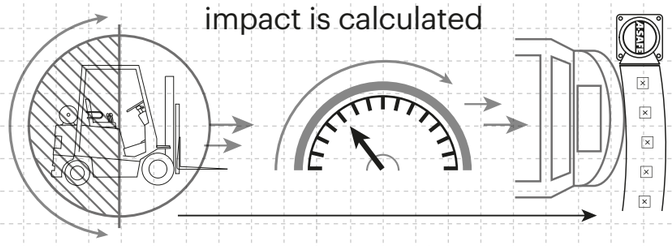
Technical Information

How the energy from a vehicle impact is calculated



½ Mass x Speed² = Joules

Tested Impact Energy

30,200 Joules

Equivalent vehicle and speed

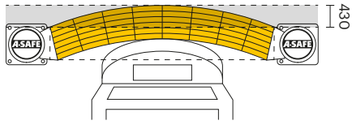
8.4 tonne X 6 mph impact

Mid Rail 45° Impact on 2000mm Post Centres

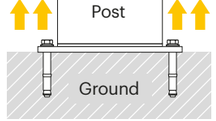
Impact Test	Impact Angle on 2000mm Post Centres			
	90°	67.5°	45°	22.5°
Mid Rail Max Energy (Joules)	15,100	17,691	30,200	103,109

End Post Max Energy (Joules) - 90°	6,900
Mid Post Max Energy (Joules) - 90°	6,900

Deflection at Max Energy 430mm



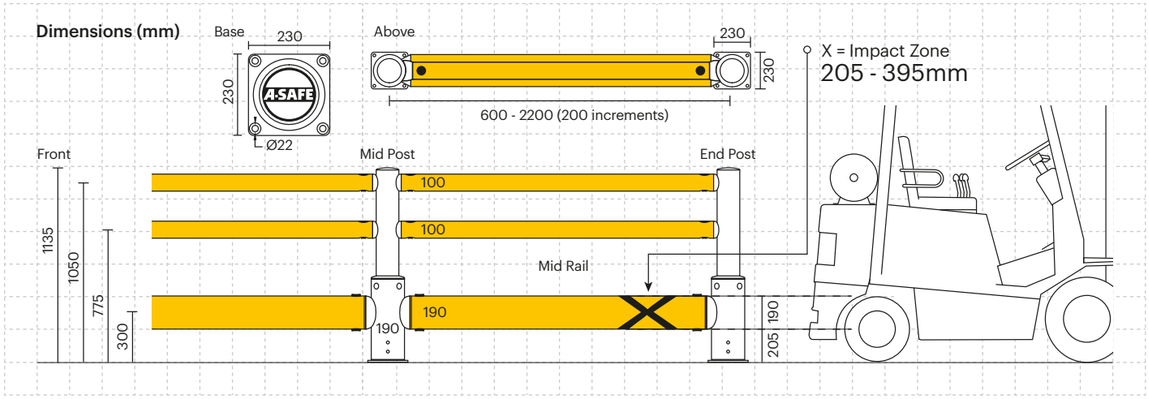
Force to Bolt 24kN



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
Hygiene Seals	Yes

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

Dimensions (mm)



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.

A-SAFE UK Ltd
Ainley House, Ainleys Industrial Estate, Elland, Halifax HX5 9JP United Kingdom
www.asafe.com

A-SAFE™

iFlex™

Single Traffic Barrier+

Designed to protect people from injury, and safeguard buildings and equipment from damage both inside and out.

The high-strength, dual-function barrier isolates vehicles whilst also guiding pedestrians. The traffic rail provides heavy-duty resistance to impacts. The addition of an ergonomic handrail increases the height to segregate pedestrians and prevent falls.

Ideal for busy environments and high traffic areas where people and vehicles mix.

Tested to the global benchmark in barrier safety

bsi. PAS 13
Code of Practice for Workplace Safety Barriers

TÜV NORD
TÜV NORD Systems GmbH & Co. KG
Determination of the Product Type
Voluntary Certification acc. TÜV NORD Standard STH:ZE:KSP:VA:320

Testing Criteria to determine essential Product Properties of Collision Protection Systems:

- PAS 13, Sec. 7.7 (Sled and Ramp Impact test)
- PAS 13, Sec. 7.8 (Pass and Fail Criteria)

For further information: www.tuev-nord.de

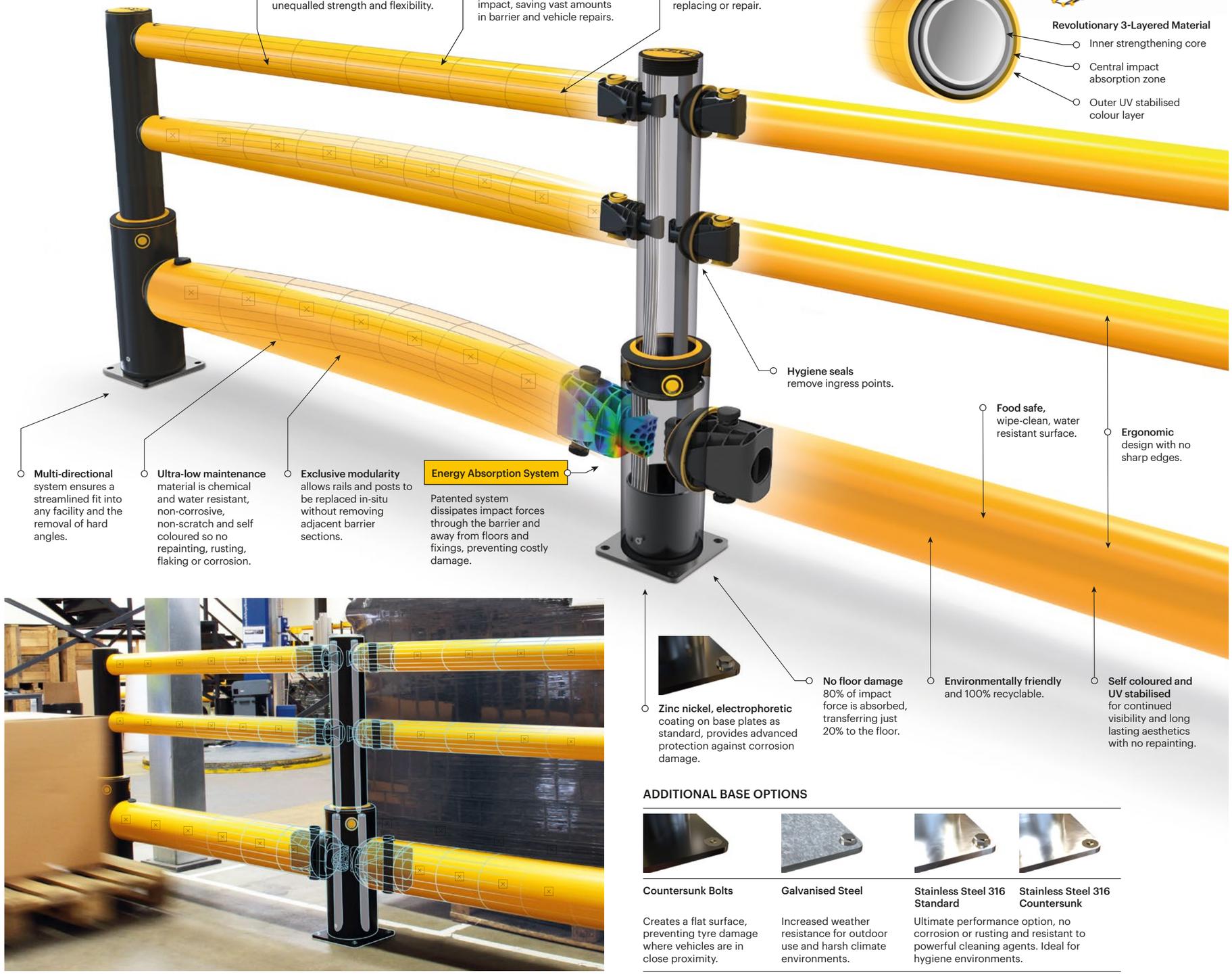
Engineered for performance

Whether in the resilience, flexibility and in-built memory of our exclusive Memaplex™ material or the unrivalled energy absorption of our unique 3-phase coupling system, a wealth of technical ingenuity goes into every A-SAFE product to ensure that it performs perfectly every time you need it to. We are continuously innovating to solve the greatest workplace safety challenges on behalf of our customers and our numerous patents attest to our industry-leading commitment to research and development.

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

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.



Multi-directional system ensures a streamlined fit into any facility 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.

Energy Absorption System

Patented system dissipates impact forces through the barrier and away from floors and fixings, preventing costly damage.

Hygiene seals remove ingress points.

Food safe, wipe-clean, water resistant surface.

Ergonomic design with no sharp edges.

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

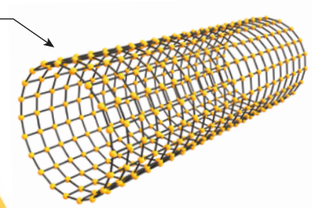
No floor damage 80% of impact force is absorbed, transferring just 20% to the floor.

Environmentally friendly and 100% recyclable.

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

MEMAPLEX™

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

ADDITIONAL BASE OPTIONS

Countersunk Bolts

Creates a flat surface, preventing tyre damage where vehicles are in close proximity.

Galvanised Steel

Increased weather resistance for outdoor use and harsh climate environments.

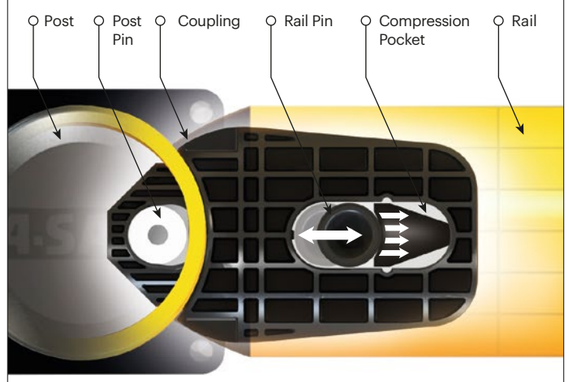
Stainless Steel 316 Standard

Stainless Steel 316 Countersunk

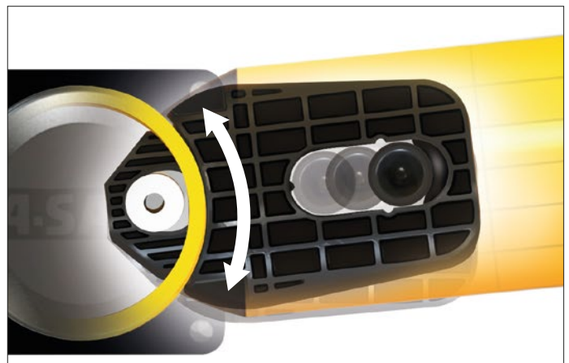
Ultimate performance option, no corrosion or rusting and resistant to powerful cleaning agents. Ideal for hygiene environments.

Energy Absorption System

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



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



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

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