WORMIFY

SUSTAINABLE FOOD PRODUCTION SYSTEM

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What is wormify?

Wormify is a smart and modular vermiponics system, specifically designed for city rooftops of apartment buildings.

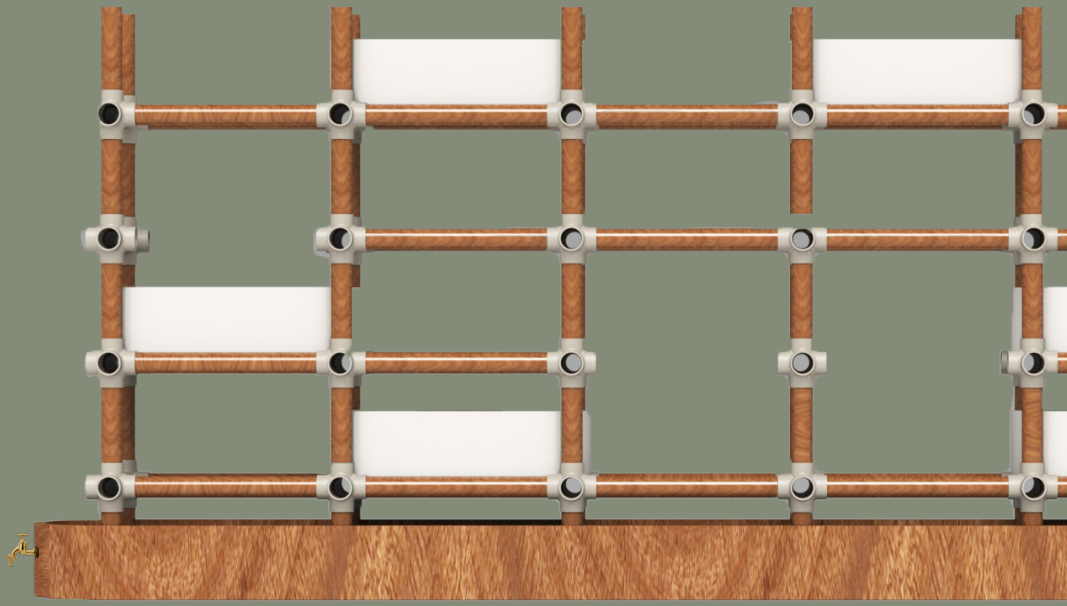
A sustainable solution?

Wormify allows residents to produce herbs and vegetables in a sustainable way and it may work as a meeting spot. On top of that it creates an opportunity to bring more green to the city environment. The product offers a solution in the search for alternative, sustainable and reliable ways to provide food for a growing global population.

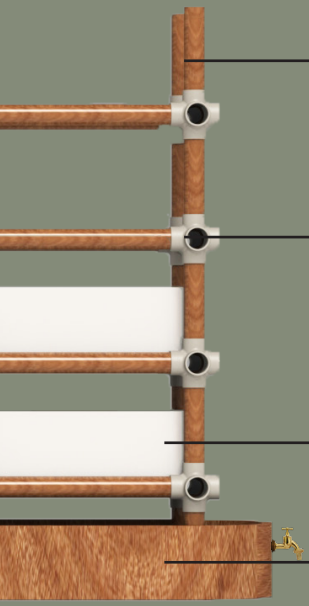
How does wormify work?

Wormify is based on a modular easily movable Keyhole Garden, taking advantage of Vermicomposting to assist in fertilizing the plants. Furthermore, the system has a rainwater collector with a filter for pollutants.

INTRODUCTION



COMPONENTS

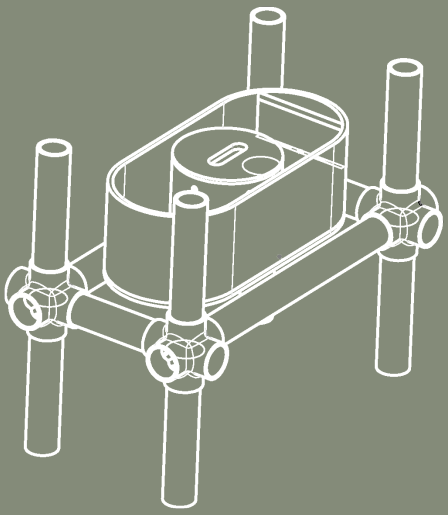


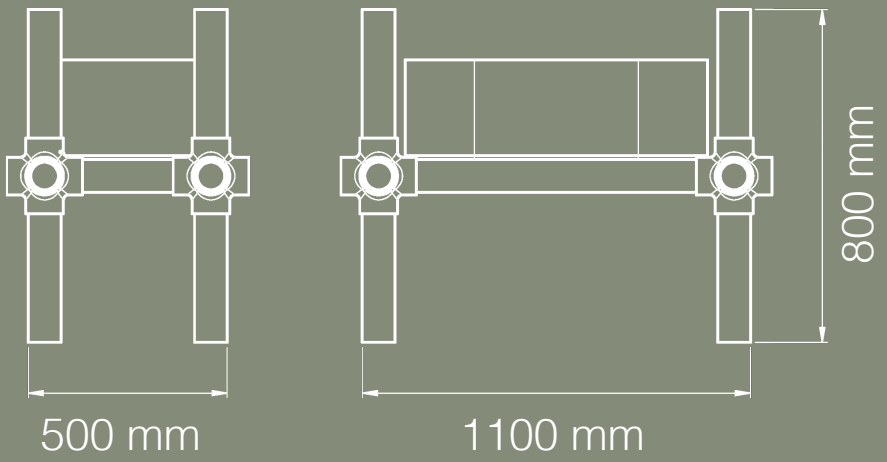
Bamboo bars
(supporting structure + rainwater harvesting)

Connectors
(enalble to create all kinds of sizes and setups)

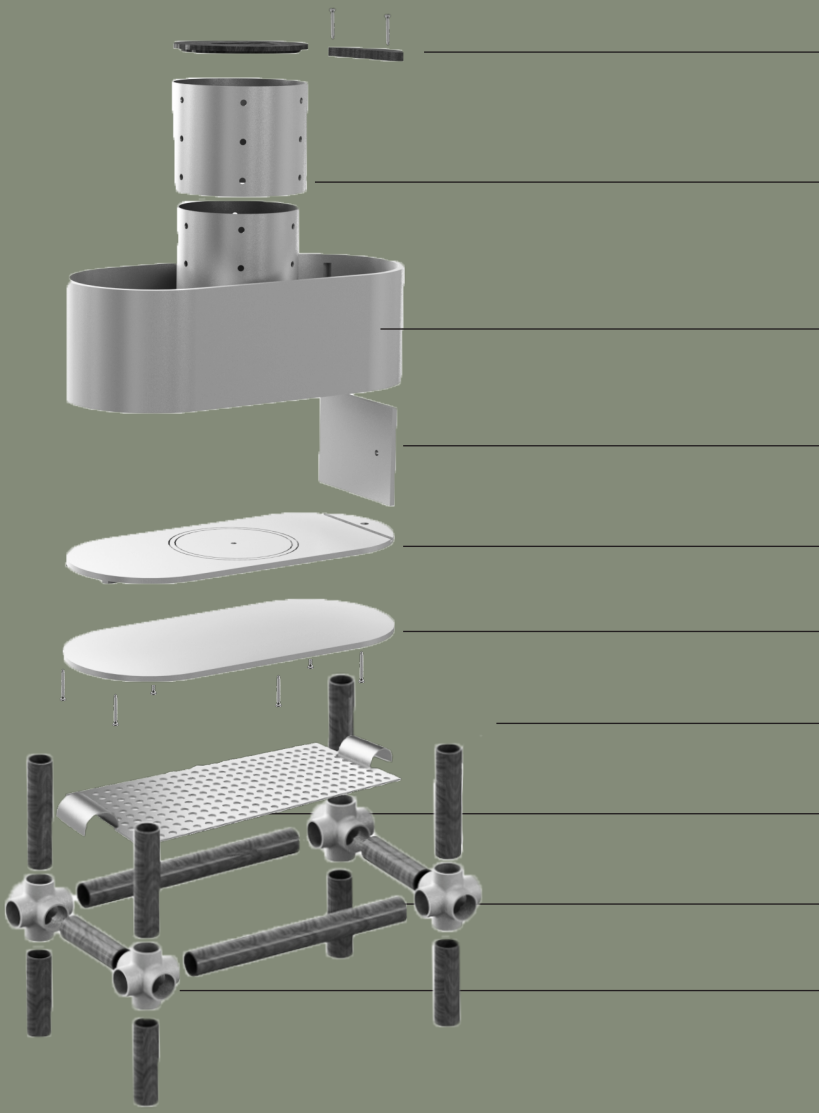
Flower pots with built-in infrastructure to enable vermicomposting

Watertank with tabs
(to collect rainwater to feed to the plants)




800 mm
500 mm
1100 mm

LIST OF MATERIALS



One module contains:

1. Lids (2x)
2. Concentric ‘worm’ cylinders (2x)
3. Flowerpot wall (1x)
4. Technical component wall (1x)
5. Double bottom (1X)
6. Bottom (1x)
7. Screws (8X)
8. Aluminium plate (1x)
9. Bamboo bars (12x)
10. Connectors (4x)

The inside contains:

01 Parts outside the cylinders are filled in with soil and are growing beds for plants.

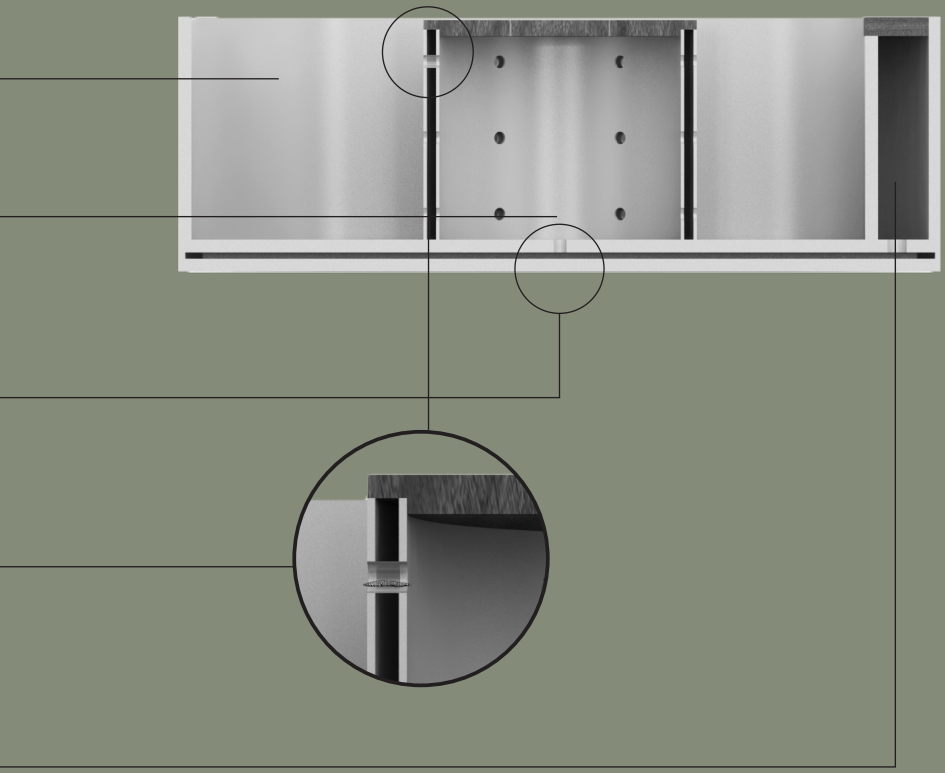
02 Inner cylinder : place where the process of vermicomposting takes place.

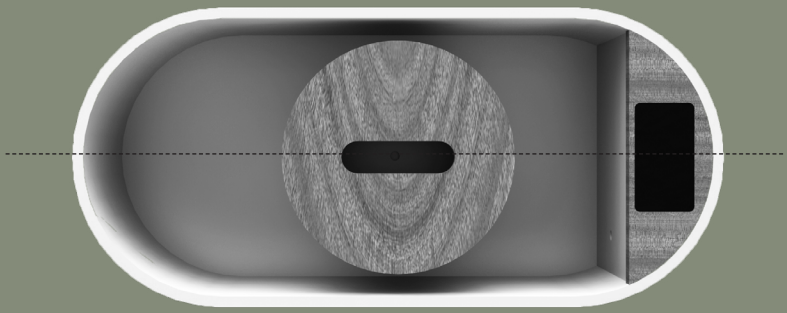
03 Position of the temperature sensor to measure the temperature inside the composting area.

03 Worm tube: worms pass this tube to transfer from soil to composting area and vice versa. Integrated light sensors to track the movement of the worms.

04 Area for technical components: micro-controller, battery & humidity sensor. Solar panel is integrated in this lid.

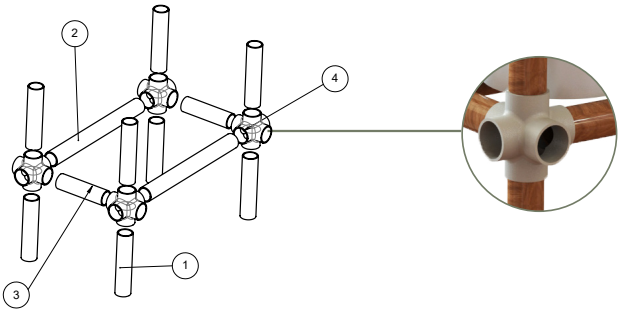
INSIDE THE FLOWERPOT





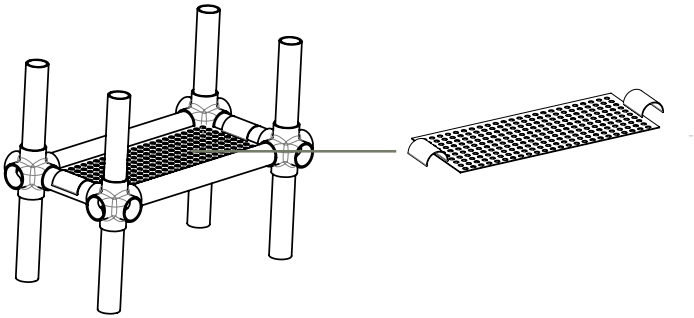
Assembly guidelines

01 Assemble supporting structure using the connectors

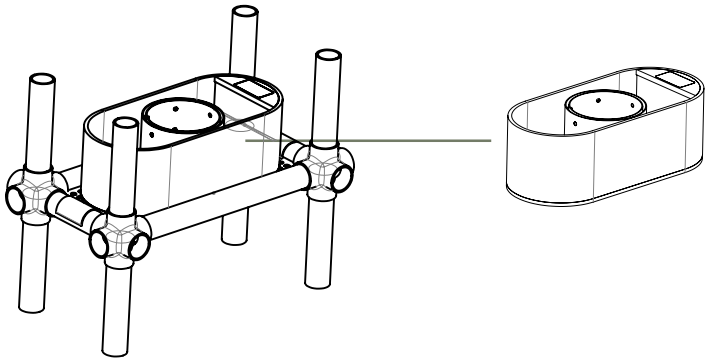


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Bamboo bar 1 (height)	Diameter: 70mm, Length 500 mm	8
2	Bamboo bar 2 (length)	Diameter: 70mm, Length 1000 mm	2
3	Bamboo bar 3 (width)	Diameter: 70mm, Length 400 mm	2
4	Connector	Injection moulded part	4

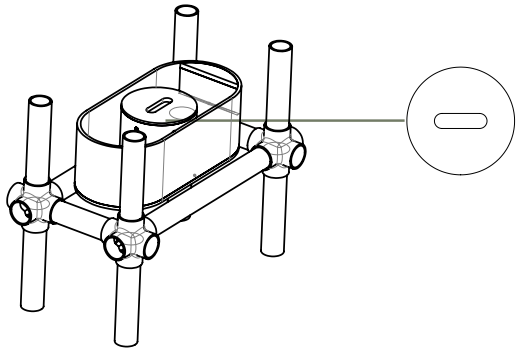
02 Attach aluminium perforated sheet



03 Put the flowerpot in position



04 Put the lid into place



Operating guidelines

01 How to create an optimal composting environment?

The process of vermicomposting will take place inside the inner worm cylinder. The rest of the flowerpot must be filled in with soil. In order to optimize this process of using worms to compost food scraps into vermicompost, you need to follow the next steps:

- Rip the carboard packaging according to the indicated lines

- Fill in inner worm cylinder with shredded cardboard, and wet it down. Allow cardboard to absorb moisture overnight.

- Add 300-600 worms to the bucket.

- Start feeding the worms with kitchen waste.

Parts next to the cylinder must be filled in with soil.

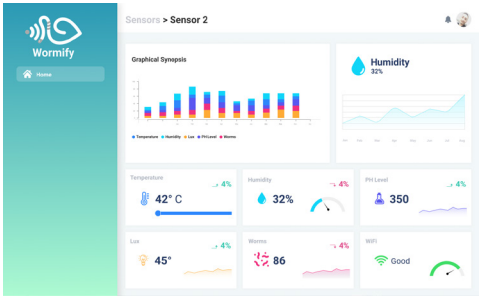
02 What to feed the worms?

- Fruit (except citrus)
- Vegetables (except onions)
- Coffee grounds and filter
- Tea bags
- Crushed egg shells
- Shredded paper

NOT to feed the worms: citrus fruits, oily foods, spicy foods, meat, pountry, fish, dairy foods, vinegar or salad dressings, plants from the onion family (garlic, shallots, leek)

03 Download the wormify app on your phone

The app keeps you informed of all important parameters and allows you to intervene in the system when necessary.



Safety guidelines

Controlling parameters for an optimal composting environment

If a certain value deviates extremely from the ideal, you will be alerted by the app. The app will give you further instructions on how to solve the problem. If the value does not recover, you can request assistance by calling: +351 729 118 931. If necessary we will send an employee to assist.

The structure

The structure can carry a maximum of 500 kg/ module.
Don't sit/stand on one module with more than 3 people.

+351 729 118 931

R. Dr. António Bernardino de
Almeida 431, 4200-072 Porto

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