

Installing HydroCon Pipes

(Read in conjunction with photos of HydroCon Pipe installation at Gerringong and Powells Creek Reserve)

HydroCon Pipes should be laid horizontally (zero gradient) with the flat base resting on lightly compacted coarse sand (river, manufactured or recycled glass sand) to the depth specified in the system design.

Pipes have flanges at both ends to allow effective connection with adjacent pipes, The flanges ensure a continuous internal flush finish. Jointing compounds are not used with HydroCon pipes.

Pipes can be transferred to the project site by fork lift with a padded tyne and manoeuvred into position with harness or other equipment as shown in the accompanying installation photos. For larger projects, a lifting device is available on loan from HydroCon.

Step 1

Fill the pipeline trench with specified filtration media (eg sand, gravel or granular activated carbon) compacting in layers with vibration machine. Continue to fill until the level of the media is 50 mm above the bottom of the outlet hole of the inlet pit.

Inlet pit can be formed up on site or precast. HydroCon supplies 1200 x 1200 mm modular pits with cutout to accommodate the unique shape of the HydroCon pipe.

If using a HydroCon pit, the 'male' flange of the HydroCon pipe should be inserted into the cutout of the HydroCon pit.

Step 2

Position pipes, working out from the inlet pit and successively checking level and alignment of each pipe. Ensure that the initial pipe is positioned appropriately with the inlet pit cutout.

100mm wide geotextile strips are supplied with HydroCon pipes. These should be placed externally around the joint of each pipe to prevent media entering the joint. A strip should be laid under the joint of each pipe as it is laid, then looped up and over the entire joint as the next pipe is positioned. The looped part of the strip may be held in position with a handful of media.

The pipeline can be completed with an end plated HydroCon pipe or a second pit.

Step 3

Use a stiff mortar mix to seal the connection between the initial HydroCon pipe and the inlet pit. This operation may be undertaken at any time prior to back filling of the trench.

Step 4

When pits and pipes have been placed in position, the trench/basin is backfilled with media to the depth specified in the system design.

Ensure that the media is carefully tucked in and lightly compacted around the HydroCon pipes and in doing so that positioning of the pipes is not disturbed.

Notes:

1. HydroCon pipes are generally placed at depths no less than 400 mm from ground surface and no greater than 2.0 m.
2. Installation of a reinforced concrete slab over the pipeline should be considered if pipes are subject to vehicle traffic loadings and minimum depth requirements are not possible. HydroCon

Notes continued:

pipes have been load tested to around 25 kN. HydroCon recommends that HydroCon pipes be installed in areas not subject to vehicle traffic. If separation is not possible, engineering advice should be obtained regarding type and composition of cover material appropriate to the location and application.

3. HydroCon pipes are sealed on the invert to facilitate cleaning when required. Pipes can be restored to near original infiltration performance with high pressure hosing/suction equipment - see *Cleaning HydroCon Pipes* in Technical Information section of website (www.hydrocon.com.au). Further information on cleaning is available from HydroCon. Frequency of maintenance depends on stormwater sediment levels, effectiveness of GPTs etc.