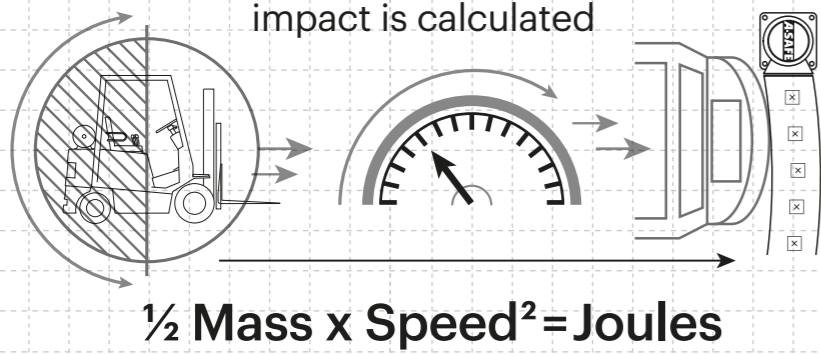


# Technical Information

How the energy from a vehicle impact is calculated



**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

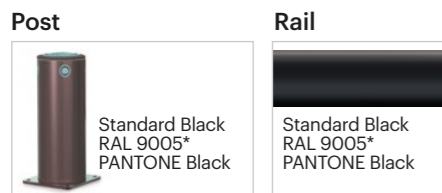
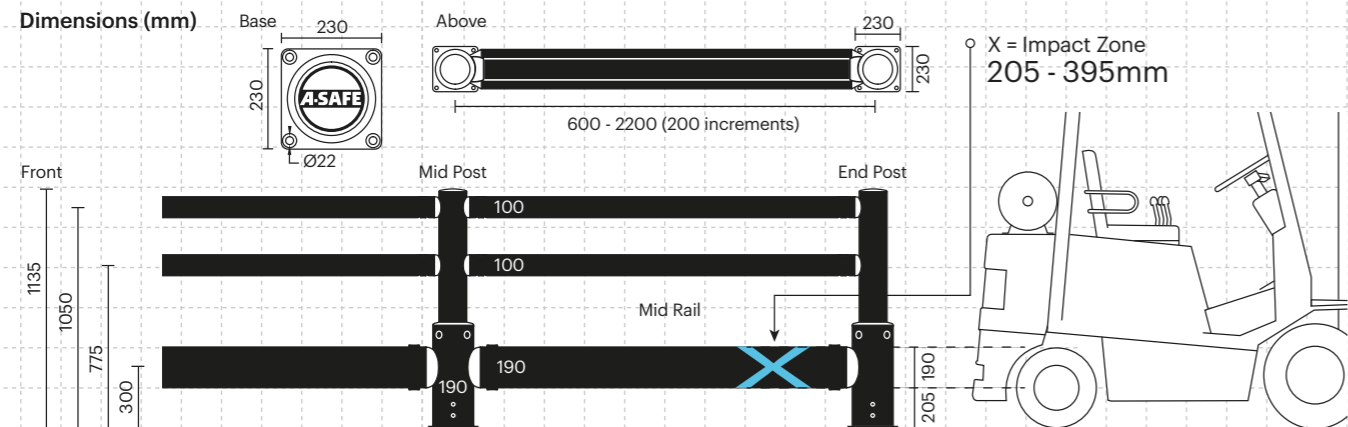
Impact Test	Impact Angle on 2000mm Post Centres			
	90°	67.5°	45°	22.5°
Mid Rail Max Energy (Joules)	15,100	17,691	30,200	103,109
End Post Max Energy (Joules) - 90°	6,900			
Mid Post Max Energy (Joules) - 90°	6,900			

Deflection at Max Energy 430mm	Force to Bolt 24kN
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Material Properties	MEMAPLEX™ SUB-ZERO
Temperature Range	-30°C to 0°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



**Colour Combination**

\*Please note that the RAL and PANTONE colour 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™

Cold Storage Single Traffic Barrier+

A-SAFE



A-SAFE iFlex Cold Storage Single Traffic Barrier+ is designed to protect people, buildings and infrastructure from impacts with forklifts and other vehicles. This high-strength dual-function barrier has been purpose-engineered for applications within sub-zero environments such as cold storage facilities. It delivers supreme performance in temperatures as low as -30°C.

Manufactured from Memaplex™ Sub-Zero, a unique blend of polymers designed to withstand multiple impacts without cracking or fragmenting, iFlex Cold Storage Single Traffic Barrier provides both guidance and physical protection. A heavy-duty traffic rail provides robust resistance against vehicle impacts, while an ergonomic handrail increases the height of the barrier to segregate pedestrian walkways and prevent falls.

Ideal for busy sub-zero environments where people and vehicles share space.





# Engineered for performance

A-SAFE Cold Storage products are state of the art and have been precision engineered to deliver the highest levels of performance in extreme sub-zero environments. Designed, developed, tested and manufactured in-house at our cutting-edge facility, every component is purpose-built to function flawlessly and deliver the ultimate in durability.

**Unique sub-zero material science** specially developed to perform in very cold conditions, Memaplex™ Sub-Zero is an exclusive composition of the most sophisticated polyolefins and rubber additives, blended for unequalled strength and flexibility.

**Unrivalled resilience** through a unique built-in memory that allows material to flex, cushion and reform repeatedly after impacts, saving vast amounts in 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.

**Ergonomic design** with no sharp edges.

**Zinc nickel 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** for enduring high visibility and long-lasting aesthetics with no need for repainting.

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

**MEMAPLEX™ SUB-ZERO**

**Revolutionary 3-Layered Material**

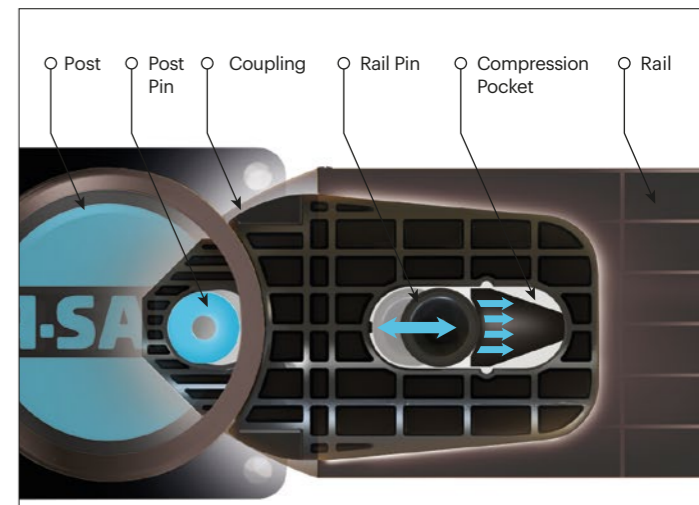
- Inner strengthening core
- Central impact absorption zone
- Outer UV stabilised colour layer

**Climate tested**  
A-SAFE cold storage products are dynamically impact-tested to PAS 13 standards under realistic climate conditions to ensure they perform perfectly everytime.

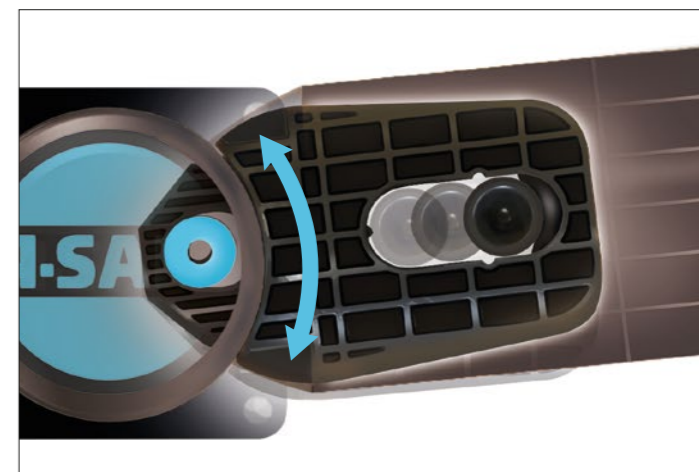
**bsi. PAS13**  
Code of Practice for Workplace Safety Barriers

## 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.