STORAGE IN APPROVED MAGAZINES OF GAU-8/A 30MM AMMUNITION PACKAGED IN AUTOMATIC LOADING SYSTEM (ALS) CNU-309/E AND/OR CNU-332/E CONTAINERS

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■THESE STORAGE PROCEDURES ARE ALSO APPLICABLE FOR STORAGE OF THE CNU-309A/E AND CNU 332A/E CONTAINERS.

THIS DRAWING, INCLUDING REVISION 1, SUPERSEDES DRAWING 19-48-7060-SP1-3-4-14-22M3, DATED JULY 1979.

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		7		William F Errist US ARMY DEFENSE AMMUNITION CENTER AND SCHOOL			
		<u>/</u>		U.S.	ARMY	AMC D	RAWING
				MAY 1989			
_				CLASS	DIVISION	DRAWING	FILE
				19	48	7060	SPI-3-4- I4-22 M3

DO NOT SCALE

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- THE STORAGE PROCEDURES SPECIFIED WITHIN THIS DOCUMENT ARE APPLICABLE TO STORAGE OF GAU-8/A 30MM AMMUNITION IN THE AUTOMATIC LOADING SYSTEM (ALS) CNU-309/E CONTAINER. THE SHIPPING AND STORAGE CONFIGURATION FOR THE CONTAINERS CONSISTS OF TWO CONTAINERS UNTITIZED INTO ONE TWIN-PACK UNIT, SUBSEQUENT REFERENCE TO TWIN-PACK UNIT HEREIN MEANS TWO CNU-309/E CONTAINERS WITH 30MM AMMUNITION UNITIZED TOGETHER.
- C. DETAILS OF THE TWIN-PACK UNIT:

TWIN-PACK UNIT DIMENSIONS---53" LONG X 28-3/4" WIDE X 45-1/4" HIGH. TWIN-PACK UNIT WEIGHT-----2,350 POUNDS MAXIMUM (APPROX).

- D. THE STORAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS TYPES AND SIZES OF MAGAZINES. THE STORAGE PROCEDURES DEPICTED FOR THE SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE TWIN-PACK UNITS IN OTHER TYPES OF APPROVED MAGAZINES. MINOR ADJUSTMENTS MAY BE MADE TO FACILITATE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED.
- CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED. STORAGE OF SOME SPECIFIC TYPES OF 30MM AMMUNITION MUST ALSO COMPLY WITH CURRENT DIRECTIVE AND REGULATORY REQUIREMENTS IN ADDITION TO THOSE SPECIFIED IN THIS DRAWING.
- STORED TWIN-PACK UNITS MUST NOT CONTACT THE WALLS OF A MAGAZINE. T PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, UNITS MAY BE ELIMI-NATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- G. AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, VARIATIONS IN TWIN-FACK UNIT DIMENSIONS, AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT.
- THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED BY LOCAL STANDARDS WILL NOT BE EXCEEDED.
- IF AVAILABLE MHE PERMITS, ADDITIONAL TWIN-PACK UNITS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- TWIN-PACK UNITS MUST NOT BE STACKED MORE THAN THREE (3) CAUTION: 1 UNITS HIGH.
- OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER TWIN-PACK UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, UNLESS TWO UPPER UNITS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TIME CARRIAGE WILL IN MOST INSTANCES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT TRUCK OF ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO UNITS AS ONE LIFT.
- STACK-STABILIZING DUNNAGE IN THE FORM OF "SHIMS" PROBABLY WILL BE REQUIRED TO ACHIEVE SOUND AND ACCEPTABLE STABLE STACKS. SHIM MATERIAL OF VARYING THICKNESSES WILL BE USED AS REQUIRED TO GAIN LEVEL OR NEARLY LEVEL STACKS AND SOLID BEARING WITHIN A STACK FROM THE FLOOR OF A MAGAZINE TO THE TOP OF THE STACK.
- O. THE USE OF "FLOOR DUNNAGE" UNDER CONTAINERS IS OPTIONAL, ALTHOUGH THE USE OF THIS TYPE OF DUNNAGE IS DELINEATED WITHIN THIS STORAGE PROCEDURE DRAWING. THE PURPOSE OF FLOOR DUNNAGE IS TO HELP KEEP THE CONTAINERS DRY, THUS AIDING IN PREVENTING DETERIORATION DUE TO OXIDATION (RUSTING). THEREFORE, FLOOR DUNNAGE SHOULD BE USED WHEN STORING IN A MAGAZINE THAT IS KNOWN TO HAVE A "DAMP" FLOOR, ALSO IN LIEU OF USING ONE-INCH THICK FLOOR DUNNAGE AS SPECIFIED, THE USE OF THICKER FLOOR DUNNAGE MAY BE REQUIRED, AND SHOULD BE USED, TO ACHIEVE THE DESIRED OBJECTIVE.
- DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY
- Q. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- STORAGE OF MULTIPLE LOTS IN A MAGAZINE WILL REQUIRE CAREFUL PREPLANNING SO AS TO INSURE MHE ACCESSIBILITY TO ANY LOT IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE APPLICABLE "SPECIAL NOTES" SECTIONS OF THE MULTIPLE-LOT STORAGE PROCEDURES TYPICALLY SHOWN ON PAGES 20 THRU 26.

(CONTINUED AT RIGHT)

(GENERAL NOTES CONTINUED)

- ALTHOUGH SPECIFIC PROCEDURES ARE INCLUDED IN THIS DRAWING FOR STORING MULTIPLE LOTS WITHIN ONE STRUCTURE, THE BASIC STORAGE PATTERNS AS SHOWN ON PAGES 4 THRU IP CAN ALSO BE ADAPTED FOR THE STORING OF MORE THAN ONE LOT. LOTS WHEN STORED IN ACCORDANCE WITH A BASIC STORAGE PATTERN MAY BE STORED WITH ONE OR MORE ROWS USED FOR EACH LOT. A SPACE OF APPROXIMATELY .!" WILL HAVE TO BE LEFT BETWEEN ADJACENT ROWS CONTAINING DIFFRENT LOTS. IN BASIC STORAGE PATTERNS WHERE THE WIDTH OF A ROW IS STABLISHED BY THE 53" UNIT-DIMENSION, EACH ROW MAY BE A DIFFERENT LOT AND BE READILY REMOVABLE. IN BASIC STORAGE PATTERNS WHERE THE WIDTH OF A ROW IS STABLISHED BY THE 28"-3/4" UNIT-DIMENSION, A LOT MUST CONSIST OF TWO OR MORE ROWS TO PROVIDE ADEQUATE SPACE TO ACCOMMODATE THE WIDTH OF A FORKLIFT TRUCK FOR STORING OR REMOVING THE LOT. HOWEVER, WHEN THE SIZE OF A LOT REQUIRES THE SPACE OF ONLY ONE ROW, IT IS PERMISSIBLE TO STORE THAT LOT WITH THE 53" UNIT-DIMENSION ESTABLISHING THE WIDTH OF THAT ROW, PROVIDING THE STORAGE PRINCIPLES SECIFIED ARE FOLLOWED AS CLOSELY AS POSSIBLE. THE 1" SPACE BETWEEN LOTS, AS STATED ABOVE, WILL NOT ADDITIONAL REQUIREMENTS AND GUIDANCE, SEE THE SPECIAL NOTES FOR MULTIPLE-LOT STORAGE ON PAGE 20 THRU 26.
- ANY "LIGHT" TWIN-PACK UNIT THAT DOES NOT CONTAIN A FULL QUANTITY OF 30MM AMMUNITION WILL NOT BE BURIED IN STORAGE. IT MUST BE POSITIONED ADJACENT TO AN AISLE, PREFERABLY IN FRONT OF THE LOT.
- TWIN-PACK UNITS PRESENTLY STORED IN ACCORDANCE WITH PRIOR APPROVED METHODS NEED NOT BE RE-STORED SOLELY TO CONFORM TO THE PROCEDURES SPECIFIED IN THIS DOCUMENT.
- V. PLACEMENT OF ONE-HIGH TWIN-PACK UNITS IN "C" STACKS IN IGLOO, ARCH TYPE (IGLOO), STRADLEY AND OVAL ARCH MAGAZINES MAY NOT BE POSSIBLE UNLESS SUITABLE HAND TRUCKS (PALLET JACKS) ARE AVAILABLE OR UNLESS PALLETS OR SOME FORM OF FLOOR DUNNAGE IS USED TO ALLOW REGULAR HAND TRUCKS TO HANDLE THE TWIN-PACK UNITS FROM THE SIDE WITHOUT USING THE UNIT FORK TINE POCKETS.

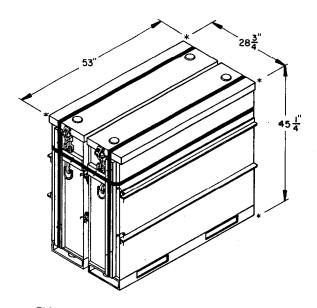
REVISIONS

REVISION NO. 1, DATED MAY 1989, CONSISTS OF:

- 1. CHANGING FROM U.S. ARMY DARCOM DRAWING TO U.S. ARMY AMC DRAWING.
- 2. INCLUDING THE CNU 332/E CONTAINERS IN THE DRAWING TITLE.
- 3. ADDING NOTES REGARDING THE INTERMEDIATE DUNNAGE REQUIRED WHEN STORING CNU 309A/E AND CNU 332/E CONTAINERS, AND NOTING TWIN-PACK UNITS THAT MAY NEED TO BE OMITTED FROM CERTAIN STACKING PATTERNS WHEN USING THE INTERMEDIATE DUNNAGE.

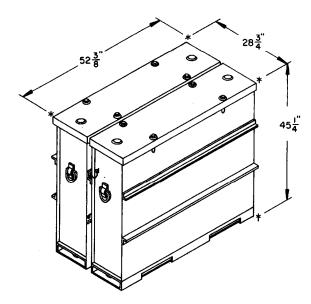
MATERIAL SPECIFICATIONS

LUMBER -----: SEE TM 743-200-1, DUNNAGE LUMBER, FED SPEC MM-L-751.



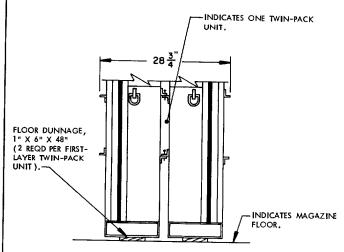
TWIN PACK UNIT (CNU-309/E CONTAINER)

NUMBER OF CONTAINERS TWO (2) GROSS WEIGHT		
5.1. CODIC 1221	GROSS WEIGHT	- 2.350 TRS (APPROX)
		- SYLY COBIC FEET



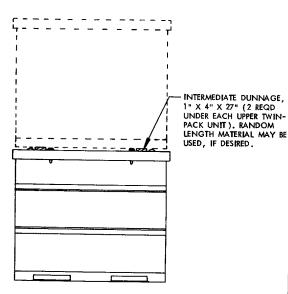
TWIN-PACK UNIT (CNU-332A/E CONTAINER)

NUMBER OF CONTAINERS	TWO (2)
GROSS WEIGHT	2,350 LBS (APPROX)
CUBE	39.4 CUBIC FEET



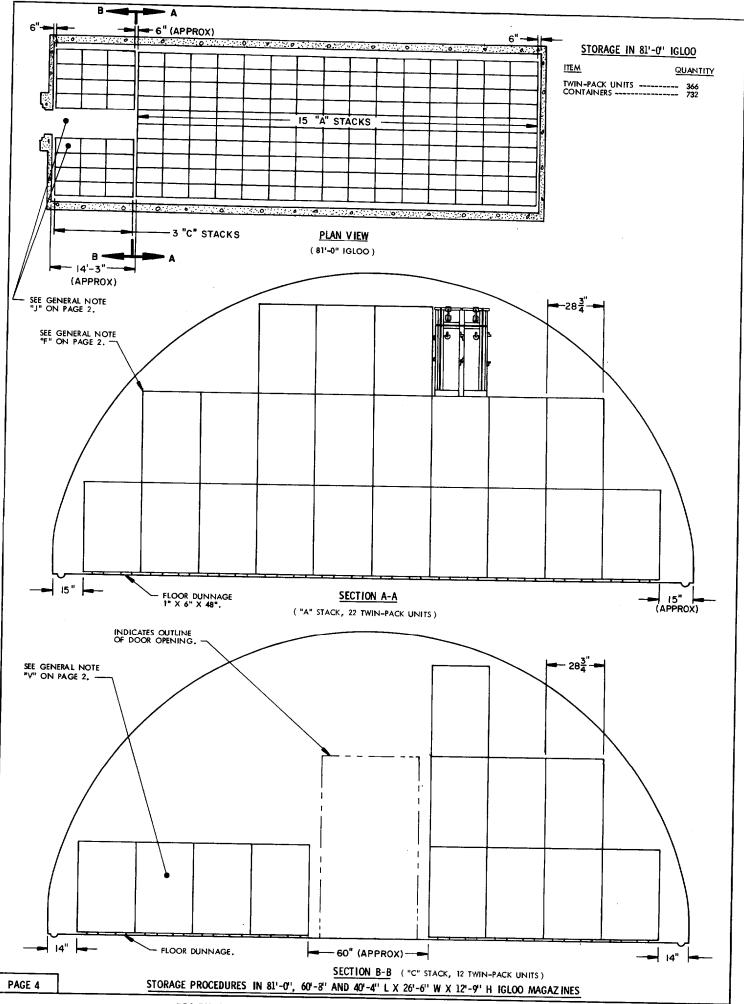
FLOOR DUNNAGE LOCATION

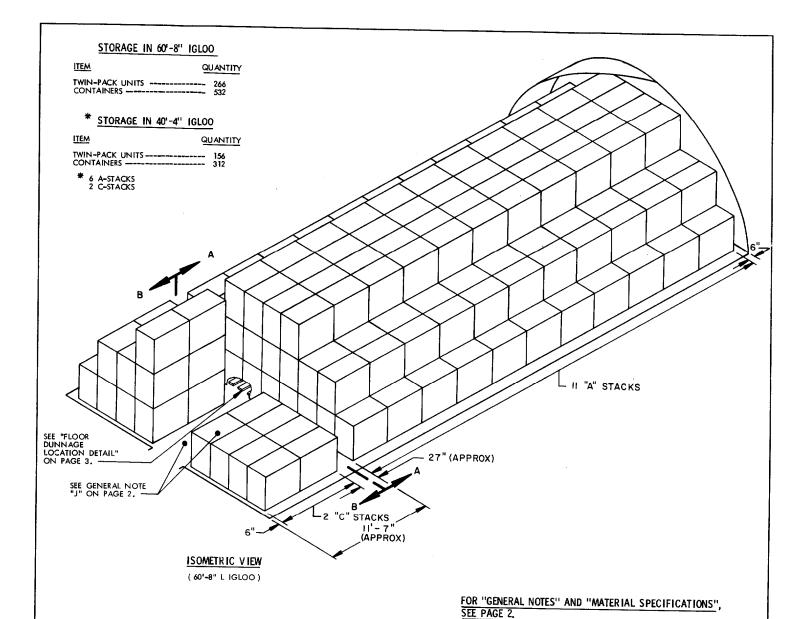
ISOMETRIC VIEWS WITHIN THIS DRAWING DO NOT DEPICT ALL FLOOR DUNNAGE THAT IS REQUIRED WHEN FLOOR DUNNAGE IS USED. FLOOR DUNNAGE IS SHOWN AT SOME LOCATION TO PROVIDE POSITIONING GUIDANCE.



INTERMEDIATE DUNNAGE LOCATION

THIS VIEW IS APPLICABLE ONLY FOR THE CNU-309A/E AND CNU-332/E CONTAINERS. INTERMEDIATE DUNNAGE MUST BE PLACED BETWEEN THE STACKING DOMES AND THE COVER BOLTS, AS APPLICABLE, AT EACH END OF A TWIN-PACK UNIT WHEN UNITS ARE BEING STACKED IN STORAGE. THIS DUNNAGE WILL PREVENT THE BASE OF AN UPPER TWIN-PACK UNIT FROM RESTING ON THE COVER BOLTS OF A LOWER TWIN-PACK UNIT.

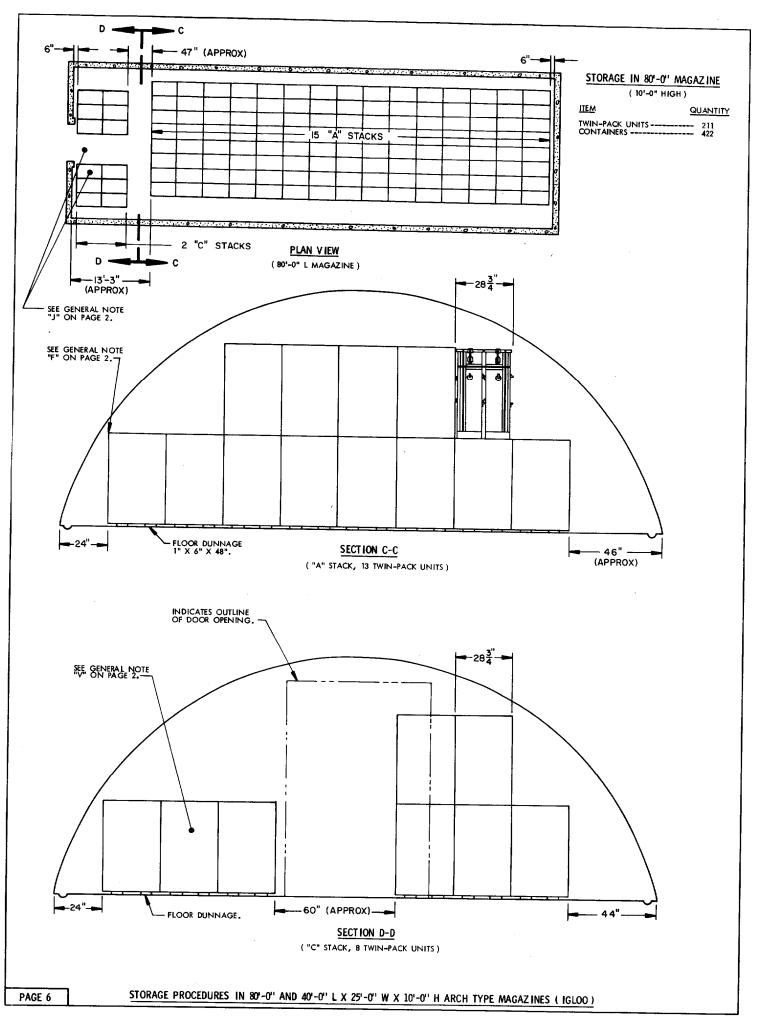


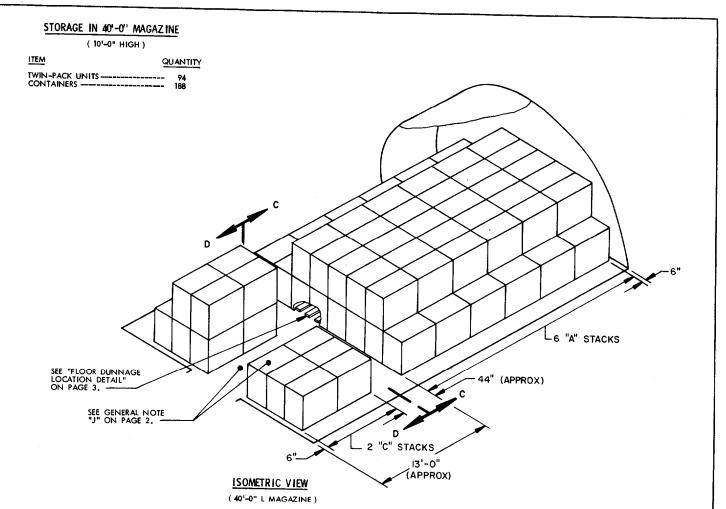


BILL O	F MATERIAL (PER ST	ACK)**	
	1" X 6" DUNNAGE LUMBER		
TYPE STACK	LINEAR FEET	BOARD FEET	
A	80.00	40.00	
С	64.00	32,00	

** SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 54 LINEAR FEET (18 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH TYPE "A" STACK AND 18 LINEAR FEET (6 BOARD FEET) WILL BE REQUIRED FOR EACH TYPE "C" STACK.





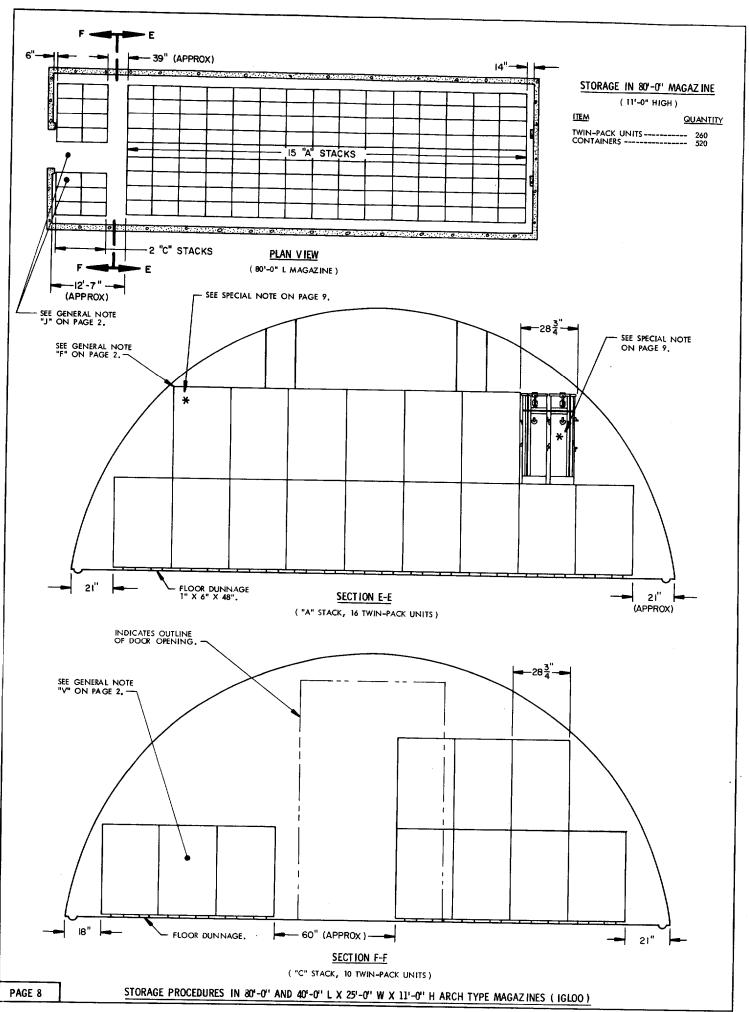
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER STACK)*				
	1" X 6" DUNN	AGE LUMBER		
TYPE STACK	LINEAR FEET	BOARD FEET		
Α	64.00	32.00		
С	48.00	24.00		

^{*} SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

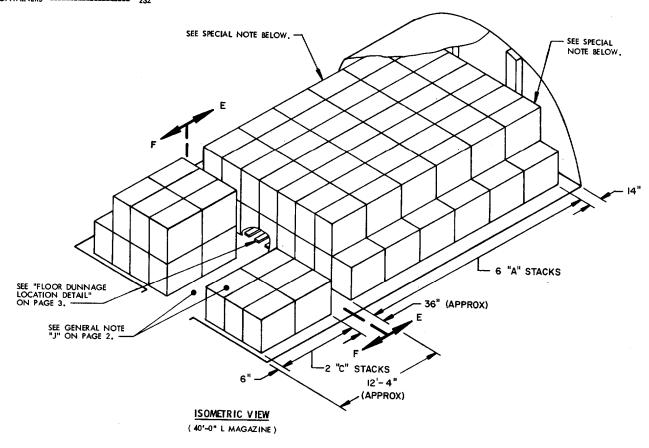
IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 22.5 LINEAR FEET (7.5 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH TYPE "A" STACK AND 9 LINEAR FEET (3 BOARD FEET) WILL BE REQUIRED FOR EACH TYPE "C" STACK.

STORAGE PROCEDURES IN 80'-0" AND 40'-0" L X 25'-0" W X 10'-0" H ARCH TYPE MAGAZINES (IGLOO)



STORAGE IN 40'-0" MAGAZINE

(11'-0" HIGH)



FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

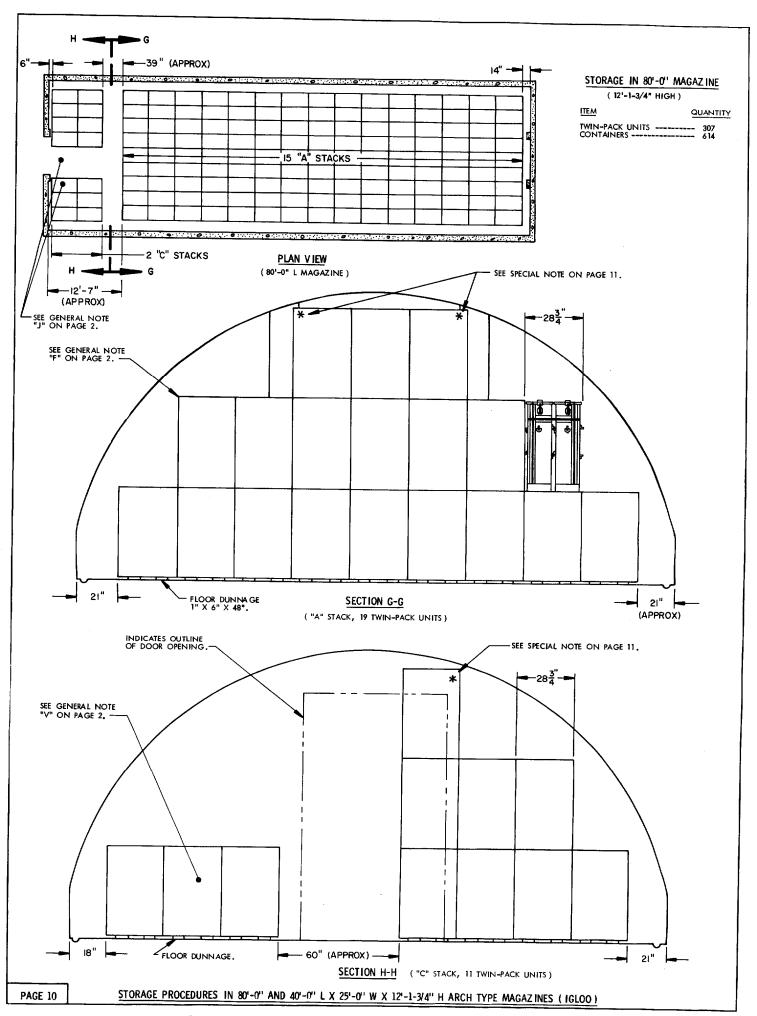
SPECIAL NOTE

WHEN STORING THE CNU-309A/E AND/OR CNU-332/E CONTAINERS, 1" X 4" X 27" LONG INTERMEDIATE DUNNAGE MUST BE POSITIONED BETWEEN THE LAYERS. SEE THE "INTERMEDIATE DUNNAGE LOCATION" DETAIL ON PAGE 3 FOR GUIDANCE, THE USE OF THE INTERMEDIATE DUNNAGE WILL INCREASE THE STACK HEIGHT AND MAY MAKE IT NECESSARY TO OMIT FROM THE DEPICTED STACKING PATTERN THE UNITS MARKED IN THE "SECTION E-E" VIEW WITH THE ASTERISKS. THIS WILL LEAVE FOURTEEN (14) TWIN-PACK UNITS PER TYPE "A" STACK AND WILL REDUCE THE TOTAL GUANTITY PER 40" MAGAZINE TO 104 UNITS AND THE TOTAL QUANTITY PER 40" MAGAZINE TO 104 UNITS AND THE TOTAL QUANTITY PER 80' MAGAZINE TO 230 UNITS.

BILL OF MATERIAL (PER STACK) *				
	1" X 6" DUNNAC	SE LUMBER		
TYPE STACK	LINEAR FEET	BOARD FEET		
A	72.00	36,00		
С	56.00	28.00		

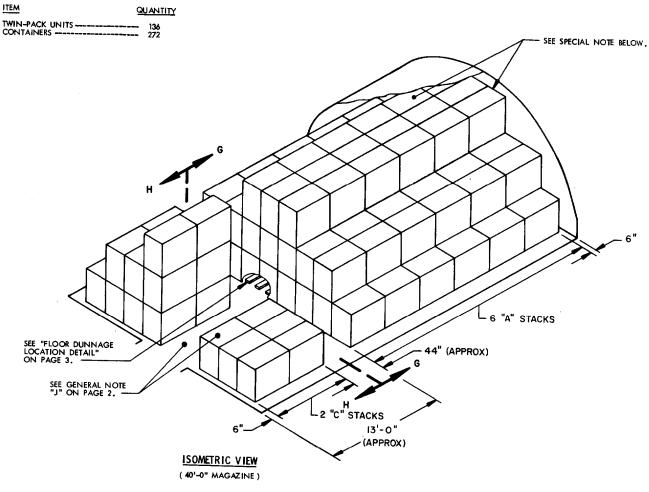
* SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 31.5 LINEAR FEET (10.5 BAORD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH TYPE "A" STACK AND 13.5 LINEAR FEET (4.5 BOARD FEET) WILL BE REQUIRED FOR EACH TYPE "C" STACK.



STORAGE IN 40'-0" MAGAZINE

(12'-1-3/4" HIGH)



FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

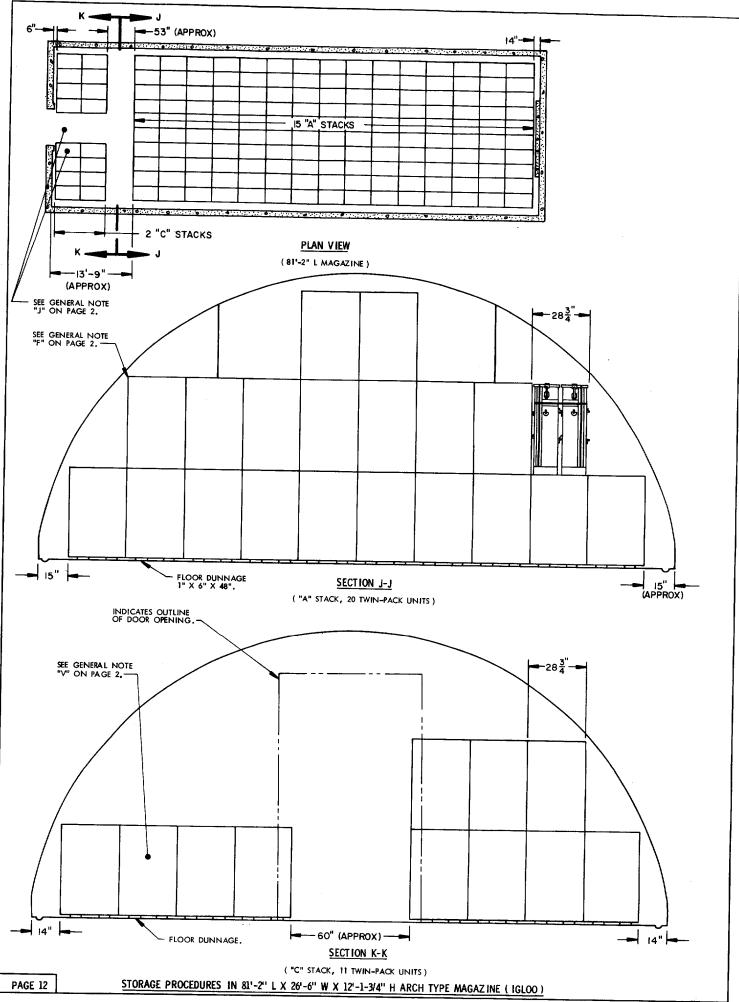
SPECIAL NOTE

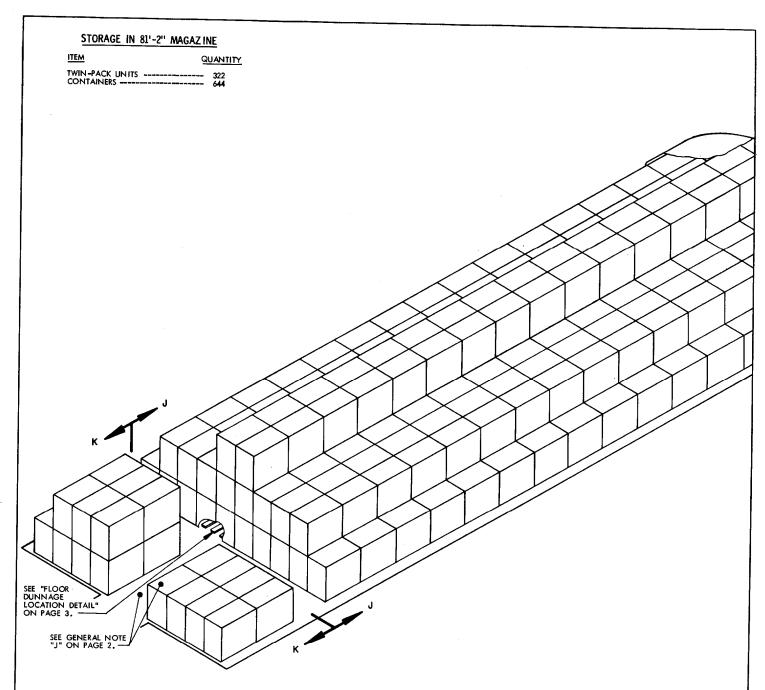
WHEN STORING THE CNU-309A/E AND/OR CNU-332/E CONTAINERS, 1" X 4" X 27" LONG INTERMEDIATE DUNNAGE MUST BE POSITIONED BETWEEN THE LAYERS, SEE THE "INTERMEDIATE DUNNAGE MUST BE POSITIONED BETWEEN THE LAYERS, SEE THE USE OF THE INTERMEDIATE DUNNAGE WILL INCREASE THE STACK HEIGHT AND MAY MAKE IT NECESSARY TO OMIT FROM THE DEPICTED STACKING PATTERNS THE UNITS MARKED IN THE "SECTION G-G" AND "SECTION H-H" VIEWS WITH THE ASTERISKS. THIS WILL LEAVE SEVENTEEN (17) TWIN-PACK UNITS PER TYPE "A" STACK AND TEN (10) TWIN-PACK UNITS PER TYPE "C" STACK, THIS WILL REDUCE THE TOTAL QUANTITY PER 40' MAGAZINE TO 122 UNITS AND THE TOTAL QUANTITY PER 80' MAGAZINE TO 275 UNITS.

BILL OF MATERIAL (PER STACK) *					
1" X 6" DUNNAGE LUMBER					
TYPE STACK	LINEAR FEET	BOARD FEET			
A	72.00	36.00			
С	56.00	28.00			

* SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 22.5 LINEAR FEET (7.5 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH TYPE "A" STACK AND 18 LINEAR FEET (6 BOARD FEET) WILL BE REQUIRED FOR EACH TYPE "C" STACK.





ISOMETRIC VIEW

(81'-2" L MAGAZINE)

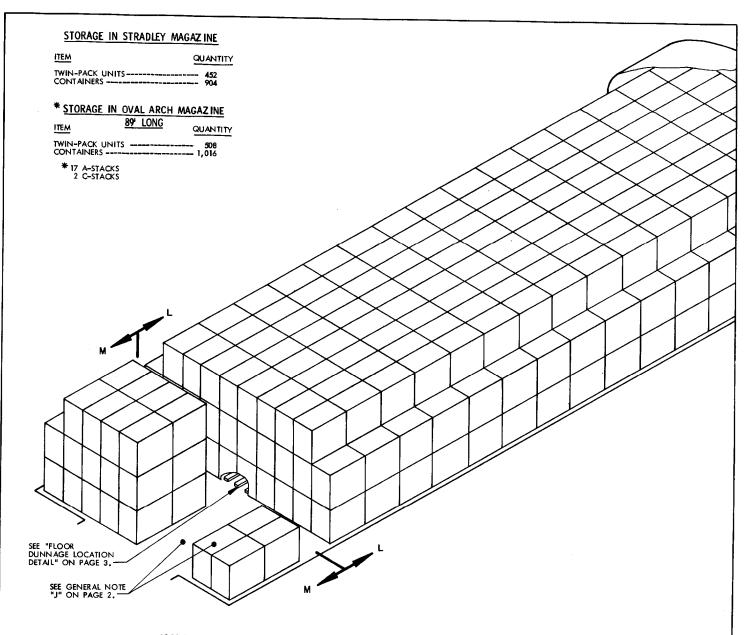
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL (OF MATERIAL (PER ST	ACK)*	
	1" X 6" DUNNAGE LUMBER		
TYPE STACK	LINEAR FEET	BOARD FEET	
A	80.00	40.00	
С	64.00	32.00	

* SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 22.5 LINEAR FEET (7.5 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH TYPE "A" STACK AND 13.5 LINEAR FEET (4.5 BOARD FEET) WILL BE REQUIRED FOR EACH TYPE "C" STACK.

STORAGE PROCEDURES IN 81'-2" L X 26'-6" W X 12'-1-3/4" H ARCH TYPE MAGAZINE (IGLOO)



ISOMETRIC VIEW

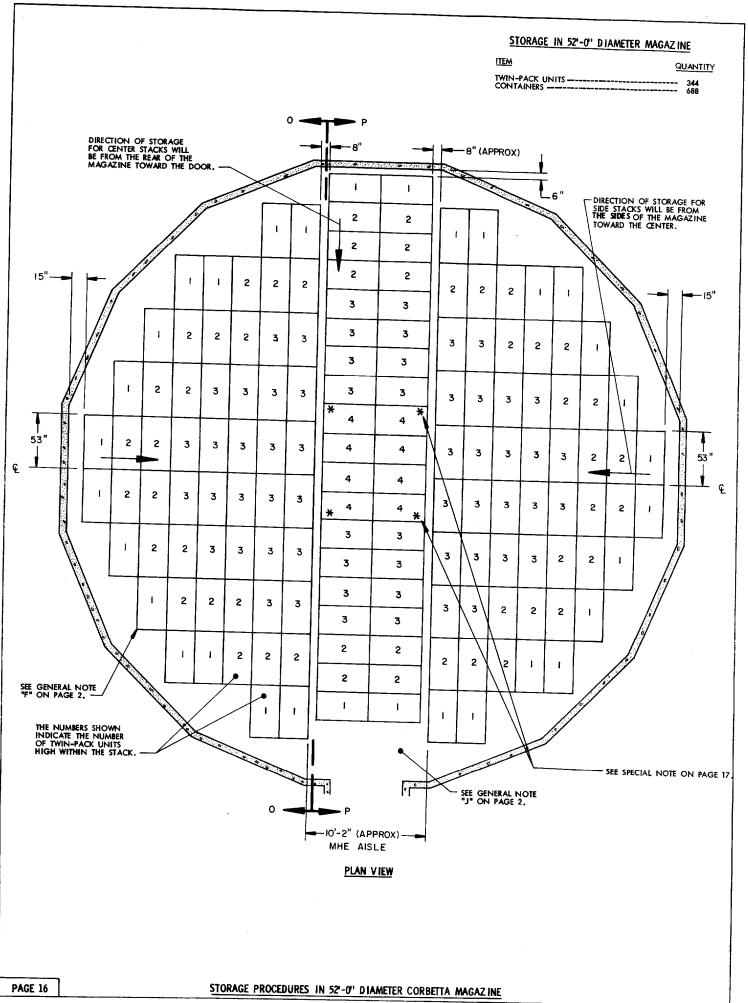
(STRADLEY MAGAZINE)

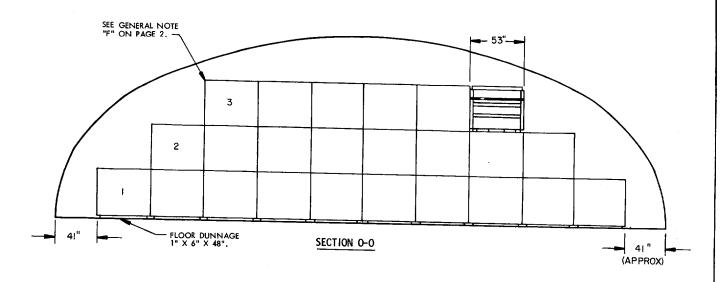
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

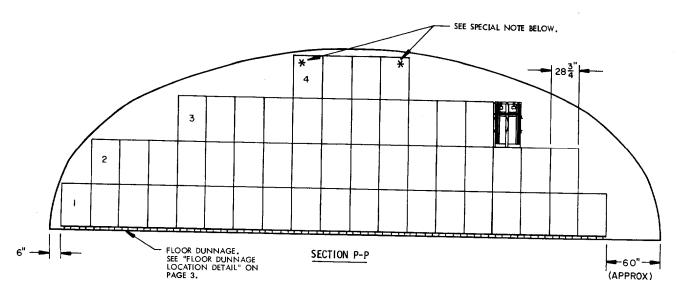
BILL OF MATERIAL (PER STACK) * *			
	1" X 6" DUNNAGE LUMBER		
TYPE STACK	LINEAR FEET	BO ARD FEET	
Α	80.00	40.00	
С	56.00	28.00	

* * SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 81 LINEAR FEET (27 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH TYPE "A" STACK AND 40.5 LINEAR FEET (13.5 BOARD FEET) WILL BE REQUIRED FOR EACH TYPE "C" STACK.







FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

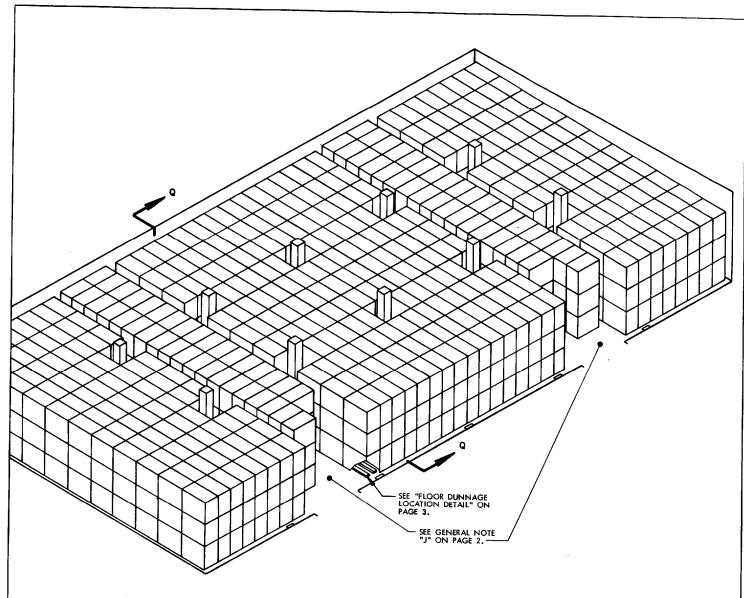
BILL OF MATERIAL (PER FIRST LAYER TWIN-PACK UNIT) * LUMBER LINEAR FEET BOARD FEET 1" X 6" 8.00 4.00

IF CNU-309A/E AND/OR CNU-332/E CONTAINERS ARE BEING STORED, 4.5 LINEAR FEET (1.5 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH 2-HIGH STACK OF TWIN-PACK UNITS, 9 LINEAR FEET (3 BOARD FEET) WILL BE REQUIRED FOR EACH 3-HIGH STACK AND 13.5 LINEAR FEET (4.5 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REQUIRED FOR EACH 4-HIGH STACK.

SPECIAL NOTE

WHEN STORING THE CNU-309A/E AND/OR CNU-332/E CONTAINERS, 1" X 4" X 27" LONG INTERMEDIATE DUNNAGE MUST BE POSITIONED BETWEEN LAYERS. SEE THE "INTERMEDIATE DUNNAGE LOCATION" DETAIL ON PAGE 3 FOR GUIDANCE. THE USE OF THE INTERMEDIATE DUNNAGE WILL INCREASE THE STACK HEIGHT AND MAY MAKE IT NECESSARY TO OMIT FROM THE DEPICTED STACKLING PATTERN THE UNITS MARKED IN THE "SECTION P-P" VIEW AND THE "PLAN VIEW" ON PAGE 16 WITH THE ASTERISKS. THIS WILL REDUCE THE TOTAL QUANTITY PER MAGAZINE TO 340 UNITS.

^{*} SEE GENERAL NOTES "N" AND "O" ON PAGE 2.



ISOMETRIC VIEW

(100'-8" L X 50'-0" W MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER TWIN-PACK UNIT)*				
LUMBER	LINEAR FEET	BOARD FEET		
1" X 6"	8.00	4.00		

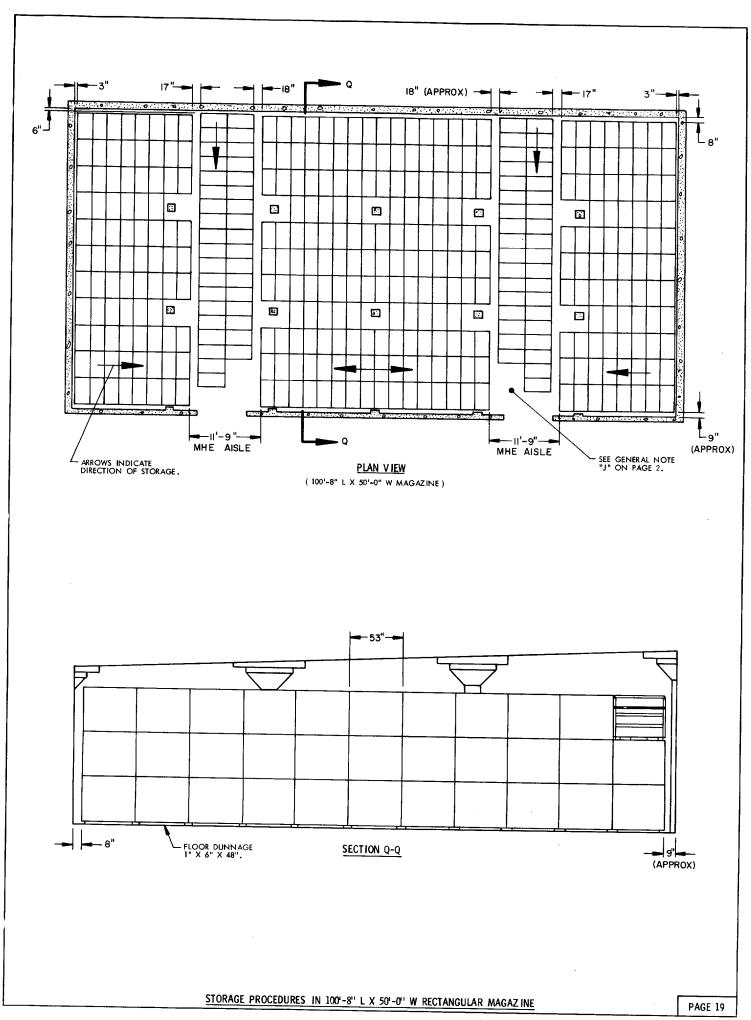
^{*} SEE GENERAL NOTES "N" AND "O" ON PAGE 2.

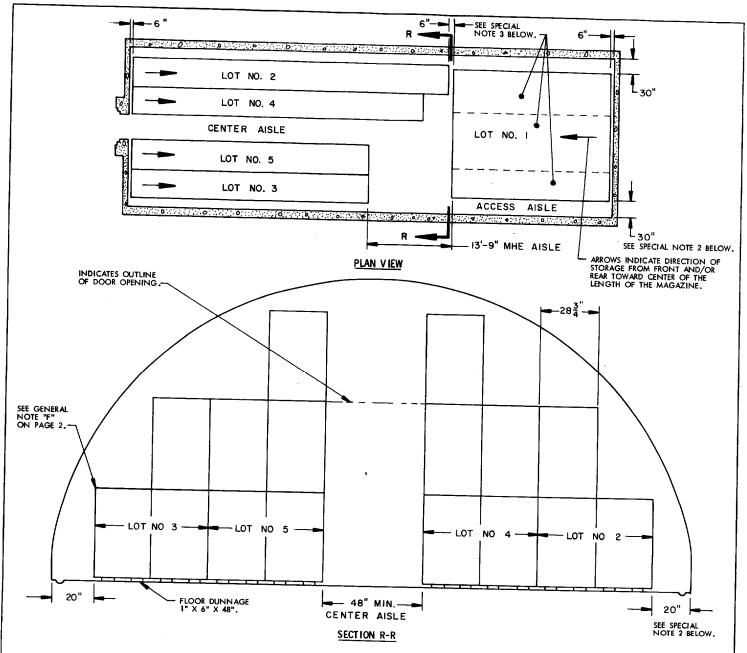
IF CNU-399A/E AND/OR CNU-332/E CONTAINERS NRE BEING STORED, 9 LINEAR FEET (3 BOARD FEET) OF 1" X 4" MATERIAL WILL BE REF UIRED FOR EACH 3-HIGH STACK OF TWIN-PACK UNITS.

STORAGE IN 100'-8" L X 50'-0" W MAGAZINE

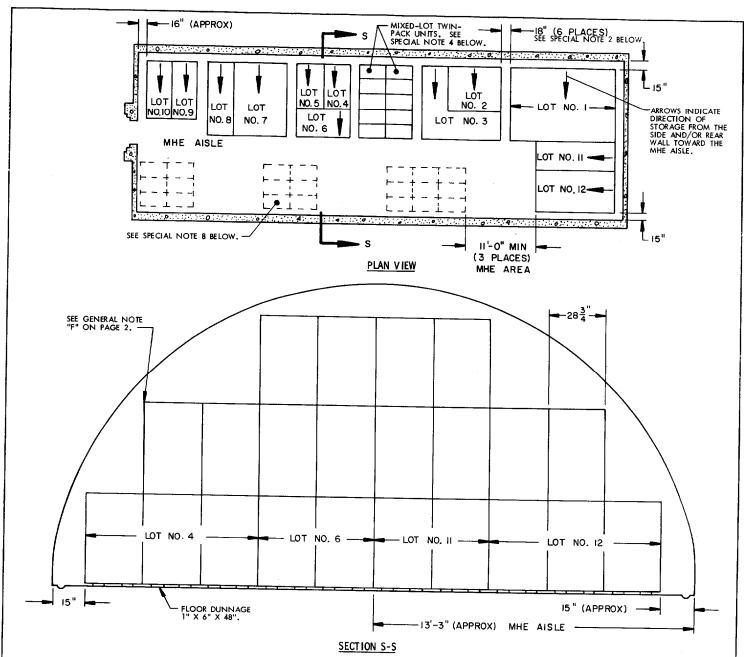
ITEM	QUANTITY
TWIN-PACK UNITS CONTAINERS	 1,212 2,424

STORAGE PROCEDURES IN 100'-8" L X 50'-0" W RECTANGULAR MAGAZINE





- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO RELATIVELY LARGE LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE MUST BE PROVIDED AT ONE SIDE OR END OF EACH LOT.
- 3. GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. A CENTER ASSE WILL NOT BE REQUIRED IN THE REAR AREA AS LONG AS EACH LOT IS ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE.
 A SINGLE-LOT OF TWIN-PACK UNITS IS CONSIDERED "ACCESSIBLE" IF NOT MORE
 THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO
 GAIN ACCESS TO THAT LOT. A "LIFT" MAY CONSIST OF ONE (1) OR MORE
 TWIN-PACK UNITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE
 HANDLING IS NOT JEOPARDIZED.
- 5. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- 6. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 7. AISLE DIMENSIONS MAY BE ADJUSTED. SEE GENERAL NOTE "G" ON PAGE 2.
- 8. FOR ADDITIONAL GUIDANCE, SEE GENERAL NOTES "R", "S" AND "T" ON PAGE 2.



- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH "BURIED" LOT.
- GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE ASILE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES
- A MIXED-LOT TWIN-PACK UNIT WILL CONSIST OF TWO CONTAINERS, EACH CONTAINING A DIFFERENT LOT. HOWEVER, EACH LOT WITHIN THE TWIN-PACK UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. TWIN-PACK UNITS OF A SINGLE-LOT OR MIXED-LOT TWIN-PACK UNITS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT UNITS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE TWIN-PACK UNITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
- FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST I" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.

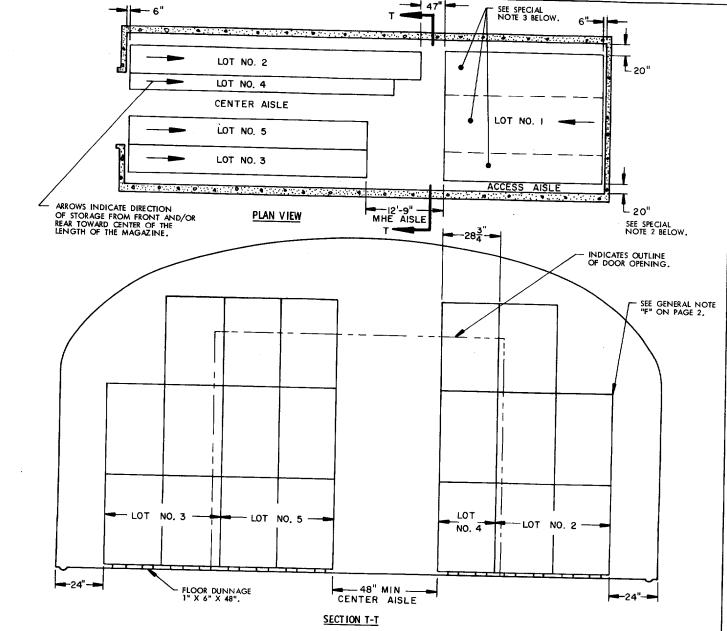
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- AREAS INCLOSED BY DOTTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED, THAT ARE FROM THE LOT OR LOTS WHICH ARE DIRECTLY OR ALMOST DIRECTLY ACROSS THE CENTER AISLE ON THE OTHER SIDE OF THE MAGAZINE. COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED. THE SIZE OF THE LOTS BEING STORED AND THE CRITERIA OF SPECIAL NOTE 5, RELATIVE TO "12 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF TWIN-PACK UNITS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY ONE OF THE ADDITIONAL STORAGE LOCATIONS. AN 11-FOOT MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL LOCATION" BY FORKLIFT TRUCK. THIS OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS COMMONLY USED IN STORAGE MAGAZINES. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORKLIFT TRUCKS, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BETWEEN STORAGE ON ONE SIDE OF A MAGAZINE AND AN "ADDITIONAL STORAGE LOCATION") IS TO BE AT LEAST 48 INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN 48 INCHES WILL ENHANCE FORKLIFT TRUCK MOVEMENT WITHIN A MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS IN STORAGE RESULTS.
- 9. AISLE DIMENSIONS MAY BE ADJUSTED. SEE GENERAL NOTE "G" ON PAGE 2.
- 10. FOR ADDITIONAL GUIDANCE, SEE GENERAL NOTES "R", "S" AND "T" ON PAGE 2.

TYPICAL MULTIPLE-LOT STORAGE IN IGLOO AND ARCH TYPE MAGAZINES

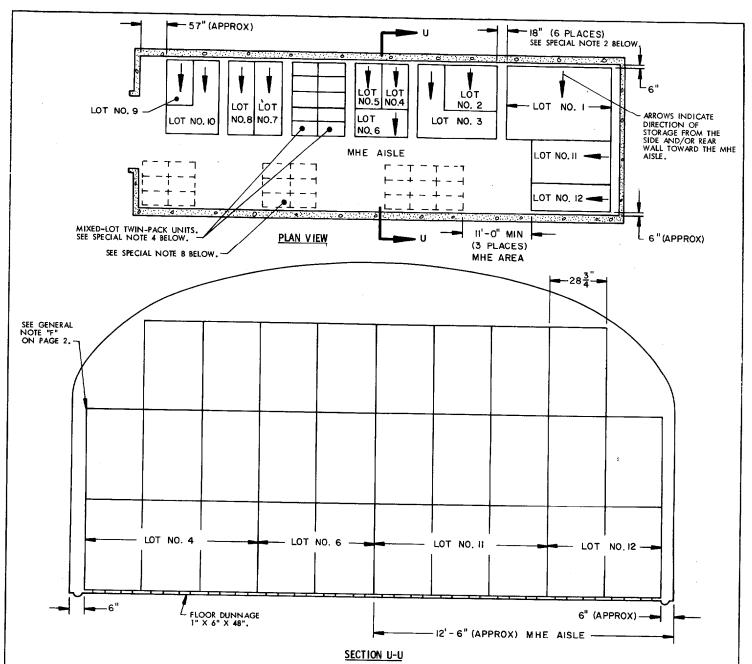
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- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO RELATIVELY LARGE LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE MUST BE PROVIDED AT ONE SIDE OR END OF EACH LOT.
- 3. GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. A CENTER AISLE WILL NOT BE REQUIRED IN THE REAR AREA AS LONG AS EACH LOT IS ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. A SINGLE-LOT OF TWIN-PACK UNITS IS CONSIDERED "ACCESSIBLE" IF NOT MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THAT LOT. A "LIFT" MAY CONSIST OF ONE (1) OR MORE TWIN-PACK UNITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
- 5. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- 6. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 7. AISLE DIMENSIONS MAY BE ADJUSTED. SEE GENERAL NOTE "G" ON PAGE 2.
- 8. FOR ADDITIONAL GUIDANCE, SEE GENERAL NOTES "R", "S" AND "T" ON PAGE 2.

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TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY AND OVAL ARCH TYPE MAGAZINES



- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH "BURKED" LOT.
- GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES
- A MIXED-LOT TWIN-PACK UNIT WILL CONSIST OF TWO CONTAINERS, EACH CONTAINING A DIFFERENT LOT, HOWEVER, EACH LOT WITHIN THE TWIN-PACK UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. TWIN-PACK UNITS OF A SINGLE-LOT OR MIXED-LOT TWIN-PACK UNITS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT UNITS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE TWIN-PACK UNITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
- FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.

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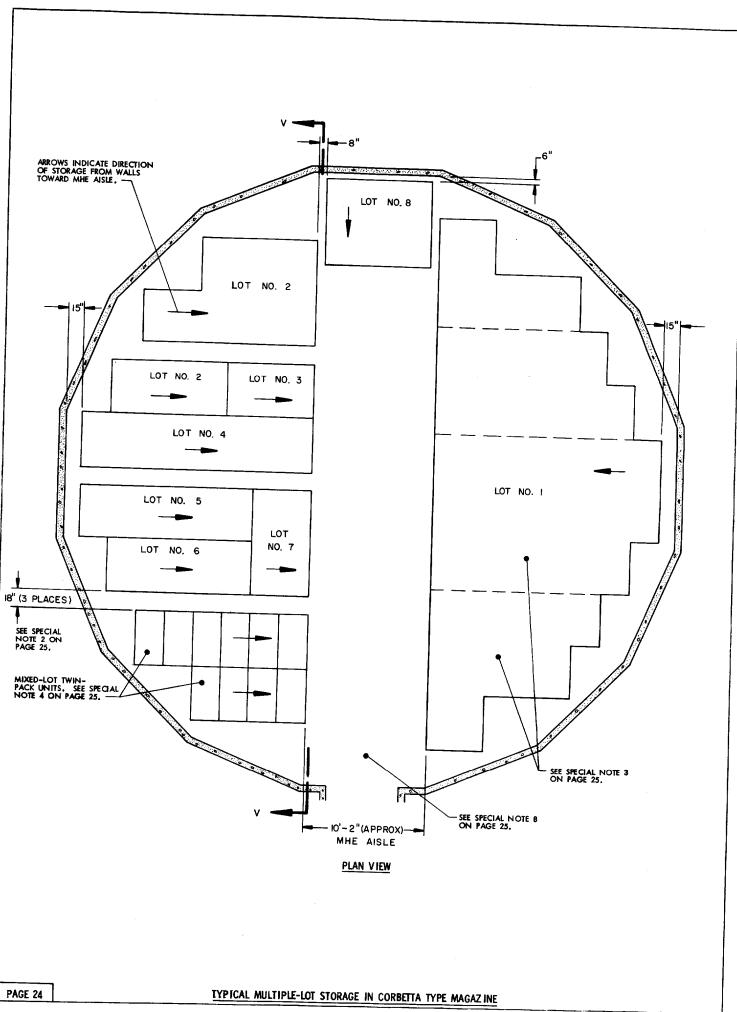
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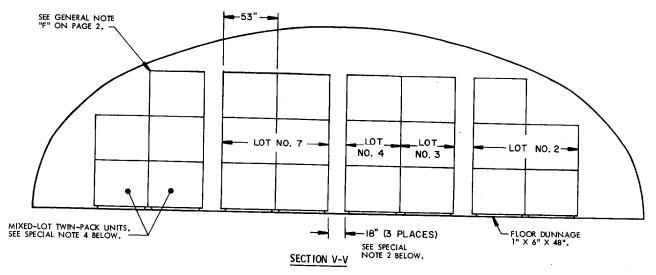
- WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
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 AREAS INCLOSED BY DOTTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED, THAT ARE FROM THE LOT OR LOTS WHICH ARE DIRECTLY OR ALMOST DIRECTLY ACROSS THE CENTER ASSLE ON THE OTHER SIDE OF THE MAGAZINE. COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED. THE SIZE OF THE LOTS BEING STORED AND THE CRITERIA OF SPECIAL NOTE 5, RELATIVE TO "12 LIFTS" WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF TWIN-PACK UNITS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY ONE OF THE ADDITIONAL STORAGE LOCATIONS, AN 11-FOOT MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL LOCATION" BY FORKLIFIT TRUCK. THIS OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS COMMONLY USED IN STORAGE MAGAZINES. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORKLIFT TRUCKS, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BETWEEN STORAGE ON ONE SIDE OF A MAGAZINE AND AN "ADDITIONAL STORAGE HOMES SMALLER IF AVAILABLE MHE PERMITS. AN "ADDITIONAL STORAGE LOCATION") IS TO BE AT LEAST 48 INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN 48 INCHES WILL ENHANCE FORKLIFT TRUCK MOVEMENT WITHIN A MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS IN STORAGE RESULTS.
- 9. AISLE DIMENSIONS MAY BE ADJUSTED. SEE GENERAL NOTE "G" ON PAGE 2.
- 10. FOR ADDITIONAL GUIDANCE, SEE GENERAL NOTES "R", "S" AND "T" ON PAGE 2.

TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY AND OVAL ARCH TYPE MAGAZINES

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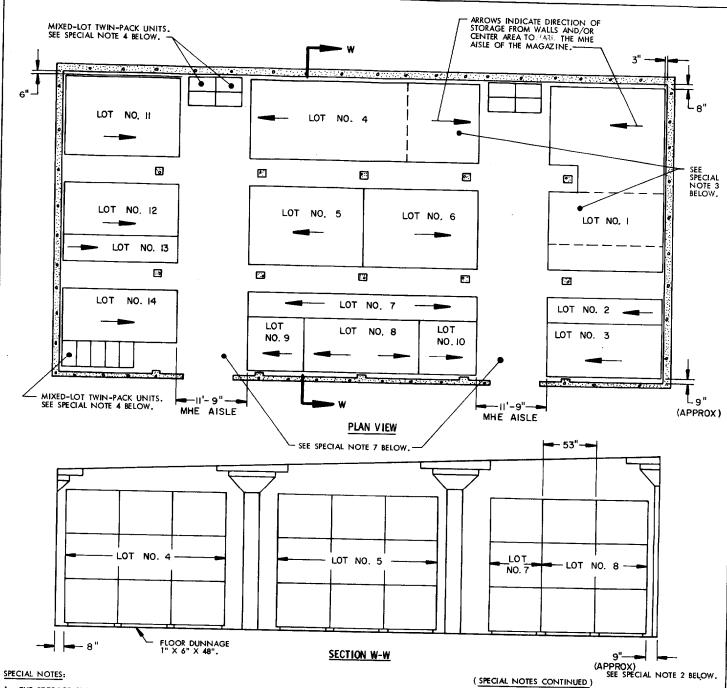




- THE STORAGE PLANS SHOWN ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH "BURIED" LOT.
- 3. GENERALLY, THE LARGEST LOT SHOULD BE STORED ON ONE SIDE OF THE MAGAZINE. HOWEVER, BOTH SIDES MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN ON THE LEFT SIDE, EACH ADDITIONAL LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. A MIXED-LOT TWIN-PACK UNIT WILL CONSIST OF TWO CONTAINERS, EACH CONTAINING A DIFFERENT LOT. HOWEVER, EACH LOT WITHIN THE TWIN-PACK UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- 5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE.

 TWIN-PACK UNITS OF A SINGLE-LOT OR MIXED-LOT TWIN-PACK UNITS ARE
 CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER
 LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR

 MIXED-LOT UNITS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE TWIN-PACK
 UNITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT
 JEOPARDIZED.
- 6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE WALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- 7. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- B. THE MHE AISLE MAY BE USED TO STORE ONE OR MORE STACKS OF ADDITIONAL LOTS OR ADDITIONAL ITEMS THAT ARE FROM A LOT ADJACENT TO THE MHE AISLE. THIS ADDITIONAL STORAGE IS TO BE ARRANGED IN A MANNER SIMILAR TO ARRANGEMENTS DEPICTED ON PAGES 21 AND 23 FOR THE "ADDITIONAL STORAGE LOCATIONS" (SHOWN BY DOTTED LINES). ADEQUATE SPACE FOR MHE OPERATION, AS DESCRIBED ON PAGES 21 AND 23, MUST BE MADE AVAILABLE FOR THE ADDITIONAL STORAGE. ALSO, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.
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 CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWENTY-FOUR (24) "LIFTS" OF
 ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT
 OR MIXED-LOT UNITS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE TWINPACK UNITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING
 IS NOT JEOFARDIZED.
- WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.

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- 7. THE MHE AISLE MAY BE USED TO STORE ONE OR MORE STACKS OF ADDITIONAL LOTS OR ADDITIONAL ITEMS THAT ARE FROM A LOT ADJACENT TO THE MHE AISLE. THIS ADDITIONAL STORAGE IS TO BE ARRANGED IN A MANNER SIMILAR TO ARRANGE-MENTS DEPICTED ON PAGES 21 AND 23 FOR THE "ADDITIONAL STORAGE LOCATIONS" (SHOWN BY DOTTED LINES), ADEQUATE SPACE FOR MHE OPERATIONS, AS DESCRIBED ON PAGES 21 AND 23, MUST BE MADE AVAILABLE FOR THE ADDITIONAL STORAGE. ALSO, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.
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TYPICAL MULTIPLE-LOT STORAGE IN RECTANGULAR MAGAZINE