

# **Specifications**

#### 1. Capacities and usage

The "Vernacare Compact" macerator will dispose of a single "Vernacare" disposable product such as a bedpan liner, bottle etc. together with its contents in a single cycle.

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 macerator.

#### Handling

The weight of the "Vernacare Compact" complete with pallet and packaging is 58 kg (machine only 50 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

0.25 KW; 3 Phase; 220-240v 50Hz/ 380-420v 50Hz; IP55; D63 frame size. Rating at peak load 4.57 amps (nominal).

#### Inverter

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

#### Pump

0.27 kW; 24vdc; 50 cycles. Protected by a 5 amp fuse.

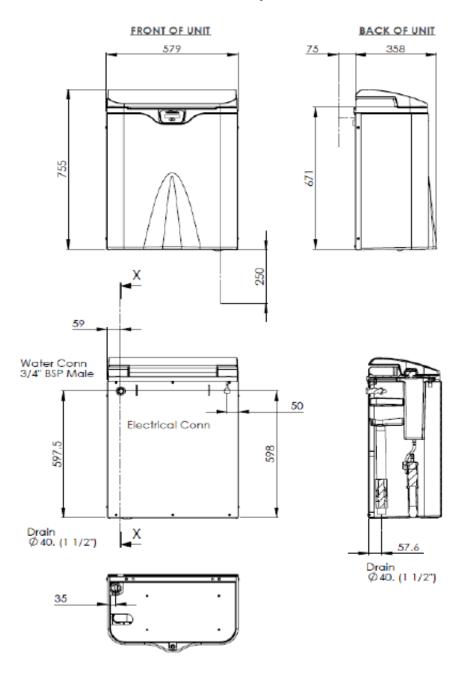
#### Water requirements

Inlet supply: Cold water **ONLY** with a minimum flow rate of 4L per minute. Nominal overall usage; 12 litres (+/- 10%) per cycle. <sup>3</sup>/<sub>4</sub>" BSP connections (male).

#### Drainage

A 1  $\frac{1}{2}$ " inch/ 40mm drain pipe to be connected either directly, or via a swept bend, to a standard 1  $\frac{1}{2}$ "in/40mm drain pipe with a 1 in 25 or suitable fall into a soil drain.

#### **Dimensions of the Vernacare Compact**

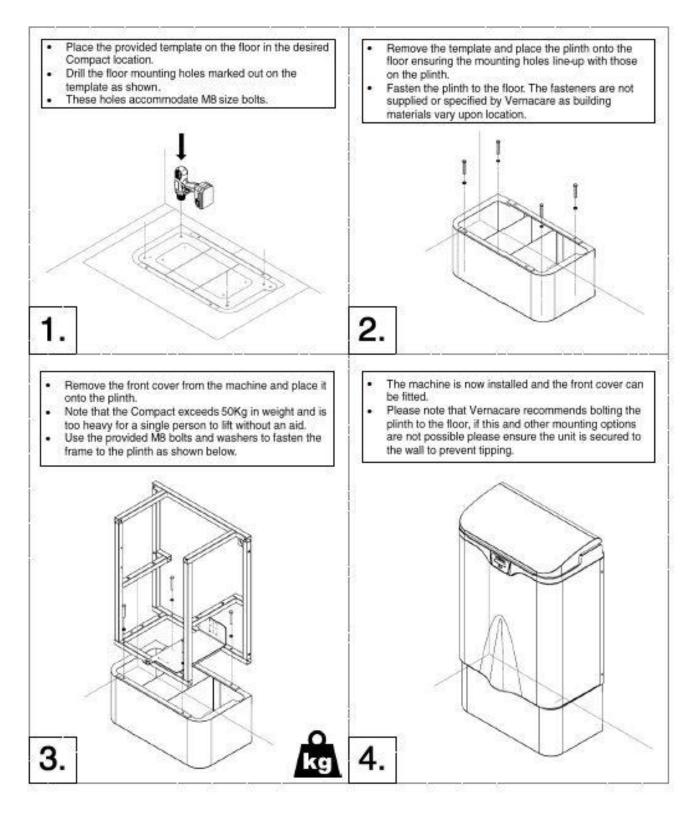


# 2. Installation / Commissioning

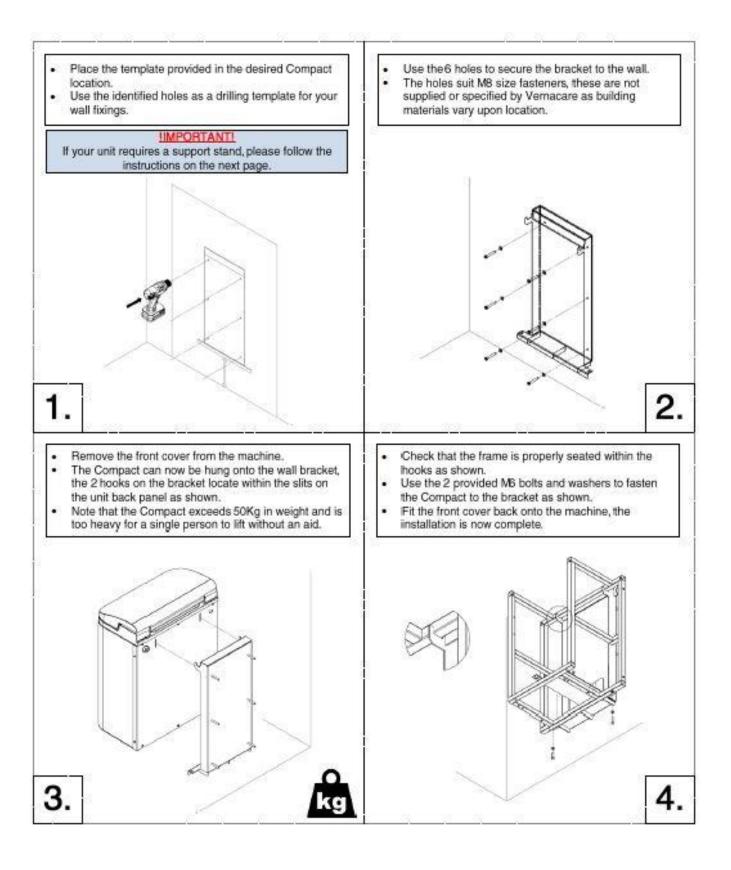
# **Installation Instructions**

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

## 2.1.1. Plinth



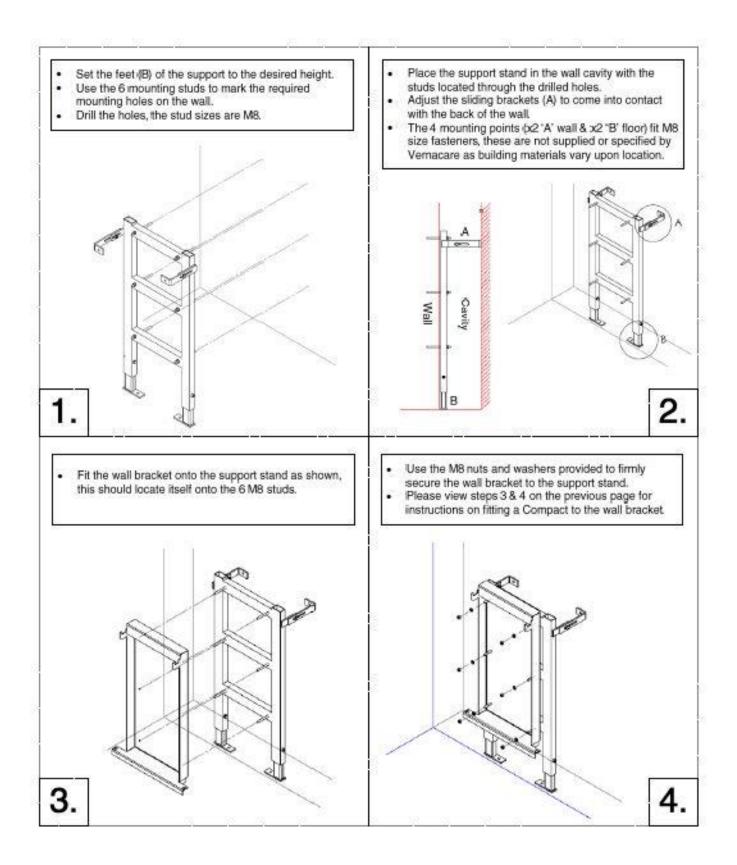
# 2.1.2. Wall Bracket (for solid walls)



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# 2.1.3. Wall Bracket & Support Stand (for hollow walls)



## 2.2. 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 4.1.

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.

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.

# 2.3. Plumbing

#### 2.3.1. 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  $\frac{3}{4}$ " 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.

#### 2.3.2. Drain connection

The drain is connected by inserting a 40mm 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.

# 2.4 Electrical

# 2.4.1. 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.

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

Damage to internal electrical components of the Compact 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.

## 2.5. 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.

#### 2.6. 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.

## 2.7. 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

#### 2.8. 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 reprogramed).

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.

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

