

# Why choose ACO MultiDrain® MD?

## Made from sustainable materials

ACO MultiDrain® MD channel elements are manufactured from Vienite®. Vienite® is ACO's new high strength sustainable material that meets environmental and sustainability targets for construction products.

Vienite® utilises high levels of post consumer recycled waste, but unlike some recycled materials does not compromise on strength or long term performance.

Vienite's high strength characteristics means the material is four times stronger than traditional concrete and has a low water absorption rate. It is also resistant to freeze thaw attack and has excellent chemical resistance.

At the end of the products operational life, Vienite® can be collected, processed and returned to production as a raw material.



## System benefits

- ▶ Provides an efficient drainage solution for a wide variety of applications
- ▶ Range of constant, sloped and shallow depth channels
- ▶ Caters for a range of catchment areas
- ▶ Strong and robust channel design
- ▶ Patented UltraSTEEL™ channel edge rail for improved strength and durability
- ▶ CE Marked and BS EN 1433: 2002 certificated to Load Class D 400\*
- ▶ Extensive choice of gratings and accessories for many applications
- ▶ Choice of outlet options, gullies, sumps or channel knockouts
- ▶ Unique ACO Drainlock™ grating fixing improves hydraulic capacity
- ▶ Lightweight design is simple and fast to install
- ▶ 100% recyclable
- ▶ Ideal for use against building facades or as a Part M threshold drainage solution when used with ACO MultiDrain® Brickslot grating



## NEW ACO Hydraulic Design Software

Register online for our free, secure online design software:

- ▶ All designs are securely stored and easily accessed online
- ▶ Data always up-to-date
- ▶ Proven calculation methodology - more accurate and efficient designs
- ▶ Flexible catchment design
- ▶ Integrated rainfall data
- ▶ Automated product optimisation
- ▶ PDF summary documents



**Register Now - It's Free**

[www.aco.co.uk/quad-hydraulic-design-2.0](http://www.aco.co.uk/quad-hydraulic-design-2.0)

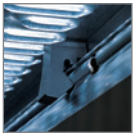
\*Not suitable for carriageways of public roads or motorways



ACO MULTIDRAIN® FEATURES OVERVIEW



Anti shunt feature holds grating securely in place



ACO Drainlock™ gratings - this bar-less locking device improves hydraulic capacity and provides for quick and simple installation of gratings

Sealant groove for simple watertight installations

V shaped channel bore improves speed of water flow and promotes self cleansing

Male and female channel connections to aid fast installation.

Improved knockout for connection to Ø110mm (for M100D channels) and Ø160mm (for M150D and M200D channels) PVC-U pipes.



LOAD CLASSES



**A 15**  
Pedestrian, cycleways, minimally trafficked areas (light domestic vehicles only).



**B 125**  
Pedestrian precincts, light vehicles, private car parks and drives.

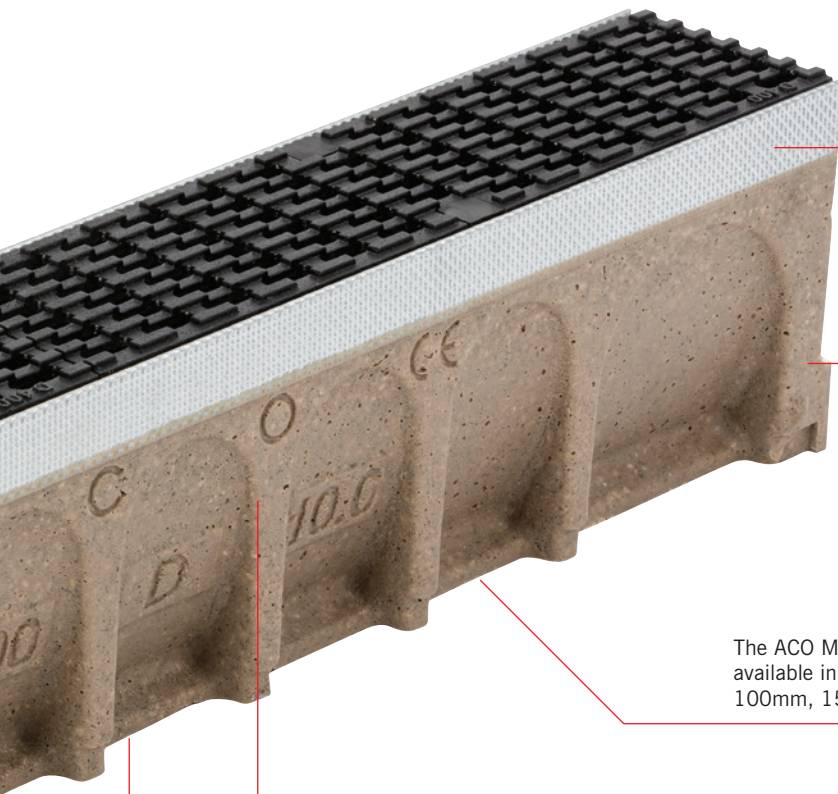


**C 250**  
Parking areas, service stations (cars) and slow-moving light commercial vehicles.



**D 400**  
Parking areas for all types of vehicles\*

\* Not suitable for carriageways of public roads or motorways.



Protective UltraSTEEL™ galvanised edge rails for improved strength and bonding between channel and surface materials. Also available in stainless steel.

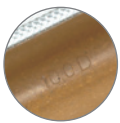
Manufactured from Vienite®, a polymeric based recycled material, strong and lightweight design, improves stability and anchors product into concrete surround.



The ACO MultiDrain® MD system is available in three channel widths; 100mm, 150mm and 200mm.

Parking areas for all types of vehicles\*

Internal channel marking for easy identification once installed.



**Gratings**

ACO MultiDrain® MD System has a wide variety of gratings available that include cast iron, stainless steel and plastic slotted gratings, heelguard options (including the new ATec coated heelguard grating), solid covers and brickslot gratings. See pages 10 to 12 for further details.

# ACO MultiDrain® M100D channels with UltraSTEEL™ galvanised edge rails.

ACO MultiDrain® M100D channels are manufactured from Vienite®, ACO's sustainable high strength material, which provides high chemical resistance. The channels are available in constant depth, sloping depth and shallow depth units.

ACO MultiDrain® M100D channels listed below are provided with integral galvanised steel protective edge rails.

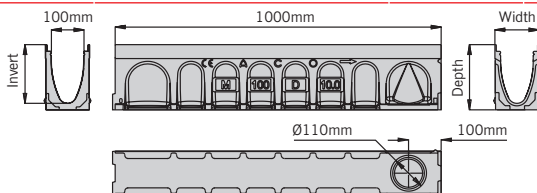
For enhanced durability these rails are manufactured from UltraSTEEL™, a unique material that has improved strength over plain steel.

The added benefit of UltraSTEEL™ is that its greater surface area improves the bond between rail and adjacent material where a sealed system is required.

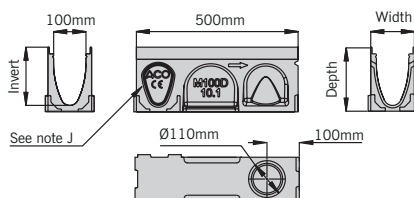
For the ACO MultiDrain® M100D range of gratings to suit these channels please refer to pages 20-23.

## Constant and sloping depth channels with UltraSTEEL™ galvanised edge rails

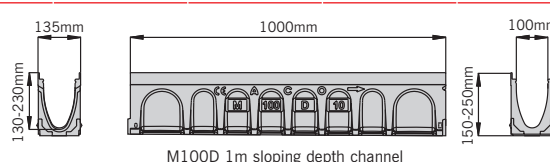
| Product code | Description     | Length (mm) | Width overall (mm) | Depth overall (mm) | Invert depth (mm) | Invert Type | Weight (kg) |
|--------------|-----------------|-------------|--------------------|--------------------|-------------------|-------------|-------------|
| 23075        | M100D No. 075   | 1000        | 135                | 75                 | 55                | 1           | 9.2         |
| 23076        | M100D No. 075V  | 1000        | 135                | 75*                | 55                | 1           | 8.9         |
| 23110        | M100D No. 0100  | 1000        | 135                | 100                | 80                | 1           | 11.0        |
| 23111        | M100D No. 0100V | 1000        | 135                | 100*               | 80                | 1           | 10.7        |
| 23000        | M100D No. 0.0*  | 1000        | 135                | 150                | 130               | 1/3         | 12.9        |
| 23050        | M100D No. 0.1J* | 500         | 135                | 150                | 130               | 1/3         | 7.6         |
| 23001        | M100D No. 1     | 1000        | 135                | 150/155            | 130/135           | 2           | 13.5        |
| 23002        | M100D No. 2     | 1000        | 135                | 155/160            | 135/140           | 2           | 13.8        |
| 23003        | M100D No. 3     | 1000        | 135                | 160/165            | 140/145           | 2           | 14.1        |
| 23004        | M100D No. 4     | 1000        | 135                | 165/170            | 145/150           | 2           | 14.4        |
| 23005        | M100D No. 5     | 1000        | 135                | 170/175            | 150/155           | 2           | 14.7        |
| 23006        | M100D No. 6     | 1000        | 135                | 175/180            | 155/160           | 2           | 15.0        |
| 23007        | M100D No. 7     | 1000        | 135                | 180/185            | 160/165           | 2           | 15.3        |
| 23008        | M100D No. 8     | 1000        | 135                | 185/190            | 165/170           | 2           | 15.6        |
| 23009        | M100D No. 9     | 1000        | 135                | 190/195            | 170/175           | 2           | 15.9        |
| 23010        | M100D No.10     | 1000        | 135                | 195/200            | 175/180           | 2           | 16.2        |
| 23100        | M100D No.10.0*  | 1000        | 135                | 200                | 180               | 1/3         | 15.9        |
| 23101        | M100D No.10.1J* | 500         | 135                | 200                | 180               | 1/3         | 9.2         |
| 23011        | M100D No.11     | 1000        | 135                | 200/205            | 180/185           | 2           | 16.5        |
| 23012        | M100D No.12     | 1000        | 135                | 205/210            | 185/190           | 2           | 16.8        |
| 23013        | M100D No.13     | 1000        | 135                | 210/215            | 190/195           | 2           | 17.1        |
| 23014        | M100D No.14     | 1000        | 135                | 215/220            | 195/200           | 2           | 17.4        |
| 23015        | M100D No.15     | 1000        | 135                | 220/225            | 200/205           | 2           | 17.7        |
| 23016        | M100D No.16     | 1000        | 135                | 225/230            | 205/210           | 2           | 18.0        |
| 23017        | M100D No.17     | 1000        | 135                | 230/235            | 210/215           | 2           | 18.3        |
| 23018        | M100D No.18     | 1000        | 135                | 235/240            | 215/220           | 2           | 18.6        |
| 23019        | M100D No.19     | 1000        | 135                | 240/245            | 220/225           | 2           | 18.9        |
| 23020        | M100D No.20     | 1000        | 135                | 245/250            | 225/230           | 2           | 19.2        |
| 23200        | M100D No.20.0*  | 1000        | 135                | 250                | 230               | 1/3         | 21.8        |
| 23201        | M100D No.20.1J* | 500         | 135                | 250                | 230               | 1/3         | 10.8        |
| 23300        | M100D No.30.0*  | 1000        | 135                | 300                | 280               | 1/3         | 25.4        |
| 23301        | M100D No.30.1J* | 500         | 135                | 300                | 280               | 1/3         | 12.5        |



M100D 1m constant depth channel 0.0 to 30.0



M100D 0.5m constant depth channel



M100D 1m sloping depth channel

**Note:** The constant depth channels have an improved knockout feature, see page 41 for more information.

\* Indicates channels supplied with a preformed Ø110mm knockout for vertical outlet.

J Indicates side knockout for 90° channel connection. Knockout on both sides of the channel.





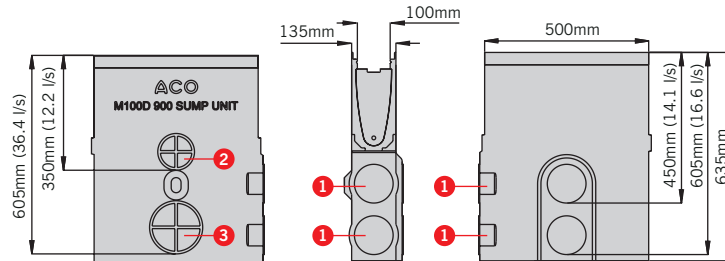
# ACO MultiDrain® MD components

## M100D sump unit with UltraSTEEL™ galvanised edge rails

| Product code | Description                                   | Length (mm) | Width overall (mm) | Depth overall (mm) | Invert depth (mm) | Invert Type | Weight (kg) |
|--------------|---|-------------|--------------------|--------------------|-------------------|-------------|-------------|
| 23410        | M100D Universal sump with plastic silt bucket | 500         | 135                | 635                | 615               | -           | 32.8        |

Standard sump outlets

- 1 = Ø110mm outlet with triple lipped seal
- 2 = Ø110mm knockout
- 3 = Ø160mm knockout



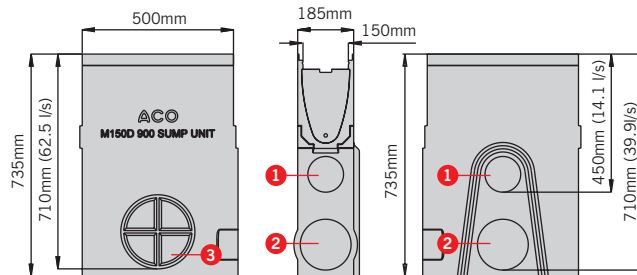
Note: Drawing shows flow through un-trapped unions. For information on the sump unit functionality see page 47.

## M150D sump unit with UltraSTEEL™ galvanised edge rails

| Product code | Description                                   | Length (mm) | Width overall (mm) | Depth overall (mm) | Invert depth (mm) | Invert Type | Weight (kg) |
|--------------|---|-------------|--------------------|--------------------|-------------------|-------------|-------------|
| 23158        | M150D Universal sump with plastic silt bucket | 500         | 185                | 735                | 715               | -           | 43.4        |

Standard sump outlets

- 1 = Ø110mm outlet with triple lipped seal
- 2 = Ø160mm outlet
- 3 = Ø200mm knockout



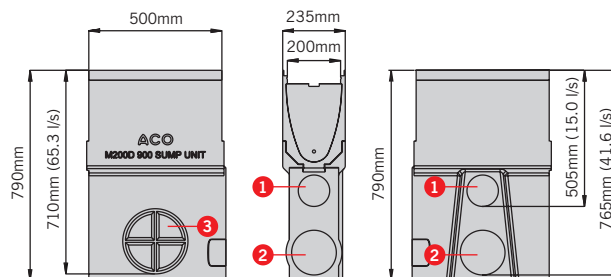
Note: Drawing shows flow through un-trapped unions. For information on the sump unit functionality see page 43.

## M200D sump unit with UltraSTEEL™ galvanised edge rails

| Product code | Description                                   | Length (mm) | Width overall (mm) | Depth overall (mm) | Invert depth (mm) | Invert Type | Weight (kg) |
|--------------|---|-------------|--------------------|--------------------|-------------------|-------------|-------------|
| 23218        | M200D Universal sump with plastic silt bucket | 500         | 235                | 790                | 765               | -           | 47.0        |

Standard sump outlets

- 1 = Ø110mm outlet with triple lipped seal
- 2 = Ø160mm outlet
- 3 = Ø200mm knockout



Note: Drawing shows flow through un-trapped unions. For information on the sump unit functionality see page 43.

