

Domestic Drainage & Landscaping Systems

CHANNEL DRAINAGE

SLOT DRAINAGE

THRESHOLD DRAINAGE

ROOF DRAINAGE

DOMESTIC STORMWATER CONTROL

WETROOM DRAINAGE

LANDSCAPING SYSTEMS

#### Building + Landscape Products









**Channel Drainage** 

**Slot Drainage** 

**Threshold Drainage** 

**Roof Drainage** 







**Landscaping Systems** 

**Domestic Stormwater Control** 

Wetroom Drainage

#### Key for product pages

car parks.

#### LOAD CLASSES AND TYPICAL USES ACCORDING TO BS EN 1433:2002



A 15

B 125

Pedestrian, cycleways and domestic drives.

Pedestrian precincts,

light vehicles, private



Parking areas, service stations (cars) and slow-moving light commercial vehicles.



Areas without vehicular traffic, such as dwellings, commercial and some public buildings.

#### MATERIAL



POLYMER CONCRETE



PLASTIC / COMPOSITE



STEEL

ALUMINIUM



RECYCLED MATERIAL

#### **GRATING CHOICE**



LIMITED



SMALL



#### HYDRAULIC CAPACITY









## Completed The LOOK of your home and garden







A range of gratings available for your landscaping project. See pages 10 to 17













- High quality polypropylene channel, suitable for pedestrian and vehicle traffic up to Load Class A 15
- Channels clip together for quick and easy installation
- A choice of eight gratings are available to suit your decorative requirements

#### **Applications**

- Garage thresholds
- Patios and paths
- Pedestrian precincts



A range of gratings available. See pages 10 to 17

### THE LOOK



Step 1. Dig trench 175mm wide by 130mm deep for channel (400mm deep for sump). Mark finishing height with fixed line 3mm below final surface. Lay 50mm (min.) bed of concrete.



Step 2. If using sump unit as outlet cut off outlet spigot, position sump in concrete bed and fit PVC-U Ø110mm pipework connection to drainage.



Knock out preformed base of corner unit and remove appropriate cut-out for channel connection. Connect corner unit to sump. Check line and level of corner unit and backfill with concrete.



Step 4. Lay channels from outlet corner unit ensuring joints clip together. Fit endcaps. With gratings fitted haunch around channels with concrete or suitable fill material. Final surface to be 3-5mm above grating.

Visit www.aco.co.uk for more details

















Downpipe connector **□**65mm



CHANNEL DRAINAGE

Downpipe connector Ø68mm

Closing end cap

ACO HexDrain® accessories

Leafguard

Outlet connector

Corner unit

Sump unit

#### ACO RainDrain®











#### The ideal drainage channel for domestic applications

#### **Benefits**

- High quality polymer concrete channel, suitable for pedestrian and vehicle traffic up to Load Class A 15
- Channels interlock for guick and easy installation
- A choice of eight gratings are available to suit your decorative requirements

#### **Applications**

- Garage thresholds
- Patios and paths
- Pedestrian precincts











A range of gratings available. See pages 10 to 17



Dig trench 318mm wide (218mm wide if against a structure) by 200mm deep for channel (400mm deep for sump). Mark finishing height with fixed line 3mm below final surface. Lay 100mm (min.) bed of concrete.



Step 2.

Knock out pre-formed outlet from the inside (marked with hammer symbol) or fit sump or outlet endcap. Position sump or outlet channel on concrete bed, fit PVC-U union/trap to drainage pipework.



Step 3.

Lay channels starting from outlet/sump, ensuring joints connect by lowering units horizontally. Fit endcap to end channel. For fully watertight joints, use a suitable sealant (contact ACO for further advice).



Step 4.

With gratings fitted, haunch around channels/sumps with concrete (or for Load Class A 15 only, haunch with suitable fill material). Final surface to be 3mm above grating. Bricks/paviours should be laid in mortar for lateral

Visit www.aco.co.uk for more details

#### ACO RainDrain® accessories



Drain union



Horizontal foul air-trap



Closing end cap



Outlet end cap



Sump unit



#### Wedge Wire





#### **Mosaic Heelguard™ ATec**





#### Intercept Heelguard™ ATec





#### Antique Iron Heelguard™ ATec





#### **Polished Stainless Steel**





#### **Anthracite**





#### **Galvanised Steel**





#### **Black Plastic**



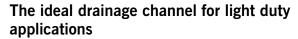












- High quality polypropylene channel, suitable for vehicle traffic up to Load Class B 125
- Drainlock technology allows quick and simple installation of gratings
- Corrosion resistant black composite Heelguard™ grating

#### **Applications**

- Driveways
- Small private car parks



18



Dig trench, allowing for width of channel plus 100mm each side for concrete haunch. Trench depth should allow for channel depth plus 100mm for concrete bedding. Also allow for 100mm concrete around and beneath sump unit. Mark finishing height with fixed line 3mm below final surface. Lav 100mm (min) bed of concrete.



#### Step 2.

Knock out pre-formed outlet from the inside (marked with hammer symbol) and trim edges with a sharp knife. Fit outlet connector and sump. Position sump and outlet channel on concrete bed, fit PVC-U union/trap to drainage pipework.



Lay channels starting from outlet/sump, ensuring joints connect by lowering units horizontally. Fit endcaps to end channels. For fully watertight joints, use a suitable sealant (contact ACO for further advice).



#### Step 4.

With gratings fitted, haunch around channels/sumps with concrete. Final surface to be 3mm above grating. Bricks/ paviours should be laid in mortar for lateral stability.

CHANNEL DRAINAGE

Visit www.aco.co.uk for more details

#### ACO HexDrain® B 125 accessories



Universal closing end cap



Vertical outlet connector



Sump unit with silt bucket



Foul air-trap

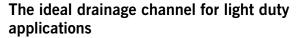










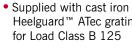


- High quality polymer concrete channel, suitable for vehicle traffic up to Load Class B 125
- Channels interlock for guick and easy installation
- Heelguard™ ATec grating for Load Class B 125

#### **Applications**

- Driveways
- Small private car parks









Dig trench 318mm wide (218mm wide if against a structure) by 200mm deep for channel (400mm deep for sump). Mark finishing height with fixed line 3mm below final surface. Lay 100mm (min.) bed of



Step 2. Knock out pre-formed outlet from the inside (marked with hammer symbol) or fit sump or outlet endcap. Position sump or outlet channel on concrete bed, fit PVC-U union/trap to drainage pipework.



Step 3. Lay channels starting from outlet/sump, ensuring joints connect by lowering units horizontally. Fit endcap to end channel. For fully watertight joints, use a suitable sealant (contact ACO for further advice).



Step 4. With gratings fitted, haunch around channels/sumps with concrete. Final surface to be 3mm above grating. Bricks/paviours should be laid in mortar for lateral stability.

Visit www.aco.co.uk for more details

#### ACO RainDrain® B 125 accessories



Drain union



Horizontal foul air-trap



Closing end cap



Outlet end cap



CHANNEL DRAINAGE

Sump unit

concrete.

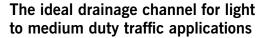












- · High quality, high strength polypropylene channel, suitable for light to medium duty traffic up to load class C 250
- Drainlock technology allows quick and simple installation of gratings
- Corrosion resistant black composite Heelguard™ grating

#### **Applications**

- Domestic landscaping
- Public landscaping
- Car parks





Step 1.

Dig trench, allowing for width of channel plus 150mm each side for concrete haunch and depth of channel plus 150mm for concrete bedding. Allow also for 150mm concrete around and beneath sump unit. Mark finishing height with fixed line 3mm below final surface. Lay 150mm (min) bed of concrete



Step 2.

Knock out pre-formed outlet from the inside (marked with hammer symbol) and trim edges with a sharp knife. Fit outlet connector and sump. Position sump and outlet channel on concrete bed, fit PVC-U union/trap to drainage pipework.



Lay channels starting from outlet/sump, ensuring joints connect by lowering units horizontally. Fit endcaps to end channels. For fully watertight joints, use a suitable sealant (contact ACO for further advice).



Step 4.

With gratings fitted, haunch around channels/sumps with concrete. Final surface to be 3mm above grating. Bricks/ paviours should be laid in mortar for lateral stability.

Visit www.aco.co.uk for more details

#### ACO HexDrain® Pro accessories



Vertical outlet connector



Universal end cap



Sump unit with silt bucket



Foul air-trap











#### The ideal drainage channel for light to medium duty traffic applications

#### **Benefits**

- · High quality, high strength polymer concrete channel, suitable for light to medium duty traffic up to load class C 250
- Drainlock technology allows quick and simple installation of gratings
- Corrosion resistant black composite Heelguard™ grating

#### **Applications**

- Domestic landscaping
- Public landscaping
- Car parks







#### 24



#### Step 1.

Dig trench, allowing for width of channel plus 150mm each side for concrete haunch and depth of channel plus 150mm for concrete bedding. Allow also for 150mm concrete around and beneath sump unit. Mark finishing height with fixed line 3mm below final surface. Lay 150mm (min) bed of concrete.



#### Step 2.

Knock out pre-formed outlet from the inside (marked with hammer symbol) and trim edges with a chisel. Fit outlet connector and sump. Position sump and outlet channel on concrete bed, fit PVC-U union/trap to drainage pipework.



Lay channels starting from outlet/sump, ensuring joints connect by lowering units horizontally. Fit end caps to end channel. For watertight joints use a suitable sealant (contact ACO for further advice)



#### Step 4.

With gratings fitted, haunch around channels/sumps with concrete. Final surface to be 3mm above grating. Bricks/paviours should be laid in mortar for lateral stability.

Visit www.aco.co.uk for more details

#### ACO CivicDrain® accessories



Drain union



940 Foul air-trap



920 Foul air-trap



Multifunctional endcap



CHANNEL DRAINAGE

Sump unit

## Complementing and enhancing your outdoor space









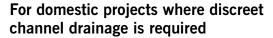












- High quality polypropylene channel, suitable for pedestrian and vehicle traffic up to Load Class A 15
- · Compatible with up to and including 60mm deep block paving
- Channels clip together for quick and easy installation

#### **Applications**

- Garage thresholds
- Paths and patios
- Pedestrian precincts
- Block paving



28



Dig trench 325mm wide (225mm wide if against a structure) by 208mm deep for channel (408mm deep for sump). Mark finishing height with fixed line 3mm below final surface. Lay 50mm (min.) bed of concrete.



If using sump unit as outlet cut off outlet spigot, position sump in concrete bed and fit PVC-U Ø110mm pipework connection to drainage.



Corner and sump unit must be fitted in order to allow subsequent access for maintenance and cleaning. Knock out preformed base of corner unit and remove appropriate cut-out for channel connection. Connect corner unit to sump. Check line and level of corner unit and backfill with concrete.



Lay channels from outlet corner unit ensuring joints clip together. Fit endcaps. With Brickslot covers fitted haunch around channels with concrete. Bricks/paviours should be laid in mortar for lateral stability. Final surface to be 3-5mm above slot.

SLOT DRAINAGE

ACO HexDrain® Brickslot accessories



Closing end cap



Visit www.aco.co.uk for more details

Corner unit with black plastic grating and vertical outlet



Sump unit











#### For light duty projects where discreet channel drainage is required

#### **Renefits**

- High quality polymer concrete channel with galvanised steel slotted grating, suitable for vehicle traffic up to Load Class B 125
- Compatible with up to and including 60mm deep block paving
- · Channels interlock for quick and easy installation

#### **Applications**

- Block paving
- Driveways
- Small private car parks







30



#### Step 1.

Dig trench 318mm wide (218mm wide if against a structure) by 278 mm deep for channel (483mm deep if installing sump unit). Mark finishing height with fixed line 3mm below final surface. Lay 100mm (min.) bed of C12/15 concrete.



#### Step 2.

Access and sump unit must be fitted in order to allow subsequent access for maintenance and cleaning. If outletting from access unit knock out pre-formed outlet from the inside, fit PVC-U Ø110mm union, connect to outlet drainage pipework and position on C12/15 concrete bed. If installing sump unit follow above steps from fit PVC-U Ø110mm union.



#### Step 3.

Lay channels starting from sump/access unit, ensuring joints connect by lowering units horizontally. Fit endcap to end of channel. For fully watertight joints, use a suitable sealant (contact a sealant specialist for guidance).



#### Step 4.

With Brickslot covers fitted haunch around channels with concrete. Bricks/paviours should be laid in Epoxy or Polymer Modified Mortar for lateral stability. Final surface to be 3-5mm above slot.

Visit www.aco.co.uk for more details

#### ACO RainDrain® Brickslot B 125 accessories





air-trap



Closing end cap



Access channel



SLOT DRAINAGE

Sump unit

## Bringing elegance and character to your threshold









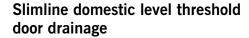












- · High quality extruded plastic channel with aluminium grating, reduces water ponding at house entrances
- The discreet system has a width of 60mm and is available with silver or black Heelguard gratings
- System is compliant with Part M of the Building Regulations for England and Wales and Section 4 of the Scottish Building standards

#### **Applications**

- Level thresholds
- Residential developments
- Patio
- Paths











Dig trench 110mm wide by 156mm deep for channel.



Step 2. Lay 50mm (min.) bed of concrete or mortar. Position the channel and fit to Ø110mm pipework, use a suitable adaptor coupling.



Step 3. Haunch around channel with concrete or suitable fill material.



Step 4. Complete the installation by sealing between the door sill and grating.

Visit www.aco.co.uk for more details

#### ACO Threshold Drain accessories



Drain connector



Ø80mm bottom outlet



Closing end cap



Corner unit - silver aluminium grating



**IHRESHOLD DRAINAGE** 

Corner unit - black aluminium grating











#### Unobtrusive high quality domestic threshold drainage

#### **Benefits**

- High quality polypropylene threshold drainage channel, eliminates water ponding at house entrances
- Corrosion resistant two piece stainless steel Heelguard™ grating, suitable for pedestrian traffic
- Channels clip together for quick and easy installation

#### **Applications**

- · Level thresholds
- Residential developments







#### 36



Step 1.

Dig trench 175mm wide by 130mm deep for channel. If connecting to underground pipework, knockout a preformed outlet at the required position in the base of the channel unit and fit the outlet connector.



Step 2.

Lay 50mm (min.) bed of concrete or mortar. Position the channel and fit to U-PVC Ø110mm pipework if required.



Step 3.

With gratings fitted haunch around channel with concrete or suitable fill material.



Step 4.

Protective film on gratings should now be removed. Complete the installation by sealing between the door sill and grating.

Visit www.aco.co.uk for more details

ACO DoorWay Drain accessories



DoorWay Drain comes with the above accessories consisting of 2 x end caps and Ø110mm vertical outlet

#### **ACO StepDrain**









#### Slimline domestic level threshold door drainage

#### **Benefits**

- · High quality galvanised steel threshold drainage channel, eliminates water ponding at house entrances
- Corrosion resistant 304 stainless steel Heelguard™ grating, suitable for pedestrian traffic
- Available in 940mm and 1088mm lengths

#### **Applications**

- Level thresholds
- Residential developments



38



Dig trench 100mm wide by 210mm deep for channel. Remove cap from outlet.



Step 2. Lay 50mm (min.) bed of concrete or mortar. Position the channel and fit to U-PVC Ø40mm pipework.



Step 3. Haunch around channel with concrete or suitable fill material.



Step 4. Protective film on gratings should now be removed. Complete the installation by sealing between the door sill and grating.

Visit www.aco.co.uk for more details

#### **ACO DrainMat**

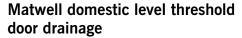












#### **Benefits**

- · High quality matwell assembly, eliminates water ponding at house entrances
- Choice of four mat styles for use with a wide variety of external surface finishes
- Three base sizes available in two different materials

#### **Applications**

- Level thresholds
- Residential developments



40

#### ACO DrainMat matwell styles



Galvanised steel mesh grid



aluminium mat



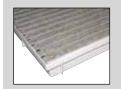


Light grey carpet and aluminium mat

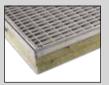


Black rubber and aluminium

#### ACO DrainMat bases



ACO DrainMat polypropylene base (image shows base with mat, mat supplied separately)



ACO DrainMat polymer concrete base (image shows base with mat, mat supplied separately)

To view ACO Indoor mats visit www.aco.co.uk for more details

## High performance drainage solutions for domestic roofs









#### **ACO Rainwater Outlets**



#### High performance rainwater outlets

#### **Benefits**

- Manufactured from marine grade aluminium alloy and powder coated cast iron for high corrosion resistance
- 304 stainless steel fixings ensure long service durability and reliability
- Large range of outlets available to suit any flat roof application

#### **Applications**

- Flat roofs
- Balconies
- Roof terraces



44

#### Visit www.aco.co.uk for more details

#### Available from ACO



HP vertical spigot outlet



HP two-way screw outlet



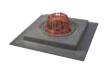
HP 45 & 90° outlets



HP vertical screw outlet



HP balcony spigot outlet



HP refurbishment outlet

#### Economical solutions for water conservation in the home and garden









#### **ACO StormBrixx**



#### Award winning domestic soakaway

#### **Benefits**

- Enables compliance with current building regulations concerning rainwater runoff from drives
- Certified structural integrity for long life assurance
- Lightweight design for easy on site handling

#### **Applications**

- Gardens
- Drives
- Patios



48

#### ACO StormBrixx accessories



Side panel



Top covers

Visit www.aco.co.uk for more details



110mm / 160mm pipe connector



225mm / 300mm pipe connector



Layer connectors

DOMESTIC STORMWATER CONTROL

# DOMESTIC STORMWATER CONTROL

#### **ACO Backflow Valves**





#### Domestic backflow valves for flood protection

#### **Benefits**

- Designed to prevent flooding resulting from sewer backflows.
- The 3 backflow ranges are tested and conform to BS EN 13564
- All valves are designed for reliable operation and long life.

#### **Applications**

Basements



50

#### Available from ACO



Junior Type 5 anti-flooding device for grey water applications

#### Visit www.aco.co.uk for more details



Triplex
Type 2 passive anti-flooding device for grey water applications



Quatrix
Type 3 automated anti-flooding device for black and grey water application

## Barrier free wetroom solutions









#### **ACO Wetroom Drainage**







#### **Barrier free wetroom** drainage systems

#### **Benefits**

- High quality stainless steel shower channel and gullies systems
- A wide range of grating designs are available to suit your decorative requirements

#### **Applications**

Wetrooms









54

#### Available from ACO

Visit www.aco.co.uk for more details









Square

Wave

Wellness

















**ACO Shower Gullies** 

## LANDSCAPING SYSTEMS

## Creating attractive, strong and sustainable surfaces













#### Award winning tile for ground reinforcement

#### **Benefits**

- Stops grass rutting and gravel movement
- Robust system certified for loads up to 250 tonnes per m<sup>2</sup>
- 90% porous, providing effective drainage of surface water

#### **Applications**

- Driveways
- Private and public parking
- Access routes
- Paths
- Shed bases



58



Step 1. Dig out the existing base e.g. typically for light vehicle traffic / parking areas, 200-300mm will suffice. With heavy wheel loads or a clay soil, 400mm may be necessary.



Step 2. Compact the sub-base. Fill the excavated area with free draining gravel or crushed stone to 100mm (grass) or 80mm (gravel) and tamp down. Level the area with a layer of fine aggregate or for grass sieve sand/compost/loam mix. Level using a rail or wooden batten.



Step 3. Install ACO BorderGuard at this stage. Install ACO GroundGuard tiles along the length of the area. Then assemble ACO GroundGuard laterally. Interlock the fastening clips. For best performance the tiles should be laid in a staggered pattern.



Step 4. Peg every other tile using two nails per tile through the holes at the corner. If used on slopes (up to a max of 5°) every tile should be pegged as above. Fill in the ACO GroundGuard tiles with the chosen finish.

#### ACO GroundGuard accessories





Visit www.aco.co.uk for more details

White parking bay markers



Steel nail

BorderGuard nail

LANDSCAPING SYSTEMS

#### **ACO GravelGuard**





#### Ground reinforcement tile for gravel applications

#### **Benefits**

- Stabilises gravel for pedestrian and vehicle access
- Incorporated DuPont<sup>™</sup> Typar<sup>®</sup> geotextile for reduced weed growth
- Load bearing capacity up to 40 tonnes per m<sup>2</sup>

#### **Applications**

- Driveways
- Paths
- Shed bases









60

## How to Install

Step 1

Depending on the soil conditions and intended use of the area to be stabilised, dig out the existing base. Typically, for driveways, 260-360mm. Note: Seek independent engineering advice to determine the required sub-base thickness and what drainage may be needed. If using concrete edging install this next.



Step 2.

Compact the sub-base using a plate compactor. Fill the excavated area with free draining gravel or crushed stone to 110mm below the finished level. Tamp down with a roller or plate compactor. Level the area with a layer of fine sand to 60mm depth. Use a rail or wooden batten and compact.



Sten 3

Install the ACO GravelGuard tiles along the length of the area. Install the tiles ensuring that the geo-membrane overlaps each other. For best performance the tiles should be laid in a staggered pattern rather than a grid pattern.



Step 4.

Fill in the GravelGuard tiles with 3-16mm gravel and compact. Once compacted add a further 15-20mm layer of gravel, finally rake the gravel to distribute evenly.

Visit www.aco.co.uk for more details

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#### ACO Water Management Building + Landscape

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