overall manufacture of the entire urinal. *By specifying a urinal manufactured in the United States, the consumer helps mitigate these human health impacts.*

Red List materials

No red list materials are present in the urinal.

Where it goes at the end of its life

TOTO encourages consumers to recycle their used urinal and urinal parts. Contact your local municipality for recycling programs.

How we're making it healthier

The Commercial Urinal is designed to be used with the TOTO EcoPower® Urinal Flush Valve. The EcoPower technology enables the flush valve to operate off the energy grid, and requires no routine battery replacement. This technology helps to reduce pollution and hazardous waste, thereby mitigating human health impacts.

Urinal models with a water consumption of 0.125gpf are engineered to utilize biomimicry, modeled after the oxbow affect found in nature. Water moving on the outside of a curve will move faster, causing turbulence. The 0.125gpf urinal utilizes a V-shaped trap to reduce turbulent flow, resulting in lower water use without compromising performance. Superior performance reduces the need for extraneous cleaning and the associated use of cleaning substances.

[See how we make it greener](#)

References

Declare

TOTO USA, Declare label for Small Profile High-Efficiency Urinal UT105U

Manufacturer's Guide to Declare

A comprehensive guide providing information about the program, the assessment methodology, how to submit material data to obtain a Declare label and how they are used to meet the Health & Happiness and Materials Petals of the Living Building Challenge.

Rating systems

LEED v4, Building product disclosure and optimization Material Ingredients

Credit values:

- Option 1. Material ingredient reporting 1 product
- Option 2. Material ingredient optimization 1 product

Living Building Challenge Living Building Challenge 3.0



Materials petal:

- Imperative 10. Red List Free
- Imperative 12. Responsible Industry
- Imperative 13. Living Economy Sourcing

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3rd party verified	<input checked="" type="checkbox"/> NSF
Self-declared	
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How we make it greener

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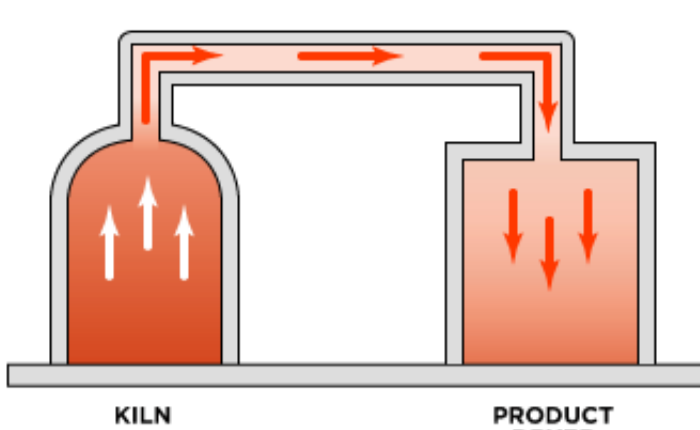
Collapse all

See LCA results by lifecycle stage

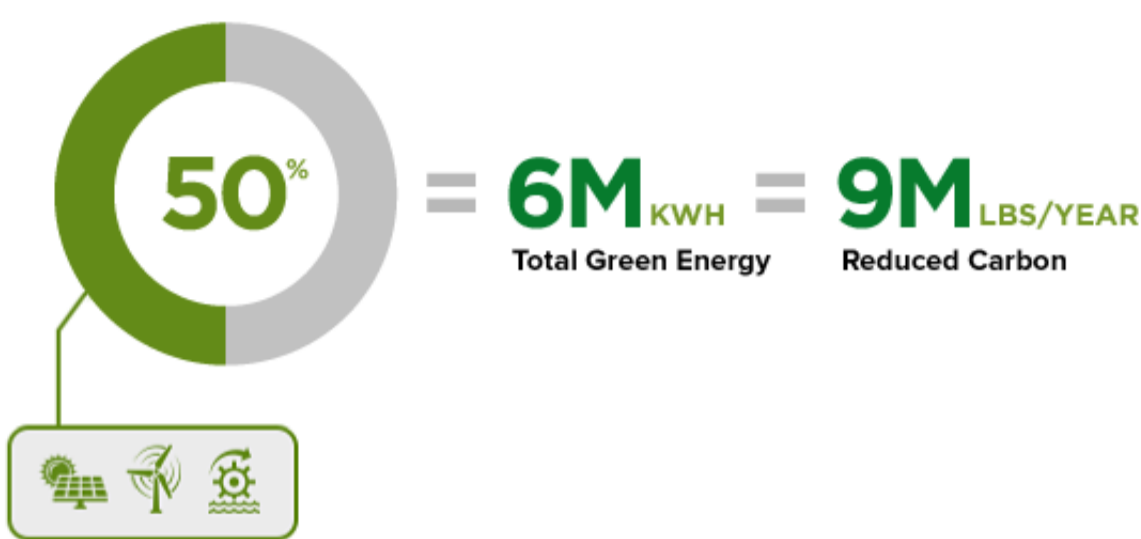
PRODUCTION



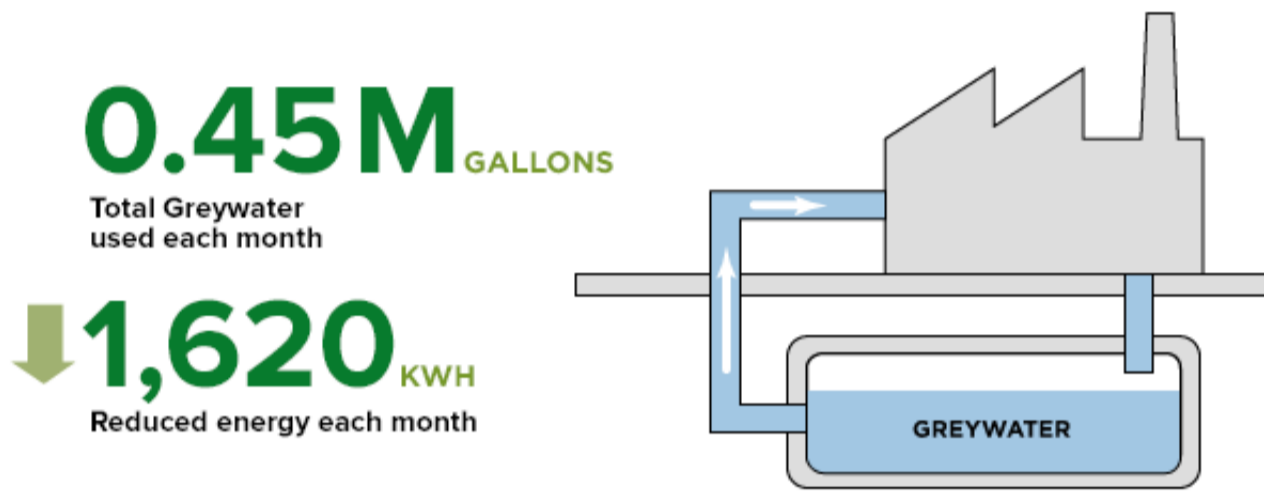
↓ 15%
Less Natural Gas



Waste heat from the kilns is routed to the product dryer. This reduces 15% natural gas consumption.



50% of the electricity that TOTO uses is based on renewable energy generation. It's 6 million kilowatt hours of green energy, which means over 9 million pounds of carbon reduced each year.



0.45 million gallons per month of greywater is used in TOTO's operations. 1,620 of kwh in energy is reduced due to less potable water.



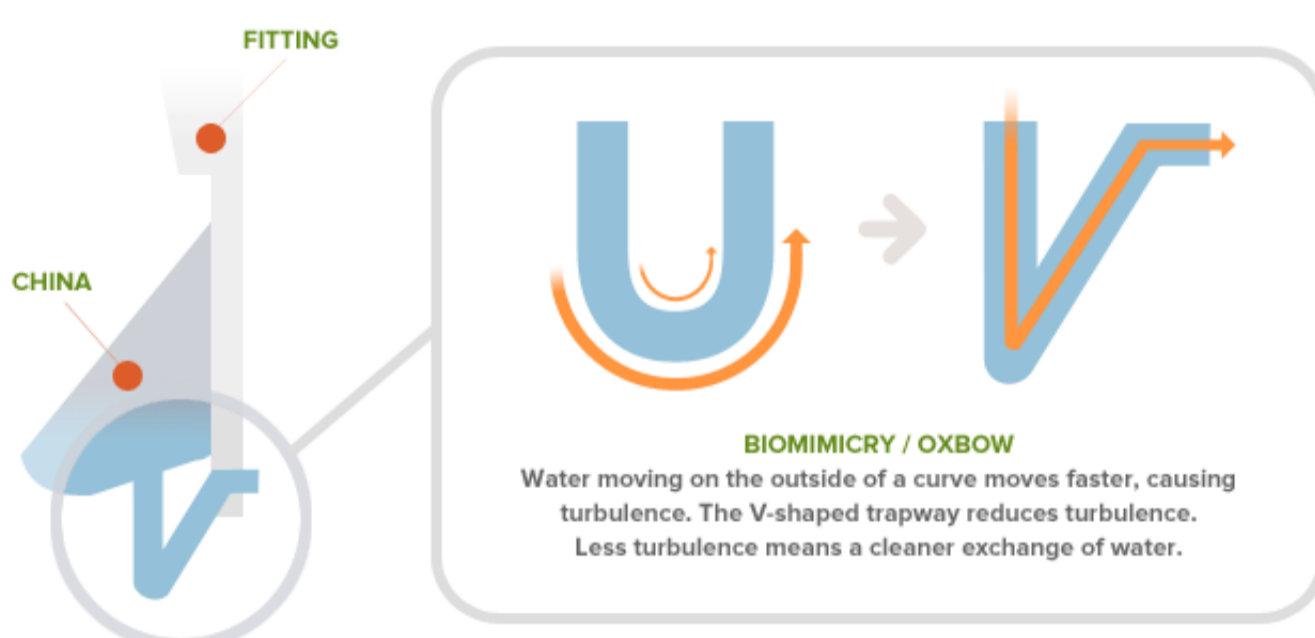
65% of all cardboard used is 100% recycled content.

CONSTRUCTION

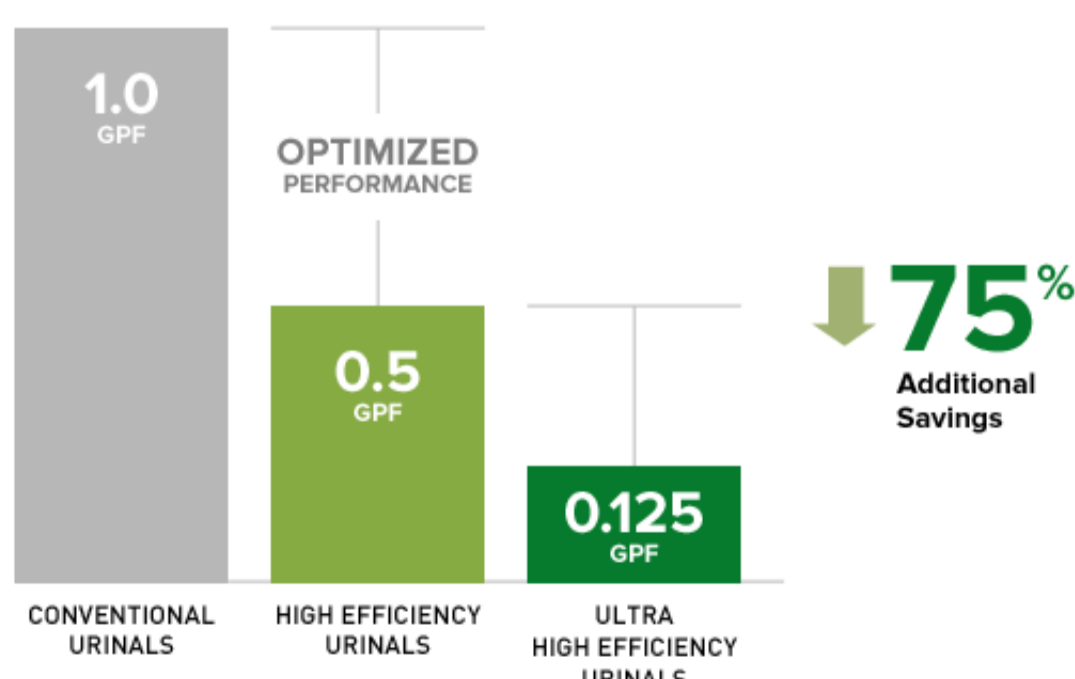


UPS parcel shipments are carbon neutral. TOTO is a registered SmartWay® Transport Partner.

USE



Designed to work in combination with the EcoPower TEU1UN Urinal Flush Valve, the urinal was engineered to utilize biomimicry, modeled after the oxbow affect found in nature. Water moving on the outside of a curve will move faster, causing turbulence. The 0.125gpf urinal utilizes a V-shaped trap to reduce turbulent flow, resulting in lower water use without compromising performance.



Designed to work in combination with the EcoPower TEU1UN Urinal Flush Valve, the 0.125 gallon per flush urinal reinforces TOTO's performance reputation while offering an additional water savings.

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Transparency Report	
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