STORAGE IN APPROVED MAGAZINES OF COMPLETE ROUNDS PACKED IN CYLINDRICAL METAL CONTAINERS, ON 4-WAY ENTRY PALLETS

PA117 SERIES CONTAINER

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U.S. ARMY MATERIEL COMMAND DRAWING				
APPROVED, U.S. ARMY INDUSTRIAL OPERATIONS COMMAND	DRAFTSM	AN	INGEBORG DE	PPE
Davidl Prihorik	ENGINEER	₹	M. DAEUMER	
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REVISION NO.1 NOVEMBER 1998	19	48	4145/11	1-2-3-4-14-
SEE THE REVISION LISTING ON PAGE 2.				22 PM1003

DO NOT SCALE

GENERAL NOTES

- THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1
- THE STORAGE PROCEDURES SPECIFIED HEREIN ARE APPLICABLE TO COMPLETE ROUNDS PACKED IN PA117 SERIES CONTAINERS ON A 42" BY 44-1/2" METAL PALLET. В.
- FOR DETAIL OF THE PALLET UNIT, SEE PAGE 3. FOR UNITIZATION PROCEDURES, SEE U.S. ARMY AMC (DARCOM) DRAWING 19-48-4079/8-20PM1002.

PALLET UNIT:

DIMENSIONS - -42" LONG BY 44-1/2" WIDE BY 39-1/2" HIGH GROSS WEIGHT- - - 1,883 POUNDS (APPROX) CUBE - - - - 42.7 CUBIC FEET (APPROX)

- THE STORAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS TYPES AND SIZES OF MAGAZINES. THE STORAGE PROCEDURES DEPICTED FOR THE n. OF MAGAZINES. THE STORAGE PROCEDURES DEPICTED FOR THE SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE PALLET 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. THIS LIMITATION MAY REQUIRE A QUANTITY REDUCTION FROM THE STORAGE AS Ε.
- STORED PALLET UNITS MUST NOT CONTACT THE WALLS OF A MAGAZINE. THEREFORE, PALLET UNITS WILL BE STORED A MINIMUM OF SIX INCHES (6') FROM THE SIDEWALL OR CURVATURE OF THE MAGAZINE AS APPLICABLE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUITEMENT, UNITS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS F.
- AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, VARIATIONS IN PALLET UNIT DIMENSIONS, AND/OR AVAILABLE G. MATERIALS HANDLING EQUIPMENT (MHE).
- THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED BY LOCAL STANDARDS WILL NOT BE EXCEEDED. Η.
- IF AVAILABLE MHE PERMITS, ADDITIONAL PALLETIZED UNITS MAY BE STORED WITHIN THE MHE AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- IF THE DUANTITY OF PALLET UNITS 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 DUANTITY TO BE STORED THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS.
- THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER LINITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, LINLESS TWO UPPER PALLET UNITS ARE HANDLED AS DINE 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 PALLET UNITS AS DINE 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.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

SEE TM 743-200-1 (DUNNAGE LUMBER) LUMBER - - - - -: AND VOLUNTARY PRODUCT STANDARD PS

(GENERAL NOTES CONTINUED)

- THE USE OF "FLOOR DUNNAGE" LINDER METAL PALLETS 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 PALLET 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 REQUIRED, AND SHOULD BE USED, TO ACHIEVE THE DESIRED OBJECTIVE.
- DUNNAGE LUMBER SPECIFIED THROUGHDUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE:
- CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POLINDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCHEQUALS 25.4MM AND ONE POUND EQUALS 0.454KG.
- STORAGE OF MULTIPLE LOTS IN A MAGAZINE WILL REQUIRE CAREFUL PREPLANNING SO AS TO INSURE MHE ACCESSIBILITY TO ANY LOT IN ACCORDANCE WITH THE ROUIREMENTS SET FORTH IN THE APPLICABLE "SPECIAL NOTES" SECTIONS OF THE MULTIPLE-LOT STORAGE PROCEDURES TYPICALLY SHOWN ON PAGES 24 THRU 30
- ALTHOUGH SPECIFIC PROCEDURES ARE INCLUDED IN THIS DRAWING FOR STORING MILITIPLE LOTS WITHIN ONE STRUCTURE, THE BASIC STORAGE PATTERN AS SHOWN ON PAGES 4 THRU 23 CAN ALSO BE ADAPTED FOR THE STORING OF MORE THAN DNE LOT. MULTIPLE LOTS OF PALLET UNITS WHEN STOREO IN ACCORDANCE WITH THE BASIC STORAGE PATTERN MAY BE STOREO WITH ONE OR MORE STACKS USED FOR EACH LOT. LOTS WILL NOT BE MIXED, EXCEPT TO THE EXTENT THAT UNITS OF ONE LOT WILL NOT BE STACKED ON TOP OF PALLET UNITS FROM ANOTHER LOT. MULTIPLE LOTS OF PALLET UNITS MAY BE STOREO WITH ONE OR MORE ROWS USED FOR EACH LOT. (A ROW RUNS FROM THE REAR OF THE MAGAZINE MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE GENERAL NOTES AND IN THE SPECIAL NOTES ON PAGES 24 THRU 30.
- ANY "LIGHT" PALLET UNIT THAT DDES NOT CONTAIN A FULL BLANTITY OF ROUNDS WILL NOT BE BURIED IN STORAGE. IT MUST BE POSITIONED ADJACENT TO AN AISLE, PREFERABLY IN FRONT OF THE LOT.
- A PRODUCTION OR STORAGE FACILITY IS AUTHORIZED TO HAVE A PRIDUCTION OR STURAGE FALILITY IS ADTHURIZED TO HAVE DNE INCOMPLETE, LIN-BANDED PARTIAL UNIT LOAD PER LOT IN A STORAGE STRUCTURE. PRIDR TO SHIPMENT OF A PARTIAL UNIT, A LAYER MUST BE COMPLETED, IF APPLICABLE, BY THE POSITIONING OF DNE OR MORE EMPTY CONTAINERS AS DELINEATED BY DRAWING 19-48-4079/B-20PM1002. THE UNIT MUST THEN BE RE-BANDED WITH THE SAME SIZE AND QUANTITY DF STRAPS AS THE ORIGINAL UNIT.
- PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND RODES HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- PALLET UNITS PRESENTLY STORED IN ACCORDANCE WITH A PREVIOUSLY APPROVED STORAGE DRAWING NEED NOT BE RESTORED SOLELY TO COMPLY WITH THE PROCEDURES SPECIFIED IN THIS REVISED DRAWING.

REVISIONS

REVISION NO.1, DATED NOVEMBBER 1998 CONSISTS OF:

- CONVERTING TO CAD

- LUNDERTING TO LAD.

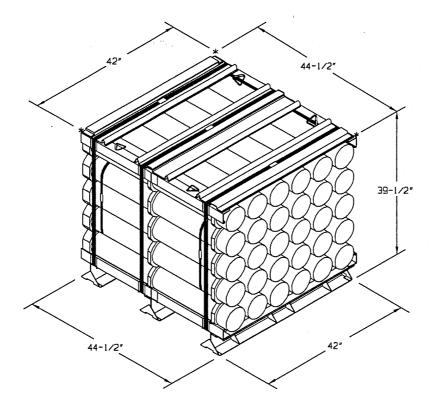
 UPDATING DRAWING FORMAT TO CURRENT STANDARDS.

 REVISING PROCEDURES AS NECESSARY TO COMPLY

 WITH REQUIREMENTS OF REVISED GENERAL NOTE "F"

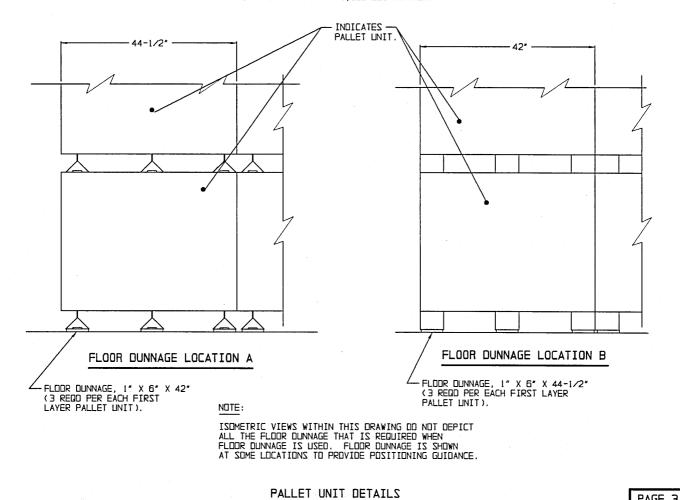
 ADDING GENERAL NOTE "V".

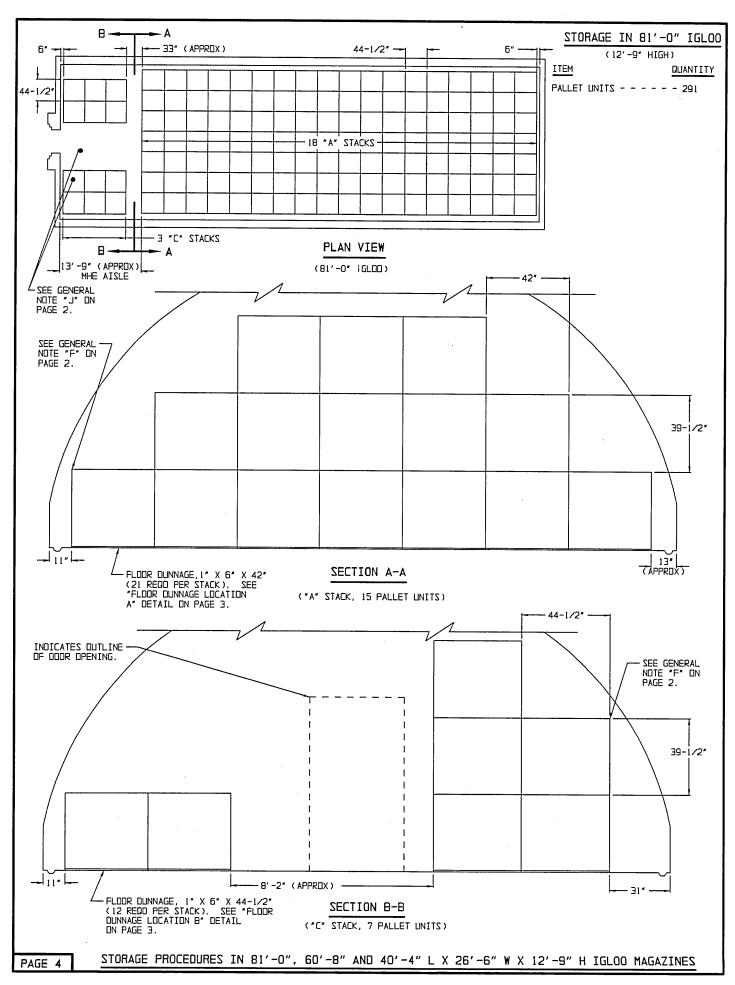
 REPLACING PROCEDURES FOR OVAL ARCH MAGAZINE ON PAGES 16 AND 17 WITH PROCEDURES FOR CURRENT STEEL ARCH MAGAZINE.

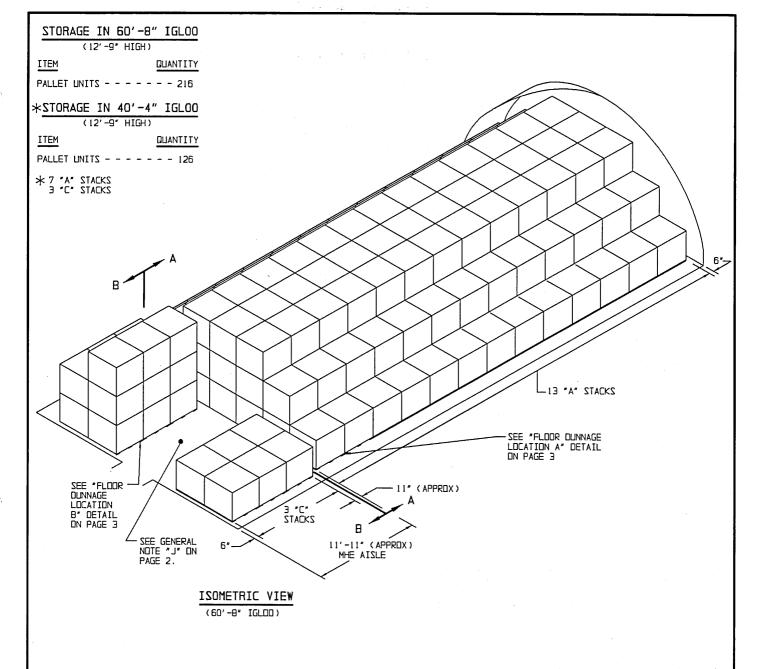


PALLET UNIT

UNIT WEIGHT - - - - -1,883 LBS (APPROX)

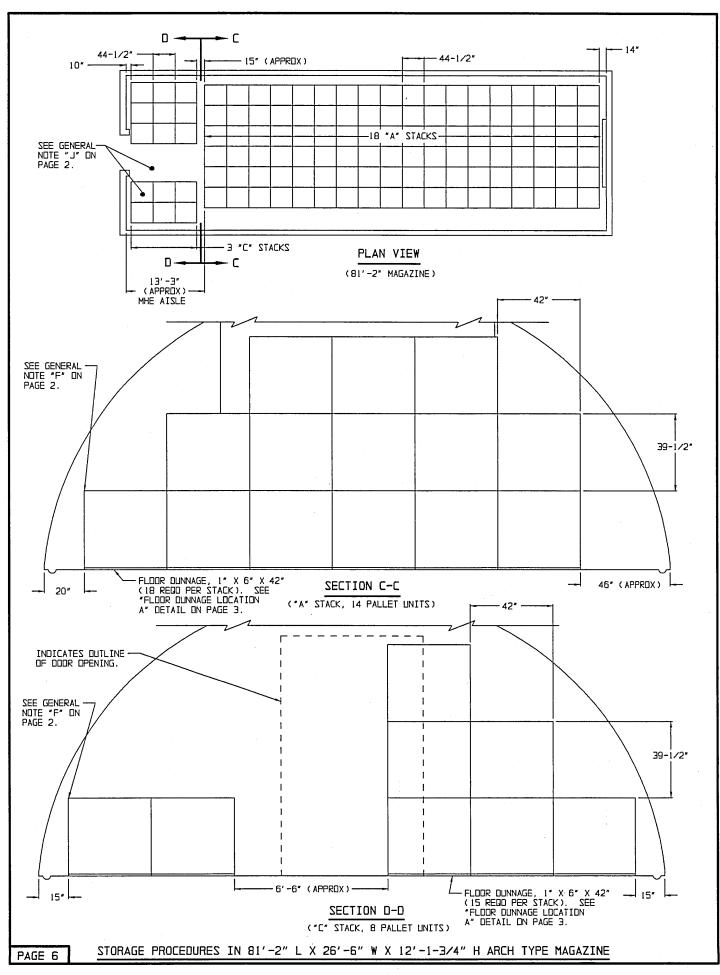


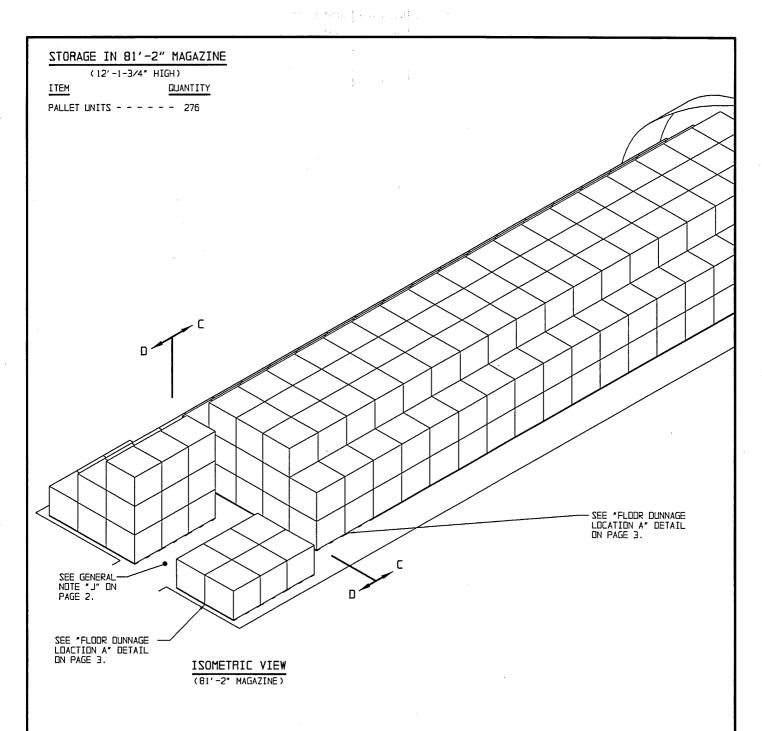




BILL OF MATERIAL (PER STACK)		
TYPE STACK		
THE STACK	LINEAR FEET	BOARD FEET
A	74	37
С	45	23

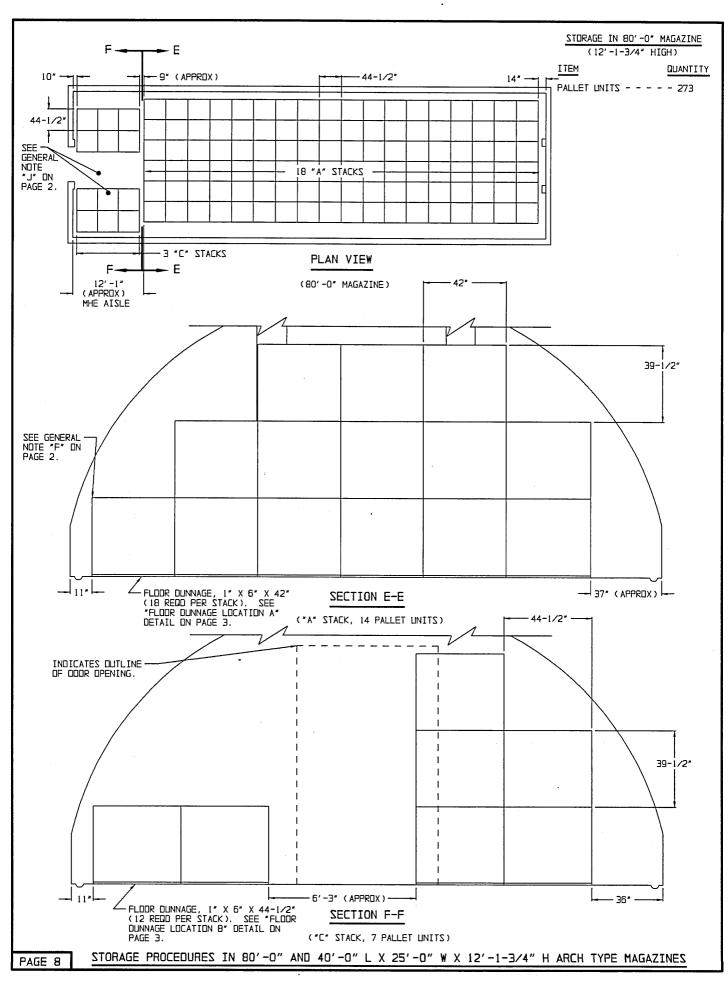
STORAGE PROCEDURES IN 81'-0", 60'-8" AND 40'-4" L X 26'-6" W X 12'-9" H IGLOO MAGAZINES





BILL OF MATERIAL (PER STACK)		
TYPE STACK		
THE STACK	LINEAR FEET	BOARD FEET
Α	63	32
С	53	27

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



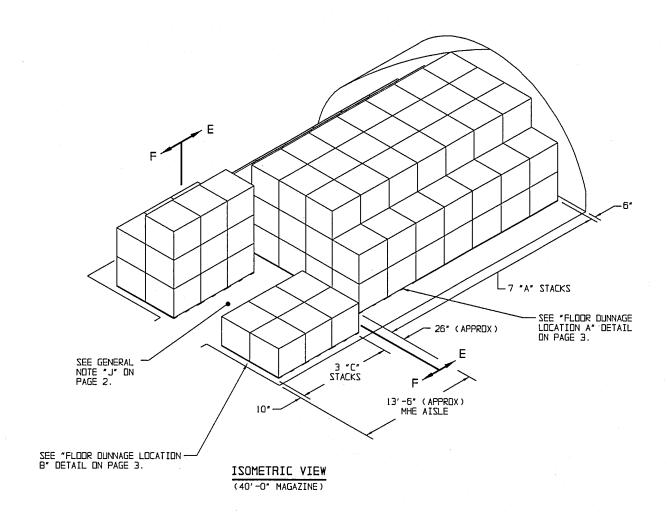
STORAGE IN 40'-0" MAGAZINE

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

ITEM

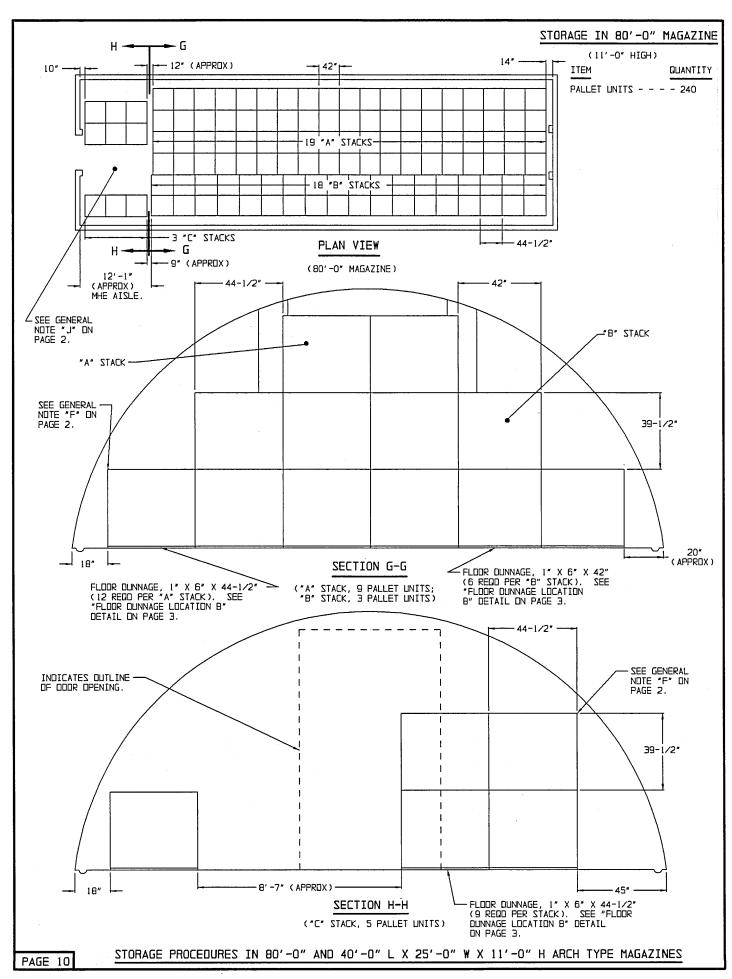
QUANTITY

PALLET UNITS - - - - - - 119



BILL OF MATERIAL (PER STACK)		
TYPE STACK	1" X 6" DLINNAGE LUMBER	
THE STACK	LINEAR FEET	BOARD FEET
A	63	32
С	45	23

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



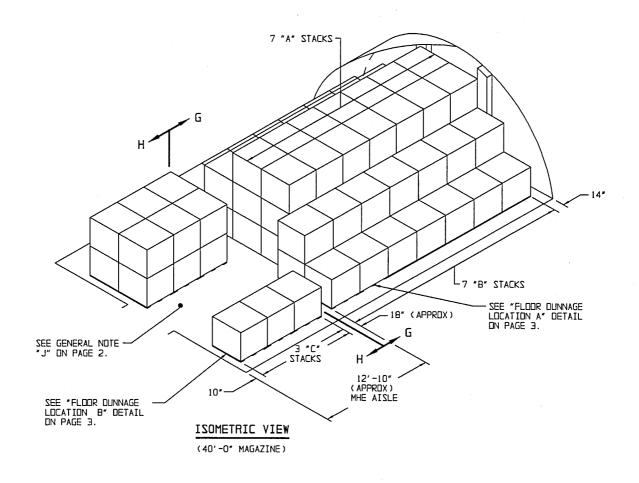
STORAGE IN 40'-0" MAGAZINE

(11'-0" HIGH)

ITEM

DUANTITY

PALLET UNITS - - - - - - 99

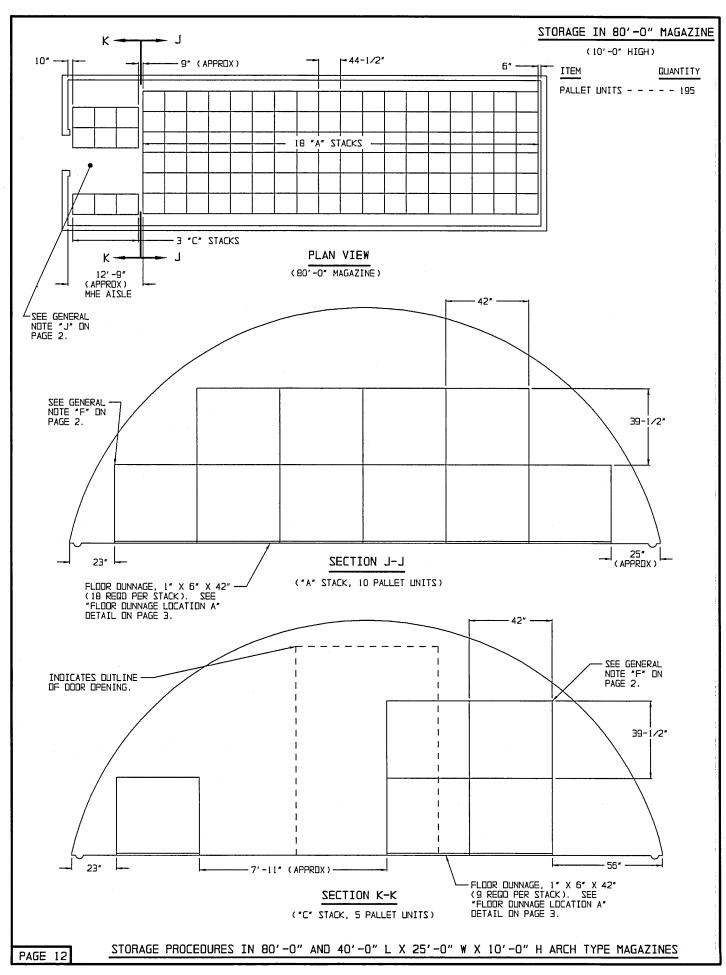


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BILL OF MATERIAL (PER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
THE STACK	LINEAR FEET	BOARD FEET
Α -	45	23
В	21	11
Ċ	34	17

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

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



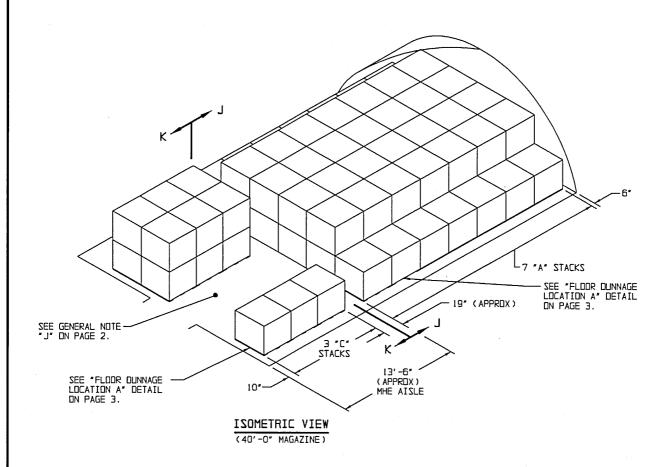
STORAGE IN 40'-0" MAGAZINE

(10'-0" HIGH)

ITEM

QUANTITY

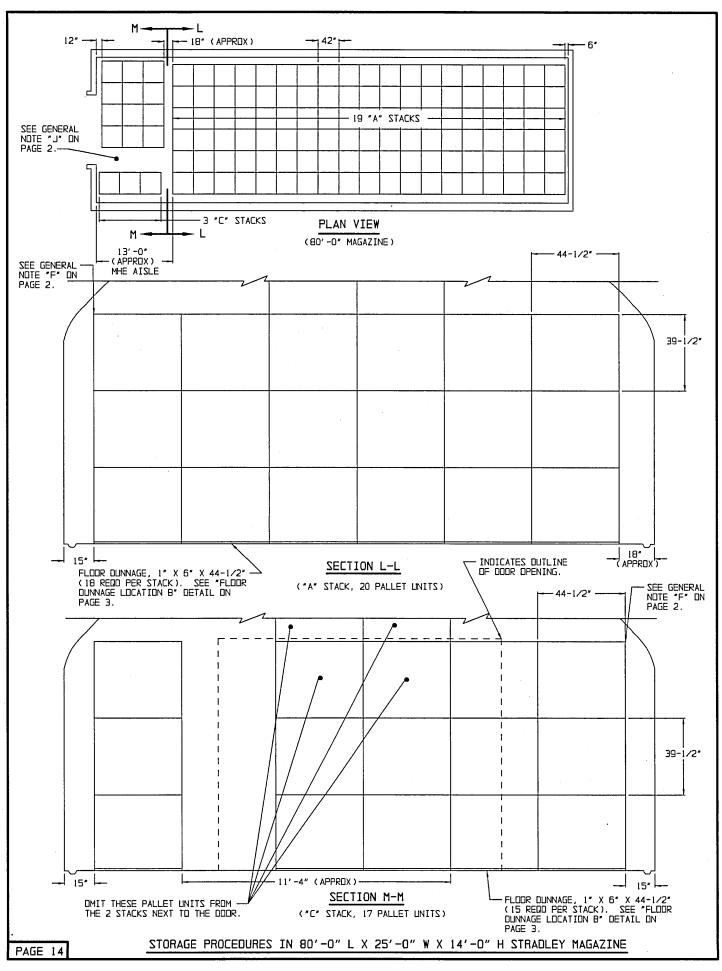
PALLET UNITS - - - - - - - 85

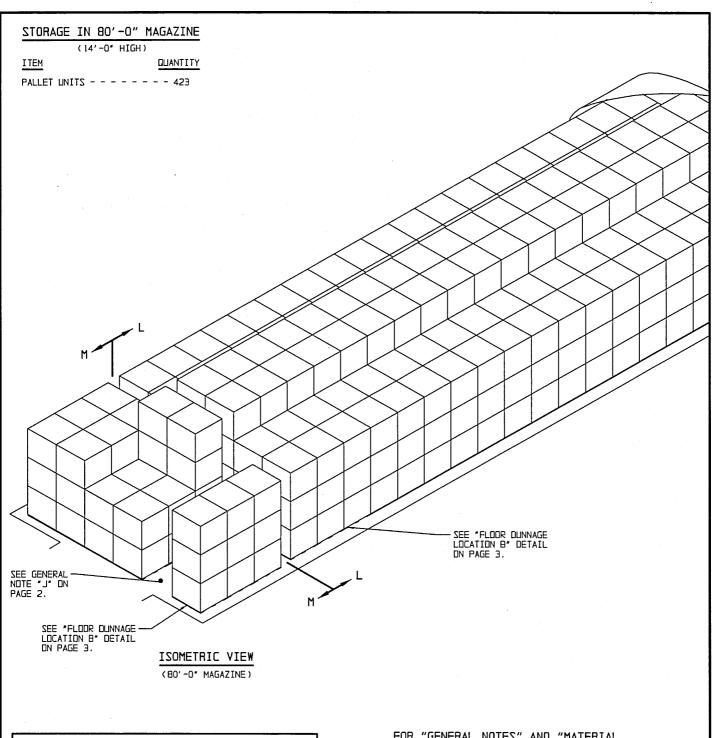


BILL OF MATERIAL (PER STACK)			
TYPE STACK	1" X 6" DUNNAGE LUMBER		
THE STACK	LINEAR FEET	BOARD FEET	
A	63	32	
С	32	16	

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

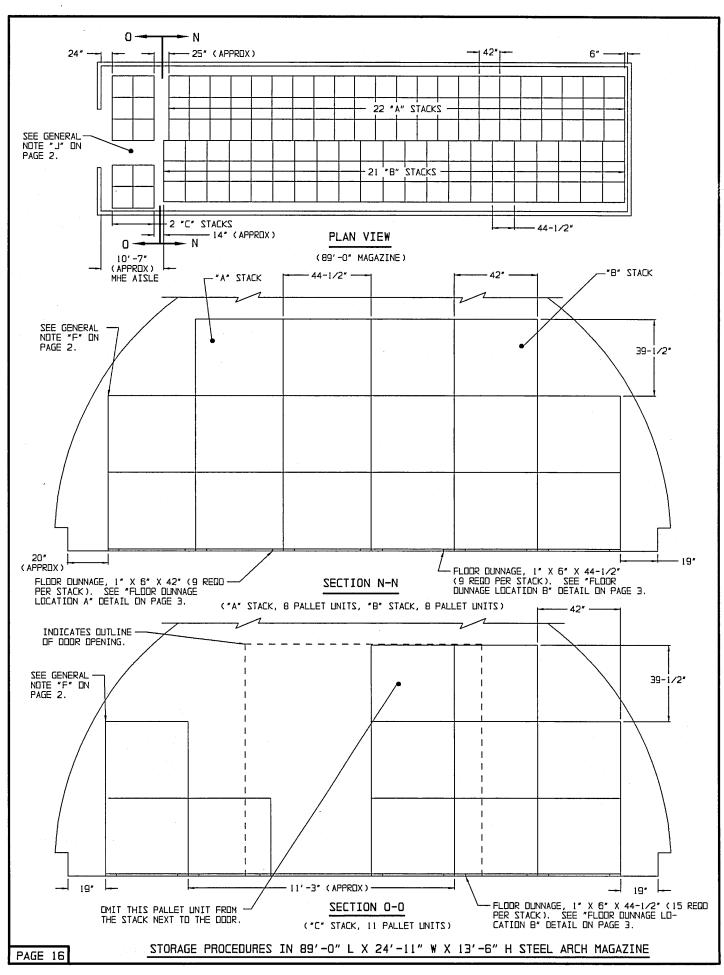
STORAGE PROCEDURES IN 80'-0" AND 40'-0" L X 25'-0" W X 10'-0" H ARCH TYPE MAGAZINES

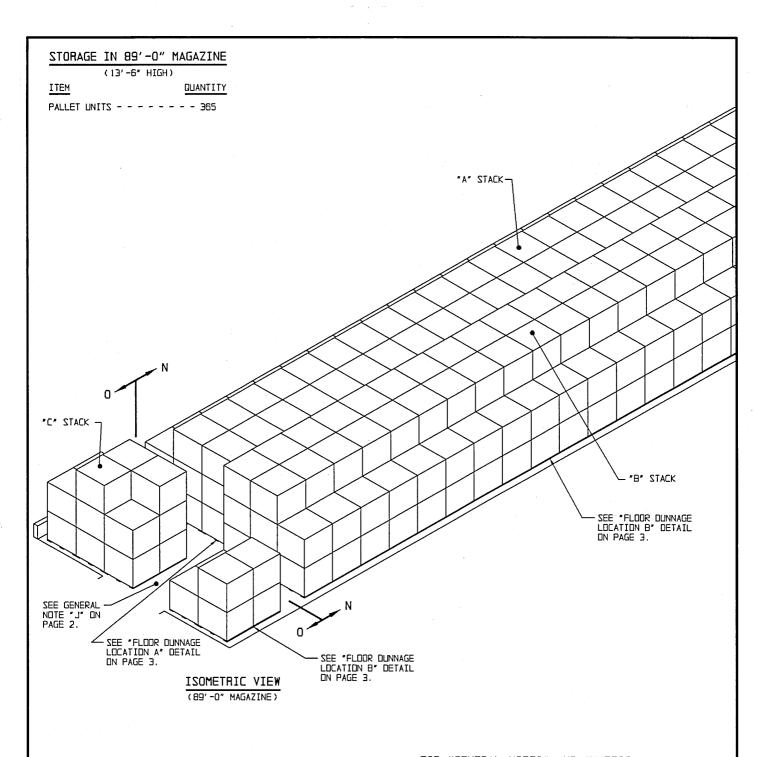




BILL OF MATERIAL (PER STACK)			
TYPE STACK	1" X 6" DUNNAGE LUMBER		
THE STACK	LINEAR FEET	BDARD FEET	
А	67	34	
С	56	28	

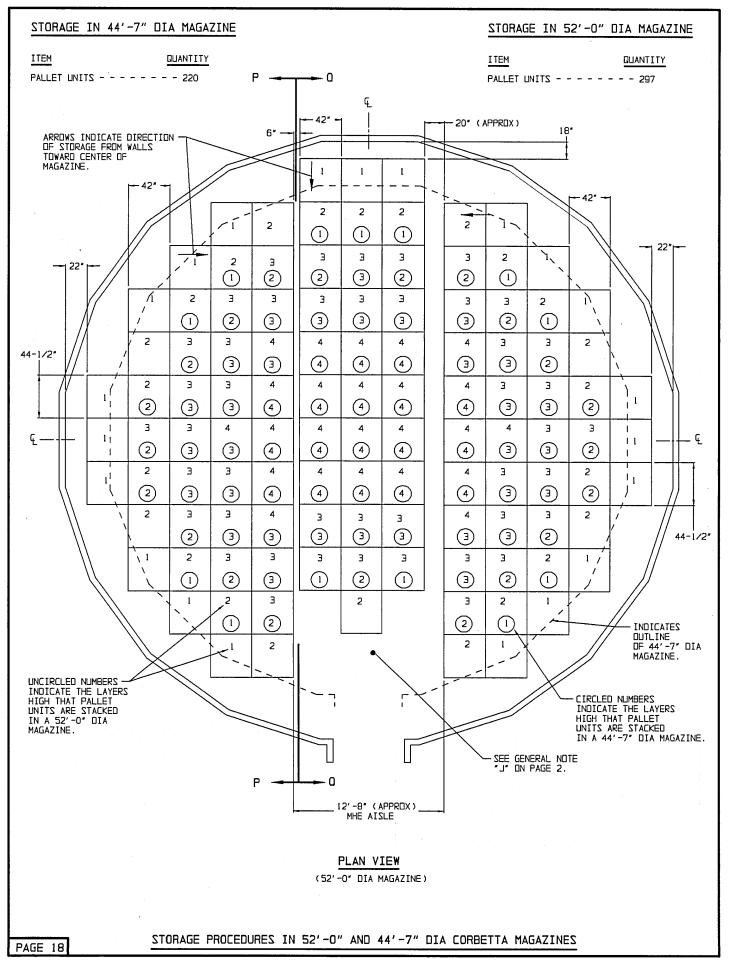
STORAGE PROCEDURES IN 80'-0" L X 25'-0" W X 14'-0" H STRADLEY MAGAZINE

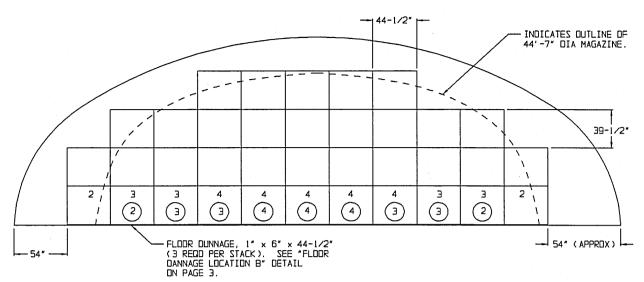




BILL OF MATERIAL (PER STACK)		
TYPE STACK		
THE STACK	LINEAR FEET	BOARD FEET
Α	32	16
В	34	17
С	56	28

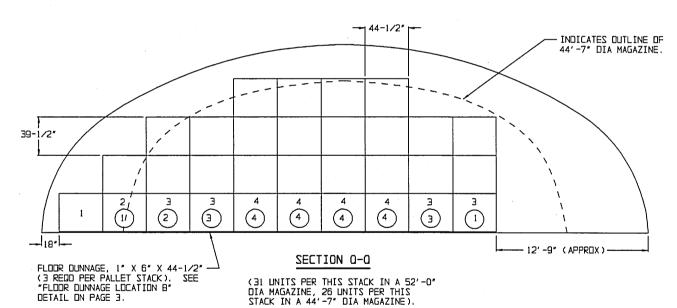
STORAGE PROCEDURES IN 89'-0" L X 24'-11" W X 13'-6" H STEEL ARCH MAGAZINE





SECTION P-P

(36 UNITS PER THIS STACK IN A 52'-O" DIA MAGAZINE, 28 UNITS PER THIS STACK IN A 44'-7" DIA MAGAZINE).



BILL OF MATERIAL (PER FIRST LAYER PALLET UNIT)

LUMBER LINEAR FEET BDARD FEET

1"X 6" 12 6

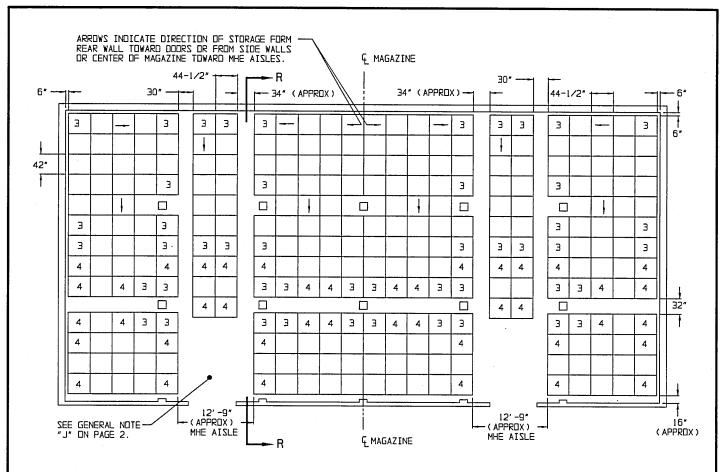
FOR "GENERAL NOTES" AND "MATERIAL

SPECIFICATIONS", SEE PAGE 2.

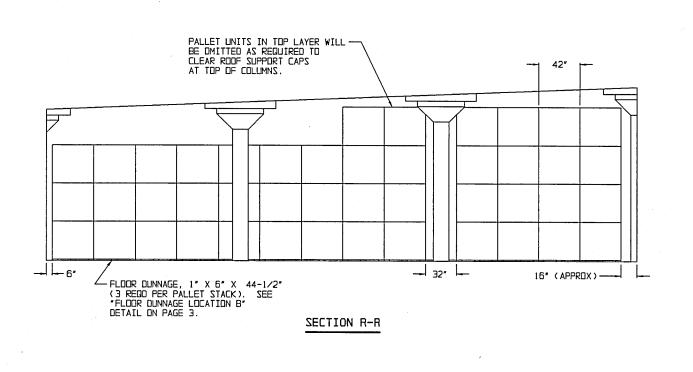
SPECIAL NOTE:

THE PRINCIPLES OF STOARAGE IN 52'-0" DIA MAGAZINES CAN ALSO BE APPLIED TO STORAGE IN 44'-7" DIA DR DTHER DIA MAGAZINES. SOME PALLET STACKS MUST BE OMITTED AND PALLET UNITS MAY NEED TO BE DMITTED FROM SOME PALLET STACKS TO PROVIDE THE NECESSARY CLEARANCE FROM THE MAGAZINE WALL.

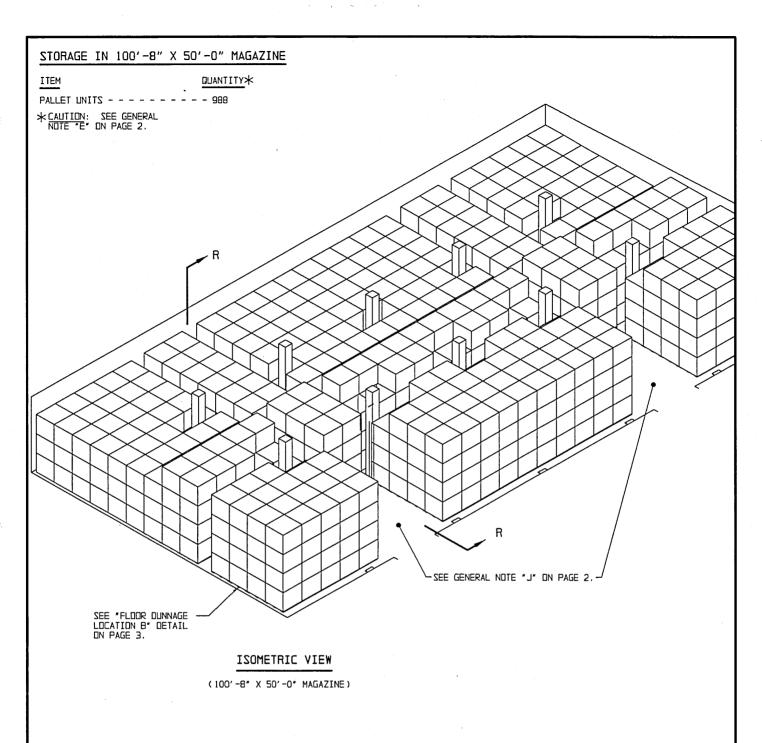
STORAGE PROCEDURES IN 52'-0" AND 44'-7" DIA CORBETTA MAGAZINES



PLAN VIEW
(100'-8" X 50'-0" MAGAZINE)

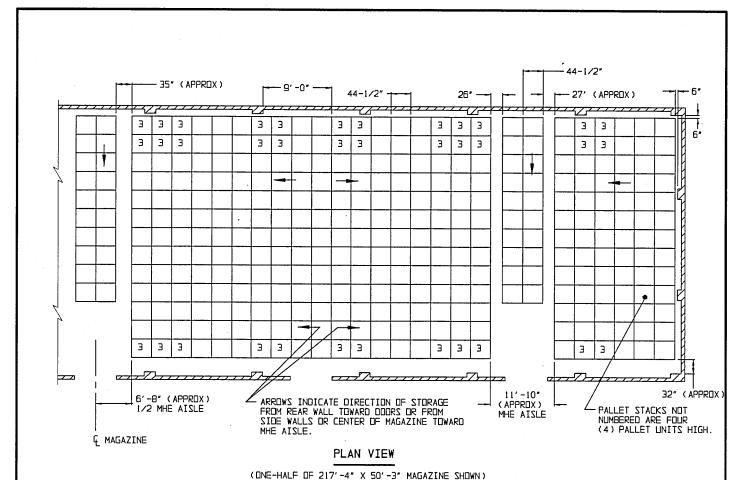


STORAGE PROCEDURES IN 100'-8" L X 50'-0" W RECTANGULAR MAGAZINE

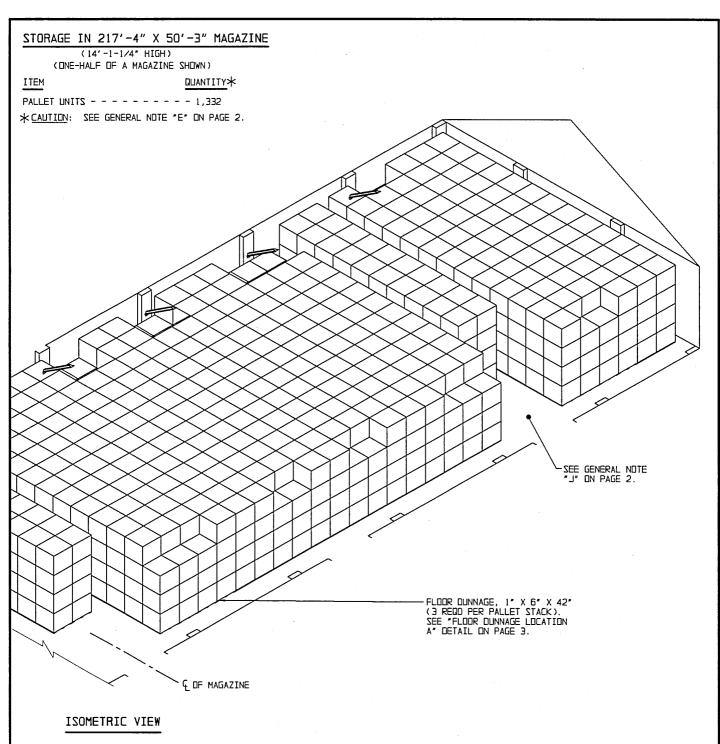


BILL OF MATERIAL (PER FIRST LAYER UNIT)		
LUMBER	LINEAR FEET	BOARD FEET
1"X 6"	12	б

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



STORAGE PROCEDURES IN 217'-4" L X 50'-3" W X 14'-1-1/4" H STANDARD MAGAZINE

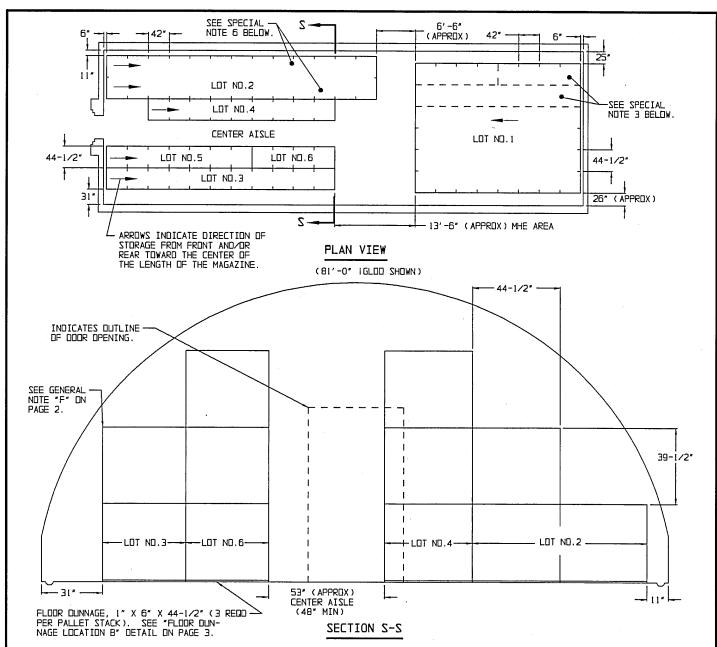


(ONE-HALF OF A MAGAZINE SHOWN)

BILL OF MATERIAL (PER FIRST LAYER UNIT)		
LUMBER	LINEAR FEET	BOARD FEET
1"X 6"	11	6

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

STORAGE PROCEDURES IN 217'-4" L X 50'-3" W X 14'-1-1/4" H STANDARD MAGAZINE



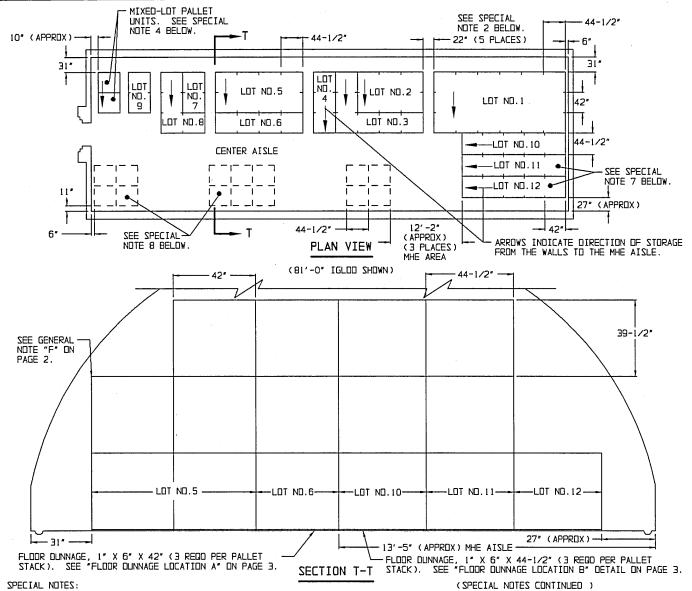
- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL DNLY, AND APPLY TO RELATIVELY LARGE LDTS.
 ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LDTS TO BE STORED IN MAGAZINE REQUIRE.
- AN INSPECTION/INVENTORY AISLE MUST BE PROVIDED AT ONE SIDE OR END OF EACH LOT.
- GENERALLY, THE LARGEST 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 ROWS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE STURE HAN DINE EDIT BY ERECTION RUNG 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 ON PAGE 2.
- EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. A SINGLE-LOT OF PALLET LINITS IS CONSIDERED "ACCESSIBLE" IF NO 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 DNE (1) OR MORE PALLET LINITS, PROVIDING THE CAPACITY OF THE MAYE OF THE MAY CONSIST OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEDPARDIZED.

(SPECIAL NOTES CONTINUED)

- 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 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- A 13'-6" MHE OPERATING AREA HAS BEEN SHOWN. THE MHE A 13'-6" MHE OPERATING AREA HAS BEEN SHOWN. 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 EACH SIDE OF THE MAGAZINE) IS TO BE AT LEAST 48 INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN 48 INCHES WILL ENHANCE FORK LIFT TRUCK MOVEMENT WITHIN A MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS IN STORAGE RESULTS.
- WHEN STORING MULTIPLE LOTS IN THE STEEL ARCH MAGAZINE, FLOOR DUNNAGE MUST BE POSITIONED LENGTHWISE IN THE MAGAZINE AS SHOWN IN THE SECTION VIEWS ON PAGE 16.

(CONTINUED AT RIGHT)

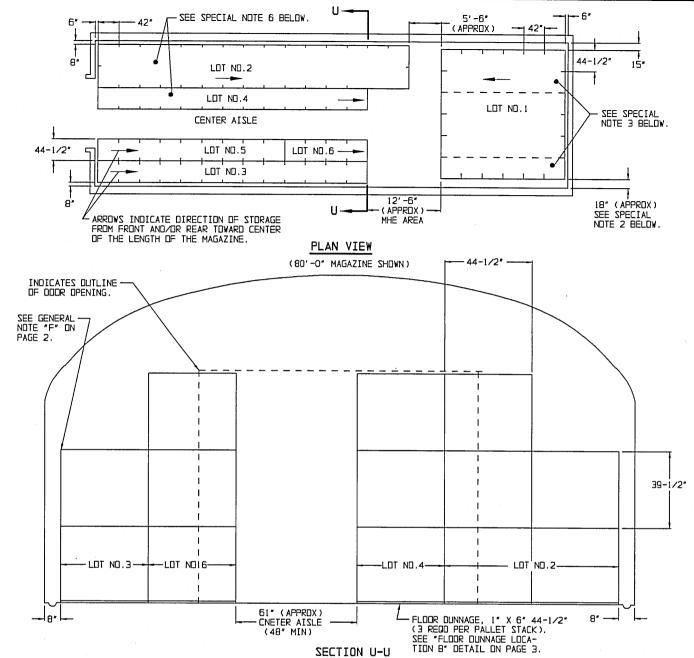
TYPICAL MULTIPLE-LOT STORAGE IN IGLOO AND ARCH TYPE MAGAZINES



- 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 REDUIRE.
- 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 AISLE WILL BE REGUIRED 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 ON PAGE 2
- A MIXED-LOT PALLET LINIT MAY HAVE FROM TWO LOTS PER PALLET LINIT UPWARDS TO AS MANY DIFFERENT LOTS AS CONTAINERS WITHIN THAT LINIT, HOWEVER, LOTS WITHIN THE PALLET LINIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. OF A SINGLE-LOT OR MIXED-LOT ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO A SINGLE-LOT OR MIXED-LOT UNITS. A "LIFT" MAY CONSIST OF ONE (1) OR TWO PALLET UNITS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
- FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDE-WALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE. (CONTINUED AT RIGHT)

- 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.
- 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 MULTIFLE LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED. THE CRITERIA AS SELFURIH UN THIS PAGE MUST BE UBSERVED. THE
 SIZE DF THE LOTS BEING STORED AND THE CRITERIA DF SPECIAL
 NOTE 5, RELATIVE TO "12 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF 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.
 A 12'-2" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO
 EACH "ADDITIONAL STORAGE LOCATION" BY FORKLIFT TRUCK. THIS
 OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS
 COMMONLY LISED IN STORAGE MAGAZINES. THE MHE OPERATING AREA LIPERATING AREA IS BASED UN REGUIREMENTS OF FORKLIFT TRUCKS COMMONLY USED IN STORAGE MAGAZINES. THE MHE DPERATING AREA CAN BE ENLARGED AS REGILIRED TO SUIT AVAILABLE FORKLIFT TRUCKS, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BETWEEN STORAGE ON DINE 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 PESULTS. IN STURAGE RESULTS NI
- WHEN STORING MULTIPLE LOTS IN THE STEEL ARCH MAGAZINE, FLOOR DUNNAGE MUST BE POSITIONED LENGTHWISE IN THE MAGAZINE AS SHOWN IN THE SECTION VIEWS ON PAGE 16.

TYPICAL MULTIPLE-LOT STORAGE IN IGLOO AND ARCH TYPE MAGAZINES



PAGE 26

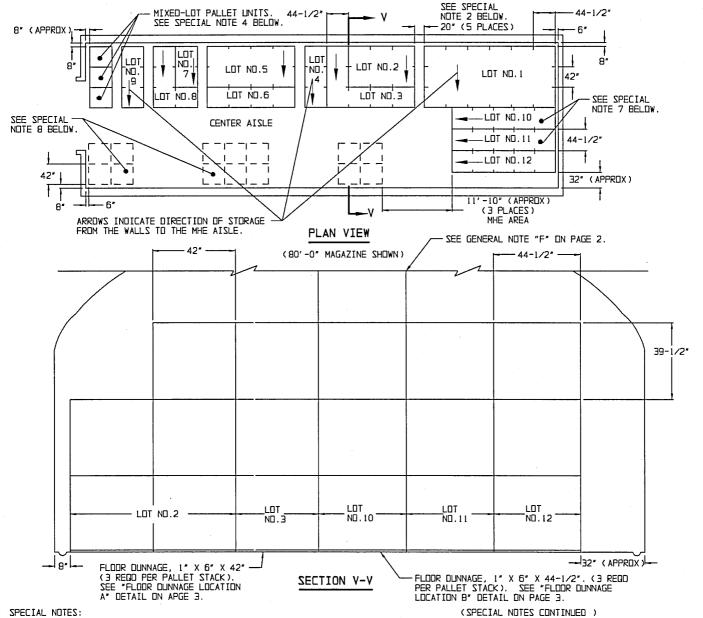
- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY, AND APPLY TO RELATIVELY LARGE LOTS. ADAP-TATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE MUST BE PROVIDED AT DNE SIDE DR END DF EACH LOT.
- 3. GENERALLY, THE 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 REGUIRED 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 PALLET LINITS IS CONSIDERED "ACCESSIBLE" IF NO 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 DNE (1) DR MORE PALLET LINITS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEDPARDIZED.

(SPECIAL NOTES CONTINUED)

- 5. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDE-WALL 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 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 7. A 12'-6" MHE OPERATING AREA IS SHOWN. 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 EACH SIDE OF THE MAGAZINE) IS TO BE AT LEAST 48" WIDE. A SLIGHTLY WIDER AISLE WILL ENHANCE FORK LIFT TRUCK MOVEMENT WITHIN THE MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS OF STORAGE RESULTS.

(CONTINUED AT RIGHT)

TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY MAGAZINE

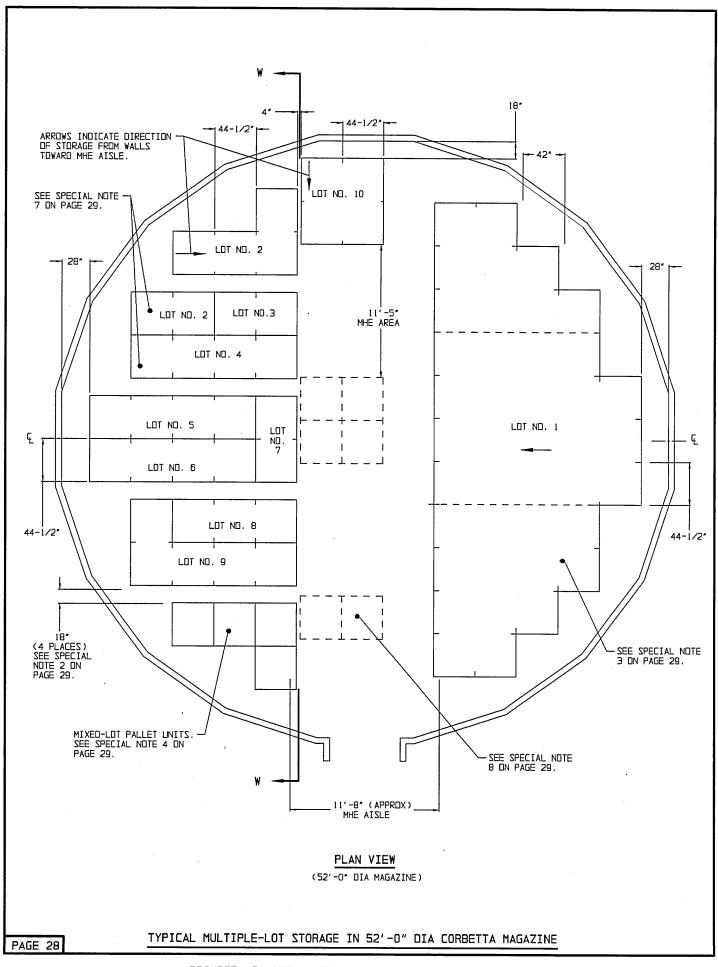


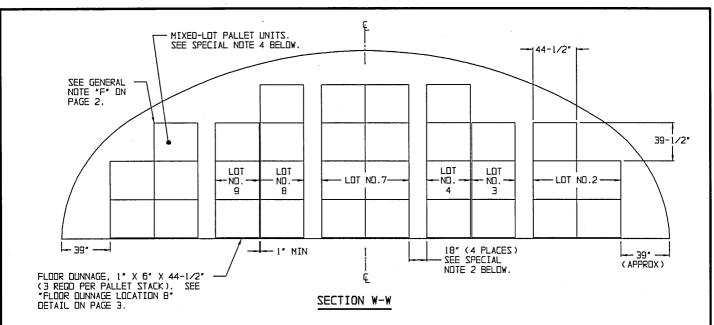
- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL DNLY, AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REDUIRE.
- AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH "BURIED" 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 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 3. NOTES ON PAGE 2.
- A MIXEO-LOT PALLET UNIT MAY HAVE FROM TWO LOTS PER PALLET UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS CONTAINERS WITHIN THAT UNIT, HOWEVER, ALL LOTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. A SINGLE-LOT OR MIXED-LOT PALLET UNITS ARE CONSIDERED "ACCESSIBLE" IF NO 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 PALLET UNITS PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JERBARDIZED. HANDLING IS NOT JEDPARDIZED

(CONTINUED AT RIGHT)

- FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDE-WALL 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 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- AREAS INCLOSED BY OUTTED 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 CRITERIA AS SET FORTH ON THIS PAGE MUST BE DBSERVED. 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 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'-10" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO
 EACH "ADDITIONAL STORAGE LOCATION" BY FORKLIFT TRUCK, THIS
 OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS.
 COMMONIY LISED IN STORAGE MAGAZINES THE MHE OPERATING AREA DPERATING AREA IS BASED ON REDUIREMENTS OF FURKLIFT TRUCKS COMMONLY USED IN STORAGE MAGAZINES. THE MHE DPERATING AREA CAN BE ENLARGED AS REGIURED TO SUIT AVAILABLE FORKLIFT TRUCK 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.

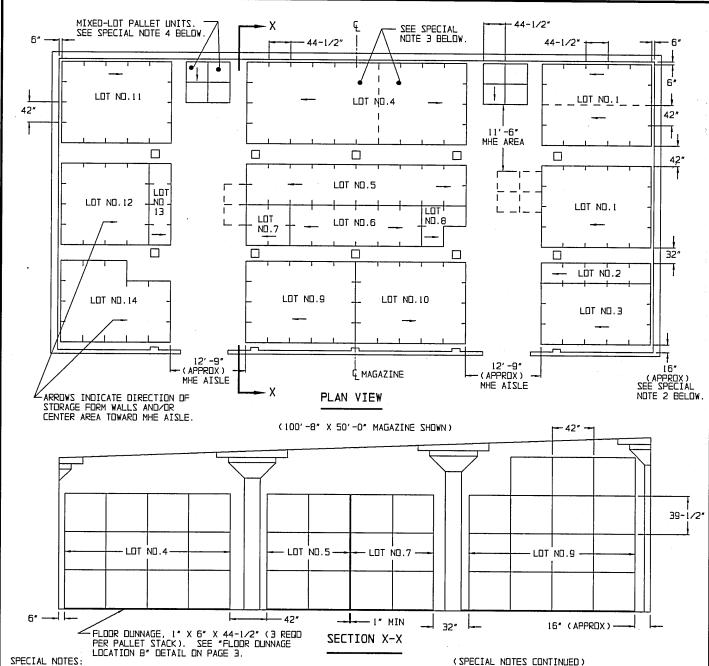
TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY MAGAZINE





- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS AND ON PAGE 28 ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. 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 DNE SIDE OF THE MAGAZINE. HOWEVER, BOTH SIDES MAY BE USED TO STORE MORE THAN DNE LOT BY ERECTING STACKS SIMILAR TO THOSE SHOWN ON THE LEFT SIDE. AN MHE AISLE WILL BE REQUIRED IN THE CENTER 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 DN PAGE 2.
- 4. A MIXED-LOT PALLET UNIT MAY HAVE FROM TWO LOTS PER PALLET UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS CONTAINERS WITHIN THAT UNIT, HOWEVER, ALL LOTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- 5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. PALLET UNITS OF A SINGLE-LOT OR MIXED-LOT
 PALLET 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 TWO (2) PALLET UNITS,
 PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE
 HANDIING IS NOT JEPPARDIZED.
- 6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE WALL 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 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 8. AREAS INCLOSED BY DOTTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS OR ADDITIONAL ITEMS MAY BE STORED, THAT ARE FROM THE LOT OR LOTS ADJACENT TO THE MHE AISLE. 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 LINITS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY DNE OF THE ADDITIONAL STORAGE LOCATIONS. AN 11'-5" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL STORAGE LOCATIONS. AN 11'-5" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL STORAGE 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 REGIURED 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 COCATION") 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.

TYPICAL MULTIPLE-LOT STORAGE IN 52'-0" DIA CORBETTA MAGAZINE



THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE 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.
- GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OR ON DNE SIDE OF THE MAGAZINE. HOWEVER, THESE AREAS MAY BE USED TO STORE MORE THAN DNE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE SMALLER SIZED LOTS OR AS TYPICALLY SHOWN BY DOTTED LINES. 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.
- A MIXED-LOT PALLET UNIT MAY HAVE FROM TWO LOTS PER PALLET UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS CONTAINERS WITHIN THAT UNIT, HOWEVER, LOTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVE-MENT BY MHE. PALLET UNITS OF A SINGLE-LOT ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWENTY-FOUR (24) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THAT (CONTINUED AT RIGHT)

LOT. A "LIFT" MAY CONSIST OF ONE (1) OR MORE PALLET UNITS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.

AREAS INCLOSED BY DOTTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED, THAT ARE FROM THE LOT OR LOTS ADJACENT TO THE MHE AISLE. 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 "24 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF UNITS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY DIRE OF THE ADDITIONAL STORAGE LOCATIONS. A 11'-6" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL STORAGE 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 REDIURED TO SUIT AVAILABLE FORKLIFT TRUCKS AND USED IN STURAGE MAGAZINES. THE MHE DPERATING AREA CAN BE ENLARGED AS REDIURED TO SUIT AVAILABLE FORKLIFT TRUCKS AND AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. AN MHE AISLE (SPACE BETWEEN STORED PALLET UNITS) 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

TYPICAL MULTIPLE-LOT STORAGE IN RECTANGULAR MAGAZINE