

TOTO®

Commercial Wall-Hung Toilet

CT708E(V)(G)

The Commercial HET Wall-Hung Toilet delivers TOTO's leadership in innovations and performance to your commercial space. Offering a classic design and clean lines, the wall-hung design opens up your space, making the entire bathroom easy to clean.



Performance Dashboard

Features & functionality

- High efficiency, 1.28 GPF / 4.8 LPF, flushometer toilet
- Powerful siphon jet flushing action
- Design for use with TOTO low-flow EcoPower® flushometer valve
- ADA compliant
- Wall mounted, elongated bowl toilet

Visit TOTO for more product specifications for:

[CT708E\(V\)\(G\)](#), [CT708E](#), [CT708EG](#), [CT708EV](#), [CT708EVG](#)

CSI MasterFormat™ #22 42 13.13

Environmental performance

Improved by:

Lower water use

Certifications & rating systems:

Declare™ label

[See LCA results & interpretation](#)



TOTO PeoplePlanetWater Smart Fact:
The Commercial HET Wall-Hung Toilet Bowl uses CeFIONtect™ ceramic glaze, which creates a super smooth, ion-barrier surface to keep your toilet bowl clean with each and every flush.



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: 10/18/14 – 10/18/17
TOT – 10/18/14 – 005

The LCA and Report are independently verified and certified to the SM Transparency Report Framework and ISO 14025.

NSF International
P.O Box 130140
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The material health evaluation is self-declared and done in accordance with the Manufacturers Guide to Declare.

International Living Future Institute
501 East Madison St.
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206 223 2028



TOTO USA

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Contact us

LCA results & interpretation

Commercial Wall-Hung Toilet CT708E(V)(G)

Life cycle assessment

Material health

Scope and summary

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

Functional unit

One toilet in an average U.S. commercial environment that functions for 10 years. The period of 10 years is modeled as the period of application based on the average economical lifespan for commercial applications. The technical lifespan is longer. 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 1.28 gallon/use and 133 uses/day resulting in 621,376 gallons of water.

What's causing the greatest impacts

All lifecycle stages

The use stage is dominating the results for all 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 (91-98%). This is expected as this is a commercial product with a use stage that is very intensive among other sanitary products. The production stage itself and the construction/installation stage are slightly significant but not dominant in any impact category. The recovery stage includes recycling benefits by preventing the need to produce primary materials. Recycling is a relevant factor for all of the impact categories, offsetting a portion of the impacts caused by production. Additionally, the processes for dismantling the product and final waste treatment during the end of life stage do not have a significant impact.

Production stage

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

The brass parts together with the injection molding process have dominating contributions to the ozone depletion, non-carcinogenics and eutrophication impact categories. The remaining parts and processes contribute between 4% and 23% 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

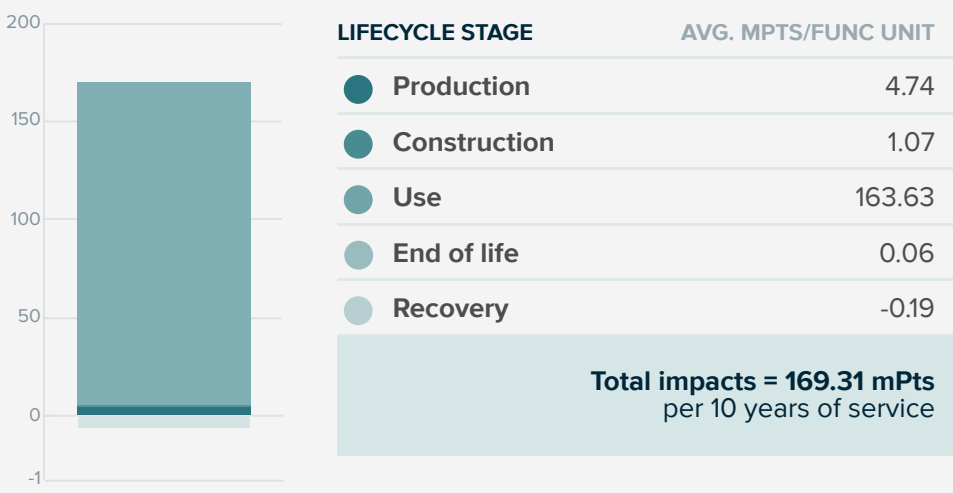
- Dual-Max®, E-Max®, Tornado Flush™, 1G®, and EcoPower® reduce water consumption in the use phase
- Energy efficiency programs optimize the firing process
- 50% electricity from renewable energy
- 100% of post-industrial ceramic waste is recycled

[See how we make it greener](#)

Material composition greater than 1% by weight

PART	MATERIAL	AVG. % WT.
Ceramic	Ceramic	82%
Seat	Polypropylene	10%
Packaging	Corrugated Board	6%
	Other	2%

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	4.74 mPts	1.07 mPts	163.63 mPts	0.06 mPts	-0.19 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

A variation of 10 to 20% | A variation greater than 20%

LIFECYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY	
Ecological damage						
Impact Category	Unit					
Acidification	kg SO ₂ eq	5.12E-01	1.62E-01	1.42E+01	3.43E-03	-1.20E-02
Ecotoxicity	CTU _e	8.02E+01	2.48E+01	1.31E+03	1.13E+00	-2.39E+00
Eutrophication	kg N eq	5.07E-02	1.00E-02	1.20E+00	3.29E-04	-3.09E-03
Global warming	kg CO ₂ eq	5.93E+01	1.08E+01	2.11E+03	1.39E+00	5.94E-01
Ozone depletion	kg CFC-11 eq	3.34E-06	4.47E-09	8.91E-05	6.54E-08	-9.19E-08
Human health damage						
Impact Category	Unit					
Carcinogenics	CTU _h	5.82E-07	1.34E-07	4.47E-05	8.15E-09	-2.59E-08
Non-carcinogenics	CTU _h	1.24E-05	1.28E-06	1.98E-04	5.93E-08	-1.47E-06
Respiratory effects	kg PM _{2.5} eq	3.18E-02	2.77E-03	9.43E-01	2.27E-04	-1.34E-03
Smog	kg O ₃ eq	2.81E+00	4.77E+00	9.84E+01	9.23E-02	-1.52E-01
Resources depletion						
Impact Category	Unit					
Fossil fuel depletion	MJ surplus	1.22E+02	1.76E+01	1.43E+03	1.14E+00	-2.80E+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 Toilet

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:

- LCA self-declared, Report self-declared 0 product
- LCA verified, Report self-declared 1/4 product
- 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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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 ?



● Commercial Wall-Hung Toilet



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

Red List materials

No Red List materials are present in the toilet.

Where it goes at the end of its life

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

How we're making it healthier

The Commercial Wall-Hung Toilet is designed to be used with the TOTO EcoPower® Toilet 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.

[See how we make it greener](#)

References

Declare

TOTO USA, Declare label for Commercial Wall-Hung Toilet CT708E(V)(G)

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:

- | | |
|---|-----------|
| <input checked="" type="checkbox"/> Option 1. Material ingredient reporting | 1 product |
| <input type="checkbox"/> 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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How we make it greener

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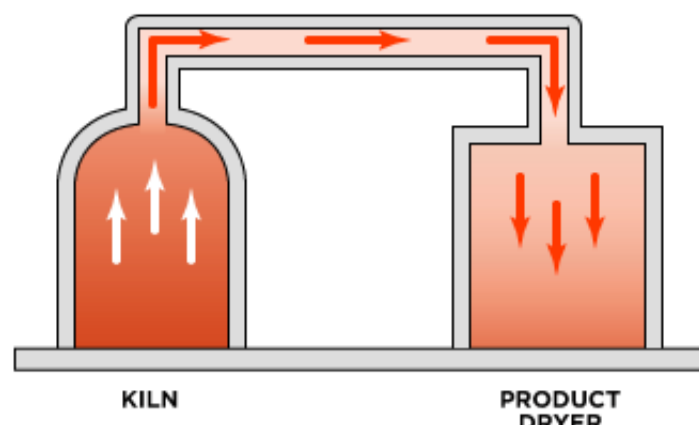
Collapse all

See LCA results by lifecycle stage

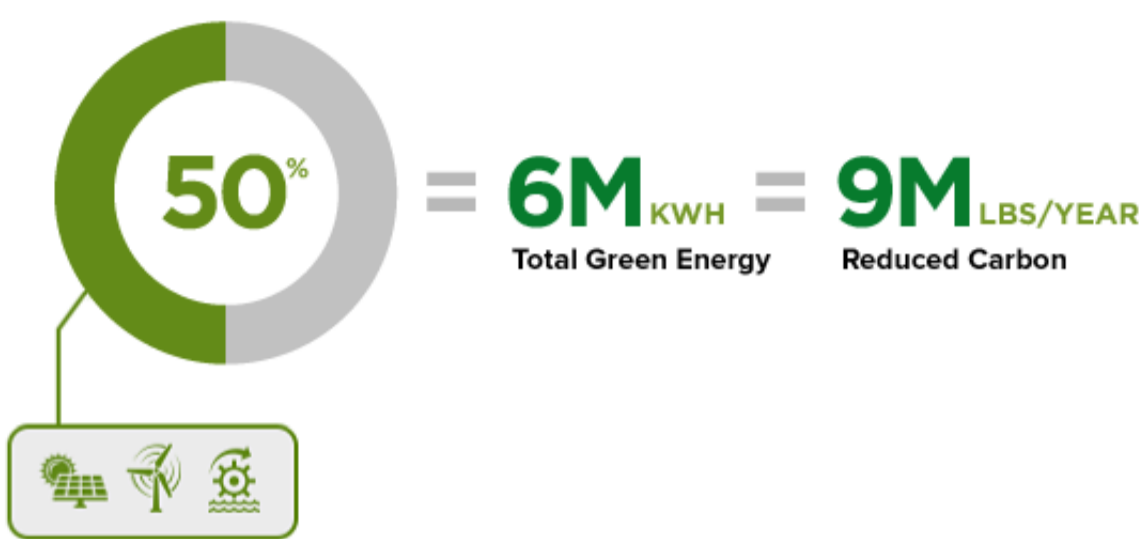
PRODUCTION



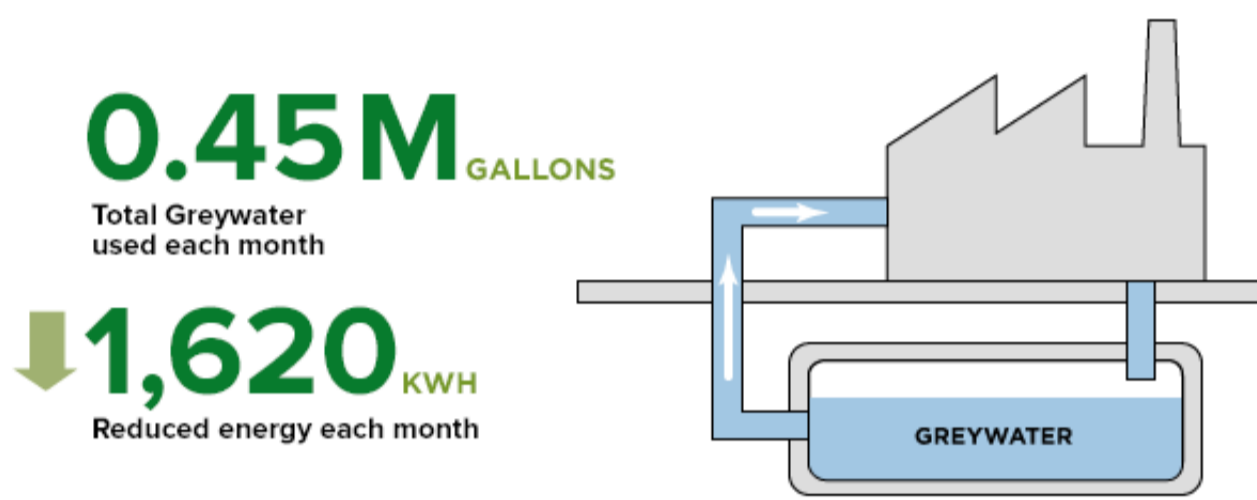
↓15%
Less Natural Gas



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

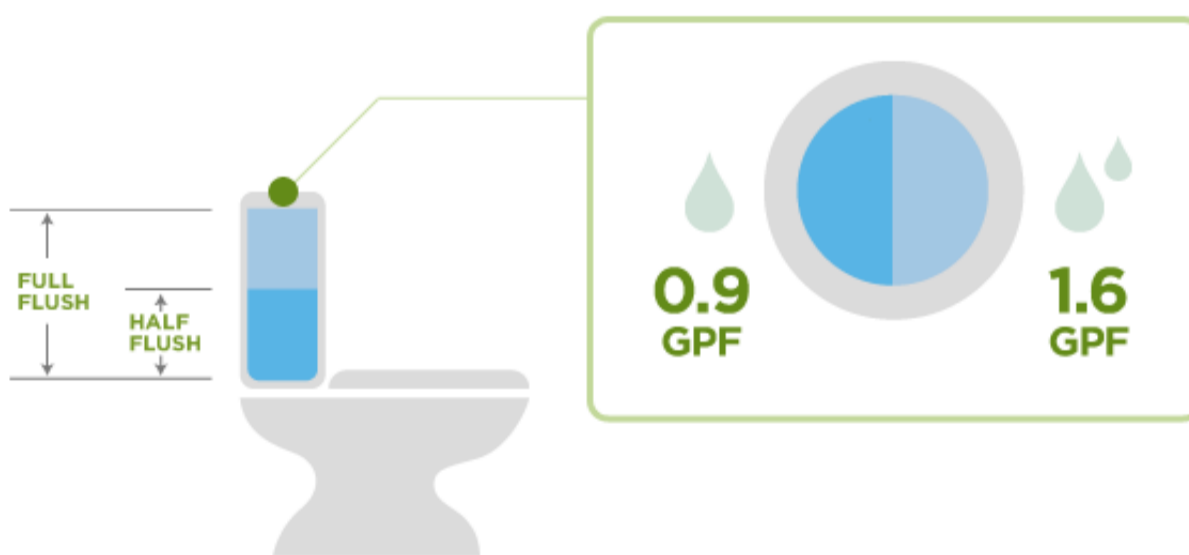


One-piece toilets are shipped with every other toilet upside down, increasing the fill rate of a truck trailer and cutting transportation cost in half.

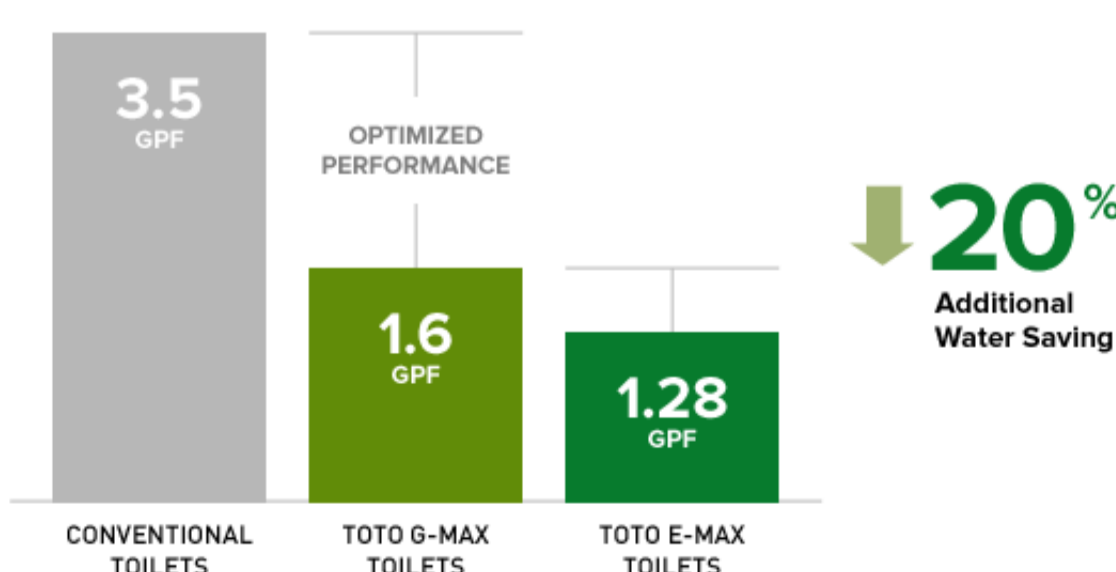


UPS parcel shipments are carbon neutral. TOTO is a registered SmartWay® Transport Partner.

USE



The dual flush system reduces water in the use phase.



Utilizing the same proven engineering as our legendary 1.6 GPF G-Max flushing system, the 1.28 GPF E-Max reinforces TOTO's performance reputation as our legendary 1.6 GPF G-Max flushing system, the 1.28 GPF E-Max reinforces TOTO's performance reputation while offering an additional water savings of 20%.

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