DROP SPINE BOX

Double wall

No ruler, no jig

Measure carefully!!

Mark pieces well
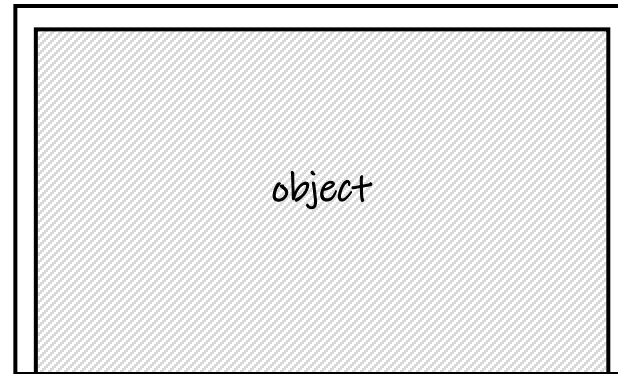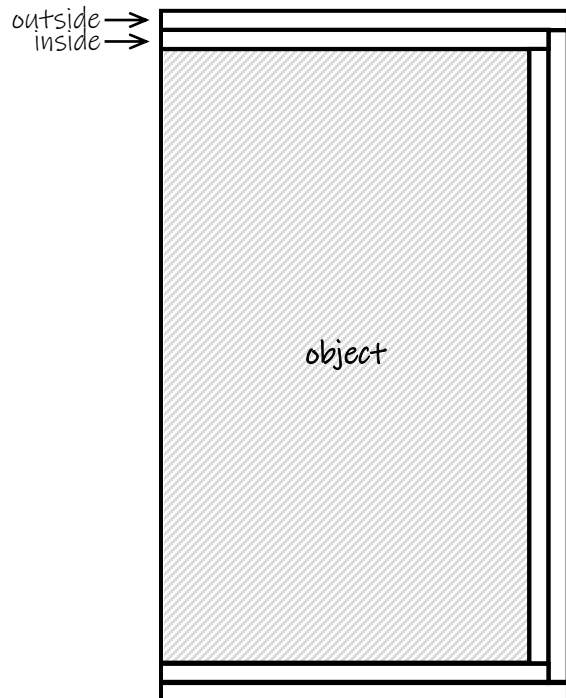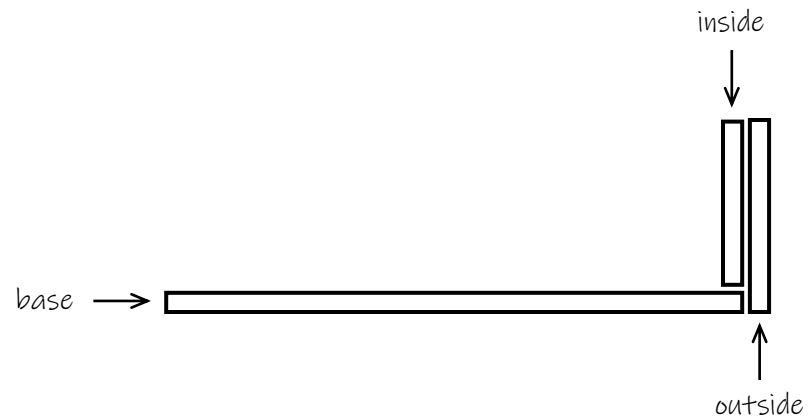
object

Diagram of walls for most strength

outside →
inside →

object

– Inside wall sits on tray
– Outside wall sits off tray

inside
↓

base →

outside
↑

BOTTOM TRAY

1. Mark the dimensions of book on binder's board.
2. Trim binder's board to sizes for the bottom tray.

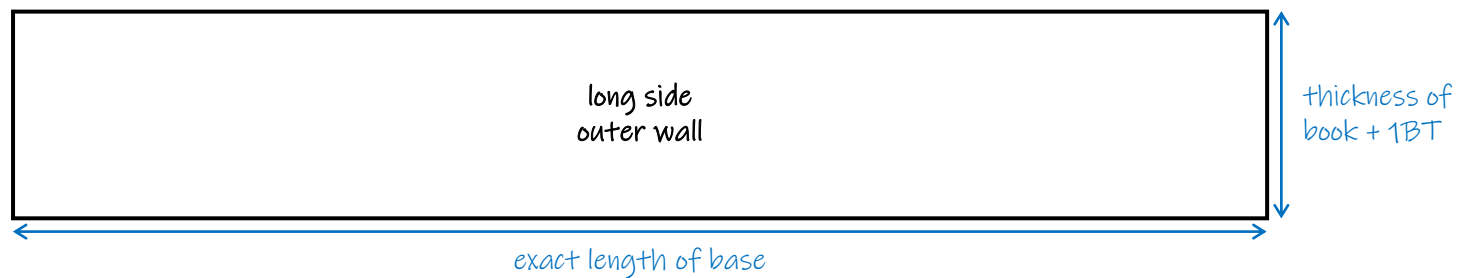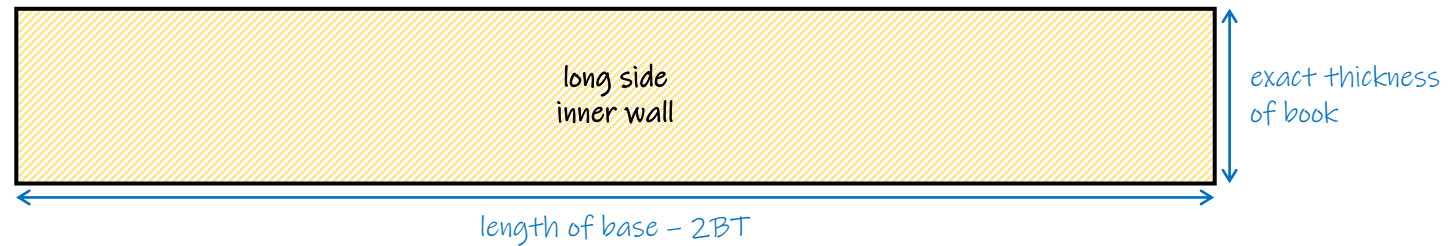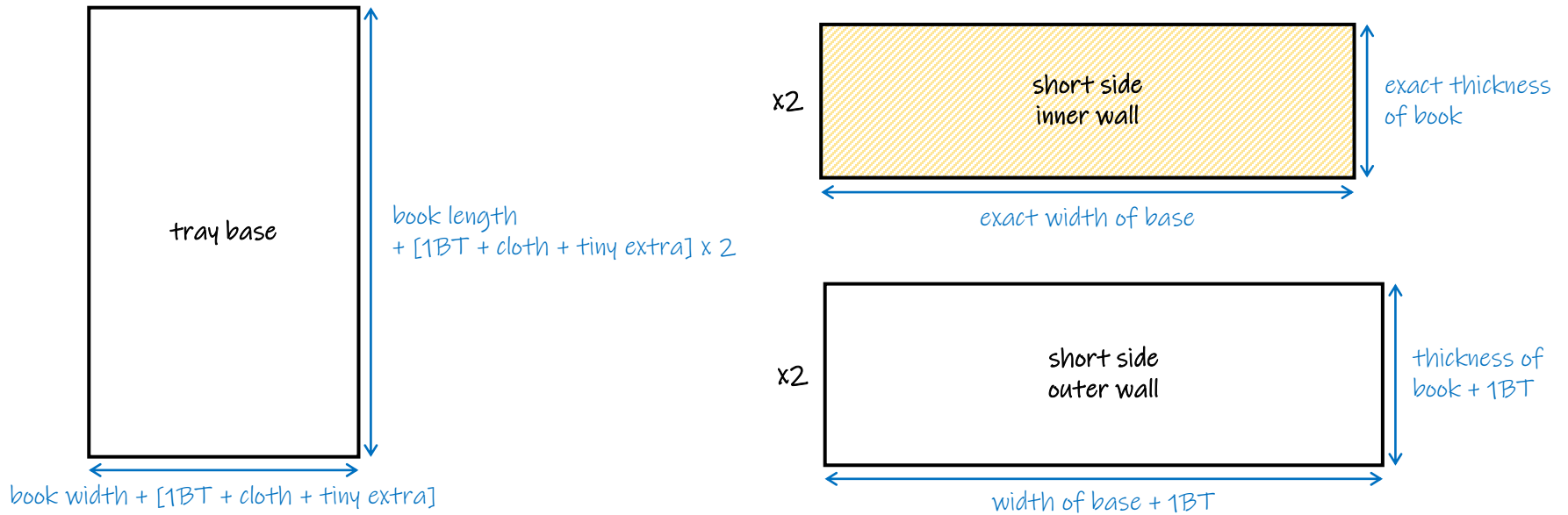Tray base = object + [1BT + cloth + tiny extra] on 3 walls

Inner short side walls (x2) = exact thickness of book x exact width of base
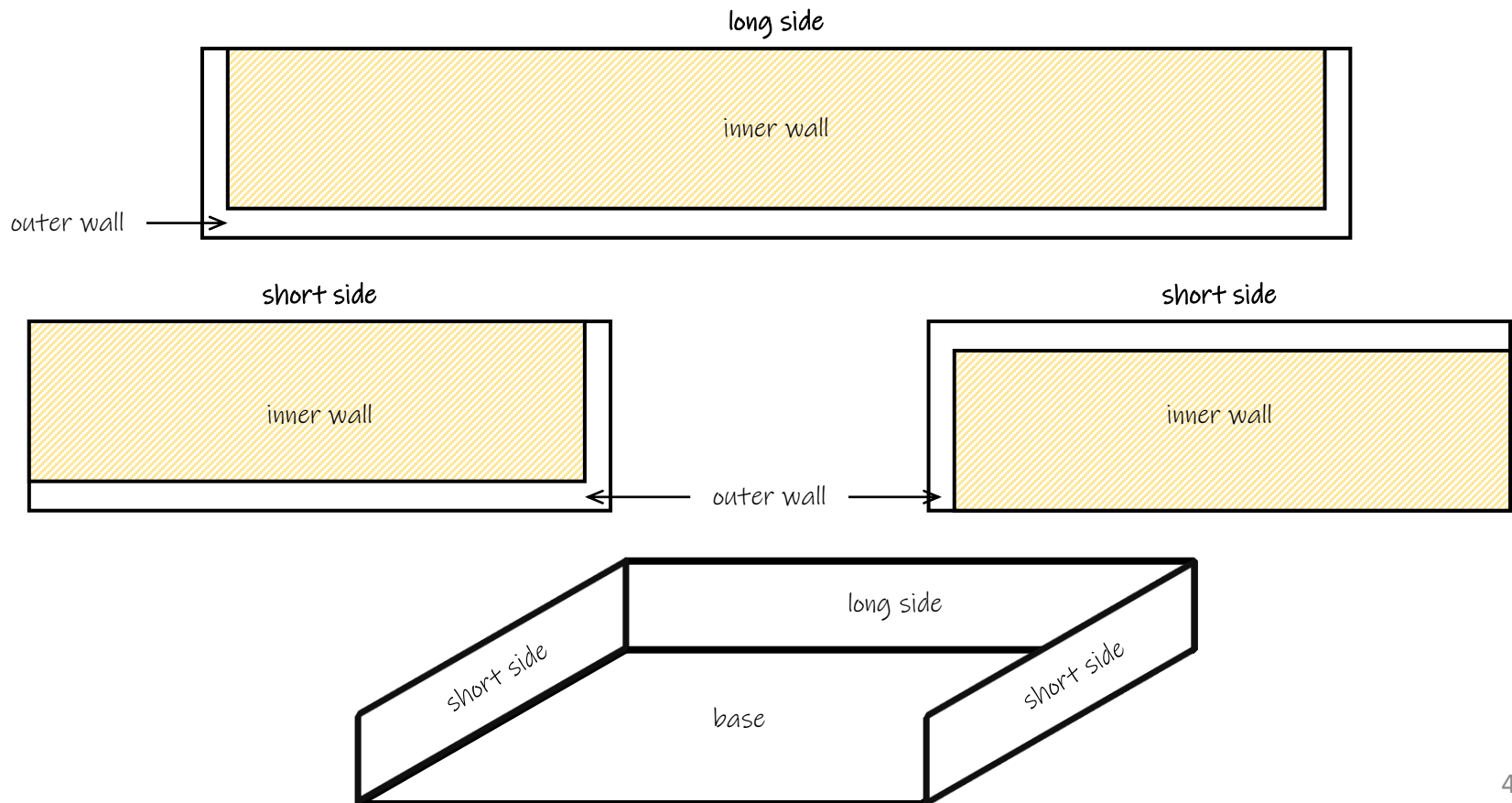Inner long side walls (x1) = exact thickness of book x [length of base – 2BT]

Outer short side walls (x2) = [thickness of book + 1BT] x [width of base + 1BT]
Outer long side walls (x1) = [thickness of book + 1BT] x exact length of base

- BT = board thickness
- Base board grain goes parallel to the book's grain
- Keep walls same grain—mark pieces carefully

tray base

book length
+ [1BT + cloth + tiny extra] x 2

book width + [1BT + cloth + tiny extra]

x2 **short side inner wall**

exact thickness of book

exact width of base

x2 **short side outer wall**

thickness of book + 1BT

width of base + 1BT

long side inner wall

exact thickness of book

length of base − 2BT

long side outer wall

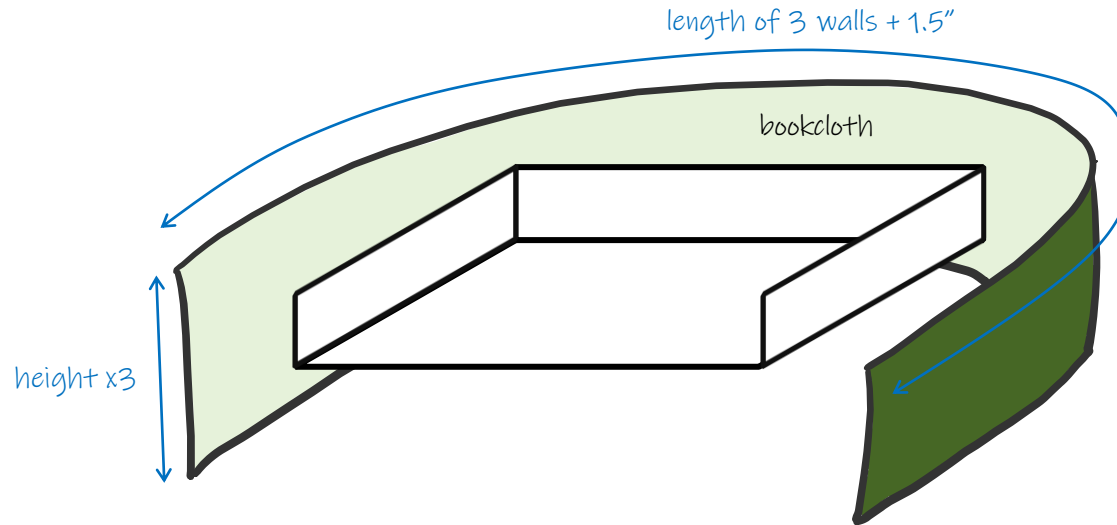thickness of book + 1BT

exact length of base

3. Set pieces in place and make any adjustments.
4. Glue inside walls to outside walls and dry in a press for an hour.
    - Apply PVA and then wait for ~20 sec before pressing.
    - Work on a piece of scrap mylar.
    - Sand anything that sticks out.
5. Glue the walls to the tray.
    - Use wooden cubes to straighten the wall attachment.

long side

inner wall

outer wall

short side

inner wall

short side

inner wall

outer wall

long side

short side

short side

base

6. Cut a piece of bookcloth.
   - [Height of wall x3 + extra] x [Length of 3 walls + 2"]

length of 3 walls + 1.5"

bookcloth

height x3

7. Mark where the tray sits on the bookcloth.
   - Bottom: leave ~1".
   - Top: leave enough to go over the walls & onto the base.
8. Glue out the outside of the tray walls.
9. Adhere the bookcloth by "walking" the tray sideways.
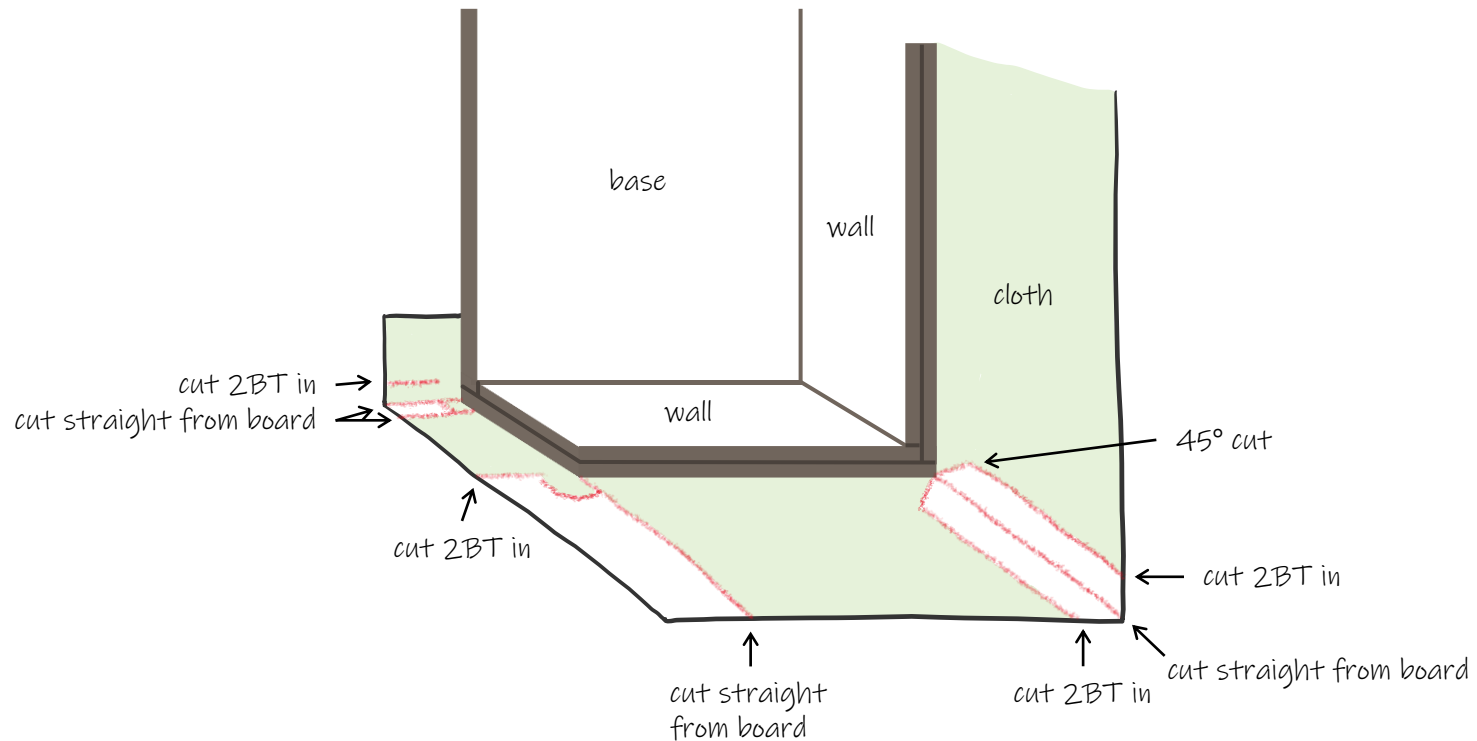   - Pull the cloth tightly to avoid gaps on the corners.
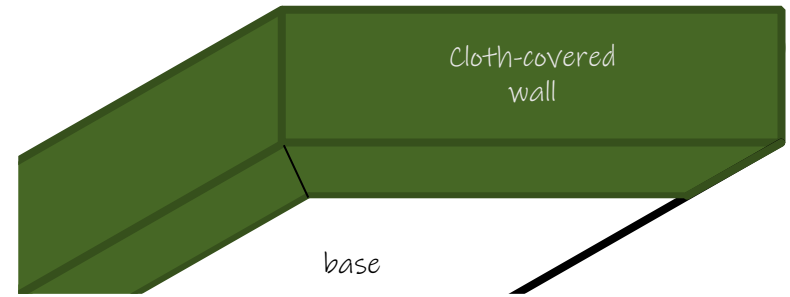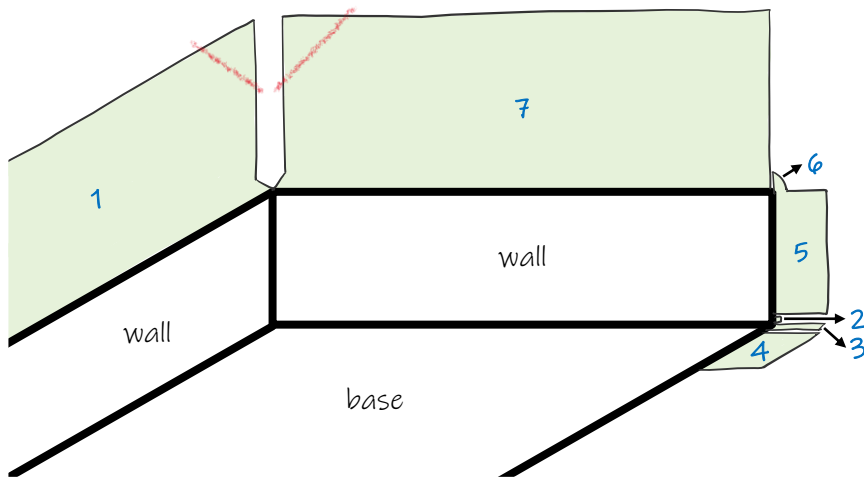   - Use Teflon folder to bone it down.

10. Bottom of the tray:

- – Roughly trim the corners of the bookcloth diagonally.
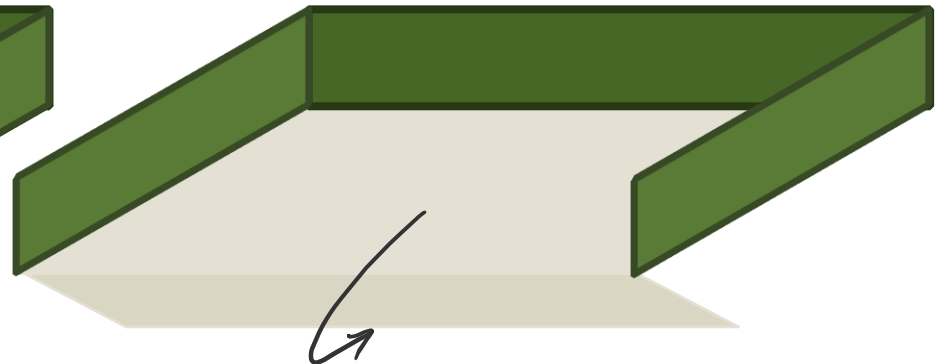- – Glue out the bookcloth on the bottom and adhere to the tray.

11. Top of the tray:

- – Make cuts on the corners, as shown in the diagrams.

base

wall

cloth

cut 2BT in

cut straight from board

wall

45° cut

cut 2BT in

cut 2BT in

cut straight
from board

cut 2BT in

cut straight from board

12. Fold cloth over walls and trim in 45° at the corners.
13. Glue the flaps in order of long side—flaps—short side.
14. Line inside of tray with Mohawk or Permalife.
    – From corners (~1/4" in) around the 4th edge about 1".

<u>TOP TRAY</u>

15. Make the top tray using same procedure as the bottom tray.
   - Start from dimensions of the bottom tray instead of the object.
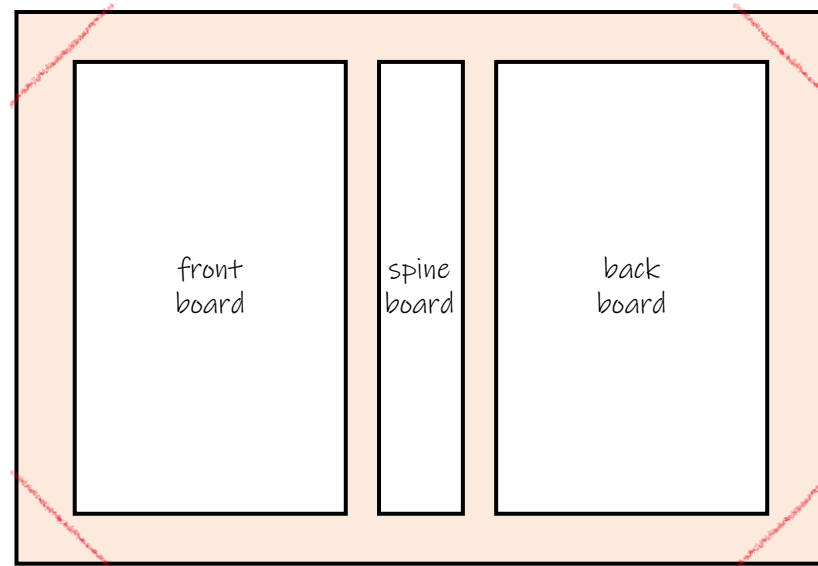   - Do not add "tiny extra" to the tray base.

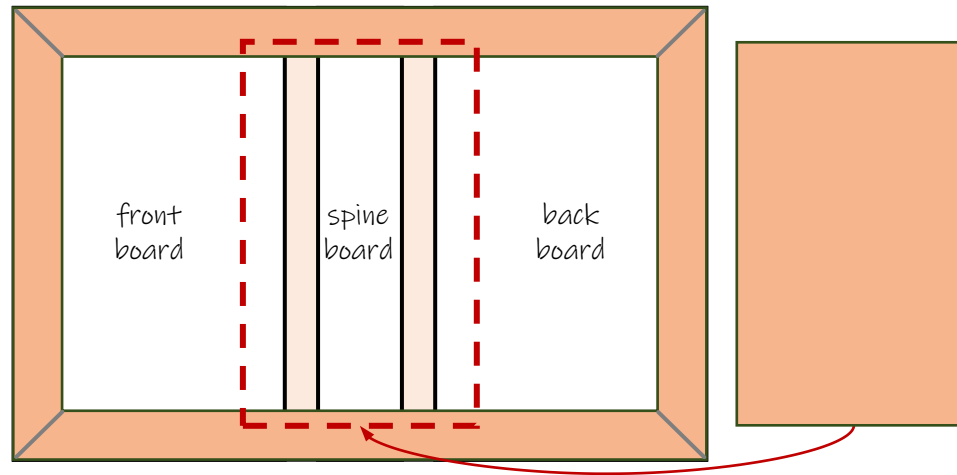<u>COVER</u>

16. Trim binder's board to sizes for the cover.

   Front & back boards = width x length of top tray + extra on 3 sides for a "lip"

   Spine board = thickness of top tray x length of front & back boards

17. Cut a piece of bookcloth bigger than the boards.

18. Attach boards to the cloth.

   Space between boards = [1BT + 6 cloth] or 2BT
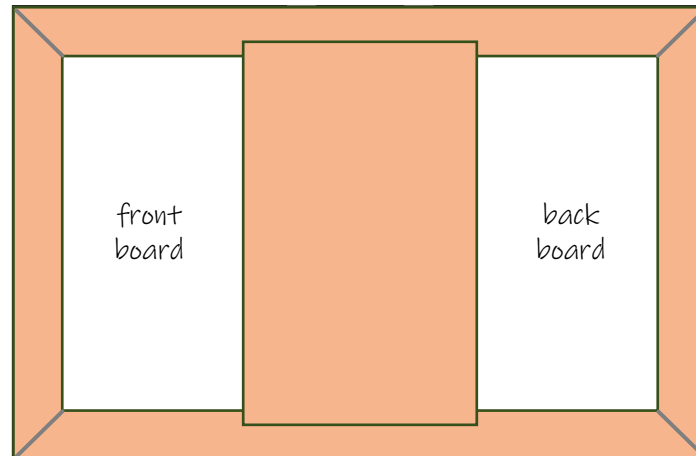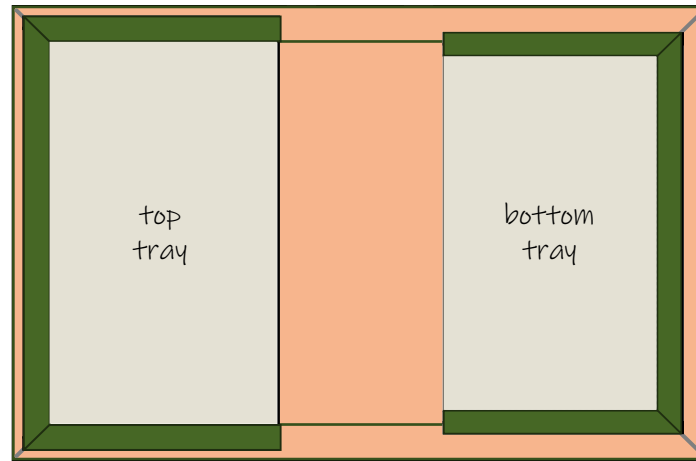
front board spine board back board

19. Trim the corners of the cloth and make the turn-ins.

20. Cut a piece of bookcloth to cover the inner center of the cover.

Length = slightly shorter than bottom tray's length

Width = wide enough to cover the edge of each board

21. Attach the bottom tray first to the cover's back board.

– Mark where the tray sits using small pieces of masking tape.

– After gluing, nip in a press for at least 5 mins.

– Place a board on the tray and wooden blocks before placing in a press.

22. Attach the top tray to the cover's front board.

– Position top tray by placing on the bottom tray.

– Nip in a press for at least 5 mins.

23. Dry completely under weight.