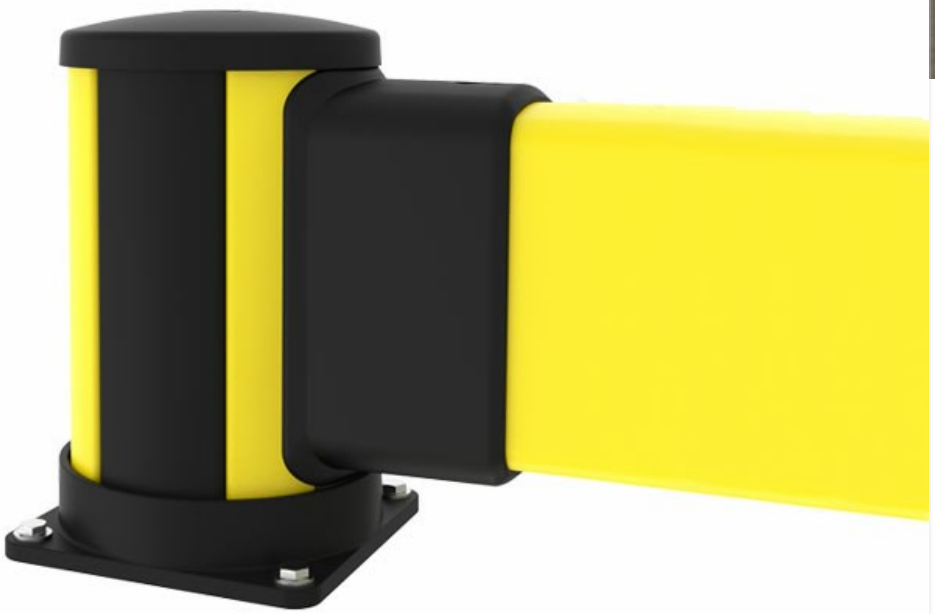
# Impact

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<br>6.8 km/h | 5000 kg<br>4.8 km/h | N/A | 4.5 kN |
| 2500mm | 4200 J | 2500 kg<br>6.6 km/h | 5000 kg<br>4.6 km/h | 367 mm | 2.8 kN |
| 3000mm | 3900 J | 2500 kg<br>6.3 km/h | 5000 kg<br>4.5 km/h | 403 mm | 5.3 kN |
| Posts | | | | | |
| End post | 4500 J | 2500 kg<br>6.8 km/h | 5000 kg<br>4.8 km/h | NA * | 23 kN |
| Mid post | 4500 J | 2500 kg<br>6.8 km/h | 5000 kg<br>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**<br>Impact rail | 2270 | 2500 | Zinc Yellow (RAL 1018) |
|  | **RCI1-277-0300**<br>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"

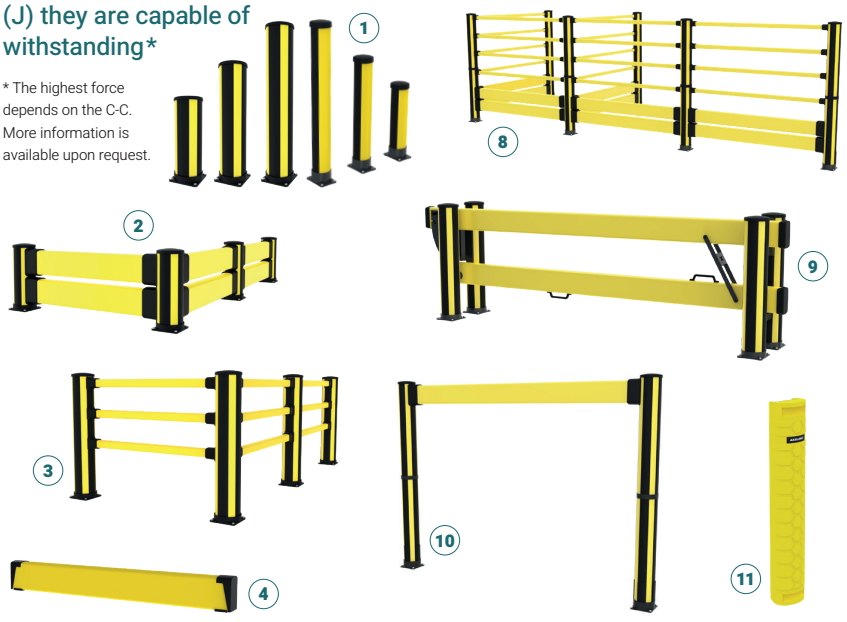
**Essential**
2 connection sides
Width:
132 mm
5 3/16"
Height:
620 – 1170 mm
24 7/16" – 46 1/16"

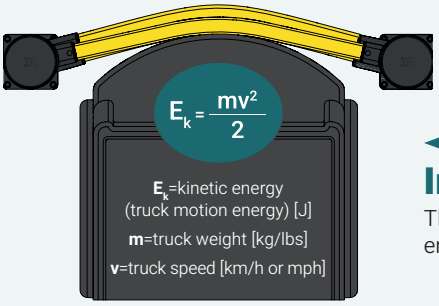


## X-Protect Standard Configurations

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

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



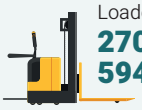

## Impact testing

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**