

## Perimeter and stand-off protection

# Corus Bi-Steel services

### Introduction

The current threat from terrorism remains real and serious. Enhanced site stand-off protection to counter attacks, and reduce consequential loss, particularly from vehicle borne improvised explosive devices (VBIEDs) is increasingly necessary. Given Bi-Steel's experience in this field it is well placed to provide technical assistance to clients to enable them to implement robust and cost effective solutions.

### PAS 68\* & PAS 69\*

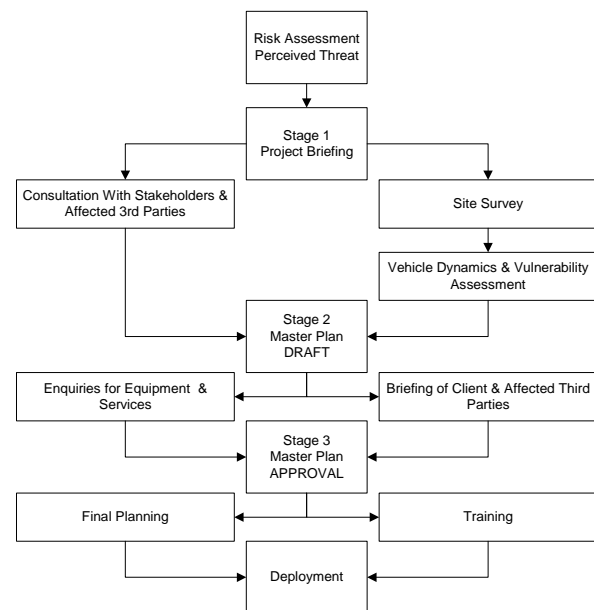
Increasingly the security industry is becoming familiar with the testing and rating of protection systems, commonly referred to as "PAS 68 rating". While PAS 68 ratings aid the client in selecting the form of vehicle mitigation system to be used, this is really only part of the process. The typical process a client needs to follow to achieve a robust solution is illustrated in **Figure 1**.

### Identify the threat & alternatives for mitigation

Bi-Steel works closely with various specialists who can advise on this, including Counter Terrorism Security Advisers (CTSAs), Architectural Liaison Officers (ALOs) and Crime Prevention Design Advisers (CPDAs). Once the threats have been identified, Bi-Steel can start work on quantifying the threats and alternatives for mitigation.

### Vehicle dynamics & vulnerability assessment

Such assessments ascertain the directions and maximum speeds (and hence kinetic energy levels) that vehicles can attain when approaching the site. This information helps to quantify the threat. Bi-Steel can undertake such assessments based on existing access routes and modified routes that utilise vehicle-calming measures.



**Figure 1: Security Solution**

### Site survey

Bi-Steel can undertake detailed 3D topographical surveys, these can be used for the early planning stages and subsequently for creating visualisations and in detailed design.

### Master plans

Having consulted with the various stakeholders and reviewed threats, Bi-Steel can prepare alternatives and costs for the various mitigation solutions. Bi-Steel can present the advantages and disadvantages of the alternatives, enabling the final scheme to be agreed upon.



## Sourcing of barrier solutions

Bi-Steel has a wide range of products including:

- Walls
- Bollards
- Gates
- Fencing

The majority of these can be surface mounted, making them re-deployable. When necessary the products can be connected to Bi-Steel foundations. Bi-Steel has partnered with other system providers to augment its range when necessary, thus ensuring a single point of contact for the client.

## Deployment & planning

Invariably the deployment of the systems will be required to take place in the shortest possible time period and with minimal disruption to all involved, ensuring business continuity. Given Bi-Steel's experience of such deployments, and the calibre of the contractors it uses to undertake this work, the client can be confident that the planning for the deployment will be thorough.

## Security audit & handover

Bi-Steel personnel are on hand to ensure the smooth deployment of the system, and to facilitate any last minute variations that may be deemed necessary. They will also train personnel in the safe operation of any systems such as gates and blockers.

## Recovery, refurbishment & storage

Where systems are used for temporary deployments, Bi-Steel can remove and store the equipment between uses and undertake any refurbishment required.

## System performance

Bi-Steel perimeter protection systems have been extensively tested and meet the requirements of the relevant agencies operating within the security and defence fields. These tests have included:

- Vehicle impact - successfully tested in accordance with PAS 68
- Blast - the Bi-Steel panel has been successfully tested against a wide range of blast attacks

For security purposes testing criteria is not published but can be discussed with potential clients.

## About Bi-Steel

A Corus-patented construction material, Bi-Steel comprises two steel plates that are permanently connected together to form panels by an array of friction welded transverse bars. These panels are then traditionally filled with concrete to create a construction material with outstanding strength. The resulting composite offers unrivalled protection against explosive blast, meeting stringent security standards.

## Quality and integrity from a leading UK company

Corus is one of the world's leading steel producers and a major UK company. Operating to the highest international quality and manufacturing standards Corus is committed to offering the very best in customer service and support.

\*PAS 68:2007 - Specification for vehicle security barriers

\*PAS 69:2006 - Guidance for selection, installation and use of vehicle security barriers  
These Publicly Available Specifications (PAS) have been prepared to address the needs of organisations who wish to have assurance that vehicle security barriers will provide the level of impact resistance that they seek.



## For more information please contact Bi-Steel

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