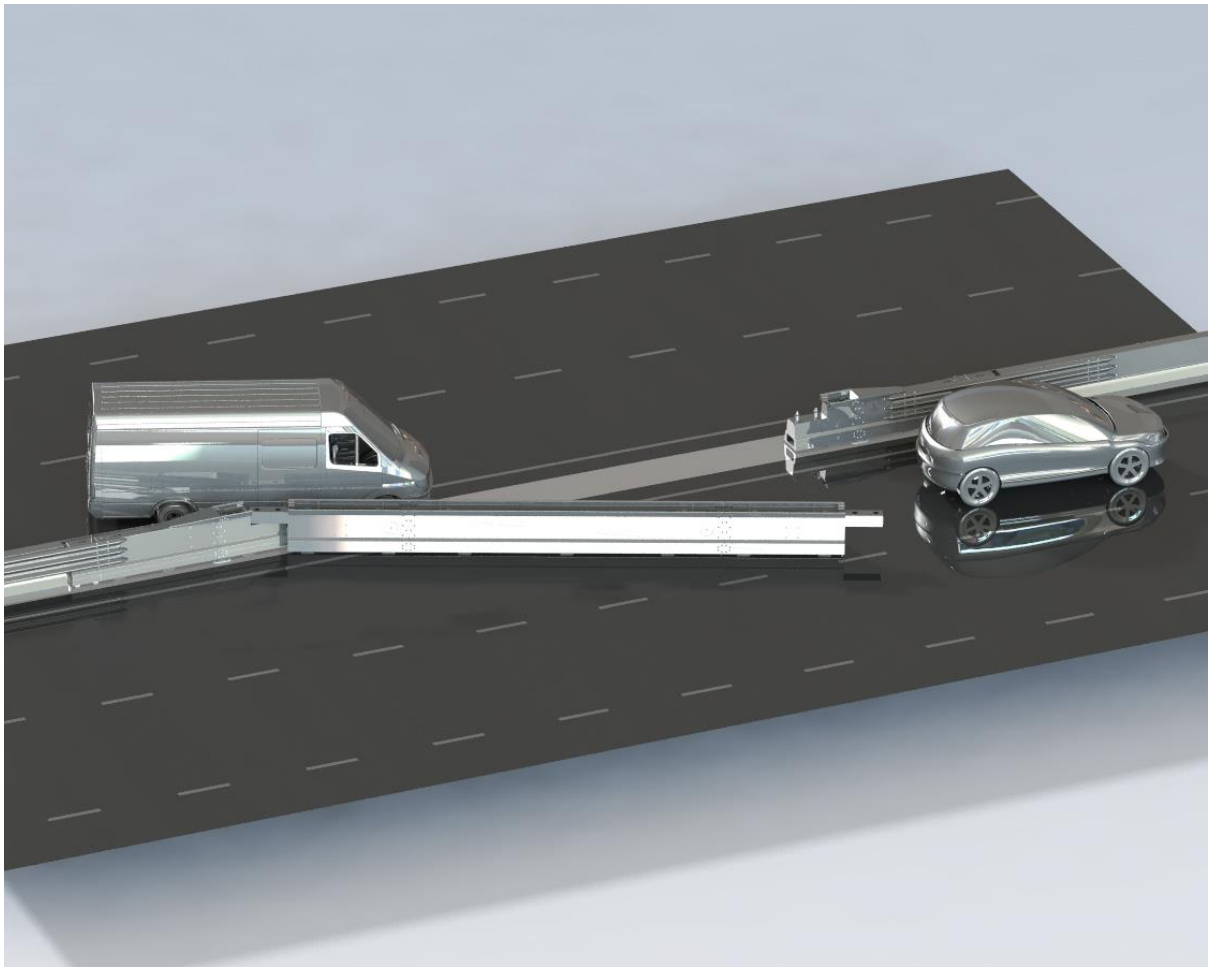
Highway Care International

BarrierGuard 800 Gate

Product Manual

Australia & New Zealand



NCHRP 350 TL-3

Assembly, Installation & Operation

Highway Care International

Revision History

Revision	Date	Prepared by	Approved by	Reason for change
1a	22nd July 2015	O. Pulling	B. Crump	First issue.
1b 11 15	13th Nov 2015	O. Pulling	B. Crump	Anchor installation update. Checklist format. Contact us section added. Approval added.

Table of Contents

Introduction

The BarrierGuard 800 Gate is a modular system that is made up from special sections of BarrierGuard 800, these are listed below;

- Gate post sections
- Gate hinge sections
- Gate sections

The BarrierGuard 800 Gate can be utilised as a permanent or temporary application and installed directly into a run of BarrierGuard 800 or by utilising one of the connection pieces can be used as a stand-alone system attached to various safety barriers & fences including, but not limited to; concrete and thrie beam to w-beam.

Testing & Acceptance

The BarrierGuard 800 Gate system has been designed and tested to meet the evaluation criteria of NCHRP 350 Test Level 3 (TL-3) and has been given eligibility by the Federal Highways Administration (FHWA). It is approved for use in USA, Australia, Qatar and many more countries.

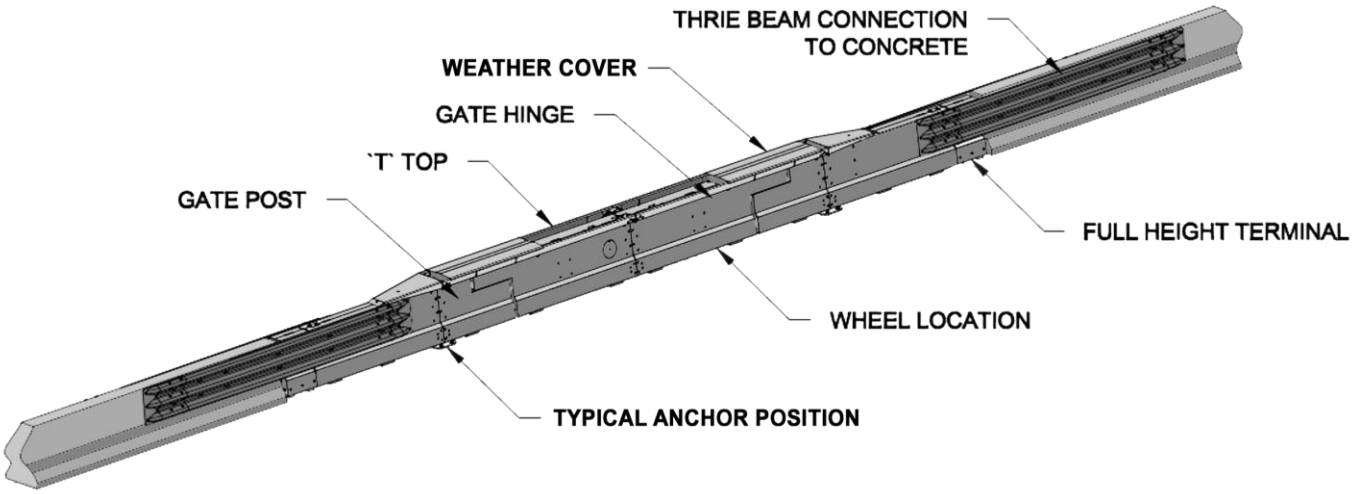
BarrierGuard 800 Gate smoothly redirects a vehicle during an impact that meets the test parameters of NCHRP 350.

Characteristics

BarrierGuard 800 Gate has been designed for both permanent or temporary applications and acts as a longitudinal barrier when closed. Common uses include;

- Emergency vehicle access
- Work zone access
- Contraflow opportunities
- Controlled access point

Note: This manual is designed to complement the gate drawing package provided. Where Highway Care bespoke gates are designed the project drawings take priority over this manual.



Design Considerations

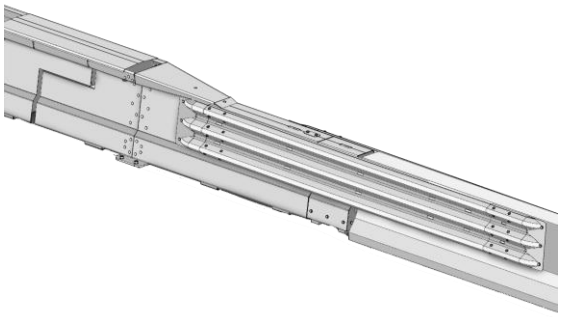
Median and Roadside Applications

The BarrierGuard 800 Gate can be impacted from either side of the barrier with no difference in performance levels. Therefore, the barrier can be used in both median and road side situations in either orientation; as long as the site condition has sufficient space and suitable ground conditions.

Connection

Connections from the BarrierGuard 800 Gate to other types of barriers are possible (thrie beam, w-beam, concrete and BarrierGuard 800). Examples are below. Additional connections are available; please contact Highway Care for further details.

Connection to precast or slip form concrete



Connection to BarrierGuard 800

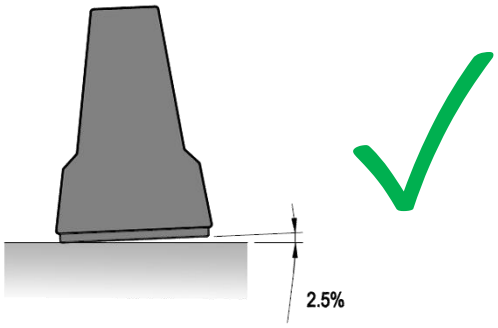
Anchoring Options

The BarrierGuard 800 Gate requires anchoring with sufficient strength from the supporting ground conditions, to allow the gate to perform as tested. The appendix contains further details for foundation options.

Environment

BarrierGuard 800 Gate should not be installed where there are ditches or kerbs that may affect operation of the gate. It is recommended that the gate is installed on straight sections but slight curves can be accommodated.

The BarrierGuard 800 Gate works on slopes, but it is recommended that the cross fall does not exceed 2.5% to allow controlled manual operation.



Note: extreme care must be taken when opening the gate on a slope as the gate can move by itself when detached from both hinges with the wheels down.

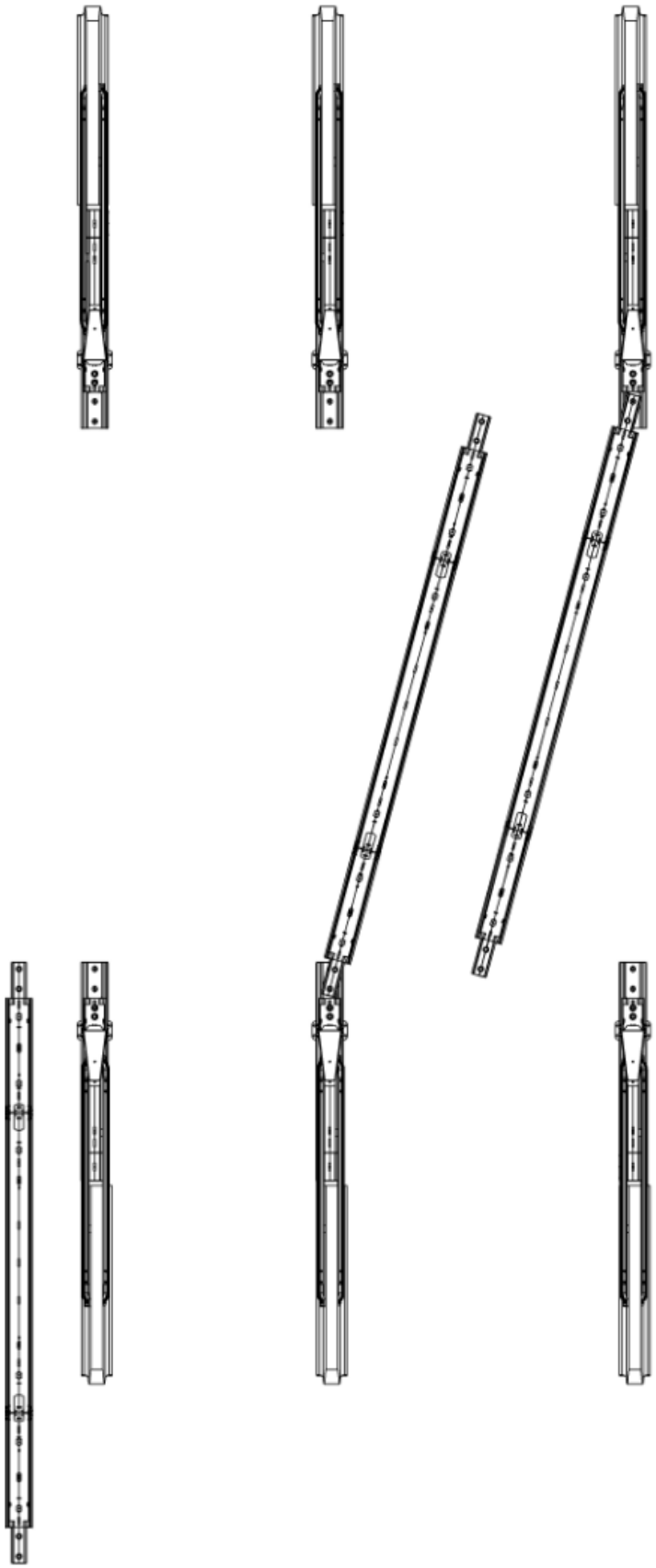
Gate Length

Standard gate lengths are 6m, 12m, 18m, 24m, 30m and 36m. These gate sizes provide openings of 4.67m, 10.67m, 16.67m, 22.67m, 28.67m and 34.67m respectively.

Please contact Highway Care for bespoke sizing options.

When the gate is not within a run of standard BarrierGuard 800, no loads are transferred to the adjoing barrier being connected to.

Standard Opening Options

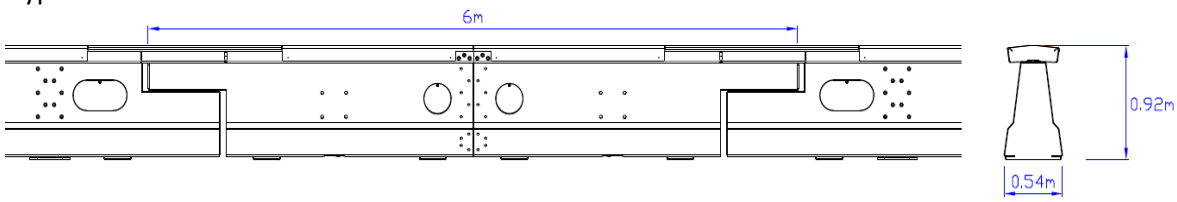


Deflections

Deflection measurements from actual crash testing provides a setting that can be useful when assessing a products suitability to perform at a given location.

NCHRP 350 Test 3-21	2000kg Pick-up truck at 25 degrees impact at 100kph		
Dynamic deflection	**1.16 m**	**Permanent Deflection**	**1.07 m**

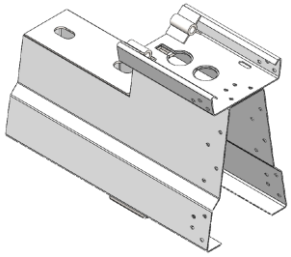
Typical 6m BarrierGuard 800 Gate



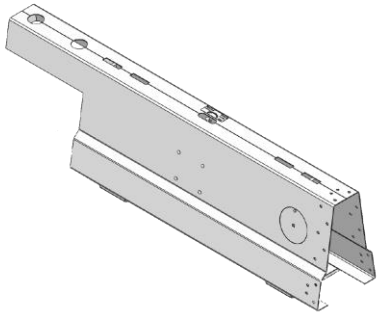
Note: Impacts with less speed and smaller angles are likely to lead to lower deflections.

Component Identification

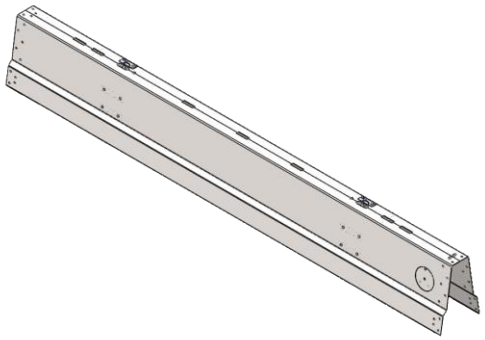
Fixed Gate Post Section (variable lengths)



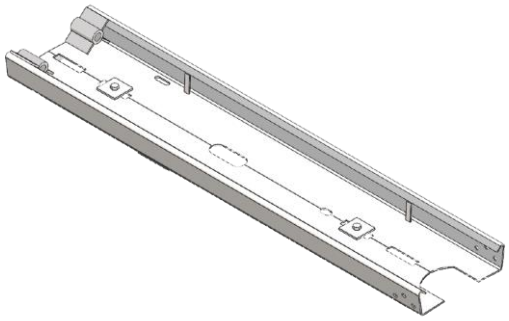
Mobile Hinge Section



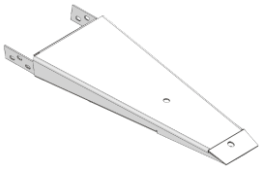
Gate Section with Wheels



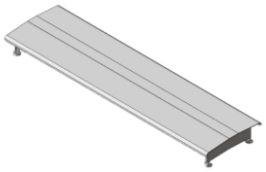
T-Top (variable lengths)



T-Top Connection

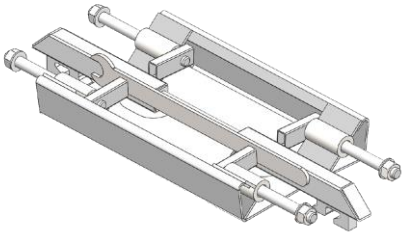


Weather Cover



Gate Pin

Removable T-Top Section & Fittings



Safety Statements

General Safety

- All required traffic safety precautions should be complied with. All workers should wear required safety clothing. (Examples, and not limited to, include: high visibility vests, steel capped footwear and gloves).
- Only authorised trained personnel should operate any machinery. Where overhead machinery is used, care must be taken to avoid any overhead hazards.
- Before drilling or excavation, always ensure that the area is clear of underground services. (The appropriate service providers may need to be contacted).
- Avoid placing hands or fingers in and around moving machine parts when components are being lifted and manoeuvred into place.

System Safety Statements

- Take care when unloading the BarrierGuard 800 Gate components, as often there will be limited space to work with. Never go underneath a load that is being lifted.
- All installers must be careful when fitting gates, especially with the risk of a trapping injury occurring.

Installation Instructions

Getting started

The gate needs to be installed on a smooth and level surface that will allow the system to be opened and closed.

When installing the gate, it is good practise to start from one end and work towards the other, but always check total length measurements before anchoring. It is good practice to fully install the gate before anchoring to ensure correct fit and alignment.

To speed up installation time, it is recommended that as many BarrierGuard 800 Gate sections as possible, are pre-assembled before delivery to site. The quantity that can be pre-assembled is usually determined by the size of the vehicle used to deliver to site.

Preparation

Before installing a BarrierGuard 800 Gate, ensure that all components required for the system are readily available and have been identified. BarrierGuard 800 Gate is a highly engineered safety device made up of relatively small number of parts. Before starting installation ensure that you are familiar with the design of the system.

The BarrierGuard 800 Gate ground conditions must meet or exceed the design specification.

Ensure that the area where the BarrierGuard 800 Gate is to be installed has enough space to work in and is flat enough so that the ground conditions will not impede installation. Minor site grading may be required.

Tools & Equipment Required

The tools required to install the BarrierGuard 800 Gate are:

- Suitable drilling equipment.
- Airline blower (for cleaning out anchor holes for resin fixings).
- Measuring tape and road marking equipment.
- Lifting chains – recommended 3m leg lengths, rated at 2 ton per leg with 1 one choke (not required if a forklift is used).
- Lifting equipment capable of lifting the BarrierGuard 800 Gate units. E.g. fork lift, crane, wheeled excavator, etc.
- ¾ inch drive socket suitable for the anchors – M24 Galvanised stud, washer & nut.
- ¾ inch drive ratchet
- ½ inch drive ratchet, ½ inch 24mm socket, ½ inch drive 4 inch extension bar; used to raise/lower gate wheels.
- ½ inch drive impact gun, ½ inch drive 24mm double depth impact socket,

compressor and pipe. *Note: Not critical items but speeds up installation time.*
- Spanner/Socket to remove inspection hatches (16mm & 17mm).
- ½ inch torque wrench with 24mm socket (90-110Nm); for tightening M16 x 45 barrier bolts.
- ¾ inch torque wrench with 36mm socket (150Nm); for tightening M24 anchor studding if used.
- 2 off 50mm spacers; for setting hinge gaps.
- Large and small podger/pry bars.
- 6ft crow bar; useful for slight adjustments when lining up the barrier.

Installation

There are many variations of gate installations, depending on the BarrierGuard 800 Gate components used. The following installation shows the basic principles which vary little from the numerous models of gates designed to meet specific site requirements.

General drawing packs and/or project specific drawings give further information regarding exact gate design.

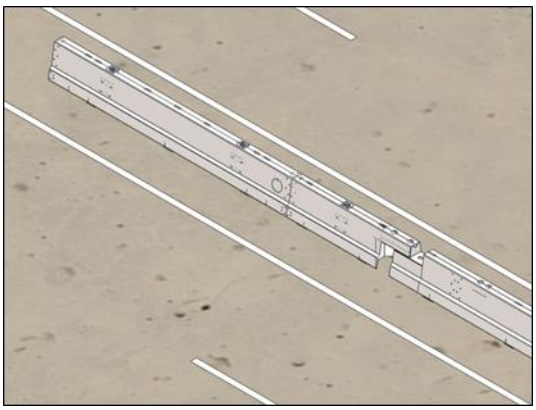
Note: Further installation advice can be sought from Highway Care International.

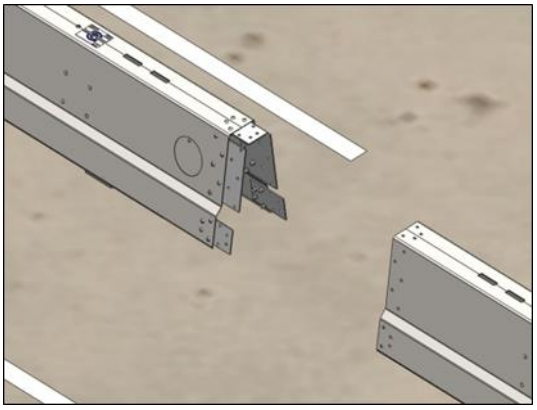
Step 01 – Measuring

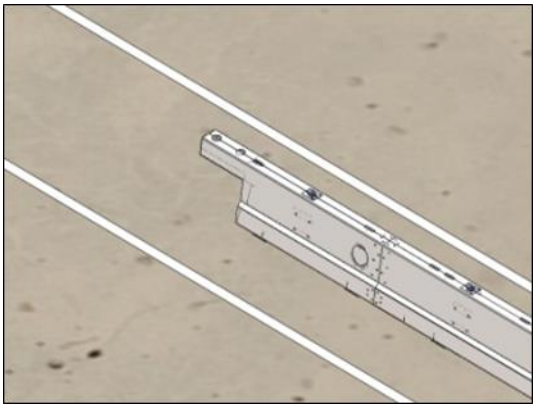
Measure the space where the gate will be installed and mark the start and end point. Start the installation from one end of the gate assembly.

Step 02 – Assembly

Assemble the gate to the desired length according to the installation drawings. Ensure any wheels and anchor points are assembled in there correct positions.

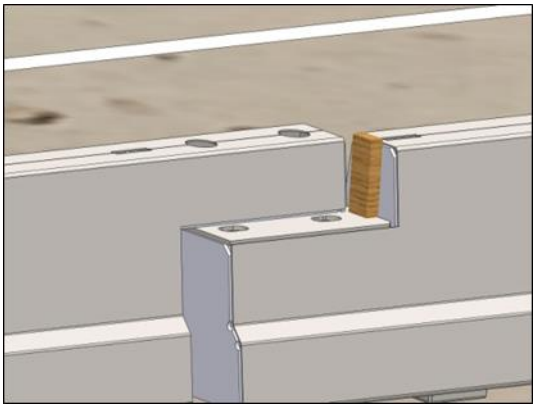


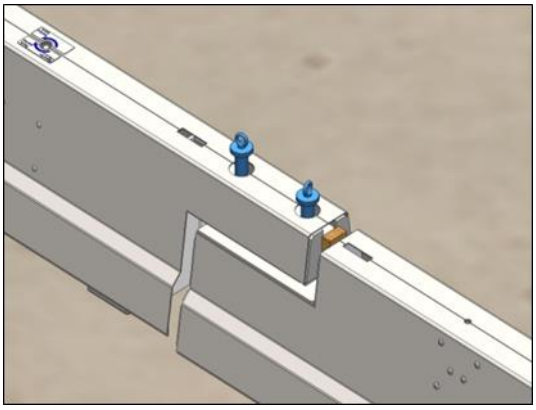


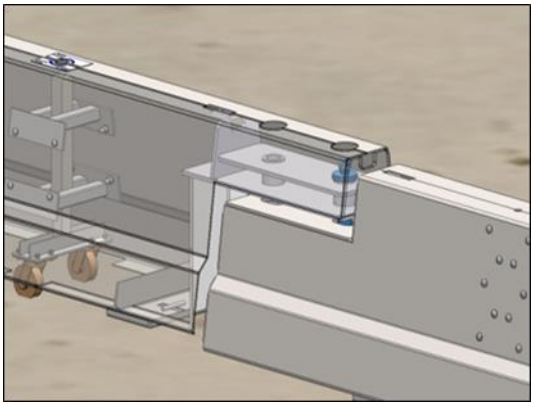


Step 03 – Position

Position the gate components in place (gate, hinge, gate posts). Ensure spacer and pins are in place. Lower the gate wheels when satisfied and make final adjustments.







Note: Ensure the gate post and hinge edges are aligned smoothly.

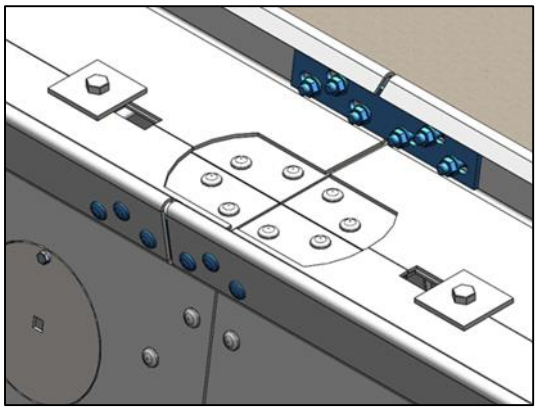
Step 04 – Connection

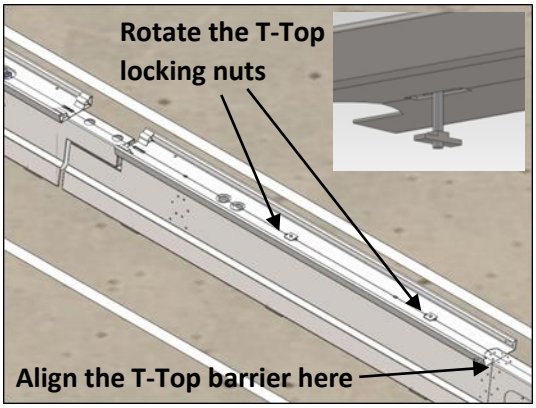
Depending on the connection used, ensure this lines up with the barrier being attached. Adjust the gate/gate post position to best match the connection section. This can be done with a large pry bar or lifting equipment.

Step 05 – T-Top

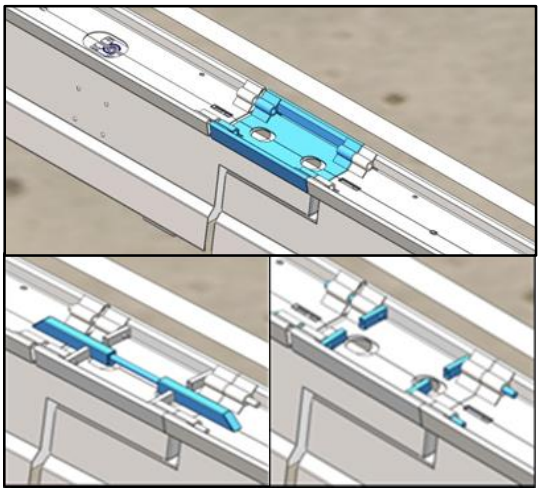
If T-top is part of your gate design then install it aligned with the barrier away from where the gate post and hinge spacer gap is. Splice plates can be used to join T-top sections.

Note: It is recommended to leave the fixings loose in the T-top until after anchoring to the removable sections.



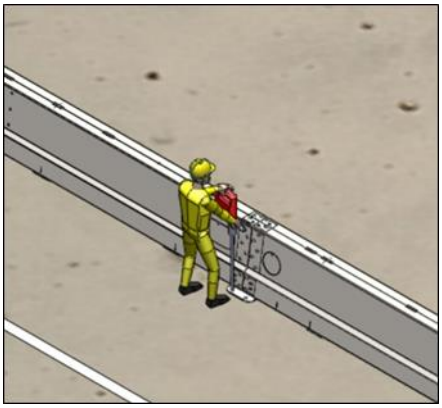


Install the removable T-top section, pins and turnbuckle. Do not tighten these components until ground anchoring is complete.



Step 06 – Anchor

Ensure the gate is aligned with connections correctly and then drill and fit any ground anchors. The type will depend on the application and ground conditions of the gate.



Note: If an internal anchor shoe is utilised it will be necessary to remove the barrier to allow the anchor to be drilled. Mark the anchor shoe position before removing the barrier.

Step 07 – System Check

Perform an operation check of the system to ensure usability.

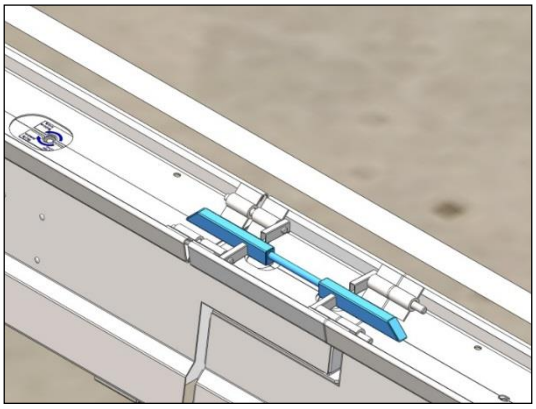
Operation

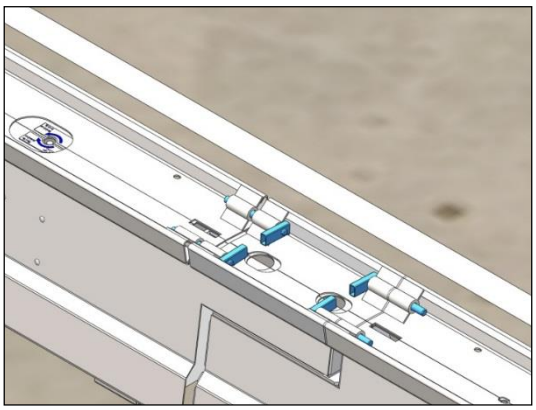
Ensure appropriate Traffic Management is in place before operating the gate.

Remove weather cover if fitted.

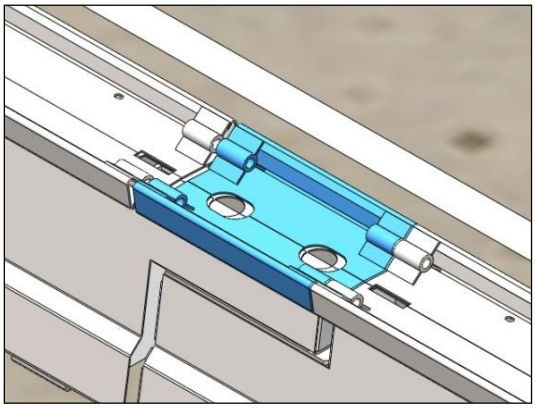
Loosen the T-Top turn buckle on the hinge unit and remove. The spanner should be stored with the turn buckle.

Loosen the 4 off T-Top pins and fully remove; refit the nuts and washers to the pins to stop them getting lost.



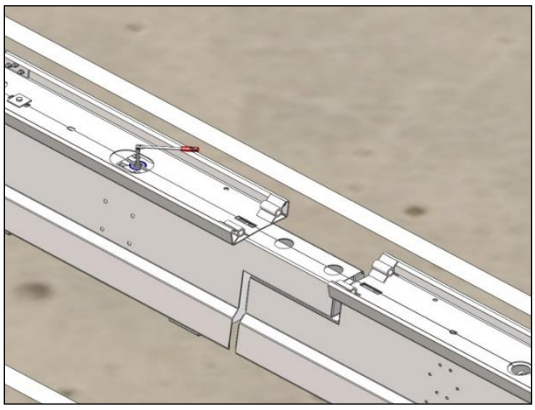


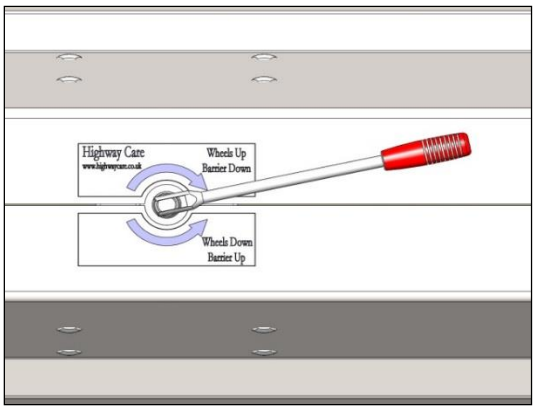
Store the pins, turn-buckle and removable T-top panel inside the T-top of the gate post, so that it is ready for use when the gate is closed. Now the gate post T-top section highlighted can be removed.



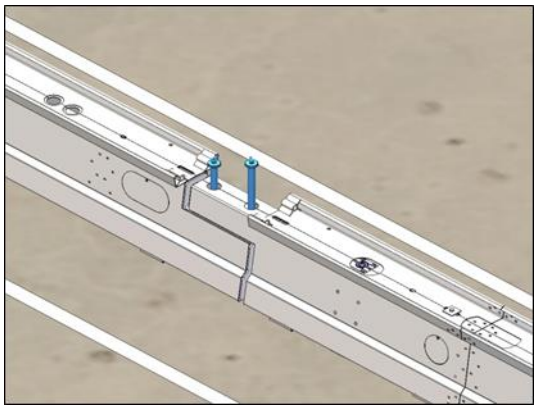
Repeat these operations for the other end of the gate post.

Use the correct socket for your gate (normally 24mm), a short extension (approximately 150mm is recommended) and a ratchet/ T bar or similar to lower all the wheel sets on the gate. Turn the socket anti-clockwise.



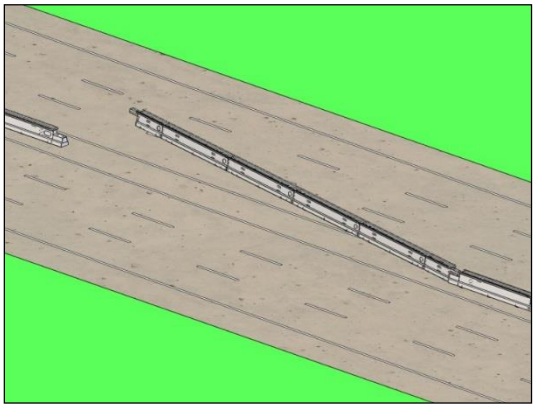


Lift and remove all 4 gate pins to fully disconnect the BarrierGuard 800 Gate. To hinge the gate, leave 1 pin inserted.



CAUTION: Once these pins are removed the gate is free to move.

Once the gate has been opened to the required position; use the socket, extension bar and ratchet to raise the wheels and lower the barrier.



Reverse these steps to close the gate.

Maintenance and Repair

Maintenance

Highway Care International recommends that the BarrierGuard 800 Gates are opened at least once a year during routine maintenance programs. This provides the opportunity to check the lifting jacks and jockey wheels operate correctly.

Repair

The BarrierGuard 800 Gate is a low maintenance system that is unlikely to be damaged after typical impacts, with just minor cosmetic damage the most common occurrence.

After more substantial impacts where a vehicle has significantly damaged the gate, it will be necessary to fully test the gates operation and also seek advice from Highway Care International regarding replacement gate components.

Note: Further advice is available from Highway Care International where required.

Photo Examples

Connection to thrie beam

T-Top transition

Gate wheel set

Vehicle passing through open gate

Hinge joint

Hinge pin being removed

Frequently Asked Questions

1) What type of equipment is required to install BarrierGuard 800 Gate?

Suitable lifting equipment such as a hiab crane with hook lifting chains, marking and drilling equipment (e.g. Hilti or compressed air rock drill), various sockets and spanners up to 36mm, 6mm Allen key. Please refer to the tools and equipment section on page 7.

2) What ground conditions are required to install BarrierGuard 800 Gate?

Typical foundations are concrete and asphalt. Gradients need to be considered. The condition around the gate should be smooth paved and flat; free from debris to allow operation of the gate. Please refer to the design consideration section on page 4. Contact Highway Care International for further assistance.

3) What can the gate attach to?

There are connections to concrete, thrie beam, w-beam and BarrierGuard 800. Contact Highway Care International for further assistance.

4) Does the gate require anchoring when in a run of BarrierGuard 800?

For gates that are opened regularly, it is recommended that the gate posts are anchored to ensure that the gate can be opened and closed easily. Gates that are not opened often, do not have to be anchored at the gate posts but consideration must be given to where the nearest anchor is located.

Note; E.g. if the gate is in a temporary run of BarrierGuard 800 and opened without anchoring at the gate post, the barrier leading up to the gate post will not perform as tested.

5) On average, how long does it take to install BarrierGuard 800 Gate?

Depending on the application and circumstances at the site, experience of the workforce, equipment available, pre assemble taken place, once the ground conditions are suitable, installation and assembly on site should take approximately 2hrs.

6) What testing has BarrierGuard 800 Gate been approved to?

BarrierGuard 800 Gate has been tested and accepted to NCHRP 350 test level 3.

7) Can the gate be installed in any temperature/humidity environment?

BarrierGuard 800 Gate can be installed in the majority of environments, in some extreme environments enhanced components may be required. Contact Highway Care International for further assistance.

8) What maintenance does the BarrierGuard 800 Gate require?

BarrierGuard 800 Gate is a low maintenance gate that requires minimal upkeep. It is recommended that gate is opened and closed annually to ensure functioning operation.

Whilst BarrierGuard 800 Gate can be opened after a ‘design’ impact, it is recommended that any damaged components are replaced once opened.

9) What is the expected lifespan of BarrierGuard 800 Gate?

The gate has an expected lifespan of over 25 years. This is dependent on maintenance regime and site specific environment.

10) What is the smallest gate and largest gate available?

Standard metric gate lengths are 6m, 12m, 18m, 24m, 30m and 36m. These gate sizes provide openings of 4.67m, 10.67m, 16.67m, 22.67m, 28.67m and 34.67m respectively.

Bespoke opening sizes are available subject to application. Contact Highway Care International for further details.

11) How many people and how long does it take to open a gate?

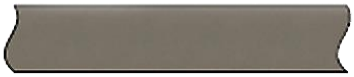
A gate can be opened by two operatives in under 2mins.

Appendix

Foundation Details

PAVEMENT MATERIAL SPECIFICATIONS

PORTLAND CEMENT CONCRETE (PPC)



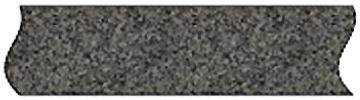
Stone affregate concrete mix, 4000 PSI [28MPa] minimum compressive strength (sampling per ASTM C31-84 or ASTM C42-84A, testing per ASTM C39-84) or similar.

ASPHALTIC CONCRETE (AC)

AR-4000 A.C. (Per ASTM D3381 '83) 0.75" [19mm] maximum, medium (type A or B) aggregate or similar.

Sieve Size	%Passing
1" [25mm]	100
3/4" [19mm]	95-100
3/8" [9.5mm]	65-80
No. 4	49-54
No. 8	36-40
No. 30	18-21
No. 200	3-8

COMPACTED SUBBASE (DGA)



6IN. [150mm] minimum depth, 95% compactation, class 2 aggregate or similar.

Sieve Size	% Passing
3" [75mm]	100
2 1/2" [64mm]	90-100
No. 4	40-90
No. 200	0-25

PAVEMENT CONSTRUCTION SPECIFICATIONS

1) P.C.CONCRETE.

Foundation: Minimum 8 in. [200mm] reinforced PCC pad or 10 in [250mm] nonreinforced PCC pad.

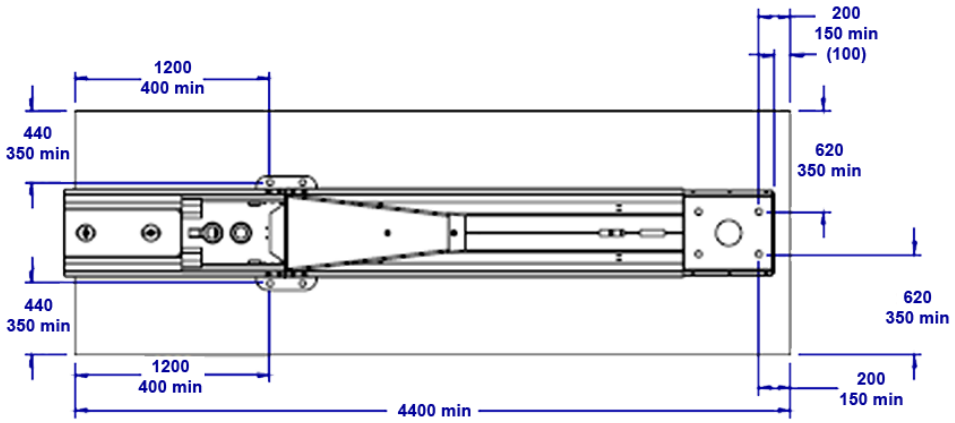
2) ASPHALT OVER SUBBASE

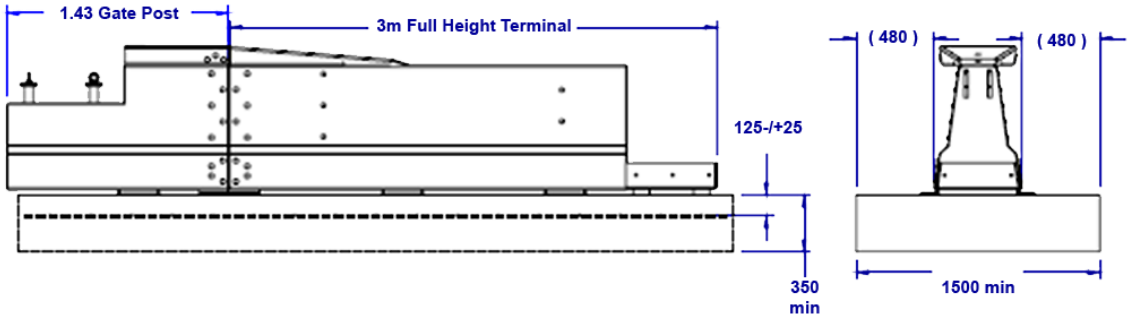
Foundation: AC over compacted DGA subbase.

3) ASPHALT OVER P.C. CONCRETE

Foundation: AC over PCC

OPTIONAL FOUNDATION PAD





Foundation Pad Notes:

1) One layer of steel mesh A252 (BS 4483) or equivalent. Minimum Lap – 400mm. Minimum cover 50mm unless otherwise stated.
2) Mesh should be positioned so as not to conflict with anchor locations.
3) Minimum concrete grade strength at time of fixing C30. Poker vibration, surface finish – U2.
4) Slab surface to be level with surrounding surface levels.
5) Maximum recommended cross slope 2.5%. Back to front not to vary more than 2%.
6) All edges must be backfilled with aggregate sub base material (maximum size 20mm) and fully compacted.
7) Slab surface to be level with surrounding surface levels.
8) Minimum depth of slab – 350mm.
9) The area between the anchor pads and the swept arc of the gate movement should be smooth paved and flat to allow operation of gates. Also, consideration should be given to location of any road studs, drainage covers and access hatches.
10) The ground bearing resistance to be no less than 50kN / sq.m.

Anchor Installation Details

Mechanical anchor bolt

The steps below detail a typical mechanical anchor bolt fixing installation.

Note: Always follow the installation instructions supplied by the fixing manufacturer. These may differ to the guidelines below.

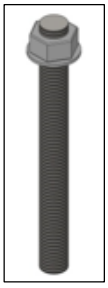
FMA-24-185-YZ

1. Drill a hole with a diameter of 30mm and a depth of 250mm.
2. Clean out the hole using an air line and blow pipe or similar.
3. Insert the complete mechanical anchor into the hole.
4. Tighten the anchor to the manufacturer's specification.

Resin anchor studding

The steps below detail a typical resin anchor studding installation.

Note: Always follow the installation instructions supplied by the fixing manufacturer. These may differ to the guidelines below.



FATB-24-250-GLV

Note: this part No. does not include the resin

1. Drill a hole with a diameter of 28mm and a depth of 250mm.
2. Clean the hole using an air line and blow pipe or similar.
3. Mix the resin as specified by the manufactures specification.
4. Pour the required volume of resin into the hole; leave approximately 100mm without resin at the top of the hole as this may need to be increased or decreased to suit each application.
5. Position the anchor plate.
6. Fit the nut and washer to the anchor studding; leave approximately 2 full threads showing at the top of the studding.
7. Push the anchor stud into the hole to the required depth, the resin should reach the top of the hole, if not increase the quantity of resin.
8. Wait for the resin to cure as per manufacturers specifications.
9. Tighten the anchor nuts to the manufacturer's specification.

Installation Checklist Example

INSTALLATION CHECKLIST				Gate Information
	Print Name	Sign Name	Date	Location; Gate connections to; Gate opening size; Serial number;
Installed by;				
Inspected by;				

BarrierGuard 800 Gate	Applicable Section; Yes or No		
Is the site suitable for BarrierGuard 800 Gate? E.g. Is there enough space for the finished gate layout?	Yes	N/A	No
Are the ground conditions suitable? E.g. No bumps/hollows/slopes that would significantly hinder the operation of the gate.	Yes	N/A	No
Are all the components available?	Yes	N/A	No
Do the anchor shoes have the lynch pin installed?	Yes	N/A	No
Has T-top been installed?	Yes	N/A	No
Are all 4 gate post to gate hinge pins installed?	Yes	N/A	No
Are all the fixings torqued according to this document and/or manufacturer's instructions?	Yes	N/A	No
Has the BarrierGuard 800 Gate operation been checked to ensure it is working?	Yes	N/A	No
Other information:			

Comments / Further Details
Is the gate installed completely according to the design drawings? Please note any variations.

Reference Drawings
Add any diagrams as required.

Approvals

Association	Approval Web Link
Austroads	http://www.austroads.com.au/road-construction/barrier-assessment

Country	State	Road Authority	Approval Web Link
Australia	New South Wales	Road and Maritime Services	http://www.rms.nsw.gov.au/business-industry/partners-suppliers/design-documents/safety-barrier-products/gate.html
	South Australia	Department of Planning, Transport and Infrastructure	http://www.dpti.sa.gov.au/standards/raod_safety_barriers
	Victoria	Vic Roads	https://www.vicroads.vic.gov.au/business-and-industry/design-and-management/design-standards-and-manuals/guidelines-for-road-design/accepted-safety-barrier-products/permanent-barriers-and-terminals
	Queensland	Department of Transport and Main Roads	http://www.tmr.qld.gov.au/business-industry/Business-with-us/Approved-products-and-suppliers/Traffic-engineering-and-road-safety-approved-products.aspx
	Western Australia	Main Roads	TBC
New Zealand	N/A	New Zealand Transport Agency	https://www.nzta.govt.nz/resources/road-safety-barrier-systems/

Safety Barrier System Conditions

Austroads

BARRIERGUARD 800 Steel Gate

Australian Distributor	Highway Care International
New Zealand Distributor	Highway Care International
Date Issued	1 July 2015

Status **Expiry: 14 March 2024**	**Accepted** – May be used on the classified road network. These acceptance conditions take precedence over any instructions in the Product Manual.
Variants accepted	BARRIERGUARD 800 Steel Gate (6 and 12 metre) with an attached T-Top structure, hinge assembly and hinge pins, terminal section with anchor assembly and wheel sets.
Variants NOT accepted	• Variants that are not on the list above are not accepted. • Variants accepted in other jurisdictions, but not accepted in the local jurisdiction, are NOT permitted.

Speed limit (km/h)	100 km/h. Permanent barriers accepted for 100km/h may be used in 110 km/h speed zones.	
Tested containment (kg)	2,000 kg at 100 km/h and 25°.	
Adopted dynamic deflection (Nominal 2 tonne vehicle)	100 km/h	1.19 metres.
	80 km/h	Use 100 km/h deflection.
	70 km/h	Use 100 km/h deflection.
	50 km/h	Use 100 km/h deflection.
	Deflections shown may be exceeded with high mass vehicles. Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers Section 6 for design advice.	
Point of need	Not applicable.	
Development length	Not applicable.	
Minimum length of barrier between terminals	Not applicable.	
System width (m)	0.54 metres.	

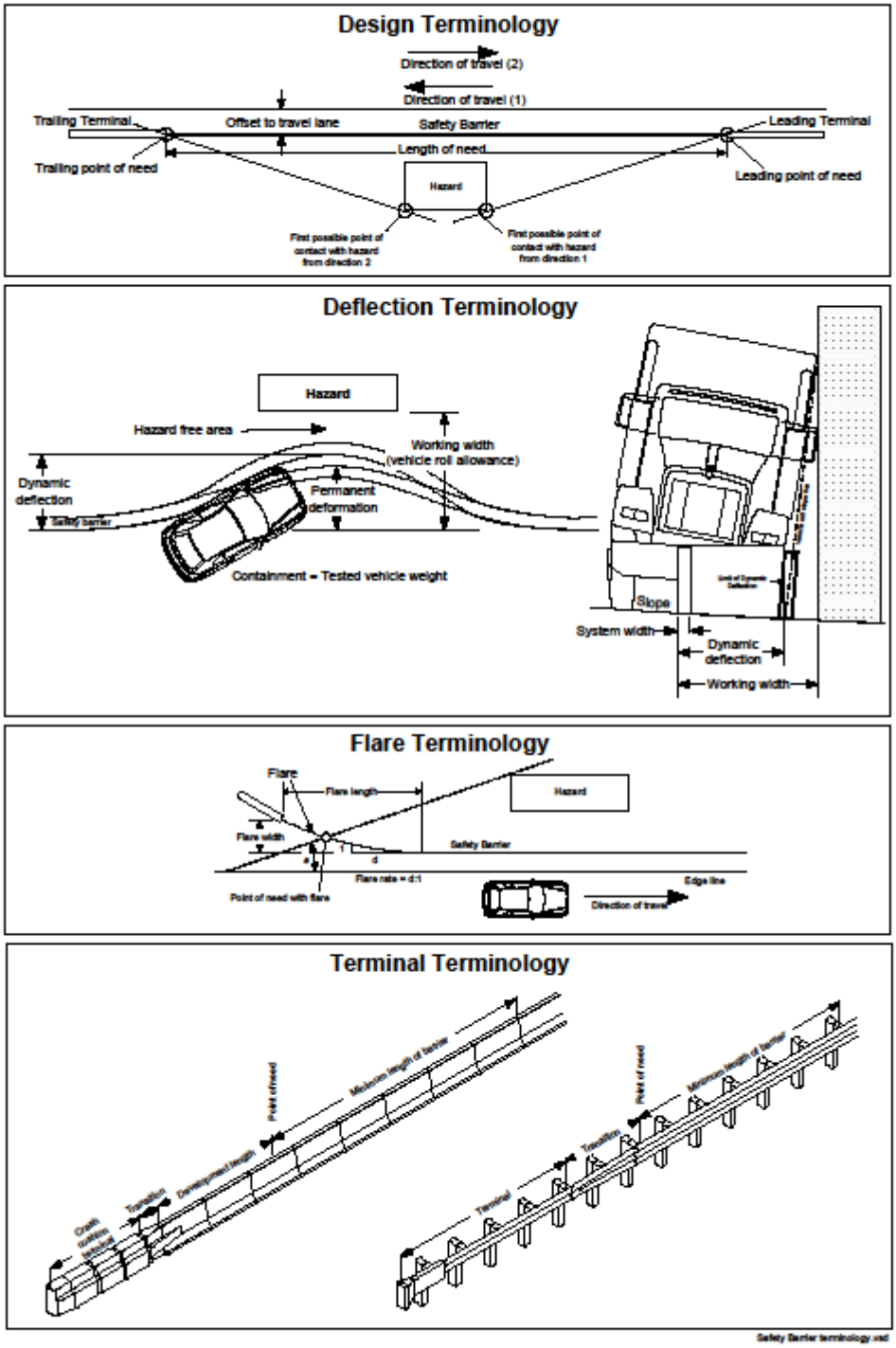
System conditions	1. Maximum gate opening is 30 metres. 2. Only to be installed on straight horizontal alignments. 3. Installation on top of a kerb is not permitted.	
Terminals and connections	W-Beam guardrail	Not Permitted.
	Thrie-Beam guardrail	Not Permitted.
	Type F Concrete Safety Barrier	Permitted – BARRIERGUARD 800 Gate to Concrete Barrier. The transition includes the Full Height End Terminal.
	Proprietary product	BARRIERGUARD 800 and MDS Steel Safety Barrier – Temporary.
	Other	Not applicable.
Gore area use	Not applicable.	

Pedestrian area use	Not applicable.
Cycleway use	Not applicable.
Frequent impact likely	Not Permitted.
Remote location	Permitted.
Median use	Permitted.
Minimum median width (m)	Not specified.
Flare (See Explanation of Terms diagram)	Not Permitted.
Offset to travel lane (m)	Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, Section 6.3.5.
Hazard free area beside barrier or terminal (Working Width)	Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, Section 6.3.16.

Installation	The BARRIERGUARD 800 Steel Gate must be installed and maintained in accordance with the Product Manual and Road Agency specifications. The Road Agency specifications and standards shall have precedence.	
Minimum distance to excavation	Not applicable.	
Slope limit	Not specified.	
Foundation pavement conditions	Concrete	Permitted.
	Deep lift Asphaltic Concrete	Permitted when installed on a concrete slab, including the hinge section.
	Asphaltic concrete over granular pavement	Permitted when installed on a concrete slab, including the hinge section.
	Flush seal over granular pavement	Permitted when installed on a concrete slab, including the hinge section.
	Unsealed compacted formation	Not Permitted.
	Natural surface	Not Permitted.
	Foundation pavement conditions must be smooth and free of snag points, kerbs or obstructions that may interfere with the operation of the product.	
Attachments and screens	In accordance with the requirements of Australian/New Zealand Standard AS/NZS 3845, road furniture such as headlight screens, signs, lighting posts and fences for pedestrians, visual screens, debris screens, platforms for workers and other non-product hardware must not be attached to the product. Screens may be placed adjacent to the side of the product not exposed to traffic. The distance between the screen and the product shall be determined by a site specific risk assessment that considers the deflection distance. Screens must not have horizontal members that present a risk of impaling errant vehicles that impact the product.	
Damaged components	Damaged components must be replaced. Repaired components must not be used.	
Delineation	The installed system shall include delineation as prescribed by Road Agency specifications and drawings.	
Traceability and markings	Product markings shall be in accordance with marking/s prescribed by the current Australian/New Zealand Standard AS/NZS 3845 Road Safety Barrier Systems and Road Agency specifications.	

	Traceability details that must be permanently fixed to the product are: • Name of the product. • Manufacturer or distributor name. • Date of manufacture. • Model or version details of the product, if applicable. • Batch number, if applicable. • Serial number, if applicable. Traceability details must be easily visible but unobtrusive and not be in a form that becomes prominent advertising. No advertising shall be displayed on the installation. Traceability must be in a form that will not be erased with use.

Notes	Conditions are based on drawings in the Product Manual supplied by the Proponent, dated February 2011 (Rev 1A). This acceptance will cease if there is any change in the product design or specifications.
	Only the Product Manual authorised by the Proponent shall be used in any marketing of the product.
	Acceptance of the BARRIERGUARD 800 Steel Gate does not place any obligation on the Road Agency, or its contractors, to purchase or use the product.
	The Austroads Safety Barrier Assessment Panel may periodically re-assess the BARRIERGUARD 800 Steel Gate. The Road Agency may withdraw or modify at any time, the acceptance status or conditions of use of the product without notice. Users should refer to the Road Agency web site to ensure they have the latest version of the conditions related to this product.



For more information, refer to
Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers

Highway Care International

Contact Details

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