



# READY FOR IMPACT

catalogue

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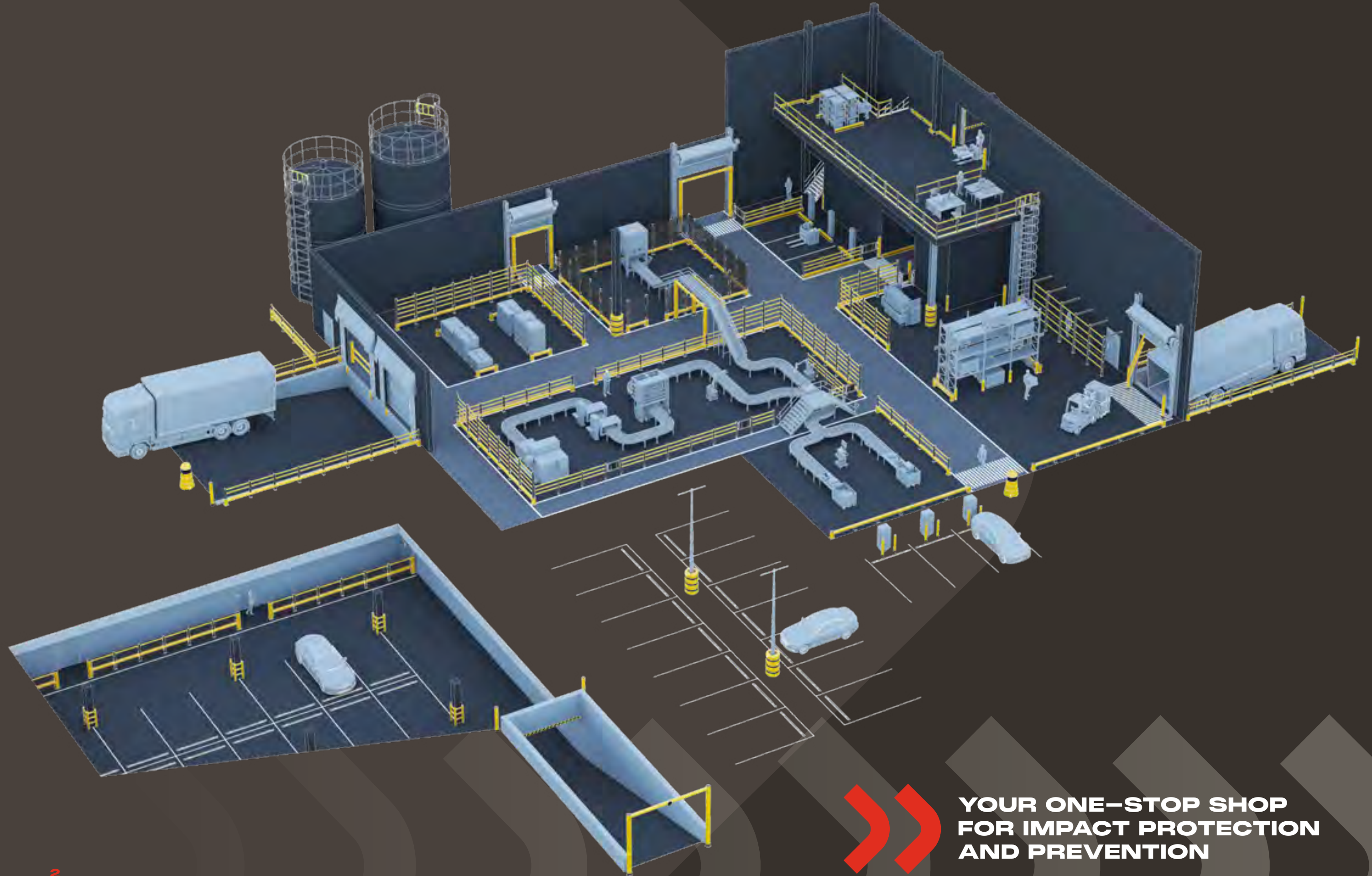
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**YOUR ONE-STOP SHOP  
FOR IMPACT PROTECTION  
AND PREVENTION**



For more information, visit [boplan.com](http://boplan.com)



**“ WE MAKE A DIFFERENCE  
IN EVERYTHING WE DO.  
OUR LEGACY IS A SAFER WORLD. ”**

In 1999, Boplan started as a family-owned business with a clear mission: to design, develop and produce high-quality safety solutions that prevent accidents, protect assets and save lives. Today, that ambition remains unchanged.

What has changed is our scale and our reach. We are proud to be a global player with a strong presence across industrial, commercial and sports sectors, recognised for our product leadership. Our growth from a local family business to an internationally trusted partner has been driven by three fundamental pillars: innovation, quality and sustainability.

With 10 regional sales offices around the world, we deliver safety solutions that meet the highest standards while remaining close to our customers. Full vertical integration allows us to control every stage of the production process, ensuring consistent quality, operational efficiency and responsible use of resources.

While we are proud of our global expansion, our greatest achievement lies in the impact we create: safer workplaces, protected infrastructures and a reduced environmental footprint. These outcomes shape our decisions today and will continue to guide Boplan in the years ahead.

Thank you for placing your trust in Boplan,  
a company making an impact.

*Xavier Ramon*

**XAVIER RAMON**  
Founder & CEO Boplan



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For more information, visit [boplan.com](https://www.boplan.com)





# THIS IS BOPLAN

**WE SELL SAFETY**

Boplan develops and manufactures high-performance safety solutions for industrial environments. Our durable fall and impact protection solutions set the standard for impact absorption and are used worldwide in warehouses, production sites, logistics centres, cold storage facilities, petrochemical and chemical sites, car parks and airports.

As incontrovertible proof of our products' exceptional impact resistance, we provide a value in joules.



## **SAFETY SOLUTIONS FOR EVERY INDUSTRY**

Our high-quality and sustainable products protect people, vehicles, and infrastructure in industries such as transport & logistics, distribution, packaging, manufacturing, airports, petrochemicals, chemicals and food processing.

Our extensive product range is used to address various safety challenges and hazards. From flexible safety barriers and handrails to bollards and column protection, our solutions withstand extreme conditions and deliver long-lasting performance. High-quality materials, advanced manufacturing techniques and rigorous testing ensure that our products meet the highest safety standards.

Whether you need to secure pedestrian areas, separate traffic flows or protect machinery, we have the right solution to improve your workplace safety.

## **WE OPERATE AROUND THE WORLD**

Although our production is based in Belgium, we are a global player in the safety industry. With sales offices in Belgium, the Netherlands, Italy, Poland, France, Germany, Spain, the United Kingdom, the United States and Japan, and numerous distributors, we have a presence in more than 50 countries and export to over 80 countries.

## **MORE THAN 25 YEARS OF EXPERIENCE**

With over 25 years of industry experience, Boplan has continuously evolved and adapted to the changing landscape of industrial safety. We have honed our expertise and refined our product range. This allows us to meet the increasingly demanding requirements of various sectors.

## **100% CONTROL OVER THE PRODUCTION PROCESS**

Experience the peace of mind offered by Boplan as a vertically integrated supplier of safety solutions. Our team of experts works closely with you to determine your safety needs and draw up detailed plans. With full control over the production process in our state-of-the-art facilities, we guarantee the highest quality. Our experienced technicians install every product efficiently, with minimal disruption to your projects. Additionally, we offer comprehensive service, maintenance and support.

## **BOPLAN R&D: WHERE INNOVATION THRIVES**

We believe in staying at the forefront of technological advances. That's why innovation knows no boundaries at Boplan R&D. We are rewriting the rules and shaping a future where the possibilities are endless.



# WE MAKE THE DIFFERENCE



**MORE THAN 25 YEARS OF EXPERIENCE IN INDUSTRIAL SAFETY**

The best solution for your specific situation



**SUSTAINABILITY**

Circular production & products: durable, repairable & recyclable



**IMPACT RESISTANCE CHAMPION**

Tested products with unrivalled performance



**SUPERIOR SERVICE AND FOLLOW-UP**

For excellent customer experience



**LEADER IN INNOVATION & PRODUCT DESIGN**

Products that excel in functionality, ergonomics and performance



**HIGHLY MODULAR AND ADAPTABLE SYSTEM**

Adapts easily to your layout needs



**ONE STOP SHOP FOR PROTECTION AND PREVENTION**

Unique & broad product portfolio



**CERTIFIED PROFESSIONAL INSTALLATION TEAM**

Hassle-free installation in the most demanding environments



**100% VERTICAL INTEGRATION**

Total control, maximum efficiency, from start to finish



**PATENTED HIGH PERFORMANCE POLYMER BLEND**

The perfect match of strength and flexibility



**SIMPLE, EASY AND QUICK INSTALLATION**

As part of our product DNA



**FAST DELIVERY**

According to the highest standards

# JOULES

## MAKE IMPACT TANGIBLE

The joule is a fundamental unit of physics and offers a perfect way to quantify energy in everyday life. That's why we use this unit to express the impact resistance of our FLEX IMPACT® safety products.

Simply put, joules are the energy units used to measure the amount of work or energy required to do something. It tells you how much energy is used, transferred or converted in a given situation.



### HOW DO OUR SAFETY PRODUCTS ABSORB ENERGY?

When a forklift hits an obstacle, it transfers a certain amount of energy to that obstacle. To stop the forklift, the obstacle has to exert a force over a certain distance.

When the obstacle is extremely rigid, such as a steel or concrete post, this distance is very short. As a result, the force is very high. The forklift stops abruptly, causing significant damage to the obstacle and vehicle and giving the operator a strong shock.

Boplan's polymer safety barriers behave differently. Thanks to their unique flexibility and high impact resistance, they absorb much more of the energy generated during a collision. This makes the impact less aggressive for the operator while still maintaining the necessary rigidity to stop the vehicle within an acceptable distance.

This difference is clearly reflected in the lower ASI (Acceleration Severity Index) of our polymer barriers. This is an indicator of reduced impact severity experienced by the operator and improved safety for people, vehicles and infrastructure.



### HOW DO WE CALCULATE THE IMPACT ABSORPTION VALUE OF OUR SAFETY PRODUCTS?

We measure the impact absorption of our safety products in joules. This allows you to objectively compare products and quickly find the impact absorption value you need.

The impact absorption value varies depending on the angle of impact. We measure impact values for our products at various angles. These reflect realistic collision scenarios, ranging from light side impacts to full frontal collisions. This allows us to accurately simulate how our barriers perform in real-life situations.

Use the Boplan Impact Calculator to determine which product you need, based on the loaded vehicle's weight, speed, and angle of impact.



### AN IMPACT ABSORPTION VALUE OF 24.1 KJ WHAT DOES THAT MEAN?

**Our FLEX IMPACT® BO250T bollard is the strongest polymer bollard in the world.**

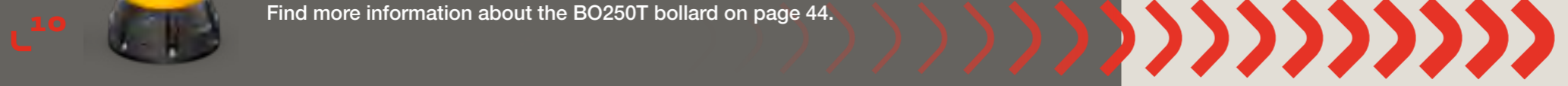
It has an impact absorption value of 24.1 kJ at a height of 0.60 m. 24.1 kJ corresponds to a 90° impact from a forklift weighing 10,000 kg travelling at a speed of 8 km/h.

Find more information about the BO250T bollard on page 44.

## BOPLAN IMPACT CALCULATOR

With the Boplan Impact Calculator, you can accurately calculate the required impact resistance for your safety solutions. This powerful tool is easy to use and allows you to make informed decisions with just a few clicks.

Enter specific parameters related to your workspace to instantly receive recommendations on the most suitable models and strength levels of safety products to avoid accidents and protect valuable assets.



# SUSTAINABLE SAFETY SOLUTIONS

## CIRCULAR SAFETY PRODUCTS

Based on the principles of a circular economy, we design our products to be durable, repairable and recyclable:

- Durable: our products have a long lifespan
- Repairable: product design encourages reuse and repair
- Recyclable: our products are easily disassembled for recycling



## YOU ARE IN CONTROL

A company's ecological footprint goes far beyond its energy consumption. Every business needs raw materials, supporting products and services, transport and so on. All these things come with their own CO<sub>2</sub> baggage. These so-called Scope 3 emissions can amount to ten times the CO<sub>2</sub> emissions associated with energy consumption. And because you're in charge of these aspects, you're also in control.

Choosing circular products helps to reduce your company's Scope 3 emissions, often without any additional costs. Especially when you look at the total cost of ownership (TCO).

If you would like to know more about our sustainability efforts, have any questions, or would like to share an opinion, please don't hesitate to contact our Sustainability Project Manager at [sustainability@boplan.com](mailto:sustainability@boplan.com)

## MANUFACTURE

Recycled materials reduce the use of new materials and lower the environmental footprint.

An average 8.5% of the weight of our tubes and profile consists of our own recycled materials. This equates to an annual reduction of more than 500 tonnes of CO<sub>2</sub> in Scope 3. We only incorporate our own post-industrial waste into our products. This closed-loop recycling ensures that our products meet all technical specifications and are free of hazardous chemicals.

## MAINTENANCE

The longer a product lasts, the smaller its footprint.

Our polymers' properties and product design allow our products to absorb impacts without damage to the product or your vehicles. As long as the design parameters are followed, the life expectancy of our products will easily exceed the time you need them. This not only saves money, but also prevents additional CO<sub>2</sub> emissions and material usage.

## REPAIR

Repairs prevent you from having to replace the entire product.

Products that exceed their intended use may become damaged. This doesn't mean you have to replace the entire product. Thanks to our products' modular design, only damaged components need to be replaced and the other parts can be reused. This reduces material use and CO<sub>2</sub> emissions.



## RECYCLING

Recycling keeps raw materials in the material cycle and prevents waste.

Recycling requires the use of materials with proven, economically viable recycling pathways and a product design that allows for easy disassembly into single-material recycling streams. Our products can be disassembled without special equipment, and up to 95% by weight is suitable for existing recycling streams. For our AXES GATES, bollards, and KP PROTECTORS, that figure is even 100%!

## TAKE-BACK

Take-back programmes enable high-quality recycling.

As a manufacturer, we know exactly how to recycle our products. We are always willing to investigate take-back options upon request.

## REUSE

Reusing a product reduces its ecological footprint.

Production facilities, warehouses, etc. must respond to changing business needs. We have designed our products to be easily disassembled and reassembled for reuse. The modular design also allows for modifications such as changes in length.

# HIGHLIGHTS SUSTAINABILITY REPORT 2025

At Boplan, we deliberately choose sustainability and embed it in the way we work. In 2025, this approach translated into tangible results in the areas of energy, circularity, logistics, safety and social engagement.

These highlights show how strategic choices lead to measurable progress, from less waste and lower CO<sub>2</sub> emissions to more sustainable product solutions. This is a snapshot of the steps we are already taking today. At the same time, they form the foundation on which we will continue to build towards our 2050 objectives. In doing so, we make sustainability clear, tangible and relevant.



 In 2025, the share of renewable electricity in our energy mix grew from 3% to **30%**.


Replacing 10,500 km of road transport with 1,600 km of transport via inland waterways saves **8 tonnes of CO<sub>2</sub>**   
(Source: Multimodaal Vlaanderen)

**Sustainable safety solutions**   
 In line with the principles of a circular economy, we design our products so that they are durable, repairable and recyclable.

**95.3%** of our total waste stream is recycled

**8.5%** of our tubes and profiles consist of recycled material

**500+** tonnes of CO<sub>2</sub> reduction in Scope 3 emissions per year


  
**80,000** coffee cups saved from landfill

In 2025, we stopped using cardboard cups in our coffee machines. On an annual basis, this means one tonne less waste.



These Boplan products are **100% recyclable**

 By sorting our waste even more effectively, we avoided **440 tons of CO<sub>2</sub>** in 2025.

 On the road to net zero by 2050, our 2030 target is a **42% CO<sub>2</sub> reduction.**

With a **24%** decrease in 2025, we are on track to meet this goal.  
(Compared with the 2030 baseline year)

**Take-back**   
 As a manufacturer, we know exactly how to recycle our products and are always willing to investigate take-back options.

We took back more than **20 tons** of products.

Want to know more about our sustainability efforts? Feel free to contact us at **sustainability@boplan.com**

  
 We support the UN Global Compact. In this way, we are part of the global movement committed to responsible business.



**PROTECTION OF PEOPLE,  
MACHINES, EQUIPMENT,  
INFRASTRUCTURE AND  
BUILDINGS AGAINST VEHICLES**

# SAFETY BARRIERS

FLEX IMPACT® safety barriers provide protection against collisions with forklifts and other vehicles. They are indispensable in busy traffic environments or locations where loads are moved or transported, such as warehouses, production halls and airports.

A unique characteristic of this safety solution is that a collision will not rip the fasteners out of the ground, and the flexible components retain their original shape after the impact. Thanks to the safety barriers' modular design, you can install your company's safety equipment zone by zone or expand it later.

# SAFETY BARRIERS



PROTECTION OF PEOPLE, MACHINES,  
EQUIPMENT, INFRASTRUCTURE  
AND BUILDINGS AGAINST VEHICLES

Effective safety barriers prevent severe and even fatal accidents. It is therefore crucial to make a well-considered choice based on the right criteria.

Boplan offers a wide range of safety barrier systems for mobile equipment. These are perfect for high-risk zones with mixed pedestrian and forklift traffic. They also provide ground-level protection and protect pedestrians from poorly stacked or falling objects.



ICE FLEX®

For temperatures down to -30°C



**EFFECTIVE SAFETY BARRIERS  
PREVENT SERIOUS AND EVEN FATAL ACCIDENTS.**

Safety barriers are a solution primarily designed to protect pedestrians, infrastructure and buildings from collisions and damage caused by vehicles. They are the perfect solution to keep designated routes clear by separating pedestrian traffic from vehicles. We offer various types of safety barriers that can also be combined with our other safety products.

KEY FEATURES AND BENEFITS



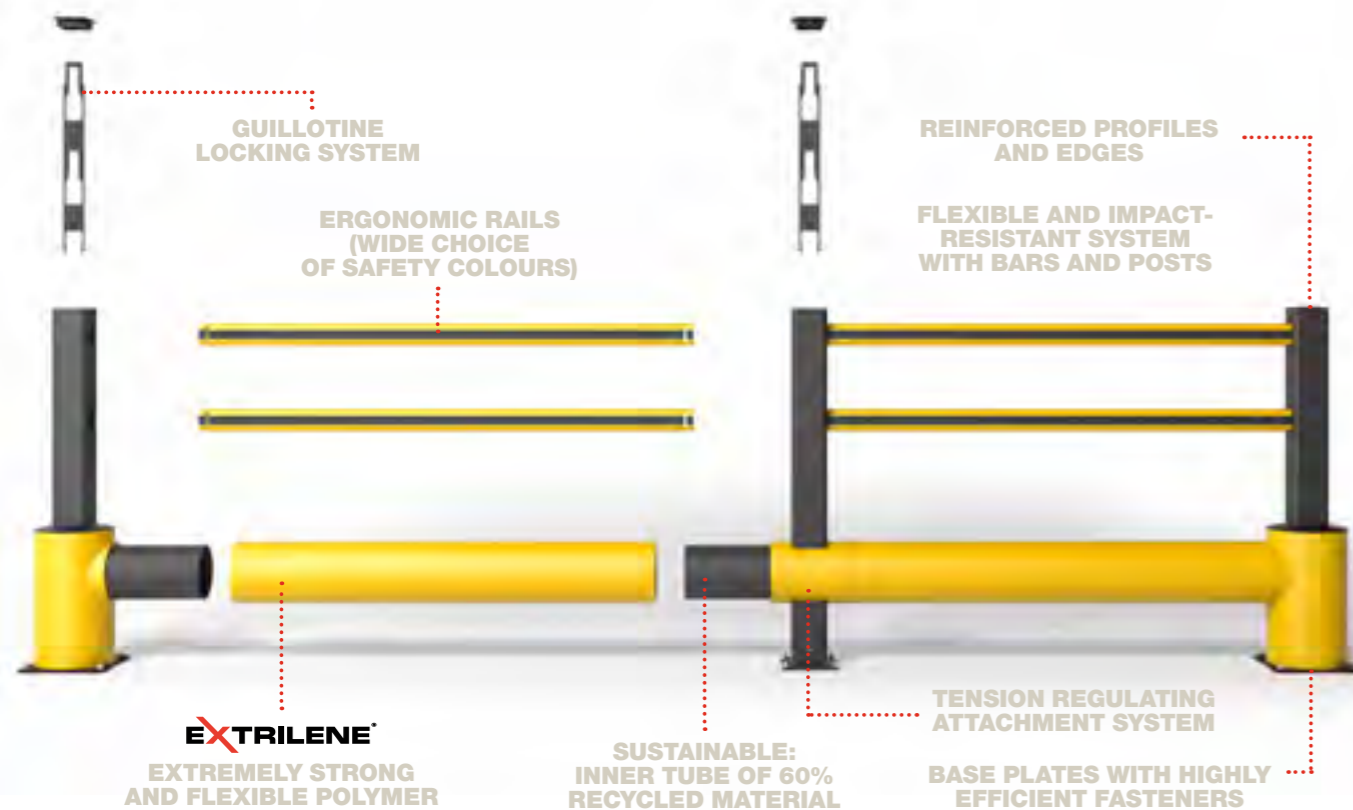
**IMPACT RESISTANCE AND FLEXIBILITY**

Our products are made from EXTRILENE®, a high-performance polymer. This material is ideal for absorbing heavy impacts. Crash tests show that our safety barriers can withstand impacts of up to 50.10 kJ, depending on the model. The deformation that occurs after each collision disappears once the vehicle has gone.



**EASY INSTALLATION DUE TO MODULAR DESIGN**

Our safety barriers are constructed using a minimum of components. You don't need screws or bolts to secure these components. All parts slide or click together. This allows a certain degree of freedom of movement. And that's a very good thing, because a rigid lock increases the risk of breakage on impact. Moreover, the polymer components are lightweight, making them easy to handle and transport.



**TYPICAL ENVIRONMENTS**

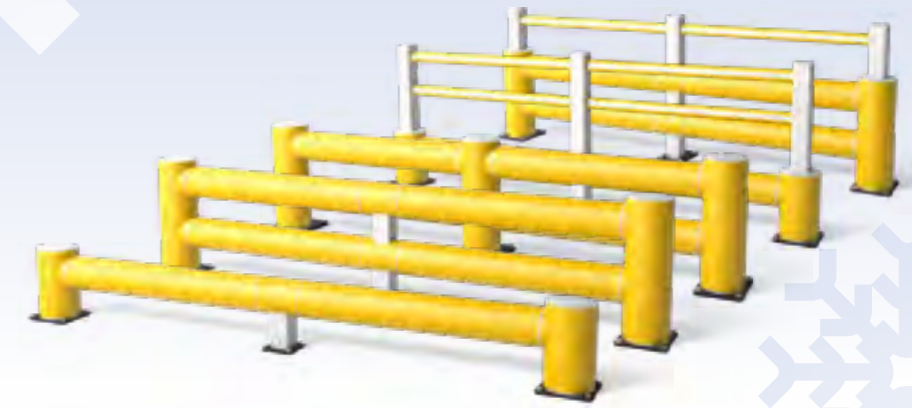
For the protection of people, machines, equipment, infrastructure and buildings in:

- Warehouses and storage facilities
- Distribution centres
- Transport & logistics centres
- Food industry
- Parking facilities
- Logistics, supply chain and material handling industries
- Petrochemical and chemical industries
- Aviation

**ICE FLEX®**

Protection in environments down to -30°C.

ICE FLEX® safety barriers offer optimal impact protection and maximum safety in extremely cold conditions.



**EASY TO CUSTOMISE AND EXPAND**

Our safety barriers are available in different sizes and configurations. They are also easy to expand. This makes them suitable for rapidly changing environments. You can easily adapt them to your needs, unlike steel safety barriers, which must be welded. Additionally, you can easily connect the safety barriers to other FLEX IMPACT® safety products such as safety gates, handrails and bollards.



**OPTIMAL VISIBILITY**

The safety barriers' standard colour is yellow, as yellow grabs attention and increases safety awareness. The safety barriers are also available in other colours such as red. Red is commonly used for matters related to fire safety. Thanks to this recognisability, the colour reinforces the function. This allows for a fast and efficient response in precarious situations. Moreover, the polymer is coloured throughout, eliminating the need for painting.



Read the full case online

Red TB 260 PLUS set-up to protect a fire hose reel in a JCL Logistics warehouse (the Netherlands).



**RESISTANCE TO CHEMICALS AND UV RADIATION**

Our weather-resistant safety barriers are resistant to chemicals and do not rust. They are perfect for environments where the use of chemicals is common and strict hygiene standards apply. Bacteria do not adhere to the polymer and it is easy to clean.



**LOW MAINTENANCE**

FLEX IMPACT® safety barriers require little to no maintenance. When used correctly, our systems have an extremely long lifespan.

# SAFETY BARRIERS



FLEX IMPACT® TB safety barriers protect people, machines, equipment, infrastructure and buildings from forklifts and other vehicles. Our range includes models that act as wheel guides or wheel stops, as well as models that can stop heavy forklifts. The impact resistance ranges from 5 kJ to an impressive 50.1 kJ. The gap between the ground and the bottom of the bar also varies depending on the model. The key is to choose the right set-up for your needs. You can rely on our team of experts to help you make the right choice.



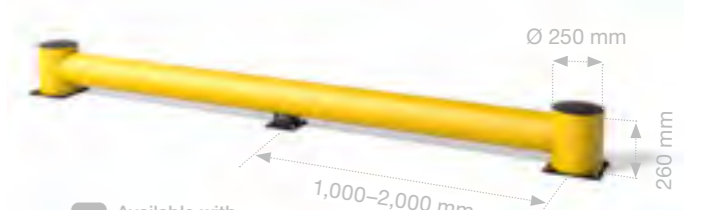
**TB MINI**  
5.00 kJ



**TB MINI DOUBLE**  
5.00 kJ



**TB 200**  
21.80 kJ



Available with removable base plates

**TB 260**  
21.20 kJ

# TB MINI

## BOPLAN IMPACT CALCULATOR

With the Boplan Impact Calculator, you can accurately calculate the required impact resistance for your safety barriers. This powerful tool is easy to use and allows you to make informed decisions with just a few clicks.

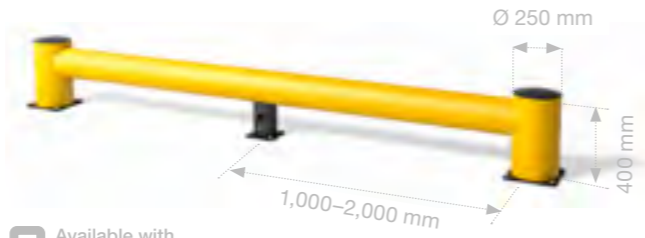
Enter specific parameters related to your workspace to instantly receive recommendations on the most suitable models and strength levels of safety barriers to avoid accidents and protect valuable assets.



FLEX IMPACT® SAFETY BARRIERS



**TB 260 DOUBLE**  
**46.50 kJ**



Available with removable base plates

**TB 400**  
**20.10 kJ**



**TB 400 DOUBLE**  
**39.10 kJ**



**TB 550**  
**18.30 kJ**



**TB SUPER DOUBLE**  
**50.10 kJ**



**TB SUPER TRIPLE**  
**48.30 kJ**



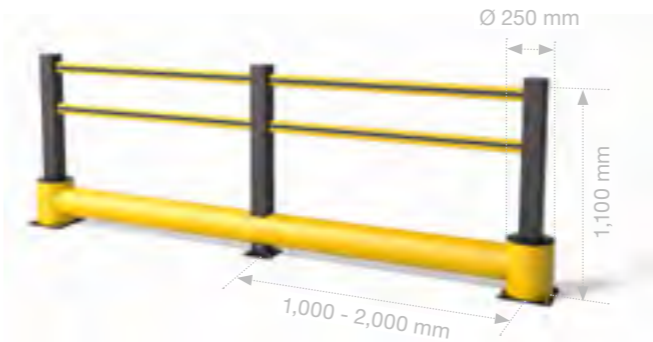
**TB 400 DOUBLE**



# SAFETY BARRIERS WITH RAIL SYSTEM



FLEX IMPACT® TB PLUS safety barriers consist of a strong barrier plus one or two handrails. This safety solution protects pedestrians from collisions with forklifts and other vehicles. It creates an effective separation between the pedestrian walkway and the area where the forklifts are active.



Available with removable base plates

**TB 260 PLUS**  
21.20 kJ



Available with removable base plates

**TB 400 PLUS**  
20.10 kJ



**TB 260 DOUBLE PLUS**  
46.50 kJ



**TB 400 DOUBLE PLUS**  
39.10 kJ



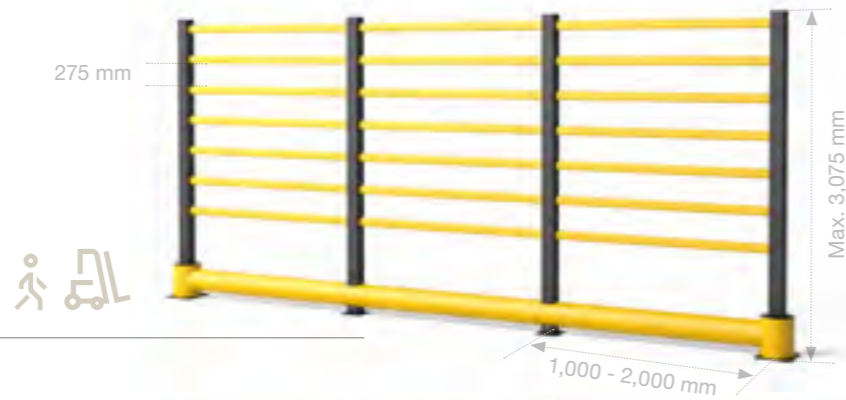
# TB 260 PLUS

# SAFETY BARRIER AGAINST FALLING GOODS

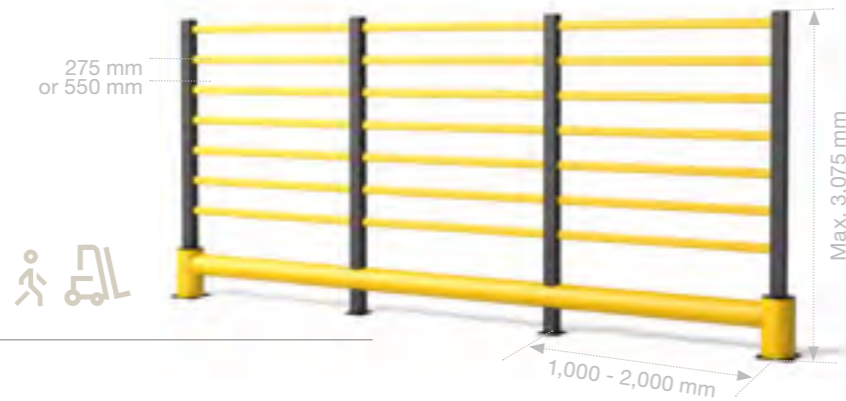


The FLEX IMPACT® TB GRILL safety barrier combines a strong barrier with a series of bars. This type of safety barrier protects pedestrians from falling goods and collisions with forklifts and other vehicles. It provides pedestrians with enhanced safety in storage areas with forklift traffic. Depending on the size of the goods, you can opt for a set-up with either 275 mm or 550 mm of space between the bars.

## TB 260 GRILL 21.20 kJ



## TB 400 GRILL 20.10 kJ



## TB 400 DOUBLE GRILL 39.10 kJ



# TB 260 GRILL

# SAFETY BARRIERS WITH FENCING



FLEX IMPACT® TB PLUS FENCE safety barriers combine a strong barrier with integrated fencing. With the added fencing, TB 260 and TB 400 reach a height of 2,300 mm to help shield machinery from falling goods while keeping pedestrians at a safe distance. The TB 550, 1,100 mm high, protects pedestrians in parking garages, car parks and ramps. Built to absorb impacts, these strong yet flexible barriers add an extra level of pedestrian safety. The fencing resists corrosion, chemicals and environmental pollution for long-lasting performance. Even in demanding industrial environments, and, because it's non-conductive, you can safely apply it around high-voltage equipment.



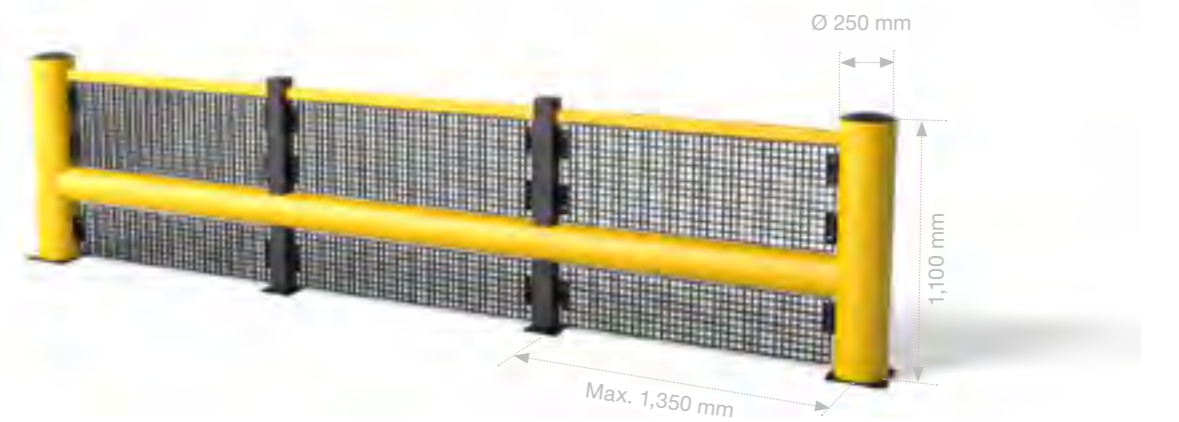
# TB 260 PLUS FENCE



**TB 260 PLUS FENCE**  
21.20 kJ



**TB 400 PLUS FENCE**  
20.10 kJ



**TB 550 PLUS FENCE**  
18.30 kJ



# HANDRAILS

Boplan's FLEX IMPACT® handrails provide a clear, logical separation between people and vehicles. Our flexible handrails are available in three versions, from light to heavy duty. You can also choose between two or three rails. All of our handrails are manufactured from high-quality polymer Extrilene®.

From handrails as the perfect complement to floor marking tape to guardrails for mezzanines and heights. From fencing for cost-effective machine guarding and pedestrian protection to reinforced pedestrian separation and perimeter fencing for high-traffic areas. Or even as protection against falling objects and stacked goods. We have a handrail for every application.



**PROTECT PEOPLE AND MACHINERY  
AGAINST FALLING OBJECTS,  
FORKLIFTS AND OTHER VEHICLES**

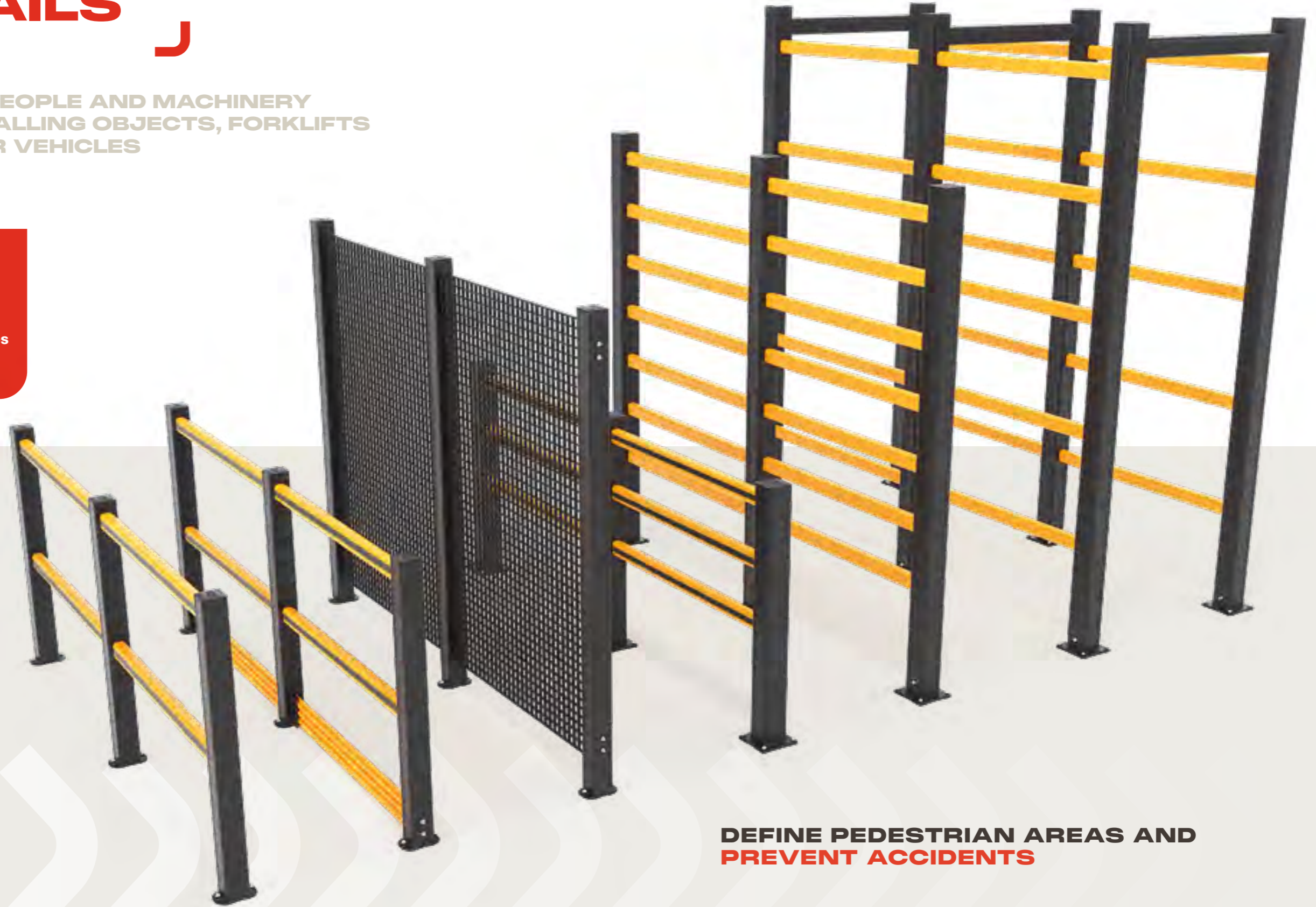
# HANDRAILS



PROTECT PEOPLE AND MACHINERY  
AGAINST FALLING OBJECTS, FORKLIFTS  
AND OTHER VEHICLES



The HP PLUS 3 RAILS ICE FLEX®  
handrail is also available  
in a version for use at temperatures  
below freezing down to -30°C.



**DEFINE PEDESTRIAN AREAS AND  
PREVENT ACCIDENTS**

## KEY FEATURES AND BENEFITS



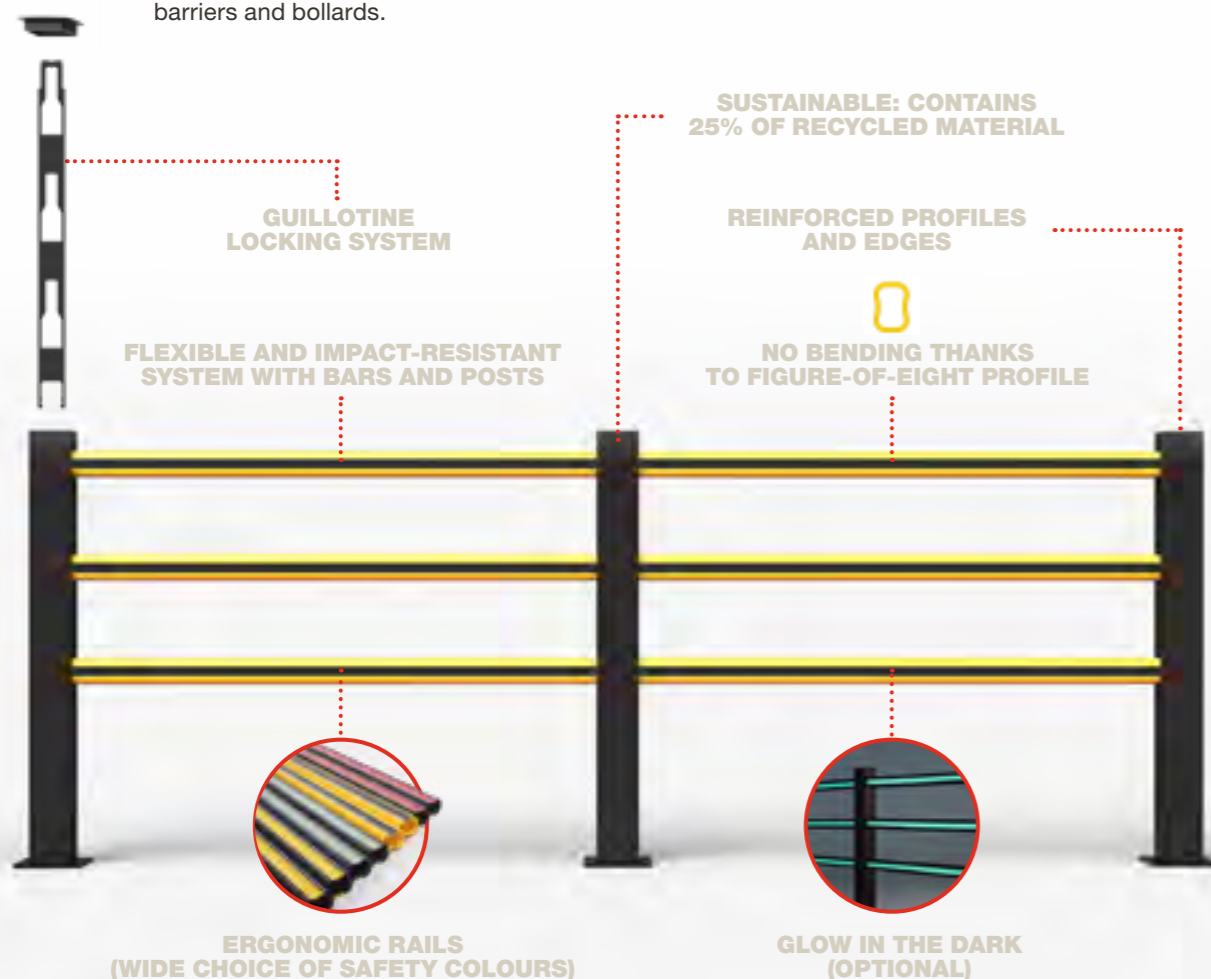
### IMPACT RESISTANCE AND FLEXIBILITY

Our products are made of high-quality EXTRILENE® polymer. This material is ideal for absorbing heavy impacts. The handrail flexes with each collision, but resumes its original shape once the vehicle has gone.



### FOR INDOOR AND OUTDOOR USE

FLEX IMPACT® handrails provide a multifunctional rail system for both indoor and outdoor use. In addition to providing a clear demarcation of walkways, these handrails are often used as a fall protection system for safe work at height on mezzanine floors or work platforms. They are also suitable for protecting people from poorly stacked goods or falling objects. In addition, you can easily connect the safety barriers to other FLEX IMPACT® safety products such as safety gates, safety barriers and bollards.



### EASY INSTALLATION DUE TO MODULAR DESIGN

Our handrails are made with as few components as possible. You don't need screws or bolts to secure these components. All parts slide or click together. This allows a certain degree of freedom of movement. And that's a very good thing, because a rigid lock increases the risk of breakage on impact. Moreover, the polymer components are lightweight, making them easy to handle and transport.



### RESISTANCE TO CHEMICALS AND UV RADIATION

Our weather-resistant handrails are resistant to chemicals and do not rust. They are perfect for environments where the use of chemicals is common and strict hygiene standards apply. Bacteria do not adhere to the polymer and it is easy to clean.



### OPTIMAL VISIBILITY

Our polymer handrails and railings are also available with a glow-in-the-dark feature. These railings have luminescent striping that absorbs light during the day. As darkness falls in the evening or in the event of a power failure, these glow-in-the-dark handrails gradually release the absorbed light for up to half an hour. This is more than enough time to find an exit in the dark.



Read the full case online



**HP PLUS with luminescent striping at ArcelorMittal warehouse (Belgium).**



### LOW MAINTENANCE

FLEX IMPACT® handrails require little to no maintenance. With proper use, our systems last a very long time.

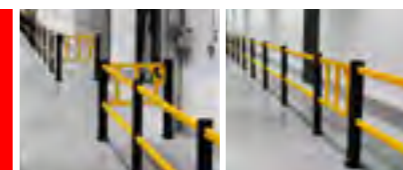
## TYPICAL ENVIRONMENTS

For the protection of people against forklifts, machines and falling goods in:

- Warehouses and storage facilities
- Logistics, supply chain and material handling industries
- Distribution centres
- Petrochemical and chemical industries
- Transport & logistics centres
- Aviation
- Food industry
- Parking facilities



*“We were looking for high-quality safety devices to keep pedestrians safe at our modern production site. Boplan polymer solutions have made our pedestrians feel safer and clarified the layout of our production centre.” – Velux*



Read the full case online



## HANDRAILS TO GUIDE PEDESTRIANS AND SEPARATE TRAFFIC FLOWS

### HD LIGHT



Employees and visitors often overlook safety rules. A physical barrier like the FLEX IMPACT® HD LIGHT forces them to stay on the walkway and prevents accidents. Handy, modular and easy to install.



### HP PLUS 2 RAILS 3.50 kJ



FLEX IMPACT® HP PLUS has 2 or 3 rails to shield pedestrians in high-traffic zones. Sturdy posts give this handrail model an impact resistance of 3.5 kJ to 5.5 kJ. HP PLUS guarantees pedestrian safety.



Available with removable base plates

### HP PLUS 3 RAILS 5.50 kJ



Available with removable base plates



### HP GRILL 5.50 kJ



FLEX IMPACT® HP GRILL handrails protect people from falling objects. The barrier ensures a clear separation between people and (stacked) goods. Depending on the size of the goods, choose a set-up with 275 mm or 550 mm of space between the rails. The HP GRILL has a maximum height of 2,800 mm. Also suitable for use on mezzanines.



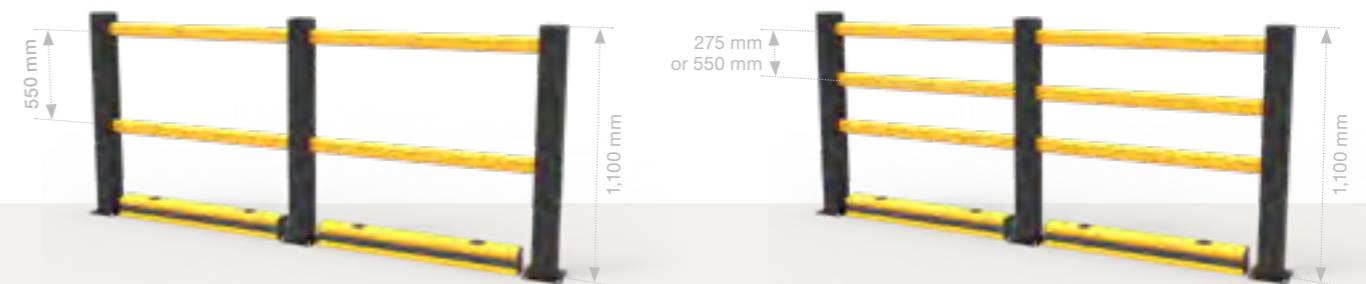
## HP PLUS 3 RAILS

### HP PLUS 2 RAILS OR 3 RAILS + FLIP120L



#### An integrated setup for multi-level safety

By combining different products, you create solutions that offer greater functionality, stronger protection and a layout that adapts to your operational needs.



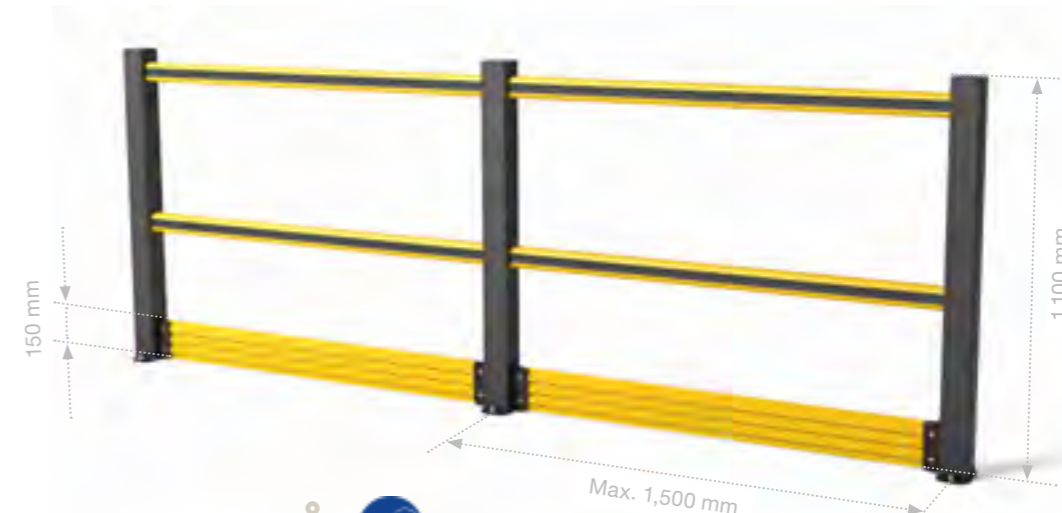
A clear illustration of this added value is the combination of an HP PLUS 2 RAILS or 3 RAILS handrail with a FLIP120L kick rail. Together, they create a robust barrier that not only defines safe pedestrian zones but also reinforces ground-level impact protection where vehicles operate.

The handrails provide highly visible separation and guidance for foot traffic, while the FLIP120L absorbs low-level bumps (4.2 kJ) from pallets, trolleys or forklift forks. By integrating both, you enhance safety on multiple levels with a single, coherent solution.

## FLEX IMPACT® HANDRAILS

HANDRAIL WITH PLINTH  
AS FALL PROTECTION

The FLEX IMPACT® HD MEZZA railing ensures the safety of people working at height. An impact-resistant plinth at floor level prevents people and objects from sliding through under the railing.



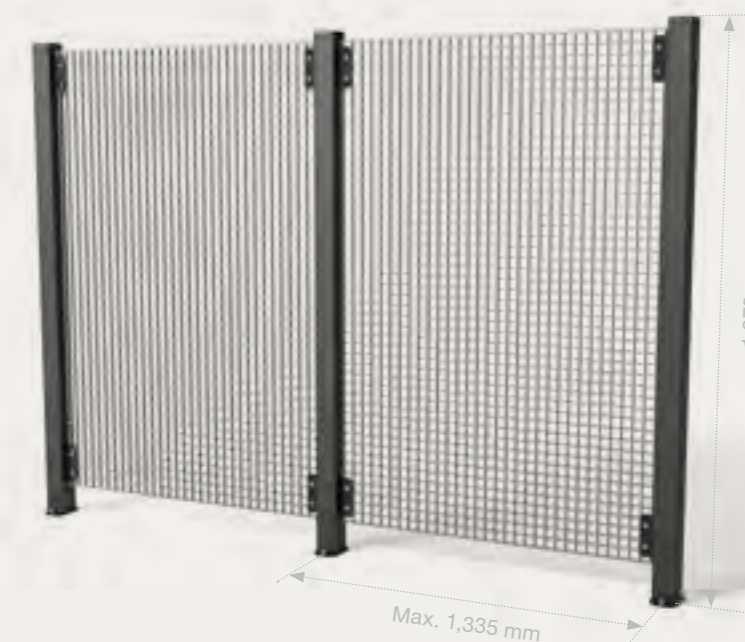
HD MEZZA



## PROTECTING PEOPLE FROM MACHINERY

Protect your workforce and shield machinery with the FLEX IMPACT® FE FENCE. This protective fencing creates a sturdy physical barrier that keeps pedestrians at a safe distance and helps prevent accidental contact with equipment if someone trips or falls nearby.

As a cost-effective alternative to metal handrails, FE FENCE is made from glass-fibre-reinforced polymer that gives the fence a certain degree of flexibility. It also resists corrosion, chemicals and other forms of environmental pollution. The material is non-conductive, so it's safe to use around high-voltage installations.



FE FENCE

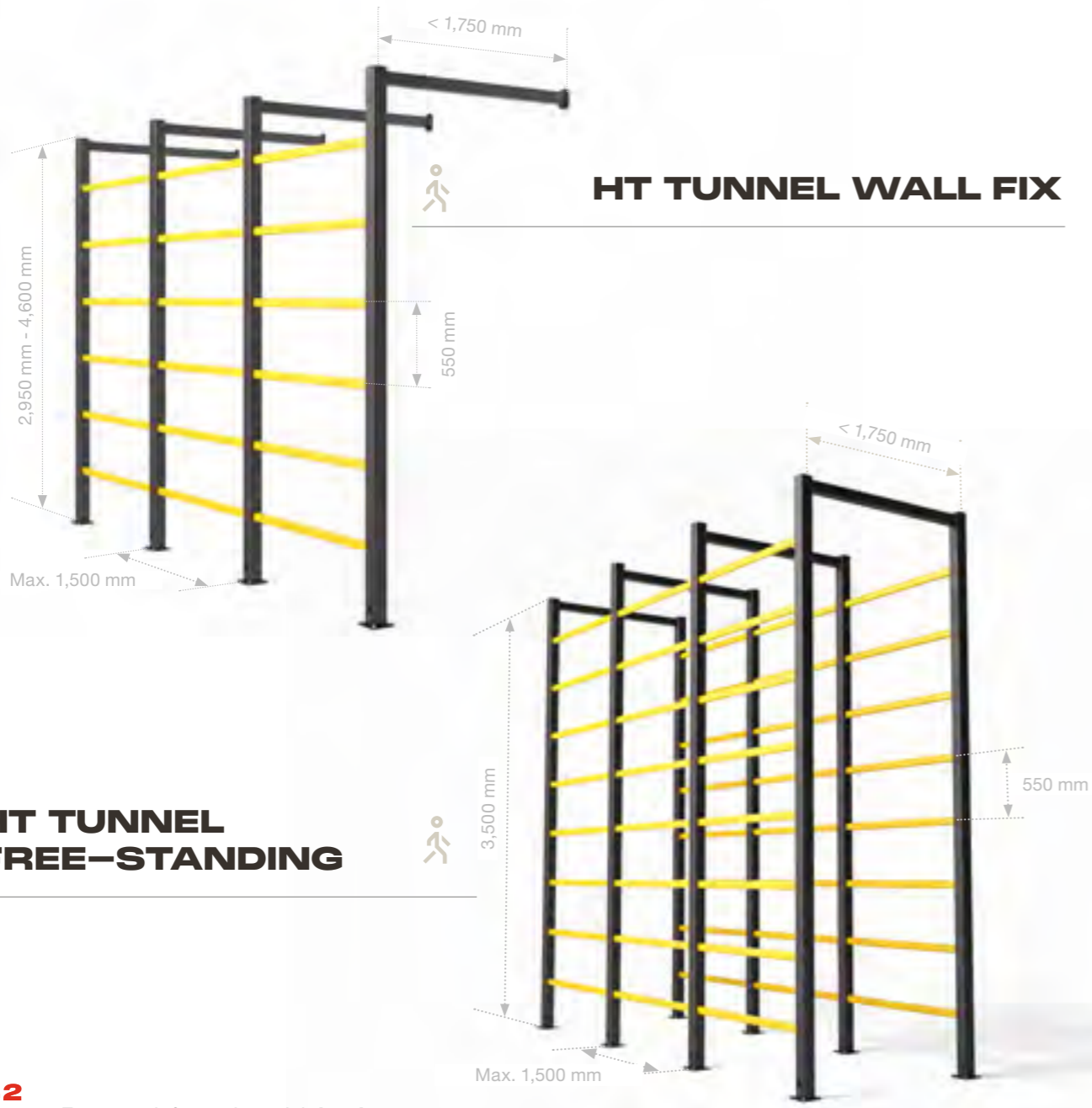


## HD MEZZA

## SECURED WALKWAYS AGAINST FALLING OBJECTS

The FLEX IMPACT® HT TUNNEL protects pedestrians by creating a safe passageway between stacks of goods or between stacked goods and a wall.

The flexible barriers prevent falling objects from hitting pedestrians. The free-standing tunnel is easy to install wherever you want to protect people from falling objects. HT TUNNEL WALL FIX is secured to a wall on one side. It is the ideal solution for walkways that run along a wall.



HT TUNNEL  
FREE-STANDING

HT TUNNEL WALL FIX



HT TUNNEL  
WALL FIX



**FLEX IMPACT® BOLLARDS PUSH  
BOUNDARIES IN TERMS OF SAFETY,  
STRENGTH, AND PERFORMANCE**

# BOLLARDS

The range of Boplan® bollards is designed to meet a variety of needs. Each bollard in this series has a specific strength and impact resistance. These range from extremely heavy impacts of 24.1 kJ to lighter impacts of 2.5 kJ. This ensures a perfect safety solution for every situation. With a wide range of options, colours, and heights, the bollards are easy to adapt to specific environments and aesthetic preferences.

The patented modular design offers unparalleled protection against collisions. The bollards are made from Extrilene®, a high-quality polymer capable of withstanding repeated impacts. The bollard flexes with each collision, but resumes its original shape once the vehicle has gone.

# BOLLARDS



FLEX IMPACT® BOLLARDS  
PUSH BOUNDARIES IN TERMS OF SAFETY,  
STRENGTH, AND PERFORMANCE



**BOPLAN®**  
**BOLLARDS**  
FIVE POWERFUL  
SAFETY SOLUTIONS



For temperatures down to -30°C



**BO125L**  
>>> 2.5 kJ

**BO170B**  
>>> 7.5 kJ

**BO200R**  
>>> 10.2 kJ

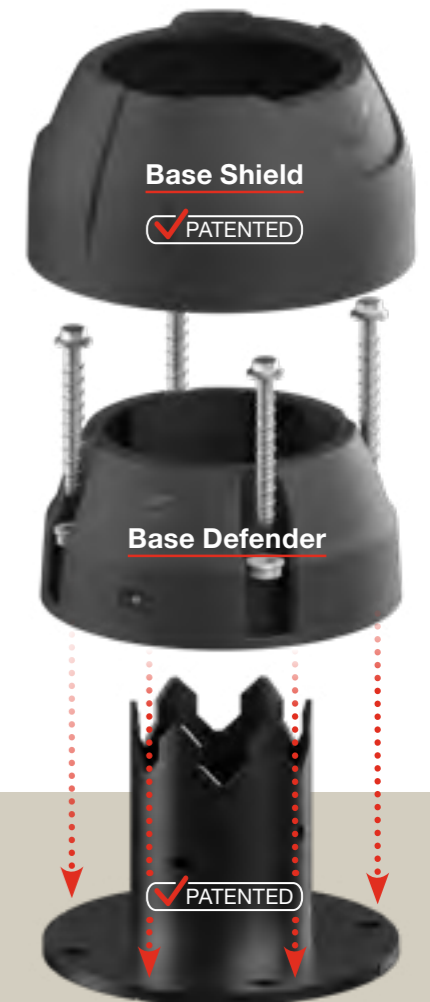
**BO200F**  
>>> 16 kJ

**BO250T**  
>>> 24.1 kJ

## THE REVOLUTIONARY BASE DEFENDER

The Base Defender protects the screws securing the round base plate to the floor. This protective cover made of durable elastomer makes it physically impossible to damage the screws by driving over the base plate. The Base Defender is wider than the bollard. This creates a free space and prevents crushed fingers.

For a more finished look, you can cover the Base Defender with an optional Base Shield. It provides extra protection against ground-level impacts and hygienic protection against dirt and dust.





**TÜV NORD**  
 TÜV NORD Systems  
 GmbH & Co. KG

**Determination of the Product Type**  
 Voluntary Certification acc. TÜV  
 NORD Standard STH-ZE-KSP-VA-320

Testing Criteria to determine essential  
 Product Properties of Collision Protection  
 Systems:  
 PAS 13, Abs. 7  
 (Methods of testing the force of impact)

tuev-nord.com

**TÜV NORD**  
 TÜV NORD Systems  
 GmbH & Co. KG

**Determination of the Product Type**  
 Voluntary Certification  
 acc. to TÜV NORD Standard  
 STH-ZE-KSP-VA-320

Testing Criteria to determine  
 essential Product Properties of  
 Collision Protection Systems:  
 UNI-TS 11886-1 2022.10  
 Impact protection in industry -  
 Part 1: Test methods and criteria  
 for classification

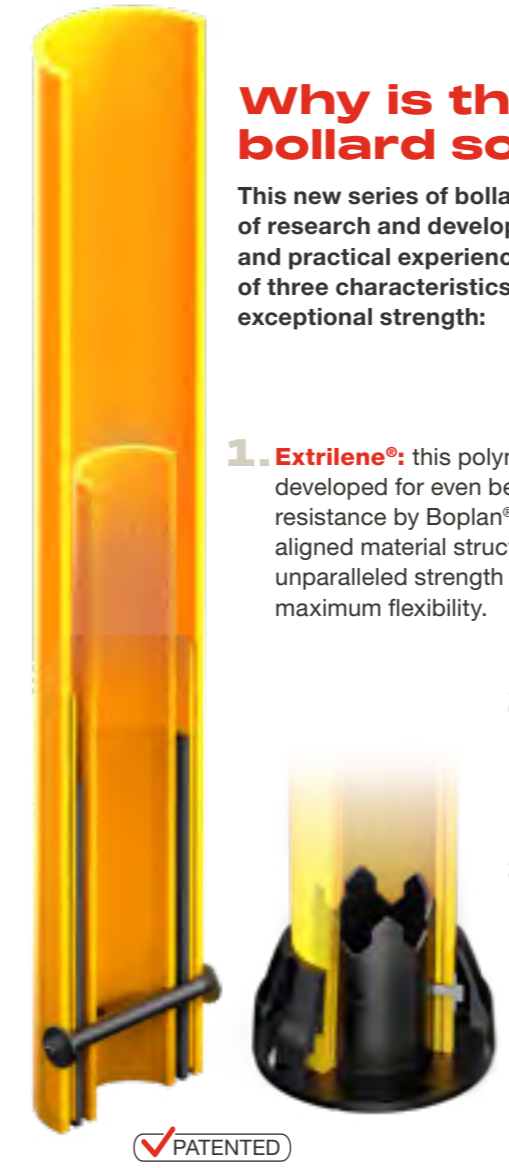
tuev-nord.com

## Why is the Boplan® bollard so strong?

This new series of bollards is the result of years of research and development, extensive testing and practical experience. A unique combination of three characteristics ensures the bollards' exceptional strength:



- 1. Extrilene®:** this polymer was specifically developed for even better impact resistance by Boplan®. A molecularly aligned material structure ensures unparalleled strength while maintaining maximum flexibility.
- 2. The different tubes** provide optimal impact absorption through deformation and friction.
- 3. The optimised base plate** covers a larger surface area and allows for more flexibility.



## NEED MORE FLEXIBILITY? CHOOSE THE REMOVABLE BASE PLATE

In industrial environments, it is sometimes necessary to remove a bollard temporarily. For these situations, Boplan developed a fastening system that allows the BO200R to be easily detached and re-anchored later. This is all without damaging the floor.

As a result, you continue to benefit from tried-and-tested protection with its 10.2 kJ impact value where required while taking advantage of maximum flexibility whenever conditions call for it.


### MAXIMUM VISIBILITY

All bollards are available in various distinctive colours and patterns, making them highly visible in any situation.

- Yellow or black (standard)
- Grey or red (available for BO200F & BO200R)
- Choose up to 3 stripes (black, white or yellow)



### FASTENERS

- Concrete screws  STANDARD
- Expansion screws  OPTIONAL
- Asphalt screws  OPTIONAL

## APPLICATIONS AND TYPICAL ENVIRONMENTS

For the protection of gates, entrances, corners, and machines in:

- Car parks
- Commercial properties
- Distribution centres
- Industrial properties
- Logistics, supply chain, and material handling
- Petrochemical and chemical plants
- Transport & logistics centres
- Warehouses and storage facilities

## ADVANTAGES

- Quick and easy installation
- Resistance to chemicals and UV radiation
- Resistance to corrosion
- Barely any maintenance required
- No paint or coating required
- Protected base plate fasteners
- Finger-safe
- Impact resistant up to 24.1 kJ
- Tested according to the latest impact standard UNI/TS 11886-1
- 100% sustainable: easy to recycle
- A tailor-made solution for every scenario
- Choice of options, colours, and heights
- Extrilene®: high-quality polymer
- Patented technology



**BO BELT**  
10.2 kJ

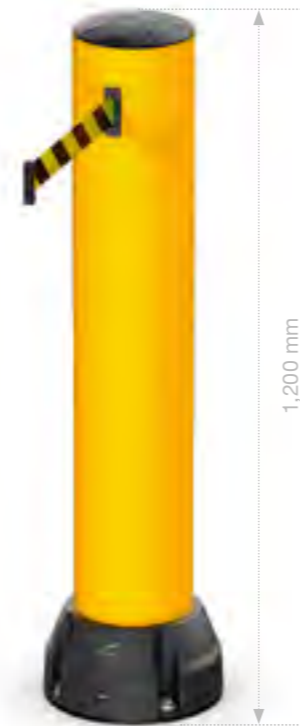


**BOLLARD WITH INTEGRATED BELT BARRIER**

**BO BELT** is a FLEX IMPACT® BO200R bollard with an integrated and easy-to-use belt barrier system. BO BELT not only provides effective protection against collisions, but also allows you to quickly and easily close off areas using a 5-metre integrated belt. This prevents pedestrians from walking into the path of moving vehicles, stepping into uncovered openings or entering an area where maintenance works are being carried out.

**Key features**

- Optimised base plate with crown structure
- Includes a Base Defender to protect the screws and base plate
- Combines with other Boplan safety products

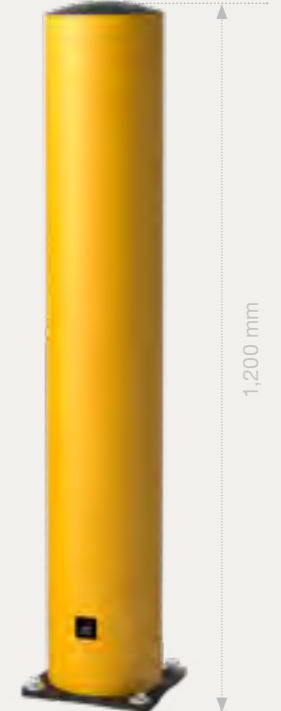


**BO SMART**  
3 kJ



**THE SMART BOLLARD THAT MONITORS CRITICAL ZONES 24/7**

The FLEX IMPACT® **BO SMART** bollard monitors and protects your most vulnerable infrastructure 24/7. After each collision, the Hub sends you a real-time notification. We can connect up to 50 smart bollards to one Hub using a wireless connection. BO SMART helps you gather valuable knowledge about protected areas, the collision history, frequency and impact. This triggers inspections and helps you to determine whether your protection needs to be replaced or upgraded.

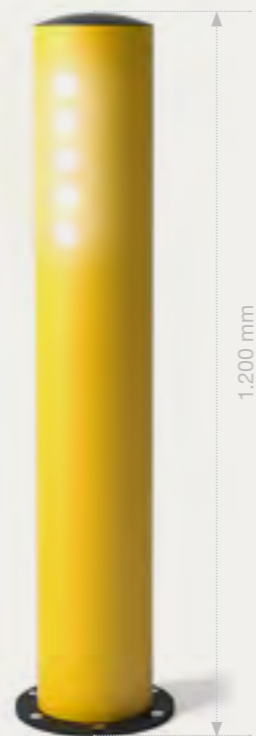
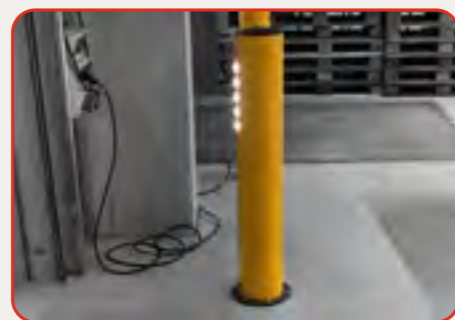


**BO LED**  
3 kJ



**BOLLARD FOR POORLY LIT AREAS AND LOADING DOCKS**

The FLEX IMPACT® **BO LED** bollard is equipped with 5 switch-operated LED lights. BO LED is ideal for areas where goods must be loaded or unloaded with poor lighting. You choose the light's direction yourself when installing the bollard. Ideal for illuminating the inside of a trailer during loading and unloading at a loading dock.



**SIGNMARK 150 & SIGNMARK 200**

With the **SIGNMARK**, you can easily communicate information in the workplace where it is most relevant and visible. **SIGNMARK 150** mounts onto any safety product with a Ø 125 mm up to Ø 170 mm section, while **SIGNMARK 200** fits any Ø 200 mm bollard tube or height restrictor.



**ADVANTAGES**

- **Flexibility:** fits perfectly and can be replaced with a simple click
- **Attractive:** soft rubber-like material and no visible screws
- **Easy to install:** click, screw or glue the black cover panel onto the holder

**THE RIGHT MESSAGE IN THE RIGHT PLACE**



# BOLLARD FOR CHARGING STATIONS



BOLLARD TO PROTECT CHARGING STATIONS FROM COLLISIONS

## BO125L EV

- Diameter: 125 mm
- Secured to concrete base with 2 screws



- No visible fasteners: concealed by black collar (standard)

Light impact: < 0.5 kJ

## BO145L EV

- Diameter: 145 mm
- No visible fasteners: mounted in concrete with a rubber collar



- The hole for the bollard is created when the concrete is poured (precast or on-site) or drilled afterward (162 mm diameter; 260 mm deep). A collar at ground level seals the gap between the base and the bollard.

Impact: < 2 kJ



## WHAT ABOUT LIABILITY?

Many countries have specific regulations and safety standards for charging infrastructure. If charging stations are not properly secured, this can lead to legal liability in the event of an accident. Therefore, it is necessary to take preventive measures to secure charging stations and comply with regulations. This reduces legal risks and shows that you value safety.

## FORGET STEEL

The polymer bollards' flexibility allows them to absorb the impact and protect the charging station. After a collision, they return to their original shape. A steel bollard, on the other hand, will already be damaged and in need of replacement after a single collision. Moreover, a steel bollard causes additional damage. Not just to the ground to which it is secured, but to the vehicle in particular. If you want to avoid problems with vehicle owners, opt for a polymer bollard.



## MAXIMUM VISIBILITY

BO125L EV and BO145L EV bollards are available in several distinctive colours, making them highly visible in any situation.

- Available colours: yellow, black and white
- To make the bollards stand out even more, a reflective yellow, white or black strip can be added.



## OPTIONAL ACCESSORIES



### Cable hook

Users can hang up their charging cable on a hook, preventing the cable from getting dirty or wet.



### SignMark 150

BO125L EV and BO145L EV can be equipped with a SignMark warning sign with a 150 mm diameter.

## ADVANTAGES

- Prevents damage to the vehicle
- UV resistance
- Long lifespan
- Finished look: concealed fasteners
- Maximum visibility
- Easy installation
- Various options and versions
- Low maintenance
- Returns to original shape after a collision



# HEIGHT RESTRICTORS

GOAL POST height restrictors from our FLEX IMPACT® range are flexible height restrictors that protect your gates, canopies and bridges from collisions with tall vehicles such as boom lifts, trucks and forklifts with high loads. A GOAL POST consists of a portal and an optional separate bar or TOUCH BARRIER. The GOAL POST is available in custom sizes and in a variety of colours. For more stability, the height restrictor can be secured to a wall using brackets.



**PROTECTION OF INFRASTRUCTURE  
FROM FORKLIFTS AND TALL VEHICLES**

# HEIGHT RESTRICTORS



PROTECTION OF INFRASTRUCTURE FROM FORKLIFTS AND TALL VEHICLES

Height restrictors are safety solutions that prevent collisions with high obstacles. They consist of a high horizontal bar supported by two vertical bollards. Their presence prevents damage to your company's infrastructure and to the vehicles themselves. We often install them at entrances and gates of warehouses, factories and loading docks, as these are most vulnerable to impacts at height.



**ICE FLEX®**

The GOAL POST is also available in a version for use at temperatures below freezing down to -30°C.



**FOR MORE STABILITY, WE SECURE HEIGHT RESTRICTORS OVER 4 METRES HIGH TO A WALL USING BRACKETS**



## FLEX IMPACT® HEIGHT RESTRICTORS



### A revolutionary base plate

An optimised base plate increases impact resistance. The Base Defender protects the screws that anchor the round base plate to the floor. This protective cover, made of durable elastomer, makes it physically impossible to drive over the base plate and damage the screws. The Base Defender is wider than the bollard. This creates a free space and prevents crushed fingers.



### Stronger than ever

The GOAL POST features EXTRILENE® tubes of various lengths bolted to a base plate. The different tubes provide optimal impact absorption through deformation and friction.

### Easy to customise and expand

Our height restrictors are easily combined with other FLEX IMPACT® safety products such as safety gates, handrails and bollards.



### IMPACT-RESISTANT AND FLEXIBLE

Our height restrictors are made of EXTRILENE®, a high-quality polymer. This material is ideal for absorbing heavy impacts. Crash tests have demonstrated that our GOAL POSTS can withstand impacts from 7.5 kJ to 10.2 kJ. The deformation that occurs after each collision disappears once the vehicle has gone.



### EASY INSTALLATION DUE TO MODULAR DESIGN

Our GOAL POSTS are constructed using a minimum of components. Moreover, the polymer components are lightweight, making them easy to handle and transport.



### RESISTANT TO CHEMICALS AND UV RADIATION

Our weather-resistant height restrictors are resistant to chemicals and do not rust. They are perfect for environments where chemicals are frequently used or where strict hygiene standards apply. Bacteria do not adhere to the polymer and it is easy to clean.



### OPTIMAL VISIBILITY

The standard colour for these height restrictors is yellow. Yellow draws attention and increases safety awareness.



### LOW MAINTENANCE

FLEX IMPACT® height restrictors require minimal maintenance. With proper use, our systems last a very long time.



### FASTENERS

Concrete screws  
STANDARD

Expansion anchors  
OPTIONAL

### TYPICAL ENVIRONMENTS

For the protection of gates, canopies, entrances and bridges in:

- Car parks
- Commercial properties
- Distribution centres
- Industrial properties
- Logistics, supply chain and material handling
- Petrochemical and chemical plants
- Transport & logistics centres
- Warehouses and storage facilities



### BOPLAN TEST CENTRE

At our indoor test centre, we can run tests at any time, regardless of the weather or external factors. This controlled environment allows us to create repeatable conditions, ensuring accurate and precise results.

We meticulously simulate scenarios, from different floor conditions to impact angles, replicating the real-world challenges our GOAL POSTS face.



FLEX IMPACT® HEIGHT RESTRICTORS



**GP GOAL POST 200B**  
7,5 kJ



2,000 - 4,000 mm

1,800 - 4,000 mm

**GP GOAL POST 250R**  
10,2 kJ

2,000 - 6,000 mm

1,800 - 6,000 mm



**TOUCH BARRIER**



For more information, visit [boplan.com](http://boplan.com)



**GP GOAL POST  
250R**



# RACK PROTECTION

Forklift collisions with racks are among the most common workplace accidents in warehouses. Workers are often under time pressure as they drive and manoeuvre forklifts, pallet trucks or stackers through tight spaces between racks. This can lead to collisions and damage. The consequences can be serious, from minor property damage to collapsed racking. Prevent accidents and protect your racking with Boplan rack protection.



**PROTECTION OF RACK ENDS  
AND UPRIGHTS AGAINST VEHICLES**

# RACK PROTECTION



PROTECTION OF RACK ENDS  
AND UPRIGHTS AGAINST VEHICLES



**RACKBULL®**  
>>>> 400 J

**PROTECT YOUR RACKING AND  
PREVENT ACCIDENTS**

Our rack protection is made from a highly energy-absorbing and flexible material. After a collision, the rack protection returns to its original shape and retains its external appearance and properties, leaving your racking intact.



**RE RACK END**  
>>>> 8.5 kJ



# RACKBULL®

400 J

## UNIVERSAL RACK PROTECTION THAT FITS NEARLY ANY RACK

No international standard for racking dimensions exists. There are simply too many racking supports in too many different sizes. As the first universal rack protector on the market, RACKBULL® solves this problem. With this rack protector, you no longer have to worry about the exact dimensions of your racking system. The RACKBULL® always fits.



**EASY INSTALLATION WITHOUT TOOLS**

**OPTIMAL VISIBILITY: SIGNAL YELLOW**  
(OTHER COLOURS AVAILABLE ON REQUEST)

**RETURNS TO ITS ORIGINAL POSITION AFTER AN IMPACT**

**RESISTANT TO CHEMICALS AND UV RADIATION**

**WATERPROOF**

**LOW MAINTENANCE**

**NO PAINT OR COATING REQUIRED**

**EXTREMELY LONG LIFESPAN**



### RACKBULL® L

### RACKBULL® XL



#### UNIQUE, FLEXIBLE AND COMPRESSIBLE CORE

Unlike most rack protection, the patented RACKBULL® features a flexible, compressible crumple zone. Furthermore, it is not anchored to the floor. That means the rack protection can move around the supports. This allows RACKBULL® to adapt to any rack width. The unique design also ensures an even greater energy absorption capacity. RACKBULL® rack protection is undoubtedly the best collision protection system for racking.



#### OPTIONAL DUST COVER

This optional dust cover can be added to RACKBULL® protection to prevent dust and small debris from accumulating between the RACKBULL® and the racking. The cover also prevents you from accidentally or intentionally dropping items into your RACKBULL®. The polymer dust cover fits neatly onto the RACKBULL® and around your shelving. This fit completes the rack protection's professional appearance.



#### OPTIONAL FOAM PAD

For extra absorption, you can add our optional foam pad to the RACKBULL® rack protector. This pad fits perfectly between your RACKBULL® and the rack. While the RACKBULL® is already extremely shock-absorbent and strong, this optional foam padding adds extra reinforcement.

### TYPICAL ENVIRONMENTS

For the protection of racking supports in:

- Warehouses and storage facilities
- Distribution centres
- Transport & logistics centres
- Logistics, supply chain and material handling industries
- Food industry



#### EASY TO INSTALL

The RACKBULL® is easy to install. Just one click is all it takes. Simply push the rack protection against the rack supports and it snaps into place. Fast, efficient and exceptionally easy!

To install multiple RACKBULLS®, we recommend our optional installation kit for an even easier process. The kit includes two metal handles to easily snap each RACKBULL® into place. This tool gives you extra leverage, allowing you to install the RACKBULL® on your rack more quickly. If you are installing large numbers of RACKBULLS®, the kit will speed up the process significantly.

# RE RACK END

»»» 8.5 kJ

## SAFETY BARRIERS FOR THE ENDS OF YOUR RACKS

Warehouse employees are often under great time pressure, making them more willing to take shortcuts. The FLEX IMPACT® RE RACK END, with its double bars and two bollards, is the best solution to protect rack ends.

**OPTIMAL VISIBILITY:**  
**SIGNAL YELLOW**  
(OTHER COLOURS AVAILABLE ON REQUEST)

**RETURNS TO ITS ORIGINAL POSITION**  
**AFTER AN IMPACT**

**RESISTANT TO CHEMICALS**  
**AND UV RADIATION**

- WATERPROOF**
- LOW MAINTENANCE**
- NO PAINT OR COATING REQUIRED**
- IMPACT-RESISTANT POLYMER**
- EXTRILENE®**
- EXTREMELY LONG LIFESPAN**



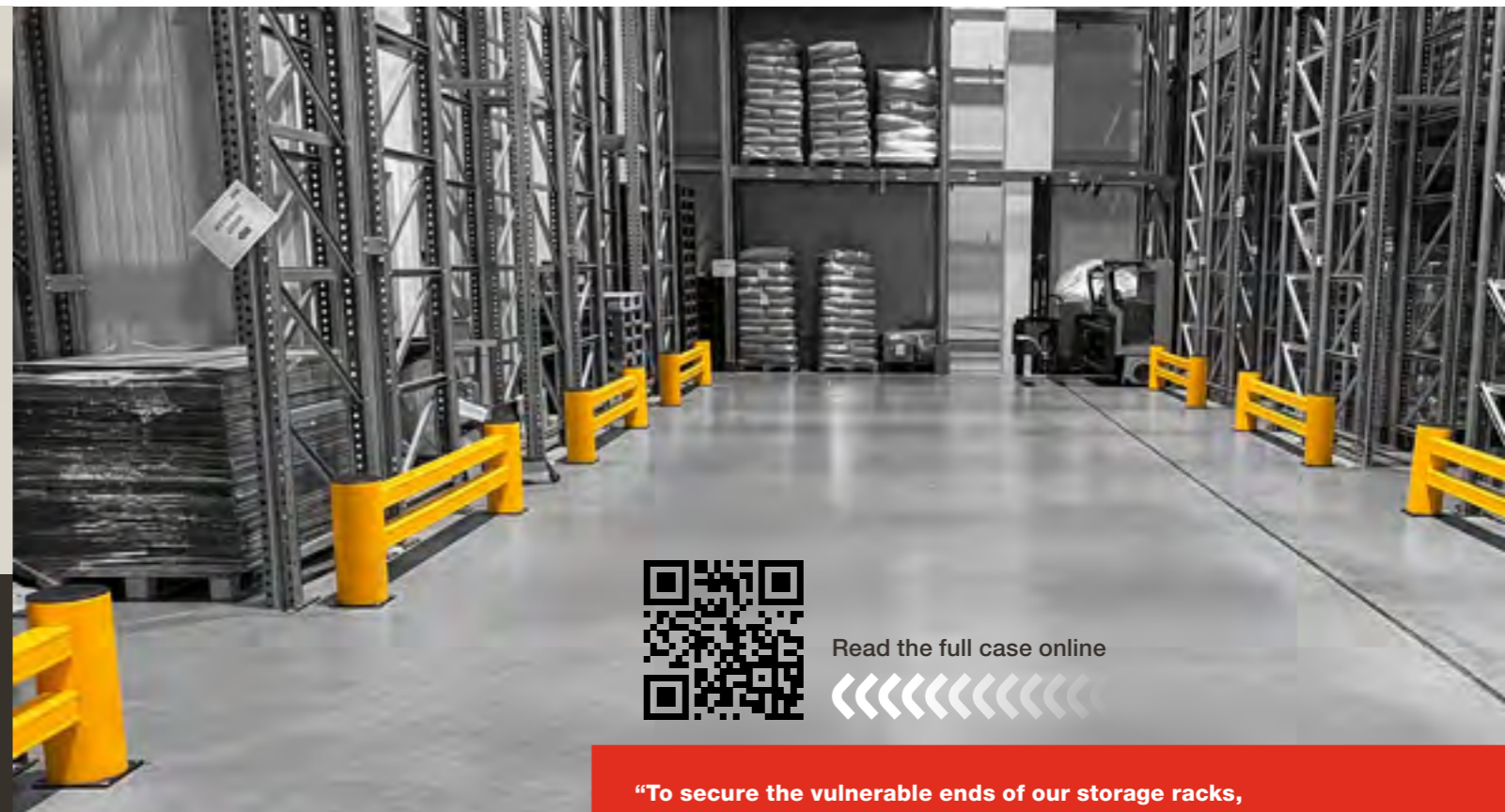
### RACK END WITH SUPPORT POST

Our RACK END provides excellent protection. Is even greater resistance needed? Then add a central support post. This post is positioned in the middle of your RACK END for extra stability and protection. It is especially useful for longer RACK ENDS.

### OPTIONAL ROTOR

#### Deflects impact by rotating

Our RACK END offers outstanding protection, but to maximise its effectiveness, we offer the option to slide rotors over the corner posts. If a vehicle collides with one of the corner posts, the rotor deflects the impact by turning away. This means your corner posts do not absorb the full force of the impact and the risk of damage to the vehicle decreases.



Read the full case online



**“To secure the vulnerable ends of our storage racks, Boplan installed several RACK ENDS. These prevent forklifts from hitting the corner of a rack when entering an aisle and causing a domino effect. Indispensable in a busy logistics centre such as ours.” - AZA Logistics (Spain).**



### TYPICAL ENVIRONMENTS

For the protection of rack ends in:

- Warehouses and storage facilities
- Distribution centres
- Transport & logistics centres
- Logistics, supply chain and material handling industries
- Food industry



**INDUSTRIAL SAFETY GATES  
FOR FALL PROTECTION  
OR MACHINE ACCESS**



For more information, visit [boplan.com](http://boplan.com)

## AXES GATE

Falling from height is a real risk in industrial environments. The **DOUBLE AXES GATE** prevents people from stepping or falling into an opening by securely closing it off. This gate is the best choice for securing caged ladders and blocking access to machines and work platforms at height.

The **SINGLE AXES GATE** is designed to close off access to dangerous areas and machinery at ground level.

# AXES GATE

**THE FIRST SAFETY GATE IN THE WORLD  
MADE FROM 100% RECYCLABLE POLYMER**

The AXES GATE is made entirely of HI-TEP, a polymer specially developed by Boplan®. This recyclable material is a major step forward in terms of sustainability. It puts an end to the toxic 2-component PU adhesive used in traditional safety gates.



**INDUSTRIAL SAFETY GATES FOR FALL PROTECTION OR MACHINE ACCESS**

EXTREMELY LONG SERVICE LIFE

LOW MAINTENANCE

RESISTANCE TO CHEMICALS AND UV RADIATION

CAN BE CUT TO LENGTH ON-SITE

SELF-CLOSING DUE TO GRAVITY

FEW TOOLS REQUIRED



FLAME RETARDANT: UL94 V0

FOR OPENINGS FROM 500 MM TO 1,130 MM

OPTIMAL VISIBILITY

NO SHARP EDGES, SAFE FOR HANDS

EASY TO CLEAN

OPENS TO THE LEFT OR RIGHT

**AXES GATE** was Boplan's very first product and has since been perfected in every detail.

This third generation is the result of valuable feedback, technical expertise and customer satisfaction Boplan has built up over the past years.

## EXTENSIVELY TESTED AND CERTIFIED AS SAFE

The **DOUBLE AXES GATE** with an opening up to 950 mm meets the EN 14122-3 safety standard, section 8.2 (strength tested and TÜV NORD certified\*) and the EN 14122-3 safety standard, section 7.1.4 (hand and knee rails). To comply with ISO 14122-3 and OSHA 1910-1910.29 regulations, there must be a minimum overlap of 80 mm and the top edge of the top rail must be at a height of 1100 mm above the walking surface. The **DOUBLE AXES GATE** with an opening up to 820 mm is TÜV NORD certified\* and meets the safety standards B-92-1143 and NBN-ISO 7892:1992 (Large Soft Body test). To meet these safety standards, a **DOUBLE AXES GATE** with an opening up to 820 mm must be equipped with a secondary support button above the bottom bar and have a minimum overlap of 125 mm.



The **SINGLE AXES GATE** with an opening up to 870 mm meets the EN 14122-3 safety standard section 8.2 (strength tested and TÜV NORD certified\*). The **SINGLE AXES GATE** does not comply with EN 14122-3 chapter 7.1.4. due to the absence of a knee rail.

\*Certificate available upon request

## KEY FEATURES AND BENEFITS



### FLAME RETARDANT AND RESISTANT TO CHEMICALS AND UV RADIATION

Boplan® AXES GATES have been used on a daily basis around the world for more than 20 years in the toughest and most challenging conditions, such as in the chemical industry and on offshore drilling platforms. They effortlessly withstand severe weather conditions, hypersaline environments and highly corrosive chemicals. The safety gate's design, composition and properties make it suitable for any application in all industries.



### EXTREMELY LONG SERVICE LIFE

The AXES GATE is made of High Impact Thermoplastic Engineered Polymer (HI-TEP) and stainless steel parts that are resistant to rust and corrosion. These materials retain their structural integrity for a very long time and require minimal maintenance. The hinge has been tested for over 150,000 cycles. This corresponds to opening and closing 20 times a day for 20 years.



### COST-EFFECTIVE

Compared to traditional metal and PU safety gates, investing in the AXES GATE means saving on repairs and replacement. Because the DOUBLE AXES GATE prevents falls, financial and other damage to the business is avoided. Examples include reputational damage, lost time, time-consuming and cumbersome work or safety inspections, etc.



### OPTIMAL VISIBILITY

The polymer is coloured through the core in bright signal yellow: RAL 1003. This striking colour makes it easy to find the exit in case of emergency. A warning sign is easily mounted by drilling holes at pre-marked positions.



### NO SHARP EDGES, SAFE FOR HANDS

The AXES GATE features rounded elements, carefully designed to prevent clothing or limbs from getting caught.



### EASY INSTALLATION

The hinge block can be configured to open to the left or right. It is secured with 2 bolts (plus optional adapters for a round tube or I-beam). Then the hinge pin is inserted and the opening sealed with a cover.

- Few tools are needed, making installation simple, quick and safe even at great heights.
- Opens in two directions: experience the ultimate convenience and flexibility of the AXES GATE, designed to open seamlessly in both directions with an impressive 120° turning radius. The gate opens just as easily to the left or right, while maintaining safety.
- The AXES GATE is delivered according to the requested dimensions, but can be shortened on-site if necessary.

## DOUBLE AXES GATE

FALL PROTECTION FOR CAGED LADDERS AND ELEVATED PLATFORMS

## SINGLE AXES GATE

FOR GROUND LEVEL USE ONLY

### APPLICATIONS

- Closing off access to machinery and hazardous areas
- Integration with existing handrail systems such as Boplan's Flex Impact® range

### TYPICAL ENVIRONMENTS

- Highly saline environments such as drilling rigs
- Petrochemical and chemical industries with use of corrosive and chemical substances
- Transportation and logistics centres
- Warehouses and storage facilities

	Opening size	Approved for use at height	For ground level use only
<b>DOUBLE AXES GATE</b> 	500-950 mm	✓	✓
	951-1130 mm		✓
<b>SINGLE AXES GATE</b> 	500-870 mm	✓	✓
	871-1130 mm		✓

**TUV NORD**

TÜV NORD Systems GmbH & Co. KG

**Determination of the Product Type**

Voluntary Certification acc. TÜV NORD Standard 5TH-ZE-KSP-WA-320

Testing Criteria to determine essential Product Properties of safety of machinery: DIN EN ISO 14122-3:2015-05, Section 6.2 (Testing of railings)

tu-ev-nord.com

### THE MOST SUSTAINABLE SAFETY GATE IN THE WORLD

- 100% recyclable**
  - High-Impact Thermoplastic Engineered Polymer (HI-TEP) is infinitely reusable as a raw material.
  - 100% recyclable: all polymer parts are made from the same groundbreaking material.
- Designed for extreme conditions**
  - Extremely long service life
  - Resistant to chemicals and UV radiation
  - Superior temperature stability and dimensional stability
- Isocyanate free**
  - Boplan® High Impact Thermoplastic Engineered Polymer (HI-TEP) contains no isocyanates. The production process not only ensures cleaner and safer conditions for workers by reducing health risks and improving the work environment but also simplifies safety protocols, contributing to a more efficient and socially responsible production process.

### CAN BE INSTALLED ANYWHERE



\* Optional

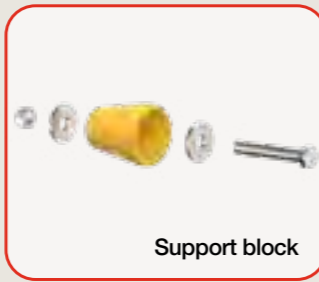


### THE SMALLEST FOOTPRINT

Plastic safety gates are usually made from polyurethane (PUR). However, producing the raw material for PUR is much more intensive than producing the raw material for HI-TEP. Furthermore, HI-TEP is reusable.



### ACCESSORIES



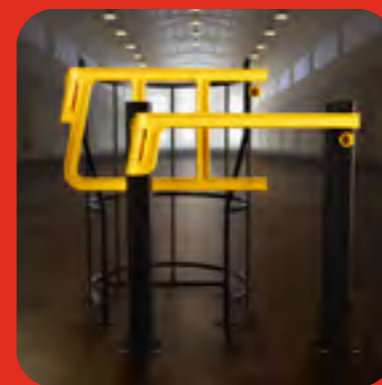


# SAFETY GATES

FLEX IMPACT® safety gates greatly enhance awareness and safety by preventing unauthorised access to hazardous areas. Pedestrians and vehicles must stop and open the gate before safely entering or exiting an area. This makes them think twice before they act.

We offer sliding safety gates, safety gates that open upwards, safety gates with a self-closing side swing gate, reinforced fall protection systems for loading bays and belt barriers to close off passages.

Safety is the top priority, but ease of use is important too. That's why our safety gates can also be combined with other safety solutions such as our safety barriers and handrails. Additionally, the swing gates feature a self-closing mechanism. This ensures smooth and safe traffic flow between different areas of the facility.



» AXES GATE  
see page 70



**RESTRICTING ACCESS  
TO HAZARDOUS AREAS**

# SG SWING GATE



## SWING GATE

The FLEX IMPACT® **SG SWING GATE** is a two-way safety gate. Gates and entrances to corridors and machine rooms are often left open. The SG SWING GATE makes this a thing of the past. This safety gate closes automatically so that access remains restricted at all times. The sturdy door is ergonomically designed and features a sign.

### LARGE SIGN BOARD

Warns employees and visitors of hazards

### GATE STOP

Prevents the gate from swinging in a specific direction

### LOCK BLOCK

Prevents the gate from locking in an open position

### WHEEL SUPPORT

Standard for gates wider than 1,500 mm



Combination of a **SWING GATE** with a **TB 400 PLUS** at the Instantprint (United Kingdom) warehouse.

Read the full case online

## KEY FEATURES AND FUNCTIONS

- Robust, impact-resistant safety gate that swings open
- Close off aisles in areas with incoming and outgoing goods
- Clear demarcation of beginning and end of pedestrian areas: warning function
- Saline and corrosive environments (food industry, coastal areas, etc.)
- Close off access routes to machine rooms
- Suitable for outdoor use (optional SS 304 stainless steel components)
- Durable and capable of withstanding heavy use
- Ergonomic design
- Can be combined with safety barriers, handrails and bollards
- Large sign board
- Lock block and stop
- Wheel support for gates wider than 1,500 mm

## 4 POSSIBLE COMBINATIONS

The **SG SWING GATE** combines perfectly with FLEX IMPACT® safety barriers and handrails. Together, these safety elements ensure smooth and safe traffic between the different areas in your working environment.



HP PLUS



TB 400 PLUS & TB 260 PLUS



BO200R



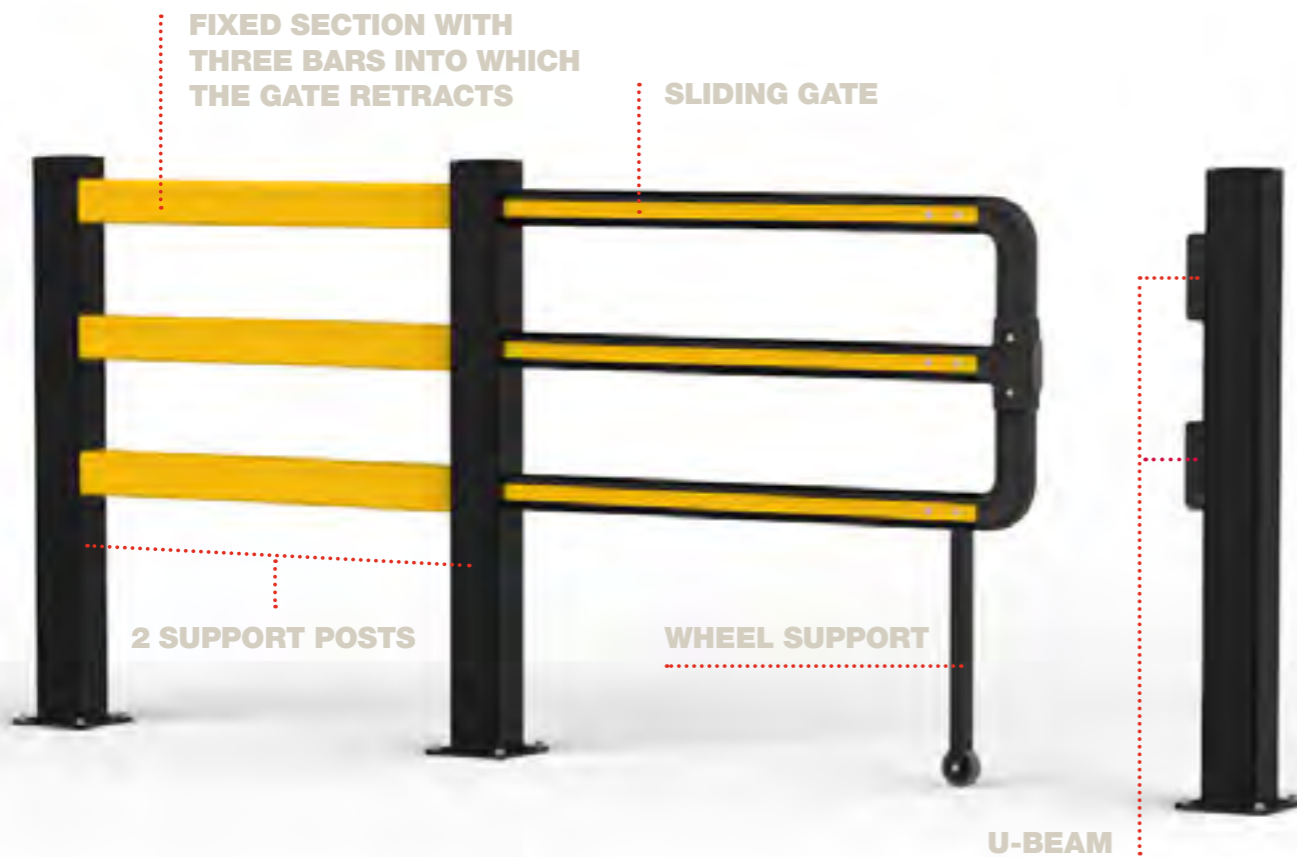
Wall mount

# SG SLIDING GATE



## SAFETY GATE THAT OPENS AND CLOSES BY SLIDING

The FLEX IMPACT® **SG SLIDING GATE** is a safety gate that opens and closes by sliding. You can have the gate slide to the left or right. When the gate opens, it rolls across the floor on a sturdy wheel and its rails slide into the profiles of the adjoining guardrail. This safety gate is easy to install.

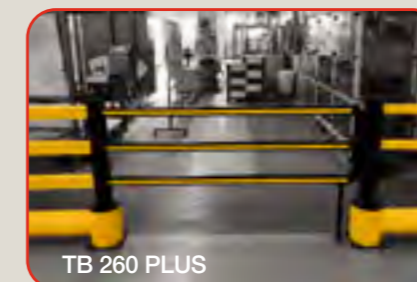


### KEY FEATURES AND FUNCTIONS

- Sliding safety gate
- Close off aisles in areas with incoming and outgoing goods
- Clear demarcation of beginning and end of pedestrian areas
- Saline and corrosive environments (food industry, coastal areas, etc.)
- Close off access routes to machine rooms
- Durable and capable of withstanding heavy use
- Ergonomic design
- Can be combined with safety barriers and handrails

### COMBINABLE WITH SAFETY BARRIERS AND HANDRAILS

The SLIDING GATE is part of the impact-resistant and attractive FLEX IMPACT® series. A sliding safety gate is ideal for spaces with limited room for movement. Additionally, the SLIDING GATE combines perfectly with our safety barriers and handrails. Together, these safety products ensure that people can circulate safely.



# SG DROP GATE



## SAFETY DROP GATE THAT OPENS UPWARD

The FLEX IMPACT® **SG DROP GATE** is a safety gate that closes off access routes when there isn't enough space to use a traditional swing gate. This gate opens upward. Just like the other safety gates in this series, the SG DROP GATE is a convenient solution to cordon off walkways and areas.

CONVENIENT HANDLE

SUPPORT

STURDY HINGE

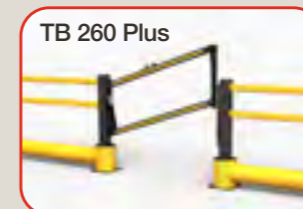
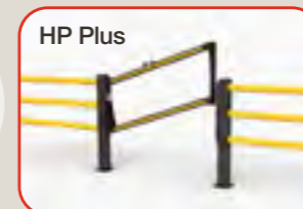


### KEY FEATURES AND FUNCTIONS

- Safety drop gate that opens upward
- Close off aisles without enough room for a swing gate
- Saline and corrosive environments (food industry, coastal areas, etc.)
- Close off access routes to machine rooms
- Durable and capable of withstanding heavy use
- Ergonomic design
- Can be combined with safety barriers and handrails
- For openings up to 1,500 mm

### 4 COMBINATIONS

The vertically opening **DROP GATE** is ideal when space is limited but there's plenty of height. This type of gate integrates modularly with other safety solutions from the FLEX IMPACT® range. Together, these safety elements ensure smooth and safe traffic between different areas at your company.



# BB BELT BARRIER



## QUICK CLOSURE OF CRITICAL AREAS

With the FLEX IMPACT® BELT BARRIER, you can quickly cordon off a doorway, gate or loading bay. This prevents pedestrians from walking into the path of moving vehicles, stepping into uncovered openings or entering an area where maintenance works are being carried out.



## A VISUAL BARRIER

Wherever there is a risk of danger, the BELT BARRIER can be easily attached to posts or walls. When these areas are safely accessible, leave the belt open to allow access. If necessary, close the belt quickly to prevent pedestrians from entering the area. Its yellow colour ensures excellent visibility, further increasing safety.

### KEY FEATURES AND FUNCTIONS

- Visual barrier
- Quick and temporary closure of areas
- Highly visible thanks to the yellow/black stripes
- Durable and capable of withstanding heavy use
- Automatic retractable mechanism
- For openings up to 10 metres
- Easily mounted between walls or to a Boplan polymer post

# JOULES

## MAKE IMPACT TANGIBLE



The joule is a fundamental unit of physics and offers a perfect way to quantify energy in everyday life. That's why we use this unit to express the impact resistance of our FLEX IMPACT® safety products.

Simply put, joules are the energy units used to measure the amount of work or energy required to do something. It tells you how much energy is used, transferred or converted in a given situation.

## BOPLAN IMPACT CALCULATOR

With the Boplan Impact Calculator, you can accurately calculate the required impact resistance for your safety solutions. This powerful tool is easy to use and allows you to make informed decisions with just a few clicks.

Enter specific parameters related to your workspace to instantly receive recommendations on the most suitable models and strength levels of safety barriers to avoid accidents and protect valuable assets.



# DOCK GATE



## FALL PROTECTION SYSTEM AND IMPACT-RESISTANT BARRIER ARM FOR LOADING AREAS

The FLEX IMPACT® **DOCK GATE** is a safety gate with double bars that acts as fall protection at loading docks or as an impact-resistant barrier arm to close off access to a specific area.

The safety gate features an assist mechanism and ergonomic handles to the side and underneath for smooth and easy operation. Additionally, a motorised version is also available.

## PROTECTION AGAINST IMPACTS UP TO **>>>16 kJ**

**THE FIRST AND ONLY ONE IN THE WORLD TO BE TESTED FOR BOTH THE BARS AND POSTS ACCORDING TO THE UNI TS 11886 STANDARD.**

Thanks to the tube-in-tube structure and strong base plates, the gate provides protection against impacts up to 16 kJ, both to the bars and to the posts.

The design is very compact, ensuring no valuable space is lost. For easy assembly, the DOCK GATE features removable bars. Installation is also quick, as a DOCK GATE consists of three pre-assembled elements.



**DG250F**  
**>>> 16 kJ**

**DG250R AE**  
**>>> 10.2 kJ**

**DG250R**  
**>>> 10.2 kJ**

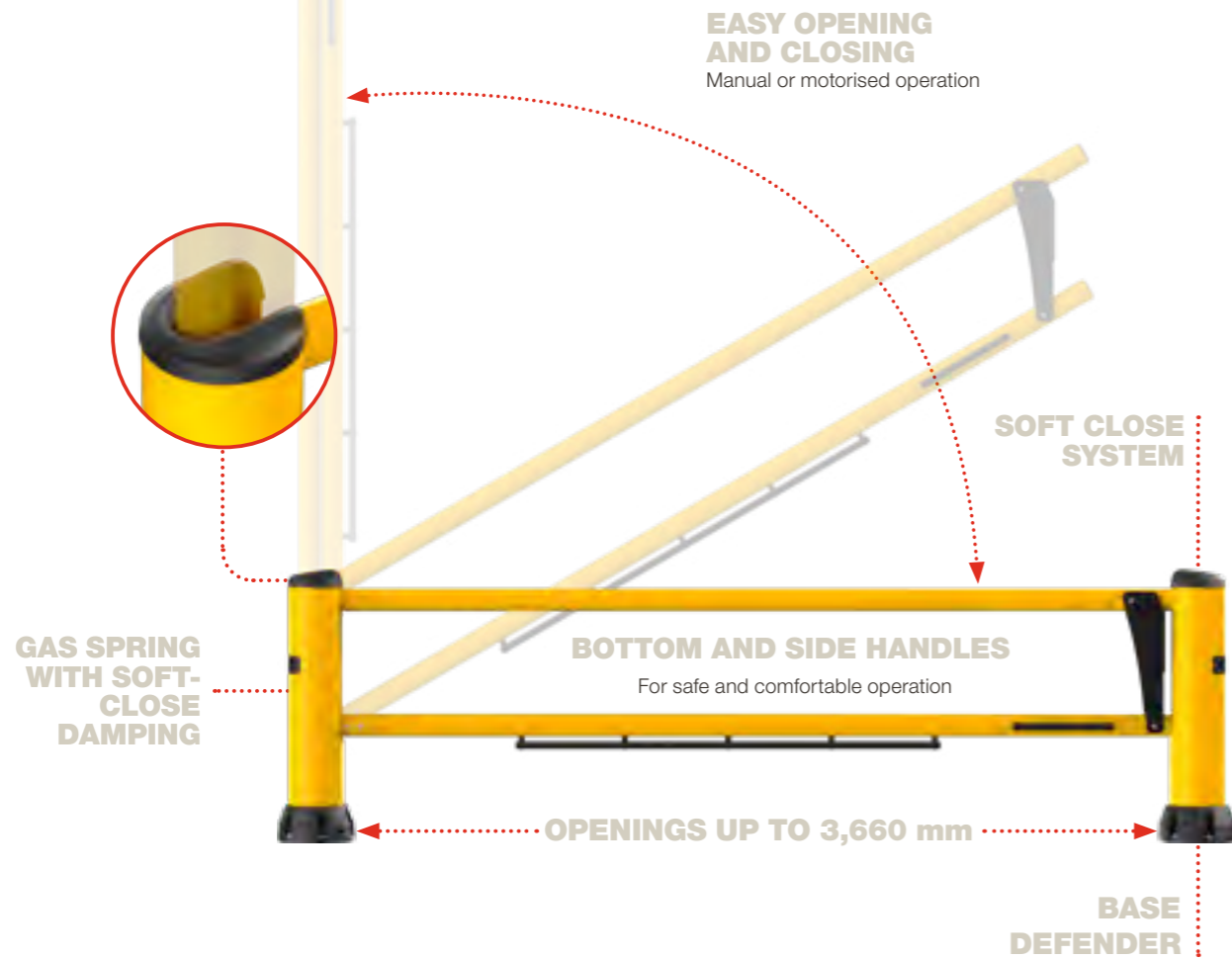




Our DOCK GATES are made of EXTRILENE®, a high-quality polymer material. This material is ideal for absorbing heavy impacts.

**EXTRILENE®**

Crash tests have demonstrated that our DOCK GATES can withstand impacts of 16 kJ. Both to the bars and to the posts. The deformation that occurs after each collision disappears once the vehicle has gone.



## KEY FEATURES AND BENEFITS



### EASY INSTALLATION DUE TO MODULAR DESIGN

Our DOCK GATE is constructed using a minimum of components. Moreover, all parts are neatly concealed within the posts. Thanks to its highly compact design, the gate takes up very little space. For easy assembly and transport, the DOCK GATE features removable bars.



### RESISTANT TO CHEMICALS AND UV RADIATION

Our DOCK GATES are resistant to chemicals and UV radiation. They are perfect for environments where chemicals are frequently used or where strict hygiene standards apply. Bacteria do not adhere to the polymer and it is easy to clean.



### OPTIMAL VISIBILITY

The standard colour for these safety gates is yellow. Yellow draws attention and increases safety awareness.



### LOW MAINTENANCE

A FLEX IMPACT® DOCK GATE requires little maintenance. With proper use, our systems last a very long time.



### A REVOLUTIONARY BASE PLATE

An optimised base plate increases impact resistance. The Base Defender protects the screws that anchor the round base plate to the floor. This protective cover, made of durable elastomer, makes it physically impossible to drive over the base plate and damage the screws. The Base Defender is wider than the bollard. This creates a free space and prevents crushed fingers.

### STRONGER THAN EVER

The DOCK GATE features Extrilene® tubes of various lengths, bolted to the base plate. The different tubes provide optimal impact absorption through deformation and friction.

✓ PATENTED

## TYPICAL ENVIRONMENTS

Fall protection system and impact-resistant barrier arm for loading and unloading areas in:

- Distribution centres
- Transport & logistics centres
- Warehouses and storage facilities
- Logistics, supply chain and material handling



## MANUALLY OPERATED DOCK GATE



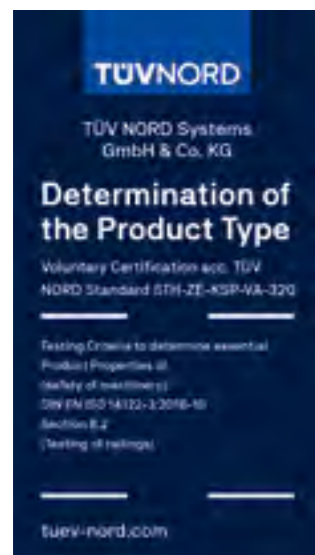
**DG250R**  
10.2 kJ TO THE BARS AND POSTS

## MOTORISED DOCK GATE



**DG250R AE**  
10.2 kJ TO THE BARS

## MANUAL DOCK GATE THE STRONGEST POLYMER GATE IN THE WORLD



**DG250F**  
16 kJ TO THE BARS AND POSTS

### BUILT FOR HIGH-RISK INDUSTRIAL ENVIRONMENTS

Engineered for demanding industrial environments such as loading docks, logistics platforms and production areas, the DG250R AE motorised safety gate provides robust protection for both people and infrastructure. By reducing fall hazards and mitigating vehicle impact risks, it ensures a secure working environment.

### STRONG BARRIER PERFORMANCE

When closed, the DG250R AE functions as a strong, impact-resistant polymer gate, delivering up to 10.2 kJ of tested energy absorption on both rails. When opened, its patented internal motorised system enables safe, controlled and ergonomic access.

### SAFE, CONTROLLED AND SMART OPERATION

A two-hand control system activates gate movement, while integrated safety sensors immediately stop the gate

if resistance is detected. A flashing red light and acoustic signal warn during movement, switching to a steady green light once the gate reaches its end position. For exceptional circumstances, a manual release mechanism is available, supported by a yellow indicator that confirms manual mode.

### COMPACT DESIGN

The DG250R AE integrates its motorisation inside the hinge post, reducing exposed components and simplifying installation. Base Defenders protect ground fixings and enhance ground-level safety, while a digital cycle counter supports inspections and preventive maintenance planning.

### FIVE MODELS

Available in five models with opening widths from 1800 to 3000 mm, the DG250R AE offers a versatile, durable and high-performance solution for facilities requiring a dependable safety gate in a bright, highly visible yellow.



## KICK RAILS

The FLEX IMPACT® kick rails from the Flip series provide complete ground-level protection and are available in a range of strengths and designs. The innovative and robust I-shaped rails absorb impacts from 4.2 kJ (FLIP120L) to 17 kJ (FLIP200F). The Flip Series kick rails are easy to install and can be combined with other Boplan safety products. Each profile is available in lengths from 500 mm to 3,000 mm.

To keep people safe from forklifts, the FLIP PLUS features ergonomic safety handrails. The FLIP120L M and FLIP180L M provide modular ground-level protection. This type of kick rail can be adapted to angles and shapes for continuous protection of walls and infrastructure.



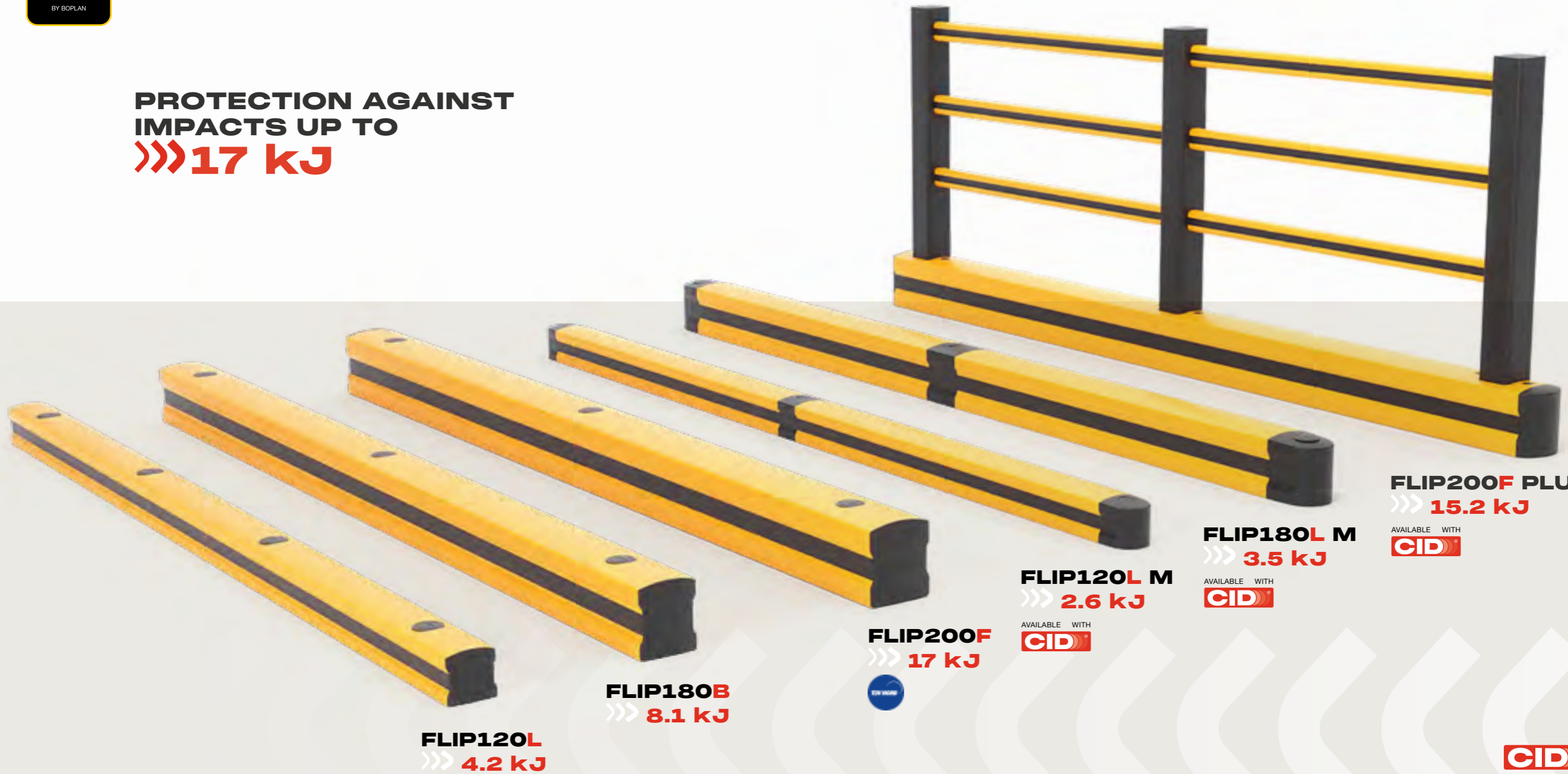
GROUND-LEVEL PROTECTION

# KICK RAILS



GROUND-LEVEL PROTECTION

PROTECTION AGAINST  
IMPACTS UP TO  
**>>> 17 kJ**



**FLIP120L**  
**>>> 4.2 kJ**

**FLIP180B**  
**>>> 8.1 kJ**

**FLIP200F**  
**>>> 17 kJ**

**FLIP120L M**  
**>>> 2.6 kJ**

**FLIP180L M**  
**>>> 3.5 kJ**

**FLIP200F PLUS**  
**>>> 15.2 kJ**

AVAILABLE WITH  
**CID**

AVAILABLE WITH  
**CID**

AVAILABLE WITH  
**CID**



WITH BOPLAN'S PATENTED CID® SYSTEM, YOU CAN IMMEDIATELY IDENTIFY WHERE YOUR SAFETY PRODUCT SUFFERED A HEAVY IMPACT. SEE PAGE 103 FOR MORE INFORMATION.

FLEX IMPACT<sup>®</sup> KICK RAILS



The FLIP180B, FLIP200F, FLIP180L M and FLIP200F PLUS kick rails are also available in a version designed for use in temperatures as low as -30°C.



## KEY FEATURES AND BENEFITS



### IMPACT-RESISTANT AND FLEXIBLE

Our products are made from EXTRILENE<sup>®</sup>, a high-quality polymer. This material is ideal for absorbing heavy impacts.



### LOW MAINTENANCE

FLEX IMPACT<sup>®</sup> kick rails require little to no maintenance. With proper use, our systems last a very long time.



### RESISTANT TO CHEMICALS AND UV RADIATION

Our weather-resistant kick rails are resistant to chemicals and do not rust. They are perfect for environments where chemicals are frequently used or where strict hygiene standards apply. Bacteria do not adhere to the polymer and it is easy to clean.



### FOR INDOOR AND OUTDOOR USE



### QUICK AND EASY INSTALLATION



### OPTIMAL VISIBILITY



## USE THE FLIP KICK RAILS FOR:

- Ground-level impact protection
- Protection of fragile walls such as refrigerator walls, decorative walls and sandwich panels
- Protection of machinery, equipment and infrastructure
- Cost-effective rack protection
- Wheel guide for pallet trucks and goods wagons in aisles

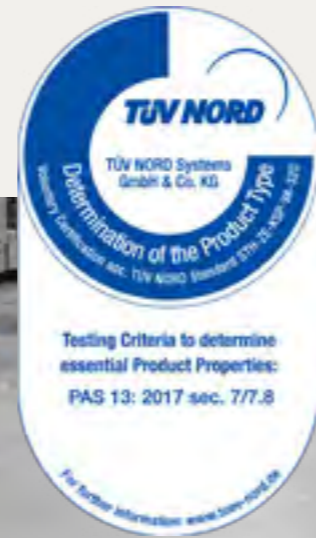
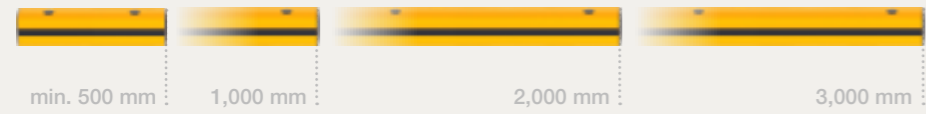
### KICK RAILS TO PROVIDE GROUND-LEVEL PROTECTION



**FLIP120L**  
>>> 4.2 kJ

**FLIP180B**  
>>> 8.1 kJ  
ICE FLEX  
AVAILABLE IN

**FLIP200F**  
>>> 17 kJ  
ICE FLEX  
AVAILABLE IN  
TUV NORD



### KICK RAILS TO GUIDE PEDESTRIANS AND PROVIDE GROUND-LEVEL PROTECTION

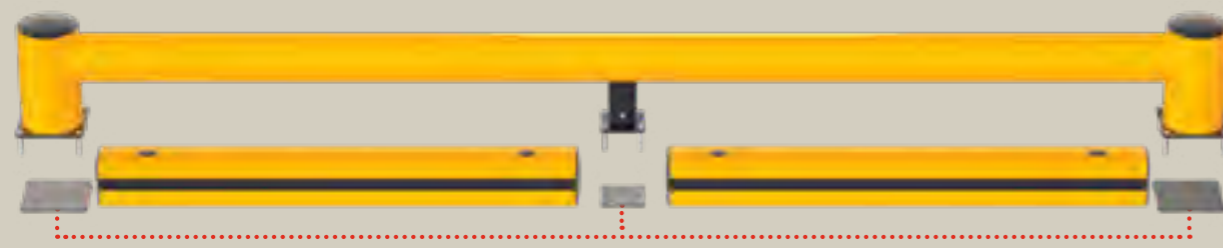


ICE FLEX  
AVAILABLE IN

**FLIP200F PLUS**  
>>> 15.2 kJ



### COMBINE THE FLIP200F KICK RAIL WITH TB 400 SAFETY BARRIERS



Spacers to increase the height of TB 400 safety barriers



## MODULAR KICK RAILS

Our modular kick rails adapt to the contours and angles of walls, machines and infrastructure. This ensures seamless protection. End pieces, middle pieces, universal angle pieces and 90° corner pieces enable modular configuration according to your business's needs.



**FLIP120L M**  
>>>> 2.6 kJ



**FLIP180L M**  
>>>> 3.5 kJ



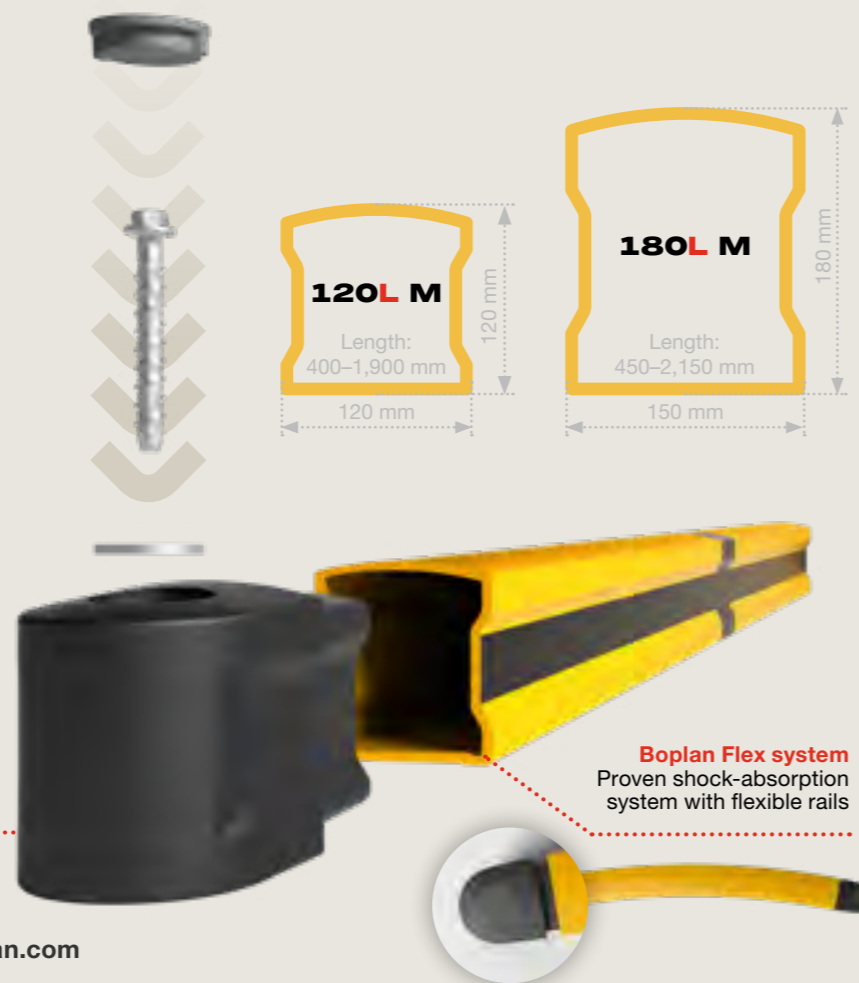
## IMPACT-RESISTANT CONNECTORS

Universal angle piece

Middle piece

End piece

90° corner piece



## CID® CRITICAL IMPACT DETECTOR

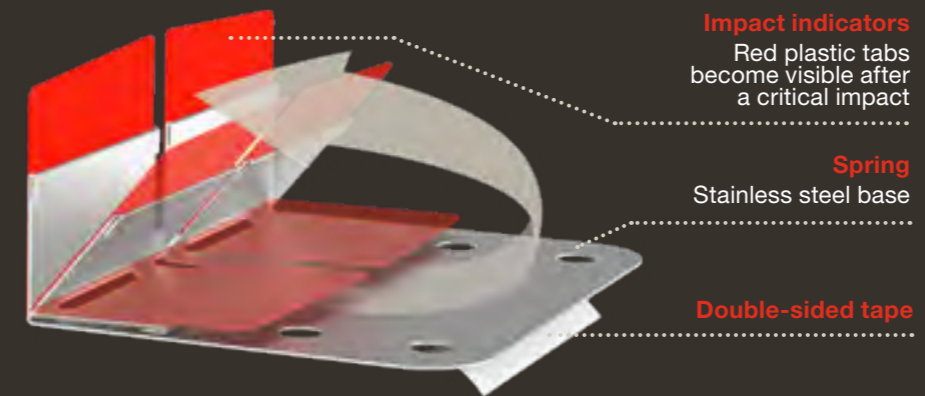
**QUICKLY IDENTIFY WHERE A SIGNIFICANT COLLISION HAS OCCURRED AND TECHNICAL INSPECTION OF YOUR KICK RAILS IS REQUIRED**

Although safety equipment often appears undamaged from the outside, an impact may have caused serious issues regarding the functional integrity, which – without CID® – can only be detected through a technical inspection.

The red CID® label only appears after such critical collisions, warning you of potential danger zones where safety might be compromised.

Additionally, CID® allows you to easily pinpoint areas in the workplace that experience frequent heavy shocks, indicating where extra protective and preventive measures are needed.

This safety optimisation could involve reevaluating the traffic plan, adjusting the workplace layout, adding more signage, raising awareness and responsibility among forklift drivers, installing heavier safety solutions, etc.



**Impact indicators**  
Red plastic tabs become visible after a critical impact

**Spring**  
Stainless steel base

**Double-sided tape**

**BEFORE IMPACT**



**DURING IMPACT**



**AFTER CRITICAL IMPACT**



**WITH BOPLAN'S PATENTED CID® SYSTEM, YOU CAN IMMEDIATELY IDENTIFY WHERE YOUR SAFETY PRODUCT SUFFERED A HEAVY IMPACT**



**AN EFFECTIVE AND  
RELIABLE SAFETY SOLUTION  
FOR PARKING MANAGEMENT**

# WHEEL STOPS

FLEX IMPACT® wheel stops are an essential safety tool to prevent vehicles from rolling away. They are commonly used in car parks and garages. Wheel stops are particularly useful in areas where space is limited or where there is a risk of collision with other parked vehicles or structures. They are also used to enforce parking regulations or to optimise parking space utilisation. Wheel stops are an effective and reliable solution for parking management and safety.

### SPEED BUMP

Our WHEEL SPEED CONTROL is a durable speed bump made of sturdy UV-resistant vulcanised rubber. With 4 integrated reflectors for better visibility in the dark. Both end and middle pieces are available in black or yellow and can be combined in any number of ways to suit any road or passage width.



### WHEEL SPEED CONTROL

### ROUNDED WHEEL STOP FOR DELINEATION OF PARKING SPACES

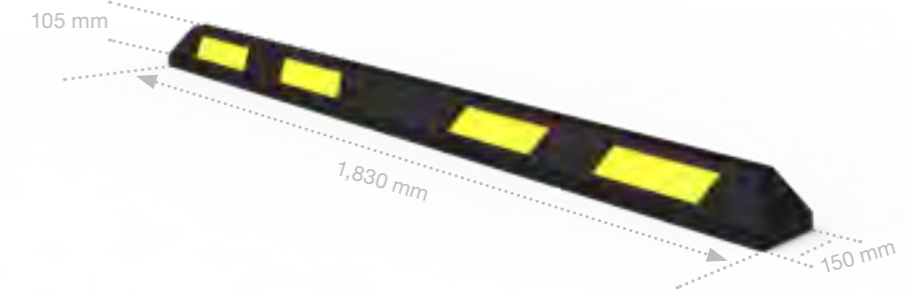
The WS WHEELSTOP 45 makes parking in car parks safe and easy. Its slim and sturdy design ensures optimal performance in any parking environment. With a white reflective strip on a black casing, the wheel stop is always visible, even in low light. The durable construction guarantees long-lasting performance. This makes the WHEELSTOP 45 a smart investment for commercial parking facilities.



### WS WHEELSTOP 45

### CLEAR AND SAFE DELINEATION OF PARKING SPACES

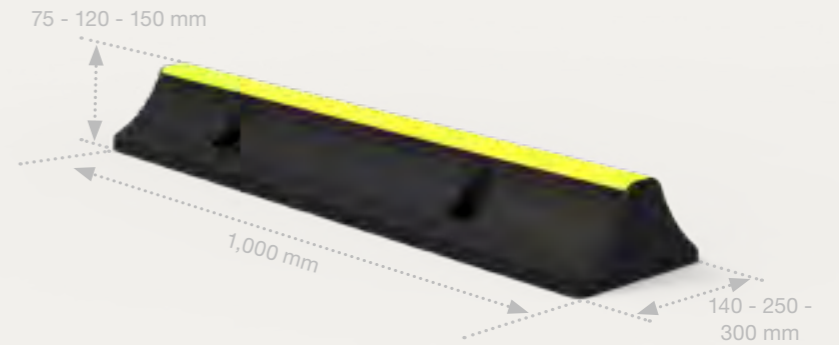
The WS WHEELSTOP 105 has eight integrated yellow reflector strips for optimal visibility in all conditions.



### WS WHEELSTOP 105

### STOPS VEHICLES FROM PERFORMING A MANOEUVRE

The WS WHEELSTOP prevents vehicles from rolling over the edge of a parking space into another vehicle or a wall. A yellow ridge along the top ensures optimal visibility. It is available in three models and is suitable for all types of vehicles, from regular cars to 40-ton trucks.



### WS WHEELSTOP



### LOOKING TO PROTECT CHARGING STATIONS?

Then combine these wheel stops with our EV protection bollards: **BO125L EV** and **BO145L EV**.

See page 52 for more information.





**PROTECTION FOR LOAD-BEARING  
PILLARS AND COLUMNS**

# COLUMN AND CORNER PROTECTION

We offer high-quality and efficient column and corner protection for wall corners as well as posts, columns and buildings. Column protection prevents costly and structural damage to columns, posts and pillars in warehouses, production halls, airports and car parks. Tested and approved to the highest safety standards, these products provide full protection. For vulnerable corners, we offer impact-resistant corner protection.

# KP PROTECTOR



## COLUMN PROTECTION FOR LOAD-BEARING PILLARS AND COLUMNS

The FLEX IMPACT® **KP PROTECTOR** is a round column protector for the protection of load-bearing pillars and columns in various industrial environments. This protector consists of two parts and can be installed without tools. It fits perfectly around the column, providing neat, versatile and highly visible protection.



The KP PROTECTOR is made of flexible and unbreakable polyethylene, providing a protective layer around vulnerable columns. These protectors absorb the impact of a collision and protect both the vehicle and the structural elements. Air channels inside the KP PROTECTOR release air at a controlled speed in the event of a collision, maintaining resistance to impact forces and minimising damage.

By reducing the impact force, the KP PROTECTOR effectively reduces the risk of structural damage to columns, safeguarding the integrity of industrial buildings. These protectors are available in various diameters and sizes.

**KP 600**  
H 1100 mm

**KP 500**  
H 1100 mm

**KP 400**  
H 1100 mm

**KP 300**  
H 1100 mm

**KP 200**  
H 1100 mm

**KP 150**  
H 1100 mm

**KP 100**  
H 1100 mm



**KP 300**  
H 500 mm

**KP 200**  
H 500 mm



**ICE FLEX®**

For temperatures down to -30°C

# FEATURES AND BENEFITS



QUICK INSTALLATION WITH VELCRO® STRIPS

RESISTANCE TO CHEMICALS AND UV RADIATION

AIR CHANNELS FOR CONTROLLED IMPACT ABSORPTION

LOW MAINTENANCE

STACKABILITY

MADE OF 100% RECYCLABLE POLYETHYLENE

WATERPROOF

THE TWO PARTS CAN BE FASTENED TOGETHER USING SCREWS



FITS PILLARS AND COLUMNS OF VARIOUS SHAPES AND SIZES

## TYPICAL ENVIRONMENTS

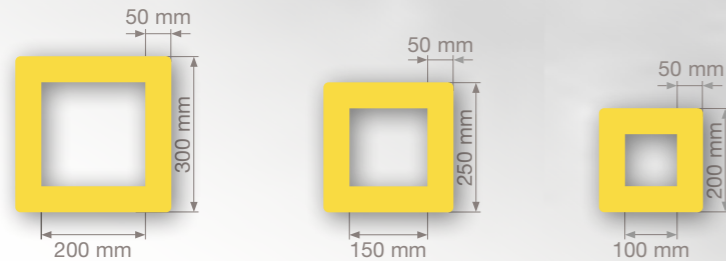
For the protection of pillars, posts and columns in:

- Warehouses and storage facilities
- Distribution centres
- Transport & logistics centres
- Logistics, supply chain and material handling industries
- Parking facilities

## MAXIMUM VISIBILITY

The KP PROTECTOR is available in a distinctive RAL 1003 yellow (signal yellow), making it highly visible in any situation. KP PROTECTORS with a height of 500 mm are also available in red for use around columns or posts with a fire extinguisher or hose reel attached. This provides protection and makes it more noticeable.





## PROTECTION OF INFRASTRUCTURE FROM PALLET TRUCKS

The FLEX IMPACT® **CP CORNER PROTECTOR** provides impact-resistant corner protection for walls and partitions of all kinds, as well as for small posts and machinery in your business, garage, warehouse or shop. The CP CORNER PROTECTOR is part of the flexible and durable FLEX IMPACT® range and is available in both yellow and black. The CP CORNER PROTECTOR is lightweight, easy to install, and provides protection for your walls and partitions' most vulnerable ends and corners.



### CP CORNER PROTECTOR 500 J

## PROTECTION OF INFRASTRUCTURE AND PEOPLE AGAINST LIGHT COLLISIONS

The FLEX IMPACT® **SOFT COLUMN COVER** uses 50 mm of impact-absorbing foam to protect columns from collisions with small mobile equipment and prevent people from injuring themselves on metal posts with sharp corners.

With a height of 1,800 mm and a distinctive yellow appearance, the SOFT COLUMN COVER guarantees optimum visibility. Installation is quick and easy thanks to Velcro straps. The water- and UV-resistant, hard-wearing PVC cover is easy to clean. Moreover, there are 3 different sizes available for a perfect fit.



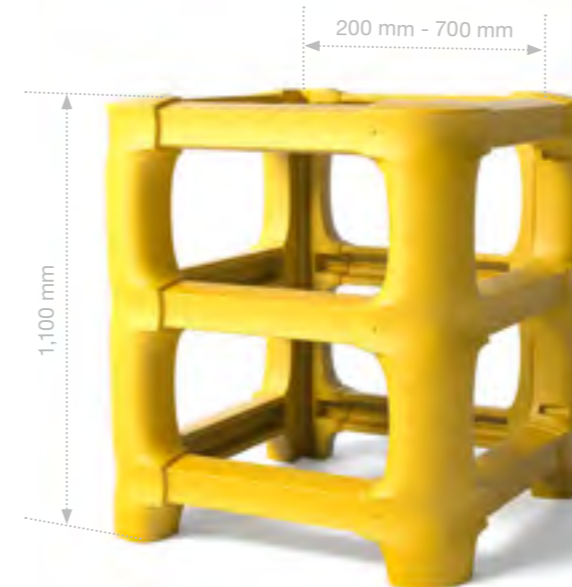
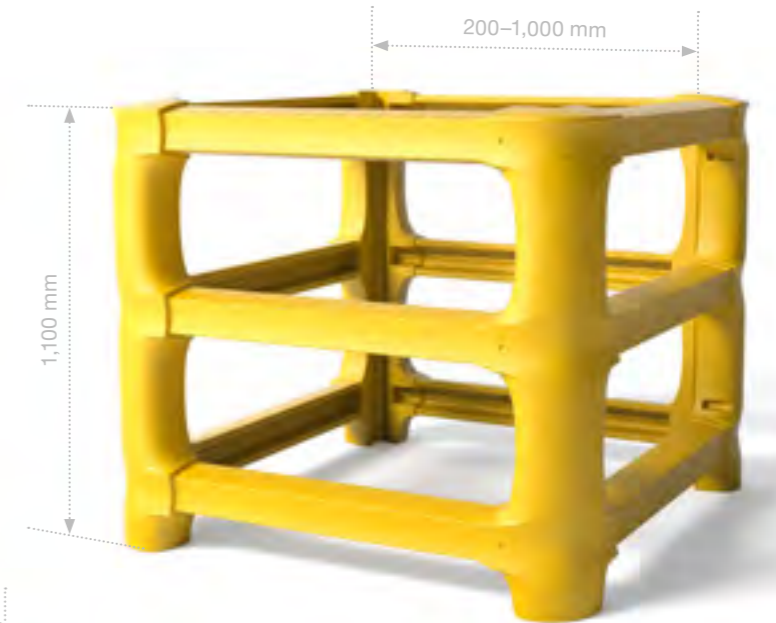
### SOFT COLUMN COVER



## ONE-SIZE-FITS-ALL COLUMN PROTECTION



The FLEX IMPACT® CP UNIVERSAL, with its modular, fence-like structure, protects masts, load-bearing pillars and columns of abnormal size from collisions. Thanks to its modular, uniform design, it fits columns of any size. You can trim the horizontal bars to fit the column.



CP UNIVERSAL is part of the FLEX-IMPACT® series and, like the other products in this series, is highly impact-resistant. With its high absorption capacity, this column protection absorbs the impact of a collision. These durable and low maintenance polymer column protections are available in bright signal yellow. After the collision, the CP UNIVERSAL column protection retains its shape, appearance and properties.

# CP UNIVERSAL

**CP UNIVERSAL**  
**2.20 kJ**





**MOVEABLE SIGNAGE FOR MARKING  
OBSTACLES AND DIRECTING TRAFFIC**

# MOVEABLE BARRIERS

FLEX IMPACT® moveable barriers provide optimal safety and visibility in locations where forklifts, trucks, bulldozers and other vehicles are manoeuvring. Made from impact-absorbing Rexilene® polymer in bright yellow, they effectively mark obstacles and indicate the direction of travel. They are easy to place and move, and are durable and weatherproof. The rounded design minimises the risk of injury. These moveable barriers are a reliable solution for safe and efficient traffic flows.

# SAFETY GUARD



## MOVEABLE SAFETY CONE

The moveable FLEX IMPACT® SAFETY GUARD is ideal for marking obstacles and directing traffic. With a height of 1,750 mm and a bright yellow colour, it alerts workers and drivers of vehicles like forklifts, trucks and bulldozers to hazards or obstacles in good time. It helps ensure safe traffic flows in locations where traffic conditions change frequently and rapidly.



**CLEARLY VISIBLE**  
Even from a truck cabin

**INTEGRATED LIFTING EYE**  
For quick and easy placement

**2-SIDED 360° SIGNAGE**  
Yellow-black stripes  
or arrows to direct traffic

**STRAP WITH 2 BRACKETS**  
For attaching signage (optional)



**SAFETY YELLOW**  
For maximum visibility  
(UV-resistant polymer)

**SPECIAL RECESSES**  
For easy transport with  
a pallet truck or forklift



1,750 mm

**CONVENIENT HANDLES**  
To manually move the GUARD

**FILL THE GUARD WITH SAND OR WATER**  
For extra stability

### TYPICAL ENVIRONMENTS

- Loading bays
- Transport & logistics centres
- Warehouses and storage facilities
- Distribution centres
- Workplaces with vehicle traffic
- Areas requiring special attention
- Parking facilities

# SAFETY TOTEM



## EXTRA LARGE MOBILE SAFETY TOTEM

The FLEX IMPACT® SAFETY TOTEM provides effective protection by marking obstacles in the workplace where forklifts, trucks, bulldozers or other vehicles are manoeuvring. With a height of 2,400 mm and a bright yellow colour, the SAFETY TOTEM has a clear signalling function, warning drivers and workers of potential hazards or obstacles, even from a truck cabin.

The TOTEM has a large panel at the front for communicating messages. Large black arrows indicate on which side to pass. Weigh down the TOTEM with sand or water for extra stability and move it with ease thanks to the special forklift recesses.



**SAFETY  
AT SPORTING  
EVENTS**



Discover the RACE TOTEM we developed for Boplan Sport.



**FILL THE TOTEM WITH SAND OR WATER**  
For extra stability

### GALVANISED STEEL LIFTING EYE

For quick and easy installation

### EXTRA LARGE

Clearly visible.  
Even from a truck cabin

### REMOVABLE ARROWS

To indicate the correct side on which to pass

### SAFETY YELLOW

For maximum visibility  
(UV-resistant polymer)

### SIGNAGE

Your message here  
(HxW 1,030 mm x 1,370 mm)

### SPECIAL RECESSES

For easy forklift transport





# LOADING DOCK PROTECTION



Loading docks are dangerous areas. Truck drivers are more likely to make steering errors here. This can cause serious damage to the truck as well as to the loading dock and gates. You can avoid these high costs by installing robust, wear-resistant polymer DOCK BUMPERS at the loading docks.



**PROTECTION OF THE LOADING DOCK DURING TRUCK LOADING AND UNLOADING**

# DOCK BUMPER



## PROTECTION OF LOADING DOCKS AGAINST TRUCKS

These FLEX IMPACT® **DOCK BUMPERS** are far more resistant to wear, cuts and tears than the conventional EPDM rubber products on the market. They are also reinforced with an integrated galvanised metal plate and absorb the significant impact from vehicles hitting the loading dock.



### ADVANTAGES OF THE DOCK BUMPER:

- Robust design with shock-absorbing fins
- Superior resistance to abrasion, cuts and tears
- Integrated galvanised metal plate
- Long lifespan
- No mechanical parts
- Resistant to UV radiation, chemicals and oils
- Only two fasteners
- Quick and easy installation
- Easy to replace (concrete screws, no chemical fixation or anchors required)





# ICE FLEX®

Handling and storing chilled and frozen products requires a specific approach. Workers can only spend short periods in cold rooms and must act quickly to complete their tasks within this timeframe. In addition, heavy protective clothing restricts their freedom of movement, glasses can mist up, and so on. These specific circumstances introduce additional safety risks and call for customised solutions like our ICE FLEX® safety products. These are specially designed for applications at temperatures below freezing down to -30°C.



**SAFETY SOLUTIONS  
FOR EXTREMELY  
COLD ENVIRONMENTS**

# ICE FLEX®

## SAFETY SOLUTIONS FOR EXTREMELY COLD ENVIRONMENTS

With the ICE FLEX® range, we offer safety solutions for use at temperatures below freezing down to -30°C. We adapted our Extrilene® and Rexilene® polymers so that the ICE FLEX® products ensure optimal impact protection and maximum safety even in extremely cold conditions.

### ICE FLEX® SAFETY KICK RAILS

The ICE FLEX® safety kick rails provide complete ground-level protection. The innovative and robust I-shaped rails absorb impacts from 8.1 kJ (FLIP180B) to 17 kJ (FLIP200F). They are easy to install and can be combined with other BOPLAN® safety products, including the TB 400 series. To keep people safe from forklifts, the FLIP200F PLUS features ergonomic safety handrails. The FLIP180L M provides modular ground-level protection. This type of safety kick rail can be adapted to corners and shapes for continuous protection of sandwich panels and/or insulation walls in large cold storage facilities.



### ICE FLEX® SAFETY HANDRAILS

The ICE FLEX® HP PLUS safety handrail has three rails and posts to shield pedestrians in cold areas with heavy traffic. HP PLUS 3 RAILS ensures the safety of pedestrians in these areas.



### ICE FLEX® RACK PROTECTION

The ICE FLEX® rack protection prevents damage to shelving and other storage systems in industrial freezer environments. You can protect the ends of a rack with the RACK END. Wrap rack uprights with the innovative RACKBULL®. Simply snap them around the rack supports. They fit almost all racking.



### ICE FLEX® SAFETY BARRIERS

ICE FLEX® safety barriers protect people and infrastructure in extremely cold environments such as cold storage facilities from forklift impacts. They are an excellent solution to keep designated routes clear by separating pedestrian traffic from vehicles. We offer various types of safety barriers that can also be combined with our other safety products.



### ICE FLEX® BOLLARDS

The ICE FLEX® BO200R bollard provides excellent protection against collisions in areas with a higher risk of impact, such as access roads, gateways and corners.

### ICE FLEX® HEIGHT PROTECTION

The ICE FLEX® GOAL POST GP200B is a flexible height restrictor that protects high gates, canopies and bridges in cold storage areas from collisions with forklifts and other vehicles.



### ICE FLEX® COLUMN PROTECTION

Prevent costly and structural damage to columns, pillars and posts with our wide range of ICE FLEX® column protection. Thanks to their impact absorption capacity, they minimise the risk of damage and ensure the columns' structural integrity. With a wide range of diameters available, the most appropriate form of column protection can be installed even in extremely cold environments.



Further products in the ICE FLEX® range are available on request. Get in touch with us. Our contact details are listed on the back cover.



# FLOOR MARKING TAPE

LINE PLAN floor markings, line markings and pictograms outperform all other floor marking systems. While the tape in most alternative systems tears off at the slightest abrupt manoeuvre of a forklift, LINE PLAN offers unmatched abrasion resistance.

With LINE PLAN floor and line markings, you can create a clearly defined, safe working environment, giving your company a professional appearance while also protecting your employees.

LINE PLAN not only provides floor markings, but also a complete range of self-adhesive pictograms. Our range of self-adhesive pictograms includes all common international safety and warning signs used in industrial and commercial environments. They are available in a variety of distinctive colours, both on rolls and as individual adhesive elements.



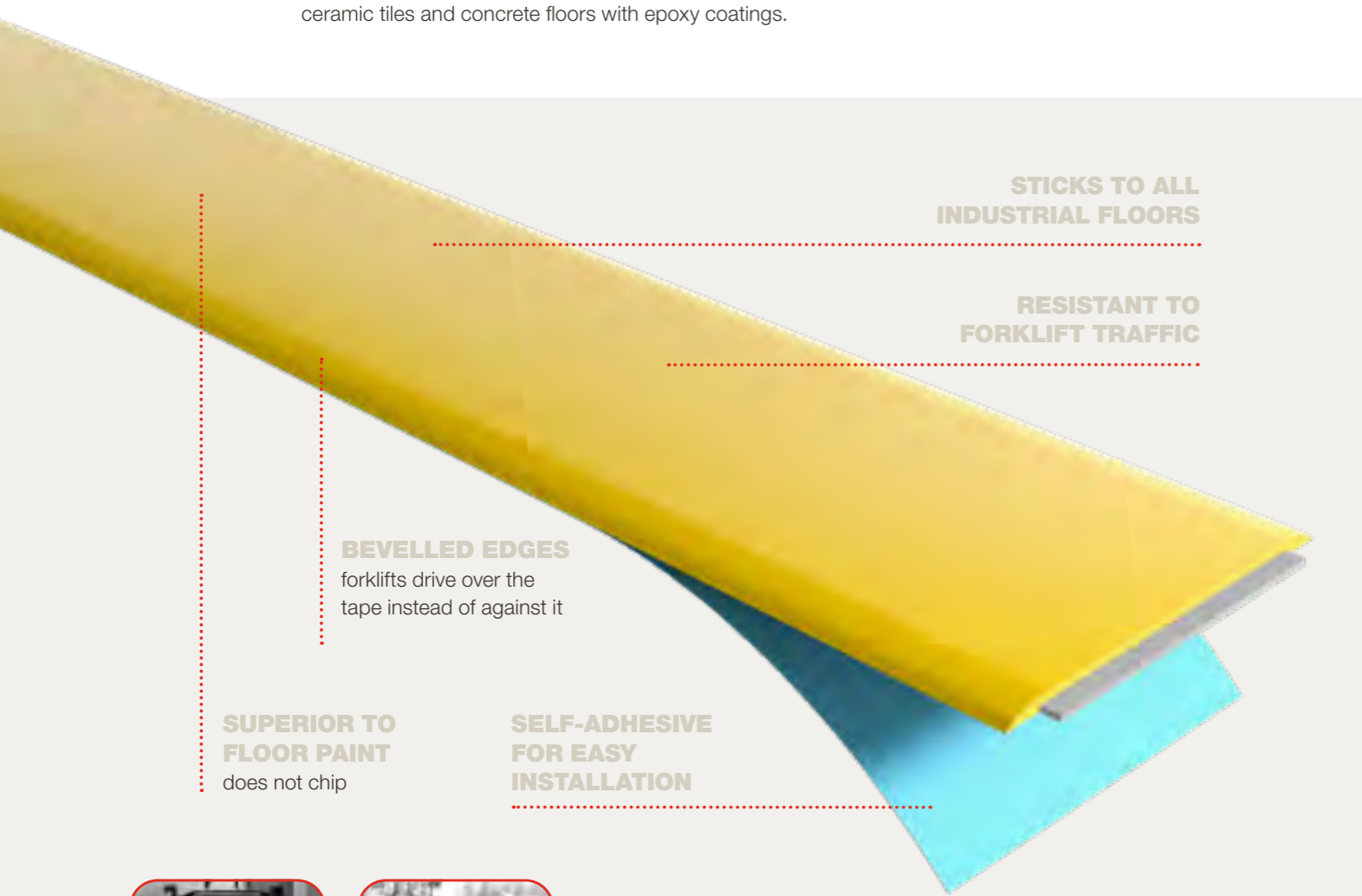
**MARKING TAPE WITH UNMATCHED RESISTANCE**

# LINE PLAN FLOOR MARKING TAPE



## MARKING TAPE WITH UNMATCHED RESISTANCE

With its unmatched resistance to all types of abrasion, LINE PLAN surpasses all other floor marking tapes. The marking tape has bevelled edges. This makes it stronger than other products and extremely suitable for high-traffic areas. The floor marking tape is also easy to apply yourself. The strong self-adhesive backing allows it to be applied to a variety of surfaces, including concrete, steel, smooth ceramic tiles and concrete floors with epoxy coatings.



**STICKS TO ALL INDUSTRIAL FLOORS**

**RESISTANT TO FORKLIFT TRAFFIC**

**BEVELLED EDGES**  
forklifts drive over the tape instead of against it

**SUPERIOR TO FLOOR PAINT**  
does not chip

**SELF-ADHESIVE FOR EASY INSTALLATION**



**VARIOUS COLOURS OF LINE MARKING AND PICTOGRAMS AVAILABLE**

**VISIBLE IN THE DARK**  
thanks to the photoluminescent strip



### LINE PLAN UNI

Floor marking tape in solid colours with bevelled edges.



### LINE PLAN CROSS

Floor marking tape with two contrasting colours in a diagonal pattern.



### LINE PLAN CENTER

Floor marking tape in two colours. Also available in glow-in-the-dark version.



### LINE PLAN ANTISLIP

Slip-resistant floor marking tape for industrial applications in dry, wet or oily conditions.



### LINE PLAN PICTO

Encourage employees and visitors to practise good hand hygiene and maintain social distancing.



### LINE PLAN L/T

Floor marking tape for areas with pallets, goods or machinery.



### LINE PLAN DOT

Floor marking tape in the shape of a dot. Ideal for connecting two line markings at a corner or for marking something with a curved dotted line or circle.



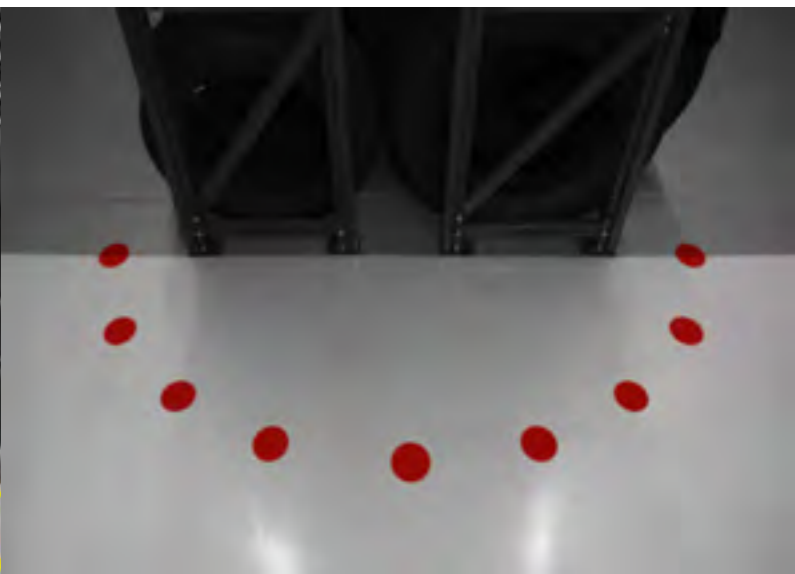
### LINE PLAN FOOT

Floor marking tape in the shape of a footprint for marking footpaths or walking directions. Also available with glow-in-the-dark centre line.



### LINE PLAN ARROW

Floor marking tape in the shape of an arrow for marking footpaths or walking directions. Also available with glow-in-the-dark centre line.





**PROTECTIVE BUMPERS TO PREVENT INJURY AND DAMAGE**

# PROTECTIVE BUMPERS

Our protective bumpers minimise damage to infrastructure and vulnerable equipment and protect people from sharp edges and dangerous corners. In our range, we offer two solutions: the **TEDDY PRO** and the **WALLY PRO**.

**TEDDY PRO** is a range of flexible and shock-absorbing PU bumpers. The **WALLY PRO** provides maximum protection for fire alarm call points and buttons in industrial and commercial environments.



**WALLY PRO**  
see page 140

# TEDDY PRO PROTECTIVE BUMPERS



## PROTECTION TO PREVENT INJURY AND DAMAGE

Our range of protective bumpers is called **TEDDY PRO**. These are flexible and shock-absorbing PU bumpers for warehouses, production halls, garages and corridors. They are designed to protect workers from corners and sharp edges. Moreover, the bumpers prevent damage from collisions with small mobile equipment. The TEDDY PRO protective bumpers are quick and easy to install on any flat surface.

### YELLOW-BLACK STRIPED

Warn passers-by of danger

### FLEXIBLE BUMPER 1 OR 2 METRES IN LENGTH

Also fits curved surfaces

### TEAR-RESISTANT FILM

For indoor use at temperatures between -40°C and +100°C

### LONG-LASTING PROTECTION

- To prevent physical injury from bumping into corners or edges
- To prevent damage to scratch-sensitive materials
- Protect infrastructure against trolleys and carts

### PERMANENT SOLVENT-FREE ADHESIVE

Suitable for most surfaces

### SILICONE-FREE PAPER FILM

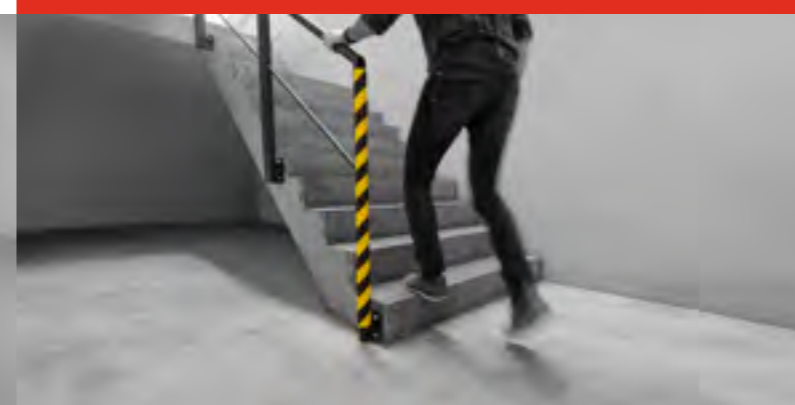
For easy and smooth application of the bumper

## 9 VERSIONS



## »» ALSO AVAILABLE WITH STAINLESS STEEL BASE (SSB)

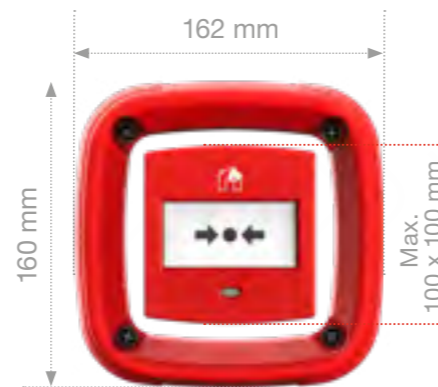
Achieve perfect adhesion on any surface with TEDDY PRO SSB. These bumpers have a stainless steel base and can be adhered to a variety of surfaces: from damp and oil-soaked to brick, wood and uneven surfaces.



# WALLY PRO

## MAXIMUM PROTECTION FOR CALL POINTS AND FIRE ALARM BUTTONS

The **WALLY PRO** is the newest innovation in call point protection. Without protection, these are very vulnerable. They are easily damaged or activated unintentionally. The WALLY PRO absorbs shocks, prevents wear and improves safety. Its durable elastomer offers long-lasting protection in industrial environments and public and commercial buildings.



### KEY FEATURES AND BENEFITS

- Sustainable elastomer
- Reduced risk of accidental activation
- No lid preventing emergency activation
- Excellent visibility
- Long service life
- For both indoor and outdoor applications
- Suitable for alarm push buttons less than 100 mm x 100 mm x 70 mm (L x W x H)



reddot winner 2025



### PROTECTION AGAINST DAMAGE DUE TO IMPACT OR SHOCK

Industrial and commercial environments often have call points in high-traffic locations such as corridors and workshops or by an entrance. This makes it easy for them to be struck by forklifts, trolleys or tools. Without protection, these accidents can cause damage, cracking the button or housing so that the call point no longer works.

The WALLY PRO is made of durable elastomer to provide optimal shock absorption and protect against damage. Its bright red or green colour also alerts people to a protected call point's presence.

### PREVENTING ACCIDENTAL ACTIVATION

Accidentally activating a call point can have serious consequences, from production downtime to an unnecessary response by emergency services.

The WALLY PRO forms a physical barrier around the call point, preventing the button from being pressed accidentally. At the same time, it remains accessible in emergencies, allowing anyone to activate the alarm quickly and easily.

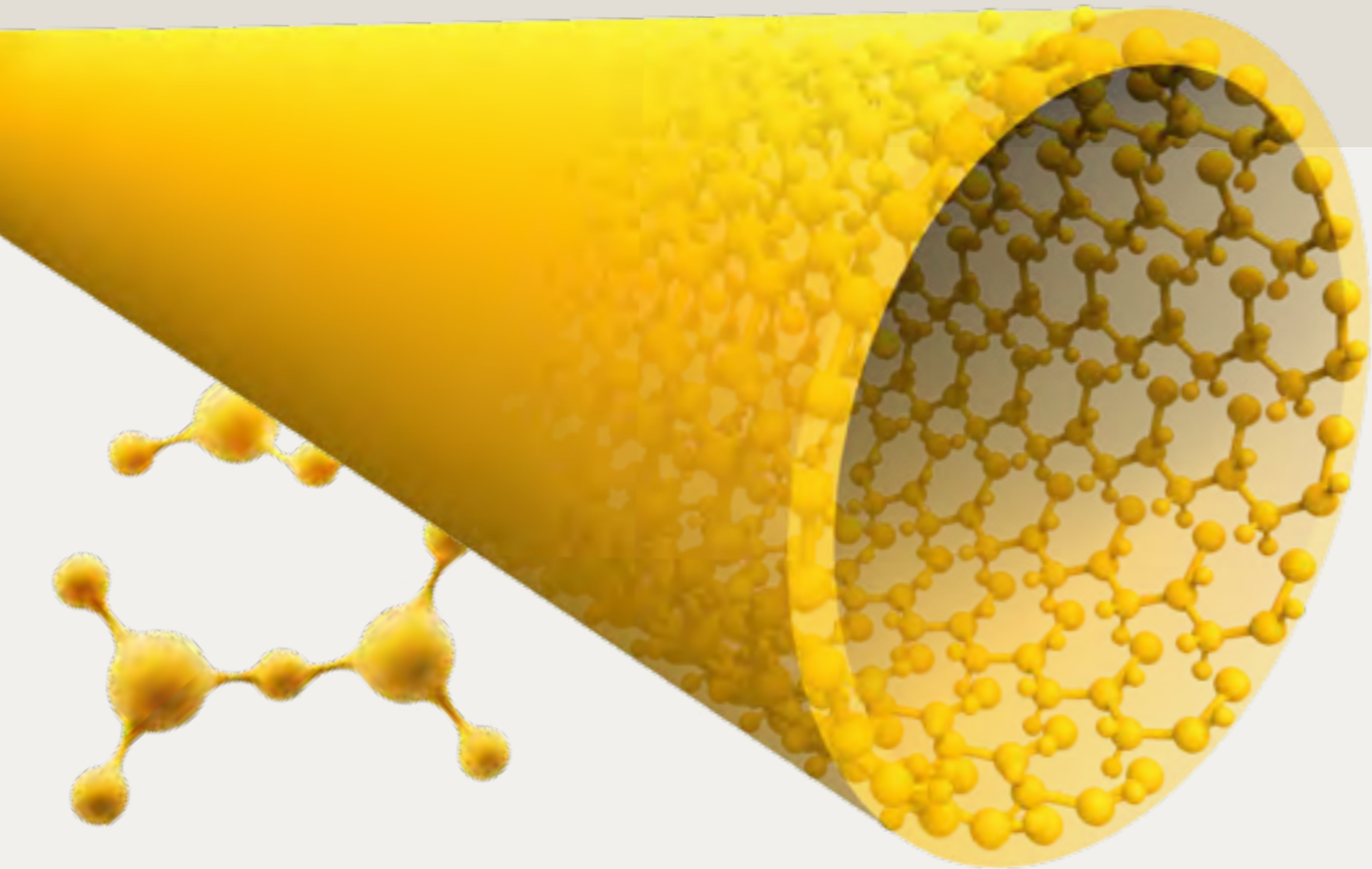
# EXTRILENE®



Extrilene® is a high-quality polymer material developed by Boplan for sustainability and impact resistance. With its exceptional strength, chemical resistance and UV stability, it is ideal for industrial safety solutions.

Its remarkable impact resistance is one of the key features of Extrilene®. This material withstands heavy impacts and collisions without cracking or breaking. That makes it particularly suitable for applications in warehouses, factories, loading docks and industrial systems.

Extrilene® products are also made from a single solid layer of polymer material, meaning there is no risk of delamination upon impact. In systems using multiple layers of polymer, the deformation from impact can cause the bond between the different layers to fail faster than the material itself. The layers come apart and the product's integrity is compromised. Not so with Extrilene®.



## YEARS OF RESEARCH AND DEVELOPMENT

The unique composition of Extrilene® is the result of years of advanced research, development and rigorous testing. The aligned molecular structure of Extrilene® ensures unparalleled strength while maintaining maximum flexibility. The energy from an impact is directed through the material with maximum efficiency. Combined with Boplan's unique slide-over tube system, this results in collision protection solutions with the highest impact resistance values on the market.



## HIGHLY SUSTAINABLE

Unlike single-use polymers, Extrilene® is extremely sustainable, because it is fully recyclable. Recycled materials limit the use of virgin raw materials and reduce the carbon footprint. We recycle 89% of our industrial waste. This results in an annual reduction of 344 tonnes of CO<sub>2</sub> compared to using new materials.

Read more about our sustainable safety solutions on page 12.



Watch the crash test video



**EXTRILENE®:  
THE ULTIMATE  
COMBINATION  
OF STRENGTH  
AND FLEXIBILITY**



# REXILENE®



Rexilene® is an advanced polymer material developed by Boplan to produce impact-resistant, durable industrial safety solutions using rotational moulding. The material is suitable for both indoor and outdoor use and is UV-resistant.

## ▶▶▶ HIGH IMPACT RESISTANCE

One of the most distinctive properties of Rexilene® is its high impact resistance. This material remains intact under heavy impacts, making it ideal for use in industrial environments.

Products made from Rexilene® have a single, solid polymer layer. This eliminates the risk of delamination upon impact. A hard impact in materials with multiple layers can cause these layers to separate, compromising the structural integrity. This issue does not occur with Rexilene®.

## ▶▶▶ YEARS OF RESEARCH AND DEVELOPMENT

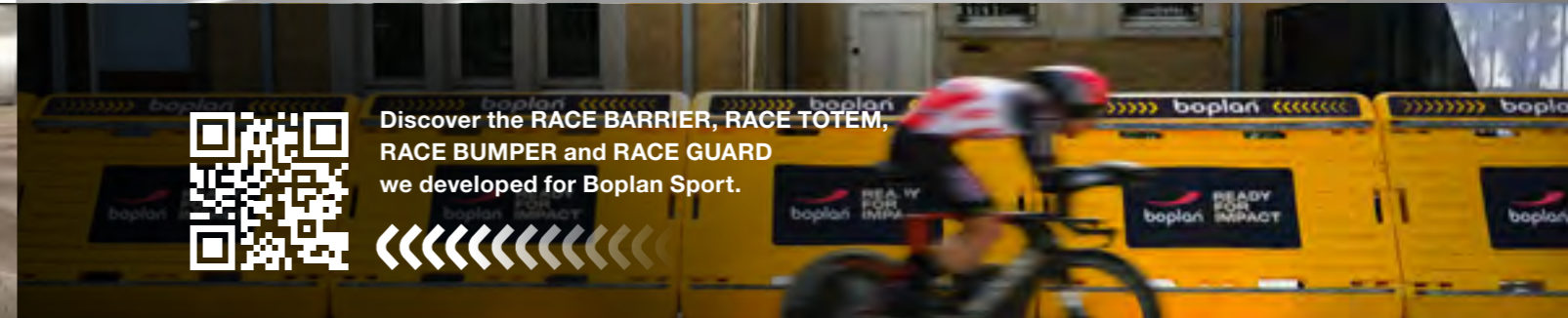
The unique properties of Rexilene® are the result of intensive research, development and rigorous testing. A special molecular structure provides Rexilene® with exceptional strength and flexibility, enabling Rexilene® products to absorb impact energy optimally. Upon impact, the material dents and then immediately returns to its original shape. Moreover, the material is resistant to most chemicals, making it versatile for use in various environments.



## ▶▶▶ HIGHLY SUSTAINABLE

Unlike single-use polymers, Rexilene® is designed for long-term use and is fully recyclable.

More information about our sustainable safety solutions can be found on page 12.



Discover the RACE BARRIER, RACE TOTEM, RACE BUMPER and RACE GUARD we developed for Boplan Sport.



## SAFETY AT SPORTING EVENTS

In addition to our industrial Rexilene® safety solutions, we developed a range of products for the protection of participants, staff and spectators during sporting events. These products are made from a softer and even more flexible variant of Rexilene®. They prevent serious injuries due to collisions with street furniture or other obstacles.

# HI-TEP

**HIGH IMPACT THERMOPLASTIC  
ENGINEERED POLYMER**



We developed our HI-TEP polymer, or High Impact Thermoplastic Engineered Polymer, specifically for our DOUBLE AXES GATE and SINGLE AXES GATE. This material is 100% recyclable and infinitely reusable. HI-TEP makes AXES GATE the most sustainable safety gate in the world.



## DESIGNED FOR EXTREME CONDITIONS

HI-TEP polymer is highly resistant to severe weather conditions, hypersaline environments and highly corrosive chemicals. That's why it is particularly suitable for applications in the chemical industry and on offshore drilling platforms.

- Extremely long service life
- Resistant to chemicals and UV radiation
- Superior temperature stability and dimensional stability
- Flame retardant
- Low maintenance



## ISOCYANATE FREE

High Impact Thermoplastic Engineered Polymer contains no isocyanates. As a result, the production process is carried out in cleaner and safer conditions. This also simplifies safety protocols, contributing to a more efficient and socially responsible production process.



## THE SMALLEST FOOTPRINT

Plastic safety gates are usually made from polyurethane (PUR). However, producing the raw material for PUR is much more intensive than producing the raw material for HI-TEP. Furthermore, HI-TEP is reusable.

	HI-TEP	PUR
	100% recyclable	Incinerated at end of useful life
Production of 1 kg of raw material	3.25 kg CO <sub>2</sub>	5.70 kg CO <sub>2</sub>
Emissions for average end-of-life processing per kg of plastic	1.41 kg CO <sub>2</sub>	2.71 kg CO <sub>2</sub>

# TESTED AND APPROVED



## HOW R&D WORKS AT BOPLAN

Your safety is our top priority. That's why we thoroughly test all our safety products before they are brought to market. External and independent parties test the absorption capacity, strength and quality. This ensures that our products meet the highest safety standards.

## WHERE INNOVATION THRIVES

R&D at Boplan consists of two complementary teams that challenge and inspire each other. Our Innovation Team is the creative force behind our success. It is responsible for designing and redesigning products. Meanwhile, our Research, Engineering & Development (RED) Team is responsible for technical validation, managing intellectual property and overseeing certification and testing processes.

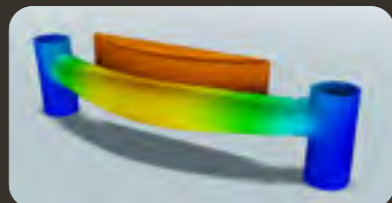
Ideas for new products emerge from the business, are market-driven or align with our intellectual property strategy. A selection of ideas is developed in more detail using sketches, renderings, etc. For the ideas with strong potential, we initiate an R&D project. We build prototypes for functional testing. Then the engineering phase begins, where we focus on technical validation based on:

### Feasibility testing by internal & external accredited laboratories



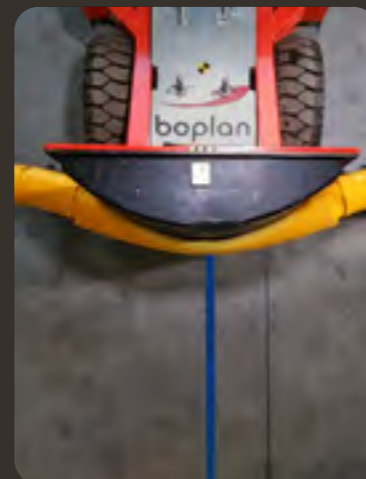
### Internal virtual simulations

Virtual simulations have become the backbone of our modern, well-considered, data-driven product development strategy. They allow us to predict how a product will respond to impact - long before a physical prototype is built. These virtual tests are not a replacement for the physical crash tests carried out in our in-house test facility. Rather, they serve as essential preparation. They enable us to develop faster, with greater focus and insight.



### Real-life vehicle impact tests according to PAS13:2017 and UNI/TS 11886-1.

We conduct a physical crash test to benchmark and validate the simulation results.



*Safety can be sexy.  
That's why we pay special attention  
to the functional aesthetics of our products.*



Xavier Ramon, CEO Boplan

## INDOOR TEST LAB

Our indoor test lab is a testament to our commitment to excellence. Here, we can run tests at any time, regardless of the weather or external factors. This controlled environment allows us to create repeatable conditions, ensuring precise and accurate results. We replicate real-life scenarios, from different floor conditions to impact angles.

## MEET THE BEAST

The Beast plays a crucial role in our testing. This is a true-to-life representation of industrial vehicles. The Beast has a variable mass ranging from 1300 kg to 4300 kg, which we can adjust to the exact weight specifications of trucks and forklifts. By fine-tuning the speed settings, we replicate collision scenarios at speeds ranging from 2 km/h to 16 km/h. In this way, we simulate real-world conditions.

## ADVANCED DATA COLLECTION

Our test facilities are equipped with the latest technology, including onboard computers, lasers and high-speed cameras. These advanced data collection systems capture precise information, providing us with invaluable insights into the performance of our safety solutions. It allows us to measure and analyse key metrics with the utmost precision, ensuring that every product leaving our factory meets the highest safety standards.



# POLYMER VERSUS STEEL

## WHY POLYMER SAFETY SOLUTIONS ARE PREFERRED IN INDUSTRIAL ENVIRONMENTS

While steel safety solutions have long been the standard, polymer has now become the more forward-thinking choice. We present a few compelling reasons why polymer safety solutions are preferred.

### NO FLOOR DAMAGE

If a forklift hits a steel bollard, there is a chance that the fasteners will come loose from the floor. This causes damage to both the forklift and the floor, resulting in double repair costs. A polymer barrier or bollard leaves the floor intact, as it absorbs the impact force and distributes it across the entire volume.



## EXCELLENT SHOCK ABSORPTION AND AT LEAST AS STRONG

Polymer safety solutions are renowned for their impressive shock-absorbing properties. In the event of a collision, the impact is absorbed and distributed over a larger area. This keeps damage to both the safeguard and the vehicle to a minimum. Compared to steel, which mostly reflects the energy of a collision rather than absorbing it, polymer offers superior protection.

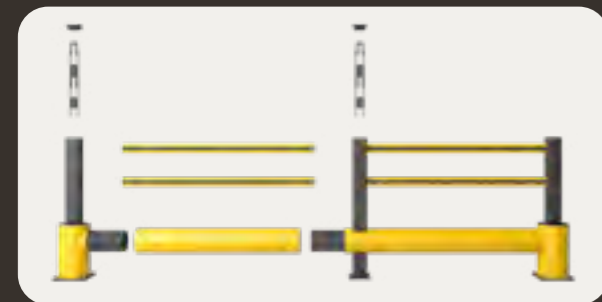
## LIGHTWEIGHT AND EASY TO INSTALL

Polymer safety products are lighter than steel. This simplifies installation and reduces the load on the infrastructure. It makes polymer a cost-effective choice, especially on large projects where multiple safety elements need to be installed.



## FLEXIBILITY IS KEY

Polymer safety barriers are easily customised. This makes it much easier to find just the right solution. A polymer application is also flexible, a characteristic not found in steel. In the event of a collision, the safety equipment will return to its original shape.



## MODULAR DESIGN

Our polymer safety solutions are modular in structure. No screws or bolts are required to fasten the components together. This creates a degree of flexibility between the different elements. The 'loose' fastening method reduces the risk of breakage in the event of an impact.

## COLOURFAST AND HIGHLY VISIBLE

Unlike steel, polymer safety products are not painted. They are made of material that is coloured throughout. A damaged steel structure will lose its colour, unlike a polymer structure. Yellow is the best colour for safeguards, but other colours are also possible. In addition, the guards can easily be fitted with luminescent or reflective strips.

## DESIGN VERSATILITY

Polymer offers a design freedom difficult to achieve in steel. This enables customisation and maximises the safeguards' effectiveness.

## CORROSION RESISTANCE

One of the biggest disadvantages of steel barriers is their susceptibility to corrosion, especially in wet and chemically aggressive environments. Polymer is completely immune to corrosion. This guarantees a longer lifespan and lower long-term maintenance costs.

## WEATHERPROOF AND RESISTANCE TO TOXIC SUBSTANCES

Another weakness of steel is the potential for rust due to weather. Paint can slow down this process, but eventually, corrosion will occur. Polymer is not subject to oxidation at all. Environments where chemical products are processed or used also pose no problem for polymer safety barriers.

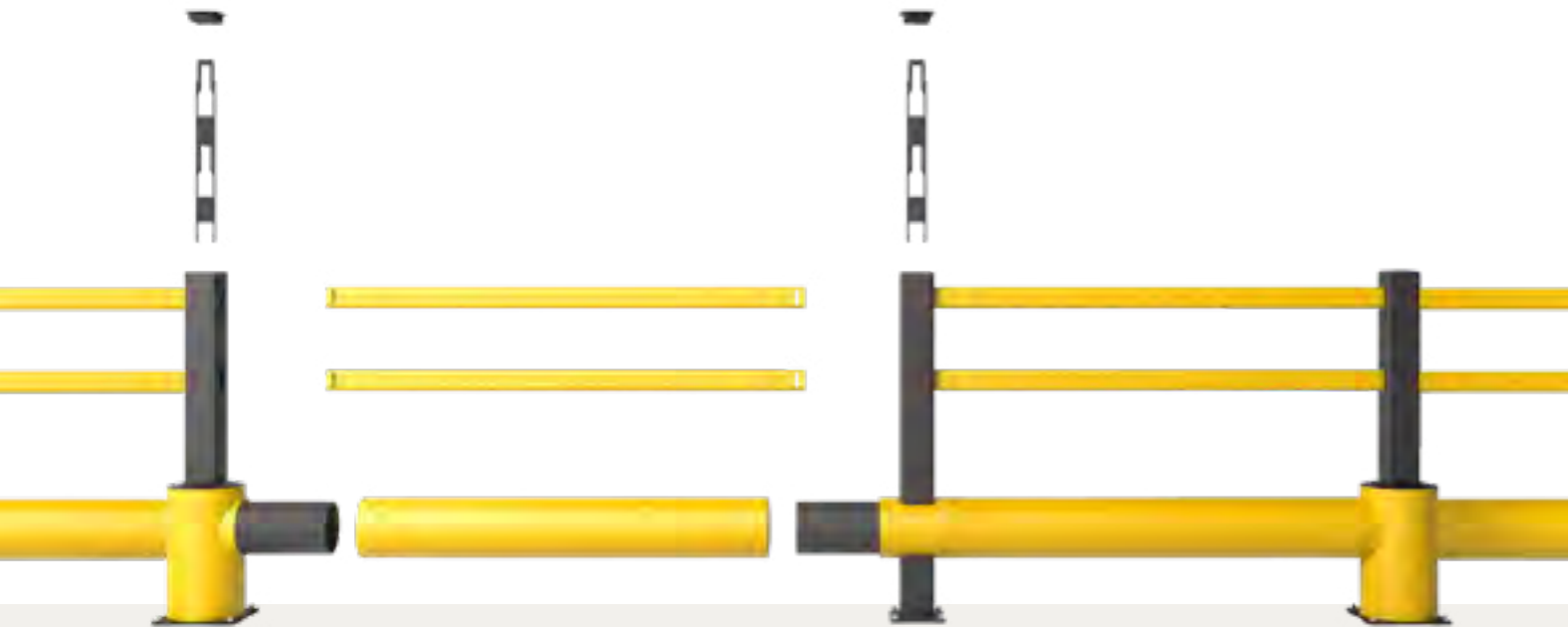
## ENVIRONMENTALLY FRIENDLY

Polymer safety products offer a more environmentally responsible alternative to steel. Their long service life, even after repeated impacts, prevents unnecessary damage and eliminates the need for frequent replacements. In addition, their modular design ensures that only specific components need to be repaired or exchanged, significantly reducing material waste over time.

# MODULAR AND REFINED DESIGN

## IT'S ALL ABOUT FLEXIBILITY AND ADAPTABILITY

Our polymer safety solutions are modular in structure. Unique attachment methods ensure greater freedom of movement and flexibility. In the event of an impact, the components move and absorb the shock rather than breaking. This results in a longer lifespan and increased safety.



### AS FEW COMPONENTS AS POSSIBLE

Our modular systems consist of a minimal number of parts and require only simple tools for installation. This means we can set up your safety infrastructure in record time. Moreover, damaged parts are easily replaced. This not only saves time and money, but is also more sustainable.

### CUSTOMISATION AND DIFFERENT SIZES AND DIMENSIONS

No workplace is the same. That's why we offer modular systems in a wide range of standard sizes. Fully customised solutions tailored to your project's dimensions or formats are also possible.

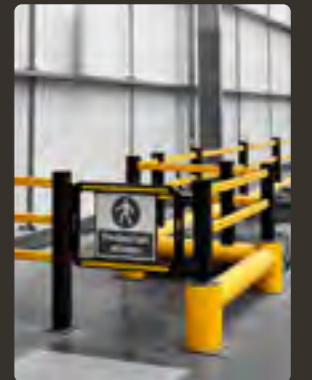
## WHY CHOOSE WHEN YOU CAN COMBINE?

Combine safety barriers, handrails, bollards and other Boplan products into a comprehensive solution that is not just effective, but also a perfect match for your specific safety requirements.

✓ TB 400 PLUS & BO200R



✓ HP PLUS, SWING GATE & TB 400 PLUS



✓ TB 400 PLUS & SWING GATE



✓ TB 400 PLUS & SG SLIDING GATE



✓ TB 400 PLUS & BO200R



✓ TB 260 PLUS, SG SWING GATE & HP PLUS



✓ BO BELT, BO200R, & TB400 PLUS



## READY FOR THE FUTURE

Thanks to the modular design, future modifications and expansions are a breeze. As your business grows or changes, so does your safety infrastructure. You can add new elements or adjust existing components to remain compliant with the latest safety standards.



	HD LIGHT	HP PLUS 2R	HP PLUS 2R + FLIP120L	HP PLUS 3R	HP PLUS 3R + FLIP120L	HP GRILL	FE FENCE	HD MEZZA	HT TUNNEL FREE STANDING	HT TUNNEL WALL FIX	
<b>SUITABILITY</b>											
Application	segregate pedestrians from traffic	reinforced segregation of pedestrians from traffic	reinforced pedestrian segregation, wheel guidance, and wall/pedestrian protection from ground-level impacts	reinforced segregation of pedestrians from traffic	reinforced pedestrian segregation, wheel guidance, and wall/pedestrian protection from ground-level impacts	protect pedestrians from the toppling of stacked goods	segregate pedestrians from machines	segregate pedestrians on mezzanines	protect pedestrians from the toppling of stacked goods	protect pedestrians from the toppling of stacked goods	
<b>MESH (between 2 posts)</b>											
Max. Height x Max. Width (mm)	-	-	-	-	-	-	1,800 x 1,200	-	-	-	
Cell height x width x depth (mm)	-	-	-	-	-	-	33 x 33 x 13	-	-	-	
Colour	-	-	-	-	-	-	●	-	-	-	
<b>RAILS SET (between 2 posts)</b>											
<b>Impact resistance *</b>	-	3.50 kJ	3.50 kJ	5.50 kJ	5.50 kJ	5.50 kJ	-	-	-	-	
N° Rails	2	2	2	3	3	3, 4, 5, 7 or 9	-	2	5 - 8	5 - 8	
Included	-	-	-	-	-	-	-	Skirting Board	-	-	
Rail Height x Width (mm)	70 x 50	70 x 50	70 x 50	70 x 50	70 x 50	70 x 50	-	70 x 50	70 x 50	70 x 50	
Standard Length (mm)**	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	-	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000	500 750 1,000 1,250 <b>1,500</b> 1,750 2,000
Custom Length (mm)**	250 - 1,999	250 - 1,999	750 - 1,999	250 - 1,999	750 - 1,999	250 - 1,999	-	250 - 1,499	250 - 1,499	250 - 1,499	
Rail Colour(s) (body/stripe)	yellow black/yellow yellow/black black/red yellow/photoluminescent black/photoluminescent	yellow black/yellow yellow/black black/red yellow/photoluminescent black/photoluminescent	yellow	yellow black/yellow yellow/black black/red yellow/photoluminescent black/photoluminescent	yellow	yellow	-	yellow yellow/black (Skirting Board is always yellow)	yellow	yellow	
<b>POST</b>											
Height (mm)	1,150	1,150	1,150	1,150	1,150	1,700 - 2,800	1,970	1,150	2,950 - 4,600	2,950 - 4,600	
Width x Depth (mm)	88 x 88	112 x 112	112 x 112	112 x 112	112 x 112	112 x 112	88 x 88	88 x 88	112 x 112	112 x 112	
Length top rail (mm)	-	-	-	-	-	-	-	-	500 - 1,750	500 - 1,750	
Corner requires 2 posts		No	No	No	No	No	No		No	No	
Colour	●	●	●	●	●	●	●	●	●	●	
KICK RAIL	-	-	See page 164	-	See page 164	-	-	-	-	-	

\* Handrails are designed for pedestrian segregation. Use SAFETY BARRIERS for vehicle protection.  
 \*\* Center to center distance between posts





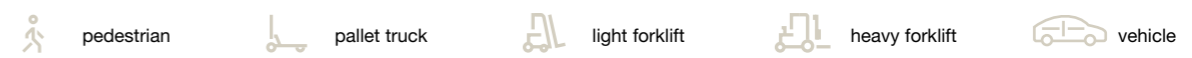
SUITABILITY																				
Corners supported	No	No	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Application																				
	protection from hand pallets with increased height	protection from hand pallets with increased height	robust protection close to ground level	where energy impacts are possible close to ground level	where high energy impacts are possible closer to ground level	where energy impacts are possible with standard wheel arch impact height	where high energy impacts are possible	where energy impacts are possible with standard wheel arch height and reinforced midposts	where high energy impacts are possible, extra reinforced	where very high energy impacts are possible, extra reinforced	where energy impacts are possible closer to ground level with extra pedestrian handrail	where energy impacts are possible with standard wheel arch height and pedestrian handrailing	where high energy impacts are possible closer to ground level and with pedestrian handrailing	where high energy impacts are possible with pedestrian handrailing	where energy impacts are possible closer to ground level with extra fencing protection	where energy impacts are possible closer to ground level with standard wheel arch impact height and extra fencing protection	where energy impacts are possible with standard wheel arch height and reinforced midposts with fencing in mind	where energy impacts are possible closer to ground level with extra pedestrian handrail + stacked goods	where energy impacts are possible with standard wheel arch height and pedestrian handrailing + stacked goods	where high energy impacts are possible + stacked goods

RAILS SET (between 2 posts)

TUBES																				
Impact resistance 90° on tube	5 kJ	5 kJ	21.80 kJ	21.20 kJ	46.50 kJ	20.10 kJ	39.10 kJ	18.30 kJ	50.10 kJ	48.30 kJ	21.20 kJ	20.10 kJ	46.50 kJ	39.10 kJ	21.20 kJ	20.10 kJ	18.30 kJ	21.20 kJ	20.10 kJ	39.10 kJ
N° Tubes	1	2	1	1	2	1	2	1	2	3	1	1	2	2	1	1	1	1	1	2
Diameter (mm)	Ø125	Ø125	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200	Ø200
Standard Length (mm) (CC = Tube + 250 mm)	1,000 2,000	1,000 2,000	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350	650 800 950 1,100	650 800 950 1,100	600 750 900 1,050 1,200 1,350	750 950 1,150 1,350	750 950 1,150 1,350	750 950 1,150 1,350
Tube colours	●●●	●●●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
HANDRAILS																				
N° Rails	-	-	-	-	-	-	-	-	-	-	2	2	1	1	-	-	1	3, 4, 5, 6, 7, 8 or 9	2,3,4,5,7 or 9	2,3,4,5,7 or 9
Height x Width (mm)	-	-	-	-	-	-	-	-	-	-	70x50	70x50	70x50	70x50	-	-	70x50	70x50	70x50	70x50
Rail colours	-	-	-	-	-	-	-	-	-	-	●	●	●	●	-	-	-	●	●	●
FENCES																				
N° Fences	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	-	-	-
Height (mm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,800	1,944	460x(700-1,450) 310x(700-1,450)	-	-	-
Rail colours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	●	●	-	-	-
END POST																				
Height (mm)	200	400	210	310	795	450	795	600	795	1,150	1,150	1,150	1,150	1,150	2,300	2,300	1,150	1,425 - 3,075	1,425 - 3,075	1,700 - 3,350
Width (mm)	-	-	375	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
MID POST																				
Impact resistance 90° on post	3 kJ	3 kJ	9 kJ	11.95 kJ	39.80 kJ	16.10 kJ	30.70 kJ	13.50 kJ	41.90 kJ	44.50 kJ	11.95 kJ	16.10 kJ	39.80 kJ	30.70 kJ	11.95 kJ	16.10 kJ	13.50 kJ	11.95 kJ	16.10 kJ	30.70 kJ
Height (mm)	-	-	-	260	750	400	750	560	750	1,150	1,150	1,150	1,150	1,150	2,300	2,300	1,150	1,425 - 3,075	1,425 - 3,075	1,700 - 3,350
Width (mm)	-	-	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250



	BO125L	BO170B	BO200R	BO200F	BO250T	BO125L EV	BO145L EV	BO BELT	BO LED
<b>SUITABILITY</b>									
Application	Bollard to protect gates, access ways, corners, building facades, loading platforms and machines from collision involving minor impact risk	Ideal for situations with a moderate risk of collisions	Bollard designed to combine with other FLEX IMPACT® safety products, allowing for numerous configurations	A very effective solution to protect doors, entrances, corners and machinery from heavy impacts	The world's strongest polymer protective post	Bollard to protect charging stations from collisions with vehicles	Bollard to protect charging stations from collisions with vehicles. Installed in concrete by means of a rubber sleeve	Bollard with an integrated and easy-to-use belt system to close off areas quickly	Where you load or unload goods in poorly lit environments
Compliance	-	PAS13 & UNI TS 11886	PAS13 & UNI TS 11886	PAS13	-	-	-	-	-
Certification	-	TÜV NORD	TÜV NORD	TÜV NORD	-	-	-	-	-
<b>POST</b>									
Impact resistance	2.50 kJ	7.50 kJ	10.20 kJ	16 kJ	24.10 kJ	0.50 kJ	2 kJ	10.20 kJ	3 kJ
Diameter (mm)	Ø125	Ø168	Ø200	Ø200	Ø250	Ø125	Ø145	Ø200	Ø200
Standard Height (mm)	450 750 1,000	450 750 1,000 1,200	450 600 750 1,000 1,200	750 1,000 1,200	1,000 1,200	750 1,000	750 1,000	1,200	1,200
Custom Height (mm)	451 - 1,000	-	1,201 - 1,525 1,600 - 2,000 2,100 - 2,500	1,201 - 1,525 1,600 - 2,000 2,100 - 2,500	1,201 - 1,525 1,600 - 2,000 2,100 - 2,500	-	-	-	-
Stripes	0 - 1	0 - 2	0 - 3	0 - 3	0 - 3	0 - 1	0 - 1	-	-
Available colours	● ●	● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ○ ●	● ○ ●	●	●
<b>LED</b>									
Lights	-	-	-	-	-	-	-	-	5
Temperature (K)	-	-	-	-	-	-	-	-	6,500
Light intensity (lm)	-	-	-	-	-	-	-	-	600
Power (W)	-	-	-	-	-	-	-	-	16
Tension (V)	-	-	-	-	-	-	-	-	220
<b>BELT</b>									
Max. length belt (mm)	-	-	-	-	-	-	-	5,000	-
<b>ACCESSORIES</b>									
<b>ROTOR</b>									
Height (mm)	-	500 - 1,200	170 400 555 805 1,005 160 - 400 500 - 1,200	170 400 555 805 1,005 160 - 400 500 - 1,200	-	-	-	-	-
Inner diameter (mm)	-	Ø178	Ø203	Ø203	-	-	-	-	-
Outer diameter (mm)	-	Ø200	Ø225	Ø225	-	-	-	-	-





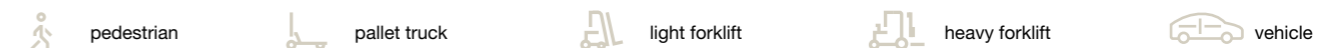
	<b>GP GOAL POST 200B</b>	<b>GP GOAL POST 250R</b>	<b>TOUCH BARRIER</b>
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SUITABILITY			
Application	doorway opening protection and height restriction	increased doorway opening protection and height restriction	-
POST			
Impact resistance	<b>7.5 kJ</b>	<b>10 kJ</b>	-
Diameter (mm)	Ø200	Ø250	Ø125
Custom Height (mm)	inner height 2,000 - 3,000 3,001 - 4,000	inner height 2,000 - 3,000 3,001 - 4,000 4,001 - 6,000	-
Diameter horizontal tube (mm)	Ø145	Ø200	-
Inner width horizontal post (mm)	1,800 - 2,500 2,501 - 4,000	1,800 - 2,500 2,501 - 4,000 4,001 - 6,000	-
For inner length (mm)	-	-	1,800 - 2,500 2,501 - 4,000
Colour	●	●	●
ACCESSORIES			
WALL FIX			
Colour	-	●	-



	<b>RACKBULL® L</b>	<b>RACKBULL® XL</b>	<b>RE RACK END</b>	<b>RE RACK END WITH SUPPORT</b>
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SUITABILITY				
Application	rack upright protection during placement and retrieval of pallets	rack upright protection during placement and retrieval of pallets	protection of ends of racking aisles	rack upright protection during placement and retrieval of pallets
Compliance	DIN EN 15512:2010-09, Chapter 6.4.1	DIN EN 16635:2009-08, Chapter 9.5.1		
RAILS SET (between 2 posts)				
Impact resistance	-	-	<b>8.50 kJ</b>	<b>8.50 kJ</b>
N° Rails	-	-	2	2
Height x Width (mm)	-	-	88 x 88	88 x 88
Standard Length (mm)*	-	-	1100 1200 2200 2400 2500	-
Custom Length (mm)	-	-	750 - 2500	2,501 - 3,200
Colour(s)	●	●	●	●
PRODUCT / POST				
Impact resistance	<b>400 J</b>	<b>400 J</b>	<b>3 kJ</b>	<b>3 kJ</b>
Height (mm)	600	600	530	530
Width (mm)	-	-	Ø200	Ø200
Rotor	-	-	optional	optional
Support	-	-	optional	included
RACK LEG				
Width (mm)	75 - 110	75 - 110	-	-
Depth (mm)	35 - 45	50 - 80	-	-
ACCESSORIES				
Installation kit	optional	optional	-	-
Dust cap	optional	optional	-	-
Foam impact	optional	optional	-	-





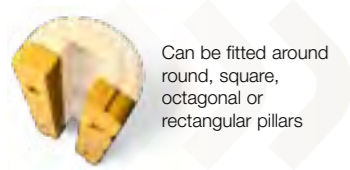
	SINGLE AXES GATE	DOUBLE AXES GATE	SG SWING GATE	SG SLIDING GATE	SG DROP GATE	BB BELT BARRIER	DG250R	DG250R AE	DG250F
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SUITABILITY									
Application	Indoor & outdoor ground level only	Fall protection Indoor & outdoor at heights	with sufficient freedom of movement, ground level only Swings 2-ways**	with very limited freedom of movement, ground level only sideways	with limited freedom of movement, ground level only upwards	temporary close access point, ground level only	Fall protection system and impact-resistant barrier for loading zones upwards	Fall protection system and impact-resistant barrier for loading zones upwards / motorized	Fall protection system and impact-resistant barrier for loading zones upwards
Opening	sideways	sideways	Swings 2-ways**	sideways	upwards	sideways	upwards	upwards / motorized	upwards
Closes automatically				No	No		No	No	No
Compliance	DIN EN ISO 14122-3 chapter 8.2	DIN EN ISO 14122-3 chapter 8.2	-	-	-	-	PAS13	PAS13	PAS13 & UNI TS 11886
Certification	TÜV NORD	TÜV NORD	-	-	-	-	-	-	TÜV NORD
Rails	1	2	-	-	-	-	2	2	2
Colours									
POST									
Impact resistance	-	-	-	-	-	-	10.2 kJ	10.2 kJ	16 kJ
N° Posts included	-	-	0	2	0	0	2	2	2
Width x Depth (mm)	-	-	-	110 x 110	-	-	-	-	-
Height (mm)	-	-	-	1,100	-	-	1,227	1,227	1,227
Diameter (mm)	-	-	-	-	-	-	Ø250	Ø250	Ø250
GATE									
Impact resistance bars	-	-	Gates are designed for pedestrian segregation. Use SAFETY BARRIERS for vehicle protection				10.2 kJ	10.2 kJ	16 kJ
Height (mm)	275	609	620	1,150	590	145 @ 5m length 167 @ 10m length	1,150	1,150	1,150
Standard Length (mm) between posts	870 1,130	500 870 950 1,130	700 800 900 1,000 1,250 1,500 2,000*	1,000 1,500 2,000	1,000 1,500	5,000 10,000	1,800 - 3,000	1,800 - 3,000	1,800 - 3,660
Custom Length (mm)	500 - 1,129	690 - 1,129	701 - 1,999	500 - 1,999	500 - 1,499	-	-	-	-
Gate Stop	-	-	included**	-	included	included	-	-	-
ACCESSORIES									
Magnetic lock (pullpower)	16 kg	16 kg	-	-	-	-	-	-	-
Safety knob (black rubber)			-	-	-	-	-	-	-
End cap (black aluminium)	-		-	-	-	-	-	-	-
Sign board	-	250 x 385 mm	included	-	-	-	-	-	-

\* Wheelsupport (included) for SG Swing Gate
 \*\* use gate stop for one-way swing.
 \*\*\* at 90° opening angle gate stays in the open position, unless it has an (included) push back block.
 pedestrian
 pallet truck
 light forklift
 heavy forklift
 vehicle

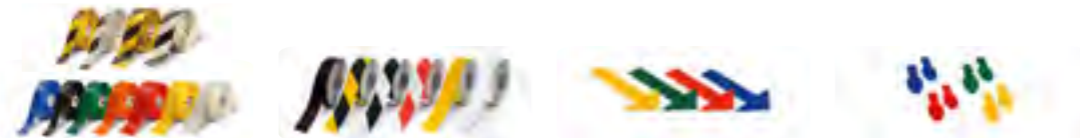


	FLIP120L	FLIP120L M	FLIP180B	FLIP180L M	FLIP200F	FLIP200F PLUS
<b>SUITABILITY</b>						
<b>Impact resistance</b>	4.2 kJ	2.60 kJ	8.1 kJ	3.50 kJ	17 kJ	15.20 kJ
Modular	No	✓	No	✓	No	✓
Application	 Wheel guides, wall & pedestrian protection from ground level impacts as a part of a BOPLAN traffic barrier system			 Wheel guides, wall & pedestrian protection from ground level impacts as a part of a BOPLAN traffic barrier system		
Width (mm)	120	120	150	150	175	175
Height (mm)	120	120	180	180	205	205 - 1,150
Standard Length (mm)	500 - 1,000 - 2,000 - 3,000	400 - 600 - 800 - 1,000 - 1,200 1,400 - 1,600 - 1,800	500 - 750 - 950 - 1,000 - 1,150 - 1,350 1,550 - 1,750 - 2,000 - 3,000	700 - 800 - 900 - 1,000 - 1,100 - 1,200 - 1,300 1,400 - 1,500 - 1,600 - 1,700 - 1,800 - 1,900 - 2,000	500 - 750 - 950 - 1,000 - 1,150 - 1,350 1,550 - 1,750 - 2,000 - 3,000	750 - 950 - 1,150 - 1,350 - 1,550 - 1,750
Custom Length (mm)	550 - 2,999	300 - 1,799	550 - 2,999	300 - 1,999	550 - 2,999	600 - 1,749
Colours	●●	●●	●●	●●	●●	●●
Rails	-	-	-	-	-	available with 2 or 3 rails



	KP 100	KP 150	KP 200 H500	KP 200	KP 300 H500	KP 300	KP 400	KP 500	KP 600	CP UNIVERSAL	CP CORNER PROTECTOR	SOFT COLUMN COVER
<b>SUITABILITY</b>												
Application	 Protect columns from damage of glancing vehicles. The concentrated local impact of the vehicle is spread out over the constructive element.									 Protect columns from damage of glancing vehicles	 Protect wall corners from damage of glancing vehicles	 Protect columns from collisions with small rolling stock and prevent people from being injured
<b>PROTECTOR COMPLETE</b>												
<b>Impact resistance</b>	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	2.20 kJ	0.50 kJ	-
Inner dimensions (mm) (straight & rotation)	105 x 100 (80 x 80)	155 x 155 (120 x 120)	210 x 210 (155 x 155)	210 x 210 (155 x 155)	310 x 310 (255 x 255)	310 x 310 (255 x 255)	410 x 410	510 x 510 (405 x 405)	610 x 610	200 to 1,000 (adjustable range)	-	100 - 150 - 200
Outer dimensions (mm)	Ø450	Ø450	Ø520	Ø520	Ø620	Ø620	Ø830	Ø930	Ø1,035	Inner dimension + 240 mm	120 x 120	200 - 250 - 300
Height (mm)	1,100	1,100	500	1,100	500	1,100	1,100	1,100	1,100	1,100	1,000	1,100 - 1,800
For corners	-	-	-	-	-	-	-	-	-	-	90°	-
<b>PROTECTOR HALF</b>												
Inner dimensions (mm)	105 x 53	155 x 77	210 x 105	210 x 105	310 x 155	310 x 155	410 x 205	510 x 260	610 x 305	-	-	-
<b>COLOUR</b>												
Colour	●	●	●●	●	●●	●	●	●	●	●	●●	●●●●
<b>FIXATION</b>												
Straps	2	2	1	3	1	3	3	3	3	-	-	1
Screws	optional	optional	optional	optional	optional	optional	optional	optional	optional	12	6	-
Extension (mm)	+100	+100	+100	+100	+100	+100	+100	+100	+100	-	-	-

## TECHNICAL INFORMATION LINE PLAN



	LINE PLAN UNI / CROSS	LINE PLAN ANTISLIP	LINE PLAN ARROW	LINE PLAN FOOT
<b>SUITABILITY</b>				
Application	Indoor use only	Indoor use only	Indoor use only	Indoor use only
Beveled edges	✓	No	No	No
Thickness (mm)	1,0	1,0	1,0	1,0
Width x Length	50 mm x 30 m 75 mm x 30 m 100 mm x 30 m	50 mm x 18 m	150 mm x 250 mm	90 mm x 240 mm
Colour	yellow red white blue green black orange	yellow black photoluminescent white	yellow	yellow red blue green
Center line	white on red (*) black on yellow (*) photoluminescent on yellow (*)	-	-	photoluminescent on yellow
Cross	yellow / black white / black	yellow / black photoluminescent white / black red / white	-	-



	LINE PLAN L / T	LINE PLAN DOT	LINE PLAN PICTO	LINE PLAN PICTO
<b>SUITABILITY</b>				
Application	Indoor use only	Indoor use only	Indoor use only	Indoor use only
Beveled edges	No	No	No	No
Thickness (mm)	1	1	0,3	0,3
Width x Length	50 mm x 150 mm	Ø 90 mm	Ø 430 mm	800 mm x 120 mm
Colour	yellow red blue green	yellow red blue green	yellow / white / black	yellow / white / black

\* only in 100 mm x 30 m.

## TECHNICAL INFORMATION FIXATIONS

We supply fixations with all safety barriers, bollards and handrail systems. Various types of fixations are used. We only work with fixations from premium suppliers and all fixations are ETA-tested (European Technical Assessment). This ensures that the specified performance values are always achieved.

**Below is an overview of our standard fixations:** alternative options are available depending on specific requirements. Our safety experts will help you choose the most suitable type of fixation for your project.

CATEGORY	TYPE	MATERIAL	FEATURES
Concrete screws		Zinc-coated Stainless steel	Strong grip in concrete Quick installation Reusable
Expansion anchors		Zinc-coated Stainless steel	Easy installation Good load distribution Robust solution Countersunk head possible
Chemical anchors		Zinc-coated Stainless steel	Ideal for the food industry Ideal for limited drilling depth Resistant to extreme conditions
Asphalt anchors		Stainless steel	For asphalt applications

## BOPLAN IMPACT CALCULATOR

With the Boplan Impact Calculator, you can accurately calculate the required impact resistance for your safety solutions. This powerful tool is easy to use and allows you to make informed decisions with just a few clicks.

Enter specific parameters related to your workspace to instantly receive recommendations on the most suitable models and strength levels of safety barriers to avoid accidents and protect valuable assets.





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