
Australian/New Zealand Standard AS/NZS ISO 8124.1:2019 Safety of Toys

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This fact sheet will provide information about relevant sections of this Australian and New Zealand Standard as pertains to Toy Libraries. Please note that this Fact Sheet does not constitute legal advice but that the information provided is a guide.

Compliance with the requirements of this document will minimize potential hazards associated with toys resulting from their use in their intended play modes (normal use) as well as unintended play (reasonably foreseeable use). If you would like further details on any specific toy in your collection and whether it adheres to the standards, please email the TLA Manager info@toylibraries.org.au

ISO Standards are voluntary by nature, however for TLA brokered insurance or liability purposes the toys in your toy library **must** adhere to these standards. Voluntary standards do not replace national laws, with which standards users are understood to comply and which take precedence.

Scope

This standard applies to all toys, i.e., “any product or material designed or clearly intended for use in play by children under 14 years of age. They are applicable to a toy as it is initially received by the consumer and, in addition, they apply after a toy is subjected to reasonably foreseeable conditions of normal use and abuse unless specifically noted otherwise.”

The Standards specify acceptable criteria for structural characteristics of toys, such as size, shape, contour, spacing (e.g., Rattles, small parts, sharp edges) as well as acceptable criteria for properties peculiar to certain categories of toy (e.g., maximum tip angles for ride ons).

They also specify requirements and test methods for toys intended for use by children in various age groups from birth to 14 years, and appropriate warnings or instructions for use on certain toys.

The Standards do not purport to cover or include every conceivable potential hazard of a particular toy, and for ease TLA has tried to simplify the Standards by including the requirements relevant for toy libraries. If you have a query that is not included in this document, email the Office Manager to look through the Standards. Please note we cannot share the Standards due to licencing requirements.

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Not covered in this document

- Bicycles with a saddle height higher than 435mm
- Home playground equipment
- Sporting goods: however, their toy counterparts are included
- Musical Instruments: however, their toy counterparts are included
- Aquatic equipment intended for use in deep water, floatation devices and aids

As a guide if the manufacturer refers to the item as a toy it is included.

What to Consider When Buying Toys

Buying toys for your library is lots of fun, it does however, come with inherent responsibilities. It is up to you to ensure that the toys that you buy for your library are safe, appropriately labelled and packaged correctly. Toy Community's purpose is to provide toy libraries with good quality, toy library tried and tested toys. All toys sold on Toy Community consider the following:

- Reputable Manufacturers
- Toys meet Australian Standards
- Can be returned if there is an issue
- Have proven performance in toy libraries

If you are looking at a toy that is not on Toy Community nor has been discussed on the Facebook group, you would be wise to ask the Toy Community or TLA manager, or search on the Discussion group to see if there have been prior queries.

Older Toys and Toys Purchased over the Internet

It is particularly important that you check the safety of older toys and those purchased via the internet as Standards have changed through time and what was once considered ok, may no longer be. In addition, Safety Standards vary from country to country, so you need to ensure that the toys in your collection follow Australian Standards as they are ones that you are bound by. There are certain toys you cannot purchase second hand for the toy library, such as bikes with chains or jumping castle blowers. Be wary of toys that seem too good to be true online, such as those through third party sites such as Wish or Alibaba.

Packaging and Labelling Toys for Borrowing

It is important that the person responsible for processing both new and donated toys read the warnings that come with the toy before throwing away the packaging. If the warnings are important for your members to know, you might want to consider lending the warning sheet as a piece with the toy. If not, all relevant warnings need to be included on the label. Toy library software, such as MiBase and SeTLS, have the capability to include warnings on the label, such as small parts, balls, or magnets. Toy Community can also provide warning labels.

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General Safety Checks

A practice of carrying out regular safety checks is important. Ideally, this should be done every time the toy is returned and counted back into your system. The check should include looking for any broken parts, sharp edges, sharp points, loose cords, loose battery covers etc. It is also good to have a process in place where members inform you if there are broken/sharp bits in toys they are returning. It is also good practice to ensure that all the necessary safety warnings and information labels are still present on your packaging each time the toy is borrowed.

Repairs and Hand Made Toys

Handmade toys and toys that are repaired (for example by Men's Sheds), must be assessed on a case-by-case basis for compliance with the Australian standards and the risks involved **as these would not be covered for a liability claim through TLA insurance**. If a repair is made for something that is unlikely to have risk associated (such as sanding edges of a wooden kitchen) then you could make the call that this is ok. Something such as a homemade Pikler Triangle should be avoided. If the gaps are too wide, for example, and a child is injured, this would open you up to liability. These injury claims in children can be very large and would (likely) shut the doors of your TL.

Age Break Terminology

You must be careful with altering the recommended manufacturers age on a toy. Toys that comply with the AS/NZS ISO 8124:1:2019 are age graded in the following terminology:

For Children under 18 months

For children 18 months and over

For children under 36 months

For children 36 months and over but under 96 months

The reason for this clarifies how test methods apply to each age range. If a toy spans more than one of these age ranges, such as '2-5 years', it is tested against the most stringent requirements.

For certain toys such as costumes or ride on toys, it may also be appropriate from a safety point of view to label in terms of size or weight limitations.

Toys for Children under 3 years of Age.

Toys for children less than 3 years are subject to more stringent safety requirements than those that are aimed at older children. For most Toy Libraries this is the age group that will constitute many of their users, it is critical that all care is taken to ensure that toys are adequately labelled and stored safely in your library. Any removable components in a toy intended for children under 36 months of age **must not** fit into the small parts cylinder (saved on the members hub as the Choke Check)

Toys for Children over 3 years but less than 6 years

The packaging of toys intended for children over 3 but under 6 years of age, shall ensure that any removable component of that toy that fits entirely into the small parts cylinder must carry a warning.

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Pre-school play figures

In 2005 the standards were altered to include mandatory standards for pre-school play figures. Therefore, any toys that you have that predate this will need to be checked. Donated toys should also be checked as they may also predate this change. The relevant parts 4.5.4 and 5.6 of AS/NZ ISO 8124.1:2019 are provided below. The following points will help you determine what age range they are suitable for.

1. Do they look like the examples in Figure 9? Yes, continue. No, continue and double check.

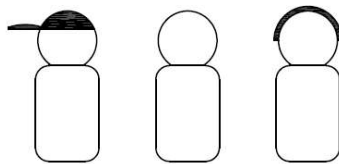


Figure 9 — Examples of pre-school play figures

2. Are they less than or equal to 64mm in length? Yes, continue.
3. Would they fit in a cylinder that is 42.7mm in diameter? Yes, continue.
4. Would the rounded end penetrate through the full depth of the test template (30mm)?

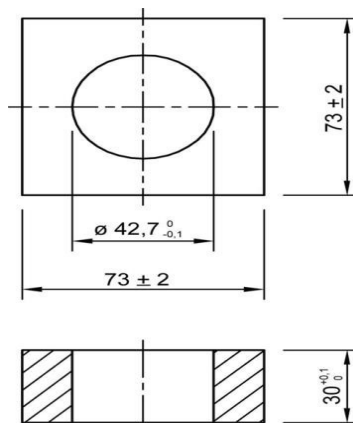
Yes, then these figures are not suitable for children under 3 years of age and need to be labelled accordingly.

Realistically this would mainly extend to 1980's Fisher Price figures such as these



To test figures if you are unsure - Orientate the play figure to be tested in a position which would most likely permit the entry of the rounded end through the slot in the test template. Place the toy in the slot so that the force on the toy is only the force due to its mass.

- a) Determine whether the rounded end penetrates past the full depth of the cavity of the test template.



If you are still unsure, remove the figures from your collection!

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Crib Toys

If you have toys that are intended to be strung across a crib or playpen then you need to provide instructions as to their use. These instructions should include at least the following information:

- The gym or similar should be removed from the crib when the baby begins to push up on hands and knees as possible entanglement or strangulation may occur.
- This toy is not intended to be “mouthed” by a baby and should be positioned clearly out of reach of the baby’s face and mouth.
- On cribs with adjustable mattress levels, the highest position can cause the toy to be too close to the baby.
- The drop side of the crib should never be lowered with the toy in place and a baby left unattended.
- Always attach all provided fasteners (strings, straps, clamps etc.) tightly to a crib or playpen according to instructions and check frequently.
- Do not add additional strings or straps to attach to a crib or playpen.

Wooden Toys

The accessible surfaces and edges of wood used in toys shall be free of splinters.

Cords

Cords on toys and dressups pose potential strangulations hazards if they are too long. The easiest way to ensure that all your toys are compliant are to always purchase toys that state that they meet Australian Standards. It is difficult to test cords and elastic to see if they meet the Standards as the test requires them to be tested under a set tension. The section from the Standard 4.11.1 is provided in Appendix 1. We have included the information in the Standards below – but be aware these lengths are when measured under the set tension.

- Cords with the potential to tangle should never exceed 220mm. When two or more cords are present in the toy and have the potential to tangle (i.e., they use the same fixing point), the total of the two individual cords shall be considered as one cord length for the purpose of this requirement.
- Other cords included with or attached to toys (excluding pull toys), shall have a free length not exceeding 300mm when measured according to the tension test referred to above.
- Cords that comprise fixed loops shall either: not permit the passage of the head; or provide breakaway features
- Cords on pull toys intended for children under 36 months shall have a free length not exceeding 800mm
- Cords connected to a self-retraction mechanism or pull toys shall have a cross sectional dimension of 1.5mm or more

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Soft Fall Requirements

There are many questions asked about the height in which 'soft fall' is needed – unfortunately, this query does not have an easy answer. The best way to help avoid falls is for the parent/carer to actively supervise their children!!

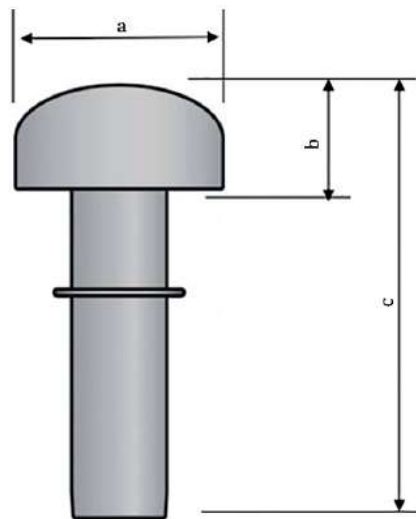
You need to remember that the climbing frames etc that are loaned by a toy library present minimal risk, and to try and completely negate this is to deny children the opportunity to develop self-managed behaviour.

Technically, once a fall is higher than 500mm, 'impact absorbing material' should be placed wherever falls are possible. Carpet or floor rugs could be classed as impact absorbing material. Grass, timber, concrete or bare earth are not suitable. You could offer foam mats if concerned.

As a rule of thumb, if you have anything over 1m high, label this as for over 36 months. Recommend that they are used inside – this is good practice to ensure longevity of your collection.

Toy fasteners with spherical ends

Toy fasteners such as nails, bolts, screws, and pegs that have spherical or dome shaped ends– for example in tool sets, stacking pegs or coordination activities, that are intended for children over 18 months but under 48 months have strict requirements regarding size. The image below indicates that it must have an overall length of 57.1mm or more, the dome must have a diameter of 15mm or more, and length of the dome part must be less than 44.4mm.



- a diameter of nearly spherical, hemispherical, or dome-shaped end, ≥ 15 mm
- b distance from the apex of the toy fastener to the undercut, $\leq 44,4$ mm
- c overall length, $\geq 57,1$ mm

These requirements do not apply to fasteners that are tethered to a toy or a fastener that has a flat top. The reason for this is the incident data almost always involves spherical, hemispherical, or domed ends.

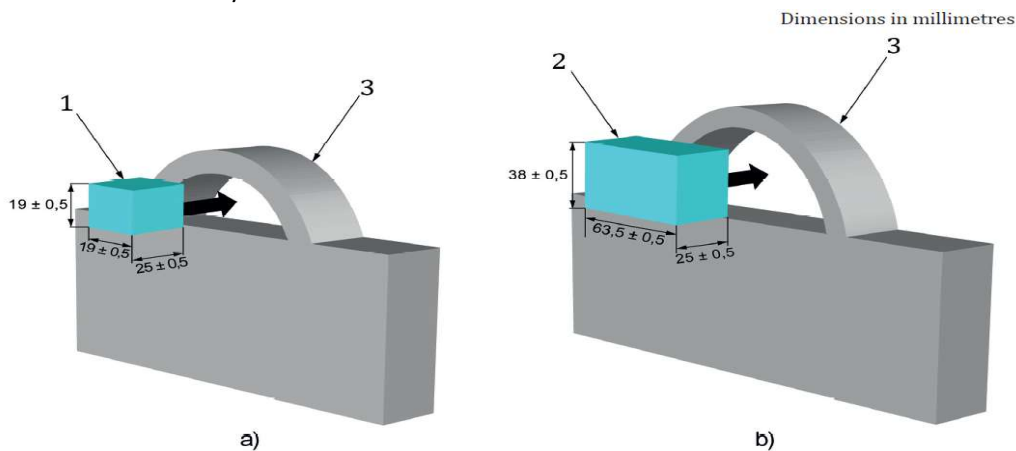
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Jaw entrapment in those under 18 months – handles and steering wheels

There have been incidents of children under 18 months experiencing jaw entrapment in accessible openings in steering wheels and handles of toys. When this occurs, there is potential for damage to teeth and gums, or in worst case, long term orthodontic consequences.

Toys in your collection this could apply to include

- Activity tables intended to be play with by a standing child
- Stationary floor toys
- Toys intended to be pushed by a child walking upright (walkers)
- Ride on toys



Key

- 1 alignment of small test fixture
- 2 alignment of large test fixture
- 3 handle on toy

What the above specifies is that any handle that allows the 19mm dimension (small test fixture) to pass completely through shall also allow the 63mm dimension (large test fixture) to pass completely through.

Straps intended to be worn around the neck

This requirement applies to toys intended for children under 36 months with straps to be worn fully or partially around the neck.

Toys in your collection this could apply to include binoculars with straps or guitars. This requirement does not include the straps of buckets / bags / box handles.

Toys that have such straps shall have a breakaway feature which breaks when tested – to test this, apply force on the other end of the axis of the cord, in such a way that the breakaway feature is in the middle between fixing points. The required force should be applied evenly within a period of 5s and maintained for 10s. If the cord does not breakaway it does not comply with these requirements.

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Toys containing button batteries

TLA recommends that all toys containing button batteries are removed from your collection or have the batteries removed. There have been many instances of injury or death due to swallowing these, however manufacturers are realising this and replacing them with AAA or similar for safety.

Toys requiring assembly

Toys intended to be repeatedly assembled and taken apart shall have the individual pieces and fully assembled articles evaluated separately. Evaluation includes checking for sharp edges, burrs, splinters, exposed threads, tangle points, etc. You should also label with the appropriate warning label covering each individual piece, not just the assembled toy.

Toys with folding mechanisms

Toys such as prams, pushchairs, ironing boards and any toy that has a folding mechanism must have a functioning locking device or safety stop to prevent collapse and must be able to support the weight of a child. They must also have adequate clearance between moving parts to protect the fingers and toes should the toy collapse.

Dress Ups

Dress ups are probably toys that are not readily associated with being a potential safety hazard. There are, however, some important points that you need to consider when purchasing and displaying your collection.

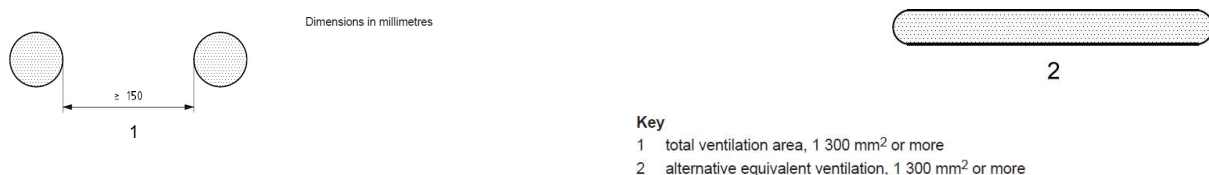
Dressups with Cords and Elastics

All dress ups should be checked to ensure that elastics and cords do not form a choking hazard. Drawstrings in particular can pose a strangulation hazard if they get caught on fixed objects such as playground equipment.

Toys that enclose the Head

If you have any toys that enclose the head such as space helmets that are made of impermeable material, then you need to ensure that they have adequate ventilation.

These ventilation areas shall consist of a minimum of either two holes, each hole having a total area of at least 650 mm² and placed at least 150 mm apart, or one opening which is equivalent to the two 650 mm² holes expanded to include the separation area.



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Warning and Information Labels

The Australian Standard requires that the following types of toys carry either warning or information labels.

Fireman Sets, Bob the Builder or similar Dressups

Do you have any dress ups that include helmets or other simulated safety equipment, such as a Fireman's set? If you do, then you need to make sure that the simulated safety equipment e.g., Helmet, as well as the bag it is stored in carries a warning such as:

This is a toy and does not offer protection.

Flammability warning

If your costume has a flammability warning, then you also need to have one on your packaging. This is the warning that you need to use.

WARNING! Keep away from fire

Small toys and toys containing small parts

Toys or parts are considered small if they fit entirely in the small parts cylinder. This is called the 'Choke Checker' and can be found on the members hub or by clicking [here](#)

Small balls test

Orientate the ball to be tested in a position which would most likely permit the entry of the ball through the slot in the test template. Place the ball in the slot so that the force on the toy is only due to its mass. Determine whether the ball passes entirely through the test template.

Dimensions in millimetres

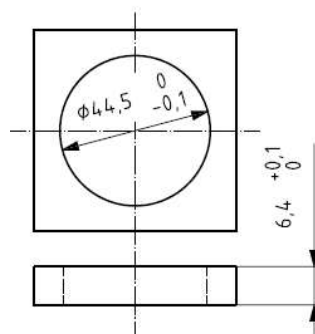


Figure 20 — Test template C

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The statement you need to include on either the toy itself, packaging, or both must be similar to:

“Warning! Not suitable for children under 3 years. Contains small parts.”

You can use this graphical warning instead if the following conditions are met:

- ☐ You still need to indicate the type of hazard e.g., Small parts
- ☐ The circle and the stroke should be red
- ☐ The background should be white
- ☐ The age range and outline of the face should be black
- ☐ The symbol should have a diameter of at least 10 mm and the proportions between its different elements should be such as those prescribed in Figure B.1.
- ☐ The age range for which the toy is not suitable should be expressed in years, e.g., 0-3.



Figure B.1

Warning Labels are also available from Toy Community, or to print on your toy labels through MiBase or SeTLS.

Small balls

In this latest Standard, small balls have been identified as needing a separate warning label. A small ball is defined as passing entirely through the template when tested in accordance with 5.4 (see Appendix 1 for details). The diameter of this test template is slightly bigger than a regular ping pong ball.

These toys need to carry a warning similar to the ones below:

“This toy is a small ball which may present a choking hazard. Not suitable for children under 3 years.”

or

“This product contains a small ball which may present a choking hazard. Not suitable for children under 3 years.”

Downloadable warning labels are available on the members hub, or through Toy Community. You can also use the inbuilt warning labels within MiBase or SeTLS.

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Marbles

While marbles are small balls, they need to carry their own warning label. This label should be similar to:

“This toy is a marble which may present a choking hazard. Not suitable for children under 3 years.”

or

“This product contains a marble which may present a choking hazard. Not suitable for children under 3 years.”

Downloadable warning labels are available on the members hub, or through Toy Community. You can also use the inbuilt warning labels within MiBase or SeTLS. It is recommended that if you have toys with marbles, the marbles are kept behind the check out counter and out of reach to young children. You can then put an alert on the system or label that the marbles are to be collected (and returned!) on check in and out.

Toys containing magnets

With the increasing awareness of the dangers of magnets, it is important that you identify all toys in your collection that include magnets. These toys should be checked regularly to ensure that they are intact to ensure that there is no possibility of magnets coming loose.

WARNING!

The product contains small magnet(s). Swallowed magnets can stick together across intestines causing serious infections and death. Seek immediate medical attention if magnet(s) are swallowed or inhaled.

Toys intended for children under 8 years of age cannot contain small magnets (ones that fit in the small pieces test cylinder – saved as ‘choke check’ in the members hub) with a flux of more than 50 kG²mm². TLA strongly recommends only having reputable brands with magnets, such as those found on Toy Community.

Magnetic experimental sets aimed at children 8 years and over shall carry the above statement plus one that warns the toy is not intended for those under 8 years old.

There are many ‘cheap’ versions of magnetic toys, such as those found at Kmart, which are strongly discouraged due to the high possibility of recall or detachment. For example, there have been instances of magnets in the Kmart brand magnetic tiles coming loose.

These requirements do not apply to functional magnets in electrical or electronic components of toys.

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Projectiles

Generally, toy libraries steer clear of toys with projectiles such as Nerf Guns or blow darts, however some have recently added foam or magnetic darts and bow and arrow sets to their collection. If you have either of these, or any other toy with a projectile, ensure they meet Australia Standards when purchased as there are many controlled tests that are performed to comply. Once in your collection, always check that the protective cap, cover, or tip is attached and intact. These toys should carry the warning:

Do not aim toy at eyes or face.

Tea sets and Similar

If your toy library has items such as tea sets, picnic sets which could be used in contact with food then you need to label the toy with a statement alerting adults to wash the product thoroughly before and after use.

This toy should be washed thoroughly before and after use.

Ride Ons

As both bicycles and scooters require warning information to be provided, toy libraries should have this information displayed in the library where parents can be reminded of these warnings. It would also be prudent to provide this information at least annually in your newsletter.

If a bike or scooter in your collection loses its rubber handle grips, you must get these replaced before the item can be loaned as these could present a potential internal injury or skin puncture hazard.

Toy Bicycles

A bicycle is defined as being a toy bicycle if is a bike with a maximum saddle (seat) height of 435mm. These bicycles need to carry a label recommending the use of a protective helmet when cycling. They should also be accompanied by a reminder that this bicycle is not permitted for use on streets or highways. Parents or carers should also be reminded that they are responsible for ensuring that children using the bike are properly instructed in how to do so. A reminder here that members must have signed the helmet waiver, which informs it is their responsibility to ensure that properly fitting helmets are worn whenever using bikes or scooters borrowed from the toy library.

TLA insurance does not cover bicycles with chains, as these are required to maintain regular servicing of the chain and braking mechanisms.

Toy Scooters

There are two types of toy scooters, those intended for children with a body mass of 20kg or less (average mass of a 5-year-old) and those for children with a body mass of 50kg or less (average mass of a 14-year-old).

The scooters need to carry the following warning:

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“Warning! Protective equipment should be worn. Not for children with a body mass of more than 20 kg (or, as appropriate, “of more than 50 kg”).”

Instructions for use should also be provided to members when they borrow scooters. These instructions should include the following:

- a reminder that the toy shall be used with caution to avoid falls or collisions causing injury to the user and third parties.
- the warnings indicated above.
- how to safely fold or unfold foldable scooters – this mechanism should be checked regularly as it can cause injury or entrapment if worn or faulty.
- the necessity to pay attention that all locking devices are engaged.
- the dangers of using it on public highways or public roads.
- a recommendation to use protective equipment such as a helmet, gloves, kneepads, and elbow- pads.
- Always check the locking devices on your scooters that adjust the height to ensure they are in proper working order, as this may present danger if a sudden change of height were to occur.
- It is not necessary to require brakes for toy scooters intended for children of 5 years or under, as they are generally unable to operate a brake effectively. The front wheel/s of 3-wheel scooters are designed for stability.

Balloons

If you have any balloons in your library, then they should be kept in a safe location away from children. If you provide any balloons to your members their packaging needs to carry the following warning.

WARNING! Children under 8 years can choke or suffocate on uninflated or broken balloons. Adult supervision required. Keep uninflated balloons from children. Discard broken balloons at once.

Packaging

4.11.4 Cords on toy bags

Toy bags made of impermeable material with an opening perimeter greater than 360 mm shall not have a drawstring or a cord as a means of closing (see also 4.10).

4.10 Plastic film or plastic bags in packaging and in toys

Plastic bags used for toy storage that have a diameter greater than 100mm need to be either greater than 0.038 mm in thickness or have holes punched as per section 4.10 in the Standard.

What does this mean for our Raeco Bags?

On the Raeco website it states that the Raeco hanging bags are 110 microns in thickness (<https://www.raeco.com.au/products/16401W>) which is larger than 0.038 mm (as this equates to 38 micron).

Previous information regarding plastic bags was in line with the old standards. The information in this fact sheet is based on the most current Australian Standards.

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However, you also need to deal with members' perceptions. If you have historically hole punched all your bags, then maybe you should continue this practice, or you could label all your bags with a label similar

WARNING
RISK OF SUFFOCATION
Plastic bags and films can be dangerous. To avoid danger of suffocation, keep this bag away from babies and children.

Battery-operated Toys

For toys intended for children under 36 months no batteries shall be accessible without the use of a tool or unless at least two independent movements have been applied simultaneously to the battery compartment.

Toys with batteries that do not meet the above criteria and are intended for children 37 months and over must carry the following age-grade warning:

WARNING! not suitable for children under 3 years. Contains small parts

So, there you have it! Remember that anything listed in here is for informative and guidance purposes only, it should not replace ensuring only toys that meet the Australian Standards are in your collection.

This guide can be used when acquiring donations to ensure the toys meet the Standards, or when checking older toys in your collection to make sure they **still** meet the standard. If there is a toy in your collection you are concerned about, please email Sarah at TLA or Kim at Toy Community.

