TOTO®

1.0 GPF Commercial Wall-Hung Toilet

CT708U(V)(G)

The Commercial Ultra High Efficiency 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

Ultra High efficiency, 1.0 GPF / 3.8 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:

CT708U(V)(G)

See ecomedes for water & energy calculations

CSI MasterFormat™ #22 42 13.13

Check specs sheet for this product

For spec help call (888) 295-8134

Environmental performance

Improved by:

Saves 38% and 22% more water than standard 1.6gpf and 1.28gpf toilets

Certifications, rating systems & disclosures:

Contributes to earning credits in LEED®

CALGreen® compliant

Declare™ Label, LBC Red list free

See LCA results & interpretation

See material health results & interpretation

TOTO PeoplePlanetWater Smart Fact:
The Commercial HET Wall-Hung Toilet Bowl uses CeFiONtect™ ceramic glaze, whihc 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 reviewed	✓ NSF
	Transparency Report
Verified	✓ NSF
	Material Health Evaluation
Self-declared	✓

Validity: 10/16/2017 – 10/16/2022
TOT – 10/16/2017 – 025

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

NSF International
P.O Box 130140
789 N.Dixboro Road
Ann Arbor, MI 48105, USA
www.nsf.org
+1 734 769 8010

The material health evaluation is self-declared and done in accordance with the Manufacturers Guide to Declare.

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Seattle, WA 98122
www.living-future.org
206 223 2028

TOTO USA
1155 Southern Road
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www.totousa.com

Contact us

LCA results & interpretation

1.0 GPF Commercial Wall-Hung Toilet CT708U(V)(G)

Life cycle assessment | Material health

Scope and summary

○ Cradle to gate ○ Cradle to gate with options ✓ Cradle to grave

Functional unit

Reference service life: 10 years. 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.

Data reporting period: 2016

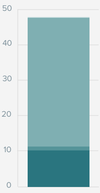
Default use phase scenario

10 years of service in an average U.S. commercial environment with 1.0 gallon/use and 60 uses/day results in 156,000 gallons of water.

Material composition greater than 1% by weight

PART	MATERIAL	AVG. % WT.
Ceramic	Ceramic	91%
Spud nut and washers	Brass	1%
Packaging	Corrugated Board	7%
	Other	1%

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



LIFE CYCLE STAGE	AVG. MPTS/FUNC UNIT
Production	10.09
Construction	1.06
Use	41.59
End of life	0.05
Recovery	-0.19

Total impacts = 52.61 mPts
per 10 years of service

What's causing the greatest impacts

All life cycle 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

LCA results

LIFE CYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
Information modules: Included | Excluded*	**A1 Raw Materials**	**A4 Transportation/ Delivery**	**B1 Use**	**C1 Deconstruction/ Demolition**	**D Reuse, recovery and/or 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**	
Operational energy use is irrelevant to the life cycle of the modeled product.	**A3 Manufacturing**		**B3 Repair**	**C3 Waste processing**	
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	10.09 mPts	1.06 mPts	41.59 mPts	0.05 mPts	-0.19 mPts
Materials or processes contributing >20% to total impacts in each life cycle 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 v2.1 results per one toilet

LIFE CYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
Ecological damage					
Impact Category / Unit					
Acidification — kg SO_2 eq	3.79E-01	1.58E-01	2.94E+00	3.22E-03	-9.53E-03
Eutrophication — kg N eq	6.78E-02	1.02E-02	3.38E-01	3.30E-04	-3.07E-03
Global warming — kg CO_2 eq	1.55E+02	1.06E+01	5.64E+02	6.79E-01	-9.78E-01
Ozone depletion — kg CFC-11 eq	2.59E-06	1.97E-08	5.90E-05	6.77E-08	-9.31E-08
Human health damage					
Impact Category / Unit					
Carcinogenics — CTU_h	2.33E-06	1.37E-07	1.15E-05	8.24E-09	-2.27E-08
Non-carcinogenics — CTU_h	2.34E-05	1.28E-06	5.84E-05	5.88E-08	-1.46E-06
Respiratory effects — kg $PM_{2.5}$ eq	3.25E-02	2.59E-03	2.03E-01	2.11E-04	-1.17E-03
Smog — kg O_3 eq	6.74E+00	4.76E+00	2.79E+01	9.07E-02	-1.41E-01
Additional environmental information					
Impact Category / Unit					
Ecotoxicity — CTU_e	8.92E+01	2.44E+01	2.04E+02	1.11E+00	-2.03E+00
Fossil fuel depletion — MJ surplus	9.80E+02	1.75E+01	3.68E+02	1.14E+00	-1.08E+00

References

LCA Background Report
TOTO Sanitary Ceramic Products LCA Background Report (public version), September 2017

SM Transparency Report Framework
Part A: Calculation Rules and Background Report Requirements v2017 (compliant with ISO14040-44 and ISO14025)
Part B: Product Group Definition – Commercial Toilets

Transparency Reports™ / environmental product declarations enable purchasers and users to compare the potential environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. TRs/EPDs of products that conform to the same PCR 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

Environmental product declarations

○ Industry-wide (generic) EPD	1/2 product
✓ Product-specific Type III EPD	1 product

Green Globes for New Construction and Sustainable Interiors
Materials and resources

✓ NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell	
✓ C 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs	

Collaborative for High Performance Schools National Criteria
MW 7.1 – Environmental Product Declarations

✓ Third-party certified type III EPD	2 points

SM Transparency Report™+ Material Health Overview™

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Material Health Evaluation	
Self-declared	✓

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LCA & material health results & interpretation

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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 (ILFI).

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 then 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

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

Red List Free

Click the label to see the full declaration.

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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
1.0 GPF Commercial Wall-Hung Toilet CT708U(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 BD+C: New Construction | v4 - LEED v4
Building product disclosure and optimization

Material ingredients

Credit value options — 1 product each

☑ 1. Reporting ○ 2. Optimization ○ 3. Supply chain optimization

Living Building Challenge 3.0
Materials petals imperatives

☑ 10. Red List Free ○ 12. Responsible Industry ○ 13. Living Economy Sourcing

WELL Building Standard®
Air and Mind Features

☑ **Air** 26. Enhanced Material Safety

☑ **Mind** 97. Material Transparency ○ **Mind** 98. Organizational Transparency

Collaborative for High Performance Schools National Criteria
MW 10.1 – Building Product Health Related Information Reporting

☑ Product Health Related Information Report — 1 point

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How we make it greener

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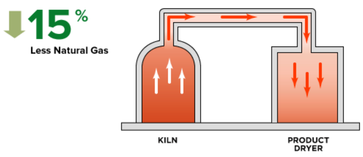
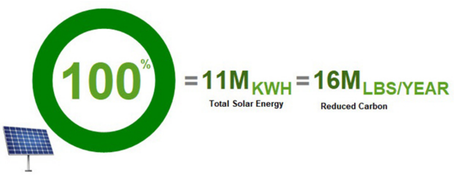
Collapse all

See LCA results by life cycle stage

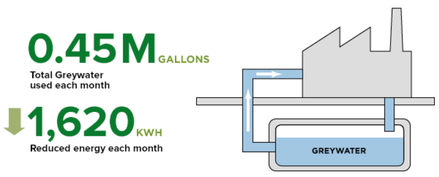
PRODUCTION



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



TOTO's Morrow plant matches 100% of its electricity usage through Georgia Power Simple Solar and helps grow solar energy. 11 million kilowatt hours of green energy helps reduce 16 million pounds of carbon 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.

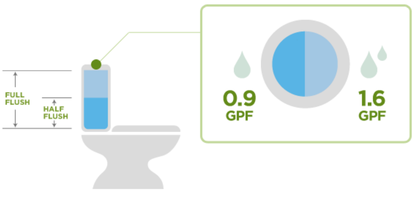
65% of all cardboard used is 100% recycled content.

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 and 1.0 GPF ultra-low flushing systems, such as Tornado Flush™ and Siphon Jet Flush, reinforce TOTO's performance reputation while offering an additional water savings of 20% and 38% respectively.