mFlex Single Traffic Barrier

Designed to safeguard walls, structures, goods and machinery from hand operated equipment and the wear-and-tear of frequent low energy impacts.

Such impacts can damage surfaces, materials and stock over time, degrading safety and causing equipment to break down.

This light duty barrier keeps vehicles and their loads on a required route, preventing them from encroaching into protected areas.
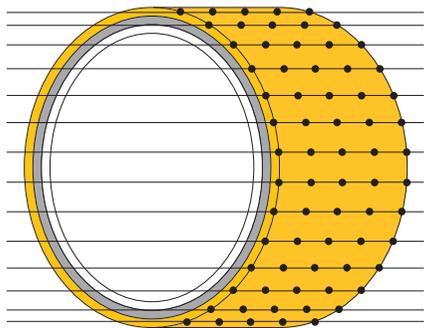
Tested to the global benchmark in barrier safety

bsi. PAS 13
Code of Practice for Workplace Safety Barriers

A-SAFE
PIONEERING WORKPLACE SAFETY

MEMAPLEX™

Ultimate strength polymer
created from an exclusive composition of the most sophisticated polyolefins and rubber additives, expertly blended for unequalled strength and flexibility.

Advanced Engineering Molecular
reorientation during manufacturing creates a unique built-in memory that enables the barrier to fully recover following impacts.

Revolutionary 3-Layered Material

• Inner strengthening core

• Central impact absorption zone

• Outer UV stabilised colour layer

Energy Absorption System

A patented 3-phase system that activates sequentially for unparalleled energy absorption.

1 Memaplex™ rail flexes to absorb impact, initiating the rail pin to slide forward and transfer load energy to the compression pocket.

2 Compression of the pocket continues to disperse energy as the coupling rotates around the post pin to activate further absorption.

3 At peak energy, the coupling twists further, engaging the post pin and instigating torsion of the post to dispel remaining forces.

A Post Pin   **D** Compression Pocket

B Coupling   **E** Rail

C Rail Pin

Suitability

Vehicle

Electric Pedestrian Stacker

Manual Pallet Truck

Frame Roll Container

Application

Building and equipment protection

Corridor and wall protection

Column Protection

Protects machinery

Airport equipment & baggage conveyor protection

Unrivalled recovery through a unique built-in memory that allows the barrier to flex, cushion and reform repeatedly upon impact, saving vast amounts in barrier and vehicle repairs.

Huge return on investment from incident prevention and downtime avoidance as barriers, vehicles, floors and equipment do not need replacing or repair.

Features and benefits

Multi-directional system ensures a streamlined fit into any operation and the removal of hard angles.

Ultra-low maintenance material is chemical and water resistant, non-corrosive, non-scratch and self coloured so no repainting, rusting, flaking or corrosion.

Exclusive modularity allows rails and posts to be replaced in-situ without removing adjacent barrier sections.

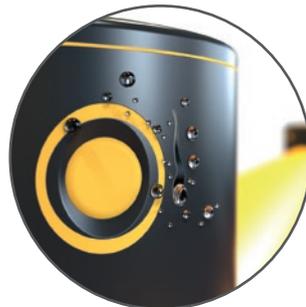Seals reduce the risk of water ingress.

Zinc nickel, electrophoretic coating on base plates as standard, provides advanced protection against corrosion damage.

Self coloured and UV stabilised for continued visibility and long lasting aesthetics with no repainting.

No floor damage 80% of impact force is absorbed, transferring just 20% to the floor.

Wipe-clean, water resistant surface.

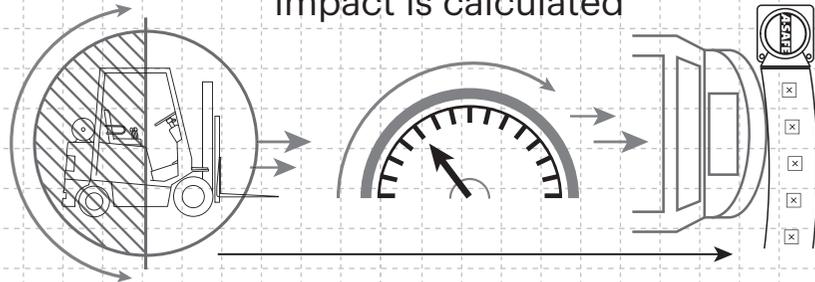Ergonomic design with no sharp edges.

Environmentally friendly and 100% recyclable.

Technical Information

How the energy from a vehicle impact is calculated

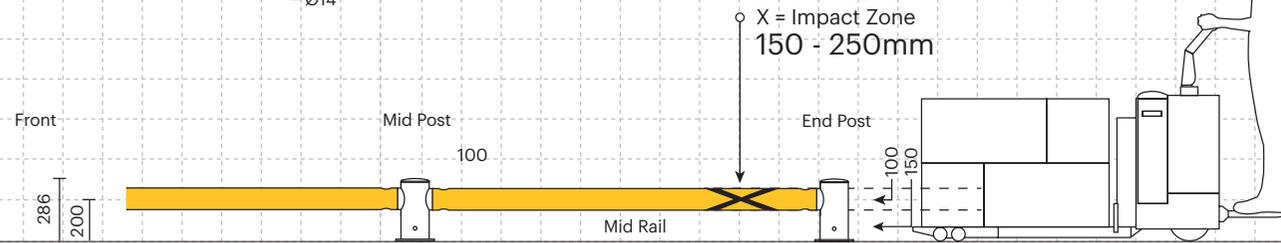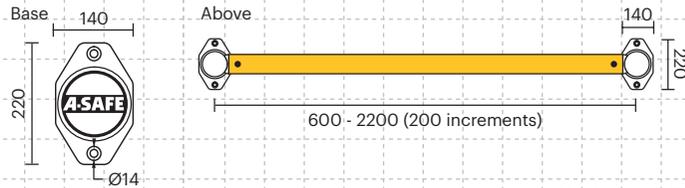$$\tfrac{1}{2} \text{ Mass} \times \text{Speed}^2 = \text{Joules}$$

Tested Impact Energy

5,400 Joules

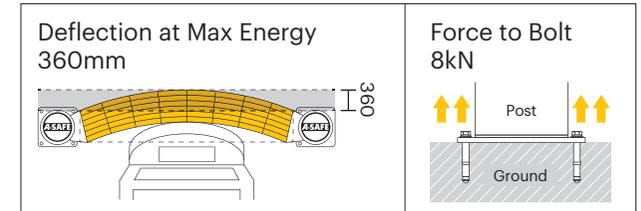Equivalent vehicle and speed

2.1 tonne X **8 km/h impact**

Mid Rail 45° Impact on 1500mm Post Centres

Impact Test	Impact Angle on 1500mm Post Centres			
	90°	67.5°	45°	22.5°
Mid Rail Max Energy (Joules)	2,700	3,163	5,400	18,437

End Post Max Energy (Joules) - 90°	3,000
Mid Post Max Energy (Joules) - 90°	3,000

Deflection at Max Energy 360mm

Force to Bolt 8kN

Post
Ground

Dimensions (mm)

Base 140
Above 140
220
220
Ø14

X = Impact Zone
150 - 250mm

Front
Mid Post
End Post
100
286 200
100 150
Mid Rail

Material Properties	**MEMAPLEX**™
Temperature Range	-10°C to 50°C
Ignition Temperature	370°C to 390°C
Flash Point	350°C to 370°C
Toxicity	Not Hazardous
Chemical Resistance	Excellent - ISO/TR 10358
Weathering Stability (Grey Scale)	5/5*
Light Stability (Blue Wool Scale)	7/8**
Static Rating (Surface Resistivity)	1015 - 1016 Ω

* Weathering scale 1 is very poor and 5 is excellent
** Light stability scale 1 is very poor and 8 is excellent

Post Options

Standard Black
RAL 9005*
PANTONE Black

Standard Yellow
RAL 1007*
PANTONE 7548*

Rail Options

Standard Yellow
RAL 1007*
PANTONE 7548*

Standard Black
RAL 9005*
PANTONE Black

Standard Grey
RAL 9007*
PANTONE Cool Grey 5*

Colour Combinations

*Please note that the RAL and PANTONE colours listed are the closest match to standard A-SAFE colours, but may not be exact matches of the actual product colour and should be used for guidance only.