

Certificate of Accreditation Sewage Management Facility Waterless Composting Toilet System

This Certificate of Accreditation is issued by the Secretary of the NSW Ministry of Health pursuant to Section 41(1) of the Local Government (General) Regulation 2021.

System:

Clivus Multrum Composting Toilet Systems

Manufacturer: Ecoflo Wastewater Management Pty Ltd

Of:

25 Shannon Place, Virginia, QLD, 4014

The Clivus Multrum Composting Toilet Systems as described in Schedule 1 have been accredited as a sewage management facility for use in single domestic premises in NSW. This accreditation is subject to the conditions and permitted uses specified in Schedule 2 and in accordance with the Waterless Composting Toilets (WCT) Accreditation Guideline, May 2005.

P. Byloveld

A/Director, Environmental Health for Secretary (delegation PH335)

Issued: 16 /Oct / 2023

Certificate No: WCT008 Expires: 31 December 2028

Schedule 1: Specification

Clivus Multrum CM composting toilet systems

General Description

The Clivus Multrum CM composting toilet systems are designed to receive and treat human waste from one or more toilet pedestals. Organic material may be added to the composting wastes as a bulking agent at intervals specified by the manufacturer. The system is designed to reduce such wastes after a specified composting period into an innocuous relatively dry waste that is capable of being disposed of within the premises without nuisance or risk to health.

The Clivus Multrum composting tank is moulded from high density polyethylene. The tank is internally divided into two compartments, the top compartment is a collection and composting chamber and the bottom compartment receives the composted waste. The composting chamber is supplied with a stainless steel front baffle, air duct, polyethylene rear baffle and inspection/access doors. The finished compost chamber is fitted with an access lid dimensioned to suit the Clivus Multrum model system.

The Clivus Multrum system incorporates an exhaust fan to control odour emissions from the composting process. Depending on climatic conditions a heating system may be incorporated to evaporate excess urine and moisture and to maintain a constant temperature in the composting pile. A liquid end product drain, if required, is supplied with all fittings and absorption trenching.

The Clivus Multrum composting toilet system is available in the CM8, CM10, CM14 and CM20 models to suit most domestic applications. The Clivus Multrum system is also available in the CM40 and CM60 models to suit commercial facilities for medium to high usage.

The composting capacity and usage of the Clivus Multrum systems are expressed in the following table:

Model	Annual	Residential use
	use	adults
CM8	8,000	3 or
		family of 5
CM10	10,000	4 or
		family of 6
CM14	14,000	5 or
		family of 7
CM20	20,000	7 or
		family of 10

Schedule 2: Conditions of Accreditation

1. General

- 1.1 For each installation the owner/occupier of a premises shall make an application to the local authority to install a Clivus Multrum CM composting toilet system as a waste management facility in accordance with Section 68, Part C of the Local Government Act 1993 and Clause 29 of the Local Government (General) Regulation 2021.
- 1.2 For each installation the application to the local authority shall include:
 - 1.2.1 Plans and specifications of the nominated model of the Clivus Multrum CM composting toilet system;
 - 1.2.2 A site plan drawn to scale showing the location and type of the proposed sullage disposal system for the premises and state the method of disposal:
 - 1.2.3 A statement detailing the proposed method of disposal of the composted end product, the frequency of such disposal and the estimated volume of composted end product to be removed:
 - 1.2.4 A statement on whether the composting system is likely to produce a liquid component and how it is proposed to dispose of the liquid. The statement shall be supported by detailed plans of any necessary liquid disposal system.

- 1.3 Installation of the nominated model of the Clivus Multrum CM composting toilet system is restricted to the number of persons occupying a domestic premises as set out in the table attached to Schedule 1 and where in the opinion of the local authority the nominated model of the Clivus Multrum CM composting toilet system will be capable of providing satisfactory toilet accommodation.
- 1.4 A permanent notice with basic instructions shall be affixed to the unit in a prominent position. The permanent notice shall include provision for recording the date the last time humus material was removed from the composting chamber.
- 1.5 The manufacturer shall supply with each system a comprehensive manual with details of the maintenance procedures necessary to ensure the efficient and safe operation of the system.
- 1.6 The Clivus Multrum CM composting toilet system shall be installed and operated in accordance with the manufacturer's instructions and any conditions imposed by the local authority.
- 1.7 All wastewater shall be disposed of by means of a disposal system designed to the satisfaction of the local authority.

2. Installation and Commissioning

- 2.1 The local authority should require that on completion of the installation of the nominated model of the Clivus Multrum CM composting toilet system, the system is inspected and checked by the manufacturer or the manufacturer's agent. The manufacturer or the agent is to certify that the system has been installed and commissioned in accordance with its design, conditions of accreditation and any additional requirements of the local authority.
- 2.2 The local authority should require that all electrical work, where necessary, must be carried out by a licensed electrician and in accordance with the relevant provisions of AS/NZS 3000.

3. Maintenance

- 3.1 Material, which has been only partially composted, may only be removed from the Clivus Multrum CM composting toilet system with the written consent of the local authority. The local authority may issue instructions as to who may remove the humus and the method of disposal of the humus.
- 3.2 Unless otherwise directed by either the local authority or the NSW Health Department, the composted end product is to be disposed of by burial within the confines of the premises in soil, which is not intended to be used for the cultivation of food for human consumption. The minimum cover of soil over the deposited humus must be 100 mm.
- 3.3 Alternatively the composted end product may be retained for an additional period of three months in a lidded compost bin. At the completion the humus may be used as a soil conditioner without any further treatment.

4. On-going Management

- 4.1 The owner's manual prepared by the manufacturer shall contain a plan for the on-going management of the Clivus Multrum CM composting toilet system. The plan shall include details of:
 - the treatment process,
 - procedures to be followed in the event of a system failure,
 - emergency contact numbers,
 - maintenance requirements,
 - inspection and sampling procedures to be followed as part of the on-going monitoring program developed by the local authority.



MODEL:

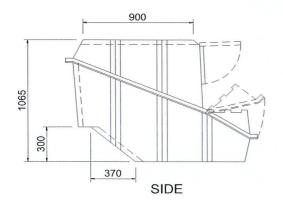
CLIVUS MULTRUM™ 8 (CM8) 1550 x 1232 x 1065 mm (Length x Width x Height) **Overall Dimension: Projected Capacity:** 20 visits daily (average) or 8,000 visits annually

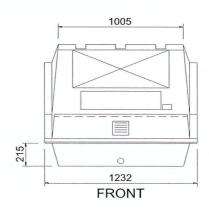
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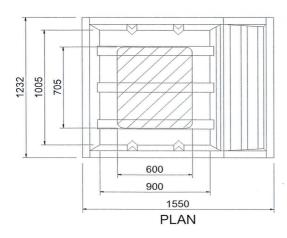
The CM8 is ideal for most domestic applications. Each CM8 can accommodate one toilet pedestal.

Specifications:

Material	Low Density Polyethylene – LDPE
Waste Chamber	Stainless Steel Baffle Air Duct Polyethylene Rear Baffle Inspection/Access Doors
Finished Compost Chamber	1000 x 350 mm Access Lid
Liquid End Product Drain	All Required Fittings Absorption Trenching
Fasteners	Stainless Steel
Fittings	Corrosion Resistant Materials







TOILET CHUTE PREFERABLY TO BE LOCATED IN HATCHED AREA

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CM8-S-01 24 APRIL 2018



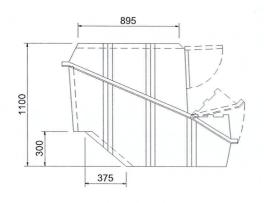
MODEL:

CLIVUS MULTRUM™ 10 (CM10) 1550 x 1560 x 1100 mm (Length x Width x Height) **Overall Dimension: Projected Capacity:** 25 visits daily (average) or 10,000 visits annually Description:

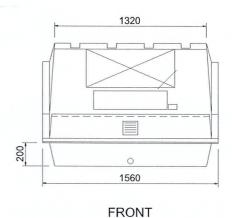
The CM10 is a wider version of the CM8, but designed to accommodate two pedestals.

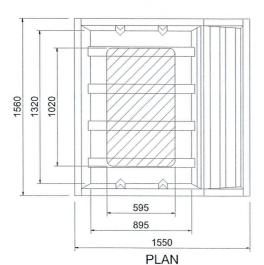
Specifications:

Material	Low Density Polyethylene – LDPE
Waste Chamber	Stainless Steel Baffle Air Duct Polyethylene Rear Baffle Inspection/Access Doors
Finished Compost Chamber	1400 x 350 mm Access Lid
Liquid End Product Drain	All Required Fittings Absorption Trenching
Fasteners	Stainless Steel
Fittings	Corrosion Resistant Materials



SIDE





TOILET CHUTE/S PREFERABLY TO BE LOCATED IN HATCHED AREA



CM10-S-01 24 APRIL 2018



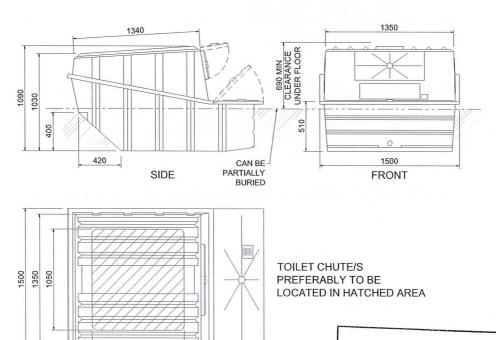
MODEL: CLIVUS MULTRUM™ 14 (CM14)

Overall Dimension: 2080 x 1500 x 1090 mm (Length x Width x Height) 38 visits daily (average) or 14,000 visits annually Description:

The CM14 is ideal for most domestic applications and particularly small facilities where height under a house or building is limited. CM14 can accommodate two toilet pedestals.

Specifications:

Material	Low Density Polyethylene – LDPE
Waste Chamber	Stainless Steel Baffle Air Duct Polyethylene Rear Baffle Inspection/Access Doors
Finished Compost Chamber	1400 x 400 mm Access Lid
Liquid End Product Drain	All Required Fittings Absorption Trenching
Fasteners	Stainless Steel
Fittings	Corrosion Resistant Materials



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2080 PLAN ACCREDITED

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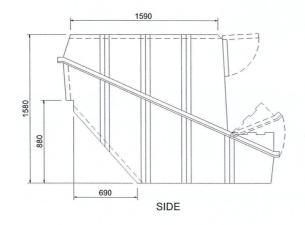
MODEL:

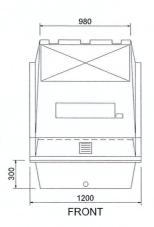
CLIVUS MULTRUM™ 20 (CM20) 2390 x 1200 x 1630 mm (Length x Width x Height) **Overall Dimension: Projected Capacity:** 55 visits daily (average) or 20,000 visits annually **Description:**

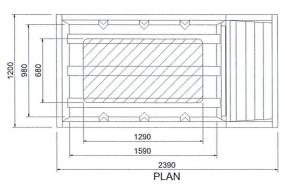
The CM20 is ideal for large houses or small public facilities. Each CM20 can accommodate up to two toilet pedestals and a urinals.

Specifications:

Material	Low Density Polyethylene – LDPE
Waste Chamber	Stainless Steel Baffle Air Duct Polyethylene Rear Baffle Inspection/Access Doors
Finished Compost Chamber	1000 x 350 mm Access Lid
Liquid End Product Drain	All Required Fittings Absorption Trenching
Fasteners	Stainless Steel
Fittings	Corrosion Resistant Materials







TOILET CHUTE/S PREFERABLY TO BE LOCATED IN HATCHED AREA

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CM20-S-01 24 APRIL 2018