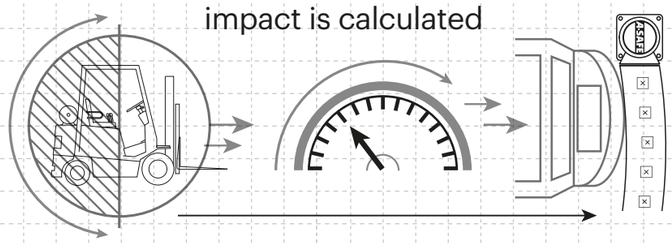
Technical Information

How the energy from a vehicle impact is calculated



½ Mass x Speed² = Joules

Tested Impact Energy

30,200 Joules

Equivalent vehicle and speed

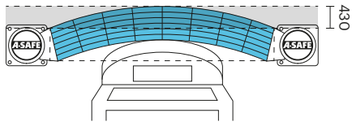
7.8 tonne X 10 km/h impact

Mid Rail 45° Impact on 2000mm Post Centres

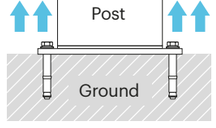
Impact Test	Impact Angle on 2000mm Post Centres			
	90°	67.5°	45°	22.5°
Mid Rail Max Energy (Joules)	15,100	17,691	30,200	103,109

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

Deflection at Max Energy
430mm



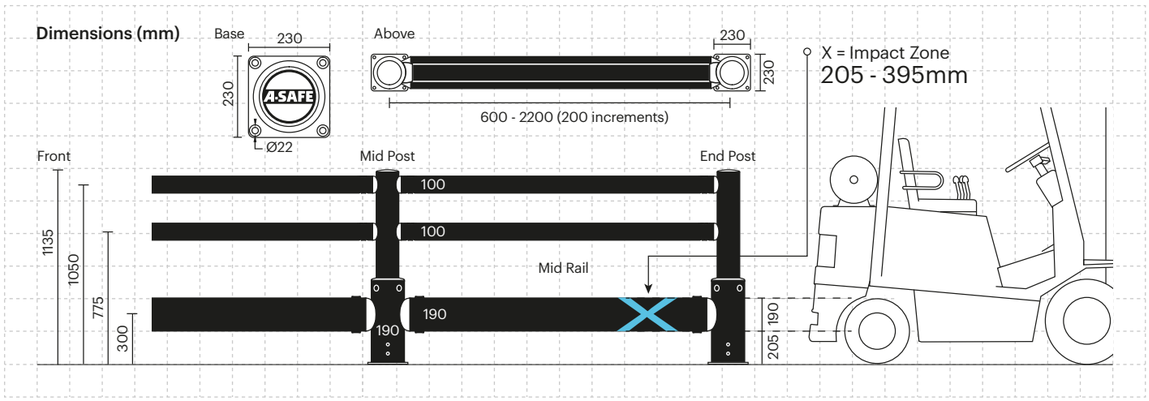
Force to Bolt
24kN



Material Properties	MEMAPLEX 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

Dimensions (mm)



Post

Standard Black
RAL 9005*
PANTONE Black

Rail

Standard Black
RAL 9005*
PANTONE Black

Colour Combination

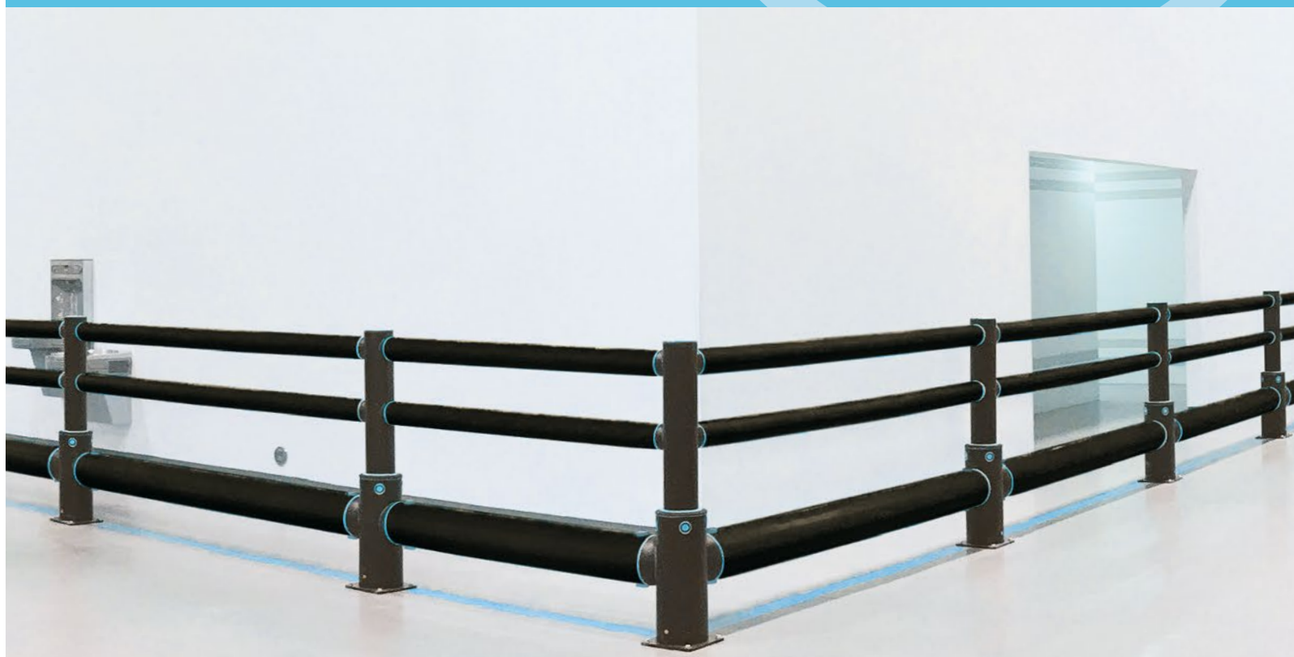
*Please note that the RAL and PANTONE colour listed are the closest match to standard A-SAFE colours, but may not be exact matches of the actual product colour and should be used for guidance only.

A-SAFE Australasia PTY Ltd
Region: Australasia, 2/177-179 Power Street, Glendenning, NSW 2761, Australia.
www.asafe.com

A-SAFE™

iFlex™

Cold Storage Single Traffic Barrier+



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.

Tested to the global benchmark in barrier safety
bsi. PAS 13
Code of Practice for Workplace Safety Barriers

ROBUST & EFFECTIVE TO -30°C

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.

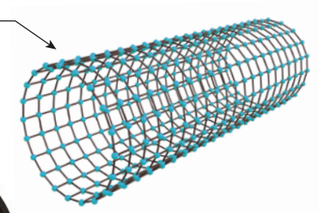
No floor damage 80% of impact force is absorbed, transferring just 20% to the floor.

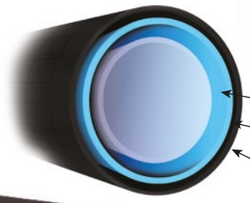
Environmentally friendly and 100% recyclable.

Self coloured for enduring high visibility and long-lasting aesthetics with no need for repainting.

MEMAPLEX™ SUB-ZERO

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

Climate tested

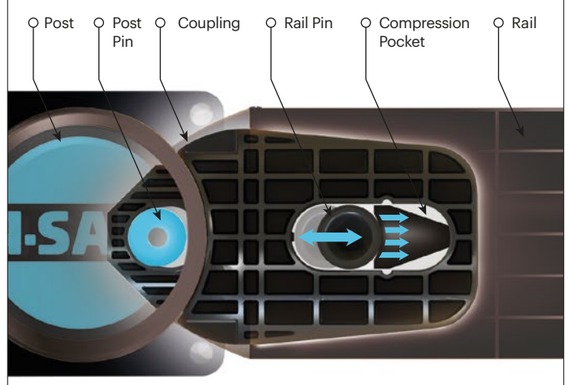
A-SAFE cold storage products are dynamically impact-tested to PAS 13 standards under realistic climate conditions to ensure they perform perfectly everytime.

bsi. PAS13

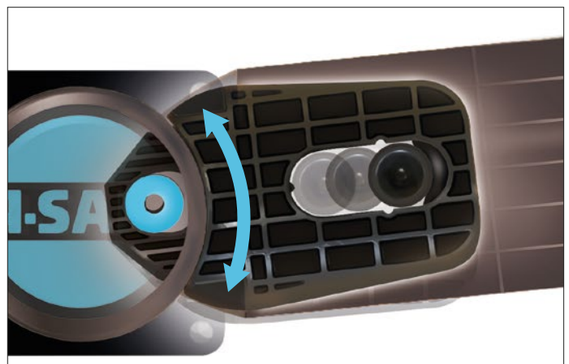
Code of Practice for Workplace Safety Barriers

Energy Absorption System

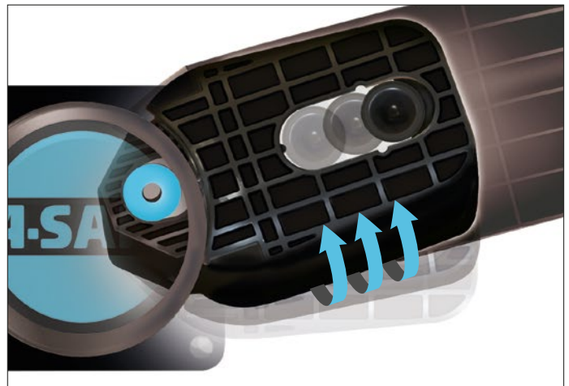
A patented 3-phase system that activates sequentially for unparalleled energy absorption



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.