EN/FR

MUFLE®
WATER CHANNELLING SYSTEMS

4ALL

DRAINAGE CHANNELS
FOR **D.I.Y. MARKET**

4ALL **2016**


4ALL
3 METER DRAINAGE
LINE BY YOURSELF!
GARAGE PACK

EQUIPPED WITH

GARAGE PACK - COD 613001

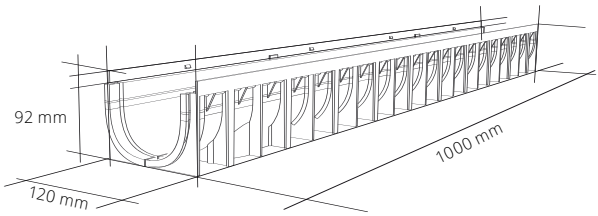
› 3 "4ALL" channels 100/70
› 3 "4ALL" A15 gratings
› Kit 1 bottom outlet + 2 end caps

3 channels 100/70 HD-PE

3 A15 gratings
in GALVANISED STEEL

3 A15 gratings in HD-PE

1 kit bottom outlet + 2 end caps
(Available in two versions Ø100 mm or Ø75 mm)



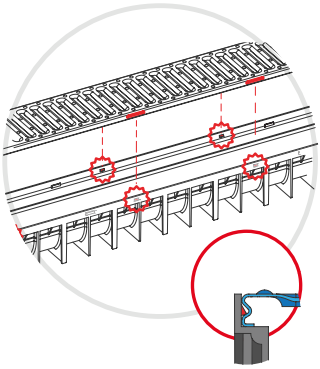
FEATURES

- Click the grating in and out, no screws required
- Designed in accordance with EN 1433
- Easy to assemble
- The smooth waterproof surface allows a quick waterflow drainage
- The external structure with ribs improves the anchoring between concrete and HDPE and is designed for a better strength and rigidity of the channel
- High mechanical and chemical resistance
- Lightweight
- Easy to carry

ACCESSORIES

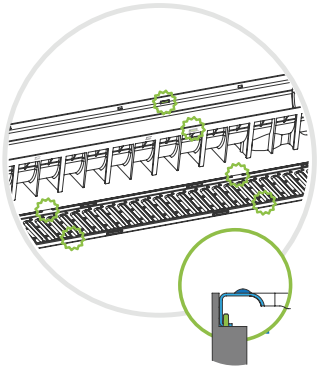
Drain box 4 connecting sides.

FIXING SYSTEM



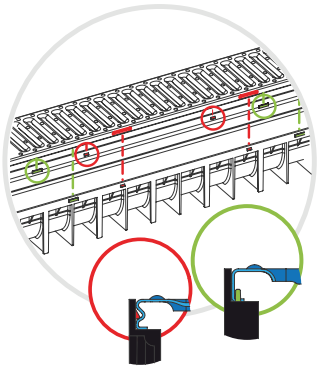
CHANNEL PROTRUSION FOR FIXING

The gratings are well-fixed to the channels thanks to the protrusions in the channels themselves without using external elements like screws or nuts.



PIVOTS FOR CENTERING THE GRATINGS

Once the grating has been centered and fixed, its correct position on the channel is guarented by the pivots that can adjust any eventual in the channel dimension due to external agents.



PROTRUSION DETAILS

INSTALLATION INSTRUCTIONS

A - LAY OUT OF DRAINING LINE

A1-Establish the exact lay out that the draining line will have to follow.

A2-Work out the trench sizes, taking into consideration:
› the channel sizes (width x height);
› the thickness for the concrete bed on which the channel will lay (please pay attention to the calculation considering also the eventual height for the space of the bottom outlet, when it is required).

e.g. For the installation of the 4ALL channel with A15 class grating, the **trench should be 192 mm high** (92 mm for the channel height + 100 mm for the concrete laying bed) and **320 mm wide** (120 mm for the channel width + 200 mm for the side flankings).

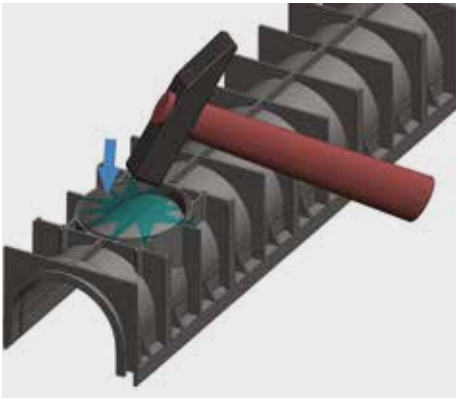
N.B. In order to obtain a good concrete, it is advisable to **mix three parts of sand, one of cement and half a part of water** (water / cement ratio=0,5); in this way the concrete will be rather “fluid”. In order to enable the concrete to reach the less accessible areas, it is advisable to use combined gravel with a maximum diameter of 15 mm.

B - OUTLET OPENING

To drain the water, you can use the bottom outlet, that is made of 2 halves.

B1-Break the outlet in the special seat with a hammer.

B2-Fit in the two halves and insert the outlet in the channel fixing it with the four screws supplied.



C - THE CHANNEL POSITIONING

C1- Proceed with the concrete cast for creating the laying bed and wait that the concrete has reached the right consistency (one hour at least).

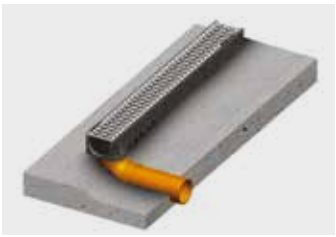
C2- If the draining line requires more than one channel, connect the channels by the coupling system “male-female”.

C3- Lay the channel on the laying bed.

C4-Link up the drainage pipes to the sewerage.

C5- Level out the channels and the final covering.

N.B. The channels inside the packaging are equipped with the gratings already fixed through a special system of protrusions in the channel itself. The special coupling system “male-female” allows the channels connection without disassembling the gratings.



D - FLANKING

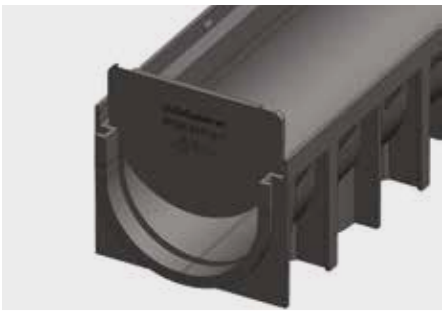
Before doing the flanking:

D1-Insert the end caps.

D2-Create the flanking.

N.B. Be careful to leave enough space without flanking, when a final covering (tiles, blockpaving, etc...) is necessary.

D3-The area will be practicable not before 72 hours.

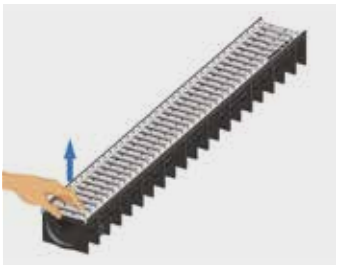


E - CHANNEL CLEANING/INSPECTION

E1- Take the grating off with lifting it up till the grating will be released.

E2- Clean the channel.

E3- Apply the grating on the channel fitting the protrusions of the channel into the slots along the grating; then make a little pressure with the hands until the grating has been fixed to the channel.



PRODUCT CERTIFICATION

The **Mufle** obtained in 2001 the company certification in compliance with **ISO 9001:2015** by the third part **IGQ** (Institute of Quality Guarantee) for the following activities: **"production and commercial distribution of drainage systems marked by MUFLE"**.
This means that all the company processes as the r**esources management**, the **product realization**, the **definition of responsibilities**, the **analyses and improvements of the aforementioned processes** are managed in a systematic and organic way and are especially aimed at increasing the customers' satisfaction and guaranting the quality standards of the manufactured goods.

The drainage HD-PE channels, the gratings and covers in galvanised steel (or stainless) and ductile iron made by MufleSystem srl are **certificated in conformity with the EN 1433 Norm "drainage channels for pedestrian and vehicular areas".**

The certification ensures the consumer that the quality procedures have been achieved in compliance with the specific requirements of the European directives and that all the units are submitted to periodic tests as per the EN 1433 Norm.
The CE marking identifies the certification assessment procedure and is marked on all the channels distributed on the market in compliance with the safety requirements.

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MUFLE

Muflesystem srl
Via dell'Industria, 7
62017 Porto Recanati MC - Italy

T +39 071 9799122
F +39 071 7592275

info@mufle.com

Certified Company ISO 9001:2008 CE EN-1433

www.mufle.com