

DRAINAGE SYSTEMS

WOLFA – Drainage systems

Drainage made easy!



- made of glass fiber reinforced polyester GRP
- easy handling
- robust and extremely break-resistant
- resistant to temperatures and chemicals
- easy to clean thanks to smooth and pore-free surface

Drainage gutters Made of GRP and metal – light and robust

We have been producing and processing glass fiber reinforced polyester / GRP for almost 60 years. Thanks to its excellent material characteristics, this thermosetting plastic is used in all industries where durability and structural stability is essential. GRP has become an integral and indispensable component in car engineering, shipbuilding and the aerospace industry.

WOLFA, pioneer in the production of glass fiber reinforced windows, has been using this material as a sheet molding compound (SMC), a mixture of polyester resin, mineral filling material and a high portion of glass fibers. The glass fiber compound and the thermosetting polyester resin guarantee greatest

stability and shape retention even under extreme conditions.

Unlike traditional thermoplastics, SMC cannot be reshaped by heat once it has hardened, and retains its sturdy and stable characteristics even when exposed to extreme temperature fluctuations,

Compared to gutters made of concrete or polymer concrete, **WOLFA** GRP gutters convince not only with their high break-resistance but also with their light weights which clearly reduce transport and handling costs.



Drainage gutter Fixo 75



**Drainage gutters
100/6V and 100/8V**



**Flat gutter systems
AquaStop-Ultra
AquaStop-Mini
AquaStop**



**Drainage gutter
100/6 and 100/8,5S**



**Drainage gutter
100V line**

Advantages of the WOLFA GRP gutters

- light weight
- easy handling
- extremely robust
- resistant to a multitude of chemicals
- frost and heat proof, resists hot asphalt
- resistant to oil, gasoline and liquid manure
- economical



Yard catch basin



Drainage gutter
150V line



Drainage gutter
150F



Drainage gutter
200V line

WOLFA flat gutters

The flat **WOLFA** gutters are ideal in locations with low installation heights. They are the perfect solution for patio, underground parking, parking deck, warehouse and shopping arcade drainage. Equipped with a safety seam, this flat gutter with a height as low as 58 mm is particularly suited for installation in above-ceiling floor constructions.

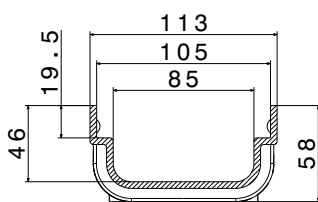
WOLFA-flat gutter 100/6

Load class A15

The perfect solution for patio or garage drainage in private homes.

Technical Data

Overall width 113 mm, installation height 58 mm, inner width 85 mm. Available with clamp-type slotted grating or pressure-locked grating, mesh width 30/30 and 30/10, class A 15.



Sizes in mm



Grating variants 100/6

A variable angle piece allows cross, corner or T connections. All gutters can be drained over a downspout (nominal width 100). An optional elevation allows gutter installation at heights of 3 to 30 cm.



Accessories

Gutter end guard
 Drain connection NW 100
 Variable elbow piece
 (for corner, T or cross connections)

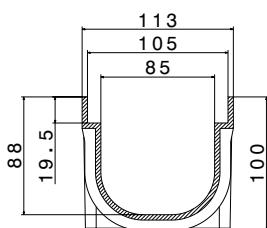
Drainage gutter 100/8,5S

Load class A 15

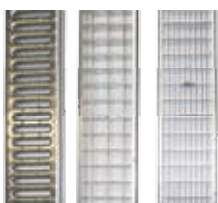
The "little" **WOLFA** GRP gutter, ideal for all areas around your home. Available with clamp-type slotted grating inside or pressure-locked grating mesh width 30/30 or 30/10, class A 15.

Technical Data

Length 100 cm or 50 cm, installation height 10 cm, Width 11.3 cm, inner width 8.5 cm



Sizes in mm



Grating variants 100/8 5S



Accessories

Drainage gutter 100/8.5S
 90° corner angle Size 47 x 35.5 cm
 Lateral front plates and NW 100 drain connection
 Bottom with intake filter and odor stop



Corner angle



Drain connection with intake filter, odor stop and two lateral end guards.

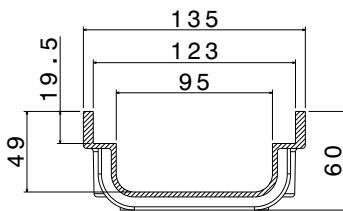
WOLFA-flat gutter 100/6 V

Load class A 15 - C 250

The XXL flat gutter, also suitable for public areas, heavy-duty gratings up to load class C250



Technical Data

Overall width 135 mm, installation height 58 mm, inner width 95 mm. Available in all grating variants, class A 15 - C 250 All gratings are screwed.



Sizes in mm

Colors:

-  light gray
-  charcoal gray (+ 10 %)



Accessories



Variable elbow piece for corner, T or cross connections



Drain connection with intake filter, odor stop and two lateral end guards.

Adapter 100/6V for catch basin



Gutter elevation

Grating variants, see 100V line

Drainage gutter 100/8V

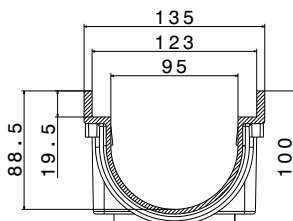
Load class A 15 - C 250

The new small universal gutter made by **WOLFA**. Thanks to the many different load class A15 - C250 gratings, the 100/8V gutter can also be used for professional applications. Besides plastic gratings, galvanized or stainless steel slotted gratings, we also supply pressure-locked gratings with 30/30 and 30/10 mesh widths and a cast iron version.

All gratings are screwed. For load classes, see the overview on page 10.



Technical Data

Length 100 cm or 50 cm, installation height 10 cm, Width 13.5 cm, inner width 9.5 cm



Sizes in mm

Colors:

-  light gray
-  charcoal gray (+ 10 %)



Accessories

Gutter end guard 100/8V

Drain connection NW 100 with intake filter and odor stop and 2 lateral end guards

Catch basin

Adapter 100/8V for catch basin

Variable elbow piece 100/8V



Variable elbow piece

Grating variants, see 100V line

Drainage gutter 100V- Line

Load class A 15 - D 400

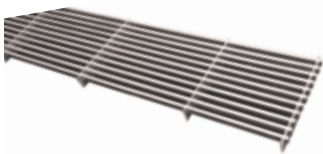
The **WOLFA** GRP gutter serves many applications. The great variety of gratings makes the 100 V line a universal gutter system. The gutter body is available with and without metal edge protection. Load class A 15 - D 400 gratings allow their use in private as well as public areas.

Technical Data

Length 100 cm or 50 cm, installation height 14.9 cm
Width 13.5 cm, inner width 9.5 cm

Grating variants

100/6V, 100/8V and 100V line



Longitudinal bars stainless steel V2A
A 15



Slotted grating
A 15, galvanized



Plastic grating, charcoal gray
B 125



Pressure-locked grating MW 30/30
A 15 and C 250



Pressure-locked grating MW 30/10
A 15 and C 250



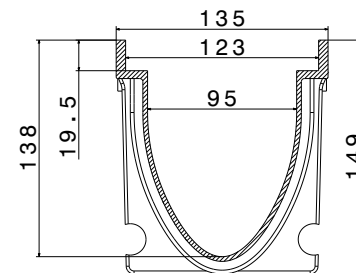
Cast iron grating
C 250 and
D 400 for gutter 100V line





With GRP or metal edge

Largely self-cleaning
thanks to its smooth surface

Resistant to frost, rust, heat
and hot asphalt



Colors:

-  light gray
-  charcoal gray
(+ 10 %)

Sizes in mm

Accessories

Drainage gutter 100/V line
Drain connection NW 100 with leaf screen,
Lateral NW 100 drain connection
Variable elbow piece 100/V line for corner,
T or cross connections



Variable elbow piece



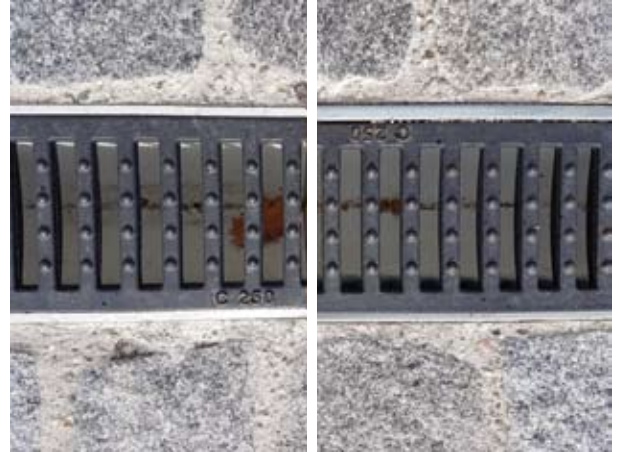
Catch basin



Lateral outlet
NW 100 connection



Drainage gutter 100/V line
with pressure-locked grating 30/10



Drainage gutter 100/V line
With GRP edges left and metal edge protection right

Drainage gutter 100/10L

Load class A 15

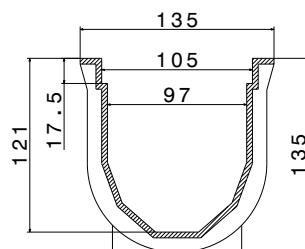
The ancestor of all gutters has been produced without hardly any changes for 30 years. The 100/10L drainage gutter has proven its worth in the field and today we count several hundreds of thousand gutter meters installed at greatly satisfied customers all over the world.

The particular feature of this GRP gutter is its flush-mounted and screwed-in-place slotted grating. Since the grating completely covers the gutter body, it perfectly protects the gutter edges from damage.



Technical Data

Length 100 cm or 50 cm, installation height 13.5 cm
Width 13.5 cm, inner width 9.7 cm. Downspout NW 100 option.



Sizes in mm

Accessories

Catch basin
Lateral front plates and NW 100 drain connection



Catch basin



Lateral front plates
and drain connection

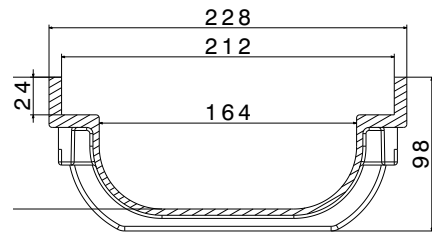
Drainage gutter 150F

Load class A 15 - D 400

The new flat gutter with a nominal width of 164 mm and an installation height of only 98 mm! Thanks to the many different load class A15 - D 400 gratings, the 150F gutter can also be used for commercial applications. All gratings with fourfold security.

Technical Data

Length 100 cm or 50 cm, installation height 9.8 cm
Width 22.8 cm, inner width 16.4 cm



Pressure-locked grating MW 30/30
A 15 and B 125



Pressure-locked grating MW 30/10
A 15 and B 125



Cast iron grating
C 250 and D 400

Accessories

Gutter end guard 150F

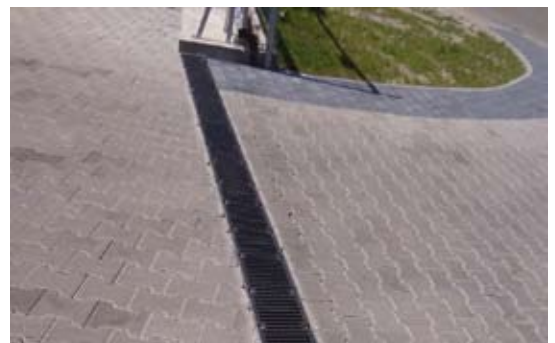
Drain connection 150F with discharge nozzle NW 125

Mud bucket and odor stop

Adapter for catch basin



Gutter end guard 150F



Drainage gutter 150F with cast iron grating

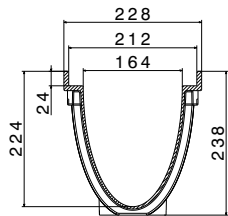
Drainage gutter 150V line

Load class A 15 - D 400

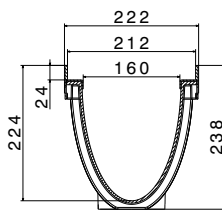
The **WOLFA** GRP gutter serves many applications. The gutter body is available with 8-mm GRP edge or 4-mm steel edge. Gratings for load classes A 15 – D 400 allow usage in private and public areas.

Technical Data

Length 100 cm or 50 cm, installation height 23.8 cm
Width 22.2 or 22.8 cm, inner width 16 cm / 16.4 cm



150V line with 8-mm GRP edge



150V line with 4-mm steel edge



150V line with 8-mm GRP edge



150V line with 4-mm steel edge



Pressure-locked grating MW 30/30
A 15 and B 125



Pressure-locked grating MW 30/10
A 15 and B 125



Cast iron grating
C 250 and D 400

Accessories

Drainage gutter 150/V line
Drain connection NW 125
Mud bucket and odor stop
Lateral drain connection



Catch basin
150/V line



Lateral outlet
Connection NW 125

Drainage gutter 200V line

Load class B 125 - D 400

The **WOLFA** GRP gutter serves many applications. **Light, high, robust, extremely resistant and resistant against chemicals and breakage.** These are just some of the many advantages over the heavy gutters made out of concrete. The gutter body is available with GRP or steel edges. Load class B 125 - D 400 gratings allow their use in private as well as public areas.

Technical Data

Length 100 cm or 50 cm
Installation height 23.8 cm
Width 26.8 / 27.4 cm
Inner width 21 cm / 20.6 cm



Pressure-locked grating MW 30/30
B 125



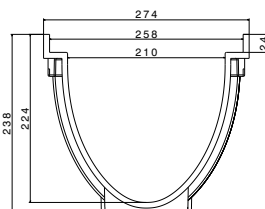
Pressure-locked grating MW 30/10
B 125



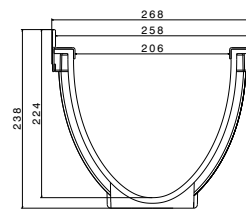
Cast iron grating
C 250 and D 400



Drainage gutter 200V line with 8-mm GRP edge



200V line
With 8-mm GRP edge



200V line
4-mm steel edge

Accessories

Drainage gutter 200V line
With discharge nozzle NW 125
Mud bucket and odor stop
Lateral NW 150 drain connection



Drainage gutter 200V with 4-mm steel edge

Drainage gutter Fixo 75

Load class A 15

Flat roofs, balconies and patios must warrant a lasting resistance to all weather conditions. Heavy precipitations need to be taken care of quickly, safely and permanently.

The *WOLFA* drainage gutter Fixo 75 provides the ideal solution for these particular areas.

The gutter made of hot-dipped sheet steel is perfectly suited for surface de-watering and the drainage of the water-bearing layer between covering and fill material such as gravel and stone chippings. The gutters come with an installation height of 75 mm and can be easily strung together via plug-in connectors. They may be covered with galvanized slotted gratings or pressure-locked gratings with 30/30 and 30/10 mesh widths. Other installation heights and widths can be supplied on request.

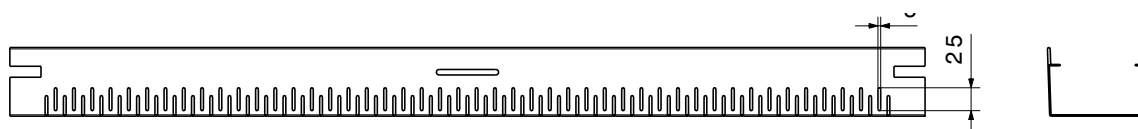


Box gutter Fixo 75

Technical Data

Length 100 cm, installation height 7.5 cm

Width 11 cm, inner width 10.5 cm



Box gutter Fixo 75

Accessories



Grating lock
(2 pieces per meter)



Lateral
connecting piece



Gutter end plate

Flat gutter AquaStop / AquaStop-Ultra

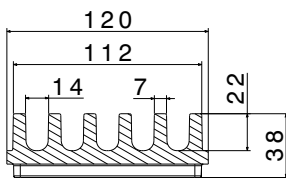
Load class D 400

AquaStop-Mini car-trafficable

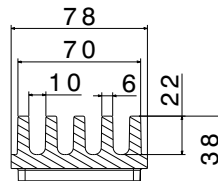
The WOLFA AquaStop drainage gutters without grating are perfectly suited for the drainage of residual or melt water in underground parking and parking decks. The multi-channel gutter with its extremely low build of just 25 or 38 mm is made of GRP material and therefore highly resilient. The safety seam guarantees bottom waterproofness.

Technical Data

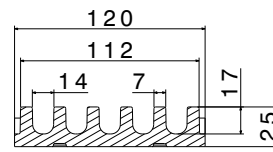
Length 100 cm or 50 cm, installation height 2.5 / 3.8 cm
Width 12 cm and 7.8 cm



Sizes in mm
AquaStop



Sizes in mm
AquaStop-Mini



Sizes in mm
AquaStop-Ultra



AquaStop



AquaStop-Mini



AquaStop-Ultra

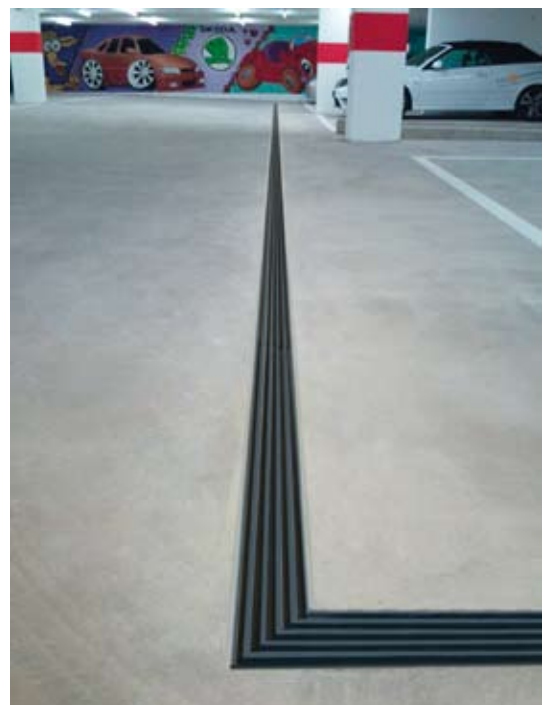
Advantages that convince:

- installation height of just 25 or 28 mm
- maintenance-free - without grating
- rattle-free and abrasion-proof
- resistant to a multitude of chemicals
- extremely high load capacity
- easy to clean

Accessories:

The AquaStop gutter can also be supplied with screwed-on sheet metal strips which allows easy installation on unfinished floors. The consignment includes an installation cover plate which keeps the gutter body clean during installation.

The variable elbow piece allows gutter connection on four sides. The open sides can be closed with a gutter end guard. The detachable inspection flap allows fast and easy cleaning of the drain spout.



Flat gutter AquaStop

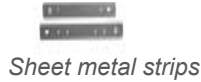
Accessories



Curve
for AquaStop-Ultra
Allows inclinations of up to 7°
Can be cut to fit



for height adjustment
from 3 cm to 30 cm



Sheet metal strips



Installation cover plate
for AquaStop



Drain connection ring
NW 125 for AquaStop / AquaStop-Ultra
NW 70 for AquaStop-Mini



Drain reducer piece
NW 125/100
for AquaStop



Straight intake filter
for AquaStop
AquaStop-Ultra
and AquaStop-Mini



Variable elbow piece
for AquaStop
Size 12 x 12 cm



Intake/elbow piece with detachable inspection
flap, four-sided gutter connection possibility
and drain connection NW 125 or NW 100



Lateral gutter end guard for
AquaStop, AquaStop-Mini and AquaStop-Ultra

Yard catch basin

The light alternative

The **WOLFA** yard catch basin is made of glass fiber reinforced polyester/GRP. The advantages over the traditional systems made of polymer concrete or concrete are obvious:

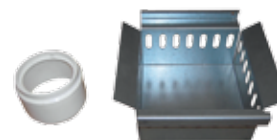
- low weight
- extremely break-resistant and solid
- resistant to many types of chemicals, oil and liquid manure
- temperature-resistant and dimensionally stable, also suited for installation in hot asphalt
- easy installation, low installation costs

Technical Data

Installation height 35 cm, width 30 cm, depth 30 cm.
With galvanized detachable mud trap with odor stop and NW 100 drain connection.
Available with **cast iron grating grating class B 125**.



Catch basin
with cast iron grating grating class B 125



Hot-dipped mud trap
with odor stop
And lateral NW 100 drain connection

WOLFA gutter system overview

Gutter types and grating variants and their load classes according to DIN EN 1433

Gutter type	Grating model / load class						Conformity according to DIN EN 1433 / DIN 19580
	Slotted gratings		Plastic gratings	Pressure-locked gratings		Cast iron gratings	
	Galvanized	V2A stainless steel		Mesh width 30/30 mm	Mesh width 30/10 mm		
100/6	A 15	-	-	A 15	A 15	-	X
100/6V	A 15	A 15 C 250	B 125	A 15 C 250	A 15 C 250	C 250 D 400	X
100/8.5S	A 15	-	-	A 15	A 15	-	-
100/8V	A 15	A 15 C 250	B 125	A 15 C 250	A 15 C 250	C 250 D 400	X
100/10L	A 15	-	-	-	-	-	-
100V with GRP edges	A 15	A 15 C 250	B 125	A 15 C 250	A 15 C 250	C 250 D400	X
100V with Metal edge	A 15	A 15 C 250	B 125	A 15 C 250	A 15 C 250	C 250 D 400	X
150 F with GRP or steel edges	-	-	-	A 15 B 125	A 15 B 125	C 250 D 400	X
150V with GRP or steel edges	-	-	-	A 15 B 125	A 15 B 125	C 250 D 400	X
200/V with GRP or steel edges	-	-	-	B 125	B125	C250 D 400	X
AquaStop	Multi-channel gutter without grating - load class up to D 400						X
AquaStop Ultra	Multi-channel gutter without grating - load class up to D 400						X



Slotted grating, galvanized or in V2A stainless steel



Pressure-locked grating
Mesh width 30/30



Pressure-locked grating
Mesh width 30/10



Plastic grating
Length 50 cm



2-piece cast iron grating
Length 50 cm

Each application its perfect gutter

Load classes as set forth in EN 1433



Class A 15*
Pedestrian areas and bike tracks



Class B 125*
Parking areas for cars and sidewalks



Class C 250*
Road and sidewalk shoulders



Class D 400*
Road lanes, parking areas, pedestrian areas and similar sealed traffic areas

*Test load in kN as set forth in DIN EN 1433

Installation examples WOLFA drainage gutters

The first step is the choice of the required load class as set forth in DIN EN 1433.

General guidelines:

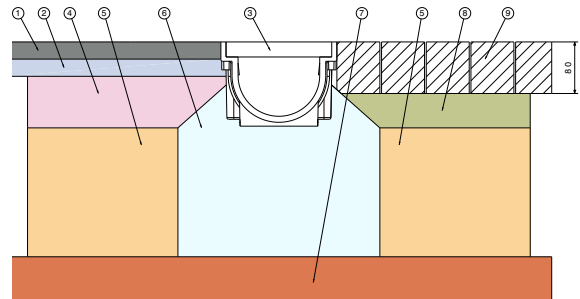
Flat gutters 100/6, 100/6V and the AquaStop systems designed for underground parking and parking decks must be installed flush with the driveway.

We recommend gutter installation with the proposed sheet metal strips. The gutters can so be easily be secured the raw concrete floor. Gutter joints and end plates must be sealed as set forth in DIN EN 1433 with a permanently elastic material (Terostat MS 9360 by Henkel).

Schematic installation diagram

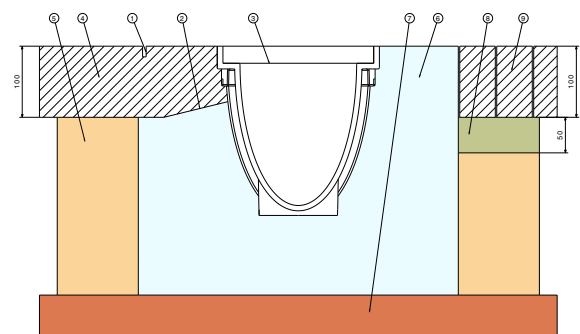
Load classes A 15 / B 125

1. Bituminous surface course, approx. 4 cm thick
2. Binder course
3. **WOLFA** drainage gutter, variant in dependence of the load class
4. Bituminous base
5. Base
6. Concrete mortar bed ≥ 6 cm (class A 15) und ≥ 10 cm (Class B 125) around the gutter
7. Undisturbed ground as level ground
8. Pavement bedding in stone chippings or sand
9. Pavers



Load classes A 250 / D 400

1. Dummy joint in concrete layer (distance approx. 15 cm)
2. Expansion joint for stress relieve (distance approx. 15 cm)
3. **WOLFA** drainage gutter, variant in dependence of the load class
4. Concrete driveway surface as needed by the expected load
5. Base
6. Concrete mortar bed ≥ 15 cm (class C 250) and ≥ 20 cm (class B 400) around the gutter
7. Undisturbed ground as level ground
8. Pavement bedding in stone chippings or sand
9. Pavers





Casement windows
Windows made of plastic
Residential windows
Front / balcony doors
Multi-purpose windows
Basement windows made of plastic
Basement windows made of steel
Window well systems
Ventilation shafts
Insulated glass
Doormats
Drainage systems
Yard catch basins
Gratings
Stair steps
Perforated plates
Soil sifters
Composters
Plastic gratings for industry
Plastic gratings for farming
Feed mangers
Feed troughs

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