

# Bunk Bed Safety Assessment Checklist

## AS/NZS 4220:2003



### Mandatory Items

For some years bunk beds have been covered by an Australian Standard AS/NZS 4220:1994 and the Accreditation program has encouraged campsites to use it to assess safety. The Safety Policy Unit, Consumer Affairs Division of The Treasury made it mandatory that bunks sold after November 2002 meet an amended and simplified version of the Standard in a Consumer Protection Notice.

**The CURRENT Australian Standard is AS/NZS 4220:2003 Bunk beds** which has a few stricter controls.

The numbers in brackets after each heading refer to the corresponding section in the Australian Standard.

See also guidance at web sites like <http://www.consumer.vic.gov.au/> and <http://www.consumer.tas.gov.au/>

**CAUTION: This checklist is NOT the Australian Standard. It is an interpretation and is not intended to replace it.**

**Bunk beds currently in campsites:** Satisfactory completion of this checklist and answering 'yes' to all questions is deemed to be an adequate assessment to meet the requirements of accreditation.

**Purchasing bunk beds:** If you purchase bunk beds you should obtain evidence from the supplier that the bunk bed is constructed to comply with the CURRENT Australian Standard.

**Building bunk beds:** Bunk beds that are built by campsites or trades-people must meet the requirements of the CURRENT Australian Standard of which this checklist is an interpretation.

	Requirement of AZ/NZS 4220:2003 Bunk Beds	Simple test	Your Answer
<b>1.1</b>	<b>Definitions (3.1(b) &amp; 6.1(a) Single bed 6.1(b)) Distance between beds (6.2)</b>		
	A <b>bunk bed</b> is defined as a bed where the upper surface of a mattress base (e.g. the timber slats or equivalent) is between 800 mm & 1350mm above the floor. (Single beds above a storage area maximum 1450mm).	Is the upper surface of the mattress base between 800 mm & 1350 mm above the floor?	Yes / No
	Where the height of the guard rails is less than 360 mm above the mattress base, a distinct mark along at least one side or end should indicate the maximum height of the (upper) mattress). This should be marked as the ' <b>MAX. MATTRESS HEIGHT</b> ' a critical point for several measurements in the Standard. This document refers to it as 'MMH Mark'.	<b>IF the guard rail less than 360 mm</b> have you made a distinct mark (MMH), which indicates the maximum height of the upper mattress? (See item 1.4.4)	Yes / No  n/a
	Where a bunk bed has an upper bed suspended over the lower bed in parallel alignment, the vertical distance between the upper surface of the lower mattress base and the lower surface of the upper mattress base shall be at least 750 mm.	Is there at least 750 mm above the lower mattress base to the lower surface of upper mattress base?	Yes / No
<b>1.2</b>	<b>Mattress support elements (6.3)</b>		
	All components used to support a mattress shall be so fixed that they shall not be capable of lateral or vertical movement by more than 5 mm so that slats are not capable of being slid or lifted out of place.	Are slats fixed to prevent sliding or lifting out?	Yes / No
<b>1.3</b>	<b>Safety barriers (6.4.1)</b>		
	Any Bunk in which the upper surface of the mattress base is at least 800 mm from the floor shall have barriers (e.g. guardrails or bed ends) which form a roll-out protection on all sides of the bed.	Is rollout protection provided on all sides? (ACA Interpretation: If the side of the top bunk rests along the wall, and the bed its securely bolted to the wall, this is considered as adequate protection along that side)	Yes / No
<b>1.4</b>	<b>Guardrails (6.4.2)</b>		
<b>1.4.1</b>	<b>Attachment (6.4.2(a))</b>		
	The guard rails must be permanently fixed or attached in such a way as to prevent a child detaching the guard rail.	Are guardrails unable to be removed by a child?	Yes / No
<b>1.4.3</b>	<b>Height from upper surface of mattress base 6.4.2 (c)</b>		
	The minimum vertical distance between the upper surface of the guard rail and the upper surface of the mattress base (e.g. timber slats) shall be 260 mm	<b>IF the guardrail less than 360 mm</b> is the vertical distance between the upper surface of the guard rail and the upper surface of the mattress base at least 260 mm?	Yes / No  n/a

<b>1.4.4</b>	<b>Height from MMH Mark 6.4.2 (d)</b>		
	The vertical distance between the upper surface of the guard rail and the MMH Mark (see explanation above 1.1) shall be at least 160 mm.	<b>IF the guardrail less than 360 mm</b> is the vertical distance between the upper surface of the guard rail and MMH Mark at least 160 mm	Yes / No n/a
<b>1.4.5</b>	<b>Access Opening 6.4.2 (b)</b>		
	The guardrail shall have at least one opening to allow access for the occupant (say at the top of the ladder) the opening in the guardrail shall be no less than 300 mm at MMH and no more than 400 mm at 260mm above mattress base.	Are all openings in the length of the guardrail at least 300 mm at MMH and no more than 400 mm at 260 mm above the mattress base?	Yes / No
<b>1.4.6</b>	<b>Internal guard rail openings 6.4.2 (d)</b>		
	Any gap formed in the guardrail itself may allow the passage of a 230 mm diameter probe but shall not be so large as to provide more than 400 mm in any direction. If any gap allows the passage of the 230mm diam. probe that gap shall not be of such a design that it has a reducing configuration. This is intended to prevent a fall-through hazard.	Are openings within the guardrail itself between 230 mm and 400 mm in any direction?	Yes / No
	<b>Climbing Access (6.5)</b>		
	<b>Treads (6.5.2)</b>		
	Treads shall be spaced so that upper surface of successive treads are equal & between 250 to 325 mm with a tolerance of 20 mm	Are treads equally spaced between 250 to 325 mm with a tolerance of 20 mm?	Yes / No
	. Bottom tread shall be at least 500 mm above floor. (to discourage toddlers climbing)	Is bottom tread at least 500 mm above floor?	Yes / No
	There shall be unobstructed tread depth of at least 90 mm.	Is unobstructed tread depth at least 90 mm?	Yes / No
	Useable tread width shall be at least 300 mm.	Is useable tread width at least 300 mm?	Yes / No
<b>1.5</b>	<b>Protrusions (6.7 &amp; 6.8)</b>		
	Exposed edges and protruding parts shall be chamfered & free on burrs, sharp points or edges within the cot.	Is the bunk free of all sharp points or edges?	Yes / No
	The inside of the bunk is free from protrusions greater than 5mm (unless they cannot snag onto clothing) which could injure an occupant (especially his or her head) if the occupant rolled or fell on to the protrusion.	Is the inside of the bunk free from protrusions which could injure an occupant (especially the head) if the occupant rolled or fell on to the protrusion? Dome nuts are acceptable.	Yes / No
<b>1.6</b>	<b>Safety and Performance Requirements (7)</b>		
<b>1.6.1</b>	<b>Entrapment Hazard (7.1)</b>		
	While many campsites focus on guardrails, it is also important to ensure that the construction of the bunk bed will not cause fingers, limbs or the head to be entrapped. Beware of gaps that taper and may offer a 230 mm opening at one end but reduce to a potential hazardous opening e.g. in a diagonal bracing member.	Have you checked to ensure that there are no possible entrapment openings in the bunk?	Yes / No
	Finger entrapment	Have you checked to ensure there are no gaps between 7 & 12 mm?	Yes / No
	Limb entrapment	Have you checked to ensure there are no gaps between 30 & 50 mm?	Yes / No
	Head entrapment	Have you checked to ensure there are no gaps between 95 & 230 mm?	Yes / No

**Even if you answered 'Yes' to every question above, it does not guarantee your bunk beds meet the very precise and demanding details of the Australian Standard.**

**You need to continue to monitor the way your bunk beds are used and maintained.**

**This completed checklist should be added to your accreditation folder in Requirement 21 : Management of Hazards.  
If you answered 'No' to any question, you must eliminate the hazard prior to becoming accredited.**