# BLÜCHER®

A WATTS Brand

# DRAINAGE FOR MULTI-STOREY CAR PARKS

Safe drainage for all floor types

MagiC



#### Why choose BLÜCHER for a multi-storey car park?

Because our products cope with anything.

Our drains and channels are available for all types of flooring, and for all load classifications. Tailored and customised special solutions are a major part of our manufacturing, and with combined experience of several decades, we will happily assist in designing specific product solutions.

Our multi-storey car park products are low profile, vandal-resistant and will tolerate temperature fluctuations – and we have a substantial reference list. A WATTS Brand

**BLÜCHER**®

### Multi-storey car park design guide

At BLÜCHER we have drainage solutions for all floor types. In order to demonstrate all these, we have decided that our design guide will illustrate one flooring type per storey, with drainage solutions specifically for that type of floor.

All drains and channels in this brochure are strong enough to be driven over, and the load classification stated for each drain or channel refers to the grating which is standard for that particular drainage solution. If you need grating to cope with heavier loading, this is available in our wider product range.

All channels can be purchased as evaporation channels if desired.

All our drainage solutions can be customised, and provided in stainless, acid-proof designs as requested.



+ stainless BLÜCHER EuroPipe









#### Floor 1 – Permeable asphalt (standard asphalt)

The lowest floor in a multi-storey car park is often fitted with permeable asphalt. For this type of surface layer we recommend two alternative drainage channels; **BEPA 635/638** in stainless steel or **Mearin Plus 100** in fibreglass-reinforced polyester.

As a floor drain for section drainage, we recommend our stainless **Allbrunn 760B** with vandal-resistant locked grating.

The drainage solutions shown on this page are also suitable for the equivalent concrete surface layer.

## FLOOR 1 – PERMEABLE ASPHALT

#### BEPA 635/638

- Robust and stable channel in stainless steel with easily removable sand bucket
- BEPA 635 has an end-fitted sand bucket, on BEPA 638 it is fitted in the middle and is double the size
- Supplied as a single piece, or in max. 6 metre sections to be joined together with a flanged joint to any desired length
- Quick and easy assembly
- High water flow
- Standard side outlet Ø75 mm for both BEPA 635 & 638. (Both channels can be manufactured with Ø75 mm and Ø110 mm side or bottom outlet)
- Driveable, hot-dip galvanised grating as standard, load classification L5500 or reinforced M125

Flow with std grating and sand bucket in accordance with EN1253

Ø75 mm – 3 l/s Ø110 mm – 6 l/s

Flow approx. 7.0 l/ outlet, in accordance with EN1253

#### Drainage channel Mearin Plus 100

- An alternative to stainless channels
- Minimal weight = lower costs for installation and transport
- Copes with temperature fluctuations and heat, as well as vibration
- Made from glass-reinforced polyester (GRP)
- Options available with/without sand bucket and a bottom or side outlet Ø110 mm
- Load classification from A15 to D400 depending on choice of grating in accordance with EN 1433

#### Allbrunn 760B

- Stainless, stable drain for section drainage
- Stocked by leading wholesalers
- Options: sand bucket and vandal-resistant grating lock
- Square upper section 200 x 200 mm
- Side or bottom outlet Ø75 or Ø110 mm
- Load classification standard grating: L1500

Flow with standard

sand bucket, 3.3 l/s

in accordance with

grating, without

EN1253



#### Floor 2 – Concrete

A very common floor surface in multi-storey car parks is concrete, often trowel-finished. For this type of surface we recommend two alternative drainage channels at different price points; **BEPA 635/638** in stainless steel or **Mearin Plus 100** in fibreglass-reinforced polyester.

As a floor drain for section drainage, we recommend our stainless **Allbrunn 760B** with vandalresistant locked grating.

The drainage solutions shown on this page are also suitable in the equivalent permeable asphalt surface layer.

## FLOOR 2 – CONCRETE

#### BEPA 635/638

- Robust and stable channel in stainless steel with easily removable sand bucket
- BEPA 635 has an end-fitted sand bucket, on BEPA 638 it is fitted in the middle and is double the size
- Supplied as a single piece, or in max. 6 metre sections to be joined together with a flanged joint to any desired length
- Quick and easy assembly
- High water flow
- Standard side outlet Ø75 mm for both BEPA 635 & 638. (Both channels can be manufactured with Ø75 mm and Ø110 mm side or bottom outlet)
- Driveable, hot-dip galvanised grating as standard, load classification L5500 or reinforced M125

Flow with standard grating and sand bucket in accordance with EN1253

Ø75 mm – 3 l/s Ø110 mm – 6 l/s

> Flow with standard grating, without sand bucket, 3.3 l/s in accordance with EN1253

#### Drainage channel Bepa Tire 150 B

• Channel in stainless steel with high drainage capacity

Flow 6 l/s at Ø110 mm

- In two different frame depths: 40 mm and bottom outlet Ø110 mm, or 140 mm and bottom outlet/side outlet Ø110 mm. The frame depth can also be customised.
- The aesthetically appealing, tyre tread patterned. Tire grating is stable and can tolerate heavy loads
- Load classification M125

#### Allbrunn 760B

- Stainless, stable drain for section drainage
- Stocked by leading wholesalers
- Options: sand bucket and vandal-resistant grating lock
- Square upper section 200 x 200 mm
- Side or bottom outlet Ø75 or Ø110 mm
- Load classification standard grating: L1500

# **BLÜCHER**®

#### Floor 3 – Epoxy floor

A usual flooring surface in multi-storey car parks is epoxy, also known as compound flooring, polyurethane and joint-free flooring. This type of flooring consists of a concrete structure with a protective surface layer of epoxy. Along with the epoxy flooring, we recommend our channel **Bepa Tire 150 E** with compound flange and Tire grating, plus our **Bepa 635/638**, also with a compound flange for good adherence of epoxy.

As a floor drain for section drainage, we recommend our stainless **Golvbrunn 761E** with vandal-resistant locked grating. Golvbrunn 761E is also fitted with a strong flange for adherence of epoxy, and is epoxy backfilled as standard, for high dynamic forces.

#### BEPA 635/638 with compound flange

- Robust and stable channel in stainless or acid-proof steel with easily removable sand bucket and water trap
- BEPA 635 has an end-fitted sand bucket, on BEPA 638 it is fitted in the middle and is double the size
- Supplied as a single piece, or in max. 6 metre sections to be joined together with a flanged joint to any desired length
- Quick and easy assembly
- High water flow
- Standard side outlet Ø75 mm for both BEPA 635 & 638. (Both channels can be manufactured with Ø75 mm and Ø110 mm side or bottom outlet)
- Driveable, hot-dip galvanised grating as standard, load classification L5500 or reinforced M125

Flow with standard grating and sand bucket in accordance with EN1253

Ø75 mm – 3 l/s Ø110 mm – 6 l/s

Flow 6 l/s at Ø110 mm

#### Drainage channel Bepa Tire 150 E

- Channel in stainless steel with high drainage capacity
- With compound flange for adherence to surface layer
- In two different frame depths: 40 mm and bottom outlet Ø110 mm, or 140 mm and bottom outlet/side outlet Ø110 mm. The frame depth can also be customised
- The aesthetically appealing, tyre tread patterned. Tire grating is stable and can tolerate heavy loads
- Load classification M125

Flow with standard grating, without sand bucket, 3.3 l/s in accordance with EN1253

#### Golvbrunn 761E

- Stable, stainless drain for section drainage
- Strong compound flange for adherence to waterproofing layer
- Options: sand bucket and vandal-resistant grating lock
- Side or bottom outlet Ø75 or Ø110 mm
- Load classification standard grating: L1500



A WATTS Brand

. .

#### Floor 4 – Mastic asphalt

A common surface layer in multi-storey car parks is mastic asphalt, a durable and watertight coating with bitumen and polymers. For the drainage channel for mastic asphalt, we recommend our **Parking 632**. The channel can also be used in polyurethane/compound assemblies, if the surface is cut down or puttied. Parking 632 is manufactured without fall, and does not damage the joists.

For section drainage, use our stainless floor drain **Parking 401** where the bitumen waterproofing is fitted in advance and the mastic asphalt can be laid last, thanks to the two-stage design with adjustable upper section.

## FLOOR 4 – MASTIC ASPHALT

#### Channel Parking 632 with compound flange

- A stainless or acid-proof channel that is easily installed by being bolted directly to the joist
- Low-profile design to allow drainage on all surfaces
- Supplied in a single piece up to a max. of 6 m
- Quick installation without the drying time of concrete
- Central outlet Ø110 mm
- Adherence flange for bitumen and mastic asphalt in accordance with TG (waterproofing guarantees)
- In addition to car parks, it is also suitable for bridges, terraces, roofs, balconies and courtyards
- Vandal-resistant with double screw locks for each grating
- Can be supplied with fill reinforced edge stiffening
- Driveable for passenger car traffic in accordance with load classification L1500

Flow 4 l/s in accordance with EN1253

#### **Brunn Parking 401**

• Two-piece construction allowing work in different stages

- Standard height above flange: 15 mm, with 3 mm extension rings if available
- Supplied with vandal-resistant grating lock as standard
- Can be supplied with different options to suit other floor surfaces
- Adherence flange for bitumen and mastic asphalt in accordance with TG (waterproofing guarantees)
- Sand bucket available
- Stainless, acid-proof steel
- Bottom outlet Ø110 mm
- Load classification standard grating: L1500

Flow 3.3 l/s excl. sand bucket in accordance with EN1253



## ALL FLOORS – EUROPIPE DRAINAGE SYSTEM



The entire BLÜCHER® EuroPipe range is available in BIM

### BLÜCHER<sup>®</sup> EuroPipe for multi-storey car parks

For drainage in multi-storey car parks, the BLÜCHER<sup>®</sup> EuroPipe system is a superior choice. All channels and drains we recommend for multi-storey car parks can easily be connected to the pipe system.

BLÜCHER<sup>®</sup> EuroPipe is a wide product range with quiet, fire and corrosion-resistant drainage pipes and sections, made from stainless or acid-proof steel in dimensions of Ø40-Ø315 mm. The pipe system is type approved, and several different cutting machines to fit the pipes are available for hire.

This pipe system is also an environmentally friendly choice – in part due to the fact that stainless steel is entirely recyclable, and partly because its lower weight is good for transportation. Its low weight also has the advantage that the pipe system can be installed considerably faster than equivalent systems made from cast iron, for example.

We recommend stainless, acid-proof steel for use in multi-storey car parks.

### Advantages specific to multi-storey car parks:

- The material strength of stainless steel makes it both vandal-resistant and will not crack if cars reverse into it.
- Long-term durability the products do not need to be replaced.
- Easy and stable fixing.
- Pipe suspension only required every third metre.
- Classed as A1 the best fire classification.
- The pipe can cope with all types of weather. Not affected by UV light, wind or water.



The BLÜCHER® EuroPipe system is stocked by leading wholesalers

# **BLÜCHER**®

At BLÜCHER we are specialists in the production of stainless steel drainage systems. Our products meet the most stringent requirements and specifications from professional users in many industries, including foodstuffs, chemicals, ship building and housing.

### **BLÜCHER° EuroPipe**

**BLÜCHER**<sup>®</sup>Channel

### **BLÜCHER®** Drain

1110

BLÜCHER · Pugdalvej 1 · DK-7480 Vildbjerg · Tel. +45 99 92 08 00 · mail@blucher.com · www.blucher.com