

VARIO GUARD®

PERMANENT/TEMPORARY SAFETY BARRIER

RAILWAY PROTECTION



Railway bridge parapet protection on the A55 Conwy, North Wales

ASSET
International

VARIOGUARD®

PERMANENT/TEMPORARY SAFETY BARRIER

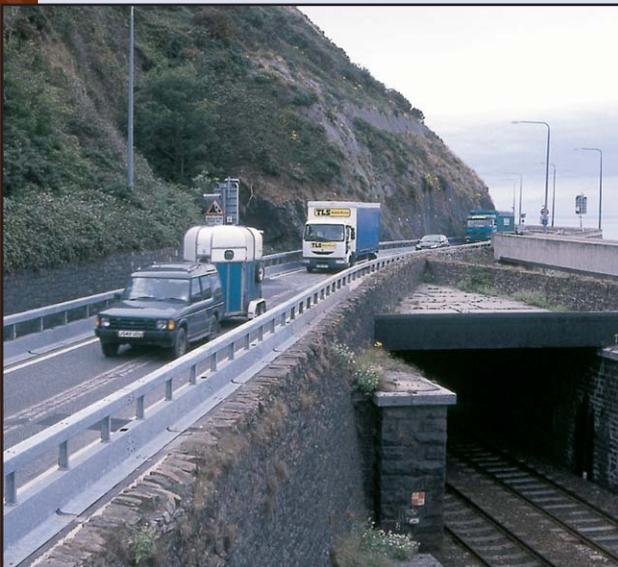
VARIOGUARD® is an ideal bridge parapet protection system for high and low speed roads and has been widely used on railway bridges throughout the UK. Major projects have been completed for the Highways Agency, Railtrack and many councils.

VARIOGUARD® is the ideal safety barrier for locations where services group together to pass beneath footways on bridge decks.

Only anchored at each end, off the bridge deck, VARIOGUARD® can accommodate tight horizontal and vertical curves. Manholes and access points to ducts can be bridged and accessed with site specific designed and built units (see photo of Chalford).

VARIOGUARD® can be used in roadways, on upstands and kerbs.

Semi-permanent bridge parapet protection



Site Penmaenbach Headland, Conwy

Client Conwy CC

Installer Conwy CC

VARIOGUARD® has been installed as a semi-permanent measure whilst strengthening works are being designed.

Upon inspection, the parapets over the railway line were found to be substandard and effective long term, proven containment was required. The client contacted ASSET International, who provided VARIOGUARD® to satisfy the site specific requirements, including special 1-3 metre VARIOGUARD® units to accommodate the tight radii.

Potters Bar uses VARIOGUARD®



Site Potters Bar

Client Railtrack

Contractor May Gurney

Installer ASSET International

After the Potters Bar rail crash, immediate protection was required for a damaged bridge pier. Within hours, ASSET installers were fitting VARIOGUARD® so that the busy town centre thoroughfare could be reopened. A site survey, setting out, installation and removal, were all completed by ASSET safety barrier experts, once design calculations provided to the contractor proved that VARIOGUARD® was ideal for this project.

Permanent bridge parapet protection



SiteShotts Landry Railway Bridge, Scotland
Client Glasgow City Council
Installer ASSET International

This narrow road bridge would have needed extensive strengthening to accommodate additional parapet protection. VARIOGUARD® steel barriers provided a highly visible, cost-effective alternative compared to reinforcing the bridge deck. Vehicles are guided safely across the narrow bridge, away from the railway line cutting and surrounding verge, whilst also providing protection for pedestrians.

Dublin on track with VARIOGUARD®



Site Dublin Light Railway
Contractor AMB Joint Venture
Installer ASSET International

VARIOGUARD® has been used extensively in the Dublin light railway project, providing cost-effective protection for the workforce compared to traditional concrete barriers. VARIOGUARD® was used in areas where high containment on high speed roads was needed.

Cotswolds regional railway line protection



Site Chalford Railway Bridge
Client Gloucester CC
Contractor Ringway
Installer Barrier Services

At Chalford, a particularly difficult barrier project was undertaken to protect defective railway bridge parapets. VARIOGUARD® steel barrier, complete with an OBB transition and tight radius piece, was installed on the bridge, one end of which had been susceptible to

vehicle impacts. A special VARIOGUARD® base unit was installed on the bridge allowing entry to a BT services access cover located in the footway.

Innovative solutions to difficult situations ...



**VARIOGUARD®
FOOT SECTION
EQUALS
LOW DEFLECTION**

VARIOGUARD®

PERMANENT/TEMPORARY SAFETY BARRIER

Additional safety for public and railway lines



SiteCheltenham Road / Rail Bridge
Client Gloucester CC
Contractor Ringway
Installer HW Martin

Gloucester City Council's consulting engineer, Halcrow, recognised the benefits of using VARIOGUARD® for site specific solutions on railway bridge parapets. On a busy Cheltenham railway bridge, protection was required for pedestrians and vehicles. Detailed design was completed with advice and drawings from ASSET barrier experts. The civils works and barrier installation was seamlessly completed and now offers effective protection for both drivers and pedestrians.

A63 Hambleton railway bridge secondary protection



SiteA63 Hambleton
Client Highways Agency
Contractor Amey
Installer H W Martin

This bridge on the West Coast main line was identified as requiring additional parapet protection. VARIOGUARD® was immediately installed to protect the existing parapet from future impacts. This interim protection is being used whilst designs for bridge parapet strengthening works are completed.

For more details, information, advice & drawings,
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