

# ITALIA PORTABLE TOILETS

Rototec portable toilets are made up of special structural elements that make their use and handling that much easier. The cabin, in fact, is equipped with all the fittings needed to ensure maximum safety during transport and maximum comfort during use. The portable toilets are delivered ready for use.



## CONSTRUCTION CHARACTERISTICS



1

VENT



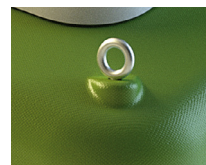
2

POLYETHYLENE  
HINGE



3

LATCH  
vacant/occupied  
indicator and key  
lock



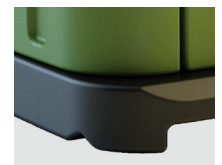
4

STEEL EYE BOLTS  
for lifting and  
handling  
(on request)



5

VENTILATION  
WINDOWS



6

RAISED BASE  
to allow handling  
with fork lift  
trucks and pallet  
transporters



## STANDARD ACCESSORIES



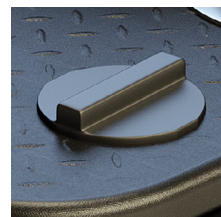
MIRROR/  
COAT HANGER



DOUBLE TOILET  
ROLL HOLDER



NON-SLIP  
FLOOR



BAYONET PLUG  
FOR FILLING  
(WHERE PROVIDED FOR)

## TRANSPORT



Optimisation of footprint for transport:  
Standard truck = 24 toilets  
40' HC = 20 toilets

# MILANO

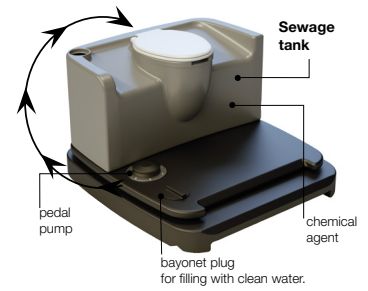


## PORTABLE CHEMICAL TOILET WITH CLEAN WATER FLUSH

Portable chemical toilet with seat and clean water flush. Supplied with all standard accessories (page 5)

### OPERATION

The toilet has two completely separate tanks, one for the sewage in which the decomposing agent is housed (300ml of decomposing agent in 10 l of clean water) and one (corresponding to the footboard) containing clean water and 50 ml of decomposing agent. The clean water tank is used to flush the bowl by means of a pedal operated diaphragm pump.



Item	Colour	Width mm	Depth mm	H mm	Door opening mm	Weight kg	Sewage storage volume l	Clean water volume l	Uses
<b>BWA100VV</b>	Green	1100	1100	2450	600 x 2000	95	170	100	200 approx.
<b>BWA100BB</b>	Blue	1100	1100	2450	600 x 2000	95	170	100	200 approx.
<b>BWA100GG</b>	Grey	1100	1100	2450	600 x 2000	95	170	100	200 approx.

# ROMA

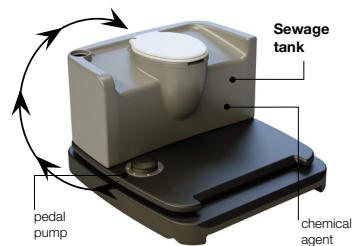


## PORTABLE CHEMICAL TOILET WITH RECIRCULATION

Portable chemical toilet with seat and recycled water flush. Supplied with all standard accessories (page 5).

### OPERATION

The sewage enters the specially designed tank and is treated with a decomposing agent (300ml of decomposing agent in 10 l of clean water). The waste water is then re-used to flush the bowl by means of a pedal operated diaphragm pump.



Item	Colour	Width mm	Depth mm	H mm	Door opening mm	Weight kg	Sewage storage volume l	Uses
<b>BWR100VV</b>	Green	1100	1100	2450	600 x 2000	95	170	200 approx.
<b>BWR100BB</b>	Blue	1100	1100	2450	600 x 2000	95	170	200 approx.
<b>BWR100GG</b>	Grey	1100	1100	2450	600 x 2000	95	170	200 approx.

# TORINO

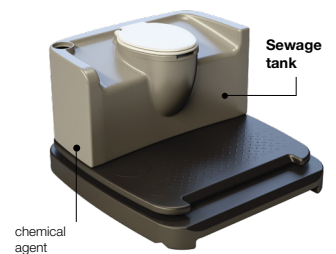


## PORTABLE DROP TANK CHEMICAL TOILET

Portable chemical toilet with seat and holding tank, without bowl or flush. Optional recirculation kit for bowl flush. Supplied with all standard accessories (page 5).

### OPERATION

The sewage enters the specially designed tank without seat and is treated with a decomposing agent (300 ml of decomposing agent in 10 l of clean water). On request, it is possible to install a recirculation kit (see page 19) that makes use of a manual pump to recycle the waste water to flush the bowl.



Item	Colour	Width mm	Depth mm	H mm	Door opening mm	Weight kg	Sewage storage volume l	Uses
<b>BWC100VV</b>	Green	1100	1100	2450	600 x 2000	95	170	200 approx.
<b>BWC100BB</b>	Blue	1100	1100	2450	600 x 2000	95	170	200 approx.
<b>BWC100GG</b>	Grey	1100	1100	2450	600 x 2000	95	170	200 approx.

# BOLOGNA

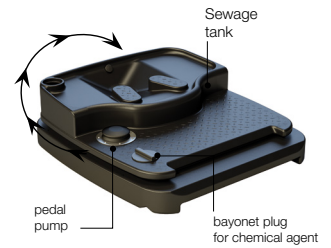


## PORTABLE CHEMICAL SQUAT TOILET WITH RECIRCULATION

Portable chemical squat toilet with recycled water flush. Supplied with all standard accessories (page 5).

### OPERATION

The sewage enters the specially designed tank and is treated with a decomposing agent (300ml of decomposing agent in 10 l of clean water). The waste water is then re-used to flush the squat pan by means of a pedal operated diaphragm pump.



Item	Colour	Width mm	Depth mm	H mm	Door opening mm	Weight kg	Sewage storage volume l	Uses
<b>BTR100VV</b>	Green	1100	1200	2450	600 x 2000	90	170	200 approx.
<b>BTR100BB</b>	Blue	1100	1200	2450	600 x 2000	90	170	200 approx.
<b>BTR100GG</b>	Grey	1100	1200	2450	600 x 2000	90	170	200 approx.

# FIRENZE

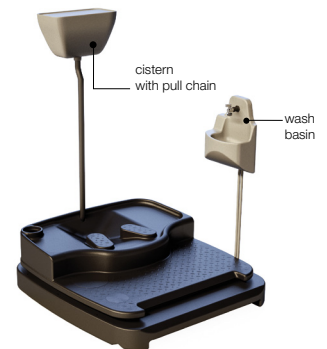


## PORTABLE SQUAT TOILET WITH SYPHON AND MAINS WATER FLUSH

Portable squat toilet with flushing cistern, washbasin and tap. A syphon is fitted on the drain. Ideal for fixed installation. Supplied with all standard accessories (page 5).

### OPERATION

The squat pan is flushed from the cistern which is fed with mains water or from a storage tank. The sewage is discharged through a syphon directly to the public sewer, to an underground holding tank or a septic tank (see page 18).



Item	Colour	Width mm	Depth mm	H mm	Door opening mm	Weight kg	Outlet pipe Ø mm
<b>BTS100GV</b>	Grey/Green	1100	1200	2450	600 x 2000	85	110
<b>BTS100GB</b>	Grey/Blue	1100	1200	2450	600 x 2000	85	110
<b>BTS100GA</b>	Grey/Orange	1100	1200	2450	600 x 2000	85	110

# GENOVA

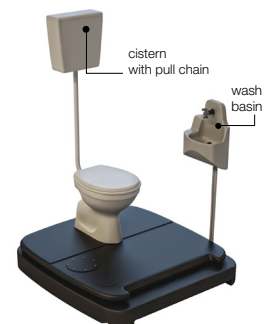


## PORTABLE TOILET WITH SYPHON AND MAINS WATER FLUSH

Portable ceramic toilet with flushing cistern, washbasin and tap. A syphon is fitted on the drain. Ideal for fixed installation. Supplied with all standard accessories.

### OPERATION

The WC is flushed from the cistern which is fed with mains water or from a storage tank. The sewage is discharged through a syphon directly to the public sewer, to an underground holding tank or a septic tank (see page 18).



Item	Colour	Width mm	Depth mm	H mm	Door opening mm	Weight kg	Outlet pipe Ø mm
<b>BWS100VV</b>	Green	1100	1100	2450	600 x 2000	100	110
<b>BWS100BB</b>	Blue	1100	1100	2450	600 x 2000	100	110
<b>BWS100GG</b>	Grey	1100	1100	2450	600 x 2000	100	110

# SUMMARY OF STANDARD UNI EN 16194:2012 (MOBILE NON-SEWER CONNECTED TOILET CABINS: REQUIREMENTS OF SERVICES AND PRODUCTS RELATING TO THE DEPLOYMENT OF CABINS AND SANITARY PRODUCTS).

**Introduction** - Over the last ten years, the use of portable toilets (so-called "chemical toilets") has become more and more widespread, to the extent that now they can be seen in all building and road construction sites, at all public open-air events, during emergencies, etc.. Up until now, there were no standards governing this service, not even those laying down the minimum performance requirements to guarantee to the user. Now, finally, a new UNI standard has been introduced to fill this gap. The corresponding European Standard EN 16194 has been formally implemented as from the start of 2012 and came into force in Italy on 12th April 2012 with the Italian standard UNI EN 16194.

**A standard for the Service** - Standard UNI EN 16194 not only lays down the requirements for the toilets, but also specifies the essential requirements for the service itself, starting with the number of toilets to be installed according to the number of expected users. In fact, for construction sites, the standard specifies one portable toilet for every 10 users, including both site workers and subcontractors. It specifies that the maximum distance from each work station to the toilet must not exceed 100 metres and that, in the case where the sites are on more than one level, there must be at least one toilet every 2 levels. For events open to the public, the standard adopts the table prepared by the American association PSAI (Portable Sanitation Association International) which defines the minimum number of toilets to be installed as a function of the number of expected users and the duration of the event (see table).

**Minimum toilet requirements** - The portable toilet is defined in broad terms without any detailed specifications, to allow each manufacturer freedom to offer innovations and alternatives. The minimum requirements, however, are fixed. Each toilet must have a minimum internal area of at least 1m<sup>2</sup> and an internal height of at least 2 metres, sufficient ventilation and adequate internal lighting. The door must be self-closing, must be fitted with a vacant/occupied indicator, must be openable from the inside and from the outside and must be lockable from the inside (e.g. with a key or latch). It must also be openable from the outside in case of an emergency. The interior of the toilet must have a container for toilet paper, a clothes hook and a sewage tank equipped with a toilet seat or other support allowing use in a seated position. The sewage container must vent to air and can be one of three types:  
 a - drop type  
 b - recirculation type (with hand or pedal-operated pump)  
 c - clean water type (with hand or pedal-operated pump)

Supplementary accessories are allowed but are not obligatory, such as a mirror, light, urinal, hand washer, soap and/or disinfectant dispenser and/or paper towel dispenser.

**Toilets for the disabled** - Toilets for the disabled, up until now available at some events but not all, now play a role. The standard, in fact, defines the obligation to provide at least one toilet for the disabled, i.e. wheelchair-friendly, at each event. To this end, the door must be at least 80 cm wide and the interior must have a width and depth of at least 140 cm. The ability of the wheelchair to carry out one complete revolution inside the toilet is not required, though the entrance must be at ground level, (i.e. not steps or ramps).

**Short-term or long-term hire**  
 The standard defines the information that must be provided for stipulating a short-term or long-term hire contract. The aim is to render the rapport between supplier and hirer that much easier by simplifying discussions on content as much as possible.

**Requirements of services** - In this section, the standard lists the operations that must be carried out when providing the service, such as complete emptying of sewage, cleaning of single components (listed one by one), replacement of agreed consumable materials, addition of sanitizing concentrate and water. Damaged toilets must be repaired on site or replaced. The requirements for delivering the toilets are also defined (they must be ready for use, complete with sanitizing solution and agreed consumable materials, such as toilet paper, soap, etc.) Similarly for collection of the toilet following complete emptying of the sewage and removal of consumable materials.

**Declaration of conformity of the service** - The hire company complying with the requirements of standard UNI EN 16194 is authorised to communicate this in its communications with customers and the public, in advertisements and on adhesives applied to the toilets, etc., with the declaration: "SERVICE PROVIDED IN ACCORDANCE WITH UNI EN 16194".

**MINIMUM NUMBER OF TOILETS TO PROVIDE AT EVENTS OPEN TO THE PUBLIC**  
(50% male - 50% female)

Number of users	Toilets required (for events up to 6 hours)	Toilets required (for events up to 12 hours)
Up to 249	2	3
From 250 to 499	3	5
From 500 to 999	6	9
From 1000 to 1999	12	18
From 2000 to 2999	25	38
From 3000 to 3999	38	57
From 4000 to 4999	50	75
From 5000 to 5999	63	95
From 6000 to 6999	75	113
From 7000 to 7999	88	132
From 8000 to 8999	100	150
From 9000 to 9999	113	170
From 10000 to 12499	125	188
From 12500 to 14999	156	234
From 15000 to 17499	188	282
From 17500 to 19999	219	329
20000	250	375
<b>Over 20000</b>	<b>To be assessed case by case</b>	

For the complete standard, contact: UNI, Via Sannio, 2 - 20137 Milan; [www.store.uni.com](http://www.store.uni.com) or [www.uni.com](http://www.uni.com)