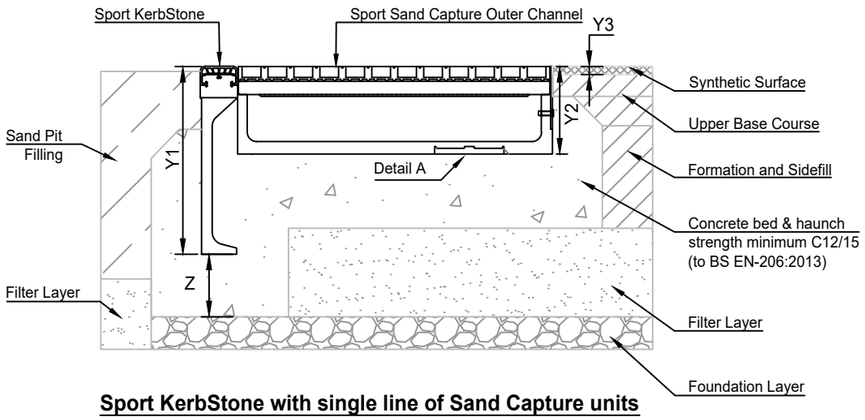
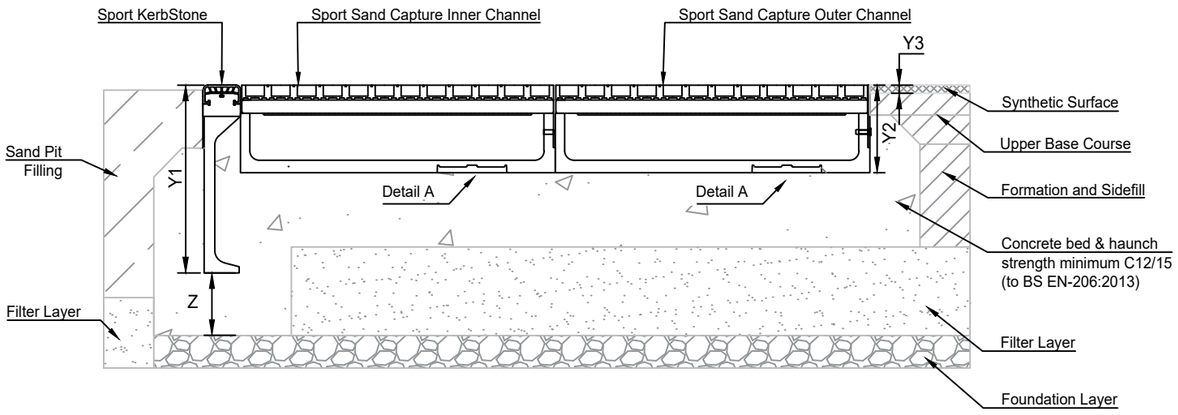
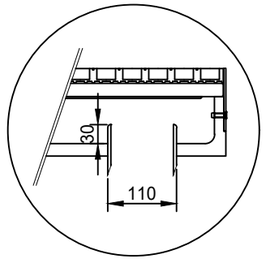
Minimum Dimensions (mm)	X	-
	Y1	Full KerbStone Height
	Y2	Full Sand Capture Channel Height
	Z	100
Maximum Dimensions (mm)	Y3	13



Sport KerbStone with single line of Sand Capture units



Sport KerbStone with two lines of Sand Capture units



Pipe into Sand Capture Unit

Detail A

Product Name	Product Code
Sports Sand Capture inner channel	
-1000mm length	01474
-560mm lengh	01476
Sports Sand Capture outer channel	
-1000mm length	01475
-560mm lengh	01477
Sport Sand Capture End Cap	15571
Sport KerbStone	See separate installation detail

Table of Parts

1.0 Load Class

Installation recommendations shown are ACO minimum recommendations for BS EN 1433:2002 load class requirements.

2.0 Ground Conditions

The long term performance of a channel installation to sustain vertical and lateral loads depends upon A) ground conditions B) stability of the adjacent pavement and C) a durable concrete bed and surround. The recommended installation detail may require the minimum dimensions to be revised to achieve site specific load class requirements (referred to in 1.0 above).

3.0 Cutting and Jointing

Mitre joints are formed by cutting the channels to the required angle and butting them together with appropriate sealant (e.g. Sikaflex 11FC or similar) or ACO Repair Kit. Where possible 90° joints and T's should be formed so that gratings do not have to be cut. Angles can be formed by connecting them using proprietary PVCu pipework attached to ACO inlet/outlet endcaps. For further details please contact ACO Design Services Team.
Note: For Load Classes higher than C 250, mitred joints are not recommended in vehicular areas. Where requested ACO can custom manufacture angled junctions to order.

4.0 Isolation Joints

The channel must be isolated from the surrounding environment. An isolation joint must be positioned up to 1500mm from the channel wall. Any dowel bars must be located no nearer than 150mm from the channel wall. Other isolation joints in surrounding slab must be continued through the channel. Additional crack control may be required to comply with specifier requirements.

5.0 Installation into in-situ Slab

Where a channel is to be installed into an existing concrete slab it is necessary to cut a suitably sized pocket in the slab. The channel will then need to be bedded in polymer modified mortar of 25mm minimum thickness (this may vary depending on the type of mortar used). Engineering advice may be necessary.

6.0 Temporary Installation

A channel installation is not complete until the final surfacing is laid. In any temporary condition, i.e. with the channel walls projecting above adjacent ground, site traffic should not cross channels. Loose boards, stone fill or cover plates will not protect the channel walls or grating. A temporary channel crossing should be formed by raising the ground level locally, to 3 - 6mm above top of edge rail, either side of a channel for a distance of 750 to 1000mm, to form ramps. Note that the channel load class should be adequate to carry the site traffic.

7.0 Channel Protection

Avoid contact between compaction equipment and top of ACO channel. The installer must ensure that the finished surface level lies above the top of the edge rail (by at least 3-6mm). Covering or protecting the grating, before concreting the haunch or laying blocks, removes the time and cost associated with cleaning the channel and grating of cement material and embedded stones. (Please note that ACO channels must be installed with the grating in place to prevent deformation of the channel).

8.0 Watertight Installation to BS EN 1433:2002

Where ACO channel joints/fittings and channel/pavement interfaces are to be sealed, an appropriate sealant should be used. Guidance on the necessary surface preparation and/or priming should be sought from the sealant manufacturer.

For Guidance a typical method of application follows:

- The end faces of the channels are to be sound and free from dust, oil, and grease, with any loose material or dirt removed, e.g. by mechanical wire brush. No water drops should be evident.
- Using a standard cartridge gun, apply the sealant evenly and with no flaws. The detail on the ends of a channel varies from one product to another:
- Products with a basically flat face - apply the sealant in a layer approximately 5mm thick to one face of the joint.
- Products with a sealing groove within the end face - apply the sealant in a bead of approximately 10mm diameter into the sealing groove.
- Products with a sealing groove following the inside shape of the channel - apply the sealant to the end face of the channel and to the sealant groove, such that when the joint is completed, the sealant will both cover the end face and fill the groove.
- The channel unit should be placed on the prepared concrete bedding and pressed against the previously placed channel unit. A sealed joint of approximately 1-2mm width should be formed between adjacent channel units.
- Excess sealant should be wiped from the inside face of the channel to leave a smooth finish.
- The sealant is to be left to cure for 24 hours, during which time the sealant should be kept as dry as possible.

Note: Galvanised steel and iron products have good corrosion resistance to concrete and mortar products but may experience corrosion if high chloride and/or sulphate content is present. Use only good quality concrete and consider using corrosion inhibitors where necessary. The use of protective coatings, such as paint, can minimise the risk of corrosion.

Installation advice:

ACO SPORT Sand Capture and Sport Kerbstone are installed together with ACO SPORT Elastic Kerb stone in a concrete bedding of minimum quality of C 12/15 acc. EN 206-1. After a leveled and aligned installation of the long jump pit the installation of the sand trap can be done. Sand Capture units shall be installed in areas where synthetic surface is, but not on take-off board side. Edges of channels shall be flush to the sand pit edge. Channels can be cut on site with a grinder. Please pay attention, that at least one preformed knockout is open and connected to a DN100 pipe, which reaches approximatley 30mm high into the channel to avoid sand entering the pipe.

NBS Specification:

ACO Sand Capture and ACO Sport KerbStone be specified in section Q10:180. Assistance in completing this clause can be found in ACO Technologies product entries in NBS Plus, or a model specification can be downloaded from www.aco.co.uk. For further assistance, contact the ACO Water Management Design Services Team.

Best Practice and Workmanship:

ACO can give guidance with respect to the most suitable methods of installation for each of the products in the ACO SandCapture and ACO Sport KerbStone. ACO SandCapture and ACO Sport KerbStone should be installed using levels of workmanship that accord with the National Code of Practice (UK: BS8000-0:2014) and in keeping with BS EN 1433:2002 (Drainage channels for vehicular and pedestrian areas).

Detailed installation statements and methodologies will vary for all sites as each will have different aspects deserving particular consideration, consequently the relevant approvals should be sought from the consulting engineer and/or the installer.

Version	Date	Description	Name
ACO Technologies plc ACO Business Park Hitchin Road Shefford Bedfordshire SG17 5TE, UK Tel: 01462 816666 www.aco.co.uk		Drawing Number: 24139	Revision: A
		Title: ACO SAND CAPTURE AND SPORT KERBSTONE INSTALLATION DETAIL DRAWING PRODUCT CODE: 01474, 01475	
Created by: WBP	Released by: WBP	Projection: ISO-A	Units: mm / Format: A3
Created at: 22/01/2018	Released at: 14/11/2018		Scale: 1 : 10
Replacement for:	Replaced by:		Sheet: 1 of 1