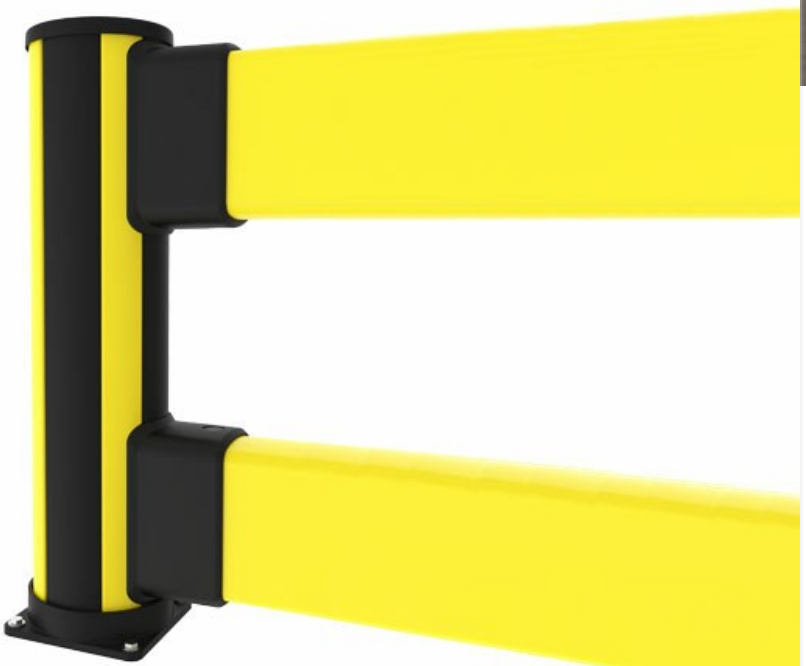
Double impact

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 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 of*		*90° Deflection*	*Force to fixings*
Centre of barrier C - C as below					
2000mm	7000 J	2500 kg 8.5 km/h	5000 kg 6 km/h	345 mm	12.4 kN
2500mm	6500 J	2500 kg 8.2 km/h	5000 kg 5.8 km/h	359 mm	11.4 kN
3000mm	6200 J	2500 kg 8 km/h	5000 kg 5.8 km/h	409 mm	10.7 kN
Posts					
End post	6100 J	2500 kg 7.9 km/h	5000 kg 5.6 km/h	NA*	15.5 kN
Mid post	6100 J	2500 kg 7.9 km/h	5000 g 5.6 km/h	NA*	12.4 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 will be reduced.

Models

Posts 3 articles

ARTICLES / DESCRIPTION	HEIGHT (MM)	LENGTH (MM)	CC (MM)	COLOR
BCE0-087-I200 Double Impact end	870			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
BCM0-087-I200 Double Impact mid	870			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
BCC0-087-I200 Double Impact corner	870			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)

Impact rails 9 articles

ARTICLES / DESCRIPTION	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	
RCI1-127-0150 Impact rail		1270	1500	Zinc Yellow (RAL 1018)
RCI1-177-0200		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

Pedestrian with impact

Use the X-Protect Pedestrian + Impact barrier configuration to protect walkways from medium duty vehicles where there is an increased risk of ground level impacts. It is also possible to combine wi...

16 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

Impact high

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 damag...

13 articles

X-PROTECT IMPACT PROTECTION

Double impact low

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 ideal for...

12 articles

X-PROTECT
Technical Information

X-Protect components

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

BARRIERS & RAILS

Pedestrian Rails

Width x Height:
68 × 72 mm | 2 11/16" × 2 27/32"
Length:
270 - 1770 mm | 10 5/8" - 69 11/16"

Impact Barriers

Width x Height:
116 × 220 mm | 4 9/16" x 8 21/32"
Length:
270 - 2770 mm | 10 5/8" - 109 1/16"

POSTS & BOLLARDS

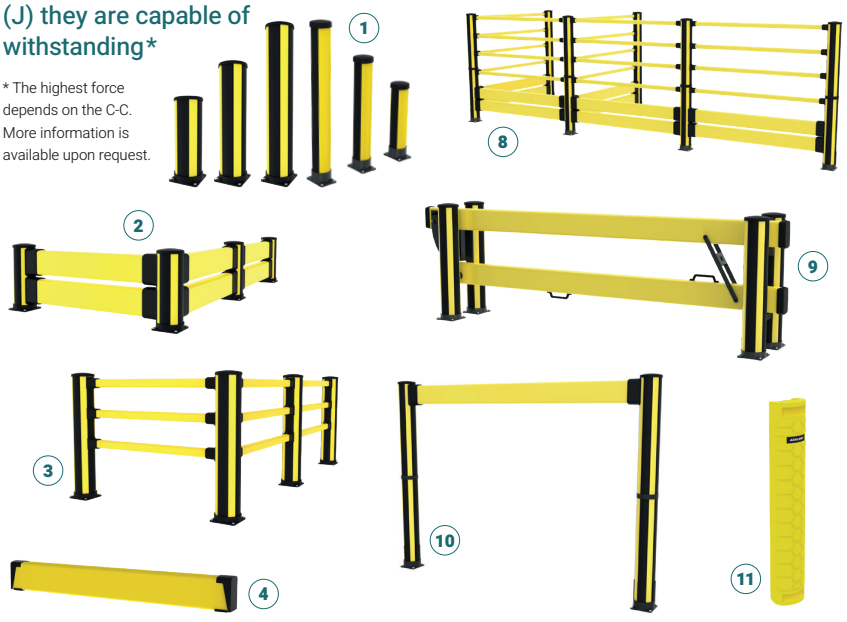
Classic
4 connection sides
Width:
200 mm
7 7/8"
Height:
350 – 1160 mm
13 13/16" – 45 11/16"

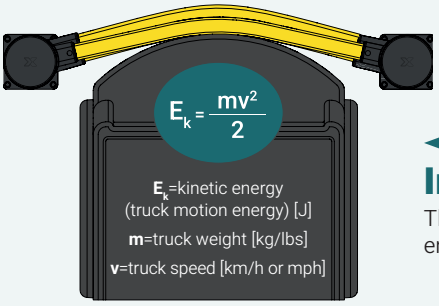
Essential
2 connection sides
Width:
132 mm
5 3/16"
Height:
620 – 1170 mm
24 7/16" – 46 1/16"

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.



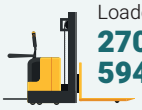


Impact testing

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

Loaded weight
3600 kg / 7930 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



Loaded weight
2700 kg / 5940 lbs

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

Loaded weight
2100 kg / 4620 lbs

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**