

Impact High Barrier

Use the X-Protect Impact High Barrier for high level impact protection. It is ideal for segregating light weight vehicles or defining warehouse zones.

Our modular rails and bollards allow for damaged or worn parts to be replaced at a component level. If you need to replace any component - it is just a slide away.



X-Protect is a unique approach to safety barriers. Unrivalled modularity, using only a few system components and damping that is built in to create a barrier system that changes with your work place. X-Protect allows rapid transformation, repair or replacement of existing barriers and bespoke configurations are limitless.

Impact test results					
Area of impact	Load	Equivalent to		90° Deflection	Force to fixings
Centre of barrier C - C as below					
2000mm	4200 J	2500 kg 6.6 km/h	5000 kg 4.6 km/h	240 mm	12.3 kN
2500mm	3900 J	2500 kg 6.3 km/h	5000 kg 4.5 km/h	470 mm	12.5 kN
3000mm	3600 J	2500 kg 6.1 km/h	5000 kg 4.3 km/h	516 mm	13.2 kN
Posts					
End post	2400 J	2500 kg 5.0 km/h	5000 kg 3.5 km/h	NA *	12.2 kN
Mid post	2400 J	2500 kg 5.0 km/h	5000 kg 3.5 km/h	NA *	16.9 kN

* Deflection of posts is equivalent or less than that of the rail/s and is not considered to be critical for product selection. Performance is tested at height of the lowest rail. The post will perform better for lower strikes and deflection.

Models

Posts 4 articles

ARTICLES / DESCRIPTION		MAX WIDTH (MM)	HEIGHT (MM)	LENGTH (MM)	CC (MM)	COLOR
	BCC0-061-I100 Impact High corner		610			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
	BCM0-061-I100 Impact High mid		610			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
	BCE1-061-I100 Impact High end		610			Zinc Yellow (RAL 1018)
	BCE0-061-I100 Impact High end		610			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)

Impact rails 9 articles

ARTICLES / DESCRIPTION		MAX WIDTH (MM)	HEIGHT (MM)	LENGTH (MM)	CC (MM)	COLOR
	RCI1-027-0050 Impact rail			270	500	Zinc Yellow (RAL 1018)
	RCI1-047-0070 Impact rail			470	700	Zinc Yellow (RAL 1018)
	RCI1-067-0090 Impact rail			670	900	Zinc Yellow (RAL 1018)
	RCI1-077-0100 Impact rail			770	1000	Zinc Yellow (RAL 1018)
	RCI1-127-0150 Impact rail			1270	1500	Zinc Yellow (RAL 1018)
	RCI1-177-0200 Impact rail			1770	2000	Zinc Yellow (RAL 1018)



RCI1-197-0220

Impact rail

1970

2200

Zinc Yellow (RAL 1018)



RCI1-227-0250

Impact rail

2270

2500

Zinc Yellow (RAL 1018)



RCI1-277-0300

Impact rail

2770

3000

Zinc Yellow (RAL 1018)

Related products



X-PROTECT IMPACT PROTECTION

Double Impact Low Barrier

Use the X-Protect Double Impact Low Barrier configuration to protect structures from ground level, heavy duty impacts. It is one of our strongest Impact protection configurations and also idea...

[12 articles](#)



X-PROTECT IMPACT PROTECTION

Impact

Use the X-Protect Impact Barrier for ground level impact protection. It is ideal for segregating light weight vehicles or defining warehouse zones. Our modular rails and bollards allow for damaged...

[12 articles](#)



X-PROTECT IMPACT PROTECTION

Double Impact Barrier

Use the X-Protect Double Impact Barrier configuration to protect structures from high level, heavy duty impacts. It is one of our strongest Impact protection configurations. Our modular rails and b...

[12 articles](#)



CLASSIC PEDESTRIAN

Pedestrian Barrier with Impact High

Use the X-Protect Pedestrian Barrier with Impact High configuration to protect walkways from medium duty vehicles where there is a reduced risk of ground level impacts. It is also possible to combi...

[16 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" -

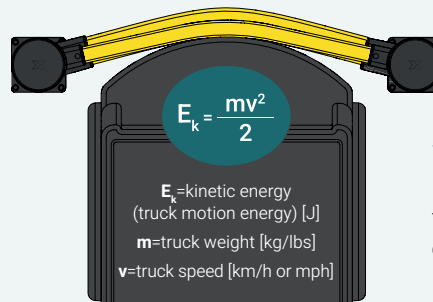
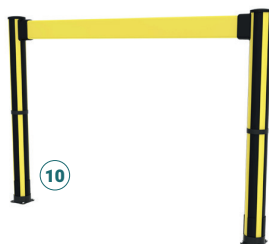
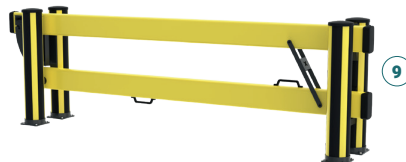
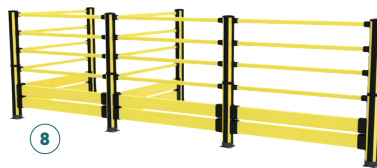
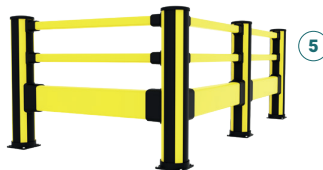
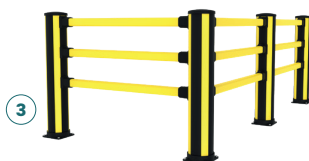
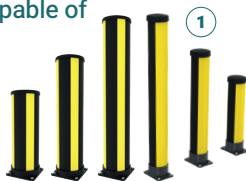
46 1/16"



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.



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

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

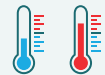
Speed	Load
6 km/h 3.7 mph	2930 J
8 km/h 5 mph	5180 J
12 km/h 7.5 mph	11670 J

Component Colours

● RAL 1018 ● RAL 9011

Operating temperature

-10°C → 40°C



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