



## Product description

### ACO Stop Channel SR 400 G (018753)

#### For use as barriers at side roads and approaches

In side roads and approach areas ACO Stop Channels perform the function otherwise performed by Guide Walls. When correctly installed Stop Channels and Guide Walls form a continuous, unbroken system. The ACO Stop Channel performs several important functions:

##### Guidance:

Amphibians moving along the ACO Guide Wall towards crossings can follow the guidance system under lateral side roads and approach areas without a break.

##### Barrier effects:

Amphibians that do go onto side roads and approaches will fall through a specially designed grating and are then guided to the next crossing.

##### Traffic safety:

Pedestrians, cyclists and vehicles of all kinds, including heavy trucks, can use side roads and approaches without hindrance. The gratings are suitable for a loading to BS EN 1433 Class D 400.



#### Technical data

##### Dimensions

##### Channel

Installed length = 1000 mm  
Installed width = 730 mm  
Installed depth = 600 mm

##### Grating

Installed length = 500 mm  
(2 pieces per gully casing)  
Installed width = 410 mm  
Grating centres = 65/42 mm

##### Weights

The standard component of 1000mm installed length weighs approx. 700 kg inclusive of grating and can be transported and positioned using light construction equipment.

##### Material

Channel: Reinforced concrete, impermeable to water, with integral ductile iron edging to give full protection at all edges.  
Grating: Ductile iron

##### Loading capacity

The gratings on the Stop Channel are subject to high loadings and are tested in accordance with BS EN 1433 Load Class D 400. The individual gratings are secured to the integral ductile iron edging on the channel at 4 fixing points.

#### The practical advantages

##### Maintenance

The floor of the ACO Stop Channel should be covered with a layer of earth/leaves to a depth of 50–100 mm immediately before the first expected amphibian migration. Further deposits of earth should then be removed in accordance with a maintenance schedule. Regular checks should be made to ensure that the system continues to function efficiently. At minimum this should include visual inspection prior to spring migration periods. A maintenance plan should be developed to keep the system free of accumulations of vegetation and leaves.

##### Driving livestock

Agricultural animals such as cattle, sheep, and horses are naturally afraid of grating covers.

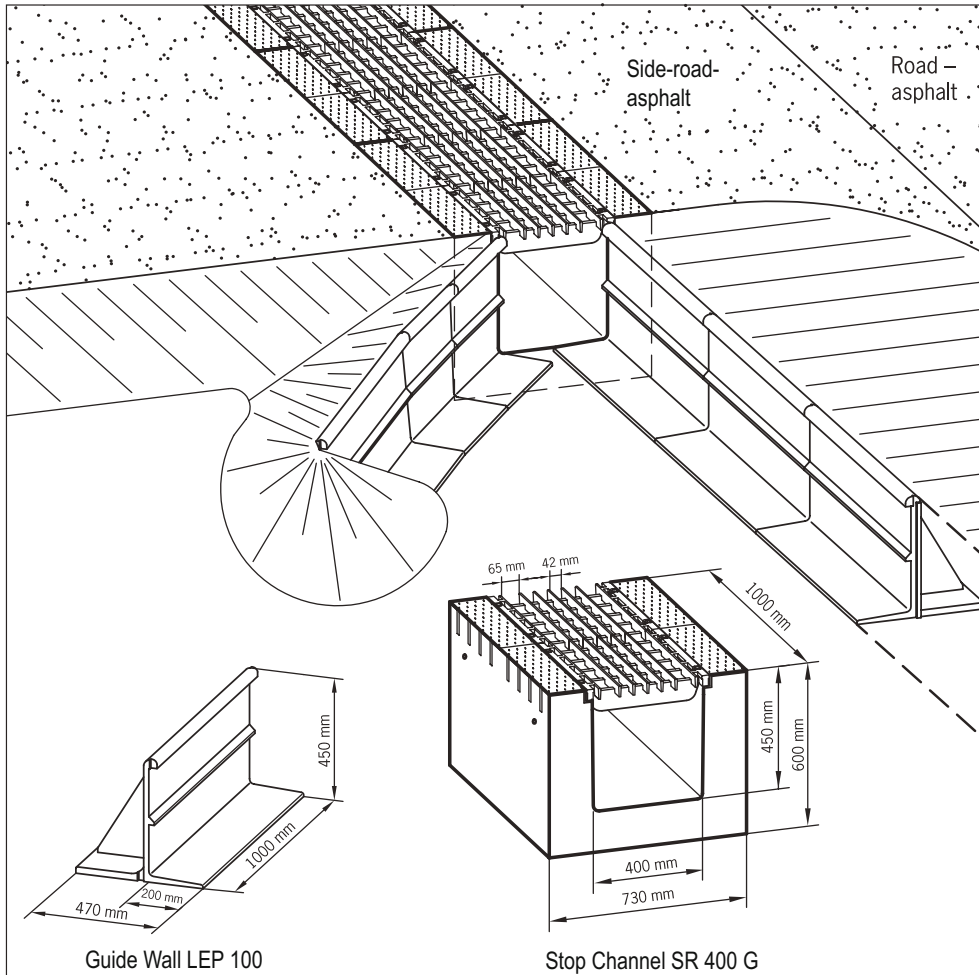
A solid rubber cover mat makes an ideal surface for animals to walk on because there is no risk of injury and it is silent. The mat has an installed length of 1.0m, and it can be secured to the grating by means of a special anti-theft fixing.

##### Protection of amphibians

Passing amphibians and those falling through the grating into the channel can proceed through the ACO Stop Channel without risk of injury. The grating has bars and 65 & 42mm wide gaps which form an integral barrier for amphibians trying to cross it.

## Installation

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#### Laying out

The ACO Stop Channel is laid across the side-road or approach, in a line that ideally leads toward the Guide Wall. The optimum arrangement will be determined by specific local conditions. Stop Channels should be laid on 200mm concrete footings and provided with support on each side as per the installation instructions below.

The elements can be readily adapted to any adjacent surfacing (concrete, asphalt, paving, etc.) without extensive construction costs. For detailed technical information please refer to the installation instructions below.

## Recommendations/notes on installation

### ACO Stop Channel SR 400 G (018753)

#### General notes

These are general guidelines on the installation of ACO Stop Channel SR 400 G in carriageway surfaces.

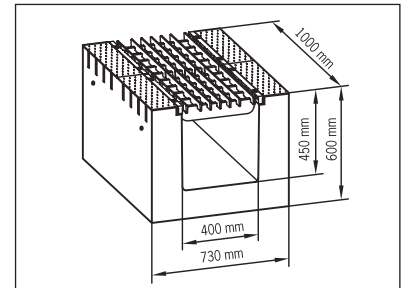
Specific details of an installation should always be determined by the designers, taking into account all local conditions.

The ACO Stop Channel serves two purposes:

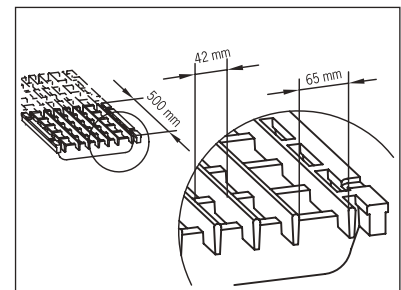
- a) preventing amphibians and small animals from going onto the main carriageway and guiding them safely to the next crossing,
- b) accommodating static and dynamic loads imposed by traffic.

When installing ACO Stop Channels the latest versions of the following technical standards should be observed insofar as they apply to the specific installation:

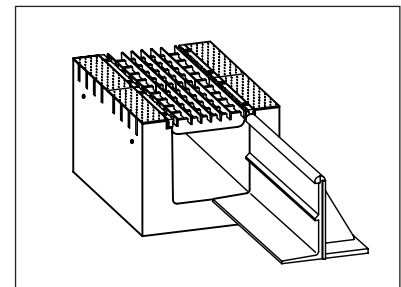
- compliance with the applicable load-bearing class of BS EN 1433 “Drainage channels for vehicular and pedestrian areas”, and
- compliance with the requirements of the Highways Agency “Specification for Highway Works” Section 517 – Linear Drainage Channel Systems.



ACO Stop Channel SR 400 G



ACO Ductile Iron grating



ACO Stop Channel and LEP 100

## Recommendations for laying out/installation

### ACO Stop Channel SR 400 G (018753)

#### Notes on laying

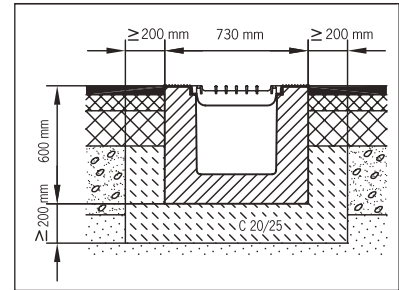
ACO Stop Channels are used in side road and approach areas lateral to the carriageway. In these areas they perform the function otherwise performed by Guide Walls.

Stop Channels and adjoining Guide Walls form a continuous uninterrupted system. Stop Channel and Guide Wall components should be laid to the same floor elevation.

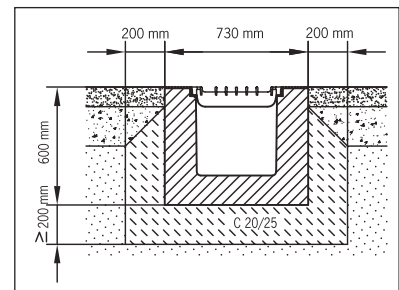
ACO Guide Walls should be joined to the vertical walls of the Stop Channel with a close-fitting butt-joint on both sides. The final arrangement should be determined by consideration of biological requirements and the options at the specific location.

#### Installation instructions

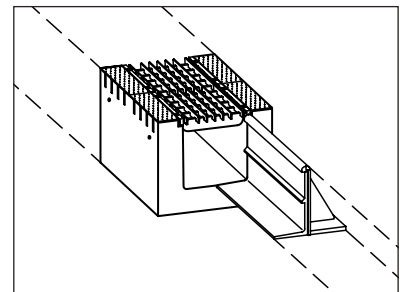
- 1) Routing of the Stop Channel should be determined by the Guide Wall arrangement.
- 2) Make two cuts in the road surface 1200mm apart or if necessary to the width of the digger bucket, or alternatively to suit any special requirements.
- 3) Excavate the trench for the foundation to a depth of approx. 800mm.
- 4) Lay a C 20/25 concrete footing of 200 mm thickness and compact onto a loadbearing foundation.
- 5) Position the Stop Channel(s) on this concrete footing to the correct line and level.
- 6) Ensure that the individual elements butt tight up against each other.
- 7) Place C 20/25 concrete lateral support to a depth of 200mm on both sides of the Stop Channel.
- 8) Fill and compact the voids to either side of the Stop Channel in layers evenly on both sides, using 0–32 mm or alternatively 0–45 mm gravel.
- 9) Repair the road surface to either side of the Stop Channel as required. Take care to ensure that the space is not overfilled or underfilled.
- 10) Clean any residual concrete and/or asphalt from the floor of the Stop Channel.



Installation in asphalt



Installation in water-bound surface



ACO Stop Grid with Guide Wall