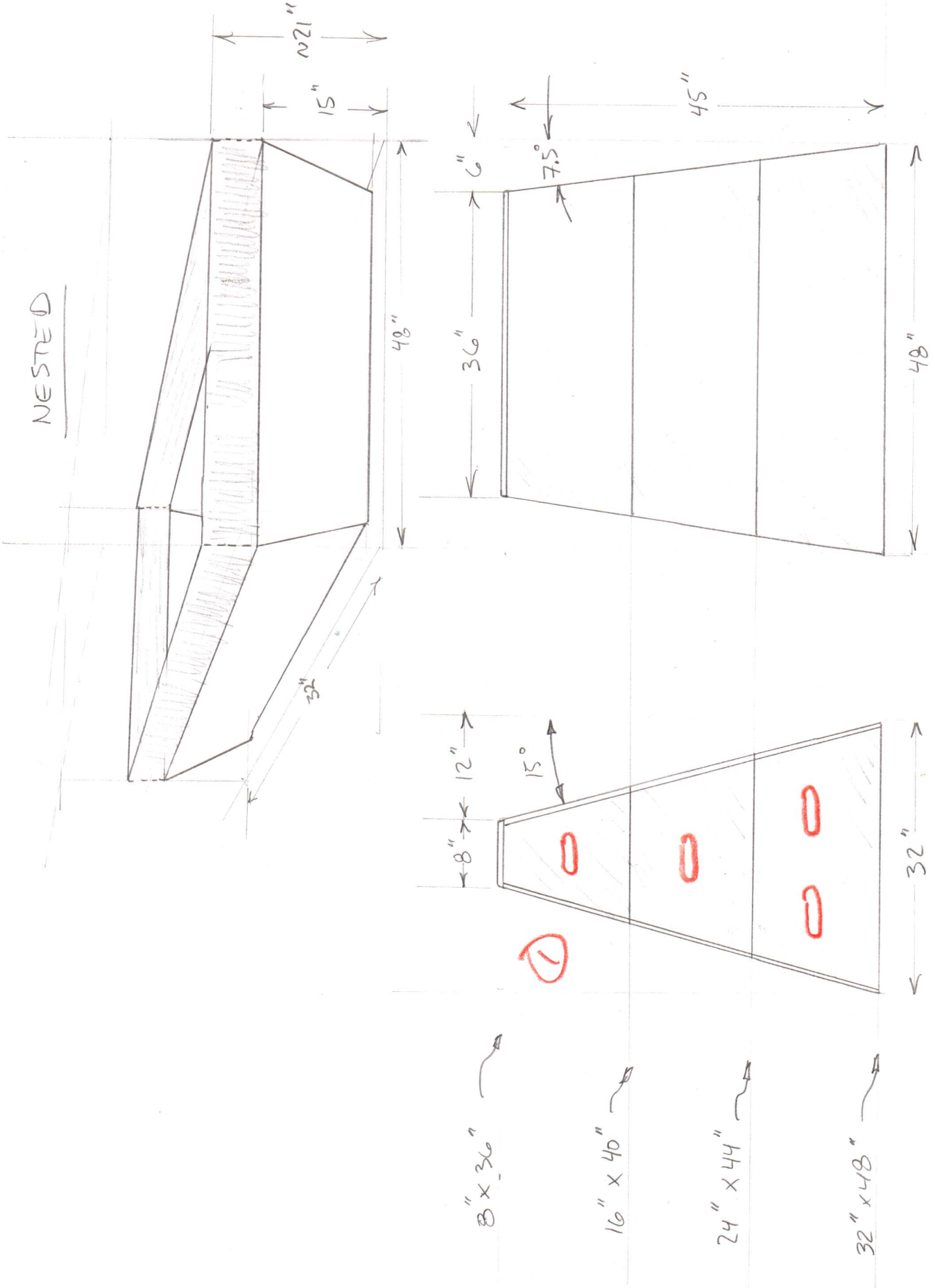
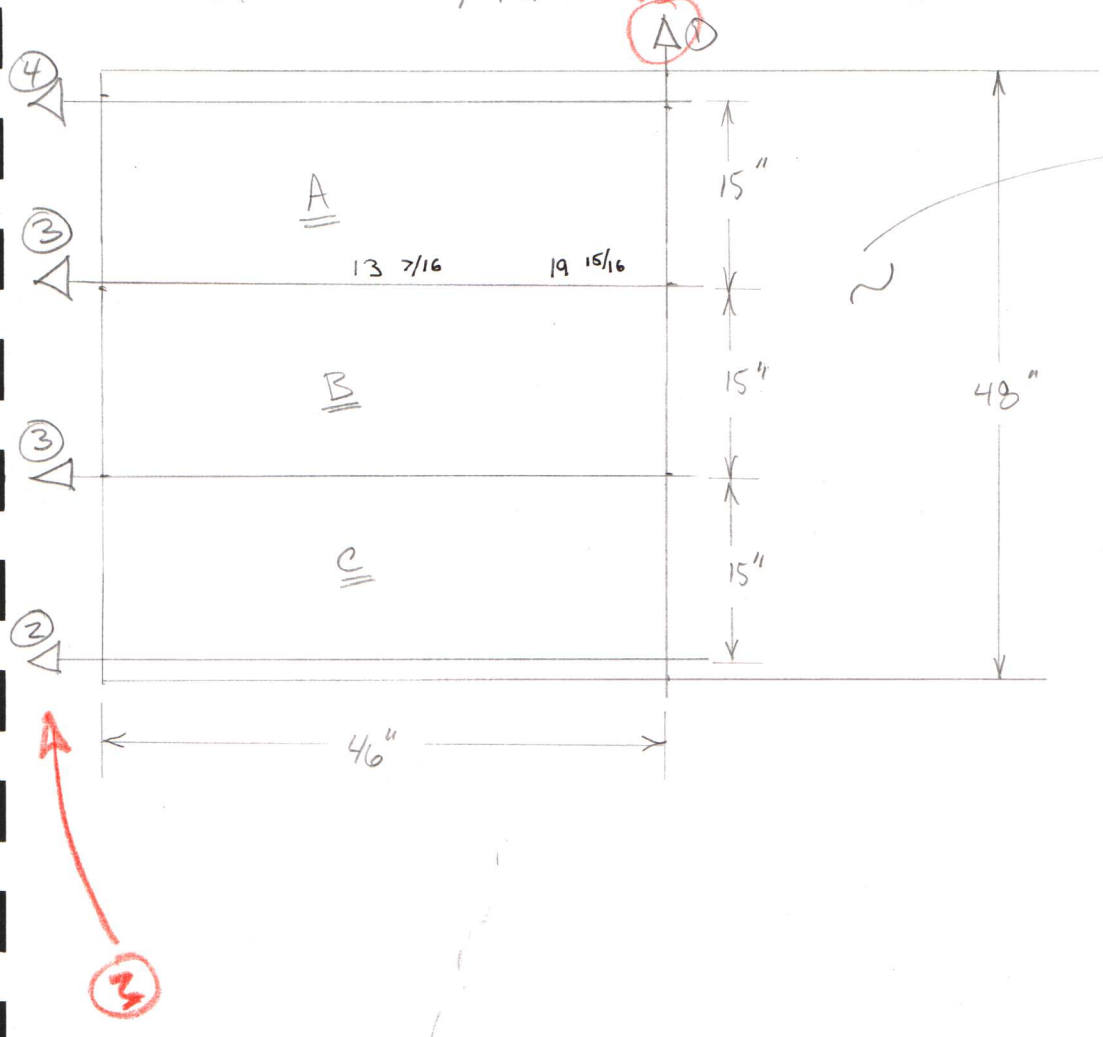
For more info, please go to…
http://constantine.name/how-not-to-build-a-vault-box
(there's a better design on the web site)



SIDE FACES

1 @ 3/4" 4'x8'

① CUT (0° BEVEL) A 46" PIECE FROM ONE SHEET OF PLYWOOD.
② PUT A 7.5° BEVEL ON THE 46" SIDE.
③ CUT (7.5° BEVEL) TWO 15" STRIPS.
④ TRIM (7.5° BEVEL) FINAL STRIP TO 15" WIDE.



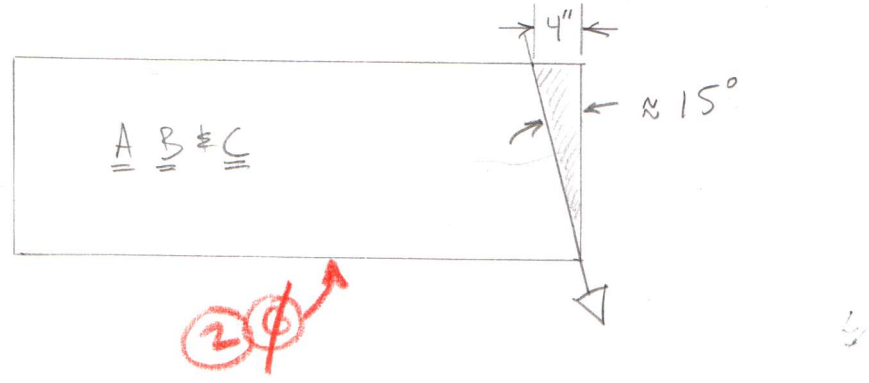
SAVE 1/2 SHEET FOR USE AS BOX TOPS

④

SIDE FACES

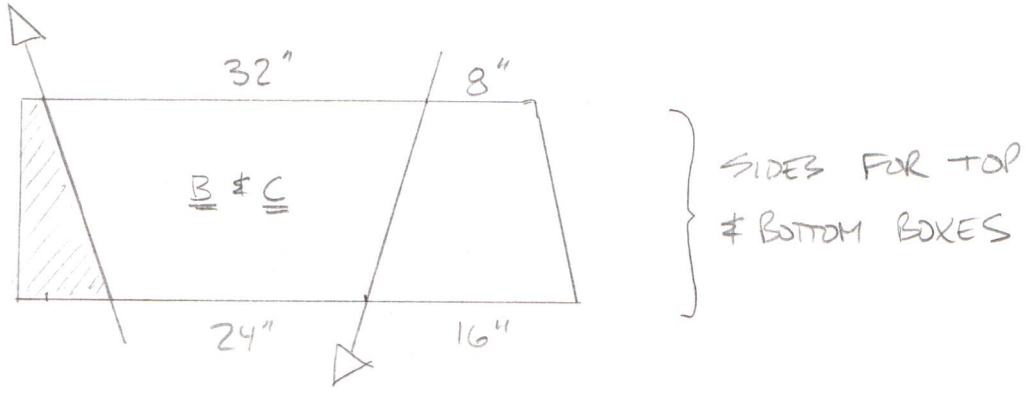
~~(4)~~ ~~(5)~~ (1)

① STACK 3 STRIPS AND TRIM (Ø° BEVEL):

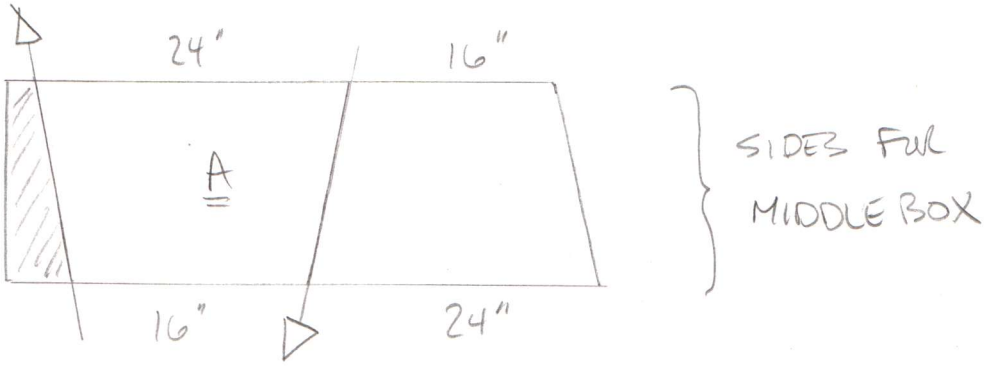


(2) (Ø)

② (SET "A" ASIDE)
CUT (Ø° BEVEL) "B" & "C" TWICE:



③ CUT (Ø° BEVEL) "A" TWICE:



(4.2 ft² for painting)

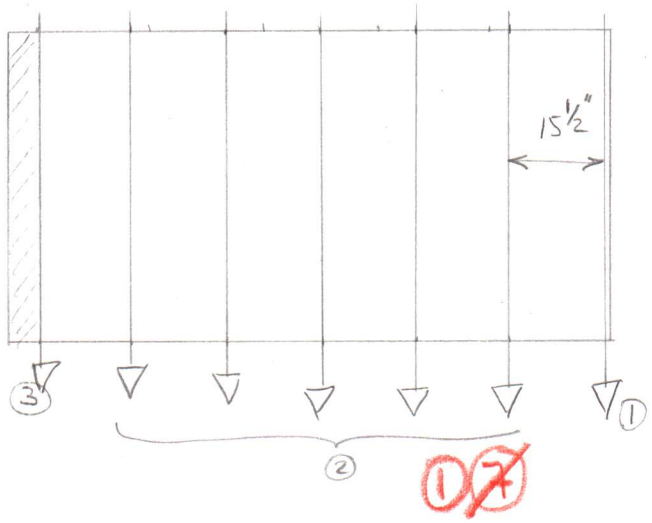
FRONT FACES

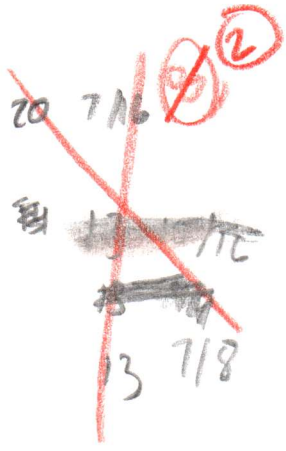
1 @ 3/4" x 4'x8'

① TRIM (15° BEVEL) 48" EDGE OF PLYWOOD

② CUT (15° BEVEL) FIVE 15½" PIECES

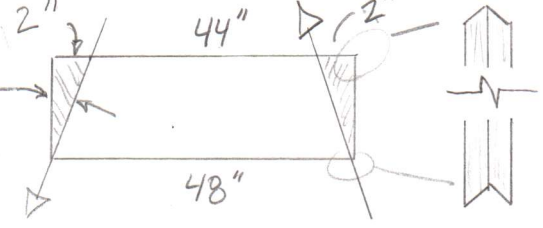
③ TRIM (15° BEVEL) SIXTH PIECE TO 15½"



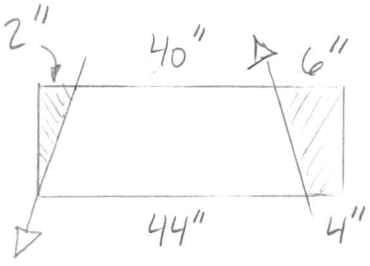


④ STACK IN PAIRS WITH OPPOSING BEVELS.

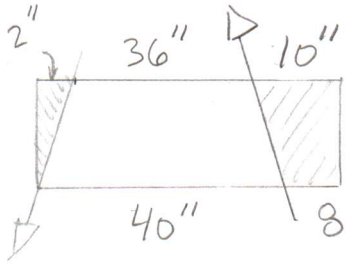
⑤ CUT (φ° BEVEL) BOTTOM,



⑥ MIDDLE,



⑦ AND TOP BOXES' FRONT FACES

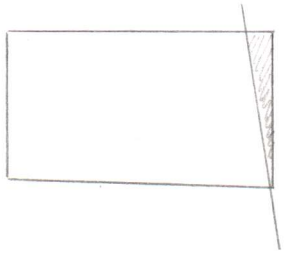


(27.2 ft² for paint)

SIDE FACES FRAMING

① RIP (~7.5° BEVEL) ONE 8' 2×4.

1 @ 8' 2×4



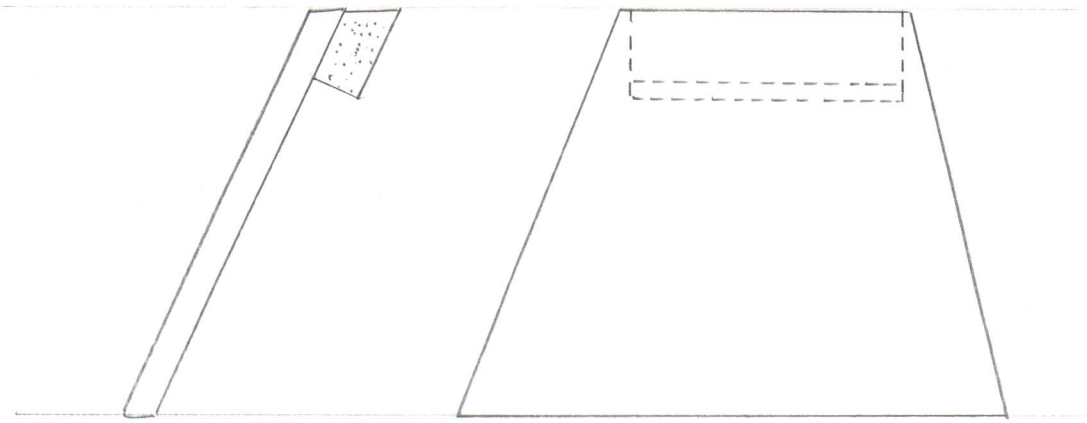
② CUT (0° BEVEL) INTO APPROX. LENGTHS:

2 @ 23½"
2 @ 15½"
2 @ 7½"

} 4 SCREWS PER 8"

~48 SCREWS

③ ATTACH TO THE TOP EDGE OF EACH SIDE FACE:



SIDE FACES FRAMING

① CUT (~7.5° END ANGLE, 15° BEVEL) SIX, 10" LONG PIECES, FROM TWO 8' 2x4's

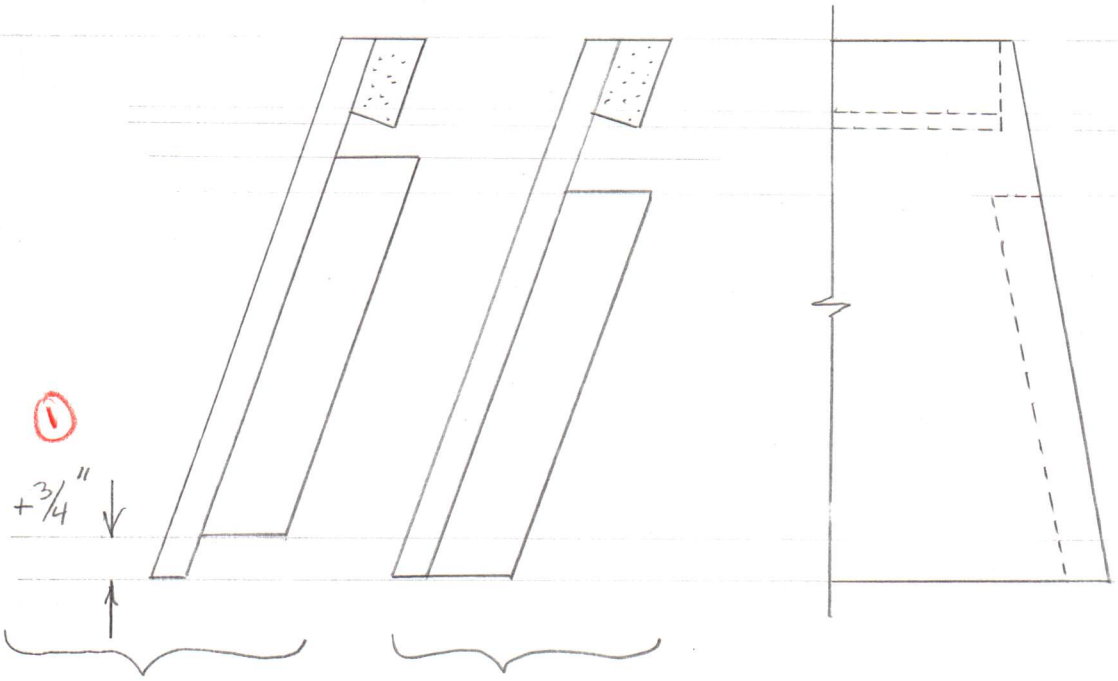
- 12, 10" PIECES WITH BOTH END ANGLED AND BEVELED
- SAVE ~36" PIECES (MARK AS "TOPS") → SAVE 2, 36" 2x4 PIECES

2 @ 8' 2x4

② ATTACH TO THE SIDES OF ALL 6 SIDE FACES

- 5 SCREWS PER 10" PIECE

~60 SCREWS



x4 FOR TOP AND MIDDLE BOXES

x2 FOR BOTTOM BOX

FRONT FACES FRAMING

(SIMILAR TO "SIDE FACES FRAMING" ON PAGE (4).)

① RIP (15° BEVEL) TWO 8' 2x4s. — 2 @ 8' 2x4

② CUT (0° BEVEL) INTO ~~32~~ 30" LENGTHS.

- SET TWO PIECES ASIDE (MARK AS "FACES") → SAVE 2 @ ~32" 2x4

③ ATTACH FRAMES TO TOP EDGE OF TOP AND MIDDLE BOXES.

- 10 SCREWS PER 32" PIECE — ~40 SCREWS

ASSEMBLY

① SCREW FRONT FACES TO SIDE FACES

- 5 SCREWS PER 10" CORNER PIECE. ~ 60 SCREWS

- CHECK SQUARE AND STACK ON EACH OTHER.

BOX TOPS

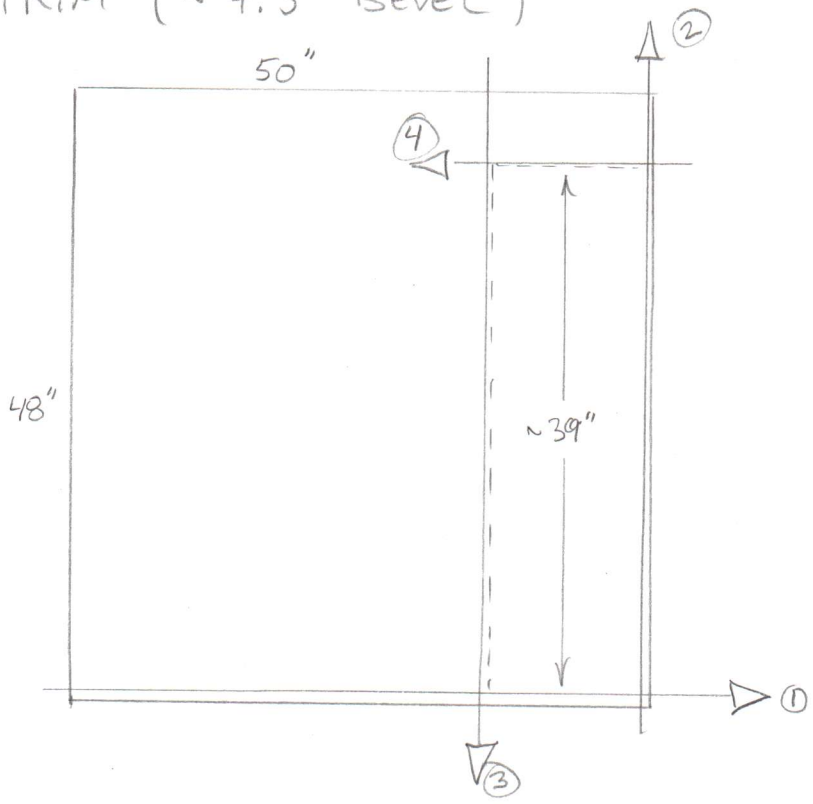
① PUT ~ 7.5° BEVEL ON 50" EDGE.

② PUT 15° BEVEL ON 48" EDGE.

- PLACE TOP BOX ON PLYWOOD AND MARK PLYWOOD.

③ CUTOFF (15° BEVEL)

④ TRIM (~ 7.5° BEVEL)



⑤ MIDDLE AND BOTTOM BOXES: PUT PLYWOOD ON BOX AND MARK — REMEMBER ~ 3/4" SET BACK.

⑥ ~ 4 SCREWS PER 10"
(14 ft² for point)

~ 80 SCREWS

BOTTOM BOX'S TOP FRAME

① FLIP BOX

② USE 2 36" SAVED PIECES ("TOPS"):
FIT (15° BEVELS) FLAT SIDE TOWARD PLYWOOD

③ PLACE 2 32" SAVED PIECES ("FACES"):
- STAND ON THEM
~4 SCREWS 10"

~24 SCREWS

SCREWS

5 @ 8' 2x4 — 2.92 ea — $14.60

2 @ 3/4" 4'x8 (23/32) — 26.42 ea — $52.84

~320 2-½" DECK SCREWS — ≈ $20

SCREWS

"DECK MATE" 2½" 84/1# $6.93 — 420/5# $23.48 — 2100/25# $98.85

×4: 93.92

	NEED	+5%	25#	5#	1#		
5 BOXES	1600	1680	0	4	0	93.92	18.78 ea
6 "	1920	2016	1	0	0	98.85	16.48 ea
7 "	2240	2352	0	5	0	122.33	17.48 ea
8 "	2560	2688	1	2	0	145.81	18.77 ea

"DECK MATE" 2" ~~99/1#~~ ~~$23.48~~ 495/5# $23.48

Box	5#'s		ea
5	4	93.92	18.78
6	5	117.4	19.57
7	5	~~140.~~ 117.4	16.77
8	6	140.88	17.61

paint

4.2 ft^2 - ENDS
27.2 ft^2 - FRONTS
14.0 ft^2 - TOPS

≈ 45.5 ft^2

× 8 layers ⇒ 363 ft^2

2 gallons of paint