

# STORAGE IN 60' & 80' IGLOO, 80' STRADLEY, AND 89' OVAL-ARCH MAGAZINES OF 105MM CHEMICAL COMPLETE ROUND, 12-BOX AND/OR 15-BOX SKIDDED UNIT AND/OR 20-BOX PALLET UNIT

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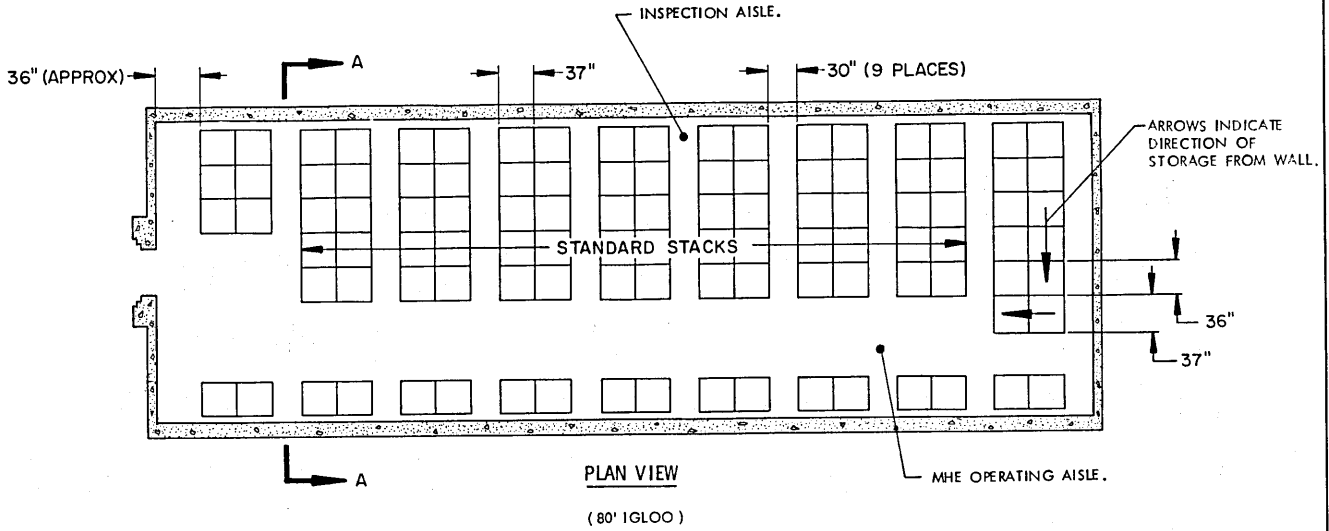
REVISIONS				DRAFTSMAN	PROJ ENG	RLH (C)
1	APR 82	NRF/WFE	<i>M. H. Benton</i>	<i>J. D. ...</i>	<i>MWD/WRF</i>	
			<i>John T. Byrd Jr.</i>		<i>W. J. ...</i>	
2	JUN 87	NRF/WFE	<i>G. Martin</i>			
			<i>William F. Ernst</i>			
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)		
				<i>M. H. Benton</i>		
				<i>John T. Byrd Jr.</i>		
				U. S. ARMY DARCOM DRAWING		
				APRIL 1982		
		CLASS	DIVISION	DRAWING	FILE	
		19	48	4514	CB 1-14-22 PA 1	

DO NOT SCALE

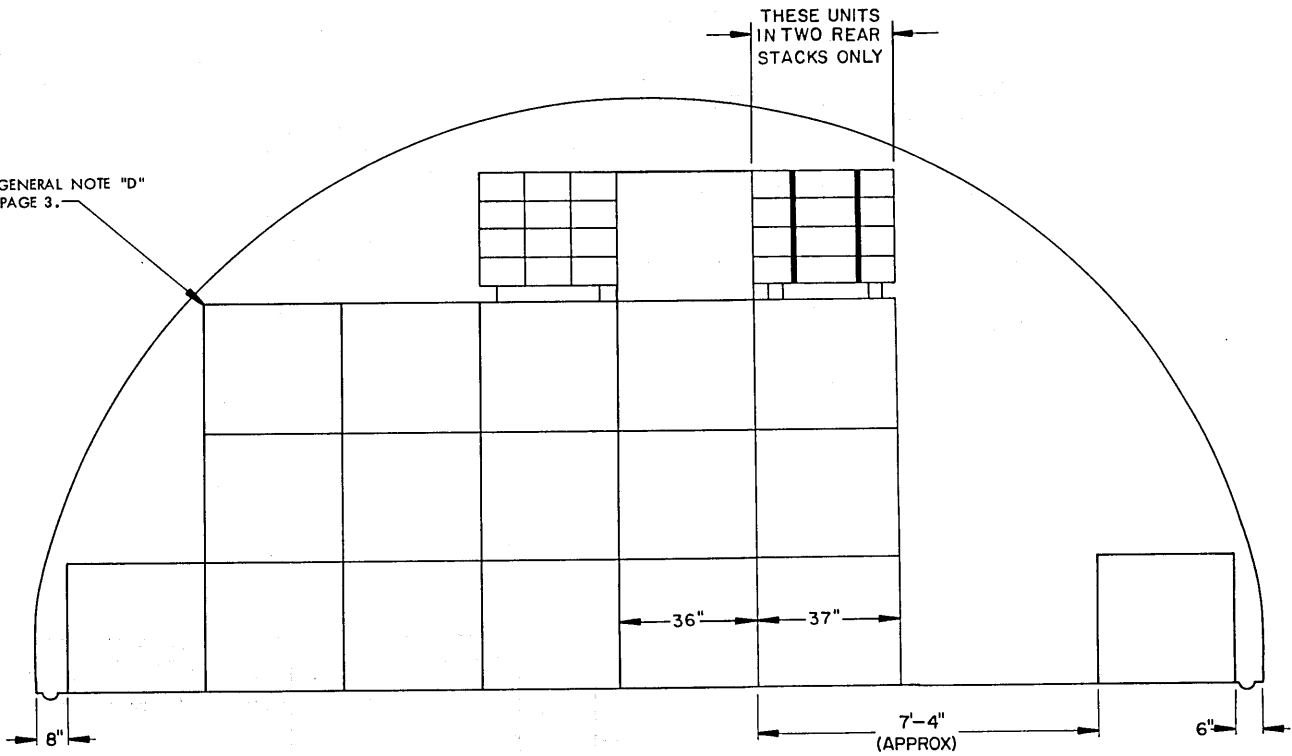
STORAGE AS SHOWN

80' IGLOO

ITEM	QUANTITY
SKIDDED UNITS	280



SEE GENERAL NOTE "D"  
ON PAGE 3.



SECTION A-A

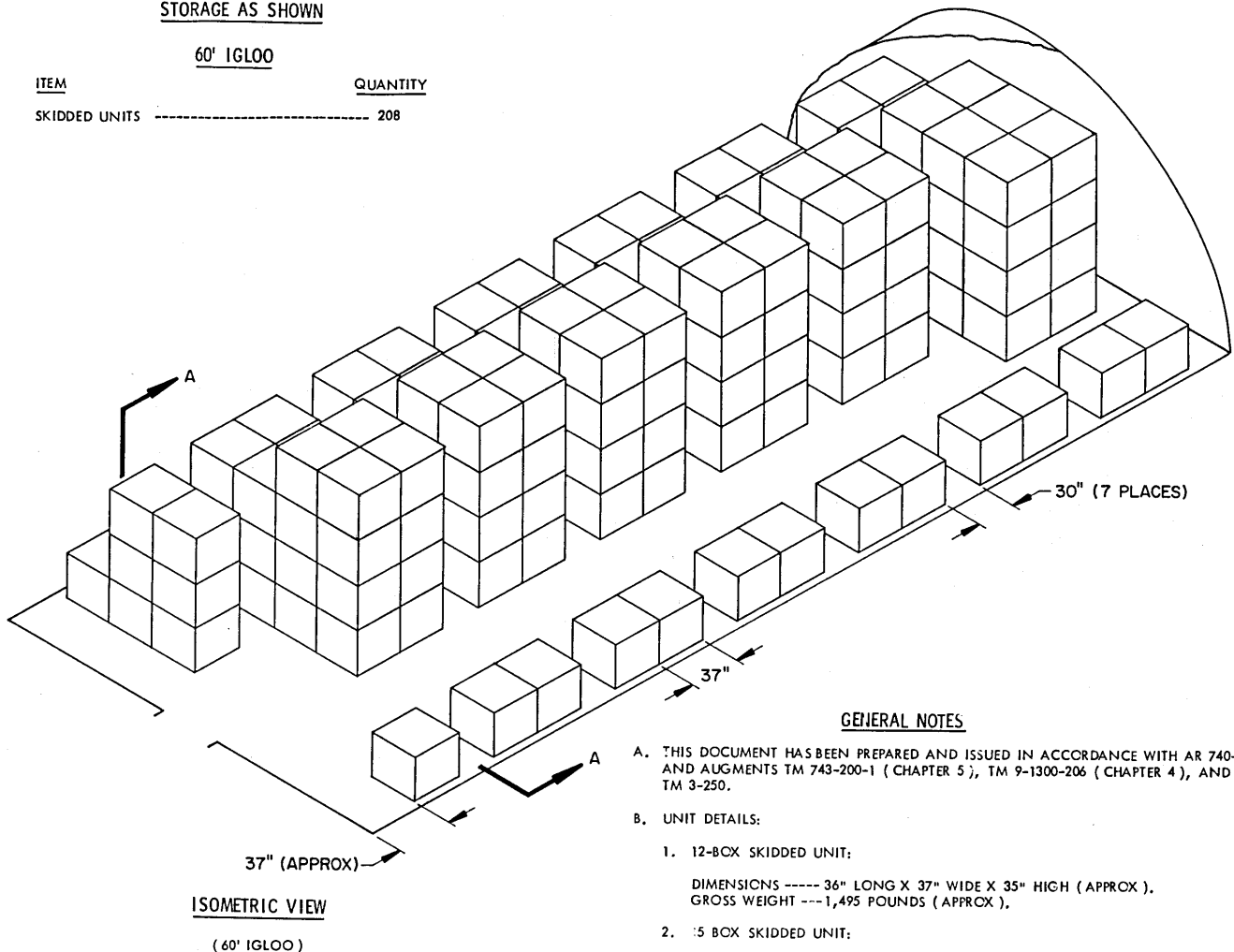
16 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 20 UNITS EACH.

IGLOO STORAGE PROCEDURES FOR 12-BOX UNIT

STORAGE AS SHOWN

60' IGLOO

<u>ITEM</u>	<u>QUANTITY</u>
SKIDDED UNITS	208



GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5), TM 9-1300-206 (CHAPTER 4), AND TM 3-250.
- B. UNIT DETAILS:
  - 1. 12-BOX SKIDDED UNIT:  
DIMENSIONS -----36" LONG X 37" WIDE X 35" HIGH (APPROX).  
GROSS WEIGHT ---1,495 POUNDS (APPROX).
  - 2. 15-BOX SKIDDED UNIT:  
DIMENSIONS-----36" LONG X 37" WIDE X 43" HIGH (APPROX).  
GROSS WEIGHT----1,755 POUNDS (APPROX).
  - 3. 20-BOX PALLET UNIT:  
DIMENSIONS-----36-3/4" LONG X 48-1/2" WIDE X 44-1/4" HIGH (APPROX).  
GROSS WEIGHT----2,472 POUNDS (APPROX).
- C. AISLE DIMENSIONS SHOWN IN THIS DRAWING MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT; HOWEVER, THIRTY-INCH (30") MINIMUM ACCESS AISLES WILL BE PROVIDED, AS SHOWN, TO FACILITATE INSPECTION.
- D. STORED UNITS MUST NOT CONTACT THE WALL OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, UNITS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- E. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE, AS PRESCRIBED BY LOCAL STANDARDS, WILL NOT BE EXCEEDED.
- F. THE STORAGE PROCEDURES DEPICTED HEREIN FOR SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE 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 COMPLIED WITH.
- G. THE MAGAZINE MUST COMPLY WITH ALL REQUIREMENTS AND BE APPROVED FOR THE STORAGE OF CHEMICAL ITEMS.
- H. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- J. A COMBINATION OF MATERIAL HANDLING EQUIPMENT (MHE), SUCH AS FORKLIFT TRUCKS, PALLET JACKS, AND OTHER APPROVED EQUIPMENT, MAY BE USED TO PLACE AND/OR REMOVE UNITS WITHIN A STACK. IF SUITABLE MHE IS NOT AVAILABLE TO PERMIT PLACING AND/OR REMOVAL OPERATIONS WITHIN THE DESIGNATED MHE OPERATING AISLE, IT MAY BE NECESSARY TO OMIT ONE ROW OF UNITS, OR UNITS FROM THE TOP OF A ROW, ADJACENT TO THE MHE OPERATING AISLE.

(GENERAL NOTES CONTINUED)

- K. REFER TO PAGE 20 FOR GUIDANCE RELATIVE TO LOT SEPARATION REQUIREMENTS WHEN STORING MULTIPLE LOTS WITHIN A MAGAZINE.
- L. THE STORAGE PROCEDURES DEPICTED FOR IGLOO MAGAZINES ARE ALSO APPLICABLE FOR STEEL ARCH MAGAZINES WHICH HAVE A SIMILAR CROSS SECTIONAL AREA.

REVISIONS

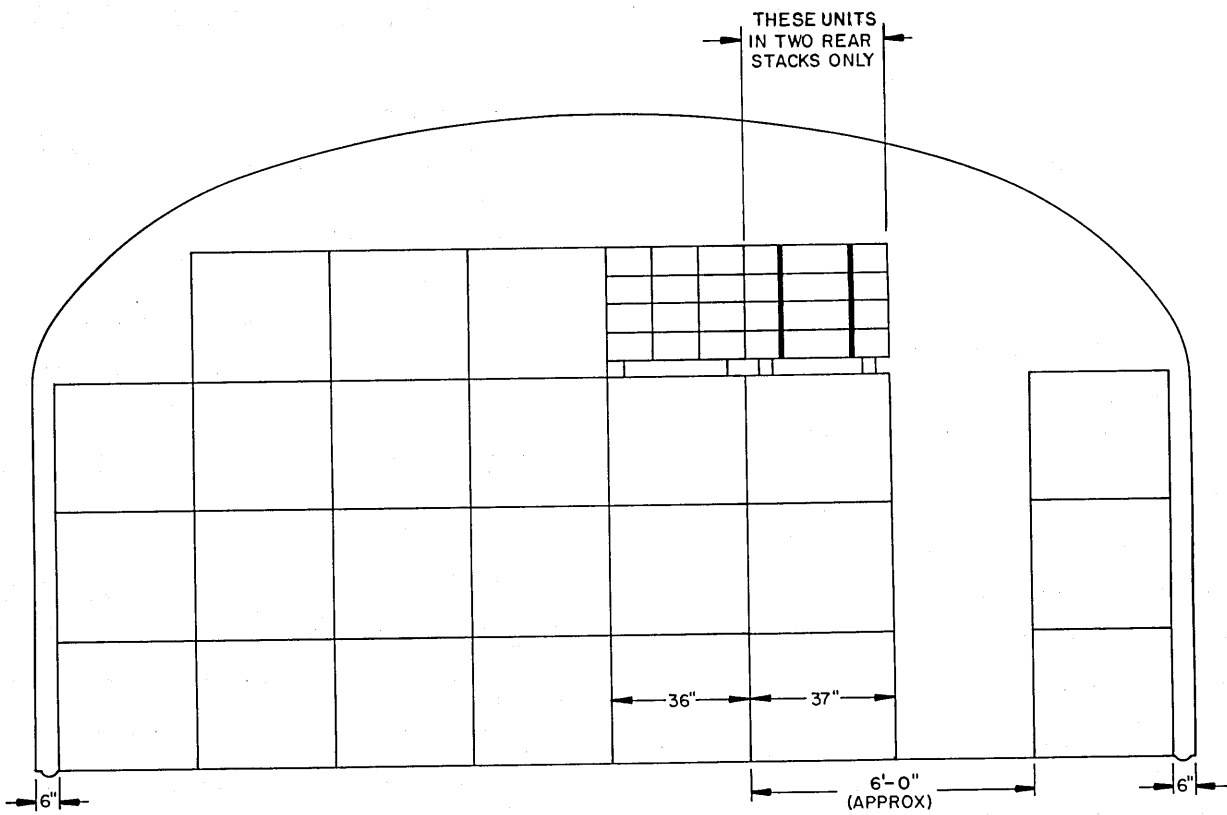
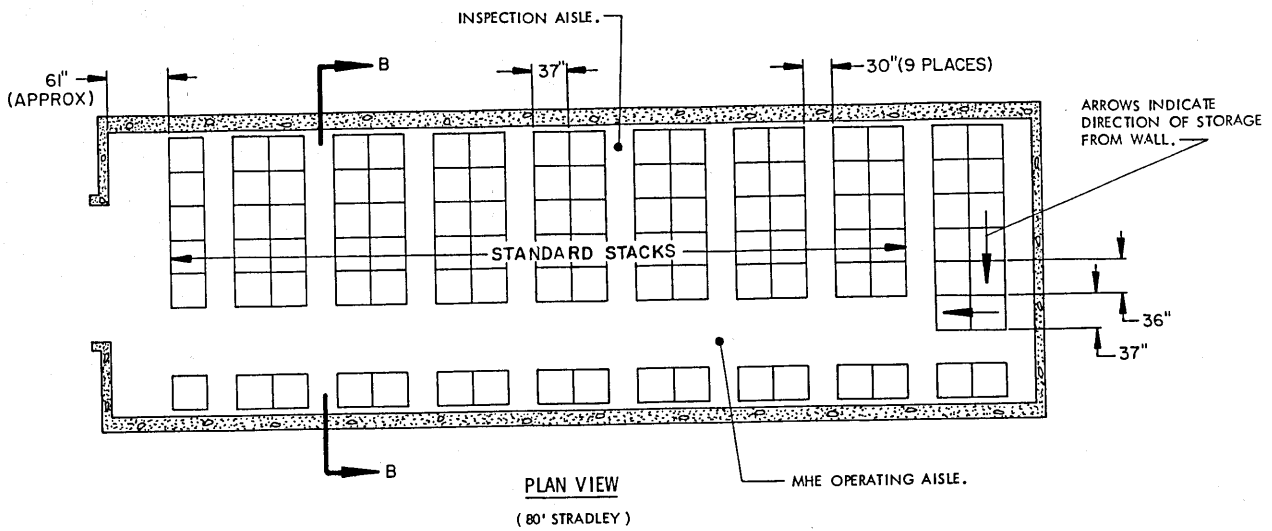
REVISION NO. 1, DATED APRIL 1982, CONSISTS OF:

- 1. ADDING PROCEDURES FOR THE 20-BOX PALLET UNIT.
- 2. UPDATING THE GENERAL NOTES.

REVISION NO. 2, DATED JUNE 1987, CONSISTS OF:

- 1. ADDING UNITS TO THE DOUBLE-STACKS AT THE REAR OF THE MAGAZINES, THUS INCREASING THE QUANTITY OF UNITS THAT CAN BE STORED.
- 2. ADDING ONE UNIT TO EACH STACK OF 12-BOX UNITS IN IGLOO MAGAZINES ON PAGE 2.

(CONTINUED AT LEFT)



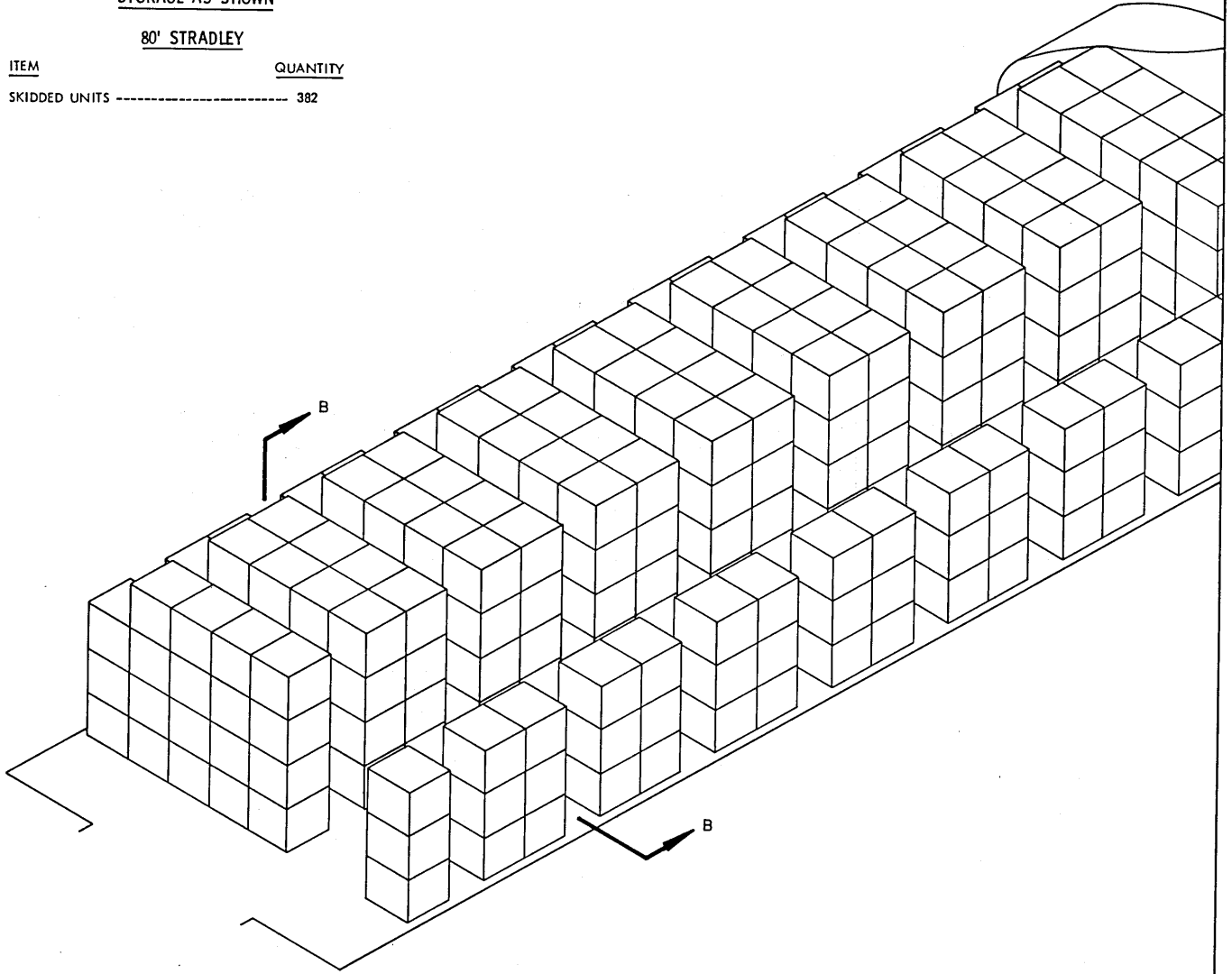
22 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 26 UNITS EACH.

**STRADLEY STORAGE PROCEDURES FOR 12-BOX UNIT**

STORAGE AS SHOWN

80' STRADLEY

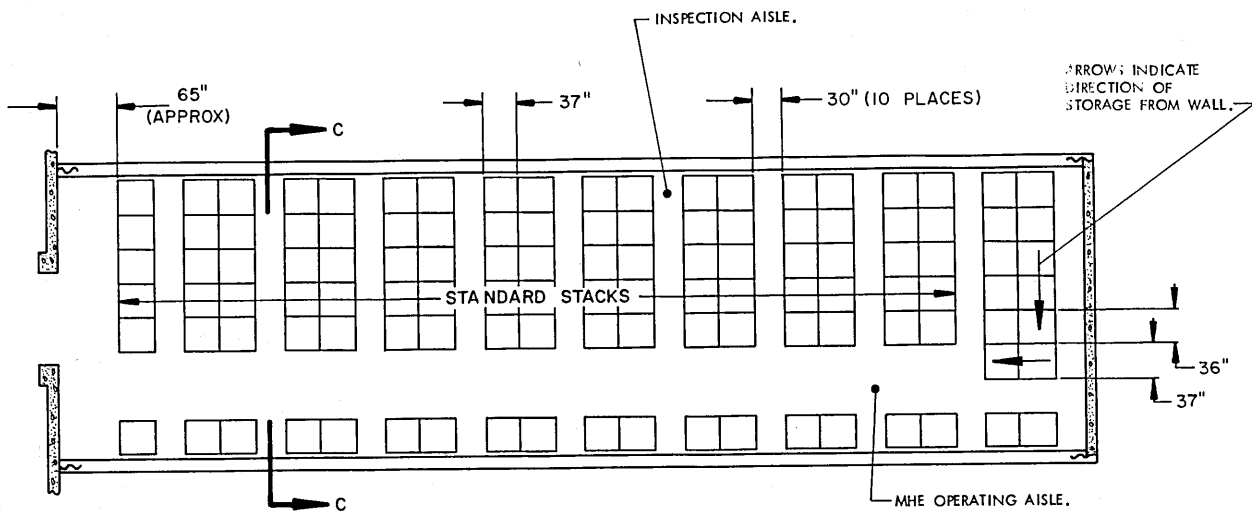
<u>ITEM</u>	<u>QUANTITY</u>
SKIDDED UNITS -----	382



ISOMETRIC VIEW

(80' STRADLEY)

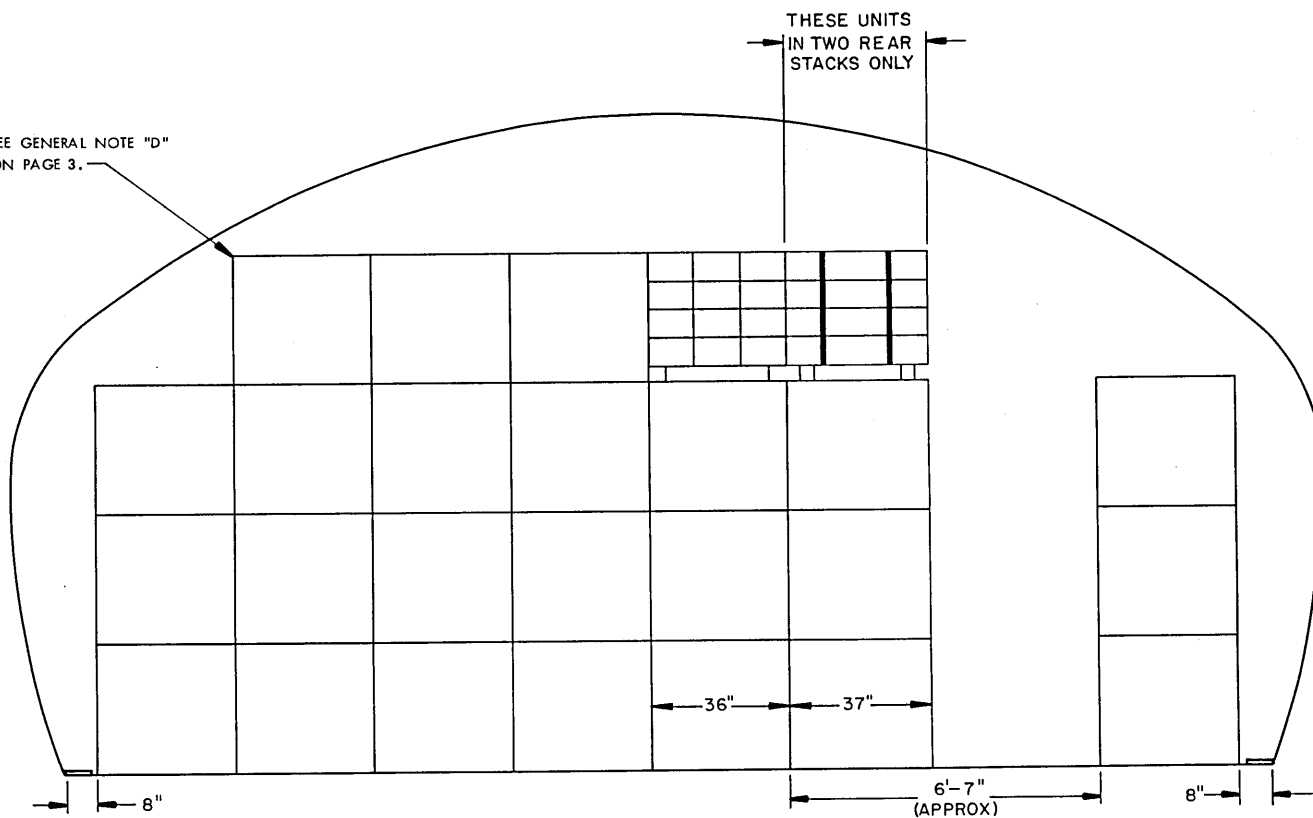
SEE "GENERAL NOTES" ON PAGE 3.



PLAN VIEW

(89' OVAL-ARCH MAGAZINE)

SEE GENERAL NOTE "D" ON PAGE 3.

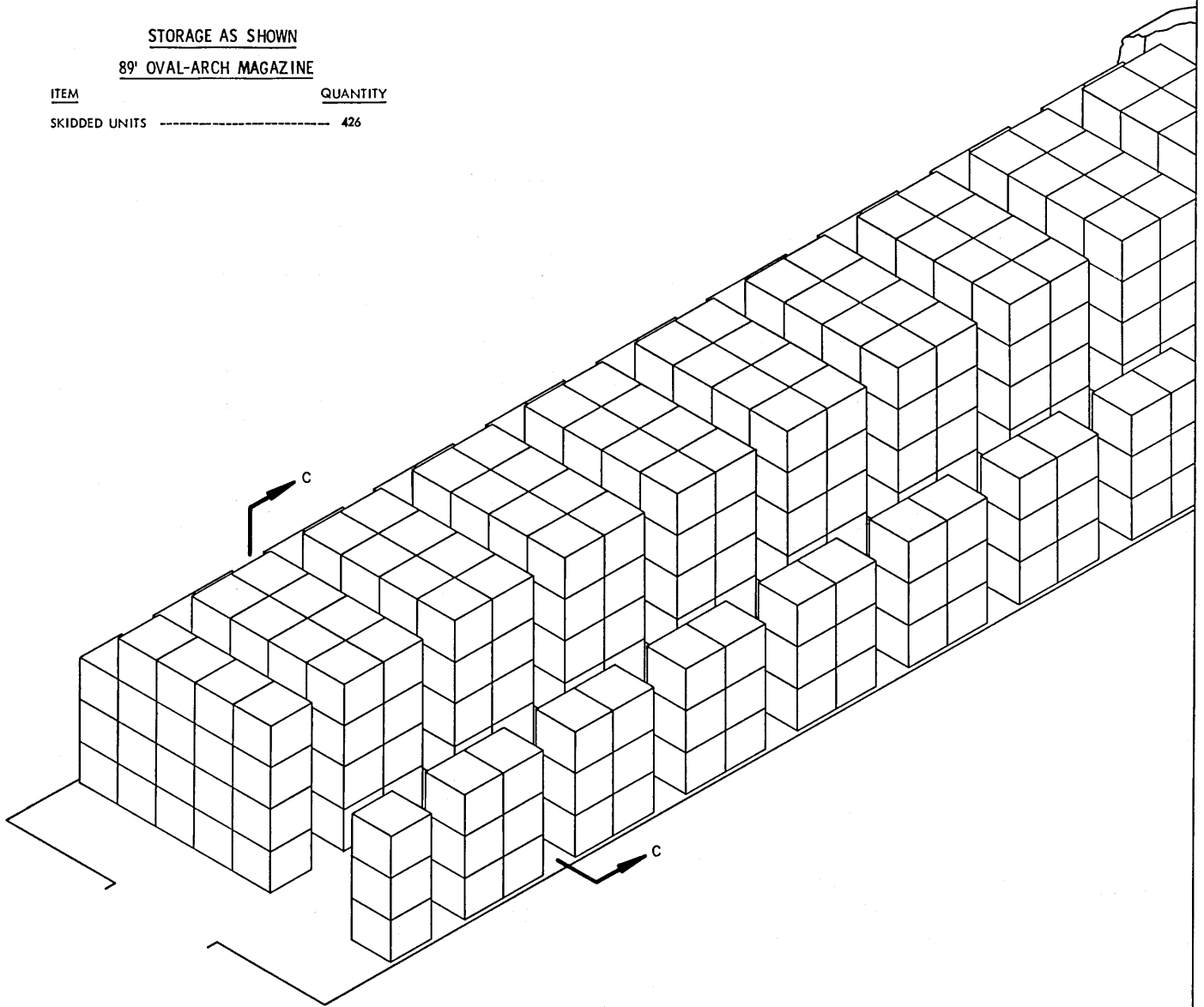


SECTION C-C

22 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 26 UNITS EACH.

STORAGE AS SHOWN  
89' OVAL-ARCH MAGAZINE

<u>ITEM</u>	<u>QUANTITY</u>
SKIDDED UNITS -----	426



ISOMETRIC VIEW

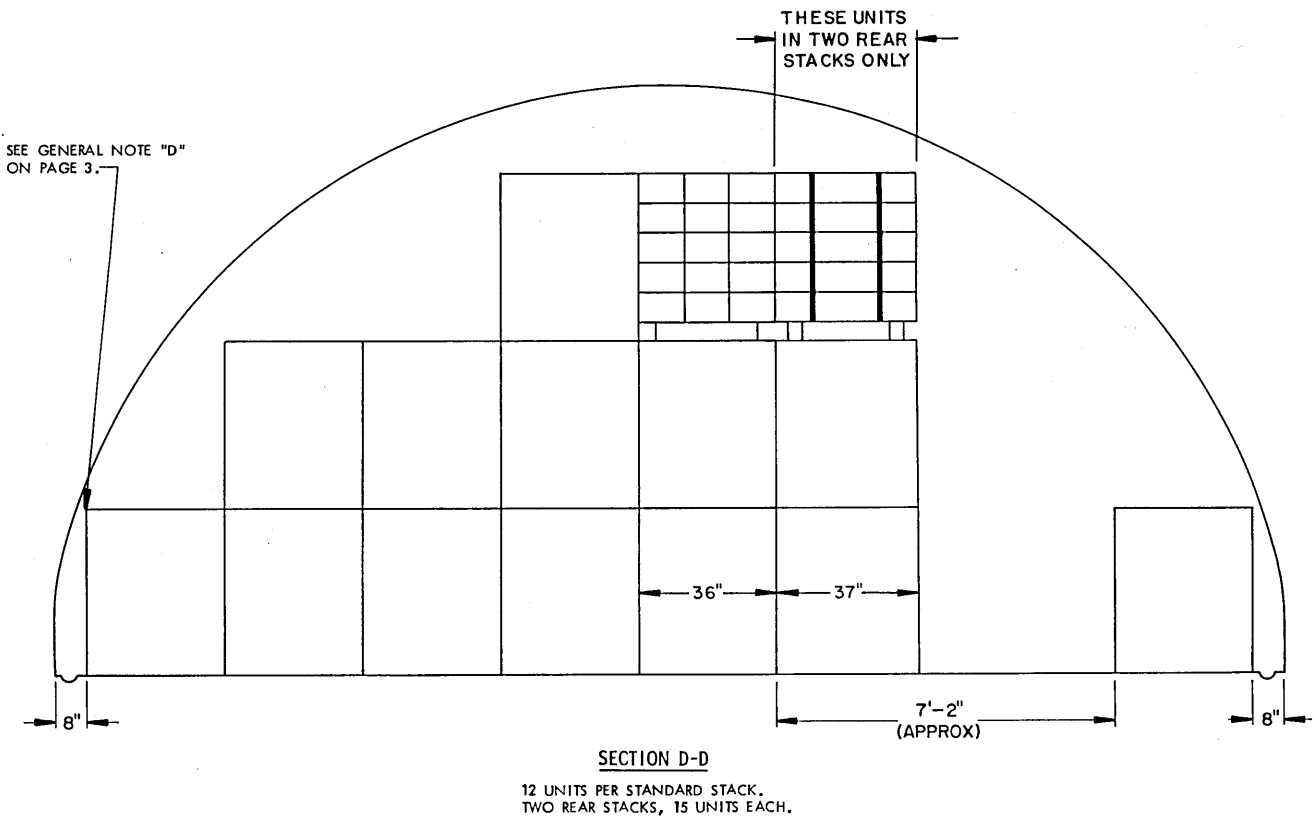
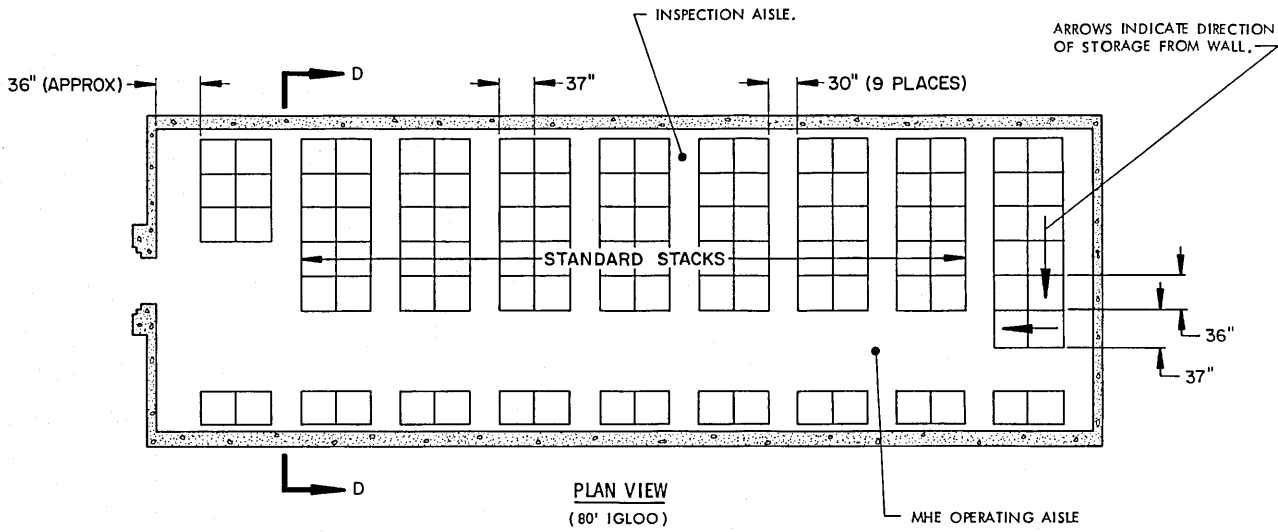
( 89' OVAL-ARCH MAGAZINE )

SEE "GENERAL NOTES" ON PAGE 3.

STORAGE AS SHOWN

80' IGLOO

ITEM	QUANTITY
SKIDDED UNITS	210





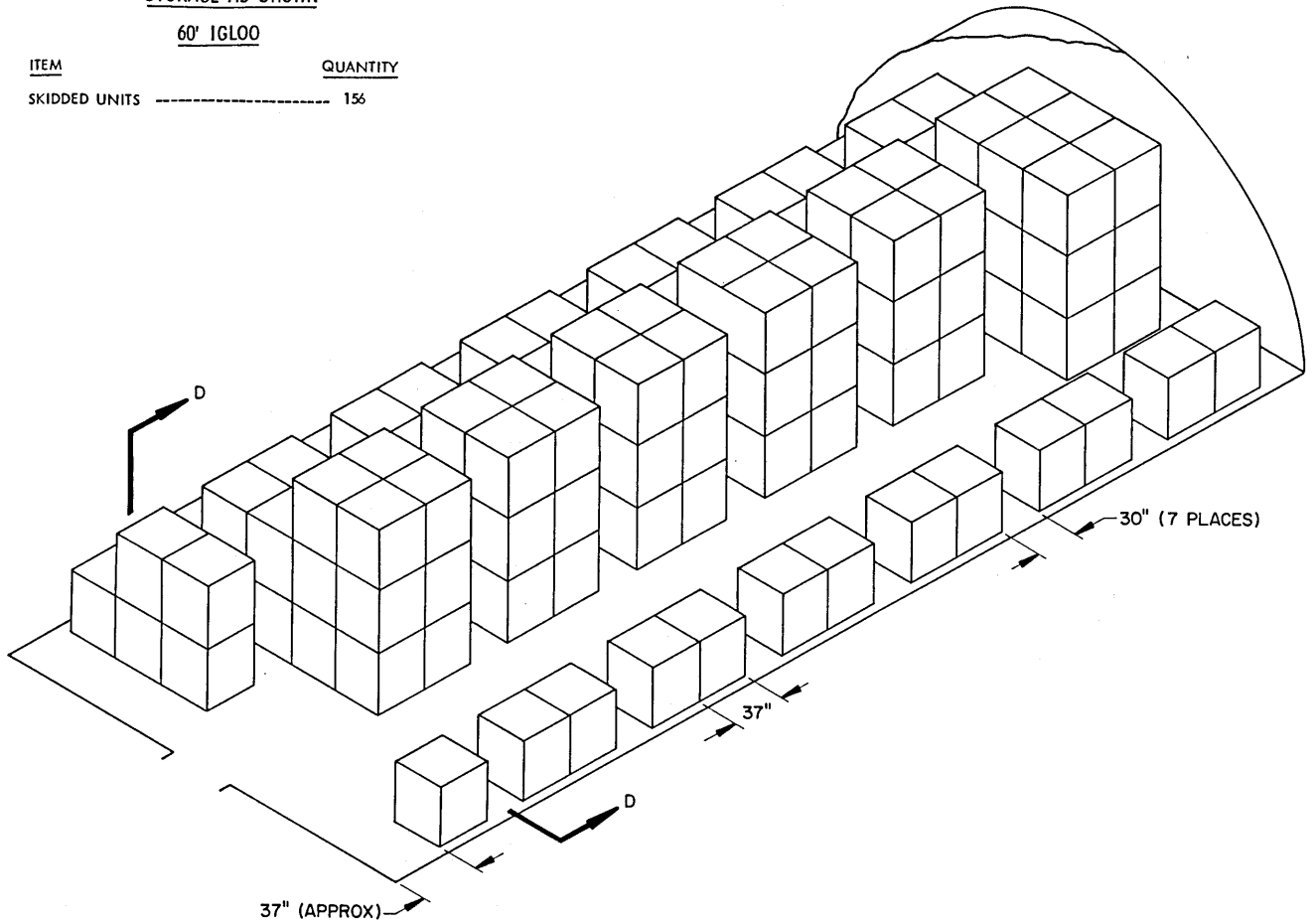
STORAGE AS SHOWN

60' IGLOO

ITEM

QUANTITY

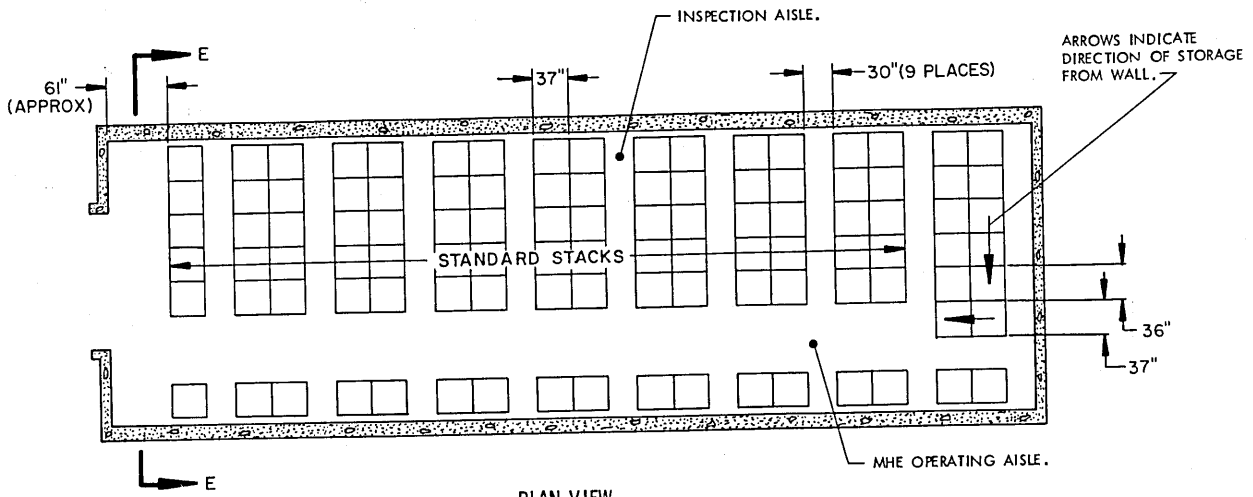
SKIDDED UNITS ----- 156



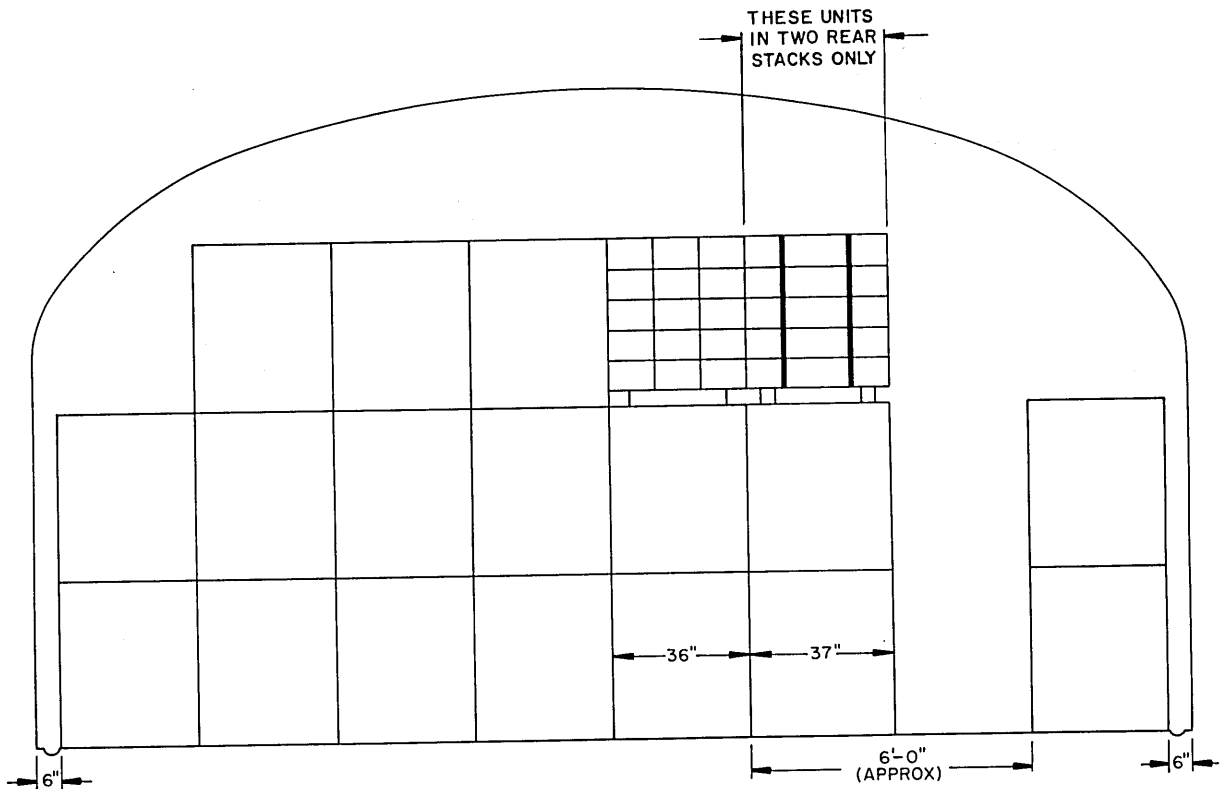
ISOMETRIC VIEW

(60' IGLOO)

SEE "GENERAL NOTES" ON PAGE 3.



PLAN VIEW  
(80' STRADLEY)



SECTION E-E

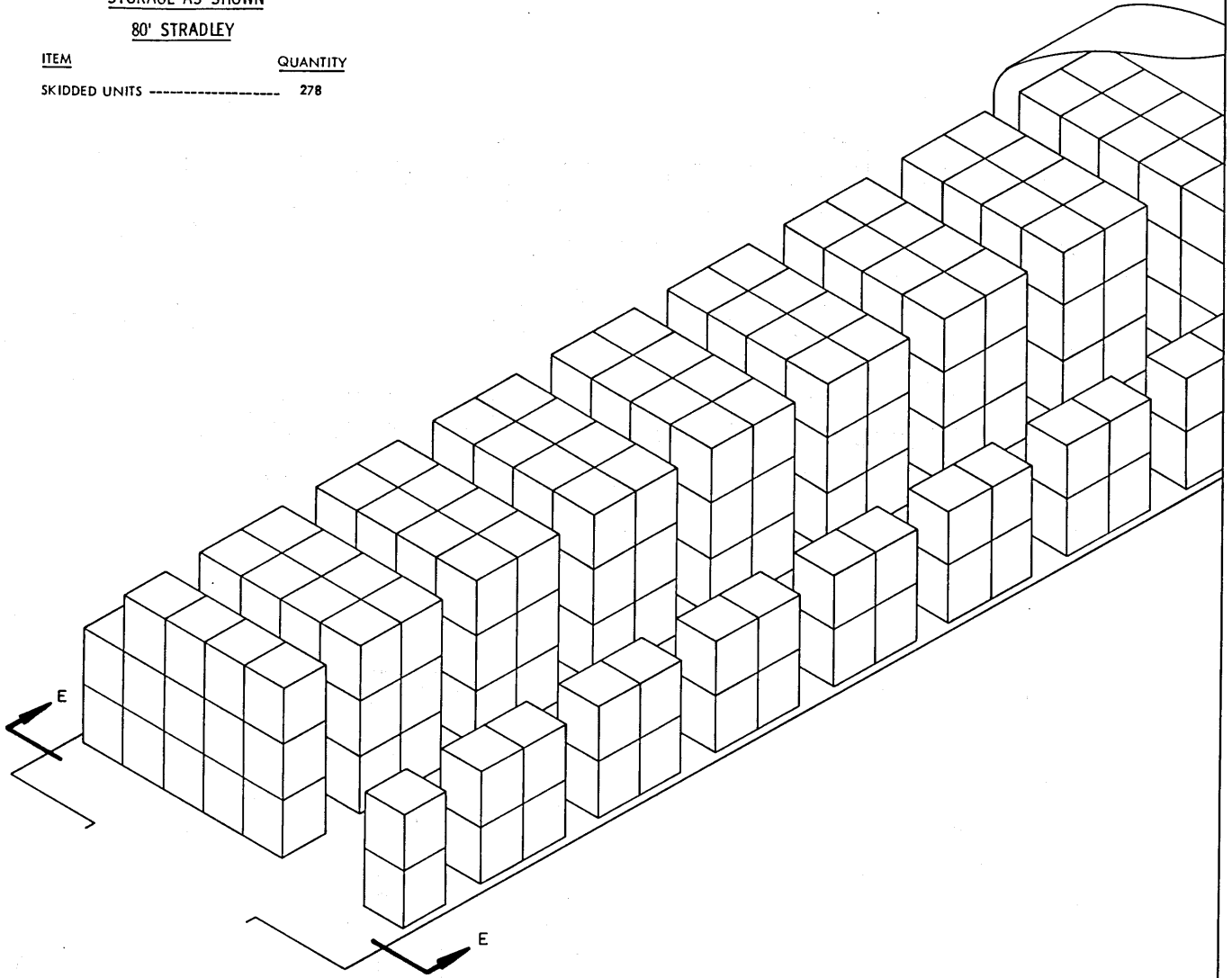
16 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 19 UNITS EACH.

STRADLEY STORAGE PROCEDURES FOR 15-BOX UNIT

STORAGE AS SHOWN

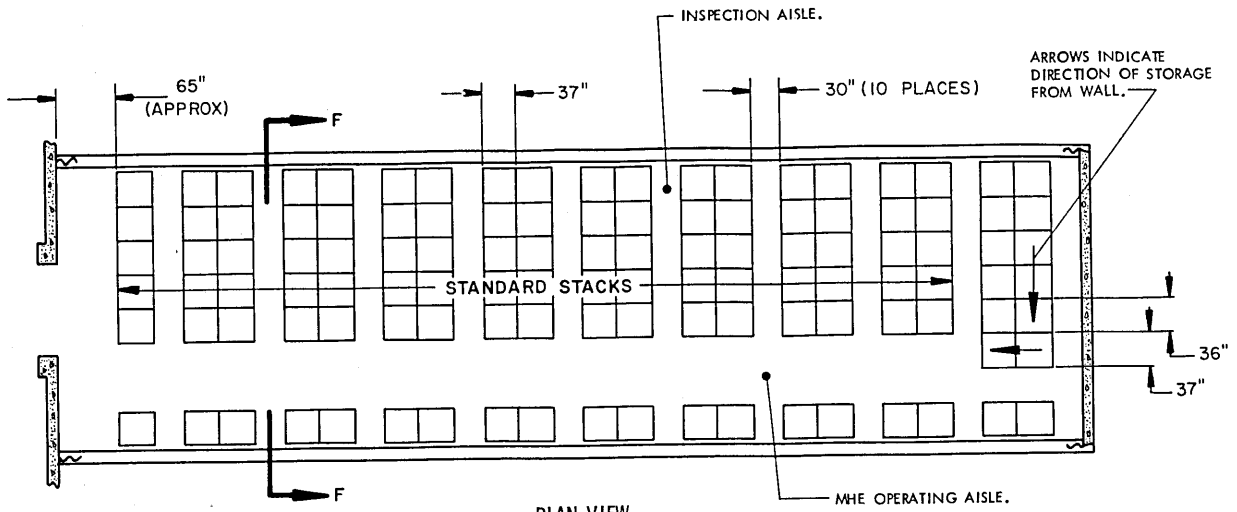
80' STRADLEY

<u>ITEM</u>	<u>QUANTITY</u>
SKIDDED UNITS -----	278

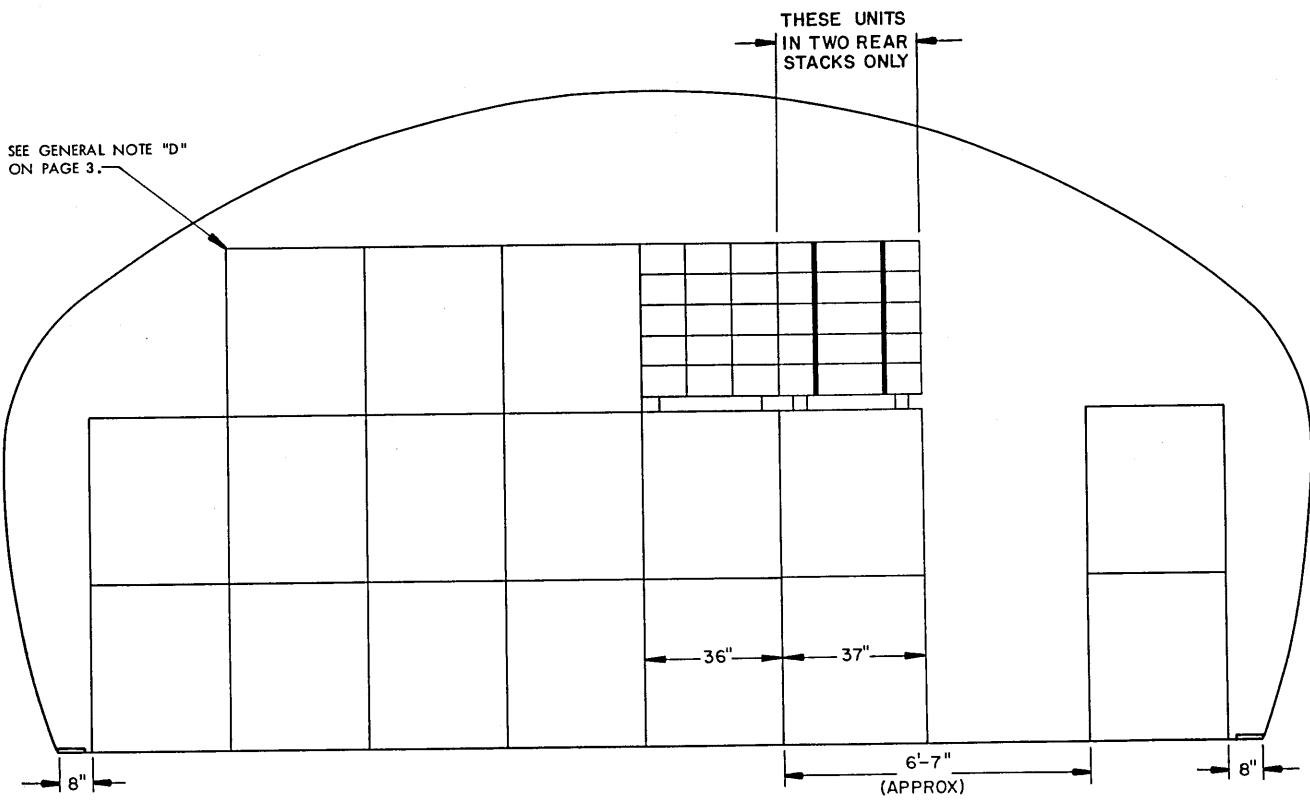


ISOMETRIC VIEW  
(80' STRADLEY)

SEE "GENERAL NOTES" ON PAGE 3.



(89' OVAL-ARCH MAGAZINE)



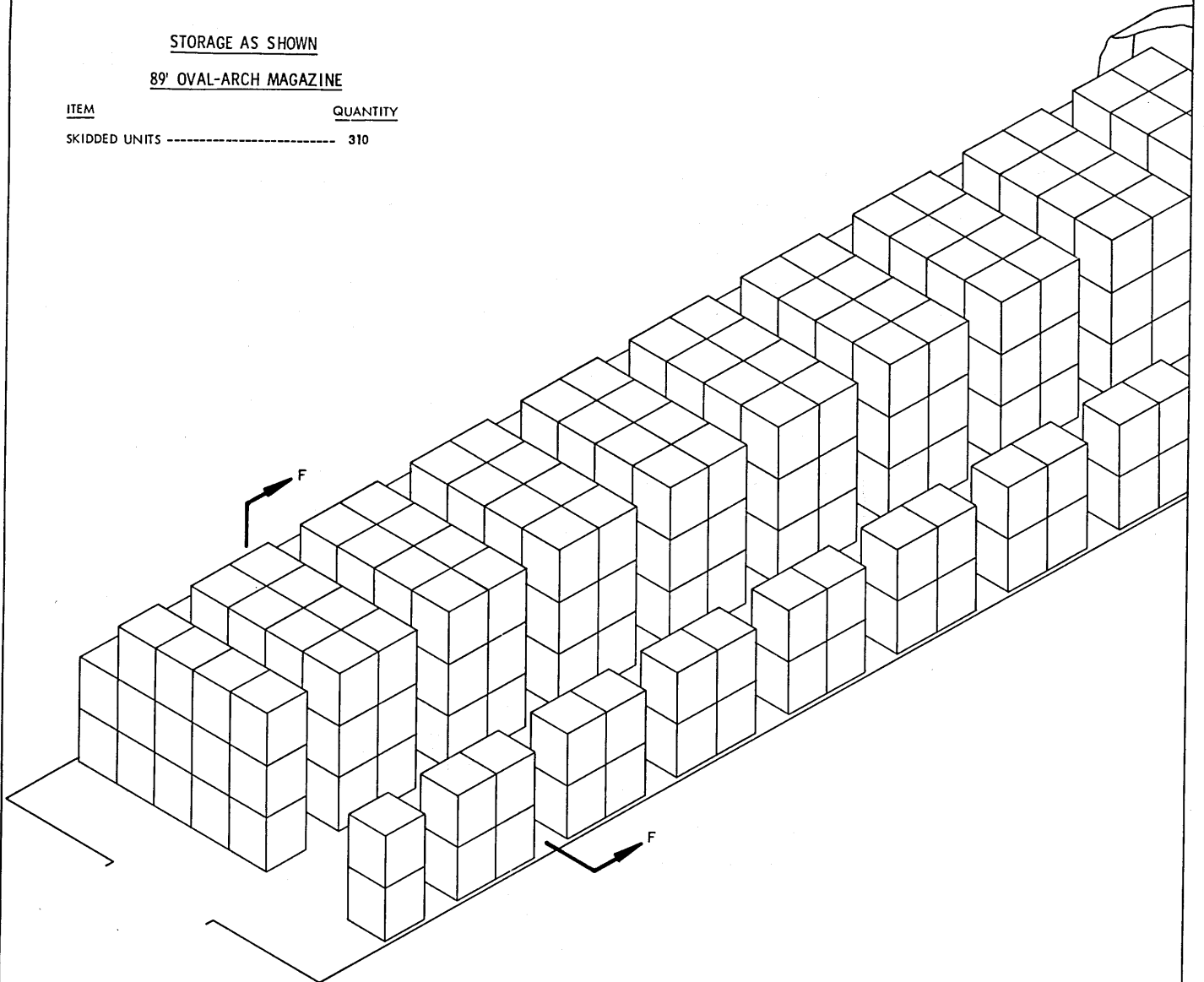
16 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 19 UNITS EACH.

OVAL-ARCH STORAGE PROCEDURES FOR 15-BOX UNIT

STORAGE AS SHOWN

89' OVAL-ARCH MAGAZINE

<u>ITEM</u>	<u>QUANTITY</u>
SKIDDED UNITS -----	310



ISOMETRIC VIEW

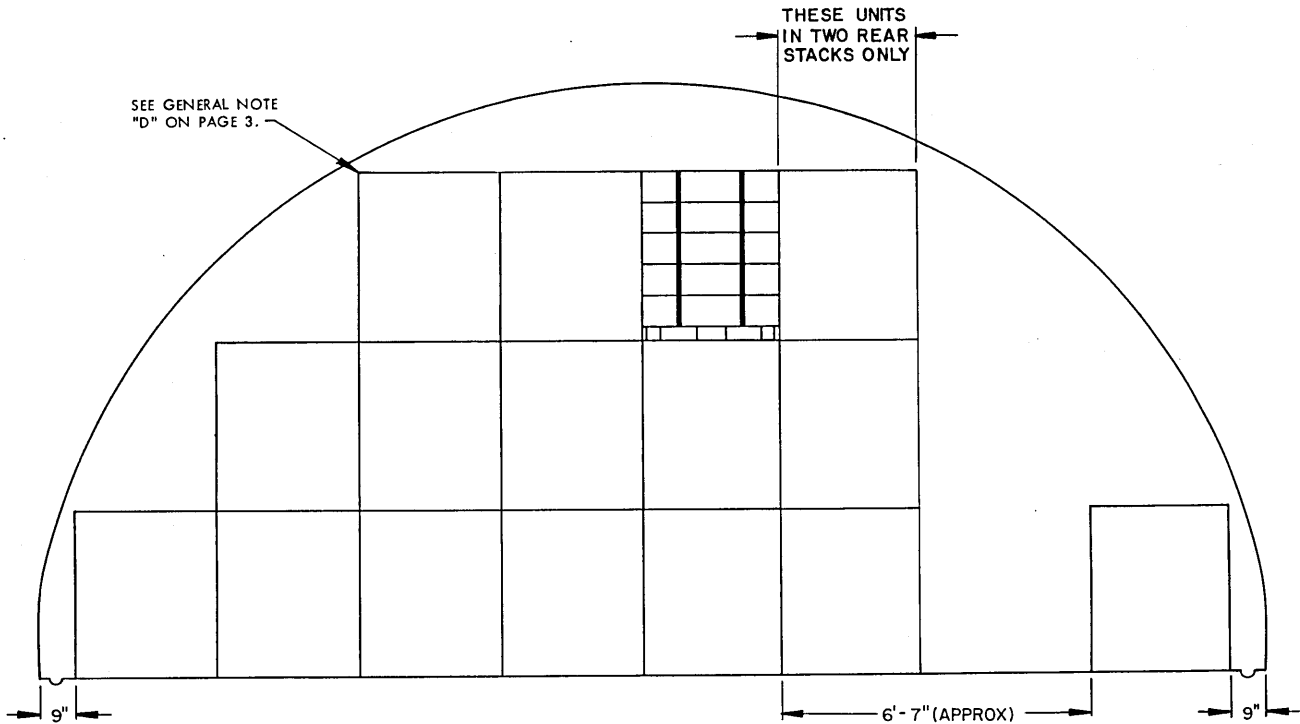
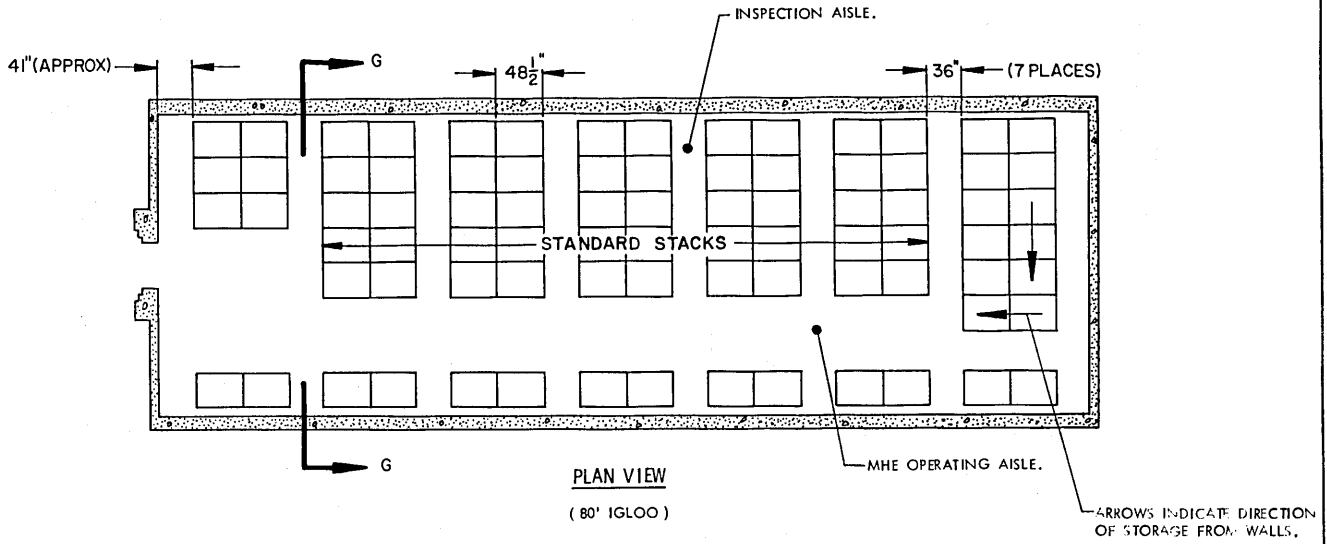
(89' OVAL-ARCH MAGAZINE)

SEE "GENERAL NOTES" ON PAGE 3.

STORAGE AS SHOWN

80' IGLOO

ITEM	QUANTITY
PALLET UNITS	----- 176



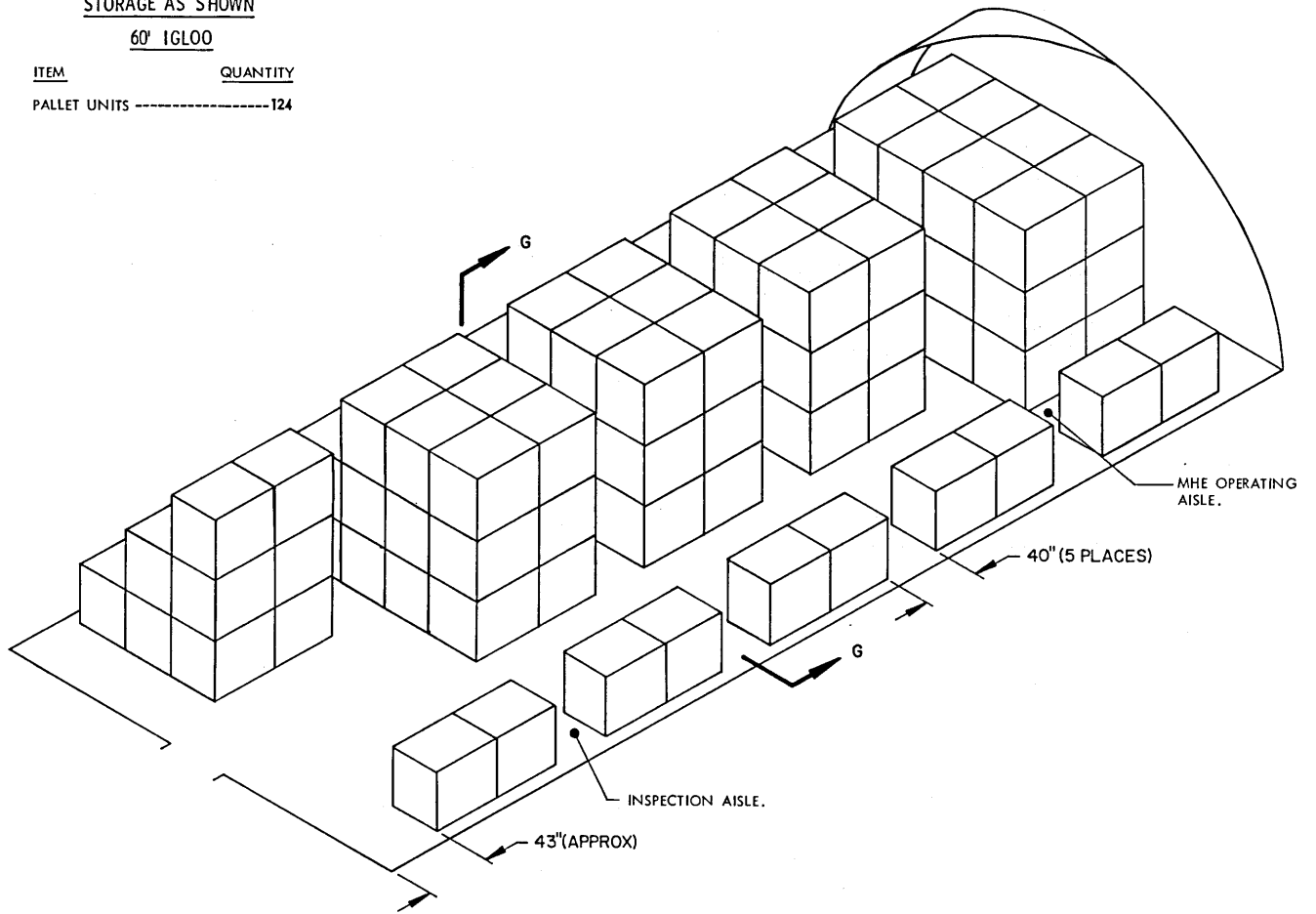
SECTION G-G

13 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 16 UNITS EACH.

STORAGE AS SHOWN

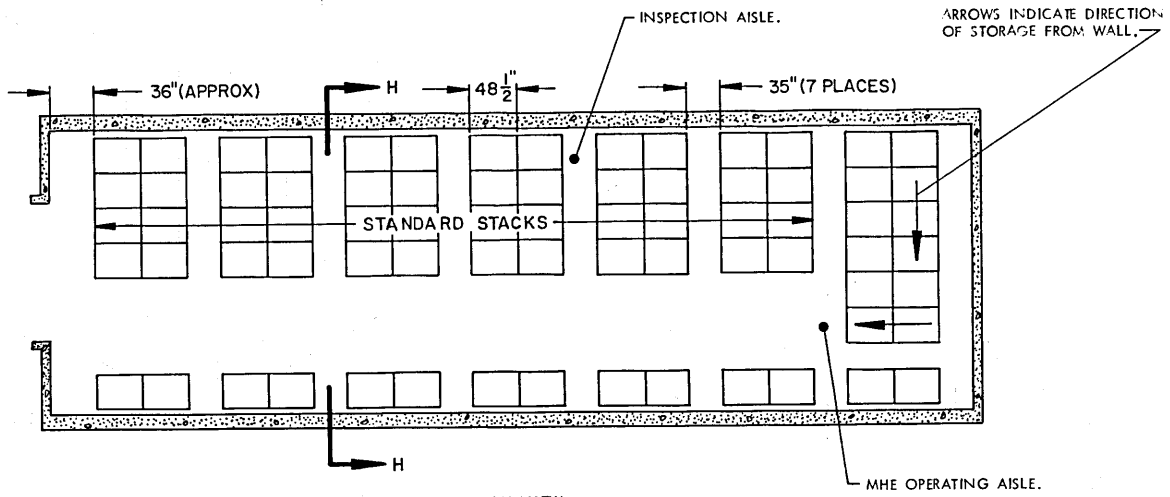
60' IGLOO

<u>ITEM</u>	<u>QUANTITY</u>
PALLET UNITS -----	124

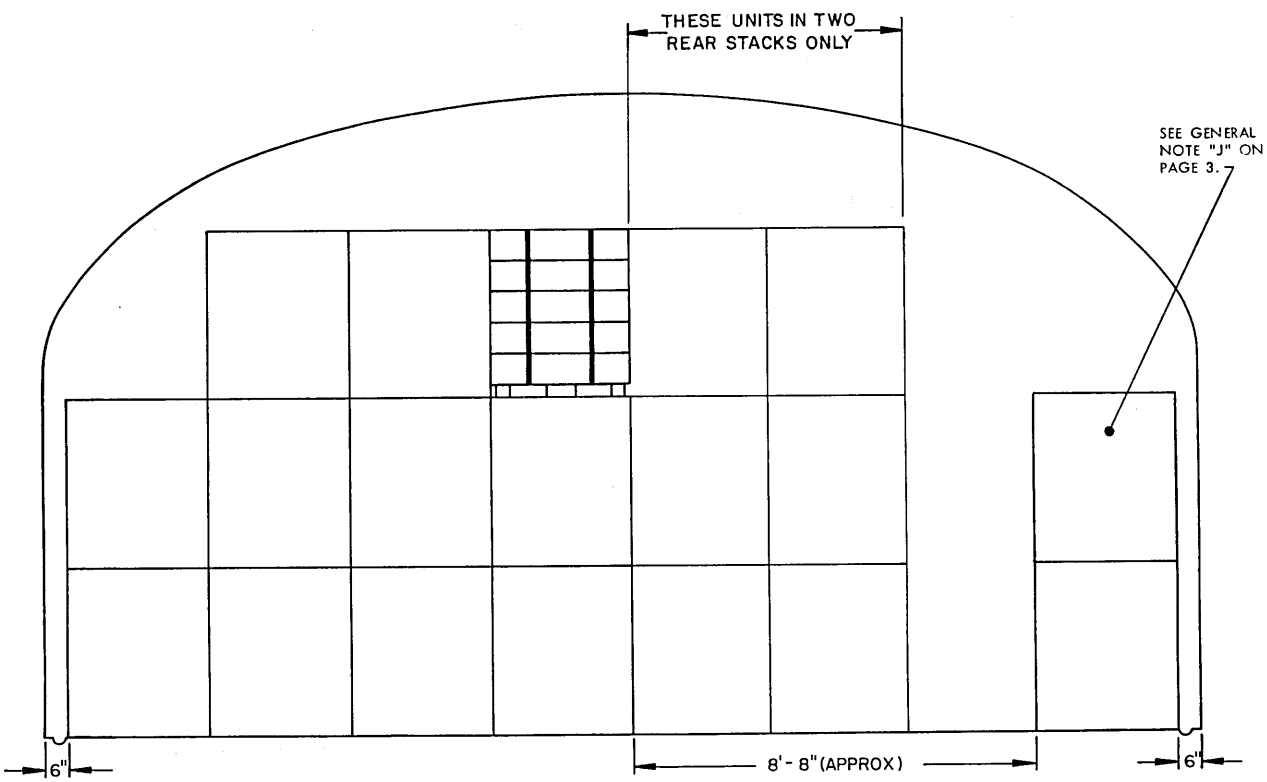


ISOMETRIC VIEW  
(60' IGLOO)

SEE "GENERAL NOTES" ON PAGE 3.



PLAN VIEW  
(80' STRADLEY)



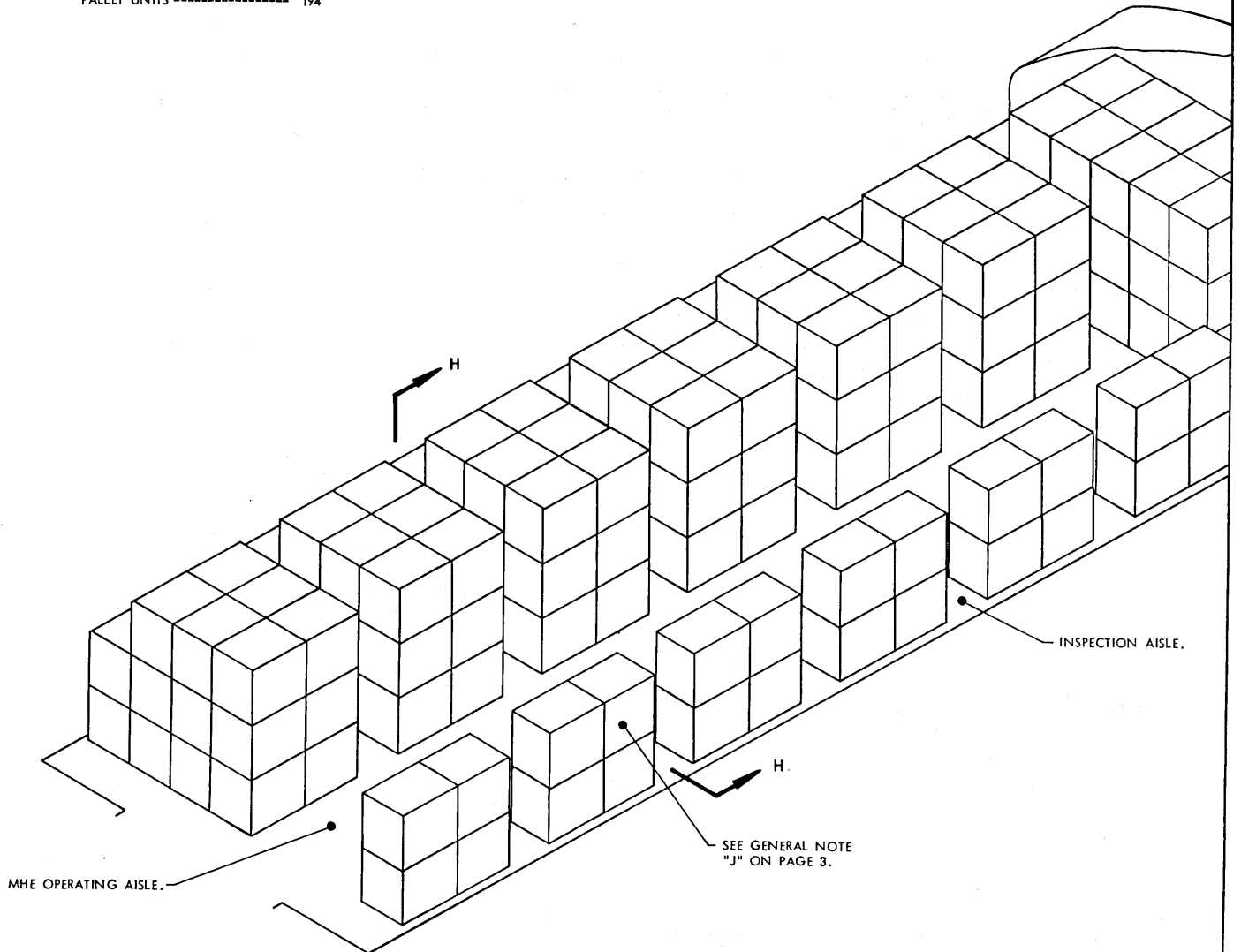
SECTION H-H  
13 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 19 UNITS EACH.



STORAGE AS SHOWN

80' STRADLEY

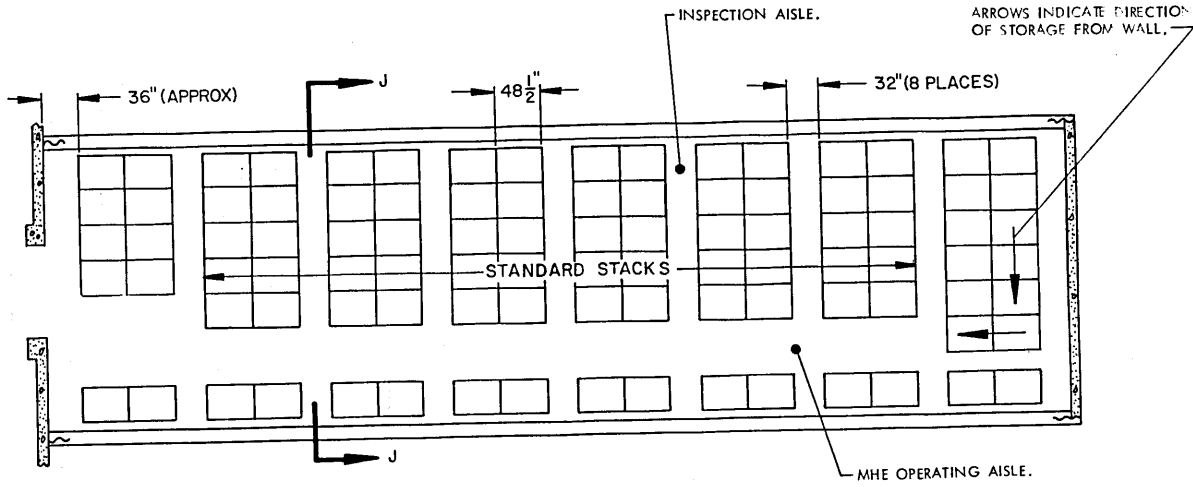
ITEM                      QUANTITY  
PALLET UNITS ----- 194



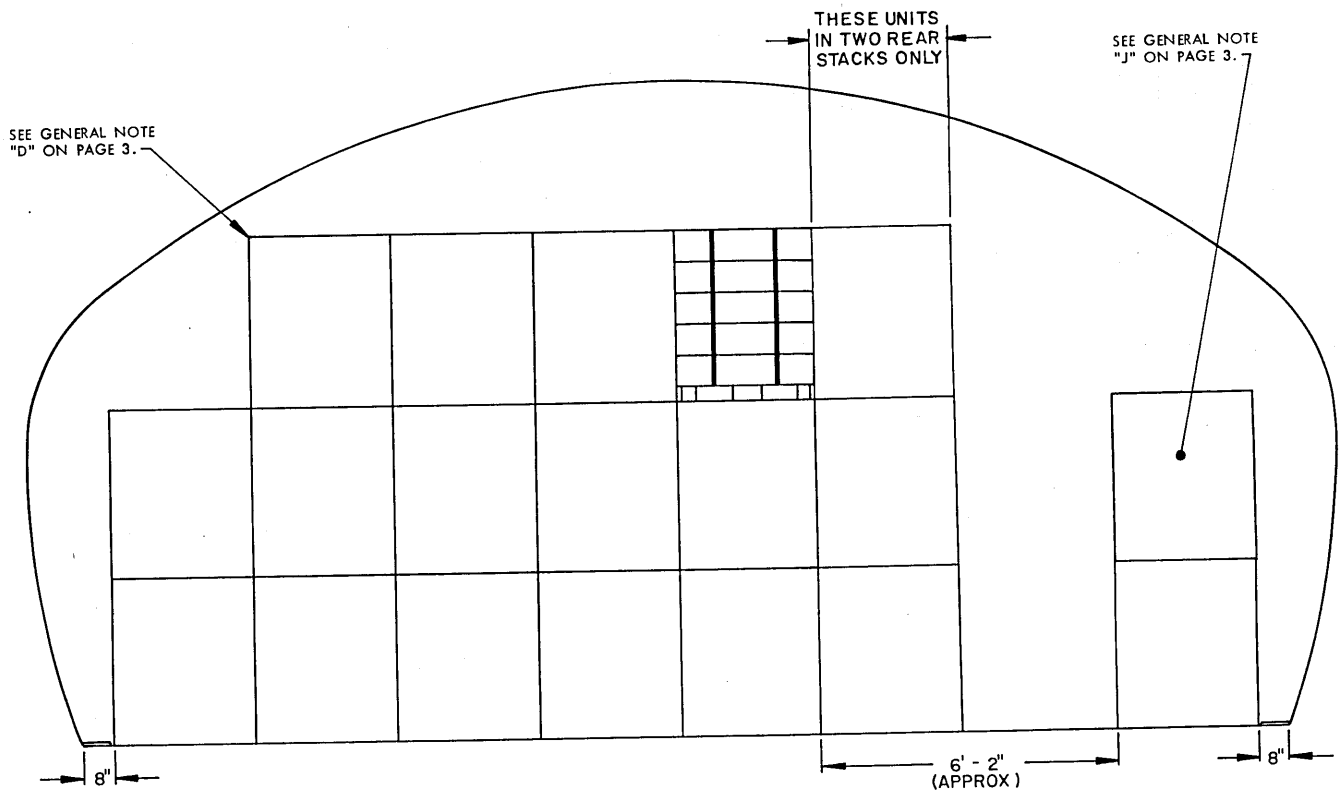
ISOMETRIC VIEW

( 80' STRADLEY )

SEE "GENERAL NOTES" ON PAGE 3.

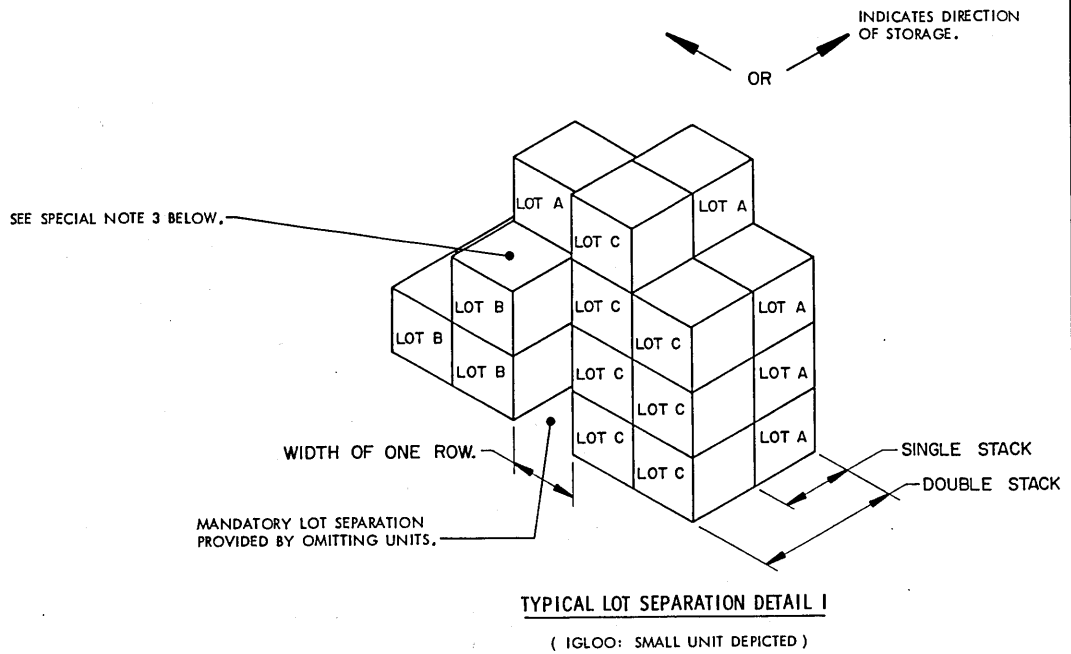


**PLAN VIEW**  
(89' OVAL-ARCH MAGAZINE)



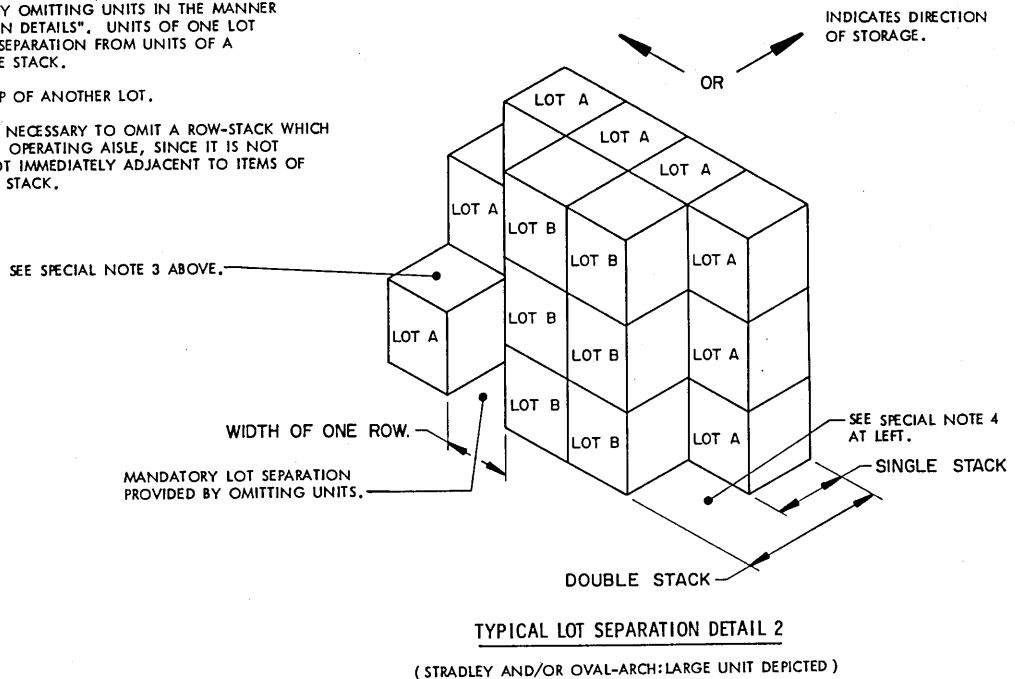
**SECTION J-J**  
16 UNITS PER STANDARD STACK.  
TWO REAR STACKS, 19 UNITS EACH.





**SPECIAL NOTES:**

1. LOT SEPARATION WILL BE MAINTAINED WITHIN A STORAGE MAGAZINE. THE TYPICAL DETAILS ON THIS PAGE ILLUSTRATE POSSIBLE CONFIGURATIONS WHICH COMPLY WITH THE MANDATORY LOT SEPARATION REQUIREMENTS. OTHER CONFIGURATIONS MAY ALSO BE USED, PROVIDED THE OTHER CONFIGURATIONS COMPLY WITH THE BASIC REQUIREMENTS STATED HEREIN.
2. WHEN STORING MULTIPLE LOTS WITHIN A MAGAZINE, DIFFERENT LOTS WILL BE SEPARATED WITHIN A SINGLE STACK BY OMITTING UNITS IN THE MANNER SHOWN IN THE "TYPICAL LOT SEPARATION DETAILS". UNITS OF ONE LOT IN A SINGLE STACK WILL NOT REQUIRE SEPARATION FROM UNITS OF A DIFFERENT LOT IN THE ADJACENT SINGLE STACK.
3. ONE LOT WILL NOT BE STACKED ON TOP OF ANOTHER LOT.
4. TO SATISFY LOT QUANTITIES, IT MAY BE NECESSARY TO OMIT A ROW-STACK WHICH WOULD NORMALLY BE NEXT TO AN MHE OPERATING AISLE, SINCE IT IS NOT PERMISSIBLE TO STACK ITEMS OF ONE LOT IMMEDIATELY ADJACENT TO ITEMS OF ANOTHER LOT WITHIN THE SAME SINGLE STACK.



**MULTIPLE LOT STORAGE REQUIREMENTS**