

# Recycle Ready Guide – Hydraloop Concealed

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## Introduction

This guide will help you determine whether your building is Recycle Ready, or which steps you'll have to take to make your building ready to recycle your greywater using the Hydraloop Concealed.

## What is Recycle Ready?

Traditionally, all drains are connected and all water is flushed away to the sewer system. Drinking water in, 1-time use, then flushed away.

To break this wasteful cycle, you can start using water twice! But you cannot use all the water again. Water with human waste or from the kitchen is too polluted to use again, and still needs to be flushed away to the sewer.

Water from the shower can be used again. This is lightly polluted water, or grey water. To use this water twice, you need to (re)route the grey water drain to the Hydraloop. The Hydraloop will recycle the water which can be used for flushing the toilet(s) or washing your laundry.

Being Recycle Ready means all pipework is prepared for a Hydraloop to work its magic!

## How does the Hydraloop Concealed work?

The Hydraloop Concealed recycles grey water via an airtight aerated bioreactor much like an industrial sewage cleaning facility does. Grey water is harvested from the grey water waste pipes without intruding in the wastewater flow.

The Concealed has an integrated toilet flush system to which any wall hung toilet pan can be hung directly which will be flushed with recycled water. An additional toilet cistern and/or washing machine can be connected.

Each Hydraloop is connected to the internet for online monitoring through the Hydraloop Device Manager (HDM). With the HDM you can monitor the greywater recycling and it can be used for (remote) maintenance and troubleshooting.

## Recycle Ready checklist

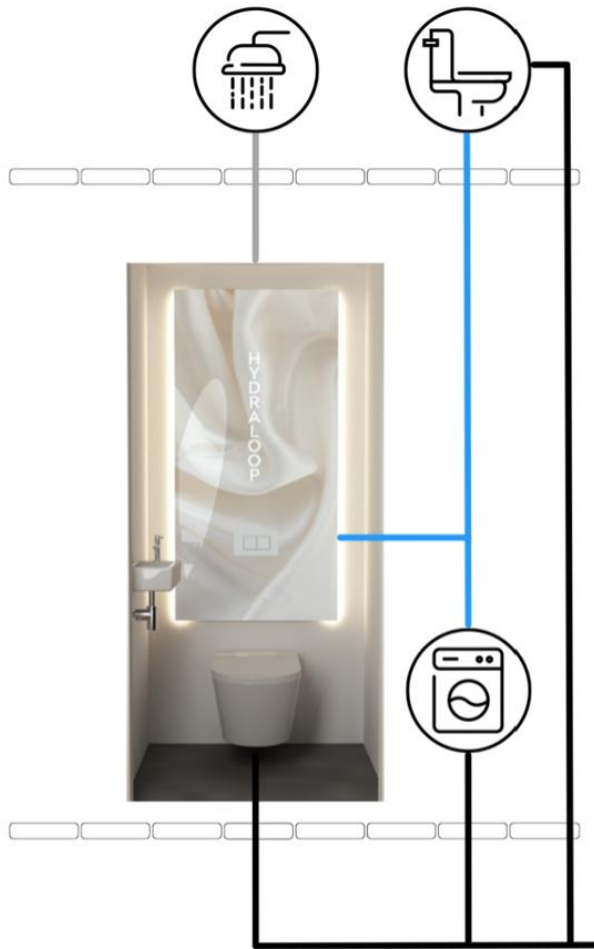
When you decide to install a Hydraloop it is important to confirm your building is Recycle Ready. Before installation, and together with your qualified installer, you then need to submit a signed copy of the [Recycle Ready Checklist](#) to your Hydraloop partner for verification.



## Recycled water connection options



*Option 1: Toilet on build-in system*



### *Option 2: Additional connection(s)*

There are 2 available options for recycled water connections:

- Option 1, use recycled shower water for flushing any toilet using the build-in wall hung cistern connection;
- Option 2, use the additional connections to use recycled water for another toilet and/or washing machine.



## Connection feature per model:

Features	Concealed Base	Concealed Standard	Concealed Premium
Shower input	O	O	O
Bath/shower combi input *	O	O	O
Integrated toilet cistern	O	O	O
Additional toilet outlet	A	A	O
Washing machine outlet	A	A	O

\* When a bath is emptied, drainage capacity may exceed Hydraloop input capacity and not all water may be recycled.

O = Included

A = Optional



## Installation dimensions

These drawings provide all necessary dimensions to prepare for an easy installation of the Hydraloop Concealed.

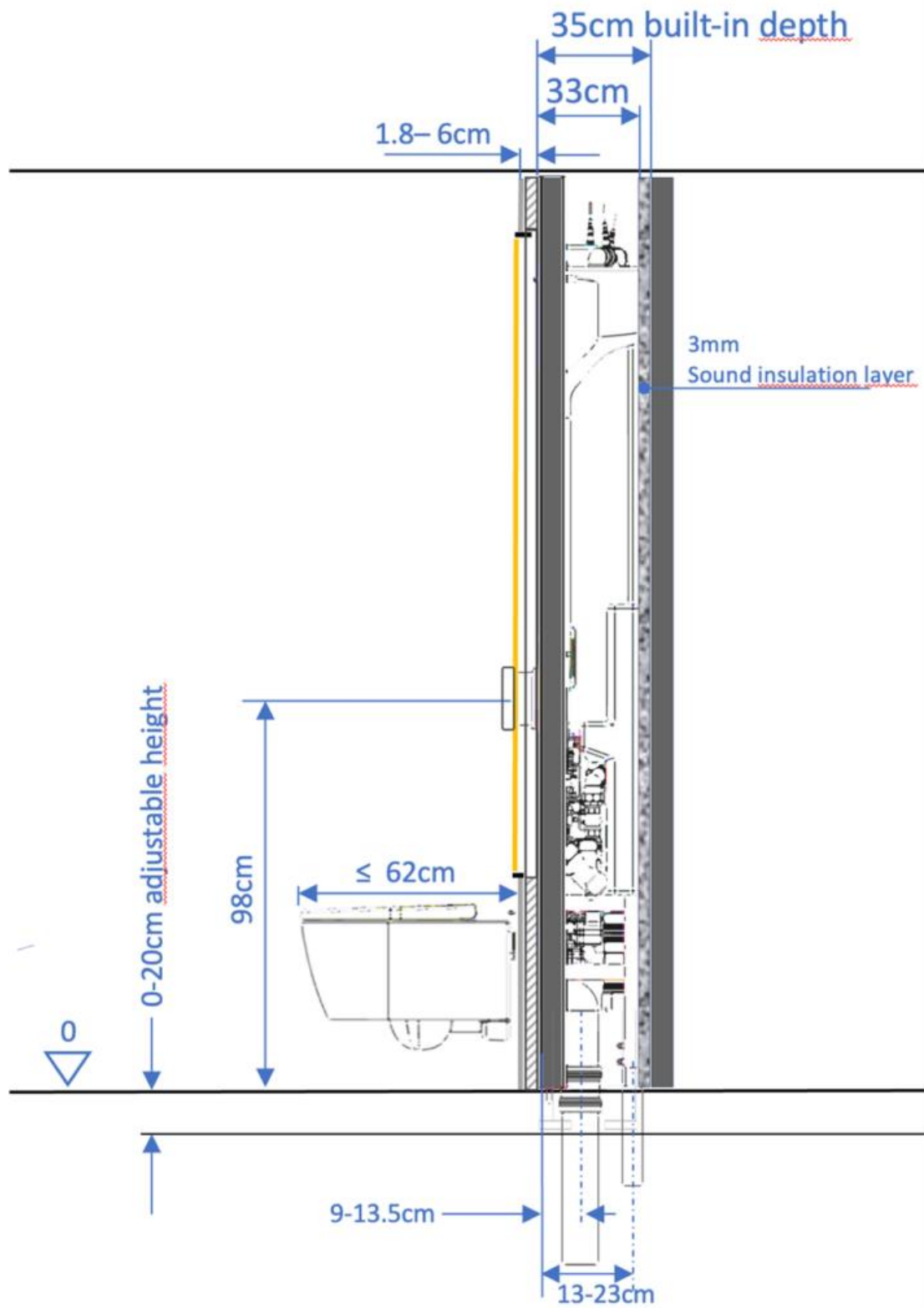


Image 1: Cross section Hydraloop Concealed

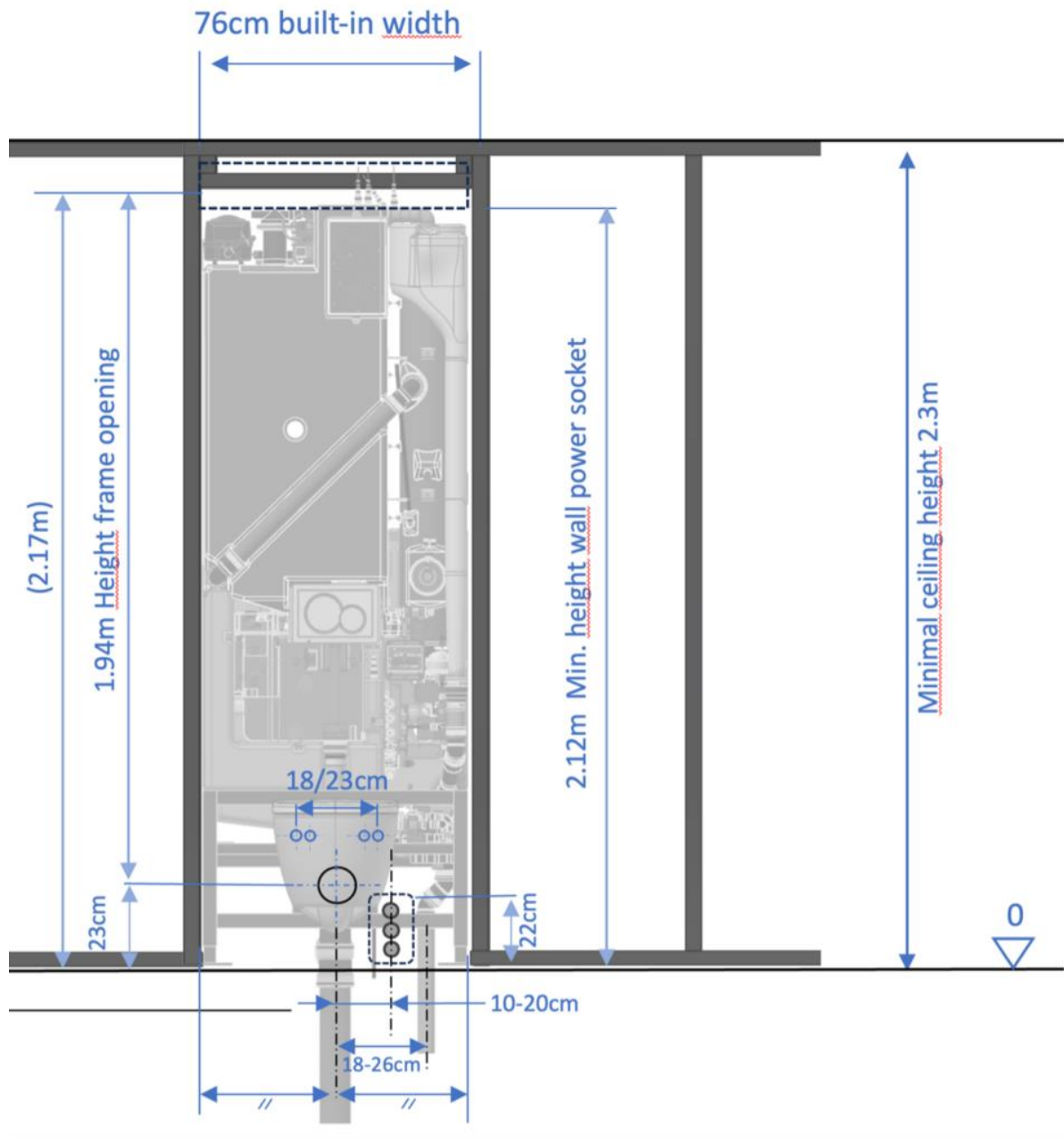


Image 2: Front view Hydraloop Concealed



The following connections are required

Location	Connection
Above	Wall plug, 230 V
Above (optional)	Ethernet cable (required if no WiFi)
Floor	Toilet wastewater connection: 110 mm
Floor	Hydraloop wastewater: 40 mm
Below	Backup water, drinking water connection, ½" BSP (Between toilet and Hydraloop drains)
Below (optional)	Additional toilet outlet, ½" BSP
Below (optional)	Washing machine outlet, ½" BSP

## Grey water inlet options

### **Hydraloop on a lower level – input by gravity**

Greywater from the shower/bath or other sources is gravity-fed to the top of the Hydraloop device.

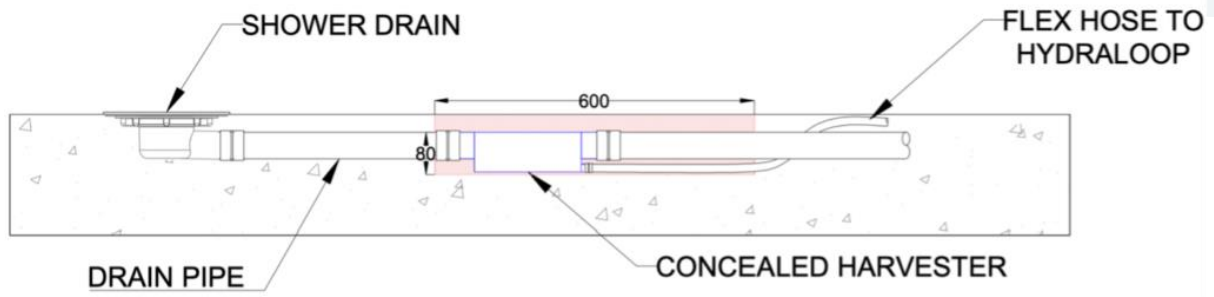
### **Hydraloop on the same level – input via third party lift pump**

Any lift pump may be used to get the grey water from the same or lower level shower, into the Hydraloop Concealed. Install the lift pump according to the manufacturers' specification.

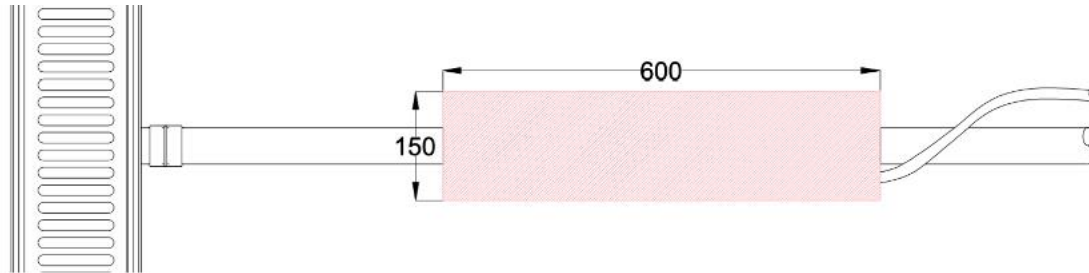
### **Hydraloop on the same level – input via Hydraloop lift pump (optional)**

The Hydraloop lift pump is a diaphragm suction pump, installed on the top of the Hydraloop concealed. An additional greywater Harvester needs to be placed.

The Harvester needs to be installed in the greywater drain. Via a secure hose connection, grey water will be suction-pumped into the Hydraloop. The Harvester requires a 600 mm long, 150 mm wide, 80 mm deep installation space. Depth is measured from the top of the connecting drain. See a cross section and top view below.



Harvester location cross section. Hatched area is minimal requirement for installation



Top view, Harvester installation space. Hatched area is minimal requirement for installation.

Activation of the Hydraloop lift pump is managed via:

- Wireless push button (RFID)
- Infrared wall sensor (wired)
- Water sensor in cold water line to shower tap (wired)

Wired connections should be installed by a certified electrician. Detailed information can be obtained on request.

Plumbing options	Hydraloop placed on		
	Lower level	Same level	Higher level
Gravity	X		
Third party lift pump		X	X
Hydraloop Lift pump + Harvester		X	

Quick reference table, greywater inlet options





## Output specifications

The reusable water from the Hydraloop Concealed is suitable for toilet flushing and use in washing machines.

Output Outlet	Water delivery	Pipe size
Integrated toilet cistern	Integrated cistern	N/A
Additional toilet outlet (optional)	Permanently pressurized	1/2" BSP
Washing machine outlet (optional)	Permanently pressurized	1/2" BSP

All outputs served by the Hydraloop must be identified with a non-potable water sign.

## Specifications

Hydraloop Concealed	
Volume	208 liters
Nominal cleaning capacity	Est. 250 liter/day (depending on usage behavior)
Voltage	240 V connection   24 V internal
Average power consumption	220 kWh/year, 25 W during treatment
Wifi	Requires internal 2.4 or 5GHz WiFi connection Ethernet cable connection possible
Sound Level	Falls in sync with shower sound levels
Greywater input sources	Shower
Dry Weight	Approx. 80 kg
Filled weight	Approx 300 kg



<b>Hydraloop Concealed, including Hydraloop lift pump</b>	
Volume	208 liters
Nominal cleaning capacity	Est. 250 liter/day (depending on usage behavior)
Voltage	240 V connection   24 V internal
Average power consumptionHydraloop	220 kWh/year, 25W during treatment
Average power consumption Lift pump	2.88 kW/min (whilst showering)210 kWh/year based on 6 min/2x day shower
Wifi	Requires internal 2.4 or 5GHz WiFi connection Ethernet cable connection possible
Sound Level	Falls in sync with shower sound levels
Greywater input sources	Shower
Dry Weight	Approx. 80 kg