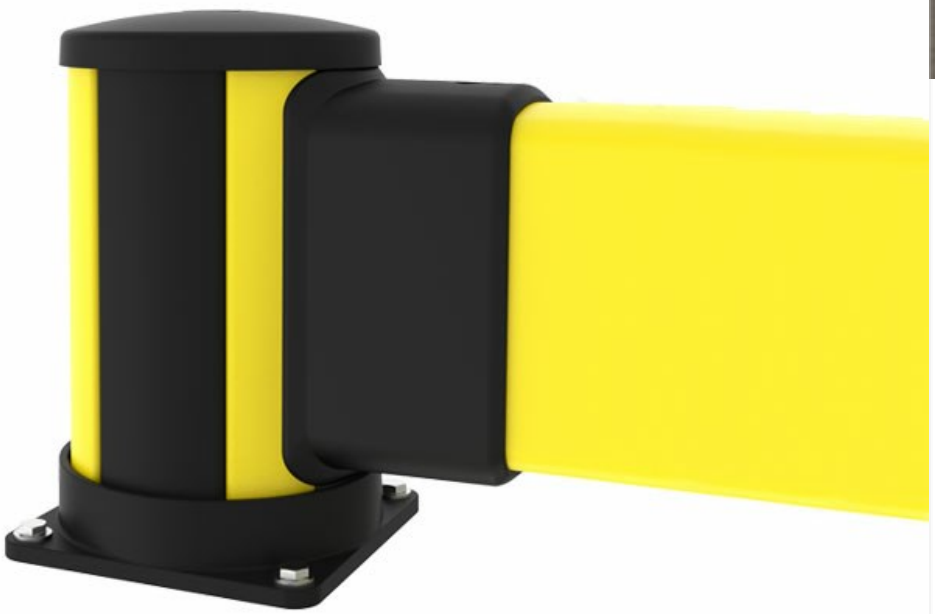
Impact

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 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	4500 J	2500 kg 6.8 km/h	5000 kg 4.8 km/h	N/A	4.5 kN
2500mm	4200 J	2500 kg 6.6 km/h	5000 kg 4.6 km/h	367 mm	2.8 kN
3000mm	3900 J	2500 kg 6.3 km/h	5000 kg 4.5 km/h	403 mm	5.3 kN
Posts					
End post	4500 J	2500 kg 6.8 km/h	5000 kg 4.8 km/h	NA *	23 kN
Mid post	4500 J	2500 kg 6.8 km/h	5000 kg 4.8 km/h	NA *	15.2 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

Bollard 3 articles

ARTICLES / DESCRIPTION	LENGTH (MM)	CC (MM)	COLOR	ACCESSORY
 **BCM0-035-I100** Impact mid			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)	
 **BCE0-035-I100** Impact end			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)	
 **BCC0-035-I100** Impact corner			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)	

Impact rails 9 articles

ARTICLES / DESCRIPTION	LENGTH (MM)	CC (MM)	COLOR	ACCESSORY
 **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

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

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



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



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

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"

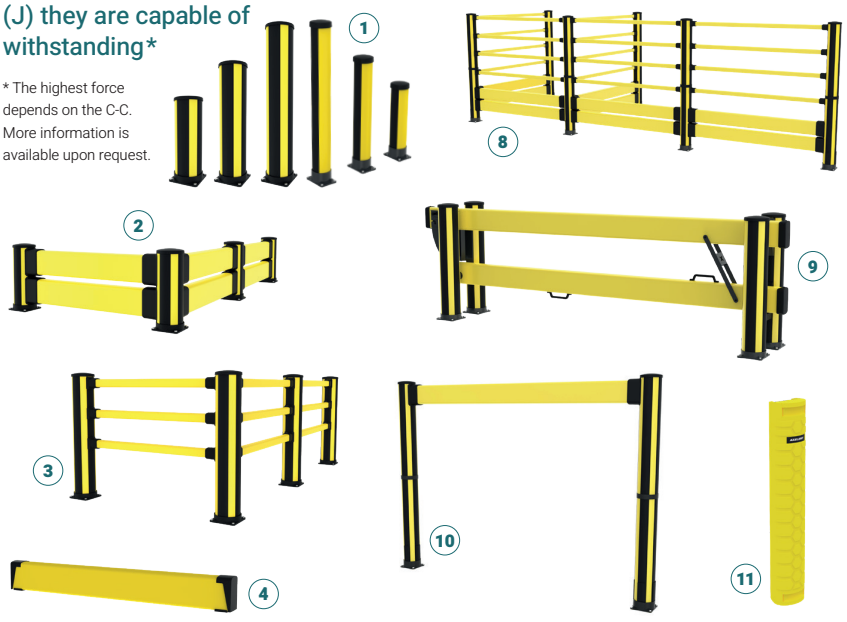
Essential
2 connection sides
Width:
132 mm
5 3/16"
Height:
620 – 1170 mm
24 7/16" – 46 1/16"

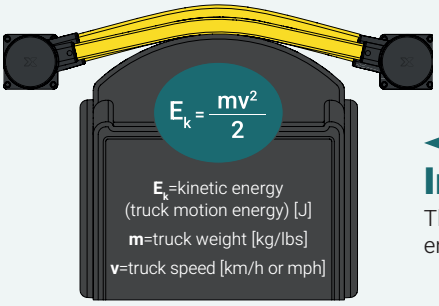


X-Protect Standard Configurations

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

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





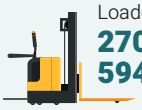
Impact testing

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**