# MLRS-BCW

STORAGE IN APPROVED MAGAZINES OF INJECTOR ASSEMBLY CONTAINER (IAC) FOR THE MULTIPLE LAUNCH ROCKET SYSTEM-BINARY CHEMICAL WARHEAD

#### INDEX

ITEM	PAGE(S)
GENERAL NOTES AND MATERIAL SPECIFICATIONS DETAILS	
81'-0", 60'-8" AND 40'-4" L X 26'-6" W X 12'-9" H IGLO	00 MAGAZINES 4.5
81'-2" L X 26'-6" W X 12'-1-3/4" H ARCH TYPE MAGAZINE	6.7
80'-0" AND 40'-0" L X 25'-0" W X 12'-1-3/4" H ARCH TYF	E MAGAZINES 8 9
80'-0" AND 40'-0" L X 25'-0" W X 11'-0" H ARCH TYPE MA	GAZINES 10.11
80'-0" AND 40'-0" L X 25'-0" W X 10'-0" H ARCH TYPE MA	GAZINES 12.13
80'-0" L X 25'-0" W X 14'-0" H STRADLEY MAGAZINE	
89'-0" L X 24'-11" W X 13'-6" H STEEL ARCH MAGAZINE -	18:17
52'-0" DIA CORBETTA MAGAZINE	
100'-8" L X 50'-0" W RECTANGULAR MAGAZINE	
60'-0" L X 40'-0" W X 15'-0" H TYPE II BUNKER MAGAZINE	22.23
60'-0" L X 40'-0" W X 11'-0" H TYPE III BUNKER MAGAZIN	E 24.25
40'-0" L X 20'-0" W X 11'-0" H TYPE IV BUNKER MAGAZINE	26.27
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APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND	DRAFTSM	AN	I. DEPPE	
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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 IN THIS DRAWING ARE APPLICABLE TO THE INJECTOR ASSEMBLY CONTAINER (IAC) FOR THE MULTIPLE LAUNCH ROCKET SYSTEM-BINARY CHEMICAL WEAPON (MLRS-BCW). SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE CONTAINER WITH INJECTOR ASSEMBLIES.
- C. FOR DETAILS OF THE INJECTOR ASSEMBLY CONTAINER, SEE PAGE 3.
  - CONTAINER DIMENSIONS - - 91" LONG BY 34" WIDE BY 37" HIGH. (36" STACKING HEIGHT ASSUMED). GROSS WEIGHT - - - - 1,053 POUNDS (APPROX)
- D. <u>CAUTION</u>: THIS ITEM MUST BE STORED WITH THE FORWARD END FACING TOWARD AN INSPECTION AISLE AS INDICATED BY THE DIRECTIONAL ARROWS ON THE STORAGE VIEWS. CONTAINERS MUST BE STACKED NO MORE THAN FOUR (4) CONTAINERS HIGH.
- E. MAGAZINES MUST COMPLY WITH ALL REQUIREMENTS AND BE APPROVED FOR STORAGE OF CHEMICAL ITEMS. 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 FACILITATE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED.
- E. STORED CONTAINERS MUST NOT CONTACT THE WALLS, COLUMNS OR BEAMS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REOUIREMENT, CONTAINERS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN OR AISLE DIMENSIONS MAY BE ADJUSTED, AS NECESSARY.
- G. AISLE DIMENSIONS AS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT (MHE). HOWEVER, A 24° MINIMUM INSPECTION AISLE MUST BE MAINTAINED AT THE FORWARD END OF ALL CONTAINERS.
- H. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED IN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- J. ANY CONTAINER THAT DOES NOT CONTAIN SIX (6) INJECTOR
  ASSEMBLIES WILL NOT BE BURIED IN STORAGE. IT SHOULD BE
  POSITIONED ON TOP OF THE LAST STACK ADJACENT TO OR
  NEAREST THE MAGAZINE DOOR.
- K. 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 "SECTION" 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 INJECTOR
  ASSEMBLY CONTAINERS AS ONE LIFT.

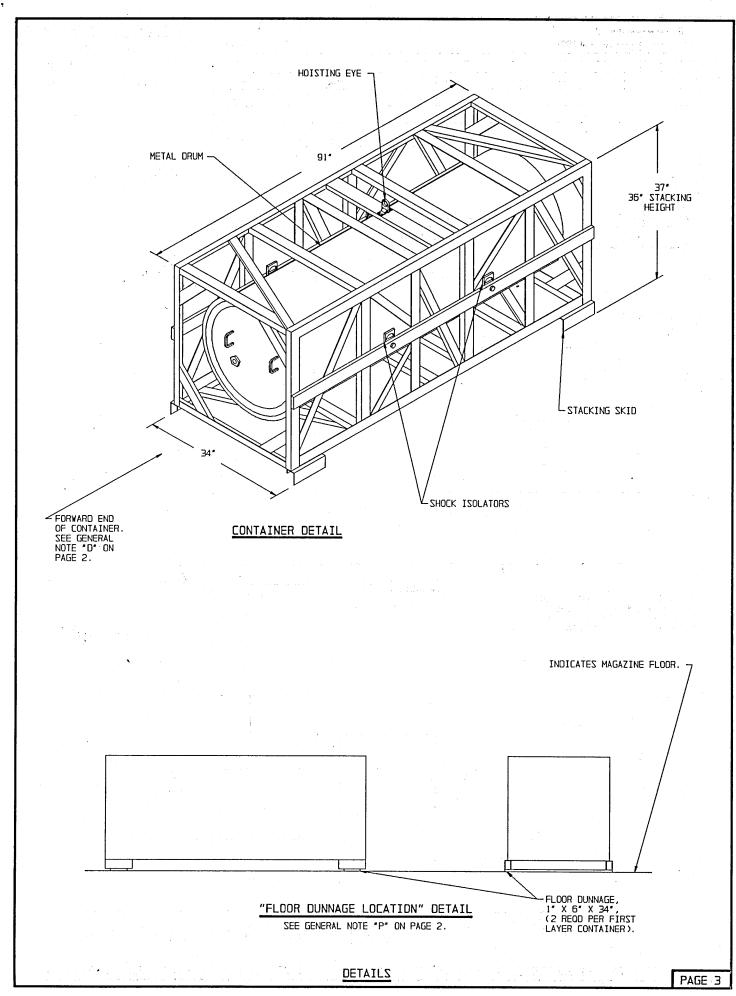
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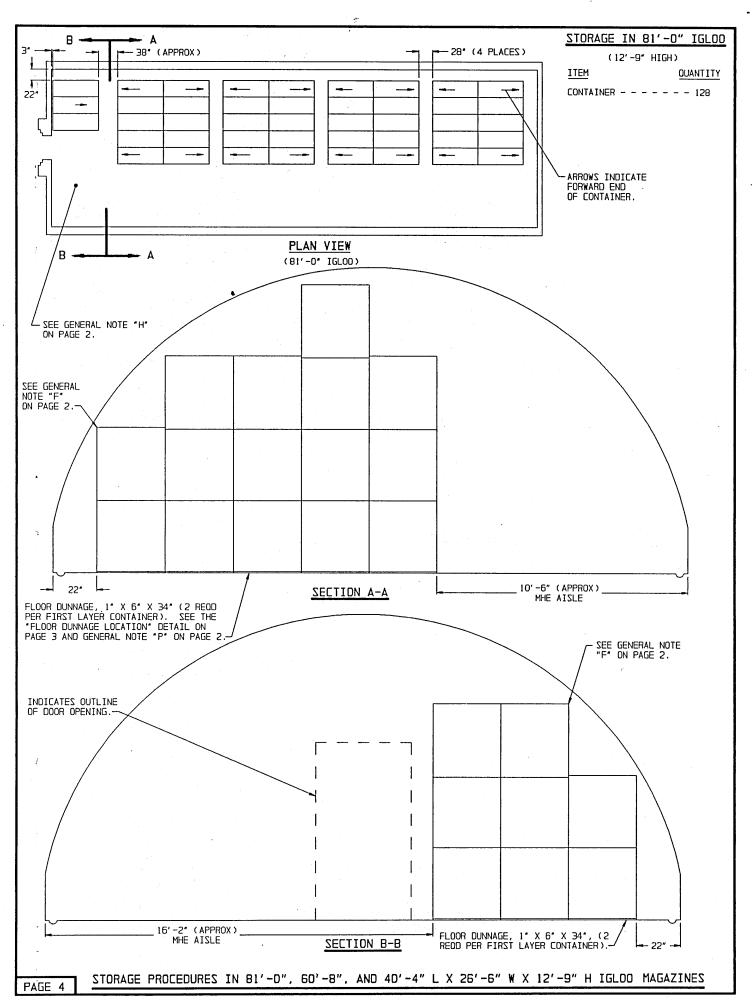
#### (GENERAL NOTES CONTINUED)

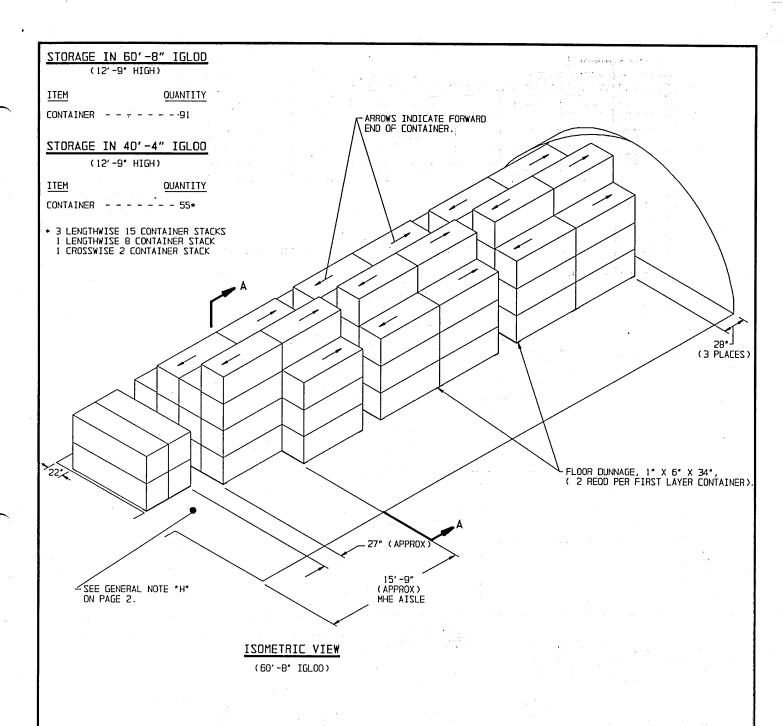
- L. IF THE OUANTITY OF CONTAINERS FOR A MAGAZINE IS TO BE REDUCED FROM WHAT IS SHOWN HEREIN, DUE TO A LIMITED OUANTITY TO BE STORED OR FOR ANY OTHER REASON, THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS.
- M. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- N. 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.
- O. <u>CAUTION</u>: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED.
- P. THE USE OF "FLOOR DUNNAGE" UNDER EACH FIRST-LAYER CONTAINER IS OPTIONAL, ALTHOUGH THE USE OF THIS TYPE DUNNAGE IS DELINEATED WITHIN THIS STORAGE PROCEDURE DRAWING. THE PURPOSE OF FLOOR DUNNAGE IS TO HELP KEEP THE SKIDS 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 AS SPECIFIED, THE USE OF THICKER FLOOR DUNNAGE MAY BE REOUIRED, AND SHOULD BE USED. TO ACHIEVE THE DESIRED OBJECTIVE. RANDOM LENGTH FLOOR DUNNAGE MAY BE USED.
- O. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- R. 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.

#### MATERIAL SPECIFICATIONS

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



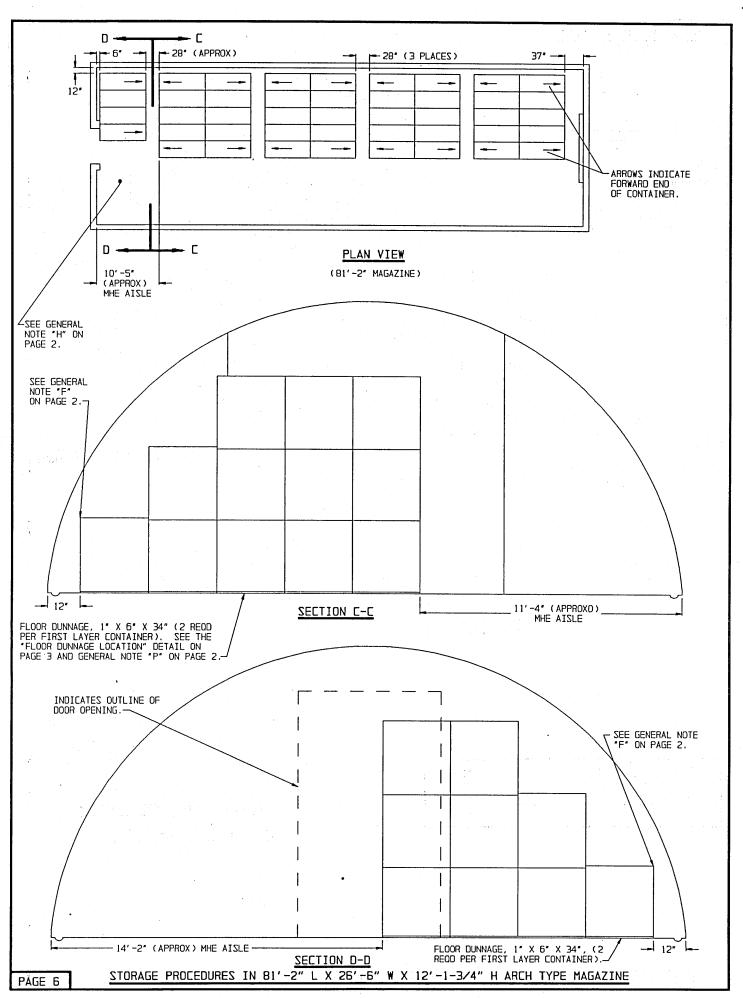


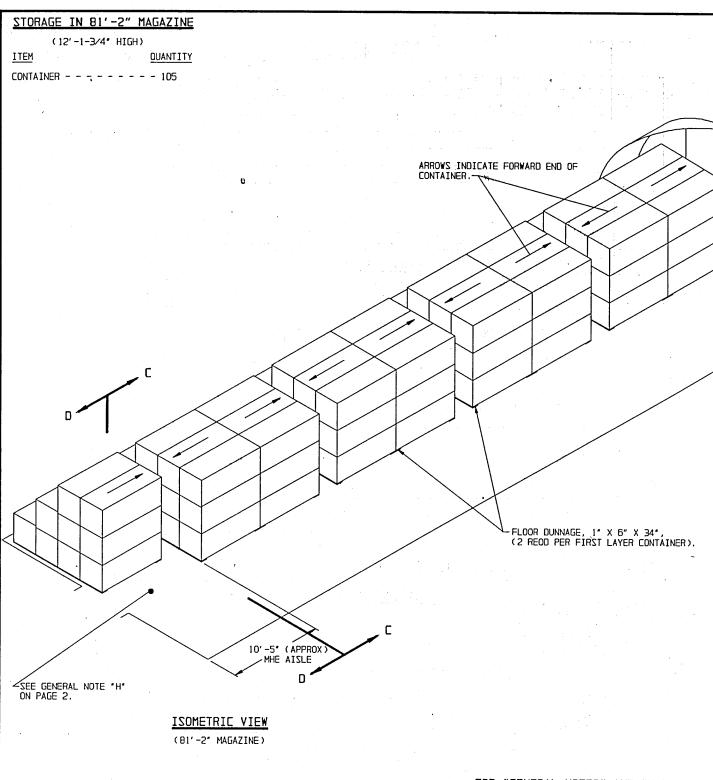


BILL OF MATERIAL (PER FIRST LAYER CONTAINER)			
LUMBER	LINEAR FEET	BOARD FEET	
1" X 6"	5.67	2.83	

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

STORAGE PROCEDURES IN B1'-D", 60'-8" AND 40'-4" L X 26'-6" W X 12'-9" H IGLOO MAGAZINES

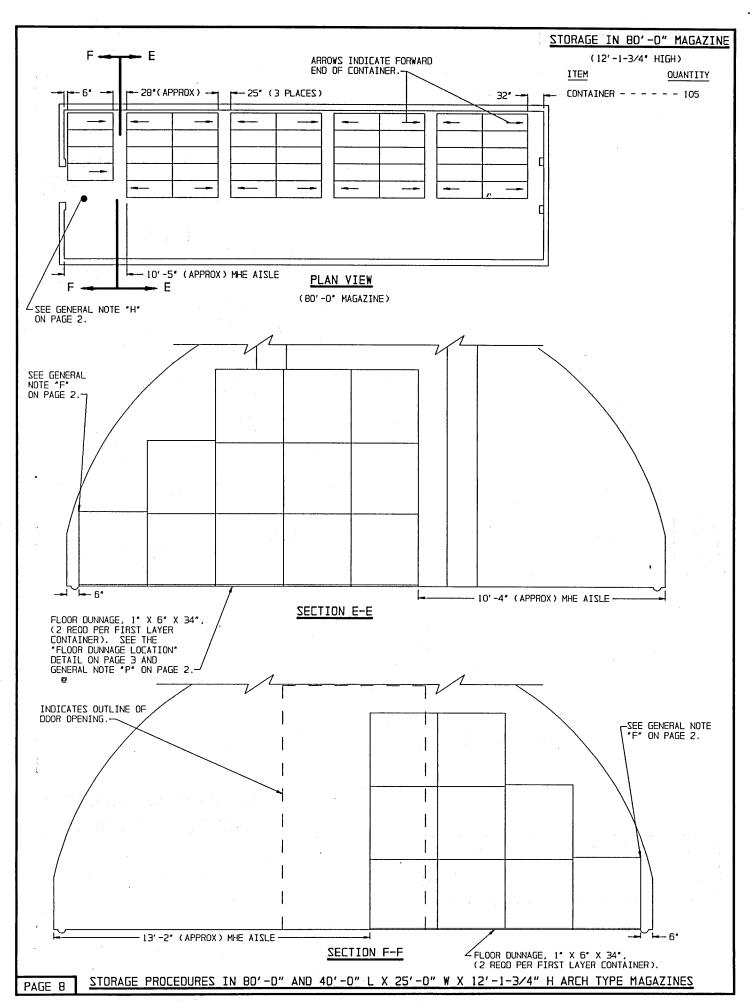




FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS". SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.67	2.83

STORAGE PROCEDURES IN B1'-2" L X 26'-6" W X 12'-1-3/4" H ARCH TYPE MAGAZINE



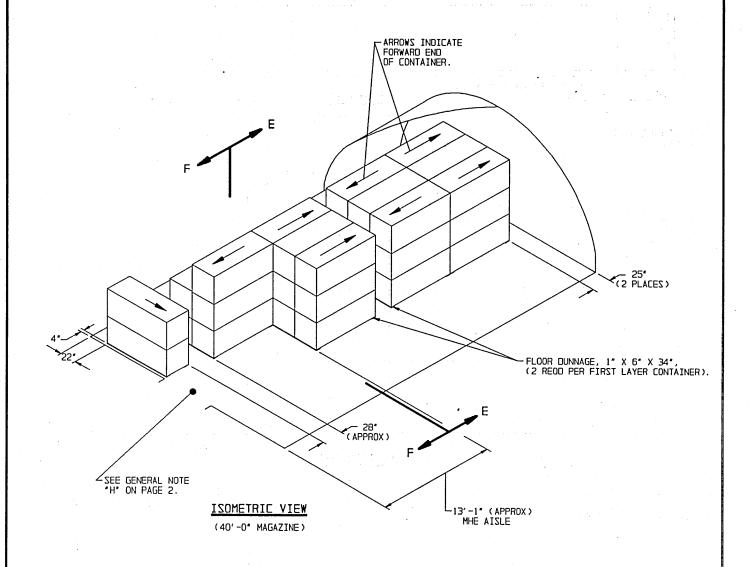
## STORAGE IN 40'-0" MAGAZINE

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

ITEM

QUANTITY

CONTAINER - - - - - - - 44

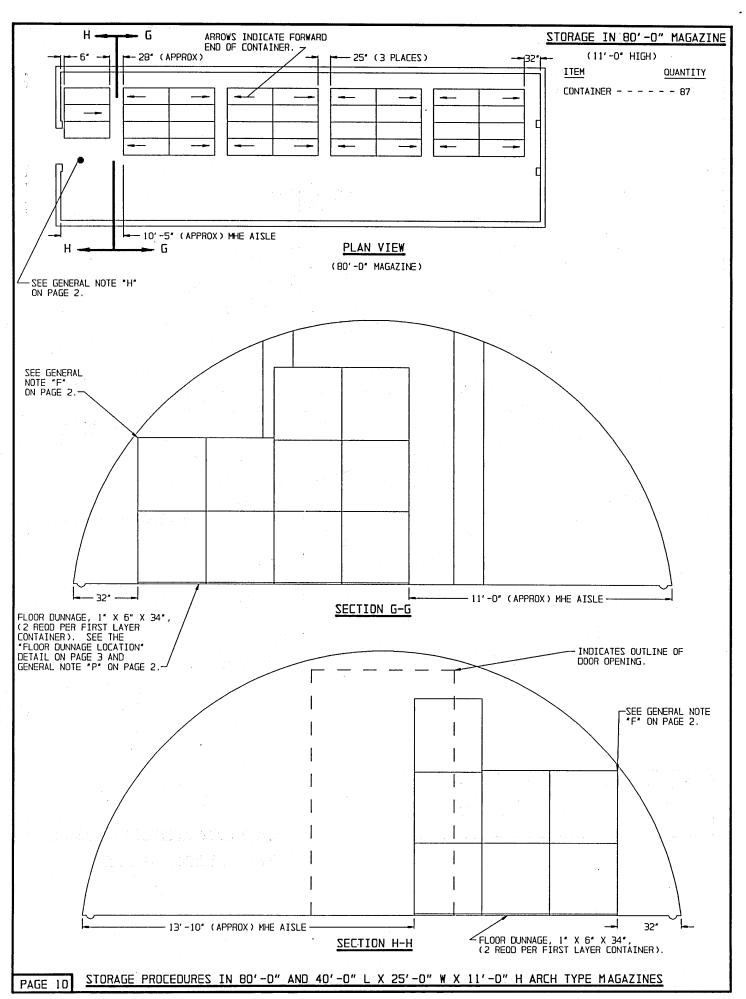


BILL OF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.67	2.83

FOR "GENERAL NOTES" AND "MATERIAL

SPECIFICATIONS". SEE PAGE 2.

STORAGE PROCEDURES IN 80'-0" AND 40'-0" L X 25'-0" W X 12'-1-3/4" H ARCH TYPE MAGAZINES



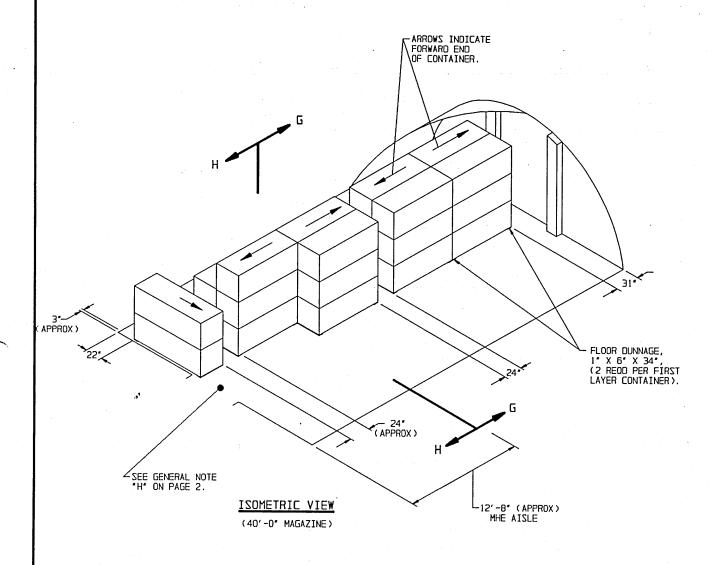
## STORAGE IN 40'-0" MAGAZINE

(11'-0" HIGH)

<u>ITEM</u>

QUANTITY

CONTAINER - - - - - - - 39

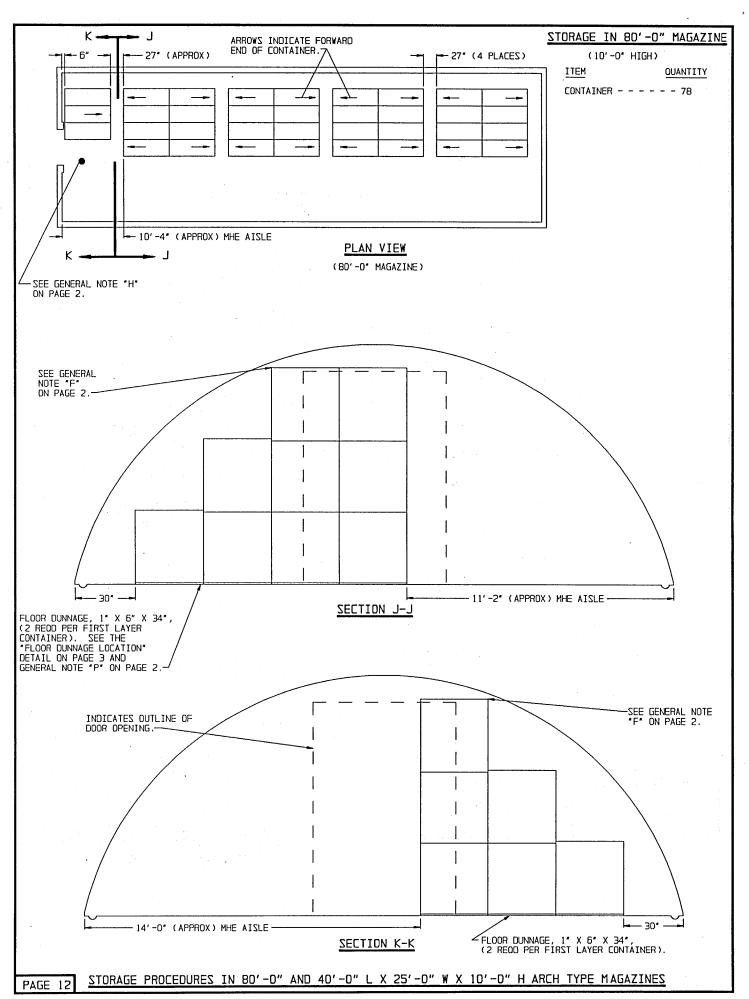


BILL OF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.67	2.83

FOR "GENERAL NOTES" AND "MATERIAL

SPECIFICATIONS". SEE PAGE 2.

STORAGE PROCEDURES IN 80'-0" AND 40'-D" L X 25'-0" W X 11'-0" H ARCH TYPE MAGAZINES



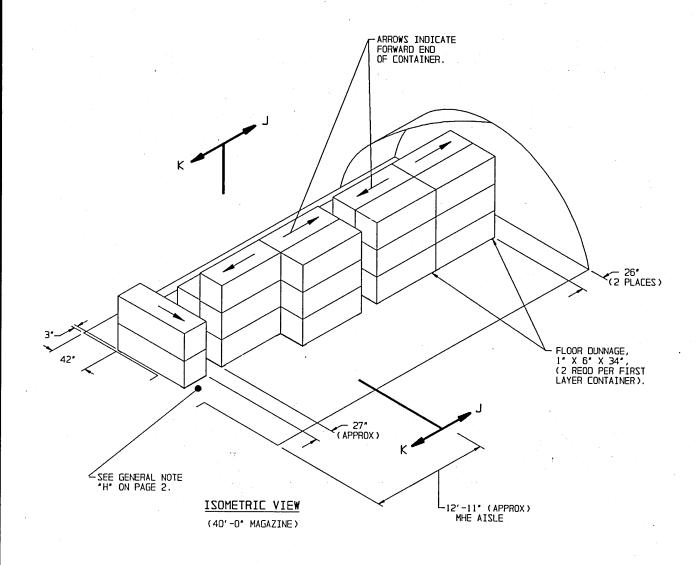
## STORAGE IN 40'-0" MAGAZINE

(10'-0" HIGH)

ITEM

<u>OUANTITY</u>

CONTAINER - - - - - - - 35

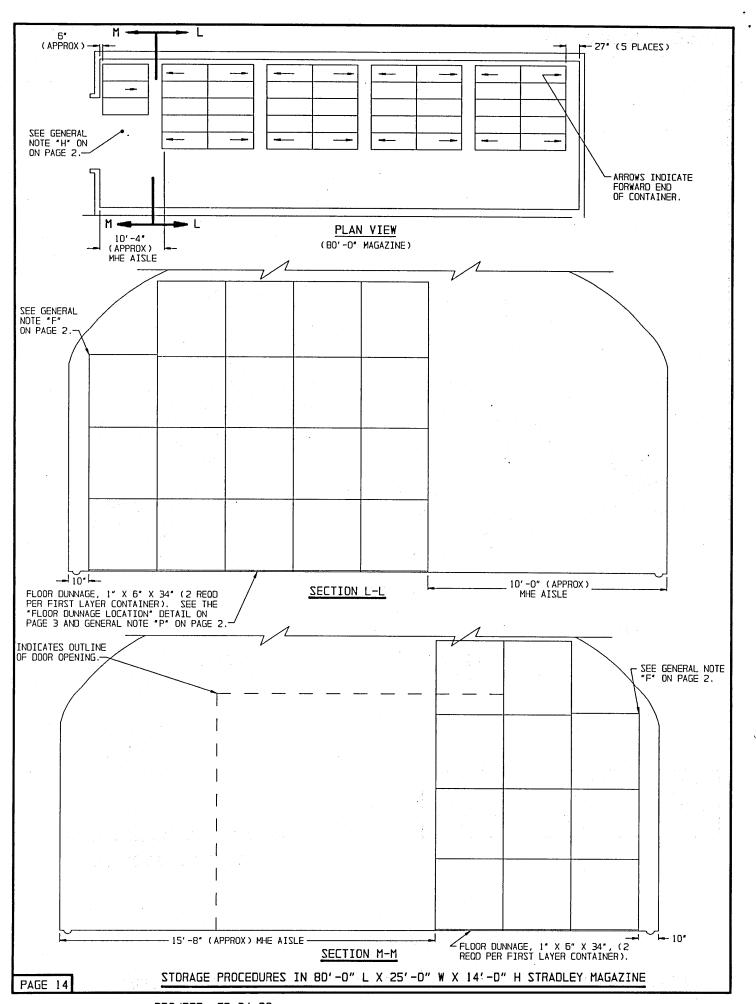


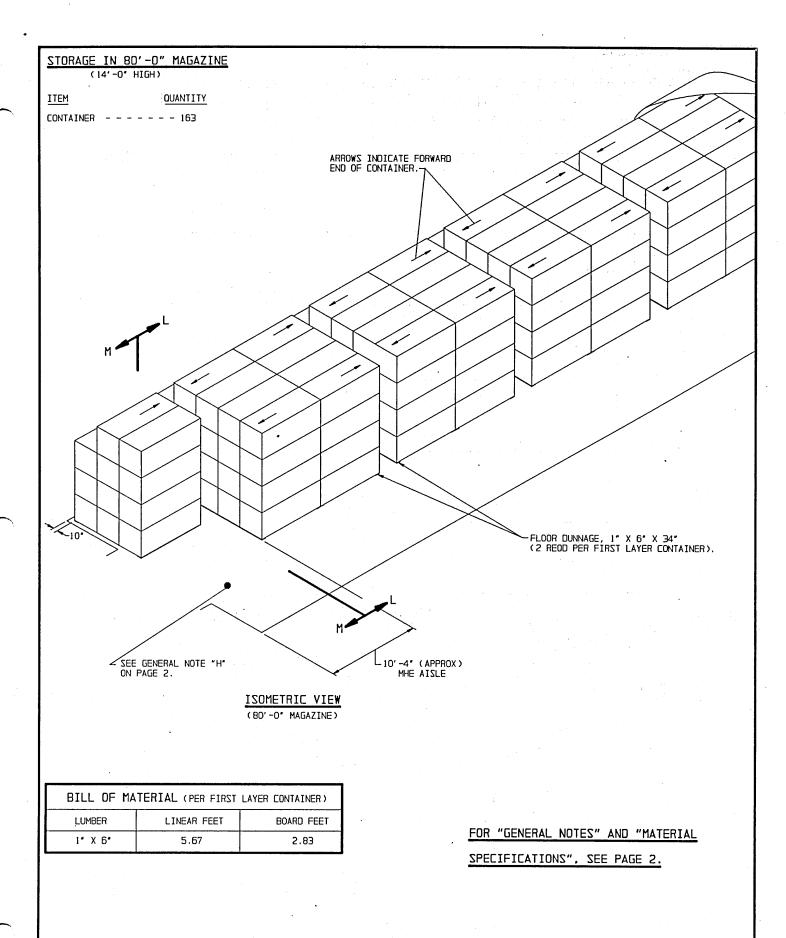
BILL OF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.67	2.83

FOR "GENERAL NOTES" AND "MATERIAL

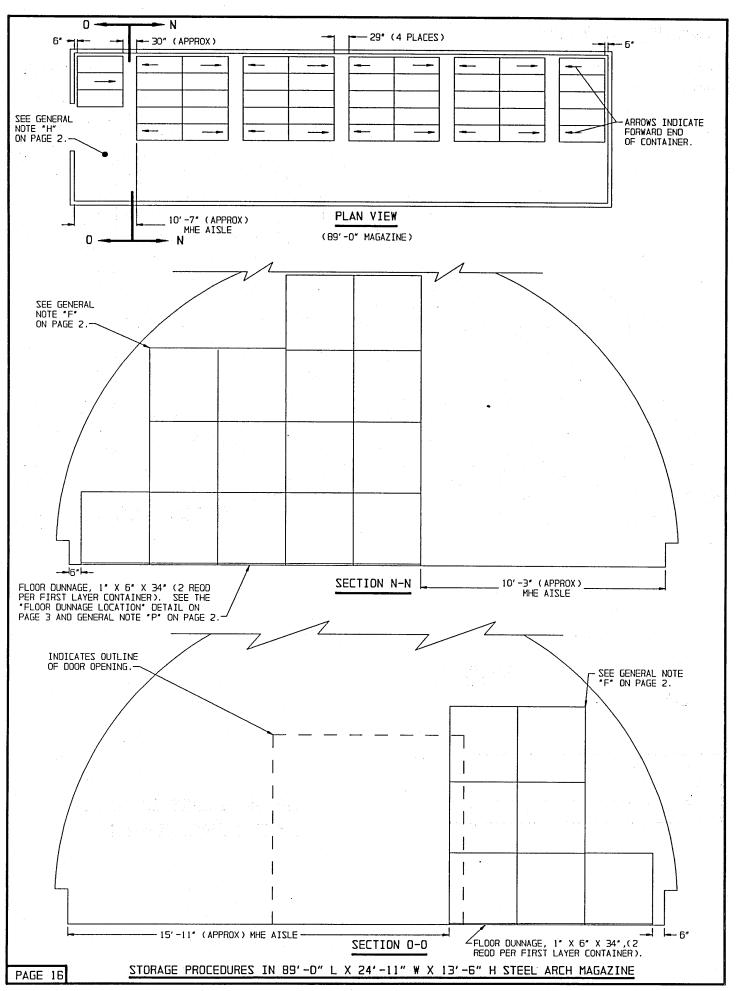
SPECIFICATIONS", SEE PAGE 2.

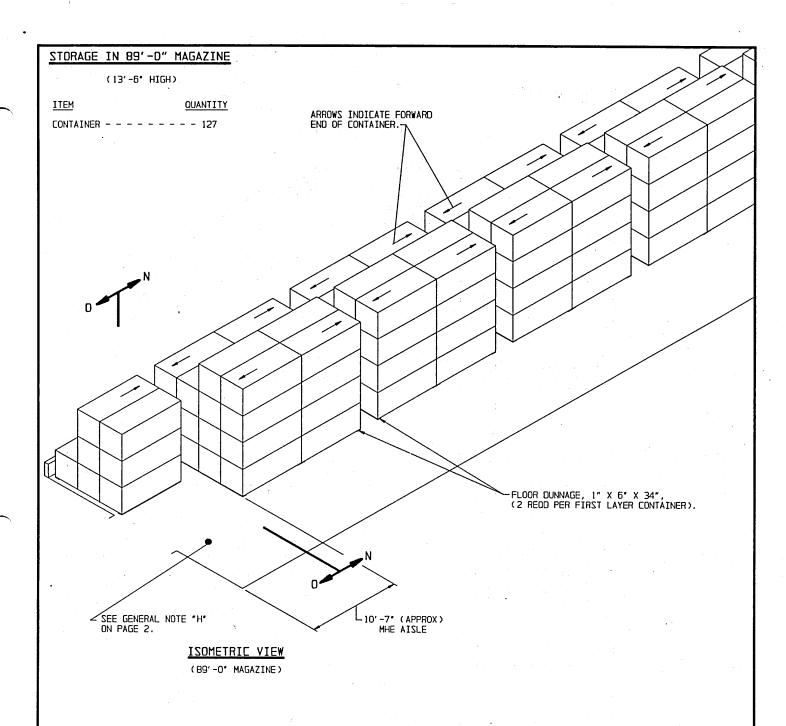
STORAGE PROCEDURES IN 80'-0" AND 40'-D" L X 25'-0" W X 10'-0" H ARCH TYPE MAGAZINES





STORAGE PROCEDURES IN 8D'-0" L X 25'-D" W X 14'-0" H STRADLEY MAGAZINE

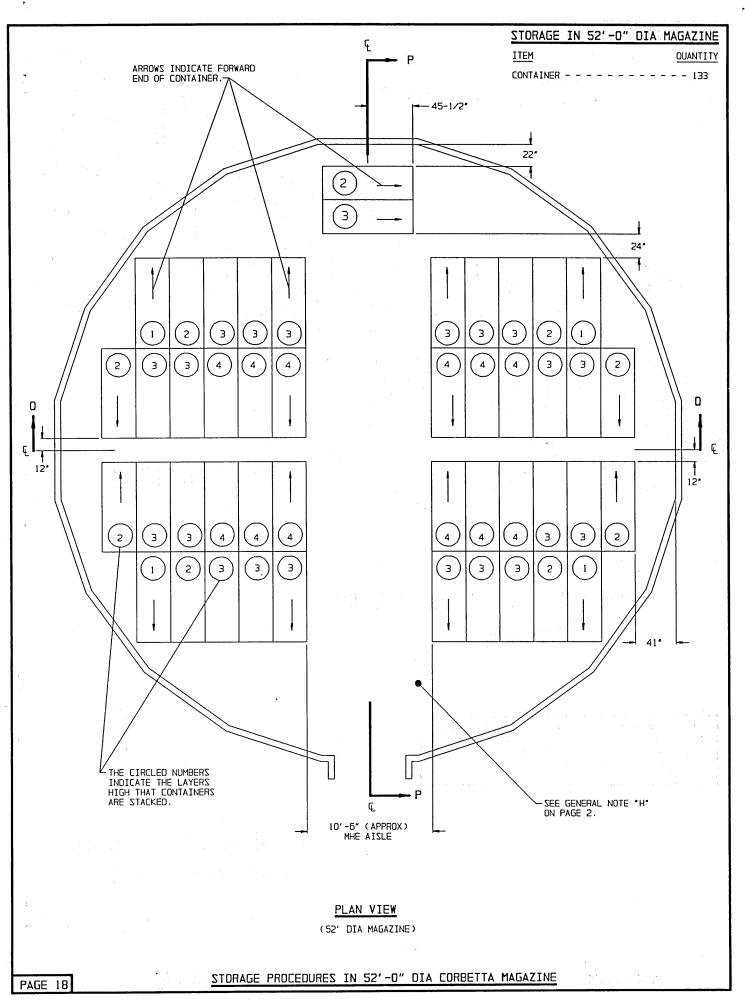


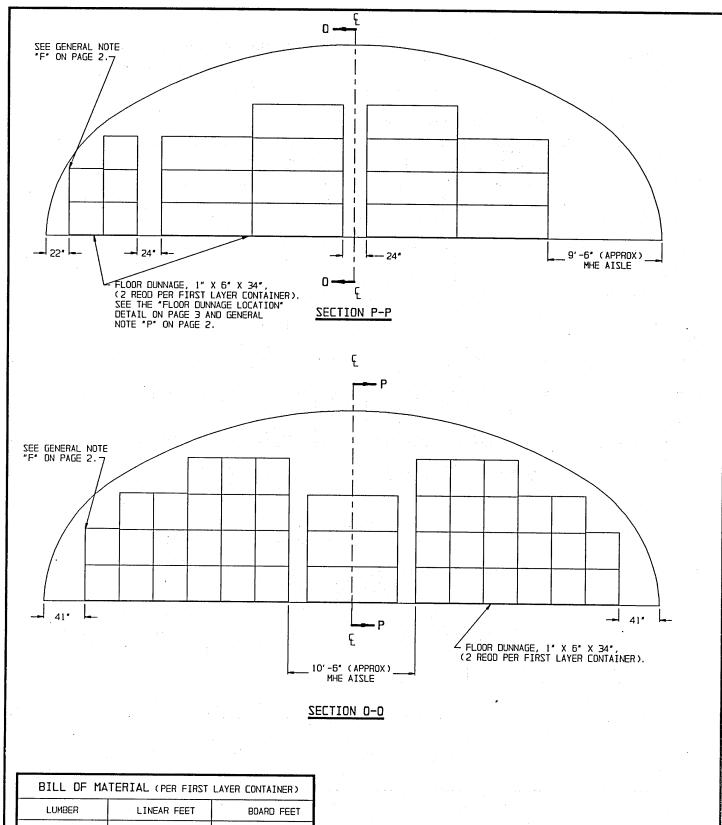


BILL OF MATERIAL (PER FIRST LAYER CONTAINER)			
LUMBER	LINEAR FEET	BOARD FEET	
1" X 6"	5.67	2.83	

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

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



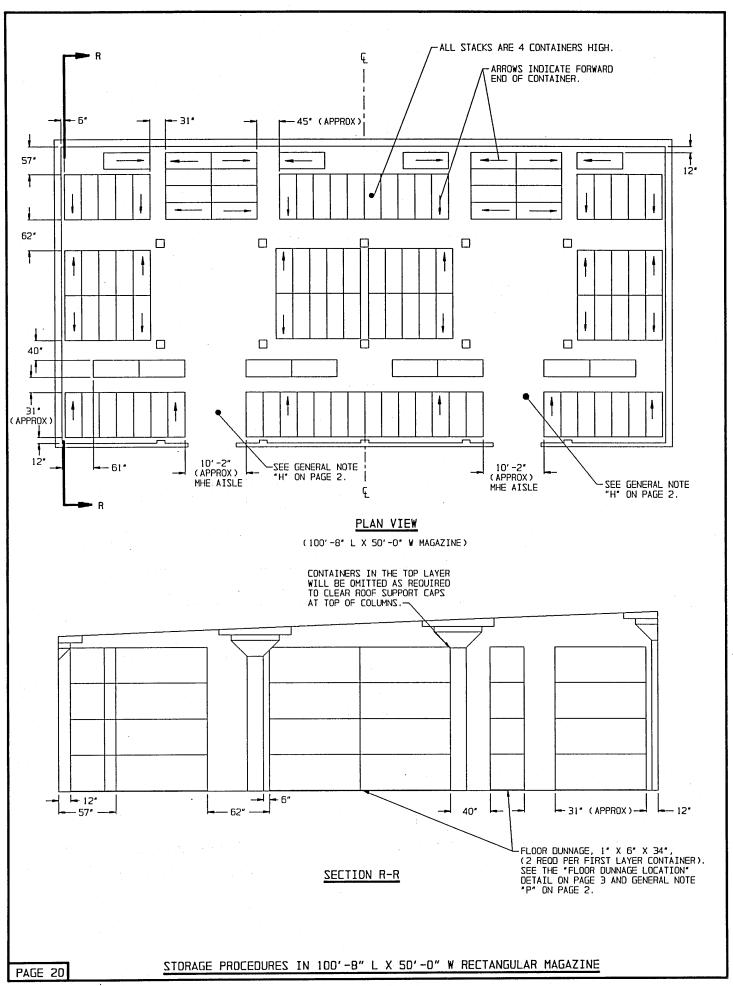


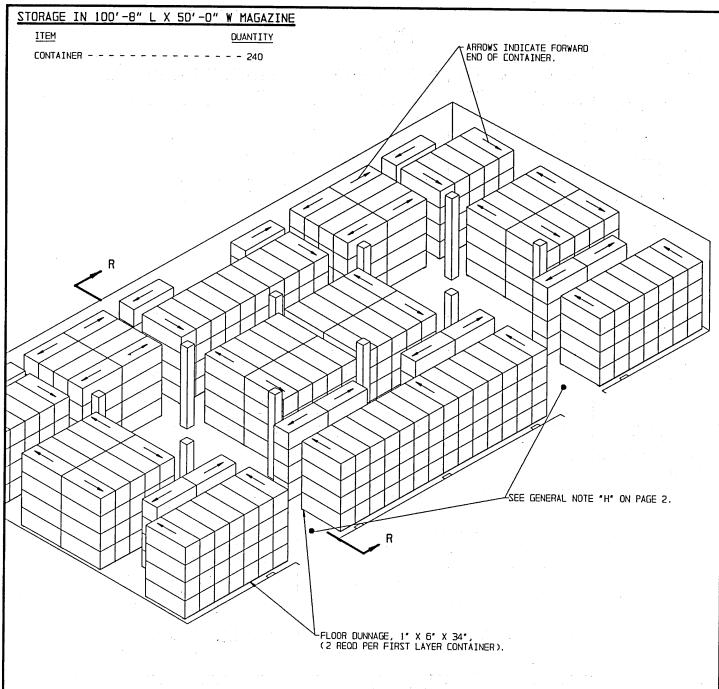
BILL DF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.67	2.83

FOR "GENERAL NOTES" AND "MATERIAL

SPECIFICATIONS", SEE PAGE 2.

STORAGE PROCEDURES IN 52'-D" DIA CORBETTA MAGAZINE





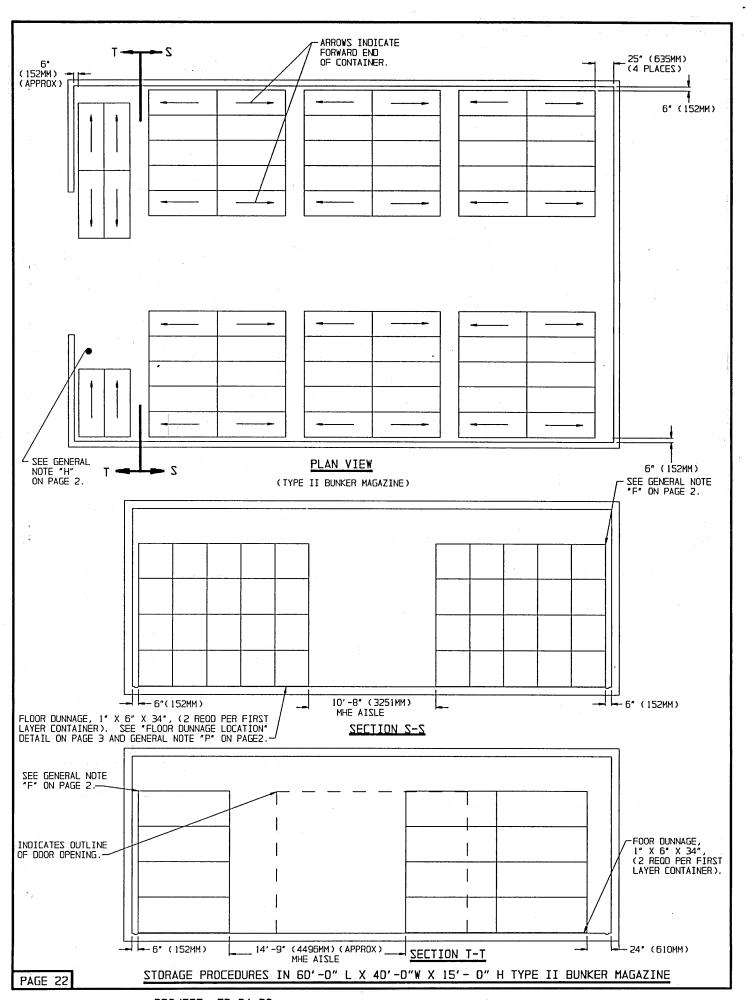
## ISOMETRIC VIEW

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

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

	BILL OF MATERIAL (PER FIRST LAYER CONTAINER)			
ı	LUMBER	LINEAR FEET	BOARD FEET	
ı	1" X 6"	5.67	2.83	

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

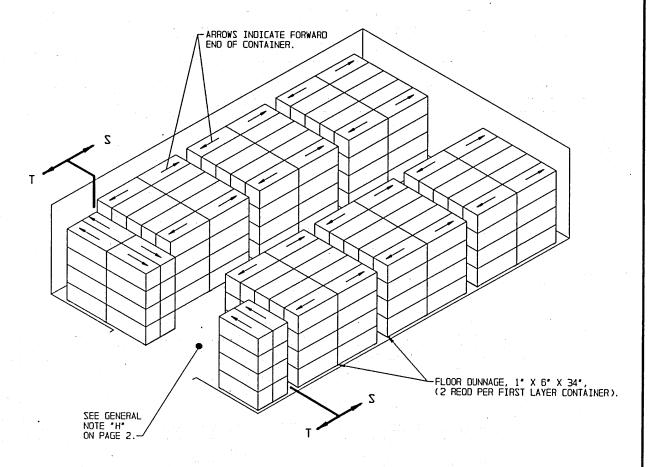


# STORAGE IN TYPE II BUNKER MAGAZINE

ITEM

QUANTITY

CONTAINER - - - - - - - - - - 264



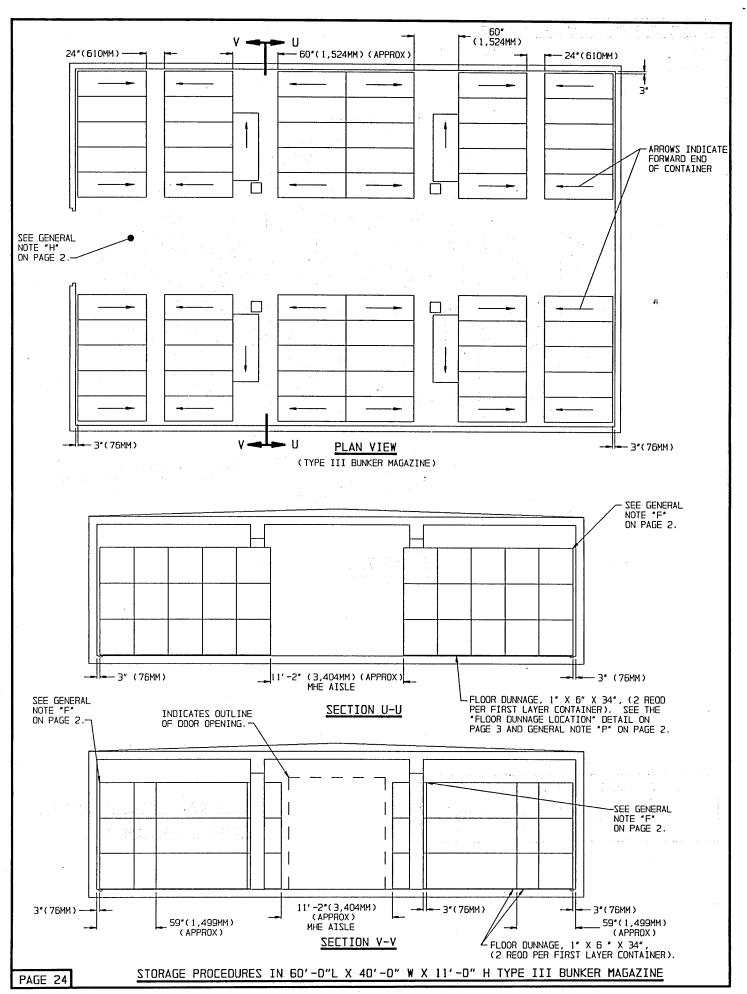
## ISOMETRIC VIEW

(TYPE II BUNKER MAGAZINE)

BILL OF MATERIAL (PER FIRST LAYER CONTAINER)			
LUMBER	LINEAR FEET	BOARD FEET	
1" X 6"	5.67	2.83	

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

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

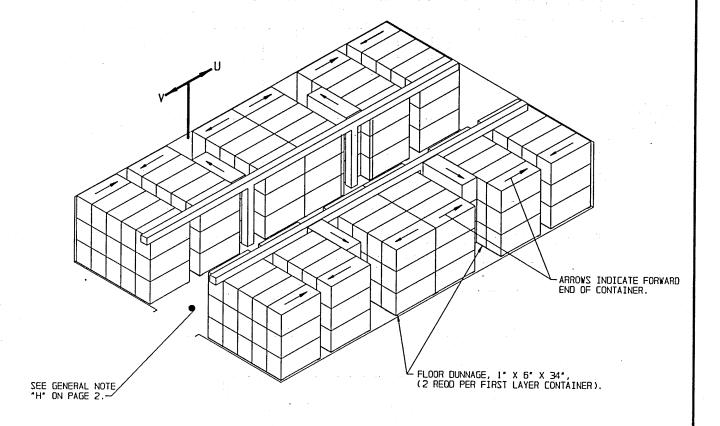


# STORAGE IN TYPE III BUNKER MAGAZINE

ITEM

QUANTITY

CONTAINER - - - - - - - - - - - 192



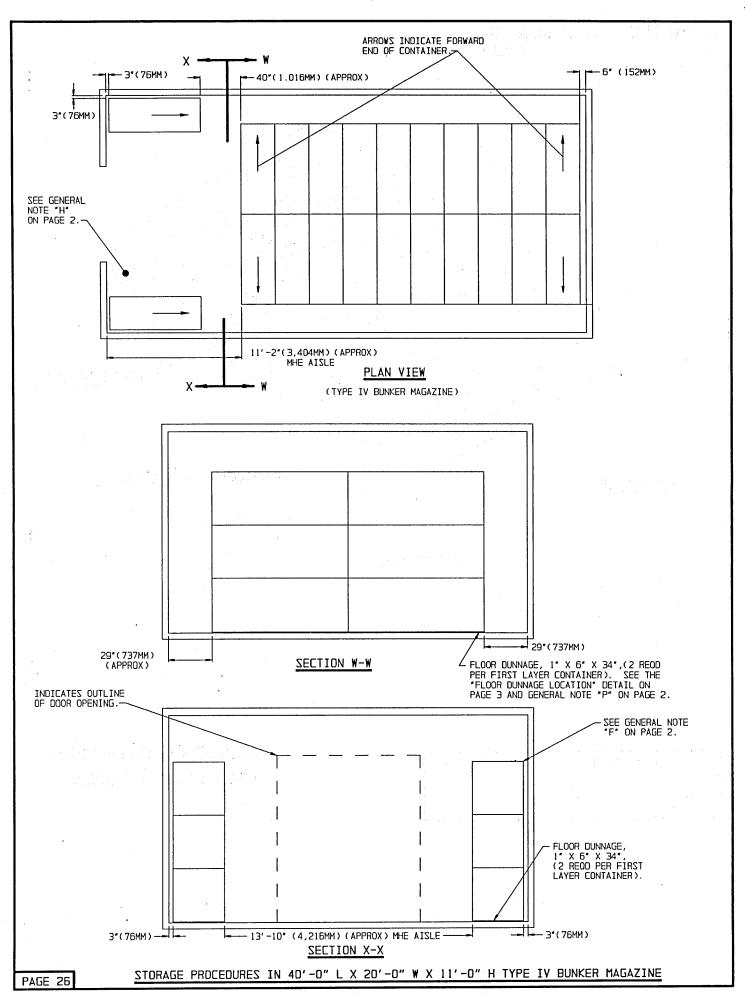
## ISOMETRIC VIEW

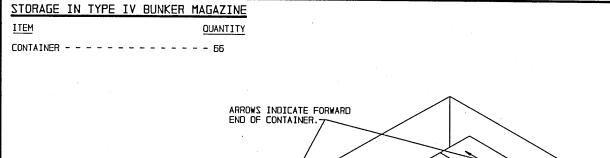
(TYPE III BUNKER MAGAZINE)

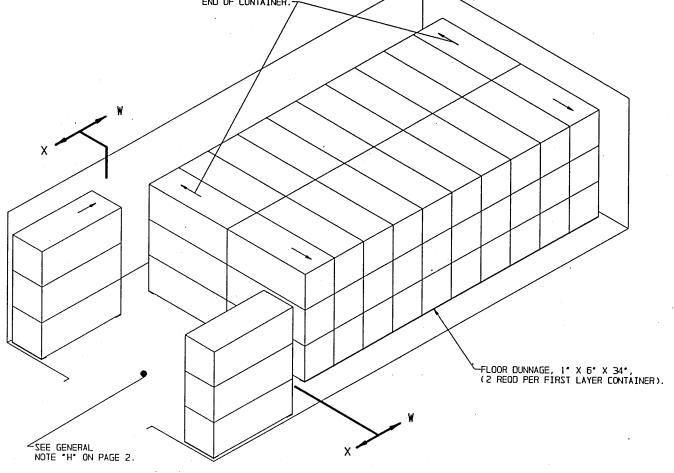
BILL OF MATERIAL (PER FIRST LAYER CONTAINER)			
LUMBER	LINEAR FEET	BOARD FEET	
1" X 6"	5.67	2.83	

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

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







#### ISOMETRIC VIEW

(TYPE IV BUNKER MAGAZINE)

BILL OF MATERIAL (PER FIRST LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	5.67	2.83

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

STORAGE PROCEDURES IN 40'-0" L X 20'-0" W X 11'-0" H TYPE IV BUNKER MAGAZINE

PAGE 2B PROJECT CB 94-90