



EUROmodul
MODULAR BUILDINGS

**AUTONOMOUS VACUUM
PUBLIC TOILETS**

AUTONOMOUS VACUUM RESTROOM

GENERAL

EUROmodul vacuum public toilets have limited capacity flushing toilet bowls which consumpt up to 10 times less water.

Energy saving (water and electricity) is our first rule of great importance that we teach! Energy consumption in our vacuum public toilets has been reduced to a minimum and consumption has been optimized for maximum efficiency

BASIC TECH. INFO

Vacuum public toilets have the same purpose, but different in degree of built-in materials, installations and equipment - particularly the automation functions. All restrooms / public toilets are designed and manufactured according to regulations, DIN and HR standards, and the regime of ISO 9001:2008 standards.

Bearing, inner, invisible structure are made of galvanized cold formed steel profiles in the quality of steel St 37.3 according to DIN standards 17100th

The dimensions of objects in width and height according to the ISO standards (width 2438 mm, height 2600 mm) which allows all transport vehicles including within the canvas of the truck and met the DIN 18024-1. Length of buildings are designed by the quantity of customer premises.

PERMISSIBLE LOAD:

ROOF 2.00 kn/m²
FLOOR 2.50 kn/m²
WALLS 0.50 Kn/m²

INSULATION WITHIN FACTORY COEFFICIENT:

under: 0.32 W/m²K the standard version - mainly floor insulation is provided within the foundation
roof: 0.37 to 0.23 W/m²K
walls: 0.41 to 0.34 W/m²K

FOUNDATION AND INSTALLATION

EUROmodul is delivering vacuum public toilet fully completed and equipped with functional equipment, software and hardware installations and built sewers, water and electricity system. For preparation of delivery, EUROmodul submits a technical documentation of foundation and installation. Based on technical documentation, client is obligated to provide foundation and installation.

FOR A SMOOTH AND EASY ACCESS OF A WHEELCHAIR, IT IS NECESSARY TO ENSURE A FLAT SURFACE OR A FRONT RAMP FOR DISABLED PEOPLE ENTRY.

DAILY MAINTANANCE

For secure work of automatic self cleaning public toilet, its to **daily check out** is necessary:

- inspection of user cabins, toilets, sinks, mirrors, clean floors and walls
- emptying trash
- amendments to the tank liquid hand soap
- completion of toilet paper
- visual inspection of sanitary premises
- lighting, sink, hand dryers, litter bins, etc.
- notifying technical personnel in the event of vandalism or failure.

TECHNICAL MAINTENANCE

Performs certified person, monthly, annual or extraordinary - preventive or due to vandalism.



WATER CONSUMPTION
based on 50 users per day through 1 year



700% LESS CONSUMPTION AND COSTS



Vacuum system – for locations without sewage and water city network

Description

Vacuum system Toilet bowls are used on locations where city infrastructure, network of sewage and clean water is not available. In technical room of sanitary object are installed tanks for sewage and clean water as well complete technology for flushing toilet bowl after use.

Water and power

Our CVS™ solutions can be used with or without running water, but use larger and more power-consuming pumps than our single-toilet systems for single cabins.

Collecting tank systems

In areas where there is no public sewerage system, a collecting tank is often used. This usually requires road access so a sewage truck can get to the tank and empty it. We offer collecting tanks for both above-ground and buried applications.

Some counties and town councils are hesitant to approve buried collecting tank systems, sometimes accusing cabin owners of deliberately drilling drain holes in the bottom of the tank.

Our systems are equipped with an automatic flush counter so the number of flushes can be compared to the volume of sewage in the tank - eliminating the risk of foul play. As an extra precaution, the tank can be equipped with a level sensor that alerts the owner when remaining capacity is less than 50-100 flushes (depending on tank size). After 50-100 more flushes, the system blocks further use and the tank must be emptied.





SAFETY through technology



⊕ vacuum public toilet user spaces (701 - 702)

classic public toilet / restroom layouts are adopted for men - women and disabled persons. Toilet user spaces are define by EUROmodul standard layout types from 701 to 702.

■ DIN 18024 / 1

Layouts are in accordance to German DIN 18024 / 1 standard which define position of the toilet bowl in the top left corner of toilet user space in automatic or classic public toilet

■ individual layout (according your design)

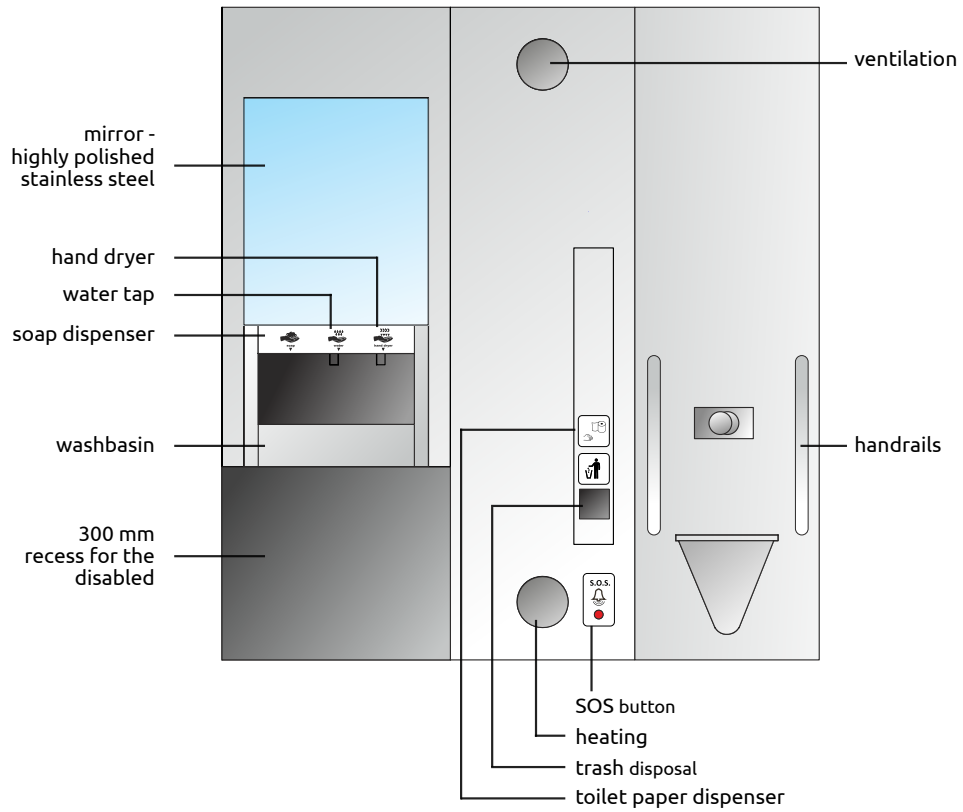
EUROmodul standard public toilet layouts can be modified on your request. Request toilet layout modification according your needs by phone or email.

Last 15 years of developing, testing, details quality enhancing is result of EUROmodul long experience that gives to client and toilet user enviromentally friendly product wich saves water and electricity.

quality is recognize by many customers in the World, where our automatic and self cleaning public toilets are installed on different locations such as: **Switzerland, Germany, Kazakhstan, Armenia, Ukraine, Russia,** etc...

SCHEMATIC OVERVIEW

VACUUM toilet according DIN 18024/1

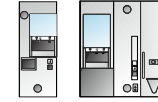




VACUUM PUBLIC TOILET

standard and additional equipment

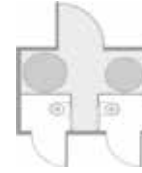
WALL VIEW _



LAYOUT TYPE _

701
VACUUM (3,3 x 2,4 m)

702
VACUUM (5,0 x 2,4 m)



STANDARD LAYOUT TOP VIEW _

EXTERIOR

facade

Design with straight shape from HPL laminates with decorative stripes and stainless steel pillars which reflect surrounding colours

Other materials and colors on request

✓

✓

entrance

doors are opened to outside

FREE ENTRANCE -user can enter by pressing entrance key on info display when nobody is inside (GREEN indicator on LED display) and doors automatically open. After entrance, doors are selfclosing and automatically locked (RED indicator on LED display)

✓

✓

slide doors (only disabled)

FREE ENTRANCE - user can enter by pressing entrance key on info display when nobody is inside (GREEN indicator on LED display) and doors automatically open. After entrance, doors are selfclosing and automatically locked (RED indicator on LED display)

□

□

additional options

coin payment (for all entrances)

□

□

payment with LCD, printer / receipt, coins and paper money acceptor, money return

□

□

EURO keylock for disabled persons free toilet cabin entrance (combined with coin payment)

□

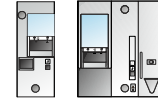
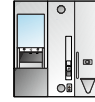
□

CITY LIGHT wall mounted - unit price

□

□

WALL VIEW _



LAYOUT TYPE _

701

VACUUM (3,3 x 2,4 m)

702

VACUUM (5,0 x 2,4 m)



STANDARD LAYOUT TOP VIEW _

INTERIOR

walls

polyurethane panel, white



stainless steel AISI 304



stainless steel AISI 316



HPL laminate (fundermax) Interior laminate Fancy Decor type 0495



ceiling

HPL laminate (fundermax) Interior laminate Fancy Decor type 0495



heating

electrical heater with LCD manual operated thermostat



other heating methods - on request



standard floor

ceramic tiles, non slip



non slip aluminium lamels



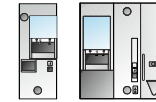
PVC



non slip rubber



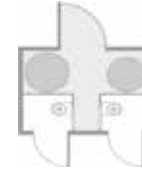
WALL VIEW _



LAYOUT TYPE _

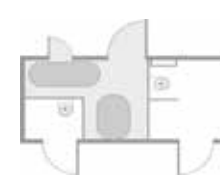
701

VACUUM (3,3 x 2,4 m)



702

VACUUM (5,0 x 2,4 m)



STANDARD LAYOUT TOP VIEW _

equipment (according DIN 18024)

inbuilt stainless steel module for hand washing, antivandal, consisting of sink, no-touch soap

doser, no-touch hand washing, no-touch hand drying

cheramic toilet bowl with plastic toilet seat and VACUUM system flush with tanks

stainless steel toilet seat (antivandal)

power saving lights

ventilation

litter bin antivandal - cleaning from the technical space

toilet paper holder - refilling from technical space

baby changing foldable stainless steel table (only in disabled toilet space)

hot water boiler

air condition

panic light - battery operated

clothes hanger

stainless steel handles for disabled persons with adequate cca 1,5 m rotating space

SOS panic push button with audio-visual signs (disabled space only)

SOS panic push button with audio-visual signs (for every cabin + standard for disabled space)

toilet sign for suitable users - on exterior facade

air freshner

inner display - timer for maximal toilet use (15 minutes or programmabile)

Unique A - dispenser of toilet paper, litter bin, air freshner

GSM system for toilet usage and service control

tank for location without sewage

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legend

✓ as standard

□ on request

✗ not offered



general equipment _ overview

EUROmodul has been testing public toilets equipment for more than **25 years**, making it user – friendly and longterm customer satisfactory

ANTI VANDAL CHARACTERISTICS

Anti-vandal characteristics are on the top priority list when longterm usage and durability are concerned. The anti-vandal concept that EUROmodul provide in it's public toilets consists of several mayor achievements.

SANITARY EQUIPMENT INBUILT IN WALL - INSIDE TECHNICAL ROOM

sanitary vital elements are protected with inbuilt system that provides no equipment or elements intalled on the inner walls where can be easily broken, stolen or vandalised.

DURABLE, QUALITY MATERIALS

sanitary elements are manufactured from stainless steel (AISI 304 or 316) material carefully designed with anti-vandal proof characteristics.

USER SPACE EQUIPMENT _ THE LIST



inbuilt stainless steel module for hand washing, antivandal, consisting of sink, no-touch soap doser, no-touch hand washing, no-touch hand drying



power saving lights



ventilation



litter bin (antivandal) - cleaning from the technical space



toilet paper holder - refilling from technical space



baby changing table, foldable, stainless steel



hot water boiler



air condition



panic light - battery operated



clothes hanger



stainless steel handles for disabled persons



SOS panic push button with audio-visual signs and door opening (disabled space only)



air freshner

Unique M - dispenser of toilet paper, litter bin, air freshner and toilet seat cover dispenser

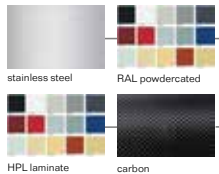
ANTI-VANDAL EMBEDDED _ HANDWASH MODULE

automatic HandWash basin

offers maximal individualisation and personification

HANDWASH BASIN _ INBUILT SYSTEM

side material for ON-WALL installation:



front material:



mirror

pictograms: men / female



design detail: men / female



ANTI-VANDAL HANDWASH BASIN

Public toilet hand washing basin is inbuilt module which is present in configurations as part of standard equipment in classic, vacuum and automatic public toilets - restrooms which consists of:

- anti vandal stainless steel imbuilt HandWash basin
- soap dispenser, sensor operated
- water tap, sensor operated
- hand dryer, sensor operated
- anti vandal stainless steel or glass mirror

HandWash basin functions are marked by pictograms. Pictogram stickers are mirror printed behind plexiglass for better resistance against anti vandal force

ADVANTAGES AND INSTALLATION

EUROmodul developed concept of hand wash basins for easy installation in already existing public toilets. Client needs to remove existing ceramic basin and replace it with our system. Anti vandal hand wash unit has many advantages instead of ceramic, traditional basin:

- innovative design and usage
- enviroment friendly: save water, electricity and soap
- fast installation
- anti vandal concept
- lifetime, durable stainless steel material

DESIGN AND CUSTOMISATION

if you are not preferring stainless steel look, we are able to provide you hand wash basin in any RAL color chart. Powdercoating will protect stainless steel surface and adopt colors to your toilet interior design.



innovative approach

PLC _ classic WC

brain and mind

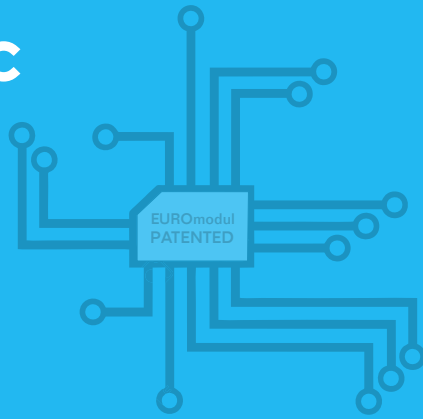
PLC central unit

„Brain“ is centralised in technical room, controlling all vital elements of automatic public toilet.

THE FUNCTION _ BRIEFLY

PLC controls all standard and additional elements of classic / automatic / vacuum public toilets which are; toilet seat cleaning, sliding doors, lights, heating and cooling, SOS, GSM, coin box machine - entry value, service and usage statistics are monitored, re-programmed and checked through EUROmodul's own individually developed software with touch screen menu.

EUROMODUL OS IS USER-FRIENDLY AND PROVIDE EASY CONTROLL AND PARAMETER CHANGES TO INDIVIDUALISE TOILET OPTIONS.



PLC controls SOS system, entry payment, GSM, etc..



UNIQUE - M

patented design

WASTE BIN and PAPER DISPENSER

We developed anti-vandal system of toilet paper dispenser combined with litter bin disposal, air fresh device and toilet seat paper cover dispenser. The element is installed on-wall between user space and technical space.

The advantage of using our system is to combine all needed toilet equipment in one place which saves toilet user space and time of usage per user.

This product is exclusively manufactured and distributed by **EUROmodul** Ltd and can be installed also on-wall in already existing public toilets on airports, railway stations, clubs, etc.

Other than stainless steel material, toilet unique modul can be powdercoated in any color upon RAL chart. Anti-vandal signs are adopted individually upon RAL color of construction.



automatic sliding door

patented design and mechanics

Automatic sliding doors made of high grade stainless steel with electronic lock function during visitor time inside toilet user space. Sliding doors with anti-vandal characteristics and mechanics are patented and certificated EUROmodul product.

Automatic opening and closing on a touch of stainless steel backlighted button or coin machine from the outside user interface.





BABY table

anti-vandal and made of stainless steel

Baby table is made of stainless steel, retractable table. It's characteristics ensure more than hundred kilograms of load for safety reasons. Baby is protected with a safety straps.

EUROmodul baby change tables are installed in our automatic and classic prefabricated public toilets around The World ensuring safety of usage for small babies.

DESIGN AND CUSTOMISATION

if you are not preferring stainless steel look, we are able to provide you baby change table in any RAL color chart. Powdercoating will protect stainless steel surface and adopt colors to your toilet / room interior design.

- 📦 fold-away bed is made of anti-bacterial wood surface
- 🔑 protected by a clear lacquer to reduce odor causing bacteria.
- 👶 child safety strap is made of strong naylor material.
- 🔒 anti-vandal stainless steel strong hinges with inner mechanism ensure load up to 300 kg.
- 💡 Universal instruction graphic pictogram





⊕ interface

Toilets sliding or classic door interface is connected with door lock and its informing potential user if toilets is free or occupied for use.

If green light is indicated on control panel interface, then user only needs to touch stainless steel button with blue LED light circle to open the door.



⊕ SOS

SOS button in emergency associated with external audio-visual signal or a call center



⊕ timer

Anti-vandal embedded timer inside user space made of aluminium and digital display which is informing user about left time for use of toilet. If user does not leave user space in given time, alarm with sound and light signal will turn on and door will be automatically open.



⊕ hook

Hook for clothes made of stainless steel



⊕ handrails

Stainless steel handrails for disabled persons are manufactured according DIN 18024/1 Germany standard.



⊕ floor disinfection

Anti-vandal nozzles are used for automatic floor cleaning. Nozzles are spraying water under high pressure and cleans dirty under the toilet bowl



GENERAL

EUROmodul is providing last 15 years payment solutions for our innovative automatic and classic prefabricated public toilets. Due to our clients and partners demands, we developed anti vandal system - coin box machines which can be installed separately in already existing public toilets in cities, parks, beaches, etc...

ANTI VANDAL STEEL PLATE CASE WITH THICKNESS OF 6 MM
LED TAGS: FREE - OCCUPY - OUT OF USE
SMART KEY SOLUTION

The currency and entry fee can be programmable upon request. We are offering possibilities to program coin box electronics to accept difference currencies for toilet entry price. Solution for disabled persons with EUROkey integration is also available on request.



STATUS _ INDICATORS

Toilet function can be easily understood through three possible states highlighted on the control panel with labels control which have three LED lights that indicate a particular working condition:

GREEN

TOILET USER SPACE IS FREE AND READY FOR USE

When all elements are in perfect working order, toilet seat is disinfected, clean and ready for next user.

RED

TOILET IS OCCUPIED OR OUT OF SERVICE

Toilet may be out of use in several cases:

during the night when its use is not provided - the so-called, night mode pre-programmed time period

when there is no electricity, water, paper and detergents

due to vandalism, technical failure or needed service

DESIGN AND CONCEPT

EUROmodul is offering two different type of coin box case installation:

INBUILT COIN BOX HOUSING ON WALL COIN BOX HOUSING

Most secure way of installing coin box housing is inbuilt toilet facade installation. On wall installation is less secure as coin box housing needs to be fixed with screws and possibility of anti vandal force is higher.

Coni box construction is made of stainless steel AISI 304 and if its needed powder coated to RAL color to match public toilet design.

Laser marked stainless steel with pictograms, tags and texts is customise upon your needs - domestic language.


ADDITIONAL FEATURES


EUROmodul is providing higher level of coin box machines which are equipped with paper and coin money acceptor, printer for receipts and digital display.


Coin box within additional features is equipped with anti vandal safety doors and hidden hinges to ensure secure usage and protect coin box inner space with money as much as possible.








 antracit facade
code: **ERAL 7016**


 stainless steel facade
code: **EES 304 /316**


 Stone facade
code: **EWf 1**

 Twinson facade
code: **ETW 8**

 Corten
code: **CRT 1**

 HPL laminate facade
code: **EHPL 1**

 RAL chart colors facade
code: **ERAL XXXX (x=RAL num.)**

 GLASS facade
code: **GlassTypX (x=glass type)**

■ FACADES

Exterior design is adopted to modern or traditional urban centres, with various colour possibilities or patterns. Its your call to be different.

⊕ RAL colour facade

White or anthracite colour or any RAL colors upon request is our standard type of facade. We paint protected, zincd steel profiles in our factory with automotive industry painting technology. The antrazit colour incorporate granulates inside original paint giving the objects stylish, modern look. We can also paint our toilets to various other colours upon request. Please consult our RAL chart for other colours available (link na colour chart PDF).

All paints are UV resistant.

⊕ stainless steel (304 or 316)

Exclusive look - stainless steel being 'neutral' colour is easily integrated into modern city centres and in old town centres. Stainless steel is often used as a facade where several things are needed:

- Antivandal grade (ease of vandal spray removing)
- Best anticorrosion quality (vicinity of sea or longterm object use)

Accompanying normal Stainless steel attributes mentioned before, stainless steel of higher grade AISI 316 is used on extremely abbrasive locations where the best quality materials must be used to achieve maximal owner satisfaction.

⊕ glass facade

Security tempered and laminated glass in different versions, EUROmodul standard or according to your specification

⊕ stone facade

Real stone fragments are implemented in hot plastic formed to create facade segments. The facade acts as ventilated facade with air barrier between exterior and interior materials.

⊕ Twinson facade (tech wood)

Inspired by nature, driven by technology, Twinson facade merges tradition and innovation in one revolutionary new concept. Discover a material that combines the natural appearance and warm feel of wood with the ease of use, durability and ease of maintenance of PVC. Discover Twinson. A new material with unlimited applications.

The best of two worlds:

Wood: high strenght, envoinrmentally friendly, robust, warm feel, natural appearance

PVC: water resistant, durable, low maintenance, resistant to insects

⊕ corten

Corten is a weathering steel. This material is a corrosion resistant steel, that left uncoated develops an outer layer patina. This patina protects the steel from additional corrosion. It is a high strength steel alloy, and it is used where higher strength and longer life cycle material are desired. Especially in situations where untreated alloys are desired for their attractive visual appeal..

⊕ HPL laminate (high pressure laminate)

HPL is used for several reasons:

- Antivandal grade surface
- UV resistant, external use
- Many factory colours available, many different patterns available
- Possibility of individual graphics (ORNAMENTAL)

INNER WALLS

vandal proof interior walls are made of most quality materials. Standard is zined /plastificated panel in RAL 9010. All other materials and variations are additional by your request.

⊕ powdercoated white

zined steel powdercated inwhite color makes the inner surface visually appealing, white, clean and full of light. The surface is easilly cleanable within longterm normal usage although not optimal if vandalism happens.

⊕ stainless steel (304 or 316)

Exclusive look – stainless steel being ‚neutral‘ colour is easily integrated into modern city centres and in old town centres. Stainless steel is often used as a cladding where several things are needed:

- Antivandal grade (ease of vandal spray removing)
- Best anticorrosion quality (vicinity of sea or longterm object use)

Accompanying normal Stainless steel attributes mentioned before, stainless steel of higher grade AISI 316 is used on extremely abbrasive locations where the best quality materials must be used to achieve maximal owner satisfaction.

⊕ RAL colour inner cassettes

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powdercoated white inner walls
code: **IPL RAL 9010** standard



HPL laminate inner walls
code: **INT HPL 1**



stainless steel inner walls
code: **EES 304 /316**



RAL chart interior colors
code: **ERAL XXXX** (x=RAL num.)

ANTIVANDAL

EUROmodul has been testing toilets for years, making it more user – friendly and of course, also longterm customer satisfactory. Anti vandal characteristics have been on the top of the list of priorities of our clients when longterm use and durability is concerned. The antivandal concept that we developpt consists in several mayor achievements:

Moving equipent from user spaces to technical (storage) spaces with no equipment or elements on the walls, it's impossible to stole them or to be vandalised
Durable, quality stainless steel materials with antivandal characteristics

TOILETS ARE DESIGNED TO BE ANTIVANDAL:

exteriour:

for instances HPL laminates are best for strenght, stainless steel for sprays

interiour:

same as outside, HPL laminates are best for strenght purpose, stainless steel for vandalyising sprays

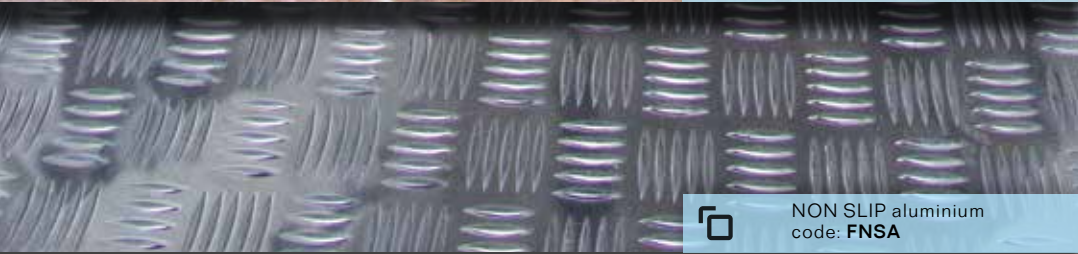
elements:

stainless steel elements are most durable (stainless steel toilet bowl can be hardly ruined in comparison to non-vandal cheramic toilet bowl)

FLOOR MATERIALS



ceramic tiles
code: **FCT** standard



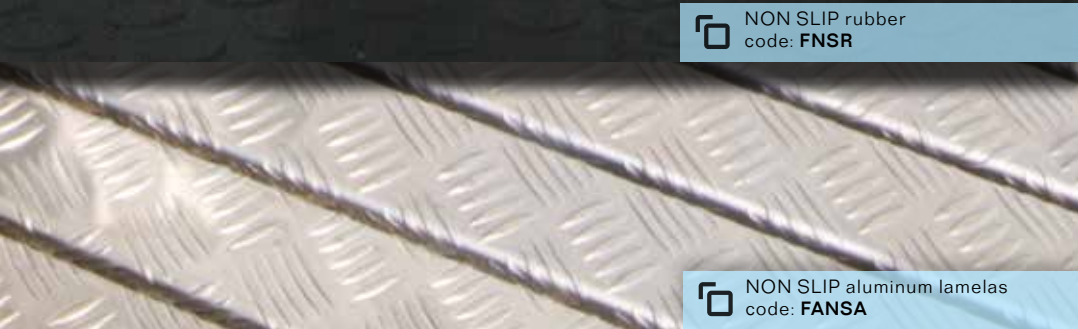
NON SLIP aluminium
code: **FNSA**



PVC vinyl
code: **PVC**



NON SLIP rubber
code: **FNSR**



NON SLIP aluminium lamelas
code: **FANSA**



stainless steel tubes
code: **FA SS304**

FLOOR MATERIALS

different floors have different way of cleaning. Aluminium, stainless steel, ceramic, pvc, rubber floor depends of design you want to implement inside of public toilet.

Automatic toilet's floor can be divided in two basic types;

- REGULAR FLOOR
- AUTOMATIC, SELF-CLEANING FLOOR

Automatic washable floor is being automatically cleaned with water sprayers after several people has used the toilet (programmable). The floor connects all water residues in bathtub which is positioned underneath floor surface.

ceramic tiles

Surface of ceramic tiles is non-slip, but in case of more water is spilled over the floor, the surface is more slippery than non-slip rubber or aluminium floor.

Ceramic tiles can make toilet users feel more as 'at home' and patterns can be chosen individually by your wishes.

NON SLIP aluminium

Standard floor material in manual public toilets, surface made of aluminium with non-slip characteristics. Aluminium have good corrosion resistance and its surface is easy to maintain and clean.

PVC vinyl

long term usage and endless possibilities in terms of colors and patterns. PVC vinyl floors are waterproof within easy cleaning and replacing possibilities if its damaged.

NON SLIP rubber

rubber is very interesting material which is easy to maintain with long term usage in harsh conditions. It's completely non-slip system within 3D raised caps. Black color is standard while you can choose different colors from our RAL rubber material chart.

NON SLIP aluminium lamelas

AUTOMATIC FLOOR CLEANING

Its the same material as previously described standard NON SLIP aluminium floor. The difference is that we engineer and manufacture aluminium sheet as lamelas which are used with automatic floor cleaning system. Between ALU lamelas is a gap for water drainage which flows into the bathtub floor beneath lamelas.

stainless steel tubes

AUTOMATIC FLOOR CLEANING

Elegant surface which collects water afterwards floor cleaning better than non-slip aluminium lamelas (tubes have short time afterwards floor cleaning water residues).

* Can be problematic for women having thin high heels surface



NON SLIP aluminium





EUROMODUL _ KNOW HOW

public toilets _ **reinvented**



EUROmodul
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