

# J Hooks Concrete Safety Barrier - Temporary

## VicRoads Requirements

Refer to Austroads - Safety Barrier System Acceptance Conditions for the J Hooks Concrete Safety Barrier. All requirements listed by Austroads have been adopted by VicRoads for use on the Victorian declared road network.

In this instance, VicRoads applies no additional requirements/conditions for use of J Hooks Concrete Safety Barrier on the Victorian declared road network.

Please Note: VicRoads requirements take precedence over any Product Manual instructions and Austroads conditions where conflicting.

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## References

- Product Installation Manual and Product Operational Manual [refer licensed product supplier website](#).
- VicRoads Road Design Note 06-04 Accepted Safety Barrier Products.

**Accepted safety barrier products are subject to periodic review and the information provided in this document may be superseded. Please refer to *Road Design Note 06-04 – Accepted Safety Barrier products* for the current VicRoads acceptance status.**



## For further information please contact:

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### Detail Sheet- J Hooks – Revision Summary

| Issue        | Approved  | Date         | Amendment                    |
|--------------|-----------|--------------|------------------------------|
| June 2017    | NDS - SSD | June 2017    | Minor Amendment- Name change |
| October 2017 | NDS - SSD | October 2017 | Updated ASBAP conditions     |

# Safety Barrier System Conditions

## J HOOKS Concrete Safety Barrier - Temporary

|   |                                |                        |
|---|--------------------------------|------------------------|
|   | <b>Australian Distributor</b>  | Advanced Group Pty Ltd |
|   | <b>New Zealand Distributor</b> | Tauren Barriers Ltd    |
|   | <b>Date Issued</b>             | 5 September 2017       |

|                                |   |
|--------------------------------|---|
| <b>Status</b>                  | <p><b>Accepted</b> – May be used on the Australian/New Zealand classified road network.</p> <p>These acceptance conditions take precedence over any instructions in the Product Manual.</p>                                       |
| <b>Product accepted</b>        | <p>3.66 metre J HOOKS Concrete Safety Barrier - Temporary.</p> <p>6.0 metre J HOOKS Concrete Safety Barrier - Temporary.</p>  |
| <b>Product Manual reviewed</b> | October 2013  |
| <b>Variants NOT accepted</b>   | <ul style="list-style-type: none"> <li>• Variants that are not on the list above are not accepted.</li> <li>• Variants accepted in other jurisdictions, but not accepted in the local jurisdiction, are NOT permitted.</li> </ul> |

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|--|--|-------------------------|
| <b>Speed limit (km/h)</b>                          | 80 km/h (70 km/h if used with ABSORB 350 Plastic Terminal).  |                         |
| <b>Tested containment</b>                          | 2,000 kg at 100 km/h and 25°.  |                         |
| <b>Tested dynamic deflection</b>                   | 100 km/h   | Not applicable.         |
|  | 80 km/h  | 1.1 metres.             |
|  | 70 km/h  | Use 80 km/h deflection. |
|  | 50 km/h  | Use 80 km/h deflection. |
|  | <p>Note that deflections are measured in crash tests performed under controlled conditions. Designers should be aware that the deflection figures published as a test result may not be the deflection values achieved in the field for all impacts by errant vehicles dependent upon foundation conditions and roadside geometry.</p> |                         |
| <b>Point of Redirection</b>                        | Point of Need is the interface between the terminal and the barrier.   |                         |
| <b>Minimum length of barrier between terminals</b> | <ul style="list-style-type: none"> <li>• 20 metres (QUADGUARD CZ).</li> <li>• 60 metres (ABSORB 350 Plastic Terminal).</li> </ul>  |                         |
| <b>System width (m)</b>                            | 0.6 metres.  |                         |

|                                  |   |   |
|----------------------------------|---|---|
| <b>System conditions</b>         | <ol style="list-style-type: none"> <li>1. Installation without a terminal listed below is NOT permitted.</li> <li>2. Flaring across the clear zone without a terminal listed below is NOT permitted.</li> <li>3. 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.</li> </ol> |   |
| <b>Terminals and connections</b> | Proprietary product   | <ol style="list-style-type: none"> <li>1. QUADGUARD CZ           <ul style="list-style-type: none"> <li>• Permitted for use with J HOOKS Concrete Safety Barrier - Temporary.</li> <li>• May only be installed where reverse impacts are highly improbable and a risk assessment has been completed and steps undertaken to mitigate any risks identified.</li> <li>• Terminal must be anchored by pins in</li> </ul> </li> </ol> |

|  |       |  |
|--|-------|--|
|  |       | <p>accordance with the installation instructions in the Product Manual.</p> <ul style="list-style-type: none"> <li>• The J HOOKS Concrete Safety Barrier adjacent to the Quadguard CZ must be anchored to the pavement as required by the Product Manual.</li> <li>• An accepted transition must be used to connect the terminal to the barrier.</li> <li>•</li> <li>• A terminal must be fitted to both ends of the barrier.</li> <li>• Permitted as a terminal on a flare.</li> <li>• See QUADGUARD CZ acceptance document for conditions of use.</li> </ul> <p>2. ABSORB 350 PLASTIC TERMINAL - TEMPORARY</p> <ul style="list-style-type: none"> <li>• Permitted for use with J HOOKS Concrete Safety Barrier - Temporary.</li> <li>• The J HOOKS Concrete Safety Barrier adjacent to the ABSORB 350 Plastic Terminal must be anchored to the pavement as required by the Product Manual.</li> <li>• An accepted transition must be used to connect the terminal to the barrier.</li> <li>• A terminal must be fitted to both ends of the barrier.</li> <li>• Not permitted as a terminal on a flare.</li> <li>• The installation is restricted to a Speed Limit of 70 km/h or less.</li> <li>• See ABSORB 350 Plastic Terminal acceptance document for conditions of use.</li> </ul> <p>3. UNIVERSAL TAU-II Steel Rail Crash Cushion</p> <ul style="list-style-type: none"> <li>• Permitted for use with J HOOKS Concrete Safety Barrier - Temporary.</li> <li>• May only be installed where reverse impacts are highly improbable and a risk assessment has been completed and steps undertaken to mitigate any risks identified.</li> <li>• The J HOOKS Concrete Safety Barrier adjacent to the UNIVERSAL TAU-II Steel Rail Crash Cushion must be anchored to the pavement as required by the Product Manual.</li> <li>• An accepted transition must be used to connect the terminal to the barrier.</li> <li>• A terminal must be fitted to both ends of the barrier.</li> <li>• Not permitted as a terminal on a flare.</li> <li>• See UNIVERSAL TAU-II Steel Rail Crash Cushion acceptance document for conditions of use.</li> </ul> |
|  | Other | A terminal must be fitted to both ends of the barrier.   |

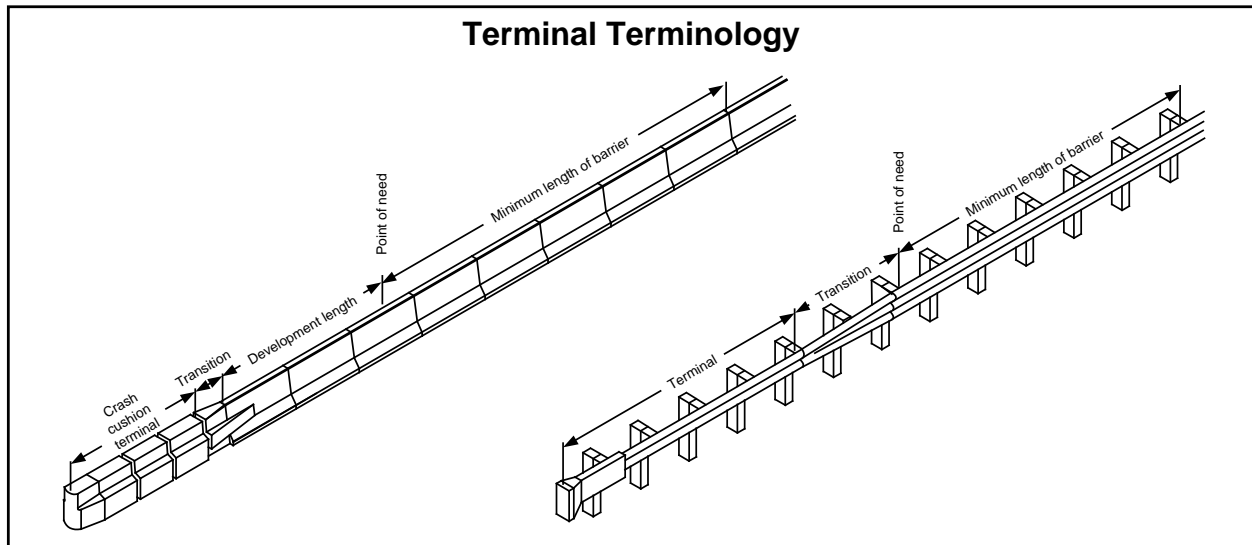
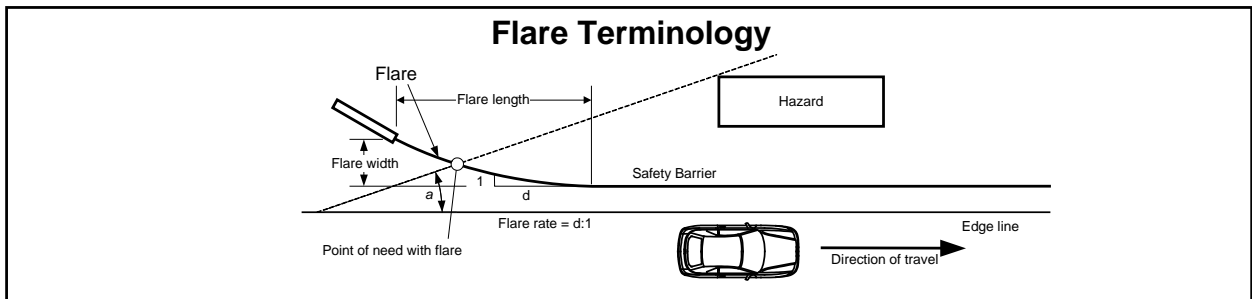
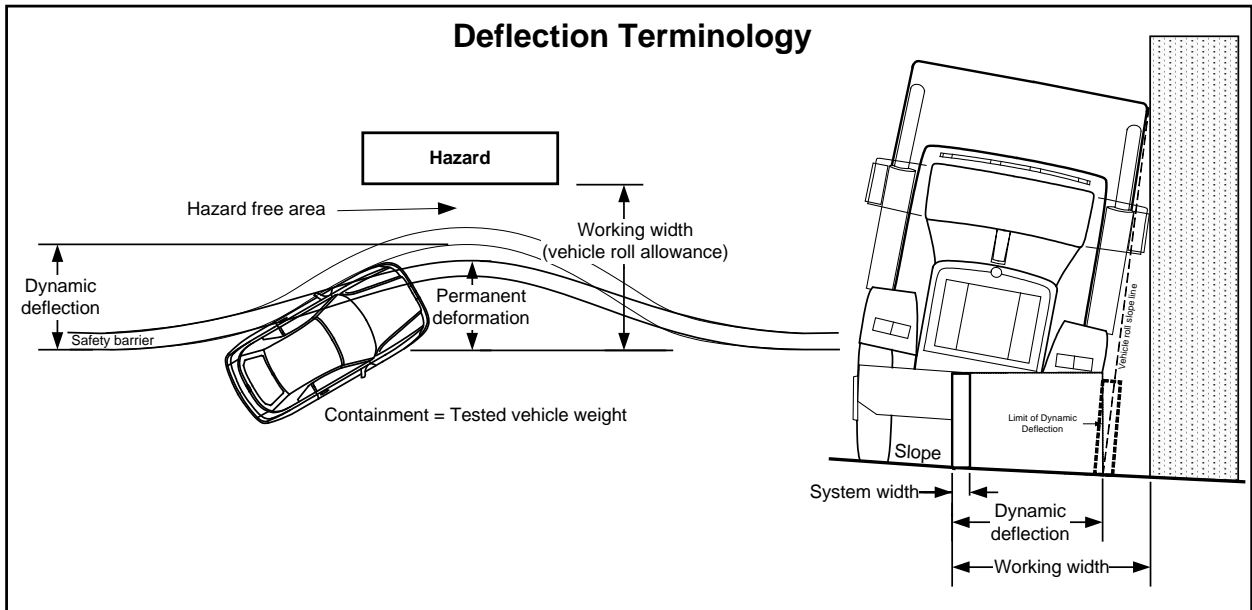
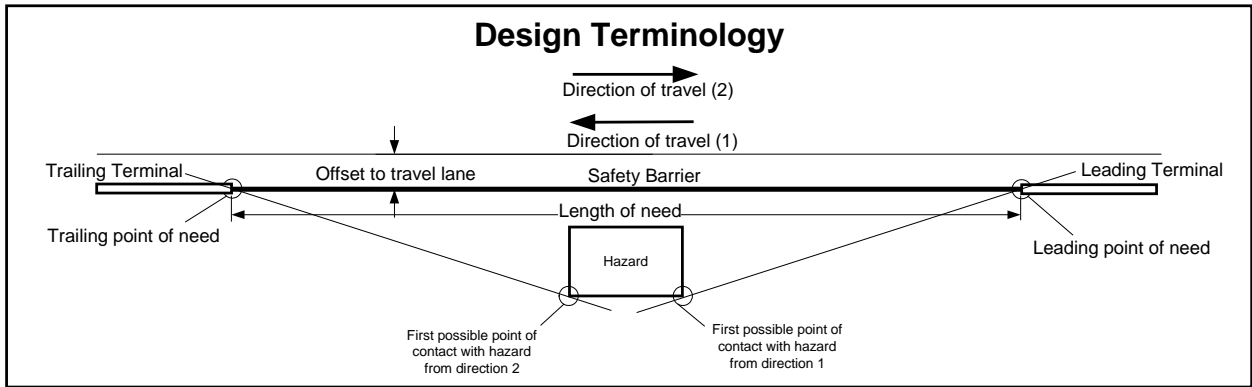
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| <b>Gore area use</b>   | Permitted – consider speed and deflection limitations.   |       |            |         |      |         |      |
|--|--|-------|------------|---------|------|---------|------|
| <b>Pedestrian area use</b>   | Permitted – consider potential for snagging and deflection.  |       |            |         |      |         |      |
| <b>Cycleway use</b>  | Permitted – consider potential for snagging and deflection.  |       |            |         |      |         |      |
| <b>Frequent impact likely</b>  | Permitted.   |       |            |         |      |         |      |
| <b>Remote location</b>   | Permitted.   |       |            |         |      |         |      |
| <b>Median use</b>  | Permitted.   |       |            |         |      |         |      |
| <b>Flare<br/>(See Explanation of Terms diagram)</b>                    | <table border="1"> <thead> <tr> <th>Speed</th> <th>Flare rate</th> </tr> </thead> <tbody> <tr> <td>80 km/h</td> <td>14:1</td> </tr> <tr> <td>70 km/h</td> <td>12:1</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Flare may be required on both leading and trailing ends of the barrier.</li> <li>• Must have a crash cushion terminal from the list above that is accepted for use on a flare.</li> <li>• Flare rates shown apply inside the shyline. Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers Table 6.5 for other situations.</li> </ul> | Speed | Flare rate | 80 km/h | 14:1 | 70 km/h | 12:1 |
| Speed  | Flare rate   |       |            |         |      |         |      |
| 80 km/h  | 14:1   |       |            |         |      |         |      |
| 70 km/h  | 12:1   |       |            |         |      |         |      |
| <b>Minimum median width (m)</b>  | 3.2 metres   |       |            |         |      |         |      |
| <b>Offset to travel lane (m)</b>                                       | Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, Section 6.3.5.   |       |            |         |      |         |      |
| <b>Hazard free area beside barrier or terminal<br/>(Working Width)</b> | Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, Section 6.3.16.  |       |            |         |      |         |      |

|                                       |  |                |
|---------------------------------------|--|----------------|
| <b>Installation</b>                   | The J HOOKS Concrete Safety Barrier - Temporary must be installed and maintained in accordance with the Product Manual and Road Agency specifications. The Road Agency specifications and standards shall have precedence.   |                |
| <b>Minimum distance to excavation</b> | 1.1 metres minimum distance between the edge of the barrier and the edge of an excavation.<br>(Being the greater of the largest adopted dynamic deflection or 1.5 times the embedment depth of the anchor).  |                |
| <b>Slope limit</b>                    | Side slope limit: 17 Horizontal to 1 Vertical (6%).<br>Longitudinal slope limit: Not specified.<br>Side slopes must be considered to minimise manual handling risks and site conditions.   |                |
| <b>Foundation pavement conditions</b> | Concrete   | Permitted.     |
|                                       | Deep lift Asphaltic Concrete   | Permitted.     |
|                                       | Asphaltic concrete over granular pavement  | Permitted.     |
|                                       | Flush seal over granular pavement  | Permitted.     |
|                                       | Unsealed compacted formation   | 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.   |                |
| <b>Attachments and screens</b>        | 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.<br>Screens may be placed adjacent to the side of the product not exposed |                |

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|                                  | <p>to traffic. The distance between the screen and the product shall be determined by a site specific risk assessment that considers the deflection distance.</p> <p>Screens must not have horizontal members that present a risk of impaling errant vehicles that impact the product.</p>   |
| <b>Damaged components</b>        | Damaged components must be replaced. Repaired components must not be used.   |
| <b>Delineation</b>               | The installed system shall include delineation as prescribed by Road Agency specifications and drawings.   |
| <b>Traceability and markings</b> | <p>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 ["terminal" or "product"] are:</p> <ul style="list-style-type: none"> <li>• Name of the product.</li> <li>• Manufacturer or distributor name.</li> <li>• Date of manufacture.</li> <li>• Model or version details of the product, if applicable.</li> <li>• Batch number, if applicable.</li> <li>• Serial number, if applicable.</li> </ul> <p>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.</p> <p>Traceability must be in a form that will not be erased with use.</p> |
| <b>Notes</b>                     | Acceptance is based on drawings PD/2200/030 Rev 0, 01-2636-S1 Rev 1, 01-2636-S2 Rev 1, PD/2200/040/3600 Rev 0, PD/2200/030/6000 Rev 0, B040221 Rev 0 and the Product Manual supplied by the Proponent, dated October 2013. 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 J HOOKS Concrete Safety Barrier - Temporary does not place any obligation on the Road Agency, or its contractors, to purchase or use the product.  |
|                                  | <p>The Austroads Safety Barrier Assessment Panel may periodically re-assess the J HOOKS Concrete Safety Barrier - Temporary.</p> <p>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.</p>   |



Safety Barrier terminology.vsd

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