

TOW

PACKING BOX FOR SHIPMENT OF LAUNCHER EQUIPMENT (COMPONENTS FOR ONE SET); INCLUDING LOADING AND BLOCKING OF EQUIPMENT PACKS IN THE BOX (SEE NOTE* BELOW)

NOTE *

FOR OUTLOADING AND STORAGE OF THE PACKING BOX SHOWN, SEE THE FOLLOWING LISTED DRAWINGS:

- A. STORAGE IN WAREHOUSE DWG NO. 19-48-5212-GSE10A26
- B. LOADING & BRACING IN VAN TRAILERS (FOR HI-WAY SHIPMENT), DWG NO. 19-48-7557-GSE11TO2
- C. LOADING AND BRACING IN CONVENTIONAL BOX CARS - DWG NO. 19-48-7175-GSE5TO1

REVISION 1 - SIZE OF PACKING BOX, FILLERS, ETC. CHANGED TO SATISFY DIMENSIONAL OR WEIGHT CHANGES OF PACKS IDENTIFIED AS ② THRU ④, PAGE 2.

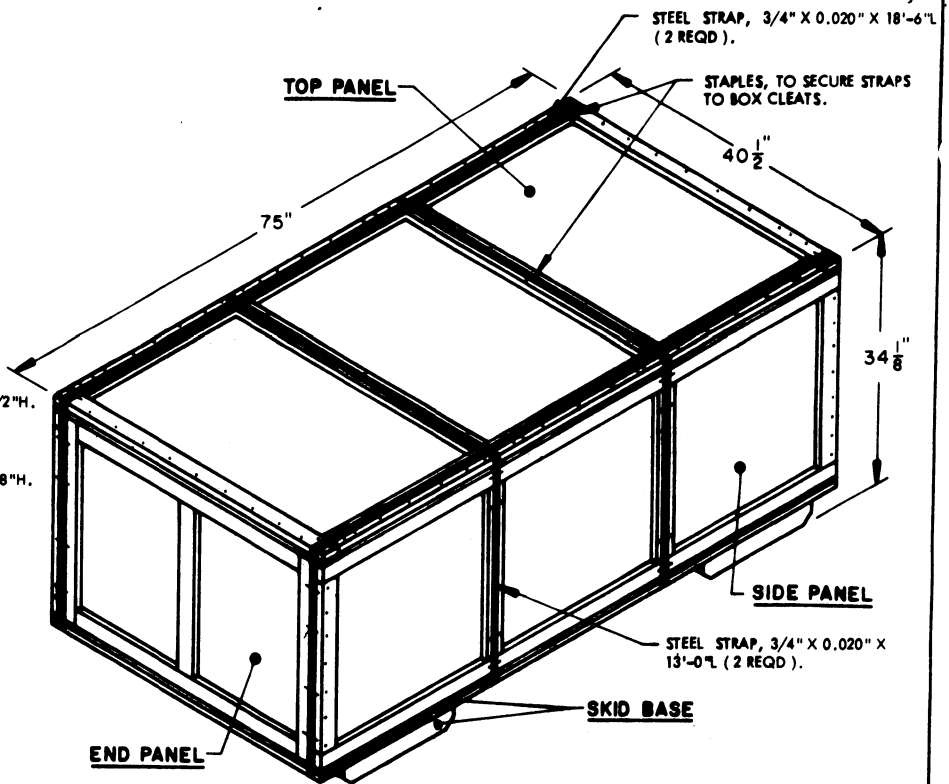
REVISION 2 - ADDED ITEMS ③ AND ④, CHANGED DIMENSIONS, ETC. OF ITEM ①, ADDED AND/OR ADJUSTED SIZE OF FILLERS AS REQUIRED.

DO NOT SCALE

<i>3.8</i>	<i>TRD</i>	<i>3/21/71</i>	<i>3/21/71</i>	<i>[Signature]</i>
REVISIONS				<i>Andrew W. Reid</i>
1	AUG 71	<i>CRS</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	JUN 73	<i>CRS</i>	<i>[Signature]</i>	<i>[Signature]</i>
				U. S. ARMY MATERIEL COMMAND
				NOVEMBER 1970
19	48	5211	GSE 20M2	

GENERAL NOTES

- A. PACKING BOX SHOWN FOR SHIPMENT OF TOW LAUNCHER EQUIPMENT IS DESIGNED IN ACCORDANCE WITH FEDERAL SPECIFICATION PPP-8-601 WITH SKID BASE MODIFICATIONS.
- B. LAYER ARRANGEMENTS SHOWN ON BOTTOM OF THIS PAGE ARE DESIGNED USING LAUNCHER EQUIPMENT PACKAGE DIMENSIONS AS SHOWN IN NOTE C. VARIATION IN THESE DIMENSIONS MAY NECESSITATE ADDING TO OR REDUCING DIMENSION(S) OF FILLER MATERIAL (PAGE 4) IN ORDER TO FORM A SNUG PACK WITHIN THE PACKING BOX.
- C. DETAILS OF LAUNCHER EQUIPMENT PACKAGES:
- ITEM (A), BATTERY ASSEMBLY STORAGE
CONTAINER DIMENSIONS -- 22-3/8" L X 12" W.
15-1/8" H.
GROSS WEIGHT ----- 26 LBS
CUBE ----- 2.3 CU. FT.
 - ITEM (B), MISSILE GUIDANCE SET
CONTAINER DIMENSIONS -- 22-1/2" L X 21" W X 14-1/2" H.
GROSS WEIGHT ----- 60 LBS
CUBE ----- 3.9 CU. FT.
 - ITEM (C), TRAVERSING UNIT
CONTAINER DIMENSIONS -- 27-7/8" L X 25-1/2" W X 18" H.
GROSS WEIGHT ----- 98 LBS
CUBE ----- 7.4 CU. FT.
 - ITEM (D), SIGHT OPTICAL
CONTAINER DIMENSIONS -- 32-5/8" L X 22-3/4" W X 23-1/4" H.
GROSS WEIGHT ----- 72 LBS
CUBE ----- 10 CU. FT.
 - ITEM (E), MOUNT, TRIPOD
CONTAINER DIMENSIONS -- 49-3/4" L X 15-1/2" W X 14-3/4" H.
GROSS WEIGHT ----- 66 LBS
CUBE ----- 6.6 CU. FT.
 - ITEM (F), TUBE
CONTAINER DIMENSIONS -- 43-1/2" L X 12-1/2" W X 12-1/2" H.
GROSS WEIGHT ----- 31 LBS
CUBE ----- 3.9 CU. FT.
 - ITEM (G), BAG
CONTAINER DIMENSIONS -- 20" L X 11" W X 4" H.
GROSS WEIGHT ----- 1.5 LBS (EST.)
CUBE ----- 0.5 CU. FT.
 - ITEM (H), STRAP ASSEMBLY
(1 BX - 4 BA)
CONTAINER DIMENSIONS -- 12" L X 12" W X 12" H.
GROSS WEIGHT ----- 7.5 LBS
CUBE ----- 1.0 CU. FT.



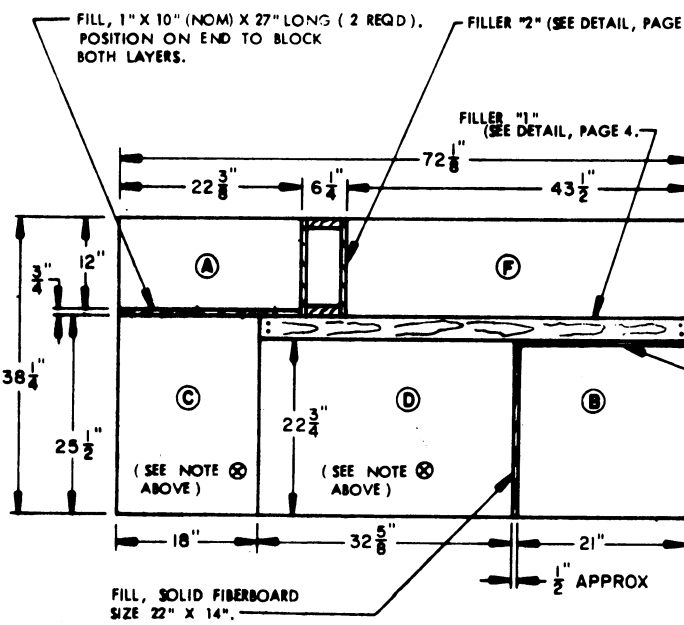
ASSEMBLED PACKING BOX

BOX WEIGHT (LOADED) = 610. LBS (est.)
TARE WEIGHT OF BOX = 205.6 LBS (est.)
CUBE = 60 CU. FT.

(FOR DETAILS AND ASSEMBLY AND LOADING OF PACKING BOX SEE PAGE 3).

NOTE (D):

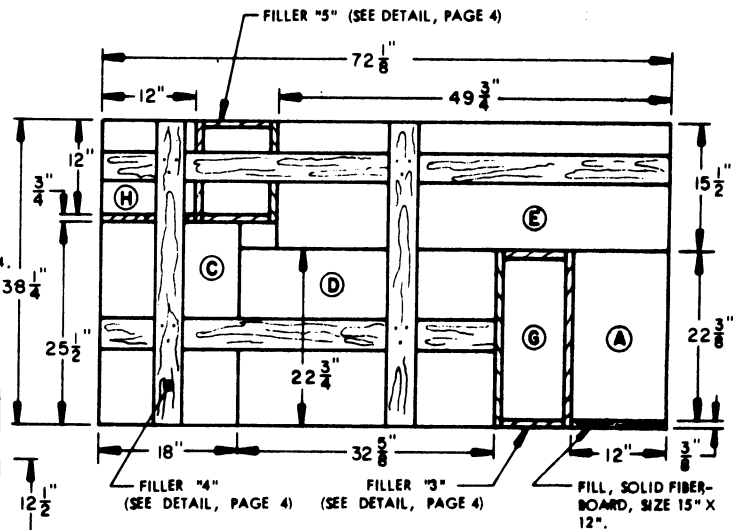
ITEMS IDENTIFIED AS (C) AND (D) ARE LARGE PACKAGES COMMON TO BOTH THE 1ST AND 2ND LAYERS IN THE PACKING BOX.



1ST LAYER ARRANGEMENT

(TOP VIEW)

LOADING AND BLOCKING OF ITEMS IN PACKING BOX

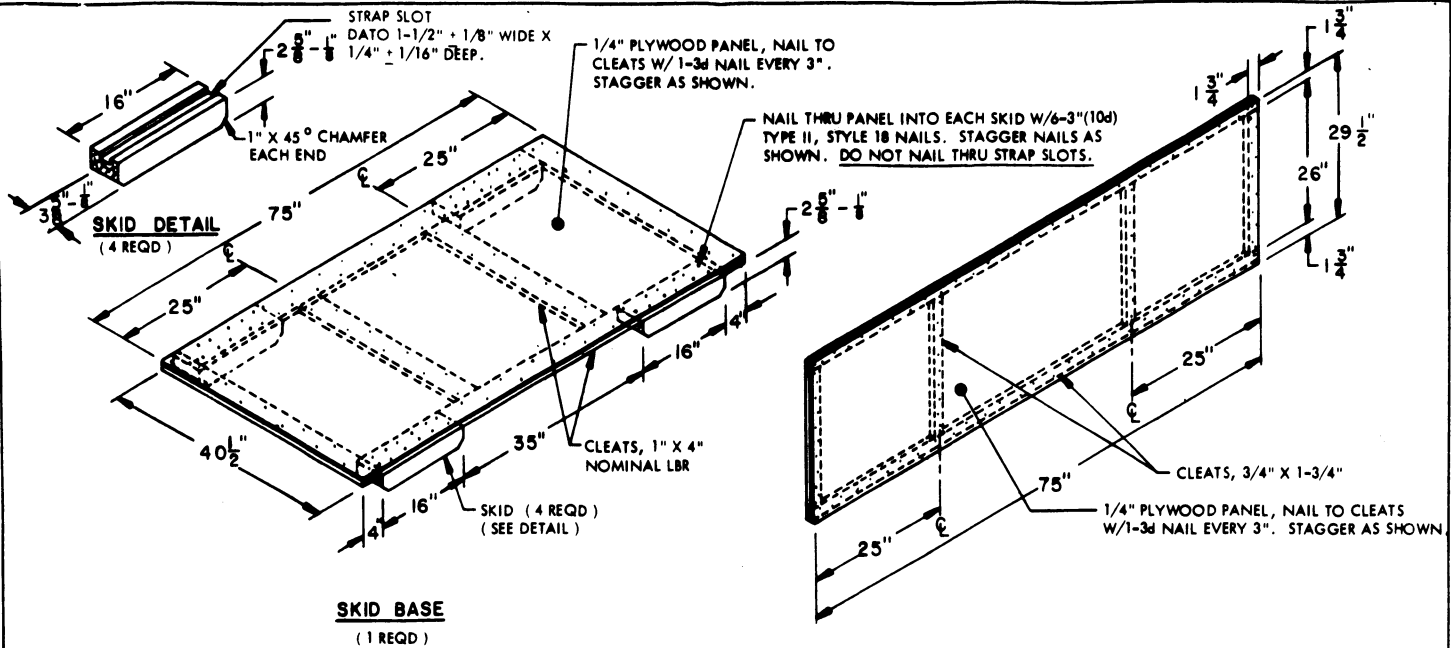


2ND LAYER ARRANGEMENT

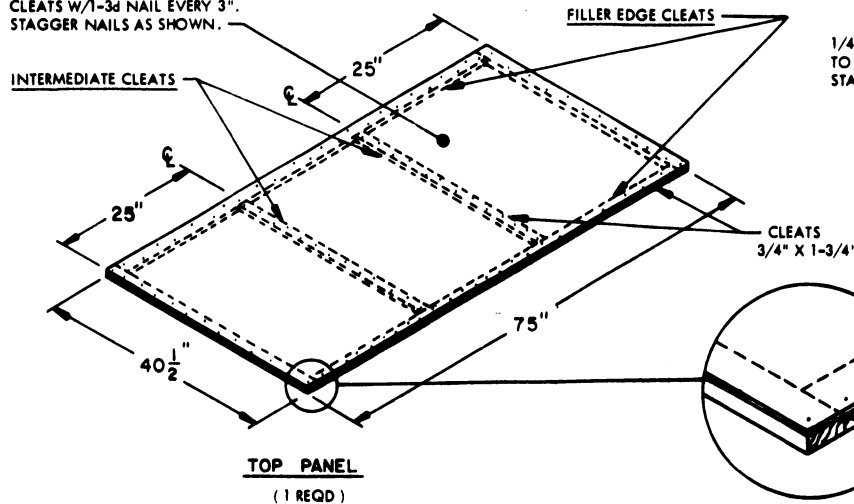
(TOP VIEW)

ITEM IDENTIFICATION

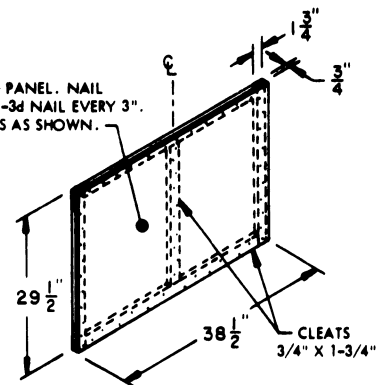
- (A) BATTERY ASSEMBLY, STORAGE ----- 2 EACH
- (B) MISSILE GUIDANCE SET ----- 1 EACH
- (C) TRAVERSING UNIT ----- 1 EACH
- (D) SIGHT OPTICAL ----- 1 EACH
- (E) MOUNT, TRIPOD ----- 1 EACH
- (F) LAUNCHER TUBE ----- 1 EACH
- (G) BAG ----- 1 EACH
- (H) STRAP ASSEMBLY (4/BX) ----- 1 EACH



1/4" PLYWOOD PANEL, NAIL TO CLEATS W/1-3d NAIL EVERY 3". STAGGER NAILS AS SHOWN.



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ASSEMBLY AND LOADING OF PACKING BOX:

- STEP 1. - ASSEMBLE SIDE PANELS TO END PANELS USING 1-7d NAIL EVERY 5 INCHES AT EACH CORNER.
- STEP 2. - ASSEMBLE SKID BASE TO ASSEMBLED SIDE & END PANELS USING 1-7d NAIL EVERY 5".
- STEP 3. - INVERT BOX AND LOAD AND BLOCK LAUNCHER EQUIPMENT PACKAGES INTO BOX, ARRANGE LAYERS AND BLOCKING AS SHOWN ON PAGE 2.
- STEP 4. - ASSEMBLE TOP PANEL TO SIDES AND ENDS USING 1-7d NAIL EVERY 5 INCHES.
- STEP 5. - POSITION, TENSION, SEAL, AND STAPLE STEEL STRAPPING.

MATERIAL SPECIFICATIONS:

LUMBER: SEE MIL-STD-731, QUALITY CLASSIFICATION, CLASS 2, GROUP I OR II.

PLYWOOD: FED SPEC NN-P-530, GROUP A OR B

NAILS: COMMON, CEMENT COATED OR ETCHED, AND STYLE 18 MECHANICALLY DEFORMED, FED SPEC FF-N-105.

STRAPPING: TYPE I, CLASS B, (3/4" X 0.020") FED SPEC QQ-5-781.

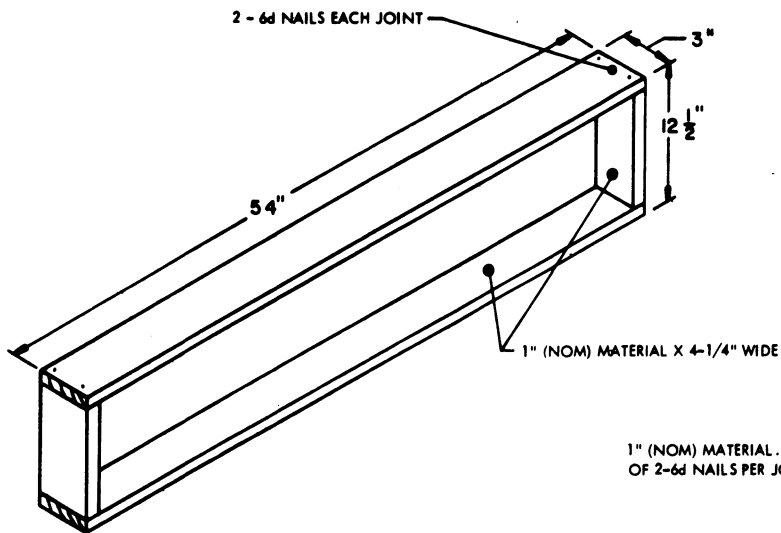
SEALS: FOR 3/4" X 0.020" STRAPPING, COMMERCIAL GRADE

STAPLES: 3/4" L X 1" CROWN, TYPE III, STYLE 3, CEMENT COATED OR ETCHED FED SPEC FF-N-105.

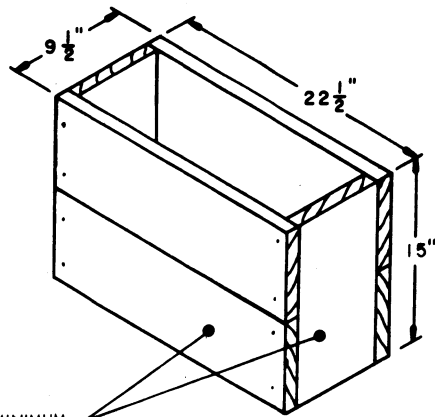
FIBERBOARD, SOLID: TYPE SF, CLASS WEATHER RESISTANT, GRADE V35. FED SPEC PPP-F-320.

BILL OF MATERIAL

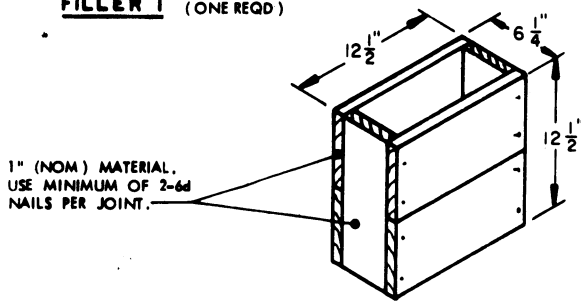
ITEM	LUMBER	LINEAR FEET	BOARD FEET
PACKING BOX	3/4" X 1-3/4"	93.50	15.75
	1" X 4"	23.75	7.92
	3" X 4" (SKIDB)	5.34	5.34
	PLYWOOD, 1/4"	88.8 SQ FT	
NAILS:		472 EA-----	0.30 LBS
		130 EA-----	1.00 LBS
		24 EA-----	0.37 LBS
STRAPPING, STEEL, SIZE 3/4" X .020"		63 FEET -----	3.30 LBS
SEALS - 4 REQD - STAPLES		50 REQD	
FILLERS	1" X 4"	16.40	5.47
	2" X 4"	6.10	4.08
	1" X 3"	10.67	2.67
	1" X 8"	20.00	13.34
	1" X 10"	5.00	4.20
	2" X 4-1/2"	2.67	1.80
	2" X 10"	1.50	2.50
FIBERBOARD, SOLID - 12" X 15" SHEETS - 8 SHEETS REQD			
NAILS: - SIZE 6d - 67 REQD - 0.90 LBS			
SIZE 10d - 42 REQD - 0.67 LBS			



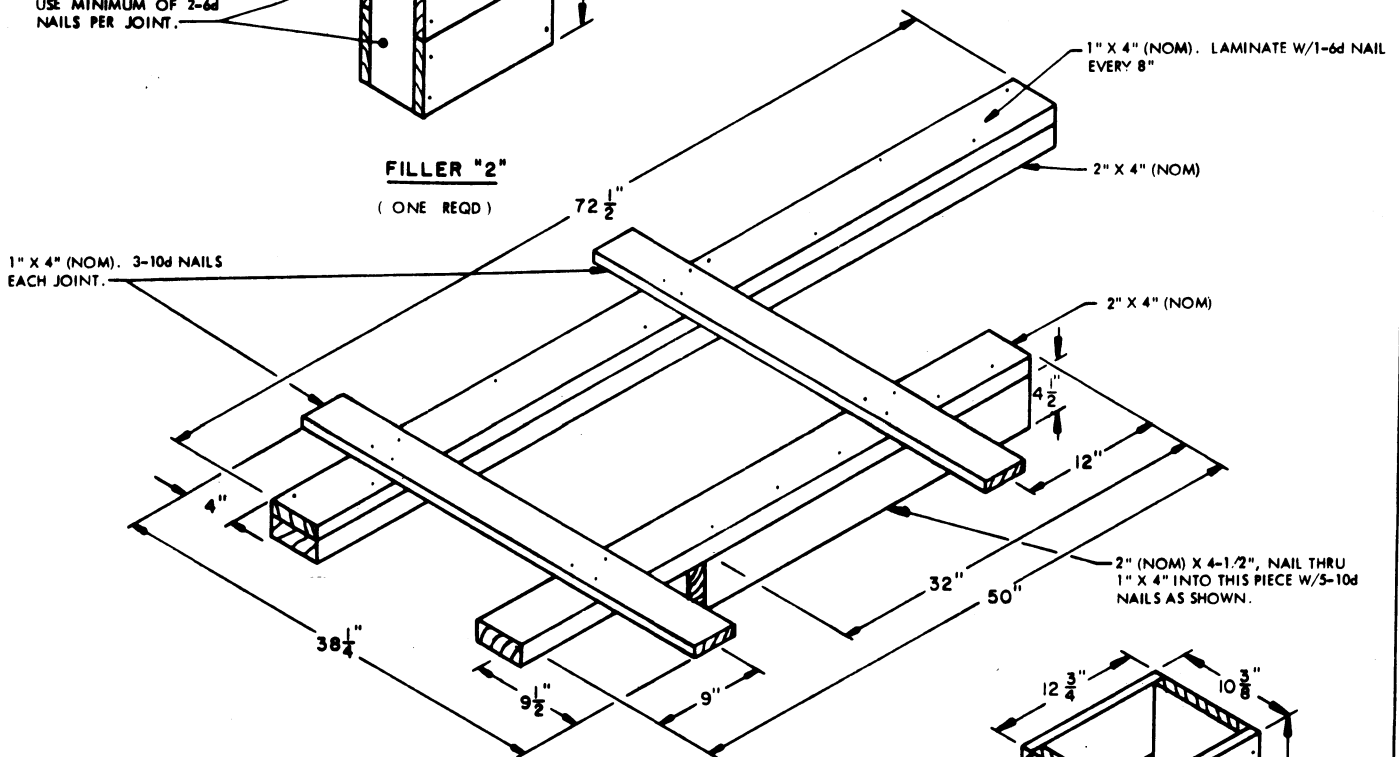
FILLER #1 (ONE REQD)



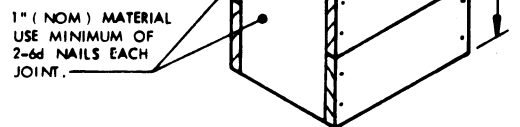
FILLER #3 (ONE REQD)



FILLER #2
(ONE REQD)



FILLER #4 (ONE REQD)



FILLER #5
(ONE REQD)