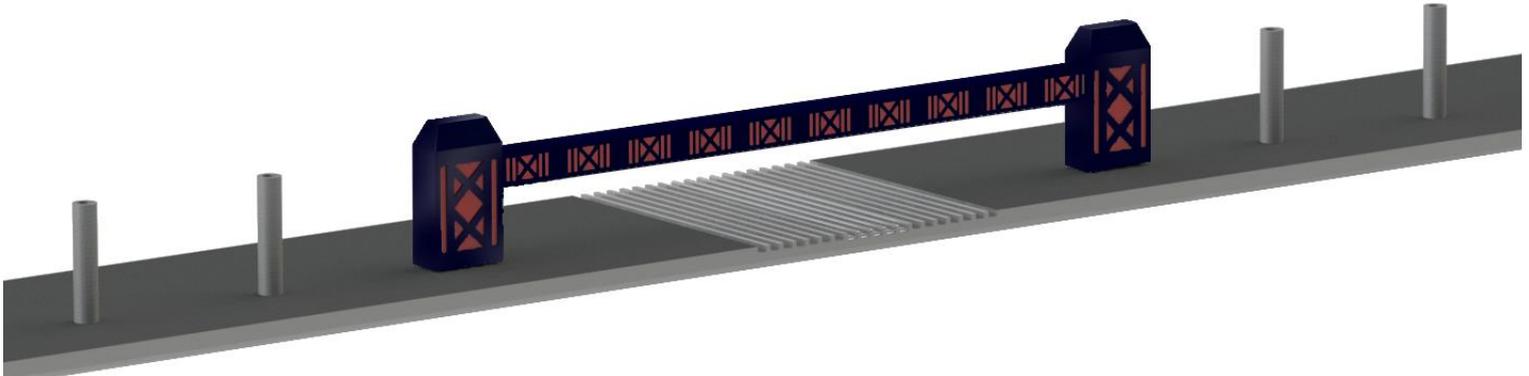


BRIDGE DECK EXPANSION BEAM

Ultra-Shallow Foundation; to complement the Populus XA Bridge Bollard System



ATG ACCESS



PRODUCT OVERVIEW

ATG Access are very proud to be able to launch the next generation in bridge protection technology. Our Bridge Deck Expansion Beam has an unrivalled expansion capacity of more than 250mm.

This system was impact tested at the MIRA testing facility to the IWA 14-1 standard. Successfully arresting a 7,200kg vehicle travelling at 48 kph. The test simulated a bridge attack where the angle of attack was 30°. The system performed incredibly well and achieved a minimal dynamic penetration of 0.2m.

The Expansion Beam was fitted on two Populus Bridge Bollards, with unconnected foundations, simulating a wide double bridge expansion joint. The structural foundation depth required for this system is only 40 mm, no other upstanding structure is required. The beam can be removed to allow for occasional vehicular access.

This security solution can be used to span across bridge expansion joints to ensure that

security measures are consistent along the length of a bridge deck. It can also be used to span across other obstructions such as service chambers or manhole covers.

The Populus Bollard system onto which this beam is mounted requires no structural connection to the bridge deck and can articulate to accommodate for changes in camber of the structure. A separate datasheet is available for this product.

The system can be clad to accommodate a wide range of aesthetic options including bespoke heritage design. ATG's design and engineering team can work closely with client design and architectural teams to ensure that the appropriate aesthetic is achieved.

The system has been designed to ensure that there are no exposed cavities into which foreign objectives may be placed. This is important when considering the overall security of the system.

SECURITY RATING

Bridge Deck Expansion Beam:

IWA 14-1: V/7,200(N2A)/48/30:0.2

Tested in configuration with the Populus Bollard System.

Populus Bollard System

IWA 14-1: V/7,200(N2A)/48/30:0.7

Minimum tested array – 7 units

BSI PAS 68: V/7,500(N2)/48/30:0.6/0.0

Minimum tested array – 7 units

FINISHES

Can be clad with an array of different materials and designs to blend into the surrounding aesthetics of the application being protected. ATG's design team can work alongside client design teams to create the desired finish.

BRIDGE DECK EXPANSION BEAM

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|---------------------------------------|--|
| Beam Span | 5,300 mm (approx.) |
| Beam Profile Width | 203 mm |
| Beam Height Above Ground | 500 mm |
| Anchoring Bollard Height Above Ground | 800 mm |
| Foundation Depth | 40 mm (true depth); no foundation required underneath the beam |
| Beam Expansion Capacity | More than 250mm |
| Finishes Available | Galvanized structure which can be clad and finished to a multitude of different aesthetics to suit the application. Historic / heritage designs can be accommodated if required; the slim profile of the beam (approx. 200mm) can easily accommodate bespoke aesthetics should they be required. |
| Security Rating | IWA 14-1: 7,200 kg @ 48 kph (30 mph) - V/7,200(N2A)/48/30:0.2 <i>Tested in configuration with the Populus Bollard System.</i> |