



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: *Alectura WCT*

Manufacturer: *Ecoflo Wastewater Management Pty Ltd*

Of: *25 Shannon Place, Virginia, Queensland, 4014*

The Alectura Waterless Composting Toilet System as described in Schedule 1 has been accredited as a sewage management facility for use in single domestic premises in NSW. This accreditation is subject to the conditions of accreditation and permitted uses specified in Schedule 2.

P. Byrland

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

Issued: 15 / Nov / 23

Certificate No: WCT018

Expires: 31 December 2028

Schedule 1: Specification

Alectura – batch waterless composting toilet system

The Alectura batch waterless composting toilet system is designed to receive and treat human waste from a single toilet pedestal. 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 minimum composting period of 10 months into an innocuous relatively dry waste that is capable of being disposed of within the premises without nuisance or risk to health. There are two models; Comfort (3-4 persons occupancy) and Premium (4-5 persons occupancy).

The Alectura is an updated and modified Clivus Multrum Low Profile batch process waterless composting system, constructed of UV stabilised medium density black polyethylene. The Alectura consists of a pedestal with toilet seat, a chute, either 2 or 3 composting chambers, a 12 volt electrical exhaust fan and a flexible air hose leading from the composting chamber to an external rigid plastic vent pipe. If mains power is not available the system is connected to solar power.

Each composting chamber contains a perforated sub-floor, which allows urine to be collected in the base of the chamber. Most of the urine evaporates by virtue of the air circulation. Any remaining urine drains to a small absorption trench.

The Alectura includes integrated wheels & handles for easier maintenance; dual walls to minimise temperature shocks; internal mixer to knock down the pile to maximize fill capacity thus reducing rotation times and mix contents to promote better composting. The mixer is connected to an external crank which can be operated manually (standard) or via 24V motor (optional) operated with a press of a button.

In the in-service chamber the air is drawn through the pedestal and chamber and directed out via the flexible air hose to the external plastic vent pipe. A moisture trap is provided at the base of the vent pipe and a rain cap is fitted on the vent pipe just above the top of the roof.

The Alectura shall be supplied with 2 composting chambers for 2 persons for week end or vacation use or 4 person full time; or 3 chambers for up to 4 persons for week end or vacation use or 5 person full time.

Schedule 2: Conditions of Accreditation

1. General

1.1 The owner/occupier of the premises shall make an application to the local authority to install a Alectura as a waste management facility in accordance with Section 68, Part C of the Local Government Act 1993 and Clause 26 of the Local Government (General) Regulation 2021.

1.2 The application to the local authority shall include:

1.2.1 Plans and specifications of the Alectura composting toilet system;

1.2.2 A site plan drawn to scale showing the location and type of the proposed effluent 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 Alectura is restricted to the number of persons occupying the domestic premises as set out in the table attached to Schedule 1 and where in the opinion of the local authority the Alectura 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 composted end product shall be retained in the compost chamber for a minimum period of 5 months after the chamber has been removed from the in-service position and placed in the out-of-service position. The total composting period from the start to fill the chamber until the chamber is emptied shall be not less than 10 months.

1.6 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.

1.7 The Alectura shall be installed and operated in accordance with the manufacturer's instructions and any conditions imposed by the local authority.

1.8 All effluent 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 Alectura, 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 Alectura 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.

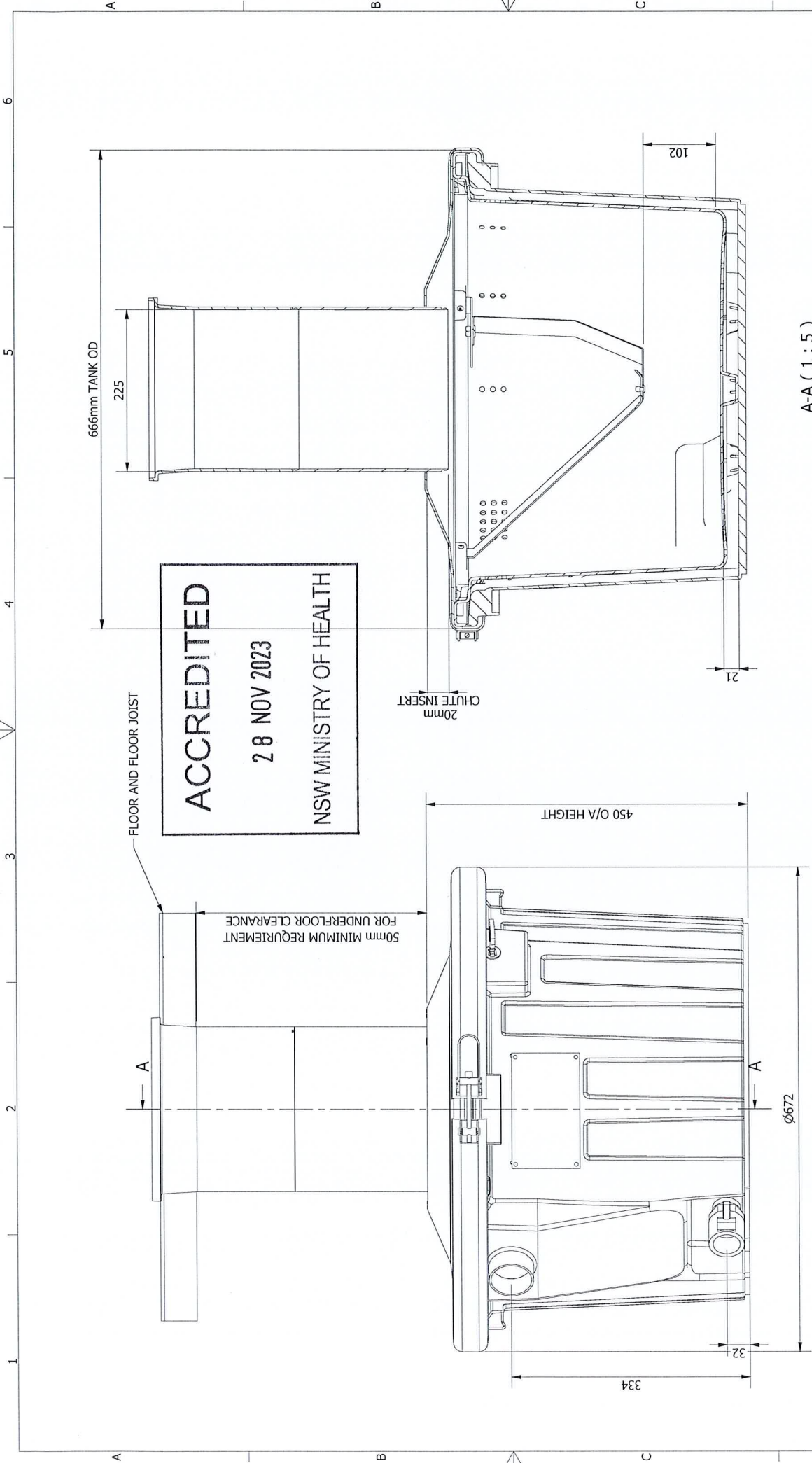
3.2 Unless otherwise directed by either the local authority or the NSW Ministry of Health, the composted end product is to be disposed of by burial within the confines of the premises in soil, which is not intended to be used for the cultivation of food for human consumption. The minimum cover of soil 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 Alectura. The plan shall include details of:

- The composting 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 an on-going monitoring program developed by the local authority



A-A (1:5)

ISSUED FOR CONSTRUCTION

ACCREDITED
 28 NOV 2023
 NSW MINISTRY OF HEALTH

DESIGNED DATE: BY: CMT 29/05/2023	CHECKED DATE: BY:	CLIENT: COMMONLY USED - NON PROJECT SPECIFIC	SHEET 1 OF 1
© COPYRIGHT ECOFLO IF IN DOUBT ASK DO NOT SCALE ALL DIMS IN mm U.N.O. AS1100	APPROX. MASS: N/A	PROJECT: NATURE LOO ALECTURA GENERAL ASSEMBLY	Rev 0
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ALECTURA IN-SERVICE TANK