1. **Tank:** Carat two piece tank. Must be assembled as per manufacturer’s instructions.

2. **HydroForce Series 3 Pump:** Supplied with 25mm outlet connector, must be primed before use. See comprehensive pump manual.

3. **Optimax Self-Cleaning Filter:** Must be fitted as per manufacturer’s instructions.

4. **Overflow Pipe:** Making sure that there is sufficient fall to encourage flow to the soakaway.

5. **Black & Green HDPE Pipe:** Running from the pump to the property using 4-inch service duct.

6. **Outside Tap:** Must be plumbed directly from the pump. See plumbing schematic in the Rain Director install manual.

7. **Rain Director Control Unit:** When fitting the control unit, install the pipe allowing sufficient movement for the removal of the solenoids.

8. **Mains Water Supply:** Running from the control unit to the Smart Header Tank.

9. **Rainwater Supply:** Running from the control unit to the Smart Header Tank.

10. **Gravity Feed Pipework:** Running from the Smart Header Tank to appliances.

11. **Smart Header Tank:** Must be a minimum of 1.2m above the control unit and highest appliance.

---

Uses For This System

- Toilets
- Washing Machines
- Garden Irrigation
- Vehicle Washing
System Components

1. Rain Director control unit
2. HydroForce pump
3. Smart header tank
4. Carat telescopic lid
5. Carat tank dome (turret)
6. Optimax Pro-Filter
7. Overflow siphon
8. Carat tank (2 pieces)

9. Tank pipe
10. Calmed inlet
   » Cat5 cable
   » Comprehensive user guide and installer manuals
   » Green & Black HDPE pipe
   » Carat dome sealing kit
   » Carat accessory pack

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
- 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, at least 1.2 metres below the bottom of the header tank.
- When fitting the control unit install the pipe allowing sufficient movement for the removal of the solenoids.

Pipework
- Avoid sharp bends, inverted U’s and any upward gradients in your pipework.
- For further plumbing schematics and installation of pipework please see glossy installation manual. (Provided with the control unit).
- Flush through your pipework before connecting the control unit.
- Use as large a bore pipework as possible from header tank to appliances to aid flow.
- Internal pipework must be labelled to identify rainwater.

Smart Header Tank
- Select an accessible part of the roof space, as you might need access to the header tank.
- The header tank must be fitted at least 1.2 metres above the highest appliance. The higher the tank, the better the pressure.
- When installing keep the header tank clean & clear of debris.
- The cat 5 data cable must be installed as provided and not be cut. (If you require a longer cable please inform RWH and we can provide one).
- At the rear of the header tank ensure the mains water pipe into the back of the Torbeck valve has a 90° bend and is properly supported. Excess weight can distort the tank and effect operation.
- The 40mm overflow pipe must flow directly to the outside of the property.

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.