

DETAIL SHEET

# IRONMAN SUITE OF BARRIERS - UNBALLASTED

**NOTE: IRONMAN STATUS IS LEGACY IN VICTORIA. EXISTING UNITS MAY CONTINUE TO BE USED UNTIL THE END OF SERVICE LIFE, BUT NO NEW UNITS CAN BE MANUFACTURED.**

**Ownership & Supplier**

Saferoads  
 P.O. Box 340  
 DROUIN VIC 3818  
 Website: [www.saferoads.com.au](http://www.saferoads.com.au)

**Accepted Test Level**

NCHRP 350 to Test Level 2 (TL2): 70km/h

**Details**

<b>Category:</b>	Longitudinal
<b>Sub Category:</b>	Semi-Rigid
<b>Main Material:</b>	Steel
<b>Gating/Non Gating:</b>	NA
<b>Redirective/</b>	Redirective
<b>Non- Redirective:</b>	
<b>Permanent/</b>	Temporary
<b>Temporary:</b>	

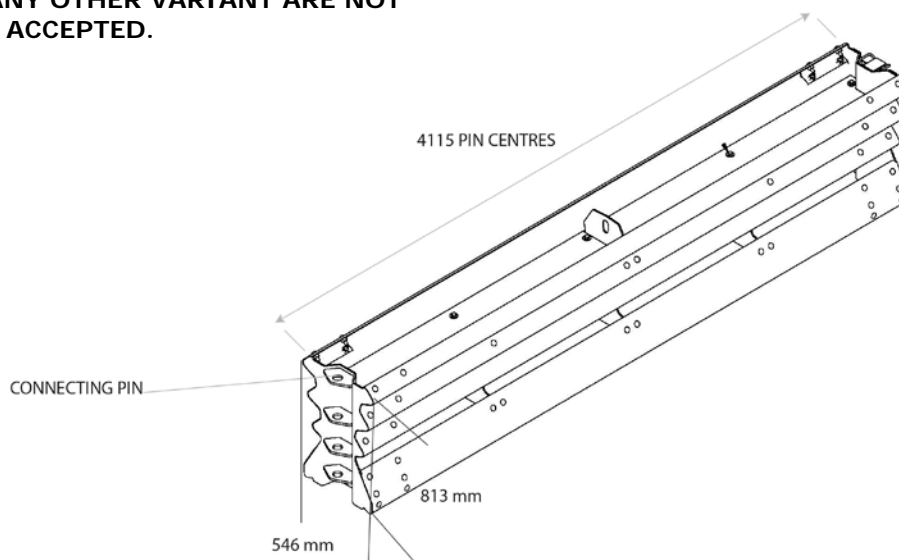


**Description**

The IronMan is a steel semi-rigid temporary safety barrier comprising of segments interlocked with steel pivot pins. The system functions as a portable longitudinal barrier to prevent errant vehicle penetration, vaulting or underriding.

**NOTE: ONLY UNITS CONTAINING GREY/GALVANISED BULK HEADS ARE CURRENTLY ACCEPTED FOR USE IN VICTORIA. UNITS CONTAINING ORANGE COLOURED BULK HEADS OR ANY OTHER VARIANT ARE NOT CURRENTLY ACCEPTED.**

**Drawing**



## Legacy Product:

### IRONMAN (LOW SPEED) Steel Rail Safety Barrier – Temporary – Anchored



Proponent:

Saferoads Pty Ltd

Email:

[Sales@saferoads.com.au](mailto:Sales@saferoads.com.au)

Australian Distributor:

Saferoads Pty Ltd

Email:

[Sales@saferoads.com.au](mailto:Sales@saferoads.com.au)

Status:

Legacy

Variants accepted as Legacy	4m and 12m units with deflection limiting spacers.
Variants not accepted as Legacy	<ol style="list-style-type: none"> <li>1. 4m and 12m units without deflection limiting spacers.</li> <li>2. All 8m units.</li> <li>3. Units anchored to the surface.</li> <li>4. Units with anti-gawk screens attached.</li> </ol>
Design speed limit (km/h)	70
Tested containment (kg)	2000
Terminals permitted	Quadguard CZ
Median use	Allowable – Consider the dynamic deflection of the system
Gore area use	Allowable – Consider the dynamic deflection
Pedestrian area use	Allowable – Consider the dynamic deflection and the top edge of the barrier
Cycleway use	Allowable – Consider the dynamic deflection and the top edge of the barrier
Frequent impact likely	Allowable in these situations but assess damage before reuse
Slope limit	<ol style="list-style-type: none"> <li>1. 20H:1V (5%) for crossfall</li> <li>2. 20H:1V (5%) for longitudinal slope</li> </ol>
Foundation conditions	Foundation in accordance with VicRoads Specifications or the requirements of the Supplier, whichever is the greater requirement. For the Suppliers conditions, refer to the Suppliers Product manual.
Anchor requirements	Required – See requirements of the permitted terminals
Point-of-need (location)	At leading end of a Quadguard CZ
Hazard free area beside barrier or terminal	See the requirements of the cushion
Minimum length between terminals (m)	56m when used with Quadguard CZ
Terminal length (m)	See the terminals permissible
Systems width (m)	0.6
Minimum offset to travel lane	See the terminals permissible
Vehicle roll allowance (m)	Use design guideline values
Performance needs	Low speed Ironman barriers are marked on the lower corners with black square to indicate it is a speed restricted barrier as well as having the speed restriction marked on the top of the barrier.

## Legacy Product:

### IRONMAN (LOW SPEED) Steel Rail Safety Barrier – Temporary - Anchored

#### Adopted Dynamic Deflection:

Vehicle: Utility (2000 kg) Adopted					
Speed	25°	20°	15°	10°	5°
110					
100					
90					
80					
70	1.05				
60					
50					
40					

Note: The deflection is interpolated from a crash test carried out at 100km/h. The installation on that test was 56m between anchors and therefore the deflection for installations longer than 56m will be greater than indicated above

## Legacy Product:

### IRONMAN (LOW SPEED) Steel Rail Safety Barrier – Temporary - Unanchored



Proponent: Saferoads Pty Ltd  
 Email: [Sales@saferoads.com.au](mailto:Sales@saferoads.com.au)  
 Australian Distributor: Saferoads Pty Ltd  
 Email: [Sales@saferoads.com.au](mailto:Sales@saferoads.com.au)  
 Status: Legacy

Variants accepted as Legacy	4m and 12m units with deflection limiting spacers.
Variants not accepted as Legacy	<ol style="list-style-type: none"> <li>1. 4m and 12m units without deflection limiting spacers.</li> <li>2. All 8m units.</li> <li>3. Units anchored to the surface.</li> <li>4. Units with anti-gawk screens attached.</li> </ol>
Design speed limit (km/h)	50
Tested containment (kg)	2000
Terminals permitted	Triton C.E.T
Median use	Allowable – Consider the dynamic deflection of the system
Gore area use	Allowable – Consider the dynamic deflection
Pedestrian area use	Allowable – Consider the dynamic deflection and the top edge of the barrier
Cycleway use	Allowable – Consider the dynamic deflection and the top edge of the barrier
Frequent impact likely	Allowable in these situations but assess damage before reuse
Slope limit	<ol style="list-style-type: none"> <li>1. 20H: 1V (5%) for crossfall</li> <li>2. 20H: 1V (5%) for longitudinal slope</li> </ol>
Foundation conditions	Foundation in accordance with VicRoads Specifications or the requirements of the Supplier, whichever is the greater requirement. For the Suppliers conditions, refer to the Suppliers Product manual.
Anchor requirements	Required – See requirements of the permitted terminals
Point-of-need (location)	30m from the beginning of TRITON C.E.T.
Hazard free area beside barrier or terminal	Equal to working width where the units are tapered through the Clear Zone
Minimum length between terminals (m)	72m when used with Triton C.E.T
Terminal length (m)	See the terminals permissible
Systems width (m)	0.6
Minimum offset to travel lane	See the terminals permissible
Vehicle roll allowance (m)	Use design guideline values
Performance needs	Low speed Ironman barriers are marked on the lower corners with black square to indicate it is a speed restricted barrier as well as having the speed restriction marked on the top of the barrier. Note that the 70km/h speed rating applies only when anchored with a cushion.

## Legacy Product:

### IRONMAN (LOW SPEED) Steel Rail Safety Barrier – Temporary - Unanchored

#### Adopted Dynamic Deflection:

Vehicle: Utility (2000 kg) Adopted					
Speed	25°	20°	15°	10°	5°
110					
100					
90					
80					
70					
60					
50	0.88				
40					

Note: The deflection is interpolated from a crash test carried out at 100km/h.