

STORAGE IN APPROVED IGLOO, ARCH-TYPE, STRADLEY, STEEL- ARCH, AND OVAL-ARCH MAGAZINES OF 5X25 INCH SINGLE ROUND CON- TAINERS, PALLETIZED

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U.S. ARMY MATERIEL COMMAND DRAWING

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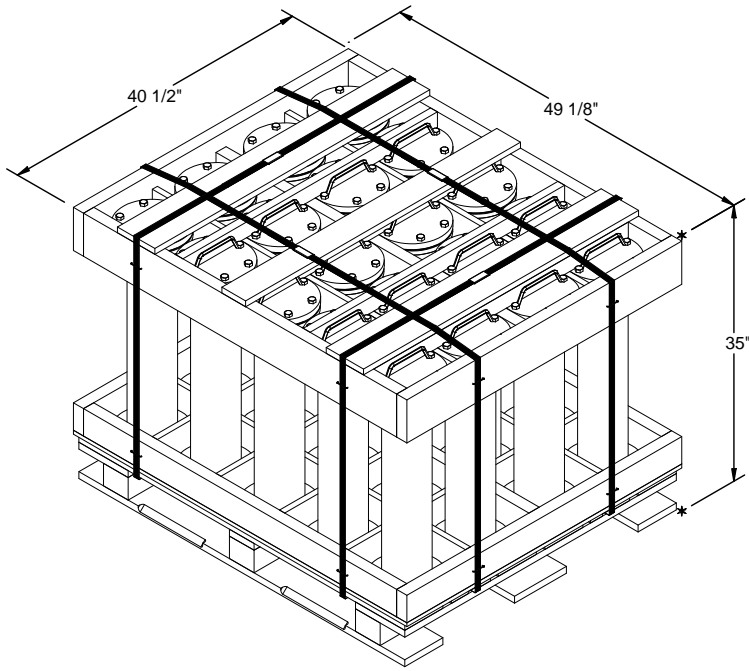
GENERAL NOTES

- 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 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 PALLETIZED 5X25 INCH SINGLE ROUND 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.
- C. THE STORAGE PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO 5X25 INCH SINGLE ROUND CONTAINERS, PALLETIZED. SUBSEQUENT REFERENCE TO PALLET UNIT HEREIN MEANS PALLET UNIT WITH AMMUNITION ITEMS. SEE PAGE 3 AND AMC DRAWING 19-48-4542-CB20PM3 FOR DETAILS OF THE PALLET UNIT.
- D. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE, WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- E. STORED PALLET UNITS MUST NOT CONTACT THE SIDES OF A MAGAZINE. THEREFORE, PALLET 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, PALLET UNITS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- F. AISLE DIMENSION SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, VARIATIONS IN PALLET UNIT DIMENSIONS, AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT (MHE). HOWEVER, A 24" MINIMUM ACCESS AISLE MUST BE MAINTAINED BETWEEN EACH PAIR OF PALLET UNITS ROW FOR INSPECTION PURPOSES.
- G. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED WILL NOT BE EXCEEDED.
- H. IF AVAILABLE MHE PERMITS, ADDITIONAL PALLET UNITS 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 PALLET UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, UNLESS TWO UPPER PALLET UNITS 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 PALLET UNITS AS ONE LIFT.

(CONTINUED AT RIGHT)

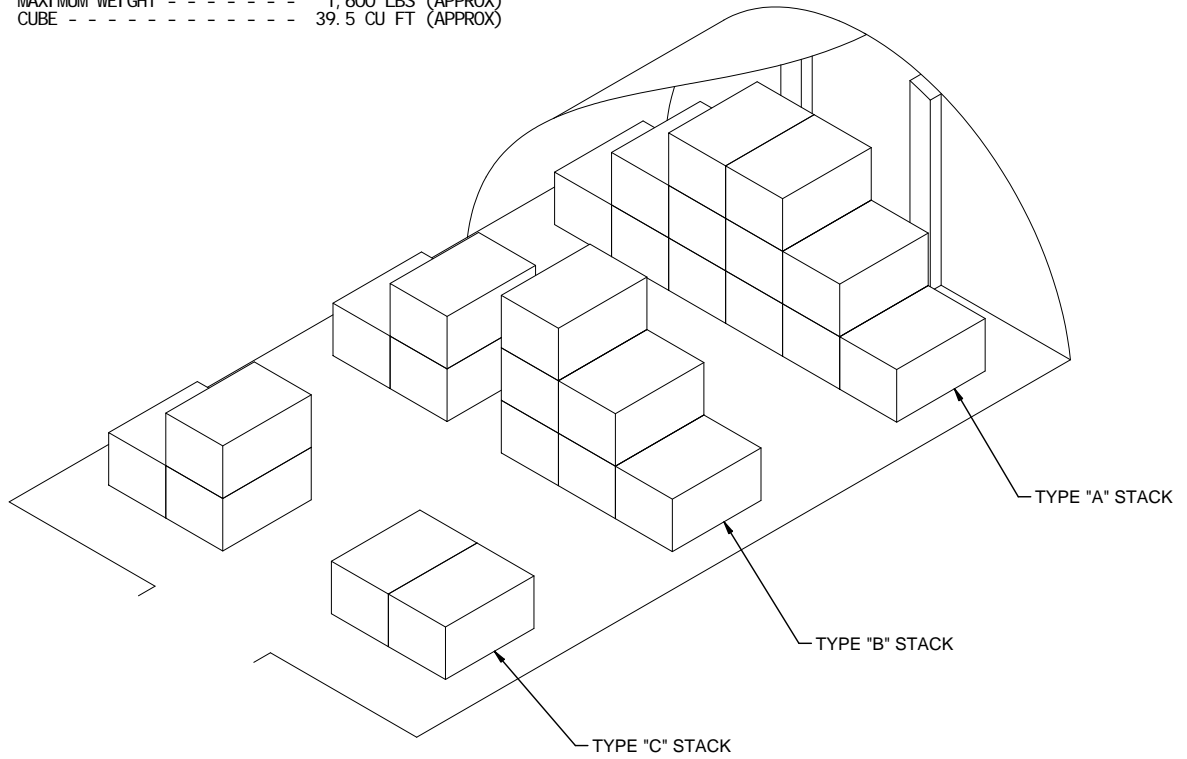
(GENERAL NOTES CONTINUED)

- K. 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.
- L. ANY "LIGHT" PALLET UNIT THAT DOES NOT CONTAIN A FULL QUANTITY WILL NOT BE BURIED IN STORAGE, IT MUST BE POSITIONED ADJECENT TO AN AISLE.
- M. PALLET UNITS PRESENTLY STORED IN ACCORDANCE WITH A PRIOR APPROVED DRAWING NEED NOT BE RE-STORED SOLELY TO CONFORM TO THE PROCEDURES SPECIFIED IN THIS DOCUMENT.
- N. IN IGLOO, ARCH TYPE AND STRADLEY MAGAZINES WHICH HAVE SLOPING FLOORS, THE DEPICTED STORAGE PATTERNS, IN SOME CASES, INCLUDE PALLET UNIT STACKS WHICH STRADDLE THE RIDGE OF THE FLOOR AT THE CENTER OF THE MAGAZINE. FLOOR DUNNAGE IN THE FORM OF SHIMS WILL BE USED AS REQUIRED TO ACHIEVE SOUND AND ACCEPTABLE STABLE STACKS. SEE THE DETAIL ON PAGE 8.
- O. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- P. 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.
- Q. 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.



PALLET UNIT

MAXIMUM WEIGHT - - - - - 1,600 LBS (APPROX)
 CUBE - - - - - 39.5 CU FT (APPROX)

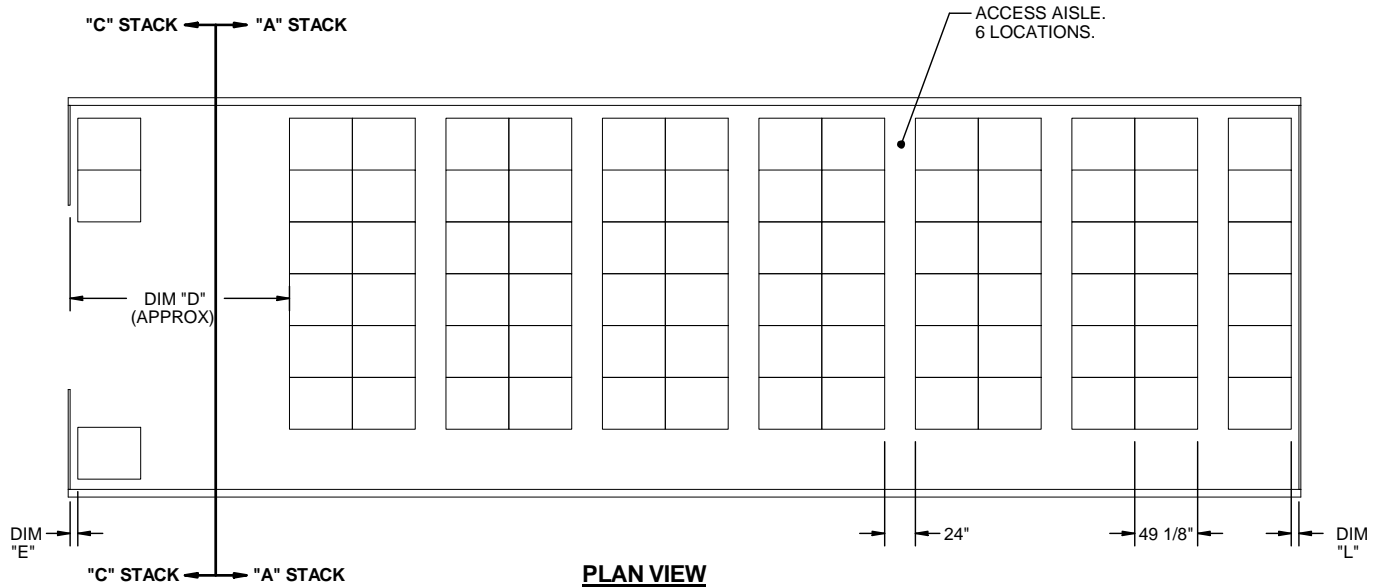


STACK IDENTIFICATION

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.

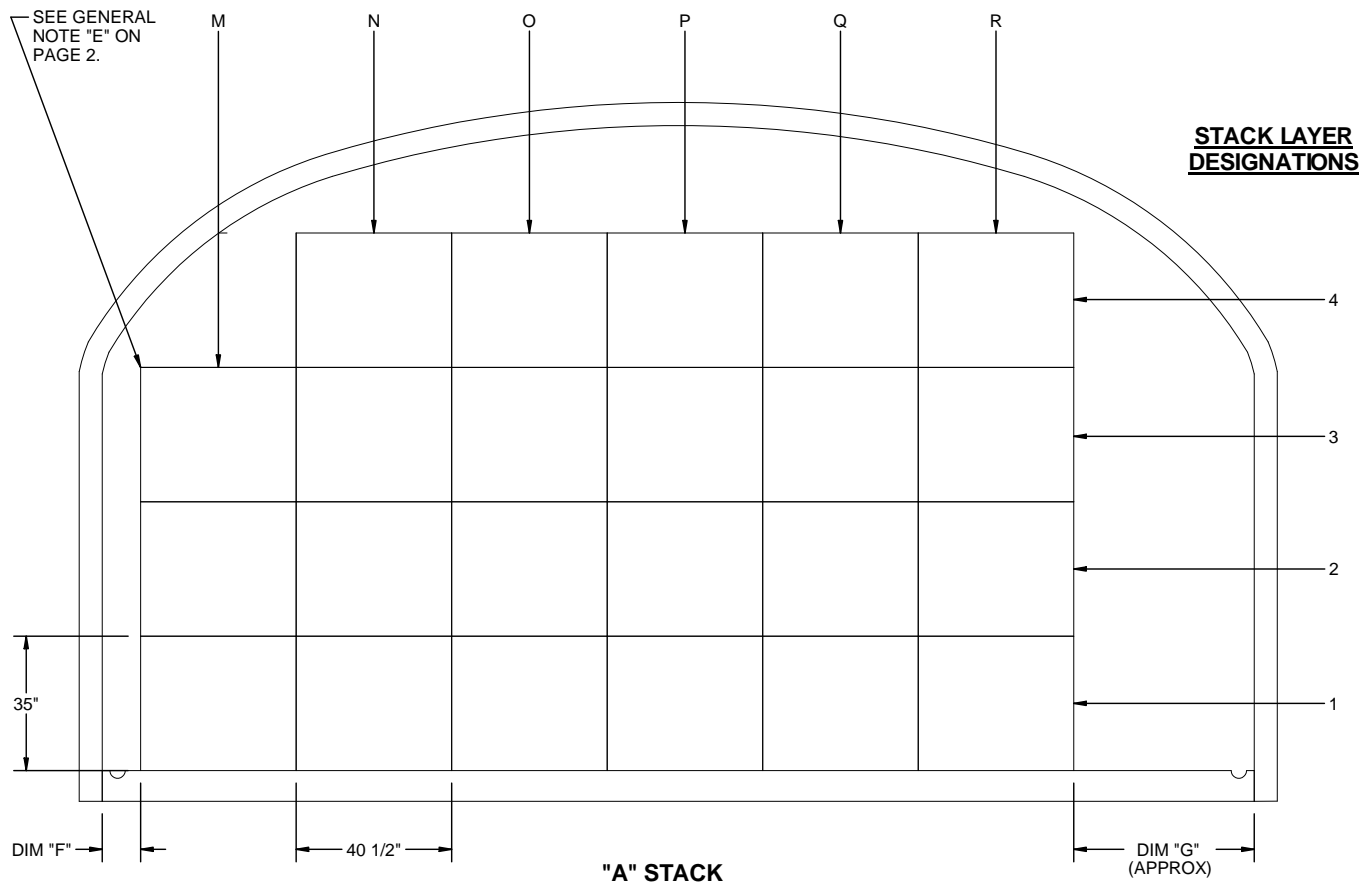
A TYPE "C" STACK IS IDENTIFIED AS A GROUP OF ITEMS/UNITS WHICH IS ONE UNIT/ITEM LONG AND CONSISTS OF PARTIAL STACKS ON EACH SIDE OF THE MAGAZINE, USUALLY ONE ITEM/UNIT HIGH ON ONE SIDE OF THE MAGAZINE.



PLAN VIEW

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

STACK COLUMN DESIGNATIONS

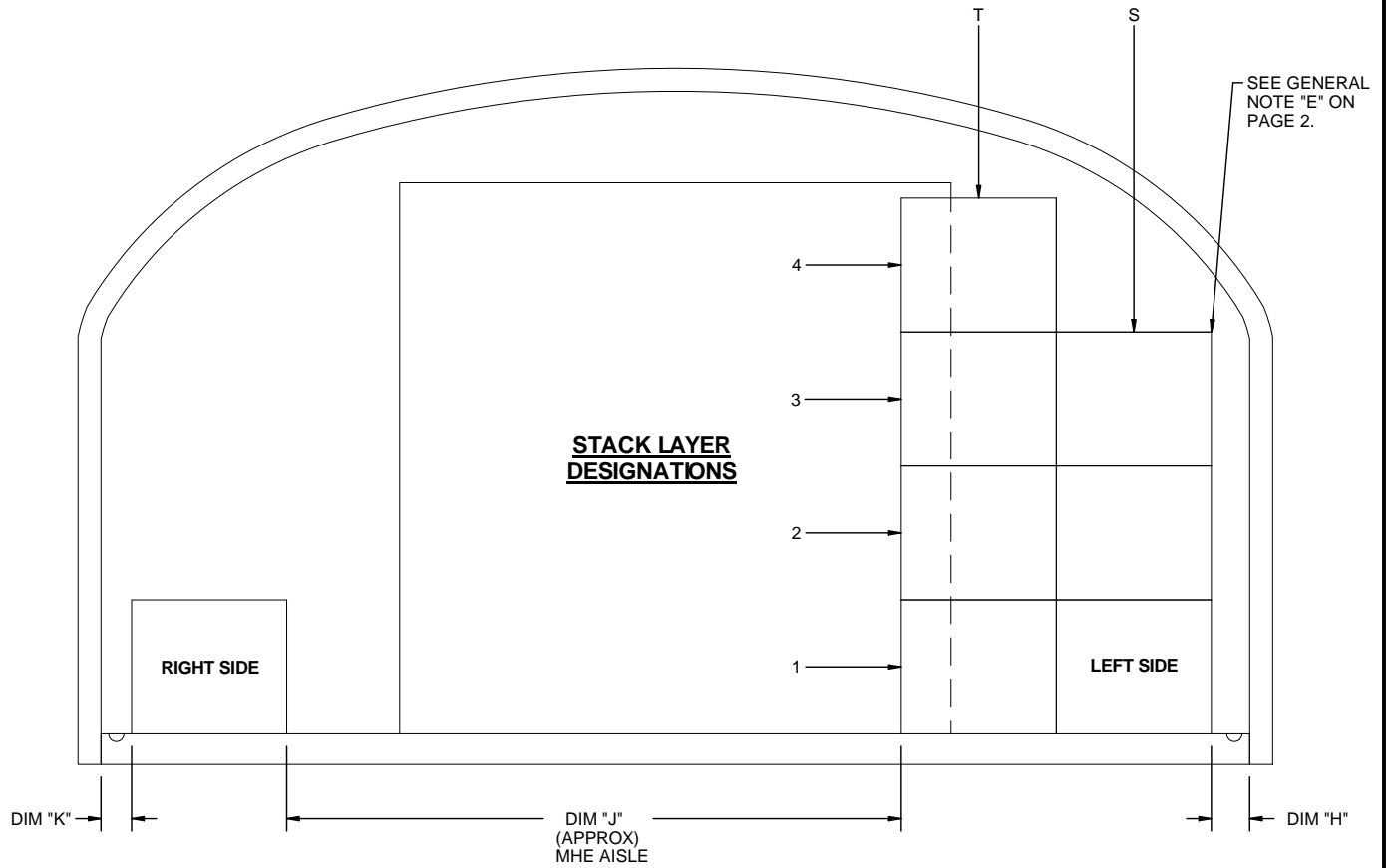


"A" STACK

(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.

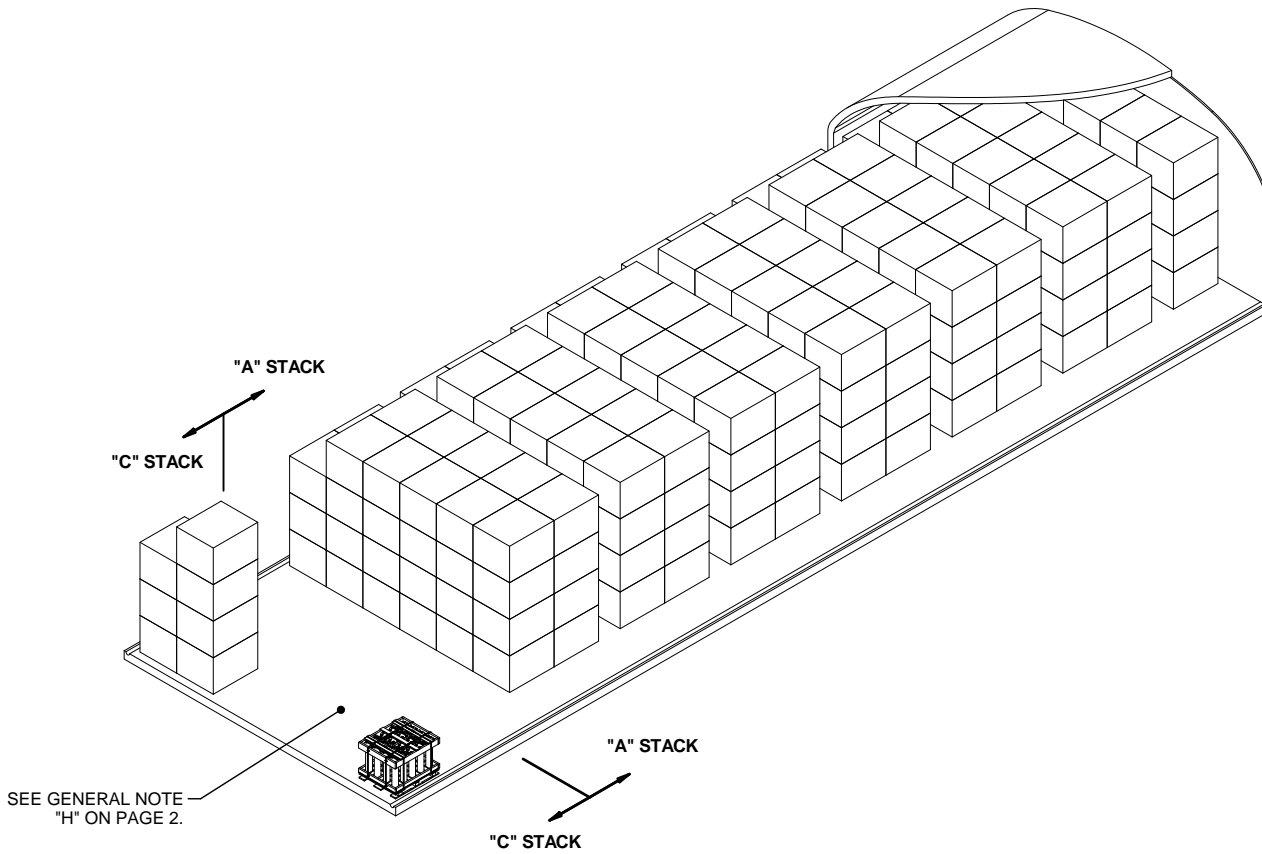
STACK COLUMN DESIGNATIONS



STACK LAYER DESIGNATIONS

"C" STACK

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



ISOMETRIC VIEW

STRADLEY MAGAZINE SHOWN AS TYPICAL.

CHART 1 - DIMENSIONS

MAGAZINE DIMENSIONS	MAGAZINE TYPE													
	IGLOO			ARCH 12'		ARCH 11'		ARCH 10'		OVAL ARCH	STRADLEY	STEEL ARCH		
LENGTH	40'-4"	60'-8"	81'-0"	26'-6"	25'-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" (MHE AREA APPROX)	15'-4"	15'-4"	15'-3"	14'-9"	15'-0"	13'-7"	14'-4"	13'-7"	15'-0"	14'-3"	13'-1"	14'-3"	13'-8"	13'-1"
DIM "E" ("C" STACK FRONT)	6"	6"	6"	14"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
DIM "F" ("A" STACK LEFT)	16"	16"	16"	24"	27"	27"	38"	38"	26"	26"	7"	10"	15"	16"
DIM "G" ("A" STACK RIGHT)	59"	59"	59"	51"	70"	70"	59"	59"	71"	71"	48"	47"	42"	40"
DIM "H" ("C" STACK LEFT)	28"	28"	28"	32"	27"	27"	17"	17"	21"	21"	7"	10"	15"	16"
DIM "J" (MHE AISLE APPROX)	13'-0"	13'-0"	13'-0"	12'-5"	11'-9"	11'-9"	12'-0"	13'-0"	11'-4"	11'-4"	13'-7"	13'-4"	13'-1"	12'-11"
DIM "K" ("C" STACK RIGHT)	12"	12"	12"	15"	10"	10"	17"	17"	21"	21"	6"	8"	6"	6"
DIM "L" ("A" STACK BACK)	6"	6"	6"	14"	6"	14"	14"	6"	6"	6"	6"	6"	6"	6"

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
	91	159	227	201	76	188	69	173	59	147	353	307	186	291

"A" STACK CONFIGURATION

LAYER	PALLET UNITS PER LAYER													
1	6 (M-R)			6 (M-R)	5 (M-Q)		5 (M-Q)		5 (M-Q)		6 (M-R)	6 (M-R)	6 (M-R)	6 (M-R)
2	5 (N-R)			5 (N-R)	5 (M-Q)		5 (M-Q)		4 (N-Q)		6 (M-R)	6 (M-R)	6 (M-R)	6 (M-R)
3	5 (N-R)			4 (N-Q)	4 (N-Q)		3 (N-P)		2 (O-P)		6 (M-R)	6 (M-R)	5 (N-R)	5 (N-R)
4	1 (P)			0	0		0		0		5 (N-R)	5 (N-R)	3 (O-Q)	2 (O-P)
SINGLE STACK TOTAL	17			15	14		13		11		23	23	20	19
NUMBER OF	5	9	13	13	5	13	5	13	5	13	15	13	9	15
"A" STACK TOTAL	85	153	221	195	70	182	65	169	55	143	345	299	180	285

"C" STACK CONFIGURATION - LEFT SIDE

LAYER	PALLET UNITS PER LAYER											
1	2 (S-T)		2 (S-T)		2 (S-T)		2 (S-T)		2 (S-T)	2 (S-T)	2 (S-T)	
2	2 (S-T)		2 (S-T)		1 (T)		1 (T)		2 (S-T)	2 (S-T)	2 (S-T)	
3	1 (T)		1 (T)		0		0		2 (S-T)	2 (S-T)	1 (T)	
4	0		0		0		0		1 (T)	1 (T)	0	
SINGLE STACK TOTAL	5		5		3		3		7	7	5	
NUMBER OF	1		1		1		1		1	1	1	
"C" STACK LF TOTAL	5		5		3		3		7	7	5	

"C" STACK CONFIGURATION - RIGHT SIDE

"C" STACK RT TOTAL	1		1		1		1		1	1	1	
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NOTE: REFER TO THE SPECIAL NOTES BELOW.

SPECIAL NOTES:

1. THE FOLLOWING NOTES, CHART 1 ON PAGE 6 AND CHART 2 ON PAGE 7 ARE PRESENTED AS GUIDANCE IN THE SELECTION OF A STORAGE PATTERN, AND IN DETERMINING THE QUANTITY OF PALLET UNITS WHICH CAN BE STORED IN THE STORAGE MAGAZINES LISTED IN THE CHARTS MENTIONED ABOVE.
2. CHART 1 ON PAGE 6 DESCRIBES THE STORAGE MAGAZINE GENERAL DIMENSIONS AND THE DIMENSIONS OF THE PALLET UNIT 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 ABOVE DETAILS THE QUANTITY OF PALLET UNITS IN EACH TYPE OF MAGAZINE AND THE LAYOUT OF THE STACKS FOR EACH TYPE OF MAGAZINE. THE CHART SHOWS THE NUMBER OF PALLET UNITS IN EACH STACK LAYER AND THE LOCATION OF THE PALLET UNIT ON EACH LAYER.

(CONTINUED AT RIGHT)

EXAMPLE:

CHART 2 - "C" STACK CONFIGURATION - LEFT SIDE
MAGAZINE: STRADLEY

LAYER NUMBER 1: 2 (S-T)
LAYER NUMBER 2: 2 (S-T)
LAYER NUMBER 3: 2 (S-T)
LAYER NUMBER 4: 1 (T)

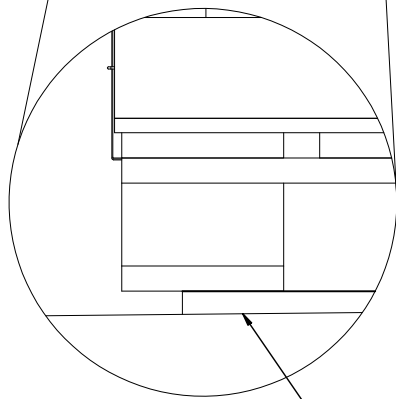
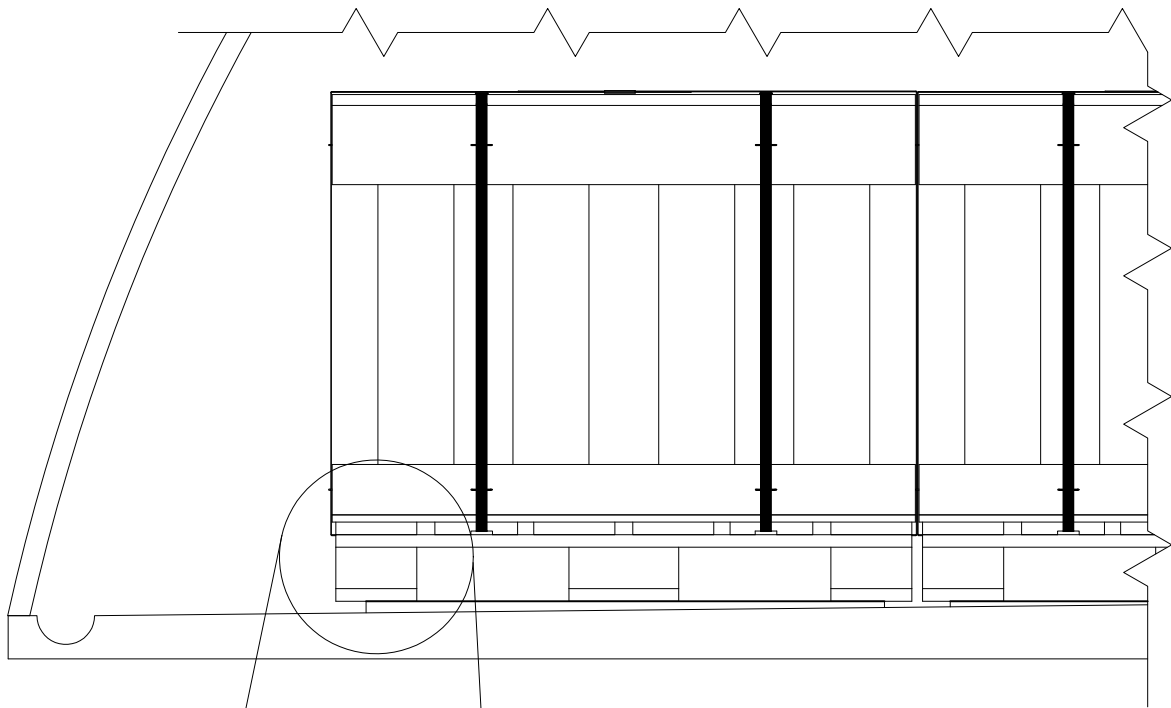
EXPLANATION:

LAYER 1 (BOTTOM LAYER) HAS TWO PALLET UNITS FROM THE "S" COLUMN (NEAREST THE LEFT SIDE OF THE MAGAZINE) TO THE "T" COLUMN.

LAYER 2 (ON TOP OF LAYER 1) HAS TWO PALLET UNITS FROM THE "S" COLUMN (NEAREST THE LEFT SIDE OF THE MAGAZINE) TO THE "T" COLUMN.

LAYER 3 (ON TOP OF LAYER 2) HAS TWO PALLET UNITS FROM THE "S" COLUMN (NEAREST THE LEFT SIDE OF THE MAGAZINE) TO THE "T" COLUMN.

LAYER 4 (ON TOP OF LAYER 3) HAS ONE PALLET UNIT AT THE "T" COLUMN.



SHIM (AS REQD TO PROVIDE A
LEVEL BEARING SURFACE FOR
THE FIRST LAYER PALLET UNITS).
POSITION UNDER PALLET. SEE
GENERAL NOTE "N" ON PAGE 2.