

Installation Guideline

Uponor Septic tank 4,5m³

uponor



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Use

Septic tank 4,5m³ is aimed for pre-treatment of domestic wastewater from up to two households as part of an infiltration or sand filter treatment system.

Structure

The three-chamber tank is produced of polyethylene (PE). The pump version is equipped with a pump.

Placing

Place the tank in green area or other areas without traffic loading.

Function

The domestic wastewater from the households is lead to an soil treatment system, which consists of a septic tank and a soil treatment field. The septic tank is dimensioned for up to 10 persons. In the septic tank the settleable solids sink to the bottom and floating substances like fats to the surface. The pre-treated wastewater is lead to the soil treatment field for biological treatment.

Planning

- Do not lead rain or drainage water to the system
- Do not plant trees closer than 3 m from the soil treatment field
- The tank is ventilated to the roof of the house. Do not use a vacuum valve

What can be put in the sewer?

- Do not put in the sewer substances, which don't belong there, so that the function of the soil treatment system is not disturbed
- Do not flush into the sewer the following:
 - household and other waste (potato or fruit peels, food scraps, coffee grounds, cigarette butts)
 - wrapping or newsprint, paper towels
 - textiles, e.g., tights
 - diapers, tampons, cotton swabs, bandages or condoms
 - outdated or unused medicines
 - sand or construction waste
 - grease, oil or substances that form toxic gases
 - petrol, solvents, paints or other flammable or explosive substances

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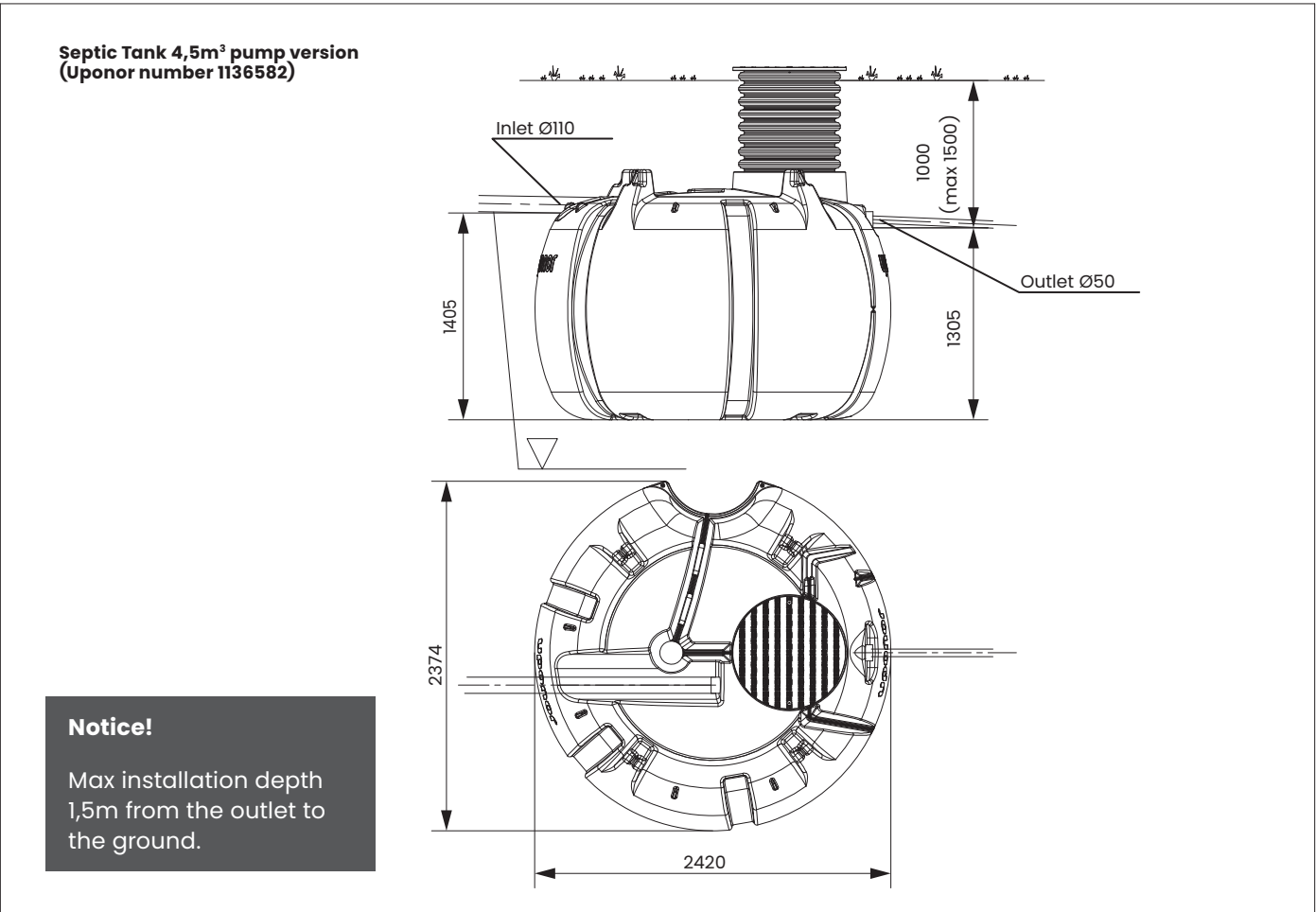
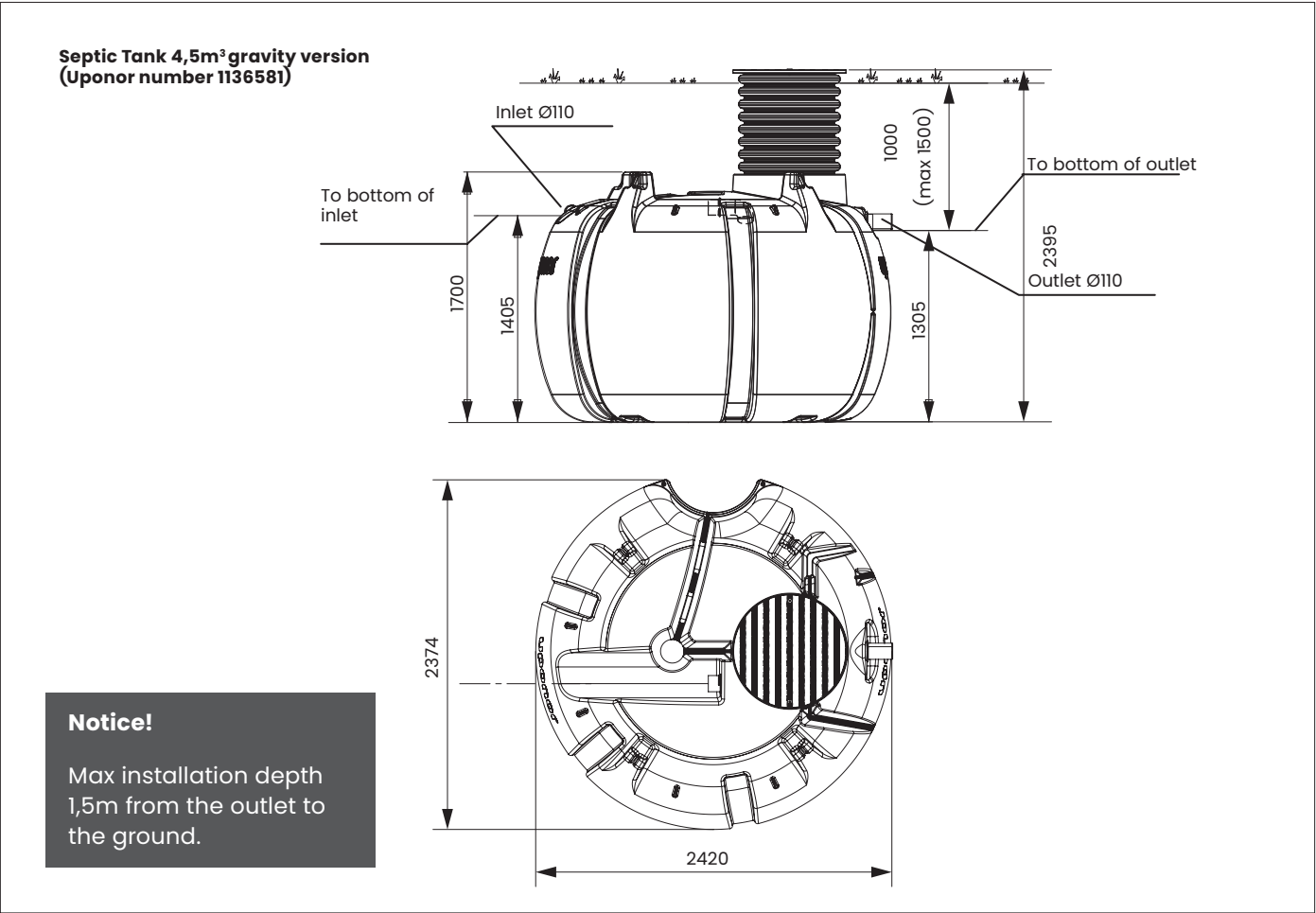
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We reserve the right to make changes.

Component list

Pump version	Gravity version
1. Lid 2. Lid sealing ring 3. Riser pipe L = 800 mm 4. Chamber riser pipe sealing ring 5. Inlet bend for syl tank 6. Chamber manchette 110mm 7. Pump package 8. Tank body 4,5m ³	1. Lid 2. Lid sealing ring 3. Riser pipe L = 800 mm 4. Chamber riser pipe sealing ring 5. Inlet bend for syl tank 6. Chamber manchette 110mm 7. T-pipe 110mm/110mm for septic tanks 8. Socket pipe 110mm 9. Tank body 4,5m ³

Dimensional drawings



Technical data

Dimensions		
Total volume	4,5m ³	
Chamber 1 volume	3,15m ³	
Chamber 2 volume	0,90m ³	
Chamber 3 volume	0,45m ³	
Length	2420mm	
Width	2420mm	
Height	1520mm	
Height with riser	2395mm	
Weight	275kg	
Inlet pipe Ø	110mm	
Outlet pipe Ø	Gravity version 110mm	Pump version 50mm
Riser pipe Ø	684mm	
Lid Ø	770mm	

Item numbers	Gravity version	Pump version
Uponor number	1136581	1136582
RSK number	5636000	5636001
LVI-number	3624863	3624864
VVS number	223141104	223141204
Standard	EN 12566-1, CE mark	

Accessories	Uponor number	RSK	LVI	VVS
Extension riser pipe Ø684 x 1,2m	1086666	4505613	3625040	
Anchoring system (need 3 sets)	1003563	5610465	3625391	223289902
Wireless alarm	1050927	5618205	3625364	223279810

Max installation height	Standard riser	Extension riser
Soil surface to tank bottom	2000mm	2400mm
Soil surface to the bottom of outlet pipe	1100mm	1500mm

Technical data, pump	
Pump type	Xylem DXM 35-5
Power	single-phase, 230V, 50Hz
Power consumption	0,55kW
Weight	10,2kg
Max flow	19,5m ³ /h
Max head	10,7m
Max particle size	35mm

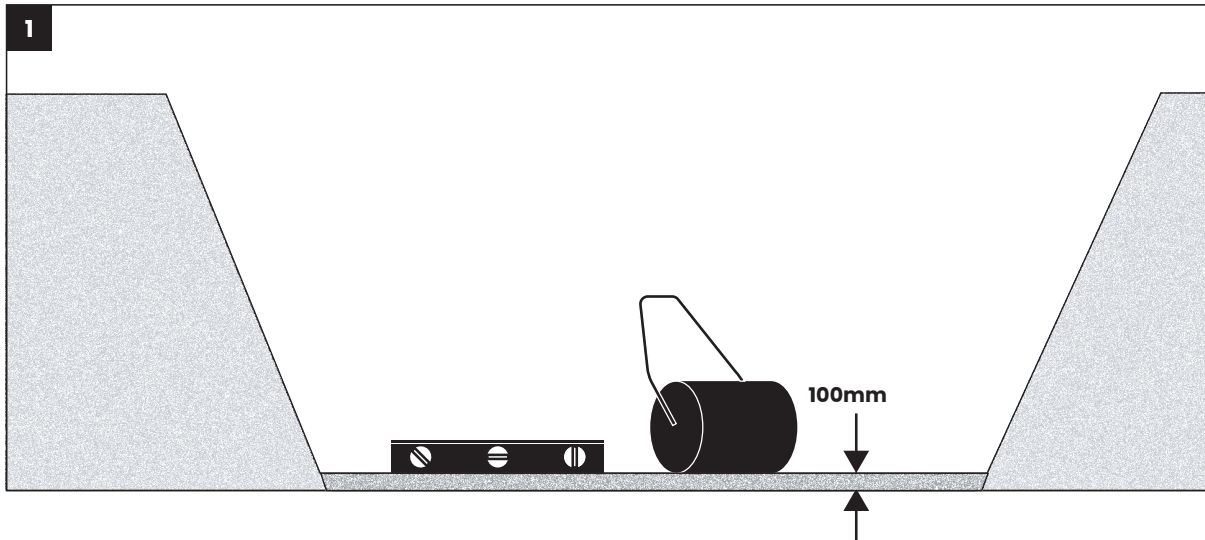
Pipe length from tank to discharge point with 2m height		
Pipe Ø	50mm	63mm
Length	max 100m	max 200m

Installation

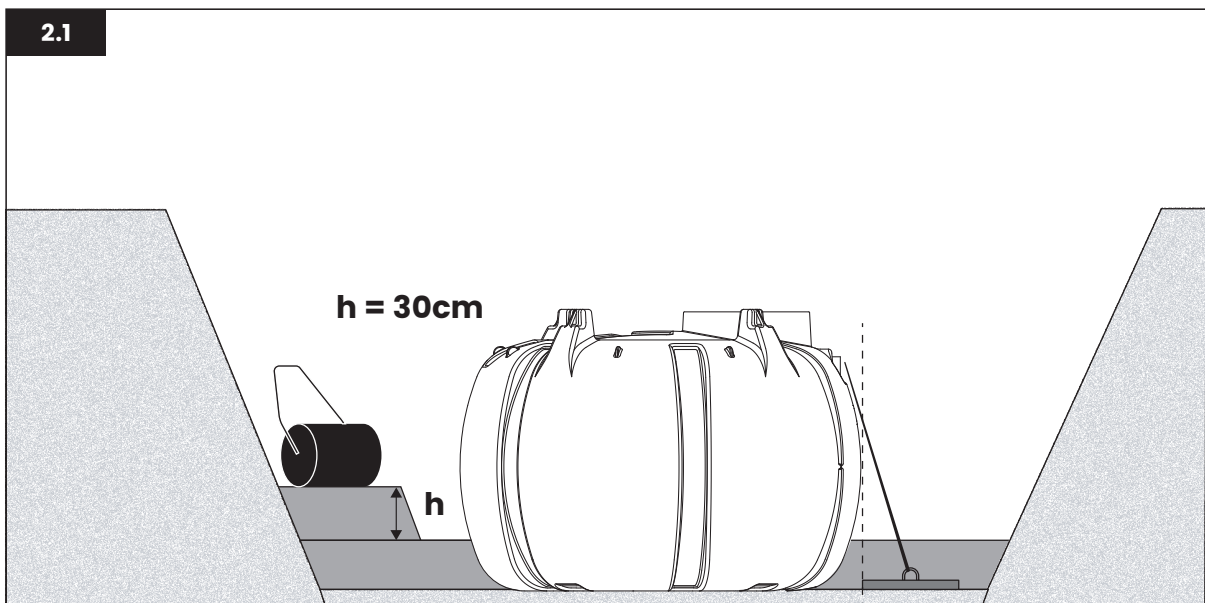
General

Check that all the components are in the delivery.
Installation is to be carried out by a professional installer and electrical installation by an authorized electrician.

Installation steps

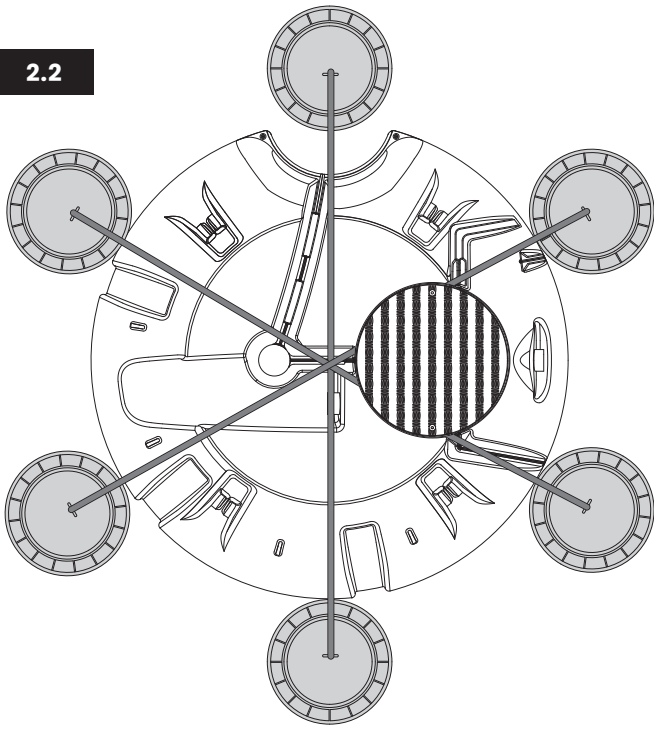


- Dimension the trench so that there is space for the anchoring plates on the sides of the tank. The bottom of the trench is to be 10cm deeper than the bottom of the tank.
- Spread on the trench bottom a layer of stoneless sand or gravel.
- Compress and level the bottom.



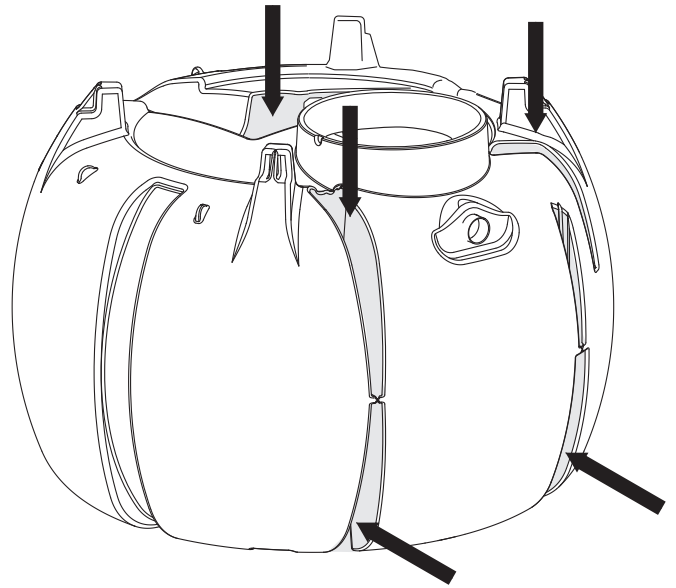
- Lift the tank with lifting belts to the bottom of the trench. Check that the tank is level and the height is right in relation to the inlet sewer pipe.
- Before backfilling fill the tank with water to about $\frac{3}{4}$ of the full volume. Backfill the trench with stoneless sand or gravel and compress in 30 cm layers to the bottom of the inlet and outlet pipes.

2.2



- Anchor the tank if there is risk of high groundwater. Use 3 Uponor anchoring sets.

2.3



- Fill also the wall-grooves from the top and from sides as much as possible as well as the hole in the middle of the tank. Compress them with water.

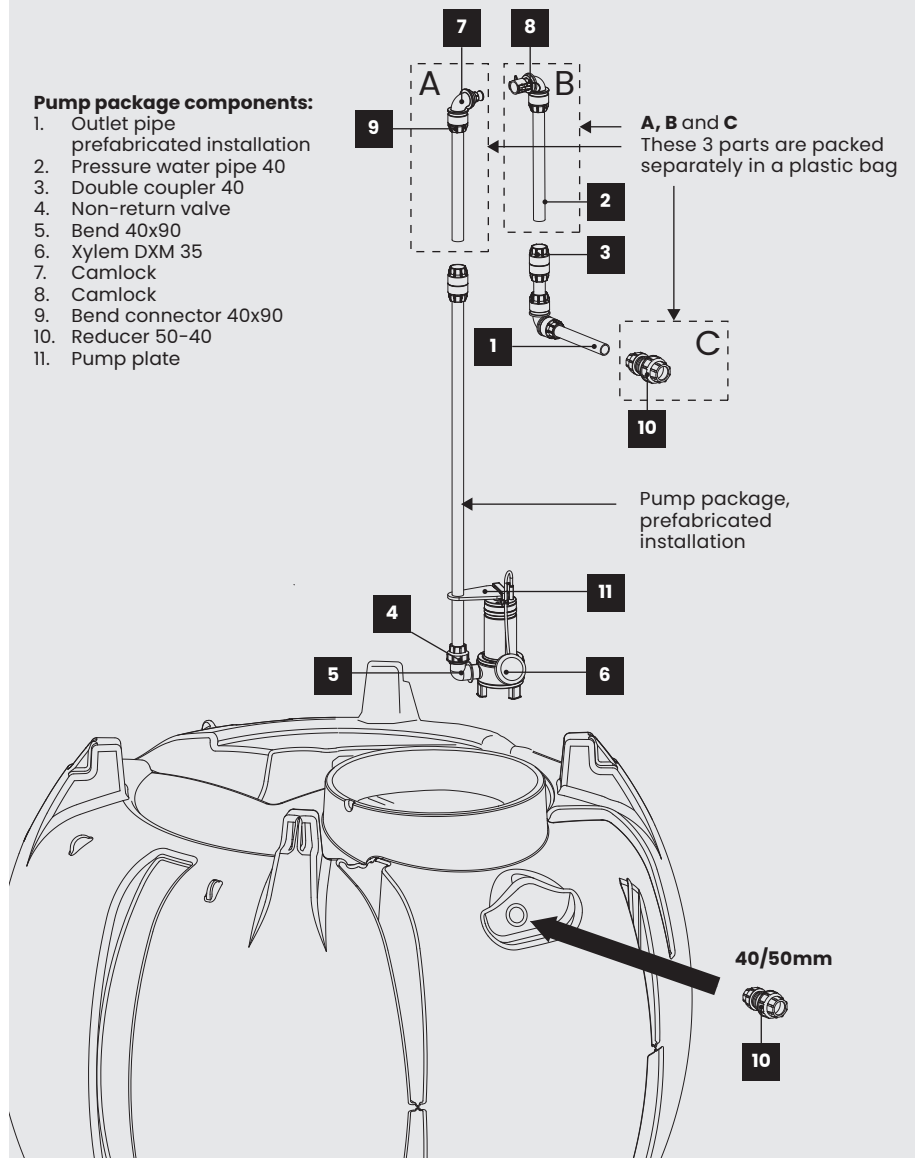
Pump version:

- Check that the level switch can move freely in the tank. Mount the extension 50/40 to the outlet pipe.

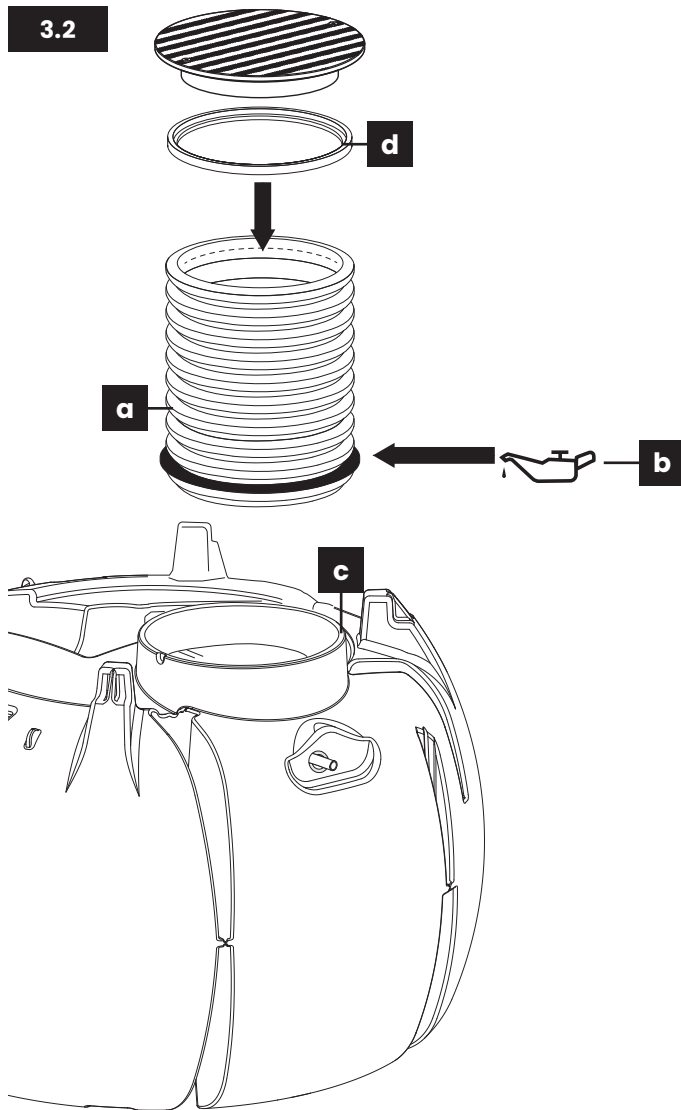
3.1

Pump package components:

- Outlet pipe prefabricated installation
- Pressure water pipe 40
- Double coupler 40
- Non-return valve
- Bend 40x90
- Xylem DXM 35
- Camlock
- Camlock
- Bend connector 40x90
- Reducer 50-40
- Pump plate



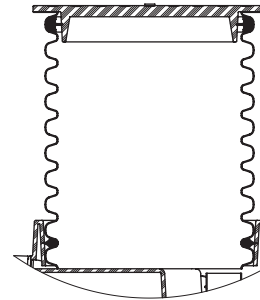
3.2



Both versions:

Riser mounting:

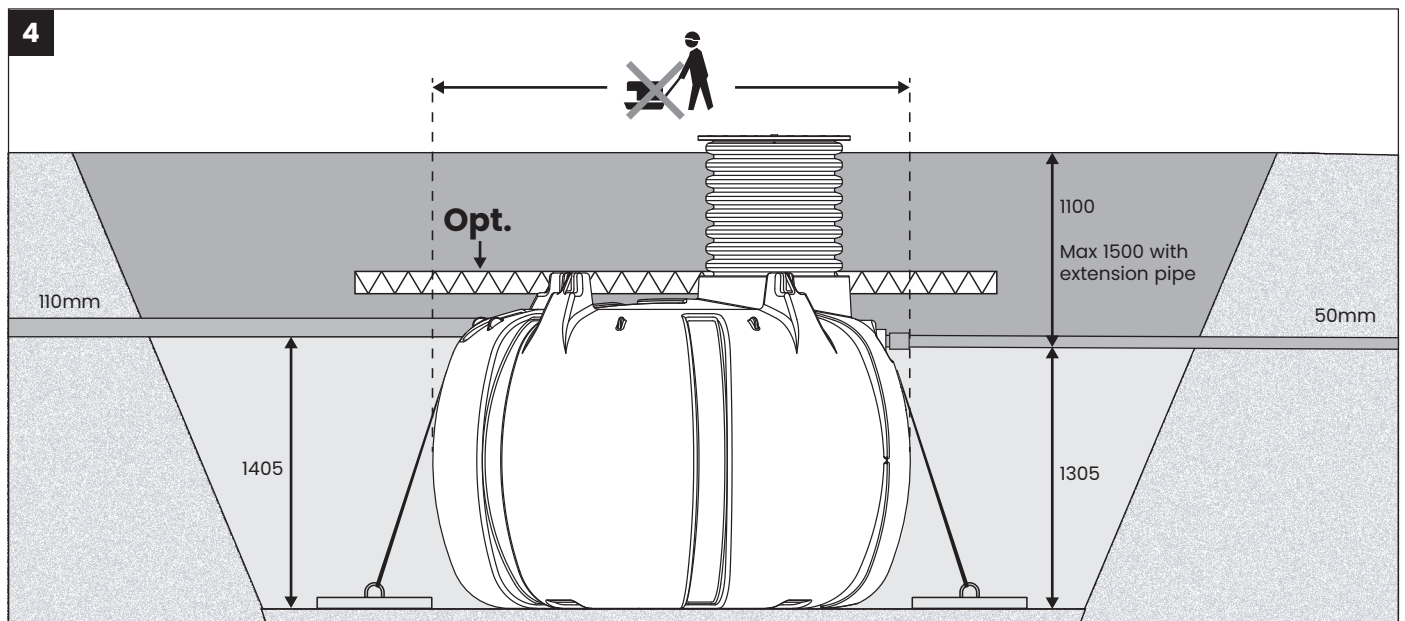
- Mount the riser sealing ring to the first groove of the riser pipe
- Lubricate the sealing ring and the socket in the tank
- Press the riser pipe to the bottom of the socket
- Mount the lid sealing ring inside the riser to the upper most corrugation groove. For transportation the lid sealing is fixed to the bottom of the lid. Press the lid to its place.



Riser height:

- Max installation height with standard riser is 1,1m from the bottom of the outlet pipe to the soil surface.
- With the extension pipe (108666 SEPTIC TANK EXTENSION PIPE 684 x 1,2M) the max installation depth is 1,5m from the bottom of the outlet pipe to the soil surface

4



- Insulate the tank and the inlet and outlet pipes if needed.
- Backfill the trench to the soil surface. Do not compress with machine on top of the tank. Shape the soil surface to guide the surface waters away from the tank.
- Leave the tank $\frac{1}{3}$ full of water after the installation. After sludge emptying, fill the tank with water to $\frac{2}{3}$ of tank volume.

Electrical installation

Power connection

Bring power cable (3 x 1,5mm²) from the switchboard to the tank. Mount a breaker on the line so that power can be cut for service. Electrical installation is to be carried out by an authorized electrician.

The IP-class of the connection box needs to be minimum IP44 and is to be mounted on the outside of the riser pipe.

Alarm

Uponor wireless alarm (Uponor no 1050927) can be used to secure the functioning of the septic tank with pump. The level sensor shall be installed in the pump chamber to 20 cm below the middle wall.

Pump cable		Connection box		3 x 1,5mm ²		Switchboard
Brown	→	Coupling	→	Brown	→	L1
Blue	→	Coupling	→	Blue	→	N
Yellow/green	→	Coupling	→	Yellow/green	→	PE

Service and maintenance

Septic tank and distribution chamber

Empty the septic tank minimum once a year. During sludge emptying it is possible to clean also the possible accumulated sludge from the distribution chamber. Check same time visually the condition of the septic tank and the distribution chamber. Flush the possible bio-growth from the walls. Check the adjustment of flow regulators. Check the lids and their locking.

NOTE!

Empty the compartments in this order: first, second and last the third compartment. This to avoid sludge flow from compartment to compartment. After the sludge emptying, fill the tank to ¾ of the volume with water in opposite order; third, second and last the first compartment.

Pump and pump module

Minimum once a year:

- Check the free function of the start switch
- Check the function of the back-flow valve.

Minimum every two years:

- Check and clean the pump according to the manufacturer's instructions.
- Check that the connections of the pump module are tight.

Service logbook

Remember to log the sludge emptyings and other maintenance activities to the service logbook. This helps in possible troubleshooting. If you have other questions of the maintenance and control of your wastewater treatment system, we ask you to contact the environmental authority of your municipality or Uponor's retailer.

Wireless alarm

Lift up the sensor of the wireless alarm from the tank and flush it clean.

DECLARATION OF PERFORMANCE

CPR-5-IWW-1000007

1. Unique identification code of the product-type:

SEPTIC TANK 4,5M3, product number 1136581
SEPTIC TANK 4,5M3 WITH PUMP, product number 1136582

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

n/a

3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

Prefabricated septic tank

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

Uponor Infra AB, SE 513 81 Fristad, Sweden

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

Uponor Infra Oy, FIN-15561 Nastola, Finland
Uponor Infra A/S, DK-4450 Jyderup, Denmark
Uponor Infra AS, N-0195 Oslo, Norway
Uponor Infra AS, 13811 Tallinn, Estonia
Uponor Latvia SIA, LV-1045 Riga, Latvia
Uponor UAB, LT-06115 Vilnius, Lithuania

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

System 3

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

EN 12566-1:2000/A1:2003

Initial type testing of product under system 3 performed by:

- *Prüfinstitut für Abwassertechnik (PIA GmbH), Hergenrather Weg 30, 52074 Aachen, Germany, Notified Body No. 1739*
Test reports: PIA2022-WD-NC-2211-1065, PIA2022-HWG-2211-1065
- *Eurofins, Box 47, FI-02151 Espoo, Finland, Notified Body No. 0809*
Test report: EUFI29-22001035-T1

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

n/a

9. Declared performance

Essential characteristics	Performance	Harmonised technical specification
Hydraulic efficiency	Gravity: 0,4 g of beads With pump: 0,7 g of beads	EN 12566-1:2000/A1:2003
Nominal capacity	Gravity: 4,5 m ³ With pump: 4,0 m ³	
Watertightness	Pass	
Crushing resistance	Pass	
Durability	Pass	
Reaction to fire	NPD	
Release of dangerous substance	NDP	

10. The performance of the product identified in point 1 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:



Niila Tast
Application Manager
IWW
19.12.2022

Contact information

Planner

Name	Phone
Address	
	E-mail

Place of purchase

Name	Phone
Address	
	E-mail

Installer/contractor

Name	Phone
Address	
	E-mail

Service

Name	Phone
Address	
	E-mail

Sludge emptying

Name	Phone
Address	
	E-mail

Environmental authority in your municipality

Name	Phone
Address	
	E-mail

Service logbook

Uponor septic tank 4,5m³ with pump

[illegible]



Uponor Infra Oy

www.uponor.com/fi-fi

www.uponor.com/sv-se

www.uponor.com/nb-no

We reserve the right to make changes

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