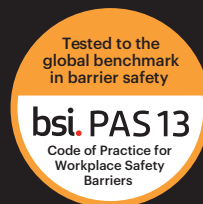# iFlex Heavy Duty Bollard

Designed to protect against damage caused by heavier weight vehicles or in higher speed environments.

The iFlex Heavy Duty Bollard is designed to protect structures and equipment from impact damage. Providing a robust physical presence to prevent access and guide vehicles.

Strong, durable and highly visible, A-SAFE Heavy Duty Bollards permanently reinforce a driver's attention to safe driving and provide enhanced protection against significant damage to property.
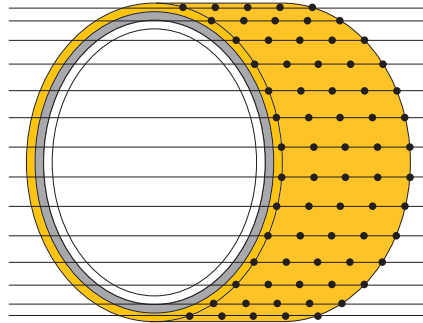
**Tested to the global benchmark in barrier safety**

**bsi. PAS 13**
Code of Practice for Workplace Safety Barriers

## A-SAFE
PIONEERING WORKPLACE SAFETY

# 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 bollard to fully recover following impacts.

**Revolutionary 3-Layered Material**

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

## In-line coupling for height flexibility

The iFlex in-line coupling introduces a new level of modularity to the vertical height of a range of A-SAFE products. The coupling enables customers to take the standard 1200mm bollard up to 2000mm.

- **Four pin positioning**
  to top and bottom sections gives increased rigidity and stability.

- **Seamless join**
  enables easy stacking of top and bottom bollard sections.

- **Moulded pins**
  lock securely into the internal layer with a quarter turn.
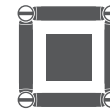
## Suitability

### Application

- Suitable for pedestrians
- Car Park protection
- Column protection
- Building and equipment protection
- Airport mast and floodlight column protection
- Industrial door protection

### Vehicle

- Heavy Duty Counterbalance FLT
- Engine Counterbalance Heavy Duty Forklift Truck
- Electric Reach Truck
- High Rack Stacker
- Car
- Small Van
- Mini Van

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

## Features and benefits



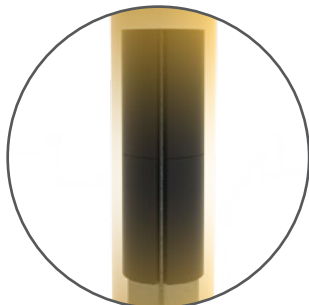Ideal for use on vehicle routes with sharp angle turns such as car parks.



Protect vulnerable access points where heavy duty vehicles are in operation.



The rotating wear collar adds an extra layer of protection along the full height of the bollard. The rotating action deflects force from repeat glancing blows. Preventing expensive on-going maintenance costs.
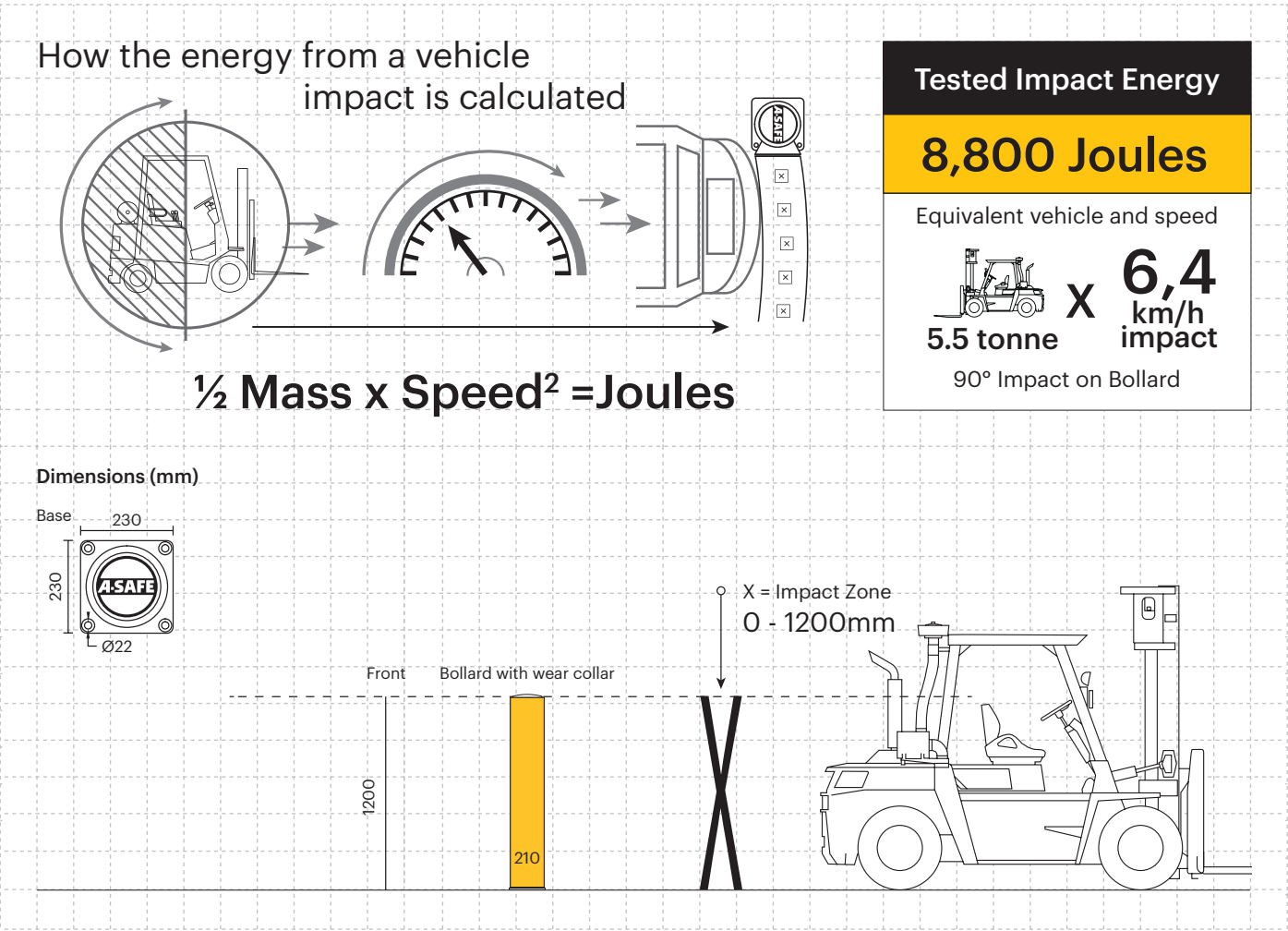


Higher level bollards give a strong visual alert for reversing HGV drivers, preventing costly damage to service yard infrastructure.



Energy absorbent foam creates permanent contact cushion between the internal and external structures.

# Technical Information

## How the energy from a vehicle impact is calculated

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

### Dimensions (mm)

Base
230
230
Ø22

A-SAFE

Front    Bollard with wear collar
1200
210

X = Impact Zone
0 - 1200mm

### Tested Impact Energy

**8,800 Joules**

Equivalent vehicle and speed

5.5 tonne X 6,4 km/h impact

90° Impact on Bollard

### Impact Test

**Max Energy (Joules) at 90°**    8,800

| Deflection at Max Energy 15° Lean | Force to Bolt 35kN |
|---|---|
| 15° | Post — Ground |

### Material Properties — MEMAPLEX™

| 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 |

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

### Post Options

**Standard Yellow**
RAL 1007*
PANTONE 7548*

**Standard Grey**
RAL 9007*
PANTONE Cool Grey 5*

### 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 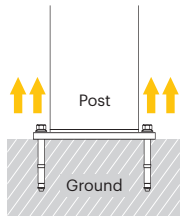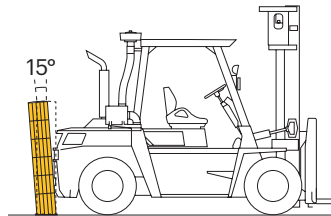product colour and should be used for guidance only.