

# 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.

<b>Impact test results</b>					
<i>Area of impact</i>	<i>Load</i>	<i>Equivalent to</i>		<i>90° Deflection</i>	<i>Force to fixings</i>
Centre of barrier C - C as below					
2000mm	4500 J	2500 kg 6.8 km/h	5000 kg 4.8 km/h	350mm	4kN
2500mm	4200 J	2500 kg 6.5 km/h	5000 kg 4.6 km/h	390mm	6.6 kN
3000mm	3900 J	2500 kg 6.3 km/h	5000 kg 4.4 km/h	420mm	9.8 kN
Posts					
End post	4500 J	2500 kg 6.8 km/h	5000 kg 4.4 km/h	NA *	11.8 kN
Mid post	4500 J	2500 kg 6.8 km/h	5000 kg 4.8 km/h	NA *	13.6 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 6 articles

ARTICLES / DESCRIPTION	HEIGHT (MM)	LENGTH (MM)	CC (MM)	COLOR
 <b>BCM1-035-I100</b> Impact mid	350			Zinc Yellow (RAL 1018)
 <b>BCM0-035-I100</b> Impact mid	350			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
 <b>BCE1-035-I100</b> Impact end	350			Zinc Yellow (RAL 1018)
 <b>BCE0-035-I100</b> Impact end	350			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
 <b>BCC1-035-I100</b> Impact corner	350			Zinc Yellow (RAL 1018)
 <b>BCC0-035-I100</b> Impact corner	350			Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)

### Impact rails 9 articles

ARTICLES / DESCRIPTION	HEIGHT (MM)	LENGTH (MM)	CC (MM)	COLOR
 <b>RCI1-277-0300</b> Impact rail		2770	3000	Zinc Yellow (RAL 1018)
 <b>RCI1-227-0250</b> Impact rail		2270	2500	Zinc Yellow (RAL 1018)
 <b>RCI1-177-0200</b> Impact rail		1770	2000	Zinc Yellow (RAL 1018)
 <b>RCI1-127-0150</b> Impact rail		1270	1500	Zinc Yellow (RAL 1018)



**RCI1-077-0100**  
Impact rail

770

1000

Zinc Yellow (RAL 1018)



**RCI1-047-0070**  
Impact rail

470

700

Zinc Yellow (RAL 1018)



**RCI1-027-0050**  
Impact rail

270

500

Zinc Yellow (RAL 1018)



**RCI1-067-0090**  
Impact rail

670

900

Zinc Yellow (RAL 1018)



**RCI1-197-0220**  
Impact rail

1970

2200

Zinc Yellow (RAL 1018)

## Related products

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### 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...

15 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...

15 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&nbsp;idea...

15 articles



### CLASSIC PEDESTRIAN

#### 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...

19 articles

### X-Protect components

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

#### BARRIERS & RAILS

##### Hand 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  
 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"

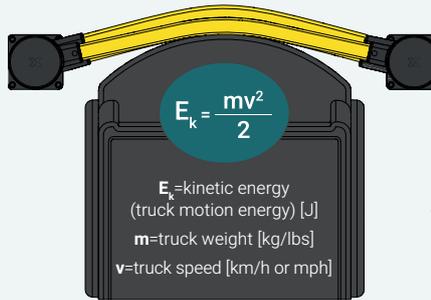
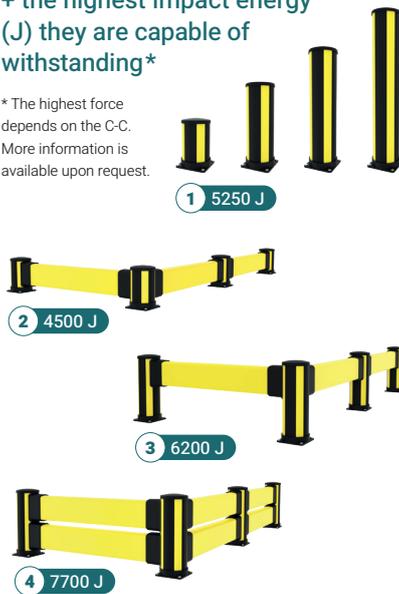
Height:  
 620 -  
 1170 mm  
 24 7/16" -  
 46 1/16"



### 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**



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

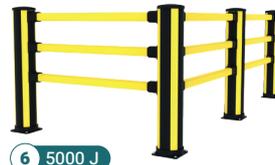
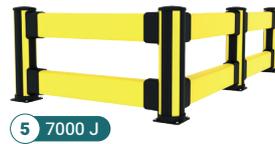
Speed	Load
6 km/h   3.7 mph	2930 J
8 km/h   5 mph	5180 J
12 km/h   7.5 mph	11670 J

#### Component Colours

● RAL 1018 ● RAL 9011

#### Operating temperature

-10°C → 40°C



1. Bollards
2. Impact
3. Impact High
4. Double Impact Low
5. Double Impact High
6. Pedestrian
7. Pedestrian + Impact
8. Pedestrian + Impact High
9. Pedestrian + Double Impact
10. Pedestrian Gate
11. Column Guard
12. Floor Barrier\*
13. Essential Bollards
14. Essential Pedestrian 2 rail
15. Essential Pedestrian
16. Essential Pedestrian + Impact High

\* The Floor Barrier can be used in combination with configurations: 3, 6, 8 & 9