

This Technical Guidance Note gives details of the various requirements for the maintenance of Drexus Driveline Drain linear drainage.

General principles

The hydraulic performance of a properly designed and installed Drexus Driveline Drain linear drainage run is a function of the following:

- Available void space in the grating
- Available capacity in the channel
- Available capacity in the outfall unit
- Available capacity in the discharge pipework

The load bearing capability of a properly designed and installed Drexus Driveline Drain linear drainage run is a function of the following:

- The security of the channel blocks and access covers
- The level of the adjacent paved surface in relation to the channel units

Available void space in gratings

Voids in the channel units permit the entry of surface water to the drainage channel. All channel voids must be free from obstruction such as stones or silt, any obstructions should be removed and disposed of to a suitable location away from the drained area.

Available capacity in the channel

Debris will accumulate in the drainage channel and this must be removed at appropriate intervals to maintain the flow capacity of the system. The frequency of inspection and maintenance is dependent on the prevailing use and location of the channel.

Debris may be removed from channels either manually or by high pressure water jetting. Appropriate protective clothing shall be worn at all times.

Manual channel cleaning – Drexus Driveline Drain 100 channel

The access cover shall be unbolted and removed to allow access into the channel. Using a flexible drain rod and extensions as required, remove all debris from the channel and disposed of to a suitable location away from the drained area. Debris may be removed from the access chamber and silt trap by use of a trowel or similar tool. If installed, the silt trap trash basket shall be lifted using the integral lifting points and replaced at the end of cleansing operations.

Manual channel cleaning – Drexus Driveline Drain 70 channels

The access cover shall be raised using a flat bladed screwdriver or similar tool and removed to allow access into the channel. Using a flexible drain rod and extensions as required, remove all debris from the channel and disposed of to a suitable location away from the drained area. Debris may be removed from the access chamber and silt trap by use of a trowel or similar tool.

Debris stuck in the surface inlet slots shall be removed with a stiff brush or bladed screwdriver or similar tool with a scraping or prising motion. Debris removal at slots shall be undertaken before any cleansing or 'flushing' of the channel blocks with water.

Low pressure water jetting - Drexus Driveline Drain 70 channels

If channels contain light debris they may be 'flushed out' by using a domestic low pressure water hose. Beginning at the downstream or outlet end, the outlet or nozzle of hose shall be inserted in to the channel before flushing begins. The hose shall be pushed up the channel until the next access chamber or stop end is reached when the hose can then be slowly withdrawn. This operation may be repeated until the water runs clear and is free from debris.

High pressure water jetting

High pressure water jetting should be undertaken with care. All appropriate PPE shall be used at all times and all mechanical or pressurize equipment shall be used as per the manufacturers recommendations.

The access cover shall be unbolted and removed to allow access into the channel. Beginning at the downstream or outlet end, the nozzle of hose shall be inserted in to the channel before flushing begins.

The hose shall be pushed up the channel until the next access chamber or stop end is reached when the hose can then be slowly withdrawn. Channels shall be jetted clean with all debris being forced toward the outfall (lower) end of the drainage run. This operation may be repeated until the water runs clear and is free from debris. All debris shall be removed from the outfall and disposed of to a suitable location away from the drained area.

The channel slots shall be boarded over to contain the high pressure water jet or a flexible mat may be dragged along the surface at the same speed as the jetter nozzle.

Proprietary self-contained enclosed rotary jetting heads are available which can be used to clear debris from inlet slots. These shall be used prior to jetting of the main channel body.

Available capacity in the outfall unit

Drexus Driveline Drain 100 Channels outfall units are designed to be rodable and have sumps for the collection of silt.

Access is gained into the outfall unit by removal of the bolted access cover or through a hinged access cover and the outfall units should be cleaned manually with a trowel or similar tool. The appropriate protective clothing shall be worn during this operation.

Available capacity in the discharge pipework

All underground pipework should be cleaned at appropriate intervals.

Adjacent paved surfaces

At the time of maintaining the Drexus Driveline Drain channel drainage system, the level of the paved surfaces immediately adjacent to the drainage channels should be noted. This surface should be between 3 & 6mm above the top of the grating.

Where the paving is found to be below this limit due to settlement, it is advisable to minimise the amount of traffic passing over the channel and remedial work should be taken to raise the paving to the specified level.

Frequency of maintenance

The frequency of inspection and maintenance is dependent on the prevailing use and location of the channel and maintenance schedules shall be determined specific to the installation and consideration should be given to at least the following:

- The overall cleanliness of the drained area
- Annual fluctuations (e.g. leaves in Autumn)
- The volume of traffic passing over the gratings

Health & safety

At all times during the maintenance of linear drainage, due care and attention should be paid to at least the following :

- Danger caused by moving vehicles in the area of work
- Potential danger to pedestrians and vehicles from covers which have been removed
- The danger of sharp objects in the debris which is being removed