



# TRUCK EDGE PROTECTION

HOW TO PROTECT WORKERS FROM FALLS FROM HEIGHT WHILST ACCESSING TRUCK DECKS?

A guide to safe use and compliance of various edge protection and access systems available in Australia.

# TRUCK EDGE PROTECTION IN AUSTRALIA

Truck edge protection is a system used to protect workers from falling off the edge of a truck while attending to loads on truck trays. The system typically consists of a guardrail attached to the truck tray or may be an independent system at the back and sides of the truck to prevent workers from accidentally or unsafely stepping off the truck.

Many logistics operators servicing construction sites find it challenging to provide Edge Protection that meets all the requirements of a relevant Australian Standard.

## FUNDAMENTAL DIFFICULTIES

One of the fundamental difficulties is to ensure that an edge protection system can withstand the forces generated by a worker falling off the side of the truck and preventing personnel from falling from height.

## WEBBING HANDRAILS - STRAP YOURSELF IN FOR NON-COMPLIANCE

For example, in Europe, the UK and the USA there has been a growing use of edge protection systems made from fabric webbing or strapping attached to a series of steel posts. In Australia, more and more companies are sourcing these systems online and they are "popping up" on vehicles and sites all over the country.

However, there appears to be no certified evidence that these products conform with Australian Standards for Edge Protection. At the very least, this means you may not have insurance cover for the user should a fall and incur an injury or at worse a fatality occur.

**"About 20% of injuries in NSW's road freight transport industry are caused by falls, with almost 900 workers lodging workers compensation claims for fall-related injuries over two years prior to April 2014."  
- SafeWork Australia, 2020**



# | WHAT DO WEBBING HANDRAILS COMPLY TO?

Currently there is no Regulation or Standard in Australia that grants or endorses the specific use of webbing rails for truck edge protection. There are two Australian Standards that provide guidance for such edge protection:

- 1. AS/NZS 4994:2009 – Temporary Edge Protection**
- 2. AS 1657:2018 – Fixed Platforms, walkways, stairways and ladders for handrails**

## SAFESMART FINDINGS

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SafeSmart Access finds that the Standard with the closest guidance for such temporary edge protection is AS/NZS 4994.

**SafeSmart's engineering team finds that clause 2.4 of AS/NZS 4994.1 prohibits the use of "chain, rope (of any material) or steel wire strand".**

Therefore, it would be reasonable to conclude that webbing having similar flexibility to chain, rope (of any material) or steel wire strand, would not be permitted.

With specific reference to AS/NZS 4994.1, it would be likely that webbing rails would need to conform with the 100mm deflection limit specified in AS/NZS 4994.1.

The amount of tension in webbing required to limit deflection to less than 100mm could damage supporting posts to which the webbing is attached and render the edge protection product unsafe.

In addition, a webbing strap would not be suitable as a handhold as it is likely to twist, thus creating a safety issue in itself.



# | LET'S LOOK AT THE RISKS

## *Personnel working on transport trailers undoing or tightening lashing chains on secure loads are at risk. Why?*

Many issues can arise during tightening or unbuckling a load, causing personnel to lose balance and fall. Chains and straps can slip, less friction on wet or muddy truck beds, trip hazards from loads like rebar or precast concrete, or shifting loads due to improper strapping.

Webbing rails have deflected excessively during these processes due to their deflection and inhibiting hands to grasp, or worse, allow a person's body to pass through the webbing rails and fall off the truck.

It would be very difficult for users to know whether suitable tension has been applied to the webbing rail so it can serve as edge protection.

In addition, the ratchet binder used to tension the webbing is situated close to the edge of the truck, leaving the worker exposed to the risk of falling before webbing is tight.

Therefore, users of webbing rails are putting personnel at risk when using products where it is unclear whether or not they comply with safety standards.

Sites across Australia are deeming webbing rails as a prohibited edge protection system due to the lack of safety inspections required, the chance of makeshift strapping, and the increased risk of personnel falling through the straps. Instead, many operators opt for rigid handrails and platform systems, which are compliant with temporary edge protection standards.

While the height of a truck bed might not seem a height risk, any fall from height can result in unpredictable falls resulting in injuries or fatality.

Webbing edge protection on trucks may look like they 'do the job', but when it comes to a fall, are these products going to prevent catastrophic injuries or save someone's life?

**"31% of recorded fatalities from workers falling at a height between 2003 to 2011 occurred from a height of less than two metres."**

**- SafeWork Australia, 2013.**



## | WHAT'S THE SOLUTION?

The allure of small, portable, and lightweight nature webbing edge protection is tempting.

But whether these products are compliant or adequate to prevent injury is still up for debate and needs rigorous testing and evidence for compliance with Australian Standards.

Using ratchet webbing straps for a “jury-rigged” edge protection solution can be dangerous!

If worker safety and efficiency are important to your company, ensure that you conform to Australian Standards – they are developed and put in place for good reasons to assist the industry to work safely with minimal disruption.

Unlike the ambiguity of webbing rails for edge protection, there are products available that do comply with Australian Standards and are easily transportable and manoeuvrable.

# | SAFESMART'S TEAM ARE INTERESTED IN YOUR FEEDBACK ON THE USE OF WEBBING HANDRAILS.

*Do you use Webbing Handrails on-site?  
How do you ensure they are compliant and safe for use?*

SafeSmart's team trust that every industry operator is invested in the safety of their personnel and would never knowingly put them at risk.

However, with products shipped from anywhere around the globe, the gap between what is considered safe and what is actually safe can be alarmingly wide. It's integral that edge protection systems are regularly reviewed to ensure compliance with the relevant Australian Standards.

## SAFESMART TRUCK EDGE PROTECTION SOLUTIONS

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Instead, SafeSmart Access recommends its range of access and edge protection solutions as safer, compliant options.

Our range of aluminium platforms and guardrail solutions are lightweight, portable, rigid, and conform to relevant requirements of AS/NZS 4994:2009 and AS 1657:2018.

No matter your machinery or fleet, we offer off-the-shelf solutions or custom & configurable systems that will protect your personnel without compromise. SafeSmart solutions include:

- **Truck Edge Protection Panels**
- **Super Maintenance Platforms (SMPs)**
- **AdjustaStairs for Trucks**
- **SafeLoader**

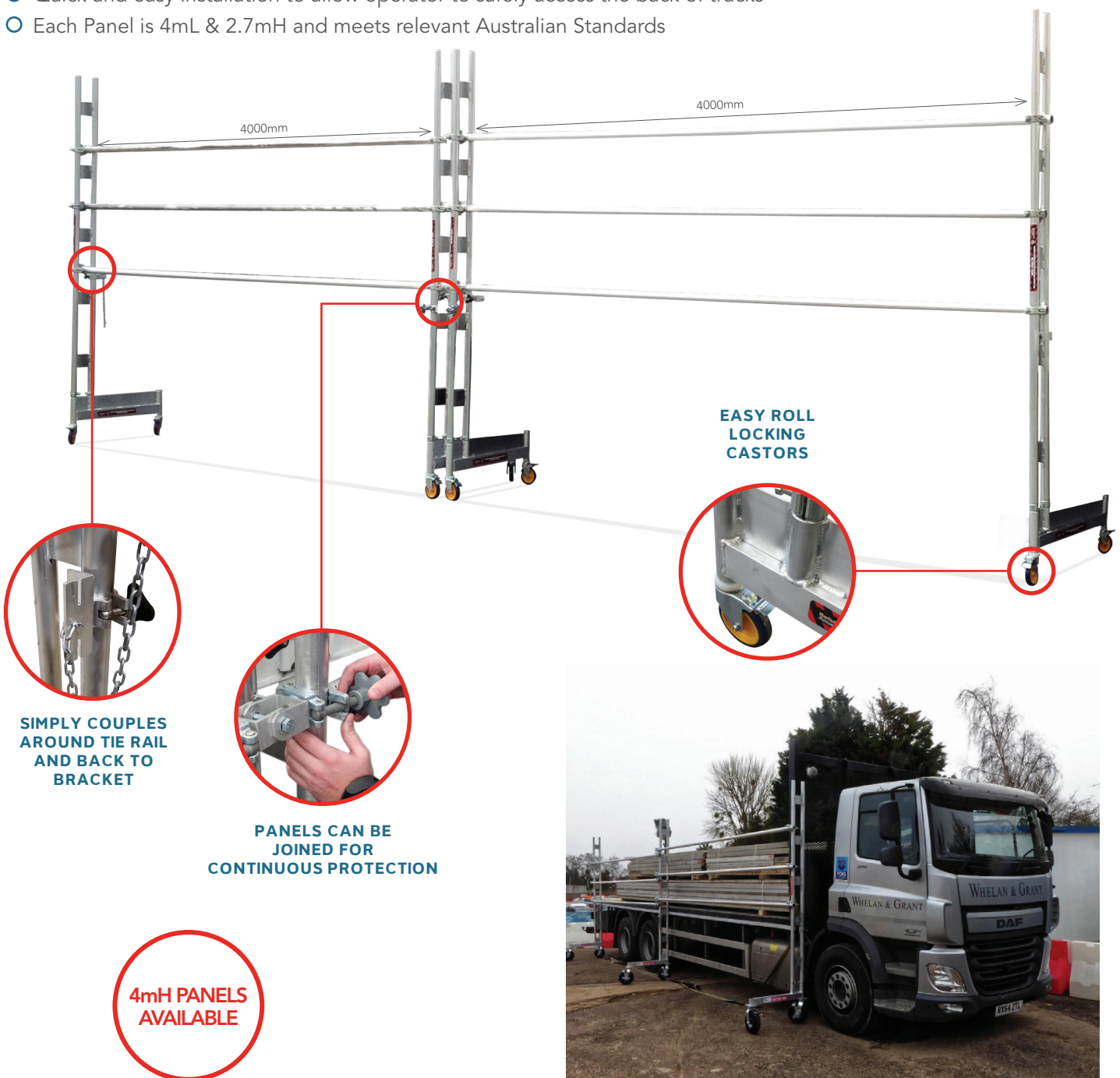
**PLEASE REACH OUT TO SAFESMART ACCESS FOR MORE INFORMATION.**

# EDGE PROTECTION

## TRUCK EDGE PROTECTION PANELS

There are many benefits to using a truck edge protection panel over webbing rails. Truck edge protection panels are a much more reliable and durable option, easy to pack down and store, and is fast to install onto flatbed trucks.

- Easy to use – simply roll up to the truck tray, lock castors, and wrap chain around the tie rail
- Secured and safe to use in seconds
- Designed to fit a wide range of trucks
- Quick and easy installation to allow operator to safely access the back of trucks
- Each Panel is 4mL & 2.7mH and meets relevant Australian Standards

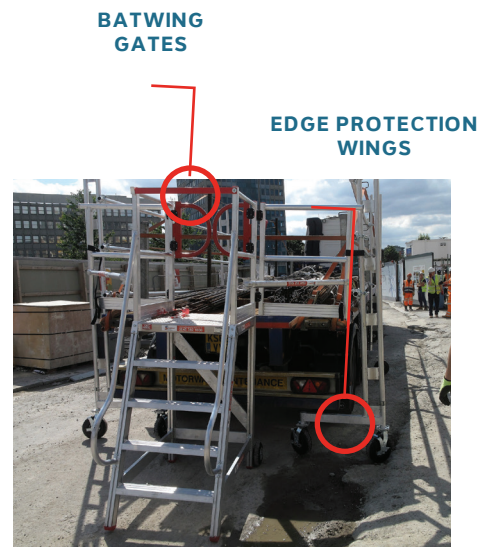


# ACCESS + EDGE PROTECTION

## SUPER MAINTENANCE PLATFORM + EDGE PROTECTION WINGS

These SMPs are the ultimate site versatility platform, as they can be used for several different tasks. They provide a stable and compliant work area with rigid guardrails when coupled with edge protection wings, batwing gates, and a rear safety bar.

- Engineers approval, SWL rating & serial number certification plate
- Built tough with 82 x 50mm marine grade Aluminum RHS - no C channel
- Perforated & swaged deck for superior traction in wet and greasy conditions





# ACCESS

## ADJUSTASTAIRS FOR TRUCKS

Self-levelling steps allow for a wide range of pitch angles, and the aluminium construction makes the portable stairs both lightweight and robust. Fully adjustable to a range of tray levels, these stairs are the perfect solution for safe and easy access to your truck.

- Developed specifically for access to truck trays
- No fixings required
- Treads self level to suit tray heights of 0.9m - 1.4m

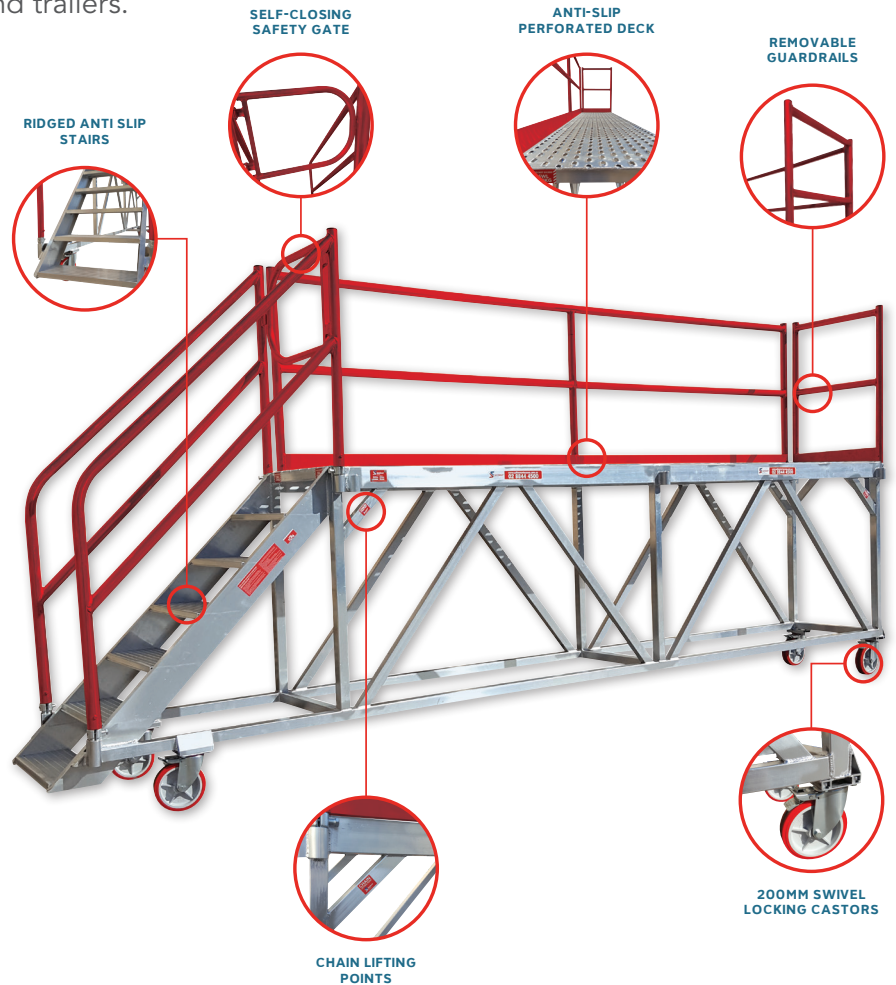


# ACCESS + EDGE PROTECTION

## SAFELOADER

Made for truck unloading, the SafeLoader is a must-have for any site where workers are required to unload materials from trucks. An inbuilt stair, swing gates and safety rails provide a safe and compliant method of unloading goods from trucks, utes and trailers.

- Comes standard with crane lifting points
- Bolt-on fork lifting channels available
- Fully cross braced Aluminium frame for a rigid platform
- Self closing gate at entrance to platform, as per AS 1657:2018
- 200mm heavy duty castors, swivel & locking
- Originally designed for easy loading & unloading of trucks. Also compatible with a variety of heavy duty vehicles, mining machinery and trains for loading and maintenance




Place in position & lock castors



Enter through the gate and onto the deck



Safely load and unload



# REQUEST A WORKSITE SAFETY AUDIT OR TRIAL FROM SAFESMART'S RANGE TODAY.

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Truck Edge Protection: How to protect workers from falls from height whilst accessing truck decks?

A guide to safe use and compliance of various systems available in Australia.

This report contains information about Truck Edge Protection and Access challenges.

The information is not advice, and should not be treated as such.

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## REFERENCES

**SafeWork Australia. 2013.** Work-related injuries and fatalities involving a fall from height, Australia. 1st ed. Canberra:, p.10.

**SafeWork NSW. 2020.** Falls from flatbed trucks and trailers – safety alert. [online] Available at: <<https://www.safework.nsw.gov.au/safety-alerts/safety-alerts/falls-from-flatbed-trucks-and-trailers-safety-alert>>



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