GMLRS

STORAGE IN APPROVED MAGAZINES OF ROCKET POD/CONTAINERS (RP/C) FOR THE GUIDED MULTIPLE LAUNCH ROCKET SYSTEM

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⊕ **THE PROCEDURES SHOWN HEREIN ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC) RAIL, MOTOR, OR WATER CARRIERS.**

U.S. ARMY MATERIEL COMMAND DRAWING

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CLASS	DIVISION	DRAWING	FILE
19	48	5278	GM1-3-4-14-22RS2

PROJECT GM 914-09

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 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 GUIDED MULTIPLE LAUNCH ROCKET SYSTEM (GMLRS) COMPLETE ROUND WHEN PACKED IN THE ROCKET POD/CONTAINERS (RP/C) 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.

C. THE STORAGE PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO GUIDED MULTIPLE LAUNCH ROCKET SYSTEM (GMLRS) COMPLETE ROUND WHEN PACKED IN THE ROCKET POD/CONTAINERS (RP/C). SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS RP/C WITH ROCKET COMPONENTS. SEE PAGE 3 FOR DETAILS OF THE CONTAINER.

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. **CAUTION**: THIS ITEM IS IN A "PROPULSIVE STATE" AND MUST BE STORED WITH THE FORWARD END FACING TOWARD THE SAME MAGAZINE SIDEWALL OR THE REAR WALL AS INDICATED BY THE DIRECTIONAL ARROWS ON THE STORAGE VIEWS.

F. STORED CONTAINERS MUST NOT CONTACT THE SIDES OF A MAGAZINE. THEREFORE, UNITS MUST BE STORED A MINIMUM OF 6" FROM THE SIDEWALL OR CURVATURE OF THE MAGAZINE AS APPLICABLE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, UNITS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.

G. AISLE DIMENSION SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, VARIATIONS IN CONTAINER DIMENSIONS, AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT (MHE). HOWEVER, A 24" MINIMUM INSPECTION AISLE MUST BE MAINTAINED AT THE AFT END OF THE CONTAINERS FOR INVENTORY PURPOSES AND FOR INSPECTION OF THE WIRING HARNESS AND GROUND CABLE, AND TO ENSURE THAT "SHORTING PLUGS" ARE IN PLACE ON ALL CONTAINERS FOR PROTECTION FROM STATIC ELECTRICITY AND STRAY VOLTAGE.

H. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED WILL NOT BE EXCEEDED.

J. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED WITHIN THE MHE AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.

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 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.

L. THE SHOCK ISOLATOR (RUBBER) SKIDS OF A ROCKET POD/CONTAINER WILL NOT ADEQUATELY SUPPORT A STACK OF TWO CONTAINERS; THEREFORE POD SUPPORT DUNNAGE MUST BE INSTALLED BEHIND THE SKIDS OF THE LOWER CONTAINERS IF STACKS ARE TWO OR MORE HIGH. TAKE CARE TO ENSURE THE "POD SUPPORT ASSEMBLIES" DO NOT CONTACT THE RADIUS BLOCKS. A "POD SUPPORT ASSEMBLY" IS NOT REQUIRED FOR A ONE-HIGH CONTAINER STACK OR BETWEEN THE TOP TWO CONTAINERS OF STACKS MORE THAN ONE HIGH. A "POD SUPPORT ASSEMBLY" CONSISTS OF 4" X 4" X 41-1/2" AND 1" X 4" X 41-1/2" PIECES LAMINATED W/4-6d NAILS. SEE THE DETAIL ON PAGE 18. FOR STABILITY PURPOSES IT IS DESIRED THAT THE SKIDS OF A LOWER CONTAINER SUPPORT A PORTION OF THE WEIGHT OF THE CONTAINERS ABOVE. THE THICKNESS OF THE "POD SUPPORT ASSEMBLY" SHOULD BE ADJUSTED AS NECESSARY TO PROVIDE THE PROPER SUPPORT. THE THICKNESS MAY BE REDUCED BY SUBSTITUTING 5/8" OR THINNER X 3-1/2" X 41-1/2" LONG PLYWOOD FOR THE 1" X 4" PIECE. THE THICKNESS MAY BE INCREASED BY ADDING A 1/4" OR THICKER PLYWOOD PIECE. **NOTE**: SOME VIEWS WITHIN THIS DRAWING WILL NOT DEPICT ALL "POD SUPPORT ASSEMBLIES" THAT ARE REQUIRED. "POD SUPPORT ASSEMBLIES" ARE SHOWN AT SOME LOCATIONS TO PROVIDE POSITIONING GUIDANCE.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER - - - - - - - - -: SEE TM 743-200-1 (DUNNAGE LUMBER) AND VOLUNTARY PRODUCT STANDARD PS 20.

NAILS - - - - - - - - -: FED SPEC FF-N-105; COMMON.

PLYWOOD - - - - - - - -: COMMERCIAL ITEM DESCRIPTION A-A-55057, TYPE A, CONSTRUCTION AND INDUSTRIAL PLYWOOD, INTERIOR WITH EXTERIOR GLUE, GRADE C-D. IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER INTERIOR OR AN EXTERIOR GRADE MAY BE SUBSTITUTED.

(GENERAL NOTES CONTINUED)

M. **CAUTION**: CONTAINERS MUST NOT BE STACKED MORE THAN FOUR CONTAINERS HIGH.

N. 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 IN LIEU OF BLOCK STORAGE PATTERNS TO FACILITATE INVENTORY, INSPECTION, THE USE OF MATERIAL HANDLING EQUIPMENT, SURVEILLANCE, ETC., OF THE AMMUNITION TO BE STORED WITHIN THE MAGAZINE.

O. ANY ROCKET POD/CONTAINER THAT DOES NOT CONTAIN SIX ROUNDS WILL NOT BE BURIED IN STORAGE; IT MUST BE POSITIONED ON TOP OF THE LAST STACK ADJACENT TO OR NEAREST THE MAGAZINE DOOR.

P. 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.

Q. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE, WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.

R. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.

S. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2' WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.

T. POD SUPPORT DUNNAGE IS NOT REQUIRED IF THE ROCKET POD/CONTAINERS BEING STORED ARE EQUIPPED WITH HARDWOOD SKIDS.

U. **CAUTION**: WHEN STACKING ROCKET POD/CONTAINERS (RP/Cs) THE ALIGNMENT HOLES IN THE SHOCK ISOLATOR SKIDS OF AN UPPER CONTAINER MUST BE PROPERLY ALIGNED WITH THE STACKING PINS OF A LOWER CONTAINER TO PRECLUDE UNDUE STRESS ON THE SHOCK ABSORBERS AND FRAME AND TO PROVIDE FOR STABILITY OF THE STACK.

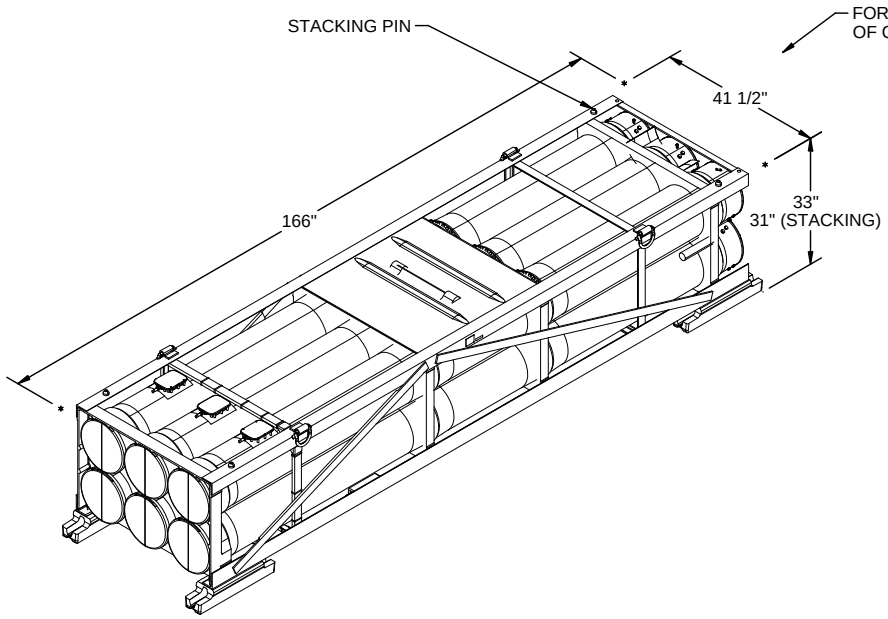
V. WHEN ROCKET POD/CONTAINERS ARE RECEIVED BY RAIL BOX CAR SHIPMENT, THE CONTAINERS WILL HAVE SPACER ASSEMBLIES AND RISER ASSEMBLIES ATTACHED, OR WILL HAVE SPACER ASSEMBLIES AND STRAPPING BOARDS ATTACHED. A ROCKET POD/CONTAINER HAVING A RISER ASSEMBLY AND A SPACER ASSEMBLY ATTACHED MUST HAVE BOTH OF THOSE ASSEMBLIES REMOVED BEFORE STORING UNLESS THE ROCKET POD/CONTAINER CAN BE PLACED IN THE TOP LAYER OF A STACK. A ROCKET POD/CONTAINER HAVING A SPACER ASSEMBLY AND STRAPPING BOARDS ATTACHED MAY BE STORED IN ANY LOCATION IN A STACK WITHOUT REMOVING THE DUNNAGE.

W. THE ROCKET POD/CONTAINER IS NOT EQUIPPED WITH FORK TINE OPENINGS AND CHANNELS FOR HANDLING WITH A FORKLIFT TRUCK. THE CONTAINER MAY SHIFT TO ONE SIDE ON THE FORK TINES FROM ITS CENTER OF BALANCE, POSSIBLY CREATING A HAZARD OR RESULTING IN DAMAGE TO THE CONTAINER. TO PREVENT SUCH AN OCCURRENCE, IT IS RECOMMENDED THAT A "MLRS POD STABILIZING FRAME" BE USED FOR HANDLING EACH CONTAINER FOR UNLOADING FROM TRANSPORT VEHICLE TO PLACING IN ITS STORAGE LOCATION. SUCH A STABILIZING FRAIME HAS BEEN DESIGNED, FABRICATED AND IS BEING SUCCESSFULLY USED. SEE GENERAL NOTE "Y" FOR APPLICABLE FABRICATION DRAWINGS.

X. TO FACILITATE MOVEMENT OF THE LONG RP/CS THROUGH THE NARROW DOOR OPENINGS OF MOST TYPES OF STORAGE MAGAZINES, A "STORAGE HANDLING AID" HAS BEEN DESIGNED, FABRICATED AND USED. THE STORAGE AID CONSISTS OF A METAL RAMP AND WHEELED DOLLY. THIS AID PROVIDES FOR AN EFFICIENT OPERATION WITH A FORKLIFT TRUCK UNLOADING A CONTAINER FROM A TRANSPORT VEHICLE PLACING THE CONTAINER ON THE WHEELED DOLLY ON THE RAMP AND ROLLING THE CONTAINER THROUGH THE NARROW DOOR OPENING INTO THE MAGAZINE WITH AN ELECTRIC PALLET JACK, TO PERMIT A FORKLIFT TRUCK WITHIN THE MAGAZINE TO REMOVE THE CONTAINER FROM THE DOLLY AND PLACE IT IN THE DESIGNATED STORAGE LOCATION. SEE GENERAL NOTE "Y" FOR APPLICABLE DRAWINGS.

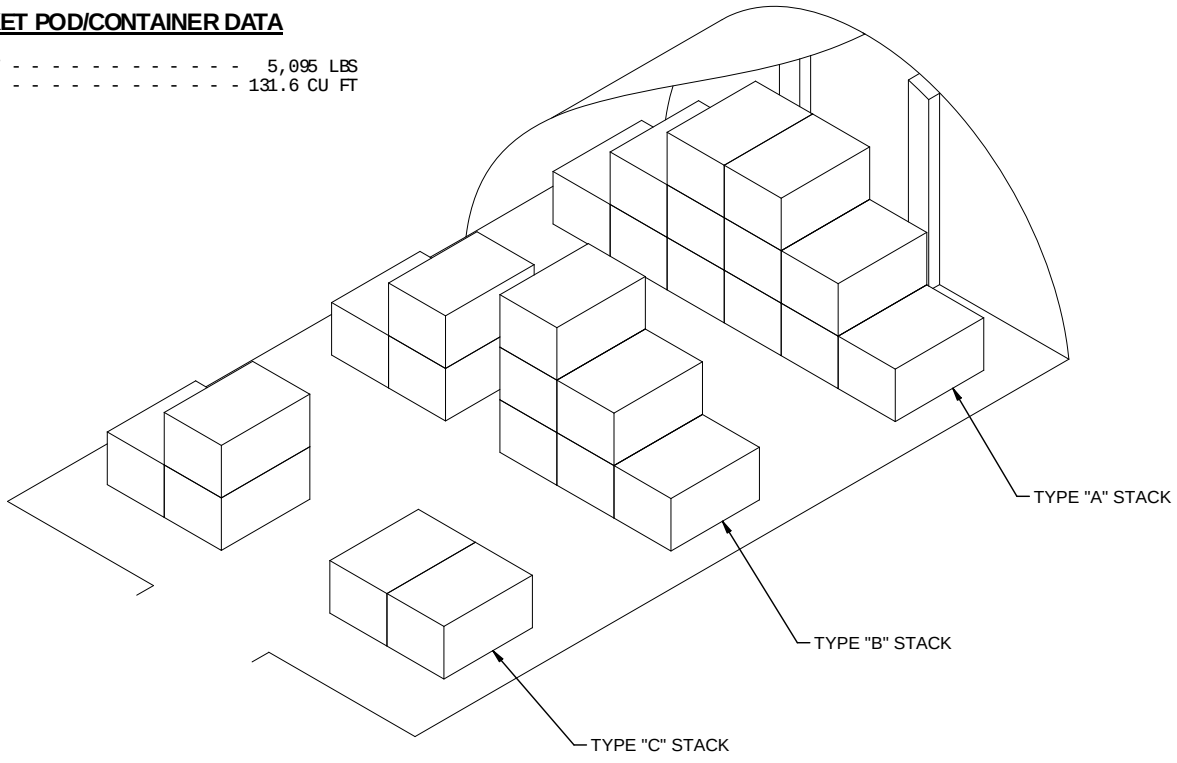
Y. FABRICATION DRAWINGS FOR THE STORAGE AIDS DESCRIBED IN NOTES "W" AND "X" ARE AVAILABLE FROM THE DEFENSE AMMUNITION CENTER (DAC), 1 C TREE ROAD, ATTN: JMAC-DET, MCALESTER, OK, 74501, DSN 956-8927. THE DRAWING NUMBERS AND TITLES ARE AS FOLLOWS: AC200000809; MLRS POD STABILIZING FRAME USED W/6K FORKLIFT, ACV00140; MLRS STORAGE HANDLING AID FOR NARROW DOOR MAGAZINES.

Z. 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 0.454 KG.



ROCKET POD/CONTAINER DATA

GROSS WEIGHT - - - - - - - - - - - - - 5,095 LBS
CUBE - - - - - - - - - - - - - - - - - 131.6 CU FT

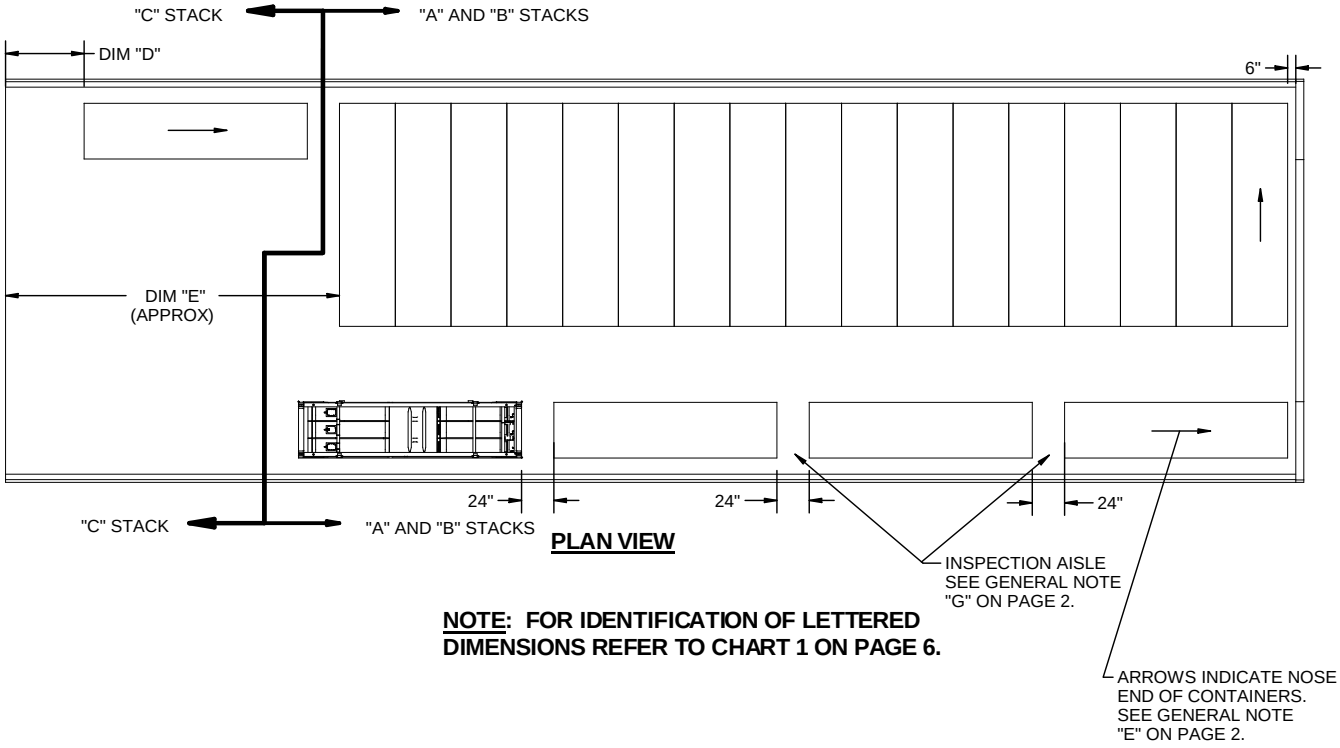


STACK IDENTIFICATION

A TYPE "A" STACK IS IDENTIFIED AS A GROUP OF ITEMS /UNITS WHICH EXTENDS FULL WIDTH AND HEIGHT OF THE MAGAZINE, AND IS ONE ITEM/UNIT LONG IN THE LENGTH OF THE MAGAZINE.

A TYPE "B" STACK IS IDENTIFIED AS A GROUP OF ITEMS/UNITS WHICH EXTEND FULL WIDTH AND HEIGHT OF THE MAGAZINE, AND IS ONE UNIT/ITEM LONG, BUT HAS AN AISLE AT OR NEAR THE CENTER OF THE WIDTH OF THE STACK.

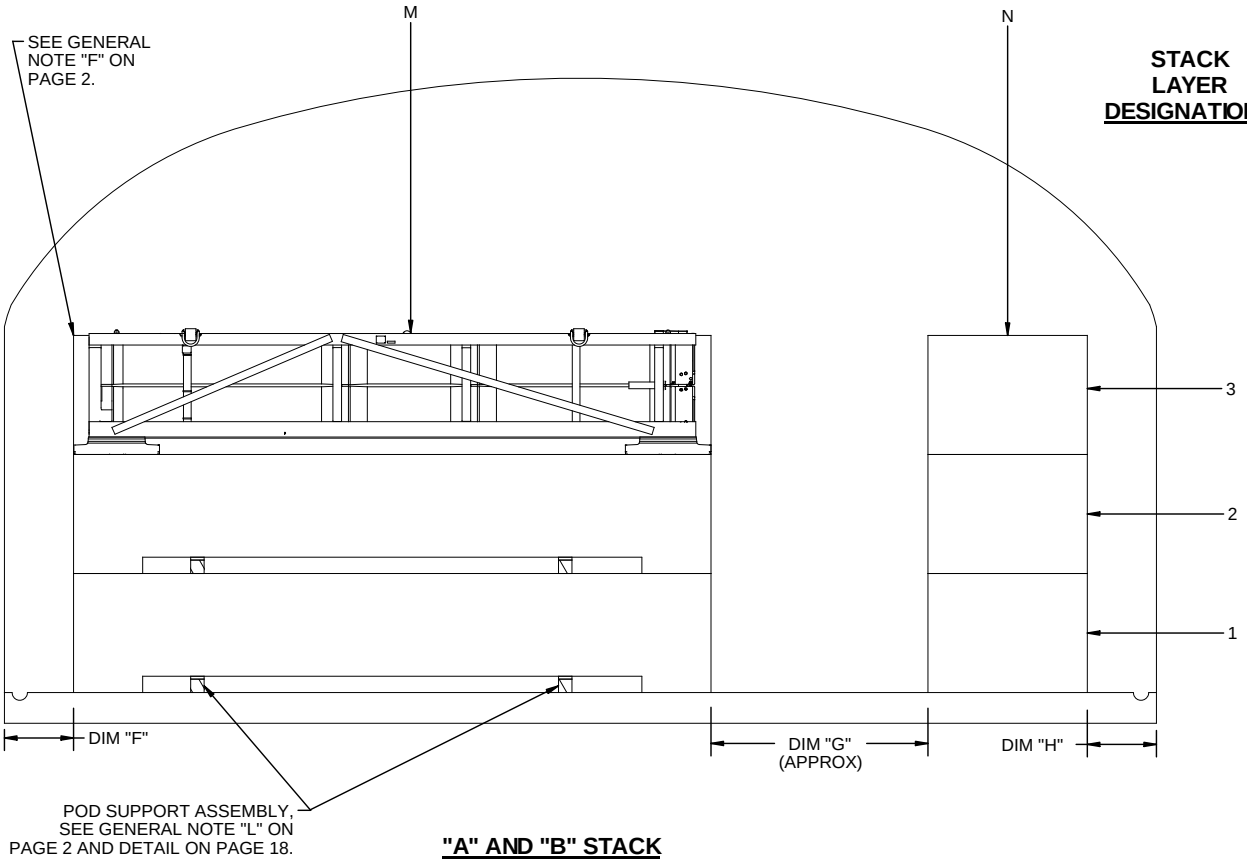
A TYPE "C" STACK IS IDENTIFIED AS A GROUP OF ITEMS/UNITS WHICH IS ONE UNIT/ITEM LONG AND CONSISTS OF PARTIAL STACKS ON EACH SIDE OF THE MAGAZINE, USUALLY ONE ITEM/UNIT HIGH ON ONE SIDE OF THE MAGAZINE.



PLAN VIEW

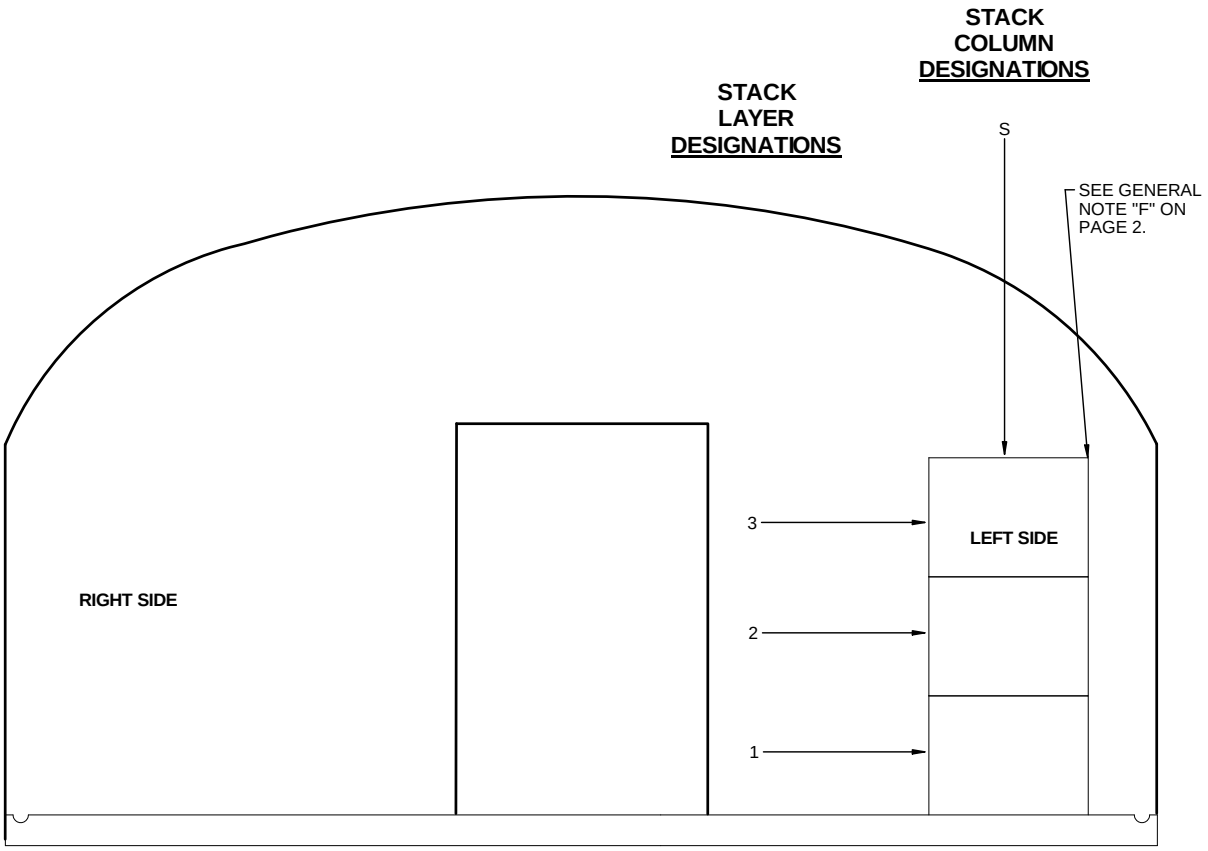
NOTE: FOR IDENTIFICATION OF LETTERED DIMENSIONS REFER TO CHART 1 ON PAGE 6.

STACK COLUMN DESIGNATIONS



"A" AND "B" STACK

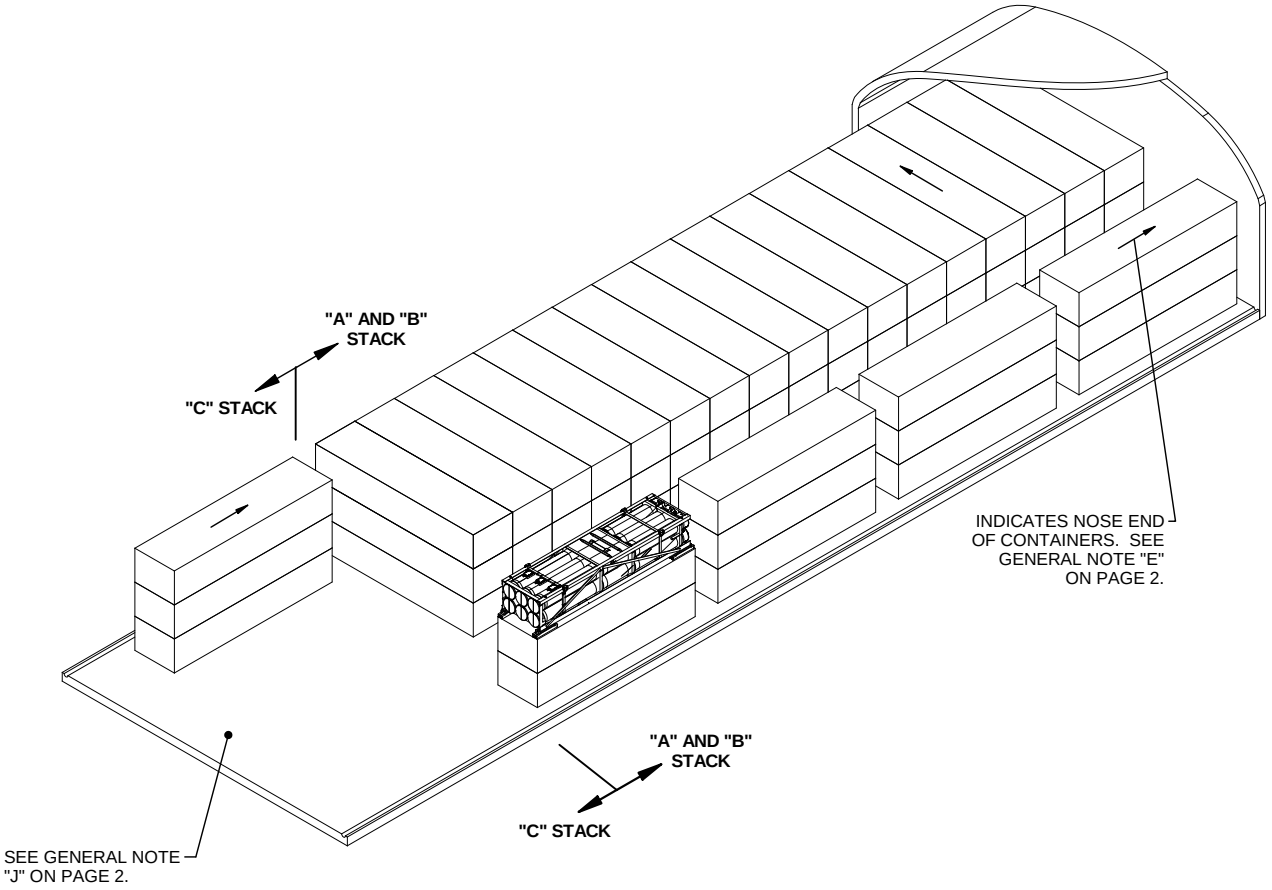
THE MAGAZINE SHOWN ABOVE IS NOT TYPICAL AND IT IS FOR ILLUSTRATION PURPOSES ONLY. (SEE "STACK IDENTIFICATION" ON PAGE 3 AND "CHART 2 - STACK CONFIGURATION" ON PAGE 7. FLOOR DUNNAGE IS SHOWN IN POSITION.



"C" STACK

TYPICAL "C" STACK FOR STRADLEY MAGAZINE.
(SEE "STACK IDENTIFICATION " ON PAGE 3 AND
"CHART 2 - STACK CONFIGURATION" ON PAGE 7)

NOTE: FOR IDENTIFICATION OF LETTERED DIMENSIONS REFER TO CHART 1 ON PAGE 6.



ISOMETRIC VIEW

STRADLEY MAGAZINE
SHOWN AS TYPICAL.

CHART 1 - DIMENSIONS

MAGAZINE DIMENSIONS	MAGAZINE TYPE													
	IGLOO			ARCH 12' 26'-6"	ARCH 12' 25'-0"		ARCH 11'		ARCH 10'		OVAL ARCH	STRADLEY	STEEL ARCH	
LENGTH	40'-4"	60'-8"	81'-0"	81'-2"	40'-0"	80'-0"	40'-0"	80'-0"	40'-0"	80'-0"	89'-0"	80'-0"	59'-0"	89'-0"
WIDTH	26'-6"			26'-6"	25'-0"	25'-0"	25'-0"		25'-0"		24'-10"	25'-0"	25'-0"	24'-11"
HEIGHT	12'-9"			12'-1-3/4"			11'-0"		10'-0"		14'-5"	14'-0"	14'-0"	13'-6"
DIMENSIONS	PALLET UNIT SPACING DIMENSIONS													
DIM "D" ("C" STACK FRONT)	24"	22"	24"	6"	24"	24"	24"	24"	24"	28"	--	58"	--	24"
DIM "E" (MHE AISLE APPROX)	19'-1"	14'-6"	18'-3"	18'-11"	18'-3"	17'-8"	18'-3"	19'-2"	18'-9"	18'-1"	9'-2"	18'-1"	8'-9"	21'-6"
DIM "F" ("A" STACK LEFT)	24"	24"	24"	48"	44"	44"	49"	44"	24"	33"	25"	16"	7'-0"	58"
DIM "G" ("A" STACK RIGHT)	26"	24"	24"	24"	24"	24"	24"	24"	24"	26"	21"	56"	34"	24"
DIM "H" ("B" STACK RIGHT)	6"	6"	6"	29"	15"	15"	7"	15"	46"	26"	7"	16"	15"	9"
DIM "J" (MHE AREA APPROX)	14'-11"	14'-11"	14'-11"	14'-6"	12'-8"	13'-0"	13'-0"	13'-0"	12'-9"	12'-4"	5'-9"	19'-6"	25'-0"	13'-10"

TYPICAL STORAGE IN ARCHED OR ROUNDED ROOF MAGAZINES

CHART 2 - STACK CONFIGURATION

MAGAZINE TYPE														
QUANTITY PER MAGAZINE	IGLOO			ARCH 12'	ARCH 12' X 25' W		ARCH 11'		ARCH 10'		OVAL ARCH	STRADLEY	STEEL ARCH	
	40'-4" L	60'-8" L	81'-0" L	26'-6" W	40'-0" L	80'-0" L	40'-0" L	80'-0" L	40'-0" L	80'-0" L			59'-0" L	89'-0" L
	34	61	89	67	28	67	19	44	19	44	131	108	62	94
"A" STACK CONFIGURATION														
LAYER	ROCKET POD/CONTAINERS PER LAYER													
1	1(N)			1(M)	1(M)		1(M)		1(M)		1(M)	1(M)	1(N)	
2	1(N)			1(M)	1(M)		1(M)		1(M)		1(M)	1(M)	1(N)	
3	1(N)			1(M)	1(M)		--		--		1(M)	1(M)	1(N)	
4	1(N)			--	--		--		--		1(M)		1(N)	
SINGLE STACK TOTAL	4			3	3		2		2		4	3	4	
NUMBER OF STACKS	6	12	18	17	6	17	6	17	6	17	12	17	14	19
"A" STACK TOTAL	24	48	72	51	18	51	12	34	12	34	48	51	56	76
"B" STACK CONFIGURATION														
LAYER	ROCKET POD/CONTAINERS PER LAYER													
1	2(M, O)			1(N)	1(N)		1(N)		1(N)		2(N-O)	1(N)	1(M)	1(N)
2	--			1(N)	1(N)		--		--		2(N-O)	1(N)	1(M)	1(N)
3	--			--	--		--		--		2(N-O)	1(N)	--	--
4	--			--	--		--		--		1(N)	--	--	--
SINGLE STACK TOTAL	2	2	2	2	2	2	1	1	1	1	7	3	2	2
NUMBER OF STACKS	1	2	4	4	1	4	1	4	1	4	5	4	3	4
"B" STACK TOTAL	2	4	8	8	2	8	1	4	1	4	35	12	6	8
"C" STACK CONFIGURATION - LEFT SIDE														
LAYER	ROCKET POD/CONTAINERS PER LAYER													
1	3(S-U)			3(S-U)			3(S-U)		3(S-U)		--	1(S)	3(S-U)	
2	2(T-U)			2(T-U)			2(T-U)		2(T-U)		--	1(S)	3(S-U)	
3	2(T-U)			2(T-U)			1(U)		1(U)		--	1(S)	2(T-U)	
4	1(U)			1(U)			--		--		--	--	2(T-U)	
SINGLE STACK TOTAL	--	8		8			6		6		--	3	--	10
NUMBER OF STACKS	--	1		1			1		1		--	1	--	1
"C" STACK LF TOTAL	--	8		8			6		6		--	3	--	10
"C" STACK CONFIGURATION - RIGHT SIDE														
"C" STACK RT TOTAL	--	--		--			--		--		--	--	--	--

SPECIAL NOTES:

1. THE FOLLOWING NOTES, CHART 1 ON PAGE 6 AND CHART 2 ON THIS PAGE ARE PRESENTED AS GUIDANCE IN THE SELECTION OF A STORAGE PATTERN, AND IN DETERMINING THE QUANTITY OF CONTAINERS WHICH CAN BE STORED IN THE STORAGE MAGAZINES LISTED IN THESE CHARTS.
2. CHART 1 ON PAGE 6 DESCRIBES THE STORAGE MAGAZINE GENERAL DIMENSIONS AND THE DIMENSIONS OF THE CONTAINER SPACING WITHIN THE STORAGE MAGAZINES.
3. DIMENSIONS "A", "B" AND "C" HAVE BEEN OMITTED TO AVOID CONFUSION WITH STACKS "A", "B" AND "C".
4. CHART 2 ON THIS PAGE DETAILS THE QUANTITY OF CONTAINERS IN EACH TYPE OF MAGAZINE AND THE LAYOUT OF THE STACKS FOR EACH TYPE OF MAGAZINE. THE CHART SHOWS THE NUMBER OF UNITS IN EACH STACK LAYER AND THE LOCATION OF THE CONTAINER ON EACH LAYER.

(CONTINUED AT RIGHT)

EXAMPLE:

CHART 2 – "A" STACK CONFIGURATION
MAGAZINE: STRADLEY

LAYER NUMBER 1: 1 (M)
LAYER NUMBER 2: 1 (M)
LAYER NUMBER 3: 1 (M)

EXPLANATION:

LAYER 1 (BOTTOM LAYER) HAS ONE CONTAINER FROM THE "M" COLUMN.

LAYER 2 (ON TOP OF LAYER 1) HAS ONE CONTAINER FROM THE "M" COLUMN.

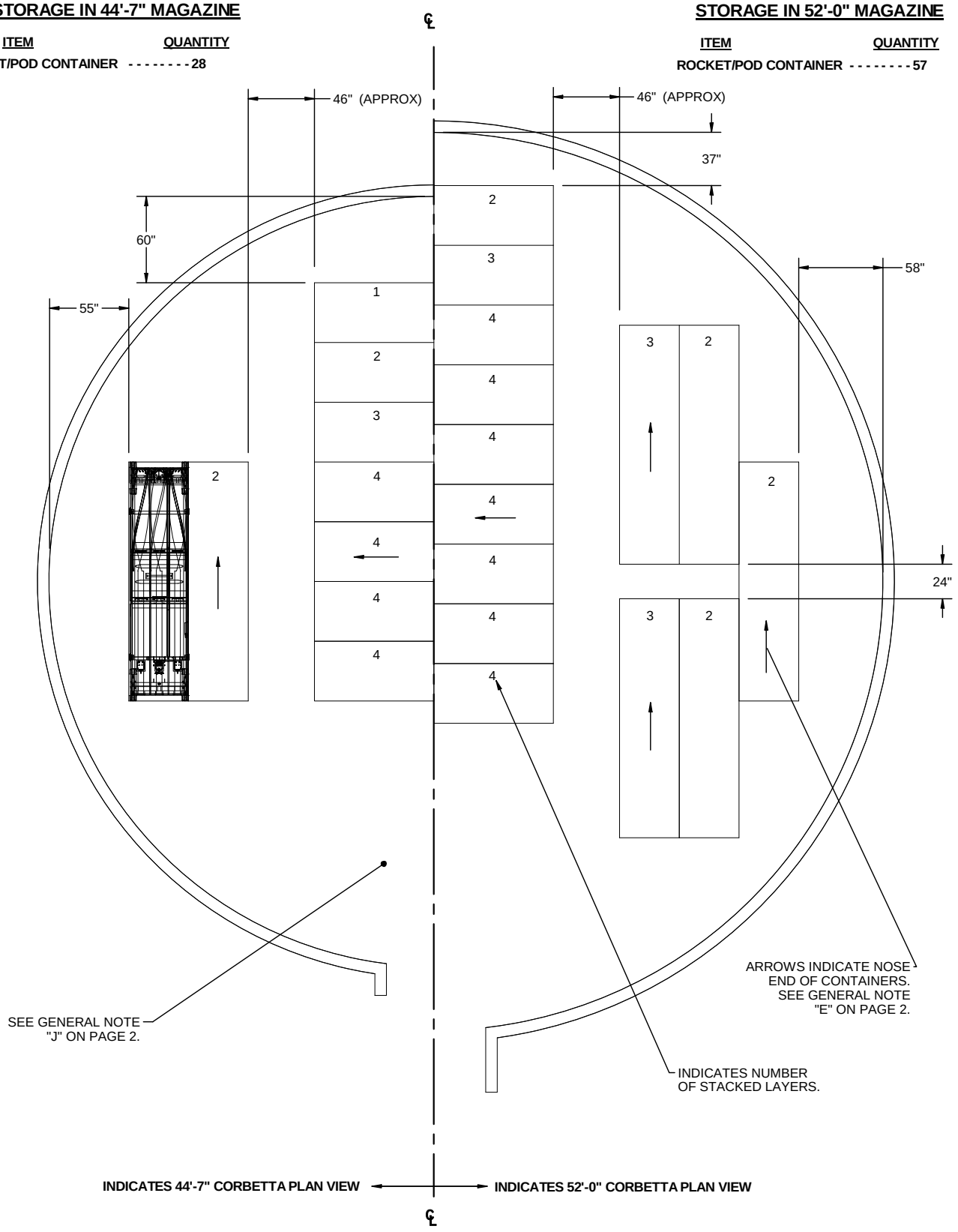
LAYER 3 (ON TOP OF LAYER 2) HAS ONE CONTAINER FROM THE "M" COLUMN.

STORAGE IN 44'-7" MAGAZINE

ITEM	QUANTITY
ROCKET/POD CONTAINER	28

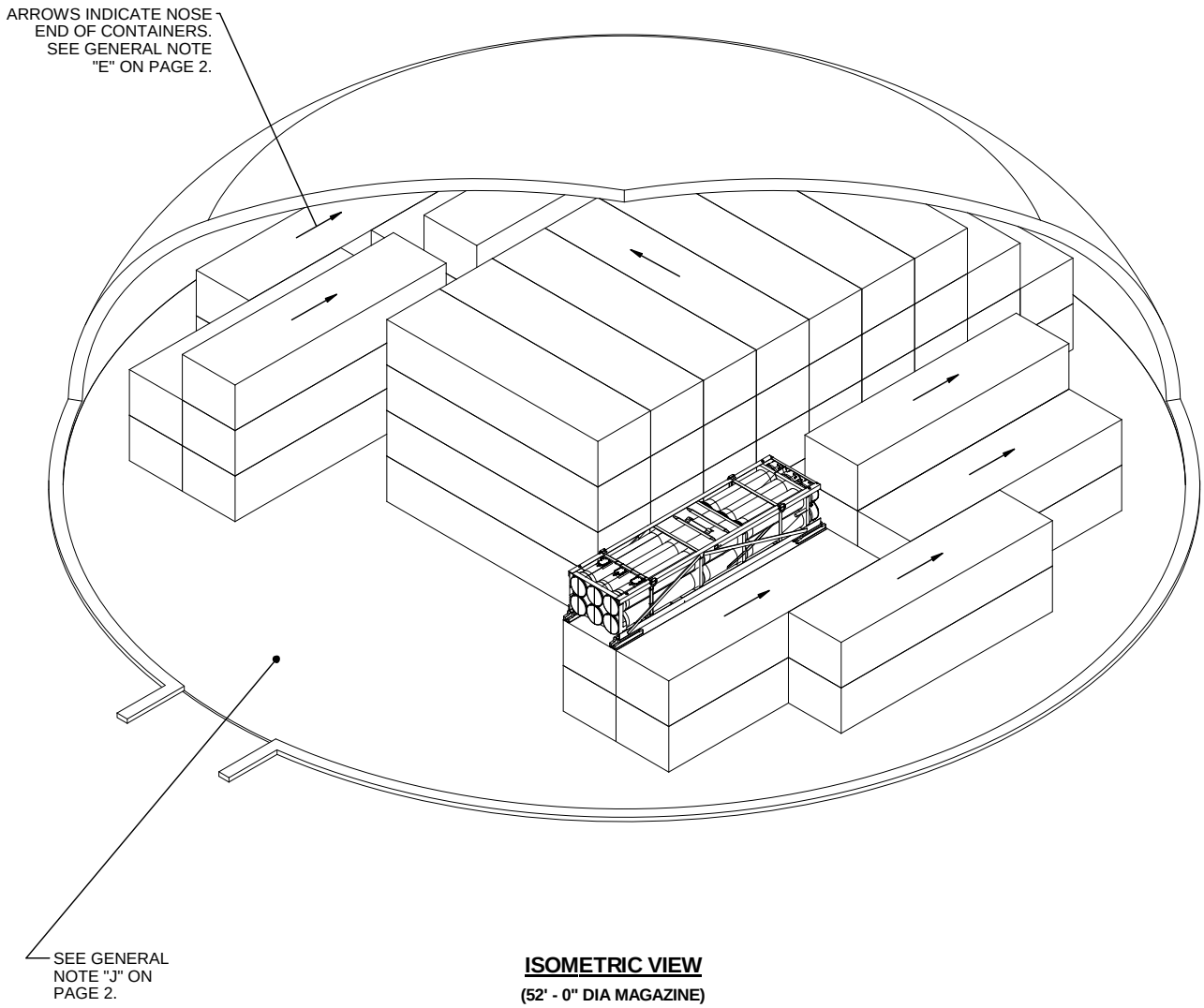
STORAGE IN 52'-0" MAGAZINE

ITEM	QUANTITY
ROCKET/POD CONTAINER	57



PLAN VIEW

THE RIGHT HAND PLAN VIEW INDICATES A 52'-0" CORBETTA MAGAZINE, AND THE LEFT HAND PLAN VIEW INDICATES A 44'-7" CORBETTA MAGAZINE. BOTH SIZE MAGAZINE LAYOUTS ARE SYMMETRICAL AROUND THE VERTICAL CENTER LINE.

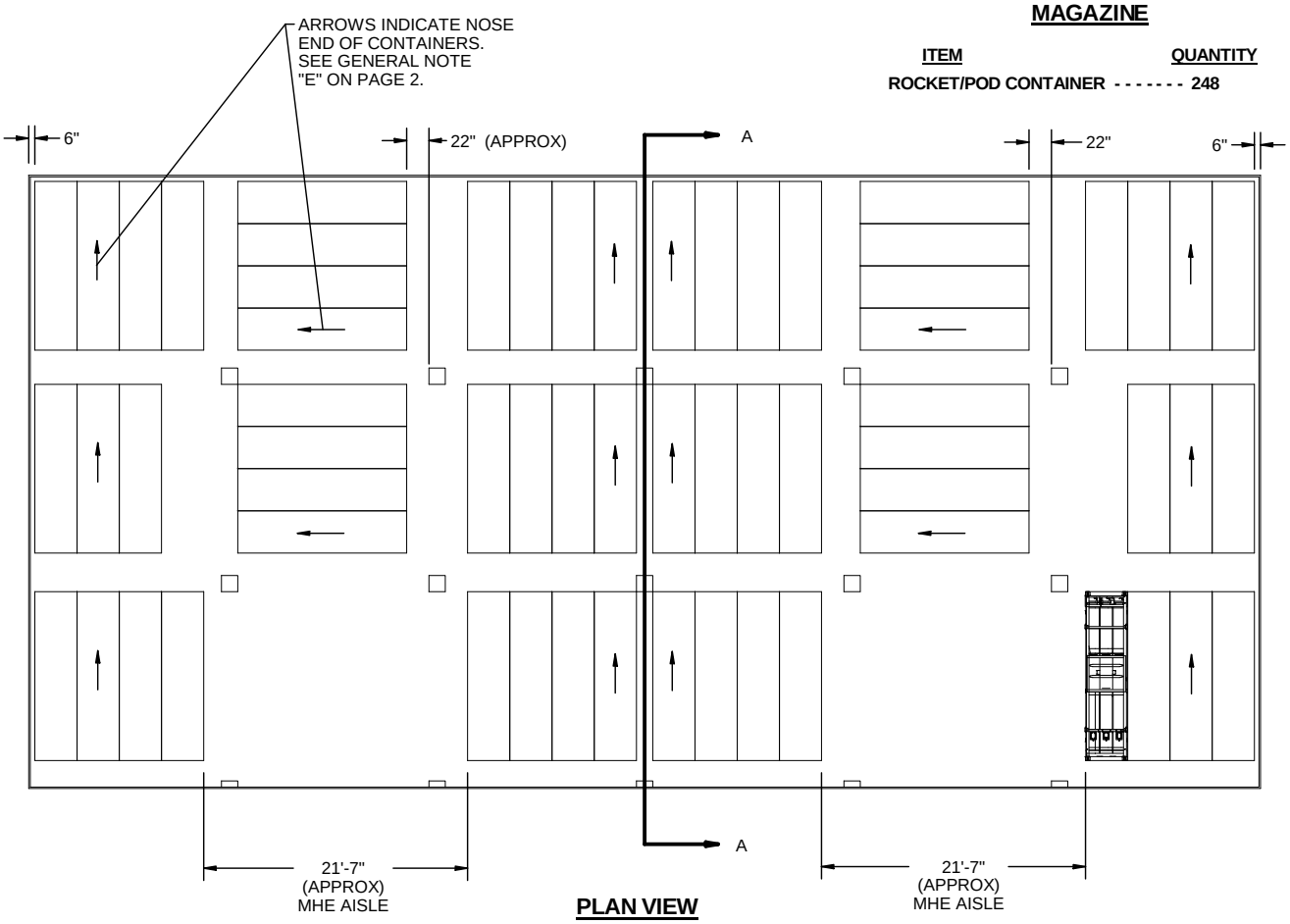


ISOMETRIC VIEW

(52' - 0" DIA MAGAZINE)

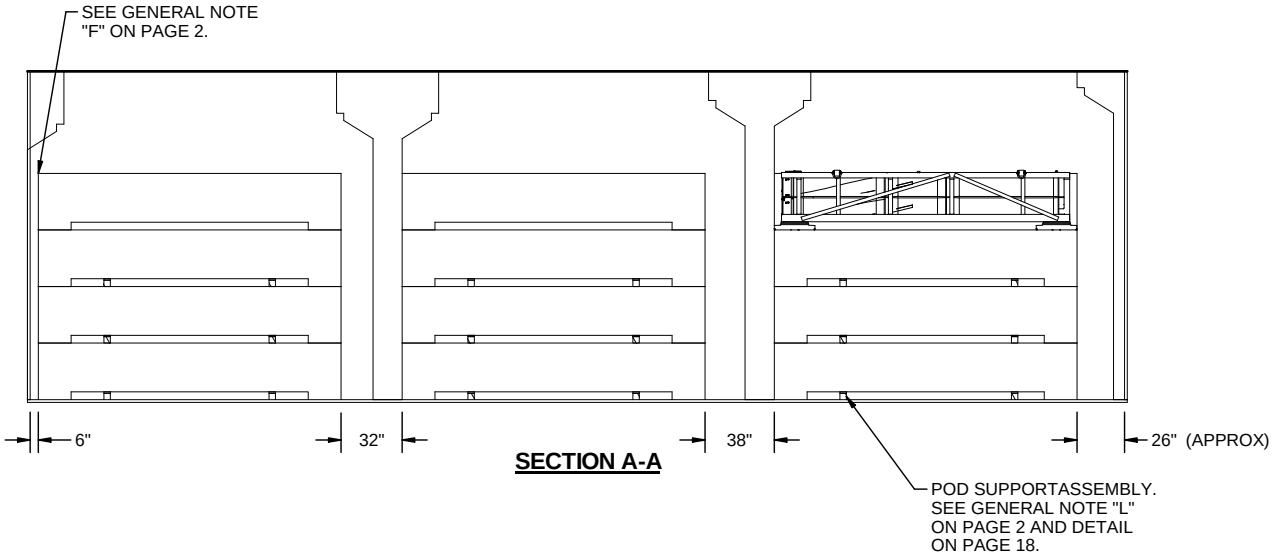
STORAGE IN RECTANGULAR MAGAZINE

ITEM	QUANTITY
ROCKET/POD CONTAINER - - - - - - -	248

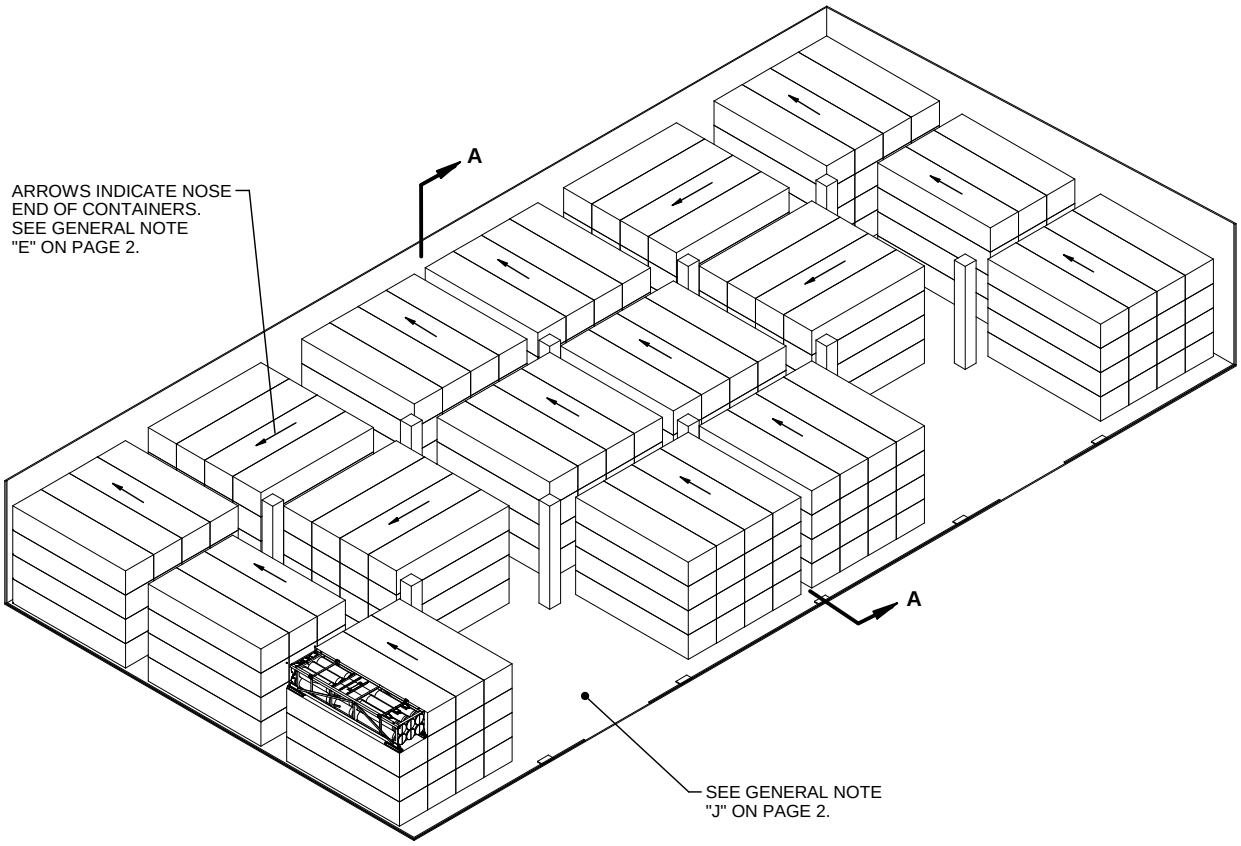


PLAN VIEW

ALL ROCKET POD/CONTAINERS STACKED FOUR LAYERS HIGH.



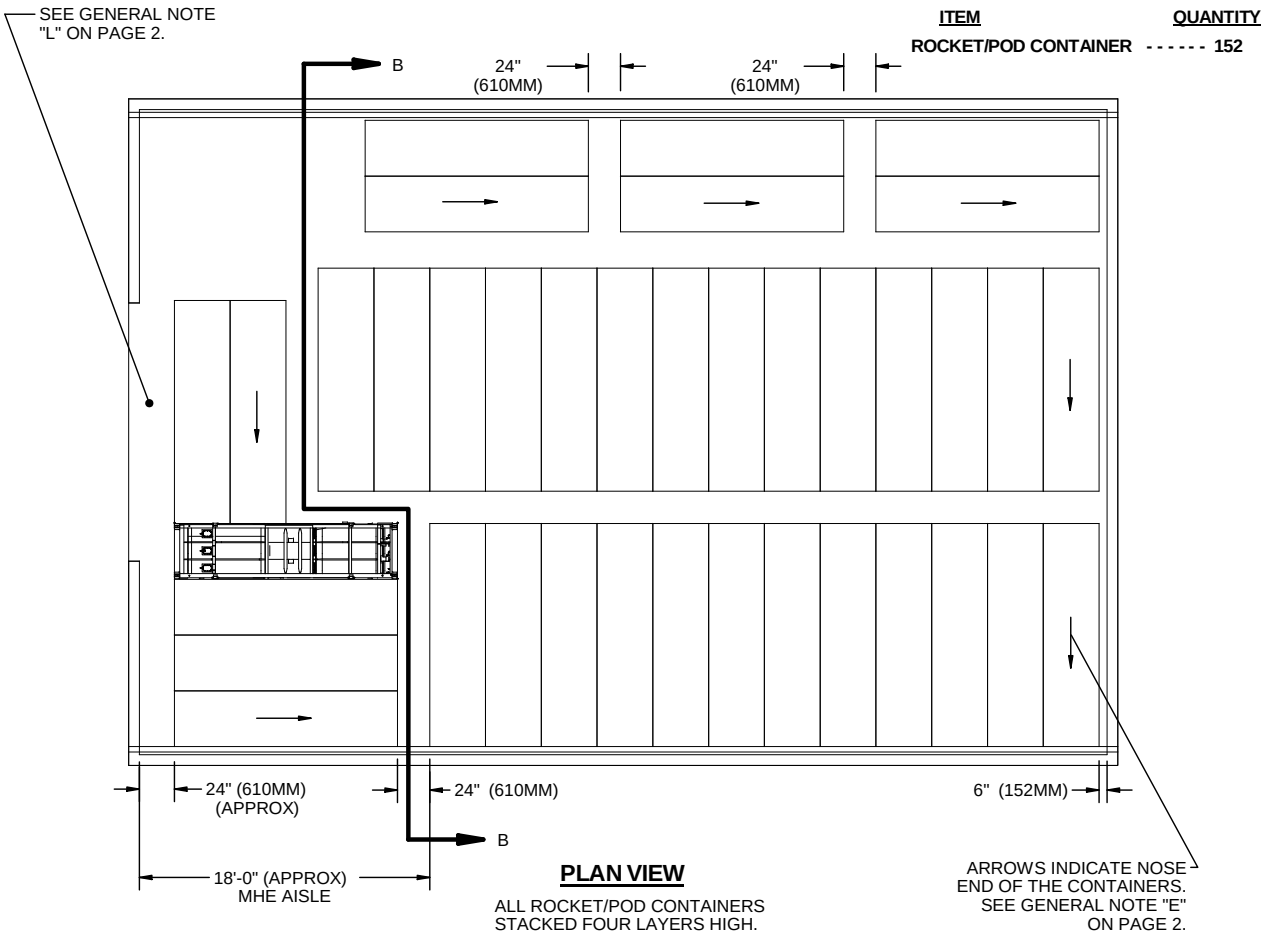
SECTION A-A



ISOMETRIC VIEW

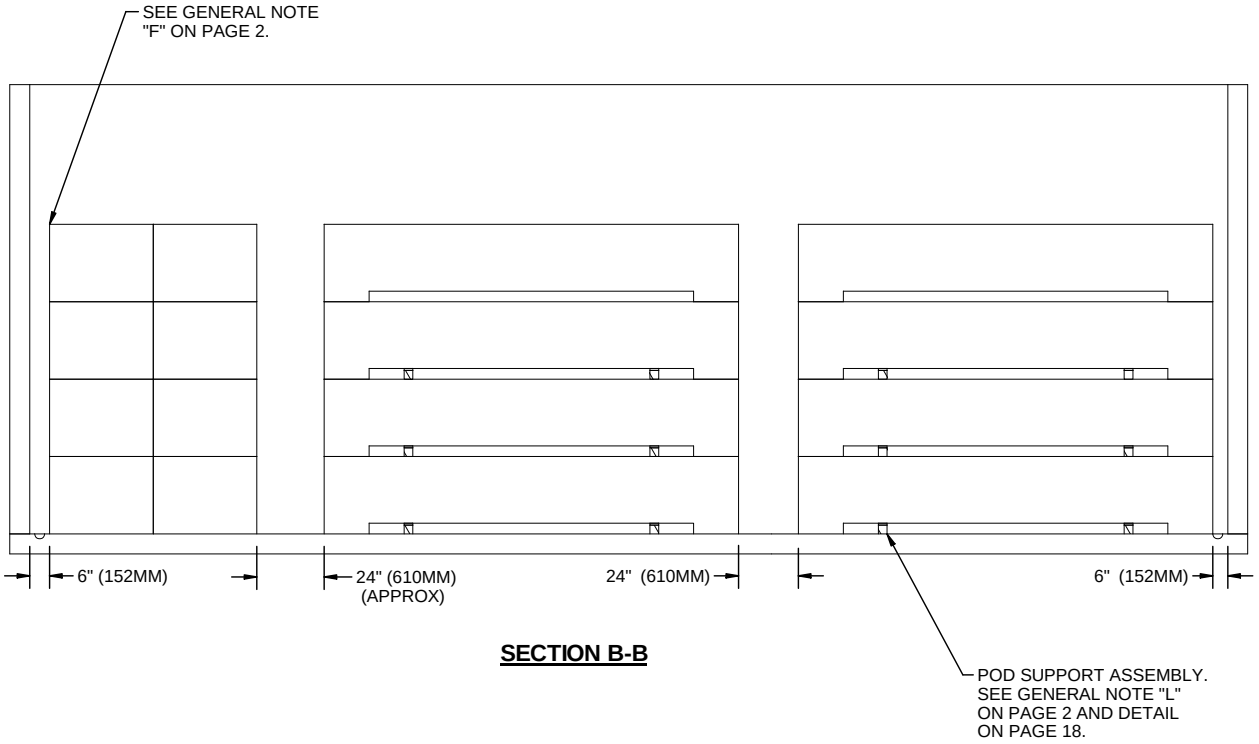
STORAGE IN TYPE II BUNKER MAGAZINE

ITEM	QUANTITY
ROCKET/POD CONTAINER	152

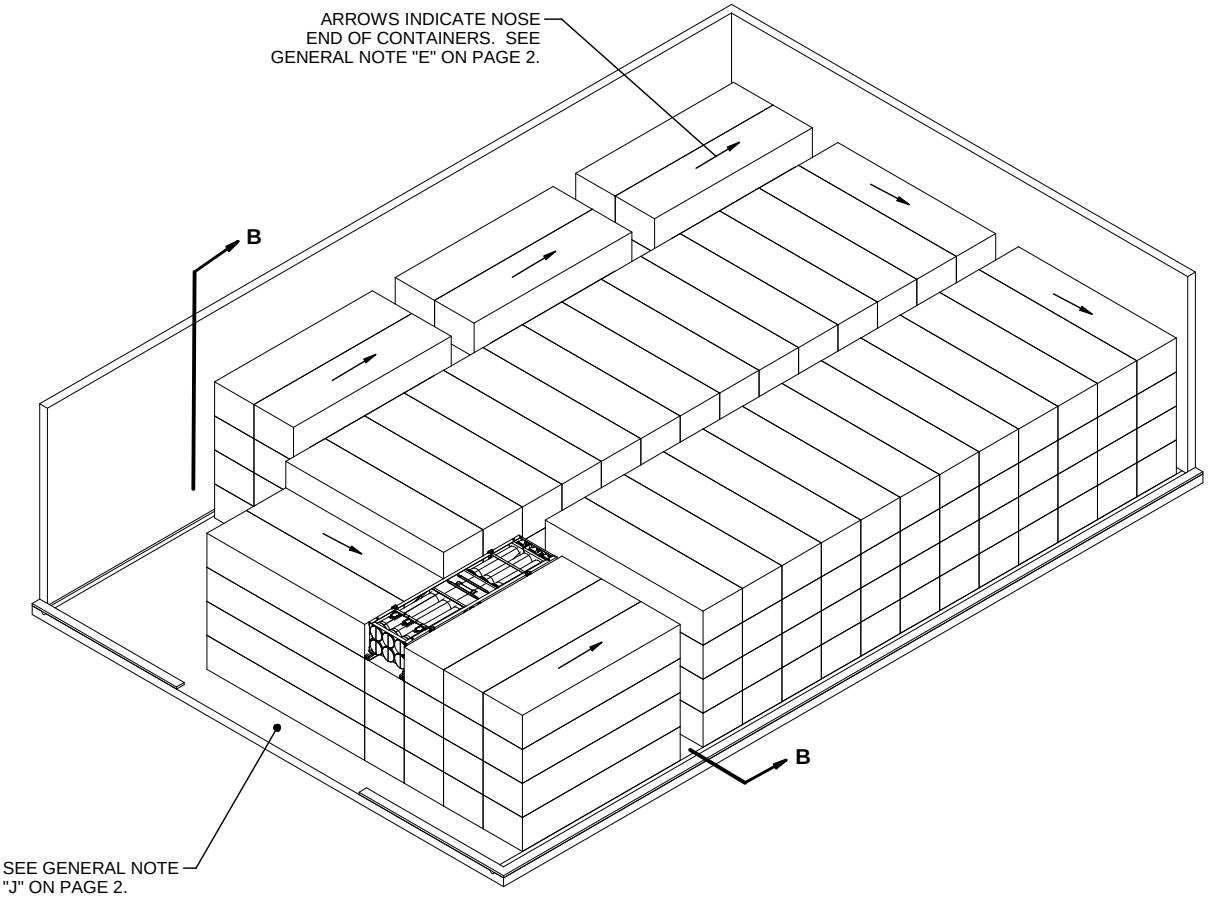


PLAN VIEW

ALL ROCKET/POD CONTAINERS STACKED FOUR LAYERS HIGH.



SECTION B-B

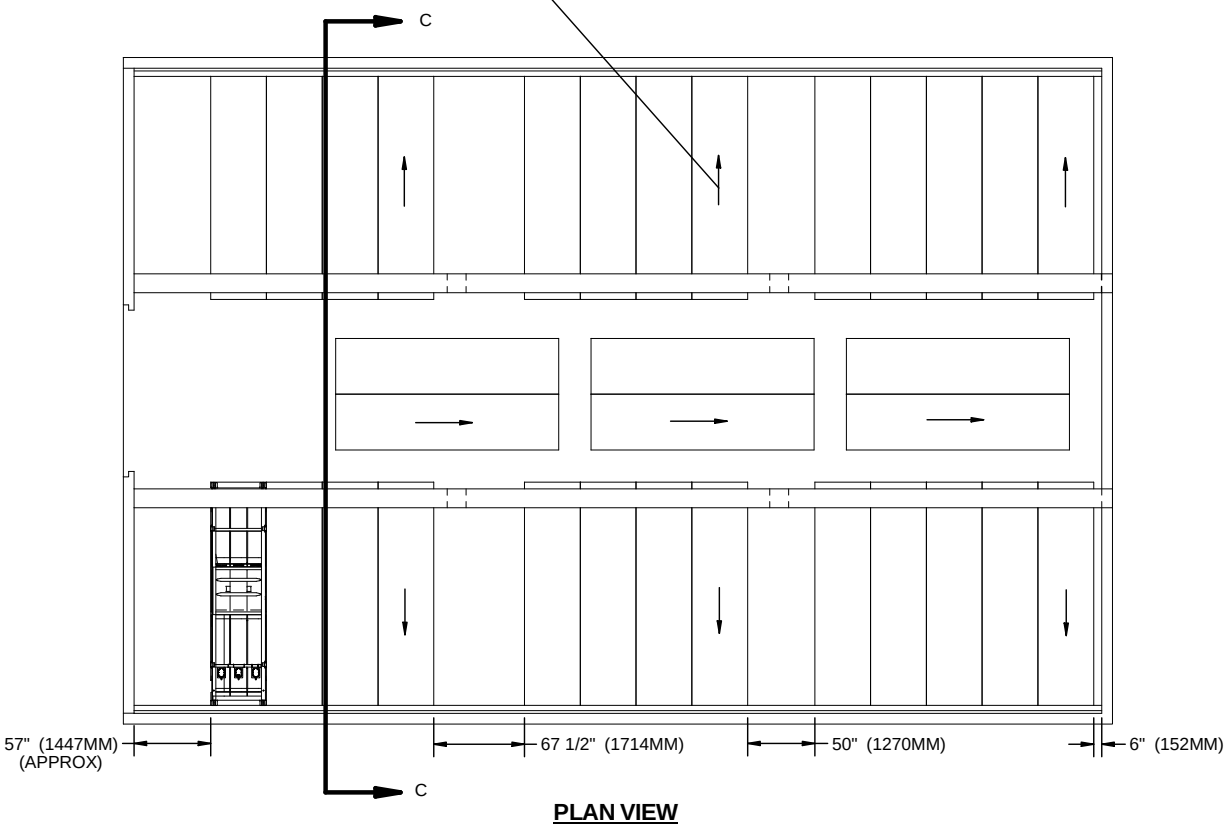


ISOMETRIC VIEW

(TYPE II BUNKER MAGAZINE)

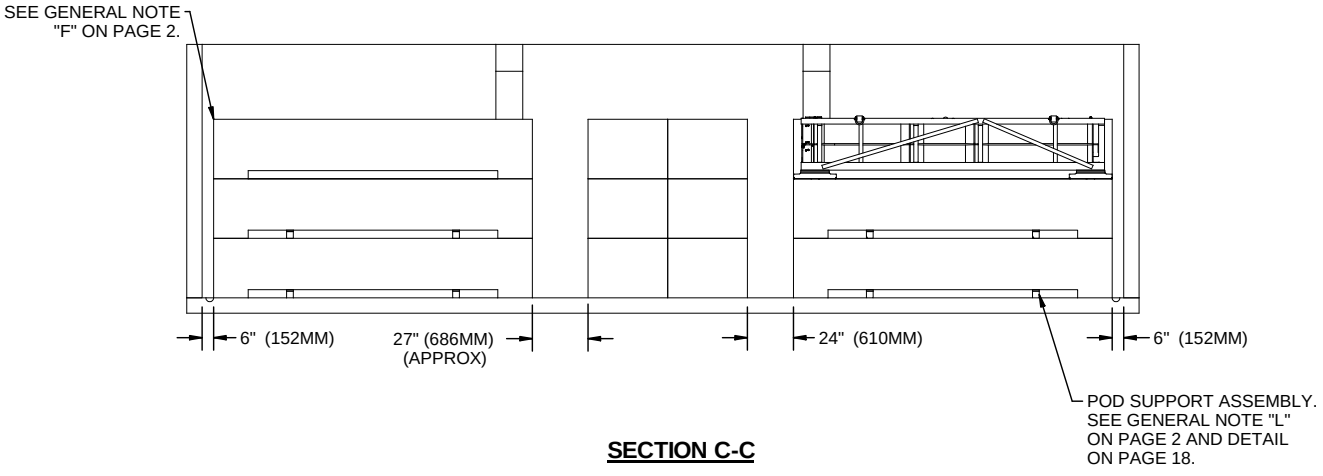
STORAGE IN TYPE III BUNKER MAGAZINE

ITEM	QUANTITY
ROCKET/POD CONTAINER	96

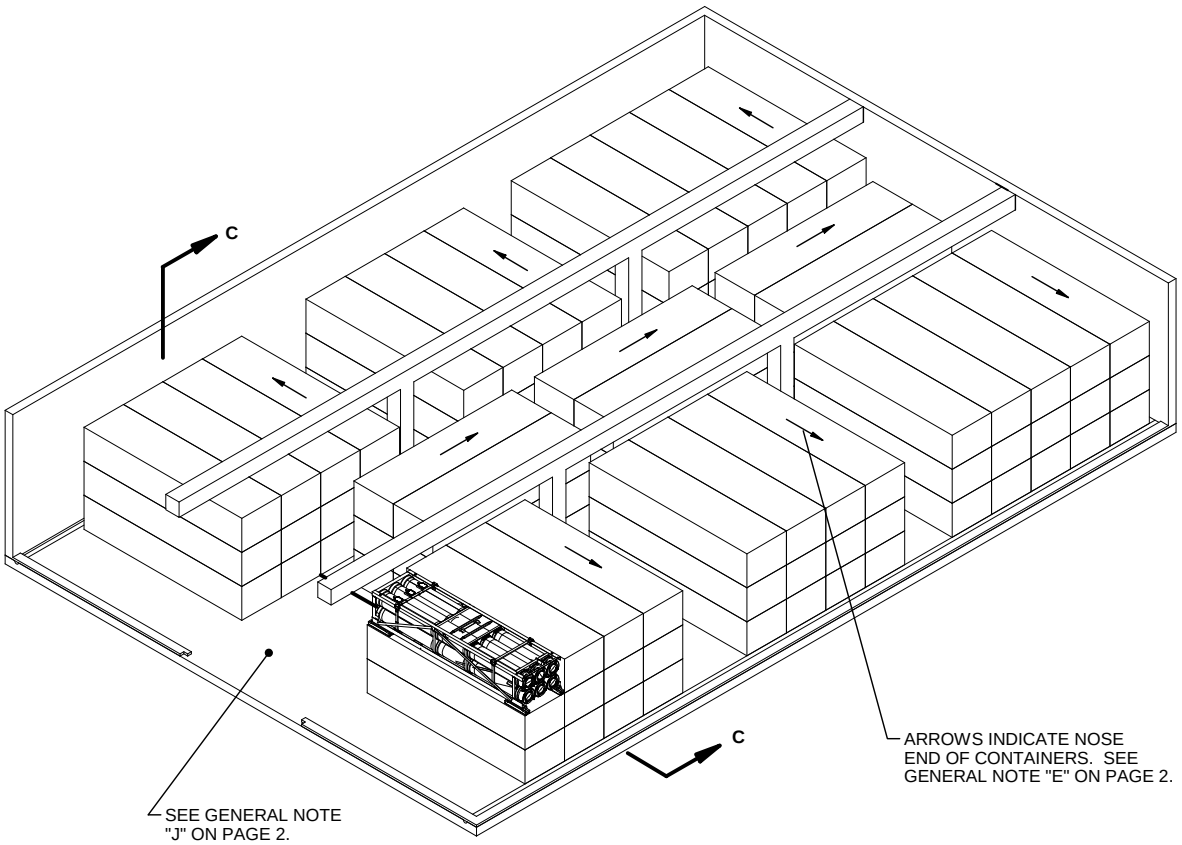


PLAN VIEW

ALL ROCKET/POD CONTAINERS STACKED THREE LAYERS HIGH.



SECTION C-C

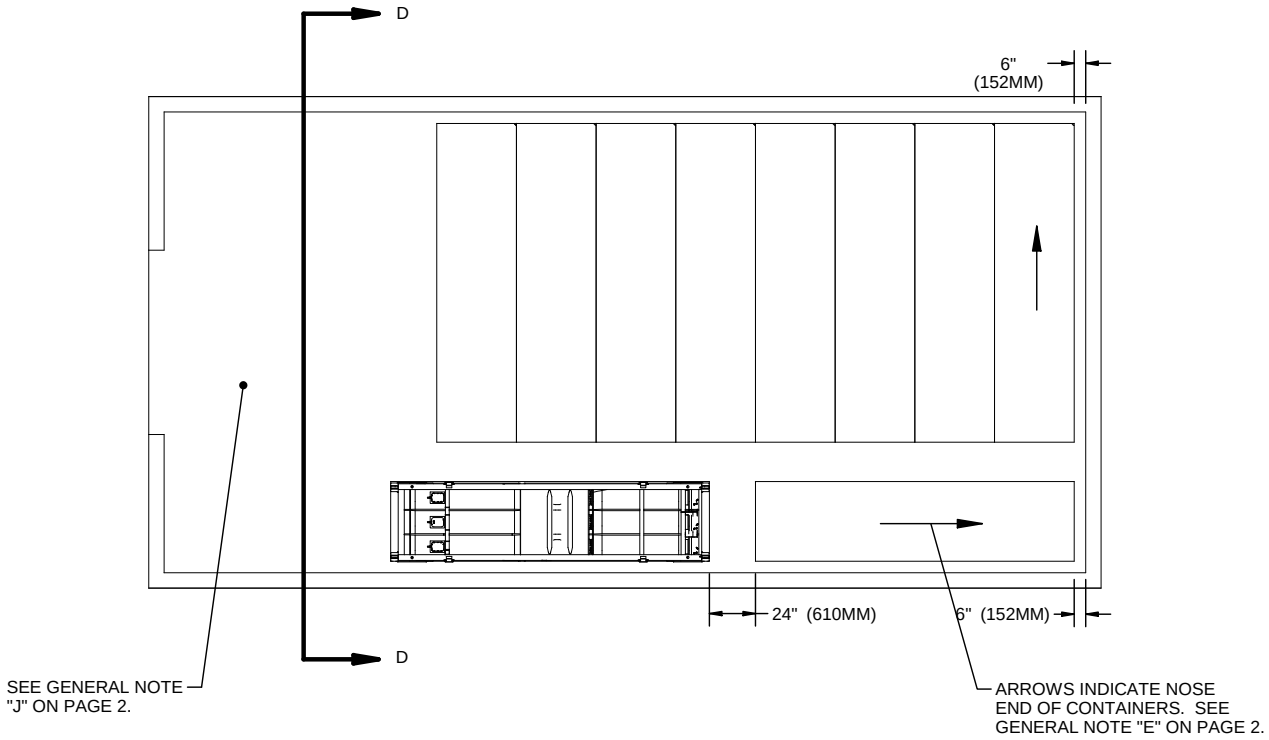


ISOMETRIC VIEW

(TYPE III BUNKER MAGAZINE)

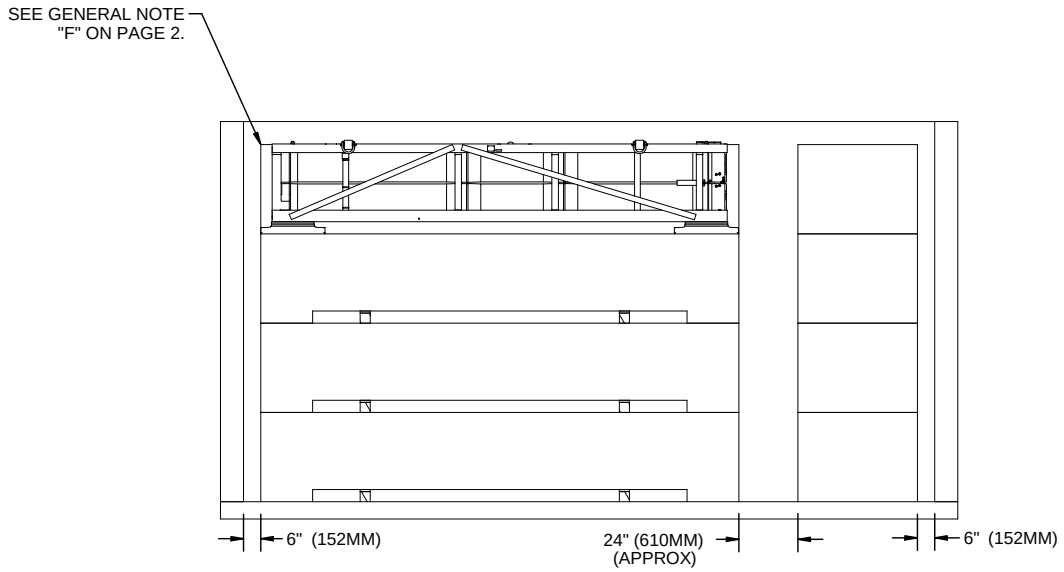
STORAGE IN TYPE IV BUNKER MAGAZINE

ITEM	QUANTITY
ROCKET/POD CONTAINER	40



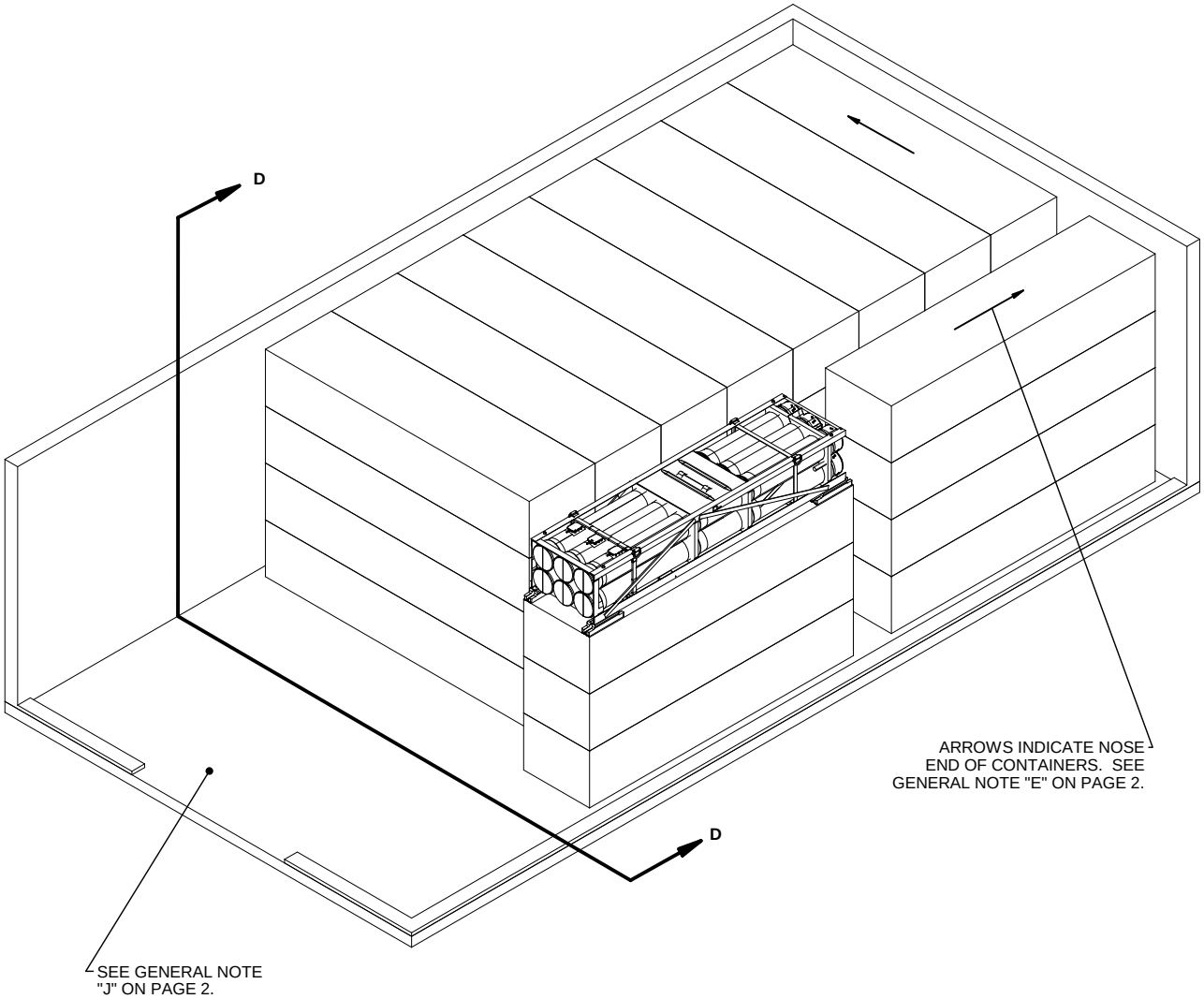
PLAN VIEW

ALL ROCKET/POD CONTAINERS STACKED FOUR LAYERS HIGH.



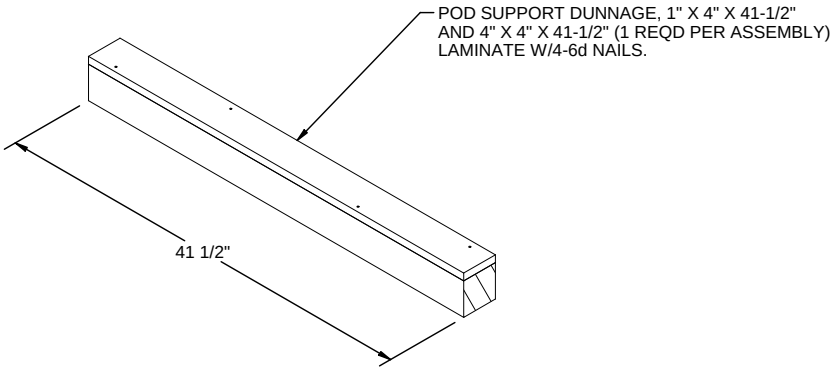
SECTION D-D

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



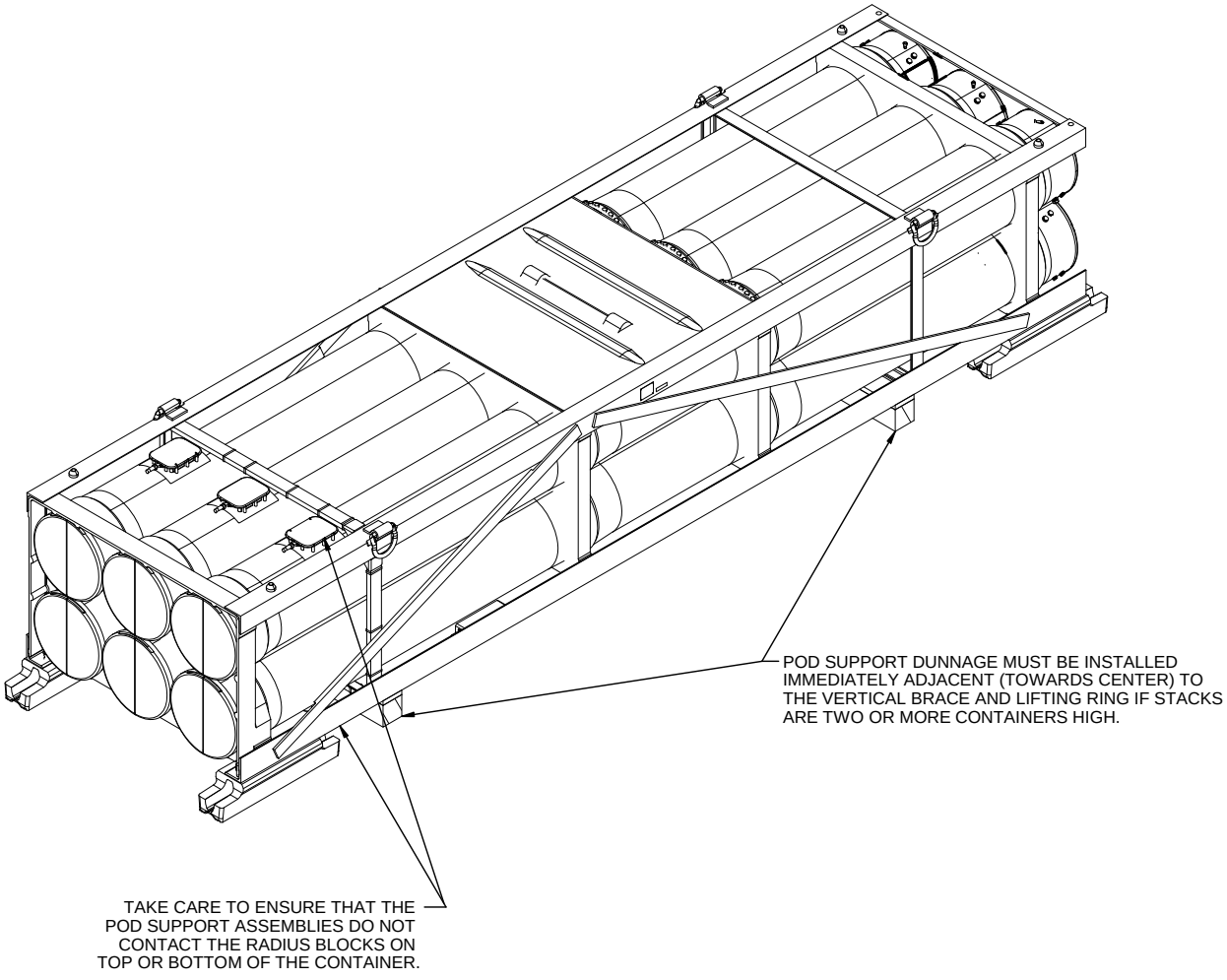
ISOMETRIC VIEW

(TYPE IV BUNKER MAGAZINE)



POD SUPPORT ASSEMBLY

SEE GENERAL NOTE "L" ON PAGE 2.



POD SUPPORT LOCATION DETAIL

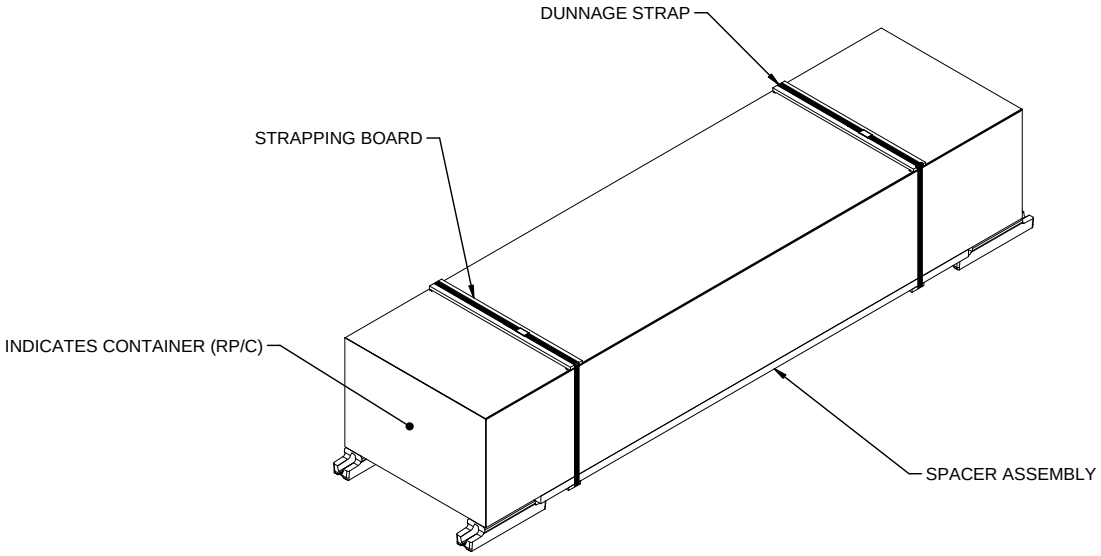


FIGURE 1

THIS VIEW DEPICTS AN UPPER LAYER CONTAINER WITH DUNNAGE/DUNNAGE ASSEMBLIES ATTACHED, AS REMOVED FROM A BOXCAR LOAD. STRAPPING BOARDS AND SPACER ASSEMBLY MAY REMAIN WITH CONTAINER DURING STORAGE. SEE SPECIAL NOTES 1 AND 2 ON PAGE 20.

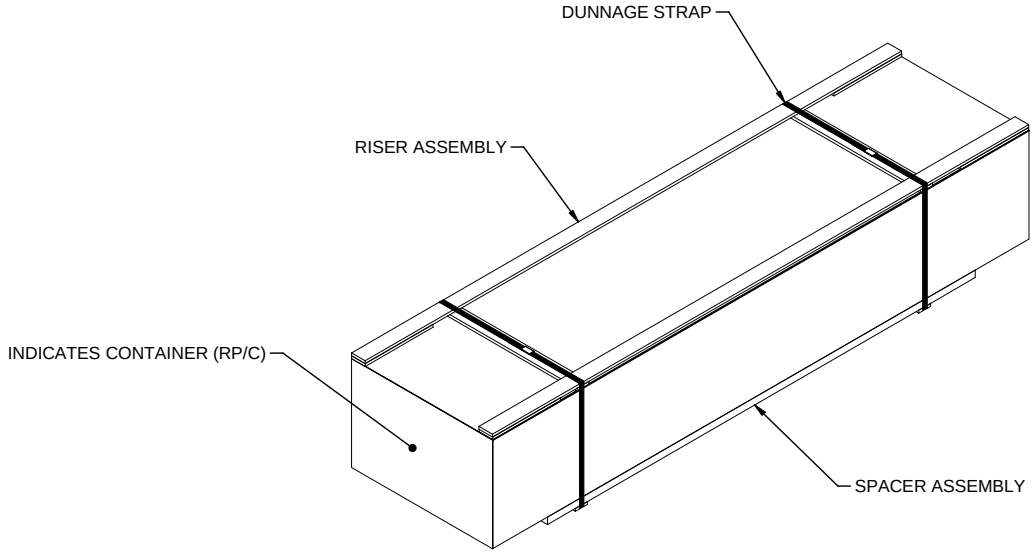
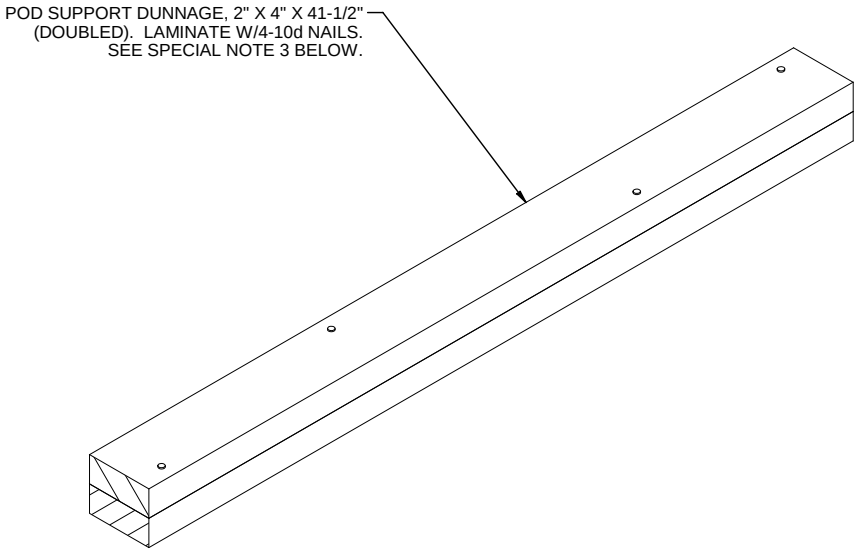


FIGURE 2

THIS VIEW DEPICTS A LOWER LAYER CONTAINER WITH DUNNAGE ASSEMBLIES ATTACHED, AS REMOVED FROM A BOXCAR LOAD. REMOVE BOTH DUNNAGE ASSEMBLIES BEFORE STORING CONTAINER UNLESS THE CONTAINER IS TO BE STORED IN THE TOP LAYER OF A STACK.



ALTERNATIVE POD SUPPORT ASSEMBLY

SPECIAL NOTES:

1. TWO POD SUPPORT ASSEMBLIES ARE REQUIRED UNDER THE FRAME OF EACH FIRST-LAYER CONTAINER WHICH HAS ONE OR MORE CONTAINERS ON TOP. WHEN THE FIRST-LAYER CONTAINER HAS A SPACER ASSEMBY ATTACHED, AS SHOWN IN THE FIGURE 1 VIEW ON PAGE 19, THE POD SUPPORT DUNNAGE WILL CONSIST OF LAMINATED 2" X 4" X 41-1.2" LONG PIECES IN LIEU OF THE LAMINATED 1" X 4" AND 4" X 4" X 41-1/2" LONG POD SUPPORT DUNNAGE SHOWN WITHIN THIS DOCUMENT. SEE THE "ALTERNATIVE POD SUPPORT ASSEMBLY" DETAIL ABOVE.

2. EACH UPPER LAYER ROCKET POD/CONTAINER WHICH HAS A SPACER ASSEMBLY ATTACHED, EXCEPT FOR THE VERY TOP CONTAINER IN A STACK, WILL HAVE THE LAMINATED 2" X 4" POD SUPPORT ASSEMBLIES POSITIONED UNDER IT AT EACH INWARD END OF THE CONTAINER SKIDS. EACH UPPER LAYER ROCKET POD/CONTAINER NOT HAVING A SPACER ASSEMBLY ATTACHED, EXCEPT FOR THE VERY TOP ONE IN A STACK, WILL HAVE THE LAMINATED 1" X 4" AND 4" X 4" POD SUPPORT DUNNAGE POSITIONED UNDER IT AS SHOWN WITHIN THE STORAGE VIEWS HEREIN.

3. FOR STABILITY PURPOSES, IT IS DESIRED THAT THE SKIDS OF A LOWER CONTAINER SUPPORT A PORTION OF THE WEIGHT OF THE CONTAINERS ABOVE. THE THICKNESS OF THE ALTERNATIVE SUPPORT ASSEMBLY SHOULD BE ADJUSTED AS NECESSARY TO PROVIDE THE PROPER SUPPORT BUT STILL MAINTAIN CONTACT BETWEEN THE METAL BOTTOM OF THE UPPER CONTAINER SKIDS AND THE TOP FRAME OF THE LOWER CONTAINER OR THE MAGAZINE FLOOR, AS APPLICABLE, TO PROVIDE PROPER ELETRICAL CONDUCTIVITY. THE THICKNESS OF THE ALTERNATIVE SUPPORT ASSEMBLY MAY BE REDUCED BY SUBSTITUTING A COMBINATION OF 1" X 4" X 41-1/2" LONG LUMBER AND VARIOUS THICKNESSES OF 3-1/2" WIDE BY 41-1/2" LONG PLYWOOD FOR ONE THICKNESS OF THE 2" X 4" MATERIAL. THE THICKNESS MAY BE INCREASED BY ADDING A 1/4" OR THICKER PLYWOOD PIECE.