

# BG800 GATE

## REVISION REGISTER

Revision	Description	Date
1	Issued for use.	28/04/16
1 A	Details for additional Owner / Supplier added. Deflection corrected.	5/11/2018
1 B	Product name changed. Owner / Supplier details updated. Manual references updated.	24/01/2020

The BG800 Gate system is a semi-rigid NCHRP 350 TL-3 gate that can be used in a permanent or temporary application and installed directly into a run of BG800 or concrete barrier.

The system is hinged at both ends and uses a manual jack system to raise the gate section on caster wheels. This enables the system to be unhinged and swung open from either end, or the whole gate section can be disconnected at both ends and moved in any direction. When the units are not being moved, the caster wheels are raised.

The system consists of 6m or 12m nominal units, hinge sections, fixed gate post sections, transitions to the concrete barrier and the T-Top structure. The fixed gate post sections are required to be anchored to the pavement.

### Images:

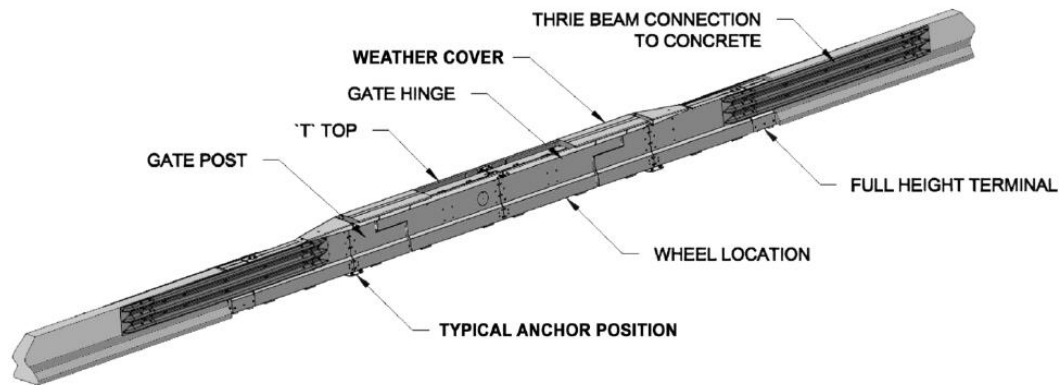


Photograph of BG800 Gate installation



Photograph of BG800 Gate opening

## BG800 GATE



Drawing of BG800 Gate (showing typical 6m gate)

### Ownership:

Ownership
Highway Care 3 Bullace Lane, Dartford, Kent DA1 1BB, United Kingdom
Supplier
Ingal Civil Products 3 Temperley Close, Welshpool 6106 Ph: (08) 9358 9139 <a href="http://www.ingalcivil.com.au/home">http://www.ingalcivil.com.au/home</a>

**Test Level:** NCHRP 350 TL-3.

### Accepted Configuration:

The BG800 Gate system consists of 6 or 12m long units and may be installed in various configurations to a maximum gate size of 30m.

### Design Considerations:

Design should be undertaken in accordance with BG800 Gate Product and Installation Manual Revision B, dated October 2018.

### Deflection:

1.16 m under TL-3 conditions (2000 kg vehicle at 100 km/h impacting at 25 degrees).

For other speeds use TL-3 deflection.

### Length of Need:

The whole length of the gate is re-directive.

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### Offset from Kerbing:

Kerbing is not to be placed in front of the gate.

Kerbing should not be placed behind the gate within the deflection limits of the system.

Gate shall not be placed on top of kerbing as this reduces the effectiveness of the profile.

### Approach surface:

The approach to the gate system should be a trafficable surface clear of objects and grade changes to allow an errant vehicle to hit the barrier at an appropriate height.

### End Treatments:

Not Applicable.

### Limitations:

- A foundation equivalent to a pavement thickness of 300mm shall be provided to anchor the transition. For permanent installations the gate must be installed using the concrete foundation pad as per the installation manual.
- The units are moved using caster wheels. As such a smooth concrete surface should be provided to facilitate gate operations.
- A clear area is required to operate the gate.
- As the system deflects there must be adequate room to accommodate the deflection of the system. This area must be flat (1 in 10 or less) to prevent barrier lean and possible roll.
- Objects should not be placed on top of the gate as they are designed to move under impact. "Gawk" screens are not to be attached.
- Not to be used on crossfalls greater than 2.5%.
- Only to be installed on straight horizontal alignments.

### Parts to be Replaced after Impact:

All damaged components, repaired components must not be used.

### References:

BG800 Gate Product and Installation Manual Revision B, dated October 2018. Refer to website:

<http://www.ingalcivil.com.au/products/road-safety-barriers/emergency-access-gate>

### Relevant FHWA Approval Letters:

Refer to website [http://safety.fhwa.dot.gov/roadway\\_dept/policy\\_guide/road\\_hardware/listing.cfm](http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/listing.cfm)

Code	Description
B-159	BarrierGuard 800 Gate System Approval.