# STORAGE IN APPROVED MAGAZINES OF THE HARM MISSILE PACKED IN CNU-355/E METAL CONTAINER

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	APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND	DRAFTSMA	AN	D. WH	ITMORE
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### GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE STORAGE PROCEDURES SPECIFIED HEREIN ARE APPLICABLE TO THE HARM MISSILE PACKED IN THE CNU-355/E CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE CNU-355/E CONTAINER WITH CONTENTS. FOR DETAILS OF THE CONTAINER, SEE U.S. AIR FORCE DRAWING NO. 808183 AND THE DETAIL ON PAGE 3.

CONTAINER DIMENSIONS - - - 15'-0" L X 35" W X 22.64" H
STACKING HEIGHT - - - - - 20.43"
GROSS WEIGHT - - - - - - - 2,400 LBS (APPROX)
CUBE - - - - - - - - - - 82.5 CUBIC FEET (APPROX)

CAUTION: THIS ITEM IS IN A "PROPULSIVE STATE" AND MUST BE STORED WITH THE FORWARD END FACING TOWARD EITHER SIDE WALL AND/OR THE REAR WALL AS INDICATED BY THE DIRECTIONAL ARROWS ON THE STORAGE VIEWS. ADDITIONALLY, CONTAINERS MUST NOT BE STACKED MORE THAN SEVEN (7) CONTAINERS HIGH.

- C. 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 CONTAINERS IN OTHER TYPES OF APPROVED MAGAZINES. MINOR ADJUSTMENTS MAY BE MADE TO FACTLITATE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED.
- D. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED. THIS LIMITATION MAY REQUIRE A QUANTITY REDUCTION FROM THE STORAGE AS SHOWN.
- E. STORED CONTAINERS MUST NOT CONTACT THE WALLS, COLUMNS OR BEAMS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, CONTAINERS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- F. AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT (MHE); HOWEVER, AN 187 MINIMUM INSPECTION AISLE MUST BE MAINTAINED AT THE END OF THE CONTAINERS WHERE HUMIDITY INDICATORS ARE LOCATED.
- G. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED BY LOCAL STANDARDS WILL NOT BE EXCEEDED.
- H. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED WITHIN THE MHE AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- J. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS
  MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER CONTAINERS
  IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, UNLESS
  TWO UPPER CONTAINERS ARE HANDLED AS ONE LIFT OR THE
  PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST
  INSTANCES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION).
  ONLY A FORKLIFT TRUCK OF ADEQUATE CAPACITY WILL BE USED
  WHEN LIFTING TWO CONTAINERS AS ONE LIFT.
- K. IF THE QUANTITY OF CONTAINERS FOR A MAGAZINE IS TO BE REDUCED FROM WHAT IS SHOWN HEREIN DUE TO THE PERMITTED "EXPLOSIVE LIMIT" OR FOR ANY OTHER REASON, SUCH AS A LIMITED QUANTITY TO BE STORED, THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS.
- L. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- M. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENT MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM, AND ONE POUND EQUALS 0.454KG.

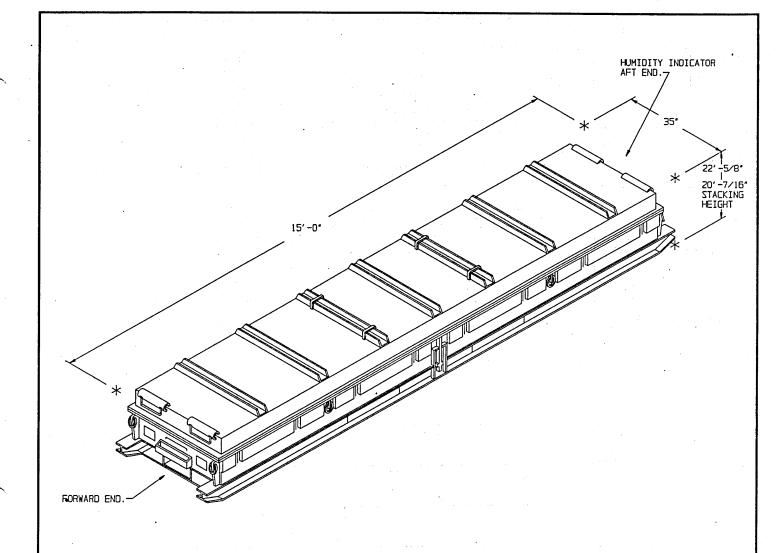
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## MATERIAL SPECIFICATIONS

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

### (GENERAL NOTES CONTINUED)

- N. CONTAINERS PRESENTLY STORED IN ACCORDANCE WITH A PRIOR APPROVED DRAWING NEED NOT BE RE-STORED SOLELY TO CONFORM TO THE PROCEDURES SPECIFIED IN THIS DOCUMENT.
- O. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- P. THE USE OF "FLOOR DUNNAGE" UNDER EACH FIRST-LAYER
  CONTAINER 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 RUNNERS OF A CONTAINER DRY, THUS AIDING IN
  PREVENTING DETERIORATION DUE TO CORROSION. 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 WHERE SPECIFIED, THE
  USE OF THICKER FLOOR DUNNAGE MAY BE REQUIRED, AND SHOULD
  BE USED, TO ACHIEVE THE DESIRED OBJECTIVE.
- O. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- R. WHEN LOCAL STORAGE CONDITIONS ARE SUCH THAT AN AMMUNITION STORAGE MAGAZINE NET EXPLOSIVE WEIGHT LIMIT WILL BE REACHED BEFORE ALL AVAILABLE STORAGE SPACE WILL BE UTILIZED, A COMBINATION OF THE VARIOUS STORAGE PATTERNS DELINEATED HEREIN MAY BE USED TO FACILITATE INVENTORY, INSPECTION, THE USE OF MATERIALS HANDLING EQUIPMENT, SURVEILLANCE, ETC., OF THE AMMUNITION TO BE STORED WITHIN THE MAGAZINE.
- S. THE STORAGE PROCEDURES OUTLINED FOR STRADLEY MAGAZINES ON PAGES 14 AND 15 WILL BE USED WHEN STORING ITEMS COVERED BY THIS DRAWING IN OVAL ARCH MAGAZINES.

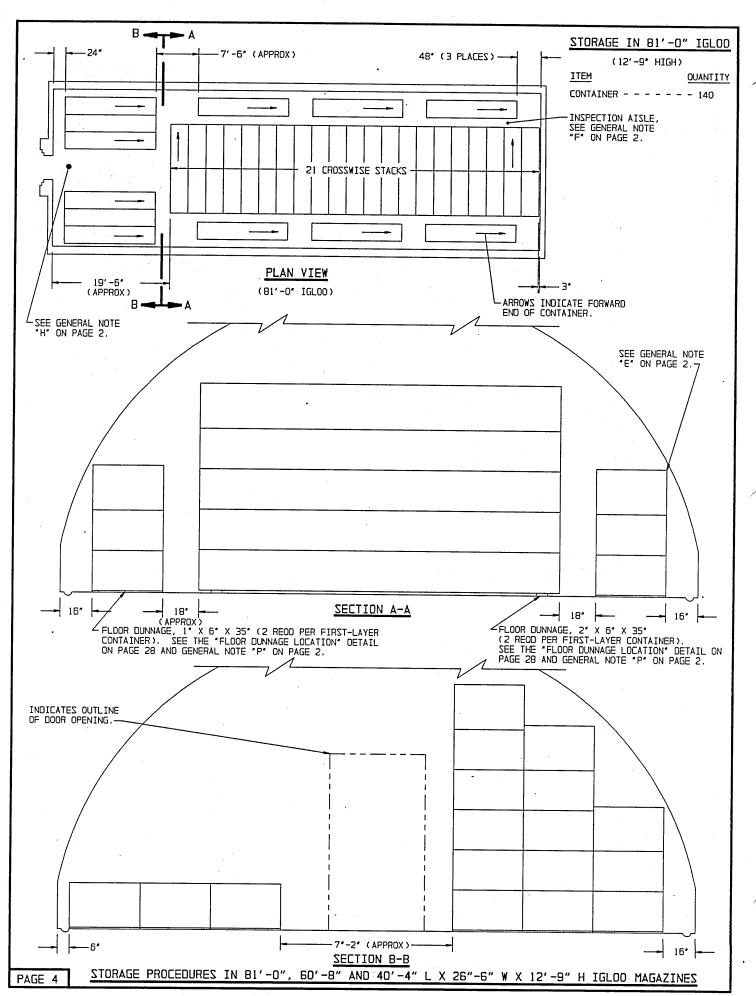


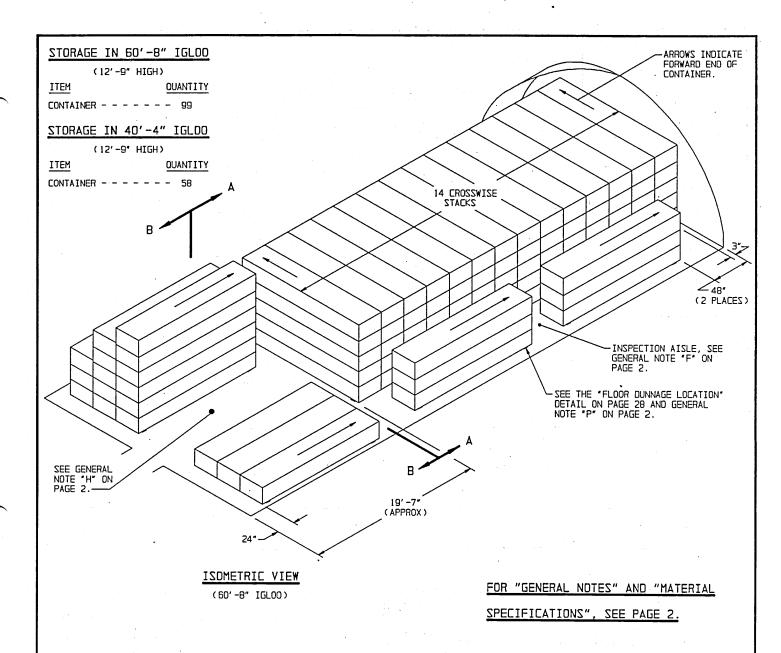
# CNU-355/E CONTAINER DETAIL

CONTAINER - - - - - - - - - - - 820 LBS (APPROX)
CUBE - - - - - - - - - - 82.5 CU FT (APPROX)
GROSS WEIGHT - - - - - - - 2,400 LBS (APPROX)

CONTAINER DETAIL

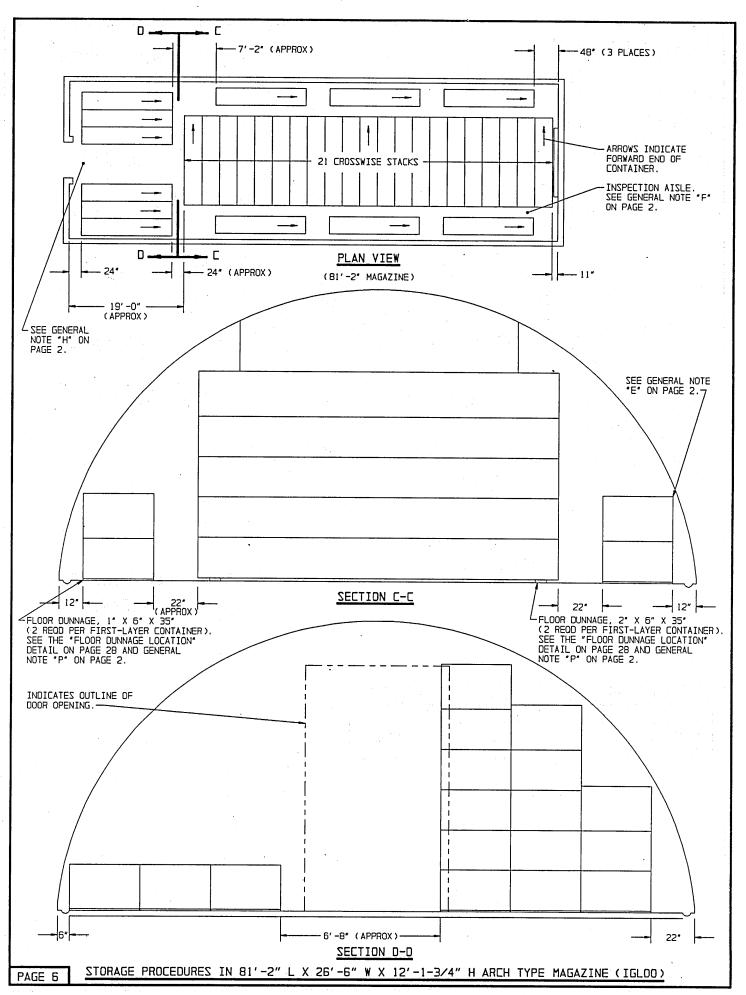
PAGE 3

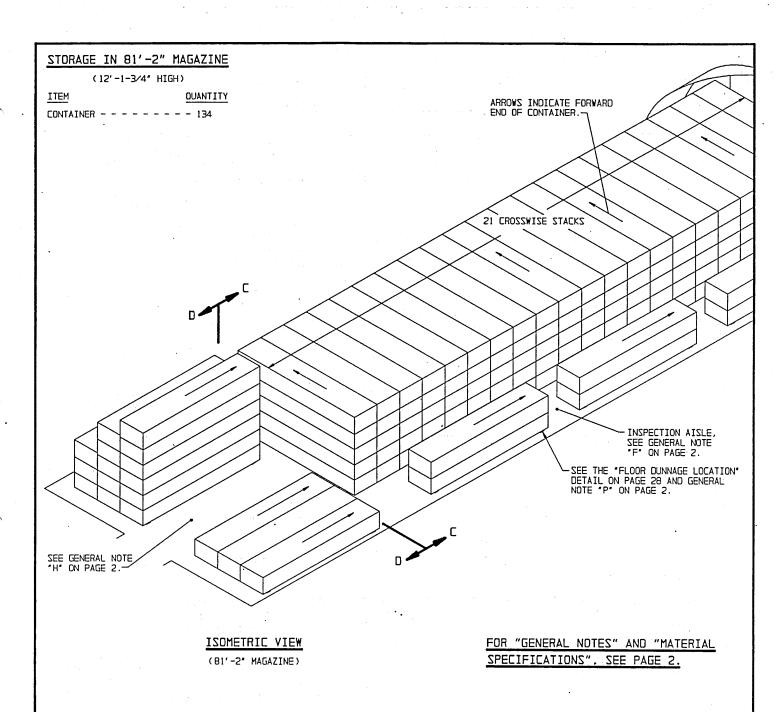




BILL OF MATERIAL	(PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET	
LENGTHWISE STACKS 1. X 6.	5.84	2.92	
CROZZMIZE ZTACKZ S. X 6.	5.84	5.84	

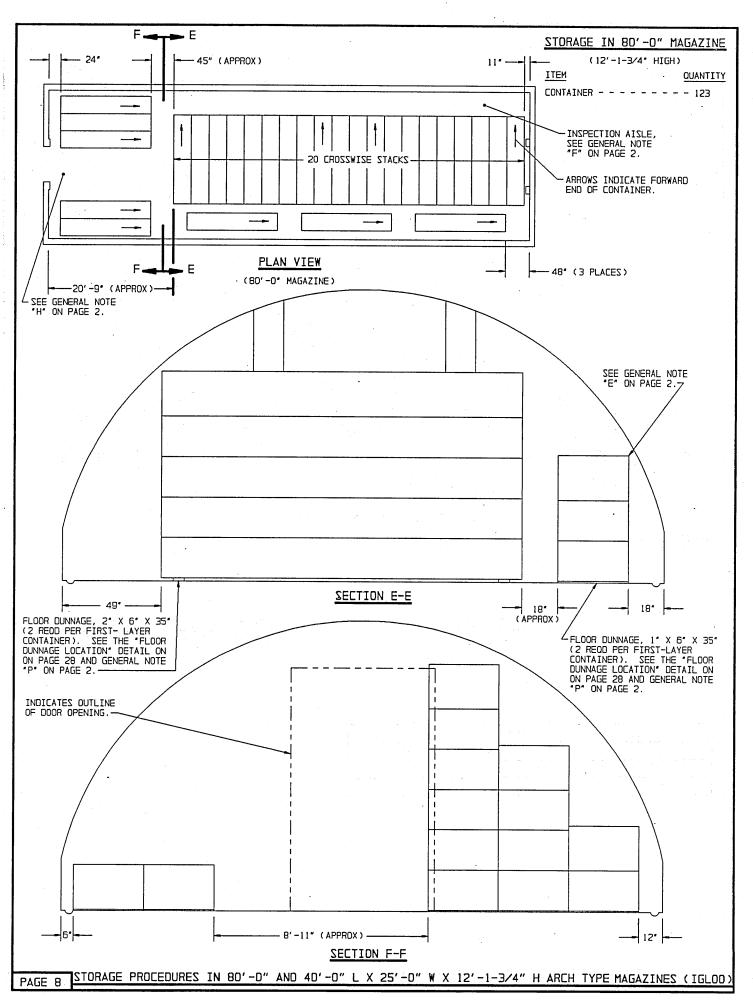
STDRAGE PROCEDURES IN 81'-0", 60'-8" AND 40'-4" L X 26'-6" W X 12'-9" H IGLOO MAGAZINES

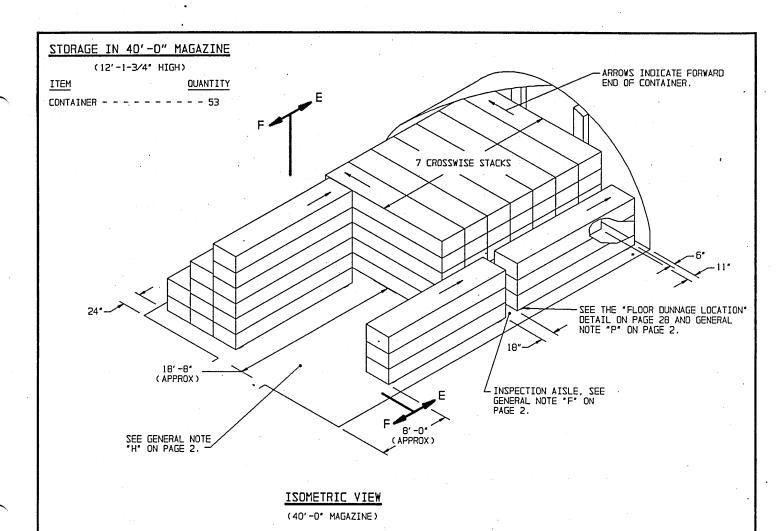




BILL OF MATERIAL	(PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET	
LENGTHWISE STACKS 1" X 6"	· 5.84	2.92	
CROSSWISE STACKS 2" X 6" .	5.84	5.84	

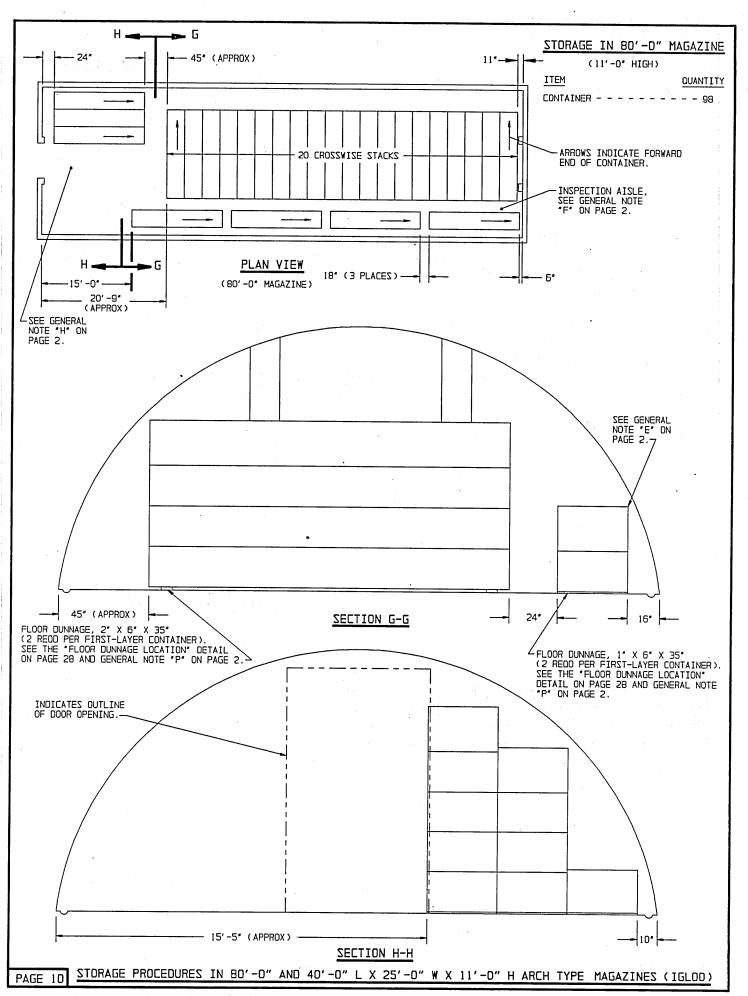
STORAGE PROCEDURES IN 81'-2" L X 26'-6" W X 12'-1-3/4" H ARCH TYPE MAGAZINE (IGLOO)

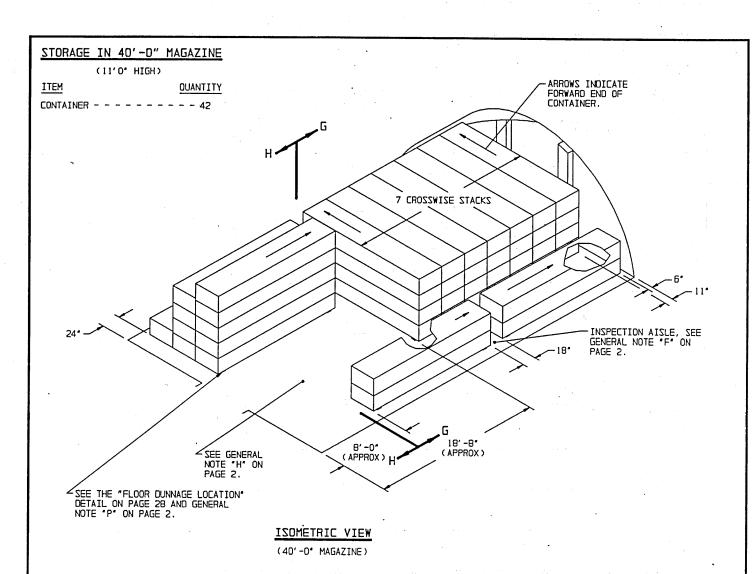




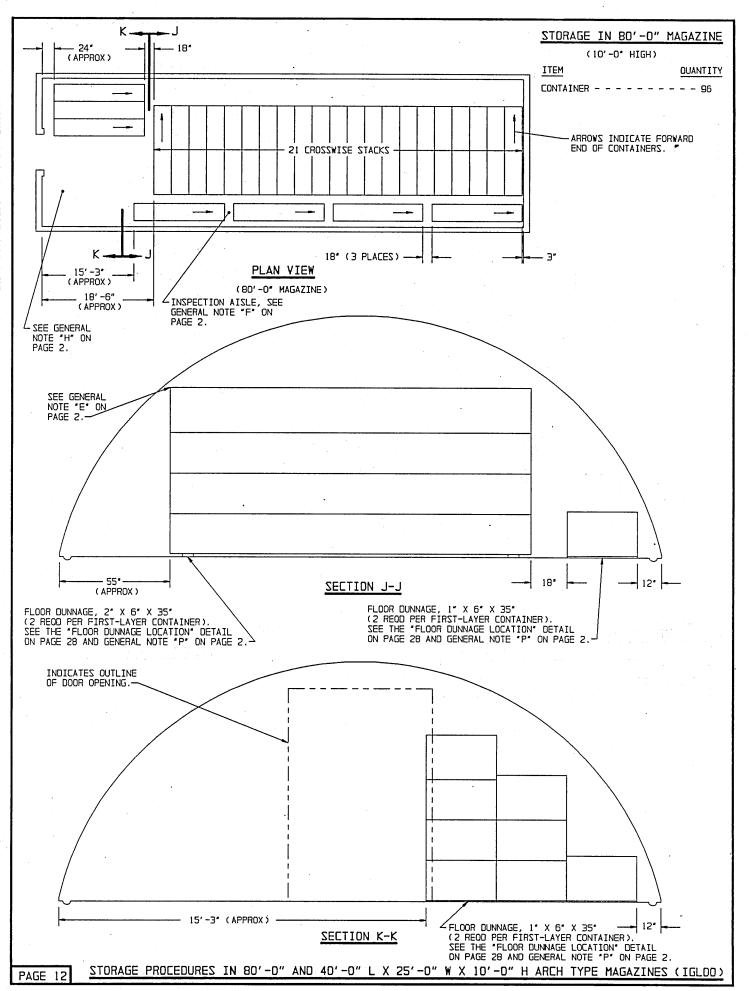
BILL OF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
LENGTHWISE STACKS 1" X 6"	5.84	2.92
CROSSWISE STACKS 2° X 6°	5.84	5.84

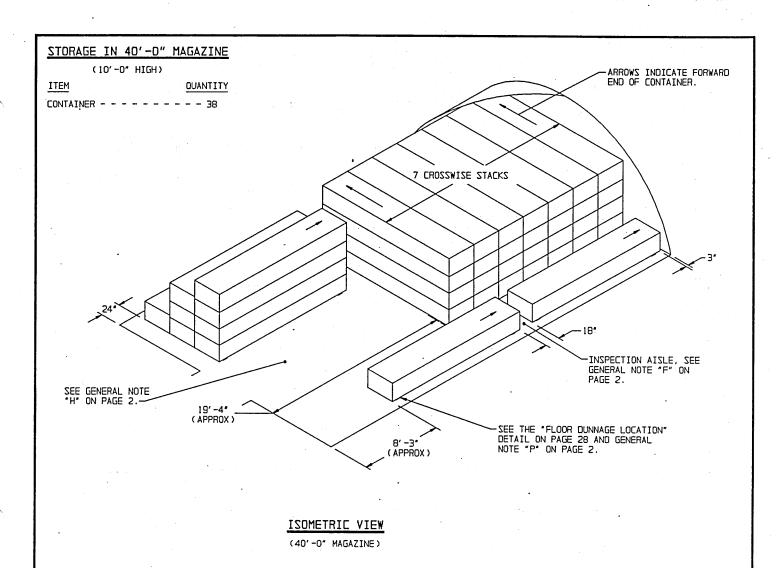
STORAGE PROCEDURES IN 80'-0" AND 40'-0" L X 25'-D" W X 12'-1-3/4" H ARCH TYPE MAGAZINES (IGLOO) PAGE 9



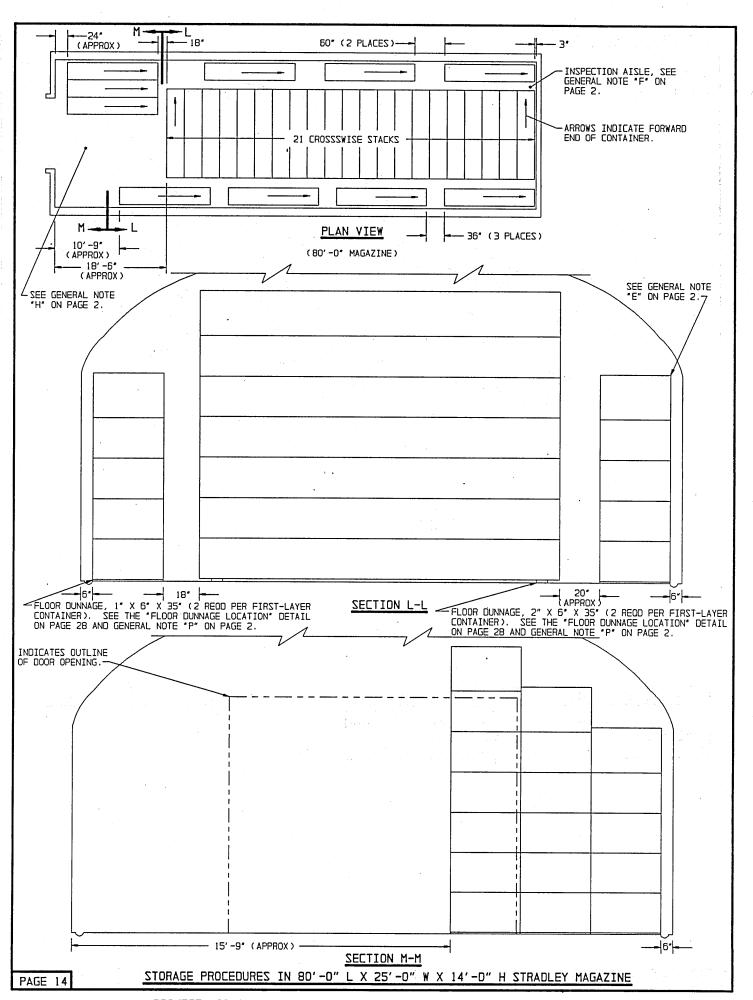


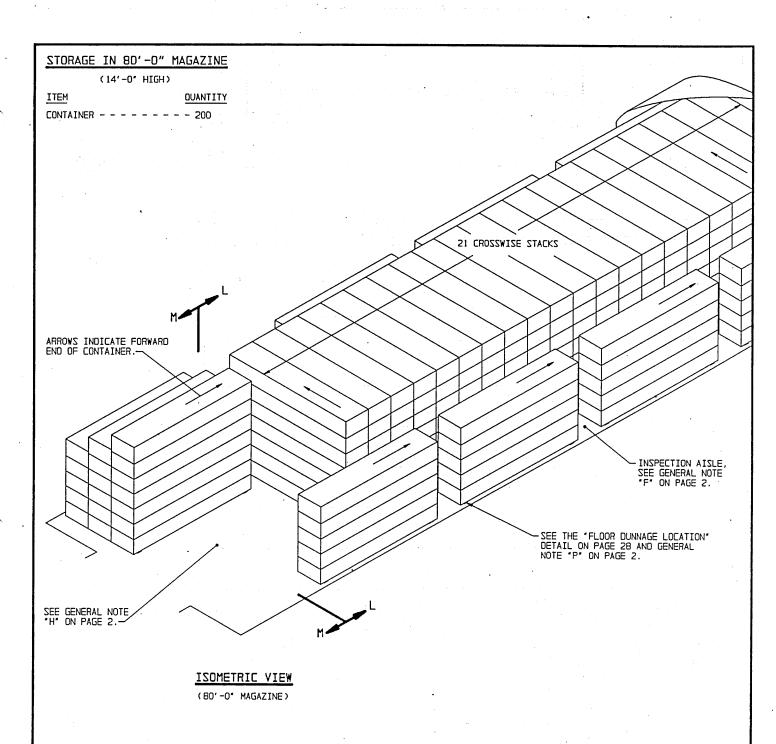
BILL OF MATERIAL	(PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET	
LENGTHWISE STACKS 1" X 6"	5.84	2.92	
CROSSWISE STACKS 2" X 6"	5.84	5.84	





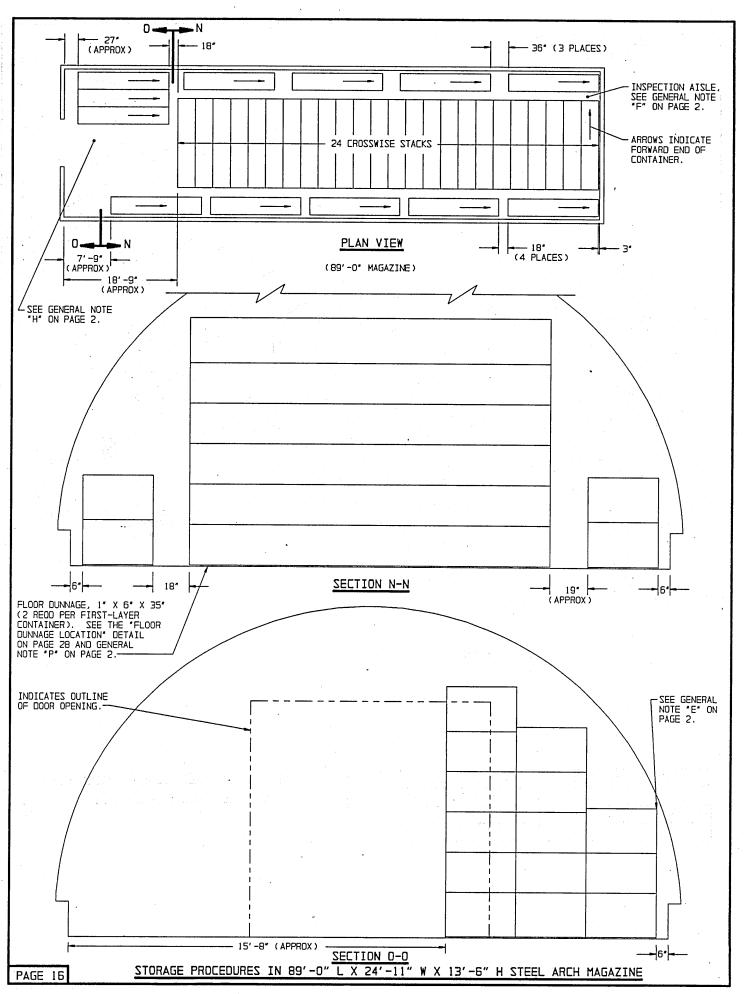
BILL OF MATERIAL	(PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET	
LENGTHWISE STACKS 1" X 6"	5.84	2.92	
CROSSWISE STACKS 2" X 6"	5.84	5.84	

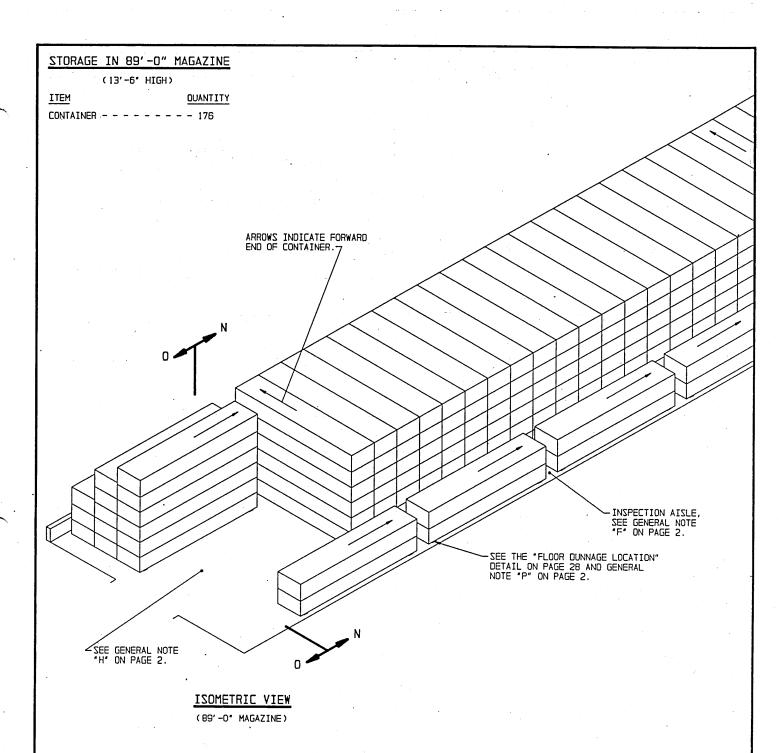




BILL OF MATERIAL	ATERIAL (PER FIRST LAYER CONTAINER)	
LUMBER	LINEAR FEET	BOARD FEET
LENGTHWISE STACKS 1" X 6"	5.84	2.92
CROSZMIZE ZIACKZ S. X 6.	5.84	5.84

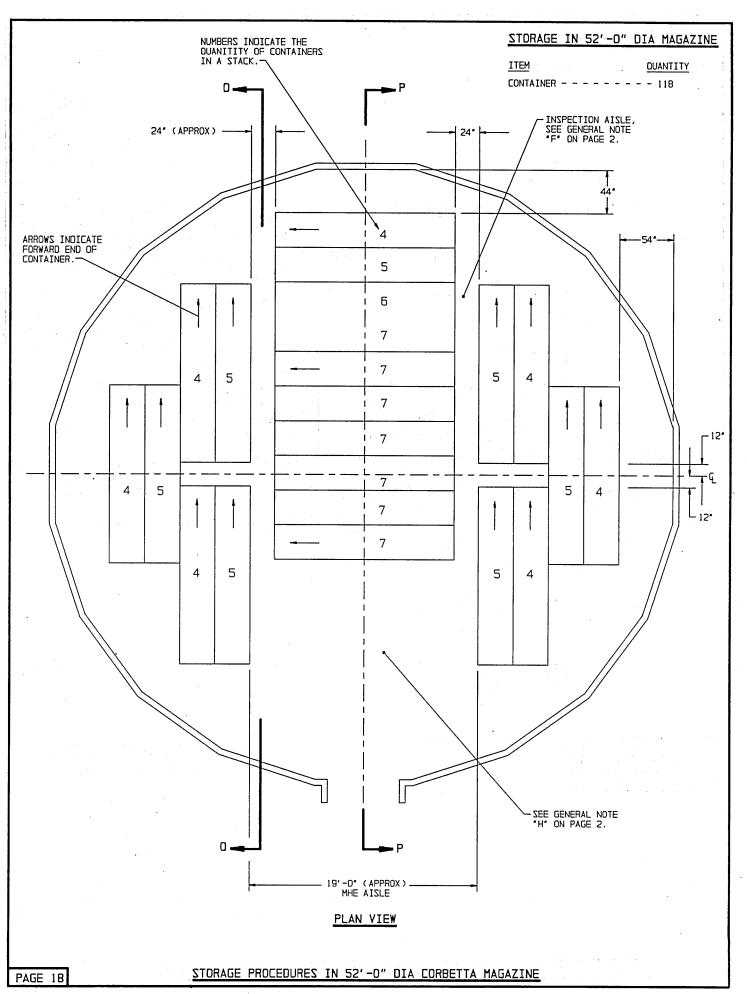
STORAGE PROCEDURES IN 80'-0" L X 25'-0" W X 14'-0" H STRADLEY MAGAZINE

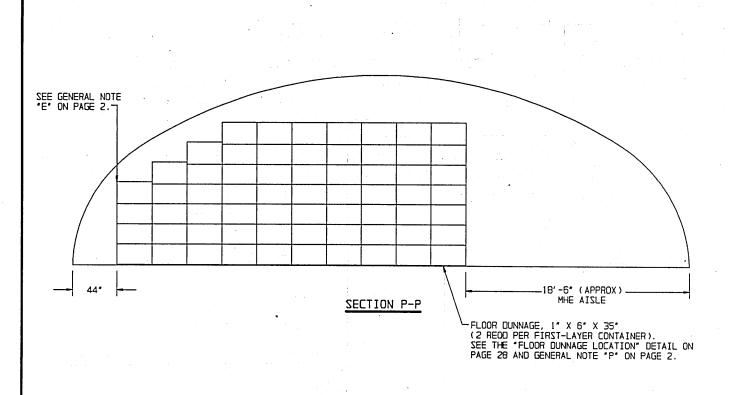


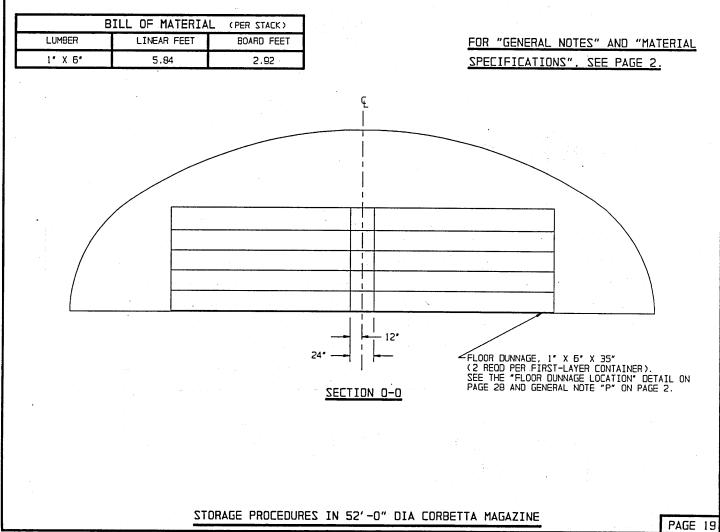


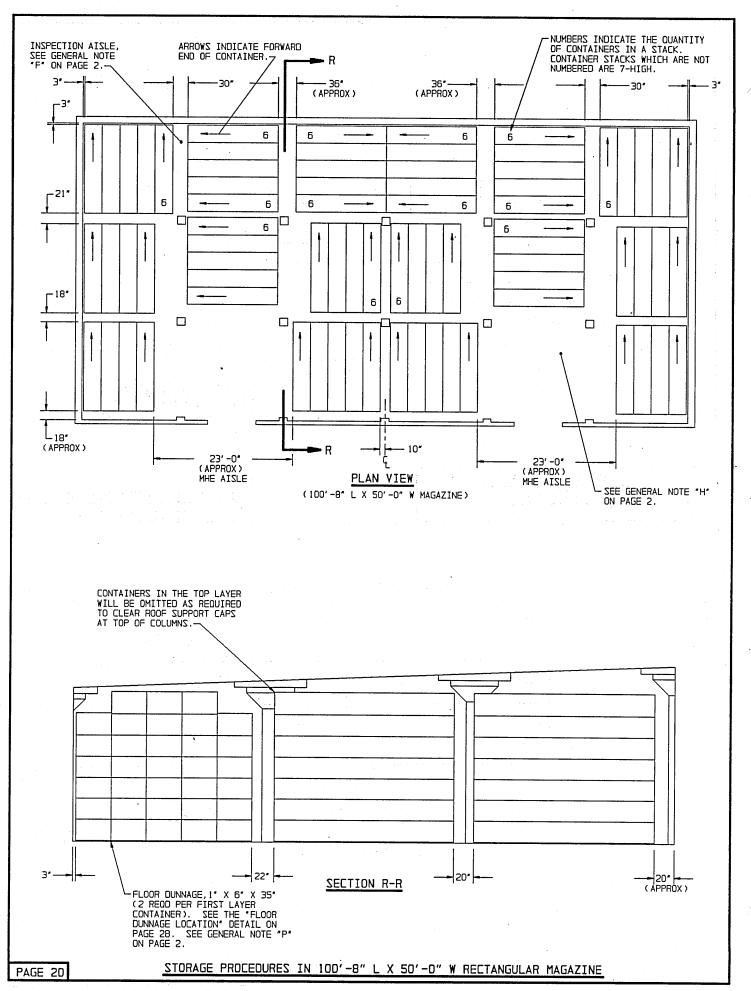
BILL OF MATERIAL (PER STACK)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.84	2.92

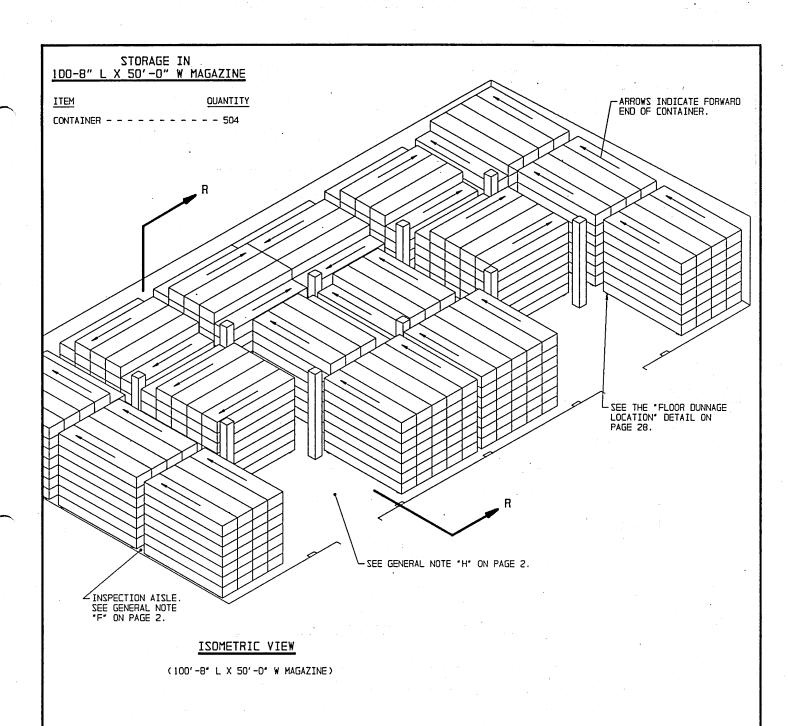
STORAGE PROCEDURES IN 89'-0" L X 24'-11" W X 13'-6" H STEEL ARCH MAGAZINE





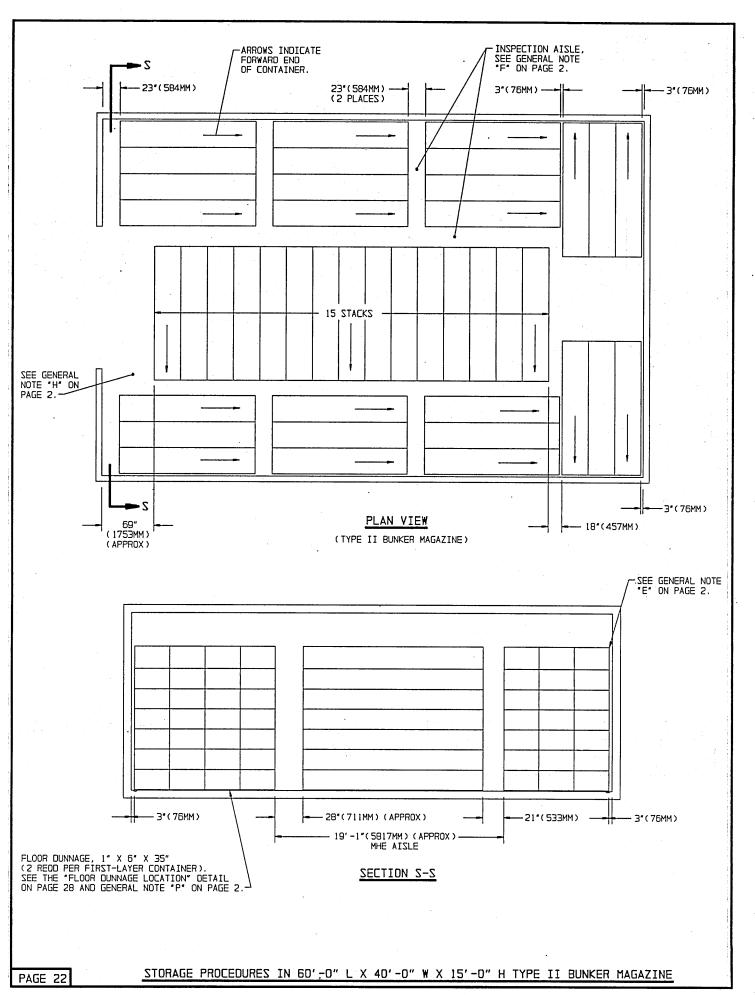


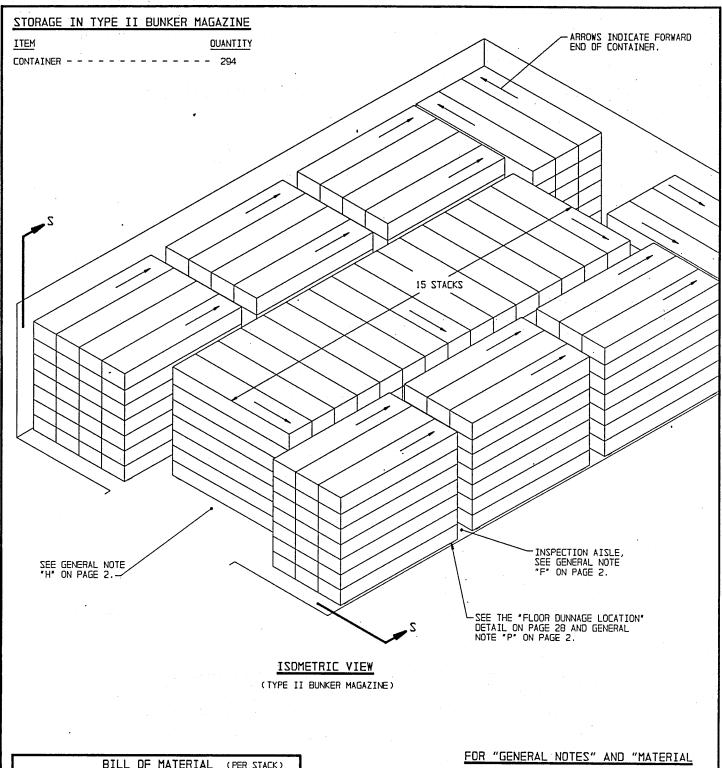




BILL OF MATE	RIAL (PER FIRST	LAYER CONTAINER)
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.84	2.92

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

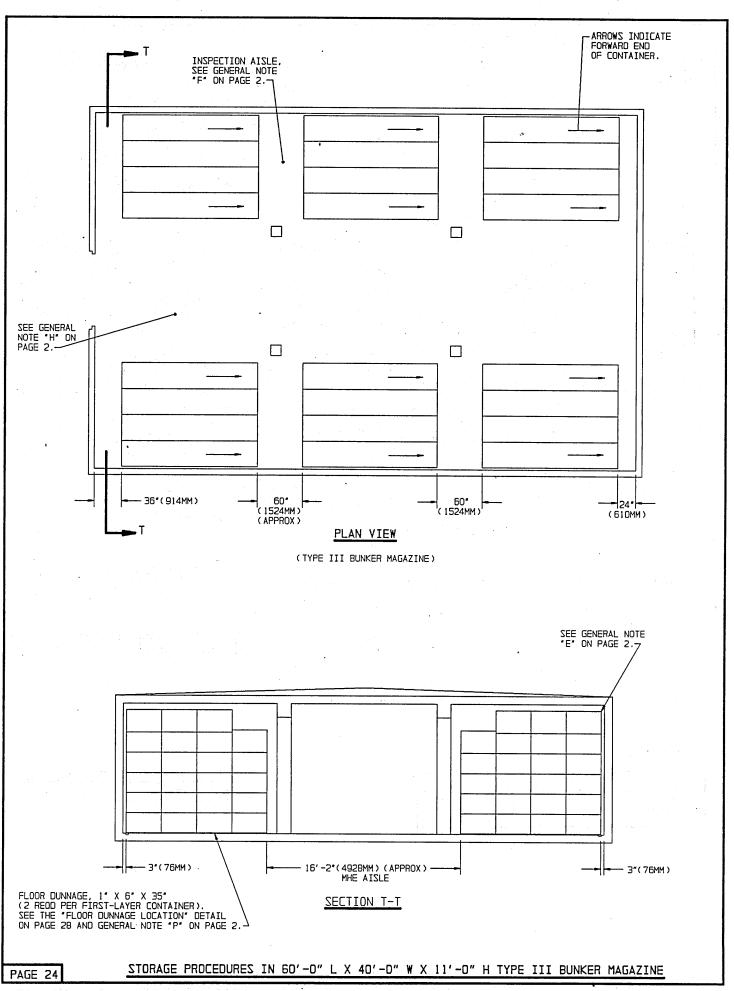


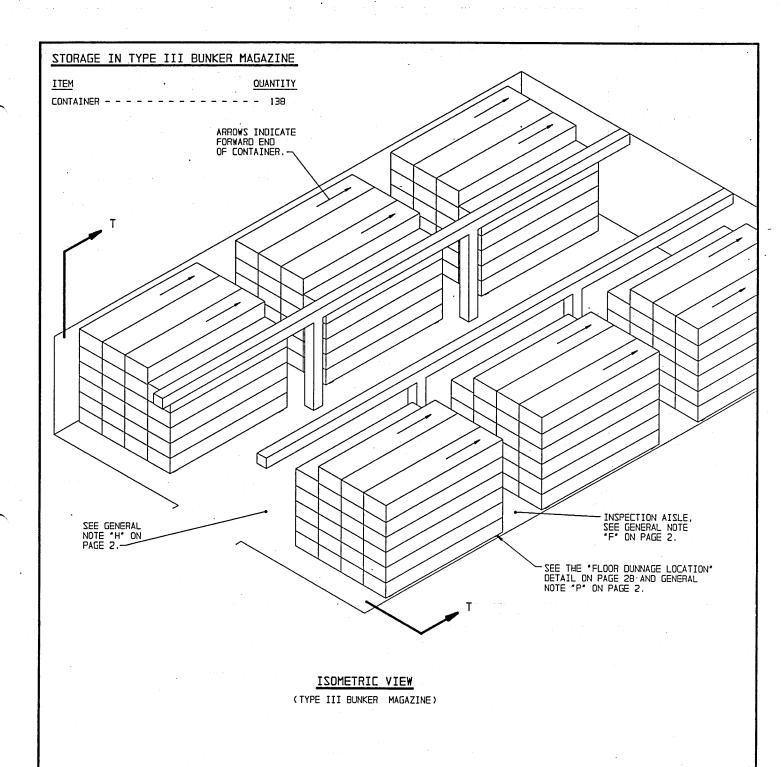


В	ILL OF MATERIA	L (PER STACK)
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.84	2.92

SPECIFICATIONS", SEE PAGE 2.

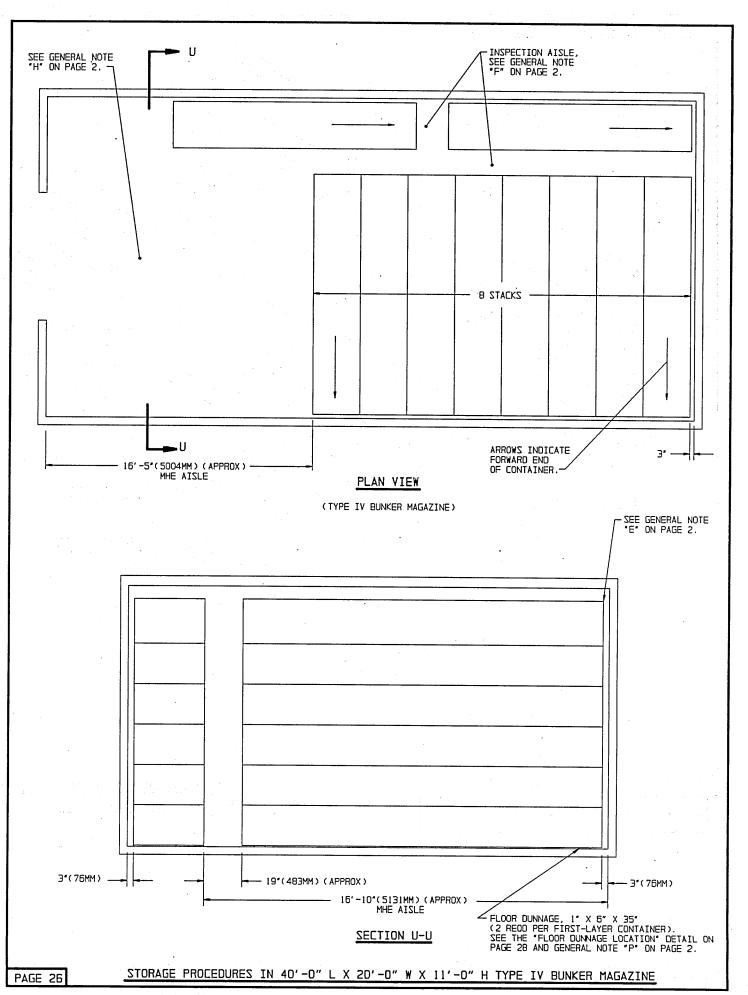
STORAGE PROCEDURES IN 60'-0-" L X 40'-0" W X 15'-0" H TYPE II BUNKER MAGAZINE

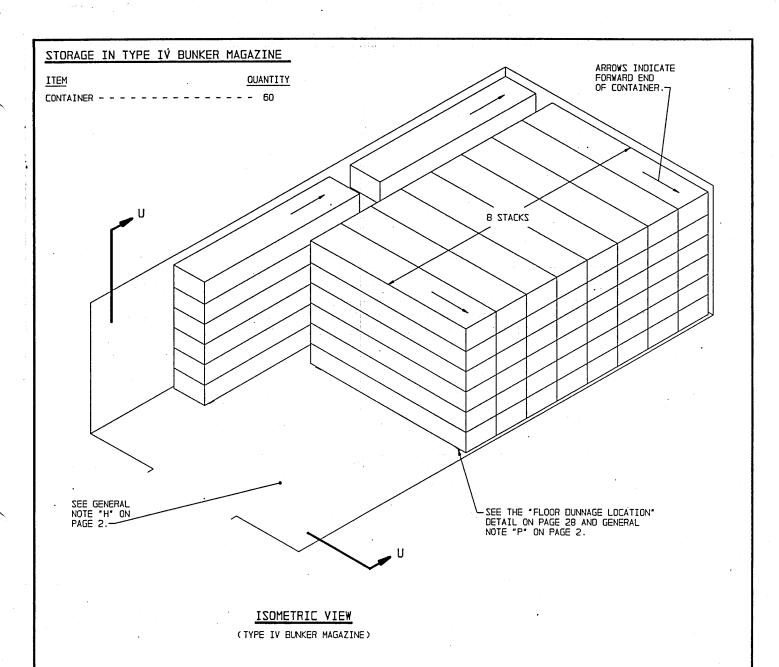




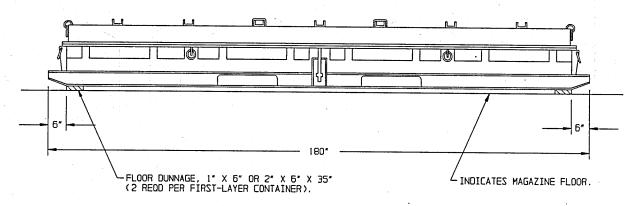
	BILL OF MATERIAL	(PER STACK)
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.84	2.92

STORAGE PROCEDURES IN 60'-0" L X 40'-0" W X 11'-0" H TYPE III BUNKER MABAZINE





BILL OF MATERIAL (PER STACK)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.84	2.92



# FLOOR DUNNAGE LOCATION

SEE GENERAL NOTE "P" ON PAGE 2.

DETAILS