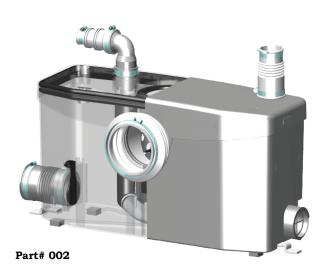
External Units - Macerators

Saniplus



The Saniplus is a system that is used to install a complete bathroom up to 15 feet below the sewer line, or even up to 150 feet away from a soil stack. It can handle the effluent from a toilet, sink, bathtub and shower.

The Saniplus is simplicity itself to install; there are just four connections.

- The macerator/pump is connected to the spigot of a horizontal rear discharge toilet.
- The toilet tank is connected to the water supply.
- The macerator/pump is connected to the small diameter discharge pipe work.
- The macerator/pump is connected to the electrical supply.

The inside of the Saniplus comprises of a pressure chamber, which starts and stops the unit, and the motor, which drives the stainless steel macerator blades and the pump.

When the flush is activated, the water flowing into the Saniplus activates a micro switch in the pressure chamber, which in turn starts the motor. The motor is sealed for life in an oil filled enclosure. A common spindle/shaft drives the impeller and the macerator blades. The moving parts therefore are kept to an absolute minimum. Water and organic waste matter enter the chamber and are reduced to slurry as the macerator blades rotate at 3600 RPM. The centrifugal force causes the reduced solids to be ejected through a grill into the container where it is picked up by the impeller pump mounted beneath the motor. The unit pumps the effluent upward to 15 feet and/or 150 feet horizontally (with gravity fall). Once the water level in the container goes down, the micro switch deactivates the unit until the flush is activated again. A normal operating cycle for Saniplus takes about 10 - 15 seconds depending upon the discharge pipe run configuration; power consumption is therefore minimal.

In addition to the toilet waste, the Saniplus will also discharge gray water from a variety of other sanitary fixtures such as: a sink, a bathtub, a shower and a urinal. When adding a bathtub or shower, a base will have to be constructed. This base should be made out of a $2" \times 6"$ (minimum) or $2" \times 8"$ (recommended) on edge, to allow for the installation of a P-trap and the required 1/4"per foot gravity flow towards the pump unit.

The wastewater from other sanitary fixtures is discharged into the Saniplus via two 2-inch inlets on either side of the housing. Either one or both inlets can be used as required. The discharge elbow on top of the Saniplus can be turned either to the left, to the right, or towards the back, depending on the discharge installation. A non-return valve, which comes already assembled on the discharge elbow, prevents back flow into the unit.

This unit has been designed with a vent connection on the lid. All plumbing codes require connection to a vent system. Please note that the vent system should be a two-way air vent. The use of mechanical vents, air admittance valves or similar devices are not permitted as these are considered one-way air vent systems. It is also highly recommended for the macerator/pump to be connected to a Ground Fault Interrupter (GFI) circuit.

The design of this model consists of vibration absorbers which enable the reduction of operating sound by reducing the transmitted sounds from any location where such resonance transmission could occur. This new design reduces the operating sound of this pump by 10dB.

The Saniplus unit must be connected to our rear discharge toilet. This system uses much less water than a regular toilet. Note: This toilet only works in combination with Saniflo systems.

The Saniplus has been certified to American and Canadian Standards. Macerating standard; US: CSA Certified & IAPMO (UPC) listed - ASME A112.3.4, CA: Macerating Standard CSA B45.9.

All items may be purchased separately. However, the Saniplus works as a system and therefore a toilet bowl (003 or 007), toilet tank (005) and the macerating unit (002) need to be purchased. An optional extension pipe (030) is available for the pump to be installed behind the wall. No toilet seat, cabinets, shower nor bathtub are included.



Specifications:	
Dimensions:	Including Pump Only H 10-5/8" x W 20" x D 7" H 27cm x W 51cm x D 17.5cm
Motor:	Induction Motor (no carbon brushes or gears), tested over 50,000 cycles. 3600 rpm.
Electrical supply:	110-115V; 60Hz; Max Amperage: 4.5 amps; 0.5 HP
Discharge:	Pumps vertically to 15 ft (4.6 m) Horizontally to 150 ft (50m)
Gravity Fall on Horizontal installations:	1/4" per Ft
Discharge Pipe Diameter:	3/4"
Construction Materials:	Polypropylene, C.R.P., stainless steel, Neoprene Max. temp. 104°F (40°C)
Normal Running Time:	10–15 seconds subject to installation pipe run
Water per Flush:	1.6 US gal (6 liters) or 1.28 US gal (4.8 liters)
Discharge Rate:	Discharge Rate at 15 Ft - 17 gal/min (66 l/m) Discharge Rate at 3 Ft - 27 gal/min (103 l/m)
Designed to function with:	Toilet, Sink, Shower, Bathtub.

