



SMART WASHROOM SOLUTION

Enhance the cleaning management of washrooms and improve the quality of public services. Provides real-time environmental monitoring for users and cleaning staff.





Objectives



Traffic Monitoring



Hygienic Experience



Safety Awareness



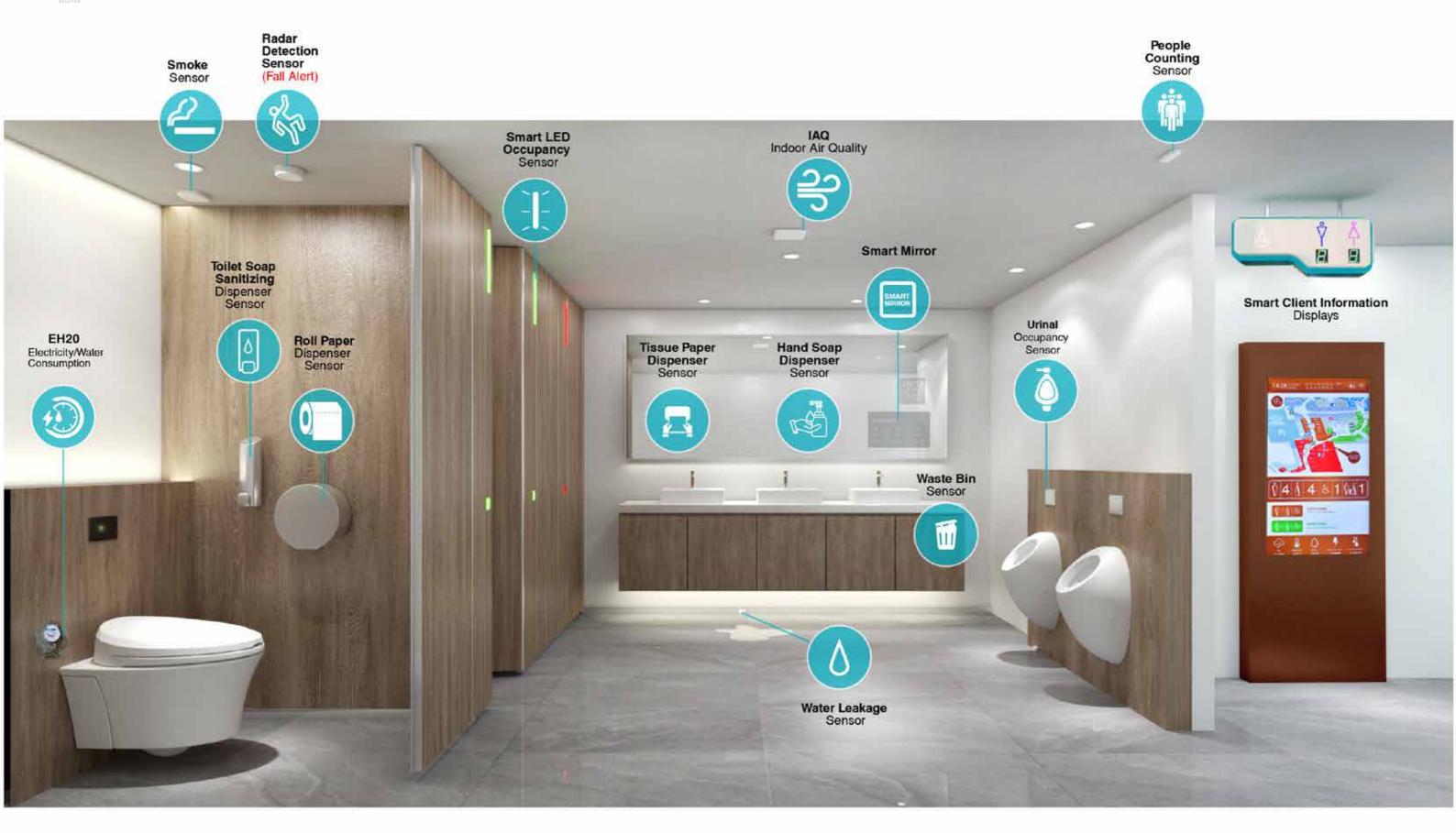
Efficient Management



Good Customer Relationship

SMART WASHROOM SENSORS







MOST COMMON PROBLEMS &

CASES OF POOR WASHROOM ENVIRONMENT

Long queueing

No available toilets

Lack of toilet paper/ soap

Bad odour

Dirty & Slippery

Fall & Unconcious

Overflowing Bins

Poor Management



MY EXPECTATIONS

SMART WASHROOM

People visit the washroom three to four times per day on average, touching many commonly used surfaces in the process. This can make washrooms a hotbed for virus transmission. Looking for an available washroom cubicle can be hassle too. This lack of visibility into washroom conditions can quickly lead to poor user experiences, heightened tenant complaints and unhygienic environments—issues that further complicate facility managers' already a challenging workday.

With Smart Washroom Solution

It helps to prevent the spread of viruses, ensuring the washroom remains clean, monitors air quality, alerts in case of accidents inside the cubicle, detects low toilet supplies and reports management for daily cleaning to maintain a healthy, hygienic and safe washroom environment.

TRAFFIC MONITORING

Sensors provide an accurate indication of how many users enter a particular washroom. This will control overcrowding and reduce queuing time

AVAILABILITY

The client information display shows which stalls are empty, occupied or available. it also includes temperature, indoor air quality, and weather forecast.

HYGIENIC EXPERIENCE

Smart washrooms enhance the washroom experience for tenants, especially since poor toilet hygiene, sanitation, and waste disposal spread germs and affect public health.

SAFETY AWARENESS

The system alerts management when it detect a fall inside the cubicle or prolonged inactivity. The Management will conduct an immediate response and quick rescue operation.

EFFICIENT MANAGEMENT

Consumable level monitoring ensures timely replenishment of soap, toilet paper and hand tissue paper. Helping management to plan resource needs and allocation more effectively.

GOOD CUSTOMER RELATIONSHIP

Helping facility managers or property owners to improve the quality standards of washroom services will help to build a strong culture and good reputation.

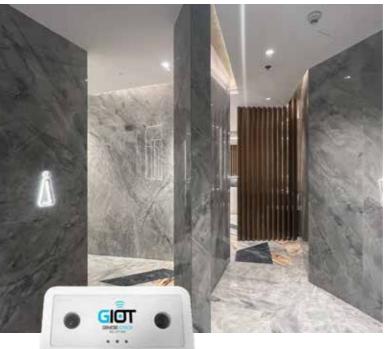


LONG QUEUING

POOR CUBICLE AVAILABILITY



- SOLUTION -



01



People Counting

System

Adopts the latest 24GHz radar technology and apply a noval radar analytic algorithm for people counting in shops, office buildings, exhibition halls and washroom.

It measures only the walking speed of all objects in the frequencyspectrum under the detection range.

No personal identity is detected.



02



LED Lighting w/ Occupancy Sensor

Easy identify and special designed cubicle to indicate the occupation status.

Easily visible and understanding.

Real-time status shows in Monitoring Pad for user washroom guiding.

Better for Management level in forecasting the future maintenance plan.

Alert for user abnormal condition

(Prevent user fainting inside the cubicle).



THE BAD SMELL DIFFERENT TYPES OF BAD ODOUR.



- SOLUTION -



03



IAQ Indoor Air Quality

GIOT Smart IAQ Sensor is a highly customized environmental quality device designed for detecting specific gases inside the washroom. It can collect the air quality data and send alert to cleaner for further action.

Keeping and monitoring washrooms air in good quality and environmental safety.

(8-in-1 odour sensor)

Temperature

Humidity

Ammonia (NH3)

Carbon Dioxide (C02)

Hydrogen Sulfide (H2S)

Methane (CH4)

PM2.5

Formaldehyde (HCHO)





- SOLUTION -







Roll Paper Dispenser Sensor is specific designed for detecting the amount of roll paper leave in the paper box and send a replacement reminder to cleaners when in a certain level. Tracking the toilet paper level and reminding staff for exchange or immediate replacement. Preventing a worse user experience from lack of toilet paper.

Improving efficiency in washroom items procurement planning.



Toilet Soap Sanitizing Dispenser



Sensor

Toilet Soap Sanitizing Dispenser Sensor can specifically detect the amount of liquid soap and send a replacement reminder to cleaners when the soap drops to a certain level.

Prevent the lack of soap situation for guest.

Providing a high level of hygiene attention to keep and keeping a stable supply of toilet soap.





- SOLUTION -



06



Hand Soap Dispenser Sensor

Providing a high level of hygiene attention to keep and keeping a stable supply of handwash soap.

The soap usage data helping management level on hygiene planning

CASE NO. 4

**NO SOAP ** TISSUE PAPER

LACKING OF SUPPLY



07

Tissue Paper Dispenser Sensor



Accurate and high-speed distance measurement for attention to keep and keeping a stable supply of paper tissue.

It can send a replacement reminder to cleaners when in a certain level.

Manager can decide the replacement reminder.





EMERGENCY FALL ALERT

SUDDEN FALL



- SOLUTION -







Watch the Video now!

Smart Toilet Cubicle | Fall Detection | Genesis Development - YouTube

08



Radar Detection Sensor (Fall Alert)

With the technology of 60G millimeter wave radar & Human posture recognition by point cloud imaging algorithm. Our Radar detection (Fall Alert) Sensor can accurately detect & report motion detection, residence time & stationary state of human body.

ADVANTAGES

Workable for toilet cubicles with or without door. No Movement detection for unconsciousness cases. Fall alert handling. On-Site-Lamp Alert for immediate rescue.

Case 01

Unconcious without Fallen

If a person not showing any type of actions or any movements.

- 10:30 mins duration shown without body movement.
- Alarming for unconcious state

Case 02

Sudden Fall

If a person suddenly slipped/fallen unconciously.

- 600mm detection scanning measuring level from floor.
- 30 seconds reading from the sensor will detect suddenly fall.
- After 10 mins and still no body movement from the user will conduct an alert system.





ISSUE NO. 6

SLIPPERY FLOOR

WATER LEAKAGE

- SOLUTION -

09





Sensor



Sends a safety alert to cleaner to prevent accident.

Sending alert to staff when water leakage happens and ordering staff to clean and clear water the floor.



10



Cigarette Smoke Detector

Sensor

This sensor are capable of detecting smoke inside the cubicle.







ISSUE NO. 7

OVERFLOWING BIN

WASTE AND GARBAGE MANAGEMENT

- SOLUTION -



11



Waste bin

Sensor

Accurate and high-speed distance measurement for attention to prevent overflowing of paper tissues in the bin.

It can send a remind er to cleaners when in a certain level. Manager can decide the report and considering actions.



12



Smart Mirror

A Smart Mirror like any other Mirror but it is manufactured with our lot of Hardware-Technology like temperature sensors, LED for illumination, LCD Display for information, internet connection, touch capabilities, and a brain that is an internet of things Operating System.

Original high definition industrial grade

Resolution: 1920x1080

HD resolution above 21.5 inches, 1366x768 / 1280x1280 resolution for small size **Brightness**: 450nit-1000nit optional





13



EH20 Water & Electric **Iot Solution**

Benefits:

- **Reduced Operating Cost**
- Lower maintenance cost
- Extended equipment lives
- Decreased Building product Waste Streams











SMART WASHROOM CLIENT INFORMATION DISPLAY





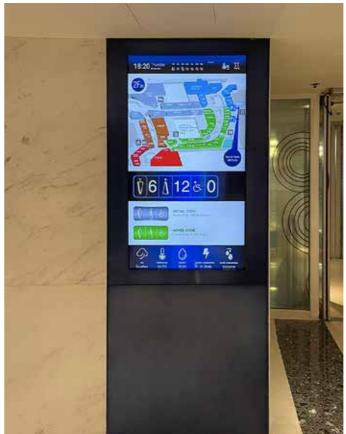
Client Information Display Platform with 55" Screen

Design 01

Display toilet occupancy in advance
Easily locate the available washroom.

No more waiting!

Existing Sample at the ELEMENTS Place Shopping Mall

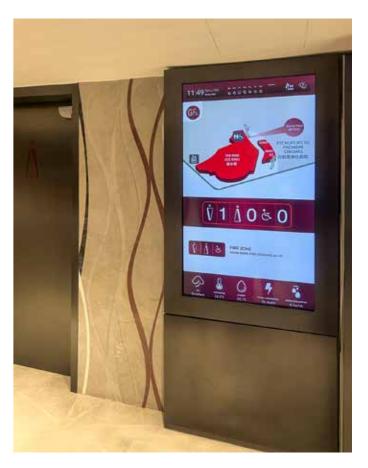




WATER ZONE







WOOD ZONE

FIRE ZONE





15

Client Information Display Platform with 55" Screen

Design 02

Smart Toilet display helps people to determine the Occupancy, Air Quality, Date & Time and different washrooms availability that saves people a lot of time

16

Toilet Feedback Panel 11"

Interactive touch feedback system enables visitor to rate their experience and submit a service request for poor and bad services. Upon submit, cleaner received SMS and perform the necessary corrective action immediately. Cleaner is required to scan ID card to login the system, clear fault reporting, submit checklist, etc.





Ceiling Mount Information Display Signage

Smart Toilet display helps people to determine the Occupancy, Air Quality, Date & Time and different washrooms availability that saves people a lot of time



Cleaner Display

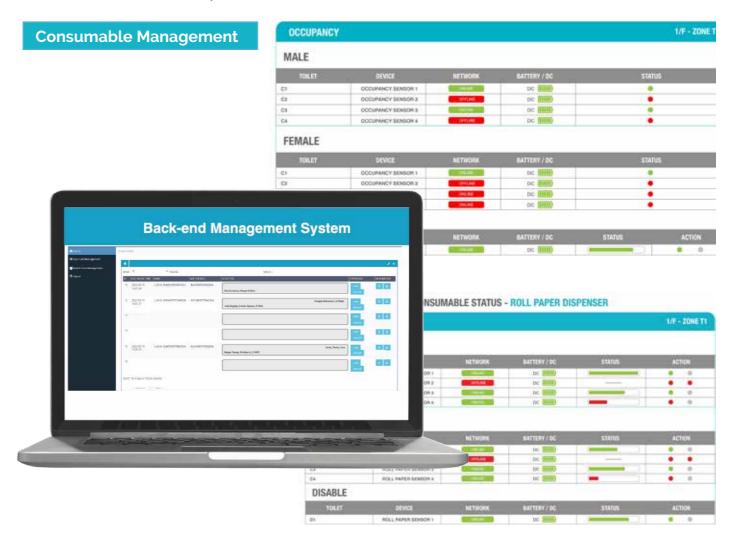
Notifying the cleaner to report for duty, cleaning, air quality monitoring, supply replacement and alert emergencies.





GIOT Management Platform

Standard Back-end system



BIG Data Analysis





Real-Time Management

Monitor washroom environment status to assign specific staff for management.

Lesser reliance on manpower

Smart Network

Connect smart devices for multiple system operation

Odor Monitoring

Odor includes Methane, Sulfur Dioxide,CO2, Amonia, humidity, temperature

PeopleCounting Attendance

Automatic attendance, people counting throughput statistics and workers scheduling

Vacancy Monitoring

Monitor vacancy with GIOT Smart Occupancy sensor

Personal Safety & Security

Configuration, design and sighting minimizes the risk of anti social behavior, emergency accident, and violence (speaker will need to explain the sensor)

Consumable Management

Consumable statistics, system alerts, such as low in toilet paper or soap, enable management optimization

Big Data Cloud Platform

Aggregation, storage, analyses, user and integration interfaces through big data cloud

Smart Washroom Solution



USERS EXPERIENCE



Enhanced washroom experience.

Safe and comfortable environment.



Improved cleanness, neatness and hygiene condition inside the toilet.



All in toilet appliances and facilities are available and operating in good condition.

Pleasant environment with comfortable temperature, humidity, ventilation, air quality.



No unpleasant odors.

EFFICIENT MANAGEMENT



Improving washroom management efficiency



Detects Fall incident



Save labor cost and minimize overstock of supplies (Soap, Toilet paper)



Efficiently scheduled maintenance.



Detecting and reporting smoking activities at inside the cubicle



Helps facility managers or property owners to improve the washroom service quality standards.



Money - The true life-cycle cost of your project stays with you for a very long time



Adds value to your property.



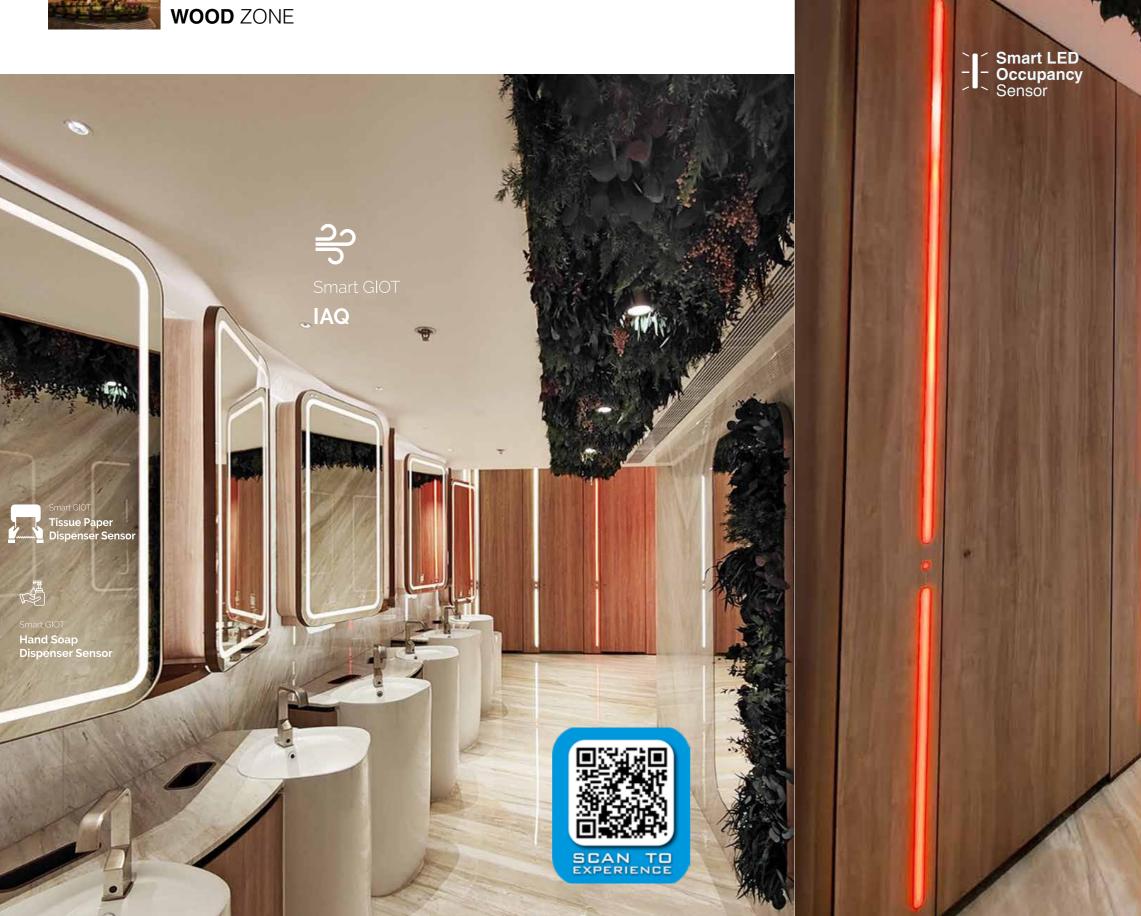


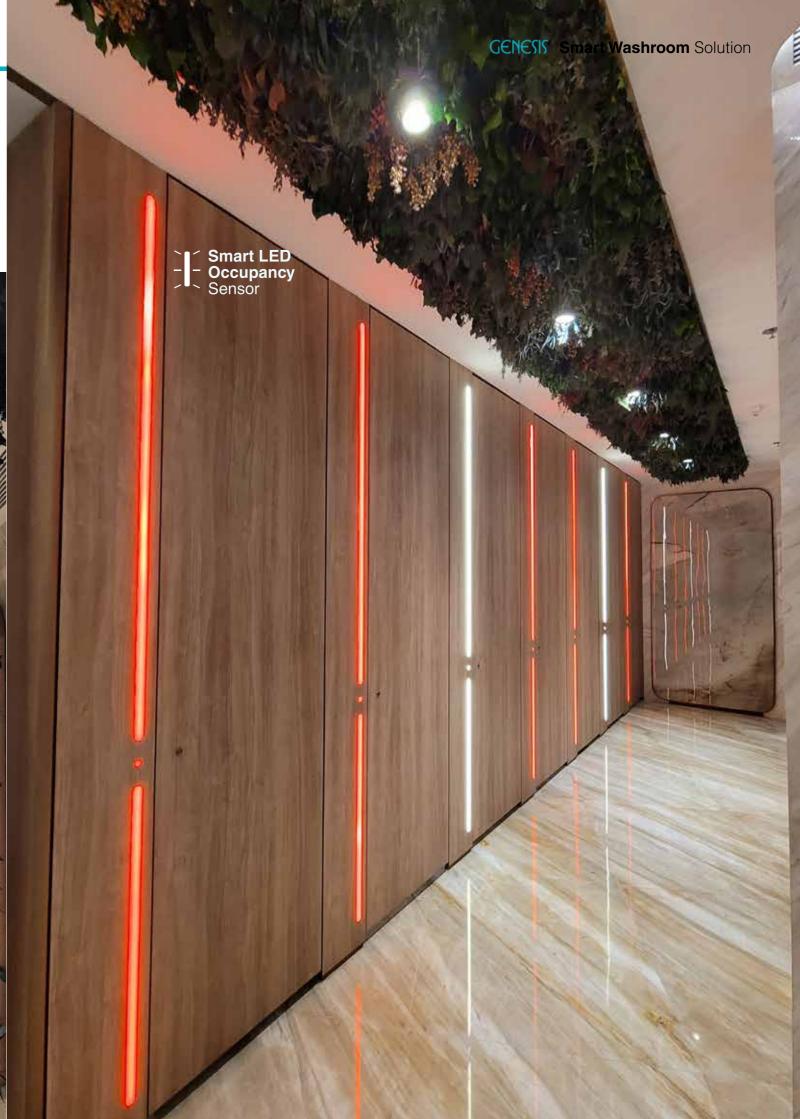
THE **ELEMENTS**

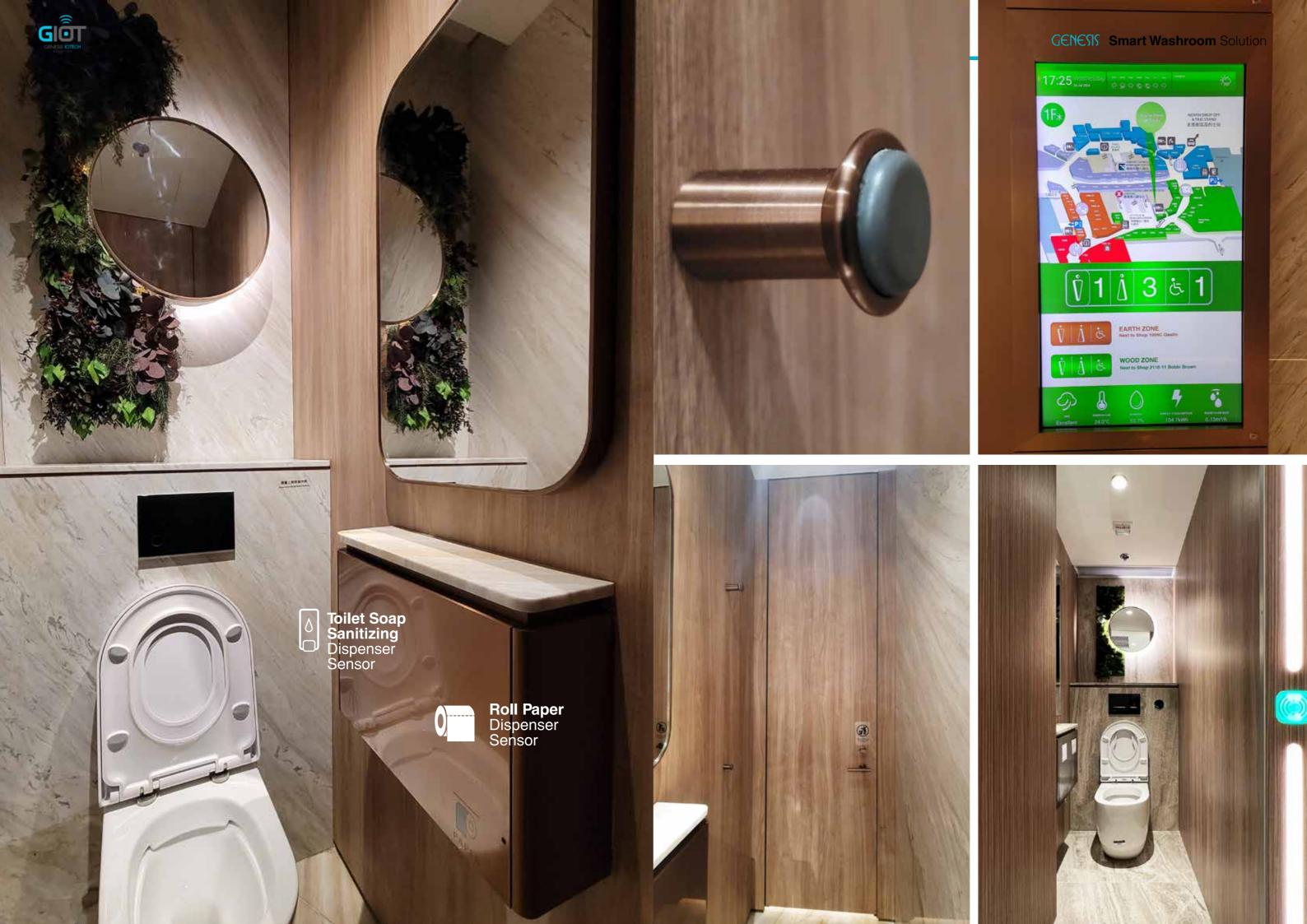
Austin Road West Kowloon

Schäfer EF3 Smart LED + Smart Washroom Solution

By MTR Corporation









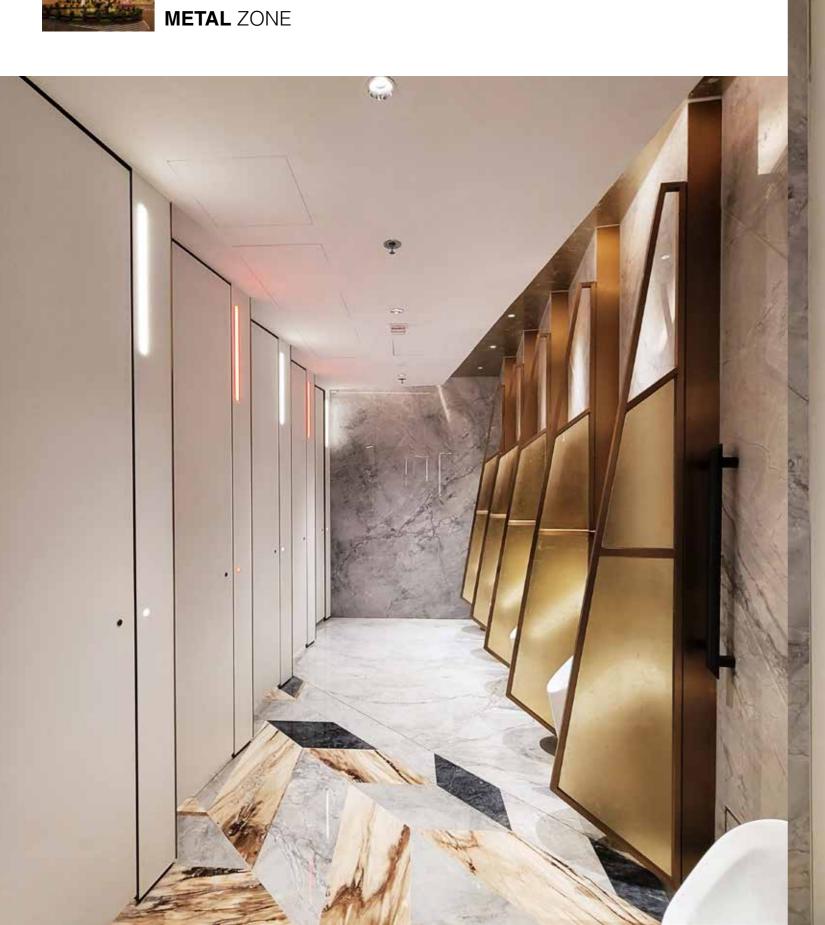


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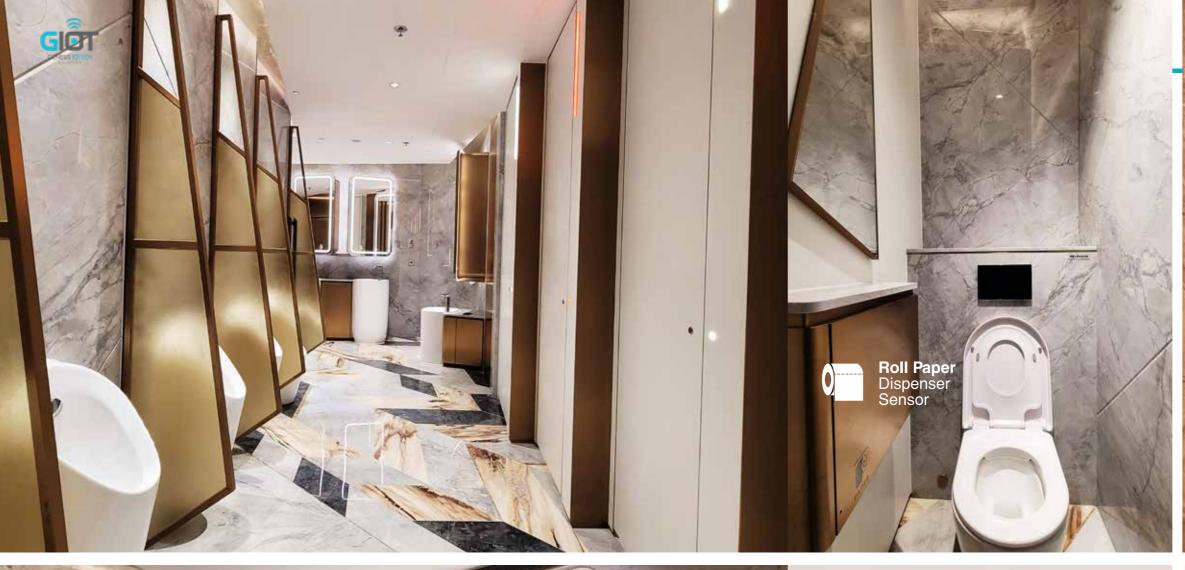
Austin Road West Kowloon

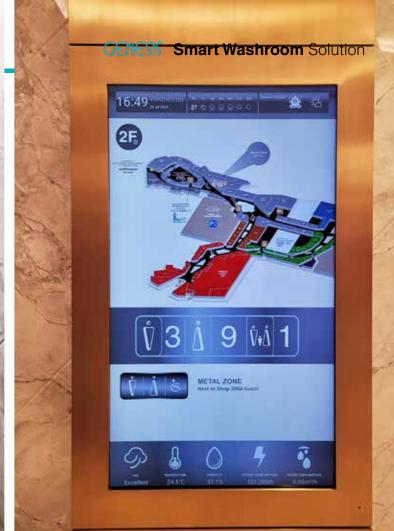
Schäfer EF3 Smart LED + Smart Washroom Solution

By MTR Corporation

















Austin Road West Kowloon



GENESIS Smart Washroom Solution





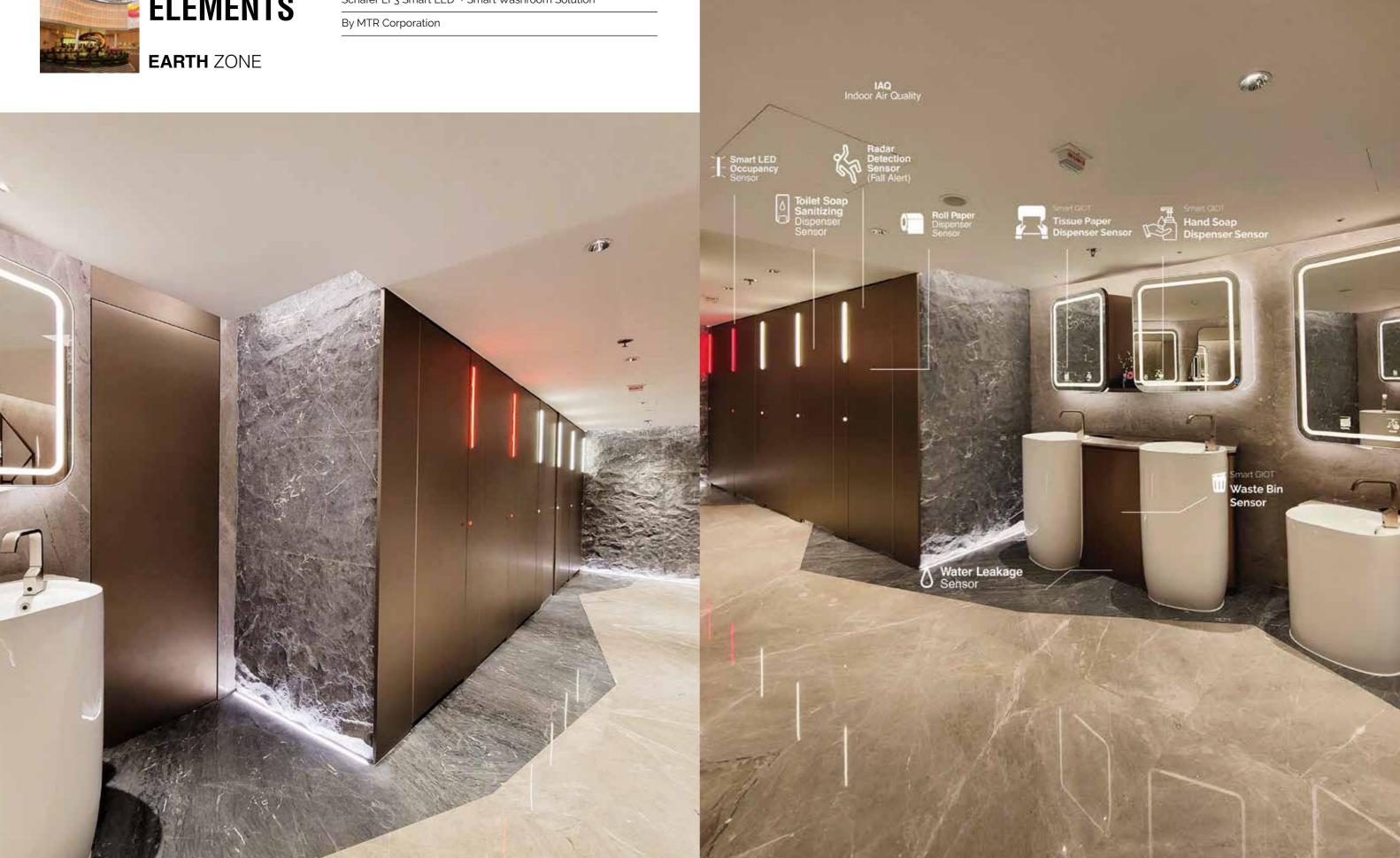




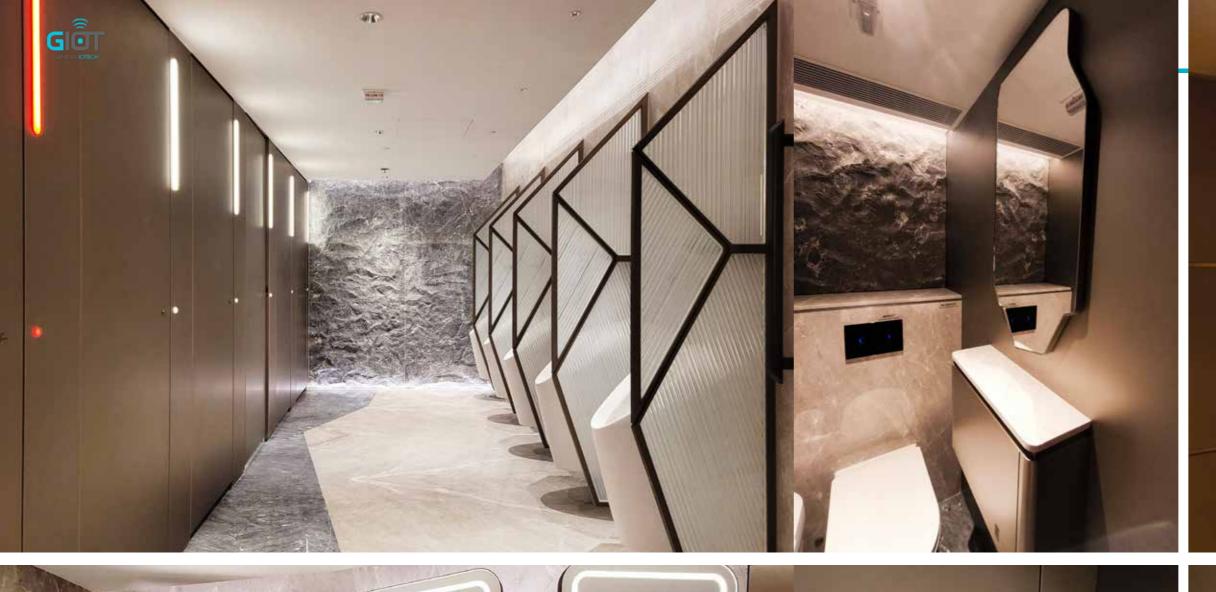
THE **ELEMENTS**

Austin Road West Kowloon

Schäfer EF3 Smart LED + Smart Washroom Solution



GENESIS Smart Washroom Solution









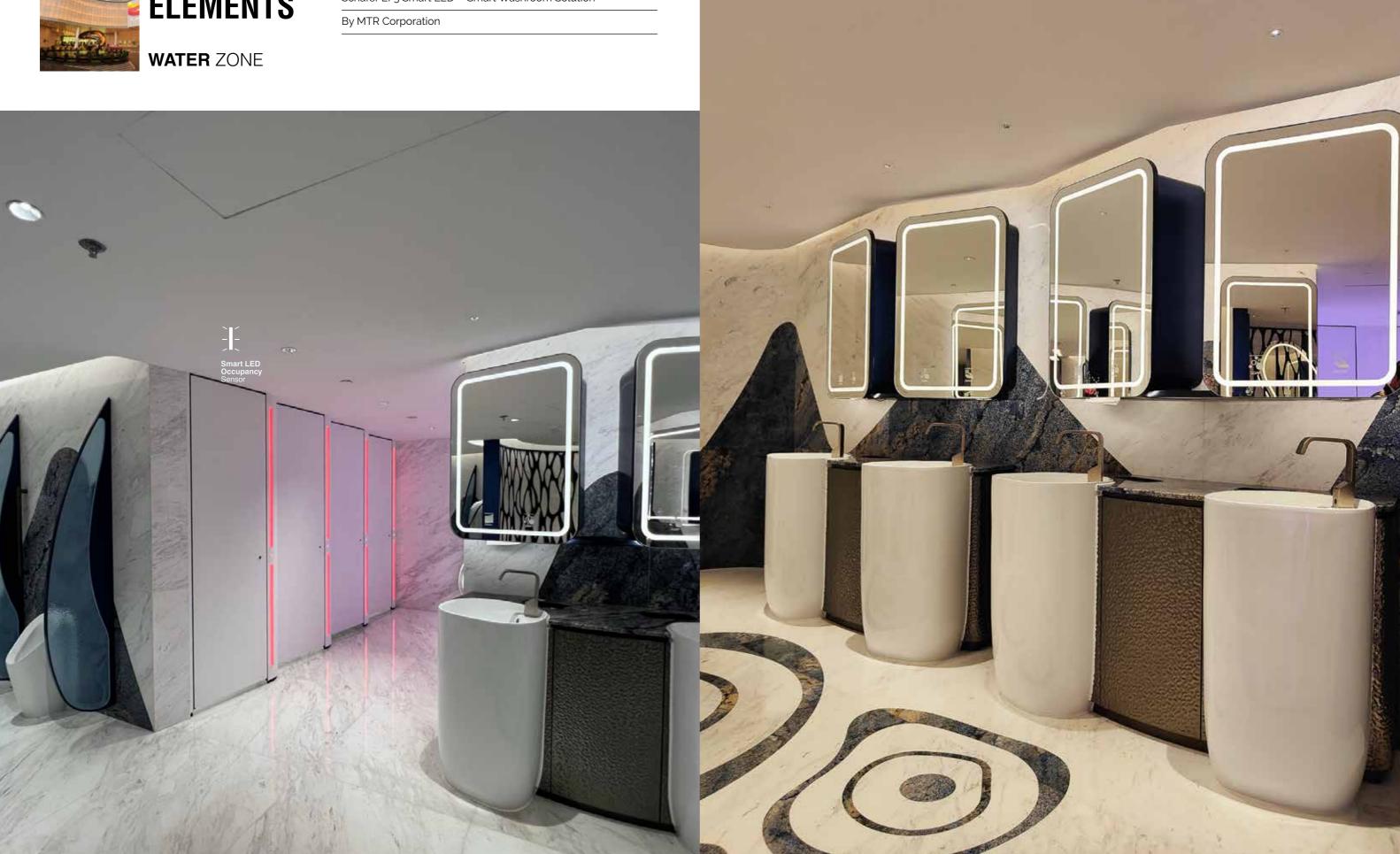




THE **ELEMENTS**

Austin Road West Kowloon

Schäfer EF3 Smart LED + Smart Washroom Solution



TONE

GENESS Smart Washroom Solution





+ WOO MALL

Tin Shui Wai, New Teritorries

Schäfer EF3 Smart LED + Smart Washroom Solution

By CK Hutchison Holdings

















DOMAIN MALL

Yau Lai Shopping Mall

Schäfer EF3 Smart LED + Smart Washroom Solution

By Hong Kong Housing Authority

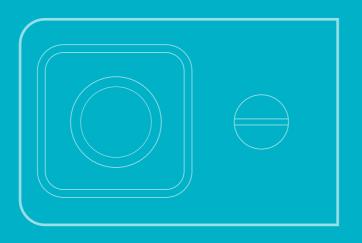


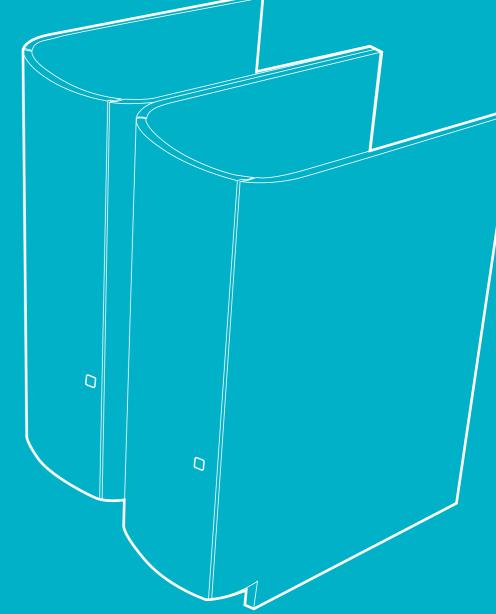












SMART TOUCHLESS CUBICLE SYSTEM



GENESIS EF3

ZEROTOUCH 1.0

TOILET CUBICLE SYSTEM

- Touchless Technology
- Anti-Virus / Anti-Bacteria
- Safe and reliable
- Automatic, Quiet and Smooth motion



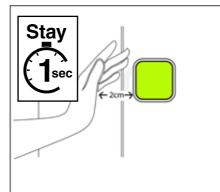




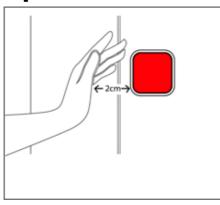


Worlds First Touchless Curve Cubicle









Close



The Henderson

by Zaha Hadid Architects





1.1 Usual Operation

Look & Wave system allow the user to use the cubicle without touching

In the free state, the door is closed, and the IR sensor lights up as Green inside and outside. Indicating available to be use.

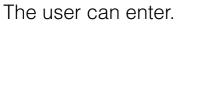


To open, the user need to hold the palm of his hand in front of the IR sensor at a distance of 2 cm and stay 1 second to activate the door and open.



The IR sensor activated, and the door will open automatically.





The door will take 10 seconds to complete the cycle of opening and closing.



6

After the door closed, The user needs to hold the palm of his hand again in the IR sensor with 2 cm distance and stay 1 second to activate the Lock function. The green light color will turn to Red indicating that the door is **Locked** both inside and outside the cubicle.



The door is now no longer can be open from outside. And will indicate as occupied cubicle.



8

When the user wants to leave the cubicle, the user needs to hold the palm of his hand again in the IR sensor with 2 cm distance and stay 1 second to activate the Unlock function.



9

The lock unlocks, the sensor switches from red to Green and the door will open.



10

The user can now leave the cubicle, and the door closes behind him automatically.





1.2 Emergency Release

User Operation (inside cubicle)



Press Emergency Button:

Unlock the door by pressing the emergency release button inside the cubicle.



Recessed Pull handle:

You can push to pull this recessed handle to be able to open the door from inside cubicle.

Management Operation (Outside cubicle)



Unlock the door by Service key:

Hold the Service key at the IR sensor. The lock unlocks and the door opens.



Unlock the door by pressing the Switch at the Hinge below:

Unlock the door by pressing the switch of at the bottom of the cubicle, the HINGE has a button to press and can open the door.

1.3 UPS Back-up System

UPS Back-up System



Incase of an Electrical power shutdown, The UPS will automatically backup to support the power operation continuosly. The UPS can operate not less than 3 - 4 hrs.

1.4 Manual Operation

User Assist Mode



The user can gently hand push a little to open the door and the door will open automatically in 90 degrees and will stop until the user can enter, and manually push the door back to close.

The door will lock and unlock only by holding the palm of the hand in the IR sensor with a distance of 2 cm and stay for 1 second method.

Manual Mode



The user can already hand push to open and close the door manually without damaging the automatic mechanical parts.

The door will lock and unlock only by holding the palm of the hand in the IR sensor with a distance of 2 cm and stay for 1 second method.

Schäfer EF3 SMART

JOB REFERENCES





International Commerce Centre

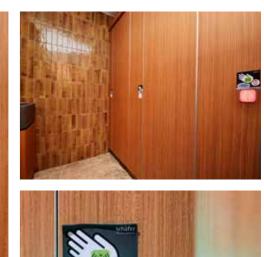




Two Taikoo Place

PROJECT INSTALLED ALL OVER HONG KONG











Dorset House

and many more...



GENESIS

SMART WASHROOM SOLUTION

TOUCHLESS CUBICLE SYTEM

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