

Shelving requirements for school library

Shelving design

Types of shelving for the storage and display of resources can vary in design. Examples include:

1. Horizontal / flat shelves



Suitable for all types of resources

2. Divider / Slotted shelves



Picture Books, Reference, Non-Fiction, and Magazines (cover facing upwards)

3. Browser bin style



Picture Books, Sophisticated Picture Books, Graphic novels, and Quick Reads / Quick Picks

4. Sloped shelves



New book displays, Thematic / topical displays, and Magazines

5. Sloped (two or three tier)



Suitable for displaying all types of resources face-out

6. Lift up display shelf



Suitable for magazines: latest issue displayed on the sloped shelf and back copies stored underneath

A combination of shelving types may be used. For example:

- A sloped shelf for displaying book covers face-out is included in Examples 1, 2 & 3.
- A flat canopy shelf positioned at the top as a dust cover and for displaying books is included in Examples 1 & 5.

There is a range of storage options for magazines and DVDs/CDs, including standalone display stands.

Further examples of shelving options can be viewed at the **Gallery: <http://schools.natlib.govt.nz/gallery>**

For a full range of shelving / storage options see the Suppliers List with contact details

Check your shelving supplier has the full range of shelving features you require for each type of resource format.

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Calculating your library's shelving requirements

To facilitate maximum flexibility, shelving should be adjustable and easily reconfigured to accommodate redesigning of library layouts. The type and number of shelves will depend on your choice of shelving style.

Chart A: Wall shelving: Horizontal shelves

- Each horizontal shelf to leave room for face-out display of a book.
- Sloped display shelf to be included in every second bay.

Resource format	Height of canopy shelf		Number of shelves per bay (excluding canopy shelf)		Width	Depth	Average capacity per horizontal shelf	
	Prim /Int	Sec	Prim/Int	Sec			Prim/Int	Sec
Non-Fiction	1500mm	1800mm	3	4	900mm	250mm -300mm	55 books	40 books
Reference	1500mm	1800mm	3	4	900mm	250mm -300mm	30 books	20 books
Fiction	1500mm	1800mm	4	5	900mm	200mm	50 books	30 books
Picture books, Sophisticated Picture Books	1200mm	1800mm	2	4	900mm	300mm	60 books	60 books
Magazines	1500mm	1800mm	4	4	900mm	300mm	4 mags	4 mags
Display areas (horizontal &/or sloped shelves)	1500mm	1800mm	3		900mm	250mm		

Example: Primary School with a collection of 2500 Non-Fiction books to be shelved in 18 bays.

Height of Non-Fiction shelves	1500mm
Width of shelves	900mm
Depth of shelves	250mm
Number of horizontal shelves @ 55 books per shelf	2500 divided by 55 = 46 horizontal shelves
Number of bays @ 3 shelves per bay	46 shelves divided by 3 = 15.33 bays
Number of sloped shelves (one shelf every 2 nd bay)	8 sloped shelves = 2.66 bays
Total number of bays	15.33 + 2.66 = 18 bays
Number of canopy shelves (at top of each bay)	18 canopy shelves

Note:

- Fixed shelving strips / 'wall channels' should ideally only be to the height of the canopy shelving and not extend above. This is visually more appealing and allows the space above the shelving to be used for wall displays.
- Ensure wall studs and noggins are placed correctly for the shelving width and height so that the wall channels can be attached correctly. An option is to have standalone shelving on L-shaped posts against the wall.

Chart B: Wall shelving: Browser bin shelves



Resource format	Height of canopy (alternatively, use a sloped shelf)		Number of shelves per bay (excluding canopy)		Width	Depth	Average capacity per browser bin shelf	
	Prim /Int	Sec	Prim/Int	Sec			Prim/Int	Sec
Picture books, Sophisticated Picture Books	1200mm	1500mm	2	3	900mm	300mm	40 books	40 books
Quick Picks / Quick Reads	1500mm	1500mm	3	3	900mm	200mm - 250mm	48 books	48 books
Graphic Novels	1500mm	1500mm	3	3	900mm	200mm - 250mm	48 books	48 books

If including a sloped shelf above a browser bin, check the gap between the shelf's overhang and the top of the books in the browser bin, to ensure ease of access.

Chart C: Island / Mobile / Rollaway Shelving

Note: Each rollaway unit to be a maximum of two bays long to aid moveability.
Aisle space between shelves to have a minimum width of 1.5m.



Flat display panel included at each end



Rollaway unit on castors

Resource format	Height of canopy (including castors)	Number of shelves per bay (excluding canopy)	Width	Depth	Average capacity per browser bin shelf	
					Prim/Int	Sec
	<i>Prim /Int /Sec</i>	<i>Prim /Int /Sec</i>			<i>Prim/Int</i>	<i>Sec</i>
Non-Fiction	Approx 1200mm - 1375mm	2 3	900mm	250 - 300 mm	55 books	40 books
Fiction:	Approx 1200mm - 1375mm	3 4	900mm	200 - 250mm	40 books	30 books
Picture Books	Approx 1200mm - 1375mm	2 3	900mm	300mm	60 books	60 books

How to calculate shelving requirements

<p>Step 1: Calculate size of collection, including the rate of expansion over next ten years, to future-proof shelving requirements within your school's 10-year Property Plan.</p>	<ul style="list-style-type: none"> • Weed/cull the collection to remove dated, worn and unappealing items. • Note number of books on shelves in each collection: reference, non-fiction, picture books, sophisticated picture books, fiction, quick reads /quick picks, graphic novels, and magazines. • Add number of books out on issue in each collection. • To future-proof the collection: <ul style="list-style-type: none"> - add the average number of new resources likely to be purchased/donated annually for the next 10 years - subtract the average number of books likely to be withdrawn / lost annually for the next 10 years. <p>(Estimate the amounts by using your library stocktake / audit figures for the last 3-5 years.)</p>
<p>Step 2: Decide on style of shelving</p>	<ul style="list-style-type: none"> • See Charts A, B, C.
<p>Step 3: Calculate number of shelves</p>	<ul style="list-style-type: none"> • Divide the size of collection (eg Fiction) by average number books per shelf. <p>eg 2000 Fiction divided by 40 books per shelf = 50 horizontal shelves</p>
<p>Step 4: Calculate number of bays</p>	<ul style="list-style-type: none"> • Divide no. of shelves by no. of shelves per bay. <p>eg 50 shelves divided by 4 shelves per bay = 12.5 bays</p>
<p>Step 5: Calculate number of sloped shelves</p>	<ul style="list-style-type: none"> • Include one sloped shelf in every second bay. <p>eg 12.5 bays will have 6 sloped shelves</p>
<p>Step 6: Calculate additional number of bays to allow for sloped shelves</p>	<ul style="list-style-type: none"> • Divide no. sloped shelves by no. shelves per bay. <p>eg 6 sloped shelves divided by 4 shelves per bay = 1.5 bays</p>
<p>Step 7: Calculate total number of bays</p>	<ul style="list-style-type: none"> • Add Steps 4 and 5. <p>eg 12.5 bays + 1.5 bays = 14 bays</p>
<p>Step 8: Calculate total number of canopy shelves</p>	<ul style="list-style-type: none"> • One canopy shelf per bay. <p>eg 14 bays = 14 canopy shelves</p>

Summary: Amount of wall shelving for 2000 Fiction is 14 bays consisting of:

- 50 horizontal shelves
- 6 sloped shelves
- 14 canopy shelves
- Height of canopy = 1500mm
- Size of shelves = 900 mm (width) by 200mm (depth)

Repeat the above Steps 1-8 for each of the collections: Non-Fiction etc

Book ends, Display stands, and Indicator blocks

In addition, calculate the number of book ends required (one for each horizontal shelf), book display stands, and indicator blocks for Non-Fiction (000-900), Fiction (A-Z), and Picture Books (A-Z) if shelved on horizontal or divider shelves.

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