

Essential Pedestrian Barrier with Impact High

The X-Protect Essential Pedestrian Barrier with Impact High offers reinforced protection in busy traffic zones. Designed to handle low-level impacts, it separates pedestrians from vehicles while maintaining strong, flexible barrier performance.



The Essential Pedestrian with Impact High Barrier provides reinforced safety for walkways exposed to medium-duty vehicles and frequent ground-level impacts. Designed for combined strength and flexibility, it separates pedestrians from vehicles while absorbing impact energy at the base to minimise damage and maintain barrier integrity.

For areas with intensive material handling, the Floor Barrier adds an extra layer of protection. Positioned at ground level, it ensures a clear division between pedestrian and vehicle routes, preventing contact with vehicle forks, low pallets or stray objects. Acting as a robust foundation, it complements the higher structure by distributing impact forces efficiently and maintaining safe, predictable traffic patterns throughout the facility.

Installation is fast and straightforward, with minimal fixings and a design that protects the floor surface during both setup and maintenance.

Key feature

- Fast to install
- Kind to the floor
- Easy to repair

Impact test results					
Area of impact	Load	Equivalent to		90° Defelction	Force to fixings
Centre of barrier C - C as below					
2000mm	3100 J	2500kg 5.7 km/h	1500kg 7.3 km/h	295mm	5.7kN
Posts					
End post	1500 J	2500kg 3.9 km/h	1500kg 5 km/h	500mm	3.2kN
Mid post	1500 J	2500kg 3.9 km/h	1500kg 5 km/h	450mm	3.3kN

Models

Posts 3 articles

ARTICLES / DESCRIPTION		HEIGHT (MM)	LENGTH (MM)	CC (MM)	OTHER
	BCC0-116-I1P2-E2 Corner post	1160		2000	
	BEE0-117-I1P2-A1 End post	1170		2000	Compatible with the Floor Barrier
	BEM0-117-I1P2-A1 Mid post	1170		2000	Compatible with the Floor Barrier

Impact rails 7 articles

ARTICLES / DESCRIPTION		HEIGHT (MM)	LENGTH (MM)	CC (MM)	OTHER
	RCI1-027-0050 Impact rail		270	500	
	RCI1-047-0070 Impact rail		470	700	
	RCI1-077-0100 Impact rail		770	1000	
	RCI1-127-0150 Impact rail		1270	1500	

	RCI1-177-0200 Impact rail	1770	2000
	RCI1-227-0250 Impact rail	2270	2500
	RCI1-277-0300 Impact rail	2770	3000

Hand rails 5 articles

ARTICLES / DESCRIPTION	HEIGHT (MM)	LENGTH (MM)	CC (MM)	OTHER
	RCP1-027-0050 Hand rail	270	500	
	RCP1-047-0070 Hand rail	470	700	
	RCP1-077-0100 Hand rail	770	1000	
	RCP1-127-0150 Hand rail	1270	1500	
	RCP1-177-0200 Hand rail	1770	2000	

Related products

IMPACT PROTECTION

Floor Barrier



Designed to serve as a standalone solution, it provides safeguarding of building perimeters and vital infrastructure from the everyday risks of vehicle forks, pallets in transit, AMRs and AGVs, and...

[11 articles](#)

X-Protect components

These are the building blocks of our modular Impact Protection range.

BARRIERS & RAILS

Pedestrian Rails



Width x Height:

68 x 72 mm | 2 11/16" x 2 27/32"

Length:

270 - 1770 mm | 10 5/8" - 69 11/16"

Impact Barriers



Width x Height:

116 x 220 mm | 4 9/16" x 8 21/32"

Length:

270 - 2770 mm | 10 5/8" - 109 1/16"

POSTS & BOLLARDS



Classic

4 connection sides

Height:

350 -

Width:

200 mm

7 7/8"

1160 mm

13 13/16" -

45 11/16"



Essential

2 connection sides

Height:

620 -

Width:

132 mm

5 3/16"

1170 mm

24 7/16" -

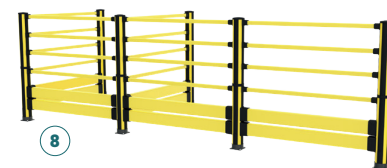
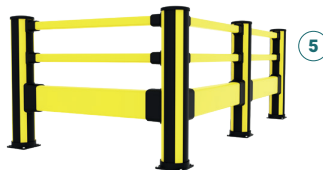
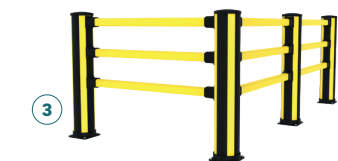
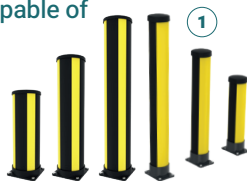
46 1/16"



X-Protect Standard Configurations

+ the highest impact energy (J) they are capable of withstanding*

* The highest force depends on the C-C. More information is available upon request.



Component Colours



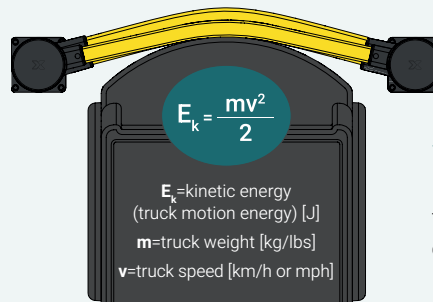
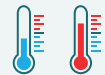
RAL 1018



RAL 9011

Operating temperature

-10°C → 40°C



$$E_k = \frac{mv^2}{2}$$

E_k = kinetic energy (truck motion energy) [J]

m = truck weight [kg/lbs]

v = truck speed [km/h or mph]

Impact testing

This is how we calculate the energy from a vehicle impact.



Loaded weight

3600 kg / 7930 lbs



Loaded weight

2700 kg / 5940 lbs



Loaded weight

2100 kg / 4620 lbs

Speed	Load
6 km/h 3.7 mph	5020 J
8 km/h 5 mph	8880 J
12 km/h 7.5 mph	19960 J

Speed	Load
6 km/h 3.7 mph	3770 J
8 km/h 5 mph	6660 J
12 km/h 7.5 mph	14970 J

Speed	Load
6 km/h 3.7 mph	2930 J
8 km/h 5 mph	5180 J
12 km/h 7.5 mph	11670 J

1. Bollards

- Classic | 5220 J
- Essential | 1500 J

2. Impact Barriers

- Impact | 4500 J
- Impact High | 6200 J
- Double Impact Low | 7700 J
- Double Impact High | 7000 J

3. Pedestrian Rails

- Pedestrian | 5000 J
- Essential Pedestrian | 2250 J
- Essential Pedestrian 2 rail | 1700 J
- Essential Pedestrian | 2250 J

4. Floor Barrier | 2250 J

- Can be used both with Impact & Pedestrian configurations or as stand-alone protection.

5. Pedestrian Rails + Impact Barriers

- Pedestrian + Impact | 6700 J
- Pedestrian + Impact High | 8000 J
- Pedestrian + Double Impact | 8300 J
- Essential Pedestrian + Impact High | 3100 J

6. Pedestrian Gate | 0 J

7. Column Guard | 1800 J

8. Topple Barriers

- Pedestrian | 5250 J
- Impact | 6200 J

9. Dock Gate | 10200 J

10. Height Restrictors

- Goal Post | 4200 J
- Height Guard

11. Upright Protector