

# **TECHNICAL SPECIFICATION**

CSG 10840 & 10850

Articulated Shallow Depth Static Bollard



#### **PRODUCT OVERVIEW**

The CSG 10840 and 10850 Bollards have been designed specifically to protect critical national infrastructure from vehicle borne improvised explosive devices, whilst maintaining the most stringent aesthetic requirements and capable of being installed into utility rich, undulating shallow substructure.

Current shallow depth bollard systems are restricted to straight line arrays on level sites - any directional or level changes necessitate bases and linkages to be specially engineered to suit the particular site conditions.

With this in mind, Cova have devised and tested the unique Articulated Linkage which not only allows for each bollard unit to accommodate gradients up to 3.6° (1:16), but allows for convex and concave arrays.

This unique feature eliminates the necessity to survey and individually design and manufacture special units, allowing complete on-site freedom to adjust for height and position before tightening up the connector plates to form a strong rigid link.

The system has been fully tested at the Transport Research Laboratories, Wokingham, Berkshire, including full testing of the end units in arrays of three bollards.

## **CONTACT US**

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#### **CRASH TESTING**

Model 10840 crash tested to 7,500kg (7.5 Tonne) @ 64 km/h (40mph).

Test rating:

PAS 68:2010 Fixed Bollard V/7500(N2)/64/90:0.0/17.9\*

Model 10850 crash tested to 7,500kg (7.5 Tonne) @ 80km/h (50mph).

Test rating:

PAS 68:2010 Fixed bollard V/7500(N2)/80/90:2.8/9.8\*

\*V/test weight [vehicle class]/speed[kmh]/ angle:penetration/dispersion).

### CONSTRUCTION

- Core diameter 254mm.
- Mild steel circular hollow section.
- Nominal height topping 1050mm.
- Foot of bollard is embedded in 210mm concreate foundation.
- Unique articulated arm system allows the bollards to be installed on gradients, curved arrays and 90 degree angles achievable.
- Each bollard can be individually levelled via four jacking screws
- Stainless steel sleeve diameter 279mm, other sizes available on request.
- Left and right-hand end units fully tested to PAS 68:2010.

### **OPTIONS**

- Reflective 50mm wide band option sandwiched between two stainless steel bands.
- Stainless steel sleeve option with DDA compliant band.

#### **FINISH**

 Available in Galvanised or sleeved, painted to a specific RAL No.





















## **Cova Security Gates Ltd**

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