

Topple Barrier Impact

The X-Protect Topple Barrier Impact combines topple prevention and impact protection in warehouse and logistics environments with mixed pedestrian and vehicle traffic. Designed to maintain safe workflows and clear separation, the system helps protect personnel, goods and surrounding infrastructure.



The X-Protect Topple Barrier Impact is developed for warehouse, logistics and production environments where falling goods, pallet handling and vehicle traffic create safety risks for personnel and operations.

The reinforced configuration combines lower rails with impact protection and upper pedestrian protection to help prevent goods from entering walkways while providing additional protection against vehicle impacts. Its modular construction integrates directly with the X-Protect range, enabling flexible and continuous protection layouts throughout the facility.

Suitable for high-bay storage, loading areas, pick and pack zones and internal logistics routes, the barrier maintains open visibility and efficient workflows in demanding operational environments. The flexible design helps absorb impact forces while installation remains fast and straightforward using the same simple installation approach as the rest of the X-Protect range.

Key features

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Combined topple and impact protection

- Designed for forklift and [AGV traffic](#)
- Modular X-Protect integration
- Fast and easy installation








Impact test results

	Area of impact	Load	90° deflection	Force to fix
	Centre of barrier C - C as below			
Topple Barrier Impact 2300	2000 mm	6200 J	N/A*	12,2 kN
	Post			
Topple Barrier Impact 2300	End post	5250 J	N/A*	5,4 kN
Topple Barrier Impact 2300	Mid post	5250 J	N/A*	5,9 kN
	Area of impact	Load	90° deflection	Force to fix
	Centre of barrier C - C as below			
Topple Barrier Impact 3400	2000 mm	6200 J	N/A*	5,9 kN
	Post			
Topple Barrier Impact 3400	End post	5250 J	N/A*	4,8 kN
Topple Barrier Impact 3400	Mid post	5250 J	N/A*	5,1 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

Impact rails 7 articles

ARTICLES / DESCRIPTION	HEIGHT (MM)	COLOR
 RCI1-047-0070 Impact rail		Zinc Yellow (RAL 1018)
 RCI1-077-0100 Impact rail		Zinc Yellow (RAL 1018)
 RCI1-127-0150 Impact rail		Zinc Yellow (RAL 1018)
 RCI1-177-0200 Impact rail		Zinc Yellow (RAL 1018)
 RCI1-227-0250 Impact rail		Zinc Yellow (RAL 1018)
 RCI1-277-0300 Impact rail		Zinc Yellow (RAL 1018)
 RCI1-027-0050 Impact rail		Zinc Yellow (RAL 1018)

Hand rails 5 articles

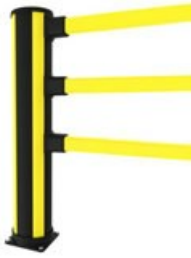
ARTICLES / DESCRIPTION	HEIGHT (MM)	COLOR
 RCP1-047-0070 Hand rail		Zinc Yellow (RAL 1018)
 RCP1-077-0100 Hand rail		Zinc Yellow (RAL 1018)
 RCP1-127-0150 Hand rail		Zinc Yellow (RAL 1018)
 RCP1-177-0200 Hand rail		Zinc Yellow (RAL 1018)



RCP1-027-0050
Hand rail

Zinc Yellow (RAL 1018)

Related products



CLASSIC PEDESTRIAN

Pedestrian

Use the X-Protect Pedestrian barrier configuration to define pedestrian routes and protect from light duty impacts. It is also possible to combine with a pedestrian gate. The pedestrian gate is sel...

9 articles



IMPACT PROTECTION

Floor Barrier

Designed to serve as a standalone solution, it provides safeguarding of building perimeters and vital infrastructure from the everyday risks of vehicle forks, pallets in transit, AMRs and AGVs, and...

11 articles



COLUMN GUARDS

Multifunction Column Guard

The Multifunction Column Guard is designed to protect large building columns and pillars from impacts caused by forklifts and other material handling equipment. With asymmetrical on-site adjustment...

3 articles



X-PROTECT BOLLARDS

Bollards

X-Protect Bollards safeguard corners, doorways and equipment from vehicle impacts. The black and yellow colour scheme enhances visibility and helps direct forklift traffic, creating safer, well-org...

7 articles



X-PROTECT DOCK GATE

Dock Gate

The X-Protect Dock Gate helps protect loading bays and dock areas in demanding warehouse and logistics environments. Designed for smooth and controlled operation, it combines reliable impact protec...

3 articles

NEW

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 – 1160 mm
Width: 200 mm | 13 13/16" – 7 7/8" | 45 11/16"

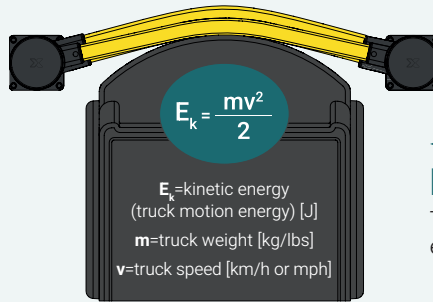
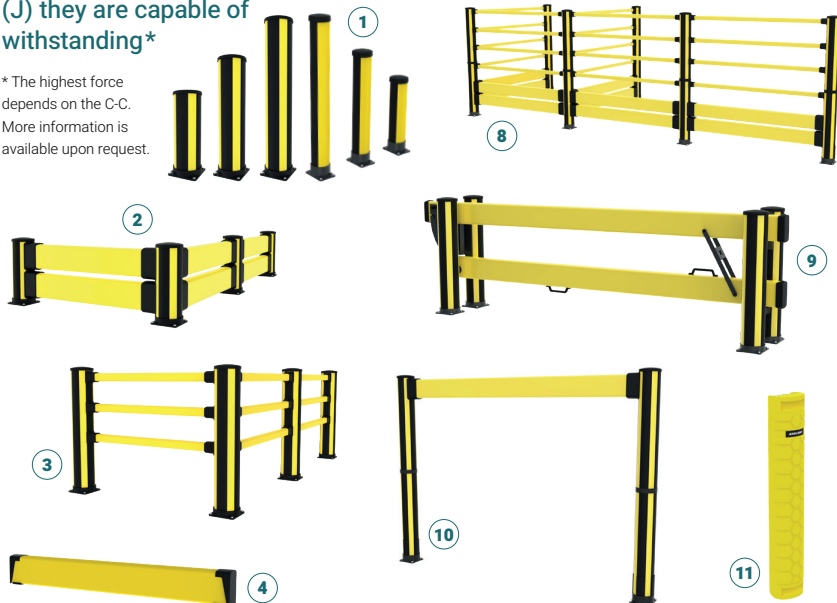
Essential
2 connection sides

Height: 620 – 1170 mm
Width: 132 mm | 24 7/16" – 5 3/16" | 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

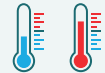
Speed	Load
6 km/h 3.7 mph	2930 J
8 km/h 5 mph	5180 J
12 km/h 7.5 mph	11670 J

Component Colours

● RAL 1018 ● RAL 9011

Operating temperature

-10°C → 40°C



1. Bollards

- 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