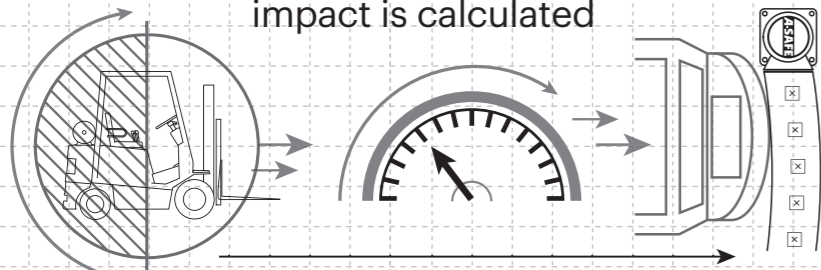


# Technical Information

How the energy from a vehicle impact is calculated

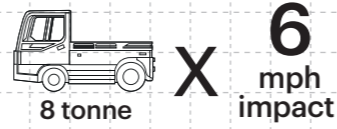


$$\frac{1}{2} \text{ Mass} \times \text{Speed}^2 = \text{Joules}$$

Tested Impact Energy

**28,950 Joules**

Equivalent vehicle and speed



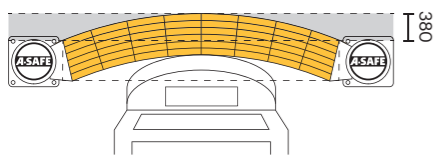
Mid Rail 45° Impact on 2000mm Post Centres

Impact Test	Impact Angle on 2000mm Post Centres			
	90°	45°	22.5°	10°
Mid Rail Max Energy (Joules)	20,500	28,950	53,550	118,000
End Post Max Energy (Joules) - 90°	6,900			
Mid Post Max Energy (Joules) - 90°	6,900			

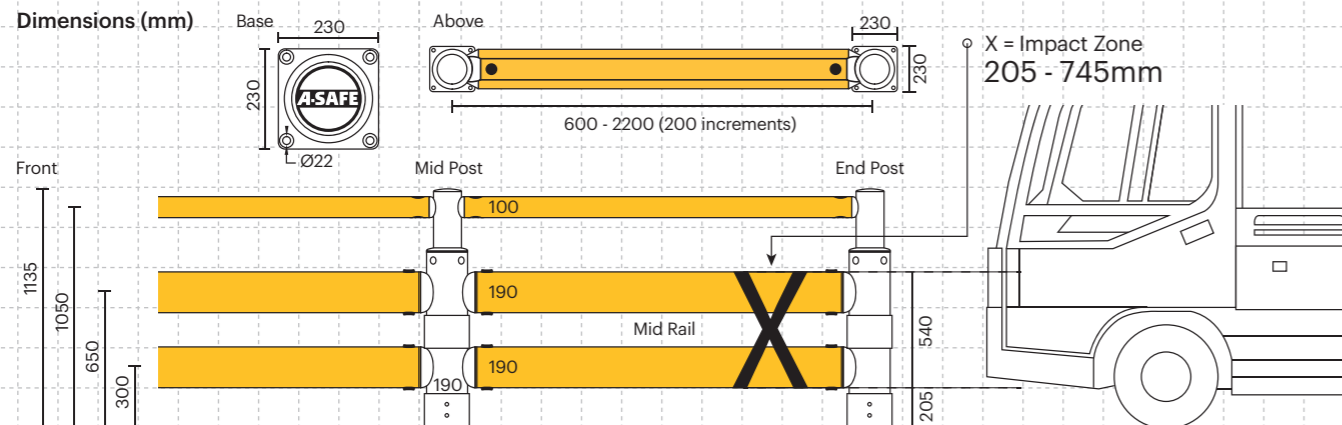
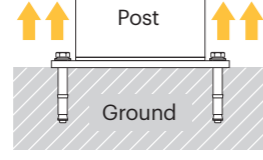
Material Properties	MEMAPLEX™
Temperature Range	-10°C to 50°C
Ignition Temperature	370°C to 390°C
Flash Point	350°C to 370°C
Toxicity	Not Hazardous
Chemical Resistance	Excellent - ISO/TR 10358
Weathering Stability (Grey Scale)	5/5*
Light Stability (Blue Wool Scale)	7/8**
Static Rating (Surface Resistivity)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

Deflection at Max Energy 380mm



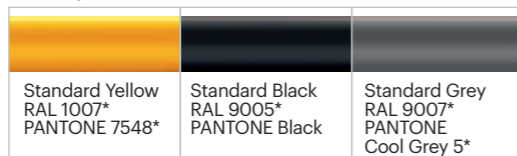
Force to Bolt 34kN



### Post Options



### Rail Options



### 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.



**Atlas™**  
 Double Traffic Barrier+

# A-SAFE

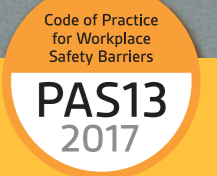
Est. 1984



Developed specifically for airports with input from the British Airports Authority, Atlas Barriers provide the ultimate in safety and protection for demanding conditions and large operations.

Designed to be highly resilient to the toughest of climates and with the strongest tolerance to impact damage, this dual-function solution physically segregates and shields walkways from vehicles to keep pedestrians safe and out of danger.

Able to withstand repeated impacts from the largest of workplace vehicles, Atlas barriers are ideal for any heavy-duty environment requiring unrivalled safety.



# 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 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.

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

**Hygiene seals** prevent the ingress of dirt and debris.

**Water resistant** wipe-clean, food safe surface.

**Ergonomic design** with no sharp edges.

**Environmentally friendly** and 100% recyclable.

**Rotating wear collars** deflect force from repeat glancing blows preventing expensive on-going maintenance costs.

**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.

**Heavy Duty Self-Undercutting Anchors** create a durable mechanical interlock with flooring, giving exceptional pull-out resistance under extreme force impacts.

**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**

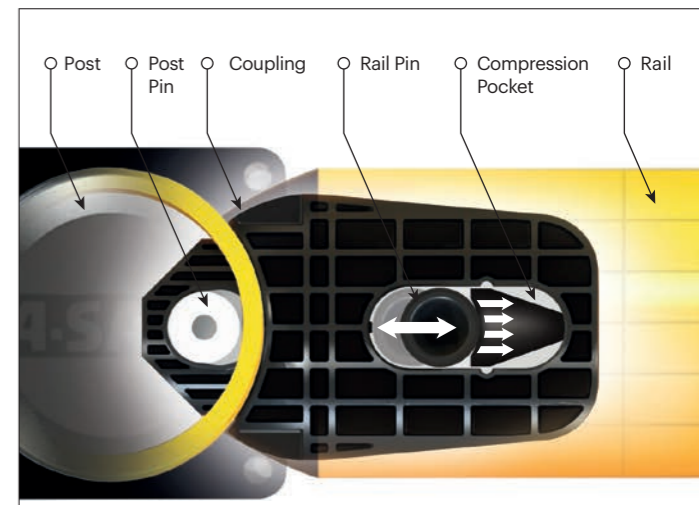
- Inner strengthening core
- Central impact absorption zone
- Outer UV stabilised colour layer

**ADDITIONAL BASE OPTIONS**

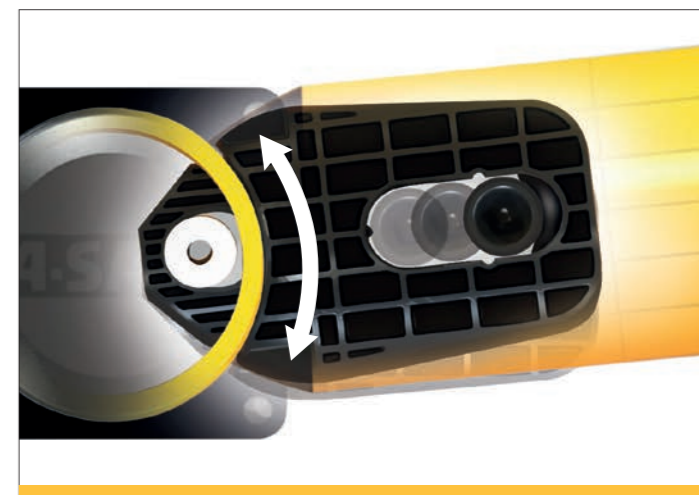
- Galvanised Steel**  
Increased weather resistance for outdoor use and harsh climate environments.
- Stainless Steel 316 Standard**  
Ultimate performance option, no corrosion or rusting and resistant to powerful cleaning agents. Ideal for hygiene environments.
- Stainless Steel 316 Countersunk**

## 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.