

CHAPTER 10

RIGGING THE DEPLOYABLE UNIVERSAL COMBAT EARTHMOVER (DEUCE) ON A 24-FOOT, TYPE V PLATFORM FOR LOW-VELOCITY AIRDROP**10-1. Description of Load**

The Deployable Universal Combat Earthmover (DEUCE), Figure 10-1, is rigged on a 24-foot type V airdrop platform with eight G-11 cargo parachutes. The unrigged DEUCE weighs 35,000 pounds. It is 112 inches high reduced to 90 inches in the kneeling position for airdrop. The rigged load is 310 inches long, 101 1/2 inches high and 110 inches wide.

10-2. Preparing Platform

Prepare a 24-foot, type V airdrop platform as shown in Figure 10-2.

NOTES:

1. The nose bumper may or may not be installed.
2. Measurements given in this load are from the front edge of the platform, NOT from the front edge of the nose bumper.

NOTE: Remove the cab for airdrop.

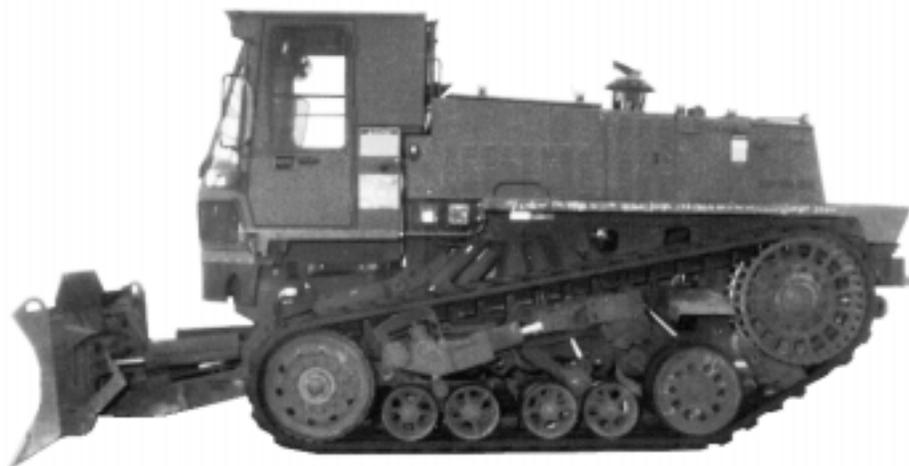
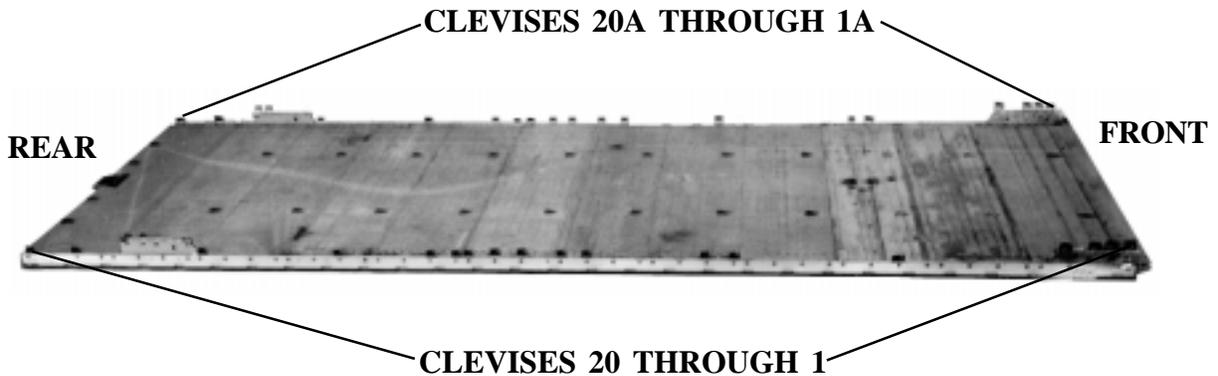


Figure 10-1. Deployable Universal Combat Earthmover



Step:

1. Inspect, or assemble and inspect, a 24-foot, type V airdrop platform as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.
2. Install a tandem link to the front of each platform side rail using holes 1, 2, and 3.
3. Install a suspension link to the right and left platform side rails using holes 41, 42, and 43. The links are required to lift the load after rigging is completed.
4. Install a clevis on bushings 1, 2, 3, and 4 of each tandem link.
5. Install a clevis on bushing 3 and a doubled clevis on bushing 4 of each suspension link.
6. Starting at the front of the right platform side rail, install clevises on the bushings bolted to holes 10, **17**, 18, 23, 24, 26, 27, 28, 29, 30, 34, 40, 46, and 48.
7. Starting at the front of the left platform side rail, install clevises on the bushings bolted to holes 10, **11**, 18, 23, 24, 26, 27, 28, 29, 30, 34, 40, 46, and 48.
8. Starting at the front of the platform, number the clevises 1 through 20 on the right side, and 1A through 20A on the left side.
9. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

Figure 10-2. Platform prepared

10-3. Building and Positioning Honeycomb Stacks

10-3 through 10-6. Position the honeycomb stacks as shown in Figure 10-7.

Build the honeycomb stacks as shown in Figures

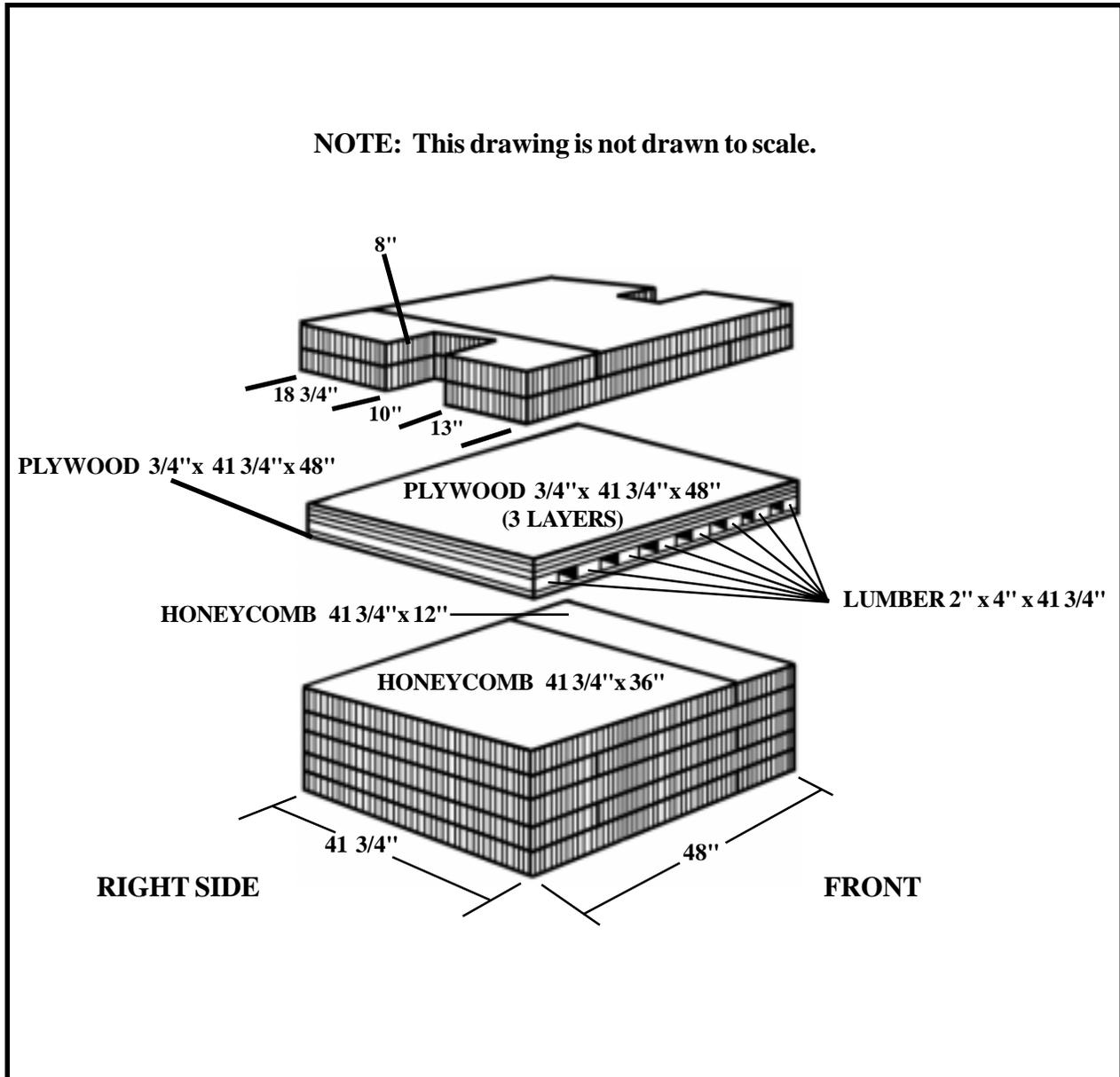


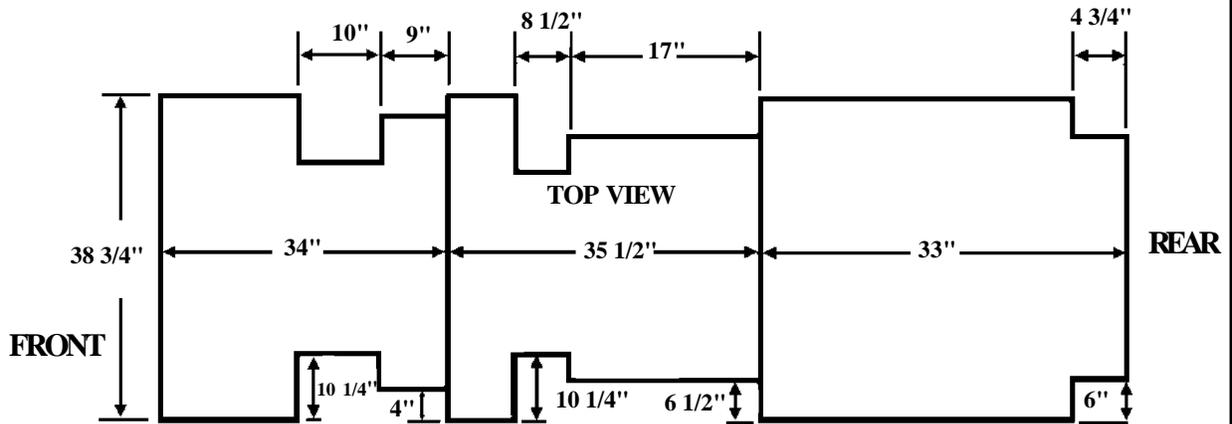
Figure 10-3. Stack 1 prepared

Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	5	36	41 3/4	Honeycomb	Alternate and glue the 41 3/4" x 36" piece with the 41 3/4" x 12" piece to form a base.
	5	12	41 3/4	Honeycomb	
	4 8	48	41 3/4 41 3/4	3/4" Plywood 2" x 4" Lumber	Place and nail a 2" x 4" piece of lumber flush on each 41 3/4" side of a piece of plywood. Place and nail the remaining six pieces of 2" x 4" lumber, 3" apart from each other, to the plywood. Place and nail the remaining three pieces of plywood on top of and flush with the 2" x 4" pieces of lumber. Glue the plywood and lumber on top of the honeycomb base.
2	2	36	41 3/4	Honeycomb	Alternate and glue the 41 3/4" x 36" pieces and the 41 3/4" x 12" pieces together. Make a 10" long by 8" deep cutout on each 41 3/4" side, 13" from the front edge. Glue the honeycomb on top of and flush with the plywood.
	2	12	41 3/4	Honeycomb	

Figure 10-3. Stack 1 prepared (continued)

NOTE: This drawing is not drawn to scale.

TOP VIEW (TWO LAYERS OF HONEYCOMB)



PLYWOOD 3/4"x 38 3/4"x 51 1/4"
TWO PIECES PLACED END TO END

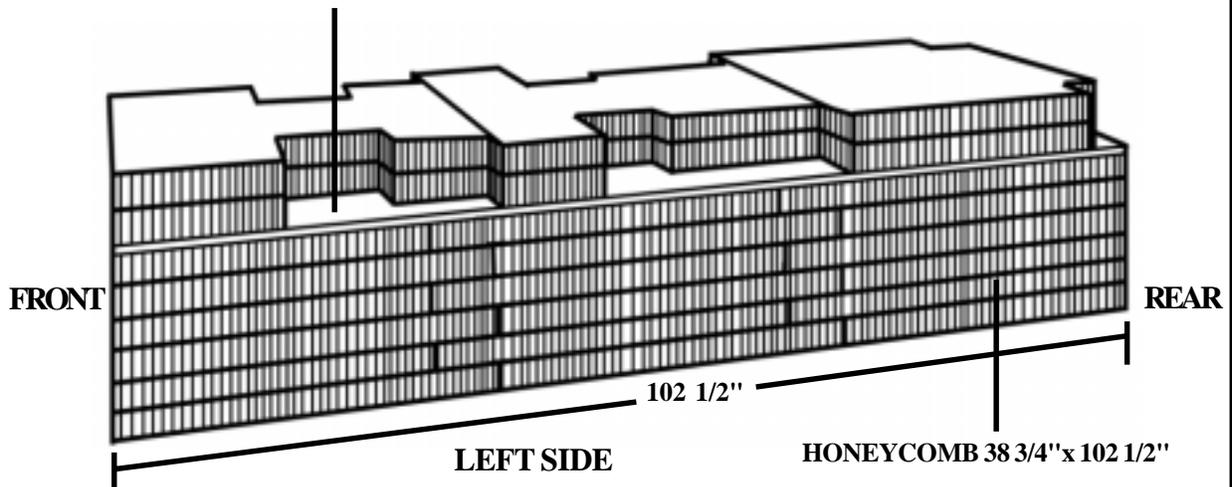


Figure 10-4. Stack 2 prepared

Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
2	12 6	38 3/4 38 3/4	36 30 1/2	Honeycomb Honeycomb	Place a 30 1/2" x 38 3/4" piece of honeycomb beside two pieces of 36" x 38 3/4" honeycomb forming a 38 3/4" x 102 1/2" layer. Alternate the pieces in the following layers to form a base six layers high. Glue all layers together.
	2	38 3/4	51 1/4	3/4" Plywood	Place and glue the plywood end to end on top of the honeycomb base.
	2	38 3/4	33	Honeycomb	Cut a notch 4 3/4" long by 6" deep on each corner of one 38 3/4" side of each piece of honeycomb. Align the notches and glue the layers together. Glue the honeycomb to the plywood with the notches facing rear.
	2	38 3/4	35 1/2	Honeycomb	Cut a notch 17" long by 6 1/2" deep along each 35 1/2" side of each piece of honeycomb measured from the rear. Cut a second notch 8 1/2" long by 10 1/4" deep on both sides of both pieces of honeycomb measured from the front of the first notch. Align the notches and glue the honeycomb pieces together. Glue the honeycomb to the plywood with the notches facing rear and against the previously placed stack.
	2	38 3/4	34	Honeycomb	Cut a notch 9" long by 4" deep along each 34" side of each piece of honeycomb measured from the rear. Cut a second notch 10" long by 10 1/4" deep on both sides of both pieces of honeycomb measured from the front of the first notch. Align the notches and glue the honeycomb pieces together. Glue the honeycomb to the plywood with the notches facing rear and against the previously placed stack.

Figure 10-4. Stack 2 prepared (continued)

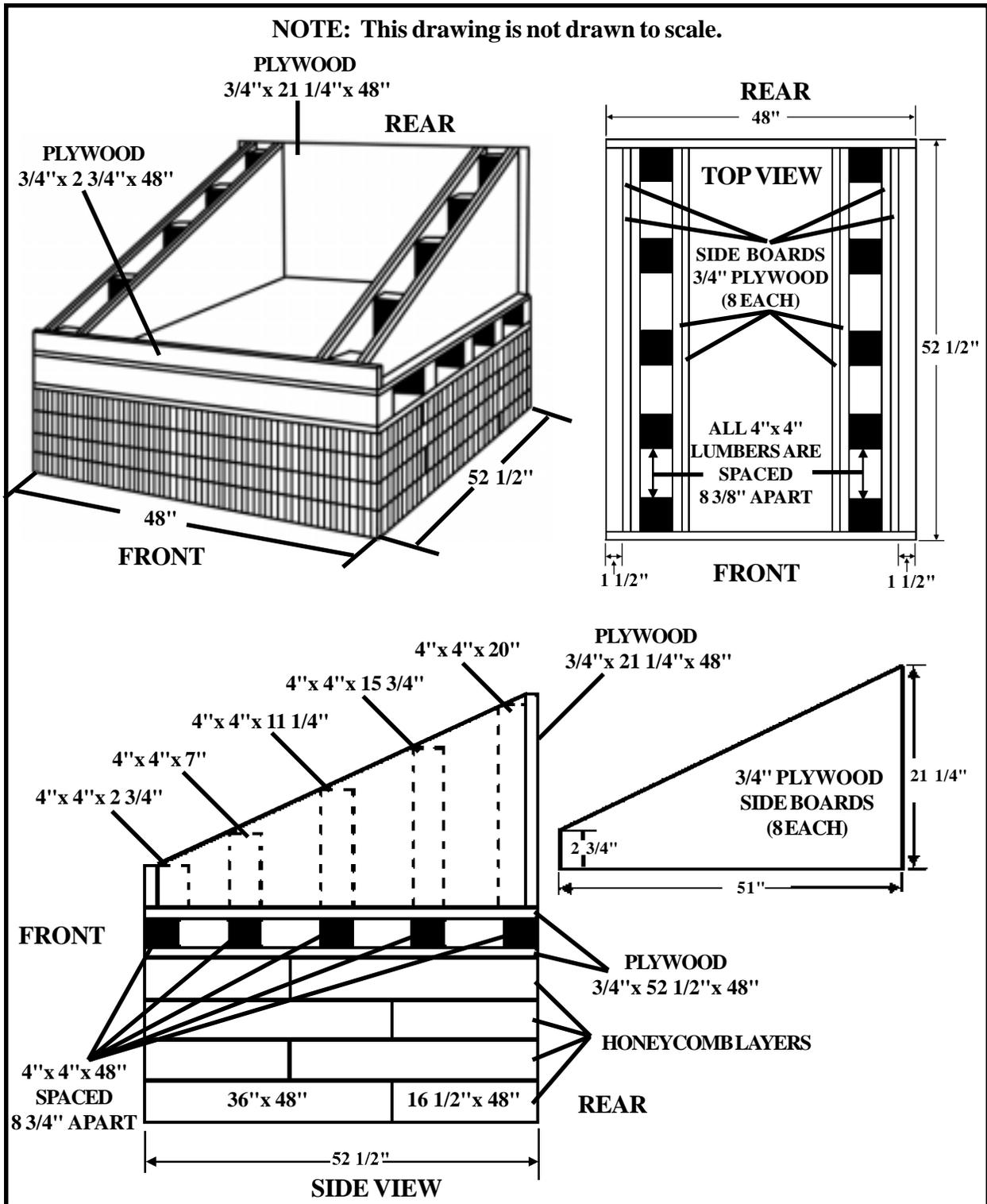
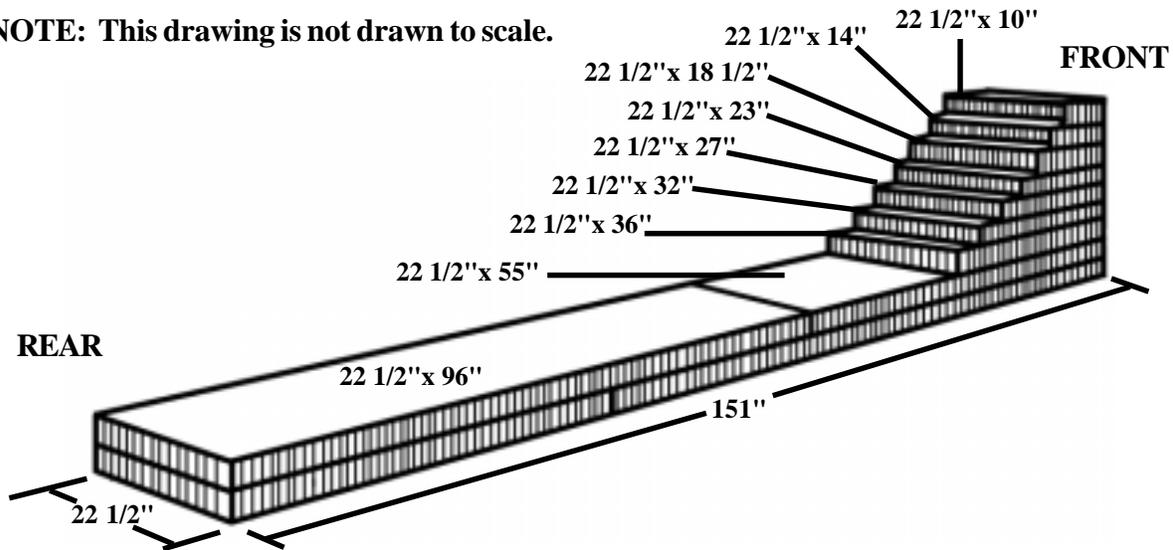


Figure 10-5. Stack 3 prepared

Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions	
3	4	48	16 1/2	Honeycomb	Alternate and glue the 48" x 36" piece with the 48" x 16 1/2" piece to form a 48" x 52 1/2" base.	
	4	48	36	Honeycomb		
	2	48	52 1/2	3/4" Plywood	Place and nail a 4" x 4" piece of lumber flush on each 48" side of a piece of plywood. Place and nail to the plywood the remaining three pieces of 4" x 4" lumber, 8 3/4" apart.	
	5	48		4" x 4" Lumber		
	8	51	2 3/4 to 21 1/4	3/4" Plywood		Cut eight 3/4" plywood sideboards as shown in Figure 10-5.
	2		2 3/4	4" x 4" Lumber		Nail the 4" x 4" lumber to the sideboards using the dimensions shown in Figure 10-5. There are two layers of plywood on each side.
	2		7	4" x 4" Lumber		
	2		11 1/4	4" x 4" Lumber		
	2		15 3/4	4" x 4" Lumber		
	2		20	4" x 4" Lumber		
1	48	21 1/4	3/4" Plywood	Nail to the sideboards and 4" x 4" lumber with a 1 1/2" overhang on each end.		
1	48	2 3/4	3/4" Plywood	Nail to the sideboards and 4" x 4" lumber with a 1 1/2" overhang on each end.		
				Nail the remaining 48" x 52 1/2" piece of plywood to the sideboards and 4" x 4" lumber ensuring all sides are flush. Nail this assembly to the 3/4" plywood with five 4" x 4" pieces of lumber built above. Glue the wooden assembly to the 48" x 52 1/2" honeycomb base.		

Figure 10-5. Stack 3 prepared (continued)

NOTE: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
4	2	22 1/2	96	Honeycomb	Alternate and glue the 22 1/2" x 96" piece with the 22 1/2" x 55" piece to form a 22 1/2" x 151" base.
	2	22 1/2	55	Honeycomb	
	1	22 1/2	36	Honeycomb	Glue on top, flush with front edge.
	1	22 1/2	32	Honeycomb	Glue on top, flush with front edge.
	1	22 1/2	27	Honeycomb	Glue on top, flush with front edge.
	1	22 1/2	23	Honeycomb	Glue on top, flush with front edge.
	1	22 1/2	18 1/2	Honeycomb	Glue on top, flush with front edge.
	1	22 1/2	14	Honeycomb	Glue on top, flush with front edge.
	1	22 1/2	10	Honeycomb	Glue on top, flush with front edge.
5	2	22 1/2	96	Honeycomb	Same as stack 4.
	2	22 1/2	55	Honeycomb	
	1	22 1/2	36	Honeycomb	
	1	22 1/2	32	Honeycomb	
	1	22 1/2	27	Honeycomb	
	1	22 1/2	23	Honeycomb	
	1	22 1/2	18 1/2	Honeycomb	
	1	22 1/2	14	Honeycomb	
	1	22 1/2	10	Honeycomb	

Figure 10-6. Stacks 4 and 5 prepared

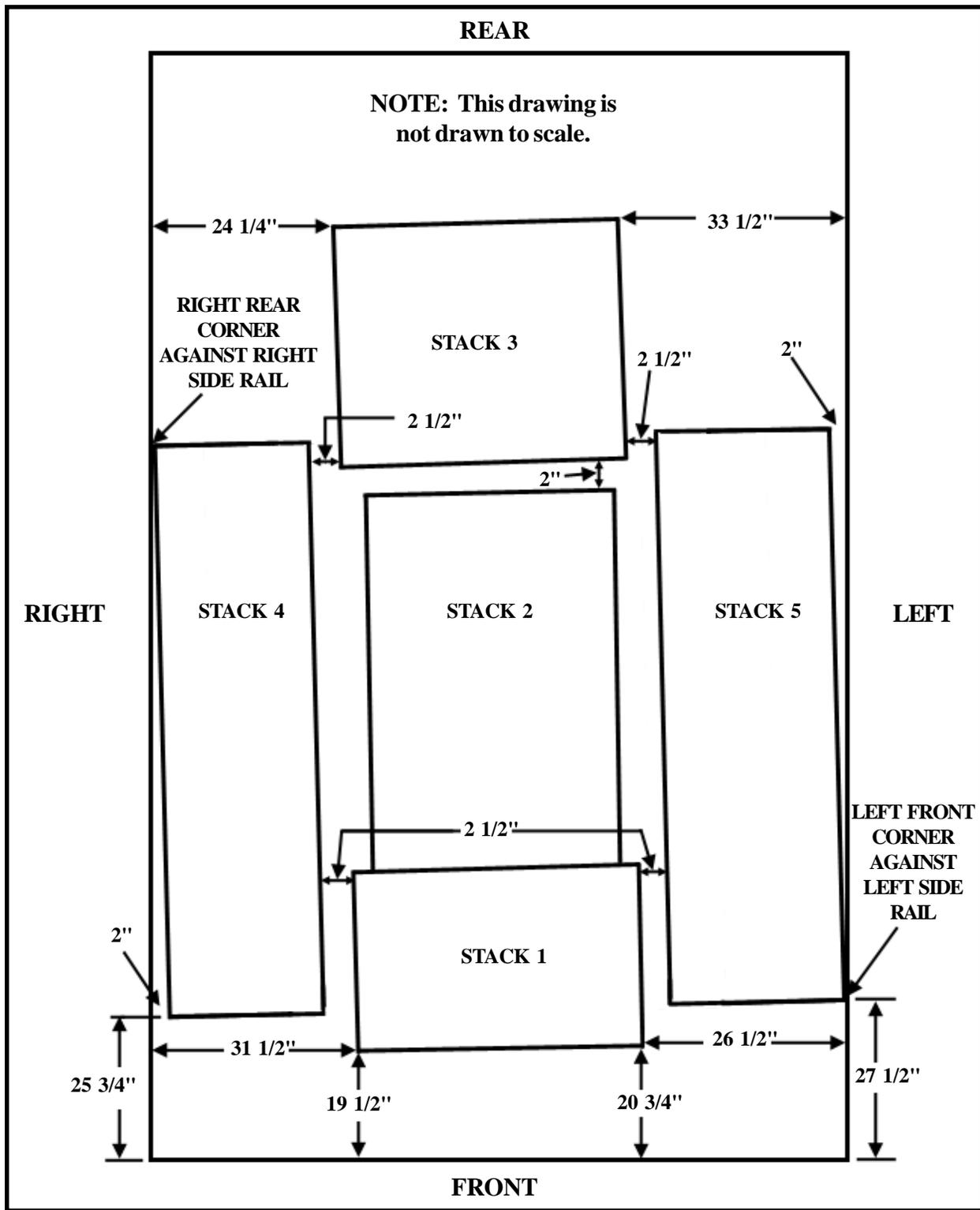


Figure 10-7. Honeycomb stacks positioned on platform

Step:

1. Position stack 1 with the right front corner 19 1/2 inches from the front edge of the platform and 31 1/2 inches from the right side rail. The left front corner is 20 3/4 inches from the front of the platform and 26 1/2 inches from the left side rail.
2. Position stack 2 centered on and flush with stack 1 maintaining the same angle as stack 1.
3. Position stack 3 with the front edge 2 inches from the rear edge of stack 2. The right rear corner is 24 1/2 inches from the right side rail and the left rear corner is 33 1/2 inches from the left side rail.
4. Position stack 4 with the right front corner 25 3/4 inches from the front edge of the platform and the right rear corner against the right side rail. Maintain the same angle as stacks 1 and 2.
5. Position stack 5 with the left front corner 27 1/2 inches from the front edge of the platform and against the left side rail. Maintain the same angle as stacks 1 and 2.

Figure 10-7. Honeycomb stacks positioned on platform (continued)