

Technical Information

How the energy from a vehicle impact is calculated

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

Tested Impact Energy

**21,350 Joules**

Equivalent vehicle and speed

8.5 tonne

$\times$

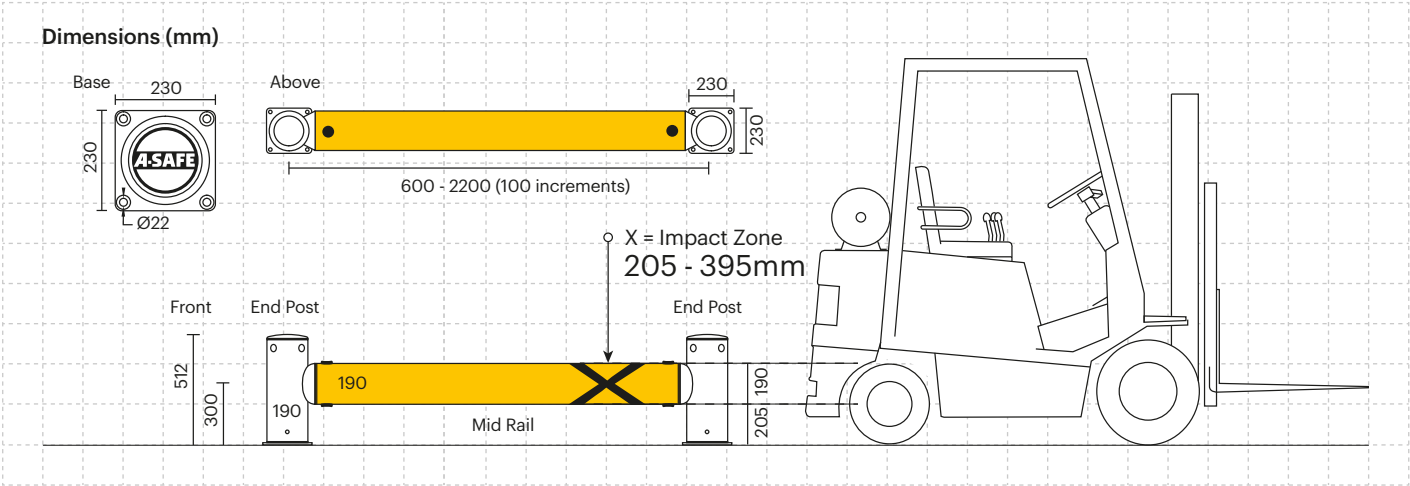
5 mph impact

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              |        |        |
| 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



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.



iFlex™

Single RackEnd Barrier

A-SAFE



Designed to protect the end of racking aisles where turning vehicles and equipment can impact vulnerable racking structures.

This RackEnd barrier provides heavy duty protection to shield racking systems from high impact accidents and prevent damage.

The circular end posts provide enhanced protection at the barrier ends which are most susceptible to impact. Innovative spinning collars further deflect and dissipate impact forces.

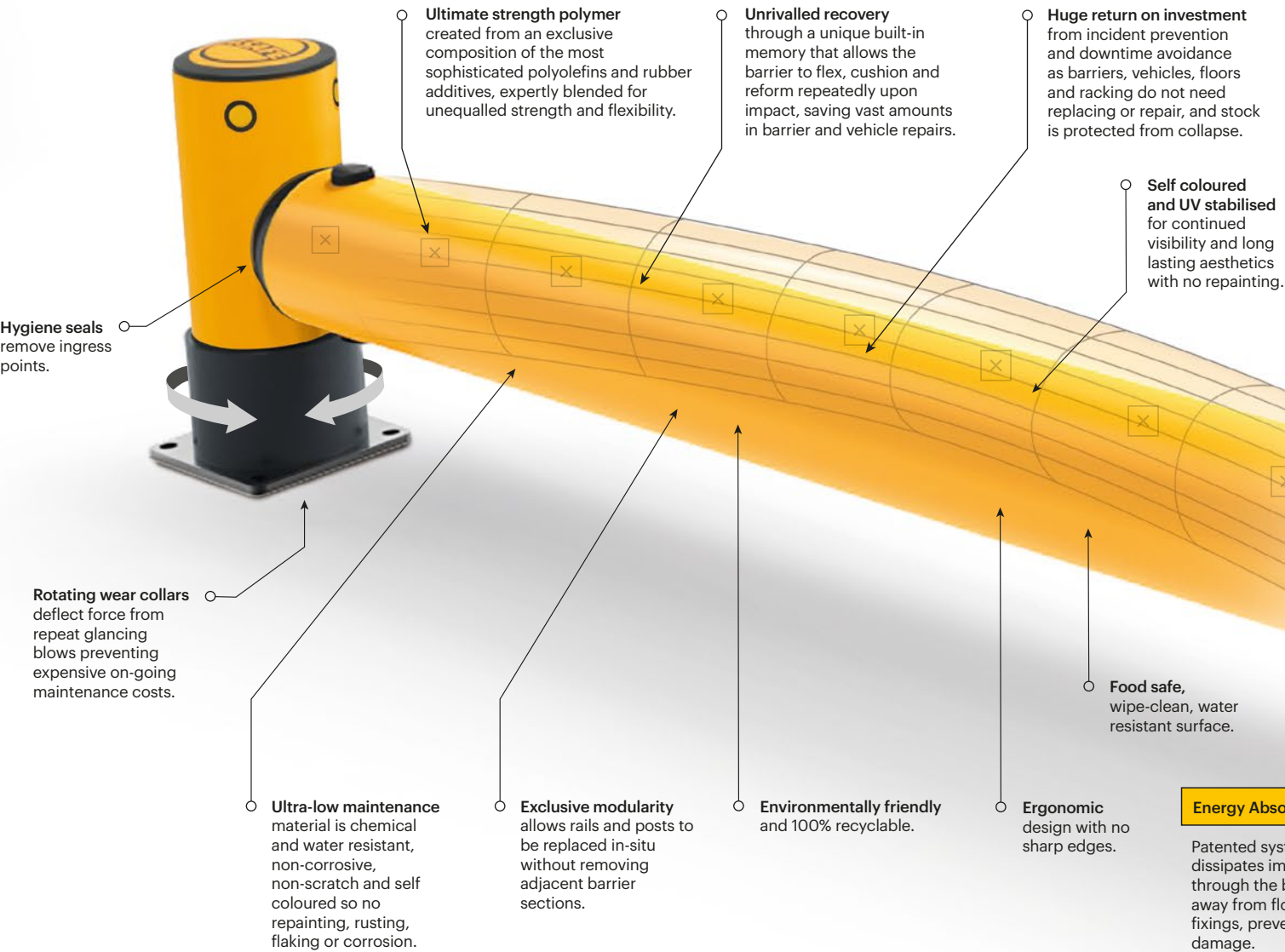
Tested to the global benchmark in barrier safety

**bsi. PAS 13**  
Code of Practice for Workplace Safety Barriers



Engineered for performance

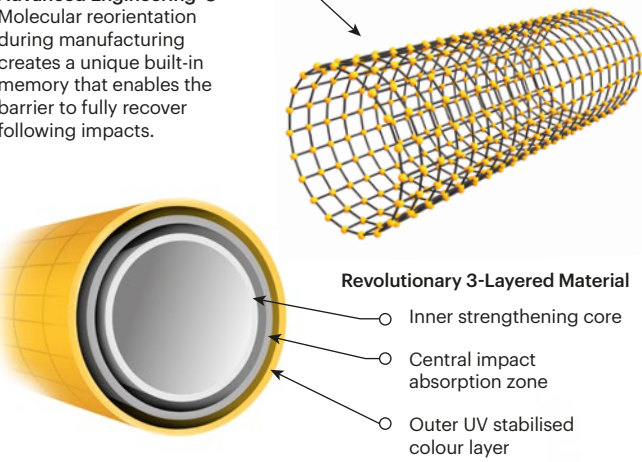
Whether in the resilience, flexibility and in-built memory of our exclusive Memaplex™ material or the unrivalled energy absorption of our unique 3-phase coupling system, a wealth of technical ingenuity goes into every A-SAFE product to ensure that it performs perfectly every time you need it to. We are 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.



iFlex RackEnd Barrier shown with optional iFlex ForkGuard.

MEMAPLEX™

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



Energy Absorption System

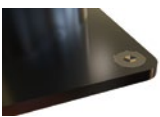
Patented system dissipates impact forces through the barrier and away from floors and fixings, preventing costly damage.



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

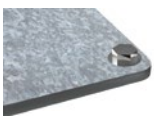
No floor damage  
80% of impact force is absorbed, transferring just 20% to the floor.

ADDITIONAL BASE OPTIONS



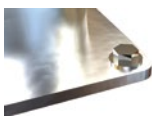
Countersunk Bolts

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



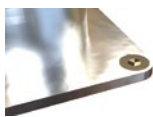
Galvanised Steel

Increased weather resistance for outdoor use and harsh climate environments.



Stainless Steel 316 Standard

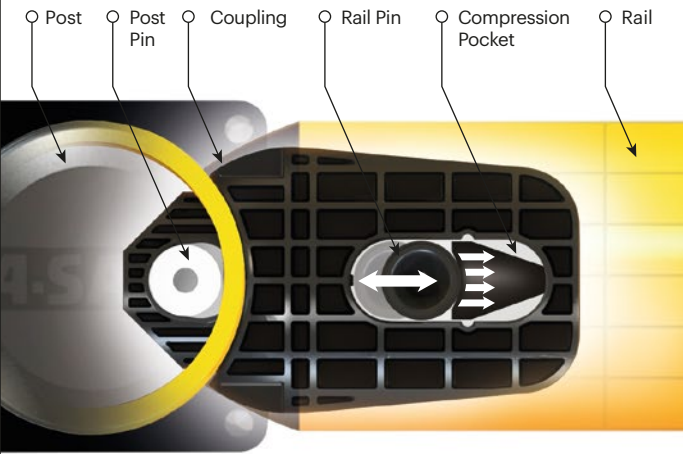
Ultimate performance option, no corrosion or rusting and resistant to powerful cleaning agents. Ideal for hygiene environments.



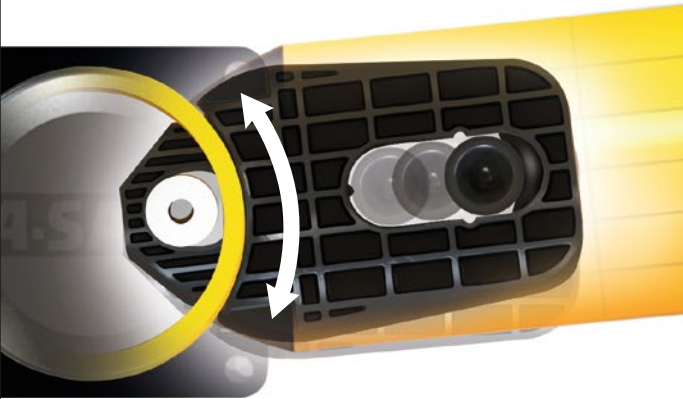
Stainless Steel 316 Countersunk

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.