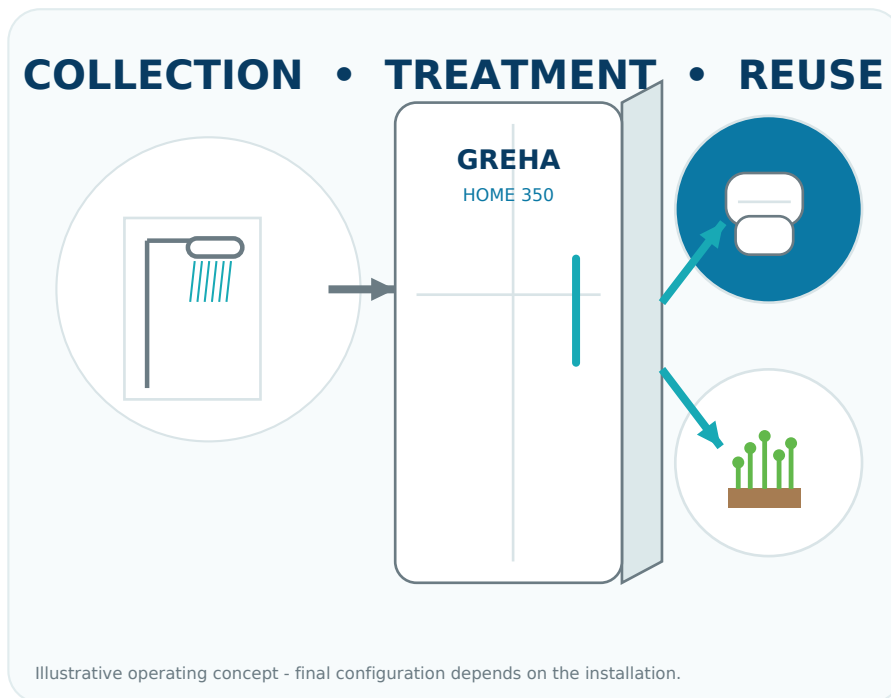


GREHA HOME 350

Residential greywater treatment and reuse system



TYPICAL APPLICATIONS

- Sources: showers, bathtubs and hand wash basins.
- Reuse: toilet flushing, washing machines*, irrigation and outdoor cleaning.
- Homes: new or existing, where separate pipework can be provided.
- Users: designed for 1-4 persons.
- Water: exclusively for non-potable applications.

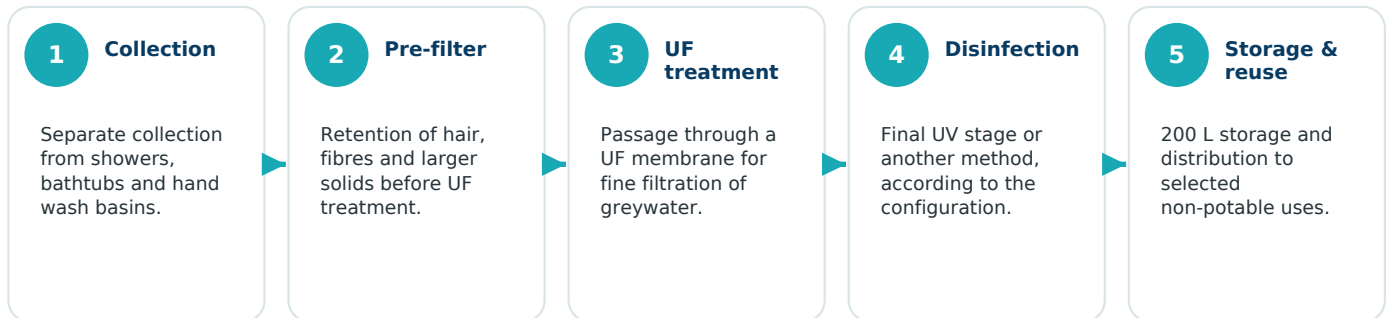
* Washing-machine use depends on local requirements and the appliance manufacturer's instructions.

Key features

- Daily treatment capacity up to 350 L of treated water.
- UF ultrafiltration technology for suspended-solids retention and turbidity reduction.
- Final disinfection stage using UV or another stage, depending on project configuration.
- Integrated 200 L storage for treated non-potable water.
- Automatic PLC control with local status monitoring.
- Compact vertical construction for indoor or protected outdoor installation.
- Level and overflow control for safe daily operation.

Operating principle

The GREHA HOME 350 collects greywater from showers, bathtubs and hand wash basins through separate pipework. The water passes through successive stages of pre-treatment, ultrafiltration and final disinfection, before being stored and supplied to selected non-potable applications.



Greywater sources

- Showers and shower enclosures
- Bathtubs
- Bathroom / hand wash basins

Excluded sources

- Toilets and urinals
- Kitchen sinks and grease traps
- Other blackwater or high-organic-load streams

Treatment stages

Mechanical pre-treatment: protects the UF system from larger solids and fibres.

UF: the membrane acts as a physical barrier to suspended particles and helps reduce the microbial load.

Final disinfection: UV or another suitable stage is applied according to the final design and intended use.

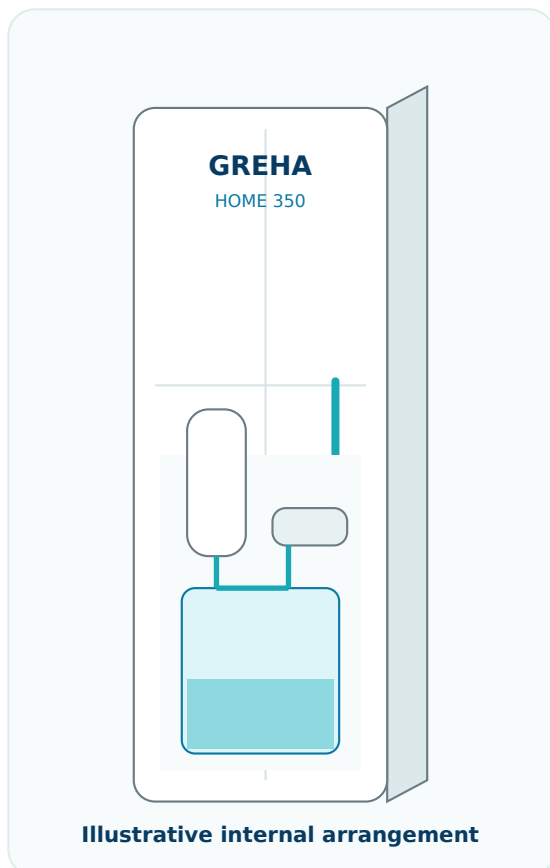
Storage: treated water is held in a separate 200 L tank until required.

Important safety principle

The treated-water network remains completely separate from, and clearly identified against, the potable-water network. The produced water is not intended for drinking, cooking, personal hygiene or food preparation.

System specification

The GREHA HOME 350 is an integrated vertical residential greywater treatment unit. Its exact internal arrangement and individual components may be adapted to project requirements.



1. Unit enclosure

Compact vertical construction protecting the electromechanical components.

2. Inlet and pre-filtration

Ø63 mm connection and initial solids-retention stage.

3. UF ultrafiltration unit

Membrane for fine filtration of pre-treated greywater.

4. Final disinfection

UV or another suitable stage, depending on configuration.

5. Treated-water tank

Integrated 200 L capacity for non-potable water.

6. Pump / hydraulic components

Transfer between stages and supply to the reuse network.

7. PLC and local indication

Automatic control of operation, levels and basic alerts.

8. Overflow and drain

Ø63 mm connection for safe removal of excess water.

Optional equipment / project adaptations

- Automatic backup supply from the potable-water network, with suitable backflow protection.
- Remote monitoring and operating-data logging.
- Pressure set or expansion vessel according to the distribution network.
- Additional storage tank or project-specific connection arrangement.
- Preventive maintenance agreement.

Note: Final component selection, connection sizes and disinfection configuration are confirmed after technical assessment of the home and the expected water balance.

Technical data

GREHA HOME 350

Specification	Value / description
Daily treatment capacity	up to 350 L/day
Recommended users	1-4 persons
Treatment technology	UF ultrafiltration
Final disinfection	UV / other stage, depending on configuration
Treated-water storage	200 L
Electrical supply	230 V AC / 50 Hz
Maximum installed power	500 W
Greywater inlet connection	Ø63 mm
Reuse-water outlet	Specified for each installation
Overflow connection	Ø63 mm
Dimensions W x D x H	600 x 700 x 2,100 mm
Empty unit weight	70 kg
Installation location	Indoor or protected outdoor area
Control system	Automatic PLC controller
Monitoring	Local
Water use	Non-potable applications only

Performance notes

Nominal capacity applies under suitable operating conditions and with incoming greywater compatible with the system design. The actual quantity of reusable water depends on greywater yield, demand, inlet quality, maintenance and installation configuration.

Specifications may be amended as part of continuous technical improvement or project-specific configuration.

Connections and installation requirements

Hydraulic connections

- a. Greywater inlet from showers, bathtubs and hand wash basins: Ø63 mm.
- b. Overflow / safety drain: Ø63 mm.
- c. Treated-water outlet: specified according to the reuse network.
- d. Cleaning or maintenance-water drain, where required.
- e. Optional mains-water backup with approved separation and backflow protection.

Electrical connection

- 230 V AC / 50 Hz supply.
- Suitable circuit protection and earthing by a qualified electrician.
- The control panel must remain accessible and protected from water.

Installation area

- Indoor or protected outdoor area.
- Protection from frost, flooding, direct sunlight and excessive temperatures.
- Stable, level floor with suitable load-bearing capacity.
- Adequate ventilation and lighting.
- Clear access for opening covers, removing filters and carrying out maintenance.

Pipework

- Separate greywater collection pipework.
- Separate and clearly identified non-potable-water pipework.
- No direct connection to the potable-water network.
- Drainage provision for overflow and maintenance work.

Recommended accessories and site works

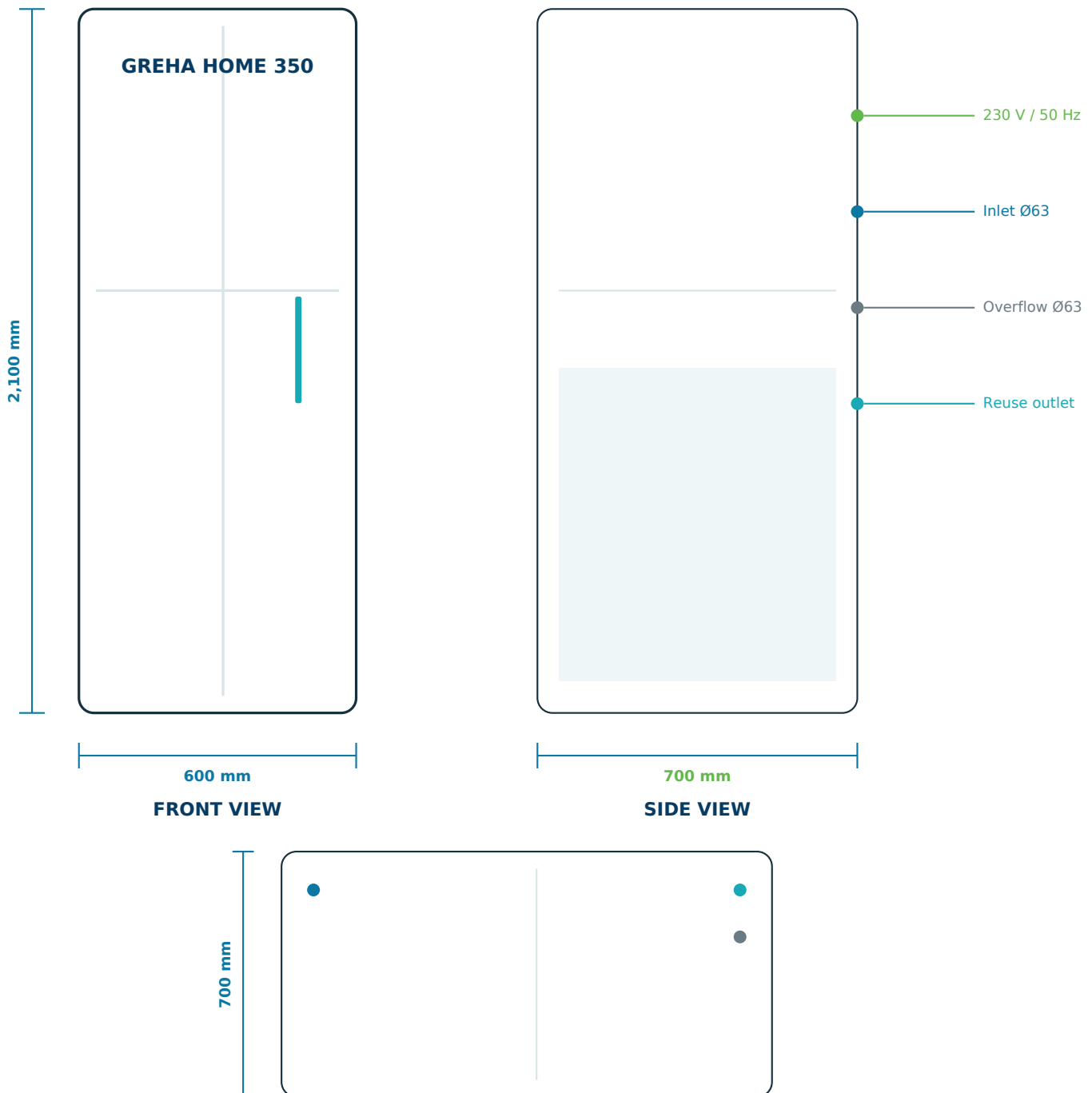
- Pressure set or distribution pump suitable for the required flow and pressure.
- Isolation valves, non-return valves and drain points for easy maintenance.
- "NON-POTABLE WATER" identification on pipework and points of use.
- Sampling point, where required by the design or local requirements.
- Preventive maintenance of filters, UF, disinfection, pumps, sensors and tank.

Notes

Building works, external pipework, electrical lines, drainage networks, backflow-protection systems and special bases are not included with the standard unit unless expressly stated in the quotation. Installation must be carried out by suitably qualified technicians and comply with applicable local requirements.

Illustrative installation drawing

The following views are illustrative and do not replace the approved project installation drawing.



Final connection positions and required service clearances are defined in the project drawing. Dimensions refer to the unit only and exclude external pipework, valves and accessories.