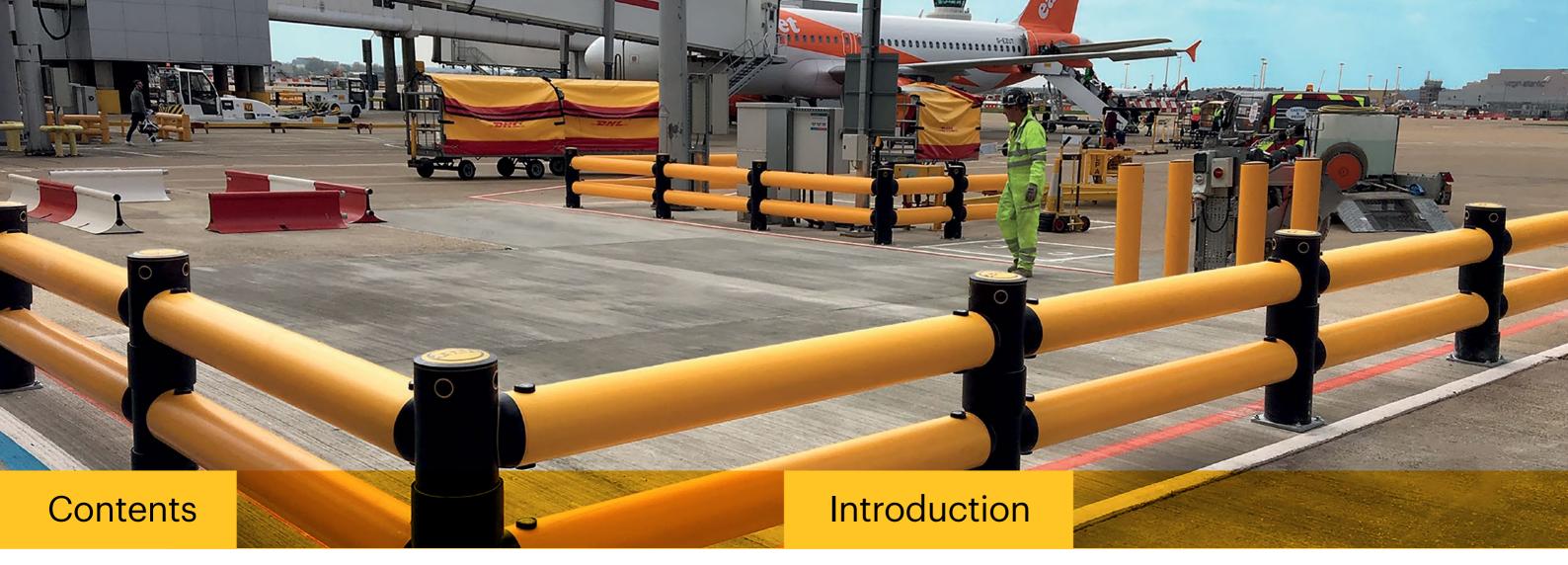


A-SAFE

Airport Solutions







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Established In 1984, A-SAFE is a specialist manufacturer and supplier of high-performance safety barriers and associated products. In 2001, we invented the world's first industrial-strength safety barrier, and for more than fifteen years, we have been at the forefront of airport safety.

Our Atlas range of airport barriers have been purpose-designed and engineered in conjunction with the BAA to provide unrivalled heavyweight protection for demanding airport environments. Atlas barriers fulfil the most rigorous of safety standards, and are capable of withstanding impacts from fully laden baggage tugs and dollies. They are the safety barriers of choice for many of the world's leading airports.

Designed for use in busy baggage halls, cargo facilities and terminal buildings – as well as outdoors on aprons and service roads – the A-SAFE range of airport products segregates vehicles from pedestrians as well as critical infrastructure, providing supreme protection to charging stations, floodlights, passenger boarding bridges, masts and other essential equipment.

A-SAFE is the only airport polymer safety barrier manufacturer on the market to test and independently verify its products to the rigorous standards of PAS 13, a global benchmark for barrier testing developed by the British Standards Institution. Every test is independently certified by TÜV Nord, an international leader in controlled testing.

A-SAFE Airport Barriers

- ✓ Trusted by the world's busiest international airports
- ✓ In conjunction with the BAA, purpose-engineered to withstand the heaviest of vehicles and the harshest of conditions
- ✓ The only airport barrier to be tested and certified to PAS 13 the global benchmark in barrier testing
- Maximum energy absorption of heavyweight forces owing to a patented coupling system unique to A-SAFE
- Unrivalled ability to flex and reform following impacts through an exclusive polymer developed in-house







Service roads

Airport service roads are fast-paced, heavy-duty environments that can operate up to 24 hours a day. With numerous ground support vehicles in operation, such as tugs, dollies and fuel trucks, the risk of collisions is high. A-SAFE airport safety barriers offer the most reliable solution for segregating traffic, as well as protecting pedestrians and infrastructure from the risk of vehicle collision. Robust and low-maintenance, A-SAFE barriers flex to withstand multiple impacts without the need for repair or replacement.

- Segregate passengers and vehicles
- Protect against high-energy impacts
- Define and defend pedestrian and vehicle routes
- Create pedestrian safe zones
- Control the movement of traffic





Expensive air-side equipment needs to be available and working at all times. Impact damage can play havoc with airport logistics. Atlas barriers from A-SAFE are reliable and tough. They will protect your apparatus, removing the risk of damage from vehicles and providing full peace of mind that these vital airport assets are protected.









- Prevent collisions and protect vital equipment from impact damage
- Provide visual guidance for drivers
- Avoid incidents and downtime



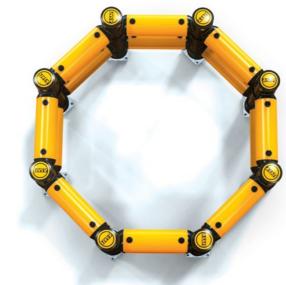
Light columns and masts

A vehicle impact with a floodlight can mean a section of airport is out of action until repairs have been made. The flexible A-SAFE Atlas barrier solves this problem, as it can be configured to fit around masts, columns and floodlights to provide complete protection from passing vehicles.









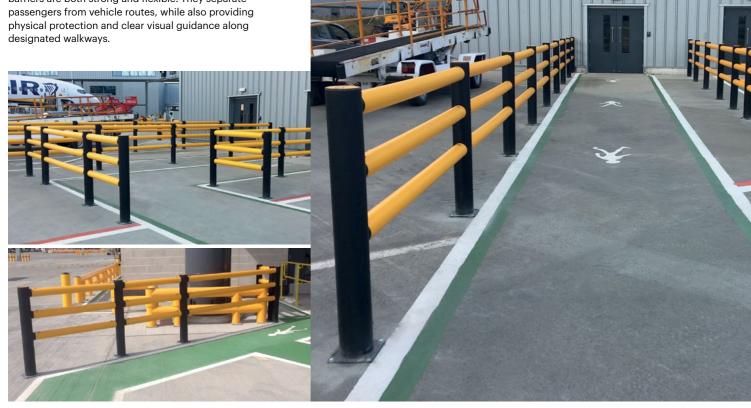


Double Traffic Polygon

- Segregate and guide vehicles away from critical structures
- Physically protect columns, masts and vertical structures from impact damage
- Provide visual guidance for drivers
- Defend any size, shape or location of column



Passengers and personnel need to be protected from service vehicle traffic and kept to walkways to protect them from danger. A-SAFE pedestrian segregation barriers are both strong and flexible. They separate passengers from vehicle routes, while also providing physical protection and clear visual guidance along designated walkways



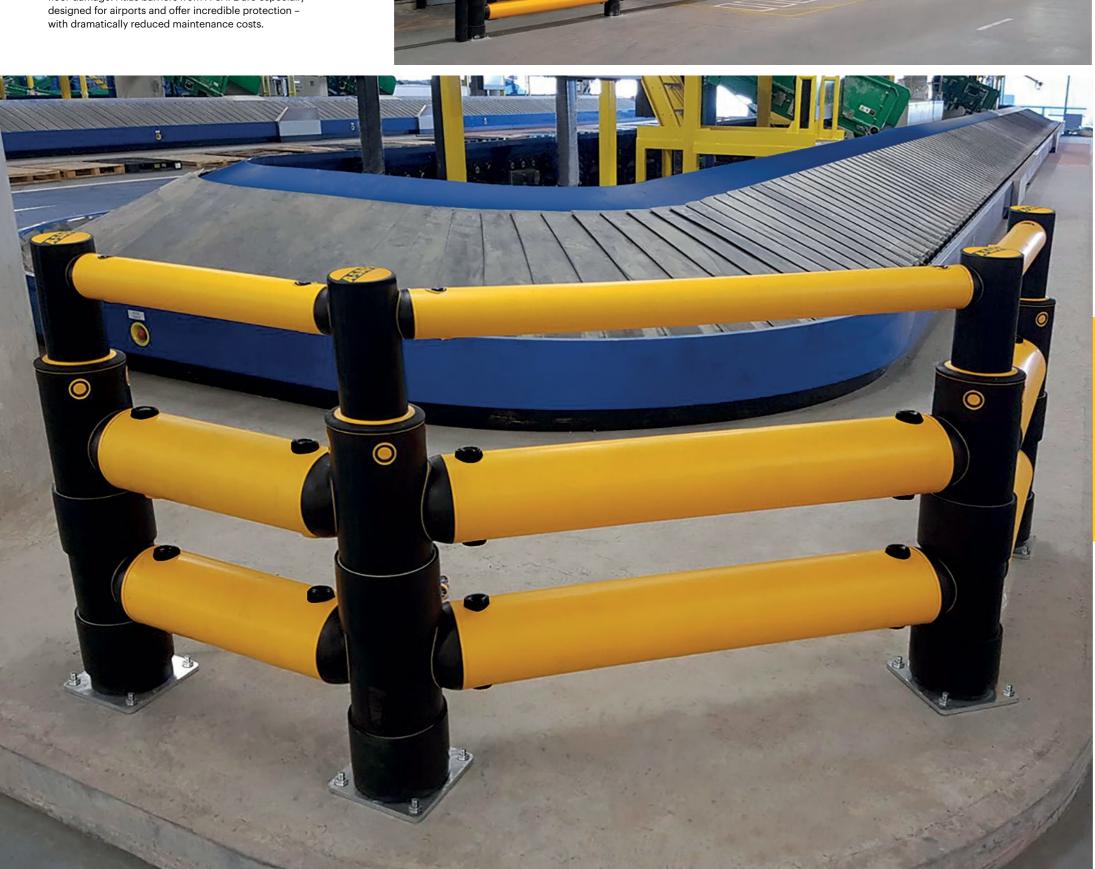




Baggage halls

Conveyors and other pieces of expensive baggage handling equipment are regularly in close contact with airport vehicles. This makes them vulnerable to impacts. Steel barriers are expensive to repair and replace after impact damage. They also carry the hidden cost of repairs to ground substrates, as impacts often result in floor damage. Atlas barriers from A-SAFE are especially designed for airports and offer incredible protection – with dramatically reduced maintenance costs.







- Segregate heavyweight vehicles in high-traffic areas
- Protect buildings, machinery and equipment from impact damage
- Provide visual guidance for drivers
- Define and defend traffic routes
- Avoid incidents and downtime









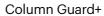
- Segregate and guide vehicles away from critical structures
- Physically protect columns, building supports and vertical structures from impact damage
- Provide visual guidance for drivers
- Defend any size, shape or location of column



Column Guard

Columns are essential to the structure of your building.
One impact and a whole section of airport could be at risk of collapse, with catastrophic consequences. With multiple vehicles constantly in operation on aprons and in and around airport buildings, columns can be vulnerable to impacts.
Column protection from A-SAFE keeps your structure safe and helps you prevent potentially devastating accidents.





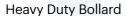


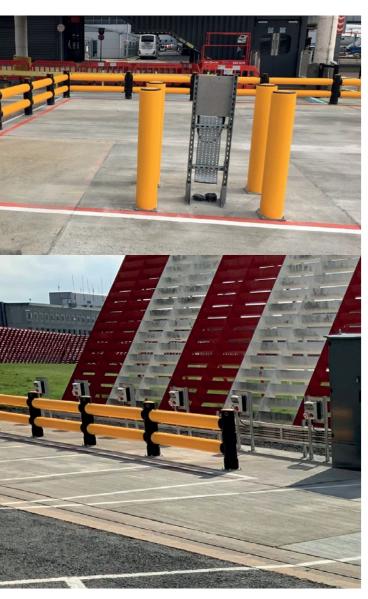
Tug charging

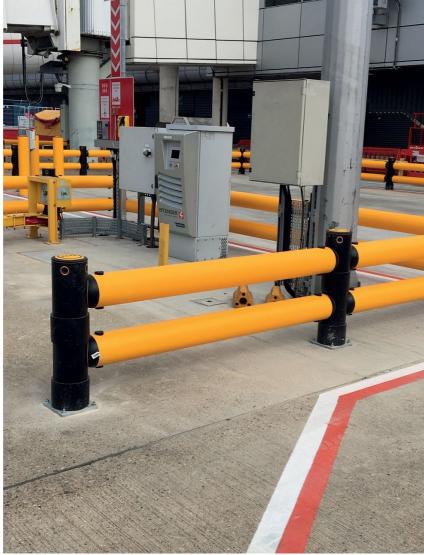
Tug charging stations are essential for keeping electrically powered airport tugs and ground support vehicles operational. However, multiple vehicles coming and going can make charging infrastructure vulnerable to impact damage. Such damage can be costly both in terms of repairs and equipment downtime. A-SAFE barriers shield and protect charging stations from vehicle impacts. Unlike steel barriers, they are engineered to absorb and deflect heavyweight forces, preventing damage and avoiding

- Protect vulnerable charging infrastructure
- Provide visual guidance for drivers
- Define and defend vehicle routes
- · Control the movement of traffic









Door protection

Airports are busy environments, with high levels of traffic in constant circulation. It's therefore no surprise that doors can be vulnerable to impacts from airport vehicles. Damage to doors can result in costly repairs and operational downtime, reducing airport efficiency. Highly visible, robust bollards and corner guards provide vehicle drivers with clear direction, as well as offering physical protection against collisions.

- Protect doorways and doors
- Provide visual guidance for drivers
- Shield buildings and infrastructure from vehicle impacts







Wall protection

• Segregate heavyweight vehicles in high-traffic areas

- Protect buildings from impact damage
- · Provide visual guidance for drivers
- Define and defend traffic routes
- · Avoid incidents and downtime



Walls are built to be strong, but they are not invincible. An impact from a vehicle can have costly consequences, so it's important to protect your walls. The flexible Atlas barrier not only stops vehicles from impacting with walls, it also flexes and fully recovers - preventing damage to your vehicles, walls and floors.





Project management

Our team will come out to see you and discuss your requirements at your site. We'll look at the areas you need to protect, make recommendations on the most appropriate types of barrier, and take care of the design work as part of the quotation.



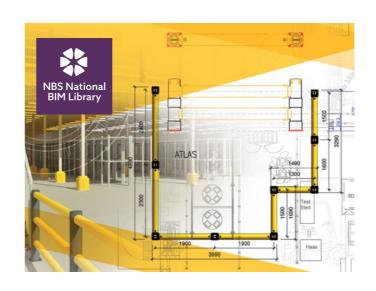
Working with architects

We'll work with your architects, specifiers and project managers to ensure that the we provide the ideal safety and protection solution for your project.



CAD drawing

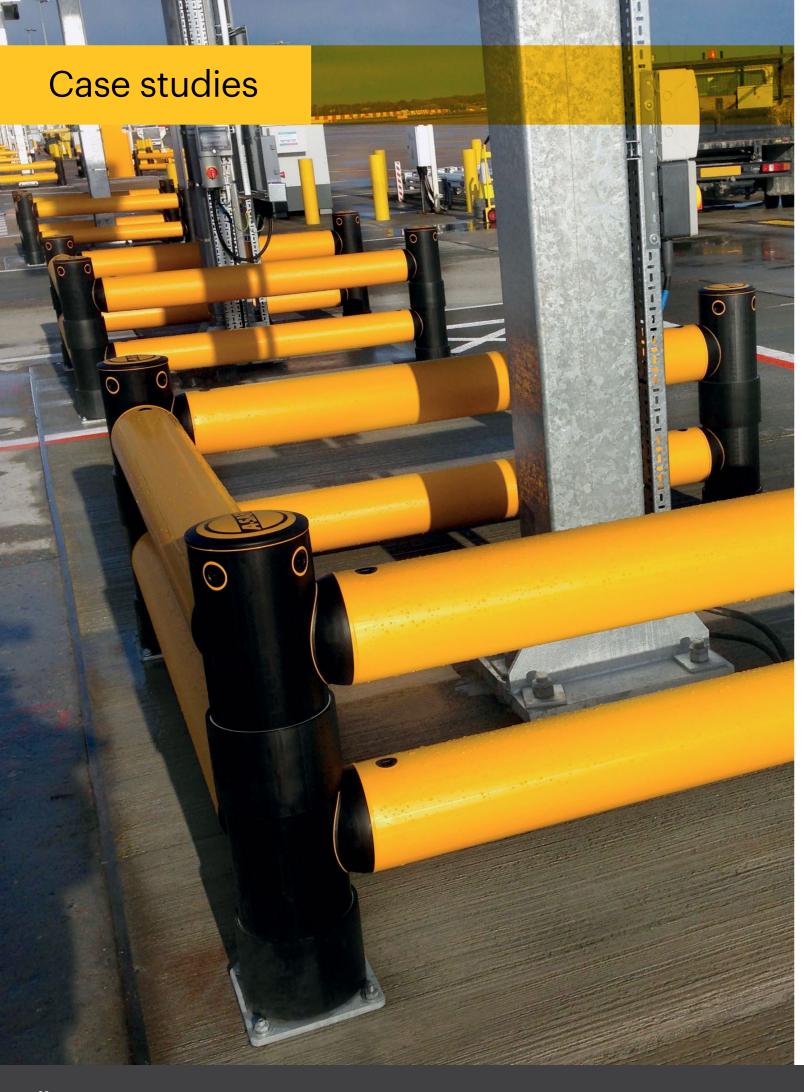
After carrying out your site survey, our consultant will discuss your requirements with our in-house design team. They'll turn your requirements in to full CAD drawings, including the proposed products, before sending them to you for approval.



Installation support

Our expert installation team – who are fully trained to the highest European and global standards – will come to your airport and fit your new A-SAFE barriers. Our installers work efficiently and with specialist tools, allowing them to complete installations around four-times faster than internal installation crews.





Gatwick Airport

Among the greatest benefits of choosing A-SAFE barriers is the amount they can save you in maintenance. The savings are apparent within the first year of installation and over time they become even

Gatwick's savings

Gatwick airport was spending in excess of £100,000 annually on barrier and floor damage repairs in its north and south baggage handling halls.

In 2009 the airport replaced its steel barriers with A-SAFE products and in the period since, they have only spent approximately £3,000 $\,$ on maintenance.

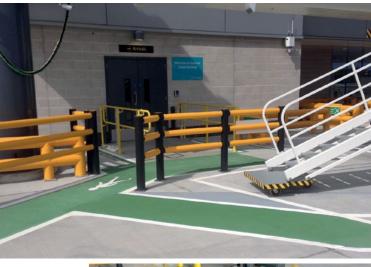
Annual maintenance cost for 100 metres of barrier

Total annual cost £9,242

Rail and post damage £5,658 a year Floor damage £2,328 a year Painting twice £1,256 a year

Total cost over 5 years

£46,210







100m A-SAFE

barrier

100m steel barrier

Total annual cost £1,444

Rail and post damage £780 a year Floor damage £664 a year

Total cost over 5 years

£7,220









Singapore Changi Airport

Singapore Changi is the country's main airport, currently rated the World's Best Airport by Skytrax for the fifth consecutive year. It's also one of the world's busiest airports based on international passenger and cargo traffic.

The airport's health and safety team called upon the aviation expertise of A-SAFE to supply a unique protection and segregation solution for baggage conveyors. Extreme-strength Atlas barriers were originally designed in consultation with Heathrow Airport to exceed the required standards for airport safety, making them a trusted choice for the Changi team.

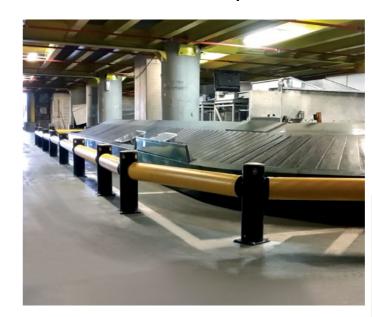




A-SAFE manufactured, supplied and installed over 150 metres of Atlas Double Traffic+ Barrier throughout the airport in key high traffic areas. The barrier end posts were reinforced with spinning collars on the end posts, to further deflect impact forces from vehicle collisions and ensure extreme-strength traffic protection for Changi Airport's vital baggage conveyor belts.

Our Atlas range is designed with galvanised steel base plates, and it's also non-corroding, self-coloured and UV-protected to stand up to tough external weather conditions in a range of climates.

Brussels Airport



Brussels Airport is an international hub, close to Belgium's capital. In 2016, more than 21 million passengers travelled through Brussels, making it Europe's 25th busiest airport.

The team responsible for health and safety at Brussels Airport required a solid, durable solution to protect two baggage handling conveyor belts from vehicle impacts. The vehicles responsible for transporting luggage and passengers through the airport were frequently impacting with conveyors, causing lasting damage both to machinery and vehicles.

The expert A-SAFE team installed Atlas Single Traffic Barrier to protect against frequent, damaging collisions. Atlas barriers provide heavy-duty impact protection and feature reinforced bollard-style end posts to provide enhanced impact absorption and deflection capabilities.

A-SAFE Atlas barriers are purpose built for the airport environment. They are designed with protected, galvanised steel base plates and anti-corrosive properties, making them the solution ideal for prolonged use outdoors. Atlas is also manufactured using extreme-strength materials which absorb the energy from impacts with airport vehicles, dissipating force evenly through the barrier to avoid floor damage, before flexing back to its original shape.



Our airport partners



A local company, globally.

We work hard to maintain the spirit of a local business, while achieving the far-reaching impact of a global enterprise.

Our policy of being "global and local" allows us to respond to your needs wherever you are in the world. In every office worldwide, we employ local experts throughout the business. Specialists in their field, they are equipped with an in-depth knowledge of domestic markets, legislation, safety practices and social customs.

We strive to give all workplaces access to world-class products, through local offices and consultants.

Global Offices

A-SAFE Australasia PTY Ltd	Australia & New Zealand	A-SAFE B.V.	Netherlands
A-SAFE bvba	Belgium & Luxembourg	A-SAFE Sp. z o.o.	Poland
A-SAFE Scandinavia ApS	Denmark	A-SAFE Soluciones S.L.	Spain
A-SAFE SAS	France	A-SAFE AB	Sweden
A-SAFE GmbH	Germany & Austria	A-SAFE DWC-LLC	UAE
A-SAFE Italia s.r.l.	Italy	A-SAFE UK Ltd	UK
A-SAFE K.K.	Japan	A-SAFE Inc	USA
A-SAFE S.A. de C.V.	Mexico	A-SAFE International Ltd	Rest of the World

For contact information for your specific region, please visit ${\bf www.asafe.com}$



A-SAFE Headquarters A-SAFE HQ LTD, Habergham Works, Ainleys Industrial Estate, Elland, HX5 9JP, West Yorkshire, United Kingdom.

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