



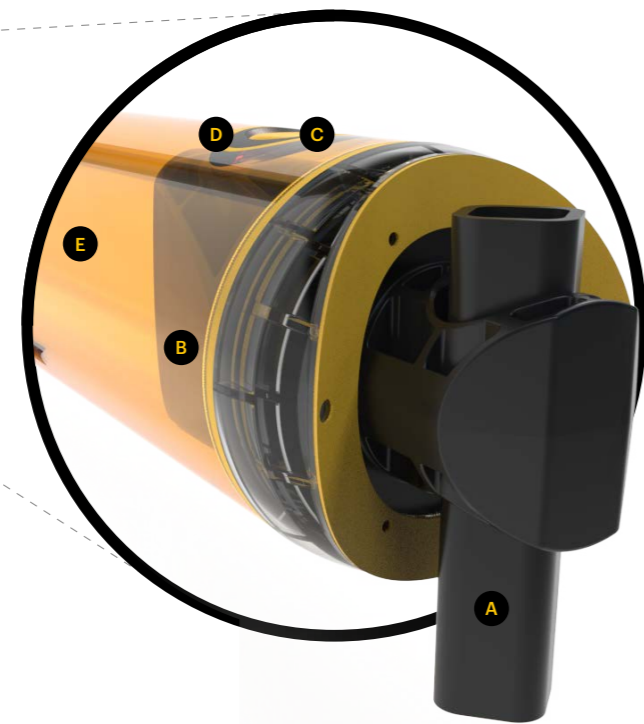
# iFlexRail Column Guard

Designed to provide bespoke protection of columns, building supports and structures of any size and with any section shape; square, rectangular, circular or irregular.

This impact-resisting guardrail system provides visual guidance to drivers and a robust physical shield for vulnerable structures. The rails are set apart from the column to isolate and absorb collision forces away from uprights.

Fully modular and adaptable, the guardrails can also be supplied as two or three sided units to safeguard columns located at the corner of two walls or in front of walls.





## Energy Absorption System

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

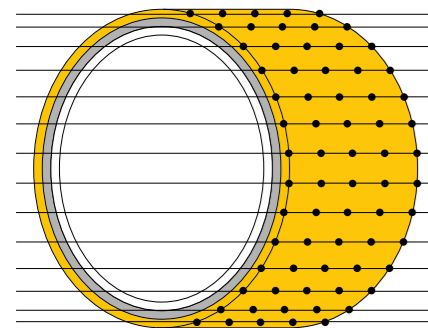
- 1 Memaplex™ rail flexes to absorb impact, initiating the rail pin to slide forward and transfer load energy to the compression pocket.
- 2 Compression of the pocket continues to disperse energy as the coupling rotates around the post pin to activate further absorption.
- 3 At peak energy, the coupling twists further, engaging the post pin and instigating torsion of the post to dispel remaining forces.

- |                   |                             |
|-------------------|-----------------------------|
| <b>A</b> Post Pin | <b>D</b> Compression Pocket |
| <b>B</b> Coupling | <b>E</b> Rail               |
| <b>C</b> Rail Pin |                             |

## MEMAPLEX™

**Ultimate strength polymer**  
created from an exclusive composition of the most sophisticated polyolefins and rubber additives, expertly blended for unequalled strength and flexibility.

**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

## Suitability

Vehicle



Engine Counterbalance Heavy Duty Forklift Truck



Horizontal Order Picker



Electric Pedestrian Truck

Application



Pedestrian Segregation



Column protection



Building and equipment protection

## Features and benefits



Multi-directional system ensures a streamlined fit around any column shape and any column location.



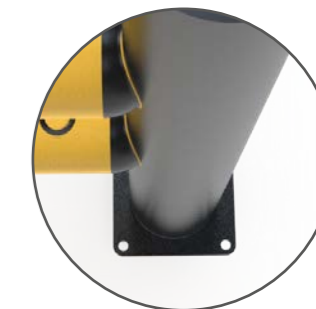
Ultra-low maintenance material is chemical and water resistant, non-corrosive, non-scratch and self coloured so no repainting, rusting, flaking or corrosion.



Unrivalled recovery through a unique built-in memory that allows the barrier to flex, cushion and reform repeatedly upon impact, saving vast amounts in guardrail and vehicle repairs.



Hygiene seals remove ingress points.



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



Self coloured and UV stabilised for continued visibility and long lasting aesthetics with no repainting.



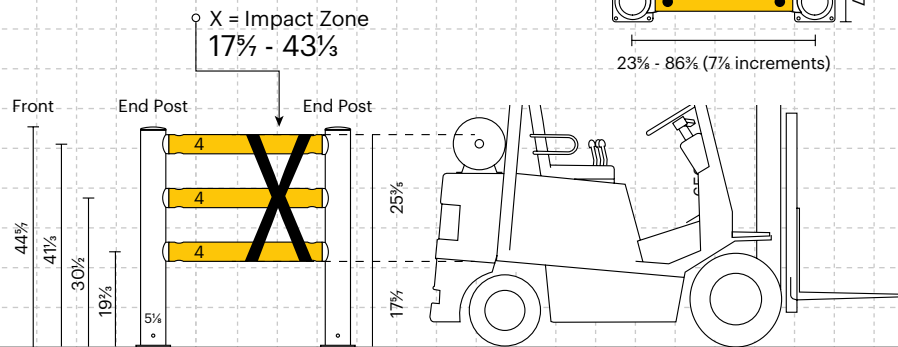
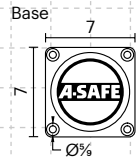
Huge return on investment from incident prevention and downtime avoidance as guardrails, vehicles, floors and equipment do not need replacing or repair.





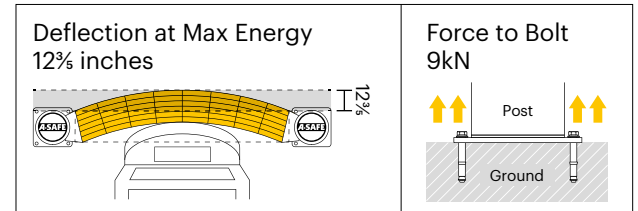
## Technical Information

### Dimensions (inches)



| Impact Test                     | Impact Angle on 59 inch Post Centres |       |        |        |
|---------------------------------|--------------------------------------|-------|--------|--------|
|                                 | 90°                                  | 67.5° | 45°    | 22.5°  |
| Mid Rail<br>Max Energy (Joules) | 5,800                                | 6,795 | 11,600 | 39,605 |

|                                    |       |
|------------------------------------|-------|
| End Post Max Energy (Joules) - 90° | 3,000 |
| Mid Post Max Energy (Joules) - 90° | 3,000 |

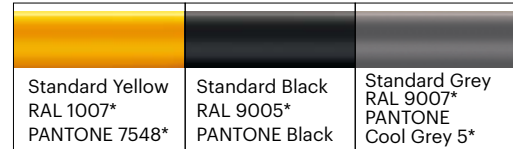


| Material Properties                 | MEMAPLEX™                |
|-------------------------------------|--------------------------|
| Temperature Range                   | 14°F to 122°F            |
| Ignition Temperature                | 698°F to 734°F           |
| Flash Point                         | 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                      |

### Post Options



### Rail Options



### Color Combinations

\*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.

\* Weathering scale 1 is very poor and 5 is excellent  
 \*\* Light stability scale 1 is very poor and 8 is excellent

