

Austrroads Safety Barrier Assessment Panel

Guidelines for Submission



The following information provides a step-by-step guide for completing an online submission for assessment by the Austrroads Safety Barrier Assessment Panel.

Submission Guidelines

All documentation must be developed in line with AS/NZS 3845 Part 1 and Part 2, as appropriate.

For product submissions, Proponents are required to step through the entire portal via the save and continue option on each section. Failure to provide the required documentation will result in the submission not progressing to technical and risk assessment.

For variations to recommended products, Proponents are required to select the product for which the variation is relevant and complete all of the fields related to the variation.

Submissions for longitudinal safety barriers must include connection to an approved terminal/crash cushion (including end treatment Proponent letters and connection drawings). Letters from the end treatment Proponent are required stating that the connection would not affect the performance of the system. It should be noted that requests to attach barriers and end treatments should come from the barrier Proponent as any acceptance will result in a change to the barrier Technical Conditions for Use.

All submissions must contain ASHTAS Training Material or detailed justification outlining why ASHTAS training material is not required.

It is recognised that further product information is required under AS/NZS 3845 Parts 1 and 2 and Proponents must certify that the product meets all of the requirements of AS/NZS 3845 Parts 1 or 2, as applicable.

All PDF uploads need to be searchable format.

Documentation Format and Requirements

Product Details			
New Submission		Variation	
New Product	Select radio button	Variation to existing product	Select radio button
Product Name	Enter text	Select an existing product	Select from drop down list
Select Standard	Select radio button	Variation details	Enter text (outline request)
Classification	Select from drop down list	Select Standard	Prefilled from original product submission
Product Description	Select from drop down list	Classification	
Use	Tick box (single or multiple)	Product Description	
Type	Select from drop down list	Use	
		Type	
Save and Continue			

Proponent Details

All fields will pre-fill from Registration

Save and Continue

System Owner, System Manufacturer, Distributor – Australia, Distributor – New Zealand

Provide details for each section.

Save and Continue

Connection to Public Domain Products

W-Beam	Select radio button (permitted/not permitted)
Justification for W-Beam	Enter text
Thrie Beam	Select radio button (permitted/not permitted)
Justification for Thrie Beam	Enter text
Concrete	Select radio button (permitted/not permitted)
Justification for Concrete	Enter text
Connection drawings	Upload connection to public domain product drawings (pdf searchable format)

Save and Continue

Terminals and connections – Proprietary Products

Name	Select from list of products (drop down)
Proponent Justification	Enter text
Connection Approval Letter	Upload letters from proprietary product owner (pdf searchable format)
Connection Drawings	Upload connection drawings (pdf format)
+ Add selected product	Details above are not added to the submission until you click this button. Also opens a new window if further connections are requested

Save and Continue

Design Guidance

Slope limit (horizontal to vertical)	Enter text (%)
System width	Enter text (m)
Minimum distance to excavation	Enter text (m)
Minimum median width	Enter text (m)
Use	Select radio button (permitted/not permitted)
Proponent Justification	Enter text – justification for any/or all fields above

Save and Continue

Supporting Documentation

Cover letter	Outlining the submission request (pdf searchable format)
Product manual	Product manuals must include a date and/or version number and must contain information that is required to safely install, operate, maintain and remove the product on a 'whole of life' basis. Product Manuals must also reflect the crash tested article and the supporting documentation. Products will not be 'recommended for acceptance' where the Product Manual includes elements not covered by crash testing or justification. Product manuals submitted by Proponents at the time of product submission form an integral part of the assessment process and the date and version of the Product Manual is recorded on the Technical Conditions for Use documents. Technical Conditions for Use will take precedence over any instructions in Product Manuals (pdf searchable format)
Product drawings	(pdf searchable format) - In addition to the standard product drawings the Panel would expect to see additional drawings for products with multiple variants (please contact the Secretariat for sample CADD file).
Product photos	Maximum 2 product photos (jpg, jpeg format). These photographs will be used as identification and will be included in the Technical Conditions for Use document for any products 'recommended for use'.
Materials and specifications	(pdf searchable format)

Save and Continue

Crash Testing

Where a product has not been tested in accordance with MASH guidelines, Proponents must provide MASH equivalency and justification. Full-scale and complete crash testing is required as it provides valuable data on likely performance. All components of the submitted product shall be in-place during crash testing. Where full-scale and complete crash testing is not undertaken, full and comprehensive engineering justification must be provided in the Submission Template for the Panel to undertake the assessment. The Panel reserves the right not to accept non-tested justification and strongly advises Proponents to undertake the complete suite of tests required by the Standard. All systems must rely on testing and analysis of their own or licenced products where variations are submitted for assessment.

Any submissions received which references MASH 2009 protocol would need to provide justification against the differences between MASH 2009 and MASH 2016.

Test Level 4 and above testing conducted with an unboxed vehicle requires commentary on the working width expected with a nominal 4.3m high box attached. It is preferable that in Test Level 4 and above testing that the vehicle remain upright during and after the collision. The Panel will consider the stability and roll over of any vehicle with the expectation that the vehicle demonstrates stability during the impact as a minimum.

Proponents are required to satisfy the Panel that the testing laboratory is accredited by a signatory of The International Laboratory Accreditation Cooperation (ILAC), in order to be considered for acceptance for use on Australian/New Zealand roads under the care and control of individual Road Agencies.

Crash test photos should not be submitted. The Panel will request test photographs if and when required.

Additionally, the Panel has determined the following:

- Capture devices are not accepted for assessment.
- MASH 44 tests resulting in ORA above 20.49g are not accepted for assessment.
- Water filled crash cushions successfully tested to MASH TL3 are speed restricted to speeds zones up to and including 80 km/h.

Finite Element Analysis

AS/NZS 3845.1 Section D4.4.2 discusses that if simulation techniques are to be used, then appropriate verification of the calibrated model needs to be undertaken with known full scale tests and other physical testing. Confidence in the results of computations depends on a careful verification and validation process. An extensive verification and validation process is provided by NCHRP Report 179, which should be followed.

Therefore, the Panel expects that in accordance with the recommendations of AS/NZS 3845, that verification and validation is undertaken in accordance with the process documented in NCHRP Report 179. Additionally, it is advised that in-house simulations require independent third-party verification.

The Panel advises that as variations move further away from the physically crash tested configuration, simulations will not be considered appropriate and physical crash testing may be required. On this basis, the Panel will not assess submissions based on simulation which is more than one incremental change from the physically crash tested configuration.

The Panel does not publish design requirements based on simulations. Technical Conditions for Use documents list design requirements from physical crash testing.

For further information please refer to SBTA 20-004 Assessment of finite element analyses [SBTA 20-004 Assessment of finite element analyses](#)

Panel Crashworthiness Assessments

Crashworthiness assessments are issued for products which have been assessed by the Panel against MASH test protocol in accordance with AS/NZS 3845. There are other approvals required for these products prior to their consideration for use.

Therefore, a product which has been issued a 'Crashworthiness Assessment' has been deemed to be crashworthy however, this is not the only consideration. Users should select products which are fit for purpose to their total requirements, noting that crashworthiness is just one aspect to consider.

Test level	Select from drop down list
Product specific crash test submission template	Download the template for completion
Upload crash test submission template	Upload the completed template (pdf searchable format)
Upload crash test videos	Each video name must clearly identify the compliance test number and camera angle (e.g. 3-31 Overhead). (mp4 format) Max 40mb per video.
Upload crash test report/s	Complete crash test reports are required (summary sheets are not sufficient) (pdf searchable format).

Save and Continue

Additional Documentation

Description	Enter text
Select file	Upload files (pdf, jpg, jpeg format)

Save and Continue

ASHTAS Training Material

Description	Enter text
Select file	Upload files (pdf, ppt, pptx format)

Save and Continue

Declaration and Submission

Tick Box

Mandatory

Submit Application

Panel Outcomes

Panel Letters	Panel letters can be viewed and downloaded via the Panel Documentation tab under 'View Application' (following log-in).
Panel Technical Conditions for Use	Panel Technical Conditions for Use for products recommended for acceptance can be viewed and downloaded via the Panel Documentation tab under 'View Application' (following log-in).
Panel Crashworthiness Assessments	Panel Crashworthiness Assessments can be viewed and downloaded via Panel Documentation tab under 'View Application' (following log-in).

Please note that Panel documentation will be available within 2 weeks post Panel meetings.

Administration

Update Company Details	Company details can be updated via the 'My company details' tab at the top of the submission portal (following log-in)
Monitoring Your Applications	Applications can be monitored via the 'My Applications' tab at the top of the submission portal (following log-in)
Privacy Policy	The 'privacy policy' is available through the 'privacy policy' link in the footer of the submission portal
Contact Us	Contact us via the 'Contact Us' link in the footer of the submission portal
Feedback	Feedback can be provided via the 'feedback' link on each page of the submission portal

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