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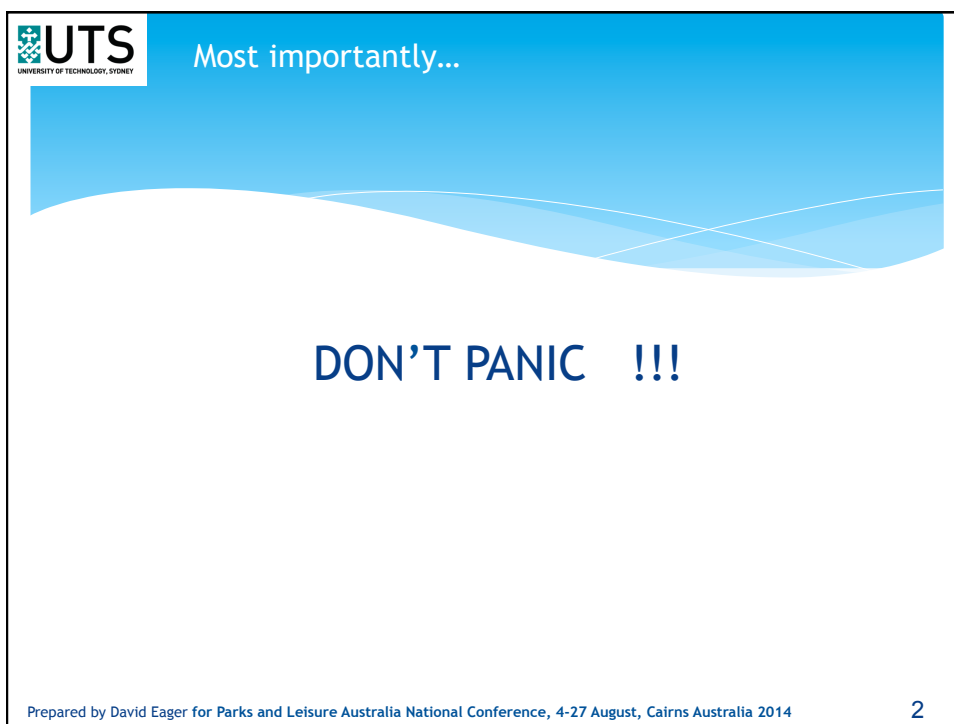
Communicate
Cooperate
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Sharing Ideas And Resources For A Healthier, Happier Australia
24 - 27 August 2014, Cairns, Australia

Management implications

The new playground Standard AS 4685:2014

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Most importantly...

DON'T PANIC !!!


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 The next important thing to note


**IT IS (ALMOST) BACKWARD
COMPATIBLE WITH THE OLD
STANDARD**

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 What should Council management do?

**UNDERTAKE RISK MANAGEMENT AUDITS
(AS/NZS ISO 31000) AND MAKE
APPROPRIATE ADDITIONAL PROVISIONING
WITHIN YOUR 2014-16 BUDGETS**

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 How do you use it ?

**IT IS LIKE A CONTRACT WITH ALL
THE SPECIAL CONDITIONS OF
CONTRACT HINDEN AT THE END
OF THE DOCUMENT**

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 Background to the new Standards

- * The Scope was the full adoption of EN 1176:2008 Parts 1 to 6 with ZZ deviations for Australia
- * AS 4685:2004 was based on the original EN 1176:1998 which is now more than 15 years old (and a lot has changed during this period)
- * Australia is a signatory to the World Trade Organisation (WTO) Marrakesh Agreement on Technical Barriers to Trade (TBT) ##
- * Standards Australia must adopt International Standards if they exist (such as ISO and CEN)
- * ZZ Deviations were only allowed if they are evidence-based and have 100% Committee agreement

http://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm


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 **Background to the new Standards**

Collaboration and consensus between 13 organisations:

- * Australian Industry Group
- * Australian Institute of Landscape Architects
- * Department for Health and Ageing, SA
- * Early Childhood Australia
- * Education and Early Childhood Services Registration and Standards Board
- * Engineers Australia
- * Institute of Public Works Engineering Australia
- * Kidsafe
- * Monash University
- * National Association of Testing Authorities Australia
- * Occupational Therapy Australia
- * Play Australia
- * Play Equipment Importers and Exporters


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 **Background to the new Standards**

Appendix ZZ Variations for Australia (42)


- * Part 1 - General safety requirements (27)
- * Part 2 - Swings safety requirements (4)
- * Part 3 - Slides safety requirements (7)
- * Part 4 - Runways safety requirements (1)
- * Part 5 - Carousels safety requirements (3)
- * Part 6 - Rocking equipment safety requirements (0)

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 **How to use Standards with ZZ Appendixes**


- * The Agreement between CEN and Standards Australia means SA can not amend the body of the CEN Standard
- * This means that the six Parts of EN 1176 are published exactly as they are published throughout Europe with an Australian Preface and Appendix ZZ
- * The Appendix ZZ is analogous to *Special Conditions of Contract* where the ZZ Clauses override the Clauses within the body of the Standard
- * Preface is located before the Contents page
- * Appendix ZZ is located at the rear of the Standard
- * My advice is that you mark up the body with the Australian variations to the Standard when you purchase the Standard

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 **Transition from old to new Standard**

- * One year transition period between the 'old 2004' and 'new 2014' Standard
- * This will allow for Contracts that are afoot to be completed under AS 4685:2004 (superseded Standard)
- * This will also allow Australian manufacturers time to retool their production processes and align them with the 'new' Standard
- * Standards are documents that reflect the general state of technology at, or around, the time of their publication and are not retrospective

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 Legal significance of playground Standards

- * The technical provisions contained within AS 4685:2014 are based on decades of injury data and accident patterns that have been observed in the child population around the world
- * AS 4685:2014 contains safety interventions that are aimed at protecting children from death and permanent injuries
- * Safety interventions that protect the child's head, neck, and body, limit injuries from falling, prevent strangulation, prevent finger amputation, limit eye injuries etc
- * AS 4685:2014 is intended to remove known hazards
- * AS 4685:2014 will not prevent all injuries, there will always be a residual risk of injury
- * There is strong evidence that a balanced exposure to managed risk assists with healthy child development

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 Legal significance of playground Standards

- * AS 4685:2014 is a voluntary Standard
- * AS 4685:2014 can be made legally binding by way of a Contract
- * The equipment manufacturer, importer or supplier bears the burden of proof that their product meets the minimum safety requirements of this Standard
- * The publication of AS 4685:2014 did not make existing equipment more dangerous just because it no longer complies with the playground equipment Standard
- * Designers of playground equipment are strongly urged to reduce the potential for foreseeable misuse of their products

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Reasonably foreseeable misuse



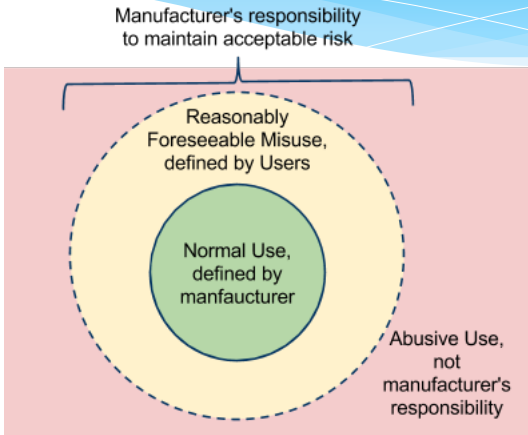
Hazard **Solution**

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Reasonably foreseeable misuse



Manufacturer's responsibility to maintain acceptable risk


Reasonably Foreseeable Misuse, defined by Users

Normal Use, defined by manufacturer

Abusive Use, not manufacturer's responsibility

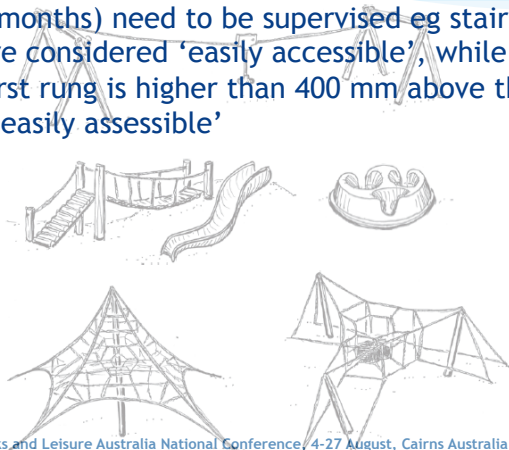
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 AS 4685:2014 General requirements


Scope

- * AS 4685 specifies the safety requirements for public playground equipment
- * AS 4685 was prepared in the context that young children (0 to 36 months) need to be supervised eg stairs and ramps are considered 'easily accessible', while ladders whose first rung is higher than 400 mm above the ground are 'not easily accessible'



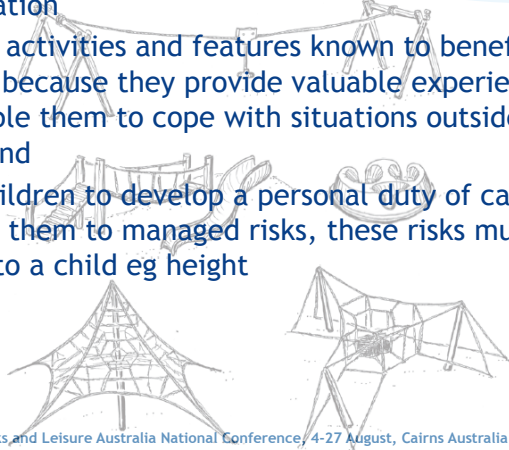
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 AS 4685:2014 General requirements

Purpose of AS 4685

- * Ensure a proper level of safety when playing in, on or around playground equipment eg remove hazards that are not obvious to the child or carer such as strangulation
- * Promote activities and features known to benefit children because they provide valuable experiences that will enable them to cope with situations outside the playground
- * Allow children to develop a personal duty of care by exposing them to managed risks, these risks must be obvious to a child eg height



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Equipment not covered by AS 4685

- * Nature play and landscaped areas
- * Supervised adventure playgrounds
- * Monuments, fountains and other unintended play elements
- * Domestic playground equipment (see AS/NZS ISO 8124)
- * Amusement rides such as motorised carousels (see AS 3533.1)
- * Contained play facilities such as indoor play facilities (see AS 3533.4.2)
- * Inflatable playgrounds such as jumping castles and pneumatic slides (see AS 3533.4.1)
- * Outdoor exercise equipment (see EN 16630)

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Impact area

- * Defined as area that can be hit by a user after falling through the falling space

If $0 \leq y < 0.6$ then $x \leq 1.5$ (in metres)
 If $0.6 \leq y \leq 1.5$ then $x = 1.5$ (in metres)
 If $y > 1.5$, then $x = \frac{2}{3}y + 0.5$
 If $y = 1.8$ then $x = 1.7$

LEGEND
 y = free height of fall
 x = minimum dimension of impact area
 a = impact attenuating surface with requirements (4.2.8.5.2)
 b = surface provided, in accordance with 4.2.8.5.3
 c = maximum free height of fall and impact area for SECS

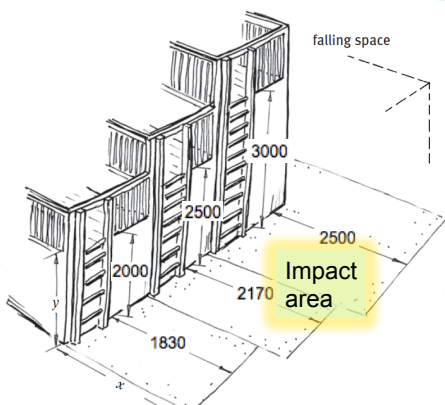
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AS 4685:2014 General requirements

Falling space

- * Defined as the space in, on, or around the equipment that can be passed through by a user falling from an elevated part of the equipment



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AS 4685:2014 General requirements

Free height of fall, h

- * Defined as the greatest vertical distance from the clearly intended body support to the impact area below
- * The intended body support includes those surfaces to which access is encouraged
- * 0.6 m impact attenuation surface required
- * 1.8 m maximum in Supervised Early Childhood Services (SECS)
- * 3.0 m maximum in all other settings
- * 2.2 m maximum for upper body equipment


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 AS 4685.1:2014 General requirements

Protection against falling

- * Access to playground equipment is used as a means of filtering the user group
- * The dimensions and degree of difficulty of the playground equipment should be suitable for the intended user group
- * Three categories of playground equipment, namely:
 - * Easily accessible to all ages and abilities
 - * Not easily accessible playground equipment
 - * Playground equipment installed in supervised early childhood services (SECS)
- * Each separate play structure should be designed to one of these three categories (mixed usage categories on one structure are not allowed!)



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 AS 4685.1:2014 General requirements

Not easily accessible equipment

- * Not easily accessible equipment requires a degree of difficulty to be accessed
- * This can be achieved by:
 - * A clearance of 400 mm between the playing surface and the lowest foothold
 - * A clearance of 600 mm between the playing surface and the top surface of a platform

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Not easily accessible equipment

Key


- 1 surfacing in accordance with 4.2.8.5
- 2 barriers required
- 3 guardrail required

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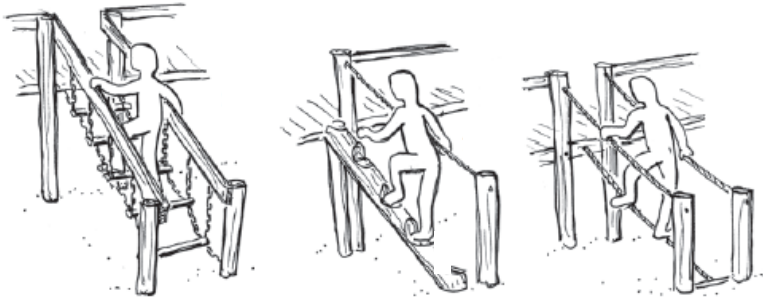
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Not easily accessible equipment


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Not easily accessible equipment




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 AS 4685.1:2014 General requirements

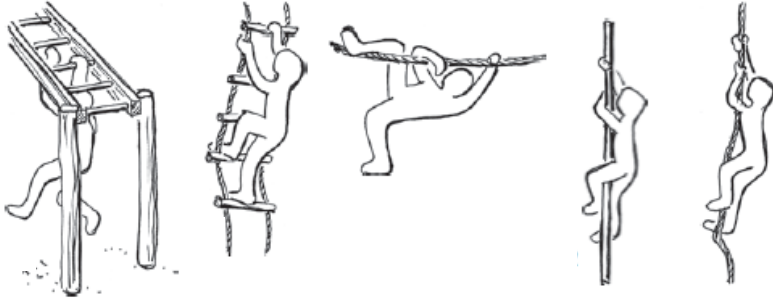
Not easily accessible equipment




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 AS 4685.1:2014 General requirements


Not easily accessible equipment



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 AS 4685.1:2014 General requirements

Cairns Esplanade - Tree House playground



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 AS 4685.1:2014 General requirements

Not easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Not easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Not easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Not easily accessible equipment (local example)



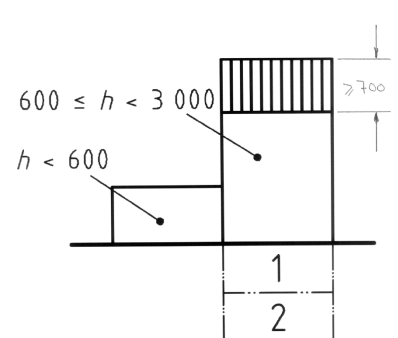
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AS 4685.1:2014 General requirements

Easily accessible equipment (for all ages and abilities)

- * Defined as equipment requiring only basic skills to access, allowing users to move freely and quickly onto and within the equipment



600 ≤ h < 3 000
h < 600
≥ 700

1
2

Key
1 surfacing in accordance with 4.2.8.5
2 barriers required
3 guardrail required

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AS 4685.1:2014 General requirements

Easily accessible equipment (for all ages and abilities)

- * There are four possible accesses defined as “easily accessible” within the new standard, namely:
 - * Ladders whose first rung is lower than 400 mm above the ground
 - * Stairs
 - * Ramps (inclination of less than 38 degrees)
 - * Tiered platforms with a height difference of less than 600 mm

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AS 4685.1:2014 General requirements

Easily accessible equipment (for all ages)




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AS 4685.1:2014 General requirements

Cairns Esplanade - Tree House playground



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Easily accessible equipment (local example)




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 AS 4685.1:2014 General requirements


Easily accessible equipment (local example)



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 AS 4685.1:2014 General requirements

Potential head and neck entrapment



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**Did you know that
UTS conducts playground inspector
training for Local Government all
around Australia**

Contact: Angelia for details via email
LiuAngelia.Lawah@uts.edu.au