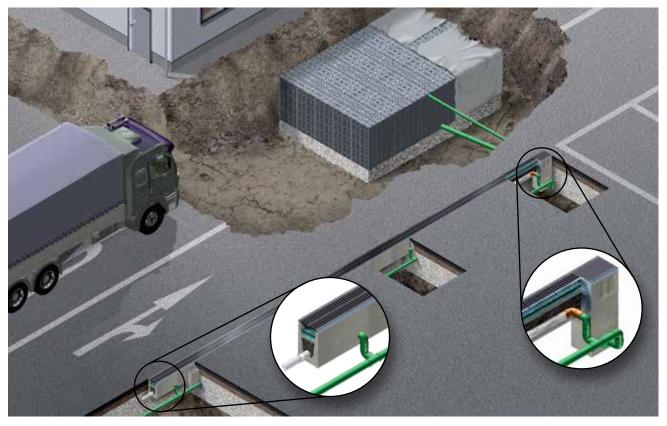
# **DRAINFIX**<sup>®</sup>CLEAN - Installation instruction

### System diagram



The installation instructions contain suggestions that are generally familiar. It is up to the specifiers involved to stipulate any special installation methods appropriate to local soil and load bearing conditions. The codes and regulations generally familiar to the trade, such as DWA-A 138, DIN 18318 and DIN 18315 ZTVT-STB, should be taken into account during installation. Additional requirements apply for installation at petrol/filling stations. Please contact the works for the relevant information.

DRAINFIX CLEAN consists of the standard FASERFIX SUPER 300 or 400 channel bodies and filter tubes which have to be inserted by the installers; in addition, the specially developed filter substrate must be filled in to complete the installation. DRAINFIX CLEAN channel runs must be fitted with a lateral discharge point at 16 - 20 m spacing (at channel joints).

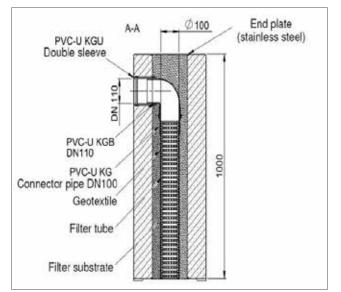
The end pieces of DRAINFIX CLEAN feature an integrated lateral discharge and can be used to accommodate a channel run or to integrate a channel section in a channel run. Apart from the lateral discharge, the end piece elements are identical to the other DRAINFIX CLEAN channel elements.

The discharge outlets in the side walls of the DRAINFIX CLEAN channel body consist of factory-cast integral double-sided DN 110 PVC-U connectors. They are used for connecting tubes for the discharge of water from the filter tubes to manholes, waterways, underground infiltration systems or main drainage lines for a number of channel sections.

The lateral discharges outlets are part of the production at the factory. HAURATON needs to be informed in good time of the exact details of the position and layout of the discharge outlets.

### Installation procedure:

1 Installing the DRAINFIX CLEAN channel bodies Install the DRAINFIX CLEAN channel bodies, including separators and end caps, in accordance with the general installation instructions for HAURATON FASERFIX SUPER channel bodies. The installation instructions are regularly updated to reflect the latest technical situation. Any new edition will render older editions invalid. Please review the current edition at: www.hauraton.com before designing and installing the drainage.

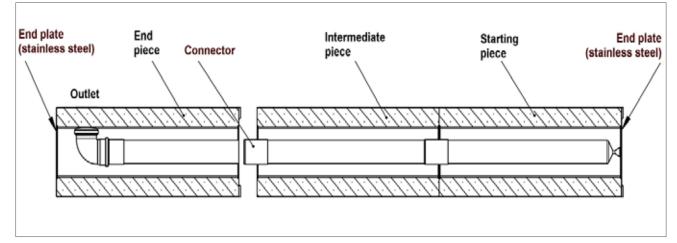


The end pieces of the DRAINFIX CLEAN channel with the lateral discharge outlets must always be installed at the lower end of the respective channel run, in order to avoid water pooling in the filter substrate. Optionally it is possible to fit additional end caps at channel section ends. This ensures that section ends can be recognised from the outside after backfilling the excavation with filter substrate.

Both end caps and separators have to be installed at the same time as the channel bodies, except when installing a FASERFIX SUPER 300 inlet manhole at a section end. These inlet manholes can be integrated directly into to the channel runs - e.g. for appearance reasons - but must have a closed cover.

The inlet manhole must not be directly connected with the DRAINFIX CLEAN filter substrate channel. For this reason, the side walls of the inlet manhole must not be removed; they serve as closure to the channel and no additional end caps are required.

It is imperative to ensure that there is no direct hydraulic connection between the manhole and DRAINFIX CLEAN channel body. The water collected in them must have gone through the filter tubes and come from the filter discharge outlets. The manholes have the function of collecting and checking the cleaned filter discharge water and are typically used where water is discharged into underground infiltration systems or open water courses.



## DRAINFIX CLEAN elements of a channel run section (cross section):

# **DRAINFIX**<sup>®</sup>CLEAN - Installation instruction

### 2 Installing the filter tubes

After installing the channel bodies, the pre-assembled filter tubes can be inserted. Start by inserting the DN 110 PVC-U bend into the double-sided connector at the lateral channel discharge. Proceed by pushing the 0.70 m filter tube end piece with the connector into the tube bend socket. Thereafter fit the middle pieces, and finally the start piece. The filter tubes rest freely at the centre of the channel base.

The filter tubes come ready wrapped with geotextile and with tube connectors attached to one end.

Different filter tube lengths are used for the various channel sections.



#### **3** Filling with filter substrate

In order to achieve an average effective filter substrate depth of 20 cm, 45 litres of filter substrate are required for DRAINFIX CLEAN 300 and 70 litres of substrate for DRAINFIX CLEAN 400. This results in a substrate depth of 15 cm above the filter tube and 28.5 cm from the substrate surface to the top edge of the channel. When filling the first time, the distance between the top edge of the channel and the top of the substrate should be 27.0 cm in order to allow for the substrate to settle by a maximum of 1.5 cm. It is not permitted to step on to the substrate.



#### **4** Aplication of gratings

Depending on the loading capacity selected, the respective gratings are installed in accordance with the general installation instructions for FASERFIX SUPER channels.