



**RainBackup<sup>®</sup>**  
in a **Box**

## Quick Install

The Rain Backup in a Box Direct Feed System  
For House & Garden With Carat Tanks



### Uses For This System

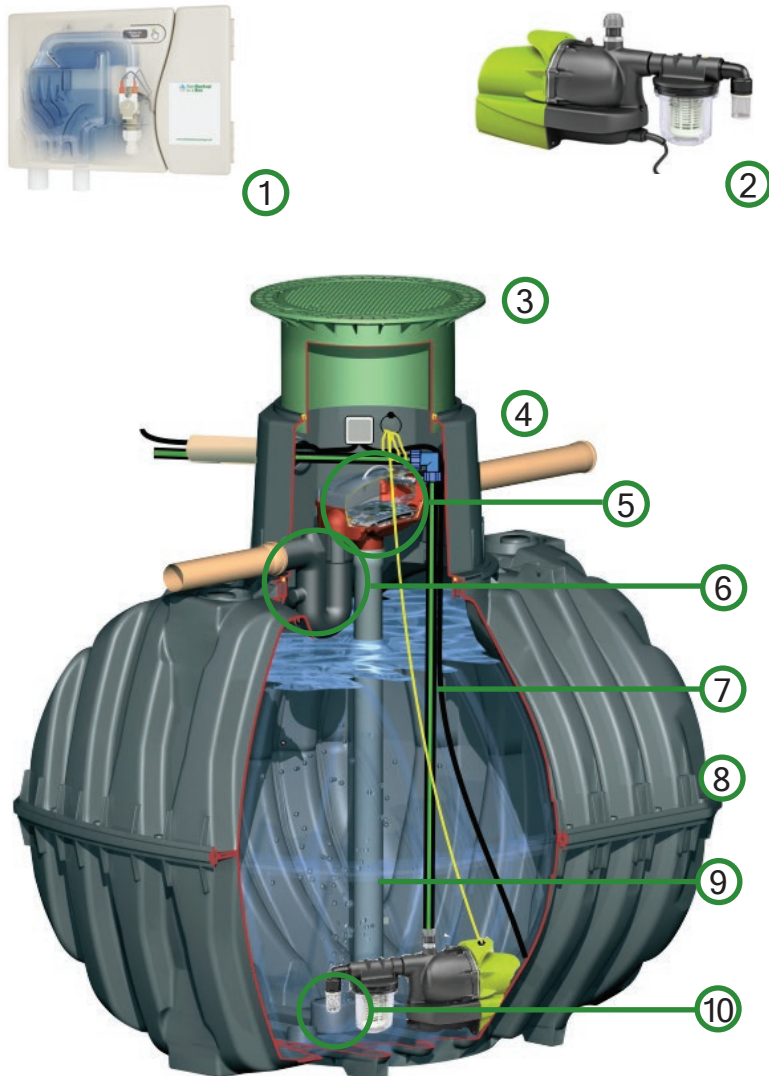
- Toilets
- Washing Machines
- Garden Irrigation
- Vehicle Washing

1. **Overflow Pipe:** Making sure that there is sufficient fall to encourage flow to the soakaway.
2. **Tank:** Carat two piece tank. Must be assembled as per manufactures instructions.
3. **Float Switch:** Connected to the control unit.
4. **HydroForce Series 3 Pump:** Supplied with 25mm outlet connector, must be primed before use. *See comprehensive pump manual.*
5. **Black & Green HDPE Pipe:** Running from the pump to the property using 4-inch service duct.
6. **Optimax Self-Cleaning Filter:** Must be fitted as per manufactures instructions.
7. **Mains Water Supply:** Running from the Rain Backup in a Box to the underground tank.
8. **Outside Tap:** Must be plumbed directly from the pump. *See plumbing schematic in the Rain Backup in a Box installation manual.*
9. **Mains Water Supply:** Running into the control unit.
10. **Rain Backup in a Box Control Unit.**
11. **Rainwater to appliances.**



## System Components

1. Rain Backup in a Box unit
2. HydroForce pump
3. Carat telescopic lid
4. Carat tank dome (turret)
5. Optimax Pro-Filter
6. Overflow siphon
7. Green & Black HDPE pipe
8. Carat tank (2 pieces)
9. Tank pipe
10. Calmed inlet
  - » Slip couplers
  - » Comprehensive user guide and installer manual
  - » Carat dome sealing kit
  - » Carat accessory pack



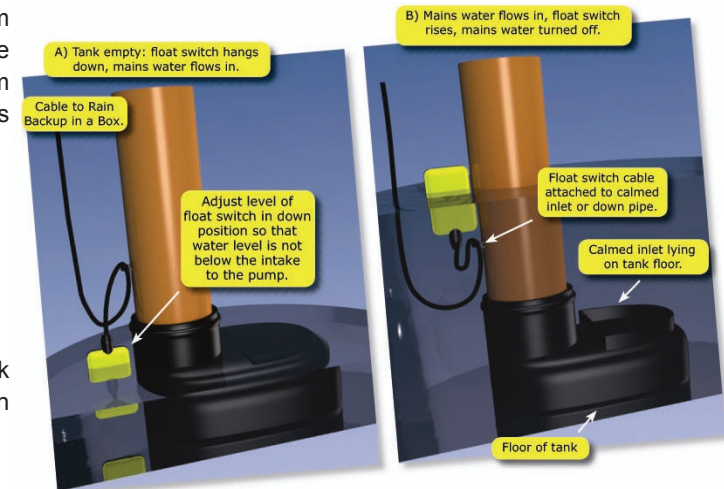
## Important Notes on Installation

### Tank

- **Make sure your underground tank is kept clean and free of debris.**
- Do not use the pump supplied to empty a dirty underground tank.
- Do not use gullies or P Traps.

### Control Unit & Piping

- Mount the control unit to the wall in a dry, frost free area such as in a utility room or where mains water is available.
- The overflow pipe at the middle of the control unit should flow to the exterior of the property through a pipe which offers no constriction and discharged over the ground.
- Pipe the outlet of the weir using 36mm waste pipe from the bottom left of the unit to the rainwater storage tank. At least the first 300mm must be straight.
- Channel the float switch cable to the underground storage tank. Typically this is through a service pipe made of 4 inch (110 mm) plastic which also carries (i) the mains electricity supply to the submerged pump (if so fitted) and (ii) the return pipe carrying rainwater from the storage tank back to the appliances in the house.
- In the tank the minimum length of teather on the float switch must be 150mm (6-inches) from where it is connected.
- For further plumbing schematics and installation of pipe work please see installation manual, provided within the control unit box.
- Flush through your pipework before connecting the Rain Backup in a Box.



### Pump

- Pump priming: It is **essential** that the pump is primed before use. See pump installation manual supplied with the pump.
- Connect the outlet connection using rainwater marked pipe of diameter between 25mm or 32mm.
- The vertical rainwater pipe should be the right length so that a 90° elbow (supplied) in the turret is at the level of the 4 inch service pipe in which the rainwater pipe is fed to the building.
- It is recommended to place an electrical connection into the highest point of the turret for easy quick maintenance, IP66 rated or better connection box or socket must be used, not supplied.

For further instruction on priming and installation of the pump and how it functions please see the manual provided.