

Purchasing Shelving and Storage

What is the problem?

The problems and hazards that can arise from the use of shelving and storage units in early childhood services are:

- shelves aren't big enough and become overcrowded with items that then spread onto the floor and create hazardous clutter
- there are too many items or their volume is too great and they simply don't fit into the available storage space
- storage areas may not provide enough levels of shelving or compartments and items are stacked on top of the other making it difficult to access items lowest in the stack
- containers are too big or heavy or don't enable workers to see what's inside so they can select the one they need and anticipate how heavy it is and how they should handle it
- upper shelves can be too high and workers either can't reach them or they use unsafe or unstable stools or ladders to access these higher levels
- storage areas may not be close to where the items are used, requiring workers to carry and handle them for longer periods of time.



What are the solutions to this problem?

Purchasing shelving, storage units and containers with the following design features may enable your organisation to eliminate or minimise these problems and hazards and reduce injury risks for children's services workers.

Maximise the available storage volume

Deep shelves should be used to increase storage volume. Shelves that are up to 800mm deep are recommended, provided sufficient space (at least 800mm) in front of the shelving unit remains. Larger items or containers of smaller items can be stored at the rear of these shelves and should be accessible.

Shelves should be spaced to reflect the size of items and containers being stored. Using larger open areas within a storage area where multiple items are stacked should be avoided unless single items, such as large toys or cleaning equipment that fit within this size are to be stored there.



Locate the most frequent and/or awkward to handle items in mid height shelves

Items should be stored relative to their shape, size and weight and their expected frequency of use – daily, weekly, seasonal. The more frequently accessed items should be stored in the most accessible positions within a storage area and on the most accessible shelves which are usually between 450 and 1200mm high.

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Use containers that reduce manual handling effort

Transparent containers should be used so workers can see the contents, easily locate the ones being sought and estimate the nature of load so they can judge how it should be handled.



The contents to be stored should be matched to the size of the container to limit its weight when full. Where possible containers should not weigh more than 10 kilograms when fully packed (this should not be regarded as a recommended weight limit).

Containers should have effective handles or handgrips at each end and should not be longer than 600mm so they are not too heavy or difficult to carry.

Larger plastic containers with two wheels at one end are not recommended as workers adopt awkward back and shoulder postures to grasp and pull them. They can also be filled so they are too heavy and inherently unsafe to handle.

Locate storage areas close to the area where items are used

Outdoor storage areas can be located against a wall or fence close to the area where the stored equipment is used. A roller door may be used across the front of the shelves to protect and secure the contents provided it does not require excessive force to raise or lower the door.



Maintaining and cleaning

Shelving and storage units and their components should be easy to clean and require minimal or no maintenance or present any hazards to workers during cleaning or maintenance.

Consulting with employees when purchasing new equipment

The design and use of shelving, storage systems and containers can result in risks to employees who will need to move items to and from storage. To ensure that the new storage system that you choose prevents or minimises these risks you must consult with the employees who will be using it. They will be able to give you feedback on any designs that they have previously used or are still using so you can understand the better design features and those features that are best avoided. They should also be able to help review and provide feedback on new items being considered.

Where employees are represented by Health and Safety Representatives, they must be involved in this consultation, with or without the involvement of the employees.



EARLY
LEARNING
ASSOCIATION
AUSTRALIA

Level 3, 145 Smith Street, Fitzroy 3065 (PO Box 1246, Collingwood 3066)
Phone 03 9489 3500 Fax 03 9486 4226 Rural 1300 730 119
Email elaa@elaa.org.au Web www.elaa.org.au