



## Zoneguard Temporary Road Safety Barrier

The ZoneGuard Steel Barrier System is a temporary steel barrier system comprising 12m sections fabricated from galvanised steel panels joined using a proprietary connection system, terminating with ground anchored end sections protected by the use of a crash cushion.

The system has been tested in accordance with NCHRP Report 350 Test Level 4 (8000kg single unit truck impacting at 80 km/h at 15°), refer FHWA Letter B-176, and MASH Test Level 3 (2270kg pick-up impacting at 100 km/h at 25°), refer FHWA Letters B-176A. The system was accepted by the Austroads Safety Barrier Assessment Panel (ASBAP) on 30 June 2014.

In-service impact deflection in excess of the test values indicated below must be allowed for in any temporary traffic management plan utilising the ZoneGuard Steel Barrier System (non-MDS variants). All relevant minimum requirements of CoPTTM in regard to working spaces and safety zones must be met irrespective of the variant in use, in particular the test level of the system must meet or exceed the test level required for the cooperating speed of the adjacent traffic (refer CoPTTM B12.1).

<b>Dimensions</b>	11.85m length unit 700mm width (base), 820mm height (includes rubber pad)
<b>Minimum Length</b>	75m with anchors at 65m spacing 60m with anchors at 10.2m spacing – NOTE: requires site specific sign-off from Lead Advisor Safety (Roads & Roadsides)
<b>Grade or Placement Restrictions</b>	Suitable for unbound granular pavements with a minimum thickness of 350mm, where anchoring shall consist of 8 x 500 mm long by 30 mm diameter pins.
<b>Deflections</b>	Standard System: 1.9m (measured at outer edge of foot on workzone side of barrier) Minimum Deflection System: requires site specific sign-off from Lead Advisor Safety (Roads & Roadsides) 0.1m (measured at outer edge of foot on workzone side of barrier)
<b>Working Width</b>	Standard System: 2.6m (measured at outer edge of foot on workzone side of barrier) Minimum Deflection System: 0.8m (measured at outer edge of foot on workzone side of barrier)
<b>Anchor Point Spacing</b>	65m maximum spacing

<b>Flare Rate</b>	<p>15V:1H for speed 100 km/h</p> <p>10V:1H for speed 70 km/h</p> <p>11V:1H for speed 80 km/h</p> <p>NOTE: Flare rates above apply inside the skyline. Refer to Austroads Guide to Road Design Part 6, section 6.3.16</p>
<b>Other Restrictions / Considerations</b>	<ul style="list-style-type: none"> <li>– The use of the minimum deflection variant requires site specific signoff by the Lead Advisor Safety (Roads &amp; Roadsides).</li> <li>– The final section at both ends of any ZoneGuard Steel Barrier System installation must be anchored to the pavement in accordance with the System Supplier's instructions.</li> <li>– The maximum anchor point spacing limit may be waived in special circumstances subject to acceptance of an evidence-based application in writing to the Lead Advisor Safety (Roads &amp; Roadsides).</li> <li>– Barrier should be placed a minimum of 250 mm from the edge of travelled way to avoid nuisance impacts.</li> <li>– Clear span between anchors of greater than 65m is not permitted.</li> <li>– Flaring across the clear area without a terminal is not permitted.</li> </ul>

## Other Considerations

- Flaring of the ZoneGuard Steel Barrier System across a clear area ahead of a worksite without a crash cushion is not permitted.
- The installed system shall include delineation as prescribed by road authority specifications and drawings.
- ZoneGuard Steel Barrier System must have one of the following accepted crash cushion installed for protection at both ends.
  - ABSORB 350 - not permitted as a terminal on a flared installation.
  - QuadGuard CZ - recommended where the permanent posted speed limit is greater than 70 km/h, permitted as a terminal on a flared installation.
  - TAU-II - recommended where the permanent posted speed limit is greater than 70 km/h, permitted as a terminal on a flared installation.
- When selecting the crash cushion, the provisions of the Code of Practice for Temporary Traffic Management (CoPTTM) section C18.2.1 must be considered.