

TOTO



TOTO's Universal Design

To Create, Is To Think About People

Universal Design BOOK

To Create, Is To Think About People

The answer is in the questions.
Who will use our products?
What is difficult for them?
What makes them comfortable?

It's always about the person.

At TOTO, when we design products
or spaces, we keep people in mind
throughout the process.

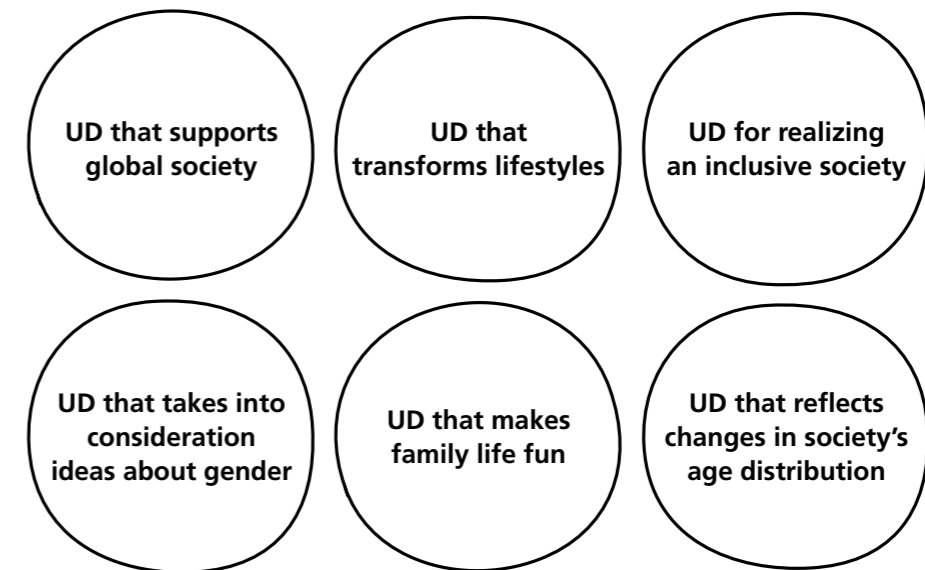
It's about making life better for all,
because when it comes to caring for people,
meticulousness is key.

Kindness. Wisdom. Technology. Effort.

Universal Design Is Our History

The value that TOTO creates through UD

Making a clean, comfortable "everyday" something everyone takes for granted.
TOTO aims to realize this through UD that takes into consideration diverse people.



The world that TOTO aims to create through UD

Pursuing ease of use for all



SUSTAINABLE DEVELOPMENT GOALS

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Potential of TOTO's Universal Design

TOTO continues to take on various UD-related challenges to create a society in which we all can live comfortably.

1917

Providing a healthy and civilized way of life

Established Toyo Toki Company, Limited (present-day TOTO LTD.)

At a time when vault toilets were located outside people's houses, we started on our path to spread the use of sanitary ware based on a firm determination and unflagging spirit that "Spreading the use of sanitary ware toilets would surely contribute to the development of society."



Japan's first seated flush toilet

1970s

No one washed their bottoms when using toilet

UD that transforms lifestyles

Spreading the practice of washing one's bottom and making the WASHLET®, a product developed for medical use, a commonplace device for everyone

TOTO started to import and sell the Wash Air Seat, the predecessor of its WASHLET®, in the 1960s. The Wash Air Seat was a medical device for people who could not wipe themselves, and it was redeveloped into TOTO's WASHLET® for general use, which contributed to the spread of the practice of washing one's bottom.



WASHLET® (Splay seat*)

**Splay seat* is a generic name for an ordinary toilet seat equipped with a warm-washing function.
*WASHLET and "WASHLET logo" are registered trademark of TOTO LTD.

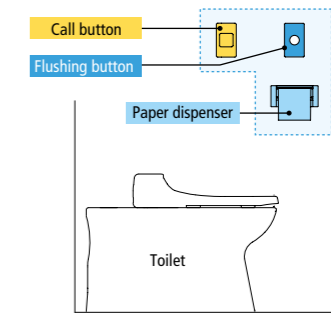
2003

Although a public toilet, it was difficult for some people to use.

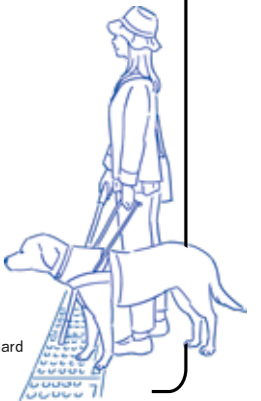
UD for realizing an inclusive society

Standardized button layout for public toilets so everyone can use without confusion

In response to comments regarding users "struggling on account of not knowing how to flush" and "mistakenly pushing the call button," TOTO launched investigative research on creating common rules for the placement of public toilet controls on walls through industrial-academic collaboration. This research was picked up throughout the industry, and JIS standards were formed in 2007, and later ISO standards were formed in 2015.



Control placement rules that became the JIS standard



2016

Era that respects diversity in gender

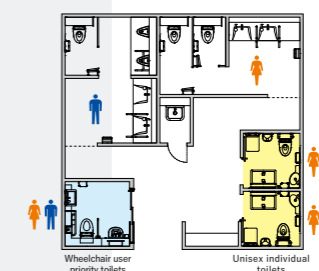
UD that takes into consideration ideas about gender

TOTO quickly started to ascertain the needs of the LGBT community and search for the ideal form of Public toilets

Sexual minorities, which are said to make up about 8% of Japan's population-LGBT- (source: Dentsu Diversity Lab's LGBT Survey 2015). In particular, in response to comments that one common difficulty transgender people face is the use of toilets when going out, TOTO launched investigative research on the ideal form of public toilets. We have come to understand that not only transgender people but also people who require the help of someone of the other sex when using the toilet, such as the elderly and people with developmental disabilities, need toilets that are not limited to a particular sex. We have launched efforts to create public toilets that anyone can use with peace of mind.



Example layout of unisex individual toilets



For example, helped by the opposite sex



For example, accompanied by the opposite sex



For example, sexual minority (transgender)

Potential of TOTO's Universal Design

2016

Number of dual income households grew to 12.19 million.*

* Ministry of Health, Labour and Welfare's 2017 Health, Labour and Welfare White Paper

Proposing comfortable homes that make housework easy, such as easy cleaning

UD that makes family life fun

Taking into consideration present-day social backgrounds, including the growing number of dual-income households, TOTO also focus on proposals related to homes that make housework easier. EWATER+*, which was developed from TOTO's unique technology, not only keeps toilets, bathrooms, and kitchens clean but also makes routine cleaning easier. We are creating homes that are always clean and comfortable and make it possible for you and your families to enjoy life.

*EWATER+electrolyzed water(containing hypochlorous acid)
* See the product information webpage or product catalog for details.



2018

Foreign visitors to Japan hit historic high of 31 million

*Source: Japan National Tourism Organization (JNTO) Inbound Tourists By Year

UD that supports global society

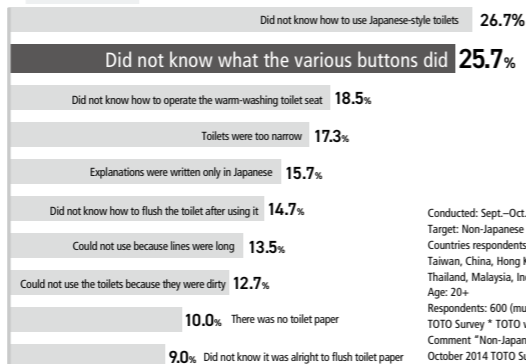
Supporting the widespread use of Japanese toilets, a pride of Japan

As the number of inbound tourists to Japan increases, there are growing calls for public toilets that are comfortable for anyone to use. With growing demand for western-style toilets, improved operability, and the full-introduction of WASHLET®, we at TOTO offer support for formulating standard pictograms so that anyone can use toilets with ease and installing equipment such as remote controls and WASHLET® that take into consideration users' religion and culture.



Japan Sanitary Equipment Industry Association "Standard pictogram"

Problems with Japanese public toilets when first visiting Japan (top 10 answers)



Conducted: Sept–Oct., 2014
Target: Non-Japanese living in Japan
Countries respondents were from: Korea, Taiwan, China, Hong Kong, U.S., France, U.K., Thailand, Malaysia, Indonesia
Age: 20+
Respondents: 600 (multiple answers)
TOTO Survey * TOTO was not indicated on survey form.
Comment "Non-Japanese Toilet Culture Tour Survey" October 2014 TOTO Survey



2023

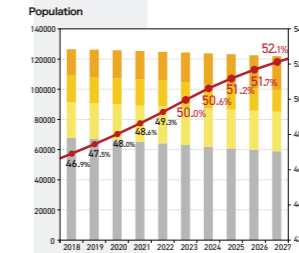
50%* of Japanese will be 50 years or older

* Source: "Population Projections for Japan (2017 Projections)" released by National Institute of Population and Social Security Research

UD that reflects changes in society's age distribution

Proposing products and consideration for living at home for a long time based on research on the physical condition and living environment of the elderly acquired over many years

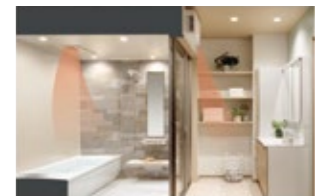
At TOTO, we have focused on research that takes into consideration the elderly since the 1980s. Over many years, we have researched not only what consideration should be given to disabilities as people grow older but also devices and spaces necessary to live independently. In response to ideas about what consideration is given to the elderly at welfare facilities and public spaces and people's desire to stay in their home for a long time, we introduced a flush toilet that can be installed next to a bed in 2013. We also give consideration to heating in rooms so that people can spend a comfortable time in such places. We propose products and plans so that people can stay in the homes they have grown used to for a long time.



Source when conducted: Compiled from "Population Projections for Japan (2017 Projections)" (estimates based on medium-variant fertility and medium-variant mortality projections) released by National Institute of Population and Social Security Research



Bedside Flushable Toilet



Bathroom / Washroom warm and comfortable set

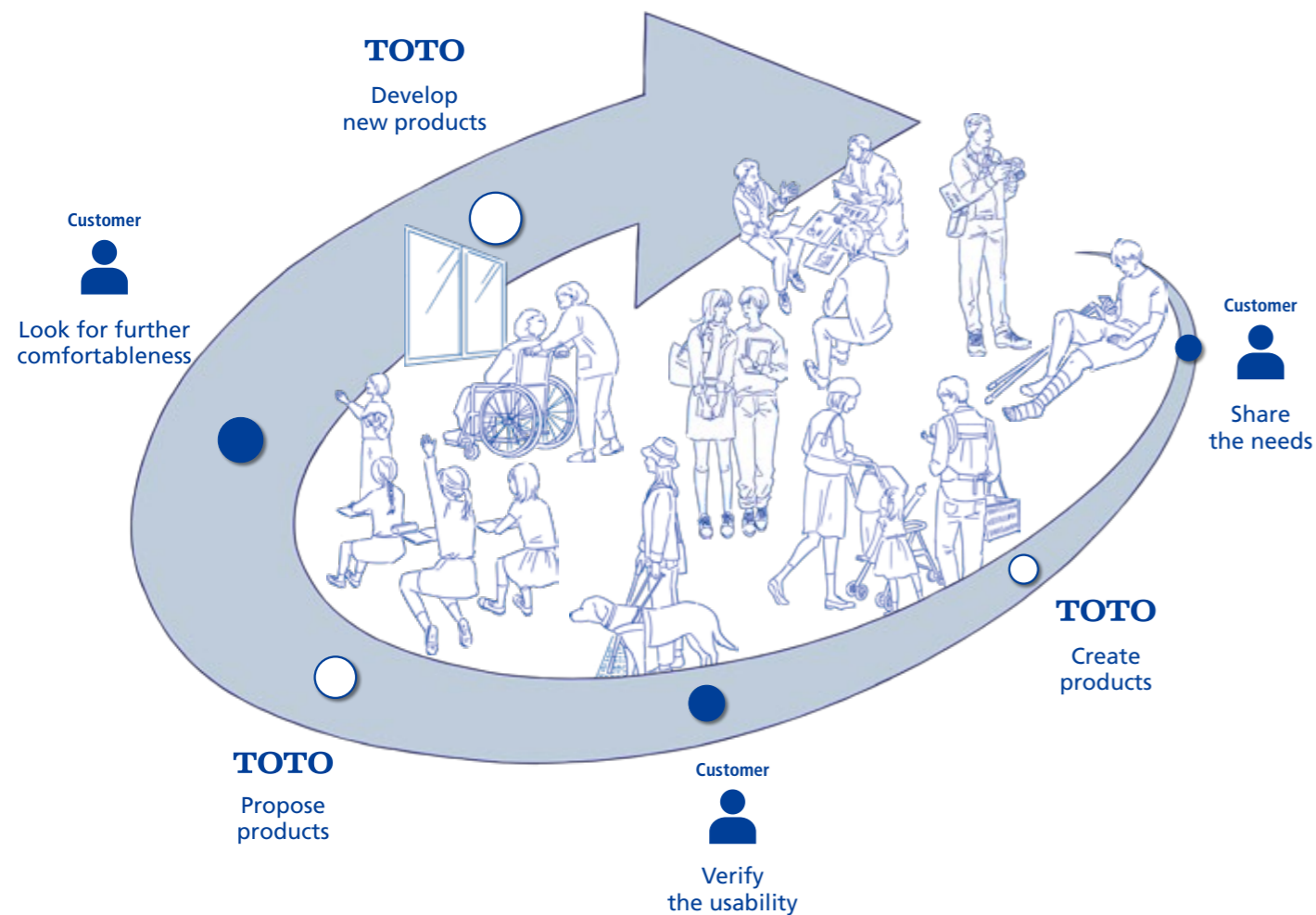


TOTO will continue to increase what it can do through UD.



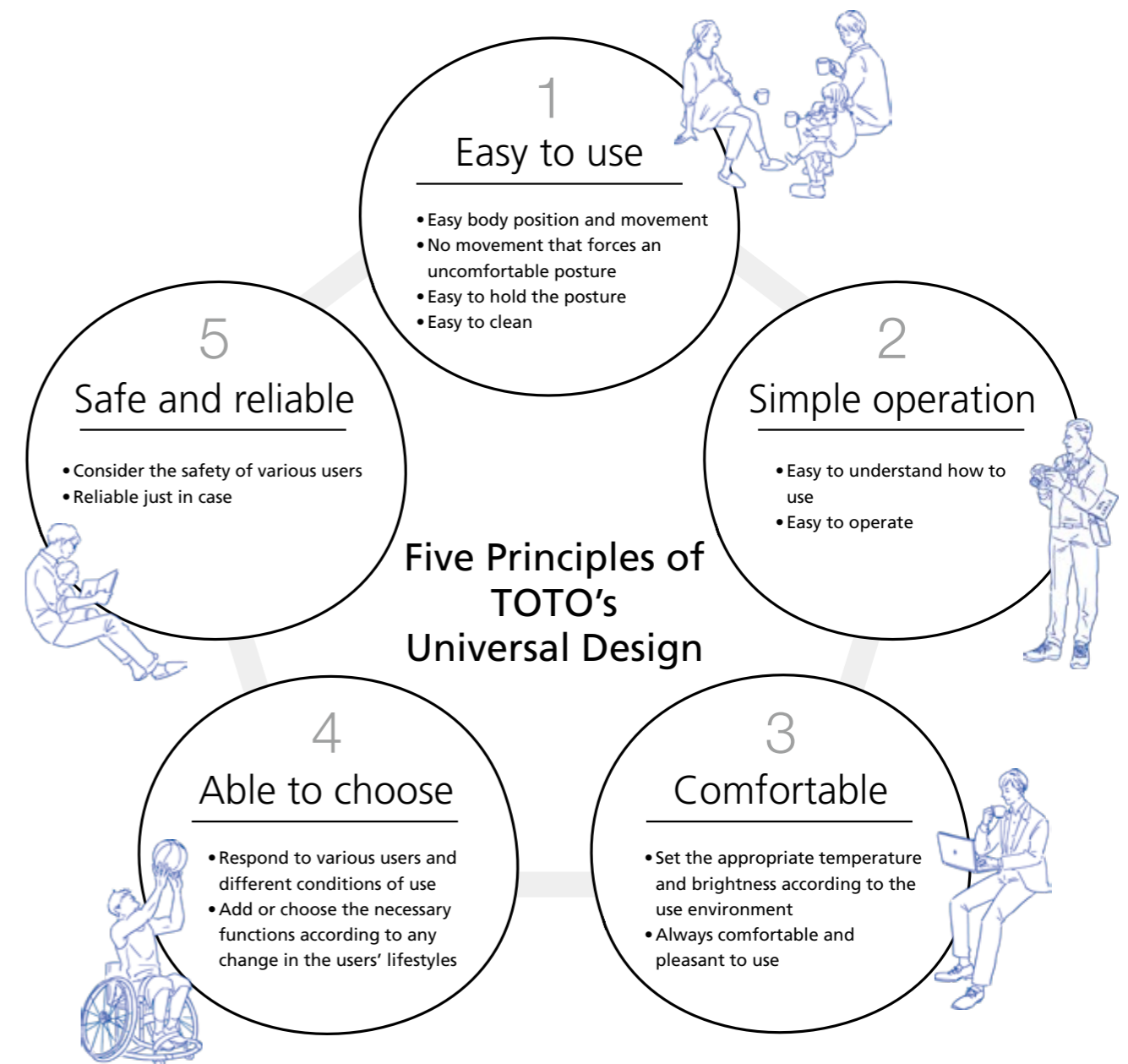
Cycle of TOTO's Universal Design

TOTO's Universal Design has evolved by considering the life of diverse people and solving their problems.
We will continue to listen to user opinions and pursue usability for as many people as possible.



Five Principles of TOTO's Universal Design

At TOTO, we think that universal design starts with considering what is ease of use and comfort for diverse people.
We develop better products and make better proposals by keeping in mind the Five Principles of TOTO's Universal Design to realize ease of use and comfort.



Five Principles of TOTO's Universal Design

1 Easy to use

- Easy body position and movement
- No movement that forces an uncomfortable posture
- Easy to hold the posture
- Easy to clean



Toilet

No movement that forces an uncomfortable posture



Auto open/close lid Auto flush

- Automatic opening and closing and automatic toilet bowl flushing eliminate movements that require getting into an uncomfortable position, such as stooping down.

Easy to clean



Rimless design Rimless WASHLET*

- Eliminating the back of the toilet bowl rim, where grime easily accumulates, makes it possible to clean around the whole rim with a single wipe.

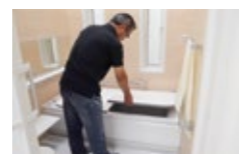
Bathroom

Easy body position and movement



Handrail

- Comfort shower bar that supports standing, sitting and moving. (Also used as a handrail)



Easy bath lid

- The easy bath lid makes it possible to open and close with a light force.

Easy to clean



Automatic bathtub cleaning

- Automatic bathtub cleaning reduces an uncomfortable posture to clean.



Easy cleaning counter

- The easy cleaning counter makes it possible to clean even parts where grime easily accumulates with a single wipe.

Washroom

No movement that forces an uncomfortable posture



Swing three-sided mirror

- The Swing three-sided mirror eliminates the need to lean forward when using the mirror, such as when putting on makeup.

Easy to clean



High back guard

- There is no step from the bowl to the bottom of the faucet, so it is easy to clean with a quick wipe.

Kitchen

No movement that forces an uncomfortable posture



Interlocking floor cabinet Eye level cabinet

- The interlocking floor cabinets and eye level cabinets eliminate the need to get into an uncomfortable posture to take out items.

Easy to clean



Slide sink Zero filter hood eco

- The Slide sink and Zero filter hood reduce the hassle of cleaning.

Public

Easy body position and movement Easy to hold the posture



Paper holder

- The toilet paper holder, which users can place their hands on to support themselves, offers support for standing and sitting movements and during excretion and eliminates uncomfortable posture.

Easy to clean



Wall-mounted toilet

- The wall-mounted toilet makes it possible to clean the floor without getting into an uncomfortable posture.



Target mark (Microwave sensor wall-mounted urinal set)

- The target mark on the urinal eliminates splatter and makes cleaning easy.

Five Principles of TOTO's Universal Design

2 Simple operation

- Easy to understand how to use
- Easy to operate



Toilet

Easy to understand how to use



Restroom dresser built-in remote control

- It detects the movement of people from when they enter the room until they leave, automatically turning on lights and lighting up the control panel.
- The control panel is designed with clearly illuminated buttons and lettering, making it easy to see.

Easy to operate



Restroom dresser automatic faucet

- Water starts flowing when you extend your hands.

Bathroom

Easy to operate



2WAY touch faucet



- The 2WAY touch faucet can be operated from above or front, making it simple to operate whether standing or sitting.



Comfort-wave click shower

- The Comfort-wave click shower can be turned both on and off with a single touch of a button at hand.

Washroom

Easy to understand how to use



Eco-single faucet

- With the Eco-single faucet, water only comes out up to the center of the lever. There is also a clicking feel when switching from cold water to warm water, which makes it easy to know when changing between cold and hot water.

Easy to operate



Automatic faucet

- The automatic faucet not only stays clean because there is no need to touch the lever with soapy or dirty hands but is also easy for small children who have difficulty reaching levers to use.

Kitchen

Easy to operate



Touchless water broom faucet

- The sensor is on the side of the faucet, so it is easy to hold your hand over it, and you can turn on or off the water without disrupting your work pace.



Easy toe push faucet switch

- With a foot switch, it is possible to operate the faucet even when one's hands are full.

Public

Easy to operate



Clean Dry

- Users can dry their hands just by inserting hands into the Clean Dry.



Urinal for kids Wash button

- Even a light push to the flush button activates the toilet so that small children, too, can flush the toilet.



Automatic soap dispenser

- The automatic dispenser releases soap just by extending one's hands.

Five Principles of TOTO's Universal Design

3 Comfortable

- Set the appropriate temperature and brightness according to the use environment
- Always comfortable and pleasant to use



Toilet

- Set the appropriate temperature and brightness according to the use environment



Soft Light

- A soft light turns on when someone approaches. Even at night, one can find the toilet bowl and remote control.



Warm air drying

- Thanks to several functions—a room heater timer, which warms the room at a set time, and anti-cooling function, which automatically comes on when the room temperature falls below about 5°C—the toilet is always at an appropriate temperature.

- Always comfortable and pleasant to use



WASHLET*

- Particular about the smallest detail, including the shape of a single water drop, we are pursuing pleasant cleaning.



Self Cleaning Bowl*

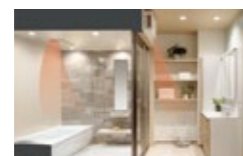


Self Cleaning Seat*

- EWATER+* maintains the cleanliness of the toilet by eliminating bacteria,* the cause of grime.

Bathroom

- Set the appropriate temperature and brightness according to the use environment



Bathroom / Washroom warm and comfortable set

- Both the bathroom and washroom heater can be simultaneously turned on by flipping a single switch.

- Always comfortable and pleasant to use



First class bathtub

- With a greater surface area to support the body, the bathtub disperses pressure on the body.



Floor wiper cleaning (EWATER+*)

- The continually cleaning function prevents mold and pink grime from forming, making it possible to always enjoy a bath pleasantly.

Washroom

- Set the appropriate temperature and brightness according to the use environment



Comfortable cool and warm wall cabinet

- A warming function for winter and cool breeze function for summer makes the after-bath experience even more comfortable.

- Always comfortable and pleasant to use

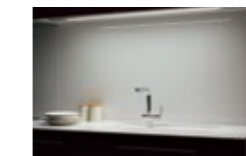


Clean toothbrush*

- After brushing your teeth, rinse your toothbrush with water and spray it with "EWATER+*" to clean and eliminate bacteria*. You can brush your teeth comfortably with a clean toothbrush.

Kitchen

- Set the appropriate temperature and brightness according to the use environment



Wide LED lighting

- Always comfortable and pleasant to use



Clean cutting board*



Clean kitchen knife*

- Spraying cutting boards and knives with "EWATER+*" after cleaning makes it possible to cook with peace of mind anytime.

Public

- Set the appropriate temperature and brightness according to the use environment



Mirror with LED lighting

- This lighted mirror makes it easy to put on makeup because the soft light from the right and left beautifully illuminates the whole face.

- Always comfortable and pleasant to use



OTOHIME

- The sound of flowing water like a murmuring stream covers unpleasant toilet sounds (sound of excretion). The natural sound is not only very effective for masking but also makes public toilets more comfortable.

Five Principles of TOTO's Universal Design

4 Able to choose

- Respond to various users and different conditions of use
- Add or choose the necessary functions according to any change in the users' lifestyles



Toilet

- Add or choose the necessary functions according to any change in the users' lifestyles



Bedside Flushable Toilet

- The Bedside Flushable Toilet is a moveable flush toilet that can be custom installed next to a bed. It not only makes it possible for people to continue to use the toilet on their own but also eliminates concerns about odors and cleanup.



Toilet Lift

- With a powered toilet seat that rises and lowers on its own, this Toilet Lift helps users sit down on the toilet seat and stand up afterward. It can be custom installed on existing toilet bowl to match the physical condition.

Bathroom

- Respond to various users and different conditions of use



Bench counter

- The bench-type counter, which is designed to be comfortable to sit on, is the same height as the bathtub and can be slid while sitting.

- Add or choose the necessary functions according to any change in the users' lifestyles



Bath Lift

- The Bath Lift helps people get into and out of the bathtub, it reduces the workload of assisting people take a bath as the powered seat rises and lowers.

Washroom

- Respond to various users and different conditions of use



ESCUA

- The washbasin counter with an open underside makes it possible to sit comfortably and relax.



ESCUA LS

- With a mirror that expands down to the countertop, even small children can see their faces.

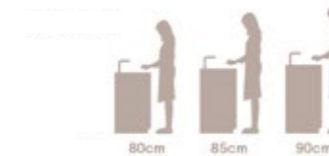
Kitchen

- Respond to various users and different conditions of use



Electric lift type kitchen cabinet

- With this electric lift type kitchen cabinet, it is easy to reach and put items up and down shelves.



Counter height variations

- The height of the counter can be set to one that makes it comfortable for users.

Public

- Respond to various users and different conditions of use



Compact barrier-free toilet pack

- With the Compact barrier-free toilet pack, functions can be selected to match the needs of various public toilet users.



Left: Urinal for kids Right: Toilet bowl for kids / Handrail

- For the infant's toilet bowl, consideration was given to size and ease of use of the child. It is also possible to install handrail.

Five Principles of TOTO's Universal Design

5 Safe and reliable

- Consider the safety of various users
- Reliable just in case



Toilet

- Reliable just in case



Safe design in the event of a blackout

- Even in the case of a blackout, the toilet bowl can be flushed by pulling the manual lever.

Bathroom

- Consider the safety of various users



Doorway step that is hard to trip

- The level difference at the entrance to the bathroom is reduced prevent tripping.



High temperature hot water regulation



Touch switch with lock function

- The shower faucet incorporates a function that regulate high temperature hot water and lock that prevents misuse by small children.

Washroom

- Consider the safety of various users



Silent rail specifications

- The drawer closes quietly and dampens the corresponding shock, which prevents users from pinching their fingers.

Kitchen

- Consider the safety of various users
- Reliable just in case



IH cooker

- Supports cooking with basic safety functions (potless detection function, empty-heating automatic OFF function, etc.).

Public

- Reliable just in case



Public compact toilet
Flush tank type (with cleaning port)

- In a situation that the toilet bowl gets clogged, it is possible to remove the blockage from the cleaning port.

Deepening TOTO's Universal Design

TOTO's Universal Design is based on discoveries in daily life, such as something being difficult to use or something making it easier to use.

Valuing these discoveries, TOTO focuses its energy on the pursuit of ease of use, which includes verifications and home-visit surveys during the product development process in which customers actually use the products.

Researching people's motion

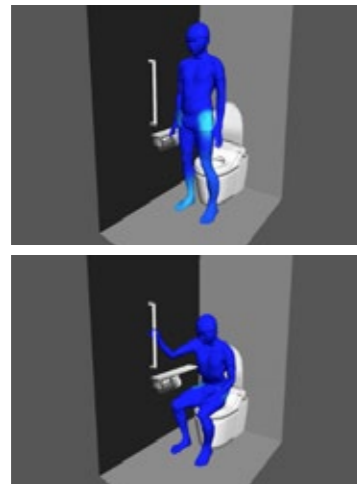
Repeatedly analyzing and considering factors, such as analyses of users' movements, daily life scenes, and space design, is useful for achieving greater ease of use.

Motion analysis

It can be useful to conduct numerical analyses of the workload of various motions in plumbing spaces, when designing products.

Toilet example

Analysis of standing up and sitting down from a toilet (verification of the benefit offered by handrail)



Bathroom example

Research on bathtub shapes that is less burdensome to the body

Conventional bathtubs*



The small surface area supporting the body results in concentrated force on the body (3-point support). The pressure on the body is strong because the tub is not fitted on the back.
* Conventional bathtubs: SUPRINO (2008-2013 product) full-submersion bathtub

First class bathtub



The larger surface area supporting the body results in dispersed force on the body (four-point support). Because it is fitted on the back, the pressure on the body is small.

Bathtubs with shapes that envelop the body offer pleasant, reliable bath times. The contact area is larger than that of conventional bathtubs, and the pressure applied to the back is dispersed.

Daily life scene verification

To achieve various goals, including new product planning and design and examining product proposals, we verify ease of use by having customers actually use products.

Daily life scenes verification process

- 1 Ask**
While relaxing, we ask customers about everyday life scenes.
- 2 Measure**
We take measurements appropriate for what is to be verified, such as length of arms and knee height when sitting and dimensions of wheelchair.
- 3 Reproduce movements**
TOTO has people move around the verification set as normally as possible and confirms their motions and flow lines. If there are tools and items they usually use, we ask them to actually prepare them.
- 4 Conduct briefing**
The results of verifications are discussed with all staff members.



Space design verification

To confirm installation measurements and space design where a product will actually be used, we conduct verification by having customers actually use the products.



User needs survey and field fact-finding survey

We conduct not only online and mail surveys but also home-visit surveys so that we can ascertain how people actually live and related difficulties.

Group interviews

We discuss lifestyles, products, and other items with customers.



Home-visit surveys

We visit the homes of customers and conduct surveys regarding how they actually live and their discoveries.

WEB questionnaire and survey

We ask about how customers actually live their lives and what they want through questionnaire surveys.



Research venue TOTO UD Laboratory

TOTO UD Laboratory

In 2006, the TOTO UD Laboratory was established in the city of Chigasaki-city, Kanagawa Prefecture. To conduct manufacturing that is closely tied to people's daily lives, we develop products and make proposals that take into consideration various elements of the lives of individual customers, including their age, physical condition, family composition, and lifestyles.



Delivering of TOTO's Universal Design

We work to deliver ease of use to diverse people.

Proposal and information dissemination related to laws, ordinances, and standards.

At TOTO, we actively undertake various activities, including contributing to the creation of laws, regulations, and standards, disclosure of knowledge at academic conferences, and releasing research results.

Proposals related to laws, ordinances, standards (JIS S 0026 / ISO 19026)

In recent years, public toilets have become better equipped, but the various operation equipments used around toilets cause confusion and problems such as users "struggling on account of not knowing how to flush" and "mistakenly pushing the call button, not flush button."

Therefore, through industry-academia collaboration with Toyo University,¹ we have examined and conducted research since 2003 related to developing common rules for the wall layout of the three operation equipments (toilet paper dispenser, toilet flush button, and call button).

As a result, we discovered that the inverted L-shaped placement is easy to understand and makes toilets easy to use for various users, including those with visually impaired and those in wheelchairs. It can also be used for both general toilet booths and toilets for people

who use wheelchairs. In 2005, we started to propose this layout.

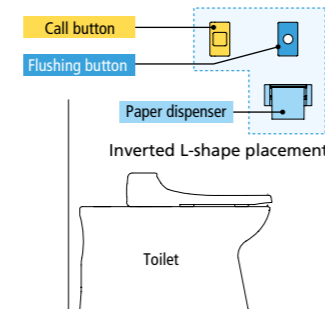
With this research as a trigger, the activity to adopt common rules spread throughout the industry. Following additional investigative research, in 2007, these common rules were formulated into Japanese industrial standards, which include the shape and color of the toilet flush button and call button (JIS S 0026). The JIS standards were also incorporated into various guidelines stipulated in the Act on Promotion of Smooth Transportation, etc. of Elderly Persons, Disabled Persons, etc., the so-called "Barrier-free Law," and it is recommended that public toilet operation equipments be designed in line with JIS.

Furthermore, in 2015, International Organization for Standardization (ISO) rules based on these JIS were formulated (ISO 19026).



Verification scene (envisoned)

* 1 Takahashi Lab (Professor Gihei Takahashi), Dept of Human Environment Design, Faculty of Human Life Design, Toyo University (2003)



Inverted L-shape placement stipulated by JIS S 0026

Presentation of research at academic conferences

We are actively presenting papers that take into consideration space design for the ease of use of various users.



Publication of survey results

We actively publish the results of research on the needs of various users.



Dissemination of information through Barrier-free Book

Barrier-free Book (Public Toilet Edition) was first published in 1974 and has carried the result of research on the movements of people with various physical conditions, including people in wheelchairs. By the research seriously tackling the problems faced by people who use these facilities, we are able to propose products and physical layouts that anticipate market demand and also use the results to make

proposals to academic associations and the national government, which also contributes to the nation and society.

By releasing a total of three editions of this book, including a Hospital, Home for the Elderly, and Elderly Facility Edition and Residential plumbing spaces Edition, we continue to propose consideration for "easy to use for as many people as possible."



Barrier-free Book (Public Toilet Edition)



Barrier-free Book (Hospital, Home for the Elderly, and Elderly Facility Edition)



Barrier-free Book (Residential plumbing spaces Edition)

UD proposal bases TOTO Technical Center

The TOTO Technical Center is a venue where we collaborate with expert customers and create optimal toilet. We make UD-related proposals through various efforts including communicating information on toilets, such as user awareness survey data, full-scale verification spaces, and confirming techniques that are difficult to communicate with photos and explanations only.



Communicating information at H.C.R.

TOTO has exhibited every year at the International Home Care and Rehabilitation Exhibition (H.C.R.) since 1995.

The exhibition is a valuable venue for exhibiting not only recommended products and necessities for plumbing spaces at homes and elderly facilities and public toilets but also for gaining the opinions of customers.



Delivering of TOTO's Universal Design

Human resource development

At TOTO, we undertake activities so that we can acquire the knowledge and skills necessary for manufacturing and proposal activities from a UD perspective.

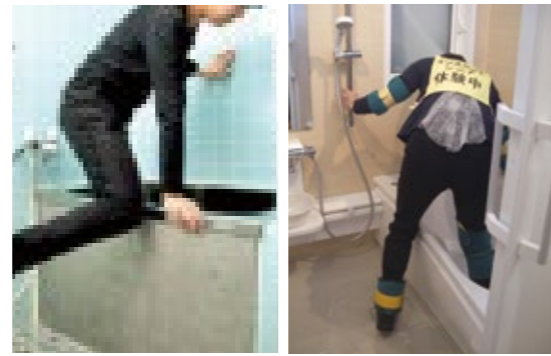
Learning the movements of people in their daily lives

For example, by doing actual cooking and observing cooking in kitchens, we consider how to make things easier to use and how to clearly explain things to customers in their own words.



Learning what people find inconvenient in their lives

We reproduce plumbing spaces from the 1960s and also the latest ones that take UD into consideration. By experiencing both, we physically learn what "ease of use" is.



Learning consideration for diverse people

We will acquire a "customer perspective" by thinking about plumbing spaces from the viewpoint of customers of various ages and physical conditions.



Mastering overall basic knowledge

We will learn about the physical condition of and assistive products for the elderly and people with disabilities through both class work and hands-on. In addition, about 1,400 employees have acquired various welfare-related qualifications, such as those for welfare living environment coordinator and welfare equipment planner, through our support for correspondence courses.



Transitions in TOTO's Universal Design

In 1917, when vault toilets were located outside people's houses, TOTO started on its path to spread the use of sanitary ware based on a firm determination and unflagging spirit that "Spreading the use of sanitary ware toilets would surely contribute to the development of society."


After launching efforts to give consideration to people with disabilities in the 1960s and then conducting research on consideration for the elderly in 1990s, TOTO started to work on universal design in the 2000s.

For half a century, TOTO has provided easy-to-use plumbing spaces for as many people as possible. Through *Barrier-free Book*, which was first published in 1974, TOTO has continued to disseminate the plumbing spaces that meet the problem and needs of people with various physical condition, as well as the movements of national law and regulations.


Consideration for people with disabilities (wheelchair users)

Consideration for the elderly



- 1964 Launched import and sale of "Wash Air Seat", the predecessor to the "WASHLET®"
Tokyo Olympics/Paralympics held
- 1968 Launched Sanitary Ware Seminar
Conducted joint research with University of Tokyo, Chiba University, Naito Architects, and Tokyo Metropolitan Institute of Gerontology
- 1971 Launched sales of toilet bowl for people with disabilities (present-day barrier-free toilet), the origin of manufacturing that reflects user opinions (A)




A
- 1974 Released *Equipment and Devices for People with Physical Disabilities* (predecessor to the present-day *Barrier-free Book*), which offers proposals on how to use plumbing spaces (B)




B
- 1980 Launched sales of "WASHLET G" as the practice of using toilets that wash bottoms spread (D)
Launched sales of "ITAWARI bathtub" for households, which increases the safety of bathtubs by incorporating a seat onto the bathtub rim (C)

C D
- 1987 Launched sales of "Interior Bar", a handrail that fits well into daily life and takes into consideration safety and relief for toilets and bathrooms (E)



E
- 1988 Started to publish *Plumbing Spaces: Design For Aging*, a planning catalog for housing that take into consideration the elderly who have less physical function (F)









F
- 1989 "Gold Plan" formulated

Transitions in TOTO's Universal Design

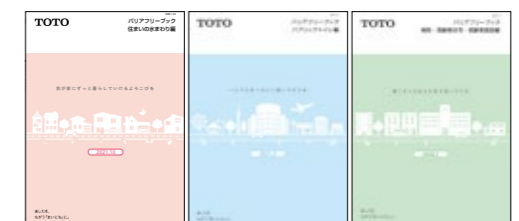
Consideration for the elderly
 Consideration for people with disabilities (wheelchair users)

Universal design consideration
 Consideration for ostomates
 Consideration for visually impaired people
 Consideration for making movements easier

- 1991 Established "Silver Research Office" to undertake research on reduced physical function related to aging with an eye toward aged society
- 1993 Established "SUNAQUA TOTO Ltd.", which employees people with serious physical disabilities
 Launched sales of "Toilet Lift", which helps people stand up after using toilet (G) 
- 1994 "Heartful Building Law" enacted
 "New Gold Plan" formulated
 "Design Guidelines for Homes in a Long-life Society" formulated
- 1995 Started to exhibit at "International Health and Welfare Assistive Device Exhibition" (present-day "International Home Care and Rehabilitation Exhibition")
 Published public toilet and home editions of the planning catalog "Barrier-free catalog" (H) 
- 1996 Launched sales of "REVLIS Products", which takes into consideration the elderly and family members living with them
 Published *REVLIS Book* to communicate the necessary consideration for the elderly and product use (J) 
 Opened technical centers, showrooms for specialists that include a barrier-free laboratory where the installation of devices can be checked (I)
- 1999 Launched sales of "Bath Lift", which helps people get into and out of bathtubs (K) 
- 2000 "Transportation Barrier-Free Act" enacted
 "Long-Term Care Insurance Act" enacted
 "Housing Quality Assurance Act" enacted
- 2001 "Act on Securement of Stable Supply of Elderly Persons' Housing" enacted 
- 2002 Published an issue of planning catalog *Barrier-Free Book* for elderly facilities (M)
 Started to make proposals of "Multifunctional Toilets" that incorporate consideration for large bed users and ostomates (L)
 "Heartful Building Act" amended 
- 2003 Launched research on introducing common rules for the wall placement of operation equipments in public toilets
 Joint industrial-academic research with Toyo University
- 2005 Received *The Prime Minister Award Distinguished Barrier-free Promoter*

Universal design consideration
 Consideration for staying in one's home
 Consideration for infants
 Proposals for renovations and small-scale facilities
 Consideration for diversity in gender

- 2006 Established "TOTO UD Laboratory" (R&D Center), which undertakes technical research related to universal design (N)
 "Barrier-free Law" enacted
 "Basic Act for Housing" enacted 
- 2007 Public Toilet operation equipments JIS formulated (JIS S 0026)
- 2008 Launched sales of "RESTROOM ITEM 01", which takes into consideration both ease of use and space design (P)
 Presented with *The 2009 Good Design Gold Award* 
- 2010 Presented with "The Grand Prize of the Kids Design Awards" for products that take into consideration being with an infant ("Baby Seat", "Fitting Board", "Baby Chair")
- 2011 Launched joint research with Toyo University regarding movement of people in wheelchairs when using bathrooms with limited space (200 cm x 200 cm) and space measurements
 "Act on Securement of Stable Supply of Elderly Persons' Housing" amended
- 2012 Launched sales of barrier-free "Compact Multifunctional Toilet Pack" for renovations and small-scale facilities
 "Building design standards in Barrier-free Law" amended
- 2013 Launched sales of moveable "Bedside Flushable Toilet" which can be used independently even when nursing care is needed (R) 
- 2015 Public Toilet operation equipments ISO standards formulated (ISO 19026)
- 2016 "Building design standards in Barrier-free Law" amended
 Japan Sanitary Equipment Industry Association's "Toilet Control Panel Standard Pictograms" formulated
- 2018 Published *Let's Think of Everyone's Public Toilet—Consideration of Diversity*, a pamphlet on toilets that also take sexual minorities into consideration (S) 
- 2019 Joined "The Valuable 500", an international initiative promoting the inclusion of people with disabilities
- 2020 "Building design standards in Barrier-free Law" amended
- 2021 "Barrier-free Law" amended
 Tokyo Olympics/Paralympics held



TOTO's Mission



TOTO

● TOTO's Universal Design
<https://jp.toto.com/ud/>

