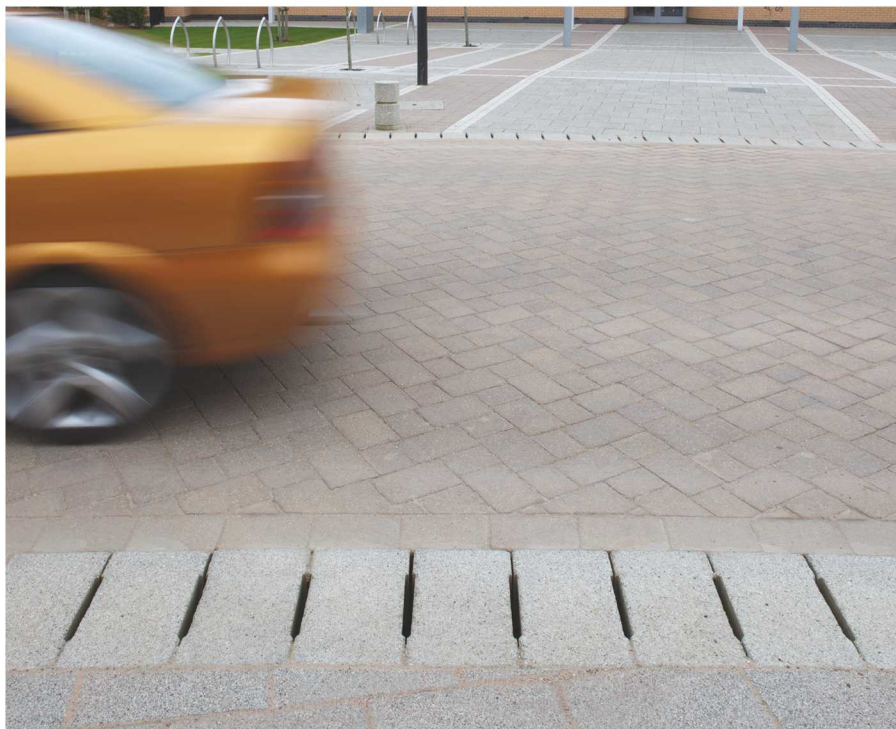
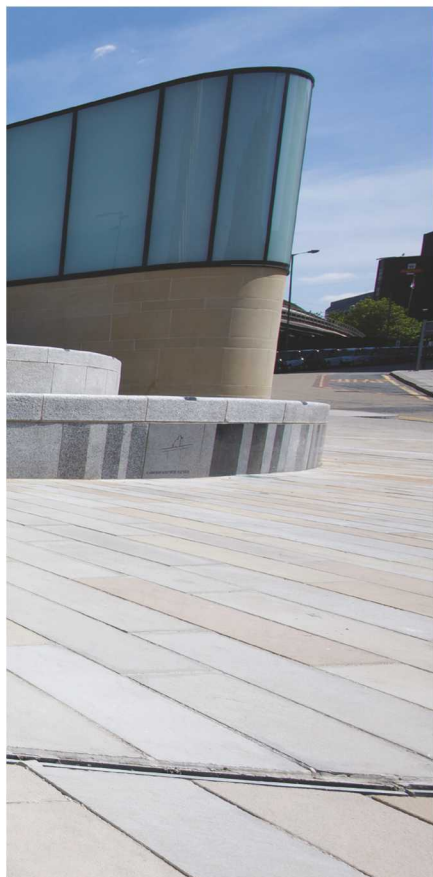


Cleaning and maintenance

CHANNEL DRAINAGE: SLOT SYSTEMS

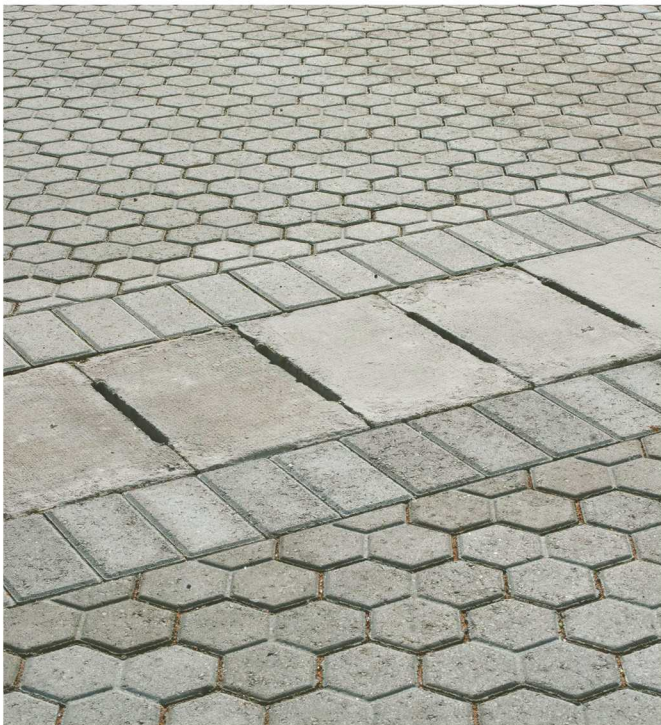


Cleaning and maintenance

CHANNEL DRAINAGE: SLOT SYSTEMS

Periodic maintenance should be carried out on all drainage systems to ensure long term performance is preserved.

The frequency of any inspections and maintenance operations will be dictated by the environment they're installed and the product used, typically no less often than once per year, factoring in annual fluctuations such as leaves falling during autumn.



A proactive maintenance regime will ensure:

- Hydraulic capacity is retained close to the newly installed maximum
- Structural defects are captured and rectified early before they propagate
- Any silt accumulated in the channel is likely to be less well established and therefore easier and quicker to clean through

DESIGN

During the design phase, it is critical to ensure adequate provision of access covers and outfalls are provided to suit the products used, area drained and environment they'll operate. When specifying the product to be used, consider the hydraulic capacity of the system compared with the required peak flow, based on the maximum rainfall intensity anticipated plus allowance for climate change where appropriate.

To allow for some silt accumulation within channels between maintenance activities, it's often prudent to design with a maximum of 90% capacity utilised. Self-cleansing velocities are often sought in drainage design, typically for pipework. We quote full flow velocities for all our products within our flow tables.

Typically, access covers are positioned at a maximum of 50m centres but consideration should be given to more frequent use of access for low capacity products where the consequence of a smaller silt load is greater. Intermediate silt traps should be positioned no greater than 100m apart. The spacing of these access covers and silt traps should be based on the proposed maintenance regime and available equipment for the maintenance works.

HEALTH & SAFETY

Appropriate health and safety requirements should be considered whenever carrying out maintenance works, always wearing appropriate Personal Protective Equipment. Works should be appropriately planned taking into account the environment, risks and potential for injury for both the workforce and general public.

Appropriate thought should be given to:

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

ACCESS

Access into slotted systems is via specialist access covers supplied with the products. Due to the more limited nature of access into the run, these systems should be cleaned using drain rods and jetting equipment.

INSPECT

Prior to any works, the surrounding area and drainage runs should be inspected to ensure the scope of planned works is appropriate given the condition of the units

CLEAN & DISPOSE

Before cleaning of the main channel drainage run is started, ensure that any blockages within the inlet slots are cleaned through into the channel using a pressure washer or similar. Silt traps and outfalls should be emptied using a suction hose or similar.

Once this is complete, cover over the slots on the length to be cleaned using boards or tarpaulin to ensure debris is contained within the drain area while jetting works is carried out. This can be a fixed barrier or one that moves with the jetter to trap debris.

Jetting can now be carried out, feeding the jetter from the outfall working upstream through the run. A suction hose should be run simultaneously with the jetting operations to empty the outfall as the silt is disturbed.

Jetting should be carried out at 100-150 bar for typical applications and depending on the level of silt/debris within the channels. This should be repeated as necessary for stubborn blockages.

Any debris trapped on the pavement by the boards/tarpaulin should be cleaned away and disposed of in an appropriate manner.

Once cleaning works are completed, the access cover lids should be re-installed ensuring they're locked where appropriate.

The slot systems will typically discharge via pipework into the downstream drainage network which will require its own maintenance regime. The effectiveness of the downstream network will impact on the ability of the slot runs to operate at their full capacity.



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The guidance contained within this brochure covers the cleaning and maintenance of channel drainage products. We accept no liability for any injury or loss caused by activities based on the advice given.

All systems should be thoroughly cleaned when installation is completed.

