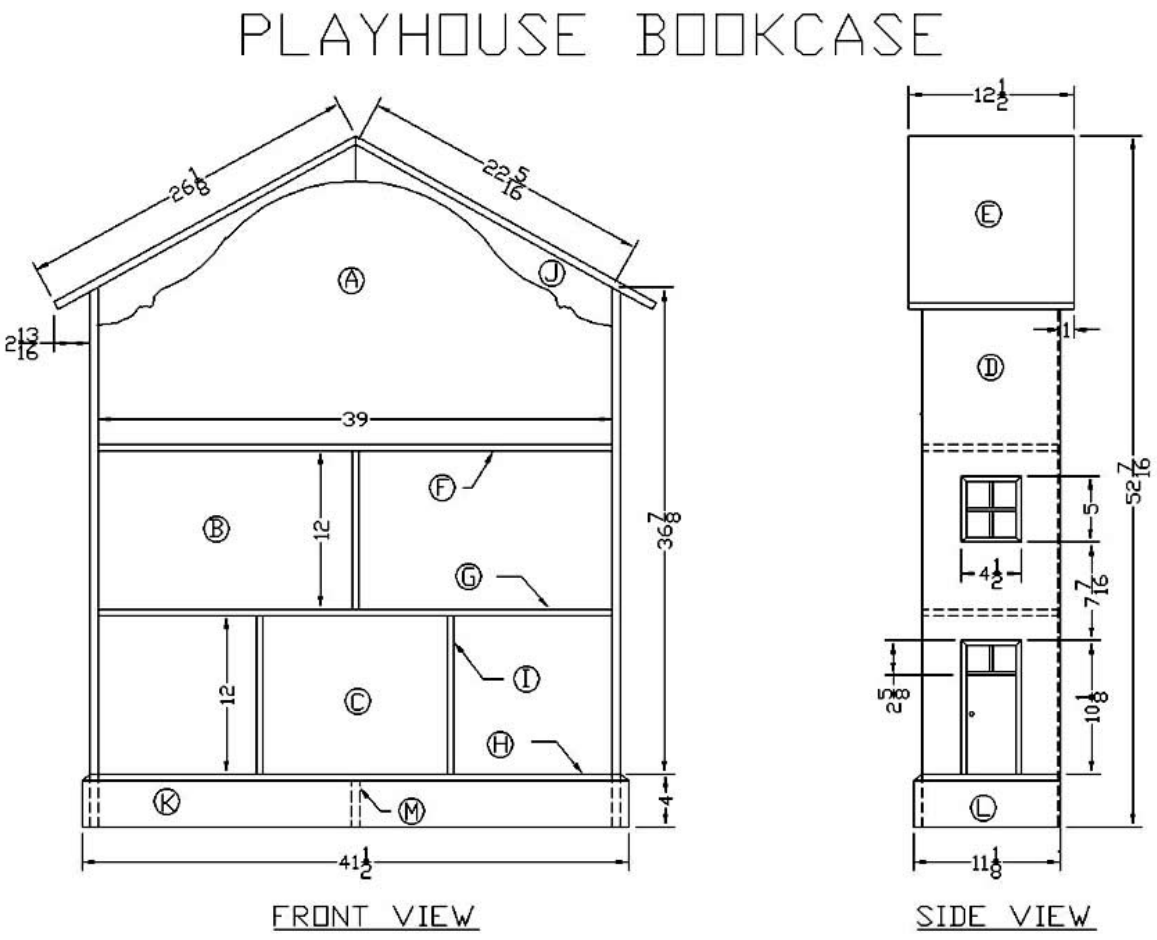
How to Build a Wooden Playhouse Bookcase

This playhouse bookcase is a perfect storage solution for your children's bedroom or playroom. It provides compartment shelves for books, toys, puzzles, games, media equipment, and many other important childhood possessions.

The dual use as a storage facility and a playhouse will provide your children many opportunities to use their creativity in a constructive way. It is the perfect way to encourage imaginative play as well as organize youngster's belongings. Its sturdy hardwood construction (Popular) will provide a durable piece of furniture. It can be easily painted to compliment any room décor where it is placed.



Technical Information for Making a Wooden Playhouse Bookcase

A. Materials List:

QUANTITY	LETTER	NAME	SIZE	MATERIAL
1	A	Top Back Panel	1/8" x 23 1/8" x 39 1/2"	Masonite
1	B	Middle Back Panel	1/8" x 12 1/2" x 39 1/2"	Masonite

1	C	Bottom Back Panel	1/8" x 12 1/2" x 39 1/2"	Masonite
2	D	Side Walls	5/8" x 10 1/2" x 40"	Paint Grade Poplar
2	E	Roofs	5/8" x 12 1/2" x 26 1/8""	Paint Grade Poplar
1	F	Top Floor	1/2" x 10 3/8" x 39"	Paint Grade Poplar
1	G	Middle Floor	1/2" x 10 3/8" x 39"	Paint Grade Poplar
1	H	Bottom Floor	1/2" x 10 3/8" x 39"	Paint Grade Poplar
3	I	Interior Walls	1/2" x 10 3/8" x 12"	Paint Grade Poplar
2	J	Fascia Trim	1/2" x 3 1/4" x 22 5/16"	Paint Grade Poplar
1	K	Front Base Trim	1/2" x 4" x 41 1/2"	Paint Grade Poplar
2	L	Side Base Trim	1/2" x 4" x 11 1/8"	Paint Grade Poplar
1	M	Bottom Floor Support	5/8" x 3 3/8" x 10 3/8"	Paint Grade Poplar

20	N	Vertical Door Frames	1/4" x 3/8" x 10 1/8""	Paint Grade Poplar
10	O	Horizontal Door Frames	1/4" x 3/8" x 4 1/2"	Paint Grade Poplar
4	P	Vertical Window Framess	1/4" x 3/8" x 5"	Paint Grade Poplar
4	Q	Horizontal Window Framess	1/4" x 3/8" x 4 1/2"	Paint Grade Poplar
6	R	Vertical Window Grids	1/4" x 1/4" x 2 "	Paint Grade Poplar
4	S	Horizontal Window Grids	1/4" x 1/4" x 3 3/4"	Paint Grade Poplar
WOOD SPECIES				
 Yellow Poplar				

B. Cutting Procedures:

1. Scale fascia trim (J) to the drawing dimension size. This can be accomplished by measuring the print out and dividing that size into the dimension size. This will give a multi-factor that can be used to figure the enlargement size for the patterns. This can be

easily done at home if you have a copier capable of making enlargements. If not, most companies that do duplicating can make the enlargements required for the pattern.
2. Trace the pattern enlargements onto poster board or Mylar and use a pair of scissors to cut out the pattern.

C. Sanding Procedures:

1. Joint one edge of all lumber.
2. Plane the side walls (D), Roofs (E), front base trim (K), side base trim (L), and the bottom floor support (M) 5/8" thick.
3. Plane the floors (F), (G), and (H), plus the interior walls (I), and the fascia trim (J) 1/2" thick.
4. Use a table saw to rip the side walls (D) 10 1/2" wide. Also rip the floors (F), (G), and (H), plus the interior walls (I) 10 3/8" wide. Rip the roofs (E) 12 1/2" wide.
5. Rip the front base trim (K) and the side base trim (L) 4" wide. Also rip the bottom floor support (M) 3 3/8" wide.
6. Rip the fascia trim (J) 3 3/4" wide.
7. Use a radial arm saw to cut the side walls (D) 40 7/8", each floor 39", and the three interior walls (I) 12" long respectively.
8. Cut the fascia trim (J) 26 1/2", the front base trim (K) 41 1/2", side base trim (L) 11 1/8", and the bottom floor support (M) 10 3/8" long respectively.
9. Trace the fascia trim pattern on the two fascia trim boards (J).
10. Use a band saw to cut out the patterns on the fascia trim (J).
11. Use a spindle sander to sand the fascia trim design.
12. Use a power miter saw to cut 29 degree angles on both ends of the fascia trim (J). Both fascia trim should be 22 5/16" after the angle cuts. Cut one end of each roof (E) 29 degrees to form the roof peak. Also cut the top of each side wall (D) 29 degrees to match the roof and fascia trim angles.

13. To find the placement for the windows draw horizontal lines 21 15/16" and 26 3/16" up from the bottom of the side walls (D). Also draw vertical lines 3 3/8" and 7 1/8" in from the left edges. Drill a 1/4" hole in the center of each window area and use a scroll saw to cut out the window openings.
14. To find the placement for the window in each exterior door, draw horizontal lines 11 3/4" and 13 3/4" up from the bottom of each side wall (D). Also draw vertical lines 3 3/8" and 7 1/8" in from the left edges. Drill a 1/4" hole in the center of each door/window area and use a scroll saw to cut out the door/ window openings.
15. Use a band saw to cut out a 3 3/4" x 9 3/4" door opening in each interior wall (I).
16. Plane a board 1/4" thick for the window grids (R) and (S), plus the door frames(N) and (O), and the window frames (P) and (Q).
17. Use a table saw with a fine toothed blade to rip the door and window frame material 3/8" wide. Also rip the window grid material 1/4" wide.
18. Use a miter saw to cut the vertical and horizontal window and door frames (N), (O), (P), and (Q) to their proper lengths. The corners should be cut at 45 degree angles.
19. Use a miter saw to cut the horizontal and vertical window grids (R) and (S) to their proper lengths.
20. Rip the remainder of the 5/8" thick board 4" wide for the front base (K) and the side bases (L). Use a table saw to cut a 45 degree bevel at the top edges of the front and side bases. Also use a miter saw to cut 45 degrees angles on both ends of the front base and on one end of each side base.
21. Use a table saw and a dado blade to cut a 5/16" x 1/8" rabbet joint on the back/inside edge of each side wall (D) and each roof (E). The joint on each roof edge should be blind rabbet joint 22 5/8" long, starting from the roof peak to the side walls.

Note: The rabbet joints should not extend into the roof overhang areas.

22. Use a table saw to rip the top, middle, and bottom back masonite panels (A), (B), and (C) 39 5/8" wide. To determine the shape of the top panel (A), measure up 12 5/16" on both sides of and 23 3/16" up from the middle of the panel. With a straight edge draw lines from the top/center of the panel to the 12 5/16" marks. Use a band saw to cut out the shape. Use a table saw to rip the height of the middle panel (B) 12 1/2". Rip the height of the bottom panel(C) 16 1/2".

D. Sanding Procedures:

1. Use a power orbital sander with 120 grit sandpaper to sand all the large pieces of the playhouse bookcase.
2. Use a power orbital sander with 220 grit sandpaper to finish sand all the large pieces.
3. Hand sand all the door and window frames, and the window grids with 220 grit sandpaper.
4. Hand sand all edges and slightly round all sharp corners.
5. Use a tack rag to remove all sanding dust.

E: Wood Playhouse Bookcase Assembly Procedures:

1. Place the bottom floor (H) on a work bench. Mark 12" in from both ends for the placement of the interior walls (I). Also, mark the middle floor (G) the same as the bottom floor. Mark the top floor (F) and the middle floor (G) 19 1/4" in from the ends for the placement of the upper interior wall (I).
2. Place wood glue on the upper edges of the two bottom interior walls (I). Stand the interior walls on the bottom floor (H) in position with the two marks. Align the middle floor (G) on top of the bottom interior walls and use a nail gun with 1 1/4' nails to secure them together. Turn the assembly on its back edges and

place glue on the bottom edges of the interior walls. Align the bottom floor and nail it to the interior walls.

3. Place wood glue on the top and bottom edges of the upper interior wall (I) and nail the middle floor to it. Also align the upper floor to the upper interior wall and nail them together.
4. Place marks on the side walls (D) for the placement of the floors (F), (G), and (H). These marks should be 4", 16 1/2", and 29" from the bottom of each side wall.
5. Stand the floor/interior wall assembly on its right side and place glue on the ends of the three floors. Align the left side wall with the marks and nail it onto the floors. Repeat the process to attach the right side wall. NOTE: Make sure that the floors, interior walls and the side walls are all flush on the front edges before gluing and nailing.
6. Use bar clamps to secure the floors and walls together and allow the glue to dry over night. Use a square to assure that all the angles are 90 degrees on the assembly.
7. Place glue on the top ends of the side walls (D), and the roof peak ends of the roofs (E).
8. Nail the two roof peaks together and then align the roof assembly with the side walls and nail it secure. Be sure that the roof overhang is 2 13/16" on each side. Also, the roof assembly should extend 1" beyond the side walls on the front and back sides of the side walls.
9. Place glue on the ends and top edges of the fascia trim (J) and temporarily clamp them to the roof. Nail the fascia trim to the roof and the side walls. The fascia trim should be flush with the front edges of the side walls.
10. Place glue on the top edge of the floor support (M). Position the floor support 19 3/16" from one of the side walls and nail the bottom floor (H) to it.
11. Stand the playhouse bookcase assembly upright on a work bench. Place glue on the front edge of the bottom floor (H), front

end of the floor support (M) and the bottom edges of the side walls (D). The side wall edges need glue only on the bottom 4". Position the front base trim (K) to the playhouse bookcase and nail it to the side walls, bottom floor, and the floor support. Place glue on the inside of each side base trim (L) and nail them to the side walls and the ends of the front base trim.

12. Glue the door and window frames (N), (O), (P), & (Q) in place. Each interior and exterior door should be framed on each side of the wall. Also, each window should be framed on both sides.
13. Glue the window grids (R) & (S) in place.
14. Lay the playhouse bookcase on its front. Place glue in the rabbet joints of the side walls (D and the roof (E). Also place glue on the back edges of the floors (F), (G), & (H) as well as the back edged of the interior walls (I).
15. Position the back panels (A), (B), and (C) in place and nail them with 1/2" brads.

Notes: Be sure to clean up any excess glue during the assembly.

F: Finish Procedures:

1. Use wood dough to fill all the nail holes, cracks and imperfections. When dry, sand flush with the surfaces.
2. Use a tack rag to remove all sanding dust.
3. Apply a coat of latex primer to all surfaces.
4. Apply two coats of interior latex paint to all surfaces.

***Congratulations, your wooden playhouse bookcase is finished and ready to use!**