# Axelent
# **Impact protection**

**AXELENT**

# A new way of preventing damage in industrial environments

How often have you experienced the following? A forklift goes astray and is stopped by a steel bollard, safety rail or bracket. Unfortunately, the collision damages the steel bollard. As well as the concrete floor, the forklift and the goods. Moreover, the operator is injured.

Surely things don't have to be like this?

Imagine if you could replace those heavy-duty collision guards with a set of solutions designed to absorb impacts and avert collisions while also reducing your maintenance costs?

Well, these solutions already exist. And they're available at Axelent.

# Axelent Group

The Axelent Group has grown into an international group of companies with a total workforce of over 200 people. Our products are sold in 60 countries and our vision is to keep on expanding.

Axelent Group consists of four companies; Axelent, Axelent Engineering, Axelent Software and Axelent Safe-X. The four companies have a joint vision of making industry competitive and profitable through automation, safety, rational procedures, functions and expertise. All companies are in the growth stage, developing their businesses on both the Swedish and international markets.

## AXELENT AB

Axelent AB, a leading manufacturer and global supplier of mesh panel systems for machine guarding and partitioning within industry, warehousing and lost prevention. The head office is located in Hillerstorp, Sweden, along with research and development, production, storage and packaging. Axelent has sales offices in 60 countries and subsidiaries in more than 10 countries.

**www.axelent.com**

## AXELENT ENGINEERING

Axelent Engineering AB provides services and products within automation predominantly to producing industry in Scandinavia. The core business is custom hardware and robotic solutions with an emphasis on profitable flow for the entire lifecycle. By partnering with Dassault Systèmes, a world leader in 3D and PLM (Product Lifecycle Management) solutions we can also offer PLM services and products such as CATIA, 3DVIA, DELMIA and ENOVIA. This combination makes Axelent Engineering an even more complete partner for the industry in terms of innovative and profitable flows.

**www.axelentengineering.com**

## AXELENT SOFTWARE

Axelent Software develops and markets user licences for their in-house software applications SnapperWorks and SafetyWorks. The programs are based on distributed platforms and standards that ensure a long length of life, continuous development and easy connectivity to other systems. Axelent Software's products are based on simplicity and ease of use and is in its original version developed for Axelent's products, but through various customizations applicable in most industries with standardized products.

**www.axelentsoftware.com**

## AXELENT SAFE-X

Axelent Safe-X offers a range of products for construction, outdoor environments, industry, warehouse and workplace. Examples of products are store room walls, bicycle racks, paper baskets, ramps, mesh shelves and impact protection. Axelent Safe-X products can be found under Axelent's X-Tra range, including products from well-known brands.

**www.axelentsafex.se**

# FlexCore® Bollard
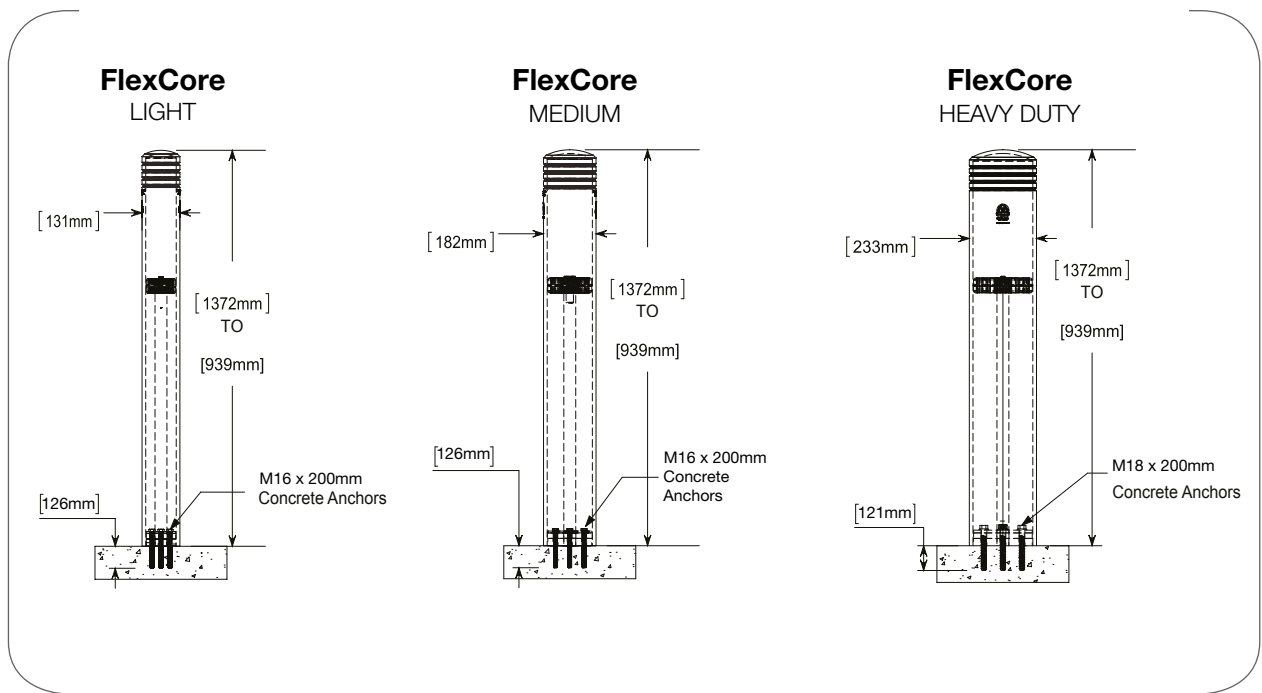
## Surface-Mounted, Shock-Absorbing Bollard



## 4 layers of impact energy absorption for superior performance

**1** Cover rotates to eliminate snags & catching points; absorbs minor impacts & transfers energy to the core ensuring safety

**2** Load ring compresses before transferring remaining impact energy to high tensile steel core

**3** Polyurethane damper relieves stress seen by anchors saving your concrete floor

**4** High tensile steel core assembly flexes upon contact—absorbs & distributes impact energy



Shock-absorbing design—no dents, no need to repaint.

U.S. Patent Number:
7901156

## FlexCore
### LIGHT

[131mm]

[1372mm]
TO
[939mm]

[126mm]

M16 x 200mm
Concrete Anchors

## FlexCore
### MEDIUM

[182mm]

[1372mm]
TO
[939mm]

[126mm]

M16 x 200mm
Concrete Anchors

## FlexCore
### HEAVY DUTY

[233mm]

[1372mm]
TO
[939mm]

[121mm]

M18 x 200mm
Concrete Anchors

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### FlexCore Light Bollard

M011-137-013

Materials: 131mm diameter HDPE shell,
steel core, anchor kit

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### FlexCore Medium Bollard

M011-137-018

Materials: 182mm diameter HDPE shell,
steel core, anchor kit

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### FlexCore Heavy duty Bollard

M011-137-023

Materials: 233mm diameter HDPE shell
steel core, anchor kit

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### Colours

Yellow
RAL 1033

# Deflector Post

Floor-Mounted, Impact Deflecting Post



## Rotating design deflects damage in high traffic environments

Rotating HDPE shell with nylon bearings spins & rolls when impacted

Domed shell provides a sanitary top eliminating dust & bacteria collecting areas

Ductile Iron & rubber core absorbs direct impacts, preventing damage to your floor and equipment

Engineered to install fast & requires no maintenance, keeping your facility safe

M16 x 200mm
Concrete Anchors



⌀176mm

500mm
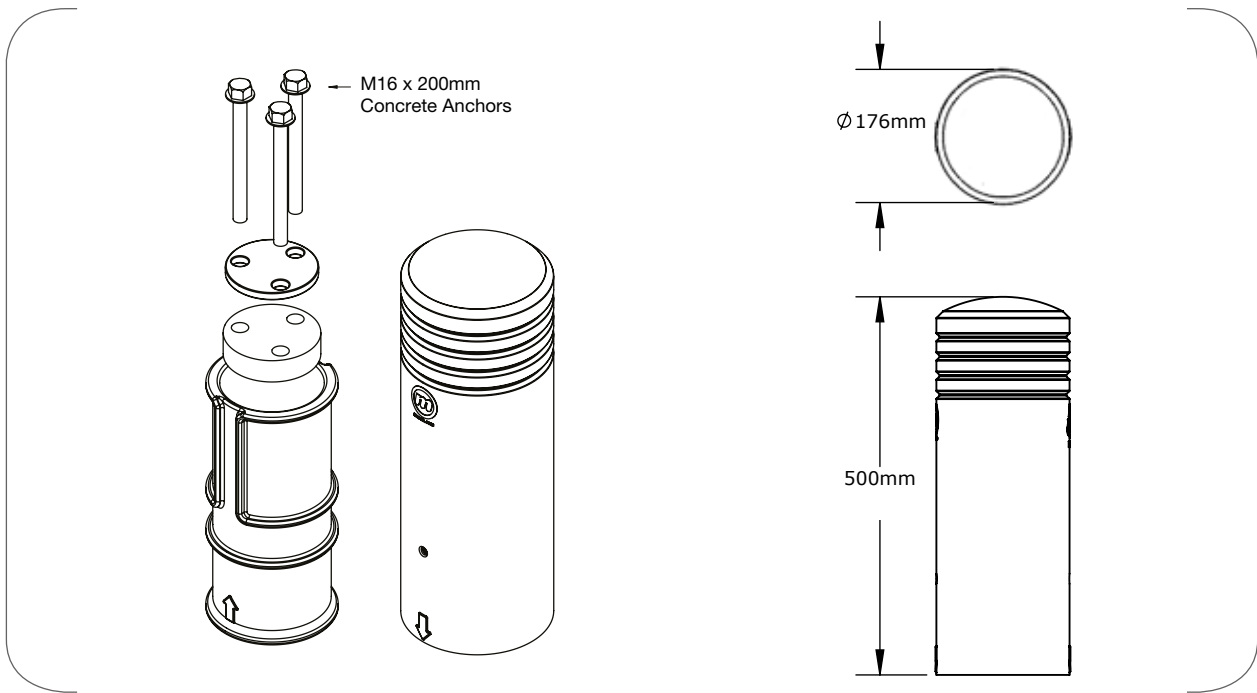
## Deflector Post

M011-050-018

Materials: HDPE shell, iron core,
rubber damper, anchor kit

## Colours

Yellow
RAL 1033



Guides your equipment around high
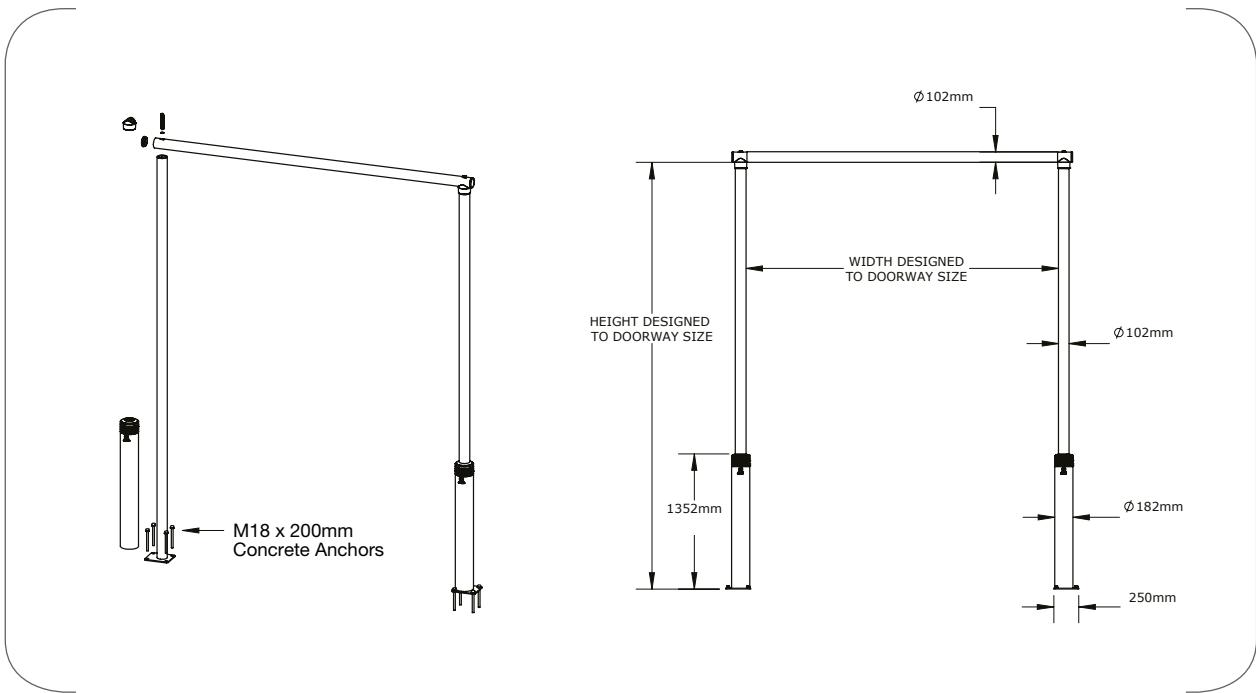traffic corners to avoid damage.

# Goal Post

Door Frame Protection



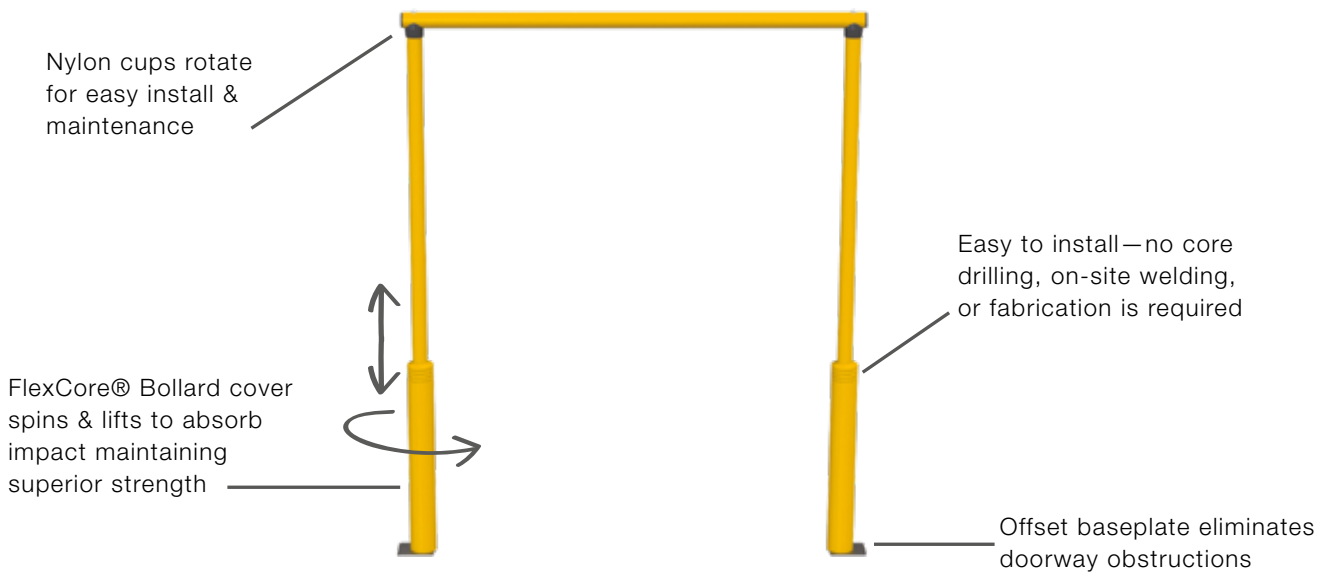## The only goal post system with a replaceable crossbar



Non-welded top allows for easy handling & modular replacement

Patented nylon cup assembly allow uprights & cross bars to be installed independently; less rigging equipment is required allowing for safer and faster installation
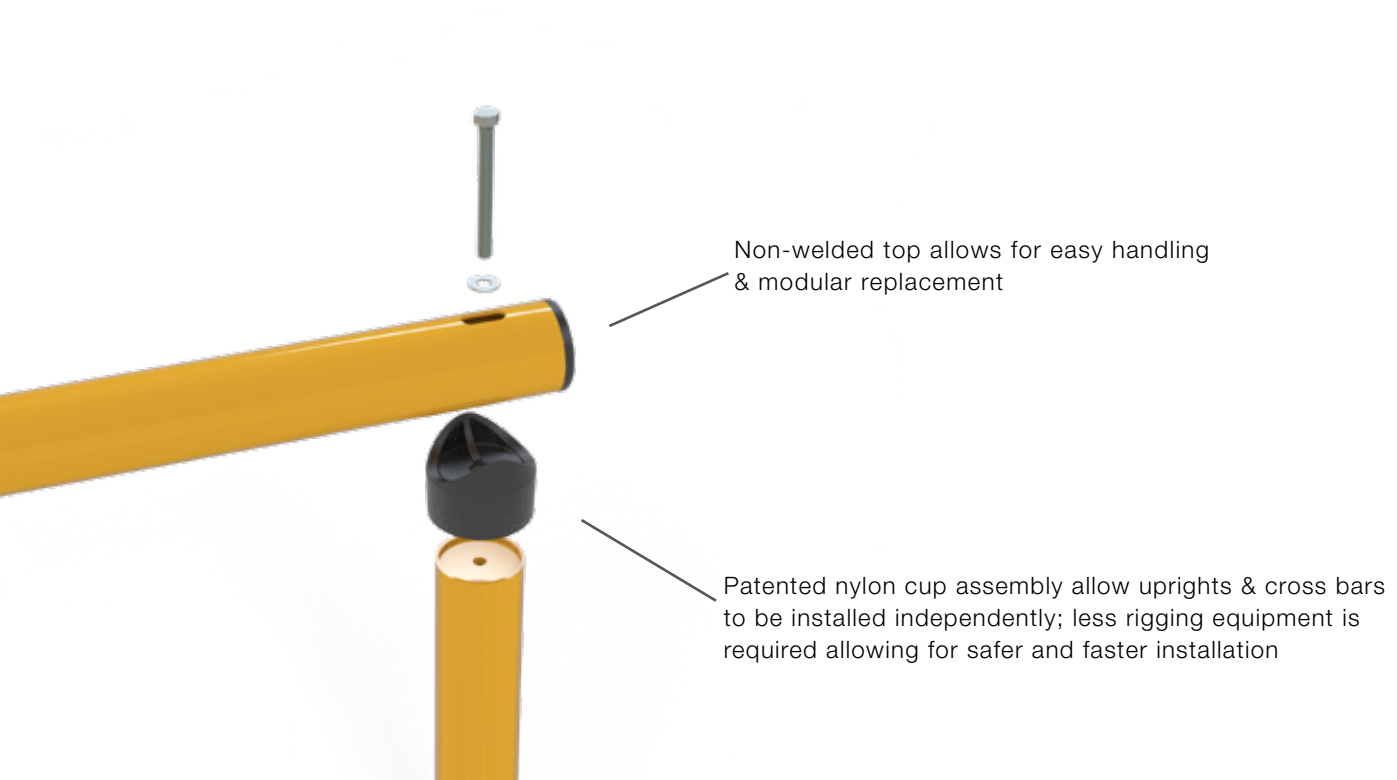
U.S. Patent Number:
9103163

Ø102mm

WIDTH DESIGNED
TO DOORWAY SIZE

HEIGHT DESIGNED
TO DOORWAY SIZE

Ø102mm

1352mm

Ø182mm

M18 x 200mm
Concrete Anchors

250mm

## Goal Post Kits

Materials: HDPE shells, HDPE sleeves, steel tubing, nylon cups, anchor kit

How to order: Sizes vary. Width ranging from 2.4 m to 4.9 and heights ranging from 2.4 m to 4.9 m.

## Colours

Yellow
RAL 1033

Nylon cups rotate
for easy install &
maintenance

FlexCore® Bollard cover
spins & lifts to absorb
impact maintaining
superior strength

Easy to install—no core
drilling, on-site welding,
or fabrication is required

Offset baseplate eliminates
doorway obstructions

# Pedestrian Barrier System

Pedestrian Safety Railing



## Shock-absorbing, modular barrier system, protects your people and facility

Shock-diffusing posts

Internal hardware eliminates catching & tripping points maintaining a seamless finish
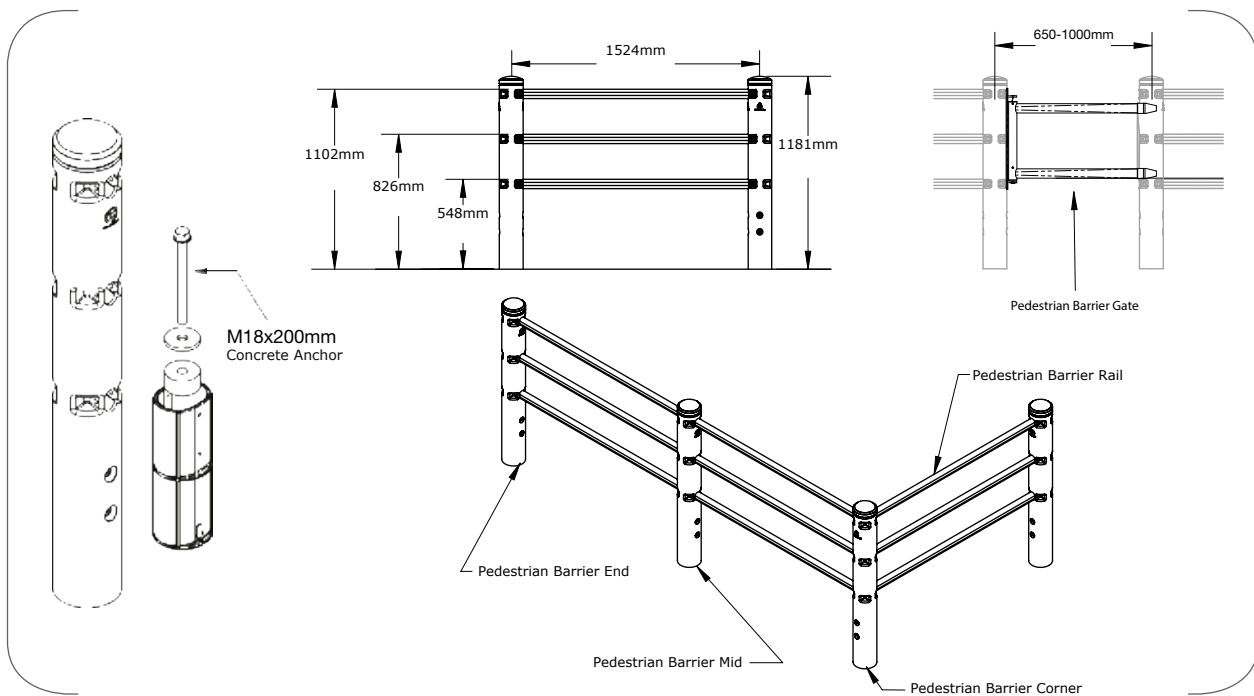


Polyolefin rails absorb impact energy
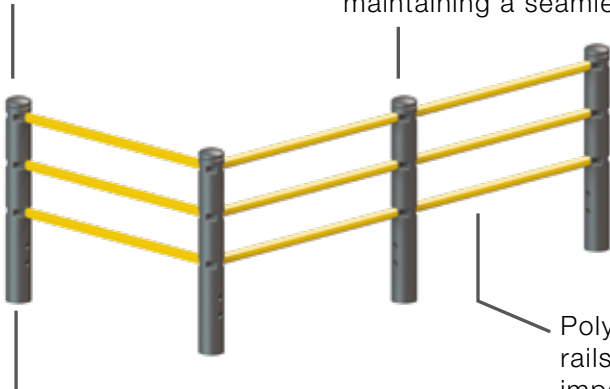
Ductile Iron core is paired with an industrial rubber damper that provides a shock-diffusing rigidity

Conforms to OSHA Standard 1910.23 for guarding floor and wall openings with railing and to IBC Standard 1012 regarding handrails, including section 1012.3 concerning the ability to grasp handrails.

Patent Pending

Figure labels:
- M18x200mm Concrete Anchor
- 1524mm
- 1102mm
- 826mm
- 548mm
- 1181mm
- 650-1000mm
- Pedestrian Barrier Gate
- Pedestrian Barrier Rail
- Pedestrian Barrier End
- Pedestrian Barrier Mid
- Pedestrian Barrier Corner

## Pedestrian Posts

M033-118-014E  (End)
M033-118-014M  (Middle)
M033-118-014C  (Corner)

Materials: HDPE shell Post, Ductile Iron core, rubber damper, anchor kit

## Pedestrian Rail

M021-000-150

Material: Polyolefin, 1.5 m length

## Pedestrian Barrier Gate

M033-041-100RL

Materials: Polypropylene rails, nylon cam, steel hinge & latch. Mounting hardware included. Post not included.

## Colours

Yellow
RAL 1033

Black
RAL 9004

# Pedestrian Barrier System with Crash Barrier

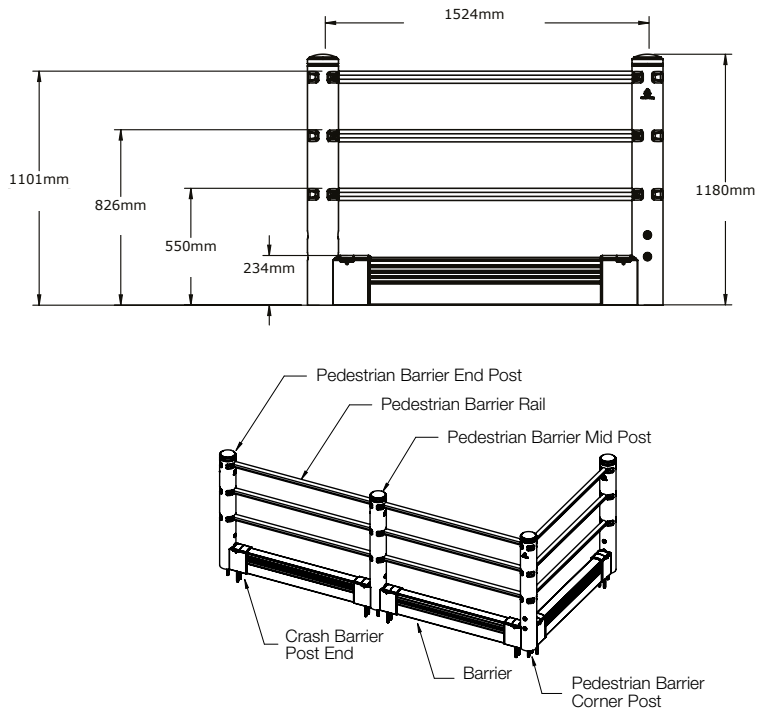Pedestrian Safety Railing With Floor-Mounted Barrier System



**Pedestrian Barrier integrated with Crash Barrier System to provide an extra level of protection**



Provides uncoupled installation so the Crash Barrier can be added to any Pedestrian Barrier run, allowing flexibility in designing your space
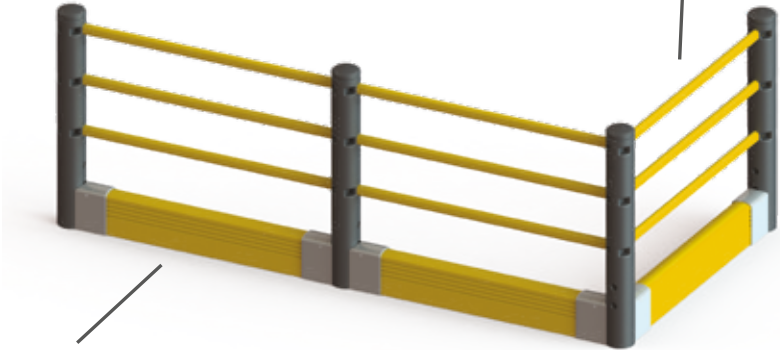
Increases employee safety by providing protection from low forks & pallets

Patent Pending

Dimensions:
- 1524mm
- 1101mm
- 826mm
- 550mm
- 234mm
- 1180mm

Labels:
- Pedestrian Barrier End Post
- Pedestrian Barrier Rail
- Pedestrian Barrier Mid Post
- Crash Barrier Post End
- Barrier
- Pedestrian Barrier Corner Post

## Crash Barrier Post End

M046-000-000F

Materials: Ductile Iron post end &
cap, rubber damper, anchor kit

## Barrier

M021-023-300

Material: Polyolefin
Cut to length per 1.5 m assembly

Our fully modular system can
incorporate Crash Barrier or a
gate to help keep employees
safe.

## Colours

Yellow
RAL 1033

Black
RAL 9004

# FlexCore GuardRail

Guardrail Safety Barrier



## A flexible guardrail system with impact-absorbing uprights

Eliminate the need for scraping, painting and repainting
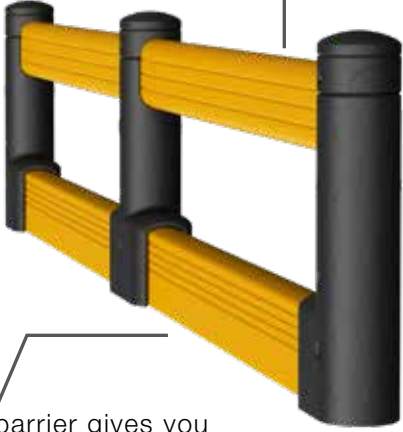
Ground-level barrier gives you complete protection

Modular design with hidden hardware



Our easily installed barrier system is designed for areas that need an extra level of protection

Patent Pending

Dimensions shown: 3048mm (Standard Length), 843mm, 182mm, 766mm, 564mm, 225mm, 270mm

Labels: Upper Rail, Mid Post, End Post, Upper Corner Rail, Corner Post, Lower Barrier
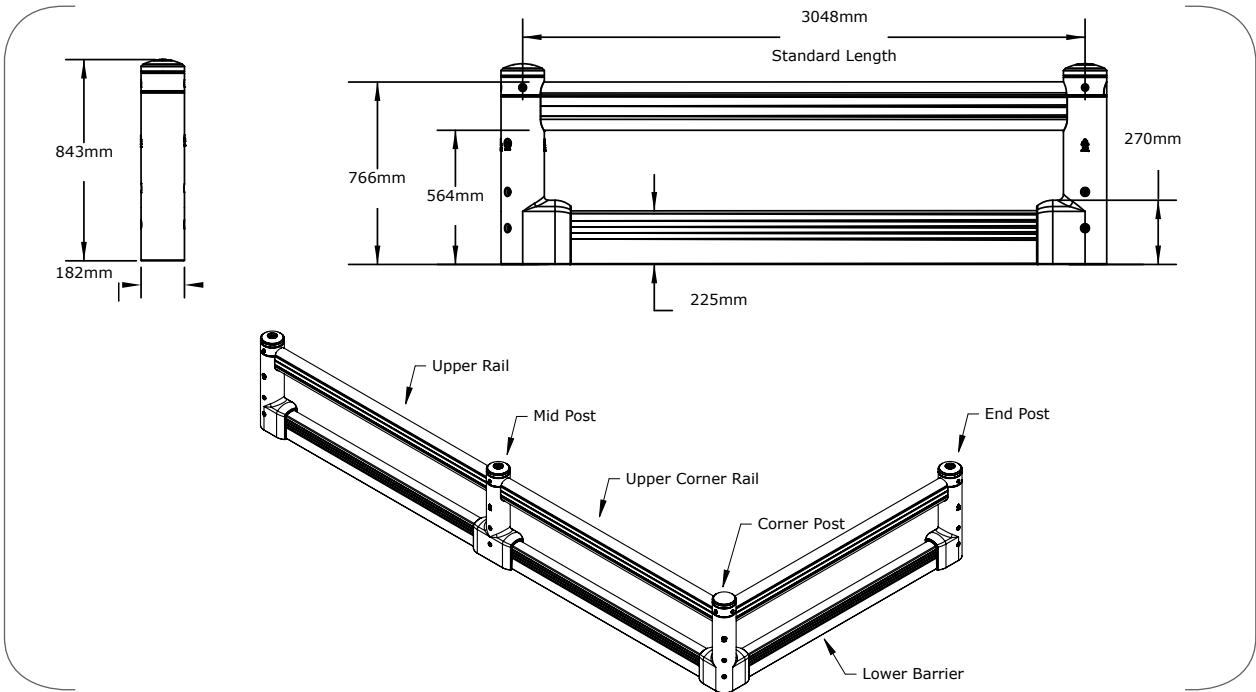
## End Post

M033-084-018E

Hardware included

## Mid Post

M033-084-018M

Hardware included

## 3 m Upper Rail

M021-023-300T

Material: Polyolefin Copolymer

## 3 m Lower Barrier

M021-023-300B

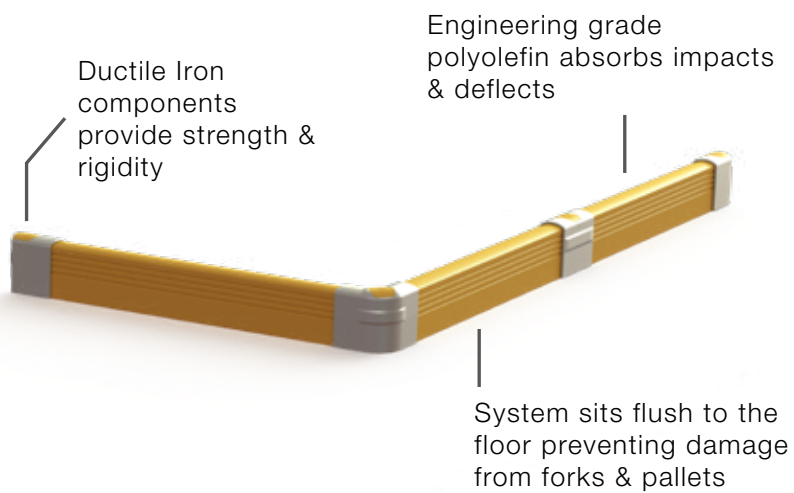Material: Polyolefin Copolymer

## Colours

Yellow
RAL 1033

Black
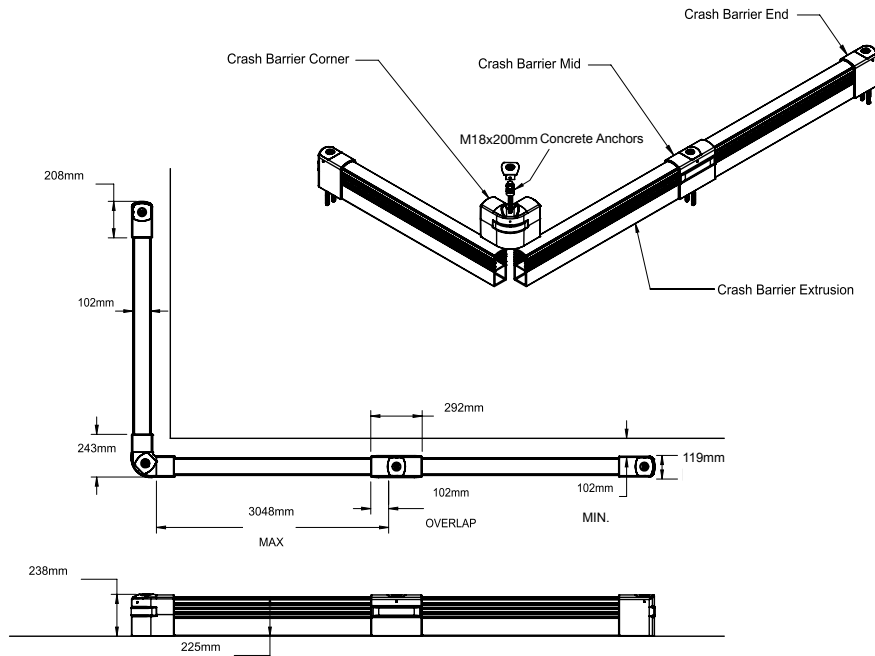RAL 9004

# Crash Barrier System

Floor-Mounted Barrier System



**No more angle iron!**
**Protect your perimeter, racks, columns and define spaces safely**

Ductile Iron components provide strength & rigidity

Engineering grade polyolefin absorbs impacts & deflects



System sits flush to the floor preventing damage from forks & pallets
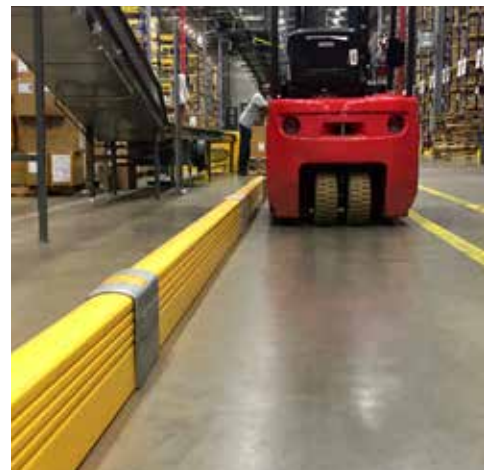
No need to repaint, the outer shell color is consistent throughout. Horizontal ribs mask abrasions.

Patent Pending

Crash Barrier End
Crash Barrier Corner
Crash Barrier Mid
M18x200mm Concrete Anchors
Crash Barrier Extrusion

208mm
102mm
243mm
238mm
225mm
292mm
102mm
3048mm
OVERLAP
MAX
102mm
MIN.
119mm

## Crash Barrier End

M046-000-000E   (End)
M046-000-000M  (Middle)
M046-000-000C  (Corner)

Materials: Ductile Iron, rubber
damper, anchor kit

## Barrier

M021-023-300

Material: Polyolefin 3 m length
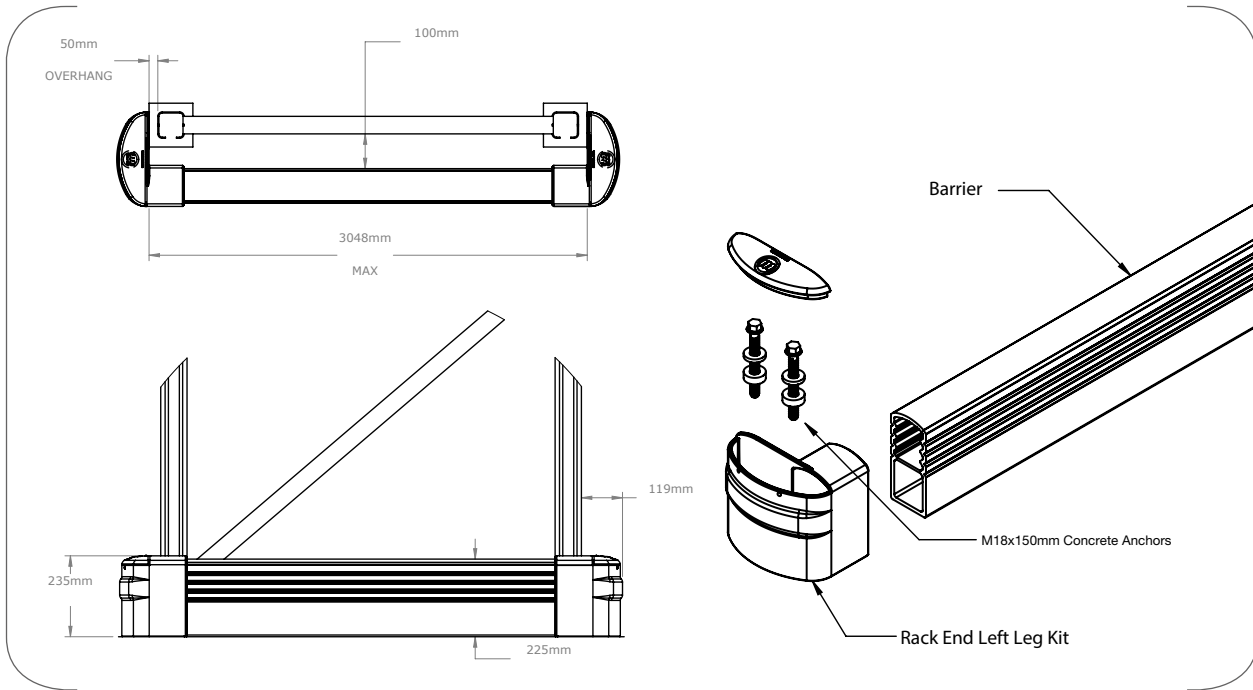
## Colours

Yellow
RAL 1033

# Rack End Protector
High Visibility Rack End Protection



## Absorbs impacts in the middle . . . Deflects impacts on the ends



Half round Ductile Iron ends protect the vulnerable first racking upright by promoting glancing blows & provides maximum strength

Internal hardware provides a smooth surface, greater strength & longevity and prevents equipment snag points

Length can be customized to fit any racking frame

Patent Pending

50mm
OVERHANG
100mm
3048mm
MAX

119mm
235mm
225mm

Barrier
M18x150mm Concrete Anchors
Rack End Left Leg Kit

## Rack End Left Leg

M046-000-000L (Left)
M046-000-000R  (Right)

Materials: Ductile Iron leg & cap,
Rack End, rubber damper, anchor kit

## Barrier

M021-023-300

Material: Polyolefin, 3 m length



Shock absorbing barrier absorbs impacts perpendicular to the rack end.
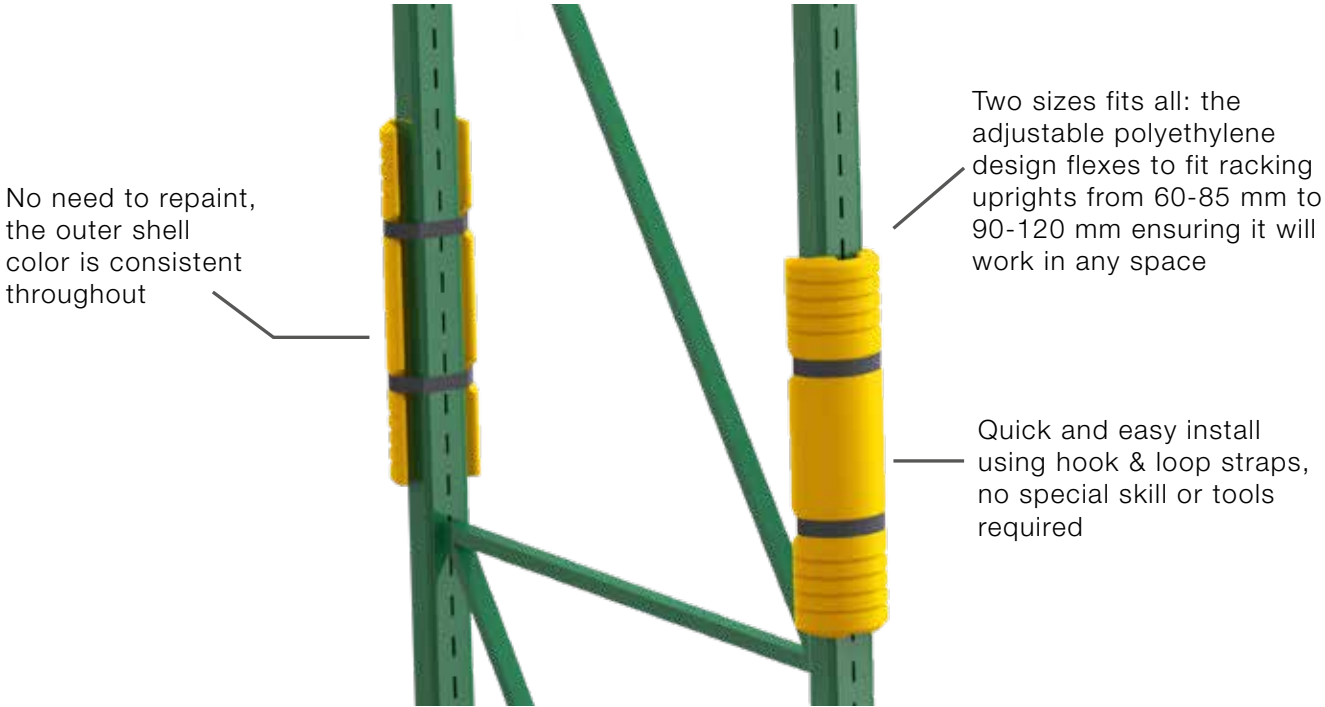
## Colours
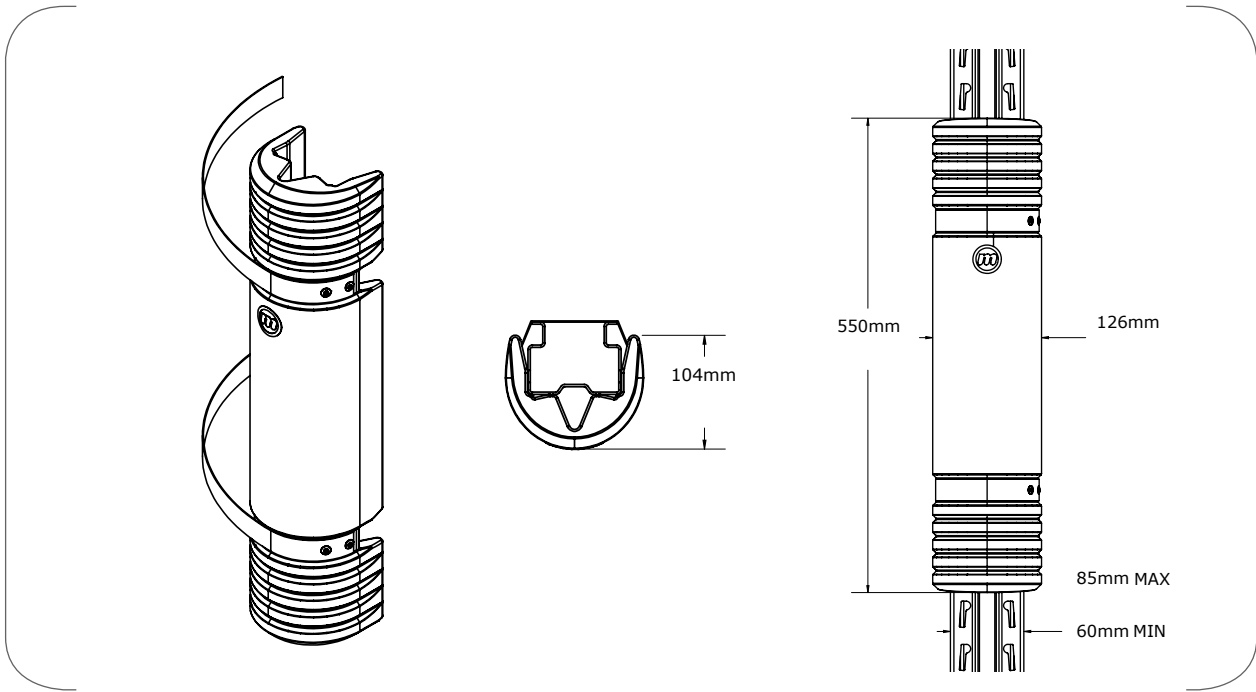
Yellow
RAL 1033

# Rack Mounted Guard

Strap-On Impact Protection for Racking



## Flexible solution to protect your racking and its contents



No need to repaint, the outer shell color is consistent throughout

Two sizes fits all: the adjustable polyethylene design flexes to fit racking uprights from 60-85 mm to 90-120 mm ensuring it will work in any space

Quick and easy install using hook & loop straps, no special skill or tools required

Patent Pending

104mm

550mm

126mm

85mm MAX

60mm MIN

**Rack Mounted Guard Kit**

M081-055-010 (60-85 mm)
M081-055-012 (90-120 mm)

Materials: Polyethylene body, hook
& loop straps

## Colours

Yellow
RAL 1033



Rack Mounted Guard
exceeded impact
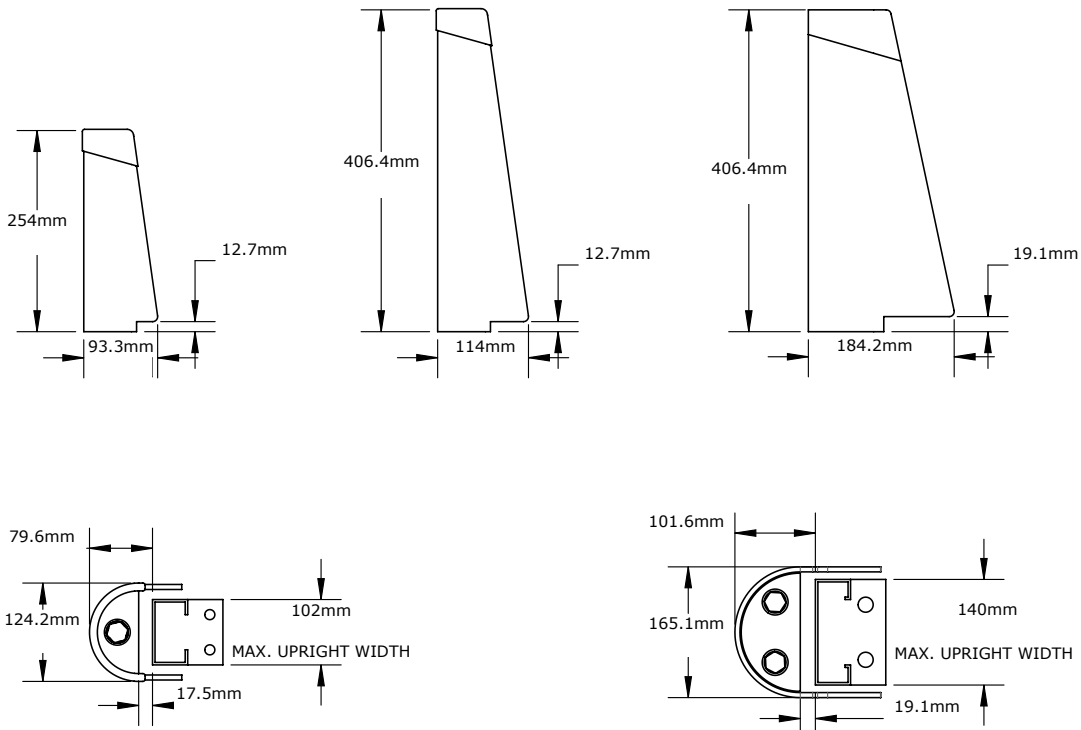requirements of EN 15512.

# Shock-Absorbing Rack Guard

Pallet Rack Upright Protection



## Heavy duty performance:  Absorbs the impact energy so your racks and concrete don't

Rubber damper absorbs impact instead of transferring it to the racking or concrete

Highly visible, half-round design

Offset sides fit over rack base panels
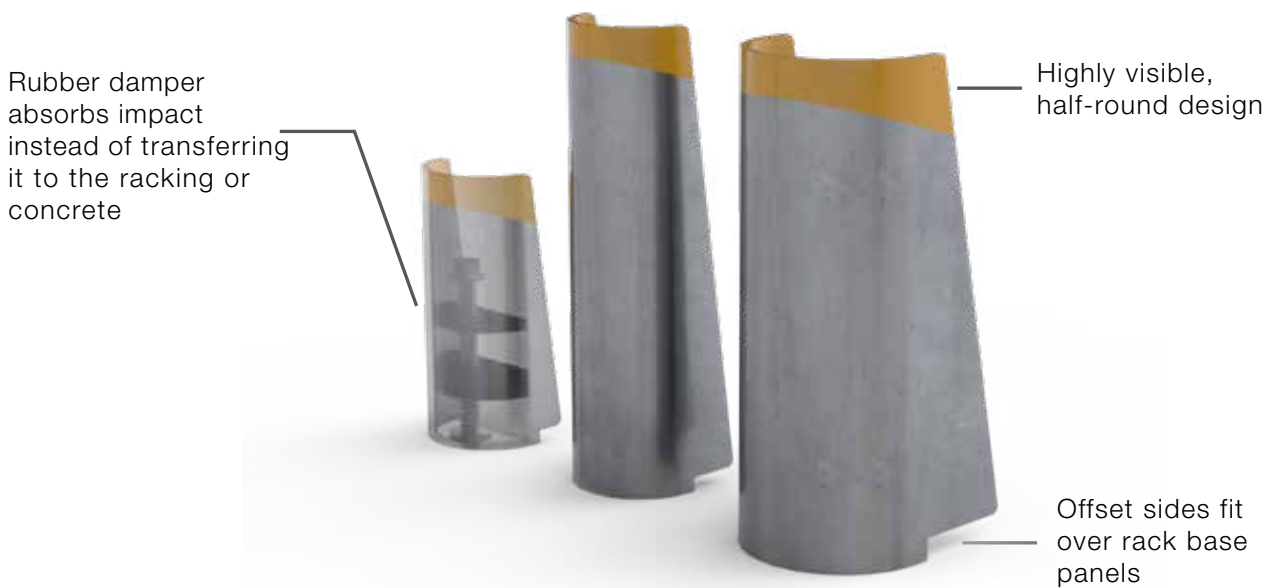
U.S. Patent Number: 8915670

254mm
12.7mm
93.3mm

406.4mm
12.7mm
114mm

406.4mm
19.1mm
184.2mm

79.6mm
124.2mm
102mm
MAX. UPRIGHT WIDTH
17.5mm

101.6mm
165.1mm
140mm
MAX. UPRIGHT WIDTH
19.1mm

## 250 mm Rack Guard

M086-025-012

Materials: Zinc plated steel
Shock-Absorbing Rack Guard,
rubber damper, anchor kit

## 400 mm Rack Guard

M086-040-012

Materials: Zinc plated steel
Shock-Absorbing Rack Guard,
rubber damper, anchor kit

## 400 mm Rack Guard XL

### For racks wider than 100 mm

M086-040-015

Materials: Zinc plated steel
Shock-Absorbing Rack Guard,
rubber damper, anchor kit

## Colours

Yellow
RAL 1033



Zinc finish will not scratch off or
rust leaving it looking like new.

# Column Guard

Adjustable Column Barrier



**Expandable assembly protects columns of different sizes from 200 mm to 300 mm**

Interlocking design provides superior impact resistance with 4 polyethylene walls vs. the conventional 2 walls for maximum strength

Easy to install straps—no special skill or tools required
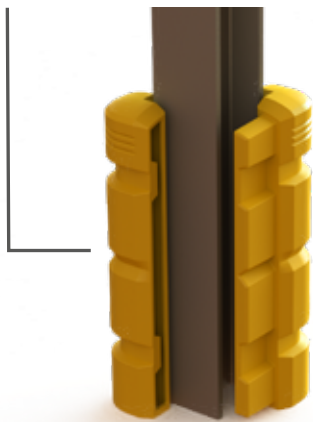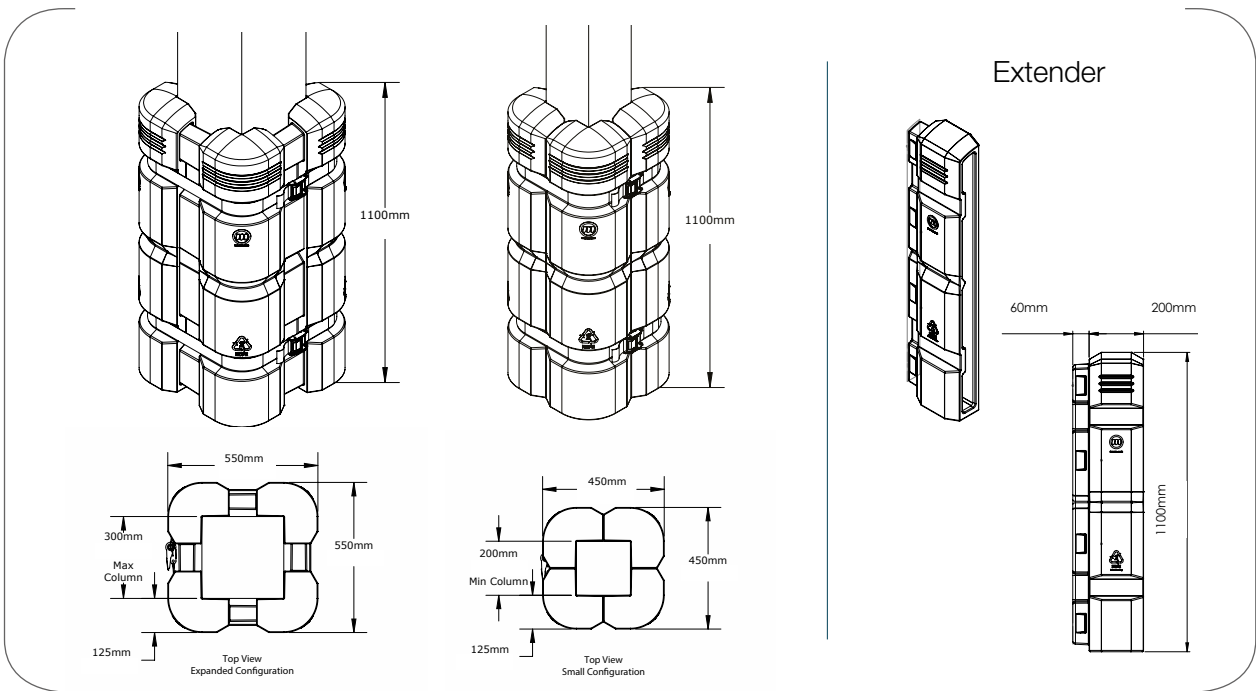


Patent Pending

Extender

1100mm
550mm
300mm
Max Column
550mm
125mm
Top View
Expanded Configuration

1100mm
450mm
200mm
Min Column
450mm
125mm
Top View
Small Configuration

60mm
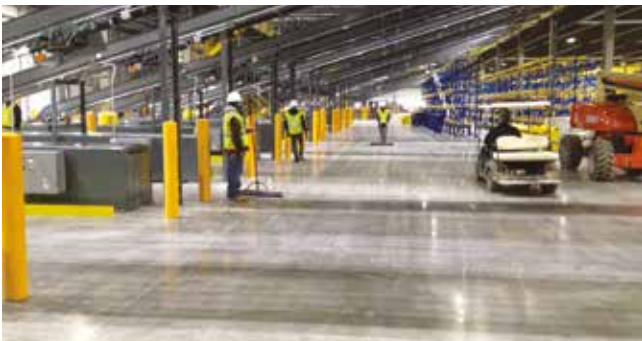200mm
1100mm

# Greater Safety Through Better Protection

A full range of engineered solutions that protect your people as well as your property and equipment. Self-protecting products with shock displacement and deflection designed to convert accidents into incidents.

# Safety Blueprint

A solution for every corner of your facility: Let us work with you to develop a comprehensive damage prevention blueprint.
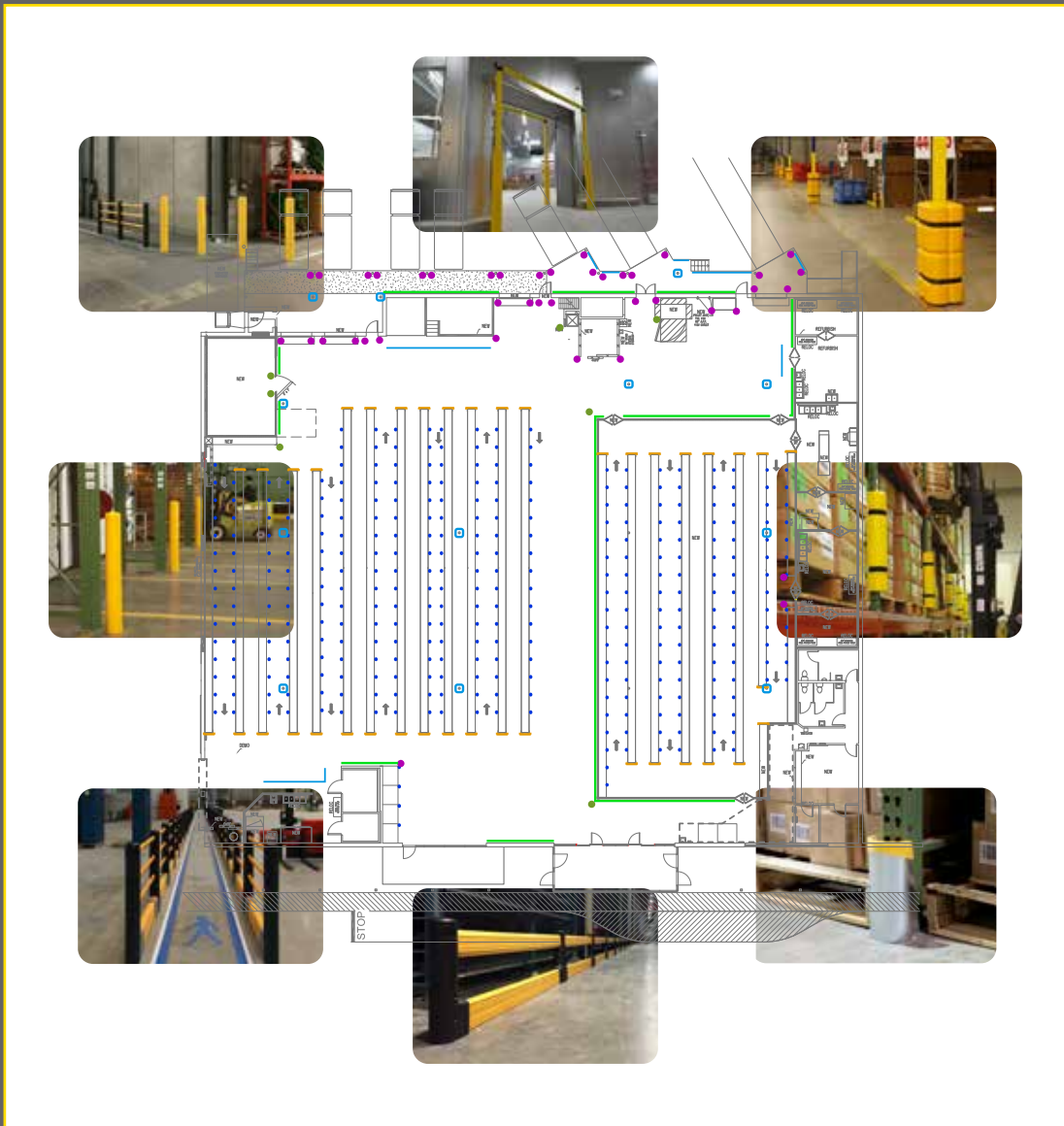
# Preventing Damage Everywhere

AXELENT

GB1910_1.3_JOJE