

Safety Barrier Technical Conditions for Use

BG800 LDS Steel Safety Barrier - Permanent

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|  | Issue Date: 2 September 2022 | Proponent: Highway Care International Pty Ltd |
| | These conditions take precedence over any instructions in the Product Manual. | |
| | This document is a summary of the Austroads Safety Barrier Assessment Panel's assessment of the technical performance of the product against AS/NZS 3845 Parts 1 or 2 only. It does not consider procurement practices by individual Road Agencies. | |
| | The Austroads Safety Assessment Panel may at any time, withdraw or modify this Technical Conditions for Use without notice. | |
| These acceptance conditions should be read in conjunction with the Product Manual and Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers. | | |
| Acceptance of this product does not place any obligation on the Northern Territory Government or its contractors, to purchase or use the product. | | |

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| Status | Accepted – may be used on the classified road network |
| Product accepted | <p>BG800 LDS Steel Safety Barrier - Permanent</p> <ul style="list-style-type: none"> 6 metre BG800 LDS Steel Safety Barrier 12 metre BG800 LDS Steel Safety Barrier BG800 LDS Full Height Terminal End (6 and 12 metre). 0.61 metre BG 800 5° Radius Section. 0.61 metre BG 800 10° Radius Section. <p><u>Variants</u></p> <p>Variants that are NOT listed above are NOT recommended for acceptance.</p> |
| Accepted Speed | 80 km/h |
| Product Manual reviewed | IMP-031 Issue 1.0 |
| Product Manual | https://www.ingalcivil.com.au/products/temporary-barriers/bg800 |

Design Requirements

| Containment Level | Point of Redirection | | Tested Article Length (m) | Anchor/Post Spacing (m) | Dynamic Deflection (m) | Working Width (m) | Notes |
|---------------------|---|--------------|---------------------------|-------------------------|------------------------|-------------------|-------------------|
| | Leading (m) | Trailing (m) | | | | | |
| MASH TL2 (modified) | Interface between barrier and end treatment | | 72 | 12 | 0.42 | 0.96 | Tested to 80 km/h |

Approved Connections

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| <i>An accepted end treatment must be provided at both ends of all barrier installations</i> | |
| Public Domain Products | |
| W-Beam Guardrail | Not Permitted |
| Thrie-Beam Guardrail | Not Permitted |
| Concrete | Not Permitted |

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| Proprietary Products | |
|---------------------------------|--|
| SMART Crash Cushion | <ul style="list-style-type: none"> • The installation is restricted to an impact speed of 80 km/h or less • Refer SMART Crash Cushion Technical Conditions for Use. • The BG800 LDS to SMART Crash Cushion transition must be used to connect the crash cushion to the barrier. The transition includes the Full Height Terminal End. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented. |
| QUADGUARD M10 CZ Crash Cushion | <ul style="list-style-type: none"> • The installation is restricted to an impact speed limit of 80 km/h or less. • Refer to QUADGUARD M10 CZ Crash Cushion Technical Conditions for Use. • The BG800 transition to end terminal must be used to connect the crash cushion to the barrier. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented. |
| Universal Tau-M Crash Cushion | <ul style="list-style-type: none"> • The installation is restricted to an impact speed limit of 80 km/h or less. • Refer Universal Tau-M Crash Cushion Technical Conditions for Use. • The BG800 to Universal Tau-M Crash Cushion transition must be used to connect the crash cushion to the barrier. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented. |
| HIGHWAYGUARD LDS Safety Barrier | <ul style="list-style-type: none"> • The installation is restricted to an impact speed of 80 km/h or less • Refer to HighwayGuard LDS Technical Conditions for Use • The BG800 LDS to HighwayGuard LDS Barrier transition must be used to connect the barriers. |

Design Guidance

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| Minimum installation length | 72 metres between crash cushions/terminals |
| System width (m) | 0.54 |
| Minimum distance to excavation (m) | 0.69 - measured from the outer edge of the foot on the works side (1.5 x anchor depth) |
| Slope limit | 8% |
| Systems conditions | <ol style="list-style-type: none"> 1. Installation on top of a kerb is not recommended, however if installed on top of a kerb all system components must be free to operate. 2. All offsets are to be measured from the relevant outer edge of the foot. The foot is not trafficable. |
| Gore area use | Permitted |
| Pedestrian area use | Permitted |
| Cycleway use | Permitted |
| Frequent impact likely | Permitted |
| Remote location | Permitted |
| Median use | Permitted |

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| Foundation Pavement Conditions | | | | | |
|---|---------------|----------------------------------|----------------------|--|---|
| Pavement Type | Use | Max Accepted Impact Speed (km/h) | Post/Pin Spacing (m) | Post/Pin Type | Pavement Construction |
| Concrete | Permitted | 80 | 12 | M24 x 460mm Threaded rod with epoxy | Min 200mm reinforced Min 250mm non-reinforced |
| Deep lift asphaltic concrete | | | | | Min 250mm |
| Asphaltic concrete over granular pavement | | | | | 150mm asphaltic concrete over 150mm granular subbase |
| Flush seal over granular pavement | Not Permitted | | | | |
| Unsealed compacted formation | Not Permitted | | | | |

Note: Installation in pavement conditions not permitted above have not been justified to the Panel's satisfaction.