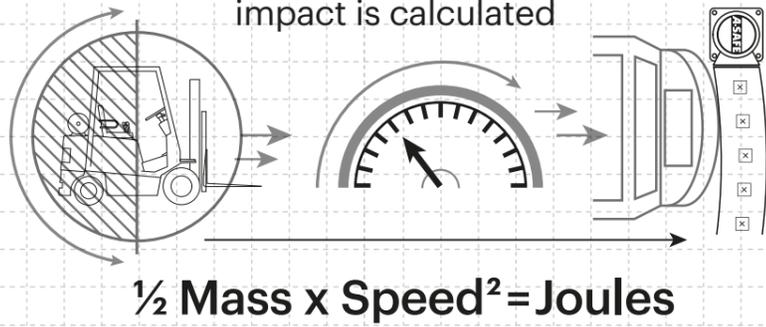


# Technical Information

How the energy from a vehicle impact is calculated



**Tested Impact Energy**  
**21,350 Joules**  
 Equivalent vehicle and speed  
**6.5 ton** X **6 mph impact**  
 Mid Rail 45° Impact on 78% Post Centers

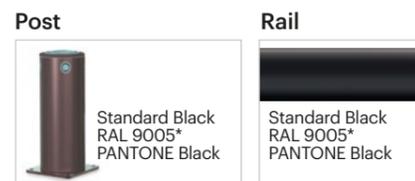
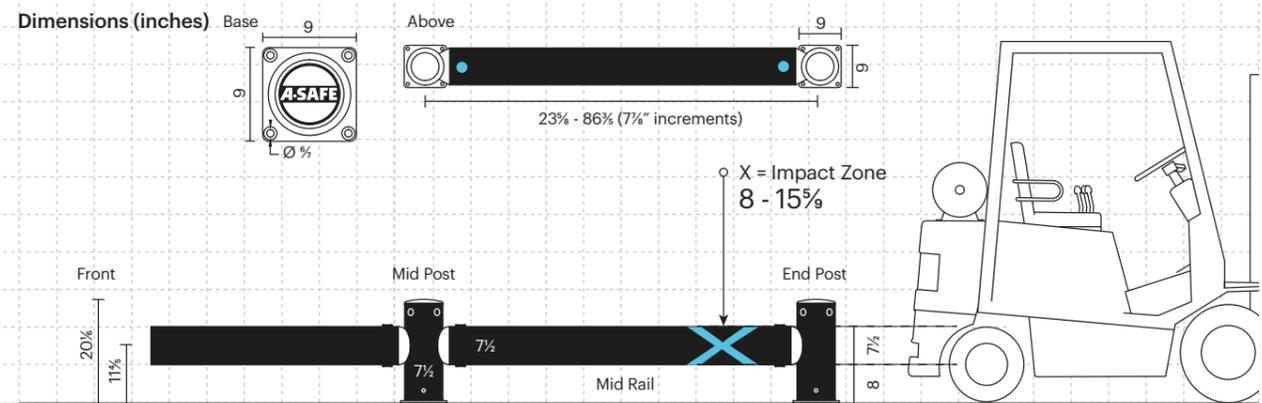
Impact Test	Impact Angle on 78% inch Post Centers			
	90°	45°	22.5°	10°
Mid Rail Max Energy (Joules)	15,100	21,350	39,450	86,950
End Post Max Energy (Joules) - 90°	6,900			
Mid Post Max Energy (Joules) - 90°	6,900			

Deflection at Max Energy 17 inches	Force to Bolt 24kN
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Material Properties	MEMAPLEX™ SUB-ZERO
Temperature Range	-22°F to 32°F
Ignition Temperature	698°F to 734°F
Flash Point	662°F to 698°F
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



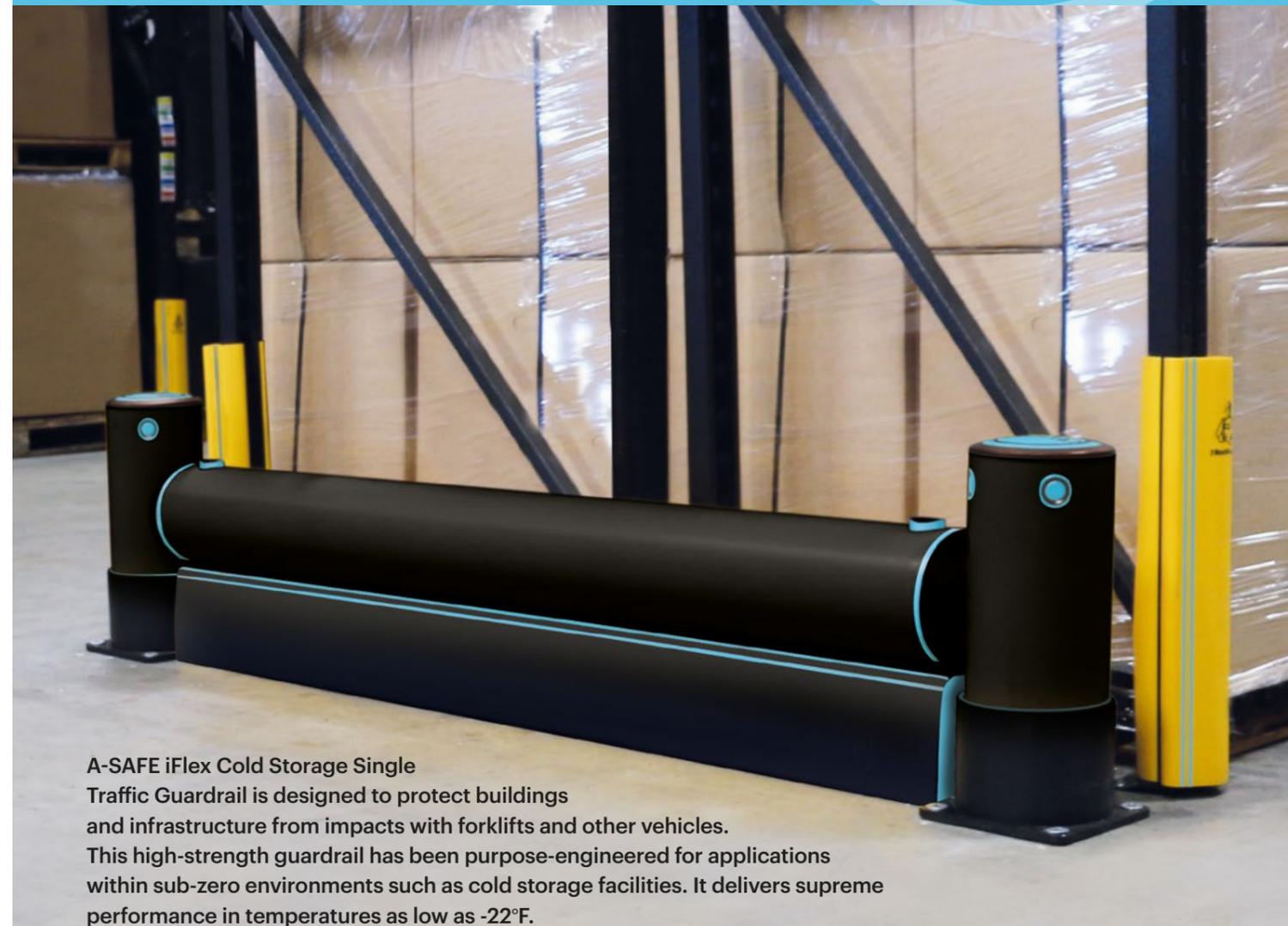
**Color Combination**

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



iFlex™

Cold Storage Single Traffic Guardrail



A-SAFE iFlex Cold Storage Single Traffic Guardrail is designed to protect buildings and infrastructure from impacts with forklifts and other vehicles. This high-strength guardrail has been purpose-engineered for applications within sub-zero environments such as cold storage facilities. It delivers supreme performance in temperatures as low as -22°F.

Manufactured from Memaplex™ Sub-Zero, a unique blend of polymers designed to withstand multiple impacts without cracking or fragmenting, iFlex Cold Storage Single Traffic Guardrail provides both guidance and physical protection against vehicle impacts.

Ideal for busy sub-zero environments where vehicles are in operation.



# 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 colored 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.

**Revolutionary 3-Layered Material**

- Inner strengthening core
- Central impact absorption zone
- Outer UV stabilized color layer

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

**MEMAPLEX™ SUB-ZERO**

**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.

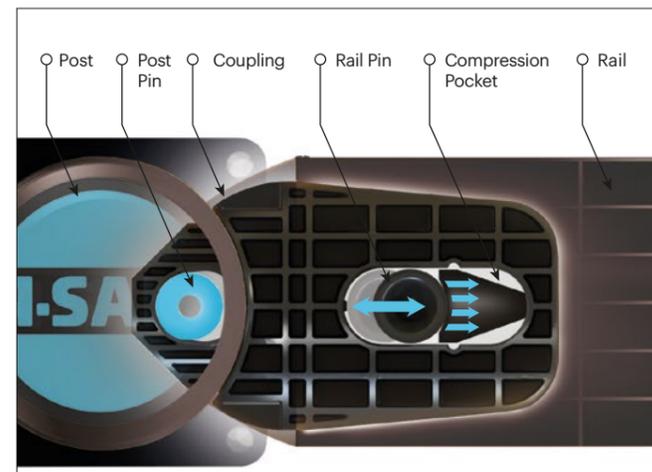
**Self-colored** for enduring high visibility and long-lasting aesthetics with no need for repainting.

**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.

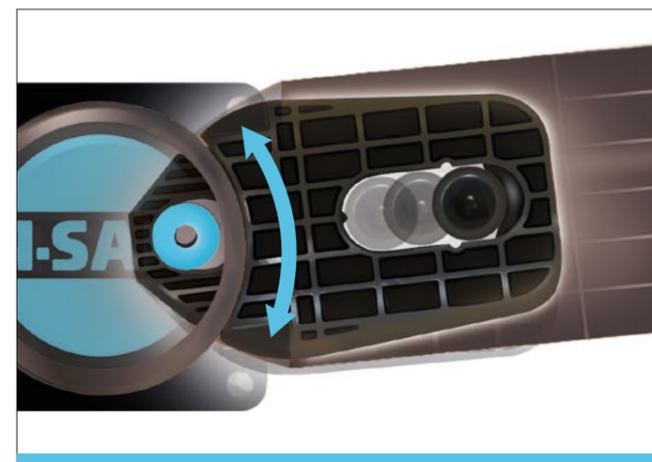
**bsi. PAS13**  
Code of Practice for Workplace Safety Barriers

## Energy Absorption System

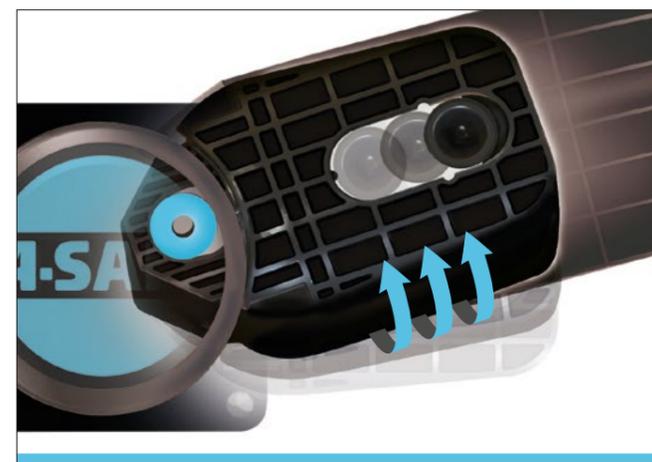
A patented 3-phase system that activates sequentially for unparalleled energy absorption



**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.