

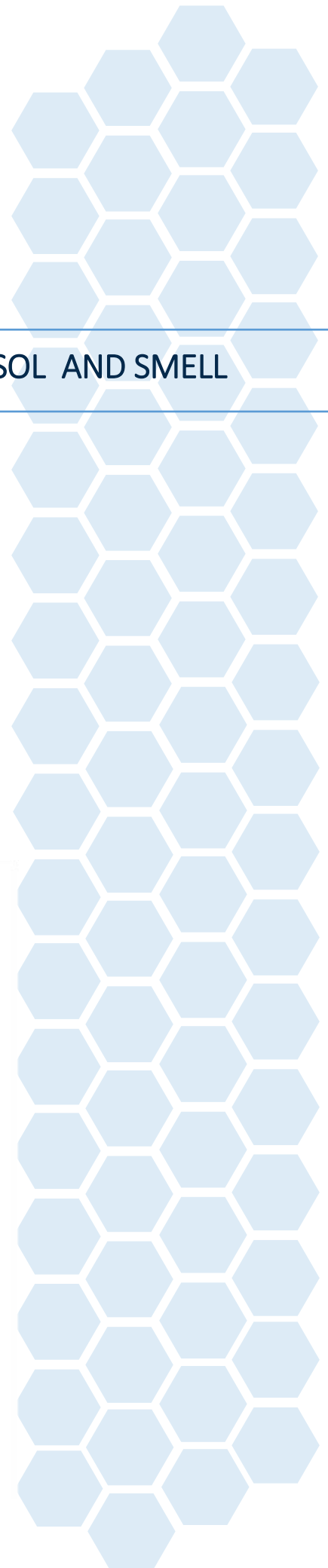


MARINE TOILETS WITH ASPIRATION OF BIO-AEROSOL AND SMELL

TECHNICAL FILE

Ai rEx

PATENTED



The use of the toilet causes
contamination of the air in the entire bathroom environment

As demonstrated by numerous international scientific studies, the use of the toilet causes contamination of the air in the bathroom due to the diffusion of **bio-aerosols**.

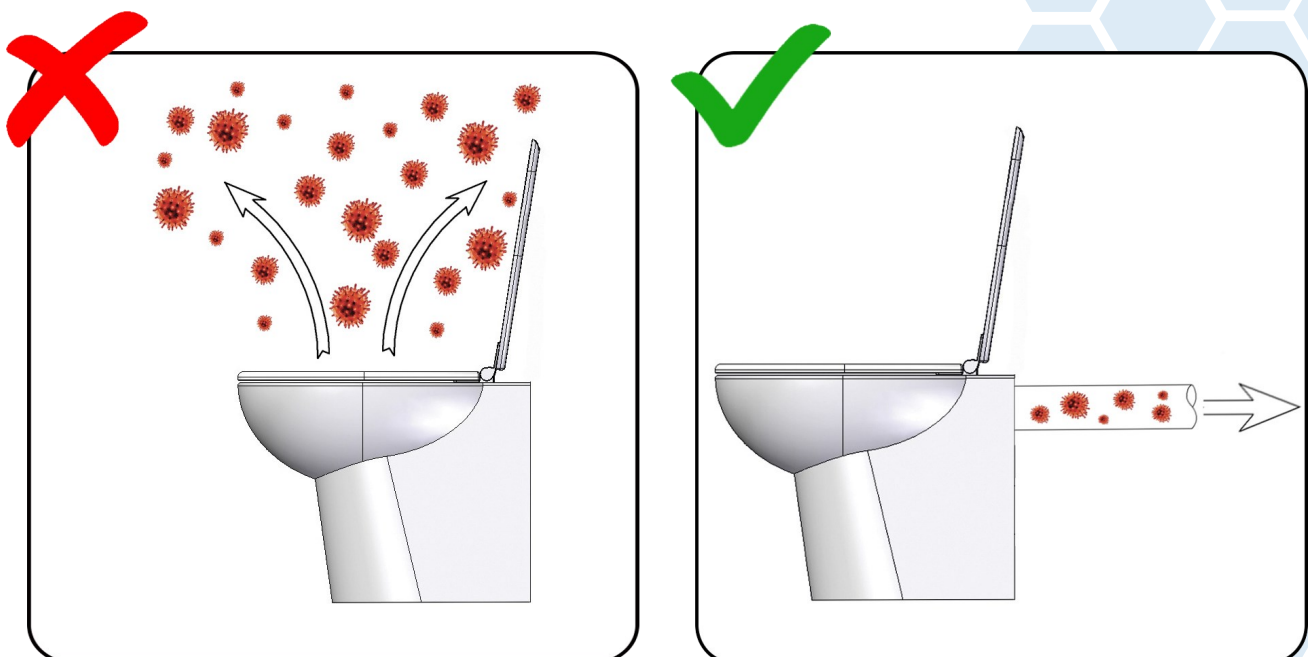
The bad odor usually perceived by smell is due to the inhalation of the bio-aerosol present in the air.

The complete exchange of air through extraction systems takes time and does not prevent the diffusion of the bio-aerosol, with the consequent contamination of all the surfaces and objects present in the bathroom, on which germs and bacteria transported by the bio-aerosol are deposited. **As happens for example with tobacco smoke, bio-aerosol also deposits on the surfaces and fabrics with which it comes into contact.**

The original PLANUS AirEx system solves the problem
of bio-aerosol and bad odors by eliminating them
before they come out of the toilet

The AirEx system prevents bio-aerosols from escaping from the toilet, thus eliminating bad odors **before** they spread.

NOTE: The suction activated at the discharge of vacuum systems has nothing to do with the prevention of contamination and the spread of bad odors generated during the entire use of the toilet.



The “AirEx” system is patented internationally



The patents filed by Planus at an international level relating to the extraction of bad odors and bio-aerosols have also been applied by us to residential toilets and in the healthcare sector.

The “AirEx” is a medical device

Our product is **the only toilet that has obtained recognition as a medical device from the Ministry of Health** (identifier N° 2021139 - UDI: 8056459897007)



Ministero della Salute

This important innovation will change the perception of the bathroom environment

Università Cattolica del Sacro Cuore

POLO UNIVERSITARIO Giovanni XXIII



Given its importance and the social impact it entails, the innovation introduced by Planus was object of study by the **Catholic University of the Sacred Heart of Rome, Policlinico "A. Gemelli"**.

The study was coordinated by Prof. Americo Cicchetti, current Director General of Health Programming of the Italian Ministry of Health, in collaboration with representatives of the Italian National Institute of Health and important medical managers.

The work was published by the Catholic University and is available for consultation at this link:

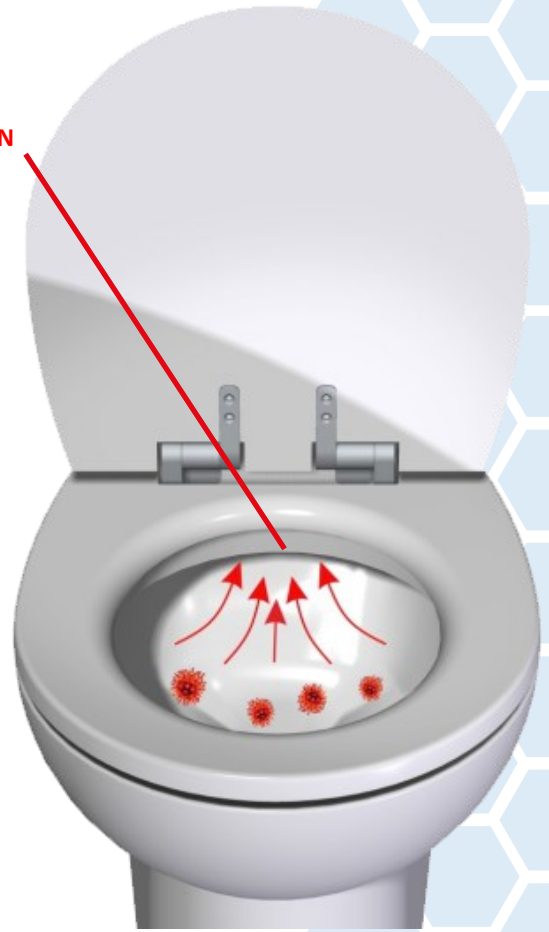
<https://altems.unicatt.it/altems-research-consultancy-studio-di-fattibilita-del-nuovo-dispositivo-medico-toile-di-planus-spa>



TOILETS IN AIREX VERSION

Planus toilets are equipped with a suction mouth for the extraction of bad odor and bio-aerosol, without change the aesthetics of the product.

HIDDEN ASPIRATION



The AirEx system does not affect the normal functioning of the toilet

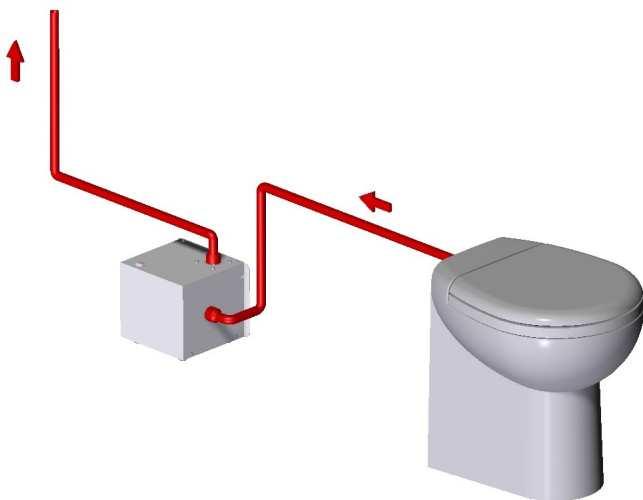
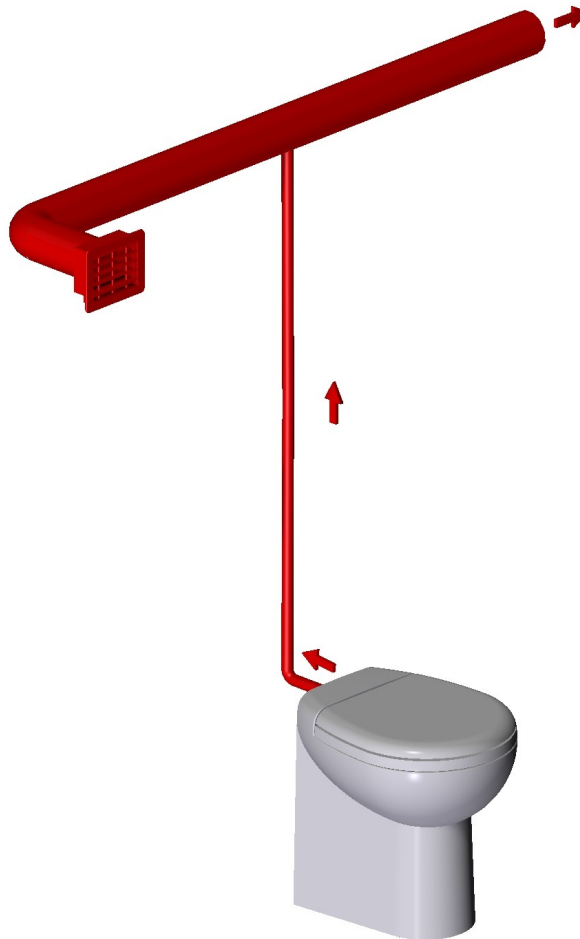


At the back of the toilet there is an adjustable \varnothing 25mm fitting, to which a pipe can be inserted for connection to the air extraction system.

CONNECTION METHODS

The Planus toilet in the AirEx version can be connected indifferently to the centralized system for extraction and exchange of air on board or to a suction box supplied by Planus on request, to be connected to a single toilet.

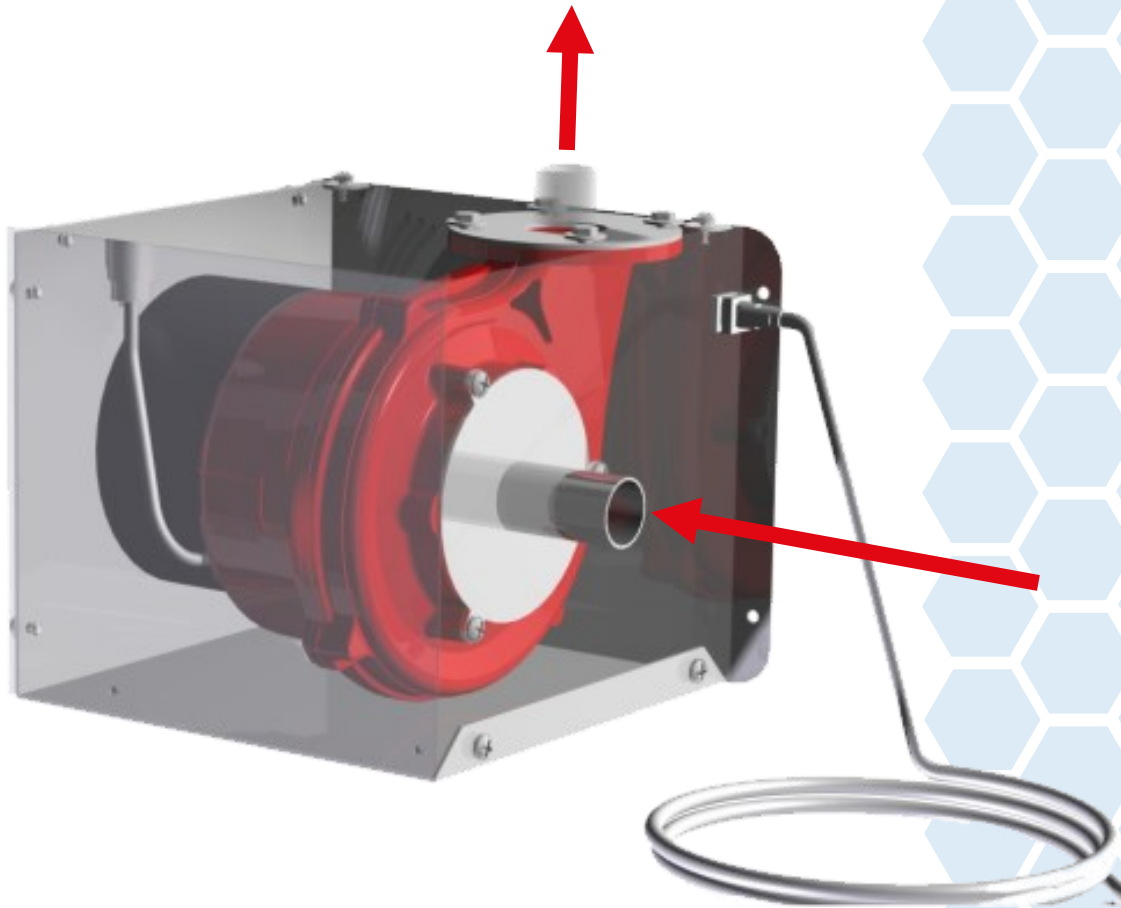
In the case of **connection to the on-board extraction system**, a derivation is sufficient to connect the bathroom ventilation system (generally with a variable DN from 60 to 80mm) to the connection present in the back of the toilet (\varnothing 25 mm).



In the case of **connection to the Planus aspirator box**, you will have to connect the inlet of this box to the connection on the back of the toilet (\varnothing 25 mm). Furthermore, the exhaust of the vacuum box must be connected to the outside of the hull.

ASPIRATOR BOX FOR AIREX TOILETS

The stainless steel aspirator box supplied by Planus on request is designed for the connection to a single toilet (DN 25 mm).



The placement of the aspirator box in relation to the toilet is irrelevant.



TECHICAL DATA

Planus Toilet in AirEx version

Diameter of the AirEx fitting \varnothing 25mm

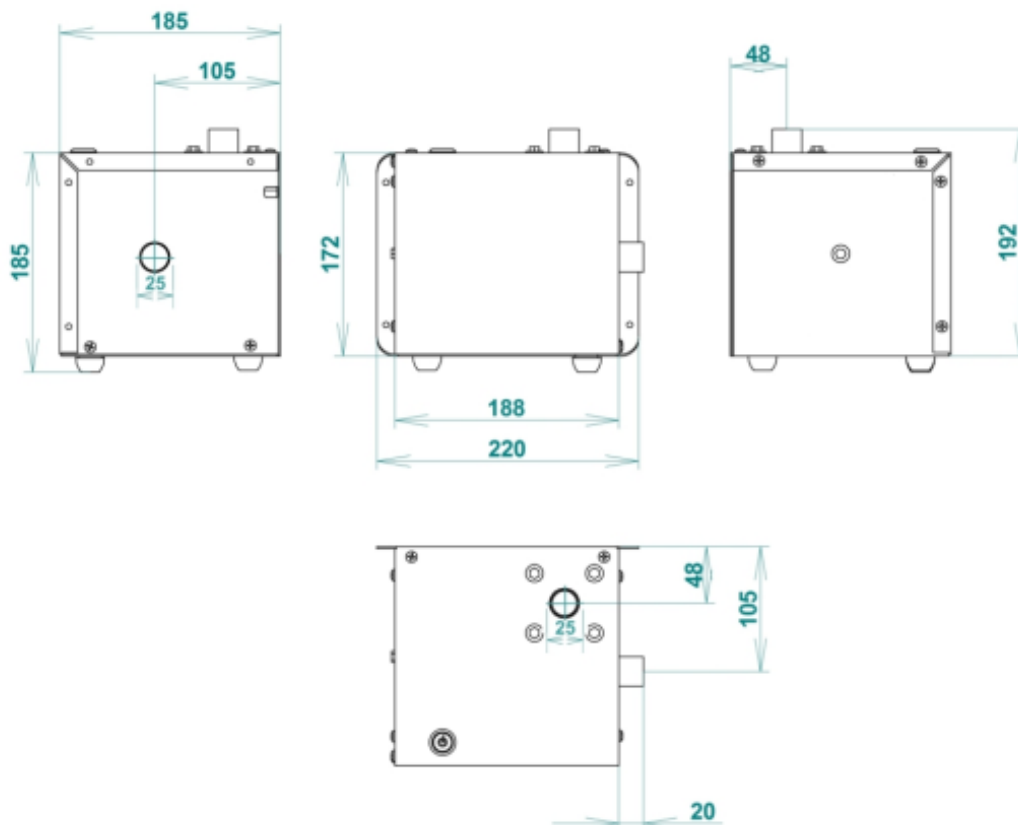
Single Aspirator BOX (optional)

Voltage (available versions) 12Vdc, 24Vdc, 230Vac-50Hz

Power 55W

Diameter inlet fitting (toilet side) \varnothing 25mm

Diameter outlet fitting \varnothing 25mm



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