

# COMPACT+

## Specifications

### 1. Capacities and usage

The “Vernacare Compact Plus” macerator will dispose of 4 “Vernacare” disposable products and their contents such as bedpan liners, bottles etc. Only 2 washbowls can be disposed of in a single cycle. **Total ‘pulp weight’ per cycle cannot exceed 200gm.**

Do not stack products inside each other or attempt to dispose of more than one item in a single cycle as this will impair the effective operation of the machine and in severe cases, may cause the motor to stall. It is considered good practice to operate the machine each time a product is placed into the machine.

Do not place string, wipes, plastic or metal items inside the machine as these may damage components. **Note: Only maceratable wipes that comply with AS/NZS 5328:2022 can be disposed of in the Compact Plus macerator.**

#### Handling

The weight of the “Vernacare Compact Plus” complete with pallet and packaging is 78 kg (machine only 70 kg). The “Vernacare Compact” should be moved to the point of installation by fork, pallet or sack truck whilst still attached to the pallet provided.

#### Electrical specification

The machine is supplied with a 3-meter length of 1.5mm flex, which shall be connected to either:

230 Volt Machine – 10 Amp MCB to BS EN60898 Type C or alternatively fused 10 Amp to BS EN60269-1. An appropriate I.E.C Approved 10 Amp isolator shall be installed in both cases.

110 Volt Machine – 16 Amp MCB to BS EN60898 Type C or alternatively fused 16 Amp to BS EN60269-1. An appropriate I.E.C Approved 16 Amp isolator shall be installed in both cases.

It is recommended that the disposal unit is supplied by a dedicated circuit.

Where supplementary protection is provided by an RCD/RCBO, this should be rated at 30mA.

**Note: The machine *should not* be switched off at the mains supply in mid-cycle except in case of emergency, as this will impair the effective operation of the machine and may cause damage to the components.**

#### Motor

0.55 KW; 3 Phase; 220-240v 50Hz/ 380-420v 50Hz; IP55; D71 frame size. Rating at peak load 2.6 amps (nominal).

## Inverter

AC inverter with either 110v or 230v supply voltage, 230v motor output and utilising current monitoring.

## Pump

0.18 kW; 24vdc; 50 cycles. Protected by a 10 amp fuse.

## Water requirements

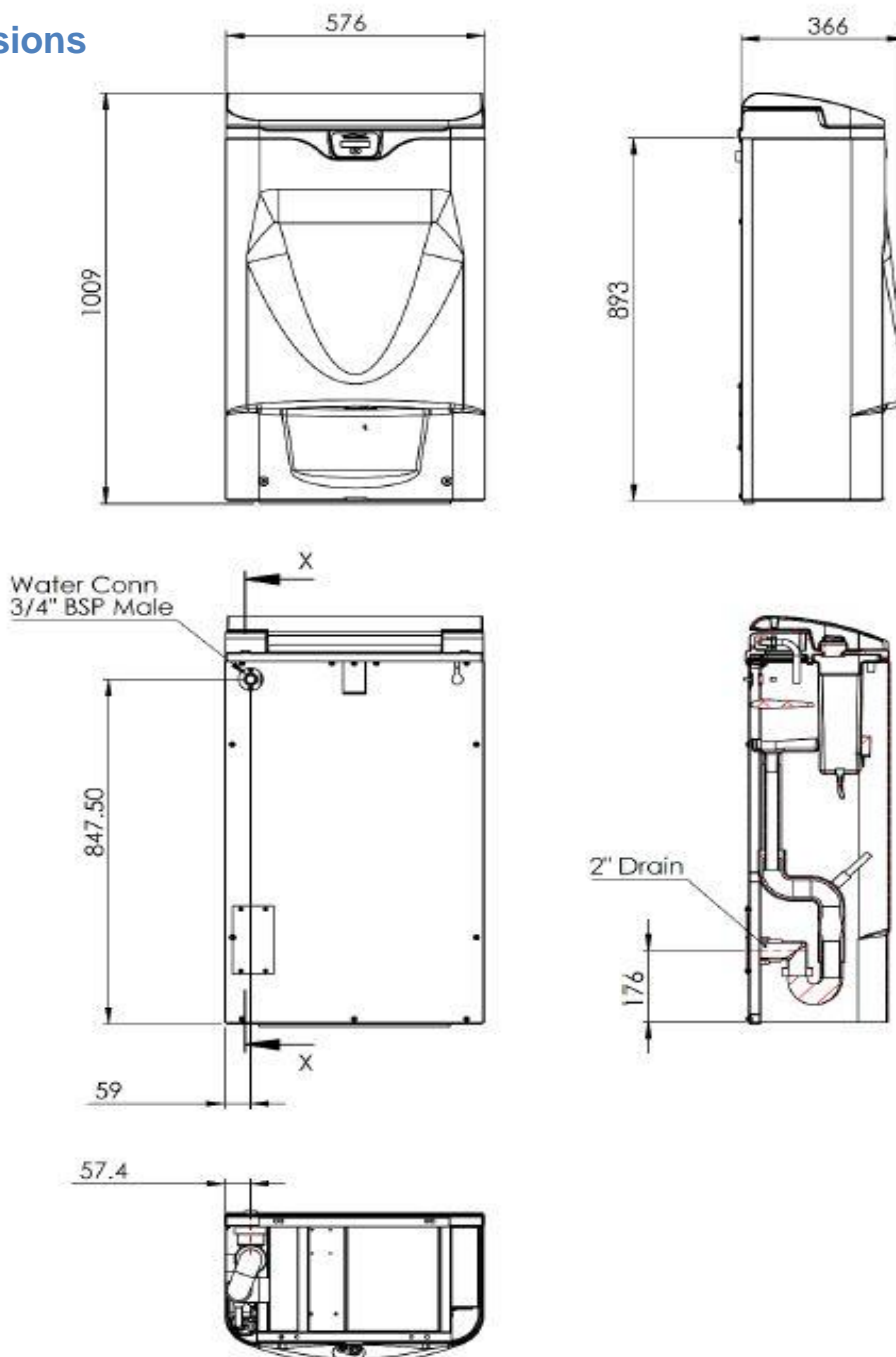
Inlet supply: Cold water ONLY with flow rate of 8 l/min minimum. Nominal overall usage is 18 litres (+/- 10%) per (standard) cycle.

$\frac{3}{4}$ " BSP connections (male).

## Drainage

A 2" inch/ 50mm drain pipe to be connected either directly, or via a swept bend, to a standard 2" in/50mm drain pipe with a 1 in 25 or suitable fall into a soil drain.

## Dimensions



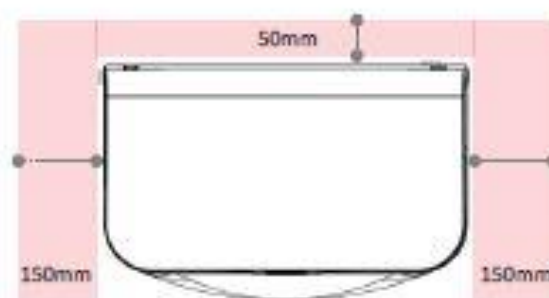
## 2. Installation / Commissioning

### 2.1. Required Install Clearances and Heights

**Note:** Installation of this equipment should only be carried out by a suitable qualified person.

#### SIDE & REAR MACHINE CLEARANCE

- A minimum of 50mm clearance is required at the back of the machine. This allows for access to the water inlet and electrical connection at the rear of the machine.
- A minimum of 150mm clearance is required either side of the Compact. This allows tool access during adding/removing of the front panel. Servicing and maintenance procedures may also be carried out without having to move the machine.



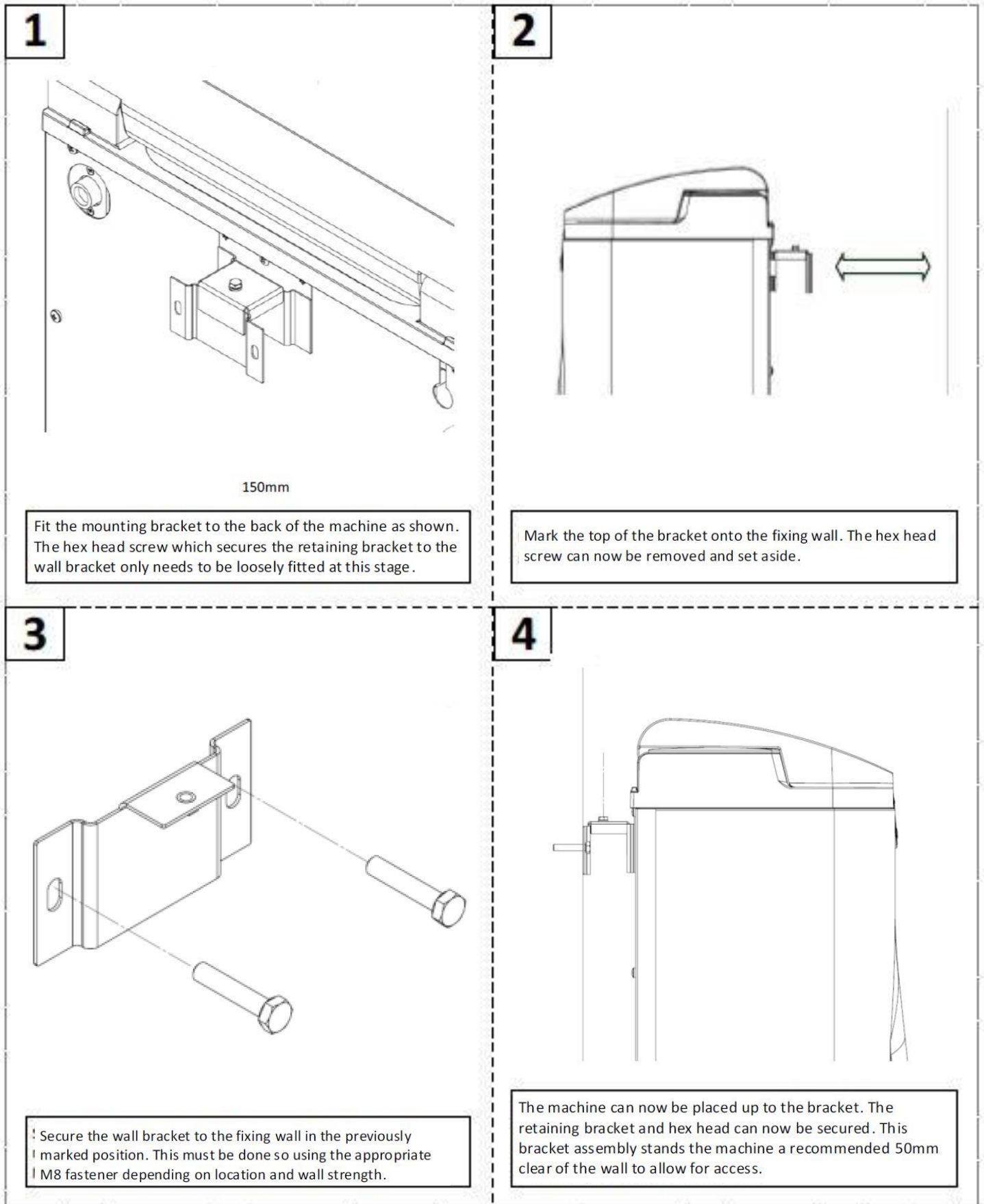
#### LID CLEARANCE & MACHINE HEIGHT

- A minimum of 350mm clearance is required above the Compact lid. Items fitted to the wall directly above the machine may restrict the lid from opening and operating effectively.
- The foot sensor is pre-set to operate at the height of a floor mounted Compact Plus (range highlighted in green). If a plinth is installed the sensor will have to be reprogrammed to adjust the range by a trained engineer.



## 2.2. Using the Wall Bracket Assembly

In some circumstances it is not possible to secure the machine to the floor. This could be due to underfloor heating etc. In this instance a wall bracket assembly will be required to ensure the machine will remain safe during operation. It also limits the vibration experienced during the cycle. Below are instructions for fitting the wall bracket assembly:



## 2.3. Siting and fixing

The Vernacare Compact disposal unit should be positioned adjacent to the following:

- a) A suitable power supply point.
- b) An adequate water supply line.
- c) A suitable drainage connection.

The machine must be securely fixed using the recommended installation methods as shown in section 2.1.

Ensure that adequate space is maintained at each side of the Macerator to allow for access. Vernacare recommend a gap of 150 - 200mm per side and a minimum of 50mm away from the wall at the back.

Check that the unit is level in both directions.

The machine has 4 mounting holes (pattern below) to accommodate M8 size fasteners which can be marked out prior to fixing. The machine **MUST** be bolted down using these holes. Ensure the the ground is firm and level.



230 Volt Machine – 10 Amp MCB to BS EN60898 Type C or alternatively fused 10 Amp to I.E.C 60269-4. An appropriate I.E.C Approved 10 Amp isolator shall be installed in both cases.

110 Volt Machine – 16 Amp MCB to BS EN60898 Type C or alternatively fused 16 Amp to I.E.C 60269-4. An appropriate I.E.C Approved 16 Amp isolator shall be installed in both cases.

Where supplementary protection is provided by an RCD/RCBO, this should be rated at 30 mA.

For all installations, an I.E.E. approved disconnection device must be fitted to the final installation. This device shall be positioned in close proximity to the Compact and within easy reach of the operator & shall also be clearly marked as being the disconnecting device for the machine.

## 2.4. Plumbing

### 2.4.1. Water supply

The machine should be connected to a suitable cold water supply as follows:-

The connection to the machine water tank is made at the rear of the machine on the top right hand side corner of the machine. It is a standard connection to a 3/4" BSP male fitting. Flow rate should be 4 litres per minute minimum.

**Note:** The inlet flow valve is supplied already fitted with a flow restrictor in place. The restrictor should be left in place on tank fed installations with heads above 50ft or mains fed installations with pressures above 1.5 bar (25psi). In all other circumstances the flow restrictor is not required. **The unit has a maximum operating pressure of 600kPa.**

#### Points to watch:

**Ensure** that the supply line to the unit is at no point less than 15mm - larger if available head is low.

**Ensure** that the water supply cannot be starved by any other fittings.

**Fit** an easily accessible, full way isolating valve close to the unit. For installations with dirty water supplies it is recommended that an in-line filter is fitted.

**Fit** an adequate backflow prevention device to the inlet water supply hose suitable for the cross connection hazard to the inlet water supply hose in accordance with AS/NZS 3500.1 and NCC PCA 2022

### 2.4.2. Drain connection

The drain is connected by inserting a 2" pipe into the blue flexible outlet and fitting & tightening the clip provided. Please note there is a P trap integrated into the machine so an external one is not required.

#### Points to Watch

- Ensure that the supply line to the unit is at no point less than 15mm - larger if available head is low.
- Ensure that the water supply cannot be starved by any other fittings.
- Fit an easily accessible, full way isolating valve close to the unit.
- For installations with dirty water supplies it is recommended that an in-line filter is fitted.
- Ensure that the route taken to soil drain is the shortest, with minimum number of bends.  
If necessary, use long radius or 'swept' bends - never short or 90' elbows.
- The waste must be run separately to the soil stack or drain.
- Ensure that there is a fall of a minimum of 1 in 25 or a sufficient fall to maintain a self-cleansing velocity.
- Provide easy access for roding.
- Ensure a clean run inside the pipework - leave no burrs or reducing shoulders.
- With plastic pipework, ensure that there is no reduction in the bore size and that there is adequate support for horizontal runs to prevent sagging. Remember, ceiling voids can get very warm.
- Avoid running the drain line near or across hot water pipes.
- Anti-syphon precautions should be in line with general practice.

## 2.5 Electrical

### 2.5.1. Single-phase electrical system (230v, 1 Ph, 50 HZ) (110v, 1 ph, 60 HZ)

The machine is supplied with a 3 metre length of 1.5mm flex to BS6500 which shall be connected to:

- 230 Volt Machine – 10 Amp MCB to BS EN60898 Type C or fused 10 Amp to IEC 60269.
- 110 Volt Machine – 16 Amp MCB to BS EN60898 Type C or fused 16 Amp to IEC 60269.

#### Notes:

1. All electrical installation to comply with current I.E.E. regulations.
2. Mains supplies to be protected by: 1 Phase 230v ..... 10 Amp approved I.E.C. fuse. 1 Phase 110v..... 16 Amp approved I.E.C. fuse.
3. For all installations, an I.E.E. approved disconnection device **must** be fitted to the final installation. This device shall be positioned in close proximity to the Compact and within easy reach of the operator & shall also be clearly marked as being the disconnecting device for the machine.

### 2.5.2. Back-up generator tests / mains electrical supply surges.

Damage to internal electrical components of the Compact Plus Macerator can occur as a result of voltage surges / spikes occurring in the electrical supply to the machine. The likelihood of such damage occurring is increased when frequent testing of back-up electrical supplies are carried out.

To prevent such damage, Vernacare recommends that transient voltage suppressors (in accordance with IEC class 3 surge protection) be installed in the electrical supply to the machine.

## 2.6. Environment

Indoor use only. Altitudes up to 2000m. Temperatures 5 deg C to 40 deg C.

Maximum relative humidity 80% for temperatures up to 31 deg C, decreasing linearly to 50% relative humidity at 40 deg C.

Mains supply voltage fluctuations not to exceed +/- 10% of nominal voltage.

## 2.7. Commissioning

After installation, to ensure warranty validity the machine should be commissioned by a Vernacare approved technician. The machine should not be run until after this check has been done.

### IMPORTANT

**The machine MUST be bolted down before use. The machine should be run once - empty - to prime the pipework.**

**Note:** For warranty, service or repair please quote the machine serial number which can be found clearly marked on the rating plate which is positioned on the RH side, bottom front of the machine.

## 2.8. Warning labels and icons – explanations



Please refer to the technical manual prior to installation, maintenance or operation of this equipment.



Symbol indicates presence of 230/110 V 50/60 Hz



Start Cycle – Press this button to start the machine. An auto-start option is also available. Contact Vernacare for more information

## 2.9. Cycle Counter















At the end of each cycle the LCD screen will briefly display the TOTAL cycle count for the machine and also the SERVICE count which is the number of cycles since the machine was last serviced.

The TOTAL cycle display counts every machine cycle and is not resettable (unless the machine is reprogrammed).

The SERVICE count is reset by the engineer when the machine is serviced. The service count will also trigger a “Service” message on the LCD display once 5,000 cycles have been completed since the last service visit.



## 2.10. Display screen icons and warning messages – explanations

 <p>Vernacare Running</p>	<p>The machine has started and the cycle has commenced. A progress bar will be displayed.</p>	 <p>Vernacare Power Fail</p>	<p>An interruption to the electrical supply has occurred during the cycle.</p>
 <p>Vernacare End</p>	<p>The cycle has ended and is now ready to re-use.</p>	 <p>Vernacare Hopper Full</p>	<p>The hopper has not drained properly, the outlet may be blocked.</p>
 <p>Vernacare Blocked Blades</p>	<p>The inverter has detected an overload due to a blockage of the cutter blades.</p>	 <p>Vernacare Lid cannot open</p>	<p>A fault/obstruction is preventing the lid from opening.</p>
 <p>Vernacare Blocked Drain</p>	<p>The pressure sensor has detected a pressure rise in the hopper due to a blocked drain outlet.</p>	 <p>Vernacare Lid cannot close</p>	<p>A fault/obstruction is preventing the lid from closing.</p>
 <p>Vernacare Low Water</p>	<p>There is insufficient water within the water tank to allow a cycle to commence.</p>	 <p>Vernacare Lid Seal Pressure Error</p>	<p>The inflatable seal has failed to operate correctly.</p>
 <p>Vernacare Low Deodoriser</p>	<p>The deodoriser level is low and should be refilled at the next opportunity. The machine will still run.</p>	 <p>Vernacare Lid Lock Fault</p>	<p>The lid interlock has failed to operate effectively.</p>
 <p>Vernacare Drain Seal Pressure Error</p>	<p>The drain (diaphragm) valve has failed to operate effectively.</p>	 <p>Vernacare Lid Error</p>	<p>The lid is unable to open or close.</p>