





Safety through quality

# Glass Railings

Handrail systems · Point fixings · Clamp fixings · Handrails

# **GLASS RAILING SYSTEMS**

| Glass fixing with revolutionary technology          | 6  |
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| Floor Profile U for top mounting                    | 8  |
| Floor Profile F for top mounting                    | 14 |
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# SINGLE POINT FIXINGS

| Adjustable point fixings | 40 |
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# **CLAMP FIXINGS**

Clamp fixings



# FRENCH BALCONY

Lyon 55



# **HANDRAILS**

Square handrails Round handrails 60 62



# **HANDLING**

Handling 64



About Bohle 70

# ONE SYSTEM. COUNTLESS POSSIBILITIES.

Thanks to its four profile variants, the tested and versatile VetroMount® glass balustrade system is suitable for a great variety of installation settings. The General Building Inspection Test Certificate (AbP) underlines the high-quality standards. The system is based on an intelligent fastening mechanism with patented glass bearers. They enable the continuous adjustment of glass panes, which can subsequently be fixed in the profile, granting 100% safety. The installation is quick and cost-effective.

## Tested system with structural analysis

- On concrete and steel
- For parapet walls from 400 mm
- For enamelled glass (Floor and Side Profile U)

## **Approval**

- Private (0.5 kN)
- Public (1.0 kN)

#### Glass thicknesses:

- 12.76 mm & 13.52 mm
- 16.76 mm & 17.52 mm
- 20.76 mm & 21.52 mm

#### **Glass dimensions**

- Min. width: 300 mm
- Max. height: 1300 mm

#### **Flexibility**

- With and without cover profiles
- Floor connection and structural connection profiles
- LED illumination can be integrated optionally

#### **Glass fixing**

- In record time thanks to patented glass bearers

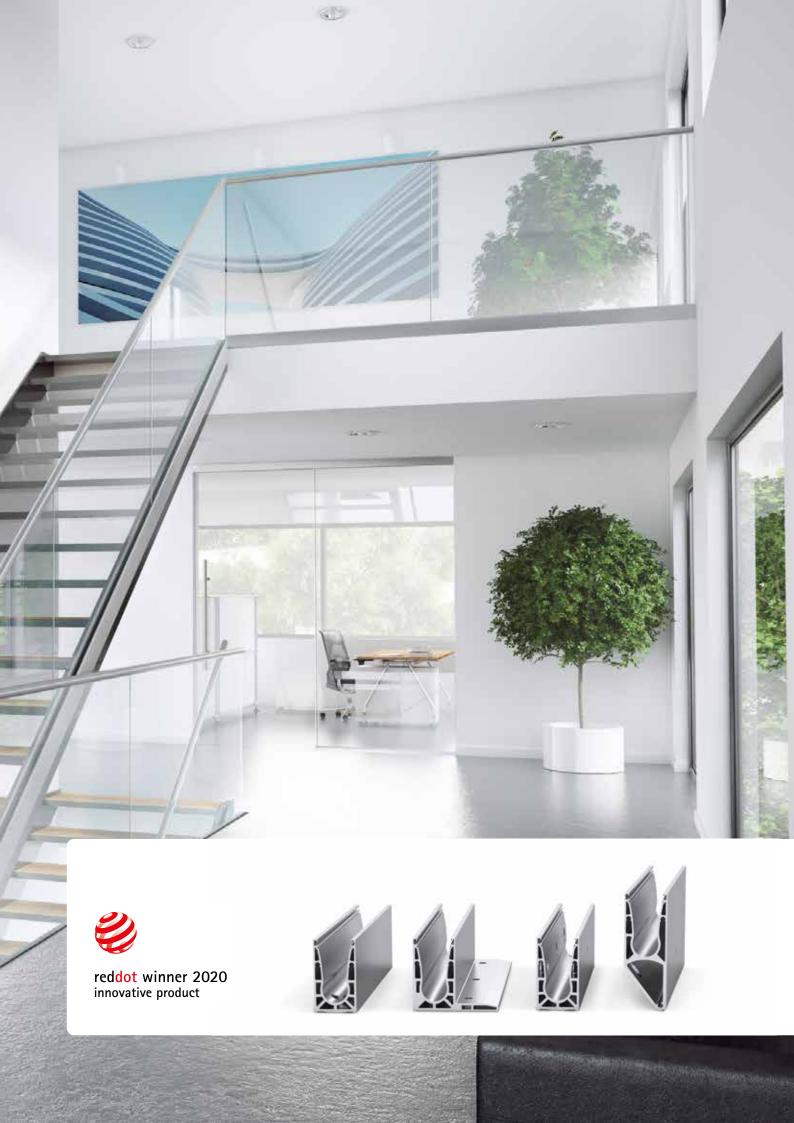
#### **Glass alignment**

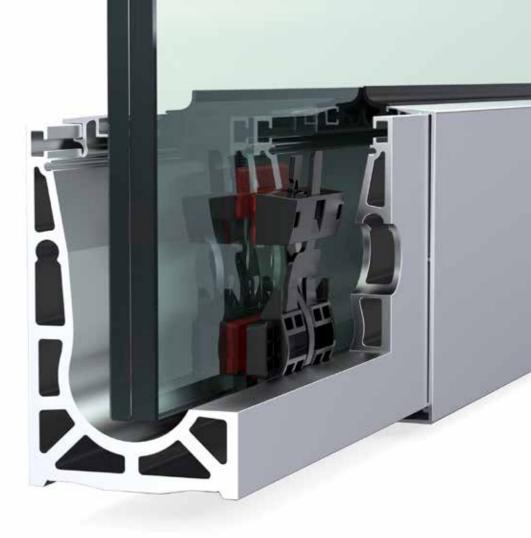
- Continuous adjustability by up to ±20 mm

#### **Material**

- Aluminium with protective 25 µm anodised layer







# GLASS FIXING EQUIPPED WITH REVOLUTIONARY TECHNOLOGY

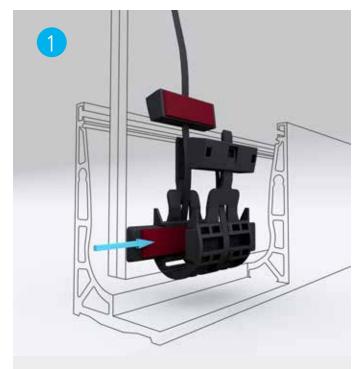
Nothing is simpler: With VetroMount®, no single parts need to be assembled for the safety mechanism. The completely pre-assembled glass bearer units are simply inserted into the profile and the glass is put in subsequently.

## Fast. Simple. Safe.

- Save time thanks to pre-drilled profiles and only a few fixing points.
- Patented glass fixing in three quick steps
- Continuous adjustment of glass panes
- Installation from the inside (opposite the fall side)
- Quick disassembly of the whole pane with a standard screwdriver (see page 38)

VetroMount® can be mounted with a few simple steps. While the floor profiles usually only need a simple concrete screw every 400 mm for fastening, the glass is fixed based on the well-known cable-tie principle.

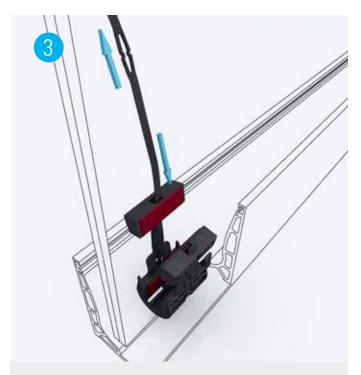
# Safely anchor the glass pane in 3 steps – thanks to the intelligent cable-tie principle.



To **fix the glass pane**, simply push the lower clamping wedge to one side. The easiest way to do this is by using the mounting aid on page 31.



The **glass inclination** can be adjusted manually without the need for any tools ( $\pm$  20 mm for a glass height of 1 m). The glass bearers move continuous and simultaneously inside the profile.



When it comes to anchoring the glass, simply engage the pull strap while the upper tensioning wedge safely locks into place — as ingenious as the cable-tie principle.



Fast. Simple. Safe.
The patented safety mechanism from VetroMount®
Watch installation video!



# **Product Highlights**

- Tested fastening mechanism on concrete and steel
- Tested for parapet walls
- Tested for enamelled glass
- Screw usually required only every 400 mm
- Installation with and without cover profile
- Floor connection and structural connection profiles available
- Glass heights up to 1300 mm
- Glass width from 300 mm possible
- Optional drainage with the aid of intermediate connectors
- Aluminium with protective anodised layer
- LED illumination can be integrated optionally





reddot winner 2020 innovative product



# **FLOOR PROFILE U** FOR TOP MOUNTING

The Floor Profile U for top mounting is made of extruded aluminium, stands out due to its high-quality appearance, and is tested for both steel and concrete. We recommend intermediate connectors for fast drainage – the connectors are fixed in between the floor profiles with a simple plug connection.

Now rated to 1.5kN for British Standard 6180:2011

























min. 60 mm











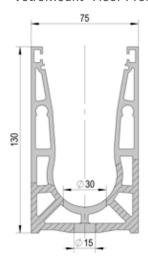


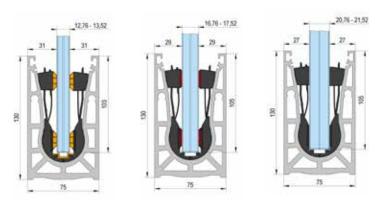




For further explanations, see page 67.

## VetroMount® Floor Profile U





| LENGTH  | FINISH                          | DRILL HOLES | ART. NO.   | SALES UNIT |
|---------|---------------------------------|-------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | 13          | B0 5403008 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | 25          | B0 5403010 | 1 x        |

# VetroMount® Mounting Set (glass bearers/rubber seals)





Glass bearers 13 x (2500 mm) 26 x (5000 mm) + 2 x rubber seals

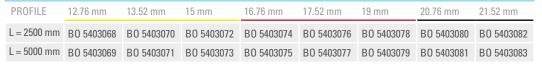
- For the version **without** cover profile
- Only 4 glass bearers per metre
- For UK 1.5kN use 5 21.52mm bearers per metre



| PROFILE      | 12.76 mm   | 13.52 mm   | 15 mm      | 16.76 mm   | 17.52 mm   | 19 mm      | 20.76 mm   | 21.52 mm   |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|
| L = 2500 mm  | B0 5403084 | BO 5403086 | B0 5403088 | B0 5403090 | B0 5403092 | B0 5403094 | BO 5403096 | B0 5403098 |
| $L=5000\;mm$ | BO 5403085 | BO 5403087 | BO 5403089 | BO 5403091 | B0 5403093 | BO 5403095 | BO 5403097 | BO 5403099 |

- For the version with cover profile
- Narrow rubber profile
- Only 4 glass bearers per metre
- For UK 1.5kN use 5 21.52mm bearers per metre







| Possib | le combinations | for cover profiles | / structural conn | nection profile / fl    | oor connection p | rofile                     |
|--------|-----------------|--------------------|-------------------|-------------------------|------------------|----------------------------|
|        | 1 2<br>3° 27    |                    |                   | 3 2<br>13 <sup>12</sup> |                  |                            |
| 3 3    |                 |                    |                   | G 4                     |                  | 6 2<br>13 <sup>12</sup> 27 |

# VetroMount® Cover Profile, top

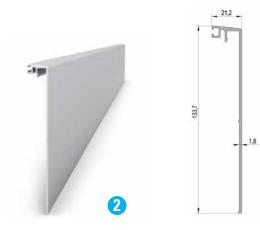


- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | BO 5403016 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403018 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403017 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | BO 5403019 | 1x         |

# VetroMount® Cover Profile, side



- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | B0 5403012 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403014 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403013 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | B0 5403015 | 1x         |

## VetroMount® Structural Connection Profile





- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: Aluminium



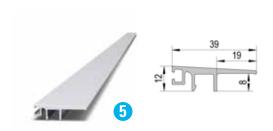
| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403036 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403136 | 1x         |

- Opening width 8, 10, 20 mm (e. g. for glass or wood panels)
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403037 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403137 | 1x         |

# VetroMount® Floor Connection Profile



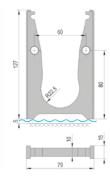
- For bridging the gap between basic profile and floor
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403038 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | BO 5403138 | 1x         |

# VetroMount® Intermediate Connector for Drainage Purposes



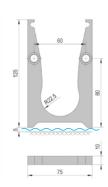


- Overlapping  $\cdot$  for use without cover profiles The number and the position of intermediate connectors must be planned on site.
- For Floor Profile U for top mounting only
- Material: aluminium



| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403020 | 1x         |



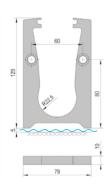


- Flush · for use without cover profiles
- The number and the position of intermediate connectors must be planned on site.
- For Floor Profile U for top mounting only
- Material: aluminium



| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403021 | 1x         |





- Flush · for use with cover profiles
- The number and the position of intermediate connectors must be planned on site.
- For Floor Profile U for top mounting only
- Material: aluminium



| FINISH                               | ART. NO.   | SALES UNIT |
|--------------------------------------|------------|------------|
| Aluminium colour anodised E6/C0      | B0 5403022 | 1x         |
| Stainless steel look anodised E4/C31 | B0 5403023 | 1x         |

The use of intermediate connectors enables excess water to quickly run off. The intermediate connectors are simply placed in between the Floor Profiles U and thus allow for the water to run off. See also page 33.



Drainage block 10 mm passage height

The drainage blocks (page 13), which are placed under the floor

profile U, allow excellent drainage of the inner railing surface.

# VetroMount® Connecting Pins for Basic Profile and Intermediate Connector for Drainage Purposes





- Complies with DIN 1481
- Diameter: 8 mm





| LENGTH | ART. NO.   | SALES UNIT |
|--------|------------|------------|
| 50 mm  | B0 5403113 | 2x         |

# VetroMount® End Caps for Floor Profile





- For use **without** cover profiles
- Mounting bolts included in set
- Simple attaching and removal of end caps
- Material: aluminium



| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403109 | 1x         |





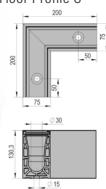
- For use with cover profiles
- Mounting bolts included in set
- Simple attaching and removal of end caps
- Material: aluminium



| FINISH                               | ART. NO.   | SALES UNIT |
|--------------------------------------|------------|------------|
| Aluminium colour anodised E6/C0      | B0 5403111 | 1x         |
| Stainless steel look anodised E4/C31 | B0 5403110 | 1x         |

# VetroMount Corner for Floor Profile U



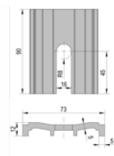


• 90° corner profile

| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403180 | 1x         |

# VetroMount Drainage Block for Floor Profile U





- For drainage of the inner railing surface
- Raises the basic profile by 10 mm
- Material: aluminium
- Packaging unit with 13 pieces suitable for 2.5 m basic profile

| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403117 | 13x        |



# **Product Highlights**

- Tested fastening mechanism on concrete and steel
- Tested for parapet walls
- For a flush finish of the edge
- Screw usually required only every 400 mm
- Installation with and without cover profile
- Floor connection and structural connection profiles available
- Glass heights up to 1300 mm
- Glass width from 300 mm possible
- Aluminium with protective anodised layer
- LED illumination can be integrated optionally

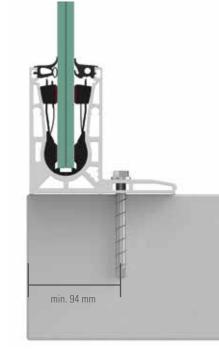






# **FLOOR PROFILE F** FOR TOP MOUNTING

The Floor Profile F for top mounting is ideally suited for creating a flush finish on the construction edge. For achieving a flush floor edge, we recommend applying a floor screed

























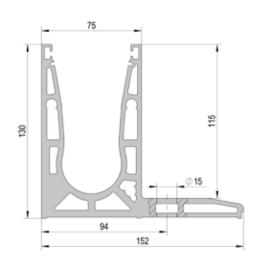


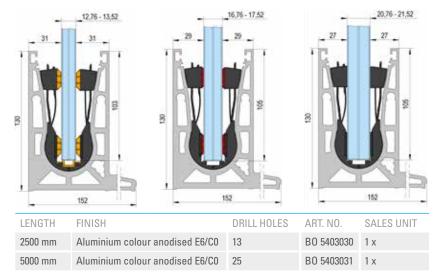




For further explanations, see page 67.

## VetroMount® Floor Profile F





# VetroMount® Mounting Set (glass bearers/rubber seals)





Glass bearers 13 x (2500 mm) 26 x (5000 mm) + 2 x rubber seals

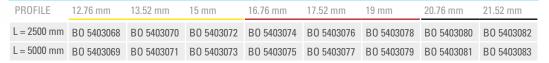
- For the version without cover profile
- Only 4 glass bearers per metre



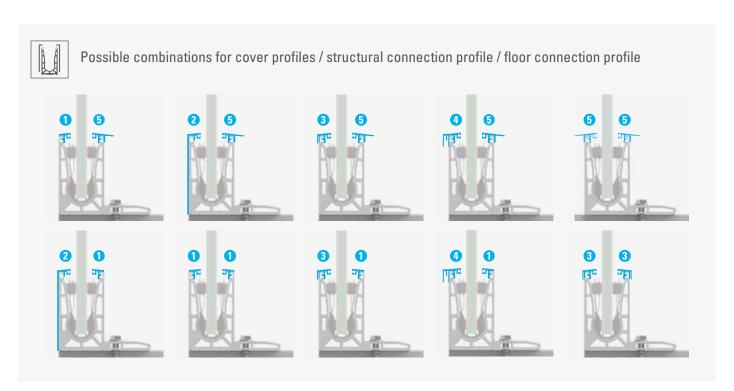
| PROFILE     | 12.76 mm   | 13.52 mm   | 15 mm      | 16.76 mm   | 17.52 mm   | 19 mm      | 20.76 mm   | 21.52 mm   |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| L = 2500 mm | B0 5403084 | B0 5403086 | BO 5403088 | B0 5403090 | B0 5403092 | B0 5403094 | BO 5403096 | BO 5403098 |
| L = 5000 mm | B0 5403085 | B0 5403087 | BO 5403089 | B0 5403091 | B0 5403093 | B0 5403095 | B0 5403097 | B0 5403099 |

- For the version **with** cover profile
- Narrow rubber profile
- Only 4 glass bearers per metre









# VetroMount® Cover Profile, top



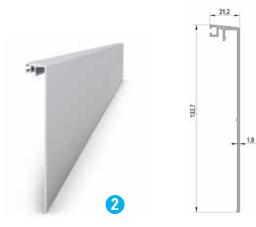


- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | BO 5403016 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403018 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403017 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | B0 5403019 | 1x         |

# VetroMount® Cover Profile, side



- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | B0 5403012 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403014 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403013 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | BO 5403015 | 1x         |

## VetroMount® Structural Connection Profile





- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: Aluminium



| LENGTH   | FINISH                          | ART. NO.   | SALES UNIT |
|----------|---------------------------------|------------|------------|
| LLINGIII | THVISTI                         | AITT. IVU. | SALLS UNIT |
| 2500 mm  | Aluminium colour anodised E6/C0 | BO 5403036 | 1 x        |
| 5000 mm  | Aluminium colour anodised E6/C0 | BO 5403136 | 1x         |

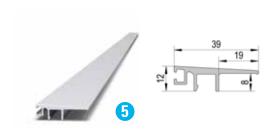


- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403037 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403137 | 1x         |

# VetroMount® Floor Connection Profile



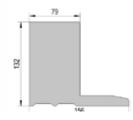
- For bridging the gap between basic profile and floor
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | BO 5403038 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403138 | 1x         |

# VetroMount® End Cap for Floor Profile F





- For use **without** cover profiles
- Mounting bolts included in set
- Simple attaching and removal of end caps
- Material: aluminium



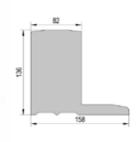
| FINISH                          | SIDE  | ART. NO.   | SALES UNIT |
|---------------------------------|-------|------------|------------|
| Aluminium colour anodised E6/C0 | Left  | BO 5403039 | 1x         |
| Aluminium colour anodised E6/C0 | Right | BO 5403040 | 1x         |

- For use with cover profiles
- Mounting bolts included in set
- · Simple attaching and removal of end caps
- Material: aluminium



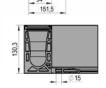
| FINISH                               | SIDE  | ART. NO.   | SALES UNIT |
|--------------------------------------|-------|------------|------------|
| Aluminium colour anodised E6/C0      | Left  | B0 5403041 | 1x         |
| Aluminium colour anodised E6/C0      | Right | B0 5403042 | 1x         |
| Stainless steel look anodised E4/C31 | Left  | B0 5403043 | 1x         |
| Stainless steel look anodised E4/C31 | Right | B0 5403044 | 1x         |

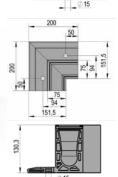
# Fig.: left end cap



# VetroMount Corners for Floor Profile F







#### • 90° inside corner

| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403183 | 1x         |



| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403184 | 1x         |

The end caps are conveniently attached with the aid of pins supplied with the set and offer a firm hold. No screwing or bonding required for fastening the end cap. Thanks to the plug-in system, the end caps can be loosened as quickly as they can be fastened.

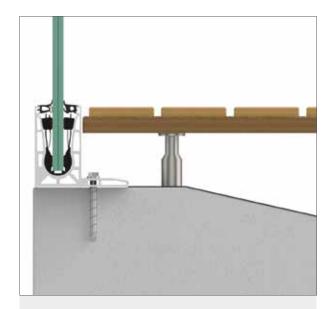


# MORE FLEXIBILITY WITH THE FLOOR PROFILE F

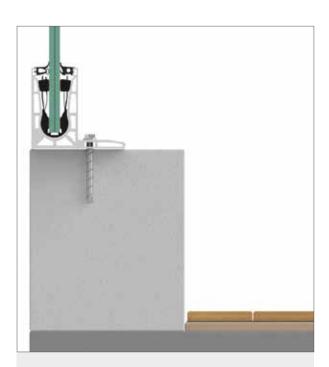
The Floor Profile F offers versatile installation options. The General Building Inspection Test Certificate for VetroMount® confirms its one hundred percent safety. We are happy to assist you with customised solutions. Please get in touch with us!



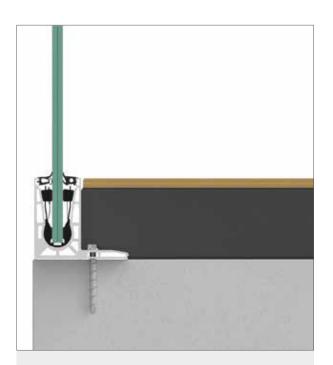
The Floor Profile F has a flush finish both to the construction edge and the floor on the right side.



Using the profile on a gradient. The floor is raised at the height of the profile.



The profile is installed onto masonry and provides a classy parapet wall solution.



The cast screed floor enables a flush finish of the top profile with the floor.

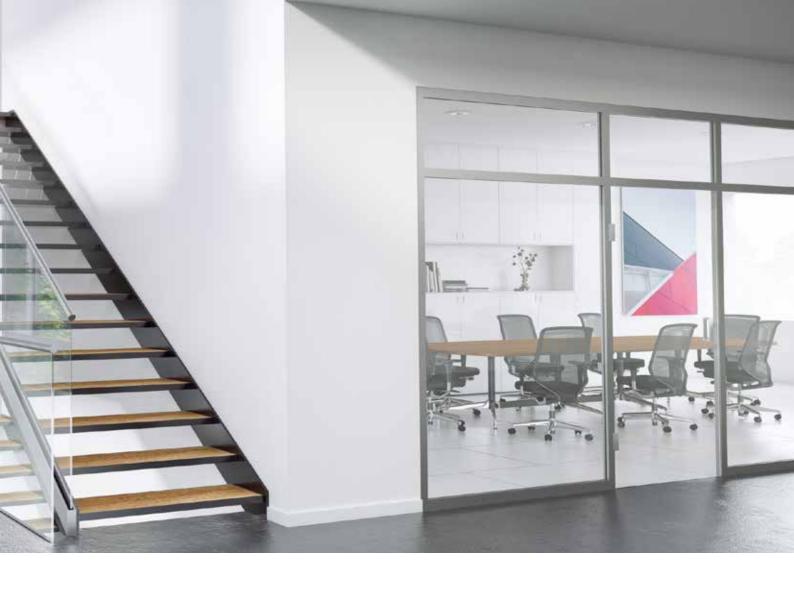


# **Product Highlights**

- Tested fastening mechanism on concrete and steel
- Tested for parapet walls
- Tested for enamelled glass
- Installation with and without cover profile
- Floor connection and building connection profiles available
- Screw required every 200 mm
- Glass heights up to 1300 mm
- Glass width from 300 mm possible
- Aluminium with protective anodised layer
- LED illumination can be integrated optionally

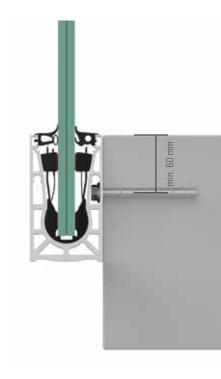






# SIDE PROFILE U FOR PROJECTING INSTALLATION

The Side Profile U is especially suited for staircases. It has pre-drilled holes on the side, every 200 mm, saving valuable installation time. The drill holes can be concealed with the aid of a cover profile.



























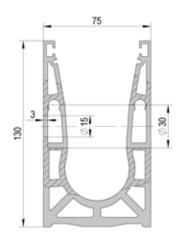


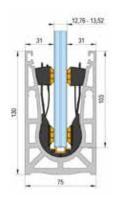


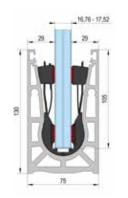


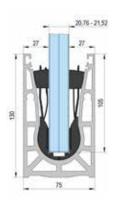
For further explanations, see page 67.

## VetroMount® Side Profile U









| LENGTH  | FINISH                          | DRILL HOLES | ART. NO.   | SALES UNIT |
|---------|---------------------------------|-------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | 13          | BO 5403009 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | 25          | B0 5403011 | 1 x        |

# VetroMount® Mounting Set (glass bearers/rubber seals)



- For the version without cover profile
- Only 4 glass bearers per metre

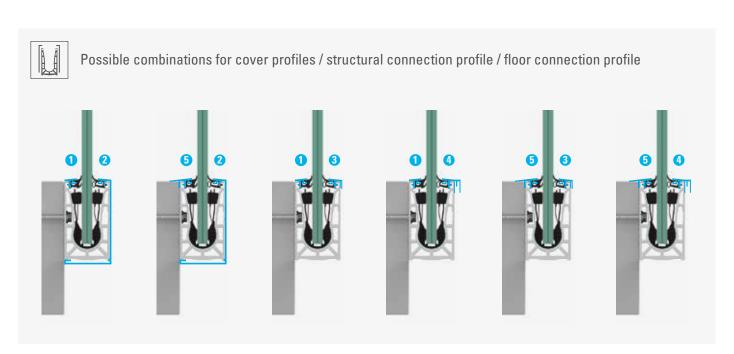


| PROFILE     | 12.76 mm   | 13.52 mm   | 15 mm      | 16.76 mm   | 17.52 mm   | 19 mm      | 20.76 mm   | 21.52 mm   |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| L = 2500 mm | B0 5403084 | B0 5403086 | B0 5403088 | B0 5403090 | B0 5403092 | B0 5403094 | BO 5403096 | B0 5403098 |
| L = 5000 mm | B0 5403085 | B0 5403087 | BO 5403089 | B0 5403091 | B0 5403093 | BO 5403095 | BO 5403097 | BO 5403099 |

- For the version with cover profile
- Narrow rubber profile
- Only 4 glass bearers per metre







# VetroMount® Cover Profile, top

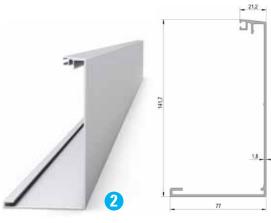


- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | B0 5403016 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403018 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403017 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | B0 5403019 | 1x         |

# VetroMount® Cover Profile, side



- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | BO 5403004 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | BO 5403006 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403005 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | B0 5403007 | 1x         |

## VetroMount® Structural Connection Profile





Powder-coating possibleMaterial: Aluminium



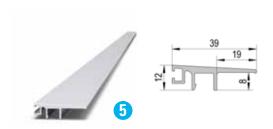
| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403036 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | BO 5403136 | 1x         |

- Opening width 8, 10, 20 mm (e. g. for glass or wood panels)
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403037 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403137 | 1x         |

# VetroMount® Floor Connection Profile



- For bridging the gap between basic profile and floor
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403038 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403138 | 1x         |

# VetroMount® End Cap for Side Profile U with Cover Profile



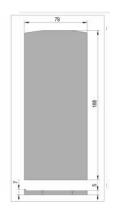
- For use with cover profilesMounting bolts included in set
- Simple attaching and removal of end capsMaterial: aluminium



| FINISH                               | SIDE  | ART. NO.   | SALES UNIT |
|--------------------------------------|-------|------------|------------|
| Aluminium colour anodised E6/C0      | Left  | B0 5403101 | 1x         |
| Aluminium colour anodised E6/C0      | Right | B0 5403103 | 1x         |
| Stainless steel look anodised E4/C31 | Left  | B0 5403100 | 1x         |
| Stainless steel look anodised E4/C31 | Right | B0 5403102 | 1x         |

# VetroMount® End Cap Staircase for Side Profile U





- For use with cover profiles
- Can be trimmed individually
- Material: aluminium





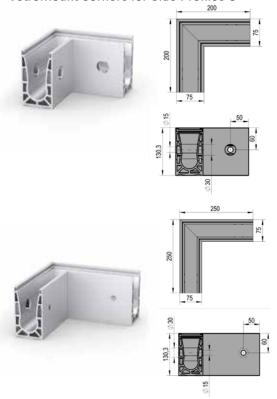
| FINISH                               | SIDE  | ART. NO.   | SALES UNIT |
|--------------------------------------|-------|------------|------------|
| Aluminium colour anodised E6/C0      | Left  | B0 5403105 | 1x         |
| Aluminium colour anodised E6/C0      | Right | B0 5403107 | 1x         |
| Stainless steel look anodised E4/C31 | Left  | B0 5403104 | 1x         |
| Stainless steel look anodised E4/C31 | Right | BO 5403106 | 1x         |

The end caps for staircases are 188 mm high and can be trimmed to size depending on the angle of inclination of the staircase. The end cap must be bonded.





# VetroMount Corners for Side Profiles U



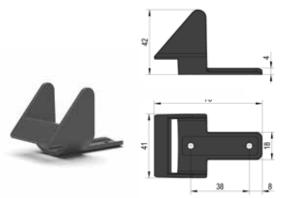
• 90° inside corner

| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | BO 5403181 | 1x         |



| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403182 | 1x         |

# VetroMount® Stoppers for Staircase



- Positioning aid for angled mounting, e. g. for staircases
- Fixing screws included in deliveryMaterial: Plastic
- One stopper per glass panel recommended







SALES UNIT ART. NO. B0 5403114

For safe mounting: The use of stoppers is recommended for staircases and similar applications to provide additional hold to glass panes and prevent them from slipping.







# **Product Highlights**

- Tested fastening mechanism on concrete and steel
- Tested for parapet walls
- Screw required every 200 mm
- Installation with and without cover profile
- Floor connection and structural connection profiles available
- Glass heights up to 1300 mm
- Glass width from 300 mm possible
- Aluminium with protective anodised layer
- LED illumination can be integrated optionally







# **SIDE PROFILE Y**FOR PROJECTING INSTALLATION

The Side Profile Y for projecting installation is ideally suited for creating a flush finish on the construction edge. The low screw-on point of the profile greatly reduces the workload, especially when carrying out installations in old buildings.























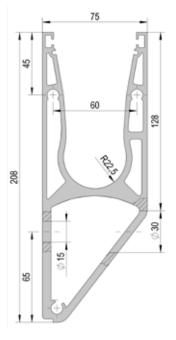


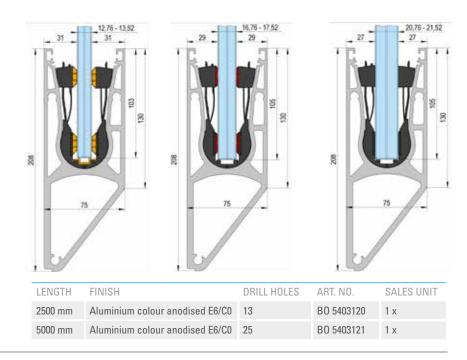




For further explanations, see page 67.

## VetroMount® Side Profile Y





# VetroMount® Mounting Set (glass bearers/rubber seals)





Glass bearers 13 x (2500 mm) 26 x (5000 mm) + 2 x rubber seals

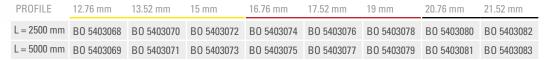
- For the version **without** cover profile
- Only 4 glass bearers per metre



| PROFILE      | 12.76 mm   | 13.52 mm   | 15 mm      | 16.76 mm   | 17.52 mm   | 19 mm      | 20.76 mm   | 21.52 mm   |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|
| L = 2500 mm  | B0 5403084 | B0 5403086 | B0 5403088 | B0 5403090 | B0 5403092 | B0 5403094 | B0 5403096 | B0 5403098 |
| $L=5000\;mm$ | BO 5403085 | B0 5403087 | BO 5403089 | BO 5403091 | BO 5403093 | BO 5403095 | BO 5403097 | BO 5403099 |

- For the version with cover profile
- Narrow rubber profile
- Only 4 glass bearers per metre







# Possible combinations for cover profiles / structural connection profile / floor connection profile













# VetroMount® Cover Profile, top

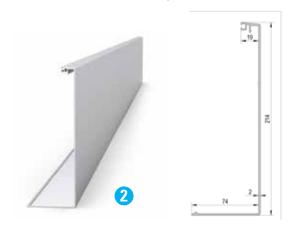


- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENOTH  | FINIOU                               | ADT NO     | CALECUANIT |
|---------|--------------------------------------|------------|------------|
| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
| 2500 mm | Aluminium colour anodised E6/C0      | B0 5403016 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403018 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403017 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | B0 5403019 | 1x         |

## VetroMount® Cover Profile, side

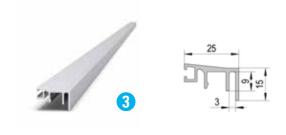


- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                               | ART. NO.   | SALES UNIT |
|---------|--------------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0      | BO 5403122 | 1x         |
| 5000 mm | Aluminium colour anodised E6/C0      | B0 5403123 | 1x         |
| 2500 mm | Stainless steel look anodised E4/C31 | B0 5403124 | 1x         |
| 5000 mm | Stainless steel look anodised E4/C31 | B0 5403125 | 1x         |

# VetroMount® Structural Connection Profile





- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: Aluminium



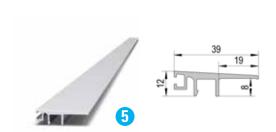
| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403036 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | BO 5403136 | 1x         |

- Opening width 8, 10, 20 mm (e. g. for glass or wood panels)
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | B0 5403037 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403137 | 1x         |

# VetroMount® Floor Connection Profile



- For bridging the gap between basic profile and floor
- Simple slide-on installation
- The rubber sealing profile is simple to mount
- Powder-coating possible
- Material: aluminium



| LENGTH  | FINISH                          | ART. NO.   | SALES UNIT |
|---------|---------------------------------|------------|------------|
| 2500 mm | Aluminium colour anodised E6/C0 | BO 5403038 | 1 x        |
| 5000 mm | Aluminium colour anodised E6/C0 | B0 5403138 | 1x         |

# VetroMount® End Cap for Side Profiles with Cover Profile



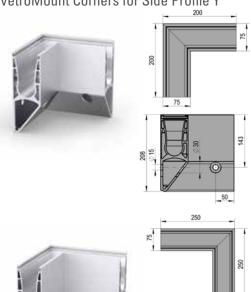


- For use with cover profilesMounting bolts included in set
- Simple attaching and removal of end capsMaterial: aluminium



| FINISH                               | SIDE  | ART. NO.   | SALES UNIT |
|--------------------------------------|-------|------------|------------|
| Aluminium colour anodised E6/C0      | Left  | BO 5403126 | 1x         |
| Aluminium colour anodised E6/C0      | Right | B0 5403128 | 1x         |
| Stainless steel look anodised E4/C31 | Left  | B0 5403127 | 1x         |
| Stainless steel look anodised E4/C31 | Right | BO 5403129 | 1x         |

# VetroMount Corners for Side Profile Y



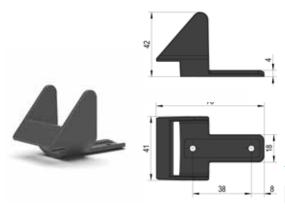
• 90° inside corner

| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403185 | 1x         |

• 90° outside corner

| FINISH                          | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Aluminium colour anodised E6/C0 | B0 5403186 | 1x         |

# VetroMount® Stoppers for Staircase



- Positioning aid for angled mounting, e. g. for staircases
- Fixing screws included in delivery
  Material: Plastic
- One stopper per glass panel recommended



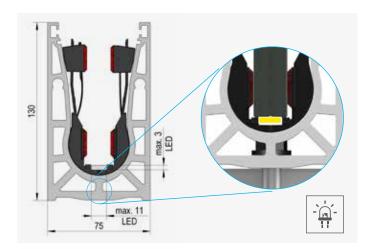




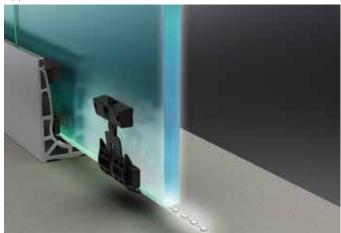
| ART. NO.   | SALES UNIT |
|------------|------------|
| BO 5403114 | 1 x        |



Can the LEDs be integrated into the profile?



Yes, they can be inserted into the corresponding groove in the glass bearer. For glass thicknesses between 16.76 and 21.76 mm, the suitable LED strips must have maximum dimensions of  $3 \times 11 \text{ mm}$  (H x W) and  $3 \times 8 \text{ mm}$  for glass thicknesses between 12.76 and 13.25 mm. The strips must be suitable for exterior application.



# **ACCESSORIES**

## VetroMount® Mounting Aid





The mounting aid facilitates fixing the glass bearers. By tapping with a hammer on the marked spot, the lower clamping wedge is pressed to the right and subsequently safely fixes the glass pane in place. The mounting aid is also used for disassembly.

- For fixing and releasing the lower clamping wedges
- For all profiles



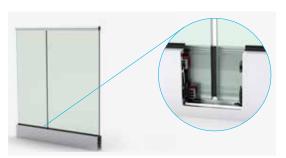


| MATERIAL | ART. NO.   | SALES UNIT |
|----------|------------|------------|
| Steel    | B0 5403116 | 1 x        |

# VetroMount® Rubber Spacers for Glass Panels



Our rubber spacers are available 1 m long and 5 or 10 mm thick matching the different glass thicknesses. These can be cut into shorter pieces (approx. 3 cm), as needed. They are adhesive on one side and are positioned between the glass panes and flush to the upper sealing profile edge. In this way, they serve as spacers and sealing profile between the glass panes at the same time.



- Good ageing, weathering and ozone resistance
- One side self-adhesive
- For all profiles





| WIDTH | 12.76 - 13.52 mm | 16.76 - 17.52 mm | 20.76 - 21.52 mm | LENGTH  |
|-------|------------------|------------------|------------------|---------|
| 5 mm  | B0 5403024       | B0 5403026       | B0 5403028       | 1000 mm |
| 10 mm | BO 5403025       | BO 5403027       | B0 5403029       | 1000 mm |

# VetroMount® Connecting Pins for Basic Profile





- Complies with DIN 1481
- Diameter 8 mm
- For all profiles

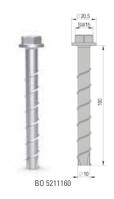




| LENGTH | ART. NO.   | SALES UNIT |
|--------|------------|------------|
| 50 mm  | B0 5403113 | 2 x        |

# Concrete Screws





- Drill diameter 10 mm
- Hexagon head (size15)
- For fastening in concreteETA approval
- For all profiles





| TYPE                            | ART. NO.   | SALES UNIT |
|---------------------------------|------------|------------|
| Hilti HUS-H (V4A)               | BO 5211161 | 25 x       |
| Hilti HUS3-H (galvanised steel) | BO 5211160 | 50 x       |

# VetroMount® Glass Bearings



• Sales unit: 13 glass bearers for 2500 mm profiles

| 12.76 mm   | 13.52 mm   | 15 mm      | 16.76 mm   | 17.52 mm   | 19 mm      | 20.76 mm   | 21.52 mm   |
|------------|------------|------------|------------|------------|------------|------------|------------|
| BO 5403060 | B0 5403061 | B0 5403062 | B0 5403063 | B0 5403064 | B0 5403065 | B0 5403066 | B0 5403067 |

• Sales unit: 60 glass bearers

| 12.76 mm | 13.52 mm | 15 mm | 16.76 mm    | 17.52 mm    | 19 mm | 20.76 mm    | 21.52 mm    |
|----------|----------|-------|-------------|-------------|-------|-------------|-------------|
|          |          |       | B0 5403063B | B0 5403064B |       | B0 5403066B | B0 5403067B |

## VetroMount® Rubber Seals



- For the version with cover profile
- Narrow rubber profile



| LENGTH  | 12.76 mm - 13.52 mm | 15 mm - 17.52 mm | 19 mm - 21.52 mm |
|---------|---------------------|------------------|------------------|
| 2500 mm | BO 5403150          | B0 5403152       | B0 5403154       |
| 5000 mm | BO 5403151          | BO 5403153       | BO 5403155       |

- For the version without cover profile
- Wide rubber profile





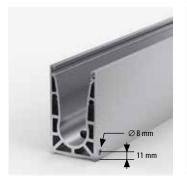
| LENGTH  | 12.76 mm - 13.52 mm | 15 mm - 17.52 mm | 19 mm - 21.52 mm |
|---------|---------------------|------------------|------------------|
| 2500 mm | BO 5403050          | BO 5403052       | BO 5403054       |
| 5000 mm | B0 5403051          | B0 5403053       | BO 5403055       |

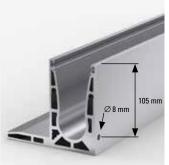
# DRAINAGE

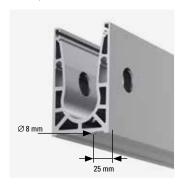
In exterior fit-out applications, rain or snowfall can lead to water accumulation on balconies or terraces. This can be avoided by integrating intermediate connectors for drainage purposes. A groove at the bottom enables draining the water in a quick and targeted manner and thus prevents waterlogging. The tested safety of the system is maintained. The intermediate connectors (BO 5403020 - 23) for drainage purposes are suited for the Floor Profile U for top mounting — they can be inserted in between two profiles with the aid of connecting pins (BO 5403113).

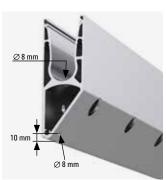


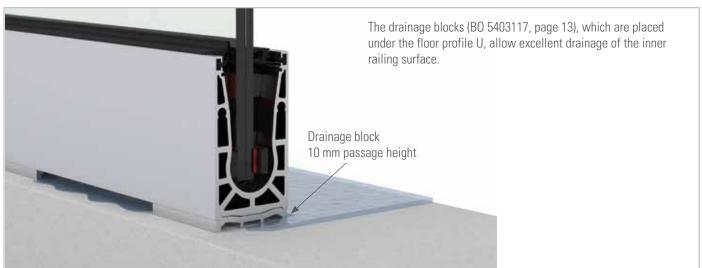
Drainage holes with a diameter of 8 mm for guiding the water out of the profile must be drilled on site.





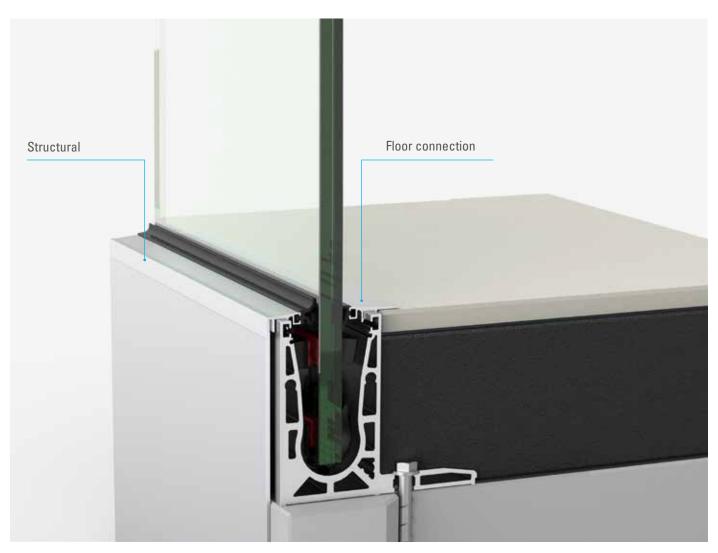


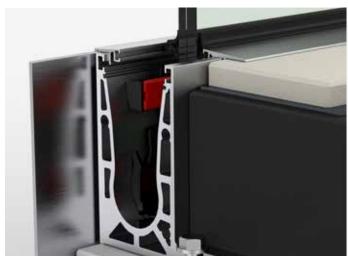




# FLOOR CONNECTION AND STRUCTURAL CONNECTION PROFILES

As one installation is not like another, an individual solution is what counts. While the Floor Connection Profile enables an optimum transition between the profile and the floor structure, structural connection profiles offer elegant cladding options. Different opening widths of 3, 8, 10 and 20 mm allow for the use of steel sheets as well as glass or wood panel. Thanks to their simple slide-on installation, the profiles can be mounted easily and emphasize the high-quality appearance of the balustrade.









# **ASSEMBLY**

| How many mounting holes are pre-drilled in each profile?                                                          | The 2500 mm profiles have 12 drill holes, the 5000 mm profiles have 24 drill holes. The number of drill holes is the same for all profile variants.                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Can VetroMount® also be installed with monolithic glass?                                                          | The corresponding glass bearers for 15 mm and 19 mm glass are available for those countries where the use of monolithic glass is permitted for fall protection purposes, e. g. in Great Britain. These glass bearers are tested and certified, too.                                                                                                                                |
| Must screws of a particular brand (Hilti, Fischer, etc.) be used for fixing?                                      | Bohle has carried out all tests with screws of the HILTI brand. These screws serve for reference purposes only and can be replaced by other equivalent products/manufacturers, if they have at least the same extraction forces as the screws mentioned in the test report. The respective manufacturer is happy to assist.                                                        |
| In which cases is a handrail required?                                                                            | Whether a handrail is required or not is determined by the corresponding building regulations of the respective countries. In Germany, a handrail is required, for example, but in Great Britain it is not.                                                                                                                                                                        |
| My customer spontaneously decided on a cover profile.  Are the rubber seals available separately or by the metre? | The rubber seals included in the VetroMount® mounting sets are also available separately, granting you more flexibility to comply with your customer's demands. This allows you to respond quickly in case of change requests. In addition, our glass bearer sets, including 13 glass bearers, are available without rubber seal. Can only be ordered by phone!  See also page 32. |
| Which surface finishes are available for the profile and is a powder coating possible?                            | All VetroMount® profiles are exclusively available in aluminium anodised E6/C0. In addition, the cover profiles are available in stainless steel look.                                                                                                                                                                                                                             |
| Which linear expansions are to be considered in case of temperature fluctuations?                                 | Please note that metal profiles on different fastening substrates have varying expansion coefficients with fluctuating temperatures, this can lead to length variations in the different seasons under certain circumstances. These material-related changes in length cannot be measured 100% and must be taken into account individually for each building project.              |
| What does left and right side mean for the end caps for Vetro-Mount?                                              | The side indicated for the end caps for VetroMount is always seen from the mounting side.                                                                                                                                                                                                                                                                                          |

# COMPREHENSIVELY CERTIFIED

For a glass balustrade system to call itself "tested", it must fulfil numerous requirements, which, among others, can be taken from DIN 18008-4 "Glass in Building - Design and construction rules". Part 4 of this standard particularly deals with additional requirements for fall protection glazing. They include, for example, permissible glass types, cut-outs, drill holes or types of storage. The certification process is regulated on a national level. BS 6180 applies for Great Britain, the General Building Inspection Test Certificate (AbP) for Germany, and the Avis Technique for France, to name only three of the available certifications. VetroMount® has been thoroughly tested under the official supervision of an independent testing authority. The system is therefore certified for the following applications:

#### Floor Profile U and Side Profile U

- Fastening on concrete
- Fastening on steel
- For use as parapet wall solution from a height of 400 mm
- Enamelled glass can be used,
  - e. g. as visual protection or sunscreen

#### Floor Profile F and Side Profile Y

- Fastening on concrete
- Fastening on steel
- For use as parapet wall solution from a height of 400 mm























#### STRUCTURAL ANALYSIS AVAILABLE

The General Building Inspection Test Certificate contains requirements especially for impacts against the glass panes of an all-glass balustrade. In addition, a structural calculation is necessary for the purpose of testing the glass balustrade with respect to design, construction, material or loads. A so-called structural analysis is already available for many VetroMount® applications. Contact us — we are happy to assist you with your building project.

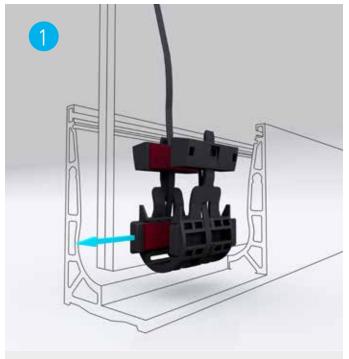


#### **TESTED SAFETY**

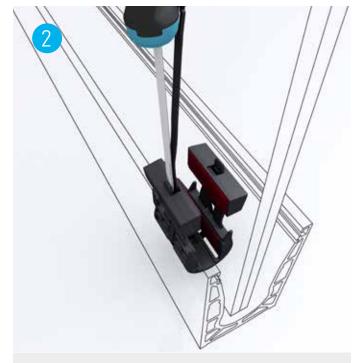
| Which certifications are available?                                                              | VetroMount® has been tested and certified for a minimum glass height of 400 mm and a maximum height of 1300 mm. Smaller panes can be used from a width of 300 mm. There is no limitation to glass length. In addition, all profiles have been tested both on concrete and on steel. Enamelled glass can be used in the Floor and Side Profile U.                          |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Is a structural examination for mounting on wood available?                                      | For installation on wood, the present system statics can serve as a basis for calculation. However, a comparative test in the substrate material by a structural engineer and/or test structural engineer must always be provided.                                                                                                                                        |
| Which mounting hardware should be used for substrates other than concrete (e. g. wood or brick)? | The correct fastening material always depends on the fastening substrate, the forces to be expected and the structural requirements. Basically, all fastening materials may be used that have at least the same or better pull-out values than the (concrete) screws (HILTI HUS3/4) tested by us. To be on the safe side, please contact the fastener supplier you trust. |
| Can VetroMount® be installed in swimming pools with chlorinated or sea water?                    | Yes, thanks to its 25 µm anodised layer, VetroMount® withstands chlorinated water.                                                                                                                                                                                                                                                                                        |
| May the profile be underpinned or raised for drainage purposes?                                  | If the HILTI screws mentioned in the test report are used, add-<br>on parts with a maximum thickness of approx. 10 mm are per-<br>missible. Everything beyond this limit will require an additional<br>structural analysis.                                                                                                                                               |

# EASY DISASSEMBLY

If a glass pane needs to be exchanged, an intelligent release mechanism enables simple disassembly.



Push the lower clamping wedge to the left to release the pane. The easiest way to do this is by using the mounting aid on page 31.



Use a screwdriver to release the catch mechanism and loosen the upper tensioning wedge.



Now pull the tensioning wedge upwards and take out the glass pane.



Please watch our disassembly video.

# BOHLE – OUR SERVICE TO YOU

VetroMount® offers the appropriate application depending on the installation. We make planning and mounting as easy as can be for you — by compiling the suitable profile, the corresponding mounting sets and, if required, the appropriate accessories for you. A simple sketch sent by e-mail or fax or a call are enough to quickly and easily find a customised solution for you.





We manage large commercial construction projects as a team: Our expert team members come from the following areas: development and technical support/product management, customer service, as well as our structural analysis office or the testing authority. This expert team accompanies a building project from the early planning stage up to completion. In this way, we are able to quickly offer suitable professional solutions for different structural requirements and individual desires.

#### **SHOWROOM AND TRAINING SUITE**

Our Showroom and Training Suite at our UK base in Cheshire is open to customers for drop-ins or to make an appointment, please contact your Sales Representative. We also run training for specialist skills which are advertised on our website.

#### ALL INFORMATION AVAILABLE ONLINE

You will find further information about VetroMount® at www.bohle.com. There you will find, among other things, test certificates, technical drawings, invitations to tender, mounting instructions and installation videos. Of course, you can order all VetroMount® products directly in our Online Shop.

# SINGLE POINT FIXINGS



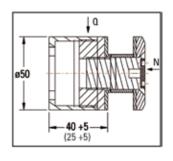
Single Point Fixings ø 50 mm adjustable

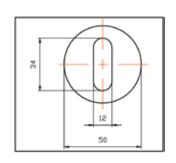


| m · stainless steel AISI 304 · 10 - 13.52 mm B0 5214026 m · stainless steel AISI 304 · 10 - 21.52 mm B0 5214027 m · stainless steel AISI 304 · 15 - 21.52 mm B0 5214034 m · stainless steel AISI 316 · 10 - 13.52 mm B0 5214028 m · stainless steel AISI 316 · 10 - 21.52 mm B0 5214029 m · stainless steel AISI 316 · 15 - 21.52 mm B0 5214035 tment range wall distance 0 - 5 mm ole in glass Ø 30 mm |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| m · stainless steel AISI 304 · 15 - 21.52 mm B0 5214034 m · stainless steel AISI 316 · 10 - 13.52 mm B0 5214028 m · stainless steel AISI 316 · 10 - 21.52 mm B0 5214029 m · stainless steel AISI 316 · 15 - 21.52 mm B0 5214035 mm range wall distance 0 - 5 mm                                                                                                                                         |
| m · stainless steel AISI 316 · 10 - 13.52 mm                                                                                                                                                                                                                                                                                                                                                            |
| m · stainless steel AISI 316 · 10 - 21.52 mm                                                                                                                                                                                                                                                                                                                                                            |
| m · stainless steel AISI 316 · 15 - 21.52 mm B0 5214035  tment range wall distance 0 - 5 mm                                                                                                                                                                                                                                                                                                             |
| tment range wall distance 0 - 5 mm                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                         |
| ole in glass ø 30 mm                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                         |

f 1 Use at least 4 pieces depending on glass dimensions  $\cdot$  For tempered and laminated safety glass  $\cdot$  Please order assembly tool BO 5214041 separately.







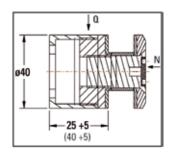
# Single Point Fixings ø 40 mm adjustable

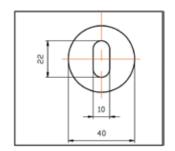


| WALL DISTANCE · MATERIAL · GLASS THICKNESS                   | ART. NO.   |
|--------------------------------------------------------------|------------|
| 25 mm $\cdot$ stainless steel AISI 304 $\cdot$ 10 - 13.52 mm | BO 5214030 |
| 40 mm $\cdot$ stainless steel AISI 304 $\cdot$ 10 - 21.52 mm | B0 5214031 |
| 25 mm · stainless steel AISI 304 · 15 - 21.52 mm             | BO 5214036 |
| 25 mm $\cdot$ stainless steel AISI 316 $\cdot$ 10 - 13.52 mm | B0 5214032 |
| 40 mm · stainless steel AISI 316 · 10 - 21.52 mm             | B0 5214033 |
| 25 mm $\cdot$ stainless steel AISI 316 $\cdot$ 15 - 21.52 mm | B0 5214037 |
|                                                              |            |
| Adjustment range wall distance                               | 0 - 5 mm   |
| Drill hole in glass                                          | ø 25 mm    |
|                                                              |            |

• Use at least 4 pieces depending on glass dimensions · For tempered and laminated safety glass · Please order assembly tool BO 5214038 separately.







# Assembly Tool for Adjustable Single Point Fixings



| DESCRIPTION      | ART. NO.   |
|------------------|------------|
| 40 mm adjustable | BO 5214038 |
| 50 mm adjustable | B0 5214041 |

1 For single point fixings BO 5214026 - 37

## Face spanner cranked



| DESCRIPTION  | ART. NO.   |
|--------------|------------|
| Face Spanner | BO 5214039 |

1 Bore hole ø 3 mm

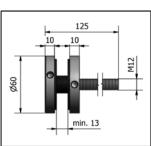
# Single Point Fixings ø 60 mm with Threaded Rod

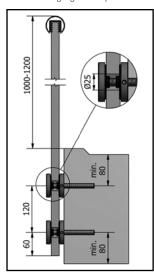


| MATERIAL                 | ART. NO.   |
|--------------------------|------------|
| stainless steel AISI 304 | BO 5214060 |
| Diameter                 | ø 60 mm    |
| Adjustable               | no         |
| Drill hole in glass      | ø 25 mm    |

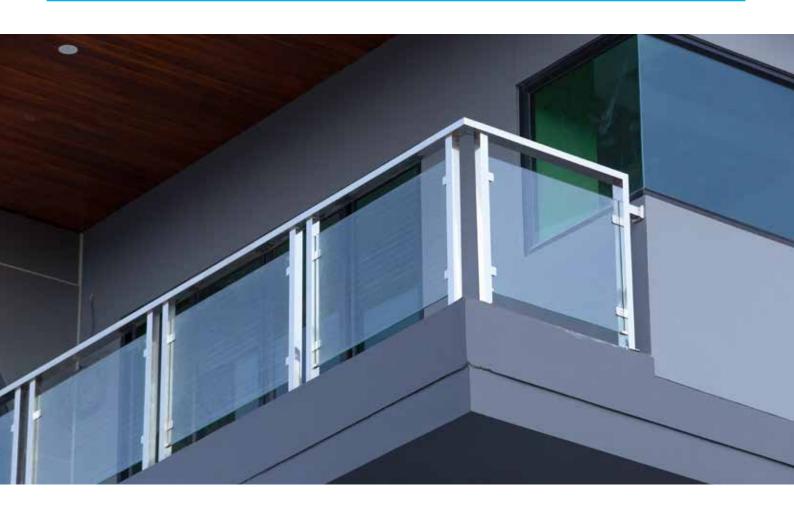
1 Use at least 4 pieces depending on glass dimensions  $\cdot$  Total length: 125 mm  $\cdot$  Packaging unit 1 pc







# **CLAMP FIXINGS**

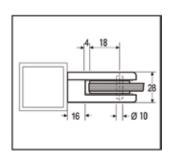


## Clamp D-shaped $50 \times 40 \text{ mm}$ for 6 - 10.76 mm



 $\ensuremath{\mathbf{0}}$  Gaskets available as accessories.  $\cdot$  Securing Pins incl.  $\cdot$  Packaging unit 4 pcs  $\cdot$  Glass thickness tempered glass 6 - 10 mm, laminated glass 8.76 - 10.76 mm  $\cdot$  When laminated safety glass is used, a slipping protection is required.

| MATERIAL · FINISH              | ART. NO.   |
|--------------------------------|------------|
| $zinc \cdot mill finish$       | B0 8710100 |
| zinc · shiny chrome-plated     | B0 8710122 |
| zinc · stainless steel look    | B0 8710163 |
| stainless steel V4A · polished | BO 8710516 |
| stainless steel V4A · brushed  | BO 8710555 |
| stainless steel V2A · brushed  | BO 8710955 |
|                                |            |
| Size                           | 50 x 40 mm |
|                                |            |

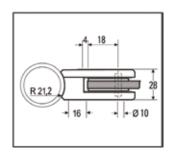


### Clamp D-shaped 50 x 40 mm for round tubes ø 42.4 mm for 6 - 10.76 mm



 $\begin{tabular}{ll} \textbf{G} askets available as accessories.} & Securing Pins incl. & Packaging unit 4 \\ pcs & Glass thickness tempered glass 6 - 10 mm, laminated glass 8.76 - 10.76 \\ mm & When laminated safety glass is used, a slipping protection is required. \\ \end{tabular}$ 

| MATERIAL · FINISH              | ART. NO.   |
|--------------------------------|------------|
| zinc · mill finish             | B0 8712100 |
| zinc · shiny chrome-plated     | B0 8712122 |
| zinc · stainless steel look    | B0 8712163 |
| stainless steel V4A · polished | BO 8712516 |
| stainless steel V4A · brushed  | BO 8712555 |
| stainless steel V2A · brushed  | B0 8712955 |
|                                |            |
| Size                           | 50 x 40 mm |
|                                |            |



### Inserts for clamps D-shaped 50 x 40 mm



 $\ensuremath{ \mbox{\bf 1}}$  Packaging unit 8 pc.  $\cdot$  1 pack of 8 inserts is required for every 4 clamps ordered

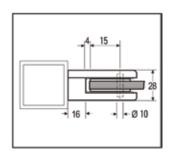
| DESCRIPTION                                     | ART. NO.   |
|-------------------------------------------------|------------|
| Glass thickness tempered glass 6 mm             | BO 8810060 |
| Glass thickness tempered glass 8 mm             | BO 8810080 |
| Glass thickness tempered glass 10 mm            | BO 8810100 |
| Glass thickness laminated safety glass 8.76 mm  | BO 8810090 |
| Glass thickness laminated safety glass 10.76 mm | BO 8810110 |
|                                                 |            |
| Size                                            | 50 x 40 mm |
|                                                 |            |

## Clamp square 45 x 45 mm for 6 - 10.76 mm



 $oldsymbol{\circ}$  Gaskets available as accessories.  $\cdot$  Securing Pins incl.  $\cdot$  Securing plates are sold separately.  $\cdot$  Packaging unit 4 pcs  $\cdot$  Glass thickness tempered glass 6 - 10 mm, laminated glass 8.76 - 10.76 mm  $\cdot$  When laminated safety glass is used, a slipping protection is required.

| MATERIAL · FINISH                          | ART. NO.   |
|--------------------------------------------|------------|
| $zinc \cdot mill \; finish$                | B0 8720100 |
| $zinc \cdot shiny \; chrome\text{-}plated$ | B0 8720122 |
| zinc · stainless steel look                | B0 8720163 |
| stainless steel V4A · polished             | B0 8720516 |
| stainless steel V4A · brushed              | B0 8720555 |
| stainless steel V2A · brushed              | B0 8720955 |
|                                            |            |
| Size                                       | 45 x 45 mm |
|                                            |            |

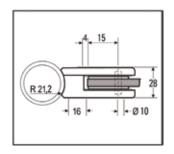


## Clamp square $45 \times 45 \text{ mm}$ for round tubes ø 42.4 mm for 6 - 10.76 mm



f O Gaskets available as accessories.  $\cdot$  Securing Pins incl.  $\cdot$  Securing plates are sold separately.  $\cdot$  Glass thickness tempered glass 6 - 10 mm, laminated glass 8.76 - 10.76 mm  $\cdot$  When laminated safety glass is used, a slipping protection is required.

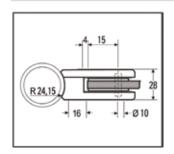
| MATERIAL · FINISH                     | ART. NO.   |
|---------------------------------------|------------|
| $zinc \cdot mill \ finish$            | BO 8722100 |
| $zinc \cdot shiny \ chrome-plated$    | BO 8722122 |
| $zinc \cdot stainless \ steel \ look$ | BO 8722163 |
| stainless steel V4A · polished        | BO 8722516 |
| stainless steel V4A · brushed         | BO 8722555 |
| stainless steel V2A · brushed         | BO 8722955 |
|                                       |            |
| Size                                  | 45 x 45 mm |



### Clamp square 45 x 45 mm for round tubes ø 48.3 mm for 6 - 10.76 mm



| MATERIAL · FINISH                          | ART. NO.   |
|--------------------------------------------|------------|
| $zinc \cdot mill \; finish$                | BO 8724100 |
| $zinc \cdot shiny \; chrome\text{-}plated$ | BO 8724122 |
| zinc · stainless steel look                | BO 8724163 |
| stainless steel V4A · polished             | BO 8724516 |
| stainless steel V4A · brushed              | BO 8724555 |
| stainless steel V2A · brushed              | BO 8724955 |
|                                            |            |
| Size                                       | 45 x 45 mm |



## Inserts for clamps square 45 x 45 mm



| DESCRIPTION                                     | ART. NO.   |
|-------------------------------------------------|------------|
| Glass thickness tempered glass 6 mm             | BO 8820060 |
| Glass thickness tempered glass 8 mm             | BO 8820080 |
| Glass thickness tempered glass 10 mm            | B0 8820100 |
| Glass thickness laminated safety glass 8.76 mm  | BO 8820090 |
| Glass thickness laminated safety glass 10.76 mm | B0 8820110 |
|                                                 |            |
| Size                                            | 45 x 45 mm |

 $\ensuremath{\mbox{\bf 1}}$  Packaging unit 8 items  $\cdot$  1 pack of 8 inserts is required for every 4 clamps ordered

## Securing Plate for Clamp square 45 x 45 mm



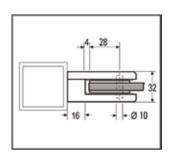
| DESCRIPTION    | ART. NO.   |
|----------------|------------|
| Securing Plate | B0 8920001 |
| Size           | 45 x 45 mm |

i Packaging unit 4 pcs

### Clamp D-shaped 63 x 45 mm for 6 - 12.76 mm



| MATERIAL · FINISH              | ART. NO.   |
|--------------------------------|------------|
| $zinc \cdot mill \; finish$    | B0 8730100 |
| zinc · shiny chrome-plated     | B0 8730122 |
| zinc · stainless steel look    | B0 8730163 |
| stainless steel V4A · polished | BO 8730516 |
| stainless steel V4A · brushed  | BO 8730555 |
| stainless steel V2A · brushed  | B0 8730955 |
|                                |            |
| Size                           | 63 x 45 mm |

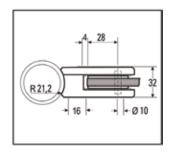


## Clamp D-shaped $63 \times 45 \text{ mm}$ for round tubes ø 42.4 mm for 6 - 12.76 mm



• Securing Pins incl. • Gaskets available as accessories. • Packaging unit 4 pcs • Glass thickness tempered glass 6 - 12 mm, laminated glass 8.76 - 12.76 mm • When laminated safety glass is used, a slipping protection is required.

| MATERIAL · FINISH ·            | ART. NO.   |
|--------------------------------|------------|
| zinc · mill finish             | B0 8732100 |
| zinc · shiny chrome-plated     | B0 8732122 |
| zinc · stainless steel look    | B0 8732163 |
| stainless steel V4A · polished | BO 8732516 |
| stainless steel V4A · brushed  | B0 8732555 |
| stainless steel V2A · brushed  | BO 8732955 |
|                                |            |
| Size                           | 63 x 45 mm |

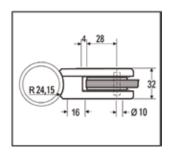


## Clamp D-shaped 63 x 45 mm for round tubes ø 48.3 mm for 6 - 12.76 mm



 $\begin{tabular}{ll} \textbf{G} askets available as accessories.} & Securing Pins incl. & Packaging unit 4 \\ pcs & Glass thickness tempered glass 6 - 12 mm, laminated glass 8.76 - 12.76 \\ mm & When laminated safety glass is used, a slipping protection is required. \\ \end{tabular}$ 

| MATERIAL · FINISH              | ART. NO.   |
|--------------------------------|------------|
| $zinc \cdot mill \; finish$    | B0 8734100 |
| zinc · shiny chrome-plated     | B0 8734122 |
| zinc · stainless steel look    | B0 8734163 |
| stainless steel V4A · polished | BO 8734516 |
| stainless steel V4A · brushed  | B0 8734555 |
| stainless steel V2A · brushed  | B0 8734955 |
|                                |            |
| Size                           | 63 x 45 mm |



## Inserts for clamps D-shaped 63 x 45 mm



 $\ensuremath{\text{\textbf{0}}}$  Packaging unit 8 pc.  $\cdot$  1 pack of 8 inserts is required for every 4 clamps ordered

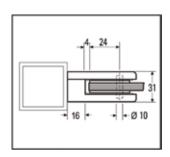
| ART. NO.   |
|------------|
| BO 8830060 |
| BO 8830080 |
| BO 8830100 |
| BO 8830120 |
| BO 8830090 |
| BO 8830110 |
| BO 8830130 |
|            |
| 63 x 45 mm |
|            |

### Clamp square 55 x 55 mm for 8 - 13.52 mm



• Gaskets available as accessories. • Securing Pins incl. • Securing plates are sold separately. • Packaging unit 4 pcs • Glass thickness tempered glass 8 - 12 mm, laminated glass 8.76 - 13.52 mm • When laminated safety glass is used, a slipping protection is required.

| MATERIAL · FINISH              | ART. NO.   |
|--------------------------------|------------|
| stainless steel V4A · polished | BO 8740516 |
| stainless steel V4A · brushed  | BO 8740555 |
| stainless steel V2A · brushed  | BO 8740955 |
|                                |            |
| Size                           | 55 x 55 mm |

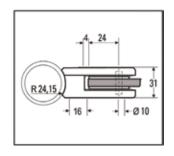


## Clamp square 55 x 55 mm for round tubes ø 48.3 mm for 8 - 13.52 mm



• Gaskets available as accessories. • Securing Pins incl. • Securing plates are sold separately. • Packaging unit 4 pcs • Glass thickness tempered glass 8 - 12 mm, laminated glass 8.76 - 13.52 mm • When laminated safety glass is used, a slipping protection is required.

| MATERIAL · FINISH              | ART. NO.   |
|--------------------------------|------------|
| stainless steel V4A · polished | BO 8742516 |
| stainless steel V4A · brushed  | B0 8742555 |
| stainless steel V2A · brushed  | BO 8742955 |
| <u></u>                        |            |
| Size                           | 55 x 55 mm |



# Inserts for clamps square 55 x 55 mm



| DESCRIPTION                                     | ART. NO.   |
|-------------------------------------------------|------------|
| Glass thickness tempered glass 8 mm             | BO 8840080 |
| Glass thickness tempered glass 10 mm            | BO 8840100 |
| Glass thickness tempered glass 12 mm            | BO 8840120 |
| Glass thickness laminated safety glass 8.76 mm  | BO 8840090 |
| Glass thickness laminated safety glass 10.76 mm | BO 8840110 |
| Glass thickness laminated safety glass 12.76 mm | BO 8840130 |
| Glass thickness laminated safety glass 13.52 mm | BO 8840140 |
|                                                 |            |
| Size                                            | 55 x 55 mm |
|                                                 |            |

 $\ensuremath{ \mbox{\bf 1}}$  Packaging unit 8 pc.  $\cdot$  1 pack of 8 inserts is required for every 4 clamps ordered

# Securing Plate for Clamp square 55 x 55 mm



| DESCRIPTION    | ART. NO.   |
|----------------|------------|
| Securing Plate | BO 8940001 |
| Size           | 55 x 55 mm |

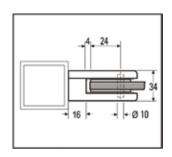
1 Packaging unit 4 pcs

### Clamp square 70 x 55 mm for 8 - 13.52 mm



• Gaskets available as accessories. • Securing Pins incl. • Securing plates are sold separately. • Packaging unit 4 pcs • Glass thickness tempered glass 8 - 12 mm, laminated glass 8.76 - 13.52 mm • When laminated safety glass is used, a slipping protection is required.

| FINISH   | ART. NO.            |
|----------|---------------------|
| polished | BO 8750516          |
| brushed  | BO 8750555          |
| Maria 1  |                     |
| Material | stainless steel V4A |
| Size     | 70 x 55 mm          |

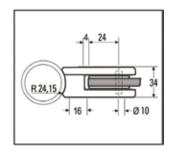


## Clamp square 70 x 55 mm for round tubes ø 48.3 mm for 8 - 13.52 mm



• Gaskets available as accessories. • Securing Pins incl. • Securing plates are sold separately. • Packaging unit 4 pcs • Glass thickness tempered glass 8 - 12 mm, laminated glass 8.76 - 13.52 mm • When laminated safety glass is used, a slipping protection is required.

| FINISH   | ART. NO.            |
|----------|---------------------|
| polished | BO 8752516          |
| brushed  | BO 8752555          |
| Material | stainless steel V4A |
| Size     | 70 x 55 mm          |



# Inserts for clamps square 70 x 55 mm



| DESCRIPTION                                     | ART. NO.   |
|-------------------------------------------------|------------|
| Glass thickness tempered glass 8 mm             | BO 8850080 |
| Glass thickness tempered glass 10 mm            | BO 8850100 |
| Glass thickness tempered glass 12 mm            | BO 8850120 |
| Glass thickness laminated safety glass 8.76 mm  | BO 8850090 |
| Glass thickness laminated safety glass 10.76 mm | BO 8850110 |
| Glass thickness laminated safety glass 12.76 mm | BO 8850130 |
| Glass thickness laminated safety glass 13.52 mm | BO 8850140 |
|                                                 |            |
| Size                                            | 70 x 55 mm |

 $\ensuremath{ \mbox{\bf 1}}$  Packaging unit 8 pc.  $\cdot$  1 pack of 8 inserts is required for every 4 clamps ordered

# Securing Plate for Clamp square 70 x 55 mm



| DESCRIPTION    | ART. NO.   |
|----------------|------------|
| Securing Plate | BO 8950001 |
| Size           | 70 x 55 mm |

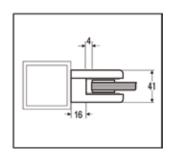
1 Packaging unit 4 pcs

### Clamp HD square 70 x 55 mm for 16.76 - 21.52 mm



**1** Gaskets available as accessories. · Securing Plate incl. · Packaging unit 4 pcs · Glass thickness laminated safety glass 16.76 - 21.52 mm · When laminated safety glass is used, a slipping protection is required.

| FINISH   | ART. NO.            |
|----------|---------------------|
| polished | BO 8755516          |
| brushed  | BO 8755555          |
|          |                     |
| Material | stainless steel V4A |
| Size     | 70 x 55 mm          |

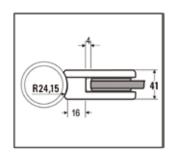


## Clamp HD square 70 x 55 mm for round tubes ø 48.3 mm for 16.76 - 21.52 mm



• Gaskets available as accessories. • Securing Plate incl. • Packaging unit 4 pcs • Glass thickness laminated safety glass 16.76 - 21.52 mm • When laminated safety glass is used, a slipping protection is required.

| FINISH   | ART. NO.            |
|----------|---------------------|
| polished | B0 8757516          |
| brushed  | B0 8757555          |
| AA       |                     |
| Material | stainless steel V4A |
| Size     | 70 x 55 mm          |



# Inserts for clamps square 70 x 55 mm



| DESCRIPTION                                     | ART. NO.   |
|-------------------------------------------------|------------|
| Glass thickness laminated safety glass 16.76 mm | BO 8855170 |
| Glass thickness laminated safety glass 17.52 mm | BO 8855180 |
| Glass thickness laminated safety glass 20.76 mm | BO 8855210 |
| Glass thickness laminated safety glass 21.52 mm | BO 8855220 |
|                                                 |            |
| Size                                            | 70 x 55 mm |
|                                                 |            |

 $\ensuremath{ \mbox{\bf 1}}$  Packaging unit 8 pc.  $\cdot$  1 pack of 8 inserts is required for every 4 clamps ordered

# Securing Plate for Clamp square 70 x 55 mm



| DESCRIPTION    | ART. NO.   |
|----------------|------------|
| Securing Plate | BO 8955001 |
| Size           | 70 x 55 mm |

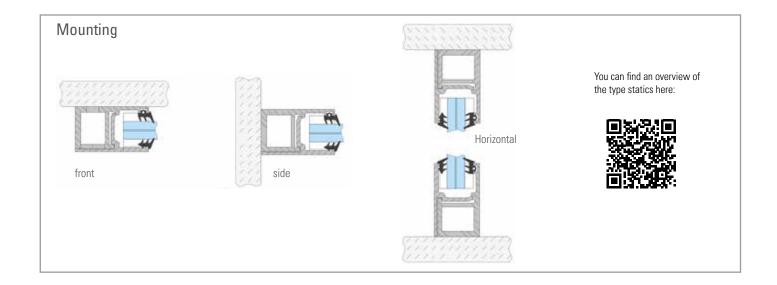
Packaging unit 4 pcs

# LYON FRENCH BALCONY



### **Product highlights**

- Highest safety for floor-to-ceiling windows, certified according to DIN 18008-4
- Installation length of up to 4 metres
- Standard profile heights: 900 mm, 1000 mm and 1100 mm (special heights upon request)
- Low mounting costs thanks to the 1-2-3 click system
- Small number of screw connections: 4 per side



### Lyon French Balcony 12.76 - 13.52 mm

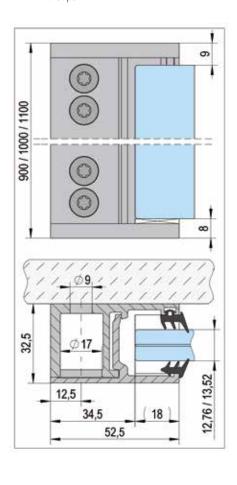


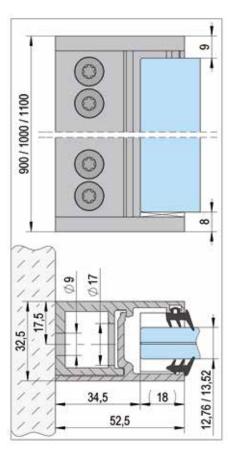
• Glass thicknesses 12.75 - 13.52 mm (further glass thicknesses upon request) · Standard profile heights: 900 mm, 1000 mm and 1100 mm (special heights upon request) · Installation length of up to 4 metres (please take any external forces into consideration) · Front or side mount (or combination of both) · Basic profile made of anodised aluminium · Standard finishes RAL 7016, RAL 9016 and aluminium colour anodised (special colours upon request) · Rail load 1.0 kN (UK: 0,74 kN) · Please note the test certificate and the structural analysis. · Please make sure to mount the window frame according to the "Fall Prevention Components" ETB Guideline.

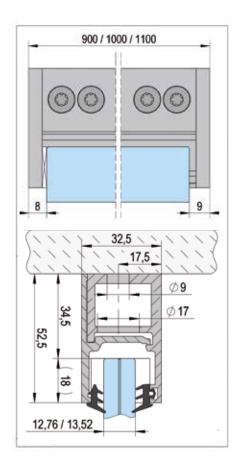
#### INCLUDED IN DELIVERY:

- 2x Base profile
- 2x Clip-on Profile
- 1x Rubber seal set
- 1x End Caps

| traffic white BAL 9016 · side · 1100 mm                   | BO 5404005 |
|-----------------------------------------------------------|------------|
| anthracite grey RAL 7016 · front · 900 mm                 | BO 5404006 |
| 0 7                                                       |            |
| anthracite grey RAL 7016 · side · 900 mm                  | B0 5404007 |
| anthracite grey RAL 7016 · front · 1000 mm                | BO 5404008 |
| anthracite grey RAL 7016 · side · 1000 mm                 | BO 5404009 |
| anthracite grey RAL 7016 · front · 1100 mm                | B0 5404010 |
| anthracite grey RAL 7016 · side · 1100 mm                 | B0 5404011 |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 900 mm  | BO 5404012 |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 900 mm   | B0 5404013 |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 1000 mm | B0 5404014 |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 1000 mm  | BO 5404015 |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 1100 mm | BO 5404016 |
| aluminium-coloured anodised · side · 1100 mm              | B0 5404017 |







#### Lyon French Balcony 16.76 - 17.52 mm



• Glass thicknesses 16.76 - 17.52 mm (further glass thicknesses upon request) · Standard profile heights: 900 mm, 1000 mm and 1100 mm (special heights upon request) · Installation length of up to 4 metres (please take any external forces into consideration) · Front or side mount (or combination of both) · Basic profile made of anodised aluminium · Standard finishes RAL 7016, RAL 9016 and aluminium colour anodised (special colours upon request) · Rail load 1.0 kN (UK: 0,74 kN) · Please note the test certificate and the structural analysis. · Please make sure to mount the window frame according to the "Fall Prevention Components" ETB Guideline.

#### INCLUDED IN DELIVERY:

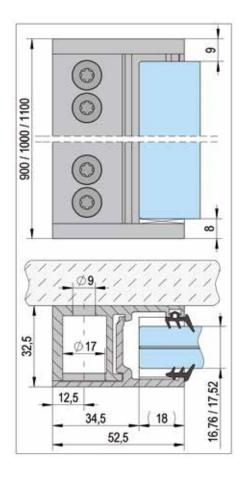
2x Base profile

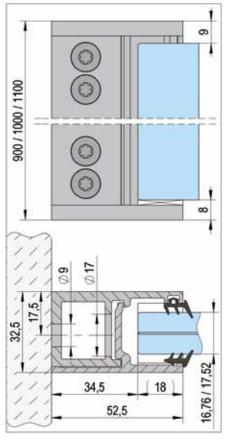
2x Clip-on Profile

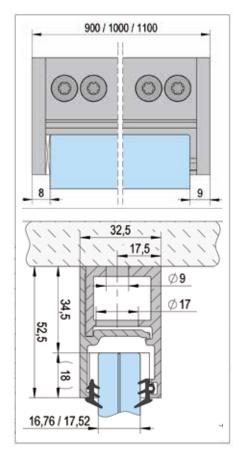
1x Rubber seal set

1x End Caps

| FINISH · MOUNTING · HEIGHT                                | ART. NO.         |
|-----------------------------------------------------------|------------------|
| traffic white RAL 9016 $\cdot$ front $\cdot$ 900 mm       | B0 5404020       |
| traffic white RAL 9016 $\cdot$ side $\cdot$ 900 mm        | B0 5404021       |
| traffic white RAL 9016 $\cdot$ front $\cdot$ 1000 mm      | B0 5404022       |
| traffic white RAL 9016 $\cdot$ side $\cdot$ 1000 mm       | B0 5404023       |
| traffic white RAL 9016 $\cdot$ front $\cdot$ 1100 mm      | B0 5404024       |
| traffic white RAL 9016 $\cdot$ side $\cdot$ 1100 mm       | B0 5404025       |
| anthracite grey RAL 7016 · front · 900 mm                 | BO 5404026       |
| anthracite grey RAL 7016 $\cdot$ side $\cdot$ 900 mm      | B0 5404027       |
| anthracite grey RAL 7016 · front · 1000 mm                | BO 5404028       |
| anthracite grey RAL 7016 $\cdot$ side $\cdot$ 1000 mm     | BO 5404029       |
| anthracite grey RAL 7016 · front · 1100 mm                | B0 5404030       |
| anthracite grey RAL 7016 $\cdot$ side $\cdot$ 1100 mm     | B0 5404031       |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 900 mm  | B0 5404032       |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 900 mm   | B0 5404033       |
| aluminium-coloured anodised · front · 1000 mm             | B0 5404034       |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 1000 mm  | B0 5404035       |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 1100 mm | BO 5404036       |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 1100 mm  | B0 5404037       |
| Glass thickness                                           | 16 76 - 17 52 mm |
| Glass fillerifess                                         | 10.70 - 17.32    |







### Lyon French Balcony 20.76 - 21.52 mm



• Glass thicknesses 20.75 - 21.52 mm (further glass thicknesses upon request) · Standard profile heights: 900 mm, 1000 mm and 1100 mm (special heights upon request) · Installation length of up to 4 metres (please take any external forces into consideration) · Front or side mount (or combination of both) · Basic profile made of anodised aluminium · Standard finishes RAL 7016, RAL 9016 and aluminium colour anodised (special colours upon request) · Rail load 1.0 kN (UK: 0,74 kN) · Please note the test certificate and the structural analysis. · Please make sure to mount the window frame according to the "Fall Prevention Components" ETB Guideline.

|  | IVFRY: |
|--|--------|
|  |        |

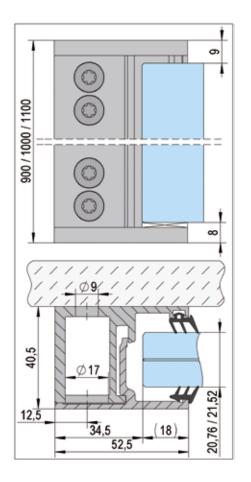
2x Base profile

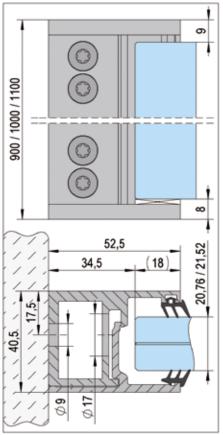
2x Clip-on Profile

1x Rubber seal set

1x End Caps

| FINISH · MOUNTING · HEIGHT                                | ART. NO.             |
|-----------------------------------------------------------|----------------------|
| traffic white RAL 9016 $\cdot$ front $\cdot$ 900 mm       | BO 5404060           |
| traffic white RAL 9016 $\cdot$ side $\cdot$ 900 mm        | BO 5404061           |
| traffic white RAL 9016 $\cdot$ front $\cdot$ 1000 mm      | BO 5404062           |
| traffic white RAL 9016 $\cdot$ side $\cdot$ 1000 mm       | B0 5404063           |
| traffic white RAL 9016 · front · 1100 mm                  | BO 5404064           |
| traffic white RAL 9016 $\cdot$ side $\cdot$ 1100 mm       | BO 5404065           |
| anthracite grey RAL 7016 · front · 900 mm                 | BO 5404066           |
| anthracite grey RAL 7016 · side · 900 mm                  | B0 5404067           |
| anthracite grey RAL 7016 $\cdot$ front $\cdot$ 1000 mm    | BO 5404068           |
| anthracite grey RAL 7016 $\cdot$ side $\cdot$ 1000 mm     | BO 5404069           |
| anthracite grey RAL 7016 $\cdot$ front $\cdot$ 1100 mm    | B0 5404070           |
| anthracite grey RAL 7016 · side · 1100 mm                 | B0 5404071           |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 900 mm  | B0 5404072           |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 900 mm   | B0 5404073           |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 1000 mm | B0 5404074           |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 1000 mm  | BO 5404075           |
| aluminium-coloured anodised $\cdot$ front $\cdot$ 1100 mm | BO 5404076           |
| aluminium-coloured anodised $\cdot$ side $\cdot$ 1100 mm  | B0 5404077           |
| Glass thickness                                           | 20 76 - 21 52 mm     |
| UIASS UIICKIIESS                                          | 20.70 - 21.32 111111 |





Lyon to suit 25.5mm glass available to special order

#### Wood Screws ASSY 3.0 SK



| DESCRIPTION             | ART. NO.   |
|-------------------------|------------|
|                         | 7111.110.  |
| Size 6 x 60 mm          | B0 5404042 |
| Size 6 x 80 mm          | B0 5404043 |
| Size 6 x 100 mm         | B0 5404044 |
|                         |            |
| Window profile material | Wood       |
|                         |            |

#### Facade Fixing Screw Piasta



| DESCRIPTION             | ART. NO.   |
|-------------------------|------------|
| Size 6 x 50 mm          | B0 5404045 |
| Size 6 x 75 mm          | B0 5404046 |
| Size 6 x 90 mm          | B0 5404047 |
|                         |            |
| Window profile material | plastic    |

 $\ensuremath{ \bullet}$  Self-drilling  $\cdot$  Stainless steel 2A  $\cdot$  With hexagon head  $\cdot$  With ø14 mm stainless steel gasket and weather-resistant 3 mm EPDM seal  $\cdot$  With German Technical Approval (AbZ) and ETA approval  $\cdot$  Material thickness to be perforated, max. 2 x 1.5 mm or 1 x 2.0 mm

## Facade Fixing Screw Faba A



• Stainless steel 2A  $\cdot$  wWith hexagon head  $\cdot$  With ø16 mm stainless steel gasket and weather-resistant EPDM seal  $\cdot$  With German Technical Approval (AbZ) and ETA approval  $\cdot$  For steel substructures <2 mm  $\cdot$  For a steel core thickness of 1.25 mm, a 4.5 mm hole must be pre-drilled.  $\cdot$  For a steel core thickness between 1.25 mm and 2.0 mm, a 5.0 mm hole must be pre-drilled.

| DESCRIPTION             | ART. NO.   |
|-------------------------|------------|
| Size 6.5 x 45 mm        | BO 5404048 |
| Size 6.5 x 50 mm        | BO 5404049 |
| Size 6.5 x 64 mm        | BO 5404050 |
| Size 6.5 x 75 mm        | B0 5404051 |
| Size 6.5 x 90 mm        | B0 5404052 |
| Size 6.5 x 100 mm       | B0 5404053 |
| Size 6.5 x 115 mm       | B0 5404054 |
| <u></u>                 |            |
| Window profile material | plastic    |
|                         |            |

An overview of fastening screws on different plastic profiles can be found here:



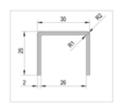
# **HANDRAILS**



## Square Handrails for Glass Thicknesses between 12.00 - 21.52 mm

#### Handrail





- Please use rubber profiles BO 5403314 BO 5403319
- Tested as per DIN 18008 part 4

| LENGTH  | FINISH              | ART. NO.   | SALES UNIT |
|---------|---------------------|------------|------------|
| 2500 mm | Stainless steel V2A | B0 5403310 | 1 x        |
| 5000 mm | Stainless steel V2A | B0 5403311 | 1 x        |

#### Corner Clamp 90°

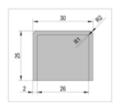


• For handrail BO 5403310 / BO 5403311• Please use rubber profiles BO 5403314 - BO 5403319

| DIMENSIONS       | FINISH              | ART. NO.   | SALES UNIT |
|------------------|---------------------|------------|------------|
| W: 30 x H: 25 mm | Stainless steel V2A | B0 5403312 | 1 x        |

#### End Cap



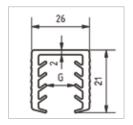


• For handrail BO 5403310 / BO 5403311• Please use rubber profiles BO 5403314 - BO 5403319

| DIMENSIONS       | FINISH              | ART. NO.   | SALES UNIT |
|------------------|---------------------|------------|------------|
| W: 30 x H: 25 mm | Stainless steel V2A | B0 5403313 | 1 x        |

#### Rubber Profile



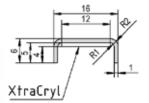


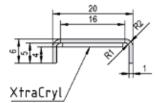
• For handrail BO 5403310 / BO 5403311

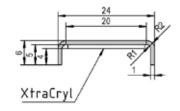
| LENGTH   | 12 - 13.52 mm | 15 - 17.52 mm | 19 - 21.52 mm | SALES UNIT |
|----------|---------------|---------------|---------------|------------|
| 5000 mm  | B0 5403315    | B0 5403317    | B0 5403319    | 1 x        |
| 25000 mm | B0 5403314    | B0 5403316    | B0 5403318    | 1 x        |

### Glass Edge Protecting Profile









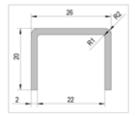
- Finish stainless steel V4A
- Self-adhesive with XtraCryl

| LENGIH  | 12 - 13.52 mm | 15 - 17.52 mm | 19 - 21.52 mm | SALES UNIT |
|---------|---------------|---------------|---------------|------------|
| 2500 mm | B0 5403300    | B0 5403302    | B0 5403304    | 1 x        |
| 5000 mm | B0 5403301    | B0 5403303    | B0 5403305    | 1 x        |

# Square Handrails for Glass Thicknesses between 12.00 - 17.52 mm

#### Handrail





- Please use rubber profiles BO 5403324 BO 5403327
- Tested as per DIN 18008 part 4

| LENGTH  | FINISH              | ART. NO.   | SALES UNIT |
|---------|---------------------|------------|------------|
| 2500 mm | Stainless steel V2A | B0 5403320 | 1 x        |
| 5000 mm | Stainless steel V2A | B0 5403321 | 1 x        |

#### Corner Clamp 90°



- For handrail BO 5403320 / BO 5403321
- Please use rubber profiles BO 5403324 BO 5403327

| DIMENSIONS       | FINISH              | ART. NO.   | SALES UNIT |
|------------------|---------------------|------------|------------|
| W: 26 x H: 20 mm | Stainless steel V2A | B0 5403322 | 1 x        |

#### End Cap

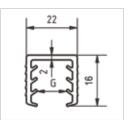


- For handrail BO 5403320 / BO 5403321
- Please use rubber profiles BO 5403324 BO 5403327

| DIMENSIONS       | FINISH              | ART. NO.   | SALES UNIT |
|------------------|---------------------|------------|------------|
| W: 26 x H: 20 mm | Stainless steel V2A | B0 5403323 | 1 x        |

#### **Rubber Profile**





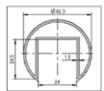
• For handrail BO 5403320 / BO 5403321

| LENGTH   | 12 - 13.52 mm | 15 - 17.52 mm | SALES UNIT |
|----------|---------------|---------------|------------|
| 5000 mm  | B0 5403325    | B0 5403327    | 1 x        |
| 25000 mm | B0 5403324    | B0 5403326    | 1 x        |

### Round Handrails for Glass Thicknesses between 12 - 21.52 mm

#### Handrail



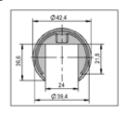


• Please use rubber profiles BO 5403337 - BO 5403342

| LENGTH  | FINISH              | ART. NO.   | SALES UNIT |
|---------|---------------------|------------|------------|
| 2500 mm | Stainless steel V2A | B0 5403330 | 1 x        |
| 5000 mm | Stainless steel V2A | B0 5403331 | 1 x        |

#### Tube Connector, straight



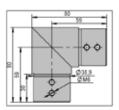


- For handrails BO 5403330 / BO 5403331
- Can be bonded with metal adhesive

| DIAMETER      | FINISH              | ART. NO.   | SALES UNIT |
|---------------|---------------------|------------|------------|
| D = Ø 42.4 mm | Stainless steel V2A | BO 5403332 | 1 x        |

#### Tube Connector, 90° corner



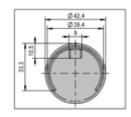


- For handrails BO 5403330 / BO 5403331
- Can be bonded with metal adhesive

| DIAMETER      | FINISH              | ART. NO.   | SALES UNIT |
|---------------|---------------------|------------|------------|
| D = Ø 42.4 mm | Stainless steel V2A | B0 5403333 | 1 x        |

#### End Cap, flat



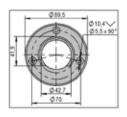


- For handrails BO 5403330 / BO 5403331Can be bonded with metal adhesive

| DIAMETER      | FINISH              | ART. NO.   | SALES UNIT |
|---------------|---------------------|------------|------------|
| D = Ø 42.4 mm | Stainless steel V2A | B0 5403334 | 1 x        |

#### Wall Connector



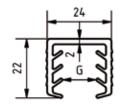


- For handrails BO 5403330 / BO 5403331
  Facilitates load distribution of glass balustrades
  Optional, not required as per General Building Inspection Test Certificate (AbP)

| DIAMETER              | FINISH              | ART. NO.   | SALES UNIT |
|-----------------------|---------------------|------------|------------|
| d = 90 mm / ø 42.4 mm | Stainless steel V2A | BO 5403336 | 1 x        |

#### Rubber Profile





• For handrails BO 5403330 / BO 5403331

| LENGTH   | 12 - 13.52 mm | 15 - 17.52 mm | 19 - 21.52 mm | SALES UNIT |
|----------|---------------|---------------|---------------|------------|
| 5000 mm  | B0 5403338    | B0 5403340    | B 0 5403342   | 1 x        |
| 25000 mm | B0 5403337    | BO 5403339    | BO 5403341    | 1 x        |

# HANDLING



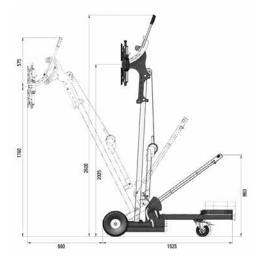
# Liftmaster B1 Lifting System

The tendency towards increasingly larger glass constructions in architecture and the growing use of 2-gap insulating glass pose new challenges for glass processors and assemblers: Elements which could previously be moved by two people have now become so heavy that they can hardly be transported manually on site or within company premises any longer. With the Liftmaster B1 Bohle has developed an innovative handling and mounting aid which enables transporting objects of up 180 kg such as glass panes, window elements or metal and stone sheets easily and safely - by only one person.



↑ Manual pumping · Length 1200 mm · Height 1950 mm · Width 800 mm (with extended axles for widening the gauge 1.1 m) · Includes vacuum lifter: can be rotated by  $360^{\circ}$  · can be removed very easily and used separately together with a crane · has a dual circuit vacuum system with 4 suction pads · is very flat and compact · is equipped with a vacuum indicator for monitoring the vacuum · the vacuum is generated via a hand pump, therefore ready for use at all times (no previous charging of batteries required) · weight of the lifting equipment approx. 22 kg

| LOAD CAPACITY | ART. NO. |
|---------------|----------|
| 180 kg        | BO 88.01 |





Safe, simple, fast in use: The innovative handling and assembly aid from Bohle. Take a look for yourself!

### Double Tyres Liftmaster B1



1 Twin tyres for Liftmaster B1 (BO 88.01) for self-assembly

| DESCRIPTION                | ART. NO.  |
|----------------------------|-----------|
| Double Tyres Liftmaster B1 | SP 88.027 |



#### Spacer for Vacuum Pad Lifter B18DM4 (GS)



| DESCRIPTION | ART. NO.  |
|-------------|-----------|
| Spacer      | SP 88.028 |

1 For applications on window elements with transoms or sash elements. Increasing the distance between the suction surface and the lifter body by approx. 50 mm.

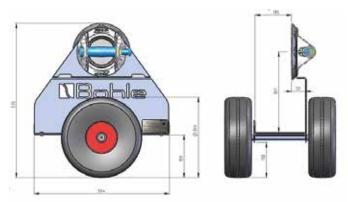
## Veribor® Trolley with suction lifter

The portable and highly manoeuvrable mounting aid for interior and exterior applications greatly facilitates handling gastight materials such as, for example, glass panes or flagstones, and is a true all-rounder. Thanks to the integrated Veribor suction lifter, the load is safely attached even on rough terrain. Trolley comes with two tension belts for increased transport safety which are even suitable for transporting gas permeable materials. In addition, a notch in the plate enables transporting windows.



 $footnote{\bullet}$  Height 575 mm  $\cdot$  Width 410 mm  $\cdot$  Load capacity up to 300 kg  $\cdot$  Minimum thickness of transported goods 3 mm  $\cdot$  Maximum height of transported goods 2000 mm  $\cdot$  Maximum length of transported goods 3000 mm

| DESCRIPTION     | ART. NO. |
|-----------------|----------|
| Veribor Trolley | BO 680.0 |
| Load capacity   | 300 kg   |



#### VetroLevel Fixing Aid with integrated spirit level

VetroLevel enables the quick horizontal positioning of glass panes. Fasten the little helper in a way that you can keep an eye on it during installation. The proven vacuum technology of the Veribor® suction pad holds it safely in place. Now you have both hands free to comfortably align the glass pane without the need for a spirit level. VetroLevel therefore ideally supports the installation of VetroMount® and is also perfectly suited for mounting all-glass showers or partition walls.



| DESCRIPTION           | ART. NO.    |
|-----------------------|-------------|
| VetroLevel Fixing Aid | B0 5140450  |
| Suction pad           | ø 90 mm     |
| Suction pau           | Ø 90 IIIIII |



1 Veribor® suction pad can be attached to all smooth and gastight surfaces

#### Veribor® pump-activated suction lifter made of plastic in Carrying Case

The Veribor®pump-activated suction lifter BO 601G is a real design highlight — with regards to both appearance and comfort. It is equipped with a vacuum indicator clearly visible from a distance, as well as with numerous functional details. Thanks to the high-quality pump mechanism, the vacuum can be generated especially quickly. On the other hand, the optimised valve button enables a faster ventilation to release the vacuum. As a result, the vacuum lifter can be attached better to the material and loosened quicker after use. An elevated gripping area enables highest carrying comfort. In addition, a plastic ring above the rubber pad provides additional stability and safety. The BO 601G pump-activated suction lifter is suited for heavy loads up to 120 kg and can be used on all materials and objects with gastight surfaces. • The high quality of this product has been confirmed by TÜV (German Technical Inspection Agency) by granting it the GS sign.



| DESCRIPTION                            | ART. NO.  |
|----------------------------------------|-----------|
| Veribor® pump-activated suction lifter | B0 601G   |
| Load capacity                          | 120 kg    |
| Lifting direction                      | parallel  |
| Material of Suction Lifter             | plastic   |
| Suction pad                            | ø 213 mmV |
|                                        |           |

## Veribor® 2-cup suction lifter made of plastic

Safe grip and highest carrying comfort. The Veribor® 2-cup suction lifter convinces due to its large, non-slip gripping area and lies perfectly in your hand. The levers have an ergonomic and user-friendly design. Their wide surface enables optimum force absorption. The high-quality, PAH-free rubber pads in proven Bohle quality are a positive development from previous models. They are dimensionally stable but still soft enough to adapt to the surface during vacuum generation. The 2-cup suction lifter is suited for loads of up to 50 kg (two-fold safety factor) and can be used for all materials and objects with gastight surfaces.



| DESCRIPTION                | ART. NO.   |
|----------------------------|------------|
| Standard version           | BO 602.1G  |
| stainless design           | BO 602.11G |
|                            |            |
| Load capacity              | 50 kg      |
| Lifting direction          | parallel   |
| Material of Suction Lifter | plastic    |
| Suction pad                | ø 120 mm   |
|                            |            |

# ABOUT BOHLE

Bohle Group has its roots in the world of glass. Looking back on 100-year history, Bohle – being a developer, manufacturer and supplier of glass balustrades, sliding door applications, shower door hardware, and products for all glass processing and finishing needs – stands out due to its unique expertise in everything concerning glass.

Today, the family company, founded in 1923 as a one-man business, is represented at 15 locations in Germany and abroad with almost 400 employees Quality is the leading principle at Bohle – in every area. The company lives up to this principle, for example by developing a large part of its products in-house and manufacturing them in Germany.

#### **KEY**



Rail load: 1.5 kilonewton



Basic profile without cover, structural connection and/or floor connection profiles



Basic profile with cover, structural connection and/or floor connection profiles



Profile drainage possible



Optional integration of LED illumination



Suitable for staircases



The General Building Inspection Test Certificate (AbP) is a proof of usability for non-regulated construction products and construction types according to the regional building regulations of the German federal states. Pursuant to the building and safety regulations, only products with a General Building Inspection Test Certificate must be used in construction.



The British Standard, issued by the British Standards Institution, BSI, includes the use of barriers and guardrails. This also comprises, among other things, the minimum heights and load limits laid down in building regulations and the BS 6180 standard.



Apart from the General Building Inspection Test Certificate, a structural calculation is required testing the glass balustrade, among other things, with respect to design, construction, material or loads. A so-called structural analysis is already available for many VetroMount® applications.



In the Netherlands, an inspection of balustrade systems according to NEN-EN 1991-1-1 is required. This inspection also includes a test of general actions on structures — density, self-weight, and imposed loads for buildings.



The South African inspection procedure is aligned to the German General Building Inspection Test Certificate (AbP). During the testing process, the dynamic load is evaluated with the aid of a pendulum test.



The American Standard ICC Evaluation Service (ICC-ES) leads the industry in conducting technical evaluations of building products, materials, and systems for compliance.



The French test certificate is issued by the Centre Scientifique et Technique du Bâtiment (CSTB). This inspection authority is a technical and scientific institution inspecting the degree of safety and quality of innovative construction technologies.



The technical building regulations of Spain (Código Técnico de la Edificación) regulate the safety and habitability of buildings according to the Spanish Building Act.



The Italian test procedure for fall protections made of glass inspects, among other things, the resistance to linear static loads, dynamic loads and overloads.



The Austrian standard evaluates the fall protection effect of a parapet glazing fastened to the lower glass edge. Part three in particular deals with vertical glazing and the fall protection function.



The Swiss SIA standards 261:2014, 358:2010 and 261:2003 regulate the current state of the art for fall protections. They can be found in many building regulations.

All certificates are available online at: www.bohle.com

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