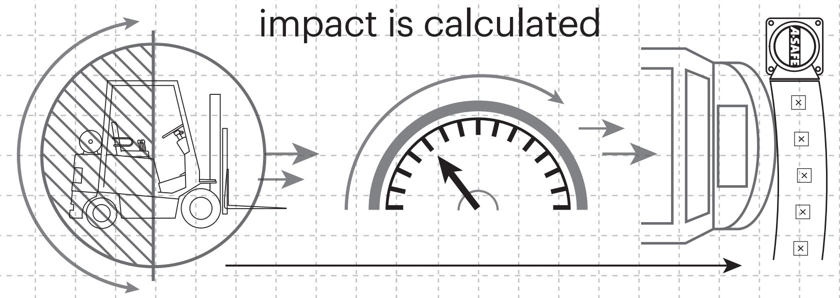
Technical Information

How the energy from a vehicle impact is calculated



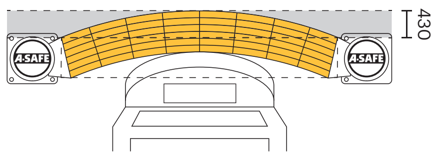
½ Mass x Speed^2 = Joules

Tested Impact Energy
21,350 Joules
Equivalent vehicle and speed
5.9 tonne X 6 mph impact
Mid Rail 45° Impact on 2000mm Post Centres

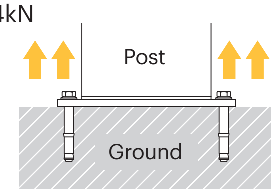
Impact Test	Impact Angle on 2000mm Post Centres			
	90°	45°	22.5°	10°
Mid Rail Max Energy (Joules)	15,100	21,350	39,450	86,950

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

Deflection at Max Energy
430mm



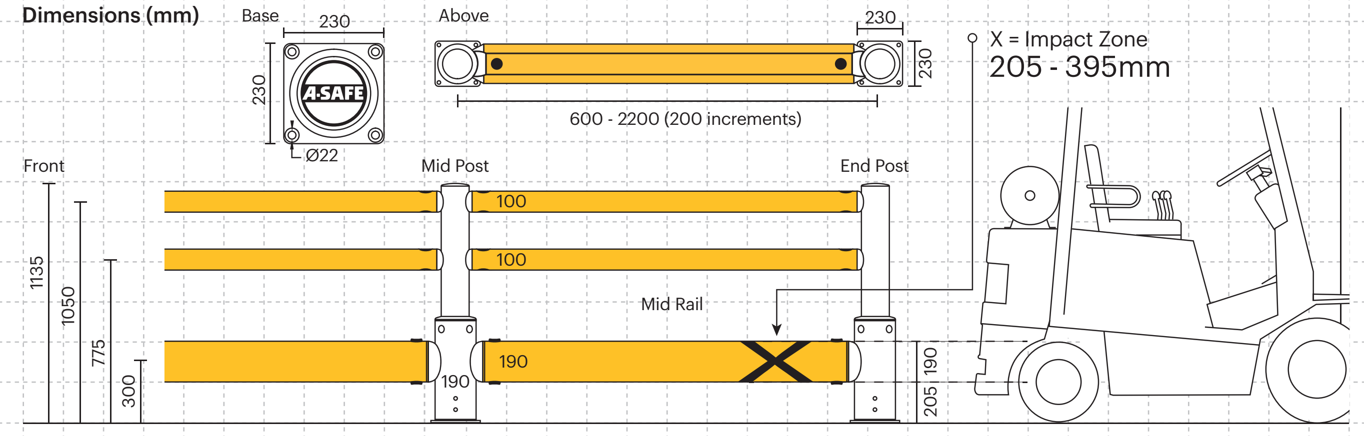
Force to Bolt
24kN



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	Standard Black	Standard Grey
RAL 1007*	RAL 9005*	RAL 9007*
PANTONE 7548*	PANTONE Black	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 Headquarters
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A-SAFE Est. 1984

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.

TÜV NORD Systems GmbH & Co. KG – Freiwillige Prüfung – A-SAFE PENDULUM IMPACT TESTER

Code of Practice for Workplace Safety Barriers
PAS13
2017

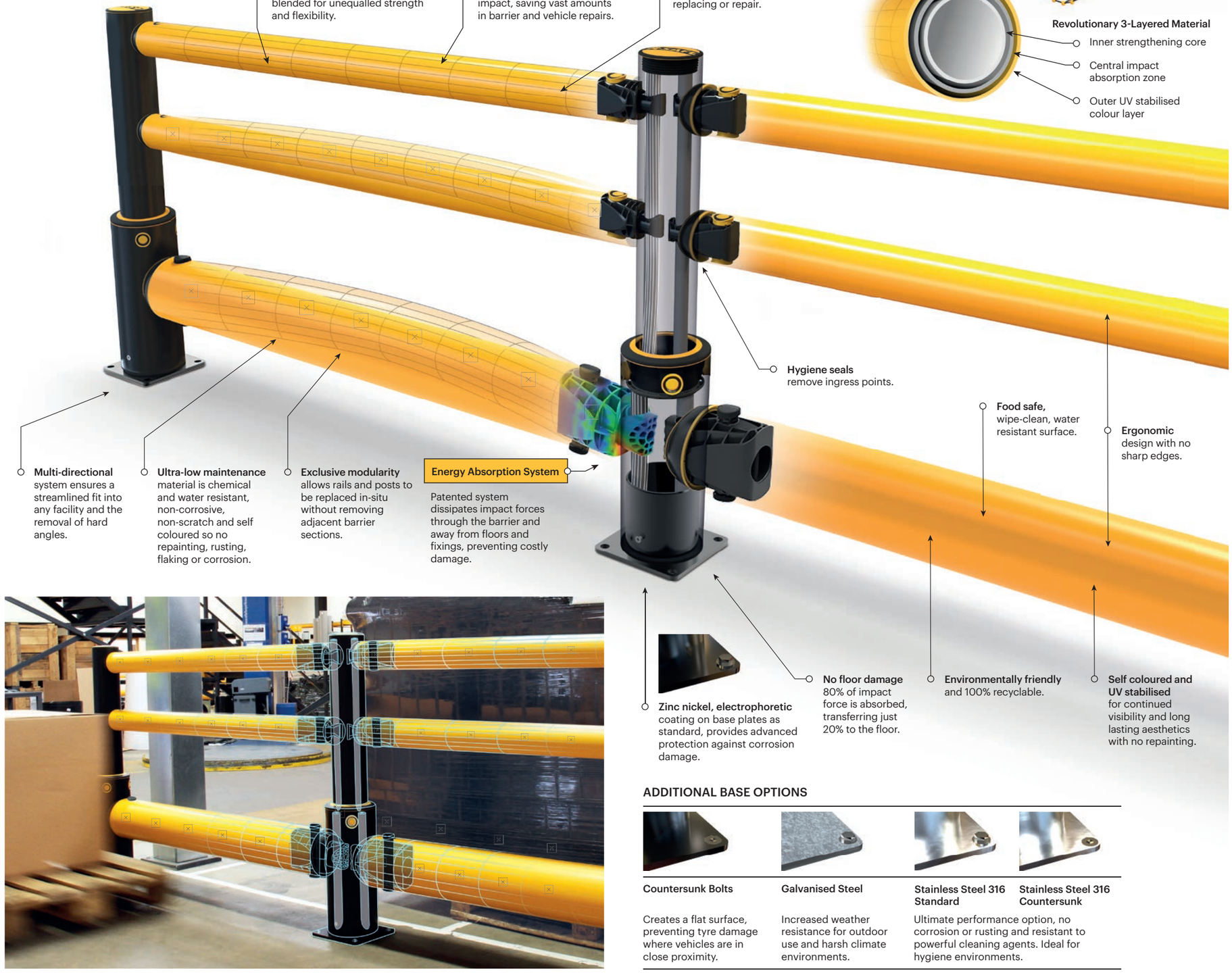
Engineered for performance

A-SAFE's state of the art products are meticulously engineered to deliver the highest performance. Designed, developed, tested and manufactured in-house at our cutting-edge facility, each unique component is carefully crafted and purpose-built to play a vital role in the product's performance.

Advanced 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.

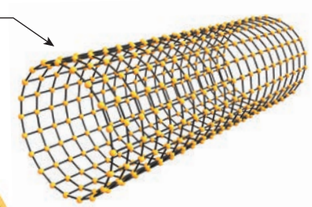
No floor damage 80% of impact force is absorbed, transferring just 20% to the floor.

Environmentally friendly and 100% recyclable.

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

MEMAPLEX™

Patented 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.

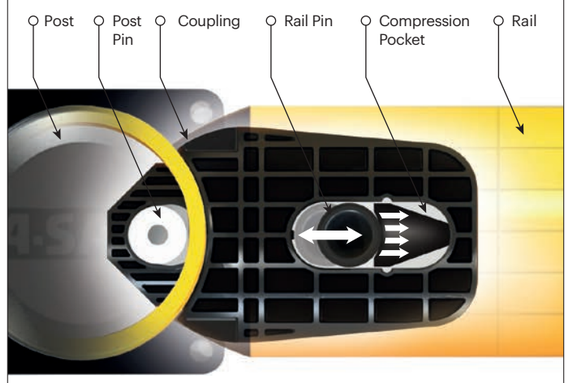
Stainless Steel 316 Standard

Stainless Steel 316 Countersunk

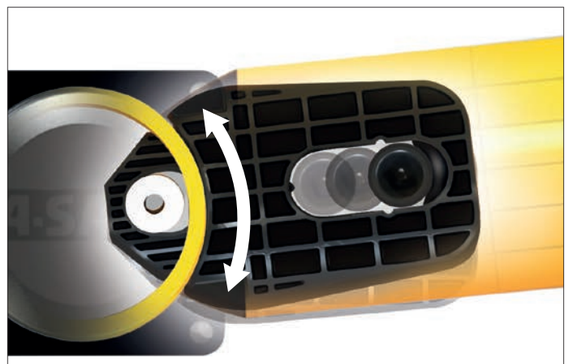
Ultimate performance option, no corrosion or rusting and resistant to powerful cleaning agents. Ideal for hygiene environments.

Energy Absorption System

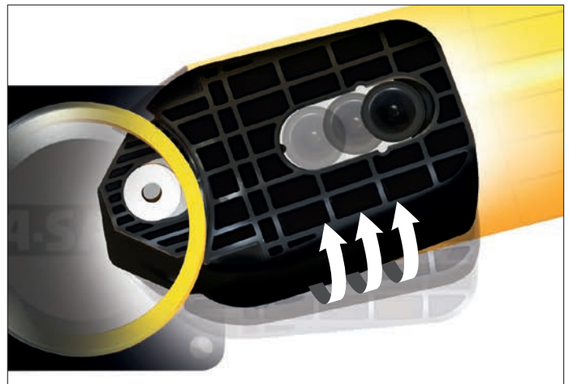
A patented 3-phase system that activates sequentially for unparalleled energy absorption



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.