

# STORAGE IN APPROVED MAGAZINES OF BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES

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## U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND  
CHEMICAL COMMAND *N.L.H.*

*David A. Prokovic*

SMCAR-ESK

APPROVED BY ORDER OF COMMANDING GENERAL, U.S.  
ARMY MATERIEL COMMAND

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U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL

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SEE THE REVISION LISTING ON PAGE 2

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22 PA1003

DO NOT SCALE

## 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. THIS DRAWING IS APPLICABLE FOR AMMUNITION ITEMS, OTHER THAN AMMUNITION WITH WHITE PHOSPHOROUS (WP) FILLER, PACKED IN WOODEN OR WIREBOUND BOXES RANGING IN LENGTH FROM TWENTY-SEVEN (27") INCHES TO SIXTY-SIX (66") INCHES, AND ASSEMBLED ON A SKID BASE.
- C. REFER TO THE BASIC PROCEDURES DRAWING 19-48-4138-20PA1000 FOR "UNITIZATION PROCEDURES FOR BOXED AMMUNITION AND COMPONENTS ON SKIDDED BASES". THIS BASIC DRAWING WILL BE AUGMENTED BY SEPARATELY ISSUED APPENDICES BEARING THE SAME DRAWING AND FILE NUMBER, WITH EACH DRAWING NUMBER CONTAINING A SUB-NUMBER AND PERHAPS AN ADDED LETTER FOR IDENTIFICATION. AN APPENDIX WILL DELINEATE THE APPROVED CONFIGURATION OF A UNIT LOAD FOR ONE ITEM OF AMMUNITION OR FOR A CATEGORY OF AMMUNITION ITEMS, AN INDEX OF THE UNITIZATION PROCEDURES IS CONTAINED IN APPENDIX O, HAVING DRAWING NUMBER 4138/O AND FILE NUMBER 20PA1000.
- D. MATERIAL, DESIGN, AND CONSTRUCTION SPECIFICATIONS FOR THE CURRENT SKID BASES ARE SHOWN IN MIL-S-50786 (AR) TITLED "SKID BASE, WOOD, FOR STORAGE AND SHIPMENT OF BOXED AMMUNITION" OR REVISIONS THERETO. THE SKIDDED UNITS WHICH ARE DETAILED WITHIN THE STORAGE PROCEDURES HEREIN ARE SHOWN AS BEING ASSEMBLED ON THE TYPE I SKID BASE. THE DEPICTED PROCEDURES ARE ALSO APPLICABLE FOR UNITS ASSEMBLED ON A TYPE IA OR TYPE II BASE, AND FOR UNITS ASSEMBLED ON A SKID BASE CONSTRUCTED IN ACCORDANCE WITH DRAWING D-AMXSV-4163 AND REVISIONS THERETO.
- E. THE STORAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS LENGTH IGLOO, ARCH TYPE, STRADLEY, OVAL ARCH, AND STANDARD MAGAZINES, AS WELL AS TYPE II, III, AND IV AMMUNITION BUNKERS. THE STORAGE PROCEDURES DEPICTED FOR THE SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE AMMUNITION ITEMS IN OTHER TYPES OF APPROVED STORAGE STRUCTURES. MINOR ADJUSTMENTS MAY BE MADE TO FACILITATE STORAGE IN OTHER TYPES OF STORAGE STRUCTURES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE COMPLIED WITH.
- F. WHEN REFERRING TO THE UNIT LENGTH OR WIDTH, THE LENGTH OF THE BOXES CONSTITUTES THE WIDTH OF THE UNIT. SEE THE TYPICAL UNIT DETAIL ON PAGE 3.
- G. STORED SKIDDED UNITS MUST NOT CONTACT THE WALL OR CEILING OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, SKIDDED UNITS MAY BE ELIMINATED FROM A DEPICTED STORAGE PATTERN.
- H. AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES AND BUNKERS MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, VARIATIONS IN SKIDDED UNITS DIMENSIONS, AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT.
- J. THE MATERIALS HANDLING EQUIPMENT (MHE) AREA SHOULD BE OF SUFFICIENT DIMENSIONS TO PERMIT "TURN-AROUND" OF THE MHE WHEN STORING IN MAGAZINES NOT EQUIPPED WITH PROPERLY SIZED APRONS FOR THAT PURPOSE. THE MHE AISLE IN ALL MAGAZINES IS BASED ON A FIGURE WHICH IS AT LEAST 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. IF THE AVAILABLE MHE AND/OR THE SPACE PERMITS, ADDITIONAL SKIDDED UNITS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- K. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED.
- L. IF THE QUANTITY OF UNITS FOR A MAGAZINE OR BUNKER IS TO BE REDUCED FROM WHAT IS SHOWN HEREIN DUE TO THE PERMITTED EXPLOSIVE LIMIT OR FOR ANY OTHER REASON, THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING TIERS (LAYERS).
- M. ANY "LIGHT" SKIDDED UNIT THAT DOES NOT CONTAIN A FULL QUANTITY OF BOXES OR ROUNDS WILL NOT BE BURIED IN STORAGE. IT MUST BE POSITIONED ADJACENT TO AN AISLE, PREFERABLY IN THE FRONT OF THE LOT.
- N. STORAGE OF MULTIPLE LOTS IN A MAGAZINE OR BUNKER WILL REQUIRE CAREFUL PREPLANNING SO AS TO INSURE MHE ACCESSIBILITY TO ANY LOT IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE APPLICABLE "SPECIAL NOTES" SECTION OF THE MULTIPLE-LOT STORAGE PROCEDURES TYPICALLY SHOWN ON PAGES 100 THRU 107 AND ON PAGES 128 AND 129.

## (GENERAL NOTES CONTINUED)

- O. WHEN STACKING LOW-HEIGHT SKIDDED UNITS AS TYPICALLY SHOWN ON PAGES 7, 15, 31, 39, 46, 54 AND OTHERS IT MAY BE NECESSARY TO STACK THE TOP TWO SKIDDED UNITS PRIOR TO LIFTING INTO POSITION, TO PREVENT THE FORKLIFT FORK TINES, CARRIAGE OR GUARD FROM CONTACTING THE WALL OR CEILING OF A MAGAZINE.
- P. AMMUNITION AND/OR COMPONENTS 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. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- R. A PRODUCTION OR STORAGE FACILITY IS AUTHORIZED TO HAVE ONE INCOMPLETE, UNBANDIED PARTIAL UNIT LOAD PER LOT IN A STORAGE STRUCTURE. PRIOR TO SHIPMENT OF A PARTIAL UNIT A LAYER MUST BE COMPLETED, IF APPLICABLE, BY THE POSITIONING OF ONE OR MORE EMPTY BOXES OR FILLER ASSEMBLIES AS DELINEATED BY THE APPLICABLE UNITIZATION PROCEDURE. THE UNIT MUST THEN BE RE-BANDIED WITH THE SAME SIZE AND QUANTITY OF STRAPS AS THE ORIGINAL UNIT.

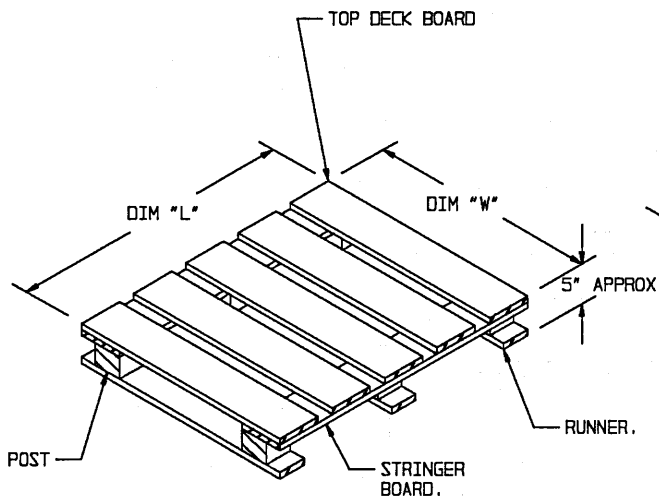
## REVISIONS

REVISION NO. 1, DATED JANUARY 1982 CONSISTS OF:

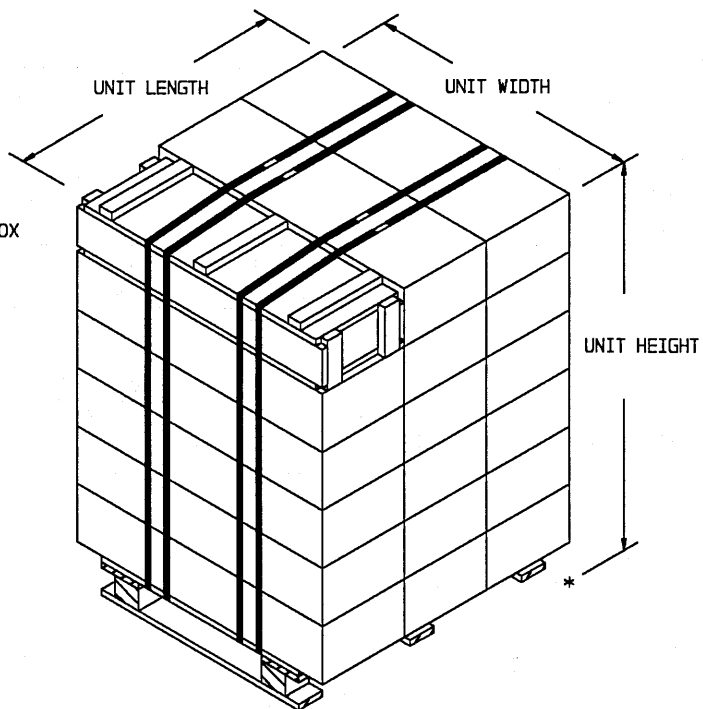
1. ADDING PROCEDURES FOR ARCH TYPE, CORBETTA AND RECTANGULAR MAGAZINES, AND TYPE II, III AND IV AMMUNITION BUNKERS.
2. ADDING ALTERNATIVE MULTIPLE-LOT STORAGE PROCEDURES.

REVISION NO. 2, DATED APRIL 1994 CONSISTS OF:

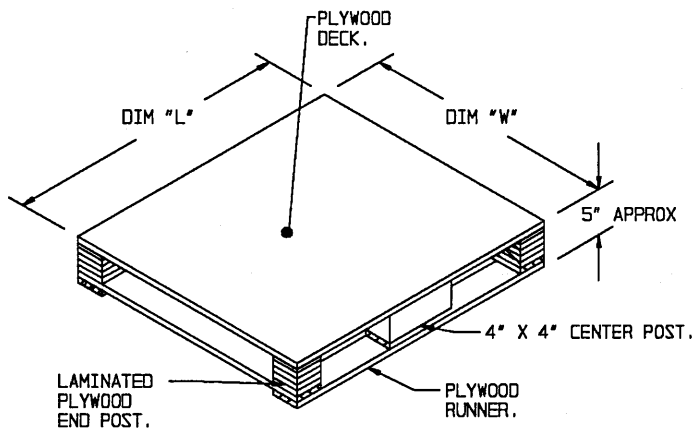
1. UPDATING DRAWING FORMAT.
2. ADDING GENERAL NOTE "R" ON PAGE 2.
3. MAKING CORRECTIONS AS APPLICABLE.



**TYPE II SKID BASE**

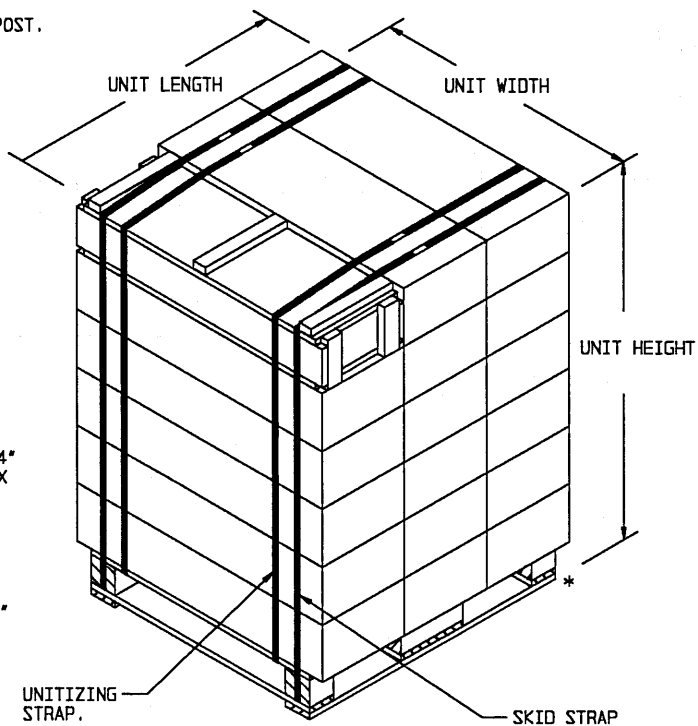


**TYPICAL UNIT ON TYPE II BASE**

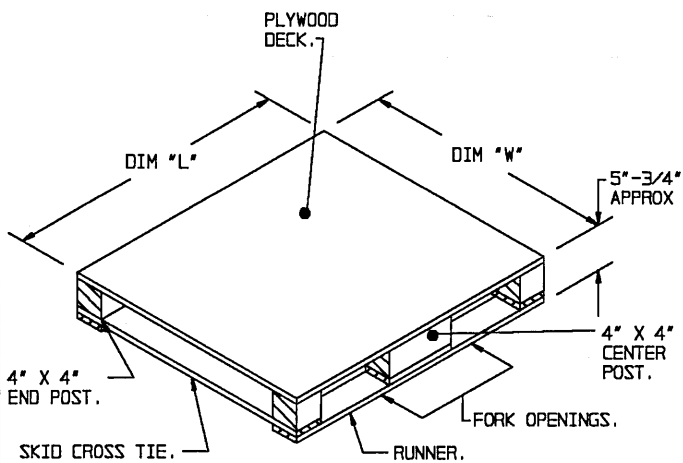


**TYPE IA SKID BASE**

UNIT IS ASSEMBLED ON THE SKID BASE IN THE SAME MANNER AS FOR THE TYPE I SKID BASE.



**TYPICAL UNIT ON TYPE I BASE**



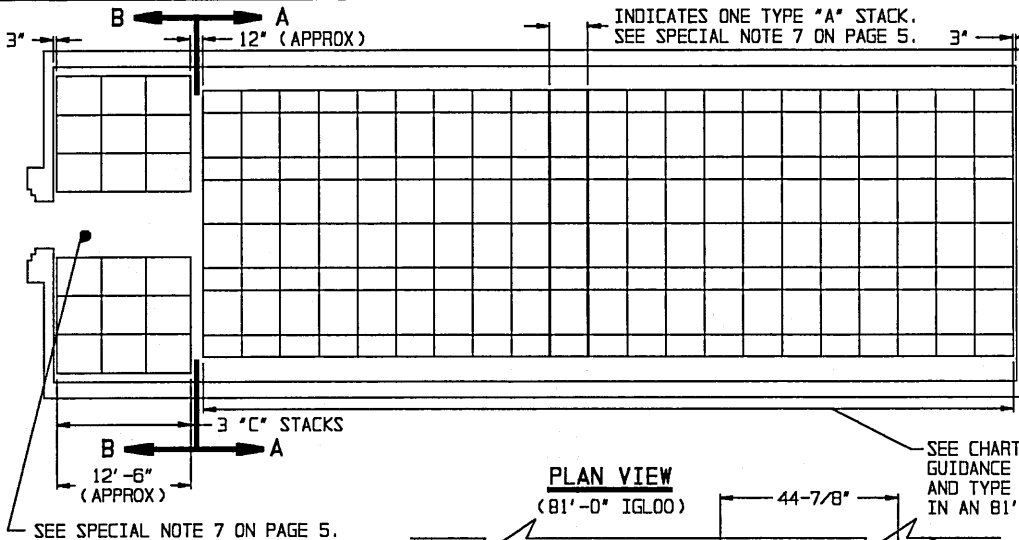
**TYPE I SKID BASE**

**STORAGE IN 81'-0" MAGAZINE**

(12'-9" HIGH)

ITEM	QUANTITY
SKIDDED UNITS - - - -	297

INDICATES ONE TYPE "A" STACK.  
SEE SPECIAL NOTE 7 ON PAGE 5.



**PLAN VIEW**  
(81'-0" IGL00)

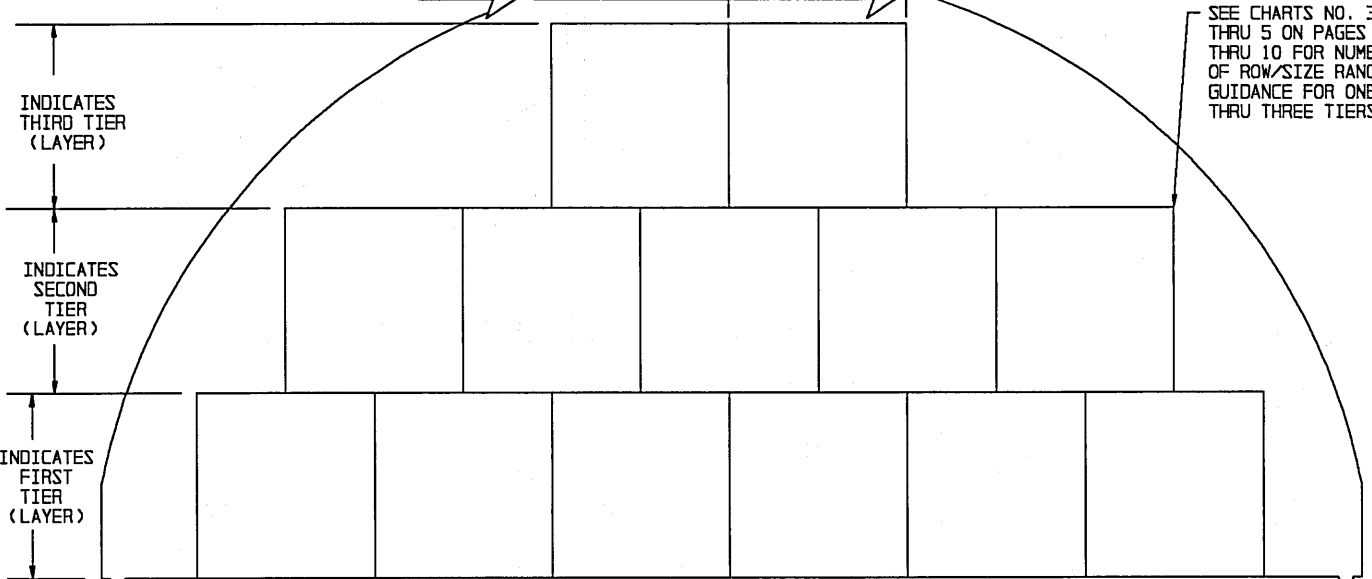
SEE CHART NO. 12 ON PAGE 12 FOR GUIDANCE AS TO THE NUMBER OF TYPE "A" AND TYPE "C" STACKS THAT CAN BE STORED IN AN 81'-0" IGL00 MAGAZINE.

SEE CHARTS NO. 3 THRU 5 ON PAGES 8 THRU 10 FOR NUMBER OF ROW/SIZE RANGE GUIDANCE FOR ONE THRU THREE TIERS.

INDICATES THIRD TIER (LAYER)

INDICATES SECOND TIER (LAYER)

INDICATES FIRST TIER (LAYER)

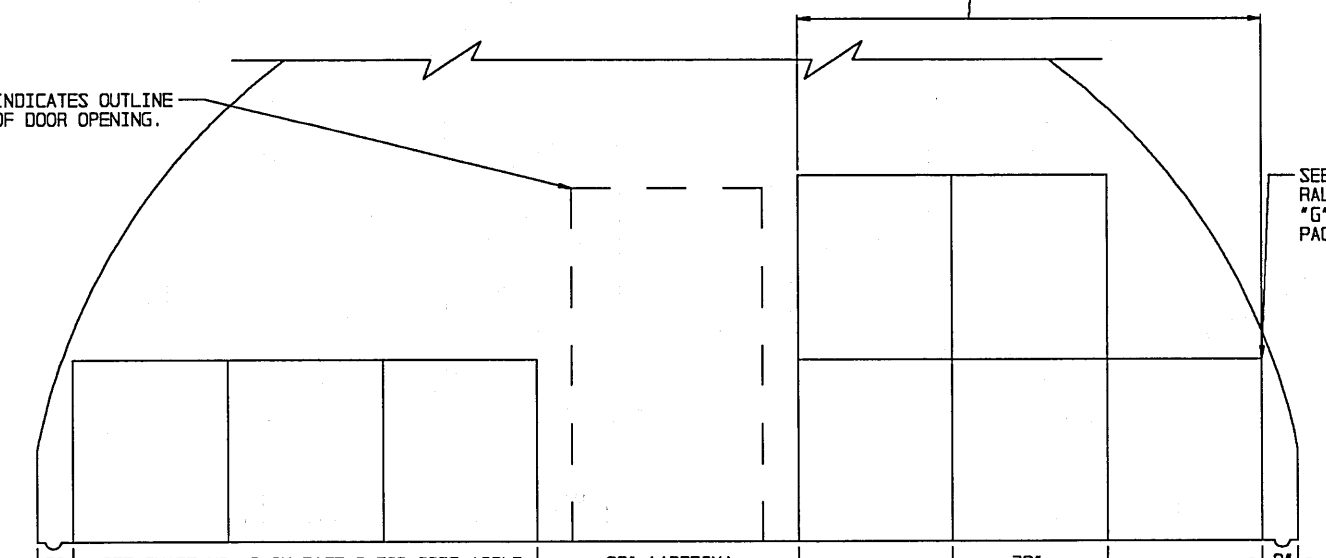


**SECTION A-A**  
(13 SKIDDED UNITS PER STACK)

SEE CHART NO. 1 ON PAGE 8 FOR SIDE AISLE DIMENSIONS TO BE USED WITH UNITS OF OTHER LENGTHS OR WIDTHS.

SEE CHARTS NO. 13 THRU 20 ON PAGES 11 THRU 13 FOR GUIDANCE AS TO THE NUMBER OF UNITS DEEP IN THE TYPE "C" STACKS IN THE FRONTAL AREA.

INDICATES OUTLINE OF DOOR OPENING.



**SECTION B-B**

SEE CHART NO. 2 ON PAGE 8 FOR SIDE AISLE DIMENSIONS FOR OTHER HEIGHT UNITS.

SEE GENERAL NOTE "G" ON PAGE 2.

**TYPICAL STORAGE PROCEDURES**

**IN 81'-0", 60'-8", AND 40'-4" L X 26'-6" W X 12'-9" H IGL00 MAGAZINES**



## STORAGE IN 60'-8" MAGAZINE

(12'-9" HIGH)

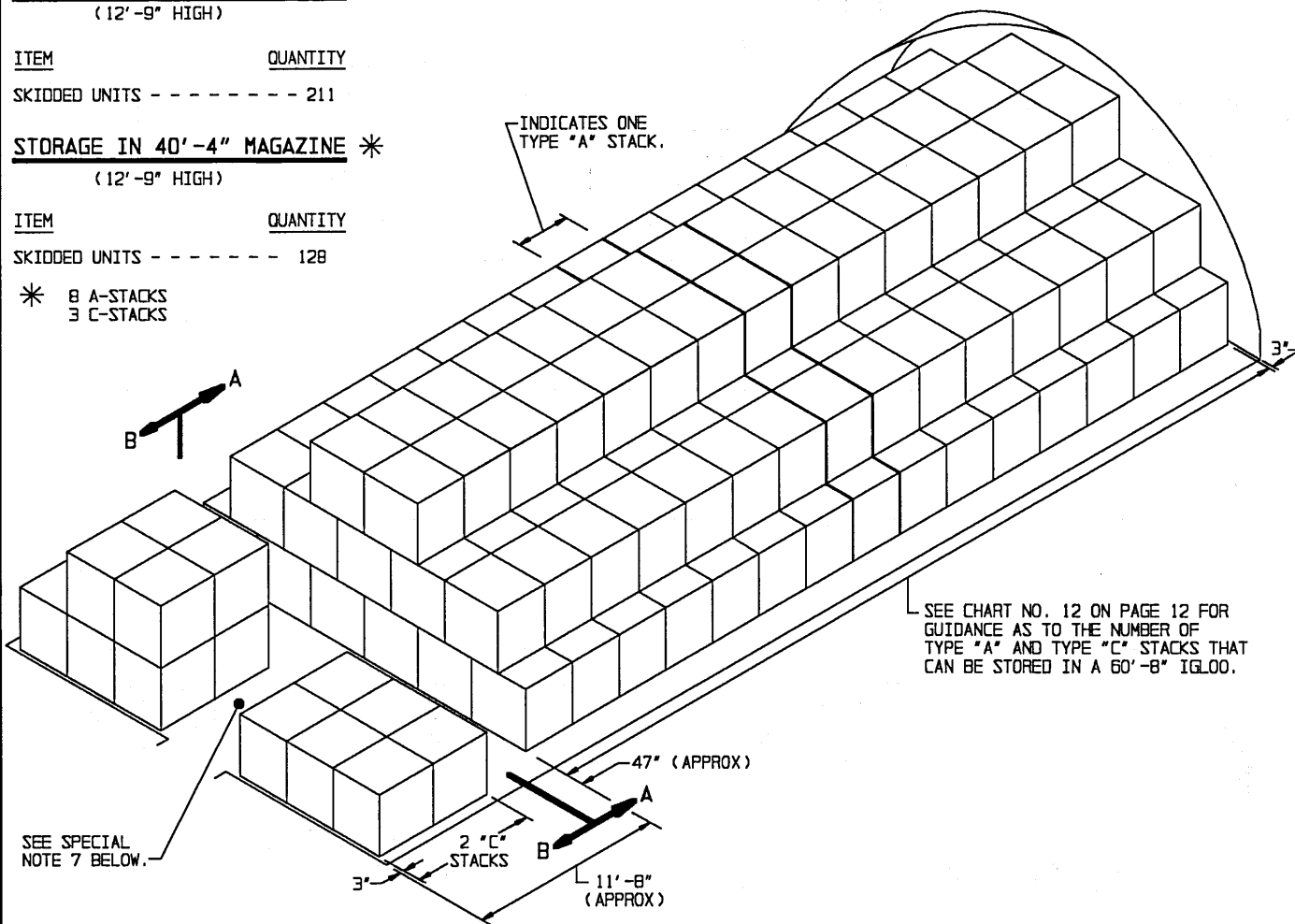
ITEM	QUANTITY
SKIDDED UNITS - - - - -	211

## STORAGE IN 40'-4" MAGAZINE \*

(12'-9" HIGH)

ITEM	QUANTITY
SKIDDED UNITS - - - - -	128

\* 8 A-STACKS  
3 C-STACKS



### ISOMETRIC VIEW

(60'-8" IGLOO)

(SPECIAL NOTES CONTINUED)

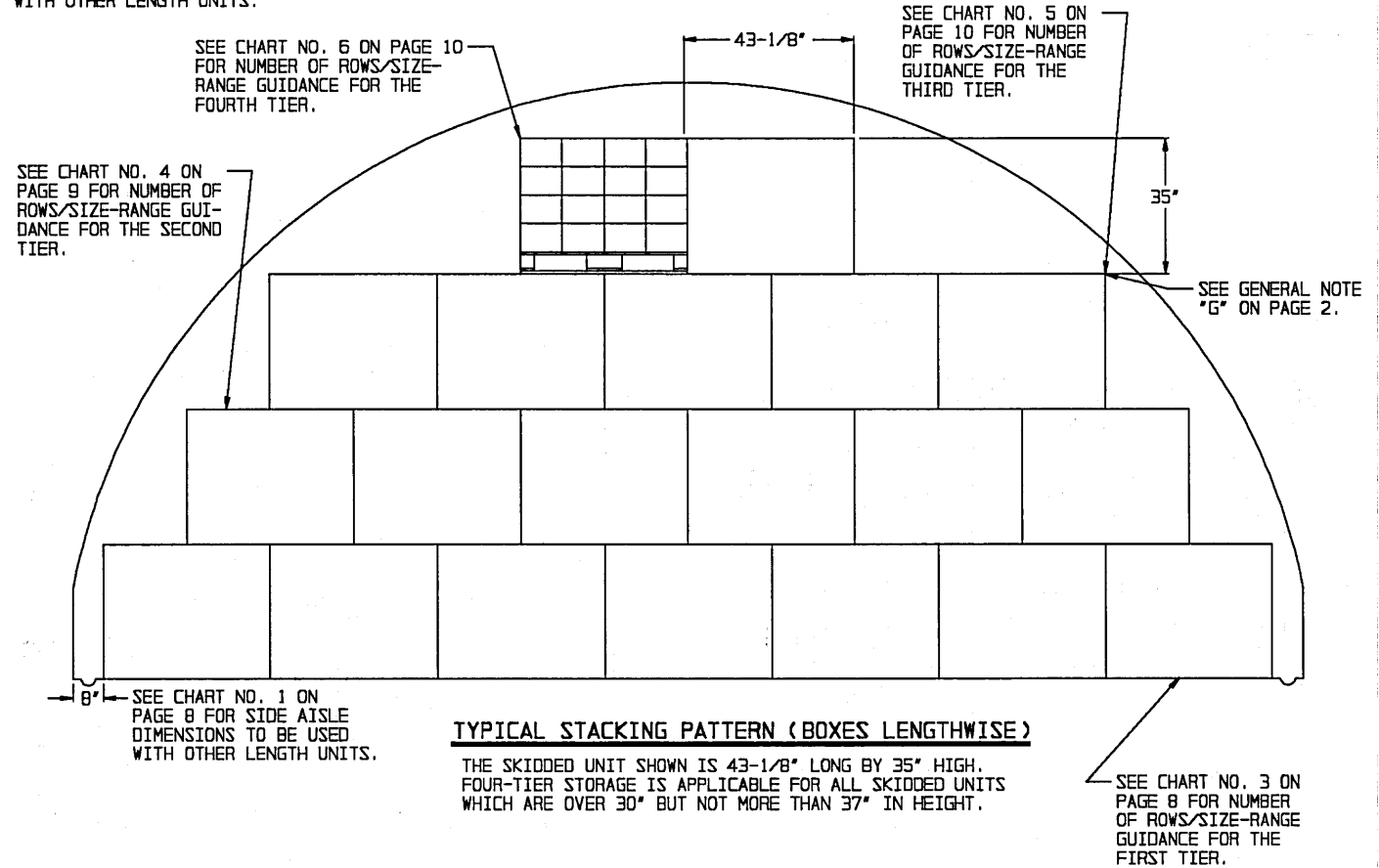
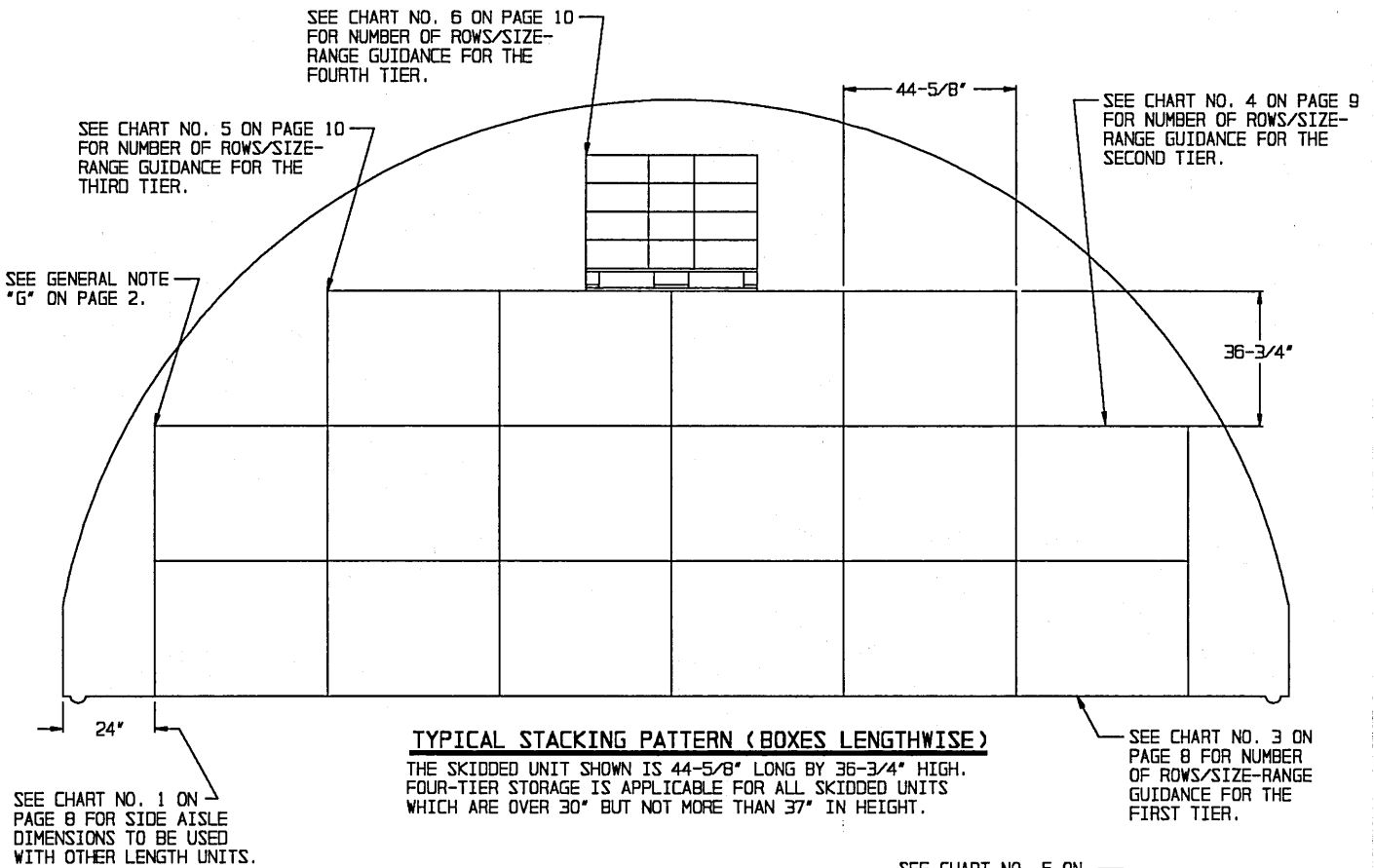
- IF IT IS DESIRED TO STORE UNITS WIDER THAN 46" WITH THE LENGTH OF THE BOXES CROSSWISE IN THE MAGAZINE, DOUBLE-DOOR EQUIPPED MAGAZINES WILL FACILITATE HANDLING. THE USE OF DOUBLE DOORS IS NOT MANDATORY, HOWEVER, IN IGLOOS HAVING SINGLE DOORS, THE WIDE UNITS MUST BE DOUBLE-HANDLED.
- SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).
- WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CLEATED BOXES ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
- REFER TO PAGES 100 AND 101 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
- THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE MAGAZINE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS.
- IF DESIRED AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

### SPECIAL NOTES:

- THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNIT BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 8 THRU 13 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
- THE STORAGE VIEWS ON PAGE 4 AND ABOVE DEPICT SKIDDED UNITS STACKED IN STAGGERED ALIGNMENT, CENTERED IN THE WIDTH OF THE MAGAZINE. THE TYPICAL STACKING PATTERN VIEWS ON PAGES 6 AND 7 DEPICT THE BOTTOM TIERS CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE UPPER TIERS IN SOME OF THOSE VIEWS ARE CENTERED (STAGGERED) OVER THE UNITS BELOW. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS NO. 3 THRU 11 ON PAGES 8 THRU 11 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INDICATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED. CHART NO. 12 ON PAGE 12 SPECIFIES THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN 81'-0", 60'-8", AND 40'-4" LONG MAGAZINES. CHART NO. 13 ON PAGE 11 SPECIFIES THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED ON EACH SIDE OF THE MAGAZINE IN THE BOTTOM TIER OF THE TYPE "C" STACKS IN THE FRONTAL AREA. NOTE THAT THOSE ON THE RIGHT SIDE MUST BE STORED BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. CHARTS NO. 14 THRU 20 ON PAGES 12 AND 13 SPECIFY THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED IN THE UPPER TIERS ON THE LEFT SIDE.

(CONTINUED AT LEFT)

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

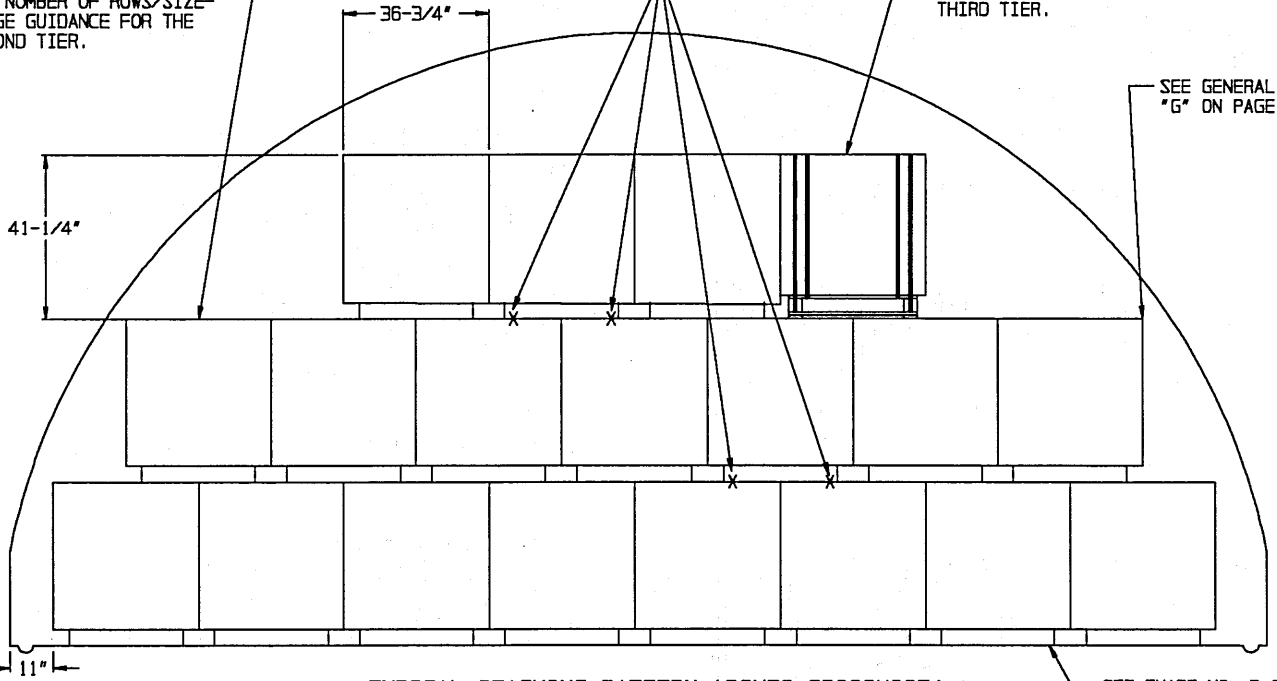


SEE CHART NO. 4 ON PAGE 8 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE SPECIAL NOTE 5 ON PAGE 5.

SEE CHART NO. 5 ON PAGE 10 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE THIRD TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



**TYPICAL STACKING PATTERN (BOXES CROSSWISE)**

THE SKIDDED UNIT SHOWN IS 36-3/4" WIDE BY 41-1/4" HIGH. THREE-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 37" BUT NOT MORE THAN 50" IN HEIGHT. NOTE THAT DOUBLE-DOOR IGLOO MAGAZINES ARE REQUIRED FOR UNITS OVER 46" WIDE UNLESS UNITS ARE TO BE DOUBLE-HANDLED.

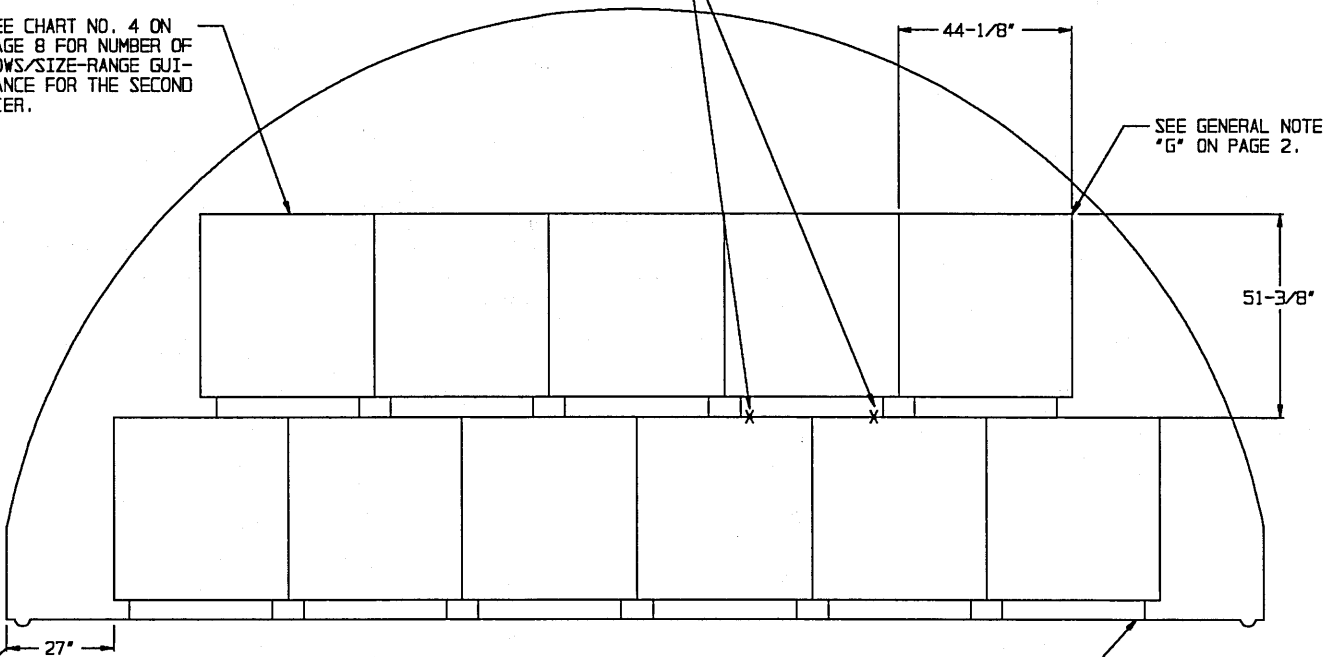
SEE CHART NO. 3 ON PAGE 8 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 1 ON PAGE 8 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

SEE SPECIAL NOTE 5 ON PAGE 5.

SEE CHART NO. 4 ON PAGE 8 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



**TYPICAL STACKING PATTERN (BOXES CROSSWISE)**

THE SKIDDED UNIT SHOWN IS 44-1/8" WIDE BY 51-3/8" HIGH. TWO-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 50" IN HEIGHT. NOTE THAT DOUBLE DOOR IGLOO MAGAZINES ARE REQUIRED FOR UNITS OVER 46" WIDE UNLESS UNITS ARE TO BE DOUBLE-HANDLED.

SEE CHART NO. 3 ON PAGE 8 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 1 ON PAGE 8 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

SPECIAL NOTES:

- THE CHARTS BELOW AND ON PAGES 10 THRU 13 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN IGLOO MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE IGLOO CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
- THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" ON PAGE 9.

STEP 1

LOCATE IN CHART NO. 1 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST TIER OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE IGLOO. IF TWO DIMENSIONS ARE GIVEN, THE SMALLER ONE MAY BE USED PROVIDING THAT FIGURE IS AT LEAST AS GREAT AS THE MINIMUM SIDE AISLE DIMENSION SPECIFIED IN CHART NO. 2 FOR THE HEIGHT OF THE UNIT BEING STORED. IF THE SMALLER DIMENSION IS LESS THAN THE DIMENSION SPECIFIED BY CHART NO. 2, IT IS OPTIONAL WHETHER THE LARGER DIMENSION IN CHART NO. 1 OR THE MINIMUM DIMENSION SPECIFIED BY CHART NO. 2 BE USED.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 3 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE, LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE FIRST TIER (LAYER). NOTE THAT ALL THE SIZE RANGES IN THE COLUMNS FOR 4 AND 5-WIDE, AND SIZES OVER 46" IN THE COLUMN FOR 6-WIDE ARE APPLICABLE ONLY FOR IGLOOS HAVING DOUBLE DOORS.

(CONTINUED AT RIGHT)

UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	9" OR 21"	46"	21"
26"	16"	47"	18"
27"	10" OR 24"	48"	15"
28"	5" OR 19"	49"	12" OR 36"
29"	14"	50"	9" OR 34"
30"	9" OR 24"	51"	6" OR 31"
31"	19"	52"	29"
32"	15"	53"	26"
33"	10" OR 27"	54"	24"
34"	6" OR 23"	55"	21"
35"	19"	56"	19"
36"	15"	57"	16"
37"	11" OR 29"	58"	14"
38"	7" OR 26"	59"	11" OR 41"
39"	22"	60"	9" OR 39"
40"	19"	61"	6" OR 37"
41"	15"	62"	35"
42"	12" OR 33"	63"	33"
43"	8" OR 30"	64"	31"
44"	5" OR 27"	65"	39"
45"	24"	66"	27"

- USE UNIT LENGTH DIMENSION IF THE BOXES WITHIN THE UNIT ARE GOING TO BE LENGTHWISE IN THE MAGAZINE.

MINIMUM SIDE AISLE	UNIT HEIGHT RANGE
5"	UP TO 37"
6"	UP TO 40"
7"	OVER 40" TO 43"
8"	OVER 43" TO 46"
9"	OVER 46" TO 49"
10"	OVER 49" TO 52"
11"	OVER 52" TO 54"
12"	OVER 54" TO 56"

- A 5" SIDE AISLE DIMENSION IS APPLICABLE ONLY FOR UNITS POSITIONED WITH THE BOXES CROSSWISE.

(SPECIAL NOTES CONTINUED)

THE USE OF DOUBLE DOORS IS NOT MANDATORY FOR THOSE SIZE RANGES, HOWEVER IN IGLOOS HAVING SINGLE DOORS, WIDE UNITS MUST BE "DOUBLE-HANDLED" IN ORDER TO STORE THEM WITH THE LENGTH OF THE BOXES CROSSWISE IN THE MAGAZINE.

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 4 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE SECOND TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND-TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS THE SAME IN BOTH TIERS, POSITION UNITS DIRECTLY ABOVE ALL FIRST-TIER UNITS.

STEP 4

REPEAT STEP 3 FOR CHARTS 5 THRU 11, AS APPLICABLE, FOR THE THIRD THRU THE NINTH TIERS.

STEP 5

LOCATE IN CHART NO. 12 ON PAGE 12 THE LENGTH OR WIDTH, AS APPLICABLE FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAN CAN BE POSITIONED IN AN 81'-0", 60'-8" OR 40'-4" LONG IGLOO MAGAZINE. SEE SPECIAL NOTE 7 ON PAGE 5 FOR THE CRITERIA USED IN DETERMINING THE NUMBER OF TYPE "A" STACKS SPECIFIED WITHIN THE CHART.

(CONTINUED ON PAGE 9)

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH								
	25"	25'-26"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"	
56"									
54"	25'-26"	26'-29"	29'-32"	32'-36"	36'-42"	42'-49"	49'-58"	58'-66"	
51"	25'-26"	26'-29"	29'-32"	32'-37"	37'-42"	42'-49"	49'-59"	59'-66"	
45"	25"	25'-27"	27'-30"	30'-33"	33'-37"	37'-42"	42'-50"	50'-60"	60'-66"
43"	25"	25'-27"	27'-30"	30'-33"	33'-37"	37'-43"	43'-50"	50'-60"	60'-66"
40"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-50"	50'-60"	60'-66"
36"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-51"	51'-60"	60'-66"
33"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-51"	51'-60"	60'-66"
26"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-51"	51'-60"	60'-66"
24"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-51"	51'-60"	60'-66"
15'-22"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-51"	51'-60"	60'-66"
UNIT HEIGHT	12	11	10	9	8	7	6	* 5	* 4
NUMBER OF ROWS WIDE IN FIRST TIER OF TYPE "A" STACKS.									

- \* ALL UNITS IN THE 4 AND 5-WIDE COLUMNS, AND UNITS OVER 46" IN COLUMN FOR 6-WIDE ARE APPLICABLE ONLY FOR IGLOOS WITH DOUBLE DOORS. THE USE OF DOUBLE DOORS IS NOT MANDATORY FOR THOSE SIZE RANGES, HOWEVER, IN IGLOOS HAVING SINGLE DOORS, WIDE UNITS MUST BE "DOUBLE-HANDLED" IN ORDER TO STORE THEM WITH THE LENGTH OF THE BOXES CROSSWISE IN THE MAGAZINE.

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH									
	25"	25'-26"	28'-32"	32'-36"	36'-41"	41'-51"	51'-66"			
56" MAX										
54"	25'-27"	27'-31"	31'-36"	36'-44"	44'-55"	55'-66"				
53"	25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"				
52"	25"	25'-28"	28'-32"	32'-37"	37'-45"	45'-56"	56'-66"			
51"	25"	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	57'-66"			
50"	25'-26"	26'-29"	29'-33"	33'-39"	39'-47"	47'-58"	58'-66"			
48"	25'-26"	26'-30"	30'-34"	34'-40"	40'-48"	48'-60"	60'-66"			
46"	25'-27"	27'-30"	30'-35"	35'-41"	41'-49"	49'-61"	61'-66"			
45"	25"	25'-27"	27'-31"	31'-35"	35'-41"	41'-50"	50'-62"	62'-66"		
44"	25"	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"		
43"	25"	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"		
42"	25'-26"	26'-28"	28'-32"	32'-37"	37'-43"	43'-52"	52'-65"	65'-66"		
40"	25'-26"	26'-29"	29'-33"	33'-38"	38'-44"	44'-53"	53'-66"			
37"	25'-27"	27'-30"	30'-34"	34'-39"	39'-45"	45'-54"	54'-66"			
35"	25"	25'-28"	28'-30"	31'-35"	35'-40"	40'-46"	46'-56"	56'-66"		
34"	25"	25'-28"	28'-31"	31'-35"	35'-40"	40'-46"	46'-56"	56'-66"		
33"	25"	25'-28"	28'-31"	31'-35"	35'-40"	40'-47"	47'-56"	56'-66"		
30"	25'-26"	26'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"		
27"	25'-26"	26'-28"	28'-32"	32'-36"	36'-42"	42'-49"	49'-57"	57'-66"		
25"	25'-26"	26'-29"	29'-32"	32'-37"	37'-42"	42'-49"	49'-59"	59'-66"		
23"	25"	25'-27"	27'-30"	30'-33"	33'-37"	37'-43"	43'-50"	50'-60"	60'-66"	
20"	25"	25'-27"	27'-30"	30'-33"	33'-38"	38'-43"	43'-50"	50'-60"	60'-66"	
15'-17"	25"	25'-28"	28'-30"	30'-34"	34'-38"	38'-44"	44'-51"	51'-61"	61'-66"	
UNIT HEIGHT	12	11	10	9	8	7	6	5	4	3
NUMBER OF ROWS WIDE IN SECOND TIER OF TYPE "A" STACKS.										

STEP 6

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 13 ON PAGE 11 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT OF THE UNIT TO BE STORED. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE DIMENSION OF THE UNIT TO BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE. THE HEADING AT THE BASE OF THAT COLUMN WILL INDICATE THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED AT EACH SIDE OF THE DOOR OPENING IN THE FIRST TIER OF A TYPE "C" STACK.

STEP 7

REPEAT STEP 6 FOR CHARTS 14 THRU 20, AS APPLICABLE TO DETERMINE THE NUMBER OF UNITS DEEP WHICH CAN BE STACKED ON THE LEFT SIDE OF THE DOOR IN DOOR IN THE SECOND THRU EIGHTH TIER.

EXAMPLE:

A UNIT WHICH IS 37" LONG BY 36-3/4" WIDE BY 41-1/4" HIGH HAS BEEN SELECTED FOR THE EXAMPLE AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE TOP OF PAGE 7. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 1 THRU 5 AND FOR THE TYPE "A" STACKS. IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED, STARTING ON PAGE 8, THE 36-3/4" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 1, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. THE SIDE AISLE DIMENSION OF 11" IS INDICATED IN THE SECOND COLUMN OF THE CHART. THIS DIMENSION IS GREATER THAN THE 7" MINIMUM DIMENSION SPECIFIED OPPOSITE THE INDICATED HEIGHT OF OVER 40" TO 43" IN CHART NO. 2. THEREFORE, THE 11" SIDE AISLE WILL BE USED IF THE UNITS ARE TO BE CENTERED IN THE WIDTH OF THE MAGAZINE. IN THE LEFT HAND COLUMN OF CHART NO. 3, USE THE 43" HEIGHT, AS THE UNIT HEIGHT OF 41-1/4" IS GREATER THAN 40" AND THE NEXT HEIGHT LISTED IS 43". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION INDICATED AS 33" - 37". FOLLOW THE ARROWS DOWNWARD TO THE NUMERAL IN THE HEADING OF THE COLUMN THAT SPECIFIES 8 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN THE FIRST TIER. FOLLOWING THE SAME PROCEDURE, CHART NO. 4 SPECIFIES THAT 7 UNITS

CAN

CAN BE STORED IN THE SECOND TIER AND CHART NO. 5 SPECIFIES THAT 4 UNITS CAN BE STORED IN THE THIRD TIER. THE ABSENCE OF THE 41-1/4" HEIGHT DIMENSION FROM THE LEFT HAND COLUMN OF CHART NO. 6 INDICATE THAT THREE TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN A MAGAZINE, THE 37" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 12, WHICH AGAIN COULD REPRESENT THE UNIT LENGTH OR WIDTH. FOLLOWING THE ARROWS TO THE RIGHT SPECIFIES THAT 22 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 81'-0" IGLOO, 16 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN A 60'-8" IGLOO, AND 9 AND 3 TYPE "A" AND "C" STACKS, RESPECTIVELY, CAN BE STORED IN A 40'-4" IGLOO MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP IN THE FIRST TIER AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, REFER TO CHART NO. 13 ON PAGE 11. THE UNIT HEIGHT OF 41-1/4" FALLS WITHIN THE 41"-50" RANGE IN THE LEFT HAND COLUMN. FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE UNIT DIMENSION INDICATED AS 31"-39". FOLLOW THE ARROWS DOWNWARD TO THE NUMBER IN THE HEADING OF THE COLUMN THAT SPECIFIES 3 UNITS CAN BE POSITIONED AT EACH SIDE OF THE DOOR OPENING, THOSE ON THE RIGHT SIDE BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. FOLLOWING THE SAME PROCEDURE, CHART NO. 14 ON PAGE 12, SPECIFIES 2 UNITS CAN BE STORED IN THE SECOND TIER AND CHART NO 15, INDICATES THAT 1 UNIT CAN BE STORED IN THE THIRD TIER. SEE SPECIAL NOTE 3 BELOW.

3. SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 12 THRU 20, IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF SKIDDED UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 12 ON PAGE 12 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

UNIT HEIGHT	CHART NO. 5											
	UNIT SIZE RANGE, LENGTH OR WIDTH											
50" MAX											25'-30"	25'-42"
49"											25'-30"	36'-66"
48"											25'-36"	30'-46"
47"											25'-36"	46'-66"
46"										25'-27"	42'-63"	
45"									25'	25'-31"	46'-66"	
44"									25'	25'-31"	63'-66"	
43"									25'	25'-30"		
42"									25'	25'-27"		
41"									25'	25'-26"		
40"									25'	25'-28"		
39"									25'	25'-27"		
38"									25'	25'-28"		
37"									25'	25'-26"		
36"									25'	25'-27"		
35"									25'	25'-27"		
34"									25'	25'-28"		
33"									25'	25'-26"		
32"									25'	25'-26"		
31"									25'	25'-27"		
30"									25'	25'-28"		
29"									25'	25'-26"		
28"									25'	25'-26"		
27"									25'	25'-26"		
26"									25'	25'-26"		
25"									25'	25'-27"		
24"									25'	25'-27"		
22"									25'	25'-28"		
21"									25'	25'-26"		
20"									25'	25'-26"		
19"									25'	25'-26"		
18"									25'	25'-26"		
16"									25'	25'-27"		
15"									25'	25'-27"		
UNIT HEIGHT	12	11	10	9	8	7	6	5	4	3	2	1

NUMBER OF ROWS WIDE IN THIRD TIER OF TYPE "A" STACKS.

UNIT HEIGHT	CHART NO. 6											
	UNIT SIZE RANGE, LENGTH OR WIDTH											
37" MAX											25'-29"	25'-52"
36"											25'-29"	44'-66"
35"											25'-29"	60'-66"
34"										25'-28"	43'-64"	64'-66"
33"										25'-28"	33'-43"	
32"										25'-27"	29'-37"	
31"										25'	27'-32"	
30"										25'	25'-29"	
29"										25'	25'-26"	
28"										25'	25'-28"	
27"										25'	25'-27"	
26"										25'	25'-27"	
25"										25'	25'-28"	
24"										25'	25'-26"	
23"										25'	25'-27"	
22"										25'	25'-28"	
21"										25'	25'-28"	
20"										25'	25'-26"	
19"										25'	25'-26"	
18"										25'	25'-27"	
17"										25'	25'-27"	
16"										25'	25'-28"	
15"										25'	25'-26"	
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1	

NUMBER OF ROWS WIDE IN FOURTH TIER OF TYPE "A" STACKS.

UNIT HEIGHT	CHART NO. 7												
	UNIT SIZE RANGE, LENGTH OR WIDTH												
29" MAX											25'-26"	26'-40"	40'-66"
28"											25'-27"	27'-36"	36'-54"
27"											25'-32"	32'-43"	54'-66"
26"											25'	25'-30"	64'-66"
25"											25'	25'-30"	
24"											25'	25'-30"	
23"											25'	25'-28"	
22"											25'	25'-28"	
21"											25'	25'-27"	
20"											25'	25'-27"	
19"											25'	25'-26"	
18"											25'	25'-26"	
17"											25'	25'-26"	
16"											25'	25'-26"	
15"											25'	25'-26"	
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1			

NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.

UNIT HEIGHT	CHART NO. 8									
	UNIT SIZE RANGE, LENGTH OR WIDTH									
24" MAX										
23"										
22"										
21"										
20"										
19"										
18"										
17"										
16"										
15"										
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.									

UNIT HEIGHT	CHART NO. 9							
	UNIT SIZE RANGE, LENGTH OR WIDTH							
21" MAX								
20"								
19"								
18"								
17"								
16"								
15"								
UNIT HEIGHT	8	7	6	5	4	3	2	
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.							

UNIT HEIGHT	CHART NO. 10						
	UNIT SIZE RANGE, LENGTH OR WIDTH						
18" MAX							
17"							
16"							
15"							
UNIT HEIGHT	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN EIGHTH TIER OF TYPE "A" STACKS.						

UNIT HEIGHT	CHART NO. 11				
	UNIT SIZE RANGE, LENGTH OR WIDTH				
16" MAX					
15"					
UNIT HEIGHT	5	4	3	2	1
	NUMBER OF ROWS WIDE IN NINTH TIER OF TYPE "A" STACKS.				

REFER TO PAGE 12 FOR CHART NO. 12.

UNIT HEIGHT	CHART NO. 13							
	UNIT SIZE RANGE, LENGTH OR WIDTH							
50"-56"								
41"-50"								
15"-41"								
UNIT HEIGHT	5 & 4	4 & 3	3 & 3	3 & 2	2 & 2	2 & 1	1 & 1	
	NUMBER OF SKIDDED UNITS DEEP IN FIRST TIER OF TYPE "C" STACKS.							

**CHART NO. 12**  
NUMBER OF STACKS IN MAGAZINE

UNIT DIMENSION LENGTHWISE IN MAGAZINE	81'-0" IGL00				60'-8" IGL00				40'-4" IGL00			
	*A* STACKS		*C* STACKS		*A* STACKS		*C* STACKS		*A* STACKS		*C* STACKS	
	NO. *	MHE AISLE	NO.	SPACE REMAIN	NO. *	MHE AISLE	NO.	SPACE REMAIN	NO. *	MHE AISLE	NO.	SPACE REMAIN
66"	12	14'-9"	2	42"	8	16'-5"	2	65"	4	18'-3"	3	16"
65"	12	15'-9"	2	56"	8	17'-1"	3	7"	5	13'-0"	2	23"
64"	12	16'-9"	2	70"	8	17'-9"	3	15	5	13'-5"	2	30"
63"	12	17'-9"	3	21"	9	13'-2"	2	29"	5	13'-10"	2	37"
62"	13	13'-7"	2	36"	9	13'-11"	2	40"	5	14'-3"	2	44"
61"	13	14'-8"	2	51"	9	14'-8"	2	51"	5	14'-8"	2	51"
60"	13	15'-9"	2	66"	9	15'-5"	2	62"	5	15'-1"	2	58"
59"	13	16'-10"	3	22"	9	16'-2"	3	14"	5	15'-6"	3	6"
58"	13	17'-11"	3	38"	9	16'-11"	3	26"	5	15'-11"	3	14"
57"	14	14'-3"	2	54"	10	12'-11"	2	38"	5	16'-4"	3	22"
56"	14	15'-5"	3	14"	10	13'-9"	2	50"	6	12'-1"	2	30"
55"	14	16'-7"	3	31"	10	14'-7"	2	62"	6	12'-7"	2	38"
54"	15	13'-3"	2	48"	10	15'-5"	3	32"	6	13'-1"	2	46"
53"	15	14'-6"	3	12"	11	11'-10"	2	33"	6	13'-7"	2	54"
52"	16	11'-4"	2	30"	11	12'-9"	2	46	6	14'-1"	3	10"
51"	16	12'-9"	2	48"	11	13'-8"	3	8"	6	14'-7"	3	19"
50"	16	14'-1"	3	16"	11	14'-7"	3	22"	6	15'-1"	3	28"
49"	17	11'-4"	2	35"	12	11'-5"	2	36"	6	15'-7"	3	37"
48"	17	12'-9"	3	6"	12	12'-5"	2	50"	7	12'-1"	2	46"
47"	17	14'-2"	3	26"	12	13'-5"	3	17"	7	12'-8"	3	8"
46"	18	11'-9"	2	46"	12	14'-5"	3	32"	7	13'-3"	3	18"
45"	18	13'-3"	3	21"	13	11'-8"	2	47"	7	13'-10"	3	28"
44"	19	11'-7"	2	42"	13	12'-9"	3	18"	7	14'-5"	3	38"
43"	19	12'-8"	3	20"	13	13'-10"	3	34"	8	11'-5"	3	5"
42"	19	14'-3"	3	42"	14	11'-5"	3	8"	8	12'-1"	3	16"
41"	20	12'-5"	3	23"	14	12'-7"	3	25"	8	12'-9"	3	27"
40"	20	14'-1"	4	6"	14	13'-9"	3	42"	8	13'-5"	3	38"
39"	21	12'-6"	3	30"	15	11'-8"	3	20"	8	14'-1"	4	10"
38"	22	11'-1"	3	16"	15	12'-11"	3	38"	9	11'-7"	3	22"
37"	22	12'-11"	3	41"	16	11'-1"	3	19"	9	12'-4"	3	34"
36"	23	11'-9"	3	30"	16	12'-5"	3	38"	9	13'-1"	4	10"
34"	24	12'-9"	4	14"	17	12'-3"	4	8"	10	11'-9"	3	36"
33"	25	12'-0"	4	9"	18	10'-11"	3	29"	10	12'-7"	4	19"
32"	26	11'-5"	4	6"	18	12'-5"	4	18"	10	13'-5"	4	30"
30"	27	13'-3"	5	6"	11	12'-7"	4	32"	11	12'-7"	4	28"
29"	28	13'-1"	5	9"	20	12'-1"	4	26"	12	11'-1"	4	14"
28"	29	13'-1"	5	14"	21	11'-5"	4	22"	12	12'-1"	4	30"
27"	30	13'-3"	5	21"	22	10'-11"	4	20"	12	13'-1"	6	12"
26"	32	11'-5"	4	30"	22	12'-9"	5	23"	13	11'-11"	5	10"
25"	33	12'-0"	5	16"	23	12'-6"	5	22"	14	10'-11"	4	28"

\* SEE SPECIAL NOTE 7 ON PAGE 5. REFER TO PAGE 11 FOR CHART NO. 13.

UNIT HEIGHT	CHART NO. 14				
	UNIT SIZE RANGE, LENGTH OR WIDTH				
54"-56"		25"-28"	28"-42"	42"-66"	
53"-54"		25"-28"	28"-43"	43"-66"	
52"-53"		25"-29"	29"-44"	44"-66"	
51"-52"		25"-30"	30"-45"	45"-66"	
50"-51"		25"-30"	30"-46"	46"-66"	
49"-50"		25"-31"	31"-47"	47"-66"	
48"-49"		25"-32"	32"-48"	48"-66"	
47"-48"		25"-32"	32"-49"	49"-66"	
46"-47"	25"	25"-33"	33"-50"	50"-66"	
44"-46"	25"	25"-34"	34"-51"	51"-66"	
43"-44"	25"-26"	26"-34"	34"-52"	52"-66"	
42"-43"	25"-26"	26"-35"	35"-53"	53"-66"	
39"-42"	25"-27"	27"-36"	36"-54"	54"-66"	
37"-39"	25"-27"	27"-37"	37"-55"	55"-66"	
34"-37"	25"-28"	28"-38"	38"-57"	57"-66"	
31"-34"	25"-29"	29"-39"	39"-58"	58"-66"	
28"-31"	25"-30"	30"-40"	40"-60"	60"-66"	
25"-28"	25"-30"	30"-41"	41"-61"	61"-66"	
21"-25"	25"	25"-31"	31"-42"	42"-63"	63"-66"
15"-21"	25"	25"-32"	32"-43"	43"-64"	64"-66"
UNIT HEIGHT	5	4	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN SECOND TIER OF TYPE "C" STACKS.				

UNIT HEIGHT	CHART NO. 15				
	UNIT SIZE RANGE, LENGTH OR WIDTH				
43"-44"				25"-26"	26"-53"
40"-43"				25"-29"	29"-59"
39"-40"				25"-35"	35"-66"
38"-39"				25"-37"	37"-66"
37"-38"			25"-26"	26"-39"	39"-66"
36"-37"			25"-27"	27"-41"	41"-66"
35"-36"			25"-28"	28"-43"	43"-66"
34"-35"			25"-30"	30"-45"	45"-66"
33"-34"			25"-30"	30"-46"	46"-66"
32"-33"			25"-31"	31"-47"	47"-66"
31"-32"			25"-32"	32"-49"	49"-66"
30"-31"			25"-33"	33"-50"	50"-66"
29"-30"	25"	25"-34"	34"-51"	51"-66"	
28"-29"	25"-26"	26"-35"	35"-52"	52"-66"	
27"-28"	25"-26"	26"-35"	35"-53"	53"-66"	
26"-27"	25"-27"	27"-36"	36"-54"	54"-66"	
24"-26"	25"-27"	27"-37"	37"-55"	55"-66"	
22"-24"	25"-28"	28"-38"	38"-57"	57"-66"	
21"-22"	25"-29"	29"-39"	39"-58"	58"-66"	
18"-21"	25"-30"	30"-40"	40"-60"	60"-66"	
16"-18"	25"-30"	30"-41"	41"-61"	61"-66"	
15"-16"	25"-31"	31"-42"	42"-63"	63"-66"	
UNIT HEIGHT	5	4	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN THIRD TIER OF TYPE "C" STACKS.				



UNIT HEIGHT	CHART NO. 16			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
32"-33"			25"-26"	26"-53"
30"-32"			25"-29"	29"-59"
29"-30"			25"-36"	36"-66"
28"-29"		25"	25"-38"	38"-66"
27"-28"		25"-27"	27"-41"	41"-66"
26"-27"		25"-28"	28"-43"	43"-66"
25"-26"		25"-30"	30"-45"	45"-66"
24"-25"		25"-31"	31"-47"	47"-66"
23"-24"		25"-32"	32"-49"	49"-66"
22"-23"		25"	33"-50"	50"-66"
21"-22"	25"-26"	26"-34"	34"-52"	52"-66"
20"-21"	25"-26"	26"-35"	35"-53"	53"-66"
19"-20"	25"-27"	27"-36"	36"-54"	54"-66"
18"-19"	25"-27"	27"-37"	37"-55"	55"-66"
17"-18"	25"-28"	28"-38"	38"-57"	57"-66"
15"-17"	25"-29"	29"-39"	39"-58"	58"-66"
15"	25"-30"	30"-40"	40"-60"	60"-66"
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FOURTH TIER OF TYPE "C" STACKS.			

UNIT HEIGHT	CHART NO. 17			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
27"-28"				25"-35"
26"-27"				25"-47"
24"-26"			25"-27"	27"-55"
23"-24"			25"-36"	36"-66"
22"-23"		25"-26"	26"-39"	39"-66"
21"-22"		25"-28"	28"-42"	42"-66"
20"-21"		25"-29"	29"-44"	44"-66"
19"-20"		25"-31"	31"-47"	47"-66"
18"-19"		25"-32"	32"-49"	49"-66"
17"-18"		25"	34"-51"	51"-66"
16"-17"	25"-26"	26"-35"	35"-53"	53"-66"
15"-16"	25"-27"	27"-36"	36"-54"	54"-66"
15"	25"-27"	27"-37"	37"-55"	55"-66"
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FIFTH TIER OF TYPE "C" STACKS.			

UNIT HEIGHT	CHART NO. 18			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
22"-23"			25"-26"	25"-42"
21"-22"			25"-32"	26"-53"
20"-21"			25"-36"	32"-65"
19"-20"		25"	25"-39"	36"-66"
18"-19"		25"-28"	28"-43"	39"-66"
17"-18"		25"-30"	30"-46"	43"-66"
16"-17"		25"-32"	32"-49"	46"-66"
15"-16"		25"	34"-51"	49"-66"
15"	25"	25"-34"	34"-51"	51"-66"
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN SIXTH TIER OF TYPE "C" STACKS.			

UNIT HEIGHT	CHART NO. 19		
	UNIT SIZE RANGE, LENGTH OR WIDTH		
19"-20"			25"-36"
18"-19"		25"	25"-50"
17"-18"		25"-30"	30"-61"
16"-17"		25"-36"	36"-66"
15"-16"	25"-26"	26"-40"	40"-66"
15"	25"-29"	29"-44"	44"-66"
UNIT HEIGHT	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN SEVENTH TIER OF TYPE "C" STACKS.		

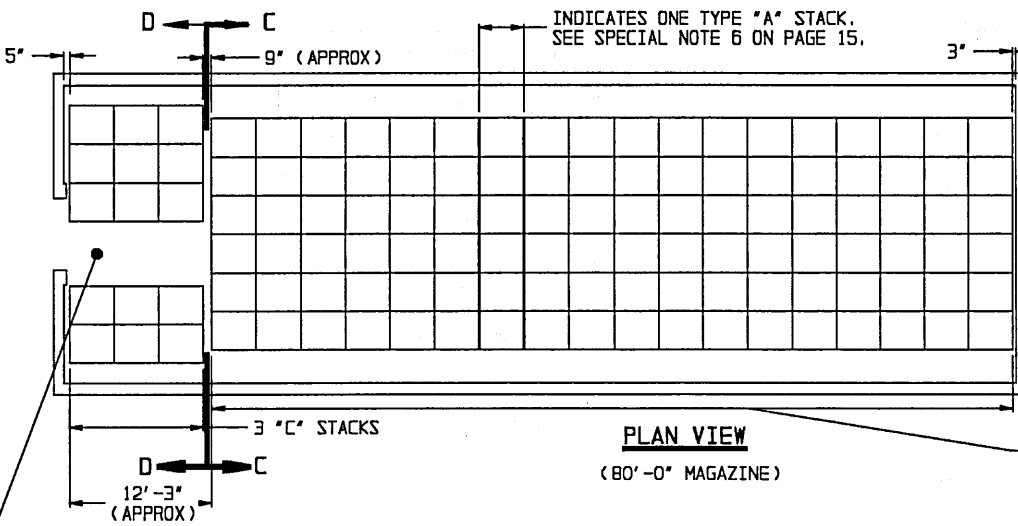
UNIT HEIGHT	CHART NO. 20	
	UNIT SIZE RANGE, LENGTH OR WIDTH	
16"-17"		25"-45"
15"-16"	25"-29"	29"-58"
15"	25"-36"	36"-66"
UNIT HEIGHT	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN EIGHTH TIER OF TYPE "C" STACKS.	

**STORAGE IN 80'-0" MAGAZINE**

(10'-0" HIGH)

ITEM	QUANTITY
SKIDDED UNITS - - - -	198

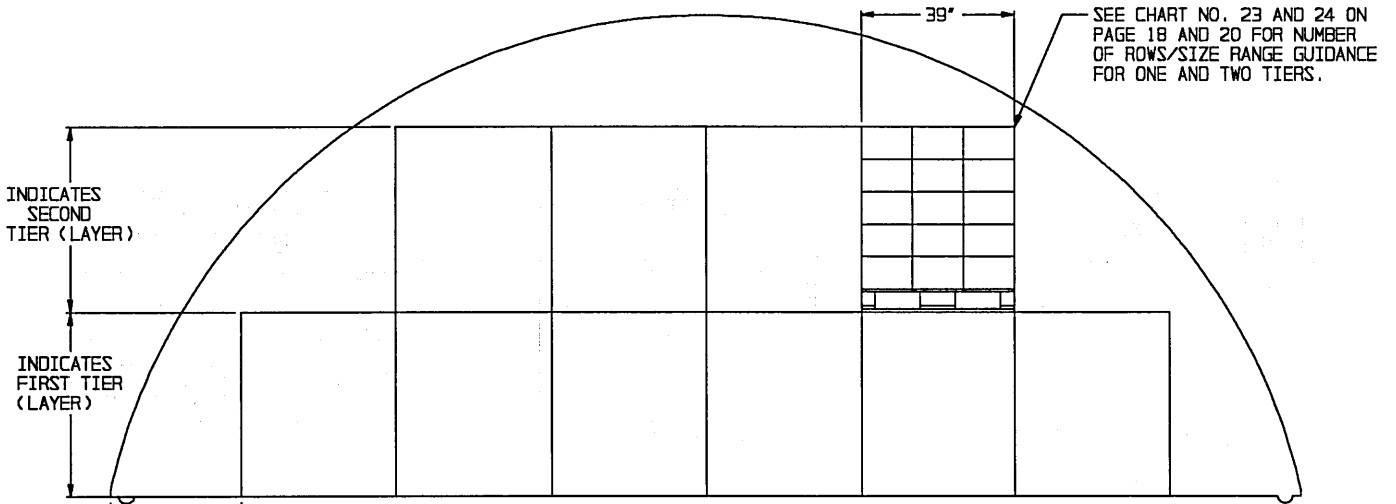
INDICATES ONE TYPE "A" STACK.  
SEE SPECIAL NOTE 6 ON PAGE 15.



**PLAN VIEW**  
(80'-0" MAGAZINE)

SEE CHART NO. 30 ON PAGE 21 FOR GUIDANCE AS TO THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN AN 80'-0" MAGAZINE.

SEE SPECIAL NOTE 6 ON PAGE 15.



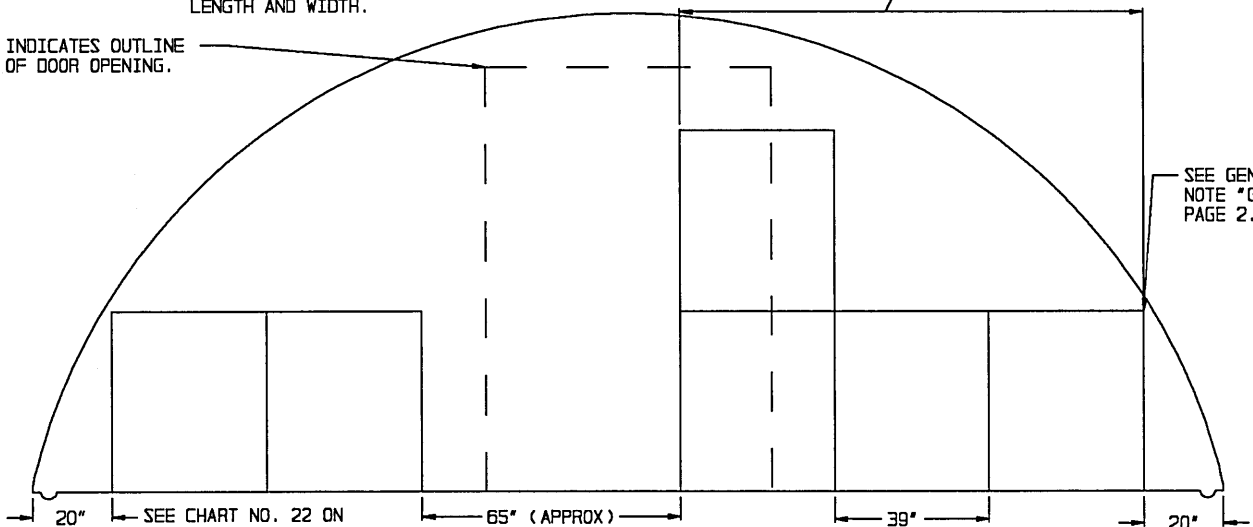
**SECTION C-C**  
(10 SKIDDED UNITS PER STACK)

SEE CHART NO. 23 AND 24 ON PAGE 18 AND 20 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR ONE AND TWO TIERS.

SEE CHART NO. 21 ON PAGE 18 FOR SIDE AISLE DIMENSIONS TO BE USED WITH UNITS OF OTHER LENGTH AND WIDTH.

SEE CHART NO. 31 THRU 36 ON PAGE 22 FOR GUIDANCE AS TO THE NUMBER OF UNITS DEEP IN THE TYPE "C" STACKS IN THE FRONTAL AREA.

INDICATES OUTLINE OF DOOR OPENING.



**SECTION D-D**

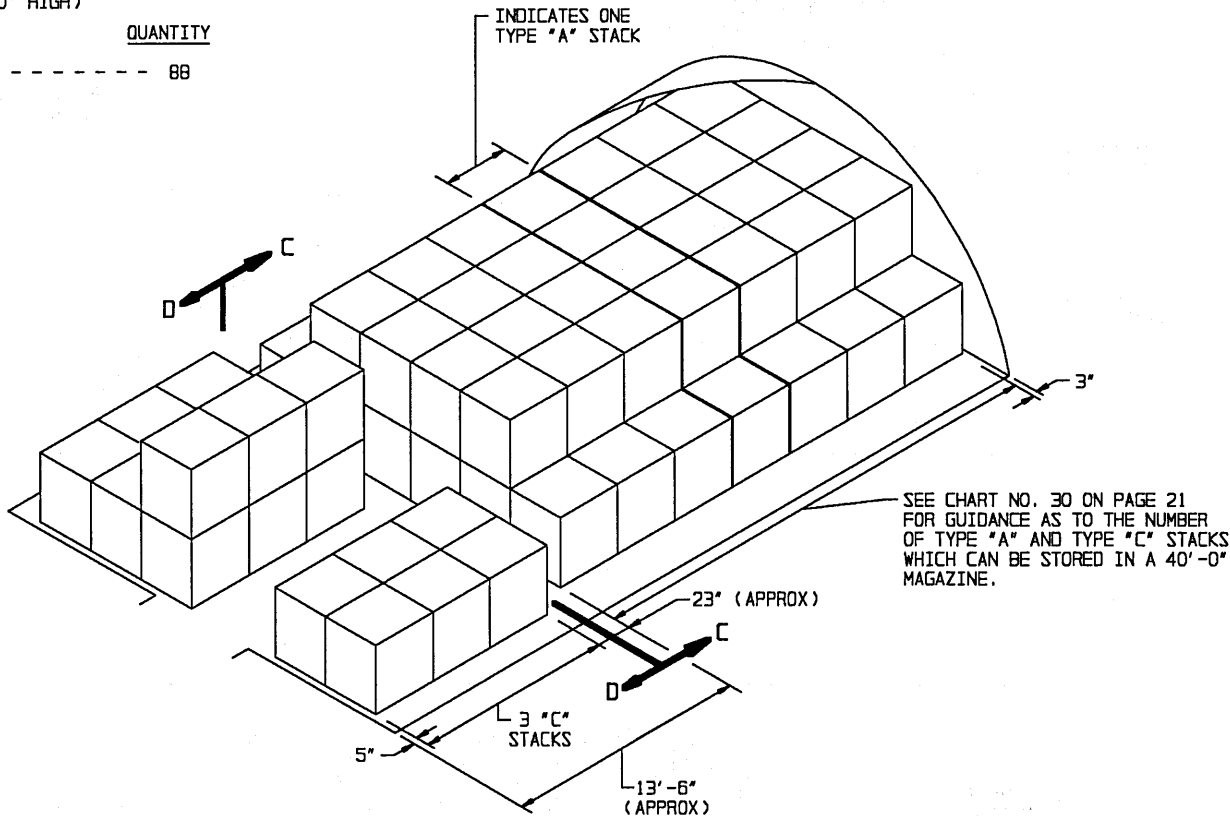
SEE CHART NO. 22 ON PAGE 18 FOR SIDE AISLE DIMENSIONS FOR OTHER HEIGHT UNITS.

SEE GENERAL NOTE "G" ON PAGE 2.

**STORAGE IN 40'-0" MAGAZINE**

(10'-0" HIGH)

ITEM	QUANTITY
SKIDDED UNIT - - - - -	88



**ISOMETRIC VIEW**  
(40'-0" MAGAZINE)

(SPECIAL NOTES CONTINUED)

4. WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CLEATED BOXES ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
5. REFER TO PAGES 100 AND 101 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
6. THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS.
7. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

SPECIAL NOTES:

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY. DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 18 THRU 22 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. THE STORAGE VIEWS ON PAGE 14 AND ABOVE DEPICT SKIDDED UNITS STACKED IN VERTICAL ALIGNMENT, CENTERED IN THE WIDTH OF THE MAGAZINE. THE TYPICAL STACKING PATTERN VIEWS ON PAGES 16 AND 17 DEPICT THE BOTTOM TIERS CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE UPPER TIERS IN SOME OF THOSE VIEWS ARE CENTERED (STAGGERED) OVER THE UNITS BELOW. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS NO. 23 THRU 29 ON PAGES 18 THRU 22 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INDICATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED. CHART NO. 30 ON PAGE 21 SPECIFIES THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN 80'-0" AND 40'-0" LONG MAGAZINES. CHART NO. 31 ON PAGE 22 SPECIFIES THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED ON EACH SIDE OF THE MAGAZINE IN THE BOTTOM TIER OF THE TYPE "C" STACKS IN THE FRONTAL AREA. NOTE THAT THOSE ON THE RIGHT SIDE MUST BE STORED BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. CHARTS NO. 32 THRU 36 ON PAGE 22 SPECIFY THE NUMBER OF SKIDDED UNITS WHICH CAN BE STORED IN THE UPPER TIERS ON THE LEFT SIDE.
3. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).

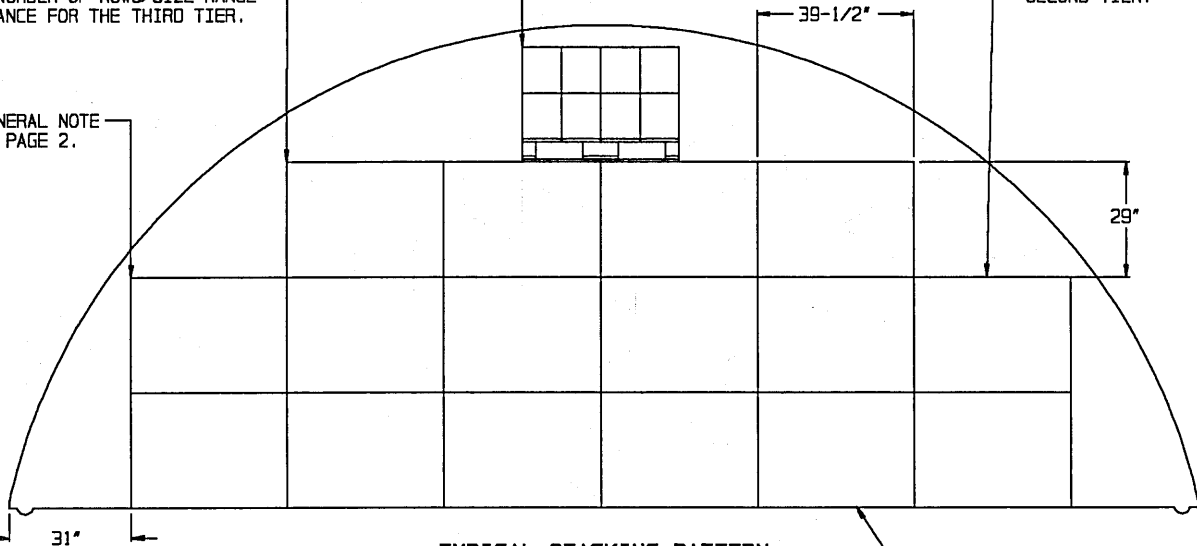
(CONTINUED AT LEFT)

SEE CHART NO. 26 ON PAGE 20  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE FOURTH TIER.

SEE CHART NO. 25 ON PAGE 20  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE THIRD TIER.

SEE GENERAL NOTE  
"G" ON PAGE 2.

SEE CHART NO. 24 ON  
PAGE 20 FOR NUMBER  
OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE  
SECOND TIER.



**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 39-1/2' LONG  
BY 29" HIGH. FOUR TIER STORAGE IS APPLI-  
CABLE FOR ALL SKIDDED UNITS WHICH ARE  
OVER 23" BUT NOT MORE THAN 29" IN HEIGHT.

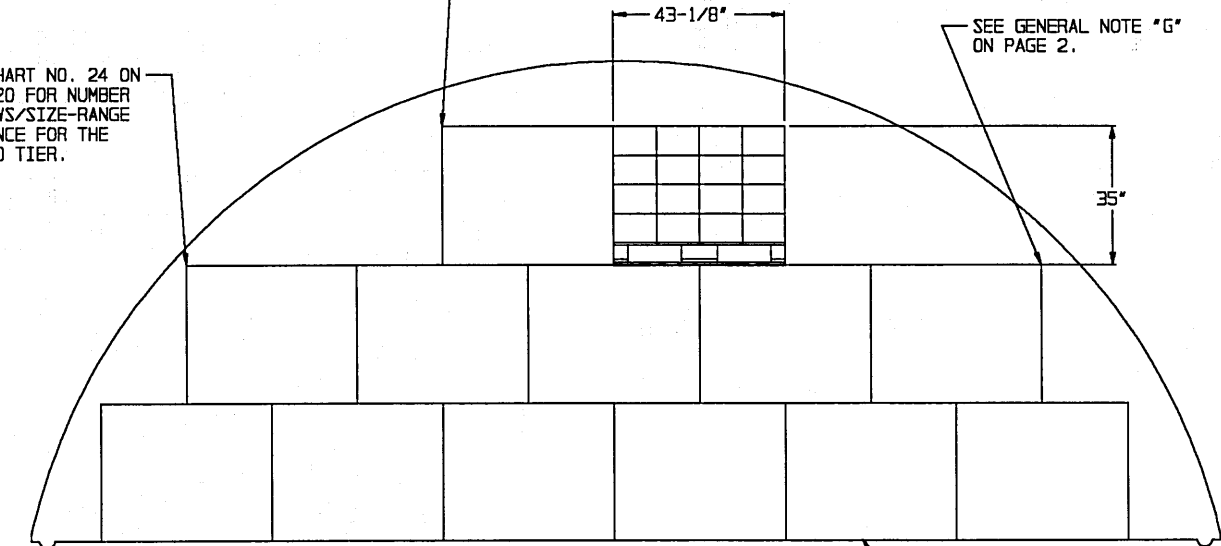
SEE CHART NO. 21 ON PAGE 18  
FOR SIDE AISLE DIMENSIONS  
TO BE USED WITH OTHER LENGTH  
UNITS.

SEE CHART NO. 23 ON PAGE 18  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 25 ON PAGE 20  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE THIRD TIER.

SEE CHART NO. 24 ON  
PAGE 20 FOR NUMBER  
OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE  
SECOND TIER.

SEE GENERAL NOTE "G"  
ON PAGE 2.



**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 43-1/8' LONG BY 35" HIGH.  
THREE TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS  
WHICH ARE OVER 29" BUT NOT MORE THAN 38" IN HEIGHT.

SEE CHART NO. 21 ON  
PAGE 18 FOR SIDE AISLE  
DIMENSIONS TO BE USED  
WITH OTHER LENGTH UNITS.

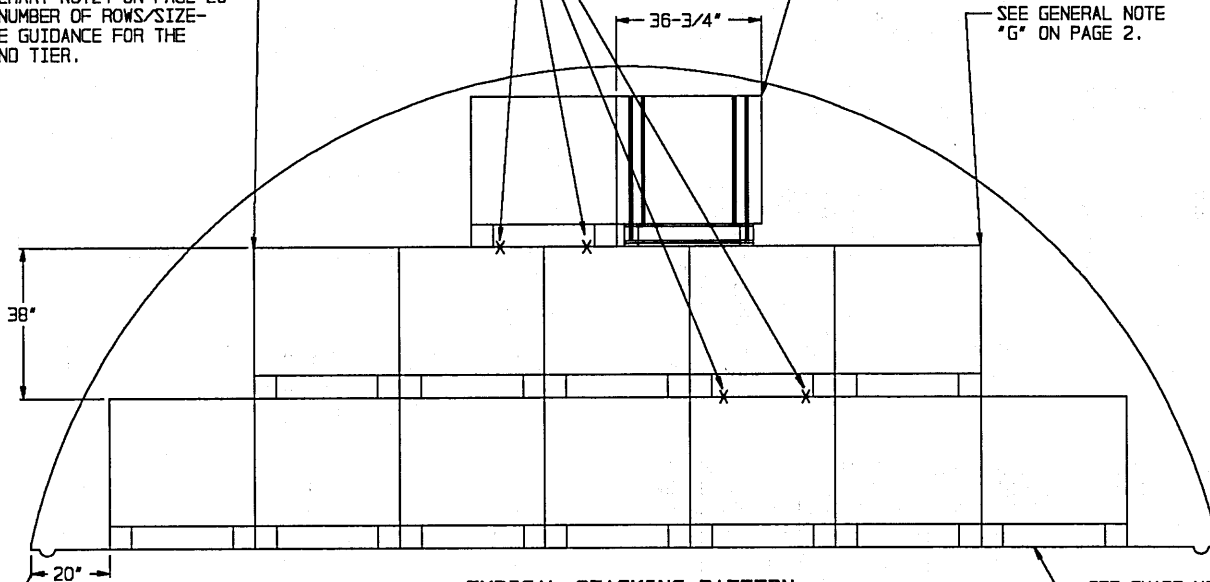
SEE CHART NO. 23 ON PAGE 18  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE FIRST TIER.

SEE SPECIAL NOTE 4 ON PAGE 15.

SEE CHART NO. 25 ON PAGE 20 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE THIRD TIER.

SEE CHART NO. 24 ON PAGE 20 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



SEE CHART NO. 21 ON PAGE 18 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

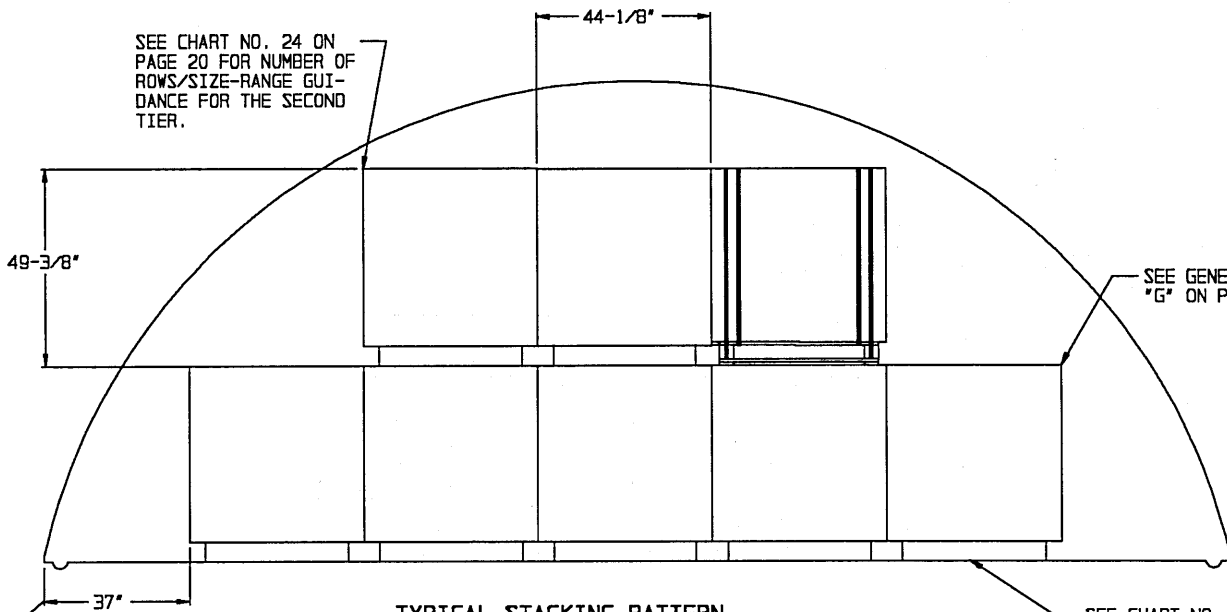
**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 36-3/4" WIDE BY 38" HIGH. THREE-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 29" BUT NOT MORE THAN 38" IN HEIGHT.

SEE CHART NO. 23 ON PAGE 18 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 24 ON PAGE 20 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



SEE CHART NO. 21 ON PAGE 18 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 44-1/8" WIDE BY 49-3/8" HIGH. TWO-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 38" IN HEIGHT.

SEE CHART NO. 23 ON PAGE 18 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

- THE CHARTS BELOW AND ON PAGES 20 THRU 22 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN ARCH TYPE MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
- THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" ON PAGE 19.

STEP 1

LOCATE IN CHART NO. 21 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST TIER OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE MAGAZINE. IF TWO DIMENSIONS ARE GIVEN, THE SMALLER ONE MAY BE USED PROVIDING THAT FIGURE IS AT LEAST AS GREAT AS THE MINIMUM SIDE AISLE DIMENSION SPECIFIED IN CHART NO. 22 FOR THE HEIGHT OF THE UNIT BEING STORED. IF THE SMALLER DIMENSION IS LESS THAN THE DIMENSION SPECIFIED BY CHART NO. 22, IT IS OPTIONAL WHETHER THE LARGER DIMENSION IN CHART NO. 21 OR THE MINIMUM DIMENSION SPECIFIED BY CHART NO. 22 BE USED.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 23 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE, LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE FIRST TIER (LAYER).

(CONTINUED AT RIGHT)

UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	12" OR 24"	41"	6" OR 26"
26"	7" OR 20"	42"	24" OR 45"
28"	10" OR 24"	43"	21" OR 42"
29"	19" OR 33"	44"	18" OR 40"
30"	15" OR 30"	45"	15" OR 37"
31"	10" OR 25"	46"	12" OR 35"
32"	6" OR 22"	47"	9" OR 32"
33"	18" OR 34"	48"	6" OR 30"
34"	14" OR 31"	49"	27"
35"	10" OR 27"	50"	25"
36"	6" OR 24"	51"	22"
37"	20" OR 38"	52"	20"
38"	17" OR 36"	53"	17" OR 43"
39"	13" OR 33"	54"	15" OR 42"
40"	10" OR 31"	55"	12" OR 39"
		56"	10" OR 38"

● USE UNIT LENGTH DIMENSION IF THE BOXES WITHIN THE UNIT ARE GOING TO BE LENGTHWISE IN THE MAGAZINE.

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH									
	25'	25'-30'	30'-34'	34'-40'	40'-48'	48'-60'	60'-66'			
56" MAX										
54"										
53"										
51"	25'	25'-27'	27'-31'	31'-35'	35'-41'	41'-50'	50'-62'	62'-68'		
50"	25'	25'-28'	28'-31'	31'-36'	36'-42'	42'-50'	50'-63'	63'-66'		
47"	25'	25'-28'	28'-31'	31'-36'	36'-42'	42'-51'	51'-63'	63'-66'		
45"	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'		
44"	25'	25'-28'	28'-32'	32'-37'	37'-43'	43'-51'	51'-64'	64'-66'		
43"	25'	25'-28'	28'-32'	32'-37'	37'-43'	43'-52'	52'-65'	65'-66'		
39"	25'	25'-29'	29'-33'	33'-37'	37'-44'	44'-52'	52'-66'			
38"	25'	25'-29'	29'-33'	33'-37'	37'-44'	44'-53'	53'-66'			
37"	25'	25'-29'	29'-33'	33'-38'	38'-44'	44'-53'	53'-66'			
33"	25'	25'-30'	30'-33'	33'-38'	38'-45'	45'-54'	54'-66'			
30"	25'	25'-30'	30'-34'	34'-39'	39'-45'	45'-54'	54'-66'			
27"	25'	25'-27'	27'-30'	30'-34'	34'-39'	39'-46'	46'-55'	55'-66'		
23"	25'	25'-28'	28'-31'	31'-35'	35'-40'	40'-46'	46'-56'	56'-66'		
15" 19"	25'	25'-28'	28'-31'	31'-35'	35'-40'	40'-47'	47'-56'	56'-66'		
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	
	NUMBER OF ROWS WIDE IN FIRST TIER OF TYPE "A" STACKS.									

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 24 ON PAGE 20 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE SECOND TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS THE SAME IN BOTH TIERS, POSITION UNITS DIRECTLY ABOVE ALL FIRST TIER UNITS.

STEP 4

REPEAT STEP 3 FOR CHARTS 25 THRU 29, AS APPLICABLE, FOR THE THIRD THRU SEVENTH TIERS.

STEP 5

LOCATE IN ONE OF THE TWO DIMENSION COLUMNS IN CHART NO. 30 ON PAGE 21 THE LENGTH OR WIDTH, AS APPLICABLE FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAT CAN BE POSITIONED IN EITHER AN 80'-0" OR 40'-0" LONG MAGAZINE. THE NUMBER OF "A" STACKS IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TINES (40") WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIAL HANDLING EQUIPMENT PERMITS. PARTIAL STACKS MAY ALSO BE STORED IN THE FRONTAL AREA OF THE MAGAZINE, EITHER IN THE SAME POSITION (BOXES LENGTHWISE OR BOXES CROSSWISE) AS THE UNITS IN THE BALANCE OF THE MAGAZINE OR ROTATED ONE QUARTER TURN.

(CONTINUED ON PAGE 19)

UNIT HEIGHT	MINIMUM LEFT SIDE AISLE	UNIT HEIGHT	MINIMUM LEFT SIDE AISLE
54"-56"	27"	35"-37"	15"
52"-54"	25"	33"-35"	14"
51"-52"	24"	31"-33"	13"
50"-51"	23"	28"-31"	12"
48"-50"	22"	25"-28"	11"
47"-48"	21"	23"-25"	10"
45"-47"	20"	21"-23"	9"
43"-45"	19"	18"-21"	8"
41"-43"	18"	15"-18"	7"
39"-41"	17"	15"	6
37"-39"	16"		

STEP 6

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 31 ON PAGE 22 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT OF THE UNIT TO BE STORED. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE DIMENSION OF THE UNIT TO BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE. THE HEADING AT THE BASE OF THAT COLUMN WILL INDICATE THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED AT EACH SIDE OF THE DOOR OPENING IN THE FIRST TIER OF A TYPE "C" STACK.

STEP 7

REPEAT STEP 6 FOR CHARTS 32 THRU 36, AS APPLICABLE TO DETERMINE THE NUMBER OF UNITS DEEP WHICH CAN BE STACKED ON THE LEFT SIDE OF THE DOOR IN THE SECOND THRU SIXTH TIER.

EXAMPLE:

A UNIT WHICH IS 40" LONG BY 39-1/2" WIDE BY 29" HIGH HAS BEEN SELECTED FOR THE EXAMPLE AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE TOP OF PAGE 16. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 21 THRU 26 AND 30, FOR THE TYPE "A" STACKS, IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED, STARTING ON PAGE 18.

THE 39-1/2" DIMENSION IS NOT INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 21, SO 40" WILL BE USED, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. THE SIDE AISLE DIMENSION OF 31" IS INDICATED IN THE SECOND COLUMN OF THE CHART. THIS DIMENSION IS GREATER THAN THE 12" MINIMUM DIMENSION SPECIFIED OPPOSITE THE INDICATED HEIGHT OF 28"-31" IN CHART NO. 22. (THE 10" SPECIFIED IN CHART NO. 21 IS TOO SMALL). THEREFORE, THE 31" SIDE AISLE WILL BE USED IF THE UNITS ARE TO BE CENTERED IN THE WIDTH OF THE MAGAZINE. IN THE LEFT HAND COLUMN OF CHART NO. 23, USE THE 30" HEIGHT, AS THE UNIT HEIGHT OF 29" IS GREATER THAN 27" AND THE NEXT HEIGHT LISTED IS 30". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION INDICATED AS 39" - 45". FOLLOW THE ARROWS DOWNWARD TO THE NUMERAL IN THE HEADING OF THE COLUMN THAT SPECIFIES 6 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN THE FIRST TIER. FOLLOWING THE SAME PROCEDURE, CHART NO. 24 SPECIFIES THAT 6 UNITS CAN BE STORED IN THE SECOND TIER AND CHART NO. 25 SPECIFIES THAT 4 UNITS CAN BE STORED IN THE THIRD TIER, AND CHART NO. 26 SPECIFIES THAT 1 UNIT CAN BE STORED IN THE FOURTH TIER. AS 29" IS THE MAXIMUM HEIGHT SHOWN ON CHART NO. 26, NO FURTHER TIERS CAN BE ADDED.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN A MAGAZINE, THE 40" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 30, WHICH AGAIN COULD REPRESENT THE UNIT LENGTH OR WIDTH. FOLLOWING THE ARROWS TO THE RIGHT SPECIFIES THAT 20 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 80'-0" MAGAZINE AND 8 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN A 40' MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP IN THE FIRST TIER AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, REFER TO CHART NO. 31 ON PAGE 22. THE UNIT HEIGHT OF 29" FALLS WITHIN THE 25"-31" RANGE IN THE LEFT HAND COLUMN. FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE UNIT DIMENSION INDICATED AS 35"-41". FOLLOW THE ARROWS DOWNWARD TO THE NUMERALS IN THE HEADING OF THE COLUMN THAT SPECIFIES 3 UNITS CAN BE POSITIONED ON THE LEFT SIDE OF THE DOOR OPENING, AND 2 ON THE RIGHT SIDE. THOSE ON THE RIGHT SIDE BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. FOLLOWING THE SAME PROCEDURE, CHART NO. 32 SPECIFIES 2 UNITS CAN BE STORED IN THE SECOND TIER AND CHART NO 33. INDICATES THAT 1 UNIT CAN BE STORED IN THE THIRD TIER. THE ABSENCE OF THE 29" HEIGHT FROM THE LEFT HAND COLUMN OF CHART NO. 34 INDICATES THAT THREE TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT. SEE SPECIAL NOTE 3 BELOW.

3. SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 30 THRU 36, IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF SKIDDED UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 30 ON PAGE 21 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

UNIT HEIGHT		CHART NO. 24 UNIT SIZE RANGE, LENGTH OR WIDTH															
56"											25'-26"	26'-47"	47'-66"				
54"											25'-27"	27'-37"	55'-66"				
53"											25'-30"	30'-41"	61'-66"				
52"											25'-32"	32'-43"	64'-66"				
51"										25'	25'-27"	27'-34"	46'-66"				
50"											25'-28"	28'-36"	48'-66"				
49"											25'-29"	29'-37"	50'-66"				
48"											25'-26"	26'-31"	53'-66"				
47"											25'-27"	27'-32"	54'-66"				
46"											25'-28"	28'-33"	56'-66"				
45"											25'	25'-29"	29'-35"	57'-66"			
44"											25'	25'-30"	30'-36"	60'-66"			
43"											25'-26"	26'-30"	30'-37"	46'-61"	61'-66"		
42"											25'-27"	27'-31"	31'-33"	33'-47"	47'-63"	63'-66"	
41"											25'-28"	28'-32"	32'-39"	39'-49"	49'-65"	65'-66"	
40"											25'	25'-28"	28'-33"	33'-40"	40'-50"	50'-66"	
39"											25'	25'-29"	29'-34"	34'-41"	41'-51"		
38"											25'	25'-29"	29'-34"	34'-41"	41'-52"		
37"											25'-26"	26'-30"	30'-35"	35'-42"	42'-53"		
36"											25'-27"	27'-30"	30'-36"	36'-43"	43'-54"		
35"											25'-27"	27'-31"	31'-36"	36'-44"	44'-54"		
34"											25'-27"	27'-31"	31'-37"	37'-44"	44'-55"		
33"											25'	25'-28"	28'-32"	32'-37"	37'-45"	45'-56"	
32"											25'	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	
31"											25'	25'-29"	29'-33"	33'-39"	39'-46"	46'-53"	
30"											25'	25'-29"	29'-33"	33'-39"	39'-47"	47'-53"	
29"											25'-26"	26'-30"	30'-34"	34'-40"	40'-48"	48'-60"	
28"											25'	25'-27"	27'-30"	30'-35"	35'-40"	40'-49"	49'-61"
27"											25'	25'-27"	27'-30"	30'-35"	35'-41"	41'-49"	49'-61"
26"											25'	25'-27"	27'-31"	31'-36"	36'-42"	42'-50"	50'-62"
25"											25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"
24"											25'	25'-28"	28'-31"	31'-37"	37'-43"	43'-51"	51'-63"
23"											25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"
22"											25'	25'-28"	28'-31"	31'-37"	37'-43"	43'-51"	51'-63"
21"											25'	25'-28"	28'-32"	32'-37"	37'-43"	43'-52"	52'-64"
19"											25'	25'-28"	28'-32"	32'-37"	37'-44"	44'-53"	53'-64"
18"											25'-26"	26'-29"	29'-33"	33'-38"	38'-44"	44'-53"	53'-66"
16"											25'-27"	27'-30"	30'-33"	33'-38"	38'-45"	45'-54"	54'-66"
15"											25'-27"	27'-30"	30'-34"	34'-39"	39'-45"	45'-54"	54'-66"
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	NUMBER OF ROWS WIDE IN SECOND TIER OF TYPE "A" STACKS.						

UNIT HEIGHT		CHART NO. 25 UNIT SIZE RANGE, LENGTH OR WIDTH																
38" MAX												25'-26"	26'-39"	39'-66"				
37"												25'-27"	27'-37"	49'-66"				
36"												25'-31"	31'-42"	63'-66"				
35"											25'	25'-27"	27'-34"	46'-66"				
34"											25'-28"	28'-36"	36'-49"	49'-66"				
33"											25'-26"	26'-31"	31'-39"	39'-53"	53'-66"			
32"											25'-27"	27'-32"	32'-41"	41'-54"	54'-66"			
31"											25'	25'-29"	29'-35"	35'-43"	43'-57"	57'-66"		
30"											25'	25'-30"	30'-36"	36'-45"	45'-60"	60'-66"		
29"											25'-27"	27'-31"	31'-38"	38'-47"	47'-62"	62'-66"		
28"											25'-28"	28'-32"	32'-39"	39'-49"	49'-65"	65'-66"		
27"											25'	25'-29"	29'-34"	34'-41"	41'-51"	51'-66"		
26"											25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"		
25"											25'-27"	27'-30"	30'-36"	36'-43"	43'-53"	53'-66"		
24"											25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"		
23"											25'	25'-28"	28'-32"	32'-37"	37'-45"	45'-56"	56'-66"	
22"											25'	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	57'-66"	
21"											25'-26"	26'-29"	29'-33"	33'-39"	39'-47"	47'-58"	58'-66"	
20"											25'-27"	27'-30"	30'-35"	35'-40"	40'-49"	49'-61"	61'-66"	
19"											25'-27"	27'-30"	30'-35"	35'-41"	41'-50"	50'-62"	62'-66"	
18"											25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-50"	50'-62"	62'-66"
17"											25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"	
16"											25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"
15"											25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	NUMBER OF ROWS WIDE IN THIRD TIER OF TYPE "A" STACKS.							

UNIT HEIGHT		CHART NO. 26 UNIT SIZE RANGE, LENGTH OR WIDTH																
29" MAX												25'-30"	30'-66"					
28"												25'	25'-27"	27'-37"	37'-55"	55'-66"		
27"												25'-28"	28'-36"	36'-48"	48'-66"			
26"												25'	25'-28"	28'-36"	36'-48"	48'-66"		
25"												25'-26"	26'-31"	31'-39"	39'-53"	53'-66"		
24"												25'-27"	27'-30"	30'-36"	36'-43"	43'-53"	53'-66"	
23"												25'	25'-28"	28'-33"	33'-42"	42'-56"	56'-66"	
22"												25'	25'-30"	30'-36"	36'-45"	45'-60"	60'-66"	
21"												25'-27"	27'-31"	31'-38"	38'-47"	47'-62"	62'-66"	
20"												25'	25'-28"	28'-33"	33'-40"	40'-50"	50'-66"	
19"												25'-26"	26'-29"	29'-34"	34'-41"	41'-52"	52'-66"	
18"												25'-27"	27'-30"	30'-36"	36'-43"	43'-54"	54'-66"	
17"												25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"	
16"												25'	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	57'-66"
15"												25'	25'-29"	29'-33"	33'-39"	39'-47"	47'-58"	58'-66"
UNIT HEIGHT	9	8	7	6	5	4	3	2	1	NUMBER OF ROWS WIDE IN FOURTH TIER OF TYPE "A" STACKS.								



CHART NO. 27								
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH							
23" MAX							25'-36"	36'-66"
22"							35'-51"	51'-66"
21"							42'-63"	63'-66"
20"				25'	25'-31'	31'-42'		
19"				25'-28"	28'-36"	36'-48"	48'-66"	
18"			25'-27"	27'-32"	32'-40"	40'-54"	54'-66"	
17"		25'	25'-29"	29'-35"	35'-43"	43'-57"	57'-66"	
16"	25'	25'-26"	26'-30"	30'-37"	37'-47"	47'-62"	62'-66"	
15"	25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"		
UNIT HEIGHT	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.							

CHART NO. 28						
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH					
19" MAX			25'-27"	25'-26"	26'-39"	39'-66"
18"			27'-34"	27'-37"	37'-55"	55'-66"
17"		25'-27"	27'-34"	34'-46"	46'-66"	
16"	25'-26"	26'-31"	31'-39"	39'-53"	53'-66"	
15"	25'-28"	28'-35"	35'-43"	43'-57"	57'-66"	
UNIT HEIGHT	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.					

CHART NO. 29					
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH				
16" MAX			25'	25'-46"	46'-66"
15"	25'	25'-31"	31'-42"	42'-63"	63'-66"
UNIT HEIGHT	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.				

CHART NO. 30								
UNIT DIMENSION LENGTHWISE IN MAGAZINE	80'-0" X 25'-0" X 10'-0" ARCH TYPE MAGAZINE				40'-0" X 25'-0" X 10'-0" ARCH TYPE MAGAZINE			
	"A" STACKS		"C" STACKS		"A" STACKS		"C" STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN	NO.	MHE AISLE	NO.	SPACE REMAIN
66"	12	13'-9"	2	28"	4	18'-1"	3	14"
65"	12	14'-9"	2	42"	5	13'-0"	2	21"
64"	12	15'-9"	2	56"	5	13'-5"	2	28"
63"	12	16'-9"	2	70"	5	13'-10"	2	35"
62"	12	17'-9"	3	22"	5	14'-3"	2	42"
61"	13	13'-8"	2	37"	5	14'-8"	2	49"
60"	13	14'-9"	2	52"	5	15'-1"	2	56"
59"	13	15'-10"	2	67"	5	15'-6"	2	63"
58"	13	16'-11"	3	24"	5	15'-11"	3	12"
57"	14	13'-3"	2	40"	5	16'-4"	3	20"
56"	14	14'-5"	2	56"	5	16'-9"	3	28"
55"	14	15'-7"	3	17"	6	12'-7"	2	36"
54"	15	12'-3"	2	34"	6	12'-9"	2	40"
53"	15	13'-6"	2	51"	6	13'-3"	2	48"
52"	15	14'-9"	3	16"	6	13'-9"	3	4"
51"	15	16'-0"	3	34"	6	14'-3"	3	13"
50"	16	13'-1"	2	52"	6	14'-9"	3	22"
49"	16	14'-5"	3	21"	6	15'-3"	3	31"
48"	17	11'-9"	2	40"	7	11'-9"	2	40"
47"	17	13'-2"	3	12"	7	12'-4"	2	49"
46"	17	14'-7"	3	32"	7	12'-11"	3	12"
45"	18	12'-3"	3	7"	7	13'-6"	3	22"
44"	18	13'-9"	3	28"	7	14'-1"	3	32"
43"	19	11'-8"	3	6"	7	14'-8"	3	42"
42"	19	13'-3"	3	28"	8	11'-9"	3	10"
41"	20	11'-5"	3	9"	8	12'-5"	3	21"
40"	20	13'-1"	3	32"	8	13'-1"	3	32"
39"	21	11'-6"	3	16"	8	13'-9"	3	43"
38"	21	13'-3"	3	40"	9	11'-3"	3	16"
37"	22	11'-11"	3	27"	9	12'-0"	3	28"
36"	22	13'-9"	4	16"	9	12'-9"	3	40"
35"	23	12'-8"	4	7"	9	13'-6"	4	17"
34"	24	11'-9"	3	34"	10	11'-9"	3	34"
33"	25	11'-0"	3	28"	10	12'-7"	4	14"
32"	25	13'-1"	4	24"	10	10'-11"	4	28"
31"	26	12'-7"	4	22"	11	11'-6"	4	11"
30"	27	12'-3"	4	22"	11	12'-7"	4	26"
29"	28	12'-1"	4	24"	12	11'-1"	4	12"
28"	29	12'-1"	4	28"	12	12'-1"	4	28"
27"	30	12'-3"	4	34"	12	13'-1"	5	17"
26"	31	12'-7"	5	16"	13	11'-1"	4	34"
25"	33	11'-0"	4	27"	14	10'-11"	4	26"

UNIT HEIGHT		CHART NO. 31 UNIT SIZE RANGE, LENGTH OR WIDTH						
54'-56'		25'-27'	27'-30'	30'-36'	36'-46'	46'-55'	55'-66'	
52'-54'		25'-28'	28'-31'	31'-37'	37'-47'	47'-56'	56'-66'	
47'-52'		25'-28'	28'-31'	31'-37'	37'-47'	47'-56'	56'-66'	
42'-47'		25'-29'	29'-32'	32'-39'	39'-49'	49'-58'	58'-66'	
36'-42'		25'-30'	30'-34'	34'-40'	40'-51'	51'-60'	60'-66'	
31'-36'		25'-30'	30'-35'	35'-41'	41'-52'	52'-61'	61'-66'	
25'-31'	25'	25'-28'	28'-31'	31'-35'	35'-41'	41'-53'	53'-62'	62'-66'
17'-25'	25'	25'-27'	27'-32'	32'-36'	36'-42'	42'-56'	56'-64'	64'-66'
15'-17'	25'-26'	26'-28'	28'-32'	32'-37'	37'-43'	43'-56'	56'-65'	65'-66'
UNIT HEIGHT	5&3	4&4	4&2	3&3	3&2	2&2	2&1	1&1
	NUMBER OF SKIDDED UNITS DEEP IN FIRST TIER OF TYPE "C" STACKS							

UNIT HEIGHT		CHART NO. 32 UNIT SIZE RANGE, LENGTH OR WIDTH			
53" MAX					25'-48'
52'-53'					25'-48'
51'-52'					25'-48'
50'-51'				25'-26'	26'-52'
49'-50'				25'-30'	30'-61'
48'-49'				25'-32'	32'-64'
42'-48'				25'-33'	33'-66'
41'-42'		25'-28'			42'-66'
40'-41'		25'-28'	28'-43'		43'-66'
39'-40'		25'-29'	29'-44'		44'-66'
38'-39'		25'-30'	30'-45'		45'-66'
37'-38'		25'-30'	30'-47'		47'-66'
36'-37'		25'-31'	31'-47'		47'-66'
35'-36'		25'-32'	32'-48'		48'-66'
33'-35'		25'-33'	33'-49'		49'-66'
32'-33'	25'	25'-34'	34'-51'		51'-66'
31'-32'	25'-26'	26'-34'	34'-52'		52'-66'
30'-31'	25'-26'	26'-35'	35'-53'		53'-66'
29'-30'	25'-27'	27'-36'	36'-54'		54'-66'
27'-29'	25'-27'	27'-36'	36'-54'		54'-66'
26'-27'	25'-28'	28'-37'	37'-56'		56'-66'
24'-26'	25'-28'	28'-37'	37'-56'		56'-66'
23'-24'	25'-29'	29'-38'	38'-58'		58'-66'
21'-23'	25'-29'	29'-39'	39'-58'		58'-66'
19'-21'	25'-30'	30'-40'	40'-60'		60'-66'
17'-19'	25'-30'	30'-40'	40'-61'		61'-66'
15'-17'	25'-31'	31'-41'	41'-62'		62'-66'
UNIT HEIGHT	4	3	2	1	
	NUMBER OF SKIDDED UNITS DEEP IN SECOND TIER OF TYPE "C" STACKS.				

UNIT HEIGHT		CHART NO. 33 UNIT SIZE RANGE, LENGTH OR WIDTH			
35" MAX				25'	25'-51'
33'-34'				25'-28'	28'-57'
32'-33'				25'-31'	31'-66'
28'-32'				25'-35'	35'-66'
27'-28'		25'-28'	28'-42'		42'-66'
26'-27'		25'-29'	29'-43'		43'-66'
25'-26'		25'-30'	30'-45'		45'-66'
24'-25'		25'-31'	31'-47'		47'-66'
23'-24'		25'-32'	32'-48'		48'-66'
22'-23'	25'	25'-33'	33'-50'		50'-66'
21'-22'	25'	25'-34'	34'-51'		51'-66'
20'-21'	25'-26'	26'-35'	35'-52'		52'-66'
19'-20'	25'-26'	26'-35'	35'-53'		53'-66'
18'-19'	25'-27'	27'-36'	36'-55'		55'-66'
17'-18'	25'-28'	28'-38'	38'-57'		57'-66'
16'-17'	25'-28'	28'-38'	38'-57'		57'-66'
15'-16'	25'-29'	29'-38'	38'-58'		58'-66'
UNIT HEIGHT	4	3	2	1	
	NUMBER OF SKIDDED UNITS DEEP IN THIRD TIER OF TYPE "C" STACKS.				

UNIT HEIGHT		CHART NO. 34 UNIT SIZE RANGE, LENGTH OR WIDTH			
26" MAX				25'-26'	26'-53'
25'-26'				25'-30'	30'-61'
24'-25'				25'-34'	34'-66'
21'-24'				25'-28'	42'-66'
20'-21'		25'-29'	29'-44'		44'-66'
19'-20'		25'-31'	31'-47'		47'-66'
18'-19'		25'-32'	32'-49'		49'-66'
17'-18'		25'-33'	33'-50'		50'-66'
16'-17'	25'	25'-33'	33'-50'		50'-66'
15'-16'	25'-26'	26'-35'	35'-52'		52'-66'
UNIT HEIGHT	4	3	2	1	
	NUMBER OF SKIDDED UNITS DEEP IN FOURTH TIER OF TYPE "C" STACKS.				

UNIT HEIGHT		CHART NO. 35 UNIT SIZE RANGE, LENGTH OR WIDTH		
20'-21'		25'	25'-51'	
19'-20'		25'-30'	30'-60'	
17'-19'		25'-34'	34'-66'	
16'-17'	25'-27'	27'-41'	41'-66'	
15'-16'	25'-29'	29'-44'	44'-66'	
15'	25'-31'	31'-47'	47'-66'	
UNIT HEIGHT	3	2	1	
	NUMBER OF SKIDDED UNITS DEEP IN FIFTH TIER OF TYPE "C" STACKS.			

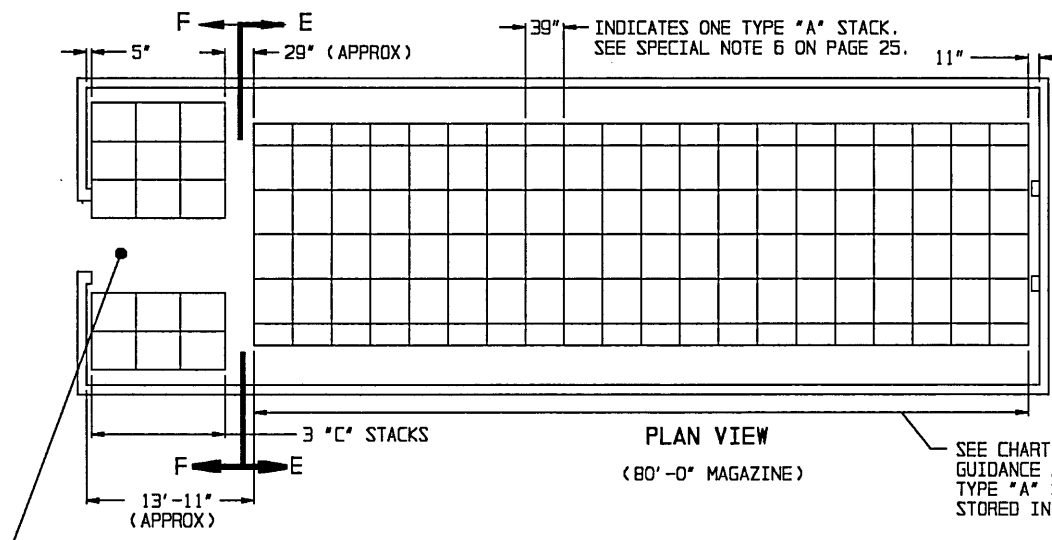
UNIT HEIGHT		CHART NO. 36 UNIT SIZE RANGE, LENGTH OR WIDTH	
16'-17'		25'-28'	28'-56'
15'-16'		25'-33'	33'-66'
15'	25'	25'-38'	38'-66'
UNIT HEIGHT	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN SIXTH TIER OF TYPE "C" STACKS.		

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**STORAGE IN 80'-0" MAGAZINE**

(11'-0" HIGH)

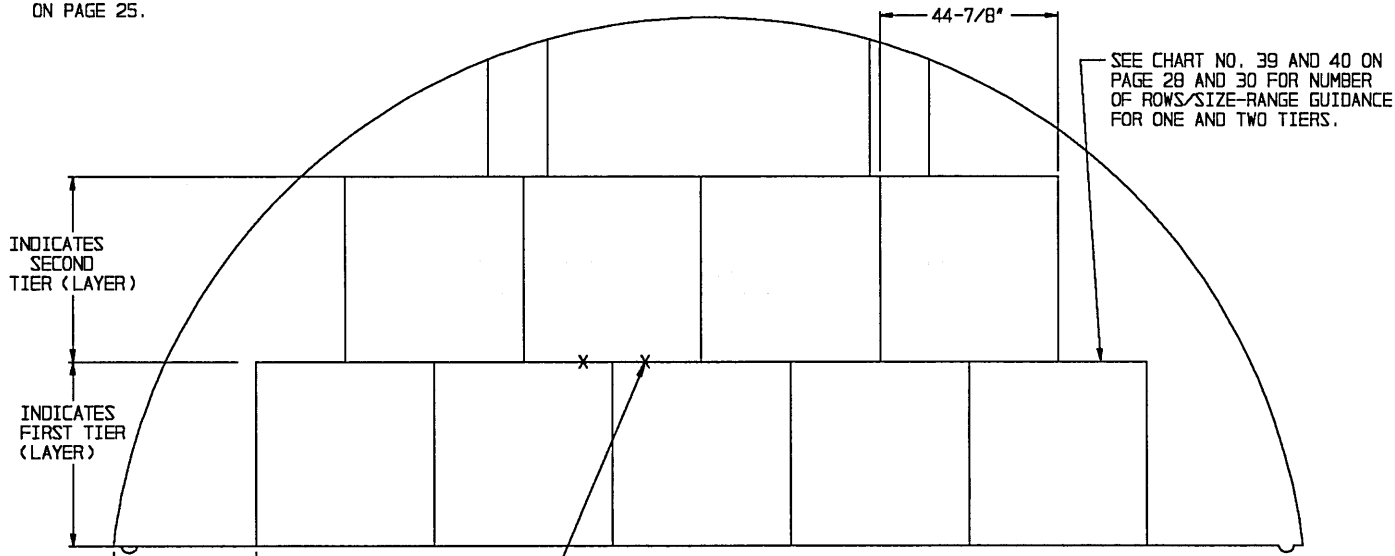
ITEM	QUANTITY
SKIDDED UNIT	----- 201



**PLAN VIEW**  
(80'-0" MAGAZINE)

SEE CHART NO. 47 ON PAGE 32 FOR GUIDANCE AS TO THE NUMBER OF TYPE "A" STACKS WHICH CAN BE STORED IN AN 80'-0" MAGAZINE.

SEE SPECIAL NOTE 6 ON PAGE 25.



**SECTION E-E**  
(9 SKIDDED UNITS PER STACK)

SEE CHART NO. 39 AND 40 ON PAGE 28 AND 30 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR ONE AND TWO TIERS.

INDICATES SECOND TIER (LAYER)

INDICATES FIRST TIER (LAYER)

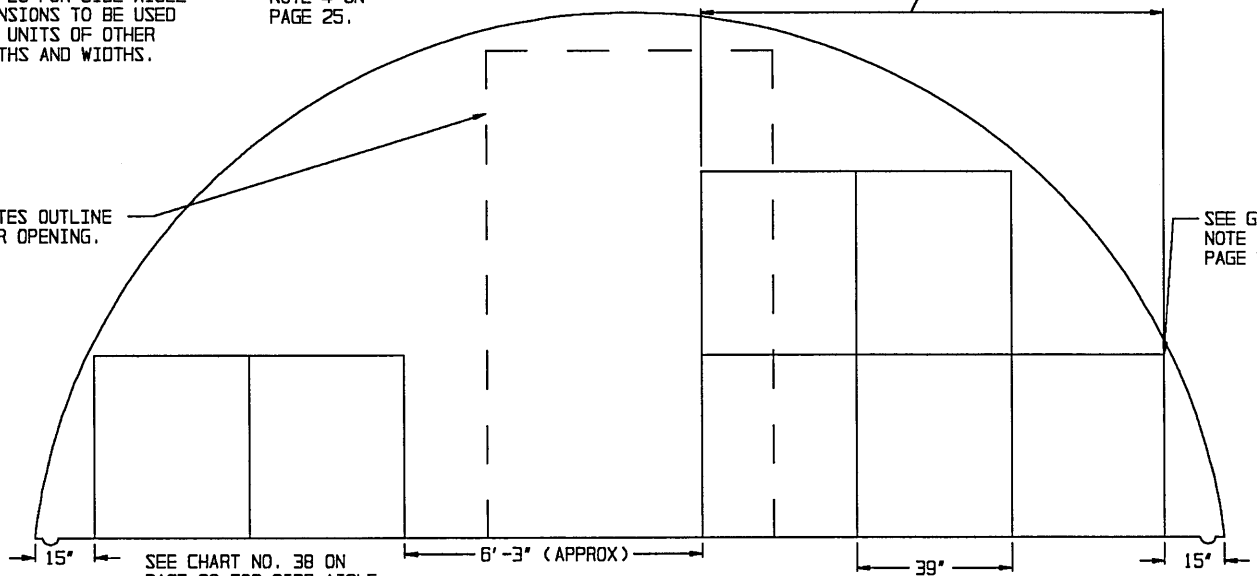
SEE CHART NO. 37 ON PAGE 28 FOR SIDE AISLE DIMENSIONS TO BE USED WITH UNITS OF OTHER LENGTHS AND WIDTHS.

SEE SPECIAL NOTE 4 ON PAGE 25.

SEE CHART NO. 48 THRU 52 ON PAGES 31 AND 32 FOR GUIDANCE AS TO THE NUMBER OF UNITS DEEP IN THE TYPE "C" STACKS IN THE FRONTAL AREA.

INDICATES OUTLINE OF DOOR OPENING.

SEE GENERAL NOTE "G" ON PAGE 2.



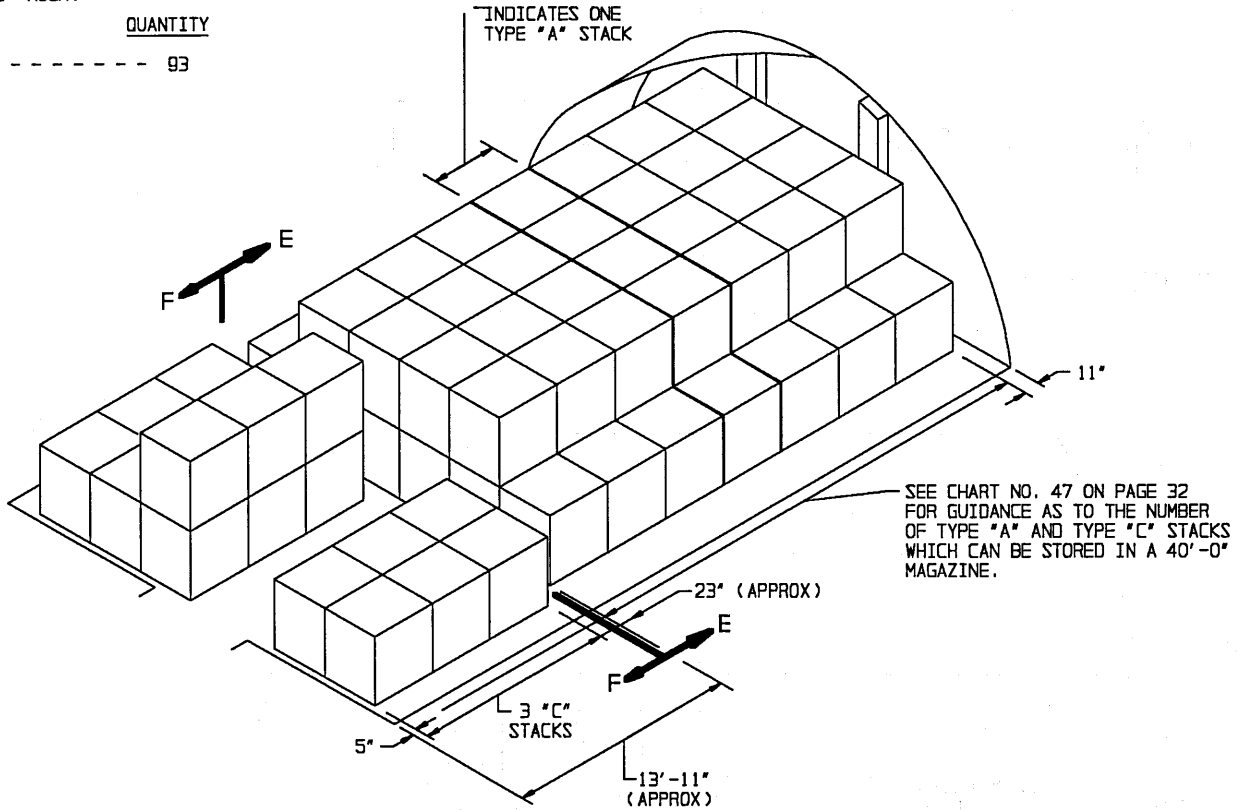
**SECTION F-F**

SEE CHART NO. 38 ON PAGE 28 FOR SIDE AISLE DIMENSIONS FOR OTHER HEIGHT UNITS.

**STORAGE IN 40'-0" MAGAZINE**

(11'-0" HIGH)

ITEM	QUANTITY
SKIDDED UNIT - - - - -	93



**ISOMETRIC VIEW**  
(40'-0" MAGAZINE)

(SPECIAL NOTES CONTINUED)

4. WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CLEATED BOXES ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
5. REFER TO PAGES 100 AND 101 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
6. THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS.
7. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

SPECIAL NOTES:

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY. DEPENDENT UPON THE SIZE OF THE UNIT BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 28 THRU THRU 32 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. THE STORAGE VIEWS ON PAGE 24 AND ABOVE DEPICT SKIDDED UNITS STACKED IN A STAGGERED ALIGNMENT, CENTERED IN THE WIDTH OF THE MAGAZINE. THE TYPICAL STACKING PATTERN VIEWS ON PAGES 26 AND 27 DEPICT THE BOTTOM TIERS CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE UPPER TIERS IN SOME OF THOSE VIEWS ARE CENTERED (STAGGERED) OVER THE UNITS BELOW. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS NO. 39 THRU 46 ON PAGES 28 THRU 31 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INDICATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED. CHART NO. 47 ON PAGE 32 SPECIFIES THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN 80'-0" AND 40'-0" LONG MAGAZINES. CHART NO. 48 ON PAGE 31 SPECIFIES THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED ON EACH SIDE OF THE MAGAZINE IN THE BOTTOM TIER OF THE TYPE "C" STACKS IN THE FRONTAL AREA. NOTE THAT THOSE ON THE RIGHT SIDE MUST BE STORED BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. CHARTS NO. 49 THRU 53 ON PAGE 32 SPECIFY THE NUMBER OF SKIDDED UNITS WHICH CAN BE STORED IN THE UPPER TIERS ON THE LEFT SIDE.
3. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).

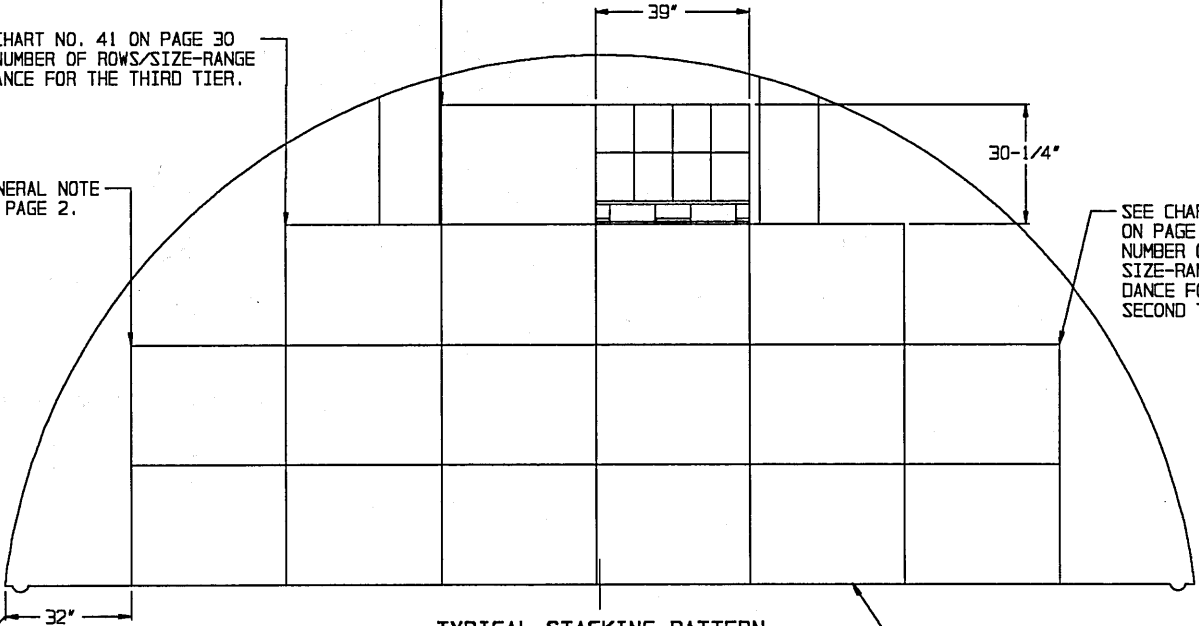
(CONTINUED AT LEFT)

SEE CHART NO. 42 ON PAGE 30  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE FOURTH TIER.

SEE CHART NO. 41 ON PAGE 30  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE THIRD TIER.

SEE GENERAL NOTE  
"G" ON PAGE 2.

SEE CHART NO. 40  
ON PAGE 30 FOR  
NUMBER OF ROWS/  
SIZE-RANGE GUI-  
DANCE FOR THE  
SECOND TIER.



**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 39" LONG  
BY 30-1/4" HIGH. FOUR TIER STORAGE  
IS APPLICABLE FOR ALL SKIDDED UNITS  
WHICH ARE OVER 25" BUT NOT MORE  
THAN 32" IN HEIGHT.

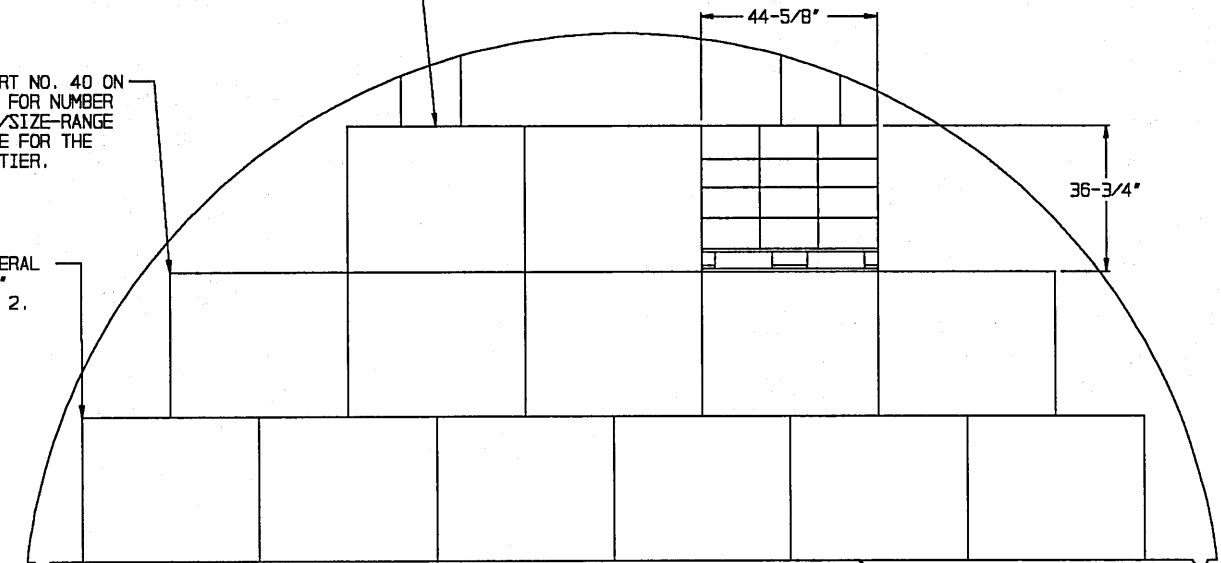
SEE CHART NO. 37 ON PAGE 28  
FOR SIDE AISLE DIMENSIONS  
TO BE USED WITH OTHER LENGTH  
UNITS.

SEE CHART NO. 39 ON PAGE 28  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 41 ON PAGE 30  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE THIRD TIER.

SEE CHART NO. 40 ON  
PAGE 30 FOR NUMBER  
OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE  
SECOND TIER.

SEE GENERAL  
NOTE "G"  
ON PAGE 2.



**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 44-5/8" LONG BY  
36-3/4" HIGH. THREE TIER STORAGE IS AP-  
PLICABLE FOR ALL SKIDDED UNITS WHICH ARE  
OVER 32" BUT NOT MORE THAN 42" IN HEIGHT.

SEE CHART NO. 37 ON  
PAGE 28 FOR SIDE AISLE  
DIMENSIONS TO BE USED  
WITH OTHER LENGTH UNITS.

SEE CHART NO. 39 ON PAGE 28  
FOR NUMBER OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 41 ON PAGE 30  
FOR NUMBER OF ROWS/SIZE-  
RANGE GUIDANCE FOR THE  
THIRD TIER.

SEE CHART NO. 40 ON PAGE 30  
FOR NUMBER OF ROWS/SIZE-  
RANGE GUIDANCE FOR THE  
SECOND TIER.

SEE GENERAL NOTE  
"G" ON PAGE 2.

20"

36-3/4"

41-1/4"

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 36-3/4" WIDE BY  
41-1/4" HIGH. THREE TIER STORAGE IS AP-  
PLICABLE FOR ALL SKIDDED UNITS WHICH ARE  
OVER 32" BUT NOT MORE THAN 42" IN HEIGHT.

SEE CHART NO. 39 ON  
PAGE 28 FOR NUMBER  
OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE  
FIRST TIER.

SEE CHART NO. 37 ON  
PAGE 28 FOR SIDE AISLE  
DIMENSIONS TO BE USED  
WITH OTHER WIDTH UNITS.

SEE CHART NO. 40 ON  
PAGE 30 FOR NUMBER OF  
ROWS/SIZE-RANGE GUI-  
DANCE FOR THE SECOND  
TIER.

SEE GENERAL  
NOTE "G"  
ON PAGE 2.

31"

46-1/8"

50-3/8"

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 46-1/8" WIDE BY  
50-3/8" HIGH. TWO-TIER STORAGE IS APPLI-  
CABLE FOR ALL SKIDDED UNITS WHICH ARE  
OVER 42" IN HEIGHT.

SEE CHART NO. 39 ON  
PAGE 28 FOR NUMBER  
OF ROWS/SIZE-RANGE  
GUIDANCE FOR THE  
FIRST TIER.

SEE CHART NO. 37 ON  
PAGE 28 FOR SIDE AISLE  
DIMENSIONS TO BE USED  
WITH OTHER WIDTH UNITS.

1. THE CHARTS ON THIS PAGE THRU PAGE 32 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN ARCH TYPE MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
2. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" ON PAGE 29.

STEP 1

LOCATE IN CHART NO. 37 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST TIER OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE MAGAZINE. IF TWO DIMENSIONS ARE GIVEN, THE SMALLER ONE MAY BE USED PROVIDING THAT FIGURE IS AT LEAST AS GREAT AS THE MINIMUM SIDE AISLE DIMENSION SPECIFIED IN CHART NO. 38 FOR THE HEIGHT OF THE UNIT BEING STORED. IF THE SMALLER DIMENSION IS LESS THAN THE DIMENSION SPECIFIED BY CHART NO. 38, IT IS OPTIONAL WHETHER THE LARGER DIMENSION IN CHART NO. 37 OR THE MINIMUM DIMENSION SPECIFIED BY CHART NO. 38 BE USED.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 39 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE, LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE FIRST TIER (LAYER).

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 40 ON PAGE 30 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE SECOND TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS THE SAME IN BOTH TIERS, POSITION UNITS DIRECTLY ABOVE ALL FIRST TIER UNITS.

STEP 4

REPEAT STEP 3 FOR CHARTS 41 THRU 46, AS APPLICABLE, FOR THE THIRD THRU EIGHT TIERS.

STEP 5

LOCATE IN THE UNIT DIMENSION COLUMN IN CHART NO. 47 ON PAGE 32 THE LENGTH OR WIDTH, AS APPLICABLE FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAT CAN BE POSITIONED IN EITHER AN 80'-0" OR 40'-0" LONG MAGAZINE. THE NUMBER OF "A" STACKS IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TINES (40") WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIAL HANDLING EQUIPMENT PERMITS. PARTIAL STACKS MAY ALSO BE STORED IN THE FRONTAL AREA OF THE MAGAZINE, EITHER IN THE SAME POSITION (BOXES LENGTHWISE OR BOXES CROSSWISE) AS THE UNITS IN THE BALANCE OF THE MAGAZINE OR ROTATED ONE QUARTER TURN.

(CONTINUED AT RIGHT)

(CONTINUED ON PAGE 29)

UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	12" OR 24"	41"	6" OR 26"
26"	6" OR 19"	42"	23" OR 44"
27"	14" OR 27"	43"	20" OR 42"
28"	9" OR 23"	44"	17" OR 39"
29"	19" OR 33"	45"	14" OR 36"
30"	14" OR 29"	46"	11" OR 34"
31"	10" OR 25"	47"	8" OR 31"
32"	21" OR 37"	48"	29"
33"	17" OR 33"	49"	27"
34"	13" OR 30"	50"	24"
35"	9" OR 26"	51"	22"
36"	11" OR 29"	52"	19"
37"	20" OR 38"	53"	17" OR 43"
38"	16" OR 35"	54"	14" OR 41"
39"	13" OR 32"	55"	12" OR 39"
40"	9" OR 29"	56"	9" OR 37"

UNIT HEIGHT	MINIMUM LEFT SIDE AISLE
54"-56"	20"
52"-54"	19"
51"-52"	18"
48"-51"	17"
47"-48"	16"
45"-47"	15"
42"-45"	14"
39"-42"	13"
36"-39"	12"
33"-36"	11"
31"-33"	10"
28"-31"	9"
24"-28"	8"
21"-24"	7"
15"-21"	6"

●USE UNIT LENGTH DIMENSION IF THE BOXES WITHIN THE UNIT ARE GOING TO BE LENGTHWISE IN THE MAGAZINE.

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH								
	11	10	9	8	7	6	5	4	3
56"			25'-28"	28'-31"	31'-36"	36'-43"	43'-51"	51'-63"	63'-66"
54"			25'-28"	28'-31"	31'-36"	36'-43"	43'-51"	51'-63"	63'-66"
53"			25'-28"	28'-32"	32'-37"	37'-43"	43'-51"	51'-63"	63'-66"
52"			25'-28"	28'-32"	32'-37"	37'-43"	43'-52"	52'-65"	65'-66"
48"			25'-28"	28'-32"	32'-37"	37'-44"	44'-52"	52'-66"	
47"			25'-28"	28'-32"	32'-37"	37'-44"	44'-53"	53'-66"	
46"			25'-26"	26'-29"	29'-33"	33'-38"	38'-44"	44'-53"	53'-66"
42"			25'-26"	26'-29"	29'-33"	33'-38"	38'-45"	45'-54"	54'-66"
39"			25'-27"	27'-30"	30'-33"	33'-39"	39'-45"	45'-54"	54'-66"
35"			25'-27"	27'-30"	30'-34"	34'-39"	39'-46"	46'-55"	55'-66"
28"	25'	25'-27"	27'-30"	30'-34"	34'-40"	40'-46"	46'-56"	56'-66"	
25"	25'	25'-28"	28'-31"	31'-35"	35'-40"	40'-47"	47'-56"	56'-66"	
18"	25'	25'-28"	28'-31"	31'-35"	35'-41"	41'-47"	47'-56"	56'-66"	
15'-16"	25'-26"	26'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"	
UNIT HEIGHT	11	10	9	8	7	6	5	4	3
	NUMBER OF ROWS WIDE IN FIRST TIER OF TYPE "A" STACKS.								



**STEP 6**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 48 ON PAGE 31 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT OF THE UNIT TO BE STORED. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE DIMENSION OF THE UNIT TO BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE. THE HEADING AT THE BASE OF THAT COLUMN WILL INDICATE THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED AT EACH SIDE OF THE DOOR OPENING IN THE FIRST TIER OF A TYPE "C" STACK.

**STEP 7**

REPEAT STEP 6 FOR CHARTS 49 THRU 53 AS APPLICABLE, TO DETERMINE THE NUMBER OF UNITS DEEP WHICH CAN BE STACKED ON THE LEFT SIDE OF THE DOOR IN THE SECOND THRU SIXTH TIER.

**EXAMPLE:**

A UNIT WHICH IS 37" LONG BY 46-1/8" WIDE BY 50-3/8" HIGH HAS BEEN SELECTED FOR THE EXAMPLE, AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE BOTTOM OF PAGE 27. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 37 THRU 40 AND 47, FOR THE TYPE "A" STACKS, IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED, STARTING ON PAGE 28.

THE 46-1/8" DIMENSION IS NOT INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 37, SO 47" WILL BE USED, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. TWO DIMENSIONS ARE GIVEN IN THE SIDE AISLE COLUMN. THE 8" DIMENSION CANNOT BE USED AS IT IS LESS THAN THE MINIMUM SIDE AISLE DIMENSION GIVEN IN CHART NO. 38 FOR THE 48'-51" HEIGHT. THEREFORE, THE 31" SIDE AISLE WILL BE USED IF THE UNITS ARE TO BE CENTERED IN THE WIDTH OF THE MAGAZINE. IN THE LEFT HAND COLUMN OF CHART NO. 39, USE THE 52" HEIGHT

AS THE UNIT HEIGHT OF 50-3/8" IS GREATER THAN 48" AND THE NEXT HEIGHT LISTED IS 52". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION INDICATED AS 43" - 52". FOLLOW THE ARROWS DOWNWARD TO THE NUMERAL IN THE HEADING OF THE COLUMN THAT SPECIFIES 5 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN THE FIRST TIER. FOLLOWING THE SAME PROCEDURE, CHART NO. 40 SPECIFIES THAT 3 UNITS CAN BE STORED IN THE SECOND TIER. THE ABSENCE OF THE 50-3/8" HEIGHT DIMENSION FROM THE LEFT HAND COLUMN OF CHART NO. 41 INDICATES THAT TWO TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN A MAGAZINE, THE 37" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 47, WHICH AGAIN COULD REPRESENT THE UNIT LENGTH OR WIDTH. FOLLOWING THE ARROWS TO THE RIGHT SPECIFIES THAT 22 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 80'-0" MAGAZINE, AND 9 TYPE "A" AND 3 TYPE "C" STACKS, CAN BE STORED IN A 40' MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP IN THE FIRST TIER AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, REFER TO CHART NO. 48 ON PAGE 31. THE UNIT HEIGHT OF 50-3/8" FALLS WITHIN THE 48"-52" RANGE IN THE LEFT HAND COLUMN. FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE UNIT DIMENSION INDICATED AS 39"-49". FOLLOW THE ARROWS DOWNWARD TO THE NUMERALS IN THE HEADING OF THE COLUMN THAT SPECIFIES 2 UNITS CAN BE POSITIONED AT EACH SIDE OF THE DOOR OPENING. THOSE ON THE RIGHT SIDE BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. FOLLOWING THE SAME PROCEDURE, CHART NO. 49 SPECIFIES 1 UNIT CAN BE STORED IN THE SECOND TIER. THE ABSENCE OF THE 50-3/8" HEIGHT FROM THE LEFT HAND COLUMN OF CHART NO. 50 INDICATES THAT TWO TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT. SEE SPECIAL NOTE 3 BELOW.

3. SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 47 THRU 53, IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF SKIDDED UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 47 ON PAGE 32 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

UNIT HEIGHT		CHART NO. 40																	
		UNIT SIZE RANGE, LENGTH OR WIDTH																	
56"												25'-26"	25'-26"	26'-31"	26'-38"	38'-51"	51'-66"		
54"												25'-26"	25'-26"	26'-31"	26'-38"	38'-52"	52'-66"		
53"												25'-26"	25'-26"	26'-32"	26'-40"	40'-54"			
52"												25'-28"	25'-28"	28'-33"	28'-42"	42'-56"			
51"												25'-28"	25'-28"	28'-34"	28'-43"	43'-57"			
50"												25'-30"	25'-30"	30'-36"	30'-45"	45'-60"			
49"												25'-30"	25'-30"	30'-37"	30'-46"	46'-61"			
48"												25'-27"	25'-27"	27'-31"	27'-38"	38'-47"	47'-62"		
47"												25'-27"	25'-27"	27'-31"	27'-38"	38'-48"	48'-64"		
46"												25'-28"	25'-28"	28'-32"	28'-39"	39'-49"	49'-65"		
45"												25'-28"	25'-28"	28'-33"	28'-40"	40'-50"	50'-66"		
44"												25'-29"	25'-29"	29'-34"	29'-41"	41'-51"	51'-66"		
43"												25'-26"	25'-26"	26'-30"	26'-35"	35'-42"	42'-52"		
42"												25'-26"	25'-26"	26'-30"	26'-35"	35'-42"	42'-53"		
41"												25'-27"	25'-27"	27'-30"	27'-36"	36'-43"	43'-54"		
40"												25'-27"	25'-27"	27'-31"	27'-37"	37'-44"	44'-55"		
39"												25'-27"	25'-27"	27'-31"	27'-37"	37'-45"	45'-55"		
38"												25'-28"	25'-28"	28'-32"	28'-38"	38'-45"	45'-58"		
37"												25'-28"	25'-28"	28'-32"	28'-38"	38'-46"	46'-57"		
36"												25'-26"	25'-26"	26'-29"	26'-33"	33'-39"	39'-47"		
34"												25'-26"	25'-26"	26'-30"	26'-34"	34'-40"	40'-60"		
32"												25'-27"	25'-27"	27'-30"	27'-35"	35'-41"	41'-49"		
30"												25'-27"	25'-27"	27'-31"	27'-35"	35'-41"	41'-50"		
29"												25'-28"	25'-28"	28'-31"	28'-36"	36'-42"	42'-50"		
28"												25'-28"	25'-28"	28'-31"	28'-36"	36'-42"	42'-51"		
26"												25'-28"	25'-28"	28'-32"	28'-37"	37'-43"	43'-52"		
24"												25'-26"	25'-26"	26'-28"	26'-32"	32'-37"	37'-44"		
23"												25'-26"	25'-26"	26'-29"	26'-33"	33'-38"	38'-44"		
21"												25'-26"	25'-26"	26'-29"	26'-33"	33'-38"	38'-45"		
19"												25'-27"	25'-27"	27'-30"	27'-33"	33'-39"	39'-45"		
15"-17"												25'-27"	25'-27"	27'-30"	27'-34"	34'-39"	39'-46"		
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	NUMBER OF ROWS WIDE IN SECOND TIER OF TYPE "A" STACKS.									

UNIT HEIGHT		CHART NO. 41																		
		UNIT SIZE RANGE, LENGTH OR WIDTH																		
42" MAX																	25'-31"	31'-47"	47'-66"	
41"																	25'-32"	32'-48"	48'-66"	
40"																	25'-27"	27'-37"	37'-55"	
39"																	25'-27"	27'-33"	33'-45"	
38"																	25'-29"	29'-37"	37'-49"	
37"																	25'-29"	29'-37"	37'-49"	
36"																	25'-26"	26'-31"	31'-39"	
35"																	25'-27"	27'-32"	32'-41"	
34"																	25'-28"	28'-34"	34'-43"	
33"																	25'-30"	30'-36"	36'-45"	
32"																	25'-27"	27'-31"	31'-38"	
31"																	25'-27"	27'-32"	32'-39"	
30"																	25'-28"	28'-33"	33'-40"	
29"																	25'-26"	26'-29"	29'-34"	
28"																	25'-26"	26'-30"	30'-35"	
27"																	25'-27"	27'-31"	31'-36"	
26"																	25'-28"	28'-32"	32'-37"	
25"																	25'-28"	28'-32"	32'-38"	
24"																	25'-26"	26'-29"	29'-33"	
23"																	25'-26"	26'-30"	30'-34"	
22"																	25'-26"	26'-30"	30'-34"	
21"																	25'-27"	27'-30"	30'-35"	
20"																	25'-27"	27'-30"	30'-35"	
19"																	25'-27"	27'-31"	31'-36"	
18"																	25'-28"	28'-32"	32'-36"	
17"																	25'-26"	26'-28"	28'-32"	
16"																	25'-26"	26'-29"	29'-33"	
15"																	25'-26"	26'-29"	29'-33"	
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	NUMBER OF ROWS WIDE IN THIRD TIER OF TYPE "A" STACKS.									

UNIT HEIGHT		CHART NO. 42																		
		UNIT SIZE RANGE, LENGTH OR WIDTH																		
32" MAX																		33'	33'-66"	
31"																		33'	33'-66"	
30"																		25'-30"	30'-46"	
29"																		25'-27"	27'-37"	
28"																		25'-32"	32'-43"	
27"																		25'-28"	28'-36"	
26"																		25'-28"	28'-36"	
25"																		25'-30"	30'-39"	
24"																		25'-30"	30'-39"	
23"																		25'-30"	30'-39"	
22"																		25'-30"	30'-39"	
21"																		25'-30"	30'-39"	
20"																		25'-30"	30'-39"	
19"																		25'-30"	30'-39"	
18"																		25'-30"	30'-39"	
17"																		25'-30"	30'-39"	
16"																		25'-30"	30'-39"	
15"																		25'-30"	30'-39"	
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	NUMBER OF ROWS WIDE IN FOURTH TIER OF TYPE "A" STACKS.									

CHART NO. 43									
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH								
25" MAX						25'-29"	29'-44"	44'-66"	
24"					25'-26"	25'-27"	27'-37"	37'-55"	55'-66"
23"					25'-29"	29'-37"	37'-50"	50'-66"	
22"					25'-27"	27'-32"	32'-41"	41'-54"	54'-66"
21"				25'-27"	27'-31"	31'-38"	38'-48"	48'-66"	
20"			25'	25'-30"	30'-36"	36'-45"	45'-66"		
19"			25'	25'-27"	27'-31"	31'-38"	38'-48"	48'-66"	
18"		25'	25'-28"	28'-33"	33'-40"	40'-50"	50'-66"		
17"		25'-26"	26'-30"	30'-35"	35'-42"	42'-53"	53'-66"		
16"		25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"		
15"	25'	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	57'-66"		
UNIT HEIGHT	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.								

CHART NO. 44								
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH							
21" MAX					25'-28"	28'-42"	42'-66"	
20"					25'-27"	27'-37"	37'-55"	55'-66"
19"				25'-27"	27'-33"	33'-45"	45'-66"	
18"			25'-26"	26'-31"	31'-39"	39'-52"	52'-66"	
17"			25'-28"	28'-35"	35'-43"	43'-57"	57'-66"	
16"		25'-27"	27'-31"	31'-38"	38'-47"	47'-62"	62'-66"	
15"	25'	25'-28"	28'-33"	33'-40"	40'-50"	50'-66"		
UNIT HEIGHT	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.							

CHART NO. 45						
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH					
18" MAX			25'-29"	29'-39"	39'-58"	58'-66"
17"			25'-28"	28'-36"	36'-48"	48'-66"
16"		25'-27"	27'-32"	32'-41"	41'-66"	
15"	25'	25'-28"	28'-33"	33'-40"	40'-50"	50'-66"
UNIT HEIGHT	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.					

CHART NO. 46				
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH			
16" MAX			25'-34"	34'-66"
15"	25'-27"	27'-37"	37'-55"	55'-66"
UNIT HEIGHT	4	3	2	1
	NUMBER OF ROWS WIDE IN EIGHTH TIER OF TYPE "A" STACKS.			

REFER TO PAGE 32 FOR CHART NO. 47

CHART NO. 48								
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH							
54"-56"			25'-28"	28'-31"	31'-37"	37'-47"	47'-56"	56'-66"
52"-54"			25'-28"	28'-32"	32'-38"	38'-48"	48'-57"	57'-66"
48"-52"			25'-29"	29'-33"	33'-39"	39'-49"	49'-58"	58'-66"
42"-48"		25'	25'-30"	30'-34"	34'-40"	40'-51"	51'-60"	60'-66"
31"-42"		25'	25'-26"	26'-30"	30'-35"	35'-41"	41'-52"	52'-61"
24"-31"		25'	25'-27"	27'-31"	31'-36"	36'-42"	42'-54"	54'-63"
15"-24"		25'	25'-27"	27'-32"	32'-36"	36'-43"	43'-55"	55'-64"
UNIT HEIGHT	5&3	4&4	4&2	3&3	3&2	2&2	2&1	1&1
	NUMBER OF SKIDDED UNITS DEEP IN FIRST TIER OF TYPE "C" STACKS							

CHART NO. 47								
UNIT DIMENSION LENGTHWISE IN MAGAZINE	80'-0" X 25'-0" X 11'-0" ARCH TYPE MAGAZINE				40'-0" X 25'-0" X 11'-0" ARCH TYPE MAGAZINE			
	"A" STACKS		"C" STACKS		"A" STACKS		"C" STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN	NO.	MHE AISLE	NO.	SPACE REMAIN
66"	12	13'-1"	2	20"	4	17'-1"	2	68"
65"	12	14'-1"	2	34"	4	17'-5"	3	9"
64"	12	15'-1"	2	48"	4	17'-9"	3	16"
63"	12	16'-1"	2	62"	5	12'-10"	2	9"
62"	12	17'-1"	3	19"	5	13'-3"	2	16"
61"	13	13'-0"	2	29"	5	13'-8"	2	23"
60"	13	14'-1"	2	44"	5	14'-1"	2	49"
59"	13	15'-2"	2	59"	5	14'-6"	2	56"
58"	13	16'-3"	3	16"	5	14'-11"	2	58"
57"	14	12'-7"	2	37"	5	15'-4"	2	65"
56"	14	13'-9"	2	48"	5	15'-9"	3	16"
55"	14	15'-7"	3	19"	5	16'-10"	3	34"
54"	14	15'-11"	3	26"	5	16'-5"	3	32"
53"	15	12'-8"	2	46"	6	12'-5"	2	40"
52"	15	13'-11"	3	8"	6	12'-11"	2	48"
51"	15	15'-2"	3	26"	6	13'-5"	2	56"
50"	16	12'-3"	2	44"	6	13'-11"	3	14"
49"	16	13'-7"	3	13"	6	14'-5"	3	23"
48"	16	14'-11"	3	32"	6	14'-11"	3	32"
47"	17	12'-4"	2	51"	7	11'-6"	2	41"
46"	17	13'-9"	3	24"	7	12'-1"	2	50"
45"	18	11'-5"	2	44"	7	12'-8"	3	14"
44"	18	12'-11"	3	20"	7	13'-3"	3	24"
43"	18	14'-5"	3	41"	7	13'-10"	3	34"
42"	19	12'-5"	3	20"	7	14'-5"	3	44"
41"	19	14'-0"	3	42"	8	11'-7"	3	13"
40"	20	12'-3"	3	24"	8	12'-3"	3	24"
39"	20	13'-11"	4	8"	8	12'-11"	3	35"
38"	21	12'-5"	3	32"	8	13'-7"	4	8"
37"	22	11'-1"	3	19"	9	11'-2"	3	20"
36"	22	12'-11"	4	8"	9	11'-11"	3	32"
35"	23	11'-10"	3	34"	9	12'-8"	4	9"
34"	24	11'-1"	3	26"	9	13'-7"	4	22"
33"	24	13'-1"	4	20"	10	11'-7"	3	35"
32"	25	12'-5"	4	16"	10	12'-5"	4	16"
31"	26	11'-11"	4	14"	10	13'-3"	4	30"
30"	27	11'-7"	4	14"	11	11'-7"	4	14"
29"	28	11'-5"	4	16"	11	12'-6"	4	29"
28"	29	11'-5"	4	20"	12	11'-1"	4	16"
27"	30	11'-7"	4	26"	12	12'-1"	4	32"
26"	31	11'-11"	4	34"	13	10'-11"	4	22"
25"	32	12'-5"	5	19"	13	12'-0"	5	15"

REFER TO PAGE 31 FOR CHART NO. 48

UNIT HEIGHT	CHART NO. 49 UNIT SIZE RANGE, LENGTH OR WIDTH				
54"-56"				25'-30"	30'-61"
48"-54"				25'-33"	33'-66"
47"-48"			25'-28"	28'-42"	42'-66"
46"-47"			25'-29"	29'-43"	43'-66"
45"-46"			25'-29"	29'-44"	44'-66"
44"-45"			25'-30"	30'-45"	45'-66"
43"-44"			25'-31"	31'-46"	46'-66"
42"-43"			25'-31"	31'-47"	47'-66"
41"-42"			25'-32"	32'-48"	48'-66"
40"-41"			25'-32"	32'-49"	49'-66"
39"-40"		25'	25'-33"	33'-50"	50'-66"
38"-39"		25'	25'-33"	33'-50"	50'-66"
36"-38"		25'	25'-34"	34'-51"	51'-66"
35"-36"		25'-26"	26'-35"	35'-53"	53'-66"
34"-35"		25'-27"	27'-36"	36'-54"	54'-66"
32"-34"		25'-27"	27'-36"	36'-54"	54'-66"
31"-32"		25'-28"	28'-37"	37'-56"	56'-66"
29"-31"		25'-28"	28'-38"	38'-57"	57'-66"
27"-29"		25'-29"	29'-38"	38'-58"	58'-66"
25"-27"		25'-29"	29'-39"	39'-59"	59'-66"
24"-25"		25'-30"	30'-40"	40'-60"	60'-66"
21"-24"		25'-30"	30'-40"	40'-60"	60'-66"
17"-21"		25'	25'-31"	31'-41"	41'-62"
15"-17"		25'	25'-31"	31'-42"	42'-63"
UNIT HEIGHT	5	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN SECOND TIER OF TYPE "C" STACKS.				

UNIT HEIGHT	CHART NO. 50 UNIT SIZE RANGE, LENGTH OR WIDTH			
38"-39"			25'	25'-50"
37"-38"			25'-28"	28'-56"
36"-37"			25'-31"	31'-62"
32"-36"			25'-33"	33'-66"
31"-32"		25'-28"	28'-42"	42'-66"
30"-31"		25'-29"	29'-43"	43'-66"
29"-30"		25'-30"	30'-45"	45'-66"
28"-29"		25'-31"	31'-47"	47'-66"
27"-28"		25'-32"	32'-48"	48'-66"
26"-27"		25'-33"	33'-49"	49'-66"
25"-26"	25'	25'-33"	33'-50"	50'-66"
24"-25"	25'-26"	26'-34"	34'-52"	52'-66"
23"-24"	25'-26"	26'-35"	35'-53"	53'-66"
22"-23"	25'-27"	27'-36"	36'-54"	54'-66"
21"-22"	25'-27"	27'-37"	37'-55"	55'-66"
20"-21"	25'-28"	28'-37"	37'-56"	56'-66"
19"-20"	25'-28"	28'-38"	38'-57"	57'-66"
18"-19"	25'-29"	29'-39"	39'-58"	58'-66"
17"-18"	25'-29"	29'-39"	39'-59"	59'-66"
16"-17"	25'-30"	30'-40"	40'-60"	60'-66"
15"-16"	25'-30"	30'-40"	40'-60"	60'-66"
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN THIRD TIER OF TYPE "C" STACKS.			

UNIT HEIGHT	CHART NO. 51 UNIT SIZE RANGE, LENGTH OR WIDTH			
28"-29"			25'-26"	26'-53"
27"-28"			25'-30"	30'-60"
24"-27"			25'-33"	33'-66"
23"-24"		25'-28"	28'-42"	42'-66"
22"-23"		25'-29"	29'-44"	44'-66"
21"-22"		25'-31"	31'-46"	46'-66"
20"-21"		25'-32"	32'-48"	48'-66"
19"-20"	25'	25'-33"	33'-50"	50'-66"
18"-19"	25'	25'-34"	34'-51"	51'-66"
17"-18"	25'-26"	26'-35"	35'-53"	53'-66"
16"-17"	25'-27"	27'-36"	36'-54"	54'-66"
15"-16"	25'-28"	28'-37"	37'-56"	56'-66"
15"	25'-28"	28'-38"	38'-57"	57'-66"
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FOURTH TIER OF TYPE "C" STACKS.			

UNIT HEIGHT	CHART NO. 52 UNIT SIZE RANGE, LENGTH OR WIDTH			
23"			25'-27"	27'-54"
22"			25'-31"	31'-63"
20"		25'-26"	26'-39"	39'-66"
19"		25'-28"	28'-42"	42'-66"
18"		25'-30"	30'-45"	45'-66"
17"		25'-32"	32'-48"	48'-66"
16"	25'	25'-33"	33'-50"	50'-66"
15"	25'-26"	26'-34"	34'-52"	52'-66"
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FIFTH TIER OF TYPE "C" STACKS.			

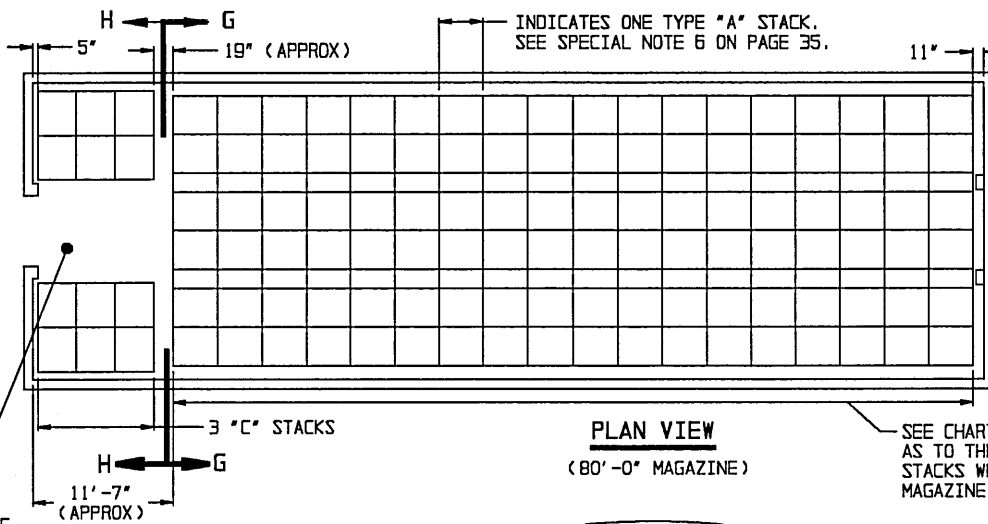
UNIT HEIGHT	CHART NO. 53 UNIT SIZE RANGE, LENGTH OR WIDTH			
19"		25'-28"	28'-56"	
18"		25'-33"	33'-68"	
16"	25'-28"	28'-42"	42'-66"	
15"	25'-30"	30'-45"	45'-66"	
UNIT HEIGHT	3	2	1	
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN SIXTH TIER OF TYPE "C" STACKS.			

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**STORAGE IN 80'-0" MAGAZINE**

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

ITEM	QUANTITY
SKIDDED UNIT	----- 267



INDICATES ONE TYPE "A" STACK.  
SEE SPECIAL NOTE 6 ON PAGE 35.

**PLAN VIEW**  
(80'-0" MAGAZINE)

SEE CHART NO. 65 ON PAGE 42 FOR GUIDANCE AS TO THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN AN 80'-0" MAGAZINE.

SEE SPECIAL NOTE 6 ON PAGE 35.

INDICATES THIRD TIER (LAYER).

SEE CHART NO. 56 THRU 58 ON PAGE 38 THRU 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR ONE THRU THREE TIERS.

INDICATES SECOND TIER (LAYER)

INDICATES FIRST TIER (LAYER)

**SECTION G-G**

(14 SKIDDED UNITS PER STACK)

SEE CHART NO. 66 THRU 71 ON PAGES 42 AND 43 FOR GUIDANCE AS TO THE NUMBER OF UNITS DEEP IN THE TYPE "C" STACKS IN THE FRONTAL AREA.

SEE CHART NO. 54 ON PAGE 38 FOR SIDE AISLE DIMENSIONS TO BE USED WITH UNITS OF OTHER LENGTHS AND WIDTHS.

INDICATES OUTLINE OF DOOR OPENING.

SEE GENERAL NOTE "G" ON PAGE 2.

SEE CHART NO. 55 ON PAGE 38 FOR SIDE AISLE DIMENSIONS FOR OTHER HEIGHT UNITS.

**SECTION H-H**

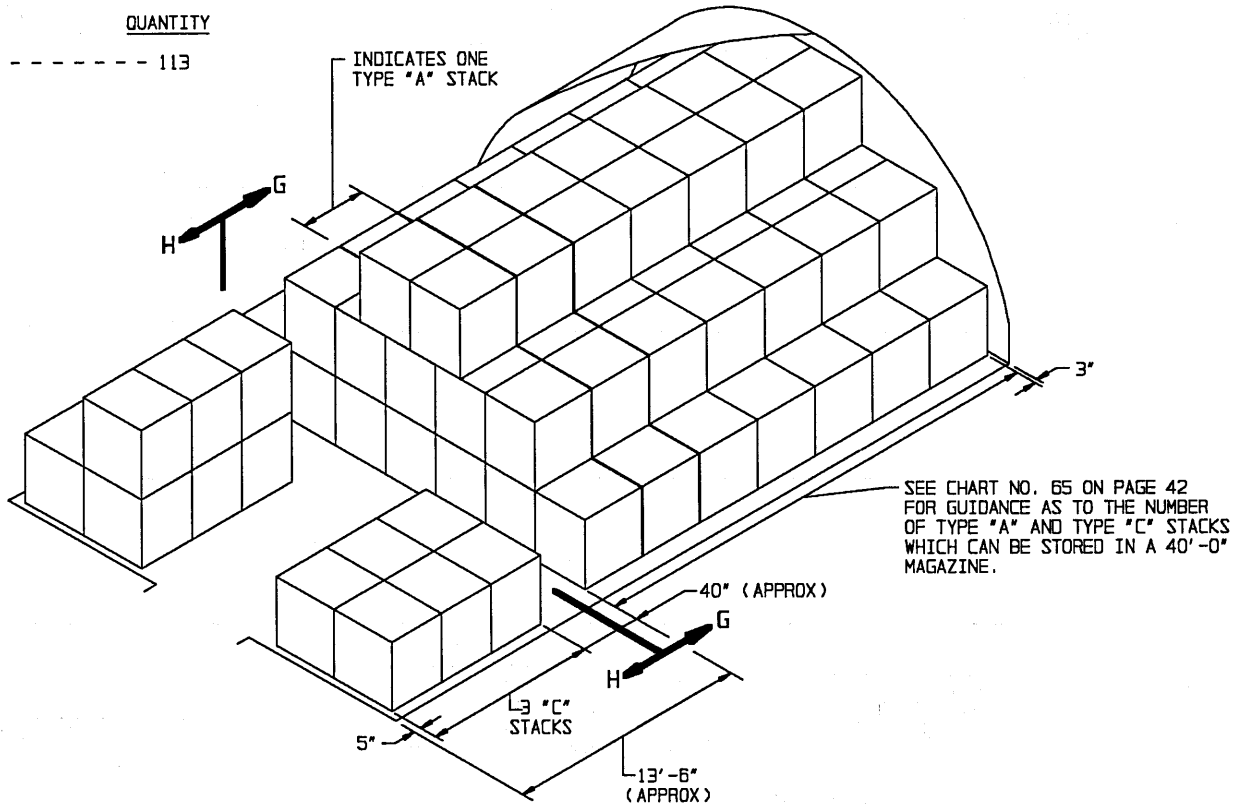
TYPICAL STORAGE PROCEDURES

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**

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

ITEM	QUANTITY
SKIDDED UNIT - - - - -	113



**ISOMETRIC VIEW**

(40'-0" MAGAZINE)

(SPECIAL NOTES CONTINUED)

- WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CREATED BOXES ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
- REFER TO PAGES 100 AND 101 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
- THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS.
- IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

**SPECIAL NOTES:**

- THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 38 THRU 43 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
- THE STORAGE VIEWS ON PAGE 34 AND ABOVE DEPICT SKIDDED UNITS STACKED IN STAGGERED/VERTICAL ALIGNMENT, CENTERED IN THE WIDTH OF THE MAGAZINE. THE TYPICAL STACKING PATTERN VIEWS ON PAGES 36 AND 37 DEPICT THE BOTTOM TIERS CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE UPPER TIERS IN SOME OF THOSE VIEWS ARE CENTERED (STAGGERED) OVER THE UNITS BELOW. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS NO. 58 THRU 64 ON PAGES 38 THRU 41 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INDICATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED. CHART NO. 65 ON PAGE 42 SPECIFIES THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN 80'-0" AND 40'-0" LONG MAGAZINES. CHART NO. 66 ON PAGE 42 SPECIFIES THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED ON EACH SIDE OF THE MAGAZINE IN THE BOTTOM TIER OF THE TYPE "C" STACKS IN THE FRONTAL AREA. NOTE THAT THOSE ON THE RIGHT SIDE MUST BE STORED BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. CHARTS NO. 67 THRU 71 ON PAGES 42 AND 43 SPECIFY THE NUMBER OF SKIDDED UNITS WHICH CAN BE STORED IN THE UPPER TIERS ON THE LEFT SIDE.
- SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).

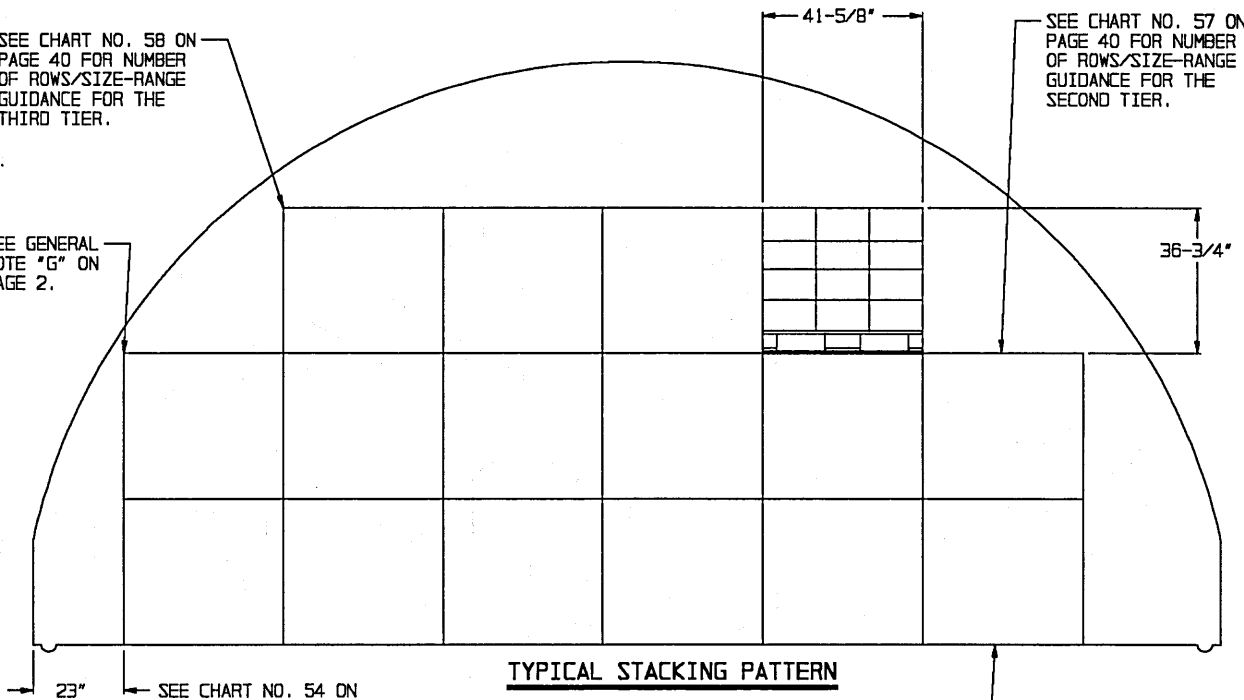
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TYPICAL STORAGE PROCEDURES  
IN 80'-0" AND 40'-0" L X 25'-0" W X 12'-1-3/4" H ARCH TYPE MAGAZINES

SEE CHART NO. 58 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE THIRD TIER.

SEE CHART NO. 57 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



**TYPICAL STACKING PATTERN**

SEE CHART NO. 54 ON PAGE 38 FOR SIDE AISLE DIMENSIONS TO BE USED WITH UNITS OF OTHER LENGTHS.

THE SKIDDED UNIT SHOWN IS 41-5/8" LONG BY 36-3/4" HIGH. THREE-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 35" BUT NOT MORE THAN 47" IN HEIGHT.

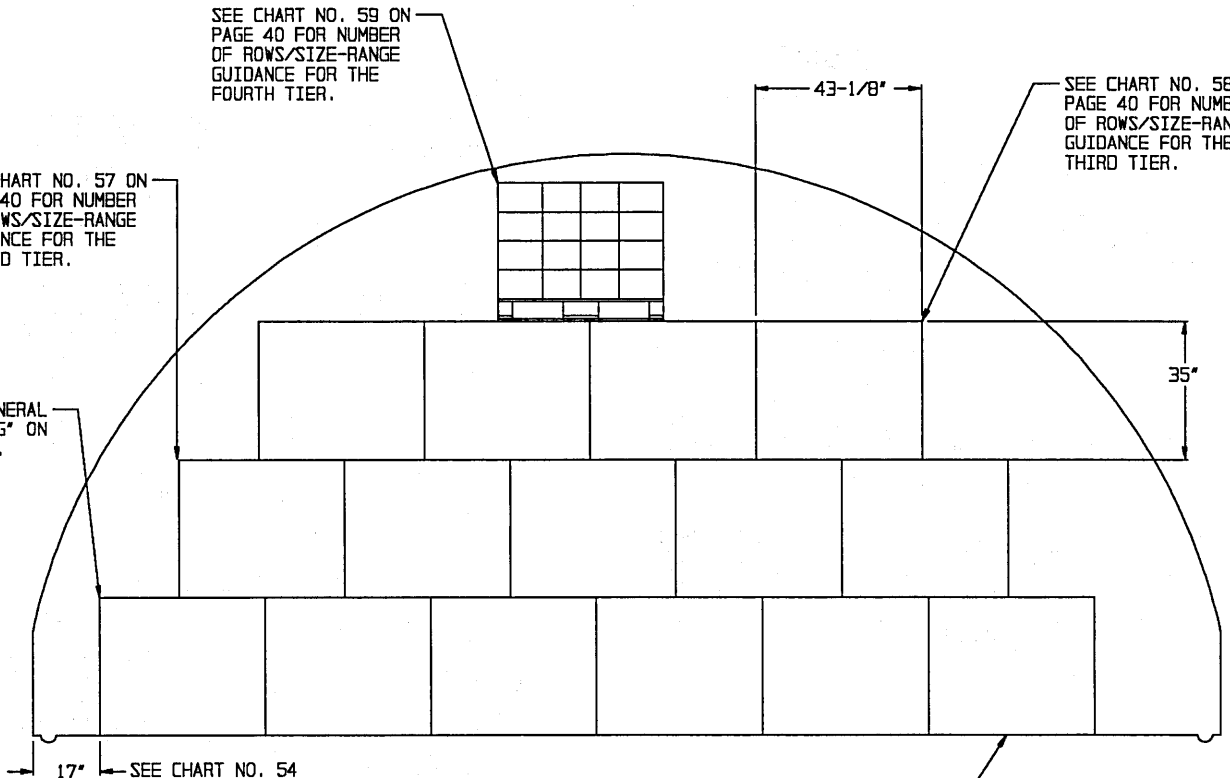
SEE CHART NO. 56 ON PAGE 38 FOR NUMBER OF ROW/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 59 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FOURTH TIER.

SEE CHART NO. 57 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE CHART NO. 58 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE THIRD TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



**TYPICAL STACKING PATTERN**

SEE CHART NO. 54 ON PAGE 38 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER LENGTH UNITS.

THE SKIDDED UNIT SHOWN IS 43-1/8" LONG BY 35" HIGH. FOUR-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 28" BUT NOT MORE THAN 35" IN HEIGHT.

SEE CHART NO. 56 ON PAGE 38 FOR NUMBER OF ROW/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.



SEE CHART NO. 58 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE THIRD TIER.

SEE SPECIAL NOTE 4 ON PAGE 35.

SEE CHART NO. 57 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE GENERAL NOTE "G" ON PAGE 2.

21"

36-3/4"

41-1/4"

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 36-3/4" WIDE BY 41-1/4" HIGH. THREE TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 35" BUT NOT MORE THAN 47" IN HEIGHT.

SEE CHART NO. 56 ON PAGE 38 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 54 ON PAGE 38 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

SEE CHART NO. 57 ON PAGE 40 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE SECOND TIER.

SEE SPECIAL NOTE 4 ON PAGE 35.

SEE GENERAL NOTE "G" ON PAGE 2.

17"

44"

49-3/8"

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 44" WIDE BY 49-3/8" HIGH. TWO-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS OVER 47" IN HEIGHT.

SEE CHART NO. 56 ON PAGE 38 FOR NUMBER OF ROWS/SIZE-RANGE GUIDANCE FOR THE FIRST TIER.

SEE CHART NO. 54 ON PAGE 38 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

**SPECIAL NOTES:**

(SPECIAL NOTES CONTINUED)

- THE CHARTS ON THIS PAGE THRU PAGE 43 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN ARCH TYPE MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
- THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" ON PAGE 39.

**STEP 1**

LOCATE IN CHART NO. 54 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST TIER OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE MAGAZINE. TWO DIMENSIONS ARE GIVEN, THE SMALLER ONE MAY BE USED PROVIDING THAT FIGURE IS AT LEAST AS GREAT AS THE MINIMUM SIDE AISLE DIMENSION SPECIFIED IN CHART NO. 55 FOR THE HEIGHT OF THE UNIT BEING STORED. IF THE SMALLER DIMENSION IS LESS THAN THE DIMENSION SPECIFIED BY CHART NO. 55, IT IS OPTIONAL WHETHER THE LARGER DIMENSION IN CHART NO. 54 OR THE MINIMUM DIMENSION SPECIFIED BY CHART NO. 55 BE USED.

**STEP 2**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 56 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE, LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE FIRST TIER (LAYER).

(CONTINUED AT RIGHT)

**STEP 3**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 57 ON PAGE 40 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE SECOND TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS THE SAME IN BOTH TIERS, POSITION UNITS DIRECTLY ABOVE ALL FIRST TIER UNITS.

**STEP 4**

REPEAT STEP 3 FOR CHARTS 58 THRU 64, AS APPLICABLE, FOR THE THIRD THRU NINTH TIERS.

**STEP 5**

LOCATE IN THE UNIT DIMENSION COLUMN IN CHART NO. 65 THE LENGTH OR WIDTH AS APPLICABLE FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAT CAN BE POSITIONED IN EITHER AN 80'-0" OR 40'-0" LONG MAGAZINE. SEE SPECIAL NOTE 6 ON PAGE 35 FOR THE CRITERIA USED IN DETERMINING THE NUMBER OF "A" STACKS SPECIFIED WITHIN THE CHART.

(CONTINUED ON PAGE 39)

CHART NO. 54			
UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	12" OR 24"	46"	11" OR 34"
26"	6" OR 19"	47"	8" OR 31"
27"	14" OR 27"	48"	29"
28"	9" OR 23"	49"	27"
29"	19" OR 33"	50"	24"
30"	14" OR 29"	51"	22"
31"	10" OR 25"	52"	19"
32"	21" OR 37"	53"	17" OR 43"
33"	17" OR 33"	54"	14" OR 41"
34"	13" OR 30"	55"	12" OR 39"
35"	9" OR 26"	56"	9" OR 37"
36"	11" OR 29"	57"	7" OR 35"
37"	20" OR 38"	58"	7" OR 36"
38"	16" OR 35"	59"	31"
39"	13" OR 32"	60"	29"
40"	9" OR 29"	61"	27"
41"	6" OR 26"	62"	25"
42"	23" OR 44"	63"	23"
43"	20" OR 42"	64"	21"
44"	17" OR 39"	65"	19"
45"	14" OR 36"	66"	17"

UNIT HEIGHT	CHART NO. 56							
	UNIT SIZE RANGE, LENGTH OR WIDTH							
56"	25'-27"	27'-30"	30'-34"	34'-38"	38'-45"	45'-54"	54'-66"	
54"	25'-27"	27'-30"	30'-34"	34'-39"	39'-45"	45'-54"	54'-66"	
51"	25'-27"	27'-30"	30'-35"	35'-39"	39'-46"	46'-55"	55'-66"	
47"	25'-27"	27'-30"	30'-35"	35'-39"	39'-46"	46'-55"	55'-66"	
46"	25"	25'-27"	27'-30"	30'-35"	35'-40"	40'-46"	46'-55"	55'-66"
44"	25"	25'-28"	28'-31"	31'-35"	35'-40"	40'-47"	47'-56"	56'-66"
36"	25'-26"	26'-28"	28'-32"	32'-36"	36'-40"	40'-47"	47'-56"	56'-66"
15'-34"	25'-26"	26'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4
	NUMBER OF ROWS WIDE IN FIRST TIER OF TYPE "A" STACKS.							

● USE UNIT LENGTH DIMENSION IF THE BOXES WITHIN THE UNIT ARE GOING TO BE LENGTHWISE IN THE MAGAZINE.

CHART NO. 55	
UNIT HEIGHT	MINIMUM LEFT SIDE AISLE
54'-56'	12'
51'-54'	10'
48'-51'	9'
45'-48'	8'
42'-45'	7'
15'-42'	6'

STEP 6

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 66 ON PAGE 42 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT OF THE UNIT TO BE STORED. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE DIMENSION OF THE UNIT TO BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE. THE HEADING AT THE BASE OF THAT COLUMN WILL INDICATE THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED AT EACH SIDE OF THE DOOR OPENING IN THE FIRST TIER OF A TYPE "C" STACK.

STEP 7

REPEAT STEP 6 FOR CHARTS 67 THRU 71 AS APPLICABLE, TO DETERMINE THE NUMBER OF UNITS DEEP WHICH CAN BE STACKED ON THE LEFT SIDE OF THE DOOR IN THE SECOND THRU SIXTH TIER.

EXAMPLE:

A UNIT WHICH IS 41-5/8" LONG BY 42" WIDE BY 36-3/4" HIGH HAS BEEN SELECTED FOR THE EXAMPLE, AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE TOP OF PAGE 36. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 54 THRU 58 AND 65, FOR THE TYPE "A" STACKS, IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED, STARTING ON PAGE 38.

THE 41-5/8" DIMENSION IS NOT INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 54, SO 42" WILL BE USED, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. THE SIDE AISLE DIMENSION OF 23" IS INDICATED IN THE SECOND COLUMN OF THE CHART. THIS DIMENSION IS GREATER THAN THE 6" MINIMUM DIMENSION SPECIFIED OPPOSITE THE INDICATED HEIGHT OF 15' TO 42" IN CHART NO. 55. THEREFORE, THE 23" SIDE AISLE WILL BE USED IF THE UNITS ARE TO BE CENTERED IN THE WIDTH OF THE MAGAZINE. IN THE LEFT HAND COLUMN OF CHART NO. 56, USE THE 44" HEIGHT AS THE UNIT HEIGHT OF 36-3/4" IS GREATER THAN 36" AND THE NEXT HEIGHT LISTED IS 44". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION INDICATED AS 40"-47". FOLLOW THE ARROW DOWNWARD TO THE NUMERAL IN THE HEADING OF THE COLUMN THAT SPECIFIES 6 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN THE FIRST TIER. FOLLOWING THE SAME PROCEDURE, CHART NO. 57 SPECIFIES THAT 6 UNITS CAN BE STORED IN THE SECOND TIER AND CHART NO. 58 SPECIFIES THAT 4 UNITS CAN BE STORED IN THE THIRD TIER. THE ABSENCE OF THE 41-5/8" HEIGHT DIMENSION FROM THE LEFT HAND COLUMN OF CHART NO. 59 INDICATES THAT THREE TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN A MAGAZINE, THE 42" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 65, WHICH AGAIN COULD REPRESENT THE UNIT LENGTH OR WIDTH. FOLLOWING THE ARROWS TO THE RIGHT SPECIFIES THAT 19 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 80'-0" MAGAZINE, 8 AND 2 TYPE "A" AND "C" STACKS, RESPECTIVELY, CAN BE STORED IN A 40' MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP IN THE FIRST TIER AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, REFER TO CHART NO. 66 ON PAGE 42. THE UNIT HEIGHT OF 36-3/4" FALLS WITHIN THE 15'-42" RANGE IN THE LEFT HAND COLUMN. FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE UNIT DIMENSION INDICATED AS 33"-44". FOLLOW THE ARROWS DOWNWARD TO THE NUMERALS IN THE HEADING OF THE COLUMN THAT SPECIFIES 3 UNITS CAN BE POSITIONED ON THE LEFT SIDE OF THE DOOR OPENING, AND TWO ON THE RIGHT SIDE. THOSE ON THE RIGHT SIDE BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. FOLLOWING THE SAME PROCEDURES, CHART NO. 67 SPECIFIES 2 UNIT CAN BE STORED IN THE SECOND TIER AND CHART NO. 68 INDICATES THAT ONE UNIT CAN BE STORED IN THE THIRD TIER. SEE SPECIAL NOTE 3 BELOW.

3. SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 65 THRU 71, IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF SKIDDED UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 65 ON PAGE 42 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

UNIT HEIGHT	CHART NO. 57									
	UNIT SIZE RANGE, LENGTH OR WIDTH									
56" MAX										
54										
53"										
52"										
51"										
50"										
49"										
48"										
47"										
46"										
45"										
44"										
43"										
41"										
40"										
39"										
37"										
35"										
34"										
33"										
32"										
31"										
29"										
27"										
25"										
23"										
22"										
18"										
15'-17"										
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2

UNIT HEIGHT	CHART NO. 58										
	UNIT SIZE RANGE, LENGTH OR WIDTH										
47" MAX											
45"											
44"											
43"											
42"											
41"											
40"											
39"											
38"											
37"											
36"											
35"											
34"											
33"											
32"											
31"											
30"											
29"											
28"											
27"											
26"											
25"											
24"											
23"											
22"											
21"											
20"											
19"											
18"											
17"											
15'											
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1

UNIT HEIGHT	CHART NO. 59									
	UNIT SIZE RANGE, LENGTH OR WIDTH									
35" MAX										
34"										
33"										
32"										
31"										
30"										
29"										
28"										
27"										
26"										
25"										
24"										
23"										
22"										
21"										
20"										
19"										
18"										
17"										
16"										
15"										
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1

UNIT HEIGHT	CHART NO. 60										
	UNIT SIZE RANGE, LENGTH OR WIDTH										
28" MAX								25'	25'-34'	25'-34'	34'-66"
27'								25'	25'-34'	34'-51'	51'-66"
26"							25'	25'-31'	31'-42'	42'-63'	63'-66"
25'							25'-28"	28'-36"	36'-48"	48'-66"	
24"							25'-27'	27'-32'	32'-40"	40'-54"	54'-66"
23"							25'	25'-29"	29'-35"	35'-44"	44'-58"
22"							25'-26"	26'-31'	31'-37"	37'-47"	47'-62"
21"							25'	25'-28"	28'-33"	33'-40"	40'-50"
20"							25'-26"	26'-30"	30'-35"	35'-42"	42'-52"
19"							25'-27'	27'-31"	31'-36"	36'-44"	44'-55"
18"							25'	25'-28"	28'-32"	32'-38"	38'-45"
17"							25'-26"	26'-29"	29'-33"	33'-39"	39'-47"
16"							25'-26"	26'-30"	30'-35"	35'-40"	40'-49"
15"							25'	25'-27'	27'-31"	31'-35"	35'-41"
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	
	NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.										

UNIT HEIGHT	CHART NO. 61										
	UNIT SIZE RANGE, LENGTH OR WIDTH										
23" MAX								25'-29"	29'-39"	35'-43'	43'-66"
22'							25'-28"	28'-35"	35'-47"	39'-58"	58'-66"
21"							25'-26"	26'-32"	32'-40"	47'-66"	
20"							25'	25'-29"	29'-35"	35'-44"	53'-66"
19"							25'-27'	27'-32"	32'-38"	44'-58"	58'-66"
18"							25'	25'-28"	28'-34"	38'-48"	64'-66"
17"							25'	25'-28"	29'-34"	34'-41"	41'-51"
16"							25'-27'	27'-30"	30'-36"	41'-51"	51'-66"
15"							25'	25'-28"	28'-32"	36'-43"	43'-54"
UNIT HEIGHT	9	8	7	6	5	4	3	2	1		
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.										

UNIT HEIGHT	CHART NO. 63					
	UNIT SIZE RANGE, LENGTH OR WIDTH					
17" MAX						
16"						
15"						
UNIT HEIGHT	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN EIGHTH TIER OF TYPE "A" STACKS.					

UNIT HEIGHT	CHART NO. 64		
	UNIT SIZE RANGE, LENGTH OR WIDTH		
15" MAX			
UNIT HEIGHT	3	2	1
	NUMBER OF ROWS WIDE IN NINTH TIER OF TYPE "A" STACKS.		

UNIT HEIGHT	CHART NO. 62							
	UNIT SIZE RANGE, LENGTH OR WIDTH							
20" MAX								
19"								
18"								
17"								
16"								
15"								
UNIT HEIGHT	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.							

CHART NO. 65

UNIT DIMENSION LENGTHWISE IN MAGAZINE	80'-0" X 25'-0" X 12'-1-3/4" ARCH TYPE MAGAZINE *				40'-0" X 25'-0" X 12'-1-3/4" ARCH TYPE MAGAZINE **			
	"A" STACKS		"C" STACKS		"A" STACKS		"C" STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN	NO.	MHE AISLE	NO.	SPACE REMAIN
	66"	12	13'-1"	2	20"	4	17'-9"	3
65"	12	14'-1"	2	34"	4	18'-1"	3	17"
64"	12	15'-1"	2	48"	5	13'-1"	2	24"
63"	12	16'-1"	2	62"	5	13'-6"	2	31"
62"	12	17'-1"	2	14"	5	13'-11"	2	38"
61"	13	13'-0"	2	29"	5	14'-4"	2	45"
60"	13	14'-1"	2	44"	5	14'-9"	2	52"
59"	13	15'-2"	2	59"	5	15'-2"	2	59"
58"	13	16'-3"	2	16"	5	15'-7"	2	66"
57"	14	12'-7"	2	32"	5	16'-0"	3	16"
56"	14	13'-9"	2	48"	5	16'-5"	3	29"
55"	14	14'-11"	3	9"	6	12'-3"	2	32"
54"	14	15'-11"	3	26"	6	12'-9"	2	42"
53"	15	12'-8"	2	46"	6	13'-3"	2	50"
52"	15	13'-11"	2	8"	6	13'-9"	2	6"
51"	15	15'-2"	3	26"	6	14'-3"	2	15"
50"	16	12'-5"	2	44"	6	14'-9"	3	24"
49"	16	13'-7"	3	13"	6	15'-3"	3	33"
48"	16	14'-11"	3	32"	7	11'-9"	2	42"
47"	17	12'-4"	2	51"	7	12'-4"	2	51"
46"	17	13'-9"	3	24"	7	12'-11"	2	14"
45"	18	11'-5"	2	44"	7	13'-6"	3	24"
44"	18	12'-11"	3	20"	7	14'-1"	3	34"
43"	18	14'-5"	3	41"	7	14'-8"	3	44"
42"	19	12'-5"	3	20"	8	11'-9"	2	12"
41"	19	14'-0"	3	42"	8	12'-5"	3	23"
40"	20	12'-3"	3	24"	8	13'-1"	3	34"
39"	20	13'-11"	3	8"	8	13'-9"	3	36"
38"	21	12'-5"	3	32"	9	11'-3"	3	18"
37"	22	11'-1"	3	19"	9	12'-0"	3	30"
36"	22	12'-11"	3	8"	9	12'-9"	3	36"
35"	23	11'-10"	3	34"	9	13'-6"	4	19"
34"	24	11'-1"	3	26"	10	11'-5"	3	30"
33"	24	13'-1"	4	20"	10	12'-3"	4	15"
32"	25	12'-5"	4	16"	10	13'-1"	4	24"
31"	26	11'-11"	4	14"	11	11'-4"	3	38"
30"	27	11'-7"	4	14"	11	12'-3"	4	22"
29"	28	11'-5"	4	16"	11	13'-2"	4	37"
28"	29	11'-5"	4	20"	12	11'-9"	4	24"
27"	30	11'-7"	4	26"	12	12'-9"	5	13"
26"	31	11'-11"	4	34"	13	11'-7"	4	30"
25"	32	12'-5"	5	19"	13	12'-8"	5	22"

\* MAGAZINE HAVING PILASTERS  
 \*\* MAGAZINE W/O PILASTERS

CHART NO. 67

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH				
54"-56"	25"	25'-26"	26'-39"	39'-66"	
53"-54"		25'-28"	28'-42"	42'-66"	
52"-53"		25'-29"	29'-43"	43'-66"	
51"-52"		25'-29"	29'-44"	44'-66"	
50"-51"		25'-30"	30'-45"	45'-66"	
49"-50"		25'-31"	31'-46"	46'-66"	
48"-49"		25'-31"	31'-47"	47'-66"	
47"-48"		25'-32"	32'-48"	48'-66"	
46"-47"		25'-32"	32'-49"	49'-66"	
45"-46"	25"	25'-33"	33'-50"	50'-66"	
44"-45"	25"	25'-34"	34'-51"	51'-66"	
42"-44"	25"	25'-26"	26'-34"	34'-52"	52'-66"
41"-42"	25"	25'-26"	26'-35"	35'-53"	53'-66"
40"-41"	25"	25'-27"	27'-36"	36'-54"	54'-66"
38"-40"	25"	25'-27"	27'-36"	36'-55"	55'-66"
37"-38"	25"	25'-28"	28'-37"	37'-56"	56'-66"
35"-37"	25"	25'-28"	28'-38"	38'-57"	57'-66"
34"-35"	25"	25'-29"	29'-38"	38'-58"	58'-66"
33"-34"	25"	25'-29"	29'-39"	39'-58"	58'-66"
31"-33"	25"	25'-29"	29'-39"	39'-59"	59'-66"
29"-31"	25"	25'-30"	30'-40"	40'-60"	60'-66"
25"-29"	25"	25'-30"	30'-41"	41'-61"	61'-66"
22"-25"	25"	25'-31"	31'-42"	42'-63"	63'-66"
17"-22"	25"	25'-32"	32'-43"	43'-64"	64'-66"
15"-17"	25"	25'-26"	26'-33"	33'-44"	44'-66"
UNIT HEIGHT	5	4	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN SECOND TIER OF TYPE "C" STACKS.				

CHART NO. 68

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH				
42"-43"				25'-26"	26'-53"
41"-42"				25'-29"	29'-58"
40"-41"				25'-31"	31'-63"
36"-40"				25'-34"	34'-66"
35"-36"			25'-28"	28'-42"	42'-66"
34"-35"			25'-29"	29'-44"	44'-66"
33"-34"			25'-30"	30'-45"	45'-66"
32"-33"			25'-32"	32'-48"	48'-66"
31"-32"			25'-32"	32'-48"	48'-66"
30"-31"			25'-33"	33'-49"	49'-66"
29"-30"	25"	25'-34"	34'-51"	51'-66"	
28"-29"	25"	25'-26"	26'-34"	34'-52"	52'-66"
27"-28"	25"	25'-26"	26'-35"	35'-53"	53'-66"
26"-27"	25"	25'-27"	27'-36"	36'-54"	54'-66"
25"-26"	25"	25'-27"	27'-37"	37'-55"	55'-66"
24"-25"	25"	25'-28"	28'-37"	37'-56"	56'-66"
23"-24"	25"	25'-28"	28'-38"	38'-57"	57'-66"
22"-23"	25"	25'-29"	29'-38"	38'-58"	58'-66"
21"-22"	25"	25'-29"	29'-39"	39'-59"	59'-66"
19"-21"	25"	25'-30"	30'-40"	40'-60"	60'-66"
17"-19"	25"	25'-30"	30'-41"	41'-61"	61'-66"
15"-17"	25"	25'-31"	31'-42"	42'-63"	63'-66"
UNIT HEIGHT	5	4	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN THIRD TIER OF TYPE "C" STACKS.				

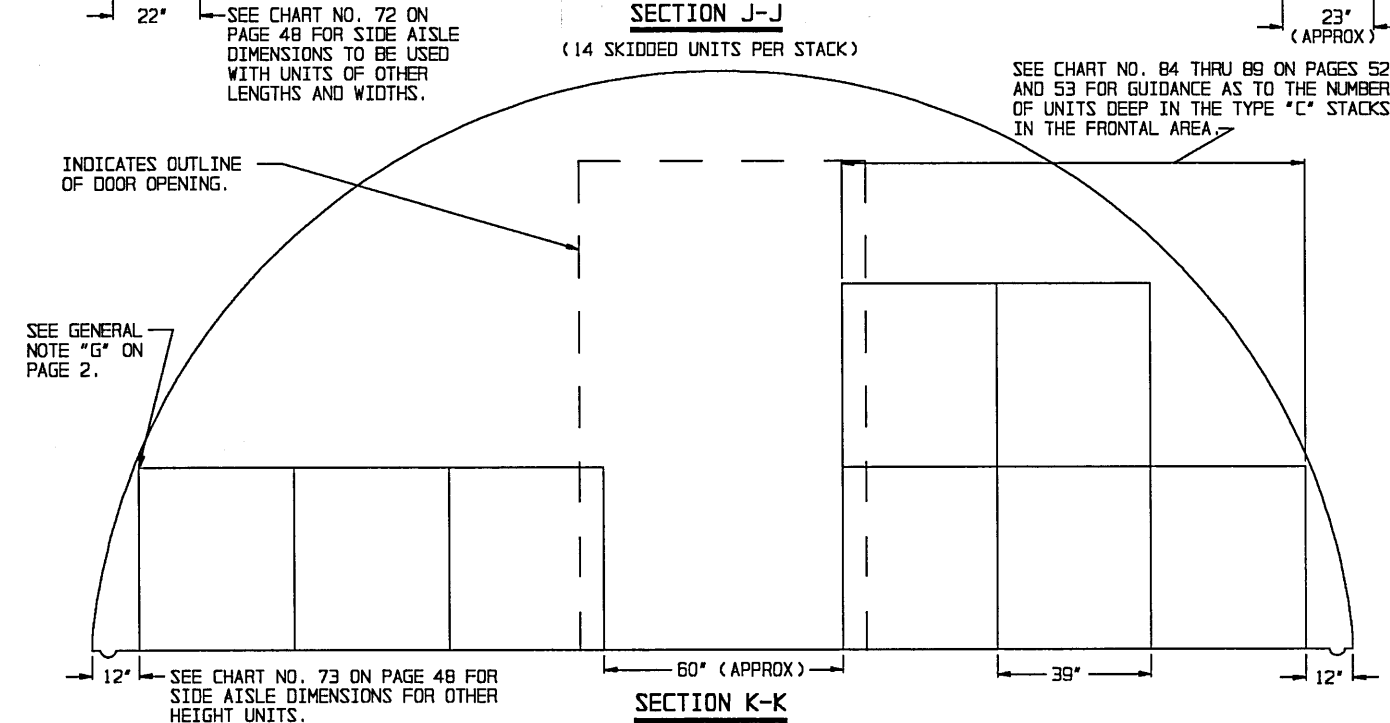
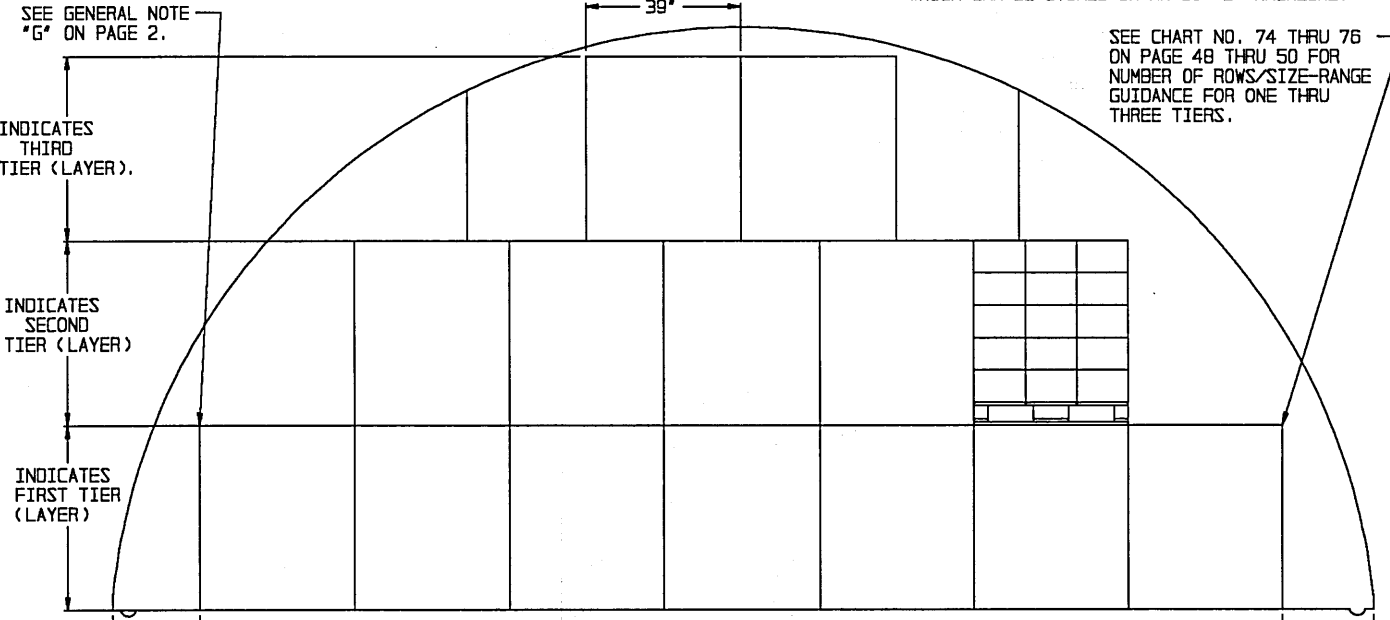
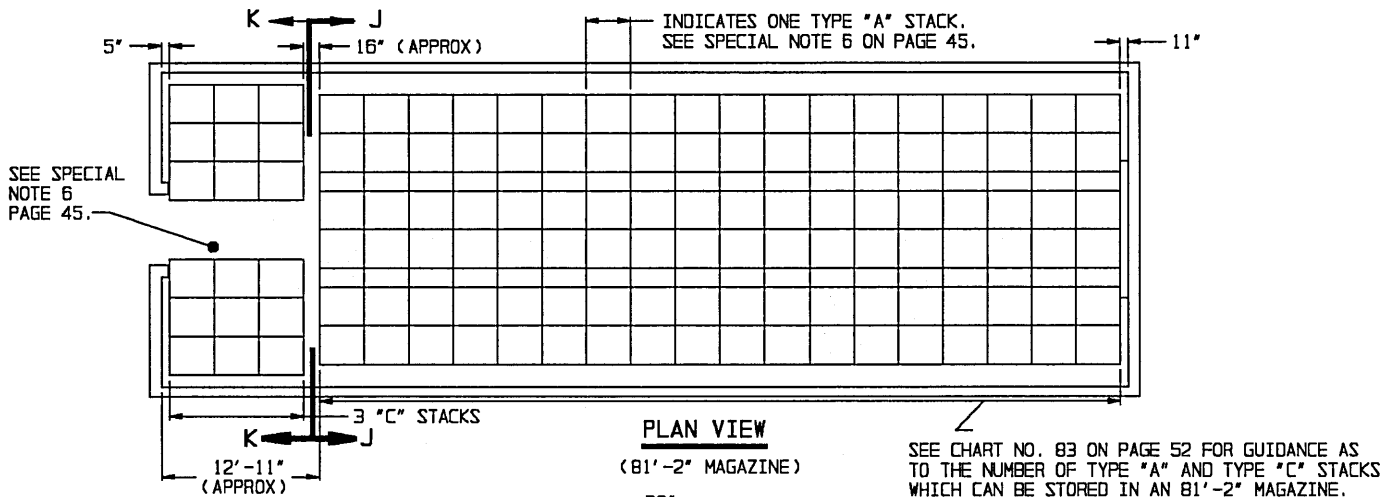
CHART NO. 66

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH				
51"-56"	25"	25'-31"	31'-42"	42'-54"	54'-63"
42"-51"	25"	25'-32"	32'-43"	43'-55"	55'-64"
15"-42"	25"	25'-26"	26'-33"	33'-44"	44'-57"
UNIT HEIGHT	5 AND 3	4 AND 2	3 AND 2	2 AND 2	1 AND 1
	NUMBER OF SKIDDED UNITS DEEP IN FIRST TIER OF TYPE "C" STACKS.				

UNIT HEIGHT	CHART NO. 69			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
31'-32'			25'-27'	27'-55'
27'-31'			25'-30'	30'-61'
26'-27'		25'-28'	28'-42'	42'-66'
25'-26'		25'-29'	29'-44'	44'-66'
24'-25'		25'-31'	31'-46'	46'-66'
23'-24'		25'-32'	32'-48'	48'-66'
22'-23'	25'	25'-33'	33'-50'	50'-66'
21'-22'	25'-26'	26'-34'	34'-52'	52'-66'
20'-21'	25'-26'	26'-35'	35'-53'	53'-66'
19'-20'	25'-27'	27'-36'	36'-55'	55'-66'
18'-19'	25'-28'	28'-37'	37'-56'	56'-66'
17'-18'	25'-28'	28'-38'	38'-57'	57'-66'
16'-17'	25'-29'	29'-39'	39'-58'	58'-66'
15'-16'	25'-29'	29'-39'	39'-59'	59'-66'
15'	25'-30'	30'-40'	40'-61'	61'-66'
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FOURTH TIER OF TYPE "C" STACKS			

UNIT HEIGHT	CHART NO. 70			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
25'-26'			25'	25'-51'
24'-25'			25'-30'	30'-60'
22'-24'			25'-34'	34'-66'
21'-22'		25'-27'	27'-41'	41'-66'
20'-21'		25'-29'	29'-44'	44'-66'
19'-20'		25'-31'	31'-46'	46'-66'
18'-19'		25'-32'	32'-49'	49'-66'
17'-18'	25'	25'-34'	34'-51'	51'-66'
16'-17'	25'-26'	26'-35'	35'-53'	53'-66'
15'-16'	25'-27'	27'-36'	36'-55'	55'-66'
15'	25'-28'	28'-37'	37'-56'	56'-66'
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FIFTH TIER OF TYPE "C" STACKS			

UNIT HEIGHT	CHART NO. 71			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
21'			25'-29'	29'-58'
20'			25'-34'	34'-66'
18'		25'-28'	28'-42'	42'-66'
17'		25'-30'	30'-45'	45'-66'
16'		25'-32'	32'-48'	48'-66'
15'	25'	25'-34'	34'-51'	51'-66'
UNIT HEIGHT	4	3	2	1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN SIXTH TIER OF TYPE "C" STACKS			

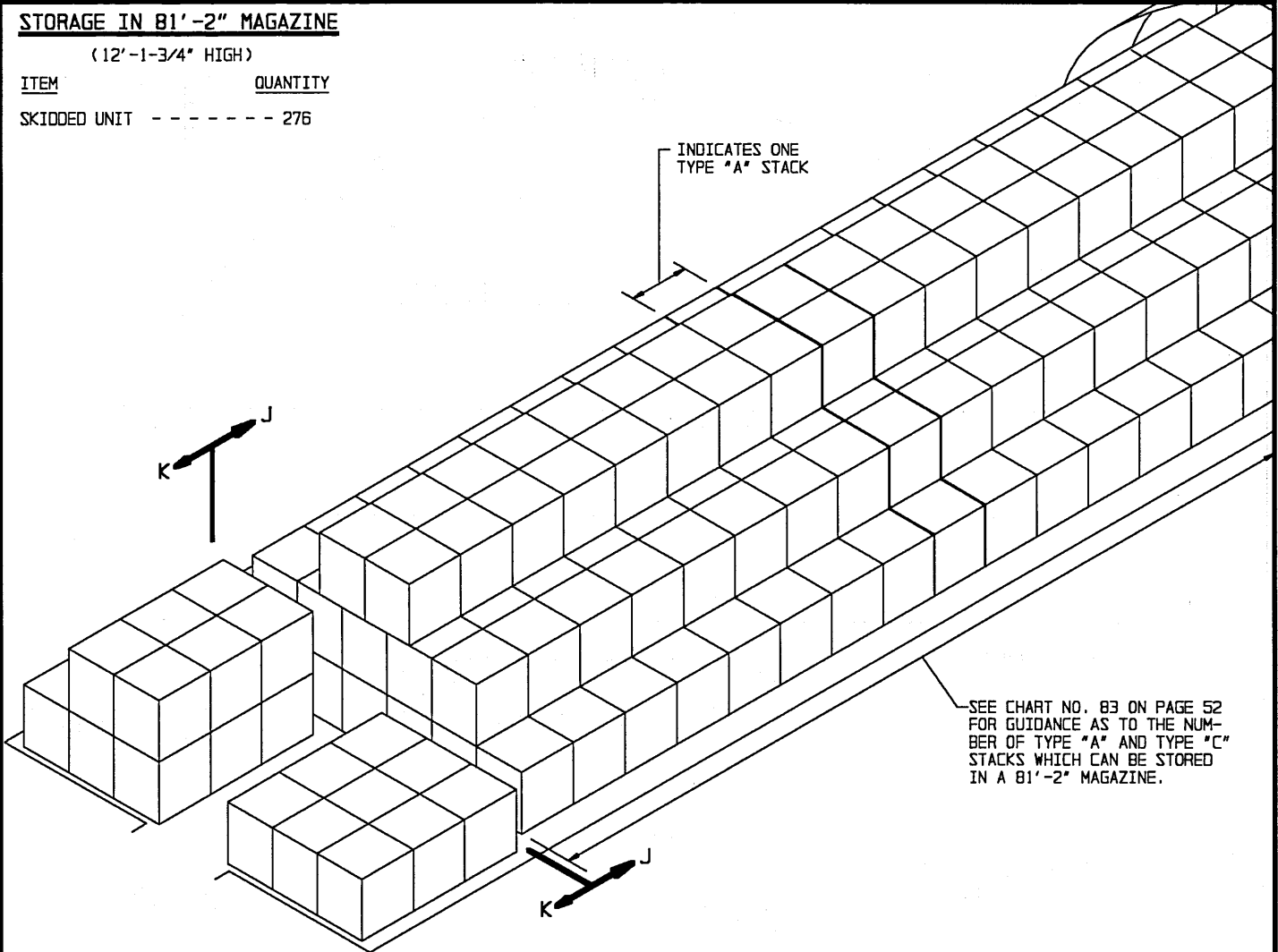




**STORAGE IN 81'-2" MAGAZINE**

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

ITEM	QUANTITY
SKIDDED UNIT - - - - -	276



**ISOMETRIC VIEW**  
(81'-2" MAGAZINE)

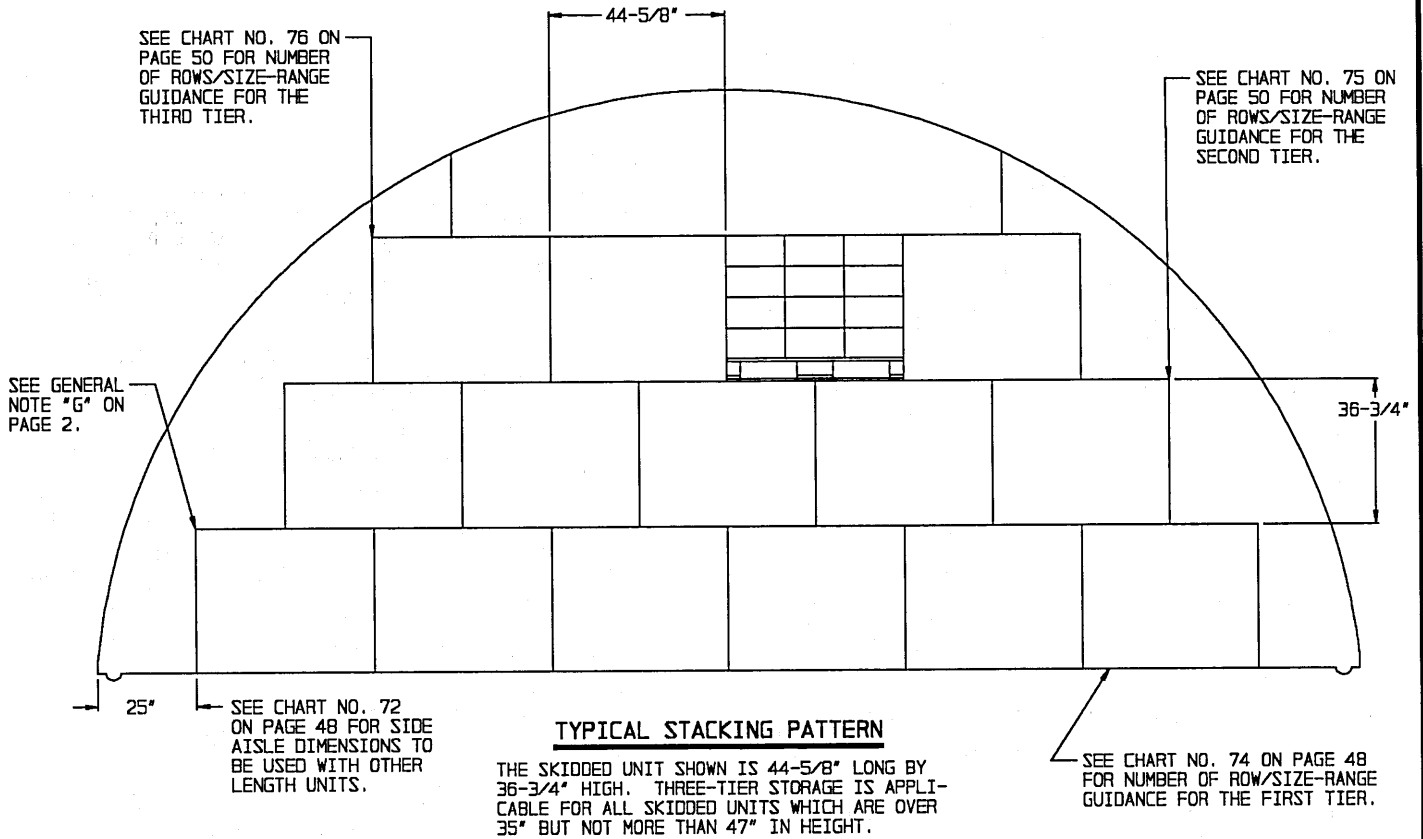
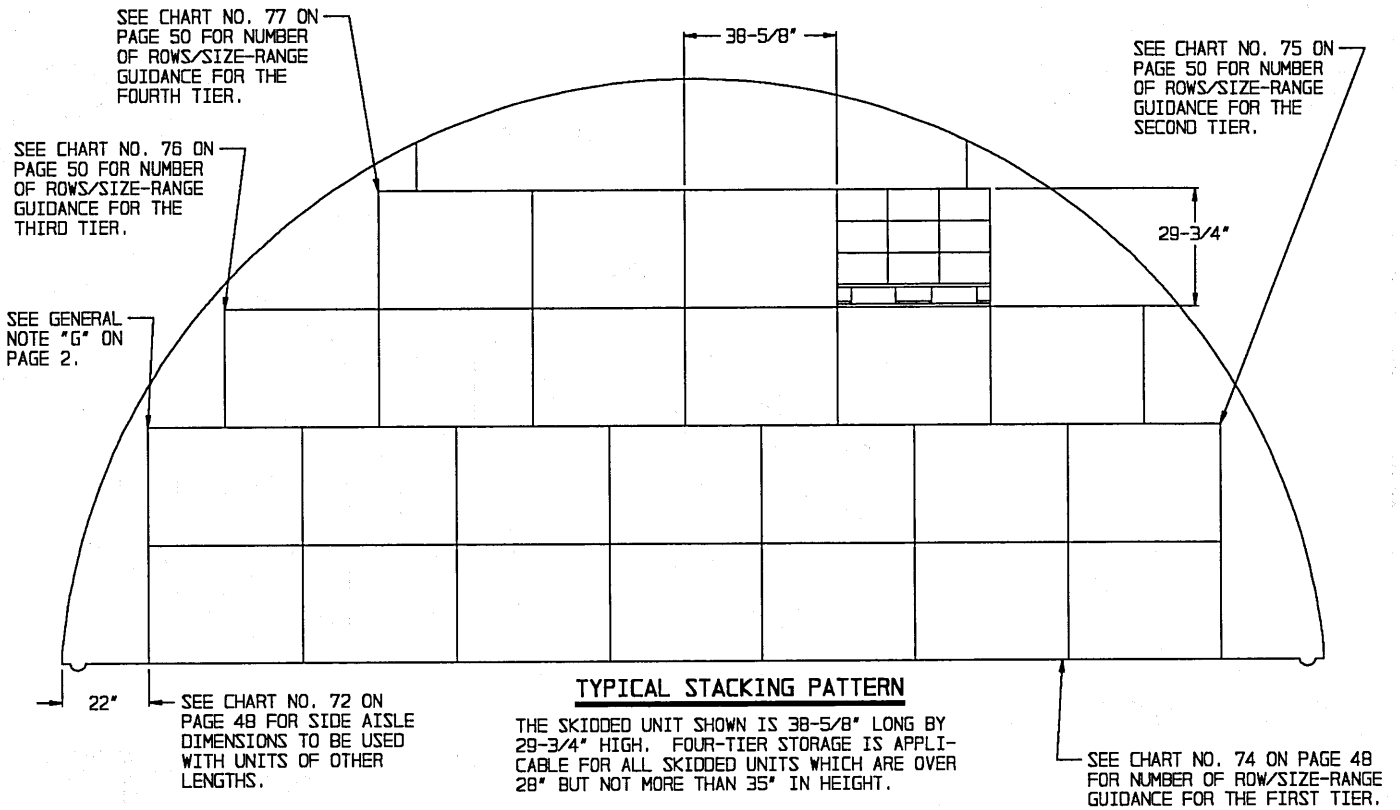
(SPECIAL NOTES CONTINUED)

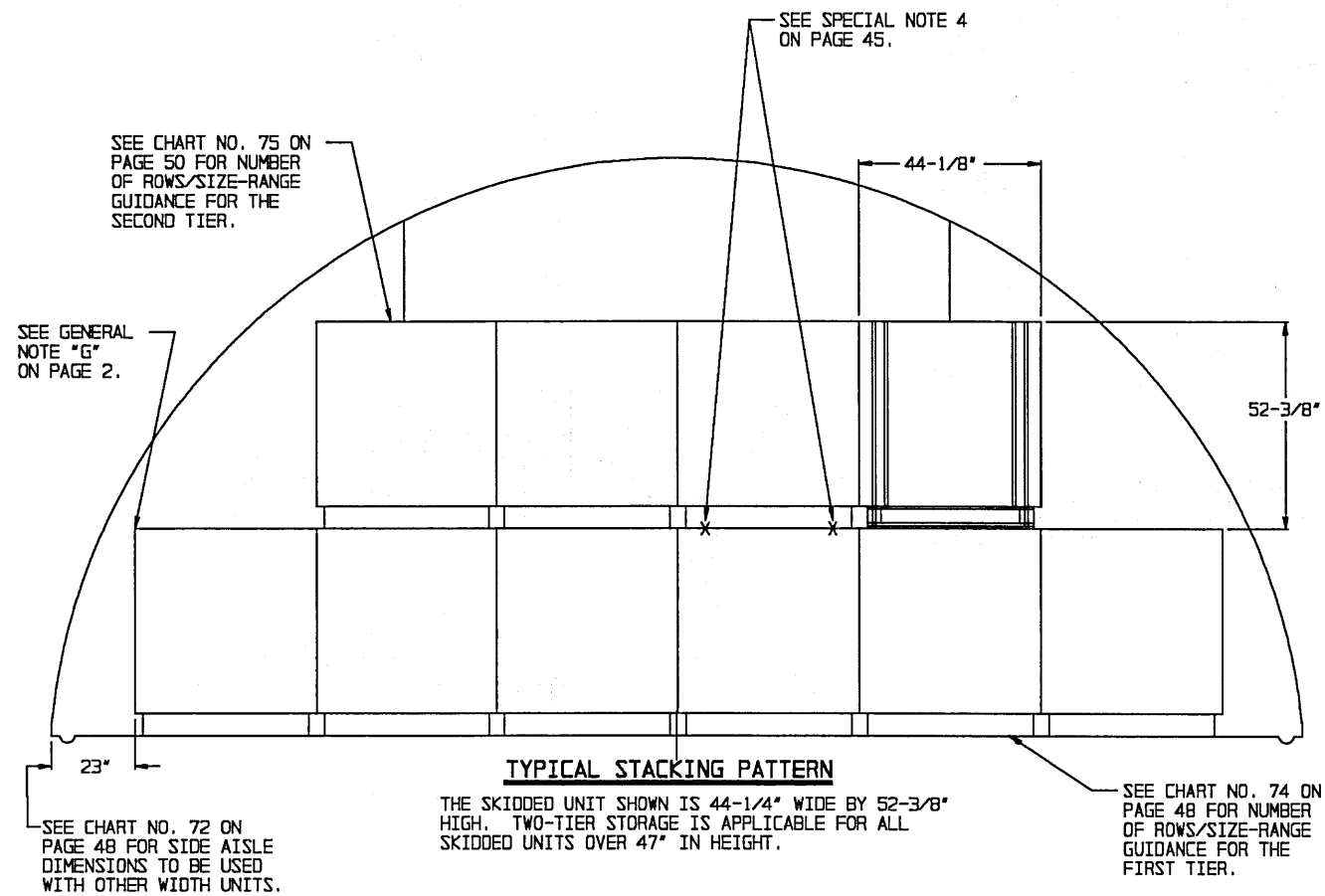
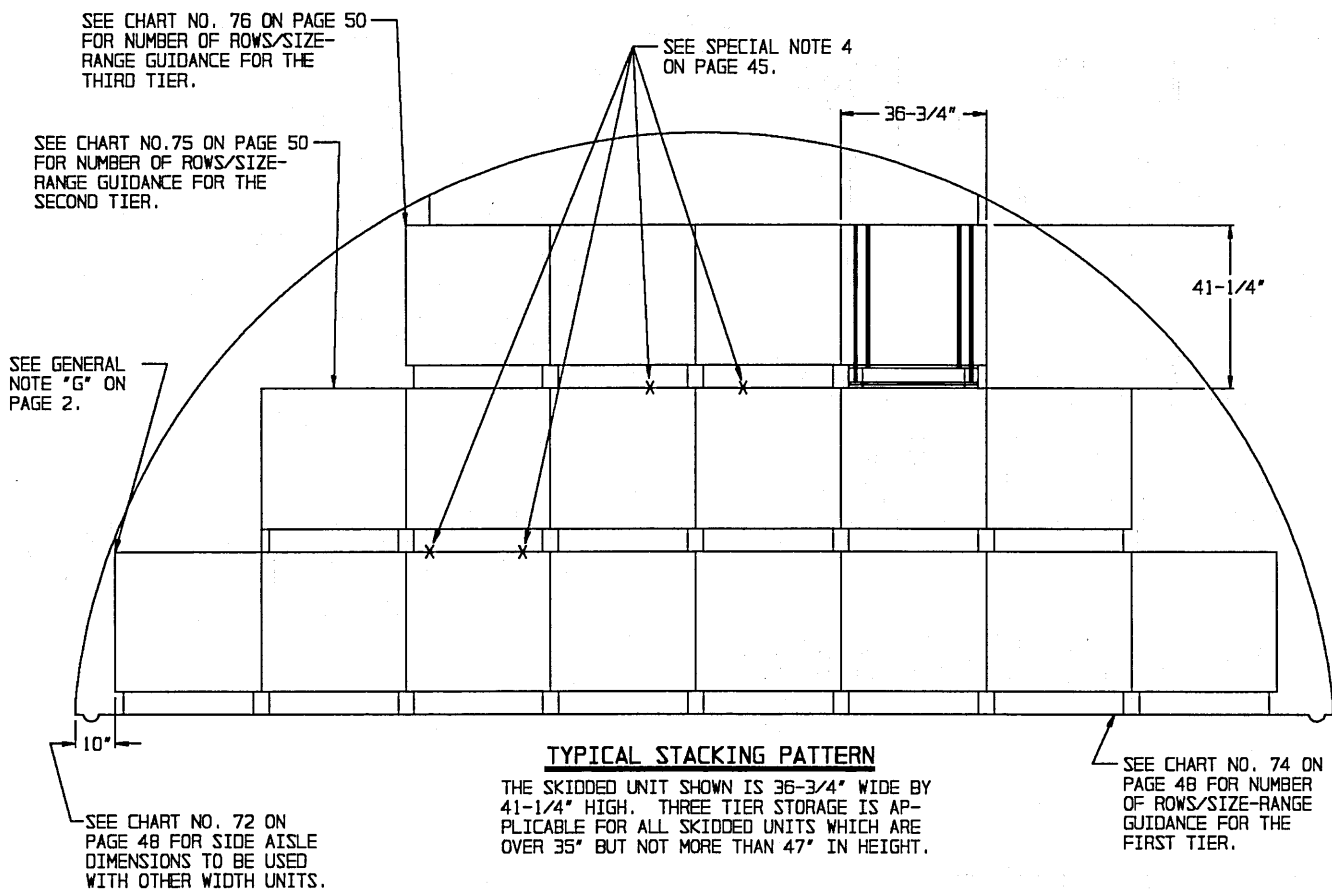
3. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).
4. WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CLEATED BOXES ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
5. REFER TO PAGES 100 AND 101 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
6. THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS.
7. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

**SPECIAL NOTES:**

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 49 THRU 52 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. THE STORAGE VIEWS ON PAGE 44 AND ABOVE DEPICT SKIDDED UNITS STACKED IN STAGGERED/VERTICAL ALIGNMENT, CENTERED IN THE WIDTH OF THE MAGAZINE. THE TYPICAL STACKING PATTERN VIEWS ON PAGES 46 AND 47 DEPICT THE BOTTOM TIERS CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE UPPER TIERS IN SOME OF THOSE VIEWS ARE CENTERED (STAGGERED) OVER THE UNITS BELOW. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS NO. 74 THRU 82 ON PAGES 48 THRU 51 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INDICATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED. CHART NO. 83 ON PAGE 52 SPECIFIES THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN 81'-2" LONG MAGAZINES. CHART NO. 84 ON PAGE 52 SPECIFIES THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED ON EACH SIDE OF THE MAGAZINE IN THE BOTTOM TIER OF THE TYPE "C" STACKS IN THE FRONTAL AREA. NOTE THAT THOSE ON THE RIGHT SIDE MUST BE STORED BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. CHARTS NO. 85 THRU 89 ON PAGES 52 AND 53 SPECIFY THE NUMBER OF SKIDDED UNITS WHICH CAN BE STORED IN THE UPPER TIERS ON THE LEFT SIDE.

(CONTINUED AT LEFT)





SPECIAL NOTES:

(SPECIAL NOTES CONTINUED)

- THE CHARTS ON THIS PAGE THRU PAGE 53 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN ARCH TYPE MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
- THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" ON PAGE 49.

STEP 1

LOCATE IN CHART NO. 72 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST TIER OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE MAGAZINE. IF TWO DIMENSIONS ARE GIVEN, THE SMALLER ONE MAY BE USED PROVIDING THAT FIGURE IS AT LEAST AS GREAT AS THE MINIMUM SIDE AISLE DIMENSION SPECIFIED IN CHART NO. 73 FOR THE HEIGHT OF THE UNIT BEING STORED. IF THE SMALLER DIMENSION IS LESS THAN THE DIMENSION SPECIFIED BY CHART NO. 73, IT IS OPTIONAL WHETHER THE LARGER DIMENSION IN CHART NO. 72 OR THE MINIMUM DIMENSION SPECIFIED BY CHART NO. 73 BE USED.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 74 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE, LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE FIRST TIER (LAYER).

(CONTINUED AT RIGHT)

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 75 ON PAGE 50 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE SECOND TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS THAN FOR THE FIRST TIER, POSITION THE SECOND TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE FIRST TIER. IF THE NUMBER OF ROWS IS THE SAME IN BOTH TIERS, POSITION UNITS DIRECTLY ABOVE ALL FIRST TIER UNITS.

STEP 4

REPEAT STEP 3 FOR CHARTS 76 THRU 82, AS APPLICABLE, FOR THE THIRD THRU NINTH TIERS.

STEP 5

LOCATE IN THE UNIT DIMENSION COLUMN IN CHART NO. 83 THE LENGTH OR WIDTH AS APPLICABLE FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAT CAN BE POSITIONED IN AN 81'-2" LONG MAGAZINE. SEE SPECIAL NOTE 6 ON PAGE 45 FOR THE CRITERIA USED IN DETERMINING THE NUMBER OF TYPE "A" STACKS SPECIFIED WITHIN THE CHART.

(CONTINUED ON PAGE 49)

UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	8" OR 20"	46"	20" OR 43"
26"	15" OR 28"	47"	17" OR 40"
27"	10" OR 23"	48"	14" OR 38"
28"	18" OR 32"	49"	11" OR 35"
29"	13" OR 27"	50"	8" OR 23"
30"	8" OR 23"	51"	5" OR 30"
31"	19" OR 34"	52"	28"
32"	14" OR 30"	53"	26"
33"	10" OR 26"	54"	23"
34"	5" OR 22"	55"	21"
35"	18" OR 35"	56"	18"
36"	14" OR 32"	57"	16"
37"	10" OR 28"	58"	13"
38"	6" OR 25"	59"	11" OR 41"
39"	22" OR 42"	60"	8" OR 38"
40"	18" OR 38"	61"	6" OR 36"
41"	15" OR 35"	62"	34"
42"	11" OR 32"	63"	32"
43"	8" OR 29"	64"	30"
44"	26"	65"	28"
45"	23" OR 45"	66"	26"

● USE UNIT LENGTH DIMENSION IF THE BOXES WITHIN THE UNIT ARE GOING TO BE LENGTHWISE IN THE MAGAZINE.

UNIT HEIGHT	MINIMUM LEFT SIDE AISLE
53"-54"	16"
52"-53"	15"
50"-52"	14"
47"-50"	13"
45"-47"	12"
42"-45"	11"
39"-42"	10"
37"-39"	9"
33"-37"	8"
31"-33"	7"
15"-31"	6"

UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH							
	25"	25"-28"	28"-31"	31"-35"	35"-40"	40"-47"	47"-56"	56"-66"
56"	25"	25"-28"	28"-31"	31"-35"	35"-40"	40"-47"	47"-56"	56"-66"
54"	25"	25"-28"	28"-31"	31"-35"	35"-40"	40"-47"	47"-56"	56"-66"
49"	25"-26"	26"-28"	28"-31"	31"-35"	35"-41"	41"-47"	47"-57"	57"-66"
48"	25"-26"	26"-28"	28"-32"	32"-36"	36"-41"	41"-47"	47"-57"	57"-66"
47"	25"-26"	26"-28"	28"-32"	32"-36"	36"-41"	41"-48"	48"-57"	57"-66"
40"	25"-26"	26"-29"	29"-32"	32"-36"	36"-42"	42"-49"	49"-58"	58"-66"
37"	25"-26"	26"-29"	29"-32"	32"-37"	37"-42"	42"-49"	49"-58"	58"-66"
30"	25"-27"	27"-30"	30"-33"	33"-37"	37"-42"	42"-50"	50"-60"	60"-66"
28"	25"-27"	27"-30"	30"-33"	33"-37"	37"-43"	43"-50"	50"-60"	60"-66"
15"-23"	25"-27"	27"-30"	30"-33"	33"-38"	38"-43"	43"-50"	50"-60"	60"-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4
	NUMBER OF ROWS WIDE IN FIRST TIER OF TYPE "A" STACKS.							

**STEP 6**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 84 ON PAGE 52 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT OF THE UNIT TO BE STORED. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE DIMENSION OF THE UNIT TO BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE. THE HEADING AT THE BASE OF THAT COLUMN WILL INDICATE THE NUMBER OF UNITS DEEP WHICH CAN BE STORED AT EACH SIDE OF THE DOOR OPENING IN THE FIRST TIER OF A TYPE "C" STACK.

**STEP 7**

REPEAT STEP 6 FOR CHARTS 85 THRU 89, AS APPLICABLE, TO DETERMINE THE NUMBER OF UNITS DEEP WHICH CAN BE STACKED ON THE LEFT SIDE OF THE DOOR IN THE SECOND THRU SIXTH TIER.

**EXAMPLE:**

A UNIT WHICH IS 45' LONG BY 44-1/8" WIDE BY 52-3/8" HIGH HAS BEEN SELECTED FOR THE EXAMPLE, AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE BOTTOM OF PAGE 47. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 72, 74, 75 AND 83, FOR THE TYPE "A" STACKS, IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED, STARTING ON PAGE 48.

THE 44-1/8" DIMENSION IS NOT INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 72, SO 45" WILL BE USED, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. THE SIDE AISLE DIMENSION OF 23" IS INDICATED IN THE SECOND COLUMN OF THE CHART. THIS DIMENSION IS GREATER THAN THE 15" MINIMUM DIMENSION SPECIFIED OPPOSITE THE INDICATED HEIGHT OF 52'-53" IN CHART NO. 73. THEREFORE, THE 23" SIDE AISLE WILL BE USED IF THE UNITS ARE TO BE CENTERED IN THE WIDTH OF THE MAGAZINE. IN THE LEFT HAND COLUMN OF CHART NO. 74, USE THE 54" HEIGHT AS THE UNIT HEIGHT OF 52-3/8" IS GREATER THAN 49" AND THE NEXT HEIGHT LISTED IS 54". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION INDICATED AS 40"-47". FOLLOW THE ARROW DOWNWARD TO THE NUMERAL IN THE HEADING OF THE COLUMN THAT SPECIFIES 6 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN THE FIRST TIER. FOLLOWING THE SAME PROCEDURE, CHART NO. 75 SPECIFIES THAT 4 UNITS CAN BE STORED IN THE SECOND TIER. THE ABSENCE OF THE 52-3/8" HEIGHT DIMENSION FROM THE LEFT HAND COLUMN OF CHART NO. 76 INDICATES THAT TWO TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN A MAGAZINE, THE 45" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 83, WHICH AGAIN COULD REPRESENT THE UNIT LENGTH OR WIDTH. FOLLOWING THE ARROWS TO THE RIGHT SPECIFIES THAT 18 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 81'-2" MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP IN THE FIRST TIER AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, REFER TO CHART NO. 84 ON PAGE 52. THE UNIT HEIGHT OF 52-3/8" FALLS WITHIN THE 47"-54" RANGE IN THE LEFT HAND COLUMN. FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT TO THE UNIT DIMENSION INDICATED AS 43"-56". FOLLOW THE ARROWS DOWNWARD TO THE NUMERALS IN THE HEADING OF THE COLUMN THAT SPECIFIES 2 UNITS CAN BE POSITIONED ON EACH SIDE OF THE DOOR OPENING. THOSE ON THE RIGHT SIDE BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE. FOLLOWING THE SAME PROCEDURES, CHART NO. 85 SPECIFIES 2 UNIT CAN BE STORED IN THE SECOND TIER. THE ABSENCE OF THE 52-3/8" HEIGHT FROM THE LEFT HAND COLUMN OF CHART NO. 86 INDICATES THAT TWO TIERS IS THE MAXIMUM STORAGE HEIGHT IN THE TYPE "C" STACKS FOR THE EXAMPLE UNIT. SEE SPECIAL NOTE 3 BELOW.

3. SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 83 THRU 89, IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF SKIDDED UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 83 ON PAGE 52 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

UNIT HEIGHT	CHART NO. 75														
	UNIT SIZE RANGE, LENGTH OR WIDTH														
56"									25'-27"	27'-31"	31'-38"	38'-47"	47'-63"	63'-66"	
54"									25'-27"	27'-32"	32'-39"	39'-49"	49'-65"	65'-66"	
53"									25'	25'-28"	28'-33"	33'-40"	40'-50"	50'-66"	
52"									25'	25'-29"	29'-34"	34'-41"	41'-51"	51'-66"	
51"									25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"	
50"									25'-26"	26'-30"	30'-35"	35'-43"	43'-53"	53'-66"	
49"									25'-27"	27'-30"	30'-36"	36'-43"	43'-54"	54'-66"	
48"									25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"	
47"								25'	25'-28"	28'-32"	32'-37"	37'-45"	45'-56"	56'-66"	
46"								25'	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	57'-66"	
45"								25'-26"	26'-29"	29'-33"	33'-39"	39'-46"	46'-57"	57'-66"	
44"								25'-26"	26'-29"	29'-33"	33'-39"	39'-47"	47'-58"	58'-66"	
43"								25'-26"	26'-30"	30'-34"	34'-40"	40'-48"	48'-60"	60'-66"	
41"								25'-27"	27'-30"	30'-35"	35'-41"	41'-49"	49'-61"	61'-66"	
40"								25'	25'-27"	27'-31"	31'-35"	35'-41"	41'-50"	50'-62"	62'-66"
39"								25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"
38"								25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"
37"								25'	25'-28"	28'-32"	32'-37"	37'-43"	43'-52"	52'-64"	64'-66"
35"								25'-26"	26'-29"	29'-33"	33'-37"	37'-44"	44'-52"	52'-66"	
34"								25'-26"	26'-29"	29'-33"	33'-38"	38'-44"	44'-53"	53'-66"	
32"								25'-27"	27'-30"	30'-33"	33'-38"	38'-45"	45'-54"	54'-66"	
31"								25'-27"	27'-30"	30'-34"	34'-39"	39'-45"	45'-54"	54'-66"	
30"								25'	25'-27"	27'-30"	30'-34"	34'-39"	39'-48"	48'-55"	55'-66"
28"								25'	25'-28"	28'-31"	31'-35"	35'-40"	40'-46"	46'-56"	56'-66"
27"								25'	25'-28"	28'-31"	31'-35"	35'-40"	40'-47"	47'-56"	56'-66"
24"								25'-26"	26'-28"	28'-31"	31'-36"	36'-41"	41'-47"	47'-57"	57'-66"
23"								25'-26"	26'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"
20"								25'-26"	26'-29"	29'-32"	32'-36"	36'-42"	42'-49"	49'-58"	58'-66"
15'-18"								25'-26"	26'-29"	29'-32"	32'-37"	37'-42"	42'-49"	49'-59"	59'-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2					
												NUMBER OF ROWS WIDE IN SECOND TIER OF TYPE "A" STACKS.			

UNIT HEIGHT	CHART NO. 76																		
	UNIT SIZE RANGE, LENGTH OR WIDTH																		
47" MAX													25'-33"	33'-66"					
46"													25'-41"	41'-66"					
45"												25'	25'-34"	34'-51"	51'-66"				
44"												25'-30"	30'-40"	40'-60"	60'-66"				
43"												25'-26"	26'-33"	33'-44"	44'-66"				
42"												25'-28"	28'-36"	36'-48"	48'-66"				
41"												25'	25'-30"	30'-38"	38'-51"	51'-66"			
40"												25'-27"	27'-32"	32'-41"	41'-54"	54'-66"			
39"												25'-28"	28'-34"	34'-43"	43'-57"	57'-66"			
38"												25'	25'-30"	30'-36"	36'-45"	45'-60"	60'-66"		
37"												25'-27"	27'-31"	31'-38"	38'-47"	47'-63"	63'-66"		
36"												25'-28"	28'-32"	32'-39"	39'-49"	49'-65"	65'-66"		
35"												25'	25'-29"	29'-34"	34'-40"	40'-51"	51'-66"		
34"												25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"		
33"												25'-27"	27'-30"	30'-36"	36'-43"	43'-54"	54'-66"		
32"												25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"		
31"												25'	25'-28"	28'-32"	32'-38"	38'-45"	45'-57"	57'-66"	
30"												25'-26"	26'-29"	29'-33"	33'-39"	39'-46"	46'-58"	58'-66"	
29"												25'-26"	26'-30"	30'-34"	34'-40"	40'-48"	48'-61"	61'-66"	
27"												25'-27"	27'-30"	30'-35"	35'-41"	41'-49"	49'-63"	63'-66"	
26"												25'-26"	26'-28"	28'-31"	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"
25"												25'-26"	26'-28"	28'-32"	32'-36"	36'-42"	42'-51"	51'-65"	65'-66"
24"												25'-26"	26'-28"	28'-32"	32'-37"	37'-43"	43'-52"	52'-65"	65'-66"
23"												25'-26"	26'-29"	29'-33"	33'-37"	37'-44"	44'-53"	53'-66"	
22"												25'	25'-26"	26'-29"	29'-33"	33'-38"	38'-44"	44'-53"	53'-66"
21"												25'	25'-27"	27'-30"	30'-34"	34'-39"	39'-45"	45'-54"	54'-66"
20"												25'	25'-27"	27'-30"	30'-34"	34'-39"	39'-46"	46'-55"	55'-66"
18"												25'	25'-28"	28'-31"	31'-35"	35'-40"	40'-47"	47'-57"	57'-66"
16"												25'-26"	26'-28"	28'-32"	32'-36"	36'-41"	41'-47"	47'-57"	57'-66"
15"												25'-26"	26'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1								
												NUMBER OF ROWS WIDE IN THIRD TIER OF TYPE "A" STACKS.							

UNIT HEIGHT	CHART NO. 77																			
	UNIT SIZE RANGE, LENGTH OR WIDTH																			
35" MAX													25'-32"	25'-37"	37'-66"					
34"													25'-32"	32'-48"	48'-66"					
33"													25'-30"	30'-40"	40'-65"	65'-66"				
32"													25'-27"	27'-33"	33'-45"	45'-66"				
31"													25'	25'-30"	30'-37"	37'-50"	50'-66"			
30"													25'-27"	27'-33"	33'-41"	41'-54"	54'-66"			
29"													25'	25'-29"	29'-35"	35'-44"	44'-58"	58'-66"		
28"													25'-26"	26'-31"	31'-37"	37'-47"	47'-62"	62'-66"		
27"													25'-28"	28'-32"	32'-39"	39'-49"	49'-65"	65'-66"		
26"													25'-29"	29'-34"	34'-41"	41'-51"	51'-66"			
25"													25'-26"	26'-30"	30'-35"	35'-43"	43'-53"	53'-66"		
24"													25'-27"	27'-31"	31'-37"	37'-44"	44'-55"	55'-66"		
23"													25'	25'-28"	28'-32"	32'-38"	38'-46"	46'-57"	57'-66"	
22"													26"	26'-29"	29'-33"	33'-39"	39'-47"	47'-57"	57'-66"	
21"													25'-26"	26'-30"	30'-34"	34'-40"	40'-48"	48'-60"	60'-66"	
20"													25'	25'-28"	28'-31"	31'-35"	35'-41"	41'-50"	50'-63"	63'-66"
19"													25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"
18"													25'	25'-28"	28'-32"	32'-37"	37'-43"	43'-52"	52'-65"	65'-66"
17"													25'-27"	27'-30"	30'-33"	33'-38"	38'-44"	44'-53"	53'-66"	
16"													25'-27"	27'-30"	30'-33"	33'-38"	38'-45"	45'-54"	54'-66"	
15"													25'	25'-27"	27'-30"	30'-34"	34'-39"	39'-46"	46'-55"	55'-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1									
												NUMBER OF ROWS WIDE IN FOURTH TIER OF TYPE "A" STACKS.								

UNIT HEIGHT	CHART NO. 78									
	UNIT SIZE RANGE, LENGTH OR WIDTH									
28" MAX								25"-28"	28"-46"	46"-66"
27"							25"	25"-34"	34"-51"	51"-66"
26"						25"	25"-31"	31"-42"	42"-63"	63"-66"
25"						25"	25"-29"	29"-36"	36"-49"	49"-66"
24"						25"	25"-27"	27"-32"	32"-41"	41"-54"
23"					25"	25"-30"	30"-36"	36"-45"	45"-60"	60"-66"
22"					25"	25"-27"	27"-32"	32"-38"	38"-48"	48"-64"
21"					25"	25"-29"	29"-34"	34"-40"	40"-51"	51"-66"
20"					25"	25"-26"	26"-30"	30"-35"	35"-43"	43"-53"
19"					25"	25"-28"	28"-32"	32"-37"	37"-45"	45"-56"
18"					25"	25"-26"	26"-29"	29"-33"	33"-39"	39"-46"
17"					25"	25"-26"	26"-30"	30"-34"	34"-40"	40"-48"
16"					25"	25"-27"	27"-31"	31"-35"	35"-41"	41"-50"
15"					25"	25"-28"	28"-32"	32"-36"	36"-43"	43"-51"
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.									

UNIT HEIGHT	CHART NO. 79									
	UNIT SIZE RANGE, LENGTH OR WIDTH									
23" MAX								25"-27"	27"-41"	41"-66"
22"							25"-30"	30"-40"	40"-60"	60"-66"
21"						25"-28"	28"-36"	36"-48"	48"-66"	
20"					27"	27"-32"	32"-41"	41"-54"	54"-66"	
19"					25"	25"-30"	30"-36"	36"-45"	45"-60"	60"-66"
18"					25"	25"-28"	28"-32"	32"-39"	39"-49"	49"-65"
17"					25"	25"-26"	26"-30"	30"-35"	35"-42"	42"-52"
16"					25"	25"-27"	27"-31"	31"-37"	37"-44"	44"-55"
15"					25"	25"-26"	26"-29"	29"-33"	33"-39"	39"-46"
UNIT HEIGHT	9	8	7	6	5	4	3	2	1	
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.									

UNIT HEIGHT	CHART NO. 80									
	UNIT SIZE RANGE, LENGTH OR WIDTH									
20" MAX								25"-35"	35"-66"	
19"							25"-28"	28"-38"	38"-57"	57"-66"
18"						25"-28"	28"-36"	36"-48"	48"-66"	
17"						25"-28"	28"-33"	33"-42"	42"-56"	56"-66"
16"						25"-26"	26"-31"	31"-37"	37"-47"	47"-62"
15"						25"	25"-29"	29"-34"	34"-40"	40"-51"
UNIT HEIGHT	8	7	6	5	4	3	2	1		
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.									

UNIT HEIGHT	CHART NO. 81						
	UNIT SIZE RANGE, LENGTH OR WIDTH						
17" MAX							25"-28"
16"							28"-42"
15"							42"-66"
							42"-66"
UNIT HEIGHT	6	5	4	3	2	1	
	NUMBER OF ROWS WIDE IN EIGHTH TIER OF TYPE "A" STACKS.						

UNIT HEIGHT	CHART NO. 82			
	UNIT SIZE RANGE, LENGTH OR WIDTH			
15" MAX				
UNIT HEIGHT	4	3	2	1
	NUMBER OF ROWS WIDE IN NINTH TIER OF TYPE "A" STACKS.			

CHART NO. 83				
UNIT DIMENSION LENGTHWISE IN MAGAZINE	81'-2" X 26'-6" X 12'-1-3/4" ARCH TYPE MAGAZINE			
	"A" STACKS		"C" STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN
66'	12	14'-3"	2	34'
65'	12	15'-3"	2	48'
64'	12	16'-3"	2	62'
63'	12	17'-3"	3	13'
62'	13	13'-1"	2	28'
61'	13	14'-2"	2	43'
60'	13	15'-3"	2	58'
59'	13	16'-4"	3	14'
58'	14	12'-7"	2	30'
57'	14	13'-3"	2	42'
56'	14	14'-5"	2	58'
55'	14	15'-7"	3	22'
54'	15	12'-3"	2	39'
53'	15	13'-8"	2	53'
52'	15	14'-9"	3	18'
51'	15	16'-0"	3	36'
50'	16	13'-1"	2	54'
49'	16	14'-5"	3	23'
48'	17	11'-9"	2	42'
47'	17	13'-2"	3	14'
46'	17	14'-7"	3	34'
45'	18	12'-3"	3	9'
44'	18	13'-9"	3	30'
43'	19	11'-8"	3	8'
42'	19	13'-3"	3	30'
41'	20	11'-9"	3	15'
40'	20	13'-5"	3	38'
39'	21	11'-10"	3	22'
38'	21	13'-7"	4	8'
37'	22	12'-3"	3	33'
36'	23	11'-1"	3	22'
35'	23	13'-0"	4	13'
34'	24	12'-3"	3	40'
33'	25	11'-6"	3	34'
32'	26	10'-11"	3	30'
31'	26	13'-1"	4	28'
30'	27	12'-9"	4	28'
29'	28	12'-7"	4	30'
28'	29	12'-7"	4	34'
27'	30	12'-9"	5	13'
26'	32	10'-11"	4	22'
25'	33	11'-6"	4	33'

CHART NO. 84							
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH						
54'-56'	25'-26'	26'-28'	28'-32'	32'-37'	37'-43'	43'-56'	56'-66'
47'-54'	25'-26'	26'-28'	28'-32'	32'-37'	37'-43'	43'-56'	56'-66'
39'-47'	25'-26'	26'-29'	29'-33'	33'-39'	39'-44'	44'-58'	58'-66'
15'-39'	25'-27'	27'-30'	30'-34'	34'-40'	40'-46'	46'-60'	60'-66'
UNIT HEIGHT	5 & 3	4 & 4	4 & 3	3 & 3	3 & 2	2 & 2	2 & 1
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FIRST TIER OF TYPE "C" STACKS.						

CHART NO. 85				
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH			
54'-56'		25'-27'	27'-41'	41'-66'
53'-54'		25'-29'	29'-44'	44'-66'
52'-53'		25'-30'	30'-45'	45'-66'
51'-52'		25'-31'	31'-47'	47'-66'
50'-51'		25'-32'	32'-48'	48'-66'
49'-50'		25'-32'	32'-49'	49'-66'
48'-49'	25'	25'-33'	33'-50'	50'-66'
47'-48'		25'-34'	34'-51'	51'-66'
46'-47'		25'-34'	34'-51'	51'-66'
45'-46'	25'-26'	26'-35'	35'-52'	52'-66'
44'-45'	25'-27'	27'-36'	36'-54'	54'-66'
43'-44'	25'-27'	27'-36'	36'-54'	54'-66'
42'-43'	25'-27'	27'-37'	37'-55'	55'-66'
40'-42'	25'-28'	28'-37'	37'-56'	56'-66'
39'-40'	25'-28'	28'-38'	38'-57'	57'-66'
38'-39'	25'-29'	29'-39'	39'-58'	58'-66'
36'-38'	25'-29'	29'-39'	39'-59'	59'-66'
35'-36'	25'-30'	30'-40'	40'-60'	60'-66'
32'-35'	25'-30'	30'-41'	41'-61'	61'-66'
29'-32'	25'	25'-31'	31'-42'	42'-63'
27'-29'	25'	25'-32'	32'-43'	43'-65'
23'-27'	25'-26'	26'-32'	32'-43'	43'-65'
22'-23'	25'-27'	27'-33'	33'-45'	45'-66'
15'-20'	25'-27'	27'-34'	34'-45'	45'-66'
UNIT HEIGHT	5	4	3	2
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN SECOND TIER OF TYPE "C" STACKS.			

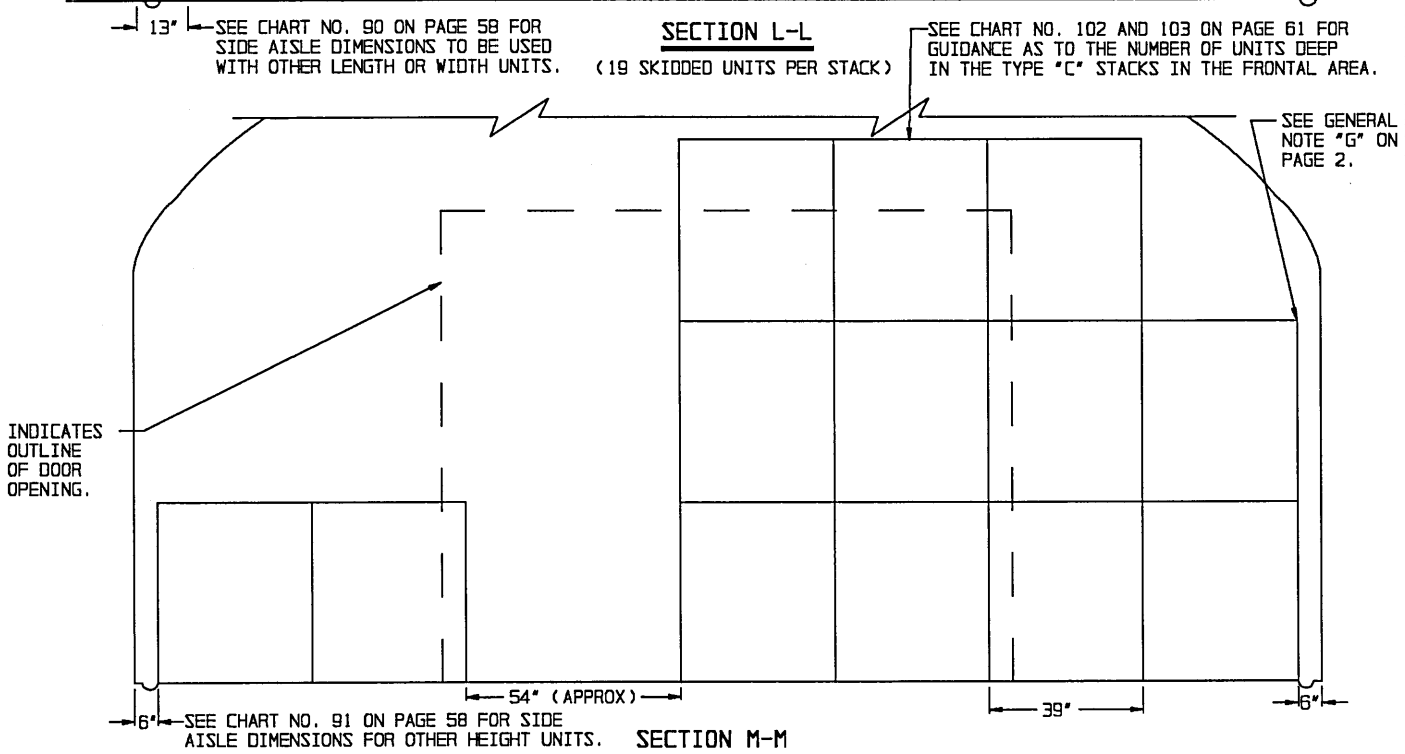
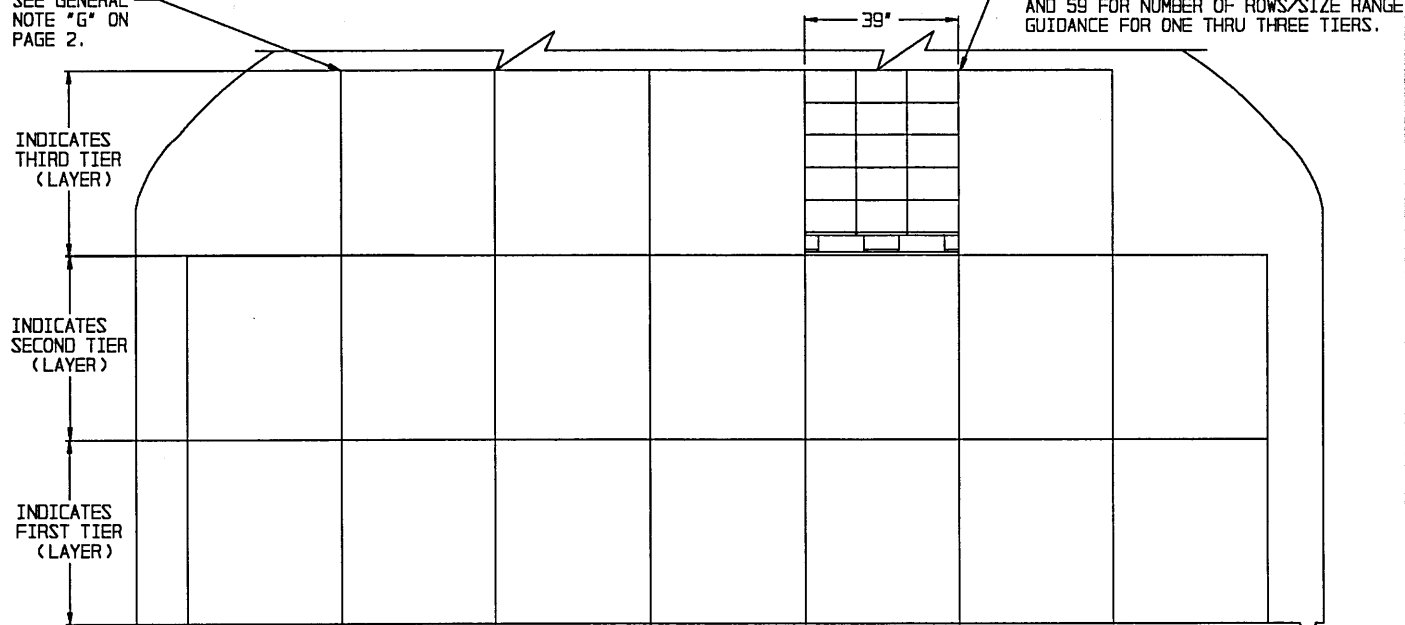
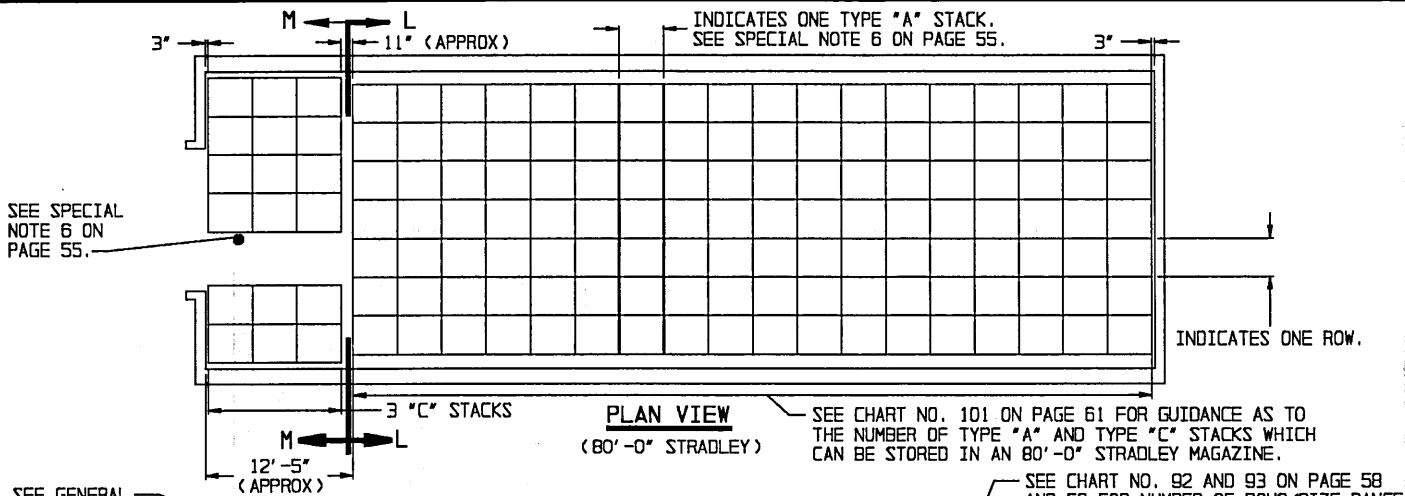
CHART NO. 86				
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH			
43'-44'			25'-26'	25'-48'
42'-43'			25'-26'	26'-54'
41'-42'			25'-30'	30'-61'
40'-41'			25'-33'	33'-66'
37'-40'			25'-36'	36'-66'
36'-37'		25'-28'	28'-42'	42'-66'
35'-36'		25'-29'	29'-44'	44'-66'
34'-35'		25'-30'	30'-46'	46'-66'
33'-34'		25'-31'	31'-47'	47'-66'
32'-33'		25'-33'	33'-49'	49'-66'
31'-32'	25'	25'-34'	34'-51'	51'-66'
30'-31'	25'-26'	26'-34'	34'-52'	52'-66'
29'-30'	25'-26'	26'-35'	35'-53'	53'-66'
28'-29'	25'-27'	27'-36'	36'-55'	55'-66'
27'-28'	25'-28'	28'-37'	37'-56'	56'-66'
26'-27'	25'-28'	28'-38'	38'-56'	56'-66'
25'-26'	25'-29'	29'-39'	39'-58'	58'-66'
24'-25'	25'-29'	29'-39'	39'-59'	59'-66'
23'-24'	25'-30'	30'-40'	40'-60'	60'-66'
21'-23'	25'-30'	30'-41'	41'-61'	61'-66'
19'-21'	25'	25'-31'	31'-42'	42'-63'
18'-19'	25'-26'	26'-32'	32'-43'	43'-65'
15'-18'	25'-26'	26'-33'	33'-43'	43'-65'
15'	25'-27'	27'-33'	33'-45'	45'-66'
UNIT HEIGHT	5	4	3	2
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN THIRD TIER OF TYPE "C" STACKS.			

CHART NO. 87			
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH		
32'-33'			25'-48'
31'-32'		25'-28'	28'-56'
30'-31'		25'-31'	31'-63'
28'-30'		25'-36'	36'-66'
27'-28'		25'-27'	27'-41'
26'-27'		25'-28'	28'-43'
25'-26'		25'-30'	30'-45'
24'-25'		25'-31'	31'-47'
23'-24'		25'-33'	33'-49'
22'-23'	25'	25'-34'	34'-51'
21'-22'	25'-26'	26'-35'	35'-53'
20'-21'	25'-27'	27'-36'	36'-55'
19'-20'	25'-28'	28'-37'	37'-56'
18'-19'	25'-29'	29'-38'	38'-58'
17'-18'	25'-29'	29'-39'	39'-59'
16'-17'	25'-30'	30'-40'	40'-60'
15'-16'	25'-30'	30'-41'	41'-61'
UNIT HEIGHT	4	3	2
UNIT HEIGHT	NUMBER OF SKIDDED UNITS DEEP IN FOURTH TIER OF TYPE "C" STACKS.		



UNIT HEIGHT	CHART NO. 88 UNIT SIZE RANGE, LENGTH OR WIDTH			
25'-26"			25'	25'-52"
24'-25"			25'-30"	30'-61"
22'-24"		25'-26"	26'-40"	40'-66"
21'-22"		25'-28"	28'-42"	42'-66"
20'-21"		25'-30"	30'-45"	45'-66"
19'-20"		25'-31"	31'-47"	47'-66"
18'-19"	25'	25'-33"	33'-50"	50'-66"
17'-18"	25'-26"	26'-35"	35'-52"	52'-66"
16'-17"	25'-27"	27'-36"	36'-54"	54'-66"
15'-16"	25'-28"	28'-37"	37'-56"	56'-66"
15'	25'-29"	29'-38"	38'-58"	58'-66"
UNIT HEIGHT	4	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN FIFTH TIER OF TYPE 'C' STACKS			

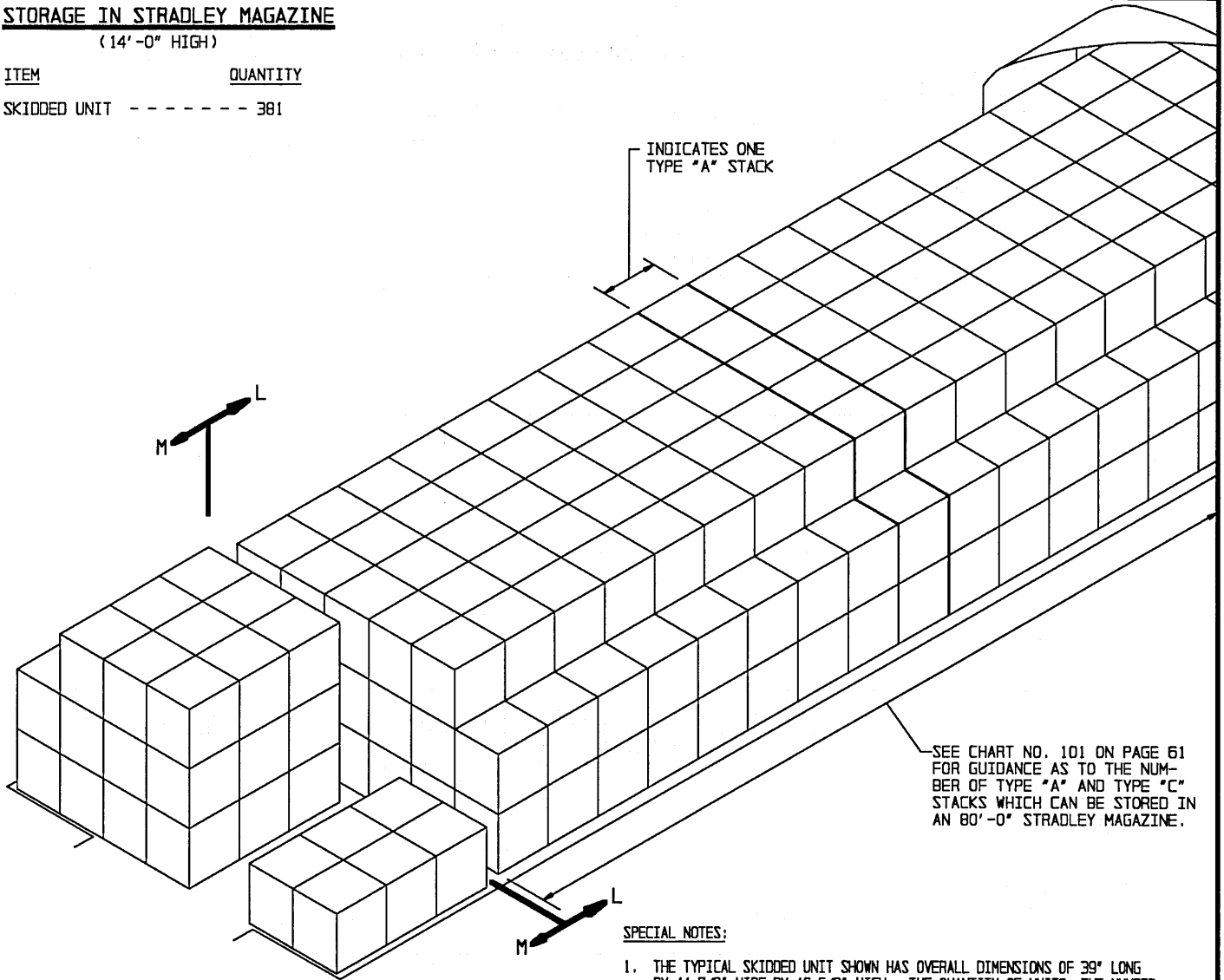
UNIT HEIGHT	CHART NO. 89 UNIT SIZE RANGE, LENGTH OR WIDTH			
21'-22"				25'-48"
20'-21"			25'-30"	30'-60"
18'-20"			25'-35"	35'-66"
17'-18"		25'-28"	28'-43"	43'-66"
16'-17"		25'-31"	31'-46"	46'-66"
15'-16"		25'-33"	33'-49"	49'-66"
15'	25'-26"	26'-35"	35'-52"	52'-66"
UNIT HEIGHT	4	3	2	1
	NUMBER OF SKIDDED UNITS DEEP IN SIXTH TIER OF TYPE 'C' STACKS			



# STORAGE IN STRADLEY MAGAZINE

(14'-0" HIGH)

ITEM	QUANTITY
SKIDDED UNIT - - - - -	381



**ISOMETRIC VIEW**  
(80'-0" STRADLEY)

### SPECIAL NOTES:

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 58 THRU 61 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. THE STORAGE VIEWS ON PAGE 54 AND ABOVE AND THE TYPICAL STACKING PATTERN VIEWS AT THE BOTTOM OF PAGES 56 AND 57 DEPICT SKIDDED UNITS STACKED IN VERTICAL ALIGNMENT. THE TYPICAL STACKING PATTERN VIEWS AT THE TOP OF PAGES 56 AND 57 DEPICT THE THIRD TIERS CENTERED (STAGGERED) OVER UNITS BELOW. ALL THE TIERS ARE CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS NO. 92 THRU 100 ON PAGES 58 THRU 61 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INDICATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED.

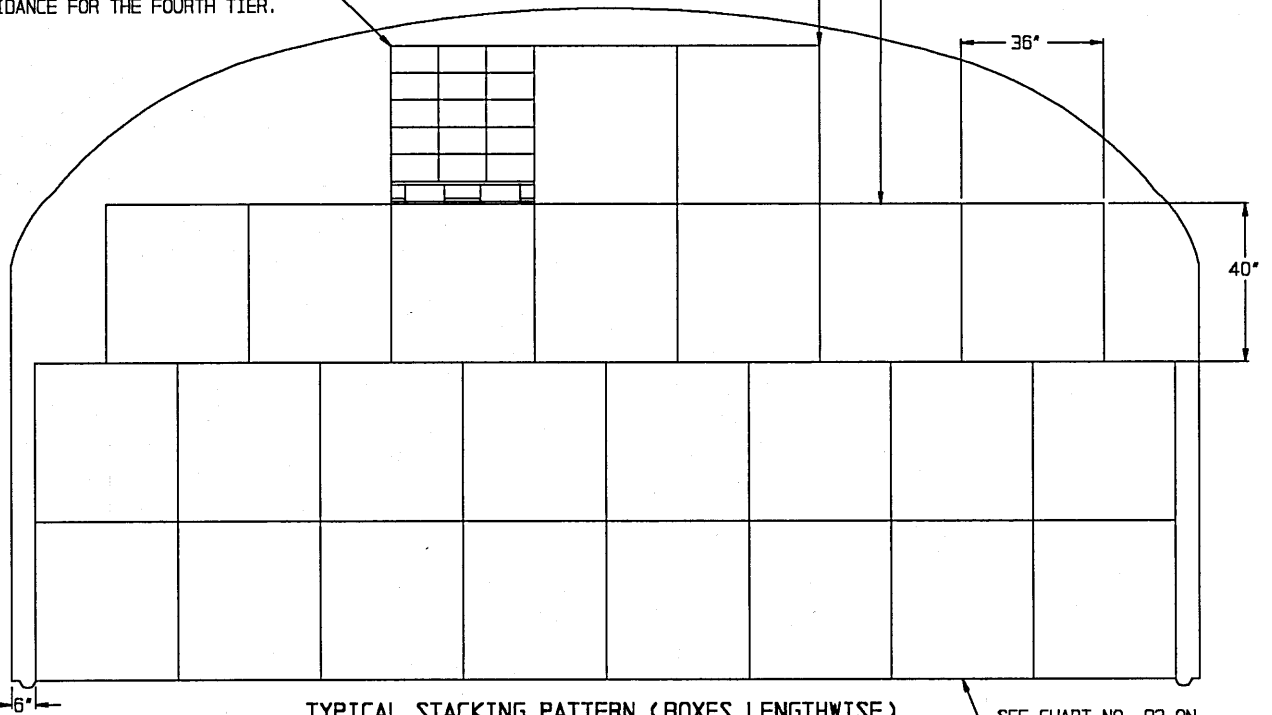
### (SPECIAL NOTES CONTINUED)

3. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).
4. WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CREATED BOXES WHICH ARE ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
5. REFER TO PAGES 102 AND 103 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
6. THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIEL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TIRES (40"), WHICHEVER IS THE GREATEST. ADDITIONALLY TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIAL HANDLING EQUIPMENT PERMITS.
7. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

SEE CHART NO. 94 ON PAGE 59 FOR NUMBER OF ROW/SIZE RANGE GUIDANCE FOR THE FOURTH TIER.

SEE GENERAL NOTE "G" ON PAGE 2.

SEE CHART NO. 93 ON PAGE 59 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE THIRD TIER.



**TYPICAL STACKING PATTERN (BOXES LENGTHWISE)**

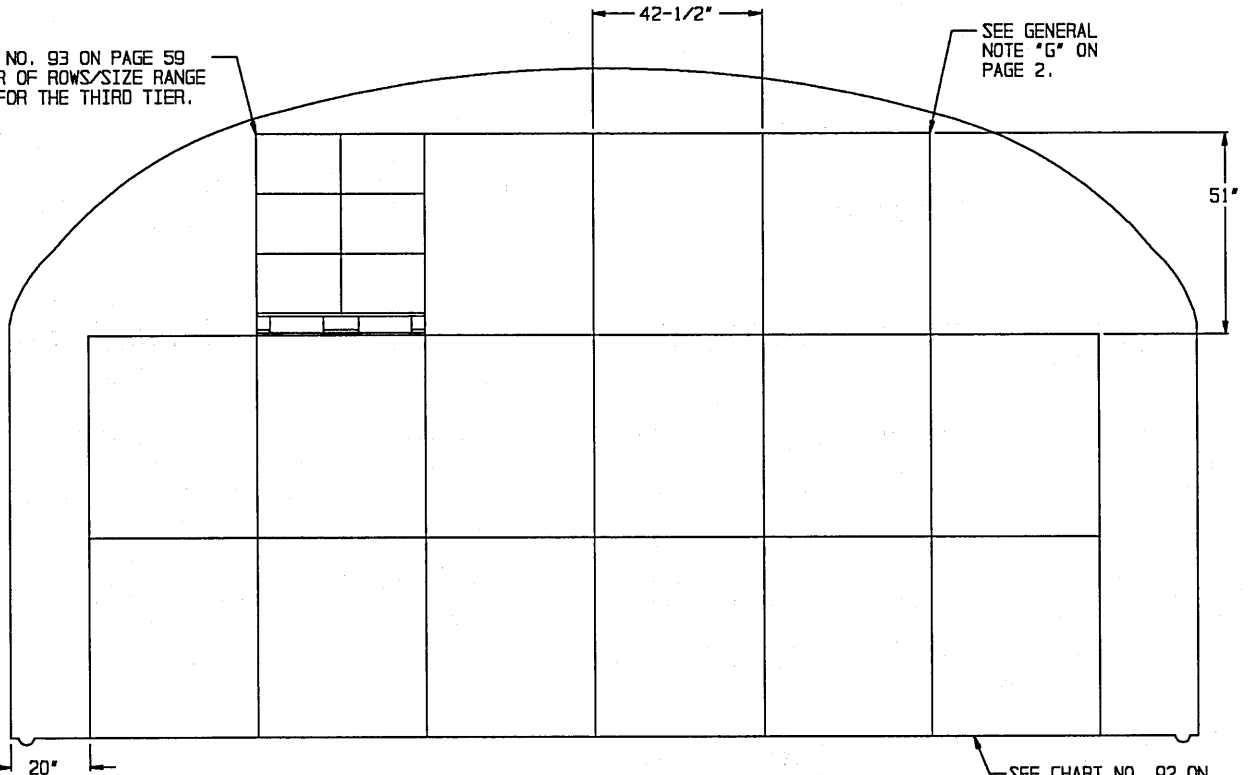
THE SKIDDED UNIT SHOWN IS 36" LONG BY 40" HIGH. FOUR-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 33" BUT NOT MORE THAN 41" IN HEIGHT.

SEE CHART NO. 90 ON PAGE 58 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER LENGTH OR WIDTH UNITS.

SEE CHART NO. 92 ON PAGE 58 FOR NUMBER OF ROWS SIZE-RANGE GUIDANCE FOR THE FIRST AND SECOND TIERS.

SEE CHART NO. 93 ON PAGE 59 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE THIRD TIER.

SEE GENERAL NOTE "G" ON PAGE 2.



**TYPICAL STACKING PATTERN (BOXES LENGTHWISE)**

THE SKIDDED UNIT SHOWN IS 42-1/2" LONG BY 51" HIGH. THREE-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 41" BUT NOT MORE THAN 55" IN HEIGHT.

SEE CHART NO. 90 ON PAGE 58 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER LENGTH OR WIDTH UNITS.

SEE CHART NO. 92 ON PAGE 58 FOR NUMBER OF ROWS SIZE-RANGE GUIDANCE FOR THE FIRST AND SECOND TIERS.

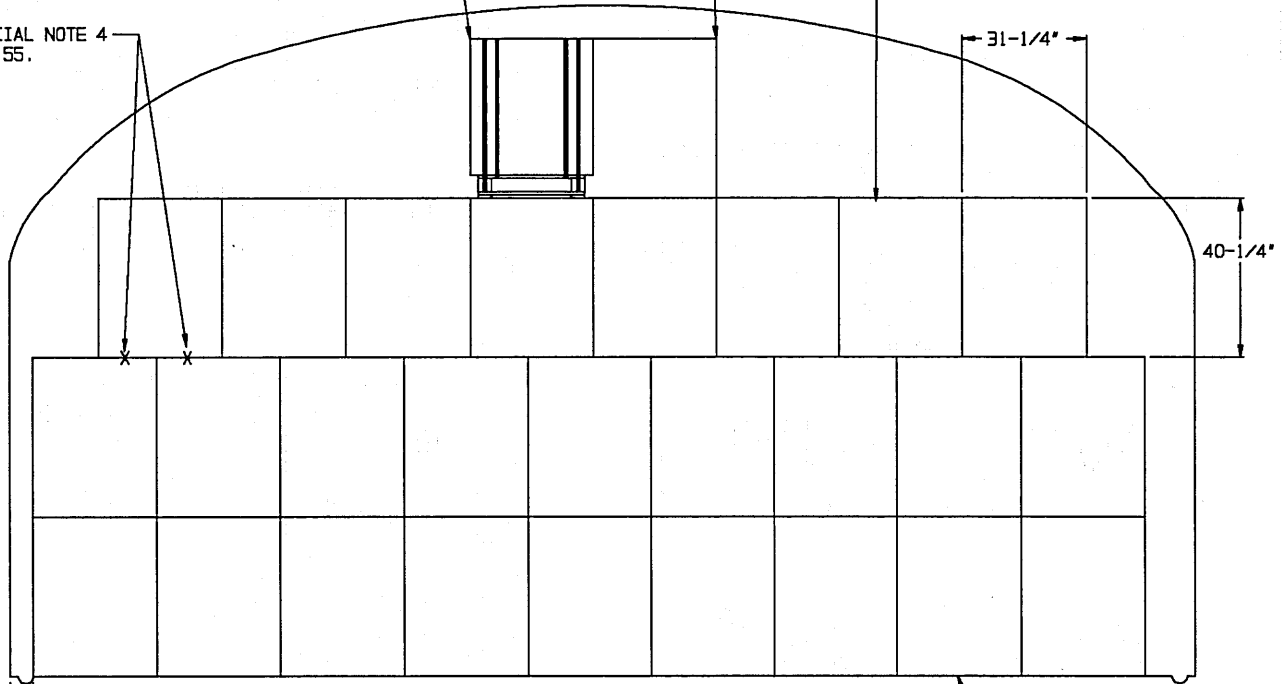
**TYPICAL STACKING PATTERNS IN STRADLEY MAGAZINES**

SEE CHART NO. 94 ON PAGE 59  
FOR NUMBER OF ROWS/SIZE RANGE  
GUIDANCE FOR THE FOURTH TIER.

SEE GENERAL NOTE  
"G" ON PAGE 2.

SEE CHART NO. 93 ON PAGE 59  
FOR NUMBER OF ROWS/SIZE RANGE  
GUIDANCE FOR THE THIRD TIER.

SEE SPECIAL NOTE 4  
ON PAGE 55.



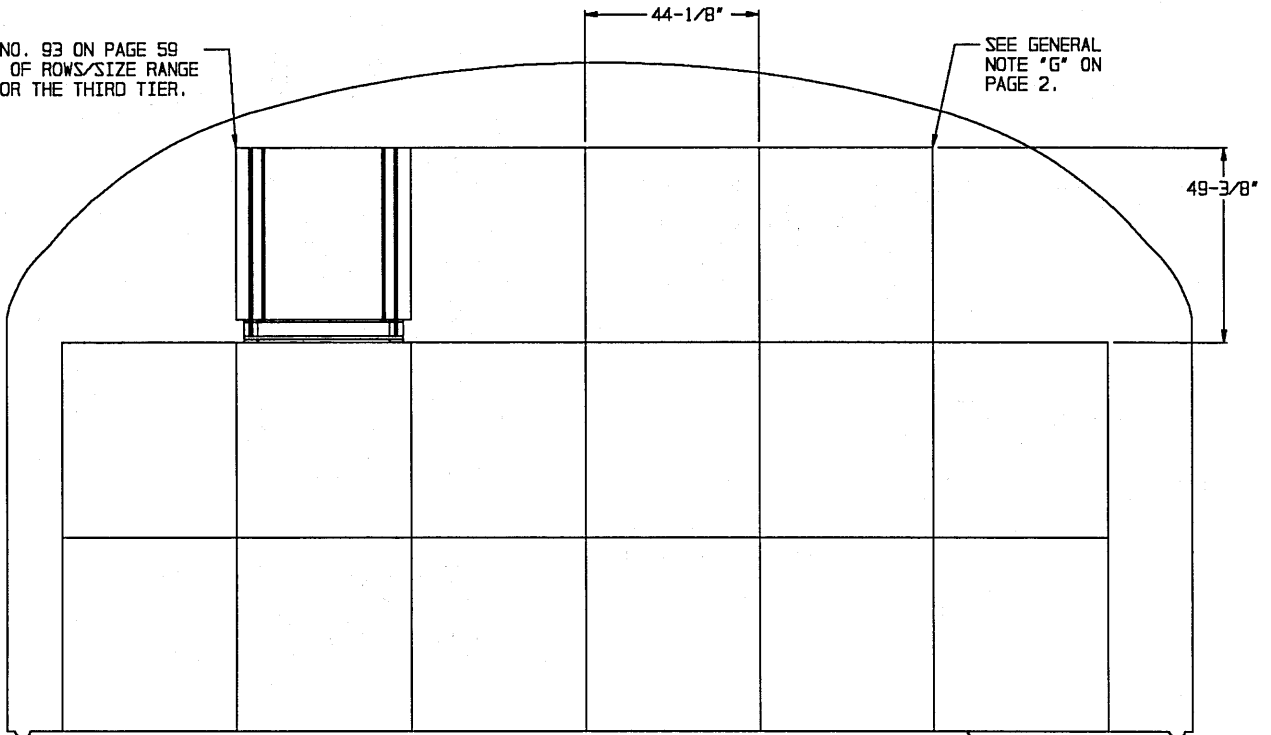
**TYPICAL STACKING PATTERN (BOXES CROSSWISE)**

THE SKIDDED UNIT SHOWN IS 31-1/4" WIDE BY 40-1/4" HIGH.  
FOUR-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS  
WHICH ARE OVER 33" BUT NOT MORE THAN 41" IN HEIGHT.

SEE CHART NO. 90 ON PAGE 58  
FOR SIDE AISLE DIMENSIONS TO  
BE USED WITH OTHER WIDTH UNITS.

SEE CHART NO. 92 ON  
PAGE 58 FOR NUMBER OF  
ROWS/SIZE-RANGE GUIDANCE  
FOR THE FIRST AND SECOND  
TIERS.

SEE CHART NO. 93 ON PAGE 59  
FOR NUMBER OF ROWS/SIZE RANGE  
GUIDANCE FOR THE THIRD TIER.



**TYPICAL STACKING PATTERN (BOXES CROSSWISE)**

THE SKIDDED UNIT SHOWN IS 44-1/8" WIDE BY 49-3/8"  
HIGH. THREE-TIER STORAGE IS APPLICABLE FOR ALL  
SKIDDED UNITS WHICH ARE OVER 41" BUT NOT MORE  
THAN 55" IN HEIGHT.

SEE CHART NO. 90 ON  
PAGE 58 FOR SIDE AISLE  
DIMENSIONS TO BE USED  
WITH OTHER WIDTH UNITS.

SEE GENERAL  
NOTE "G" ON  
PAGE 2.

SEE CHART NO. 92 ON  
PAGE 58 FOR NUMBER OF  
ROWS/SIZE-RANGE GUIDANCE  
FOR THE FIRST AND SECOND  
TIERS.

**TYPICAL STACKING PATTERNS IN STRADLEY MAGAZINES**

- THE CHARTS ON THIS PAGE THRU PAGE 61 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN STRADLEY MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
- THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" AT RIGHT.

STEP 1

LOCATE IN CHART NO. 90 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST AND SECOND TIERS OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE STRADLEY MAGAZINE. THE MINIMUM SIDE AISLE OF 6" FOR ALL UNITS IS GIVEN IN CHART NO. 91.

STEP 2

ALL UNITS CAN BE STORED IN TWO FULL TIERS. LOCATE IN CHART NO. 92 THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING OF THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN EACH OF THE FIRST TWO TIERS.

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 93 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE THIRD TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE SECOND TIER, POSITION THE THIRD-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE SECOND TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS OR THREE (3) LESS THAN FOR THE SECOND TIER, POSITION THE THIRD TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE SECOND TIER. IF THE NUMBER OF ROWS IS THE SAME AS IN THE SECOND TIER, POSITION UNITS DIRECTLY ABOVE ALL SECOND TIER UNITS.

STEP 4

REPEAT STEP 3 FOR CHARTS 94 THRU 100 AS APPLICABLE, FOR THE FOURTH THRU THE TENTH TIERS.

STEP 5

LOCATE IN THE UNIT DIMENSION COLUMN IN CHART NO. 101 THE LENGTH OR WIDTH OF THE UNIT, AS APPLICABLE FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAT CAN BE POSITIONED IN AN 80' STRADLEY MAGAZINE. SEE SPECIAL NOTE 6 ON PAGE 55 FOR THE CRITERIA USED IN DETERMINING THE NUMBER OF TYPE "A" STACKS SPECIFIED WITHIN THE CHART.

(CONTINUED AT RIGHT)

STEP 6

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 102 THE LINE WHICH SPECIFIES THE SKIDDED UNIT SIZE RANGE THAT CONTAINS THE LENGTH OR WIDTH, AS APPLICABLE, WHICH IS STORED ACROSS THE WIDTH OF THE MAGAZINE. ALONG THAT LINE TO THE RIGHT ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF UNITS WIDE THAN CAN BE STORED IN THE REAR TYPE "C" STACKS. THE STACK NEXT TO THE TYPE "A" STACKS. THE SECOND COLUMN INDICATES THE NUMBER OF UNITS WIDE THAT CAN BE STORED IN THE REMAINING TYPE "C" STACKS.

STEP 7

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 103 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT, OF THE UNIT TO BE STORED. ALONG THAT LINE TO THE RIGHT ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF UNITS HIGH IN THE TYPE "C" STACK NEXT TO THE DOOR. THE SECOND COLUMN INDICATES THE NUMBER OF UNITS HIGH FOR THE OTHER TYPE "C" STACKS.

EXAMPLE:

A UNIT WHICH IS 42-1/2" LONG BY 43" WIDE BY 51" HIGH HAS BEEN SELECTED FOR THE EXAMPLE, AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE BOTTOM OF PAGE 56. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 90 THRU 93 AND 101, FOR THE TYPE "A" STACKS, IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED AT LEFT. THE 42-1/2" DIMENSION IS NOT LISTED IN THE LEFT HAND COLUMN OF CHART NO. 90 SO 43" WILL BE USED, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. THE SIDE AISLE DIMENSION OF 20" INDICATED IN THE SECOND COLUMN OF THE CHART WILL APPROXIMATELY CENTER THE FIRST TIER OF UNITS IN THE WIDTH OF THE MAGAZINE. ALL UNITS CAN BE STACKED TWO TIERS HIGH, SO FROM THE UNIT HEIGHT DIMENSION OF 15"-56" IN CHART NO. 92 FOLLOW THE ARROWS ALONG THE DOTTED-LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION (LENGTH IF THE BOXES WITHIN A UNIT ARE TO BE LENGTHWISE IN THE MAGAZINE OR WIDTH IF THE BOXES ARE TO BE CROSSWISE) WHICH IS INDICATED AS 41"-48". THE HEADING OF THAT COLUMN SPECIFIES THAT 6 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN EACH OF THE FIRST TWO TIERS. FOLLOWING THE SAME PROCEDURE, CHART NO. 93 SPECIFIES THAT 4 UNITS CAN BE STORED IN THE THIRD TIER. THE ABSENCE OF THE 51" HEIGHT DIMENSION IN THE LEFT HAND COLUMN OF CHART NO. 94 INDICATES THAT THREE TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN THE MAGAZINE, THE 43" DIMENSION IS INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 101 ON PAGE 61, WHICH AGAIN COULD REPRESENT THE UNIT LENGTH OR WIDTH. FOLLOWING THE ARROW TO THE RIGHT SPECIFIES THAT 19 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 80'-0" LONG STRADLEY MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 102 ON PAGE 61. THE UNIT LENGTH OF 42-1/2" FALLS WITHIN THE RANGE OF 40"-47". FOLLOW THE ARROW ALONG THE DOTTED-LINE TO THE FIRST COLUMN WHICH INDICATES THAT 2 UNITS CAN BE STORED ON THE FLOOR ON ONE SIDE OF THE MAGAZINE AND 4 CAN BE STORED ON THE OPPOSITE SIDE ON THE FLOOR IN THE FIRST "C" STACK, THE STACK ADJACENT TO THE TYPE "A" STACKS.

TO FIND THE NUMBER OF TIERS THAT CAN BE STORED IN THE TYPE "C" STACKS, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 103 ON PAGE 61. THE UNIT HEIGHT OF 51" FALLS WITHIN THE RANGE OF 48"-56". FOLLOW THE ARROW ALONG THE DOTTED-LINE TO THE ADJACENT COLUMN WHICH INDICATES THAT THE SKIDDED UNITS CAN BE STORED 2 UNITS HIGH IN THE "C" STACK NEXT TO THE DOOR. FOLLOWING ALONG TO THE RIGHT THE NEXT COLUMN INDICATES THAT THE OTHER TYPE "C" STACKS CAN ALSO BE STORED 2 HIGH. SEE SPECIAL NOTE 3.

- SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 101 THRU 103 IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 101 ON PAGE 61 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

CHART NO. 90			
UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	12"	44"	17"
26"	6"	45"	14"
27"	14"	46"	11"
28"	9"	47"	8"
29"	19"	48"	6"
30"	14"	49"	27"
31"	10"	50"	24"
32"	6"	51"	22"
33"	17"	52"	19"
34"	13"	53"	17"
35"	9"	54"	14"
36"	6"	55"	12"
37"	20"	56"	9"
38"	16"	57"	7"
39"	13"	58"	7"
40"	9"	59"	31"
41"	6"	60"	29"
42"	23"	61"	27"
43"	20"	62"	25"

● USE UNIT LENGTH DIMENSION IF THE BOXES WITHIN THE UNIT ARE GOING TO BE LENGTHWISE IN THE MAGAZINE.

CHART NO. 91	
UNIT HEIGHT	MINIMUM LEFT SIDE AISLE
15"-54"	6"

NOTE:

A LEFT SIDE AISLE GREATER THAN 6" MAY BE USED TO ACHIEVE A MAXIMUM STACKING PATTERN.

CHART NO. 92									
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH								
15"-56"	25'-26"	28'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	57'-66"	
UNIT HEIGHT	11	10	9	8	7	6	5	4	
	NUMBER OF ROWS WIDE IN FIRST AND SECOND TIERS OF TYPE "A" STACKS.								

UNIT HEIGHT	CHART NO. 93											
	UNIT SIZE RANGE, LENGTH OR WIDTH											
55" MAX												25'-36"
54"												48'-66"
53"												
52"												
51"												
50"												
49"												
48"												
47"												
46"												
45"												
44"												
43"												
42"												
41"												
40"												
39"												
15'-37"												
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1	
	NUMBER OF ROWS WIDE IN THIRD TIER OF TYPE "A" STACKS.											

UNIT HEIGHT	CHART NO. 94											
	UNIT SIZE RANGE, LENGTH OR WIDTH											
41" MAX												
40"												
39"												
38"												
37"												
36"												
35"												
34"												
33"												
32"												
31"												
30"												
29"												
28"												
15'-27"												
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1	
	NUMBER OF ROWS WIDE IN FOURTH TIER OF TYPE "A" STACKS.											

UNIT HEIGHT	CHART NO. 95											
	UNIT SIZE RANGE, LENGTH OR WIDTH											
33" MAX												
32"												
31"												
30"												
29"												
28"												
27"												
26"												
25"												
24"												
23"												
15'-22"												
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1	
	NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.											

UNIT HEIGHT		CHART NO. 96									
		UNIT SIZE RANGE, LENGTH OR WIDTH									
27" MAX											
26"											
25"											
24"											
23"											
22"											
21"											
20"											
19"											
15"-18"											
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.										

UNIT HEIGHT		CHART NO. 97									
		UNIT SIZE RANGE, LENGTH OR WIDTH									
23" MAX											
22"											
21"											
20"											
19"											
18"											
17"											
16"											
15"											
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.										

UNIT HEIGHT		CHART NO. 98								
		UNIT SIZE RANGE, LENGTH OR WIDTH								
20" MAX										
19"										
18"										
17"										
16"										
15"										
UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN EIGHTH TIER OF TYPE "A" STACKS.									

UNIT HEIGHT		CHART NO. 99							
		UNIT SIZE RANGE, LENGTH OR WIDTH							
18" MAX									
17"									
16"									
15"									
UNIT HEIGHT	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN NINTH TIER OF TYPE "A" STACKS.								

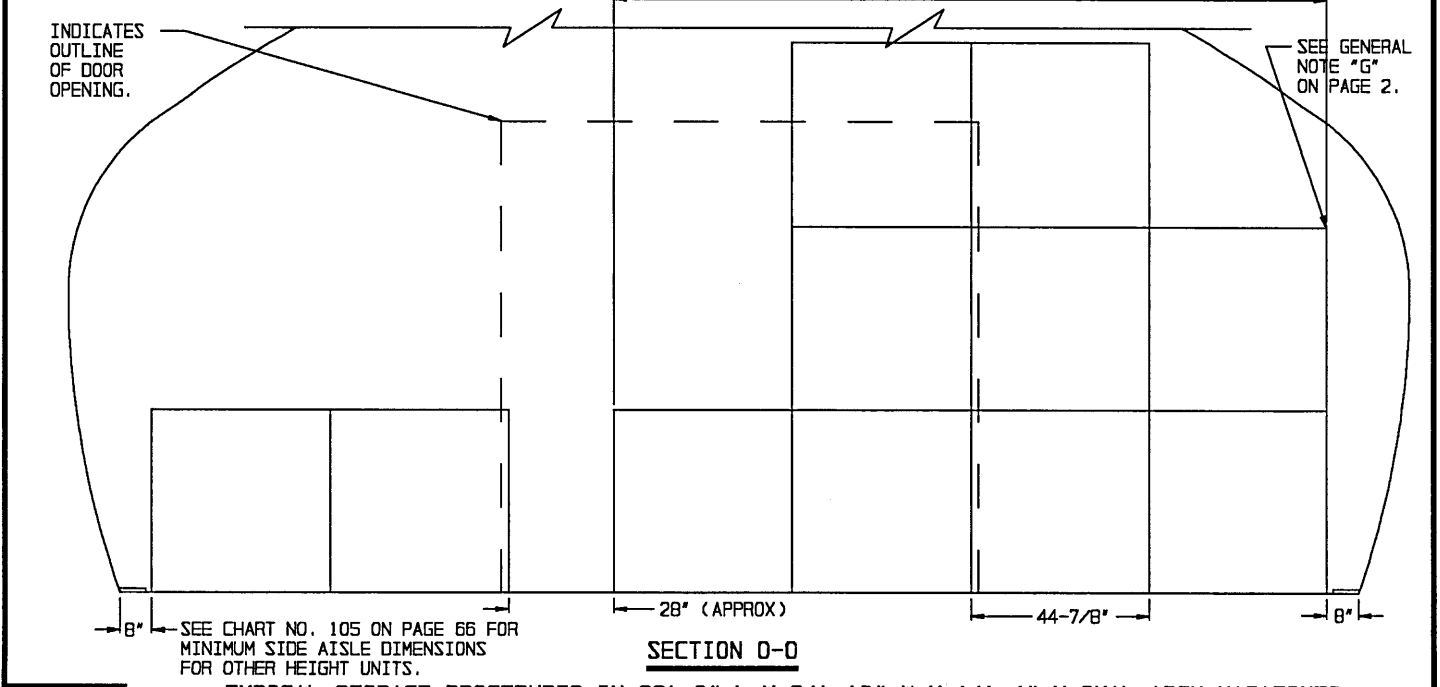
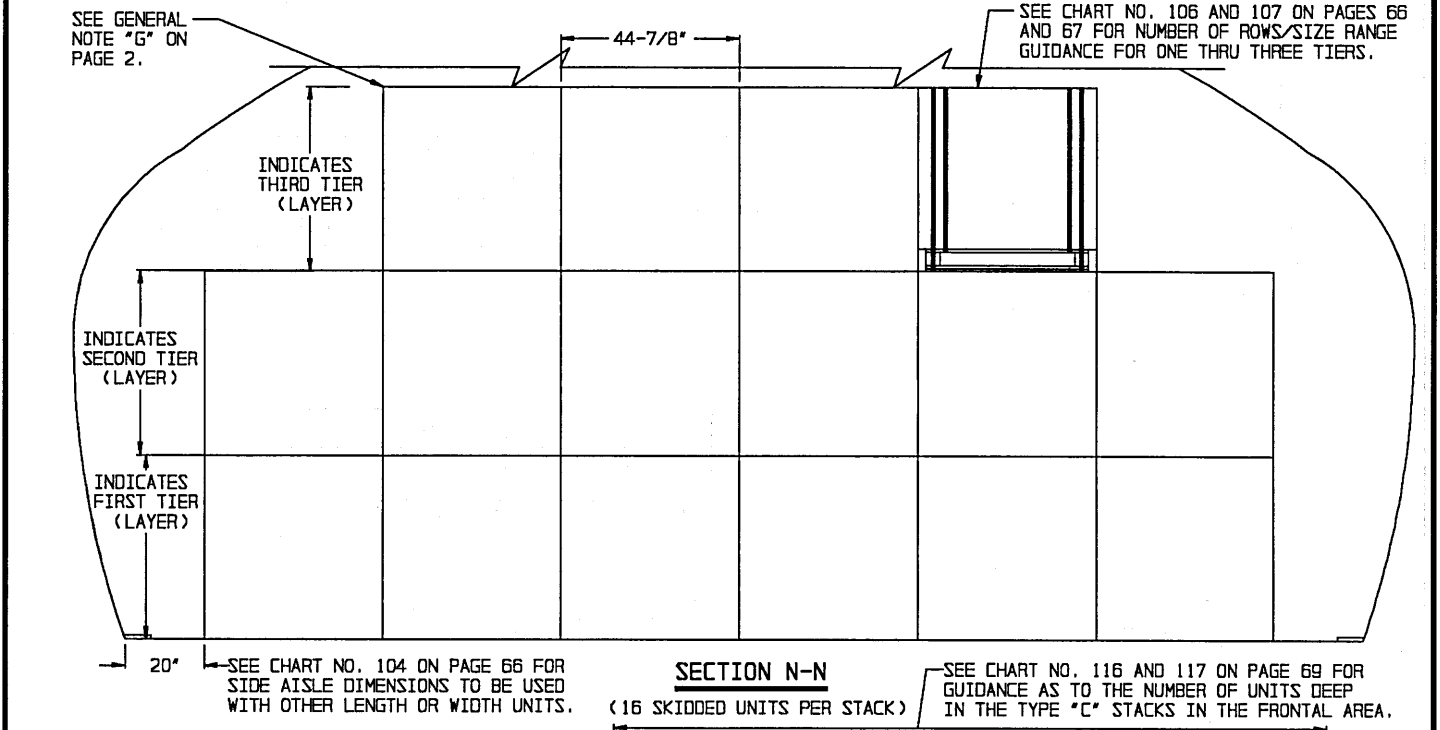
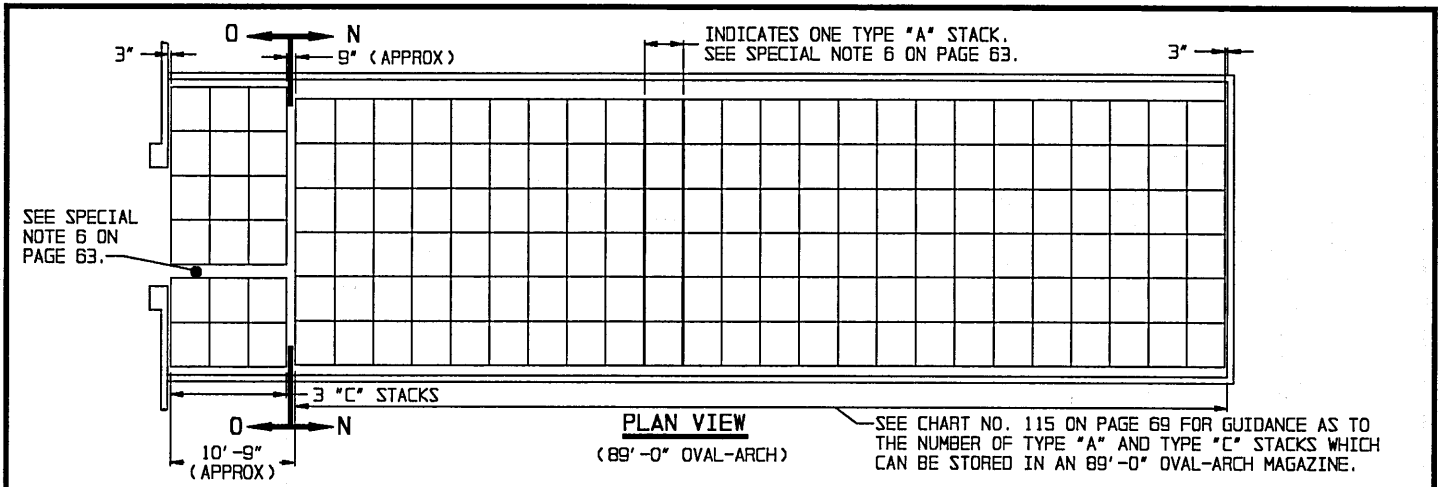


CHART NO. 101				
UNIT DIMENSION LENGTHWISE IN MAGAZINE	80'-0" X 25'-0" X 14'-0" STRADLEY MAGAZINE			
	*A* STACKS		*C* STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN
66"	12	13'-9"	2	30"
65"	12	14'-9"	2	44"
64"	12	15'-9"	2	58"
63"	12	16'-9"	3	9"
62"	12	17'-9"	3	24"
61"	13	13'-8"	2	39"
60"	13	14'-9"	2	54"
59"	13	15'-10"	3	10"
58"	13	16'-11"	3	26"
57"	14	13'-3"	2	42"
56"	14	14'-5"	2	58"
55"	14	15'-7"	3	22"
54"	15	12'-3"	2	39"
53"	15	13'-6"	2	53"
52"	15	14'-9"	3	18"
51"	15	16'-0"	3	36"
50"	16	13'-1"	2	54"
49"	16	14'-5"	3	23"
48"	17	11'-9"	2	42"
47"	17	13'-2"	3	14"
46"	17	14'-7"	3	34"
45"	18	12'-3"	3	9"
44"	18	13'-9"	3	30"
43"	19	11'-8"	3	8"
42"	19	13'-3"	3	30"
41"	20	11'-5"	3	11"
40"	20	13'-1"	3	34"
39"	21	11'-6"	3	18"
38"	21	13'-3"	3	42"
37"	22	11'-11"	3	29"
36"	22	13'-9"	4	18"
35"	23	12'-8"	4	9"
34"	24	12'-0"	3	39"
33"	25	11'-0"	3	30"
32"	25	13'-4"	4	29"
31"	26	12'-7"	4	24"
30"	27	12'-3"	4	24"
29"	28	12'-1"	4	26"
28"	29	12'-1"	4	30"
27"	30	12'-3"	5	9"
26"	31	12'-7"	5	18"
25"	33	10'-11"	4	19"

CHART NO. 103		
UNIT HEIGHT	NUMBER OF UNITS HIGH	
	TYPE "C" STACK NEXT TO DOOR	OTHER TYPE "C" STACKS
48"-56"	2	2
38"-48"	2	3
36"-38"	3	3
29"-36"	3	4
24"-29"	4	5
23"-24"	4	6
20"-23"	5	6
19"-20"	5	7
16"-19"	6	7
15"-16"	7	7

UNIT HEIGHT	CHART NO. 100						
	UNIT SIZE RANGE, LENGTH OR WIDTH						
16" MAX							
15"	25'-27"	27'-32"	32'-38"	38'-48"	48'-54"	54'-66"	55'-66"
UNIT HEIGHT	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN TENTH TIER OF TYPE "A" STACKS.						

CHART NO. 102		
UNIT DIM ACROSS MAGAZINE	NUMBER OF UNITS WIDE IN TYPE "C" STACKS	
	REAR "C" STACK	OTHER "C" STACKS
57"-66"	3 AND 1	2 AND 1
53"-57"	3 AND 2	3 AND 1
47"-53"	4 AND 1	4 AND 1
40"-47"	4 AND 2	4 AND 1
36"-40"	5 AND 2	5 AND 2
25"-36"	6 AND 2	6 AND 2

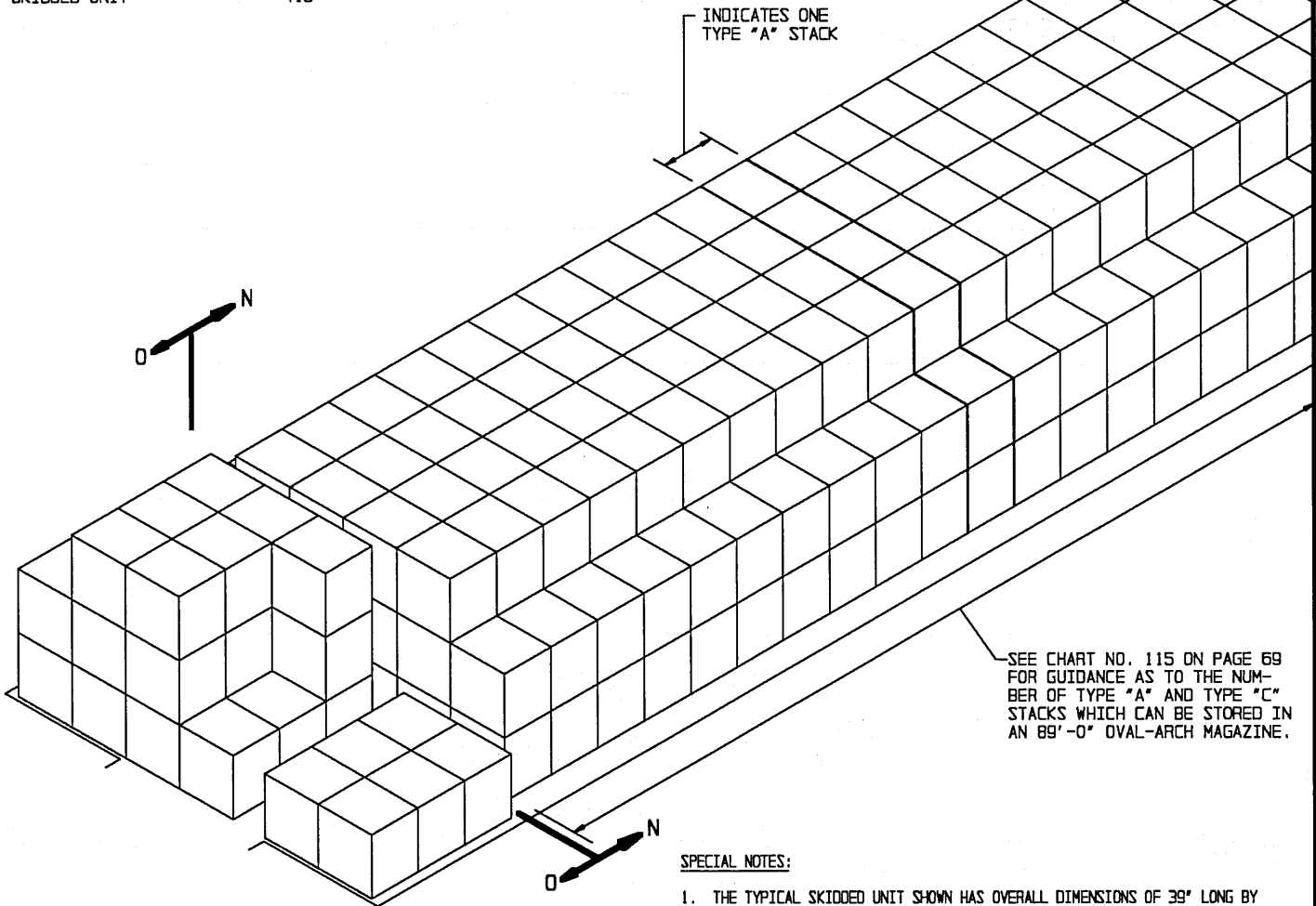


**STORAGE IN 89'-0" OVAL ARCH**

**MAGAZINE**

(14'-4" HIGH)

ITEM QUANTITY  
 SKIDDED UNIT - - - - - 419



**ISOMETRIC VIEW**  
 (89'-0" OVAL ARCH)

**SPECIAL NOTES:**

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 66 THRU 69 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. THE STORAGE VIEWS ON PAGE 62 AND ABOVE AND THE TYPICAL STACKING PATTERN VIEWS ON PAGE 64 DEPICT SKIDDED UNITS STACKED IN VERTICAL ALIGNMENT. THE TYPICAL STACKING PATTERN VIEWS ON PAGE 65 DEPICT THE THIRD AND/OR FOURTH TIERS CENTERED (STAGGERED) OVER UNITS BELOW. ALL THE TIERS ARE CENTERED IN THE WIDTH OF THE MAGAZINE USING SIDE AISLE DIMENSIONS USUALLY MORE THAN THE MINIMUM. THE UPPER TIERS IN SOME OF THOSE VIEWS ARE CENTERED (STAGGERED) OVER THE UNITS BELOW. THE MAXIMUM NUMBER OF ROWS PER TIER SPECIFIED IN CHARTS 106 THRU 114 ON PAGES 66 THRU 69 IS BASED ON UNITS BEING CENTERED IN THE MAGAZINE WIDTH. THE SKIDDED UNITS IN A STACK WILL BE STORED IN VERTICAL ALIGNMENT IF A CHART FOR THE TIER INDICATES EITHER THE SAME QUANTITY OR TWO LESS ROWS WIDE THAN IS SPECIFIED BY THE CHART FOR THE NEXT LOWER TIER. THE SKIDDED UNITS IN A TIER WILL BE CENTERED (STAGGERED) ON THE UNITS IN THE NEXT LOWER TIER IF A CHART FOR THE TIER INCATES A QUANTITY OF ONE LESS ROW WIDE THAN IS SPECIFIED FOR THE NEXT LOWER TIER. SELECTION OF A STORAGE PROCEDURE IS OPTIONAL. HOWEVER, IT IS TO BE NOTED THAT IN SOME INSTANCES GREATER STORAGE DENSITY CAN BE ATTAINED BY UTILIZING THE STAGGERED METHOD. NOTE THAT THE STAGGERED STACKING PATTERN CANNOT BE USED WHEN STORING MULTIPLE LOTS WHICH REQUIRE ADJACENT ROWS TO BE SEPARATED. CHART NO. 115 ON PAGE 69 SPECIFIES THE NUMBER OF TYPE "A" AND TYPE "C" STACKS WHICH CAN BE STORED IN AN 89'-0" LONG MAGAZINE. CHART NO. 116 ON PAGE 69 SPECIFIES THE NUMBER OF SKIDDED UNITS DEEP WHICH CAN BE STORED ON EACH SIDE OF THE MAGAZINE IN THE BOTTOM TIER OF THE TYPE "C" STACKS IN THE FRONTAL AREA. CHART NO. 117 SPECIFIES THE HEIGHT RANGE OF SKIDDED UNITS FOR THE INDICATED NUMBER OF TIERS IN THE TYPE "C" STACK IMMEDIATELY IN FRONT OF THE DOOR OPENING. THE HEIGHT OF THE OTHER TYPE "C" STACKS WILL BE THE SAME AS FOR THE UNITS IN THE BALANCE OF THE MAGAZINE.

**(SPECIAL NOTES CONTINUED)**

3. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).
4. WHEN STORED WITH THE BOXES ON THE UNIT CROSSWISE IN THE MAGAZINE, SKIDDED UNITS OF TOP-CLEATED BOXES WHICH ARE ASSEMBLED ON THE TYPE II SKID BASE WILL NEED SPECIAL SUPPORT IF AN UPPER TIER IS STAGGERED ABOVE A LOWER TIER (NOT IN VERTICAL ALIGNMENT). A 1" X 4" BY UNIT LENGTH PIECE MUST BE POSITIONED UNDER EACH PAIR OF OUTER SKID BASE POSTS TO PROVIDE STACK STABILITY.
5. REFER TO PAGES 102 AND 103 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
6. THE NUMBER OF TYPE "A" STACKS SPECIFIED FOR A MAGAZINE IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT OPERATING AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "A" STACK TO THE FRONT WALL) OF 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. ADDITIONALLY TYPE "A" STACKS MAY BE STORED IF THE AVAILABLE MATERIAL HANDLING EQUIPMENT PERMITS.
7. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

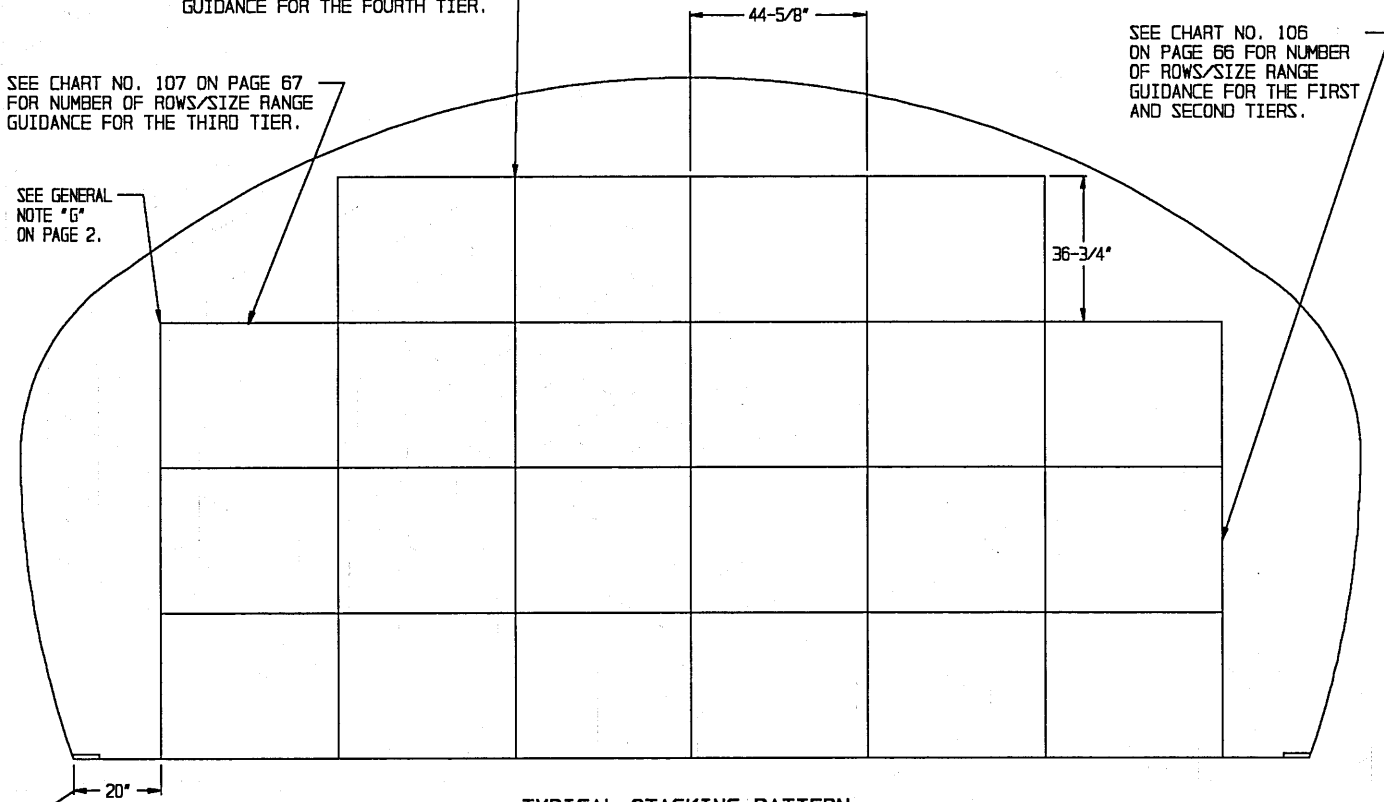
(CONTINUED AT LEFT)

SEE CHART NO. 108 ON PAGE 67 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE FOURTH TIER.

SEE CHART NO. 107 ON PAGE 67 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE THIRD TIER.

SEE GENERAL NOTE "G" ON PAGE 2.

SEE CHART NO. 106 ON PAGE 66 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE FIRST AND SECOND TIERS.



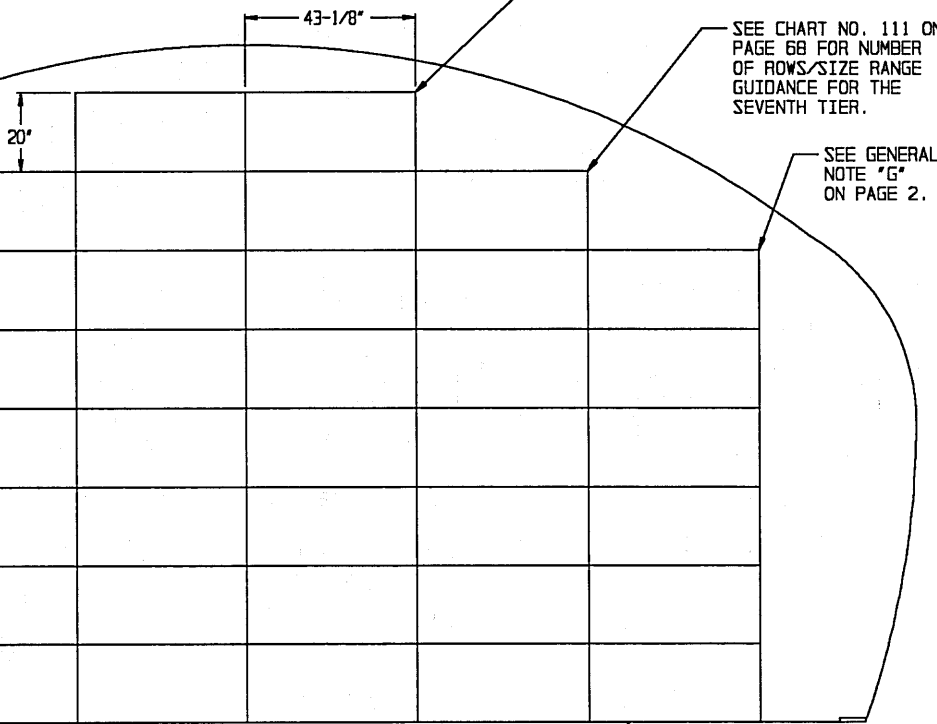
**TYPICAL STACKING PATTERN**

SEE CHART NO. 104 ON PAGE 66 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

THE SKIDDED UNIT SHOWN IS 44-5/8" WIDE BY 36-3/4" HIGH. FOUR-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 33" BUT NOT MORE THAN 42" IN HEIGHT.

SEE CHART NO. 112 ON PAGE 68 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE EIGHTH TIER.

SEE CHART NO. 107 THRU 110 ON PAGES 67 AND 68 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE THIRD THRU SIXTH TIERS.



**TYPICAL STACKING PATTERN**

SEE CHART NO. 104 ON PAGE 66 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER LENGTH UNITS.

THE SKIDDED UNIT SHOWN IS 43-1/8" LONG BY 20" HIGH. EIGHT-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 18" BUT NOT MORE THAN 20" IN HEIGHT.

SEE CHART NO. 106 ON PAGE 66 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE FIRST AND SECOND TIERS.

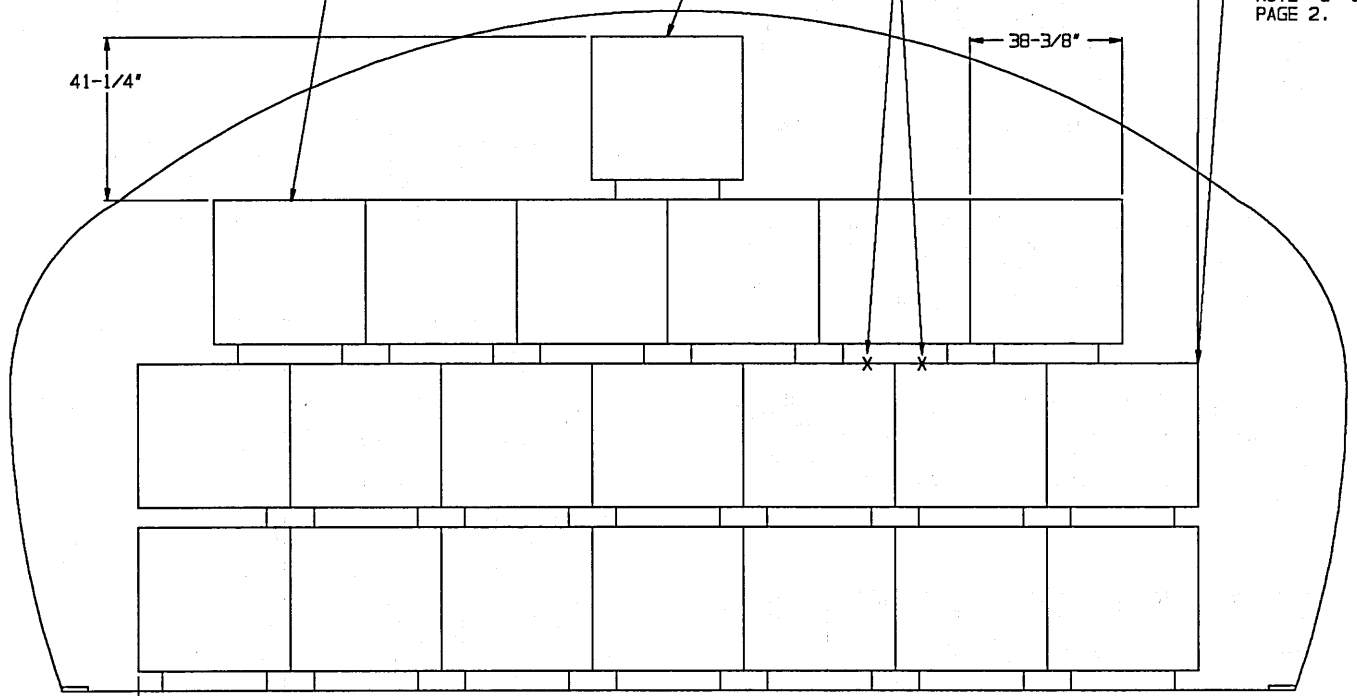
SEE CHART NO. 107 ON PAGE 67 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE THIRD TIER.

SEE CHART NO. 108 ON PAGE 67 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE FOURTH TIER.

SEE SPECIAL NOTE 4 ON PAGE 63.

SEE CHART NO. 106 ON PAGE 66 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE FIRST AND SECOND TIERS.

SEE GENERAL NOTE "G" ON PAGE 2.



19"

SEE CHART NO. 104 ON PAGE 66 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 38-3/8" WIDE BY 41-1/4" HIGH. FOUR-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 33" BUT NOT MORE THAN 42" IN HEIGHT.

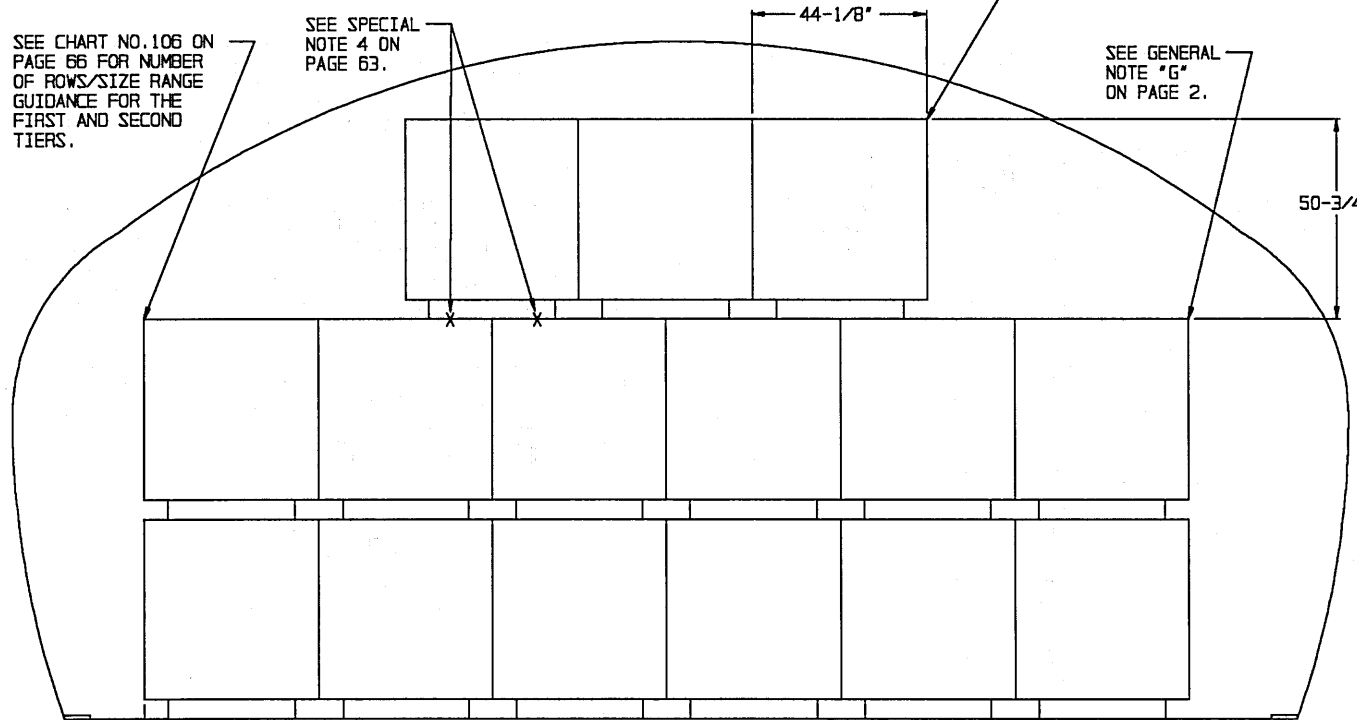
SEE CHART NO. 107 ON PAGE 67 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE THIRD TIER.

SEE CHART NO. 106 ON PAGE 66 FOR NUMBER OF ROWS/SIZE RANGE GUIDANCE FOR THE FIRST AND SECOND TIERS.

SEE SPECIAL NOTE 4 ON PAGE 63.

44-1/8"

SEE GENERAL NOTE "G" ON PAGE 2.



50-3/4"

20"

SEE CHART NO. 104 ON PAGE 66 FOR SIDE AISLE DIMENSIONS TO BE USED WITH OTHER WIDTH UNITS.

**TYPICAL STACKING PATTERN**

THE SKIDDED UNIT SHOWN IS 44-1/8" WIDE BY 50-3/4" HIGH. THREE-TIER STORAGE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE OVER 42" IN HEIGHT.

**TYPICAL STACKING PATTERNS IN OVAL-ARCH MAGAZINES**

**SPECIAL NOTES:**

(SPECIAL NOTES CONTINUED)

- THE CHARTS ON THIS PAGE THRU PAGE 69 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN OVAL-ARCH MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE OVAL-ARCH MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
- THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" AT RIGHT.

**STEP 1**

LOCATE IN CHART NO. 104 THE LENGTH OR WIDTH FIGURE WHICH IS NEAREST TO THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED A SIDE AISLE DIMENSION WHICH WILL LOCATE THE FIRST AND SECOND TIER OF UNITS SO AS TO BE NEARLY CENTERED IN THE WIDTH OF THE OVAL-ARCH MAGAZINE. THE MINIMUM SIDE AISLE OF 8" IS GIVEN IN CHART NO. 105

**STEP 2**

ALL UNITS CAN BE STORED IN TWO FULL TIERS. LOCATE IN CHART NO. 106 THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN EACH OF THE FIRST TWO TIERS.

**STEP 3**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 107 THE FIGURE WHICH IS EITHER THE EXACT UNIT HEIGHT OR IS THE NEXT WHOLE DIMENSION OVER THE UNIT HEIGHT. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH (FOR UNITS TO BE STORED WITH THE BOXES LENGTHWISE) OR THE WIDTH (FOR UNITS TO BE STORED WITH THE BOXES CROSSWISE) OF THE UNIT TO BE STORED. THE HEADING FOR THAT COLUMN WILL INDICATE THE NUMBER OF ROWS WIDE THAT CAN BE STORED IN THE THIRD TIER. IF THE NUMBER OF ROWS IS TWO (2) LESS THAN FOR THE SECOND TIER, POSITION THE THIRD-TIER UNITS DIRECTLY ABOVE ALL EXCEPT THE OUTER ROWS OF UNITS IN THE SECOND TIER. IF THE NUMBER OF ROWS IS ONE (1) LESS OR THREE (3) LESS THAN FOR THE SECOND TIER, POSITION THE THIRD TIER UNITS SO AS TO BE CENTERED ABOVE THE JOINTS OF ROWS IN THE SECOND TIER. IF THE NUMBER OF ROWS IS THE SAME AS IN THE SECOND TIER, POSITION UNITS DIRECTLY ABOVE ALL SECOND TIER UNITS.

**STEP 4**

REPEAT STEP 3 FOR CHARTS 108 THRU 114, AS APPLICABLE, FOR THE FOURTH THRU THE TENTH TIERS.

**STEP 5**

LOCATE IN ONE OF THE TWO COLUMNS IN CHART NO. 115 THE LENGTH OR WIDTH OF THE UNIT, AS APPLICABLE, FOR THE ORIENTATION OF THE UNITS BEING STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "A" STACKS (FULL STACKS ACROSS THE MAGAZINE) THAT CAN BE POSITIONED IN AN 89'-0" OVAL-ARCH MAGAZINE. SEE SPECIAL NOTE 6 ON PAGE 63 FOR THE CRITERIA USED IN DETERMINING THE NUMBER OF TYPE "A" STACKS SPECIFIED WITHIN THE CHART.

(CONTINUED AT RIGHT)

CHART NO. 104			
UNIT LENGTH OR WIDTH	SIDE AISLE	UNIT LENGTH OR WIDTH	SIDE AISLE
25"	17"	46"	17"
26"	12"	47"	14"
27"	20"	48"	11"
28"	15"	49"	8"
29"	10"	50"	30"
30"	20"	51"	27"
31"	15"	52"	25"
32"	11"	53"	22"
33"	23"	54"	20"
34"	19"	55"	17"
35"	15"	56"	15"
36"	11"	57"	12"
37"	25"	58"	10"
38"	22"	59"	37"
39"	19"	60"	35"
40"	15"	61"	33"
41"	11"	62"	31"
42"	8"	63"	29"
43"	26"	64"	27"
44"	23"	65"	25"
45"	20"	65"	23"

**STEP 6**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 116 THE LINE WHICH SPECIFIES THE SKIDDED UNIT SIZE RANGE THAT CONTAINS THE LENGTH OR WIDTH, AS APPLICABLE, WHICH IS STORED ACROSS THE WIDTH OF THE MAGAZINE. ALONG THAT LINE TO THE RIGHT IS INDICATED THE NUMBER OF UNITS WIDE THAT CAN BE STORED IN TYPE "C" STACKS.

**STEP 7**

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 117 THE LINE WHICH SPECIFIES THE SKIDDED UNIT HEIGHT RANGE THAT CONTAINS THE HEIGHT OF THE UNIT TO BE STORED. ALONG THAT LINE TO THE RIGHT ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF UNITS HIGH IN THE TYPE "C" STACK NEXT TO THE DOOR. THE SECOND COLUMN INDICATES THE NUMBER OF UNITS HIGH FOR THE OTHER TYPE "C" STACK.

**EXAMPLE:**

A UNIT WHICH IS 43-1/8" LONG BY 37" WIDE BY 20" HIGH HAS BEEN SELECTED FOR THE EXAMPLE, AS SHOWN IN THE TYPICAL STACKING PATTERN AT THE BOTTOM OF PAGE 64. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS 104 THRU 112 AND 115 FOR THE TYPE "A" STACKS, IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED AT LEFT. THE 43-1/8" DIMENSION IS NOT LISTED IN THE LEFT HAND COLUMN OF CHART NO. 104 SO 44" WILL BE USED, WHICH IN THIS EXAMPLE COULD REPRESENT EITHER THE UNIT LENGTH OR WIDTH. THE SIDE AISLE DIMENSION OF 23" INDICATED IN THE SECOND COLUMN OF THE CHART WILL APPROXIMATELY CENTER THE FIRST TIER OF UNITS IN THE WIDTH OF THE MAGAZINE. ALL UNITS CAN BE STACKED TWO TIERS HIGH, SO FROM INDICATED HEIGHT DIMENSION OF 15"-56" IN CHART NO. 106 FOLLOW THE ARROWS ALONG THE DOTTED-LINE TO THE RIGHT TO THE LENGTH OR WIDTH DIMENSION (LENGTH IF THE BOXES WITHIN A UNIT ARE TO BE LENGTHWISE IN THE MAGAZINE OR WIDTH IF THE BOXES ARE TO BE CROSSWISE) WHICH IS INDICATED AS 42"-49". THE HEADING FOR THAT COLUMN SPECIFIES THAT 6 UNITS CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE IN EACH OF THE FIRST TWO TIERS. FOLLOWING THE SAME PROCEDURE, CHART NO. 107 THRU 110 SPECIFY THAT 6 UNITS CAN BE STORED ACROSS THE MAGAZINE THRU THE SIXTH TIERS, CHART NO. 111 INDICATES STORAGE OF 4 UNITS IN THE SEVENTH TIER AND CHART NO. 112 SHOWS 2 UNITS CAN BE STORED IN THE EIGHTH TIER. THE ABSENCE OF THE 20" UNIT HEIGHT DIMENSION IN THE LEFT HAND COLUMN OF CHART NO. 113 INDICATES THAT EIGHT TIERS IS THE MAXIMUM STORAGE HEIGHT FOR THE EXAMPLE UNIT.

TO DETERMINE THE NUMBER OF TYPE "A" AND "C" STACKS THAT CAN BE STORED IN THE MAGAZINE, USE THE 37" DIMENSION WHICH AGAIN COULD REPRESENT EITHER UNIT LENGTH OR WIDTH. USING CHART NO. 115 ON PAGE 69, FIND 37" IN THE LEFT HAND COLUMN. FOLLOWING THE ARROWS TO THE RIGHT INDICATES THAT 25 TYPE "A" STACKS AND 3 TYPE "C" STACKS CAN BE STORED IN AN 89'-0" OVALARCH MAGAZINE.

TO FIND THE NUMBER OF SKIDDED UNITS DEEP AT EACH SIDE OF THE DOOR OPENING IN TYPE "C" STACKS, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 116 ON PAGE 69. THE UNIT LENGTH OF 43-1/8" FALLS WITHIN THE RANGE OF 38"-48". FOLLOW THE ARROW ALONG THE DOTTED-LINE TO THE ADJACENT COLUMN WHICH INDICATES THAT 4 UNITS CAN BE STORED ON THE FLOOR ON ONE SIDE OF THE MAGAZINE AND 2 CAN BE STORED ON THE OPPOSITE SIDE ON THE FLOOR IN THE TYPE "C" STACKS, AT THE FRONT OF THE MAGAZINE.

TO FIND THE NUMBER OF TIERS THAT CAN BE STORED IN THE TYPE "C" STACKS, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 117 ON PAGE 69. THE UNIT HEIGHT OF 20" FALLS WITHIN THE RANGE OF 18"-20". FOLLOW THE ARROW ALONG THE DOTTED-LINE TO THE ADJACENT COLUMN WHICH INDICATES THAT THE SKIDDED UNITS CAN BE STORED 4 UNITS HIGH IN THE "C" STACK NEXT TO THE DOOR. FOLLOWING ALONG TO THE RIGHT THE NEXT COLUMN INDICATES THAT THE OTHER TYPE "C" STACKS CAN BE STORED 7 HIGH. SEE SPECIAL NOTE 3.

- SKIDDED UNITS WITHIN THE TYPE "C" STACKS MAY BE STORED EITHER IN THE SAME ORIENTATION AS THE TYPE "A" STACKS IN THE MAGAZINE OR TURNED 90° TO THOSE IN THE TYPE "A" STACKS. BY STUDYING CHARTS 115 THRU 117 ON PAGE 69 IT CAN BE DETERMINED WHICH POSITIONING WILL RESULT IN THE GREATER NUMBER OF UNITS. NOTE THAT THE NUMBER OF TYPE "C" STACKS SPECIFIED IN CHART NO. 115 IS BASED ON THE UNITS BEING IN THE SAME ORIENTATION AS THOSE IN THE TYPE "A" STACKS.

CHART NO. 105	
UNIT HEIGHT	MINIMUM LEFT SIDE AISLE
15"-56"	8"

UNIT HEIGHT	CHART NO. 106							
	UNIT SIZE RANGE, LENGTH OR WIDTH							
15"-56"	25"-26"	26"-29"	29"-32"	32"-36"	36"-42"	42"-49"	49"-58"	58"-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4
	NUMBER OF ROWS WIDE IN FIRST TIER OF TYPE "A" STACKS.							

UNIT HEIGHT	CHART NO. 107												
	UNIT SIZE RANGE, LENGTH OR WIDTH												
56" MAX										25'-27"	27'-36"	25'-29"	29'-48"
54"										25'-32"	32'-43"	36'-54"	54'-66"
53"									25'	25'-30"	30'-37"	37'-50"	50'-75"
52"									25'-27"	27'-32"	32'-41"	41'-54"	54'-66"
51"									25'	25'-30"	30'-36"	36'-45"	45'-60"
50"									25'-27"	27'-32"	32'-37"	37'-48"	48'-64"
49"									25'	25'-30"	30'-36"	36'-45"	45'-60"
48"									25'-27"	27'-32"	32'-37"	37'-48"	48'-64"
47"									25'	25'-30"	30'-36"	36'-45"	45'-60"
46"									25'-27"	27'-32"	32'-37"	37'-48"	48'-64"
45"									25'	25'-30"	30'-36"	36'-45"	45'-60"
44"									25'-26"	26'-30"	30'-34"	34'-40"	40'-48"
43"									25'	25'-30"	30'-35"	35'-41"	41'-49"
42"									25'-27"	27'-30"	30'-33"	33'-38"	38'-45"
41"									25'	25'-30"	30'-33"	33'-38"	38'-45"
40"									25'-26"	26'-28"	28'-31"	31'-35"	35'-40"
39"									25'-26"	26'-28"	28'-32"	32'-36"	36'-41"
15'-36"									25'-26"	26'-28"	28'-32"	32'-36"	36'-41"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1		
	NUMBER OF ROWS WIDE IN THIRD TIER OF TYPE "A" STACKS.												

UNIT HEIGHT	CHART NO. 108													
	UNIT SIZE RANGE, LENGTH OR WIDTH													
42" MAX												25'-30"	30'-45"	25'-48"
41"												25'-30"	30'-45"	45'-66"
40"												25'-30"	30'-45"	45'-66"
39"												25'-30"	30'-45"	45'-66"
38"												25'-30"	30'-45"	45'-66"
37"												25'-30"	30'-45"	45'-66"
36"												25'-30"	30'-45"	45'-66"
35"												25'-30"	30'-45"	45'-66"
34"												25'-30"	30'-45"	45'-66"
33"												25'-30"	30'-45"	45'-66"
32"												25'-30"	30'-45"	45'-66"
31"												25'-30"	30'-45"	45'-66"
30"												25'-30"	30'-45"	45'-66"
29"												25'-30"	30'-45"	45'-66"
15'-28"												25'-30"	30'-45"	45'-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1			
	NUMBER OF ROWS WIDE IN FOURTH TIER OF TYPE "A" STACKS.													

UNIT HEIGHT	CHART NO. 109													
	UNIT SIZE RANGE, LENGTH OR WIDTH													
33" MAX												25'-28"	28'-42"	42'-66"
32"												25'-28"	28'-42"	42'-66"
31"												25'-28"	28'-42"	42'-66"
30"												25'-28"	28'-42"	42'-66"
29"												25'-28"	28'-42"	42'-66"
28"												25'-28"	28'-42"	42'-66"
27"												25'-28"	28'-42"	42'-66"
26"												25'-28"	28'-42"	42'-66"
25"												25'-28"	28'-42"	42'-66"
24"												25'-28"	28'-42"	42'-66"
15'-23"												25'-28"	28'-42"	42'-66"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1			
	NUMBER OF ROWS WIDE IN FIFTH TIER OF TYPE "A" STACKS.													

CHART NO. 110											
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH										
28" MAX								25'-27"	27'-36"	35'-48"	
27"								25'-28"	28'-36"	48'-66"	
26"								25'-28"	28'-36"	48'-66"	
25"								25'-28"	28'-36"	48'-66"	
24"								25'-28"	28'-36"	48'-66"	
23"								25'-28"	28'-36"	48'-66"	
22"								25'-28"	28'-36"	48'-66"	
21"								25'-28"	28'-36"	48'-66"	
20"								25'-28"	28'-36"	48'-66"	
15"-19"	25'-26"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN SIXTH TIER OF TYPE "A" STACKS.										

CHART NO. 111													
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH												
23" MAX								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
22"								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
21"								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
20"								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
19"								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
18"								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
17"								25'-26"	26'-31"	31'-39"	35'-38"	38'-57"	57'-66"
15"-16"	25'-26"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1		
	NUMBER OF ROWS WIDE IN SEVENTH TIER OF TYPE "A" STACKS.												

CHART NO. 112													
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH												
20" MAX								25'-28"	28'-33"	25'-30"	30'-40"	40'-50"	60'-66"
19"								25'-28"	28'-33"	25'-30"	30'-40"	40'-50"	60'-66"
18"								25'-28"	28'-33"	25'-30"	30'-40"	40'-50"	60'-66"
17"								25'-28"	28'-33"	25'-30"	30'-40"	40'-50"	60'-66"
16"								25'-28"	28'-33"	25'-30"	30'-40"	40'-50"	60'-66"
15"	25'	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"	25'-28"
UNIT HEIGHT	11	10	9	8	7	6	5	4	3	2	1		
	NUMBER OF ROWS WIDE IN EIGHTH TIER OF TYPE "A" STACKS.												

CHART NO. 113											
UNIT HEIGHT	UNIT SIZE RANGE, LENGTH OR WIDTH										
18" MAX								25'-27"	27'-36"	36'-54"	54'-66"
17"								25'-27"	27'-36"	36'-54"	54'-66"
16"								25'-27"	27'-36"	36'-54"	54'-66"
15"								25'-27"	27'-36"	36'-54"	54'-66"
UNIT HEIGHT	9	8	7	6	5	4	3	2	1		
	NUMBER OF ROWS WIDE IN NINTH TIER OF TYPE "A" STACKS.										



CHART NO. 115				
UNIT DIMENSION LENGTHWISE IN MAGAZINE	89'-0" X 24'-10" X 14'-4" OVAL-ARCH MAGAZINE			
	"A" STACKS		"C" STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN
66"	13	17'-3"	2	72"
65"	13	18'-4"	3	22"
64"	14	14'-1"	2	38"
63"	14	15'-3"	2	54"
62"	14	16'-5"	2	70"
61"	14	17'-7"	3	25"
60"	15	13'-9"	2	42"
59"	15	15'-0"	2	59"
58"	15	16'-3"	3	18"
57"	16	12'-9"	2	36"
56"	16	14'-1"	2	54"
55"	16	15'-5"	3	17"
54"	17	12'-3"	2	36"
53"	17	13'-8"	2	58"
52"	17	15'-1"	3	22"
51"	18	12'-3"	2	42"
50"	18	13'-9"	3	12"
49"	19	11'-2"	2	33"
48"	19	12'-9"	3	6"
47"	19	14'-4"	3	28"
46"	20	12'-1"	2	50"
45"	20	13'-9"	3	27"
44"	21	11'-9"	3	6"
43"	21	13'-6"	3	30"
42"	22	11'-9"	3	12"
41"	22	13'-7"	3	37"
40"	23	12'-1"	3	22"
39"	24	10'-9"	3	9"
38"	24	12'-9"	3	36"
37"	25	11'-8"	3	26"
36"	26	10'-9"	3	18"
35"	26	12'-11"	4	12"
34"	27	12'-3"	3	42"
33"	28	11'-9"	3	39"
32"	29	11'-5"	3	38"
31"	30	11'-3"	3	39"
30"	31	11'-3"	4	12"
29"	32	11'-11"	4	24"
28"	33	11'-9"	4	26"
27"	34	12'-3"	5	9"
26"	35	12'-11"	5	22"
25"	37	11'-8"	5	15"

CHART NO. 117		
UNIT HEIGHT	NUMBER OF UNITS HIGH	
	TYPE "C" STACK NEXT TO DOOR	OTHER TYPE "C" STACKS
46"-56"	1	2
42"-46"	2	2
33"-42"	2	3
31"-33"	2	4
28"-31"	3	4
23"-28"	3	5
20"-23"	4	6
18"-20"	4	7
15"-18"	5	7
15"	6	7

UNIT HEIGHT	CHART NO. 114						
	UNIT SIZE RANGE, LENGTH OR WIDTH						
16" MAX			25"	25"-30"	30"-40"	40"-60"	60"-66"
15"	25"	25"-30"	30"-36"	36"-45"	45"-60"	60"-66"	
UNIT HEIGHT	7	6	5	4	3	2	1
	NUMBER OF ROWS WIDE IN TENTH TIER OF TYPE "A" STACKS.						

CHART NO. 116	
UNIT DIM ACROSS MAGAZINE	NUMBER OF UNITS WIDE IN TYPE "C" STACKS
64"-66"	2 AND 1
48"-64"	3 AND 1
38"-48"	4 AND 2
32"-38"	5 AND 2
27"-32"	6 AND 3
26"-27"	7 AND 3
25"-26"	7 AND 4

ARROWS INDICATE DIRECTION OF STORAGE FROM WALLS TOWARD CENTER OF MAGAZINE.

P ← → O E

SEE CHART NO. 118 ON PAGE 75 FOR STARTING LOCATIONS FOR OTHER SIZE UNITS.

FIFTH ROW (LAST ROW). SEE CHART NO. 131 ON PAGE 81.

FOURTH ROW. SEE CHART NO. 130 ON PAGE 81.

NUMBERS INDICATE THE TIERS (LAYERS) HIGH THAT SKIDDED UNITS ARE STACKED.

THIRD ROW. SEE CHART NO. 129 ON PAGE 80.

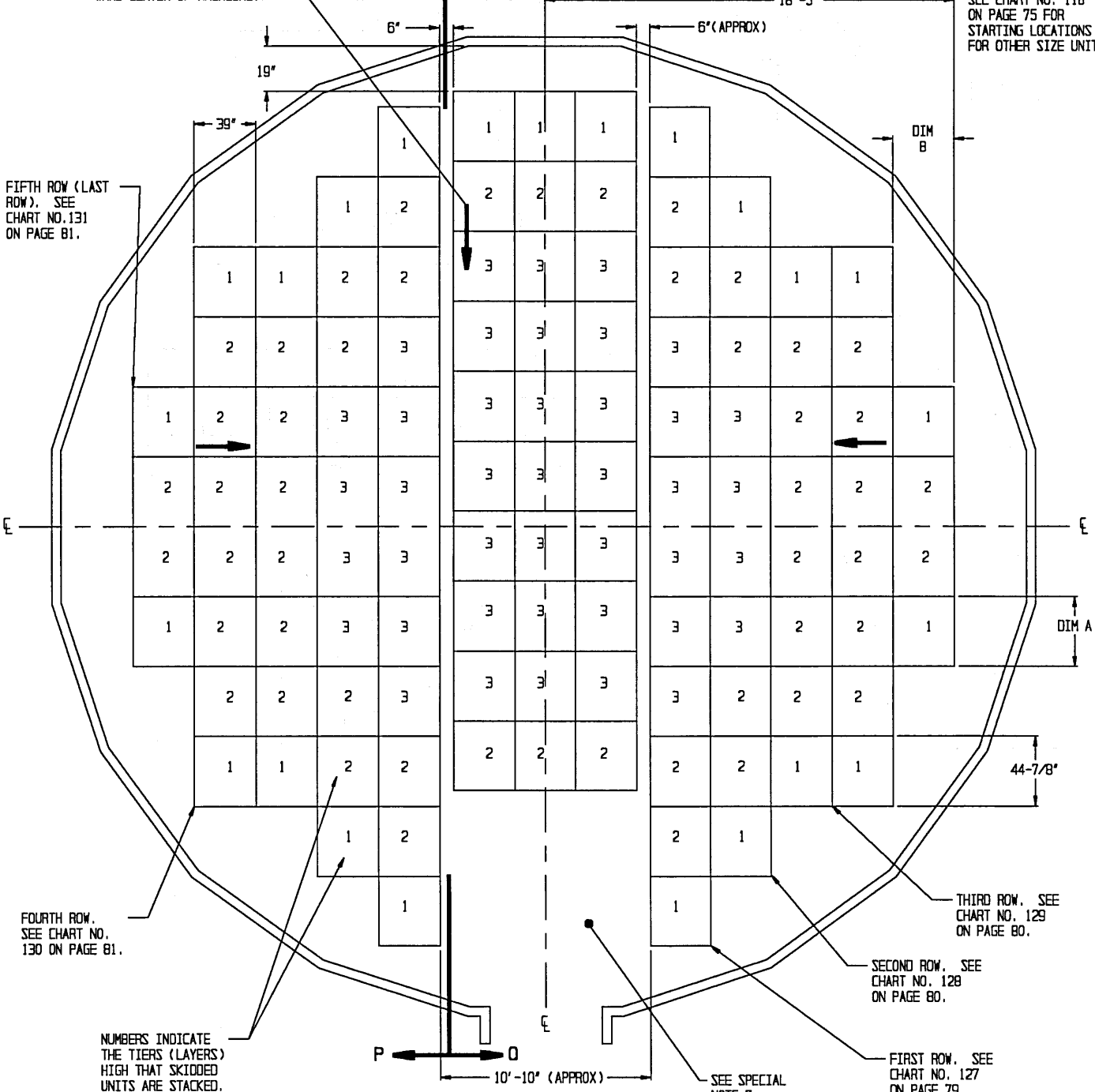
SECOND ROW. SEE CHART NO. 128 ON PAGE 80.

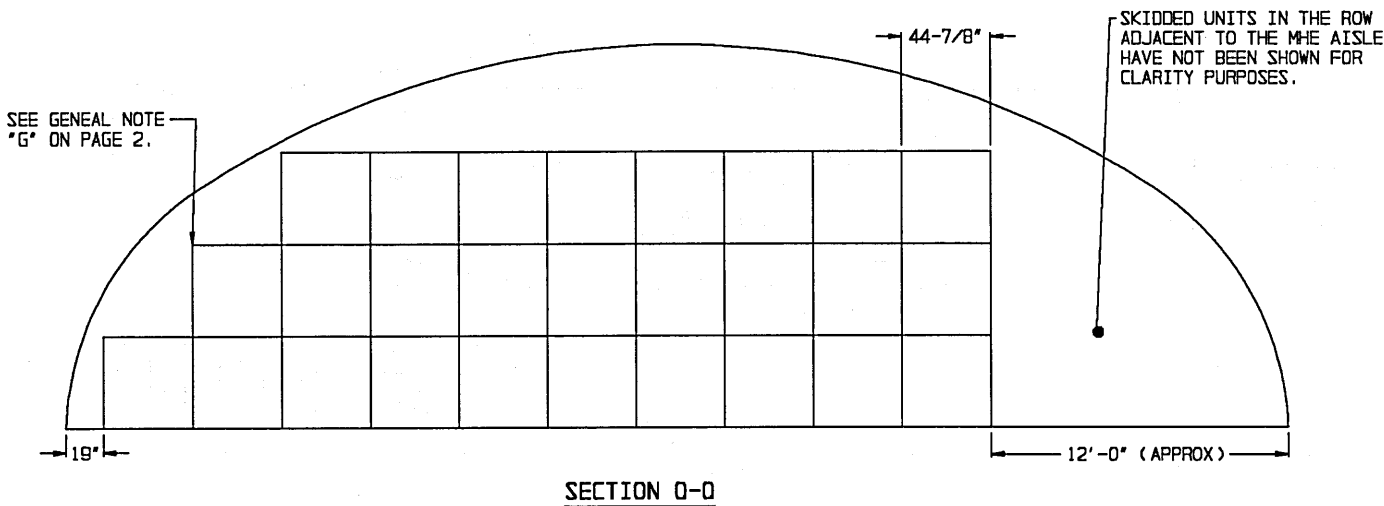
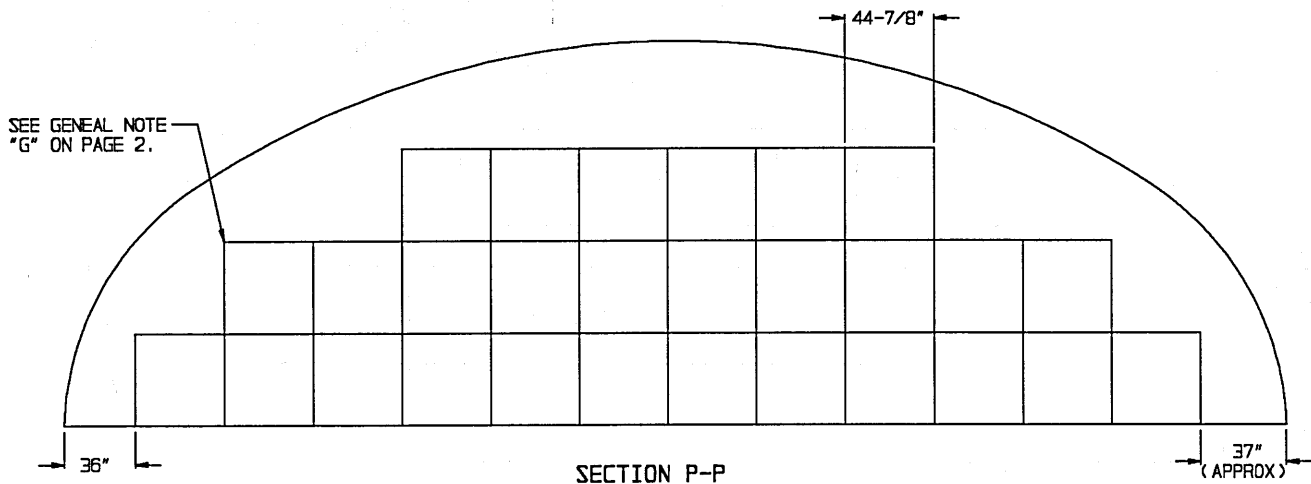
FIRST ROW. SEE CHART NO. 127 ON PAGE 79.

SEE SPECIAL NOTE 7 ON PAGE 71.

**PLAN VIEW**

THE SKIDDED UNIT SHOWN IS 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. FIVE-RW STORAGE AT EACH SIDE OF THE MHE AISLE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE FROM 39" TO 44" IN LENGTH (OR WIDTH). SEE CHART NO. 118 ON PAGE 75 FOR GUIDANCE AS TO THE NUMBER OF ROWS THAT CAN BE POSITIONED ON EACH SIDE OF THE CORBETTA AND THE DISTANCE FROM THE CENTER LINE FOR PLACEMENT OF THE LAST ROW (THE FIRST ROW TO BE POSITIONED).





(SPECIAL NOTES CONTINUED)

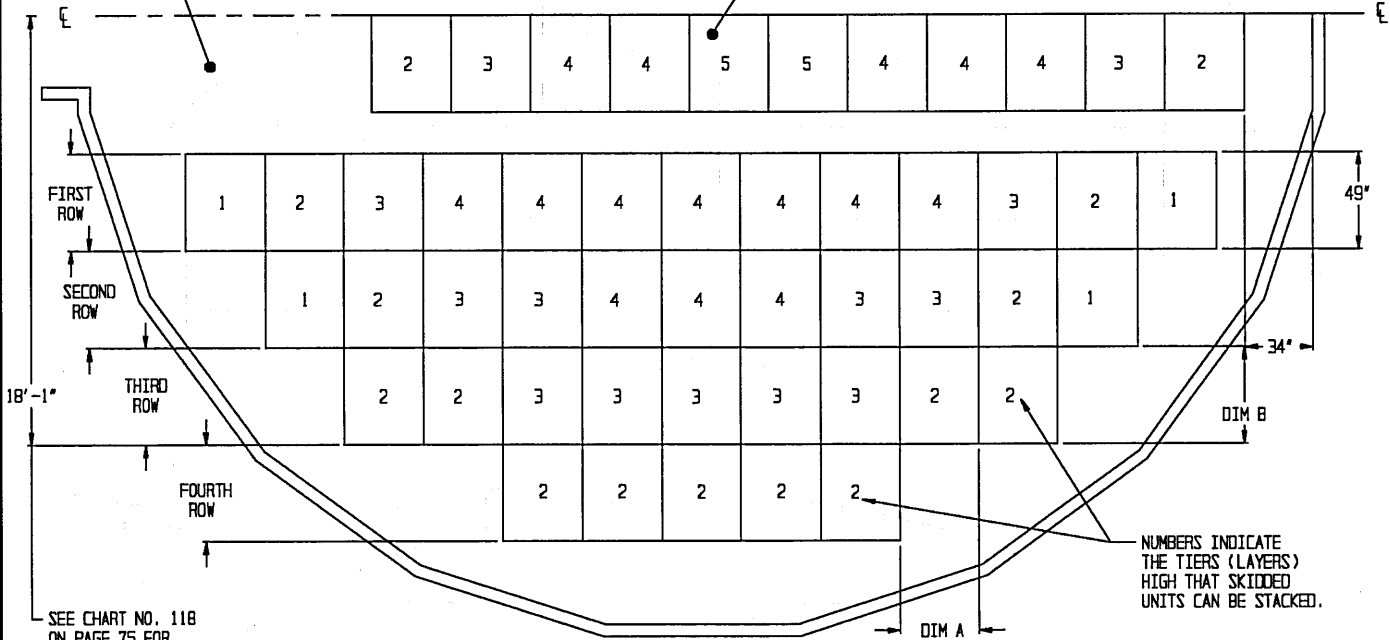
SPECIAL NOTES:

4. REFER TO PAGES 106 AND 107 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
5. IN SOME CASES, THE ACTUAL STORAGE QUANTITY FOR A TIER IN A ROW MAY BE ONE LESS UNIT THAN SPECIFIED BY A CHART. THE NUMBER OF UNITS SPECIFIED BY A CHART IS BASED ON THE MAXIMUM AVAILABLE WIDTH AT THAT LOCATION, WHEREAS THE ACTUAL QUANTITY IN A TIER OF A ROW MUST BE AN EVEN NUMBER, OR MUST BE AN ODD NUMBER IF THE ALREADY-POSITIONED TIER AND/OR ROW HAS AN ODD NUMBER OF UNITS.
6. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).
7. IF THE AVAILABLE MHE AND/OR SPACE PERMITS, ADDITIONAL SKIDDED UNITS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
8. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.
1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 74 THRU 91 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED WITHIN THE MAGAZINE, MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. THE SKIDDED UNITS WILL BE STACKED IN VERTICAL ALIGNMENT AS SHOWN IN THE STORAGE VIEWS ON PAGE 70 AND ABOVE. STAGGERED STACKING AS SHOWN FOR IGLOO, ARCH TYPE, STRADLEY, AND OVAL-ARCH MAGAZINE STORAGE IS NOT APPLICABLE FOR STORAGE IN CORBETTA MAGAZINES. STORAGE WILL BE ACCOMPLISHED BY FORMING ROWS PARALLEL TO AND ON EITHER SIDE OF A MINIMUM WIDTH MHE AISLE. THE MINIMUM WIDTH MHE AISLE IS BASED ON THE DIMENSION OF THE SKIDDED UNIT WHICH IS POSITIONED PERPENDICULAR TO THE AISLE AND IS EQUAL TO 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST.
3. AS SHOWN BY THE PARTIAL PLAN VIEWS ON PAGES 72 AND 73, SKIDDED UNITS CAN BE STORED WITH EITHER THE UNIT LENGTH OR THE UNIT WIDTH PERPENDICULAR TO THE MHE AISLE. ONE UNIT POSITIONING MAY ALLOW THE STORAGE OF MORE UNITS THAN THE OTHER, AND THE BEST METHOD MAY BE DETERMINED BY CALCULATING QUANTITIES FROM THE VARIOUS CHARTS.

(CONTINUED AT LEFT)

SEE SPECIAL NOTE 7 ON PAGE 71.

SEE CHART NO. 162 ON PAGE 91 FOR SIZE RANGE OF UNITS ACROSS THE WIDTH OF THE MHE AISLE. SEE CHART NO. 163 ON THAT PAGE FOR GUIDANCE AS TO THE NUMBER OF TIERS (LAYERS) HIGH THAT UNITS CAN BE STACKED AND FOR THE NUMBER OF UNITS WHICH CAN BE STORED IN THE LENGTH OF THE MHE AISLE.

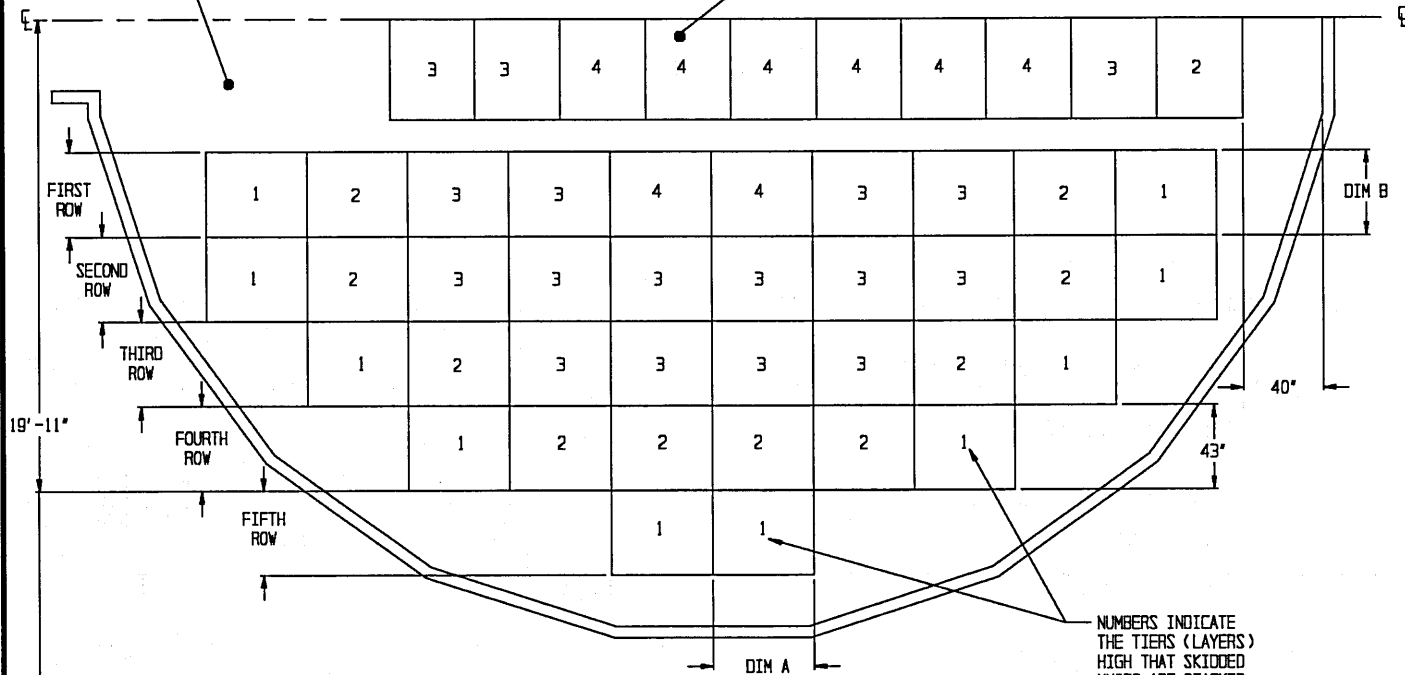


**PARTIAL PLAN VIEW**

THE SKIDDED UNIT SHOWN IS 40" LONG BY 49" WIDE BY 35" HIGH. FOUR-ROW STORAGE AT EACH SIDE OF THE MHE AISLE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE FROM 45" TO 54" WIDTH, OR LENGTH IF APPLICABLE.

SEE SPECIAL NOTE 7 ON PAGE 71.

SEE CHART NO. 162 ON PAGE 91 FOR SIZE RANGE OF UNITS ACROSS THE WIDTH OF THE MHE AISLE. SEE CHART NO. 163 ON THAT PAGE FOR GUIDANCE AS TO THE NUMBER OF TIERS (LAYERS) HIGH THAT UNITS CAN BE STACKED AND FOR THE NUMBER OF UNITS WHICH CAN BE STORED IN THE LENGTH OF THE MHE AISLE.



**PARTIAL PLAN VIEW**

THE SKIDDED UNIT SHOWN IS 43" LONG BY 51" WIDE BY 36-3/4" HIGH. FIVE-ROW STORAGE AT EACH SIDE OF THE MHE AISLE IS APPLICABLE FOR ALL SKIDDED UNITS WHICH ARE FROM 39" TO 44" IN LENGTH OR WIDTH.

SEE CHART NO. 118 ON PAGE 75 FOR STARTING LOCATIONS FOR OTHER SIZE UNITS.

NUMBERS INDICATE THE TIERS (LAYERS) HIGH THAT SKIDDED UNITS ARE STACKED.



THE CHARTS ON PAGES 75 THROUGH 91 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN 52'-0" DIAMETER CORBETTA MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE CORBETTA MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.

2. THE STORAGE LAYOUT DEPICTED FOR THE CORBETTA MAGAZINES ARE CALCULATED BY ASSUMING A MINIMUM WIDTH MHE AISLE EXTENDING FROM THE DOOR OPENING TO THE REAR OF THE MAGAZINE. THE ROW OF SKIDDED UNITS ADJACENT TO THE MHE AISLE, DESIGNATED HEREIN AS THE FIRST ROW, IS POSITIONED ON A LINE WHICH IS ONE-HALF OF THE WIDTH OF THE MINIMUM MHE AISLE FROM THE CENTER LINE OF THE MAGAZINE. THIS HALF OF THE MHE AISLE IS BASED ON THE DIMENSION OF THE UNIT WHICH IS PERPENDICULAR TO THE AISLE.
3. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE EXAMPLE, ON THIS PAGE.

STEP 1

DETERMINE THE STACKING PATTERN TO BE USED BY VIEWING THE EXAMPLES ON PAGES 70 THRU 73.

STEP 2

FROM CHART NO. 118 ON PAGE 75, FIND THE NUMBER OF ROWS WHICH CAN BE STORED ON EACH SIDE OF THE MHE AISLE BASED ON THE DIMENSION OF THE UNIT WHICH IS TO BE PERPENDICULAR TO THE AISLE. ALSO FIND THE STARTING DISTANCE FROM THE CENTER LINE FOR THE PLACEMENT OF THE LAST ROW WHEN COUNTING FROM THE CENTER OF THE MAGAZINE (THE FIRST ROW TO BE POSITIONED WHEN STORING). ALSO INDICATED IN CHART NO. 118 ARE THE PREFERRED CHART NUMBERS APPLICABLE FOR STORAGE OF SKIDDED UNITS AND THE PAGES ON WHICH THE CHARTS ARE LOCATED.

STEP 3

FROM THE APPLICABLE CHART FOR THE DIMENSION PERPENDICULAR TO THE MHE AISLE AND FOR THE LAST ROW, BE IT THE FOURTH, FIFTH, OR SIXTH, LOCATE THE "FIRST" TIER (LAYER) IN THE LEFT COLUMN FOR WHICH THE NUMBER OF UNITS WIDE IS TO BE DETERMINED. LOCATE THE HEIGHT OF THE UNIT IN THE SECOND COLUMN. ALONG THAT LINE, LOCATE THE COLUMN WHICH CONTAINS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE. THE HEADING AT THE BOTTOM OF THAT COLUMN WILL INDICATE THE NUMBER OF SKIDDED UNITS WIDE FOR THAT TIER.

STEP 4

LOCATE THE "SECOND" TIER IN THE LEFT HAND COLUMN. LOCATE THE HEIGHT OF THE UNIT IN THE SECOND COLUMN. ALONG THAT LINE LOCATE THE COLUMN WHICH CONTAINS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE. THE HEADING AT THE BOTTOM OF THAT COLUMN WILL INDICATE THE NUMBER OF SKIDDED UNITS WIDE FOR THAT TIER.

STEP 5

REPEAT STEP 4 FOR THE THIRD AND SUBSEQUENT TIERS UNTIL THE HEIGHT OF THE SKIDDED UNIT BEING STORED DOES NOT APPEAR IN THE SECOND COLUMN.

STEP 6

REPEAT STEPS 3, 4, AND 5 FOR EACH SUBSEQUENT ROW UP TO THE FIRST, WHICH IS NEXT TO THE MHE AISLE.

STEP 7

REFER TO CHART NO. 162 ON PAGE 91 FOR GUIDANCE AS TO THE NUMBER OF ROWS WIDE WHICH CAN BE STORED IN THE MHE AISLE.

STEP 8

REFER TO CHART NO. 163 ON PAGE 91 FOR GUIDANCE AS TO THE NUMBER OF SKIDDED UNITS LONG IN THE MHE AISLE IN THE VARIOUS TIERS BASED ON THE HEIGHT AND THE LENGTH AND/OR WIDTH OF THE UNIT.

4. NOTE THAT ALL ROWS MUST CONSIST OF EITHER ALL EVEN NUMBERED SKIDDED UNIT STACKS OR ELSE ALL ODD NUMBERED SKIDDED UNIT STACKS. THE NUMBER OF UNITS WIDE IN A ROW IS BASED ON USING THE FULL WIDTH OF THE MAGAZINE AT THAT POINT. THEREFORE THE ACTUAL QUANTITY THAT CAN BE STORED MAY BE ONE LESS THAN IS SPECIFIED IN THE APPLICABLE CHART.

(CONTINUED AT RIGHT)

EXAMPLE:

THE SKIDDED UNIT SHOWN IN THE "PARTIAL PLAN VIEW" AT THE TOP OF PAGE 73 HAS BEEN SELECTED FOR THE EXAMPLE. THE UNIT IS 36" LONG BY 44-1/2" WIDE BY 41-1/4" HIGH. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHART 118 ON PAGE 75, CHART NO. 127 ON PAGE 79, CHART NO. 128 AND 129 ON PAGE 80, CHARTS NO. 130, 131, AND 133 ON PAGE 81, AND CHART NO. 162 AND 163 ON PAGE 91 IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED AT LEFT.

TO START, LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 118 ON PAGE 75, THE FIGURE 36" WHICH IS THE DIMENSION OF THE SKIDDED UNIT WHICH IS POSITIONED PERPENDICULAR TO THE MHE AISLE. FOLLOWING THE ARROWS ALONG THE DOTTED-LINE TO THE RIGHT INDICATES THAT SIX ROWS CAN BE STORED ON EACH SIDE OF THE MHE AISLE. CONTINUING TO THE RIGHT THE NEXT COLUMN INDICATES THAT THE NEAR EDGE OF THE SIXTH AND LAST ROW (FIRST ROW TO BE POSITIONED) IS 20'-5" FROM THE CENTER LINE OF THE MAGAZINE THAT EXTENDS FROM THE DOOR TO THE REAR WALL. THE NEXT COLUMN TO THE RIGHT SPECIFIES THE USE OF CHART NOS. 127 THRU 131 AND 133 FOR 36" LONG UNITS. THE NEXT COLUMN INDICATES THESE CHARTS ARE ON PAGES 79 THRU 81.

TO FIND THE NUMBER OF SKIDDED UNITS WHICH CAN BE STORED IN THE SIXTH ROW, TURN TO CHART NO. 133 PAGE 81. FIND THE "FIRST" TIER SQUARED IN WITH DOTTED LINES IN THE FIRST COLUMN. THE 41-1/4" HEIGHT IS WITHIN THE 15'-56" RANGE IN THE SECOND COLUMN. FOLLOW THE ARROWS FURTHER TO THE RIGHT. THE 44-1/2" WIDTH IS WITHIN THE 38"-51" RANGE WHICH IS SQUARED IN. FOLLOW THE ARROWS DOWN TO THE NUMERAL IN THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH SPECIFIES THAT 3 SKIDDED UNITS 44-1/2" WIDE CAN BE POSITIONED ACROSS THE MAGAZINE IN THE FIRST TIER. THE 41-1/4" HEIGHT DIMENSION IS NOT INCLUDED UNDER THE SECOND-TIER LISTING, THEREFORE THE SIXTH ROW IS LIMITED TO ONE TIER. FOLLOW THE SAME STEPS IN CHART NO. 131 TO DETERMINE THAT 8-SKIDDED UNITS 44-1/2" WIDE CAN BE POSITIONED ACROSS THE MAGAZINE IN THE FIRST TIER OF THE FIFTH ROW. AGAIN THE ABSENCE OF THE 41-1/4" HEIGHT DIMENSION IN THE RANGE OF FOR THE SECOND TIER INDICATES THE FIFTH ROW IS ALSO LIMITED TO ONE TIER. SEE SPECIAL NOTE 5 ON PAGE 71.

TO FIND THE NUMBER OF SKIDDED UNITS WHICH CAN BE STORED IN THE FOURTH ROW, TURN TO CHART NO. 130 ON PAGE 81. FIND THE "FIRST" TIER SQUARED IN WITH DOTTED LINES IN THE FIRST COLUMN. THE 41-1/4" HEIGHT IS WITHIN THE 15'-56" RANGE IN THE SECOND COLUMN. FOLLOW THE ARROWS FURTHER TO THE RIGHT. THE 44-1/2" WIDTH IS WITHIN THE 40'-45" RANGE WHICH IS SQUARED-IN. FOLLOW THE ARROWS DOWN TO THE NUMERAL IN THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH SPECIFIES THAT 8 SKIDDED UNITS CAN BE POSITIONED ACROSS THE MAGAZINE IN THE FIRST TIER OF THE FOURTH ROW. NEXT FIND THE SQUARED-IN "SECOND" TIER IN THE FIRST COLUMN. FOLLOW THE ARROW DOWN TO THE 39'-42" RANGE IN THE SECOND COLUMN WHICH INCLUDES THE HEIGHT OF 41-1/4". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT. THE 44-1/2" WIDTH IS WITHIN THE 42'-49" RANGE. FOLLOW THE ARROWS DOWN TO THE NUMERAL IN THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH SPECIFIES THAT 6-UNITS 44-1/2" WIDE CAN BE STORED IN THE SECOND TIER OF THE FOURTH ROW. THE 41-1/4" HEIGHT DIMENSION IS NOT INCLUDED UNDER THE THIRD-TIER LISTING, THEREFORE THE FOURTH ROW IS LIMITED TO TWO TIERS.

REFER TO CHART NO. 129 ON PAGE 80, AND FOLLOW THE SAME STEPS TO DETERMINE THE NUMBER OF SKIDDED UNITS IN THE THIRD ROW. REFER TO CHART NO. 126 ON PAGE 80 AND CHART NO. 125 ON PAGE 79 FOR SECOND AND FIRST ROW GUIDANCE, RESPECTIVELY.

AN MHE AISLE APPROXIMATELY 11'-8" WIDE REMAINS IN THE CENTER OF THE MAGAZINE. LOCATE THE SQUARED-IN 11'-8" - 11-8" DIMENSION IN THE AISLE WIDTH COLUMN OF CHART NO. 162 ON PAGE 91. FOLLOWING THE ARROWS TO THE RIGHT THE 36" LENGTH IS WITHIN THE 32"-42" RANGE. FOLLOW THE ARROWS DOWN TO THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH INDICATES THE SKIDDED UNITS CAN BE STORED 3 WIDE IN THE MHE AISLE. CHART NO. 163 ON PAGE 91 CAN BE USED IN ESTIMATING THE NUMBER OF SKIDDED UNITS LONG THAT CAN BE STORED IN THE MHE AISLE. FIND THE "FIRST" TIER SQUARED-IN WITH DOTTED-LINES IN THE FIRST COLUMN. THE 42-1/2" HEIGHT IS WITHIN THE 15'-56" RANGE IN THE SECOND COLUMN. FOLLOW THE ARROWS FURTHER TO THE RIGHT. THE 45-1/2" WIDTH IS WITHIN THE 42"-46" RANGE WHICH IS SQUARED-IN. FOLLOW THE ARROWS DOWN TO THE NUMERAL IN THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH SPECIFIES THAT 10 SKIDDED UNITS 45-1/2" WIDE CAN BE STORED IN THE FIRST TIER OF THE MHE AISLE IN EACH ROW. NEXT FIND THE SQUARED-IN "SECOND" TIER IN THE FIRST COLUMN. FOLLOW THE ARROW DOWN TO THE 42"-45" RANGE WHICH INCLUDES THE HEIGHT OF 42-1/4". FOLLOW THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT. THE 45-1/2" WIDTH IS WITHIN THE 44"-49" RANGE WHICH IS SQUARED IN. FOLLOW THE ARROWS DOWN TO THE NUMERAL IN THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH SPECIFIES THAT 9 SKIDDED UNITS 45-1/2" WIDE CAN BE STORED IN THE SECOND TIER OF EACH ROW. NEXT FIND THE SQUARED-IN "THIRD" TIER IN THE FIRST COLUMN. FOLLOW THE ARROW DOWN TO THE 42"-45" RANGE AND THEN TO THE RIGHT ALONG THE DOTTED LINE. THE 45-1/2" WIDTH IS WITHIN THE 42"-47" RANGE WHICH IS SQUARED-IN. FOLLOW THE ARROWS DOWN TO THE NUMERAL IN THE HEADING AT THE BOTTOM OF THAT COLUMN WHICH SPECIFIES THAT 8 SKIDDED UNITS CAN BE STORED IN THE THIRD TIER OF EACH ROW. THE ABSENCE OF THE 42-1/4" HEIGHT DIMENSION IN THE RANGE FOR THE FOURTH TIER INDICATES THAT THREE TIERS IS THE MAXIMUM THAT CAN BE STORED IN THE MHE AISLE.

CHART NO. 118

UNIT DIM (DIM B)	WIDTH ALLOWED FOR ONE-HALF OF MHE-AISLE	NO. OF ROWS EACH SIDE	DISTANCE FROM CENTER LINE TO LAST ROW	CHART NOS.	CHART PAGES
25'	65"	8	20'-0"	119-126	76-78
26'	65"	8	20'-7"	119-126	76-78
27'	65"	8	21'-2"	119-126	76-78
28'	65"	7	19'-5"	119-125	76-78
29'	65"	7	19'-11"	119-125	76-78
30'	65"	7	20'-5"	119-125	76-78
31'	65"	7	20'-11"	119-125	76-78
32'	65"	6	18'-9"	119-124	76-78
33'	65"	6	19'-2"	119-124	76-78
34'	65"	6	19'-7"	119-124	76-78
35'	65"	6	20'-0"	127-132	79-81
36'	65"	6	20'-5"	127-131, 133	79-81
37'	65"	6	20'-10"	127-131, 134	79-81
38'	65"	6	21'-3"	127-131, 135	79-81
39'	65"	5	18'-5"	127-131	79-81
40'	65"	5	18'-9"	136-139, 141	82-84
41'	66"	5	19'-2"	136-139, 142	82-84
42'	66"	5	19'-6"	136-140, 143	82-84
43'	67"	5	19'-11"	136-138, 140, 144	82-84
44'	67"	5	20'-3"	136-138, 140, 145	82-84
45'	68"	4	17'-1"	146-149	85-87
46'	68"	4	17'-2"	146-149	85-87
47'	69"	4	17'-6"	146-149	85-87
48'	69"	4	17'-9"	146-148, 150	85-87
49'	70"	4	18'-1"	146-148, 151	85-87
50'	70"	4	18'-4"	146-148, 152	85-86, 88
51'	71"	4	18'-8"	153-155, 158	88-90
52'	71"	4	18'-11"	153-155, 158	88-90
53'	72"	4	19'-3"	153-155, 160	88-90
54'	72"	4	19'-6"	153-156, 161	88-89, 91
56'	73"	3	15'-3"	153-154, 156	88-90
56'	73"	3	15'-5"	153-154, 156	88-90
57'	74"	3	15'-8"	153-154, 156	88-90
58'	74"	3	15'-10"	153-154, 156	88-90
58'	75"	3	16'-1"	153-154, 156	88-90
60'	75"	3	16'-3"	153-154, 156	88-90
61'	76"	3	16'-6"	153-153, 157	88-90
62'	76"	3	16'-8"	153-154, 157	88-90
63'	77"	3	16'-11"	153-154, 157	88-90
64'	77"	3	17'-1"	153-154, 157	88-90
66'	78"	3	17'-4"	153-154, 157	88-90
66'	78"	3	17'-6"	153, 154, 157	88-90

CHART NO. 119

TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																						
		22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
1ST 2ND	15'-56"	25'	26'	27'	29'	31'	32'	34'	37'	39'	42'	46'	50'	55'	62'	66'								
	15'-30"	25'	26'	27'	29'	30'	32'	34'	36'	39'	42'	46'	50'	55'	61'	66'								
	30'-33"		25'	27'	28'	30'	31'	33'	36'	38'	41'	45'	49'	54'	60'	66'								
	33'-36"			25'	26'	27'	29'	31'	33'	35'	37'	40'	44'	48'	52'	58'	66'							
	36'-39"				25'	27'	28'	31'	32'	34'	37'	40'	43'	47'	52'	57'	66'							
	39'-42"					25'	26'	28'	29'	31'	33'	36'	38'	42'	45'	50'	56'	66'						
	42'-45"						25'	27'	28'	30'	32'	35'	37'	41'	44'	49'	54'	61'	66'					
	45'-48"							25'	27'	28'	30'	32'	34'	40'	44'	48'	54'	60'	66'					
	48'-51"								25'	27'	29'	31'	33'	36'	39'	42'	46'	52'	58'	66'				
	51'-54"									25'	26'	28'	30'	32'	34'	37'	41'	45'	50'	56'	66'			
	54'-56"										25'	27'	29'	31'	33'	36'	39'	43'	48'	54'	60'	66'		
	15'-18"	25'	26'	27'	29'	31'	32'	34'	37'	39'	42'	46'	50'	55'	62'	66'								
	18'-21"		25'	27'	28'	30'	32'	34'	36'	39'	42'	45'	49'	54'	60'	66'								
	21'-24"			25'	26'	27'	29'	31'	33'	35'	37'	40'	43'	47'	52'	57'	66'							
	24'-27"				25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'						
27'-30"					25'	27'	28'	30'	32'	35'	37'	41'	44'	49'	54'	61'	66'							
30'-33"						25'	27'	28'	30'	32'	34'	40'	44'	48'	54'	60'	66'							
33'-36"							25'	26'	28'	30'	32'	34'	37'	41'	45'	50'	56'	64'	66'					
36'-39"								25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'					
39'-42"									25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'				
42'-45"										25'	28'	30'	32'	33'	36'	40'	45'	52'	61'	66'				
45'-48"												25'	27'	30'	34'	38'	43'	51'	61'	66'				
48'-51"														25'	28'	31'	36'	42'	50'	60'	66'			
51'-54"																								
54'-56"																								
4TH	15'-18"		25'	26'	27'	28'	31'	32'	34'	37'	40'	43'	47'	52'	57'	65'	66'							
	18'-21"			25'	27'	28'	30'	32'	34'	37'	40'	44'	48'	54'	60'	66'								
	24'-27"				25'	26'	28'	30'	32'	34'	37'	41'	45'	50'	56'	64'	66'							
	27'-30"					25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'							
	30'-33"						25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'						
	33'-36"							25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'					
5TH	15'-18"				25'	27'	28'	30'	32'	35'	37'	41'	44'	49'	54'	61'	66'					36'	66'	
	18'-21"					25'	27'	28'	30'	33'	35'	38'	42'	46'	51'	57'	66'							
	21'-24"						25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'						
	24'-27"							25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'					
6TH	15'-18"					25'	26'	28'	30'	32'	34'	37'	41'	45'	50'	56'	64'	66'						
	18'-21"						25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'						
	21'-24"							25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'					
7TH	15'-18"						25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'						
	18'-21"							25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'					
8TH	15'-18"							25'	26'	28'	30'	32'	35'	38'	42'	47'	53'	60'	66'					
TIER	UNIT HEIGHT	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
NUMBER OF UNITS WIDE IN FIRST ROW FOR UNITS 25"-35"																								



CHART NO. 120

TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																			
		20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1ST 2ND	15'-56"	25'	27'	28'	30'	32'	34'	36'	39'	43'	46'	51'	57'	64'	66'						
	15'-30"	25'	26'	28'	29'	31'	33'	36'	38'	42'	45'	50'	56'	63'	66'						
	30'-36"		25'	27'	28'	30'	32'	35'	37'	41'	44'	49'	54'	61'	66'						
	36'-39"			25'	26'	28'	30'	32'	34'	37'	40'	43'	48'	53'	60'	66'					
	39'-42"				25'	27'	29'	31'	33'	36'	39'	42'	46'	52'	58'	66'					
	42'-45"				25'	27'	28'	30'	32'	35'	38'	41'	46'	51'	57'	65'	66'				
	45'-51"					27'	29'	31'	33'	36'	39'	43'	48'	54'	62'	66'	66'				
	51'-54"						25'	27'	29'	31'	34'	37'	41'	45'	51'	58'	66'				
	54'-56"							25'	26'	28'	31'	33'	36'	40'	44'	50'	57'	66'			
	15'-18"	25'	26'	28'	29'	31'	33'	36'	38'	42'	45'	50'	56'	63'	66'						
	18'-24"	25'	26'	28'	29'	31'	33'	36'	38'	42'	45'	50'	56'	63'	66'						
	24'-27"			25'	27'	29'	31'	33'	36'	39'	43'	47'	52'	59'	66'						
	27'-30"				25'	27'	28'	30'	32'	35'	38'	41'	46'	51'	57'	65'	66'				
	30'-33"					25'	27'	29'	31'	33'	36'	40'	44'	48'	55'	62'	66'				
	33'-36"						25'	27'	29'	31'	34'	37'	41'	45'	51'	58'	66'				
36'-39"							25'	27'	29'	32'	35'	38'	42'	48'	55'	64'	66'				
39'-42"								25'	27'	29'	32'	35'	39'	44'	50'	58'	66'				
42'-45"									27'	29'	32'	35'	39'	44'	50'	58'	66'				
45'-48"										27'	29'	32'	35'	39'	44'	50'	58'	66'			
48'-51"											27'	29'	32'	35'	39'	44'	50'	58'	66'		
15'-18"	25'	26'	28'	29'	31'	33'	36'	38'	42'	45'	50'	56'	63'	66'							
18'-21"			25'	27'	28'	30'	33'	35'	38'	42'	46'	51'	57'	66'							
21'-24"				25'	28'	29'	32'	34'	37'	40'	44'	49'	56'	64'	66'						
24'-27"					25'	27'	29'	31'	34'	37'	41'	45'	51'	58'	66'						
27'-30"						25'	27'	29'	31'	34'	38'	42'	47'	54'	63'	66'					
30'-33"							25'	27'	29'	31'	34'	38'	42'	47'	54'	63'	66'				
33'-36"								25'	28'	31'	34'	38'	42'	47'	54'	63'	66'				
15'-18"			25'	27'	28'	30'	32'	35'	38'	41'	46'	51'	57'	65'	66'						
18'-21"				25'	27'	29'	31'	34'	37'	41'	46'	51'	59'	66'							
21'-24"					25'	27'	29'	31'	34'	38'	42'	47'	54'	63'	66'						
24'-27"						25'	27'	29'	31'	34'	38'	42'	47'	54'	63'	66'					
27'-30"							25'	27'	29'	31'	34'	38'	42'	47'	54'	63'	66'				
15'-18"					25'	27'	29'	31'	34'	37'	41'	45'	51'	58'	66'						
18'-21"						25'	27'	29'	32'	35'	39'	44'	50'	58'	66'						
21'-24"							25'	27'	29'	32'	35'	39'	44'	50'	58'	66'					
24'-27"								25'	27'	29'	32'	35'	39'	44'	50'	58'	66'				
27'-30"									25'	27'	29'	32'	35'	39'	44'	50'	58'	66'			
15'-18"										25'	27'	29'	32'	35'	39'	44'	50'	58'	66'		
TIER	UNIT HEIGHT	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN SECOND ROW FOR UNITS 25"-34" (DIM B)																					

CHART NO. 121

TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																			
		19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3			
1ST 2ND	15'-56"	25'	27'	28'	30'	32'	34'	37'	40'	44'	48'	54'	60'	66'							
	15'-30"	25'	26'	28'	29'	31'	34'	36'	39'	43'	47'	53'	59'	66'							
	30'-33"		25'	27'	28'	30'	32'	34'	37'	40'	45'	51'	57'	66'							
	33'-36"			25'	26'	28'	30'	32'	34'	37'	40'	45'	50'	56'	64'	66'					
	36'-39"				25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'					
	39'-42"					25'	28'	30'	32'	35'	38'	42'	46'	52'	60'	66'					
	42'-45"					25'	27'	29'	31'	34'	37'	40'	45'	51'	58'	66'					
	45'-48"						25'	28'	30'	33'	36'	39'	44'	49'	56'	66'					
	48'-51"							25'	27'	29'	32'	34'	38'	42'	48'	54'	64'	66'			
	51'-54"								25'	27'	30'	32'	36'	40'	45'	51'	60'	66'			
	54'-56"									25'	26'	29'	31'	35'	38'	43'	50'	58'	66'		
	15'-18"	25'	27'	28'	30'	32'	34'	37'	40'	44'	48'	54'	60'	66'							
	18'-21"		25'	27'	29'	31'	34'	36'	39'	42'	46'	52'	58'	66'							
	21'-24"			25'	26'	28'	30'	32'	34'	37'	40'	45'	50'	56'	64'	66'					
	24'-27"				25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'					
27'-30"					25'	27'	29'	31'	34'	37'	40'	45'	51'	58'	66'						
30'-33"						25'	28'	30'	33'	36'	40'	45'	52'	60'	66'						
33'-36"							25'	28'	30'	33'	36'	40'	45'	52'	60'	66'					
36'-39"								25'	29'	31'	34'	38'	43'	49'	58'	66'					
39'-42"									25'	27'	29'	32'	36'	40'	46'	54'	65'	66'			
42'-45"										25'	29'	32'	36'	40'	46'	54'	65'	66'			
45'-48"											25'	29'	32'	36'	40'	46'	54'	65'	66'		
48'-51"												25'	29'	32'	36'	40'	46'	54'	65'	66'	
15'-18"			25'	26'	28'	30'	32'	34'	37'	40'	45'	50'	56'	64'	66'						
18'-21"				25'	28'	30'	32'	34'	37'	40'	45'	50'	56'	64'	66'						
21'-24"					25'	28'	30'	33'	36'	39'	44'	49'	56'	66'							
24'-27"						25'	27'	30'	32'	36'	40'	45'	51'	60'	66'						
27'-30"							25'	27'	30'	32'	36'	40'	45'	51'	60'	66'					
30'-33"								25'	28'	30'	33'	36'	40'	45'	51'	60'	66'				
15'-18"					25'	27'	29'	31'	34'	37'	40'	45'	51'	58'	66'						
18'-21"						25'	27'	30'	32'	36'	40'	45'	51'	60'	66'						
21'-24"							25'	27'	30'	32'	36'	40'	45'	51'	60'	66'					
24'-27"								25'	27'	30'	32'	36'	40'	45'	51'	60'	66'				
27'-30"									25'	27'	30'	32'	36'	40'	45'	51'	60'	66'			
15'-18"										25'	27'	30'	32'	36'	40'	45'	51'	60'	66'		
18'-21"											25'	29'	32'	36'	42'	49'	58'	66'			
21'-24"												25'	29'	32'	36'	42'	49'	58'	66'		
24'-27"													25'	29'	32'	36'	42'	49'	58'	66'	
27'-30"														25'	29'	32'	36'	42'	49'	58'	
15'-18"															25'	29'	32'	36'	42'	49'	
TIER	UNIT HEIGHT	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3			
NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 25"-34" (DIM B)																					

CHART NO. 122														
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)												
		15	14	13	12	11	10	9	8	7	6	5	4	3
1ST 2ND	15'-56"	25'	25'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"			
	15'-30"	25'	25'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"			
	30'-33"	25'	25'-27"	27'-30"	30'-32"	32'-35"	35'-39"	39'-43"	43'-48"	48'-55"	55'-65"	65'-66"		
	36'-39"		25'	25'-28"	28'-30"	30'-33"	33'-36"	36'-40"	40'-45"	45'-52"	52'-60"	60'-66"		
	39'-42"			25'	25'-28"	28'-30"	30'-33"	31'-34"	34'-38"	38'-43"	43'-49"	49'-58"	58'-66"	
	42'-45"			25'	25'-28"	28'-30"	30'-33"	33'-37"	37'-42"	42'-48"	48'-56"	56'-66"		
3RD	45'-48"			25'	25'-28"	28'-30"	28'-31"	31'-34"	34'-39"	39'-44"	44'-52"	52'-62"	62'-66"	
	48'-51"			25'	25'-28"	28'-30"	27'-28"	27'-28"	28'-32"	32'-36"	36'-41"	41'-48"	48'-57"	62'-66"
	51'-54"			25'	25'-28"	28'-30"	25'-27"	25'-27"	27'-30"	30'-34"	34'-39"	39'-46"	46'-55"	55'-66"
	54'-56"			25'	25'-28"	28'-30"	25'	25'-26"	26'-30"	30'-34"	34'-40"	40'-48"	48'-60"	60'-66"
	15'-18"	25'	25'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"			
	18'-21"	25'	25'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"			
TIER	UNIT HEIGHT	15	14	13	12	11	10	9	8	7	6	5	4	3
		NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 25"-34" (DIM B)												

CHART NO. 123													
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)											
		1ST 2ND	15'-56"	25'	25'-28"	28'-31"	31'-34"	34'-39"	39'-44"	44'-52"	52'-62"	62'-66"	
15'-30"	25'		25'-28"	28'-31"	31'-34"	34'-39"	39'-44"	44'-52"	52'-62"	62'-66"			
30'-33"	25'		25'-27"	27'-30"	30'-34"	34'-38"	38'-43"	43'-51"	51'-61"	61'-66"			
33'-36"			25'	25'-29"	29'-33"	33'-37"	37'-42"	42'-49"	49'-59"	59'-66"			
36'-39"				25'	25'-29"	29'-33"	33'-38"	38'-44"	44'-53"	53'-66"			
39'-42"				25'	25'-29"	25'	25'-30"	30'-35"	35'-41"	41'-49"	49'-61"	61'-66"	
3RD	15'-18"	25'	25'-28"	28'-31"	31'-34"	34'-39"	39'-44"	44'-52"	52'-62"	62'-66"			
	18'-21"	25'	25'-28"	28'-31"	31'-34"	34'-39"	39'-44"	44'-52"	52'-62"	62'-66"			
4TH	21'-24"		25'	25'-29"	29'-32"	32'-36"	36'-42"	42'-49"	49'-58"	58'-66"			
	15'-18"		25'	25'-29"	29'-32"	32'-36"	36'-42"	42'-49"	49'-58"	58'-66"			
TIER	UNIT HEIGHT	12	11	10	9	8	7	6	5	4	3		
		NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 25"-34" (DIM B)											

CHART NO. 124													
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)											
		1ST 2ND	15'-56"	25'	25'-33"	33'-39"	39'-49"	49'-66"					
15'-30"	25'		25'-33"	33'-39"	39'-49"	49'-66"							
30'-33"			25'	25'-30"	30'-37"	37'-50"	50'-66"						
33'-36"			25'	25'-30"	30'-37"	37'-50"	50'-66"						
36'-39"				25'	25'-30"	25'	25'-40"	40'-60"	60'-66"				
39'-42"				25'	25'-30"	25'	25'-40"	40'-60"	60'-66"				
3RD	15'-20"	25'	25'-33"	33'-39"	39'-49"	49'-66"							
	20'-24"		25'	25'-30"	30'-37"	37'-50"	50'-66"						
TIER	UNIT HEIGHT	7	6	5	4	3	2	1					
		NUMBER OF UNITS WIDE IN SIXTH ROW FOR UNITS 25"-34" (DIM B)											

CHART NO. 125						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
		1ST 2ND	15'-56"	25'	25'-40"	40'-60"
15'-33"			25'	25'-48"	48'-66"	
33'-36"			25'	25'-50"	50'-66"	
36'-39"			25'	25'-48"	48'-66"	
3RD	18'-22"		25'	25'-48"	48'-66"	
	22'-24"			25'-50"	50'-66"	
TIER	UNIT HEIGHT	4	3	2	1	
		NUMBER OF UNITS WIDE IN SEVENTH ROW FOR UNITS 25"-31" (DIM B)				

CHART NO. 126						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
		1ST 2ND	15'-56"	25'	25'-40"	40'-60"
15'-33"			25'	25'-48"	48'-66"	
33'-36"			25'	25'-50"	50'-66"	
36'-39"			25'	25'-48"	48'-66"	
3RD	18'-22"		25'	25'-48"	48'-66"	
	22'-24"			25'-50"	50'-66"	
TIER	UNIT HEIGHT	4	3	2	1	
		NUMBER OF UNITS WIDE IN EIGHTH ROW FOR UNITS 25"-27" (DIM B)				

CHART NO. 127

TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																				
		22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1ST 2ND	15'-56"	25'	26'	27'	28'	30'	32'	34'	36'	39'	42'	45'	50'	55'	61'	66'						
	15'-30"	25'	26'	27'	29'	30'	32'	34'	36'	39'	42'	46'	50'	55'	61'	66'						
	30'-36"			25'	27'	28'	30'	32'	34'	36'	39'	43'	47'	51'	57'	64'	66'					
	36'-39"			25'	27'	28'	30'	32'	34'	36'	39'	42'	46'	51'	57'	64'	66'					
	39'-42"			25'	26'	27'	29'	31'	33'	35'	38'	41'	45'	50'	55'	62'	66'					
	42'-45"			25'	27'	28'	30'	32'	35'	37'	40'	44'	49'	54'	61'	66'						
	45'-48"				25'	27'	29'	31'	33'	36'	39'	42'	47'	52'	58'	65'	66'					
	48'-51"				25'	27'	29'	30'	32'	35'	38'	41'	46'	51'	57'	64'	66'	66'				
	51'-54"				25'	26'	28'	30'	32'	34'	37'	41'	45'	50'	56'	64'	66'	66'				
	54'-56"				25'	27'	29'	31'	33'	36'	39'	44'	49'	55'	61'	68'	66'	66'				
	15'-18"		26'			28'	30'	32'	34'	36'	39'	42'	45'	50'	55'	61'	66'					
	18'-21"		25'		27'	28'	31'	33'	35'	37'	40'	44'	48'	52'	58'	66'						
21'-24"				25'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'						
24'-27"				25'	28'	30'	32'	34'	36'	39'	42'	46'	51'	56'	63'	66'						
27'-30"				25'	27'	28'	30'	32'	35'	37'	40'	44'	49'	54'	61'	66'						
30'-33"					25'	27'	29'	31'	33'	36'	39'	42'	47'	52'	58'	66'						
33'-36"					25'	26'	28'	30'	32'	34'	37'	41'	45'	50'	56'	64'	66'					
36'-39"					25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'						
39'-42"					25'	26'	28'	30'	33'	36'	40'	44'	49'	55'	62'	66'						
42'-45"									25'	28'	30'	33'	36'	40'	46'	52'	61'	66'				
45'-48"										25'	27'	29'	32'	36'	41'	47'	54'	65'	66'			
48'-51"												25'	27'	30'	34'	39'	46'	55'	66'			
51'-54"														25'	29'	34'	41'	51'	66'			
54'-56"															25'	29'	34'	41'	51'	66'		
15'-18"			25'		27'	28'	30'	32'	34'	36'	39'	43'	47'	51'	57'	64'	66'				66'	
18'-21"			25'		26'	27'	29'	31'	33'	35'	38'	41'	45'	50'	56'	62'	66'				66'	
21'-24"					25'	27'	29'	31'	33'	35'	38'	42'	47'	52'	58'	66'						
24'-27"					25'	28'	30'	32'	34'	37'	40'	44'	48'	54'	60'	64'	66'					
27'-30"						25'	28'	30'	32'	35'	38'	42'	47'	52'	58'	64'	66'					
30'-33"							25'	28'	30'	32'	35'	38'	42'	48'	54'	60'	64'	66'				
33'-36"								25'	28'	30'	33'	36'	40'	46'	52'	58'	64'	66'				
36'-39"									25'	28'	30'	33'	36'	40'	46'	52'	58'	64'	66'			
39'-42"										25'	28'	30'	33'	36'	40'	46'	52'	58'	64'	66'		
15'-18"				25'	27'	28'	30'	32'	35'	37'	40'	44'	49'	54'	61'	66'						
18'-21"				25'	27'	29'	30'	32'	35'	38'	41'	45'	50'	57'	65'	66'						
21'-24"					25'	28'	30'	32'	35'	38'	42'	47'	52'	60'	66'							
24'-27"						25'	28'	30'	33'	36'	40'	45'	50'	58'	66'							
27'-30"							25'	28'	30'	32'	35'	38'	42'	50'	60'	66'						
30'-33"								25'	28'	30'	33'	36'	40'	48'	58'	66'						
15'-18"				25'	26'	28'	30'	32'	34'	37'	41'	46'	50'	56'	64'	66'						
18'-21"					25'	26'	28'	30'	33'	36'	40'	45'	50'	57'	65'	66'						
21'-24"						25'	28'	30'	33'	36'	40'	45'	50'	57'	65'	66'						
15'-18"							25'	27'	29'	32'	34'	38'	42'	48'	54'	64'	66'					
18'-21"								25'	27'	29'	32'	35'	39'	44'	51'	59'	66'					
15'-18"									25'	28'	30'	33'	36'	40'	46'	52'	61'	66'				

NUMBER OF UNITS WIDE IN FIRST ROW FOR UNITS 35'-39" (DIM B)

CHART NO. 128

TIER		MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																		
TIER	UNIT HEIGHT	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1ST 2ND	15'-56"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
	15'-30"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
3RD	30'-36"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
	36'-39"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
4TH	39'-42"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
	42'-45"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
5TH	45'-51"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
	48'-51"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
6TH	51'-54"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
	54'-56"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
7TH	15'-18"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
	18'-21"	25'	26'	28'	30'	31'	34'	36'	39'	42'	46'	51'	56'	63'	66'					
TIER	UNIT HEIGHT	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
	NUMBER OF UNITS WIDE IN SECOND ROW FOR UNITS 35'-39" (DIM B)																			

CHART NO. 129

TIER		MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																		
TIER	UNIT HEIGHT	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2			
1ST 2ND	15'-54"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
	15'-30"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
3RD	30'-33"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
	33'-36"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
4TH	36'-39"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
	39'-42"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
5TH	42'-45"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
	45'-48"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
6TH	48'-51"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
	51'-54"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
7TH	54'-56"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
	15'-18"	25'	27'	29'	31'	33'	36'	40'	44'	49'	55'	63'	66'							
TIER	UNIT HEIGHT	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2			
	NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 35'-39" (DIM B)																			

CHART NO. 130													
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)											
1ST	15'-56"	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
2ND	15'-30'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	30'-33'	25'	25'-27'	27'-30'	30'-32'	32'-36'	36'-40'	40'-45'	45'-51'	51'-60'	60'-66'		
	33'-36'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	36'-39'	25'	25'-28'	28'-30'	30'-33'	33'-37'	37'-42'	42'-48'	48'-56'	56'-66'			
	39'-42'	25'	25'-28'	28'-30'	30'-33'	33'-37'	37'-42'	42'-48'	48'-56'	56'-66'			
	42'-45'	25'	25'-28'	28'-30'	30'-33'	33'-37'	37'-42'	42'-48'	48'-56'	56'-66'			
	45'-48'	25'	25'-28'	28'-30'	30'-33'	33'-37'	37'-42'	42'-48'	48'-56'	56'-66'			
	48'-51'	25'	25'-28'	28'-30'	30'-33'	33'-37'	37'-42'	42'-48'	48'-56'	56'-66'			
	51'-54'	25'	25'-28'	28'-30'	30'-33'	33'-37'	37'-42'	42'-48'	48'-56'	56'-66'			
3RD	54'-56'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	15'-21'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	21'-24'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	24'-27'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	27'-30'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	30'-33'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
	33'-36'	25'	25'-28'	28'-30'	30'-33'	33'-36'	36'-40'	40'-45'	45'-52'	52'-60'	60'-66'		
4TH	15'-18'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	18'-21'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	21'-24'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	24'-27'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
5TH	15'-18'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	18'-21'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	21'-24'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	24'-27'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
6TH	15'-18'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	18'-21'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	21'-24'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
	24'-27'	25'	25'-28'	28'-31'	31'-34'	34'-38'	38'-43'	43'-49'	49'-57'	57'-66'			
TIER	UNIT HEIGHT	14	13	12	11	10	9	8	7	6	5	4	3
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 35'-39" (DIM B)													

CHART NO. 131										
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)								
1ST	15'-56"	25'	25'-27'	27'-30'	30'-34'	34'-39'	39'-46'	46'-55'	55'-66'	
2ND	15'-30'	25'	25'-27'	27'-30'	30'-34'	34'-39'	39'-46'	46'-55'	55'-66'	
	30'-33'	25'	25'-27'	27'-30'	30'-33'	33'-38'	38'-45'	45'-54'	54'-66'	
	33'-36'	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'	
	36'-39'	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'	
	39'-42'	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'	
3RD	15'-18'	25'	25'-27'	27'-30'	30'-34'	34'-39'	39'-46'	46'-55'	55'-66'	
	18'-21'	25'	25'-27'	27'-30'	30'-34'	34'-39'	39'-46'	46'-55'	55'-66'	
	21'-24'	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'	
4TH	15'-18'	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'	
	18'-21'	25'	25'-28'	28'-32'	32'-36'	36'-43'	43'-51'	51'-64'	64'-66'	
TIER	UNIT HEIGHT	11	10	9	8	7	6	5	4	3
NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 35'-39" (DIM B)										

CHART NO. 132									
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)							
1ST	15'-56"	25'	25'-29'	29'-34'	34'-41'	41'-51'	51'-66'		
2ND	15'-30'	25'	25'-29'	29'-34'	34'-41'	41'-51'	51'-66'		
	30'-33'	25'	25'-30'	30'-36'	36'-48'	46'-61'	61'-66'		
	33'-36'	25'	25'-30'	30'-38'	38'-51'	51'-66'	61'-66'		
	36'-39'	25'	25'-30'	30'-37'	37'-50'	50'-66'	51'-66'		
	39'-42'	25'	25'-30'	30'-37'	37'-50'	50'-66'	51'-66'		
	42'-45'	25'	25'-30'	30'-37'	37'-50'	50'-66'	51'-66'		
3RD	15'-20'	25'	25'-29'	29'-34'	34'-41'	41'-51'	51'-66'		
	20'-24'	25'	25'-29'	29'-34'	34'-41'	41'-51'	51'-66'		
	24'-27'	25'	25'-30'	30'-38'	38'-51'	51'-66'	51'-66'		
	27'-30'	25'	25'-30'	30'-38'	38'-51'	51'-66'	51'-66'		
TIER	UNIT HEIGHT	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN SIXTH ROW FOR UNITS 35" (DIM B)									

CHART NO. 133									
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)							
1ST	15'-56"	25'	25'-30'	30'-38'	38'-51'	51'-66'			
2ND	15'-30'	25'	25'-30'	30'-38'	38'-51'	51'-66'			
	33'-36'	25'	25'-30'	30'-36'	36'-49'	49'-66'			
	36'-39'	25'	25'-30'	30'-36'	36'-49'	49'-66'			
	39'-42'	25'	25'-30'	30'-36'	36'-49'	49'-66'			
3RD	15'-22'	25'	25'-30'	30'-38'	38'-51'	51'-66'			
	22'-24'	25'	25'-30'	30'-36'	36'-49'	49'-66'			
TIER	UNIT HEIGHT	6	5	4	3	2			
NUMBER OF UNITS WIDE IN SIXTH ROW FOR 36" (DIM B)									

CHART NO. 134							
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)					
1ST	15'-56"	25'	25'-30'	30'-38'	38'-51'	51'-66'	
2ND	15'-30'	25'	25'-30'	30'-38'	38'-51'	51'-66'	
	30'-33'	25'	25'-30'	30'-38'	38'-51'	51'-66'	
	33'-36'	25'	25'-30'	30'-38'	38'-51'	51'-66'	
3RD	15'-20'	25'	25'-30'	30'-38'	38'-51'	51'-66'	
	20'-22'	25'	25'-30'	30'-38'	38'-51'	51'-66'	
TIER	UNIT HEIGHT	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN SIXTH ROW FOR UNITS 37" (DIM B)							

CHART NO. 135						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
1ST	15'-56"	25'	25'-34'	34'-51'	51'-66'	
2ND	15'-30'	25'	25'-34'	34'-51'	51'-66'	
	30'-33'	25'	25'-34'	34'-51'	51'-66'	
3RD	15'-20'	25'	25'-34'	34'-51'	51'-66'	
	20'-22'	25'	25'-34'	34'-51'	51'-66'	
TIER	UNIT HEIGHT	4	3	2	1	
NUMBER OF UNITS WIDE FOR SIXTH ROW FOR UNITS 38" (DIM B)						



CHART NO. 138																		
TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																
1ST 2ND	15'-56"	25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'					
	15'-30"	25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'					
	30'-33"			25'	28'	30'	32'	35'	39'	43'	49'	56'	65'	66'				
	33'-36"			25'	27'	29'	32'	34'	38'	42'	48'	54'	64'	66'				
	36'-39"				25'	28'	30'	33'	37'	41'	46'	53'	61'	66'				
	39'-42"				25'	26'	29'	31'	35'	38'	43'	50'	58'	66'				
	42'-45"					25'	28'	31'	34'	38'	42'	49'	57'	66'				
	45'-48"						25'	28'	31'	34'	39'	44'	52'	62'	66'			
	48'-51"							25'	28'	30'	34'	38'	43'	51'	61'	66'		
	51'-54"								25'	30'	33'	38'	45'	54'	66'			
	54'-56"									25'	30'	35'	42'	52'	66'			
	3RD	15'-18"	25'	27'	28'	30'	33'	36'	39'	43'	48'	54'	61'	66'				
		18'-21"	25'	27'	28'	30'	33'	34'	37'	40'	45'	51'	58'	66'				
		21'-24"			25'	27'	29'	32'	34'	38'	42'	48'	54'	64'	66'			
24'-27"					25'	28'	30'	33'	36'	40'	45'	52'	60'	66'				
27'-30"						25'	28'	31'	34'	38'	42'	49'	57'	66'				
30'-33"							25'	28'	31'	34'	39'	44'	52'	62'	66'			
33'-36"								25'	28'	31'	34'	39'	44'	52'	62'	66'		
36'-39"									25'	28'	30'	34'	40'	48'	60'	66'		
39'-42"													25'	32'	40'	66'		
42'-54"															40'	54'	66'	
4TH		15'-18"			25'	27'	29'	32'	34'	38'	42'	48'	54'	64'	66'			
		18'-21"				25'	26'	29'	31'	35'	38'	43'	50'	58'	66'			
		21'-24"						25'	28'	31'	34'	39'	44'	52'	62'	66'		
		24'-27"								25'	30'	33'	38'	45'	54'	66'		
	27'-30"									25'	30'	36'	43'	54'	66'			
5TH	15'-18"				25'	28'	31'	34'	38'	42'	49'	57'	66'					
	18'-21"						25'	28'	32'	36'	41'	48'	57'	66'				
	21'-24"								25'	30'	36'	43'	54'	66'				
	24'-27"									25'	30'	36'	43'	54'	66'			
6TH	15'-18"								25'	30'	33'	38'	45'	54'	66'			
	18'-21"											25'	32'	40'	54'	66'		
7TH	15'-18"											25'	32'	40'	54'	66'		
TIER	UNIT HEIGHT	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 40"-44" (DIM B)																		

CHART NO. 139																	
TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)															
1ST 2ND	15'-56"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'						
	15'-30"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'						
	30'-33"			25'	28'	30'	33'	37'	42'	48'	56'	66'					
	33'-36"				25'	29'	32'	36'	40'	46'	54'	64'	66'				
	36'-42"				25'	27'	30'	33'	37'	42'	46'	60'	66'	66'			
	42'-45"						25'	30'	33'	38'	45'	54'	66'				
	45'-48"							25'	28'	32'	37'	43'	52'	66'			
	48'-51"								25'	30'	36'	43'	54'	66'	66'		
	51'-54"									25'	30'	36'	43'	54'	66'	66'	
	54'-56"										25'	32'	43'	54'	66'	66'	
	3RD	15'-18"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'					
		18'-21"	25'	26'	28'	31'	34'	38'	42'	49'	57'	66'					
		21'-24"			25'	29'	32'	36'	40'	46'	54'	64'	66'				
		24'-27"				25'	27'	30'	33'	37'	42'	46'	60'	66'			
27'-30"						25'	30'	33'	38'	45'	54'	66'					
30'-33"							25'	30'	34'	40'	48'	60'	66'	66'			
33'-36"								25'	30'	34'	40'	48'	60'	66'	66'		
4TH		15'-18"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'					
		18'-21"			25'	29'	32'	36'	40'	46'	54'	64'	66'				
		21'-24"				25'	30'	33'	37'	42'	46'	60'	66'				
		24'-27"					25'	28'	32'	37'	43'	52'	66'				
		27'-30"							25'	30'	36'	43'	54'	66'	66'		
5TH		15'-18"					25'	30'	33'	38'	45'	54'	66'				
		18'-21"								25'	32'	40'	54'	66'	66'		
6TH	15'-18"										25'	32'	40'	54'	66'	66'	
TIER	UNIT HEIGHT	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 40"-42" (DIM B)																	

CHART NO. 140															
TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)													
1ST	15'-56"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'				
2ND	15'-30"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'				
	30'-33"			25'	28'	31'	35'	39'	45'	53'	66'				
	33'-36"			25'	28'	31'	34'	39'	44'	52'	66'				
	36'-39"				25'	28'	32'	36'	41'	48'	57'	66'			
	39'-42"					25'	30'	33'	38'	45'	54'	66'			
	42'-48"						25'	30'	34'	40'	48'	66'	66'		
	48'-51"									25'	32'	40'	54'		
	51'-53"											26'	34'		
3RD	15'-20"	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'				
	20'-24"			25'	28'	31'	34'	39'	44'	52'	66'				
	24'-30"						25'	30'	34'	40'	48'	66'	66'		
	30'-33"							25'	30'	36'	43'	54'	66'		
	33'-36"									25'	36'	48'	66'		
4TH	15'	25'	26'	29'	31'	35'	38'	43'	50'	58'	66'				
	15'-18"			25'	28'	31'	34'	39'	44'	52'	66'				
	18'-21"					25'	30'	33'	38'	45'	54'	66'			
	21'-24"						25'	30'	34'	40'	48'	66'	66'		
	24'-27"									25'	36'	48'	66'		
5TH	15'-18"						25'	30'	34'	40'	48'	66'	66'		
	18'-21"									25'	33'	42'	58'		
TIER	UNIT HEIGHT	14	13	12	11	10	9	8	7	6	5	4	3	2	1
		NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 42"-44" (DIM B)													

CHART NO. 141											
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)									
1ST	15'-56"	25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"		
2ND	15'-30"	25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"		
	30'-33"		25'	25'-30"	30'-35"	35'-40"	40'-49"	49'-61"	61'-66"		
	33'-36"			25'	25'-30"	30'-36"	36'-43"	43'-54"	54'-66"		
	36'-39"			25'	25'-29"	29'-34"	34'-40"	40'-51"	51'-66"		
	39'-42"					25'	25'-32"	32'-40"	40'-54"	54'-66"	
	42'-45"							25'	36'-54"	54'-66"	
	45'-54"								25'	54'-66"	
3RD	15'-20"	25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-51"	51'-63"	63'-66"		
	20'-24"			25'	25'-31"	31'-36"	36'-43"	43'-54"	54'-66"		
	24'-27"					25'	25'-30"	30'-38"	38'-51"	51'-66"	
	27'-30"							25'	36'-54"	54'-66"	
TIER	UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1
		NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 40" (DIM B)									

CHART NO. 142										
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)								
1ST	15'-56"	25'	25'-30"	30'-36"	36'-43"	43'-54"	54'-66"			
2ND	15'-30"	25'	25'-30"	30'-36"	36'-43"	43'-54"	54'-66"			
	30'-33"	25'	25'-30"	30'-35"	35'-42"	42'-53"	53'-66"			
	33'-36"	25'	25'-29"	29'-34"	34'-40"	40'-51"	51'-66"			
	36'-39"			25'	25'-30"	30'-37"	37'-50"	50'-66"		
	39'-42"					25'	25'-36"	36'-54"	54'-66"	
	42'-45"							25'	54'-66"	
3RD	15'-20"	25'	25'-30"	30'-36"	36'-43"	43'-54"	54'-66"			
	20'-24"	25'	25'-29"	29'-34"	34'-40"	40'-51"	51'-66"			
	24'-27"							25'-48"	48'-66"	
	27'-30"							25'	54'-66"	
TIER	UNIT HEIGHT	8	7	6	5	4	3	2	1	
		NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 41" (DIM B)								

CHART NO. 143						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
1ST	15'-56"	25'	25'-36"	36'-48"	48'-66"	
2ND	15'-30"	25'	25'-36"	36'-48"	48'-66"	
	30'-33"		25'	25'-36"	36'-54"	54'-66"
	33'-36"				25'	25'-48"
3RD	15'-20"	25'	25'-36"	36'-48"	48'-66"	
	20'-24"	25'	25'-36"	36'-54"	48'-66"	54'-66"
TIER	UNIT HEIGHT	5	4	3	2	1
		NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 42" (DIM B)				

CHART NO. 144						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
1ST	15'-56"	25'	25'-32"	32'-40"	40'-54"	54'-66"
2ND	15'-30"	25'	25'-32"	32'-40"	40'-54"	54'-66"
	30'-33"	25'	25'-31"	31'-39"	39'-52"	52'-66"
	33'-36"			25'	25'-36"	36'-66"
3RD	15'-20"	25'	25'-32"	32'-40"	40'-54"	54'-66"
	20'-24"			25'	25'-36"	36'-66"
TIER	UNIT HEIGHT	6	5	4	3	2
		NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 43" (DIM B)				

CHART NO. 145						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
1ST	15'-56"	25'	25'-36"	36'-48"	48'-66"	
2ND	15'-30"	25'	25'-36"	36'-48"	48'-66"	
	30'-33"		25'	25'-36"	36'-54"	54'-66"
	33'-36"				25'	25'-54"
3RD	15'-20"	25'	25'-36"	36'-48"	48'-66"	
	20'-24"				25'	25'-54"
TIER	UNIT HEIGHT	5	4	3	2	1
		NUMBER OF UNITS WIDE IN FIFTH ROW FOR UNITS 44" (DIM B)				





CHART NO. 148

TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)														
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	
1ST 2ND	15'-56"	25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"					
	15'-30"	25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"					
3RD	30'-33"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"				
	33'-36"		25'	25'-27"	27'-30"	30'-32"	32'-36"	36'-40"	40'-45"	45'-51"	51'-60"	60'-66"				
	36'-39"		25'	25'-27"	27'-29"	29'-32"	32'-35"	35'-39"	39'-44"	44'-50"	50'-58"	58'-66"				
	39'-42"			25'-26"	26'-28"	28'-31"	31'-34"	34'-38"	38'-42"	42'-48"	48'-57"	57'-66"				
	42'-45"				25'-27"	27'-29"	29'-32"	32'-36"	36'-40"	40'-46"	46'-54"	54'-64"	64'-66"			
	45'-48"				25'	25'-28"	28'-30"	30'-34"	34'-38"	38'-44"	44'-51"	51'-61"	61'-66"			
	48'-51"					25'	25'-28"	28'-31"	31'-35"	35'-40"	40'-46"	46'-56"	56'-66"			
	51'-54"						25'-26"	26'-29"	29'-33"	33'-37"	37'-44"	44'-52"	52'-66"			
	4TH	15'-18"	25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"				
		18'-21"	25'	25'-27"	27'-29"	29'-32"	32'-35"	35'-38"	38'-42"	42'-48"	48'-55"	55'-64"	64'-66"			
21'-24"			25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-40"	40'-46"	46'-52"	52'-61"	61'-66"				
24'-27"			25'	25'-27"	27'-30"	30'-32"	32'-36"	36'-40"	40'-45"	45'-51"	51'-60"	60'-66"				
27'-30"					25'-27"	27'-29"	29'-32"	32'-36"	36'-40"	40'-46"	46'-54"	54'-64"	64'-66"			
5TH	15'-18"	25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-44"	44'-49"	49'-56"	56'-66"					
	18'-21"		25'	25'-27"	27'-30"	30'-32"	32'-36"	36'-40"	40'-45"	45'-51"	51'-60"	60'-66"				
	21'-24"				26'-28"	28'-31"	31'-34"	34'-38"	38'-42"	42'-48"	48'-57"	57'-66"				
6TH	15'-18"				25'-27"	27'-29"	29'-32"	32'-36"	36'-40"	40'-46"	46'-54"	54'-64"	64'-66"			
	15'-18"					25'-26"	26'-29"	29'-33"	33'-37"	37'-44"	44'-52"	52'-66"				
TIER	UNIT HEIGHT	NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 45'-50" (DIM B)														

CHART NO. 149													
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)											
1ST	15'-56"	25'	25'-29'	29'-32'	32'-35'	35'-40'	40'-45'	45'-53'	53'-64'	64'-66"			
2ND	15'-30"	25'	25'-29'	29'-32'	32'-35'	35'-40'	40'-45'	45'-53'	53'-64'	64'-46"			
	30'-33"	25'	25'	25'-28'	28'-31'	31'-35'	35'-40'	40'-46"	46'-56"	56'-66"			
	33'-36"			25'	25'	25'-29'	29'-33'	33'-37'	37'-44"	44'-52"	52'-66"		
	36'-39"					25'	25'-28'	28'-32'	32'-38"	38'-45"	45'-57"	57'-66"	
	39'-42"						25'	25'-30'	30'-36"	36'-43"	43'-54"	54'-66"	
	42'-45"							25'	25'-30'	30'-36"	36'-45"	45'-60"	
	45'-48"								25'	25'-28"	28'-48"	60'-66"	
	48'-51"										25'	48'-66"	
3RD	15'-20"	25'	25'-28'	28'-31'	31'-35'	35'-39'	39'-45'	45'-52'	52'-63"	63'-66"			
	20'-24"			25'	25'-29'	29'-33'	33'-37'	37'-44"	44'-52"	52'-66"			
	24'-27"				25'	25'-28'	28'-32'	32'-38"	38'-45"	45'-57"	57'-66"		
	27'-30"						25'	25'-30'	30'-36"	36'-45"	45'-60"	60'-66"	
	30'-33"									25'	25'-40"	60'-66"	
4TH	15'	25'	25'-28'	28'-31'	31'-35'	35'-39'	39'-45'	45'-52'	52'-63"	63'-66"			
	15'-18"			25'	25'-28'	28'-32'	32'-37'	37'-43"	43'-51"	51'-64"	64'-66"		
	18'-21"					25'	25'-30'	30'-36"	36'-43"	43'-54"	54'-66"		
	21'-24"								25'	25'-36"	36'-48"	48'-66"	
5TH	15'-18"						25'	25'-30'	30'-36"	36'-45"	45'-60"	60'-66"	
TIER	UNIT HEIGHT	12	11	10	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 45'-47" (DIM B)													

CHART NO. 150												
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)										
1ST	15'-56"	25'	25'-30'	30'-34'	34'-39'	39'-45'	45'-54'	54'-66"				
2ND	15'-30"	25'	25'-30'	30'-34'	34'-39'	39'-45'	45'-54'	54'-66"				
	30'-33"	25'	25'-29'	29'-33'	33'-37'	37'-44"	44'-52"	52'-66"				
	33'-36"		25'	25'-30'	30'-34'	34'-40'	40'-48"	48'-60"	60'-66"			
	36'-39"			25'	25'-31'	31'-36"	36'-44"	44'-55"	55'-66"			
	39'-42"				25'	25'-28"	28'-33'	33'-40"	40'-50"	50'-66"		
	42'-45"						25'	25'-33'	33'-44"	44'-66"		
	45'-48"							25'	25'-33'	33'-58"	58'-66"	
3RD	15'-20"	25'	25'-30'	30'-34'	34'-39'	39'-45'	45'-54'	54'-66"				
	20'-24"		25'	25'-30'	30'-34'	34'-40'	40'-48"	48'-60"	60'-66"			
	24'-27"			25'	25'-30'	30'-36"	36'-43"	43'-54"	54'-66"			
	27'-30"				25'	25'-32'	32'-40"	40'-53"	53'-66"			
4TH	15'	25'	25'-30'	30'-34'	34'-39'	39'-45'	45'-54'	54'-66"				
	15'-18"		25'	25'-30'	30'-34'	34'-40'	40'-48"	48'-60"	60'-66"			
	18'-21"			25'	25'-30'	34'-40'	40'-48"	48'-60"	50'-66"			
	21'-24"				25'	28'-33'	33'-40"	40'-50"	50'-66"			
5TH	15'-18"					25'	25'-32'	32'-40"	40'-53"	53'-66"	58'-66"	
TIER	UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 48" (DIM B)												

CHART NO. 151												
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)										
1ST	15'-56"	25'	25'-28'	28'-31'	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"			
2ND	15'-30"	25'	25'-28'	28'-31'	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"			
	30'-33"		25'	25'-29'	29'-33'	33'-39"	39'-46"	46'-58"	58'-66"			
	33'-36"			25'	25'-31'	31'-37"	37'-44"	44'-55"	55'-66"			
	36'-39"				25'	25'-32'	32'-39"	39'-48"	48'-65"	65'-66"		
	39'-42"					25'	25'-33'	33'-42"	42'-56"	56'-66"		
	42'-45"						25'	25'-36"	36'-48"	48'-66"		
	45'-48"								25'	25'-66"		
3RD	15'-20"	25'	25'-28'	28'-31'	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"			
	20'-24"			25'	25'-31'	31'-37"	37'-44"	44'-55"	55'-66"			
	24'-27"				25'	25'-33'	33'-42"	42'-56"	56'-66"			
	27'-30"					25'	25'-36"	36'-48"	48'-66"			
4TH	15'	25'	25'-28'	28'-31'	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"			
	15'-18"			25'	25'-31'	31'-37"	37'-44"	44'-55"	55'-63"	63'-66"		
	18'-21"				25'	25'-33'	33'-42"	42'-56"	56'-66"			
	21'-24"					25'	25'-33'	33'-42"	42'-56"	56'-66"		
5TH	15'-18"						25'	25'-36"	36'-48"	48'-66"	25'-66"	
TIER	UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1	
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 49" (DIM B)												

CHART NO. 152										
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)								
1ST 2ND	15'-56" 15'-30" 30'-33" 33'-36" 36'-39" 39'-42" 42'-45"	25' 25'	25'-28" 25'-28" 25'-27" 25'	28'-32" 28'-32" 27'-31" 25'-28"	32'-38" 28'-32" 31'-37" 28'-33" 25'-28"	38'-45" 38'-45" 37'-44" 33'-40" 28'-34" 25'-28"	45'-57" 45'-57" 44'-55" 40'-50" 34'-43" 28'-36"	57'-66" 57'-66" 55'-66" 50'-66" 43'-57" 36'-48" 25'-29"	57'-66" 48'-66" 29'-44"	44'-66"
3RD	15'-20" 20'-24" 24'-27" 27'-30"	25'	25'-28" 25'	28'-32" 25'-28"	32'-38" 28'-33"	38'-45" 33'-40" 25'-28"	45'-57" 40'-50" 28'-36"	57'-66" 50'-66" 36'-48"	48'-66" 29'-44"	44'-66"
4TH	15' 15'-18" 18'-21" 15'-18"	25'	25'-28" 25'	28'-32" 25'-28"	32'-38" 28'-33"	38'-45" 33'-40" 25'-28"	45'-57" 40'-50" 28'-36"	57'-66" 50'-66" 36'-48" 25'-29"	48'-66" 29'-44"	44'-66"
5TH	15'-18"								48'-66" 29'-44"	44'-66"
TIER	UNIT HEIGHT	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 50' (DIM B)										

CHART NO. 153																					
TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)																			
1ST 2ND	15'-56" 15'-30" 30'-33" 33'-36" 36'-39" 39'-42" 42'-45" 45'-48" 48'-51" 51'-54" 54'-56"	25' 25'	26' 26' 25'	27' 27' 26' 25'	29' 29' 28' 25'	31' 31' 30' 28' 25'	33' 33' 32' 30' 27'	35' 35' 34' 32' 29'	38' 38' 36' 35' 27'	41' 41' 40' 38' 25'	45' 45' 44' 42' 25'	50' 50' 48' 46' 44'	55' 55' 54' 52' 49'	62' 62' 61' 60' 58' 55'	66' 66' 66' 66' 66' 65' 63' 61' 61' 66' 66'	66'	66'	66'	66'		
3RD	15'-18" 18'-21" 21'-24" 24'-27" 27'-30" 30'-33" 33'-36" 36'-39" 39'-42" 42'-45" 45'-48" 48'-51" 51'-54" 54'-56"	25' 25'	26' 26' 25'	27' 27' 26' 25'	29' 29' 28' 25'	31' 31' 30' 28' 25'	33' 33' 32' 30' 27'	35' 35' 34' 32' 29'	38' 38' 36' 35' 27'	41' 41' 40' 38' 25'	45' 45' 44' 42' 25'	50' 50' 48' 46' 44'	55' 55' 54' 52' 49'	62' 62' 61' 60' 58' 55'	66' 66' 66' 66' 66' 65' 63' 61' 61' 66' 66'	66'	66'	66'	66'	66'	
4TH	15'-18" 18'-21" 21'-24" 24'-27" 27'-30" 30'-33" 33'-36" 36'-39" 39'-42" 42'-45" 45'-48" 48'-51"	25'	26' 26' 25'	27' 27' 26' 25'	28' 28' 27' 25'	30' 30' 28' 25'	32' 32' 30' 27'	34' 34' 33' 31' 25'	36' 36' 35' 33' 27'	40' 40' 38' 36' 25'	43' 43' 41' 39' 25'	48' 45' 43' 40' 30'	53' 50' 48' 45' 33'	60' 57' 54' 51' 44'	66' 65' 61' 58' 50' 47' 41' 38'	66'	66'	66'	66'	66'	
5TH	15'-18" 18'-21" 21'-24" 24'-27" 27'-30"				25'	27' 25'	29' 27'	31' 29'	34' 27'	37' 29'	40' 25'	44' 28'	49' 32'	55' 36'	63' 41'	66' 48'	66'	66'	66'	66'	
6TH	15'-18" 18'-21" 21'-24"				25'	27'	29'	31' 25'	34' 28'	37' 30'	40' 33'	45' 25'	51' 37'	58' 42'	66' 48'	66'	66'	66'	66'	66'	
7TH	15'-18" 18'-21"								25'	28'	30'	33'	25'	28'	32'	38'	45'	57'	66'	66'	
8TH	15'-18"																				
TIER	UNIT HEIGHT	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN FIRST ROW FOR UNITS 51'-66" (DIM B)																					

CHART NO. 154																
TIER	UNIT HEIGHT	MAXIMUM SIZE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)														
1ST 2ND	15'-56"	25'	28'	30'	33'	36'	39'	44'	49'	56'	66'					
	15'-30"	25'	28'	30'	33'	36'	39'	44'	49'	56'	66'					
3RD	30'-33"	25'	27'	30'	32'	35'	39'	43'	48'	55'	65'	66'				
	33'-36"		25'	28'	31'	33'	37'	41'	46'	53'	62'	66'				
	36'-39"			25'	27'	30'	32'	36'	40'	45'	51'	60'	66'			
	39'-42"			25'	29'	31'	34'	38'	43'	49'	58'	66'				
	42'-45"			25'	28'	30'	33'	37'	42'	48'	56'	66'				
	45'-48"				25'	28'	31'	34'	39'	44'	52'	62'	66'			
	48'-51"					25'	28'	32'	36'	41'	48'	57'	66'			
	51'-56"						25'	30'	34'	40'	48'	60'	66'			
	15'-21"	25'	28'	30'	33'	36'	39'	44'	49'	56'	66'	66'	66'			
	21'-24"		25'	28'	31'	33'	37'	41'	46'	53'	62'	66'				
24'-27"			25'	27'	29'	32'	35'	39'	44'	50'	59'	66'				
27'-30"				25'	28'	30'	33'	37'	42'	48'	56'	66'				
30'-33"					25'	29'	32'	36'	42'	49'	58'	66'				
33'-36"						25'	29'	33'	37'	44'	52'	66'				
36'-39"							25'	30'	36'	43'	54'	66'				
39'-42"								25'	30'	36'	43'	54'	66'			
42'-43"										32'	43'	65'	66'			
4TH	15'-18"		25'	28'	31'	33'	37'	41'	46'	53'	62'	66'				
	18'-21"			25'	29'	31'	34'	38'	43'	49'	58'	66'				
	21'-24"				25'	28'	31'	34'	39'	44'	52'	62'	66'			
	24'-27"					25'	29'	33'	37'	44'	52'	62'	66'			
27'-30"							25'	29'	33'	39'	49'	66'				
30'-32"											25'	66'				
5TH	15'-18"			25'	28'	30'	33'	37'	42'	48'	56'	66'				
	18'-21"				25'	27'	31'	34'	39'	46'	55'	66'				
	21'-24"					25'	28'	31'	34'	25'	32'	39'	66'			
	24'-26"											49'	66'			
6TH	15'-18"						25'	29'	33'	37'	44'	52'	66'			
	18'-21"											25'	66'			
	15'-18"											25'	66'			
7TH	18'-21"											25'	66'			
	15'-18"											25'	66'			
TIER	UNIT HEIGHT	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN SECOND ROW FOR UNITS 51"-66" (DIM B)																

CHART NO. 155																
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)														
1ST 2ND	15'-56"	25'	25'-28"	28'-30"	30'-33"	33'-37"	37'-42"	42'-48"	48'-56"	56'-66"						
	15'-30"	25'	25'-28"	28'-30"	30'-33"	33'-37"	37'-42"	42'-48"	48'-56"	56'-66"						
3RD	30'-33"		25'	25'-28"	28'-30"	30'-34"	34'-38"	38'-44"	44'-51"	51'-61"	61'-66"					
	33'-36"			25'	25'-29"	29'-32"	32'-37"	37'-42"	42'-49"	49'-59"	59'-66"					
	36'-39"				25'	25'-30"	30'-34"	34'-39"	39'-45"	45'-54"	54'-66"					
	39'-42"					25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-50"	63'-66"				
	42'-45"						25'	25'-30"	30'-34"	34'-40"	40'-48"	60'-66"				
	45'-48"							25'	25'-32"	32'-39"	39'-48"	48'-65"	65'-66"			
	48'-51"								25'	25'-32"	32'-41"	41'-54"	54'-66"			
	51'-56"									25'	25'-35"	35'-46"	46'-66"			
	15'-18"	25'	25'-27"	27'-30"	30'-33"	33'-37"	37'-41"	41'-47"	47'-55"	55'-66"						
	18'-21"		25'	25'-28"	28'-31"	31'-35"	35'-39"	39'-45"	45'-52"	52'-63"	63'-66"					
21'-24"			25'	25'-29"	29'-32"	32'-37"	37'-42"	42'-49"	49'-59"	59'-66"						
24'-27"				25'	25'-28"	28'-32"	32'-37"	37'-43"	43'-51"	51'-64"	64'-66"					
27'-30"					25'	25'-30"	30'-34"	34'-40"	40'-48"	48'-60"	60'-66"					
30'-33"							25'	25'-31"	31'-38"	38'-47"	47'-63"	63'-66"				
33'-36"									25'	25'-35"	35'-46"	46'-66"				
4TH	15'-18"			25'	25'-29"	29'-32"	32'-37"	37'-42"	42'-49"	49'-59"	59'-66"					
	18'-21"				25'	25'-28"	28'-31"	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"				
	21'-24"					25'	28'-31"	31'-36"	36'-42"	42'-50"	50'-63"	63'-66"				
	24'-27"						25'	25'-32"	32'-39"	39'-48"	48'-65"	65'-66"				
5TH	15'-18"					25'	25'-30"	30'-34"	34'-40"	40'-48"	48'-60"	60'-66"	65'-66"			
	18'-21"									25'	25'-35"	35'-46"	46'-66"			
	15'-18"									25'	25'-35"	35'-46"	46'-66"			
6TH	18'-21"									25'	25'-32"	32'-41"	41'-54"	54'-66"		
	15'-18"									25'	25'-35"	35'-46"	46'-66"			
TIER	UNIT HEIGHT	13	12	11	10	9	8	7	6	5	4	3	2			
NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 51"-54" (DIM B)																

CHART NO. 156											
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)									
1ST	15'-56"	25'	25'-29"	29'-33"	33'-37"	37'-44"	44'-52"	52'-66"			
2ND	15'-30"	25'	25'-29"	29'-33"	33'-37"	37'-44"	44'-52"	52'-66"			
	30'-33"	25'	25'-28"	28'-32"	32'-36"	36'-43"	43'-51"	51'-64"	64'-66"		
	33'-36"		25'	25'-29"	29'-33"	33'-39"	39'-46"	46'-58"	58'-66"		
	36'-39"			25'	25'-30"	30'-36"	36'-43"	43'-54"	54'-66"		
	39'-42"				25'	25'-33"	33'-39"	39'-49"	49'-66"		
	42'-45"						25'	25'-31"	31'-42"	42'-63"	
	45'-48"									63'-66"	
3RD	15'-21"	25'	25'-29"	29'-33"	33'-37"	37'-44"	44'-52"	52'-66"			
	21'-24"		25'	25'-29"	29'-33"	33'-39"	39'-46"	46'-58"	58'-66"		
	24'-27"			25'	25'-29"	29'-34"	34'-41"	41'-52"	52'-63"	63'-66"	
	27'-30"						25'	25'-31"	31'-42"	42'-63"	
4TH	15'-18"		25'	25'-29"	29'-33"	33'-39"	39'-46"	46'-58"	58'-66"		
	18'-21"				25'	25'-33"	33'-39"	39'-49"	49'-66"		
	21'-24"									25'	
	15'-18"						25'	25'-31"	31'-42"	42'-63"	
5TH	15'-24"									25'-50"	
										63'-66"	
TIER	UNIT HEIGHT	10	9	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 55" TO 60" (DIM B)											

CHART NO. 157							
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)					
1ST	15'-56"	25'	25'-33"	33'-42"	42'-56"	56'-66"	
2ND	15'-30"	25'	25'-33"	33'-42"	42'-56"	56'-66"	
	30'-33"	25'	25'-32"	32'-40"	40'-54"	54'-66"	
	33'-36"			25'	25'-40"	40'-60"	60'-66"
	36'-40"						25'-48"
3RD	15'-18"	25'	25'-33"	33'-42"	42'-56"	56'-66"	
	18'-21"	25'	25'-31"	31'-39"	39'-52"	52'-66"	
	21'-24"			25'	25'-40"	40'-60"	60'-66"
	24'-27"						25'-48"
4TH	15'-18"		25'	25'-40"	40'-60"	60'-66"	
	18'-20"						25'-48"
	15'-16"						25'-48"
TIER	UNIT HEIGHT	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN THIRD ROW FOR UNITS 61"-66" (DIM B)							

CHART NO. 160							
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)					
1ST	15'-56"	25'-28"	28'-33"	33'-42"	42'-56"	56'-66"	
2ND	15'-30"	25'-28"	28'-33"	33'-42"	42'-56"	56'-66"	
	30'-33"			25'-30"	30'-40"	40'-60"	60'-66"
	33'-36"						25'-36"
	36'-40"						36'-66"
3RD	15'-20"	25'-28"	28'-33"	33'-42"	42'-56"	56'-66"	
	20'-24"						25'-36"
							36'-66"
TIER	UNIT HEIGHT	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 53" (DIM B)							

CHART NO. 158									
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)							
1ST	15'-56"	25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"		
2ND	15'-30"	25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"		
	30'-33"		25'-27"	27'-32"	32'-39"	39'-48"	48'-65"	65'-66"	
	33'-36"		25'	25'-29"	29'-35"	35'-44"	44'-58"	58'-66"	
	36'-39"				25'-28"	28'-35"	35'-46"	46'-66"	
	39'-42"						25'-29"	29'-44"	
3RD	15'-20"	25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"	44'-66"	
	20'-24"		25'	25'-29"	29'-35"	35'-44"	44'-58"	58'-66"	
	24'-27"						25'-29"	29'-44"	
4TH	15'	25'-26"	26'-30"	30'-35"	35'-42"	42'-52"	52'-66"	44'-66"	
	15'-18"		25'	25'-29"	29'-35"	35'-44"	44'-58"	58'-66"	
	18'-21"						25'-29"	29'-44"	
TIER	UNIT HEIGHT	8	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 51" (DIM B)									

CHART NO. 159								
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)						
1ST	15'-54"	25'-27"	27'-31"	31'-38"	38'-47"	47'-63"	63'-66"	
2ND	15'-30"	25'-27"	27'-31"	31'-38"	38'-47"	47'-63"	63'-66"	
	30'-33"		25'-26"	26'-31"	31'-39"	39'-52"	52'-66"	
	33'-36"			25'-26"	26'-33"	33'-44"	44'-66"	
	36'-39"						25'-36"	
3RD	15'-20"	25'-27"	27'-31"	31'-38"	38'-47"	47'-63"	63'-66"	
	20'-24"		25'	25'-26"	26'-33"	33'-44"	44'-66"	
	24'-27"						25'-36"	
4TH	15'	25'-27"	27'-31"	31'-38"	38'-47"	47'-63"	63'-66"	
	15'-18"		25'	25'-26"	26'-33"	33'-44"	44'-66"	
TIER	UNIT HEIGHT	7	6	5	4	3	2	1
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 52" (DIM B)								

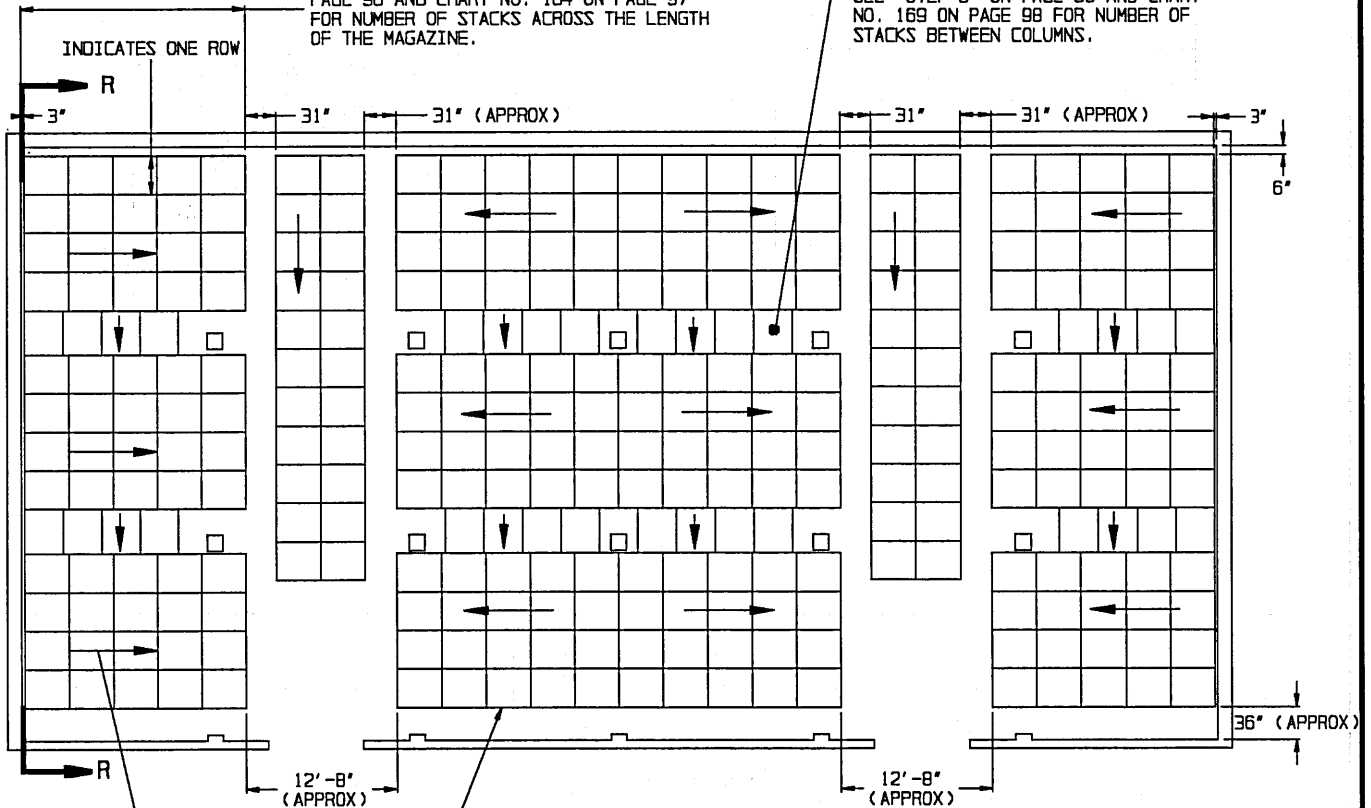
CHART NO. 161						
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH (DIM A)				
1ST	15'-56"	25'-29"	29'-37"	37'-49"	49'-66"	
2ND	15'-30"	25'-29"	29'-37"	37'-49"	49'-66"	37'-66"
	30'-33"				25'-37"	25'-66"
	33'-36"					
3RD	15'-20"	25'-29"	29'-37"	37'-49"	49'-66"	
	20'-24"					25'-66"
TIER	UNIT HEIGHT	5	4	3	2	1
NUMBER OF UNITS WIDE IN FOURTH ROW FOR UNITS 54" (DIM B)						

CHART NO. 162						
AISLE WIDTH	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH					
10'-10" TO 10'-11"		25'-29"	29'-39"	39'-59"	59'-66"	
11'-0" TO 11'-2"		25'-30"	30'-40"	40'-61"	61'-66"	
11'-3" TO 11'-5"	25'	25'-31"	31'-41"	41'-62"	62'-66"	
11'-6" TO 11'-8"	25'	25'-32"	32'-42"	42'-64"	64'-66"	
11'-9" TO 11'-11"	25'-26"	26'-32"	32'-43"	43'-65"	65'-66"	
12'-0"	25'-26"	26'-33"	33'-44"	44'-66"		
AISLE WIDTH	5	4	3	2	1	
NUMBER OF UNITS WIDE IN THE AISLE						

CHART NO. 163																		
TIER	UNIT HEIGHT	SIZE RANGE FOR SKIDDED UNIT LENGTH OR WIDTH																
1ST	15'-56"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-36"	36'-39"	39'-42"	42'-46"	46'-52"	52'-58"	58'-66"					
2ND	15'-30"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-36"	36'-39"	39'-42"	42'-46"	46'-52"	52'-58"	58'-66"					
	30'-36"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-35"	35'-38"	38'-42"	42'-46"	46'-51"	51'-57"	57'-66"					
	36'-39"	25'	25'-26"	26'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-41"	41'-45"	45'-50"	50'-57"	57'-65"	65'-66"				
	39'-42"	25'	25'-26"	26'-28"	28'-30"	30'-32"	32'-34"	34'-37"	37'-41"	41'-45"	45'-50"	50'-56"	56'-64"	64'-66"				
	42'-45"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-40"	40'-44"	44'-49"	49'-55"	55'-63"	63'-66"					
	45'-48"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-36"	36'-40"	40'-44"	44'-48"	48'-55"	55'-62"	62'-66"					
	48'-51"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-43"	43'-48"	48'-54"	54'-61"	61'-66"					
	51'-66"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
3RD	15'-20"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-36"	36'-39"	39'-42"	42'-46"	46'-52"	52'-58"	58'-66"					
	20'-24"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-35"	35'-38"	38'-42"	42'-46"	46'-51"	51'-57"	57'-66"					
	24'-27"	25'	25'-26"	26'-28"	28'-30"	30'-32"	32'-34"	34'-37"	37'-41"	41'-45"	45'-50"	50'-56"	56'-64"	64'-66"				
	27'-30"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-40"	40'-44"	44'-49"	49'-55"	55'-63"	63'-66"					
	30'-33"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-43"	43'-48"	48'-54"	54'-61"	61'-66"					
	33'-36"	25'	25'-26"	26'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	36'-39"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	39'-42"	25'	25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-40"	40'-44"	44'-50"	50'-57"	57'-66"						
	42'-45"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	45'-48"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-43"	43'-48"	48'-54"	54'-63"	63'-66"					
	48'-51"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-43"	43'-48"	48'-54"	54'-63"	63'-66"					
	51'-56"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-35"	35'-38"	38'-42"	42'-46"	46'-51"	51'-57"	57'-66"					
4TH	15'-18"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-35"	35'-38"	38'-42"	42'-46"	46'-51"	51'-57"	57'-66"					
	18'-22"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-40"	40'-44"	44'-49"	49'-55"	55'-63"	63'-66"					
	22'-27"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	27'-30"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-37"	37'-40"	40'-45"	45'-50"	50'-58"	58'-66"						
	30'-33"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-39"	39'-43"	43'-48"	48'-55"	55'-65"	65'-66"					
	33'-36"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	36'-39"	25'	25'-26"	26'-28"	28'-30"	30'-33"	33'-36"	36'-40"	40'-44"	44'-50"	50'-57"	57'-66"						
	39'-42"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	42'-45"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	45'-48"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-43"	43'-48"	48'-54"	54'-63"	63'-66"					
	48'-51"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-36"	36'-39"	39'-43"	43'-48"	48'-54"	54'-63"	63'-66"					
	51'-56"	25'	25'-27"	27'-28"	28'-30"	30'-33"	33'-35"	35'-38"	38'-42"	42'-46"	46'-51"	51'-57"	57'-66"					
5TH	15'-18"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-40"	40'-44"	44'-49"	49'-55"	55'-63"	63'-66"					
	18'-21"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-37"	37'-40"	40'-45"	45'-50"	50'-58"	58'-66"						
	21'-24"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-37"	37'-40"	40'-45"	45'-50"	50'-58"	58'-66"						
	24'-27"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	27'-30"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-39"	39'-43"	43'-48"	48'-55"	55'-65"	65'-66"					
	30'-33"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	33'-35"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	35'-38"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	38'-42"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-37"	37'-40"	40'-45"	45'-50"	50'-58"	58'-66"						
	41'-45"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	44'-48"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-39"	39'-43"	43'-48"	48'-55"	55'-65"	65'-66"					
	47'-51"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	50'-54"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	53'-57"	25'	25'-27"	27'-29"	29'-31"	31'-33"	33'-37"	37'-40"	40'-45"	45'-50"	50'-58"	58'-66"						
	56'-60"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	59'-63"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	62'-66"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	65'-69"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	68'-72"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	71'-75"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	74'-78"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	77'-81"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	80'-84"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	83'-87"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	86'-90"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	89'-93"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	92'-96"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"						
	95'-99"	25'	25'-27"	27'-28"	28'-30"	30'-32"	32'-35"	35'-38"	38'-42"	42'-46"	46'-52"	52'-60"	60'-66"					
	98'-102"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-37"	37'-41"	41'-45"	45'-51"	51'-58"	58'-66"						
	101'-105"	25'	25'-27"	27'-29"	29'-31"	31'-34"	34'-38"	38'-42"	42'-47"	47'-54"	54'-63"	63'-66"		</				

END AREA OF MAGAZINE. SEE "STEP 1" ON PAGE 96 AND CHART NO. 164 ON PAGE 97 FOR NUMBER OF STACKS ACROSS THE LENGTH OF THE MAGAZINE.

SEE "STEP 6" ON PAGE 96 AND CHART NO. 169 ON PAGE 98 FOR NUMBER OF STACKS BETWEEN COLUMNS.



INDICATES ONE ROW

ARROWS INDICATE DIRECTION OF STORAGE TOWARD MHE AISLE/AREA.

**PLAN VIEW**

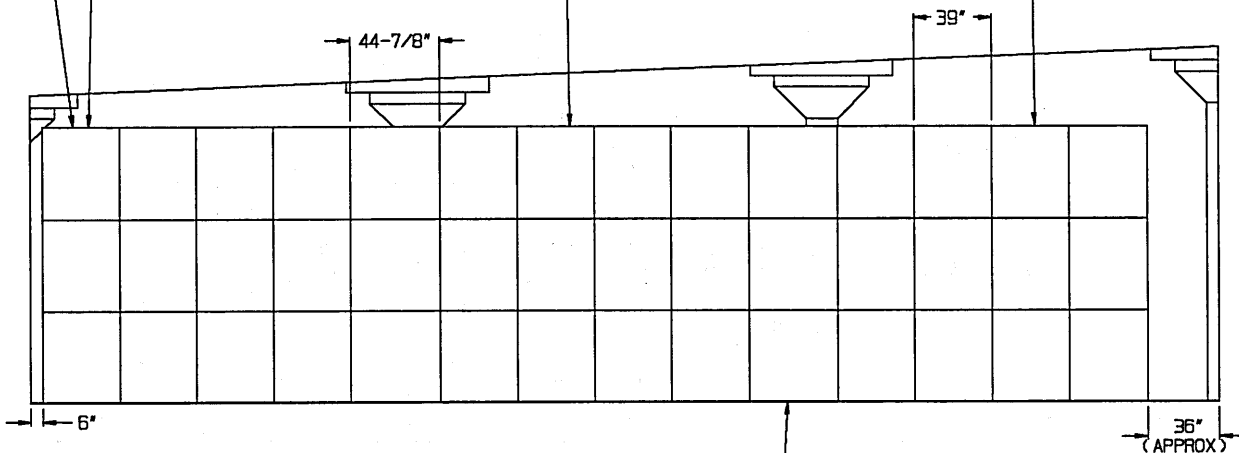
SEE "STEP 7" ON PAGE 96 AND CHART NO. 170 ON PAGE 98 FOR NUMBER OF ROWS BETWEEN FRONT WALL AND BUILDING COLUMNS.

SEE "STEP 8" ON PAGE 96 AND CHART NO. 171 ON PAGE 98 FOR NUMBER OF TIERS (LAYERS) IN REAR BAYS.

SKIDDED UNITS IN TOP LAYER WILL BE OMITTED AS REQUIRED TO CLEAR ROOF SUPPORT CAPS AT TOP OF COLUMNS.

SEE "STEP 9" ON PAGE 96 AND CHART NO. 172 ON PAGE 98 FOR NUMBER OF TIERS (LAYERS) IN CENTER BAYS.

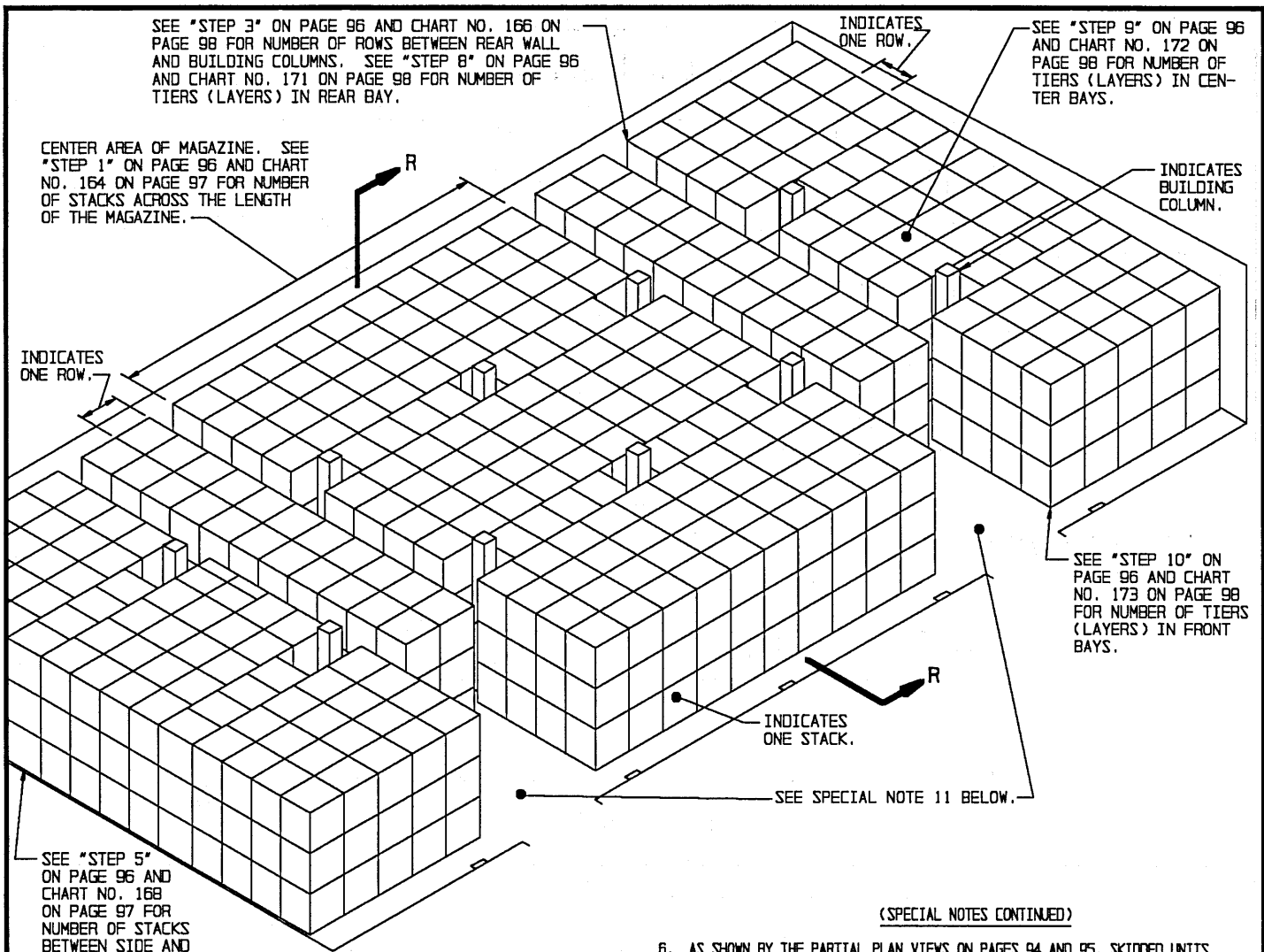
SEE "STEP 10" ON PAGE 96 AND CHART NO. 173 ON PAGE 98 FOR NUMBER OF TIERS (LAYERS) IN FRONT BAYS.



**SECTION R-R**

SEE "STEP 5" ON PAGE 96 AND CHART NO. 168 ON PAGE 97 FOR NUMBER OF STACKS BETWEEN SIDE WALL AND BUILDING COLUMNS.





**ISOMETRIC VIEW**

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

(SPECIAL NOTES CONTINUED)

**SPECIAL NOTES:**

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS AND TIERS (LAYERS) WILL VARY DEPENDING ON THE SIZE IF THE UNIT BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 96 THRU 98 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED WITHIN THE MAGAZINE.
2. SKIDDED UNITS WILL BE STACKED IN VERTICAL ALIGNMENT. STAGGERED STACKING AS SHOWN IN IGLCO, ARCH TYPE, STRADLEY AND OVAL-ARCH MAGAZINE STORAGE IS NOT APPLICABLE FOR STORAGE IN RECTANGULAR MAGAZINES.
3. A SIX INCH (6") MINIMUM SPACE WILL BE ALLOWED BETWEEN THE REAR WALL AND THE SKIDDED UNITS. A MINIMUM OF THREE INCHES (3") WILL BE PROVIDED BETWEEN A SIDE WALL AND THE UNITS. CLEARANCE IS NOT REQUIRED BETWEEN THE STORED UNITS AND THE BUILDING COLUMNS.
4. THE ARROWS ON THE PLAN VIEWS HEREIN INDICATE THE DIRECTION OF STORAGE FROM THE SIDE WALLS AND/OR CENTER AREA TOWARD THE MHE AISLE, OR FROM THE REAR WALL TOWARD THE FRONT WALL, OR WITHIN THE MHE AISLE FROM THE REAR WALL, TOWARD THE DOOR OPENINGS. SKIDDED UNITS STORED ALONG THE REAR WALL, AS WELL AS SOME UNITS POSITIONED AT RIGHT ANGLES TO THE MHE AISLE NEAR THE TEN BUILDING COLUMNS, NEED NOT BE STORED IN THE DIRECTION INDICATED BY THE "DIRECTION OF STORAGE" ARROWS IF THE LIFTED UNITS WILL CLEAR THE ROOF SUPPORT CAPS AT THE TOP OF THE COLUMNS, AND THOSE WITHIN THE REAR WALLS (IF PRESENT).
5. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN UNLESS TWO UPPER SKIDDED UNITS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST CASES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT OF ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO SKIDDED UNITS AS ONE LIFT.

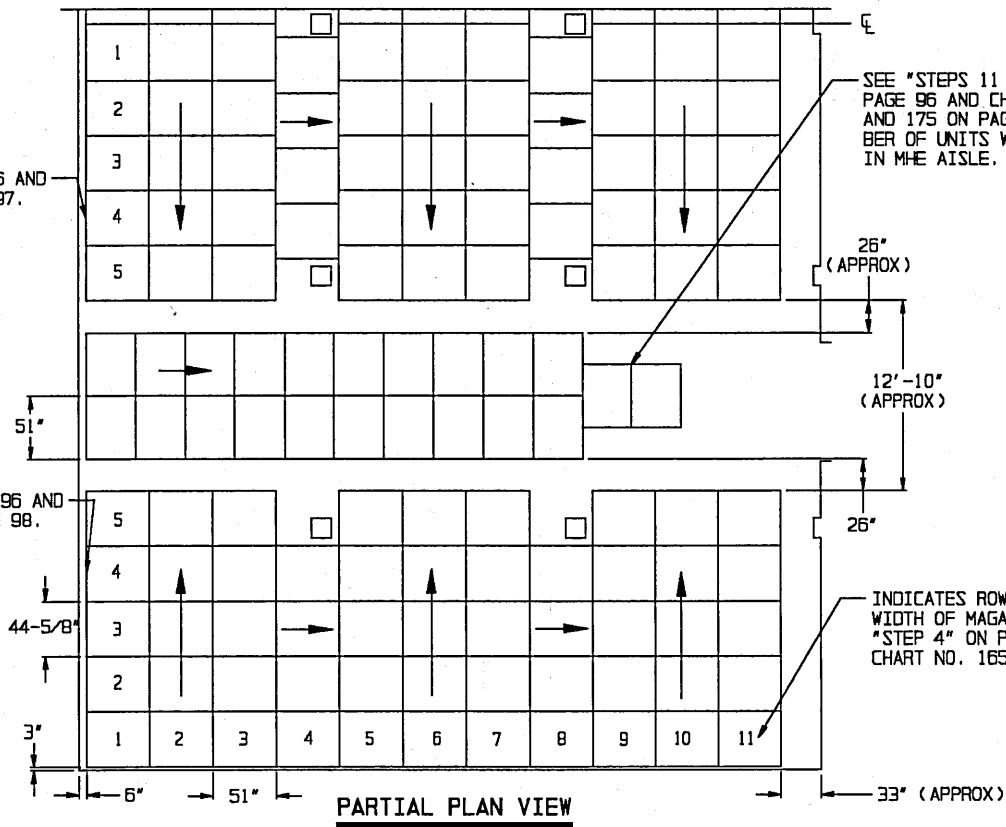
6. AS SHOWN BY THE PARTIAL PLAN VIEWS ON PAGES 94 AND 95, SKIDDED UNITS STORED IN THE END AREA AND IN THE CENTER AREA CAN BE STORED EITHER ALL IN ONE POSITION, WITH EITHER THE LENGTH OR THE WIDTH BEING PARALLEL TO THE SIDE WALL, OR CAN BE STORED USING A COMBINATION OF POSITIONS. LIKEWISE, SKIDDED UNITS IN THE MHE AISLE CAN BE STORED EITHER LENGTHWISE OR CROSSWISE OR A COMBINATION OF THE TWO POSITIONS.
7. IN SOME INSTANCES, LOTS CONSISTING OF NARROW UNITS MUST BE STORED TWO (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE WIDTH OF THE MAGAZINE, LENGTH OR WIDTH OF THE SKIDDED UNIT AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, 2-WIDE STORING WILL NOT BE NECESSARY.
8. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL THE NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOORS OF THE MAGAZINE).
9. CHARTS ARE SHOWN ON PAGES 97 AND 98 WHICH CAN BE USED AS GUIDANCE IN DEVELOPING A STORAGE PATTERN AND IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. THE NUMBER OF STACKS SPECIFIED IN CHART NO. 164 IS BASED ON A MATERIALS HANDLING EQUIPMENT (MHE) AISLE OF AT LEAST 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40"), WHICHEVER IS THE GREATEST. THE NUMBER OF STACKS AND/OR THE SIZE RANGE OF UNITS MAY VARY IF THE AVAILABLE MHE CAN OPERATE IN NARROWER AISLES.
10. REFER TO PAGE 104 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS.
11. IF THE AVAILABLE MHE AND/OR SPACE PERMITS, ADDITIONAL SKIDDED UNITS MAY BE STORED WITHIN THE THE FRONTAL AREAS AND/OR OTHER AVAILABLE AREA OF THE MAGAZINES.
12. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

(CONTINUED AT RIGHT)

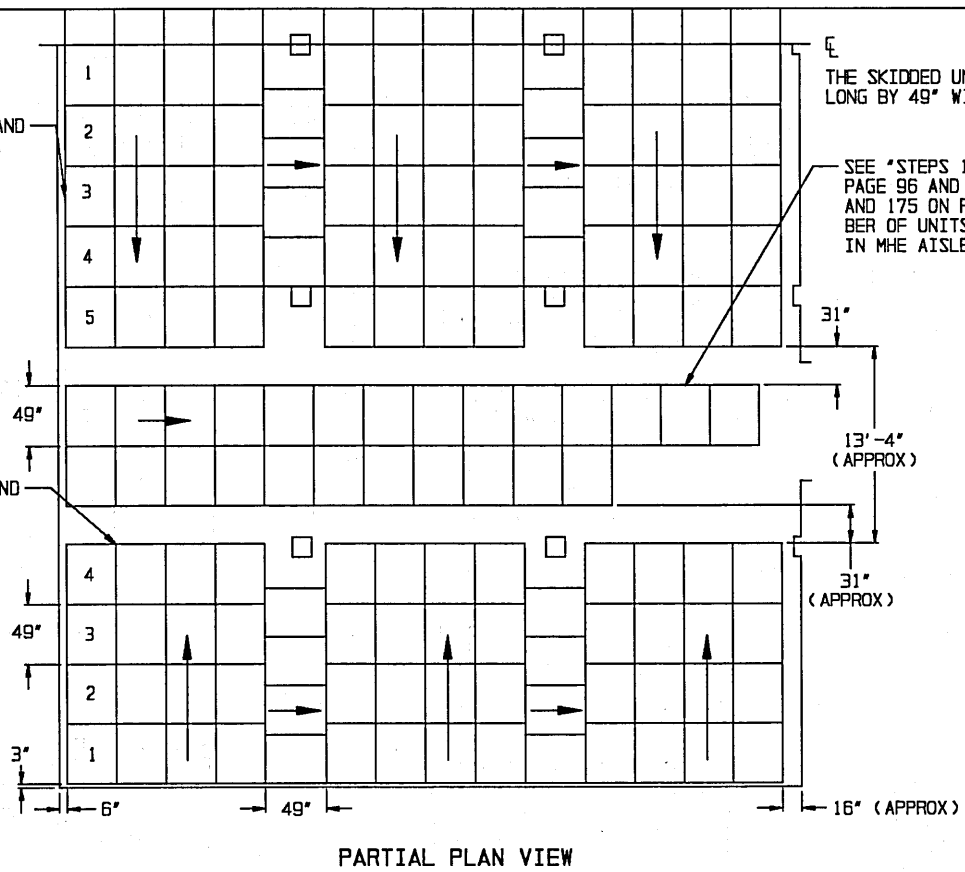
**TYPICAL STORAGE PROCEDURES IN 100'-8" L X 50'-0" W RECTANGULAR MAGAZINES**

THE SKIDDED UNIT SHOWN IS 44-5/8" LONG BY 51" WIDE BY 36-3/4" HIGH.

SEE "STEP 1" ON PAGE 96 AND CHART NO. 164 ON PAGE 97.



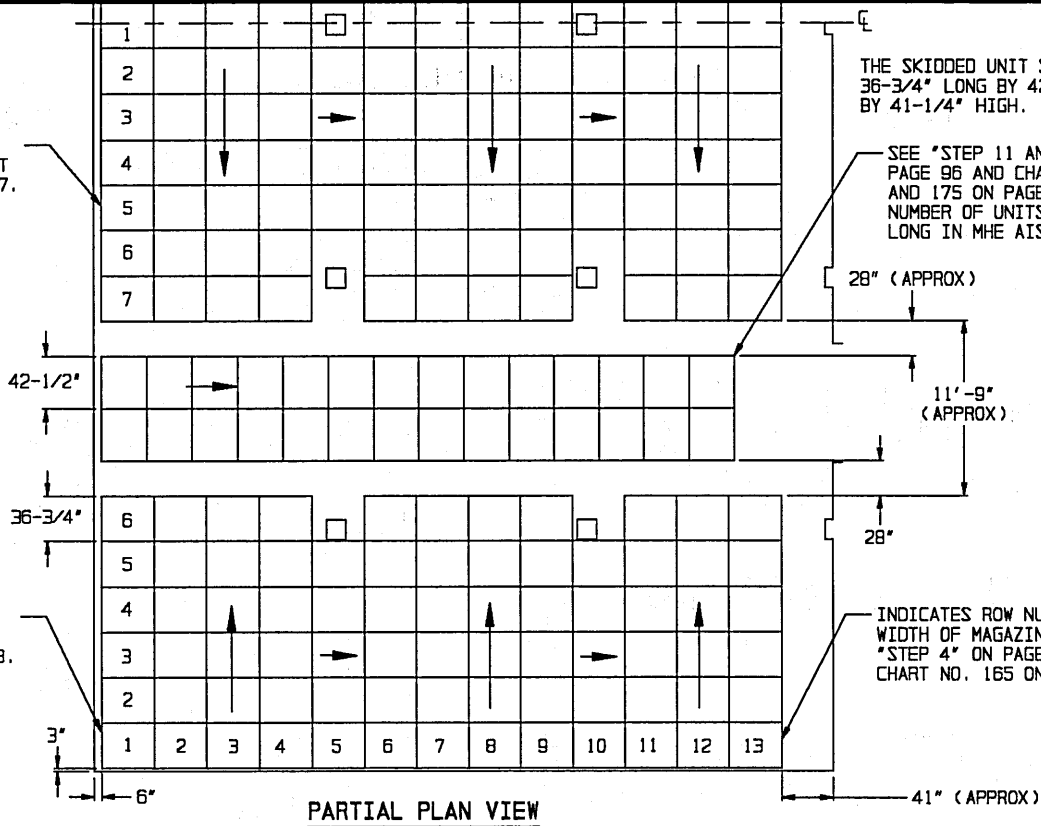
SEE "STEP 1" ON PAGE 96 AND CHART NO. 164 ON PAGE 97.



SEE "STEP 8" ON PAGE 96 AND CHART NO. 171 ON PAGE 98.

**TYPICAL STACKING PATTERNS IN 100'-8" L X 50'-0" W RECTANGULAR MAGAZINES**

SEE "STEP 1" ON PAGE 96 AND CHART NO. 164 ON PAGE 97.



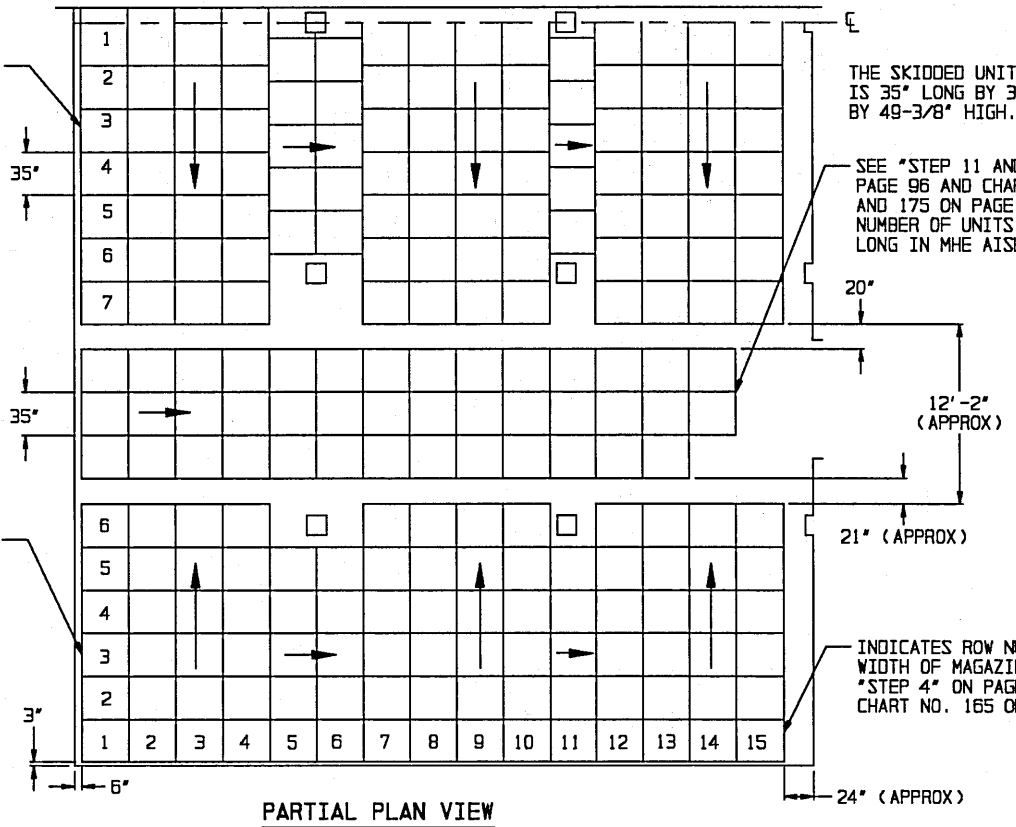
THE SKIDDED UNIT SHOWN IS 36-3/4" LONG BY 42-1/2" WIDE BY 41-1/4" HIGH.

SEE "STEP 11 AND 12" ON PAGE 96 AND CHART NO. 174 AND 175 ON PAGE 98 FOR NUMBER OF UNITS WIDE AND LONG IN MHE AISLE.

INDICATES ROW NUMBERS IN WIDTH OF MAGAZINE. SEE "STEP 4" ON PAGE 96 AND CHART NO. 165 ON PAGE 97.

**PARTIAL PLAN VIEW**

SEE "STEP 8" ON PAGE 96 AND CHART NO. 171 ON PAGE 98.



THE SKIDDED UNIT SHOWN IS 35" LONG BY 38" WIDE BY 49-3/8" HIGH.

SEE "STEP 11 AND 12" ON PAGE 96 AND CHART NO. 174 AND 175 ON PAGE 98 FOR NUMBER OF UNITS WIDE AND LONG IN MHE AISLE.

INDICATES ROW NUMBERS IN WIDTH OF MAGAZINE. SEE "STEP 4" ON PAGE 96 AND CHART NO. 165 ON PAGE 97.

**PARTIAL PLAN VIEW**

SEE "STEP 1" ON PAGE 96 AND CHART NO. 164 ON PAGE 97.

SEE "STEP 8" ON PAGE 96 AND CHART NO. 171 ON PAGE 98.

SPECIAL NOTES:

1. THE CHARTS ON PAGE 97 AND 98 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN 100'-8" LONG BY 50'-0" WIDE RECTANGULAR MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCES IN THE INSIDE DIMENSIONS OF THE RECTANGULAR MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
2. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE "EXAMPLE" ON THIS PAGE.

STEP 1

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 164 ON PAGE 97 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 100'-8" LENGTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS A COLUMN WHICH INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED IN THE END AREAS OF THE MAGAZINE, AND A COLUMN WHICH INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED IN THE CENTER AREA.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 165 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 50'-0" WIDTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE TOTAL NUMBER OF ROWS WHICH CAN BE STORED

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 166 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 50'-0" WIDTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF ROWS WHICH CAN BE PLACED BETWEEN THE REAR WALL OF THE MAGAZINE AND THE REAR MOST ROW OF THE BUILDING COLUMNS.

STEP 4

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 167 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 50'-0" WIDTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE ROW NUMBERS OF THE ROWS WHICH WILL FALL BEHIND THE BUILDING COLUMNS, AS NUMBERED FROM THE REAR OF THE MAGAZINE TOWARD THE DOOR. NOTE THAT THESE ROW NUMBERS ARE ONLY APPLICABLE IF ALL THE UNITS IN THE MAGAZINE, WITH THE EXCEPTION OF THOSE IN THE MATERIAL HANDLING EQUIPMENT AISLE, ARE ORIENTATED IN THE SAME DIRECTION. SEE THE "PARTIAL PLAN VIEWS" ON PAGE 95 FOR TYPICAL APPLICATIONS. ALSO NOTE THAT A COMBINATION OF SKIDDED UNIT ORIENTATIONS IS PERMISSIBLE AND SHOULD BE USED IF SUCH PLACEMENT RESULTS IN INCREASED STORAGE QUANTITIES.

STEP 5

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 168 ON PAGE 97 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 100'-8" LENGTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF STACKS WHICH CAN BE PLACED BETWEEN THE SIDEWALL OF THE MAGAZINE AND THE ADJACENT BUILDING COLUMN.

STEP 6

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 169 ON PAGE 98 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 100'-8" LENGTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF STACKS WHICH CAN BE PLACED BETWEEN LONGITUDINALLY ADJACENT BUILDING COLUMNS IN THE CENTER AREA.

STEP 7

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 170 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 50'-0" WIDTH OF THE MAGAZINE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF ROWS WHICH CAN BE PLACED BETWEEN THE BUILDING COLUMNS NEAREST THE DOORS AND THE PILASTERS WITHIN THE FRONT WALL OF THE MAGAZINE.

STEP 8

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 171 THE HEIGHT RANGE WHICH INCLUDES THE HEIGHT OF THE UNIT TO BE STORED. OPPOSITE THAT HEIGHT FIGURE IS INDICATED THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED IN THE REAR BAYS. THIS IS THE AREA FURTHEST FROM THE DOOR, BETWEEN THE REARMOST ROW OF COLUMNS AND THE REAR WALL.

(CONTINUED AT RIGHT)

STEP 9

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 172 THE HEIGHT RANGE WHICH INCLUDES THE HEIGHT OF THE UNIT TO BE STORED, OPPOSITE THAT HEIGHT FIGURE IS INDICATED THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED IN THE CENTER BAYS. THIS IS THE AREA BETWEEN THE TWO ROWS OF COLUMNS.

STEP 10

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 173 THE HEIGHT RANGE WHICH INCLUDES THE HEIGHT OF THE UNIT TO BE STORED, OPPOSITE THAT HEIGHT FIGURE IS INDICATED THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED IN THE FRONT BAYS. THIS IS THE AREA IMMEDIATELY INSIDE THE DOORS.

STEP 11

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 174 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSIONS OF THE UNIT TO BE STORED IN THE 100'-8" LENGTH OF THE MAGAZINE. THE COLUMN IMMEDIATELY ADJACENT INDICATES THE NUMBER OF ROWS WHICH CAN BE PLACED IN THE MHE AREA WHEN THE UNITS ARE ORIENTED THE SAME AS THE UNITS IN THE LATERALLY ADJACENT ROWS. THE NEXT COLUMN INDICATES THE NUMBER OF ROWS AND THE LENGTH OR WIDTH DIMENSION RANGE OF THE UNITS WHEN THEY ARE ROTATED 90° TO THOSE IN THE LATERALLY ADJACENT ROWS.

STEP 12

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 175 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE LENGTH OF THE MHE AISLE (THE 50'-0" WIDTH OF THE MAGAZINE). OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF STACKS IN THE ROWS WITHIN THE MHE AISLE, WHEN SUFFICIENT SPACE IS ALLOWED AT THE FRONT OF THE MAGAZINE FOR PLACEMENT OF THE UNITS WITH A FORKLIFT TRUCK. NOTE THAT ADDITIONAL STACKS MAY BE POSITIONED IN ONE OR MORE OF THE ROWS WHEN THE ROWS ARE ALIGNED WITH THE DOOR OPENING AND/OR WHEN THE AVAILABLE MHE PERMITS.

EXAMPLE

THE SKIDDED UNIT SHOWN IN THE "PARTIAL PLAN VIEW" AT THE TOP OF PAGE 95 HAS BEEN SELECTED FOR THE EXAMPLE. THE UNIT IS 36-3/4" LONG BY 42-1/2" WIDE BY 41-1/4" HIGH. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS NO. 164 THROUGH 169 IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED ON THIS PAGE.

TO FIND THE NUMBER OF STACKS IN THE 100'-8" LENGTH OF THE MAGAZINE LOOK IN THE LEFT HAND COLUMN OF CHART NO. 164 UNDER THE UNIT LENGTH OR WIDTH. THE 36-3/4" UNIT LENGTH IS WITHIN THE 35" TO 37" RANGE. FOLLOWING THE ARROWS ALONG THE DOTTED-LINE TO THE RIGHT. THE FIRST COLUMN INDICATES THAT 6 STACKS CAN BE STORED IN EACH END AREA AND THE SECOND COLUMN INDICATES THAT 13 STACKS CAN BE STORED IN THE CENTER AREA. USING THE SAME PROCEDURE, THE NUMBER OF ROWS ACROSS THE 50'-0" WIDTH OF THE MAGAZINE CAN BE DETERMINED FROM CHART NO. 165. CHART NO. 166 SPECIFIES THE NUMBER OF ROWS WHICH CAN BE PLACED BETWEEN THE REAR WALL OF THE MAGAZINE AND THE REARMOST ROW OF BUILDING COLUMNS. BY FOLLOWING THE ARROW ALONG THE DOTTED-LINE TO THE RIGHT IN CHART NO. 167 WE FIND THAT ROW NUMBER 5 AND ROW NUMBER 10 WILL BE BEHIND THE COLUMNS WHEN ALL THE UNITS ARE POSITIONED SO THE 42-1/2" WIDTH DIMENSION IS PLACED SO AS TO BE IN THE WIDTH OF THE MAGAZINE. CHARTS NO. 168, 169 AND 170 ON PAGE 97 AND 98 SPECIFY THE NUMBER OF STACKS BETWEEN THE SIDE WALL AND THE ADJACENT COLUMN, THE NUMBER OF STACKS BETWEEN LONGITUDINALLY ADJACENT COLUMNS, AND THE NUMBER OF ROWS BETWEEN THE FRONT WALL OF THE MAGAZINE AND THE FRONT ROW OF COLUMNS.

CHARTS NO. 171, 172 AND 173 INDICATE THE NUMBER OF TIERS (LAYERS) THAT CAN BE STORED IN THE REAR BAY, CENTER BAY, AND FRONT BAY, RESPECTIVELY. CHART NO. 174 INDICATES IN THE SECOND COLUMN THE NUMBER OF ROWS WHICH CAN BE PLACED IN THE MHE AISLE WHEN POSITIONED WITH THE DIMENSION SPECIFIED IN THE FIRST COLUMN LENGTHWISE IN THE MAGAZINE. NOTE THAT A COMBINATION OF SKIDDED UNIT POSITIONS IS PERMITTED.

CHART NO. 175 ON PAGE 98 INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED IN THE LENGTH OF THE MHE AISLE.

3. THE UNIT SIZE RANGE (LENGTH OR WIDTH) AND THE UNIT HEIGHT DIMENSIONS COVER ALL THE SIZES WITHIN THE RANGE SPECIFIED.

CHART NO. 164		
NUMBER OF STACKS ACROSS THE LENGTH		
UNIT LENGTH OR WIDTH	NUMBER OF STACKS	
	END AREA	CENTER AREA
25'	9	19
OVER 25' TO 26'	9	18
OVER 26' TO 27'	8	18
OVER 27' TO 28'	8	17
OVER 28' TO 29'	8	16
OVER 29' TO 30'	7	17
OVER 30' TO 31'	7	16
OVER 31' TO 32'	7	15
OVER 32' TO 33'	7	14
OVER 33' TO 34'	6	15
OVER 34' TO 36'	6	14
OVER 36' TO 37'	6	13
OVER 37' TO 39'	6	12
OVER 39' TO 40'	6	11
OVER 40' TO 42'	5	12
OVER 42' TO 44'	5	11
OVER 44' TO 46'	5	10
OVER 46' TO 48'	5	9
OVER 48' TO 50'	4	10
OVER 50' TO 53'	4	9
OVER 53' TO 56'	4	8
OVER 56' TO 60'	4	7
OVER 60' TO 63'	3	8
OVER 63' TO 66'	3	7

CHART NO. 167	
ROWS WHICH FALL BEHIND COLUMNS	
UNIT LENGTH OR WIDTH	ROW NUMBER
25' TO 25-3/4'	8 AND 16
OVER 25-3/4' TO 26'	8, 15 AND 16
OVER 26' TO 27-1/2'	7, 8, 15
OVER 27-1/2' TO 28-1/4'	7, 8, 14 AND 15
OVER 28-1/4' TO 29-1/2'	7 AND 14
OVER 29-1/2' TO 30-1/2'	7, 13 AND 14
OVER 30-1/2' TO 32'	6, 7 AND 13
OVER 32' TO 32-3/4'	6, 7, 12 AND 13
OVER 32-3/4' TO 33-1/4'	6, 12 AND 13
OVER 33-1/4' TO 35'	6 AND 12
OVER 35' TO 38-1/4'	5, 6 AND 11
OVER 38-1/4' TO 39-1/4'	5, 6, 10 AND 11
OVER 39-1/4' TO 40'	5, 10 AND 11
OVER 40' TO 42-1/2'	5 AND 10
OVER 42-1/2' TO 45'	5 AND 9
OVER 45' TO 48'	4 AND 9
OVER 48' TO 49-1/2'	4 AND 8
OVER 49-1/2' TO 49-3/4'	4, 8 AND 9
OVER 49-3/4' TO 54'	4 AND 8
OVER 54' TO 55'	4 AND 8
OVER 55' TO 57'	4, 7 AND 8
OVER 57' TO 60-1/2'	4 AND 7
OVER 60-1/2' TO 64-1/4'	3, 4 AND 7
OVER 64-1/4' TO 66'	3, 4, 6 AND 7

CHART NO. 165	
NUMBER OF ROWS ACROSS THE WIDTH	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
25' TO 26'	22
OVER 26' TO 27'	21
OVER 27' TO 28-1/2'	20
OVER 28' TO 30'	19
OVER 30' TO 32'	18
OVER 32' TO 34'	17
OVER 34' TO 36'	16
OVER 36' TO 38-1/2'	15
OVER 38-1/2' TO 41'	14
OVER 41' TO 44-1/2'	13
OVER 44-1/2' TO 48'	12
OVER 48' TO 52-1/2'	11
OVER 52' TO 57-1/2'	10
OVER 57' TO 64'	9
OVER 64' TO 66'	8

CHART NO. 168	
NUMBER OF STACKS BETWEEN SIDE WALL AND COLUMN	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25' - 26'	7
26' - 30-1/2'	6
30-1/2' - 36-1/2'	5
36-1/2' - 45-3/4'	4
45-3/4' - 61'	3
61' - 66'	2

CHART NO. 166	
NUMBER OF ROWS BETWEEN REAR WALL AND COLUMNS	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
25' TO 25-1/2'	7
OVER 25-1/2' TO 30'	6
OVER 31' TO 36'	5
OVER 36' TO 45'	4
OVER 45' TO 60'	3
OVER 60' TO 66'	2

CHART NO. 169	
NUMBER OF STACKS BETWEEN COLUMNS	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25' - 26-1/2'	7
26-1/2' - 31'	6
31' - 37'	5
37' - 46-1/2'	4
46-1/2' - 62'	3
62' - 66'	2

CHART NO. 170	
NUMBER OF ROWS BETWEEN FRONT WALL AND COLUMNS	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
25'	7
25' TO 29-1/2'	6
29-1/2' TO 35-1/2'	5
OVER 35-1/2' TO 44-1/2'	4
OVER 44-1/2' TO 59'	3
OVER 59' TO 66'	2

CHART NO. 171	
NUMBER OF TIERS IN REAR BAYS	
UNIT HEIGHT	NUMBER OF TIERS
15'	10
OVER 15' TO 17'	9
OVER 17' TO 19'	8
OVER 19' TO 22'	7
OVER 22' TO 26'	6
OVER 26' TO 31'	5
OVER 31' TO 39'	4
OVER 39' TO 52'	3
OVER 52' TO 56'	2

CHART NO. 172	
NUMBER OF TIERS IN CENTER BAYS	
UNIT HEIGHT	NUMBER OF TIERS
15' TO 16'	10
OVER 16' TO 18'	9
OVER 18' TO 20'	8
OVER 20' TO 23'	7
OVER 23' TO 27'	6
OVER 27' TO 32'	5
OVER 32' TO 41'	4
OVER 41' TO 54'	3
OVER 54' TO 56'	2

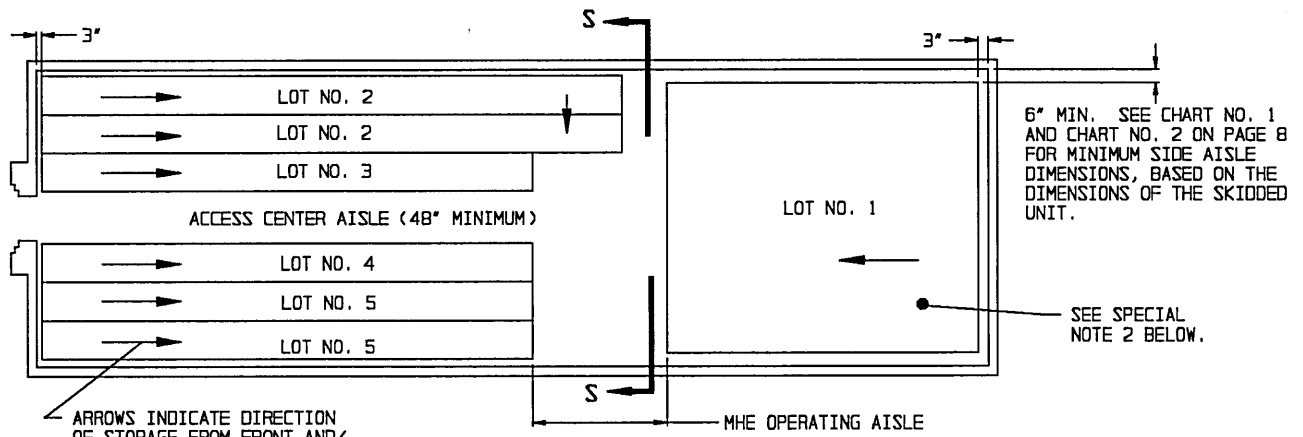
CHART NO. 173	
NUMBER OF TIERS IN FRONT BAYS	
UNIT HEIGHT	NUMBER OF TIERS
15'	11
OVER 15' TO 17'	10
OVER 17' TO 19'	9
OVER 19' TO 21'	8
OVER 21' TO 24'	7
OVER 24' TO 28'	6
OVER 28' TO 34'	5
OVER 34' TO 43'	4
OVER 43' TO 56'	3

CHART NO. 174		
NUMBER OF ROWS WIDE IN MHE AISLE		
UNIT DIM LENGTH-WISE IN MAGAZINE	UNIT AT SAME POSITION	ALTERNATIVE UNIT POSITION
25'	4	2 AT 34' TO 51' OR 3 AT 25' TO 34'
OVER 25' TO 26'	3	2 AT 32' TO 48' OR 3 AT 25' TO 32'
OVER 26' TO 27'	3	2 AT 35' TO 53' OR 3 AT 26' TO 35' OR 4 AT 25' TO 26'
OVER 27' TO 28'	3	2 AT 34' TO 51' OR 3 AT 25' TO 34' OR 4 AT 25'
OVER 28' TO 32'	3	2 AT 33' TO 50' OR 3 AT 25' TO 33' OR 4 AT 25'
OVER 32' TO 33'	3	2 AT 34' TO 51' OR 3 AT 25' TO 34'
OVER 33' TO 34'	3	2 AT 35' TO 53' OR 3 AT 26' TO 35' OR 4 AT 25' TO 26'
OVER 34' TO 35'	3	2 AT 35' TO 56-1/2' OR 3 AT 28' TO 35' OR 4 AT 25' TO 28'
OVER 35' TO 36'	3	2 AT 33' TO 50' OR 3 AT 25' TO 33' OR 4 AT 25'
OVER 36' TO 37'	2	3 AT 35' TO 52-1/2' OR 3 AT 26' TO 35' OR 4 AT 25' TO 26'
OVER 37' TO 38'	2	2 AT 37' TO 56' OR 3 AT 28' TO 37' OR 4 AT 25' TO 28'
OVER 38' TO 39'	2	2 AT 33' TO 50' OR 3 AT 25' TO 33' OR 4 AT 25'
OVER 39' TO 40'	2	2 AT 36' TO 54' OR 3 AT 27' TO 36' OR 4 AT 25' TO 27'
OVER 40' TO 41'	2	2 AT 39' TO 58' OR 3 AT 29' TO 39' OR 4 AT 25' TO 29'
OVER 41' TO 42'	2	2 AT 35' TO 53' OR 3 AT 26' TO 35' OR 4 AT 25' TO 26'
OVER 42' TO 43'	2	2 AT 36' TO 58' OR 3 AT 29' TO 36' OR 4 AT 25' TO 29'
OVER 43' TO 44'	2	2 AT 35' TO 53' OR 3 AT 26' TO 35' OR 4 AT 25' TO 26'
OVER 44' TO 45'	2	2 AT 39' TO 59' OR 3 AT 29' TO 39' OR 4 AT 25' TO 29'
OVER 45' TO 46'	2	2 AT 36' TO 54' OR 3 AT 27' TO 36' OR 4 AT 25' TO 27'
OVER 46' TO 47'	2	3 AT 40' TO 60' OR 3 AT 30' TO 40' OR 4 AT 25' TO 30'
OVER 47' TO 48'	2	2 AT 37' TO 56' OR 3 AT 28' TO 37' OR 4 AT 25' TO 28'
OVER 48' TO 49'	2	2 AT 42' TO 63' OR 3 AT 31' TO 42' OR 4 AT 25' TO 31'
OVER 49' TO 50'	2	2 AT 39' TO 59' OR 3 AT 29' TO 39' OR 4 AT 25' TO 29'
OVER 50' TO 51'	2	2 AT 44' TO 66' OR 3 AT 33' TO 44' OR 4 AT 25' TO 33'
OVER 51' TO 52'	2	2 AT 42' TO 63' OR 3 AT 31' TO 42' OR 4 AT 25' TO 31'
OVER 52' TO 53'	2	2 AT 39' TO 59' OR 3 AT 29' TO 39' OR 4 AT 25' TO 29'
OVER 53' TO 54'	2	2 AT 45' TO 66' OR 3 AT 34' TO 45' OR 4 AT 25' TO 34'
OVER 54' TO 55'	2	2 AT 41' TO 62' OR 3 AT 31' TO 41' OR 4 AT 25' TO 31'
OVER 55' TO 56'	2	2 AT 39' TO 59' OR 3 AT 29' TO 39' OR 4 AT 25' TO 29'
OVER 56' TO 57'	2	3 AT 45' TO 66' OR 3 AT 34' TO 45' OR 4 AT 25' TO 34'
OVER 57' TO 58'	2	2 AT 43' TO 65' OR 3 AT 32' TO 43' OR 4 AT 25' TO 32'
OVER 58' TO 59'	2	2 AT 40' TO 61' OR 3 AT 30' TO 40' OR 4 AT 25' TO 30'
OVER 59' TO 60'	1	2 AT 38' TO 57' OR 3 AT 28' TO 38' OR 4 AT 25' TO 28'
OVER 60' TO 61'	2	2 AT 46' TO 66' OR 3 AT 34' TO 46' OR 4 AT 25' TO 34'
OVER 61' TO 62'	2	2 AT 43' TO 65' OR 3 AT 32' TO 43' OR 4 AT 25' TO 32'
OVER 62' TO 63'	1	2 AT 41' TO 62' OR 3 AT 31' TO 41' OR 4 AT 25' TO 31'
OVER 63' TO 64'	2	2 AT 49' TO 66' OR 3 AT 37' TO 49' OR 4 AT 25' TO 37'
OVER 64' TO 65'	2	2 AT 47' TO 66' OR 3 AT 35' TO 47' OR 4 AT 25' TO 35'
OVER 65' TO 66'	2	2 AT 45' TO 66' OR 3 AT 34' TO 45' OR 4 AT 25' TO 34'

CHART NO. 175	
NUMBER OF STACKS LONG IN MHE AREA *	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25'	18
OVER 25' TO 27'	17
OVER 27' TO 28-1/2'	16
OVER 28-1/2' TO 30'	15
OVER 30' TO 32'	14
OVER 32' TO 35'	13
OVER 35' TO 38'	12
OVER 38' TO 41-1/2'	11
OVER 41-1/2' TO 46'	10
OVER 46' TO 51'	9
OVER 51' TO 57-1/2'	8
OVER 57-1/2' TO 66'	7

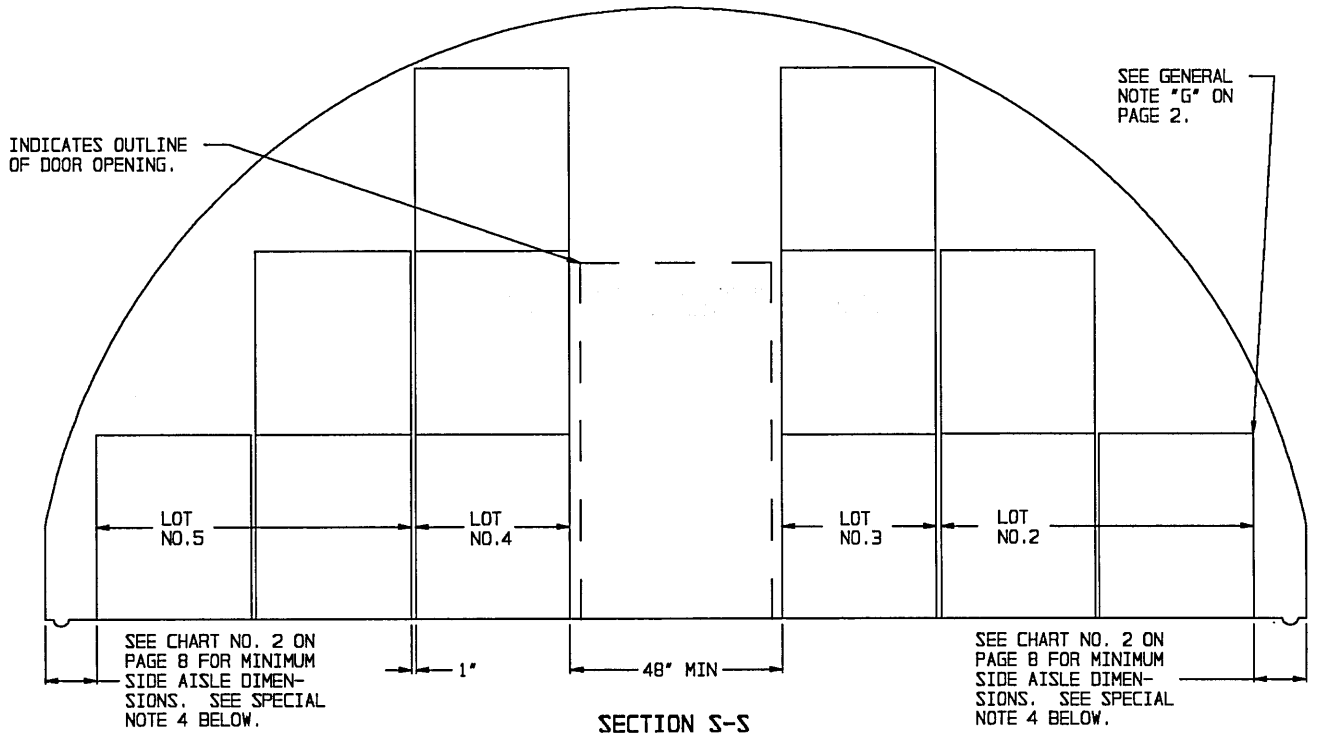
\* SEE SPECIAL NOTE 11 ON PAGE 92.

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**TYPICAL PLAN VIEW**

(81'-0" MAGAZINE)



**SECTION S-S**

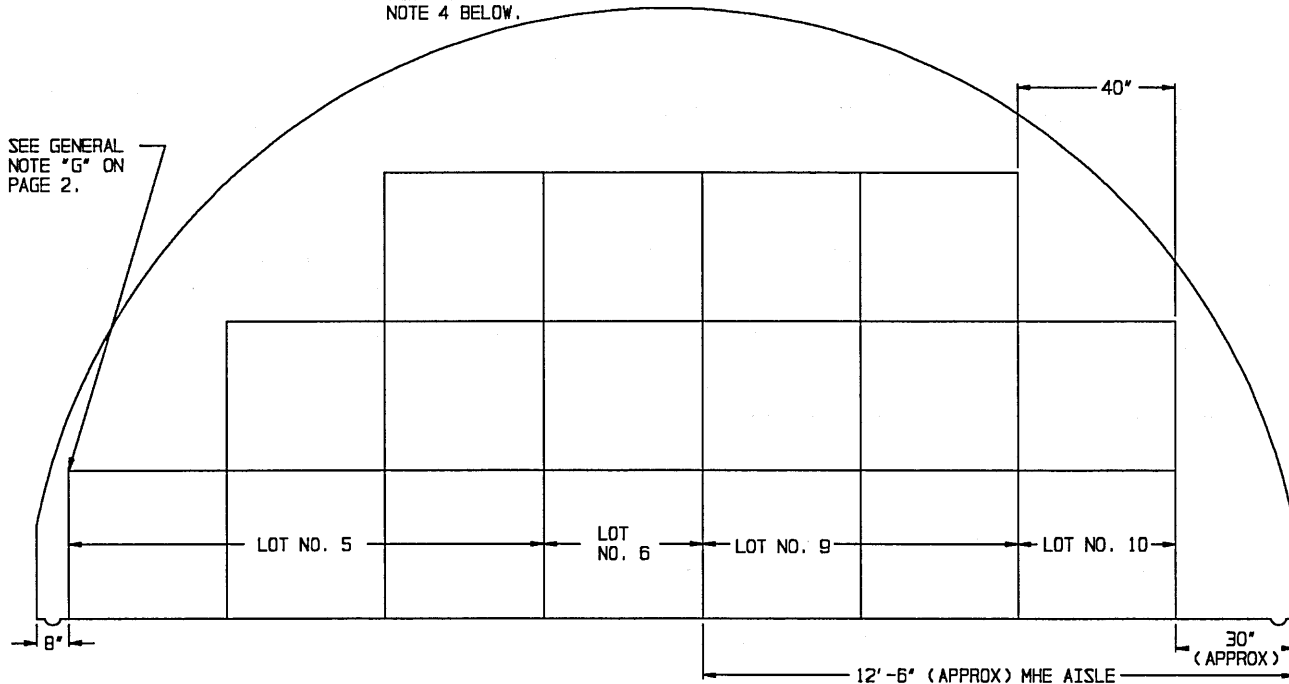
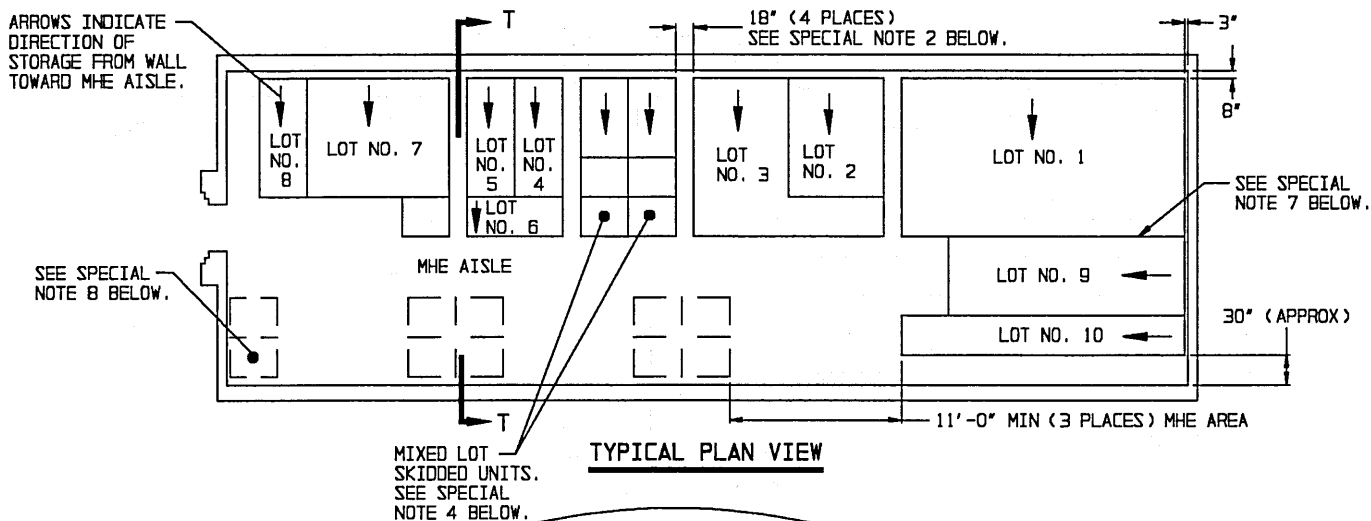
**SPECIAL NOTES:**

**(SPECIAL NOTES CONTINUED)**

1. THE MULTIPLE LOT STORAGE PLAN SHOWN IS TYPICAL ONLY. ADAPTATIONS MAY BE MADE TO THE STORAGE PLAN AS THE NUMBER AND SIZES OF LOTS TO BE STORED IN THE MAGAZINE REQUIRE.
2. THE LARGEST LOT WILL BE STORED IN TYPE "A" STACKS ACROSS THE REAR OF THE MAGAZINE. IF THE LOT OCCUPIES LESS THAN 1/4 OF THE MAGAZINE, STORAGE IN REAR OF THE MAGAZINE OF MORE THAN ONE (1) LOT MAY BE ERRECTED IN ROWS SIMILAR TO THAT SHOWN IN THE FRONTAL AREA. A 48" ACCESS CENTER AISLE WILL NOT BE REQUIRED FOR LOTS STORED AT REAR OF THE MAGAZINE. THE SMALLER LOTS WILL BE STORED IN ROWS RUNNING THE LENGTH OF THE MAGAZINE. LOTS WILL NOT BE MIXED WITHIN STORAGE STACKS, BUT ONLY TO THE EXTENT THAT ITEMS OF ONE LOT WILL NOT BE STACKED ON TOP OF ITEMS OF ANOTHER LOT.
3. EXCEPT FOR EACH ROW ADJACENT TO THE ACCESS CENTER AISLE, LOTS CONSISTING OF NARROW UNITS MUST BE STORED (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE MAGAZINE, LENGTH OR WIDTH, AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, LOTS NEED NOT BE STORED IN DOUBLE ROWS.
4. THE SIDE AISLE DIMENSIONS FOR MULTIPLE LOT STORAGE, AS SPECIFIED IN CHART NO. 2 ON PAGE 8, MAY NEED TO BE INCREASED TO PROVIDE OVERHEAD CLEARANCE FOR THE MHE.
5. THE TYPICAL STACKING PATTERNS ON PAGES 6 THRU 47, DEPICTING SKIDDED UNITS STAGGERED IN SOME OF THE UPPER TIERS OF THE STACK, ARE ONLY APPLICABLE WHEN STORING A LARGE LOT IN THE REAR OF THE MAGAZINE, OR WHEN STORING ONE LOT TO A MAGAZINE. WHEN STORING MULTIPLE LOTS IN THE WIDTH OF THE MAGAZINE, UNITS MUST BE STACKED IN VERTICAL ALIGNMENT.

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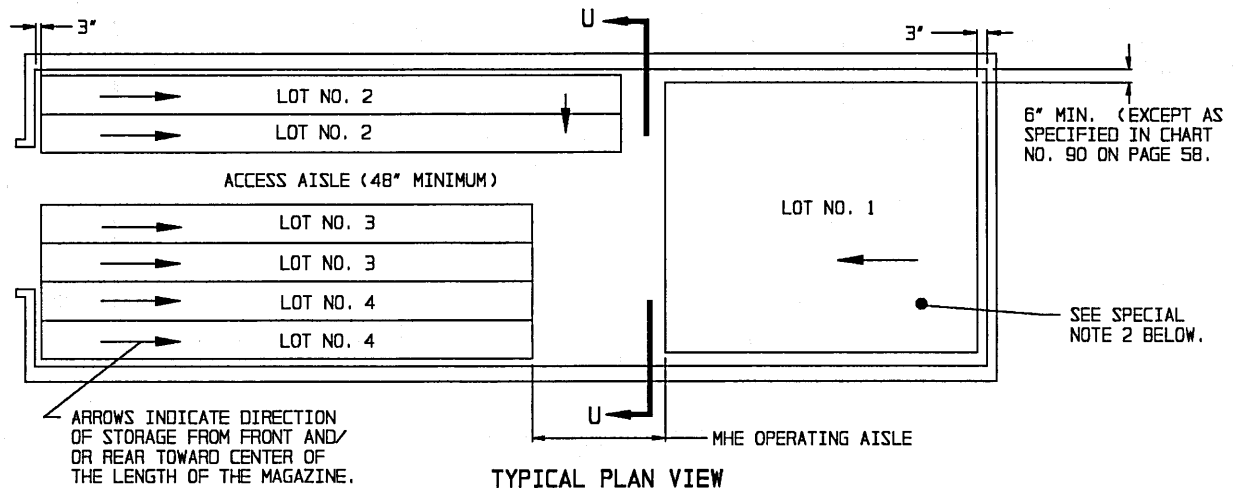
**SPECIAL NOTES:**

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. THE SKIDDED UNITS SHOWN HAVE OVERALL DIMENSIONS OF 40" LONG BY 48" WIDE BY 37-5/8" HIGH. ADAPTATIONS MAY BE MADE TO SUIT THE DIMENSIONS OF THE SKIDDED UNIT TO BE STORED AND AS NUMBER AND SIZES OF LOTS 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 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 AN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
4. A MIXED-LOT SKIDDED MAY HAVE FROM TWO LOTS PER SKIDDED UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS BOXES WITHIN THAT UNIT. HOWEVER ALL ITEMS AND LOTS WITHIN THE SKIDDED UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. SKIDDED UNITS OF A SINGLE LOT OR MIXED LOT SKIDDED 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 MORE SKIDDED UNITS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.

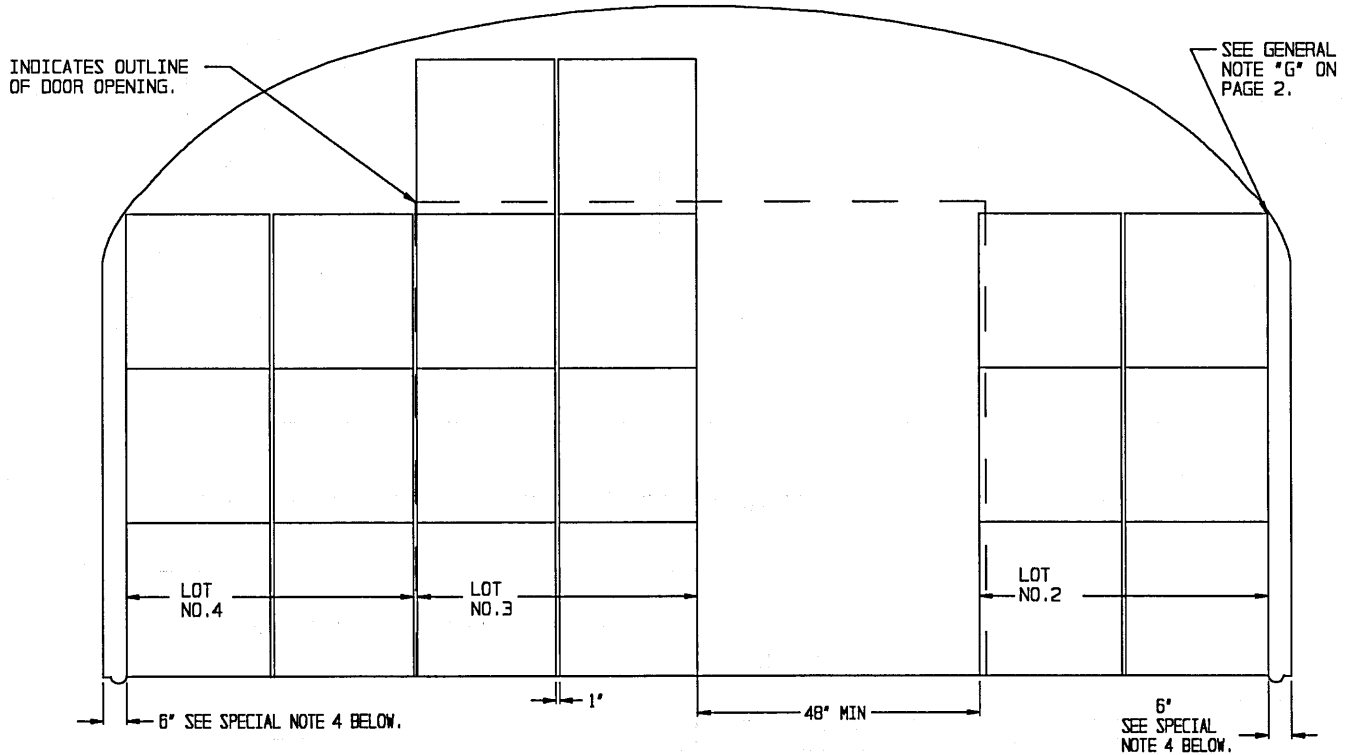
**(SPECIAL NOTES CONTINUED)**

6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
7. 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 INCLUDED 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 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 UNIT LOADS 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 LOCATION. AN 11-FOOT MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL 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 REQUIRED 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 LOCATION" IS TO BE AT LEAST 48" 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.

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**TYPICAL PLAN VIEW**  
(80'-0" STRADLEY MAGAZINE)



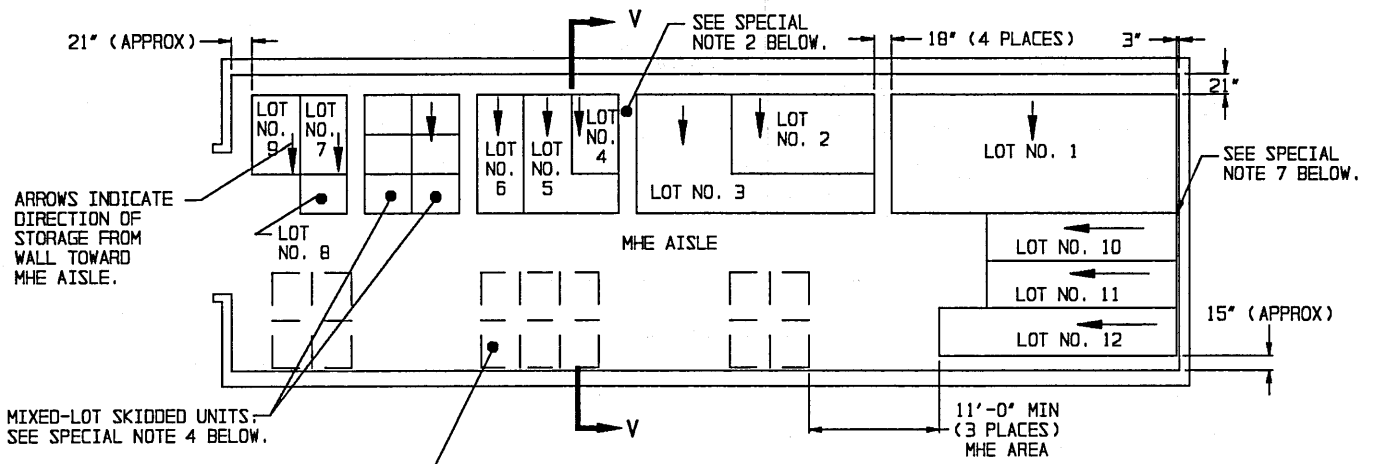
**SECTION U-U**

**SPECIAL NOTES:**

**(SPECIAL NOTES CONTINUED)**

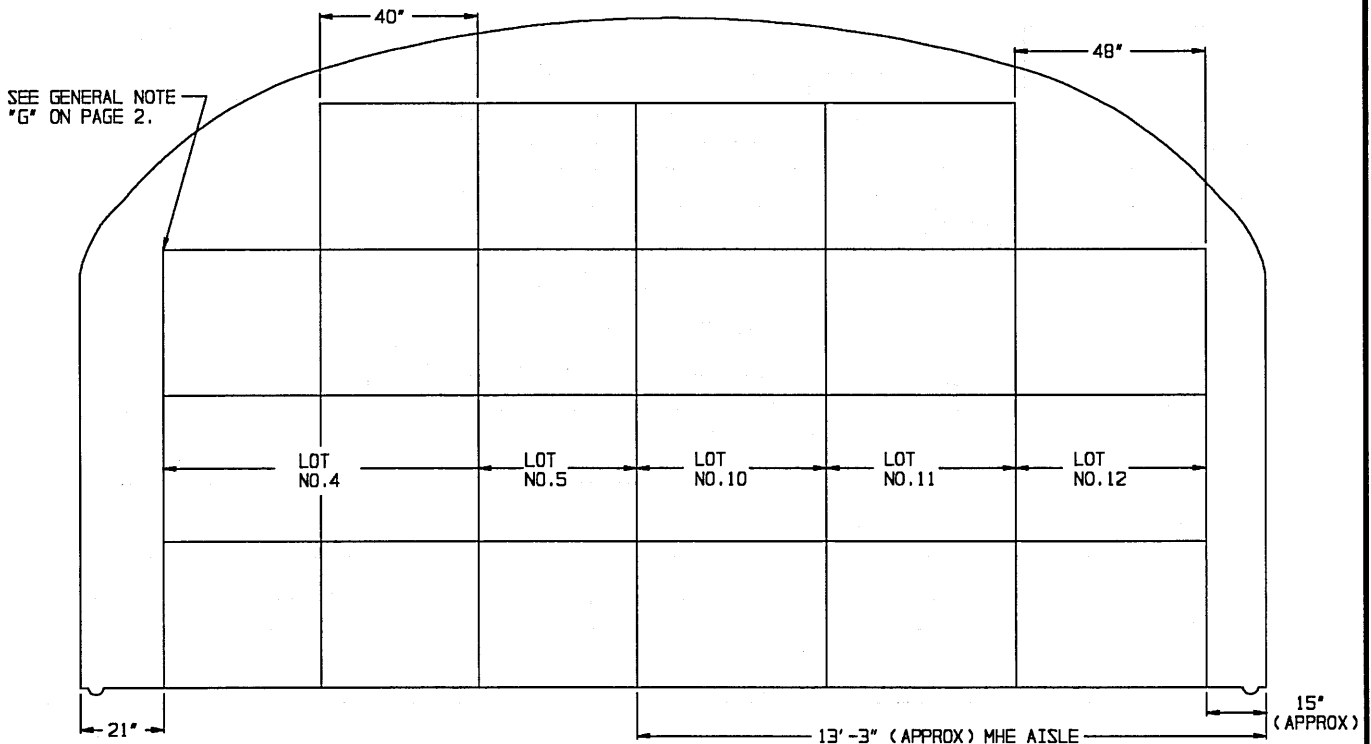
1. THE MULTIPLE LOT STORAGE PLAN SHOWN IS TYPICAL ONLY. ADAPTATIONS MAY BE MADE TO THE STORAGE PLAN AS THE NUMBER AND SIZES OF LOTS TO BE STORED IN THE MAGAZINE REQUIRE.
2. THE LARGEST LOT WILL BE STORED IN TYPE "A" STACKS ACROSS THE REAR OF THE MAGAZINE. IF THE LOT OCCUPIES LESS THAN 1/4 OF THE MAGAZINE, STORAGE IN REAR OF THE MAGAZINE OF MORE THAN ONE (1) LOT MAY BE ERRECTED IN ROWS SIMILAR TO THAT SHOWN IN THE FRONTAL AREA. A 48" ACCESS AISLE WILL NOT BE REQUIRED FOR LOTS STORED AT REAR OF THE MAGAZINE. THE SMALLER LOTS WILL BE STORED IN ROWS RUNNING THE LENGTH OF THE MAGAZINE. LOTS WILL NOT BE MIXED WITHIN STORAGE STACKS, BUT ONLY TO THE EXTENT THAT ITEMS OF ONE LOT WILL NOT BE STACKED ON TOP OF ITEMS OF ANOTHER LOT.
3. EXCEPT FOR EACH ROW ADJACENT TO THE ACCESS AISLE, LOTS CONSISTING OF NARROW UNITS MUST BE STORED (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE MAGAZINE, LENGTH OR WIDTH, AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, LOTS NEED NOT BE STORED IN DOUBLE ROWS.
4. THE 6" SIDE AISLE DIMENSION MAY NEED TO BE INCREASED, OR THE TOP UNIT IN THE OUTER ROW MAY NEED TO BE OMITTED, IN ORDER TO PROVIDE OVERHEAD CLEARANCE FOR THE MHE.
5. THE TYPICAL STACKING PATTERNS AT THE TOP OF PAGES 56 AND 57, DEPICTING SKIDDED UNITS STAGGERED IN SOME OF THE UPPER TIERS OF THE STACK, ARE ONLY APPLICABLE WHEN STORING A LARGE LOT IN THE REAR OF THE MAGAZINE, OR WHEN STORING ONE LOT TO A MAGAZINE. WHEN STORING MULTIPLE LOTS IN THE WIDTH OF THE MAGAZINE, UNITS MUST BE STACKED IN VERTICAL ALIGNMENT.
6. THE ACCESS AISLE, WHICH IS SHOWN IN AN OFF-CENTER LOCATION, MAY BE LOCATED ON THE CENTER OF THE MAGAZINE IF DESIRED.

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SEE SPECIAL NOTE 8 BELOW.

**TYPICAL PLAN VIEW**  
(80'-0" STRADLEY MAGAZINE)

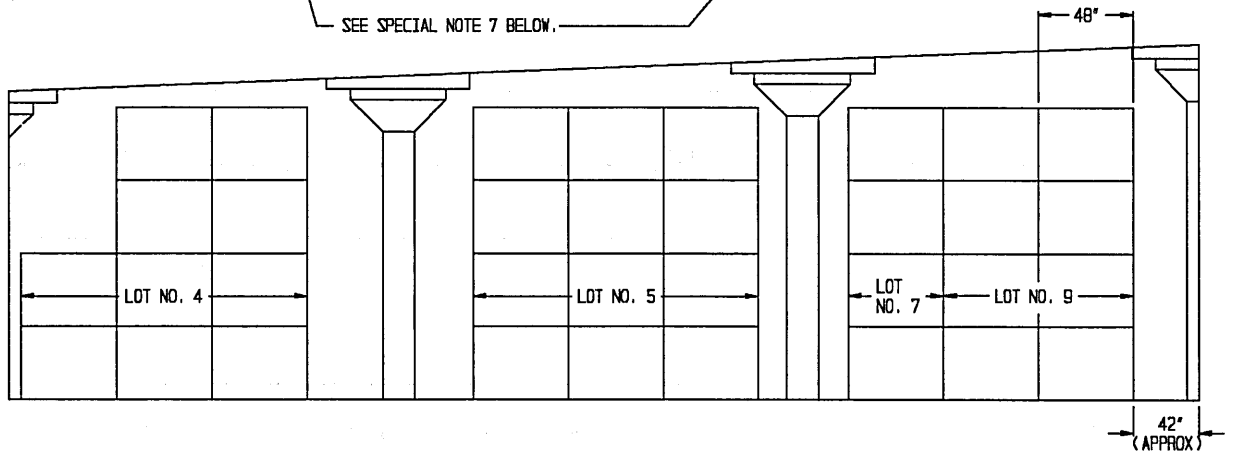
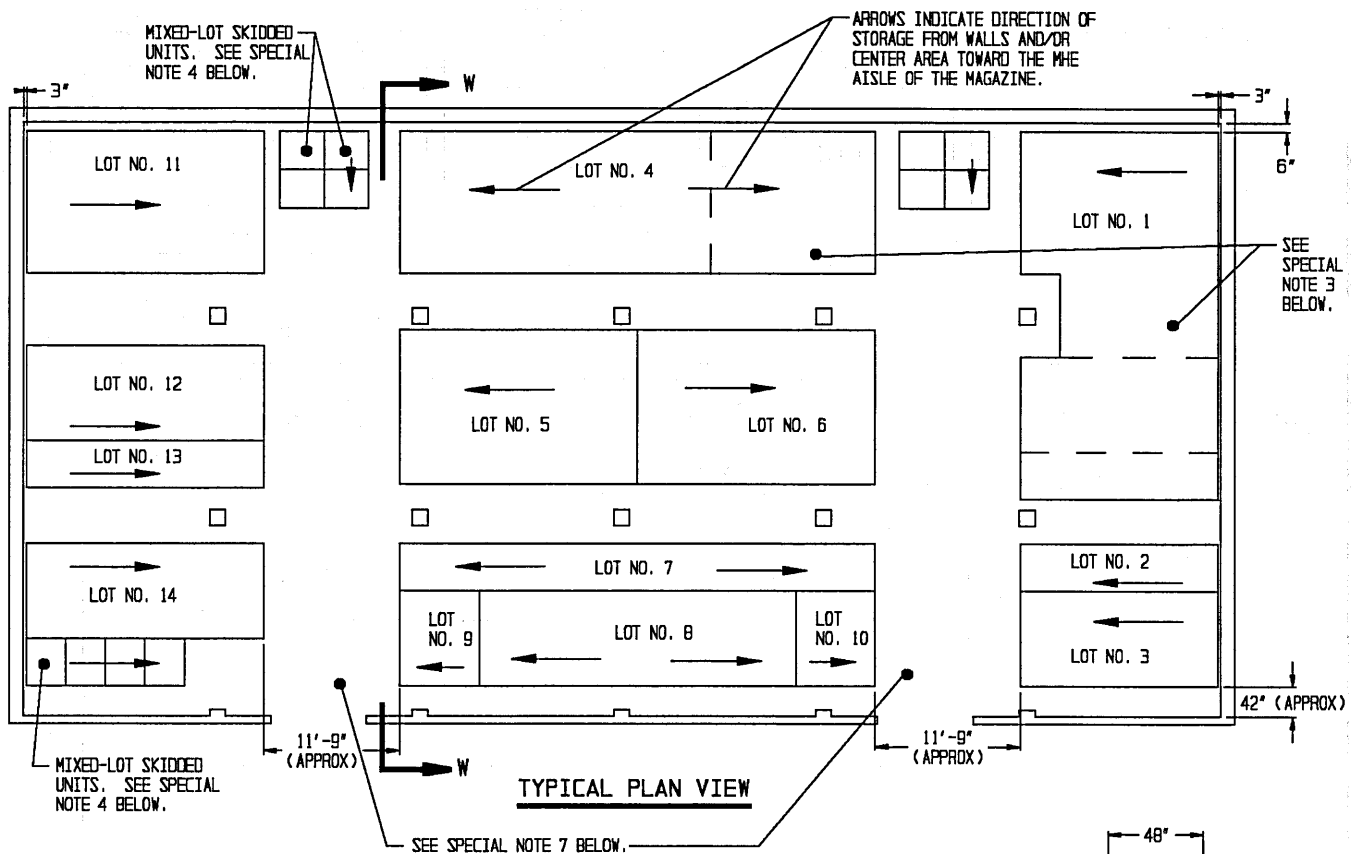


**SECTION V-V**  
(SPECIAL NOTES CONTINUED)

**SPECIAL NOTES:**

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTATIONS MAY BE MADE TO SUIT THE DIMENSIONS OF THE UNIT TO BE STORED AND AS NUMBER AND SIZES OF LOTS IN MAGAZINE REQUIRE. THE TYPICAL SKIDDED UNIT SHOWN IS 40" LONG BY 48" WIDE BY 37" HIGH.
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 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 NOTES ON PAGE 2.
4. A MIXED-LOT SKIDDED UNIT MAY HAVE FROM TWO LOTS PER SKIDDED UNITS UPWARDS TO AS MANY DIFFERENT LOTS AS BOXES WITHIN THAT UNIT. HOWEVER, ALL ITEMS AND LOTS WITHIN THE SKIDDED UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. SKIDDED UNITS OF A SINGLE-LOT OR MIXED-LOT SKIDDED 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 MORE SKIDDED UNITS, PROVIDING THE

- CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
  7. 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 ENCLOSED 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 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 THE "12 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF UNIT LOADS 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-FOOT MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL 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 REQUIRED 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 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.



**SPECIAL NOTES:**

1. THE STORAGE PLANS SHOWN ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE TO SUIT DIMENSIONS OF THE SKIDDED UNIT TO BE STORED AND AS NUMBER AND SIZES OF LOTS 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 IN THE REAR OR ON ONE SIDE OF THE MAGAZINE. HOWEVER, THESE AREAS MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE CENTER AREA OR AS TYPICALLY INDICATED 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.
4. A MIXED-LOT SKIDDED UNIT MAY HAVE FROM TWO LOTS PER SKIDDED UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS BOXES WITHIN THAT UNIT. HOWEVER, ALL ITEMS AND LOTS WITHIN THE SKIDDED UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. SKIDDED UNITS OF A SINGLE-LOT OR MIXED-LOT SKIDDED UNITS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWENTY-FOUR (24) "LIFTS" OF ANOTHER LOT

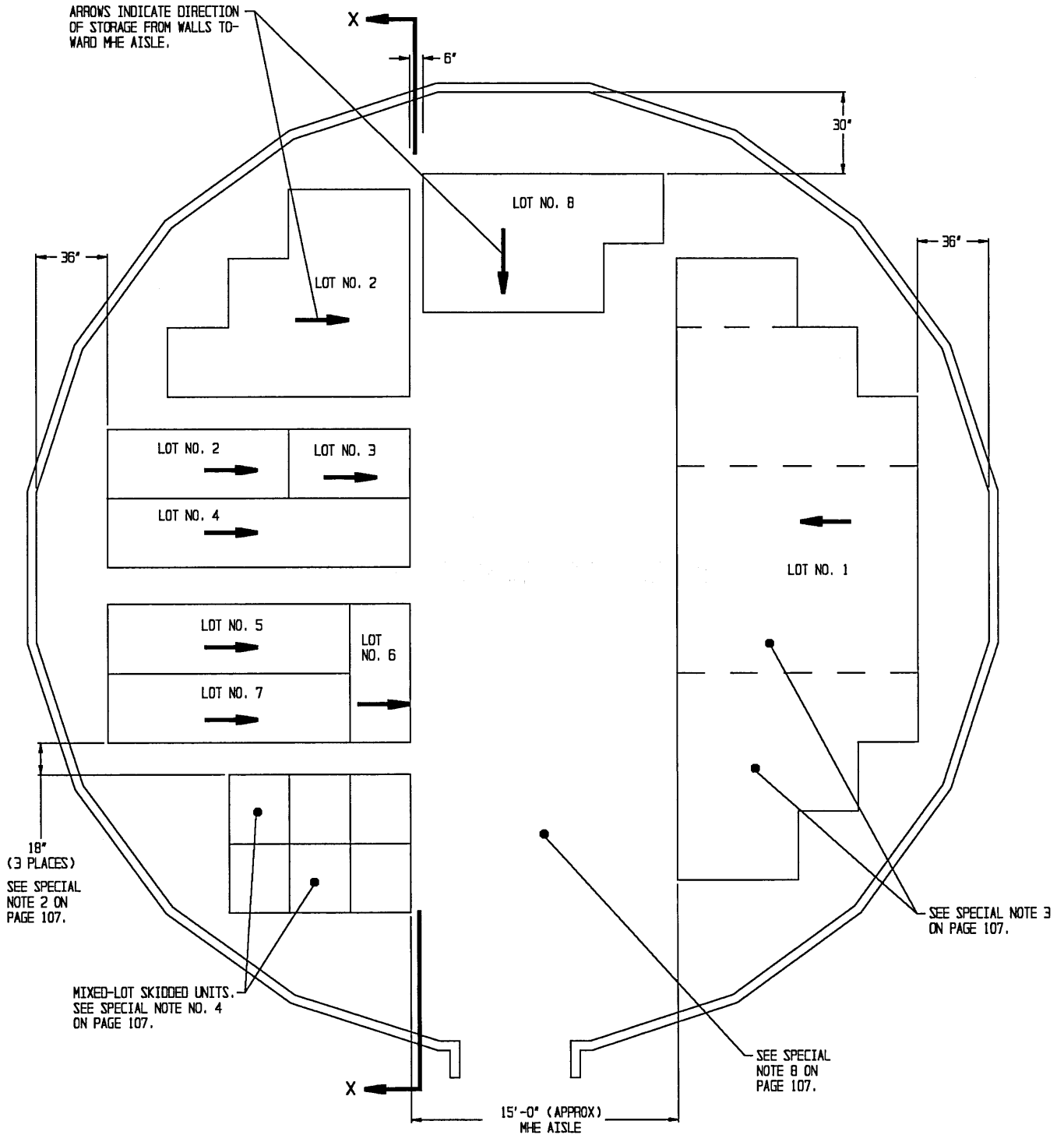
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**(SPECIAL NOTES CONTINUED)**

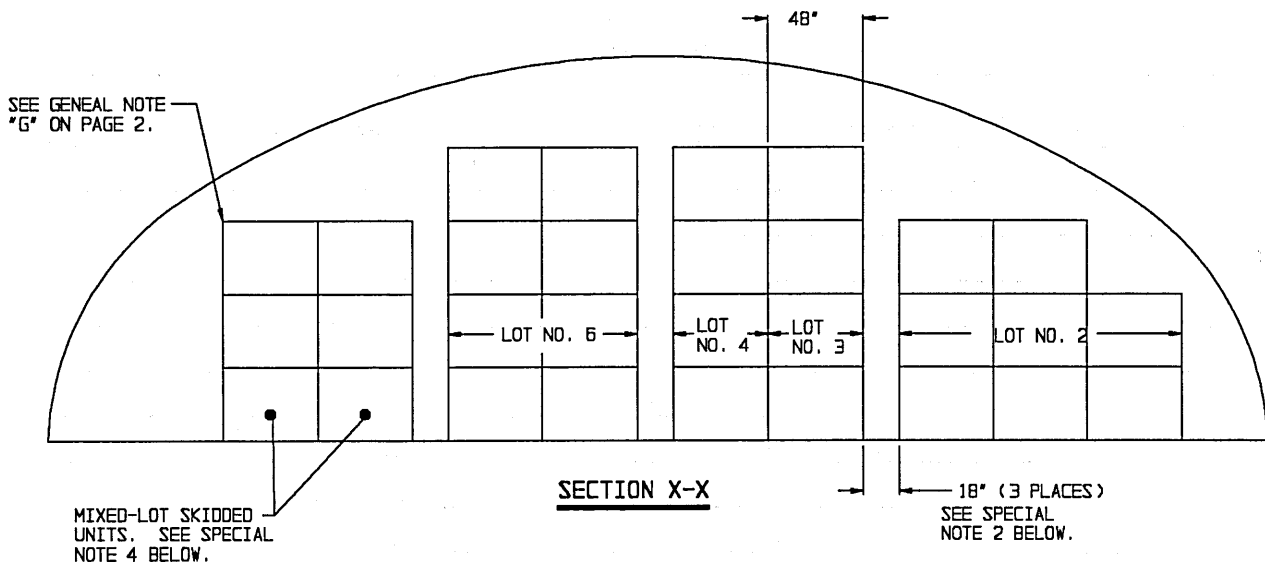
- OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT UNITS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE SKIDDED UNITS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
7. THE MHE AISLE MAY BE USED TO STORE ONE OR MORE STACKS OF ADDITIONAL LOTS OR ADDITIONAL ITEMS THAT ARE FROM A LOT ADJACENT TO THE MHE AISLE. THIS ADDITIONAL STORAGE IS TO BE ARRANGED IN A MANNER SIMILAR TO ARRANGEMENTS DEPICTED ON PAGES 101 AND 103 FOR THE "ADDITIONAL STORAGE LOCATIONS" (SHOWN BY DOTTED LINES). ADEQUATE SPACE FOR MHE OPERATION, AS DESCRIBED ON PAGES 101 AND 103, MUST BE MADE AVAILABLE FOR THE ADDITIONAL STORAGE. ALSO, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.
8. THE DEPICTED MULTIPLE-LOT STORAGE PROCEDURES FOR RECTANGULAR MAGAZINES MAY BE USED AS GUIDANCE FOR THE STORAGE OF MULTIPLE LOTS IN TYPE II AND TYPE III AMMUNITION BUNKERS.

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ARROWS INDICATE DIRECTION OF STORAGE FROM WALLS TOWARD THE AISLE.

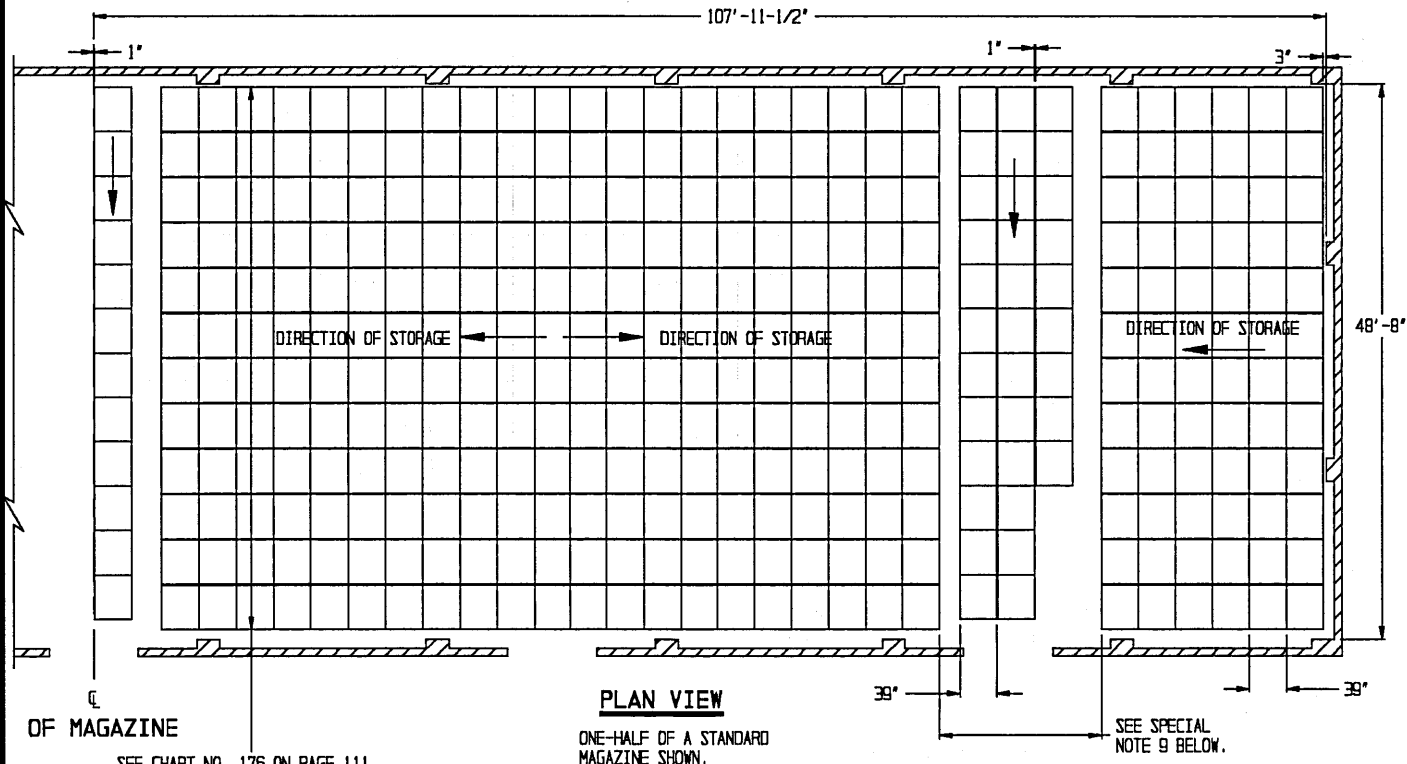


TYPICAL PLAN VIEW



**SPECIAL NOTES:**

1. THE STORAGE PLANS SHOWN ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE TO SUIT THE DIMENSIONS OF THE SKIDDED UNIT TO BE STORED AND AS NUMBER AND SIZES OF LOTS 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 ONE SIDE OF THE MAGAZINE. HOWEVER, BOTH SIDES MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN ON THE LEFT SIDE. 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.
4. A MIXED-LOT SKIDDED UNIT MAY HAVE FROM TWO LOTS PER SKIDDED UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS BOXES WITHIN THAT UNIT. HOWEVER, ALL ITEMS AND LOTS WITHIN THE SKIDDED UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. SKIDDED UNITS OF A SINGLE-LOT OR MIXED-LOT SKIDDED 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 MORE SKIDDED UNITS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE WALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
7. 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. THE MHE AISLE MAY BE USED TO STORE ONE OR MORE STACKS OF ADDITIONAL LOTS OR ADDITIONAL ITEMS THAT ARE FROM A LOT ADJACENT TO THE MHE AISLE. THIS ADDITIONAL STORAGE IS TO BE ARRANGED IN A MANNER SIMILAR TO ARRANGEMENTS DEPICTED ON PAGES 101 AND 103 FOR THE "ADDITIONAL STORAGE LOCATIONS" (SHOWN BY DOTTED LINES). ADEQUATE SPACE FOR THE MHE OPERATION, AS DESCRIBED ON PAGES 101 AND 103, MUST BE MADE AVAILABLE FOR THE ADDITIONAL STORAGE. ALSO COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.



**PLAN VIEW**  
ONE-HALF OF A STANDARD  
MAGAZINE SHOWN.

OF MAGAZINE

SEE CHART NO. 176 ON PAGE 111  
FOR GUIDANCE AS TO THE NUMBER  
OF ROWS WHICH CAN BE STORED  
ACROSS THE WIDTH OF A MAGAZINE.

SEE SPECIAL  
NOTE 9 BELOW.

**STORAGE AS SHOWN**

ONE-HALF OF A STANDARD MAGAZINE

ITEM	QUANTITY
SKIDDED UNIT - - - - -	1,087

**SPECIAL NOTES:**

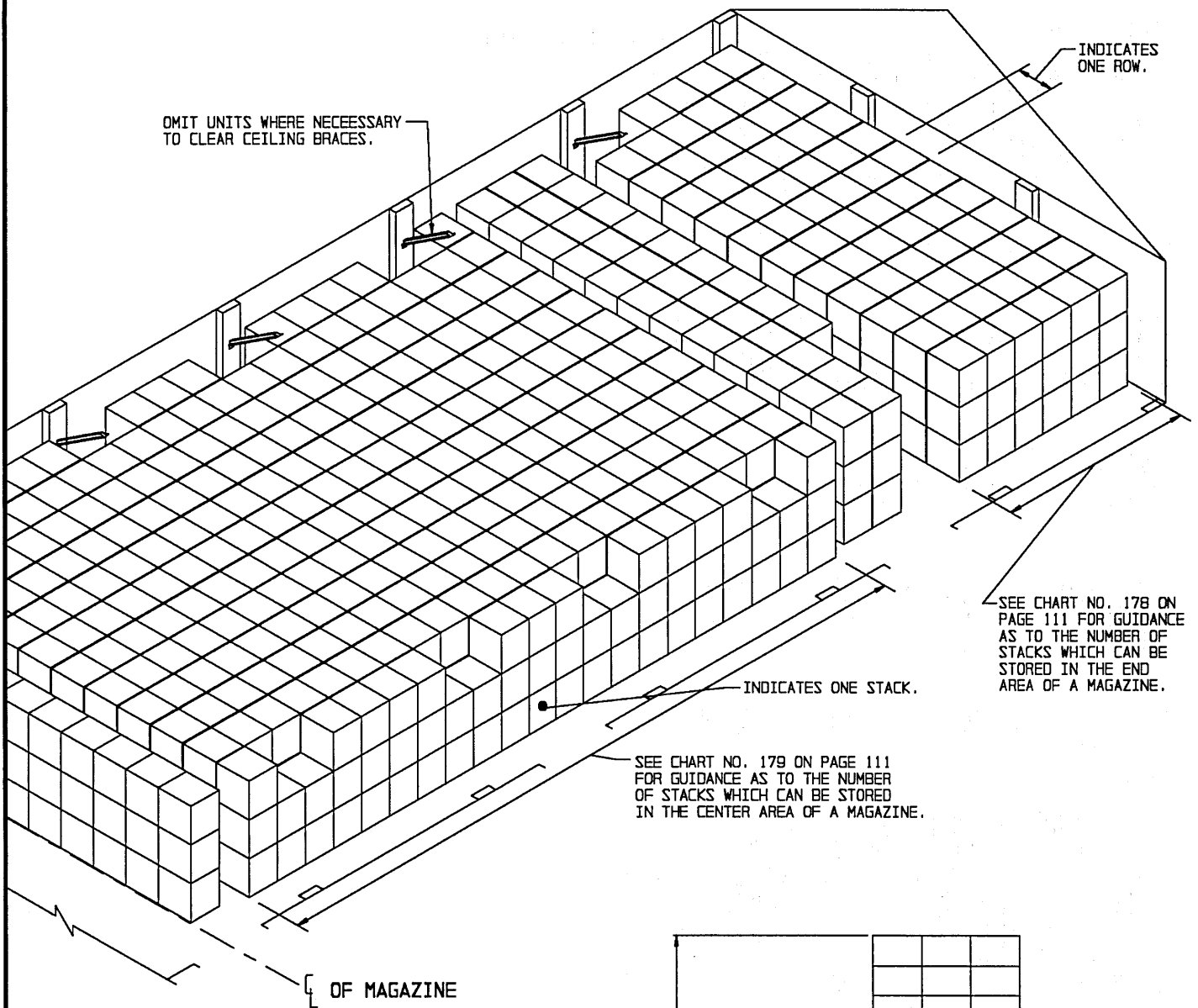
1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39' LONG BY 44-7/8' WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY DEPENDING UPON THE SIZE OF THE UNIT BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 110 AND 111 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED IN THE WIDTH AND LENGTH OF THE MAGAZINE; MAXIMUM STORAGE CAPACITY WILL BE UTILIZED.
2. SKIDDED UNITS WILL BE STACKED IN VERTICAL ALIGNMENT. STAGGERED STACKING AS SHOWN FOR IGL00 AND STRADLEY MAGAZINE STORAGE IS NOT APPLICABLE FOR STORAGE IN STANDARD MAGAZINES.
3. A THREE INCH (3") MINIMUM SPACE MUST BE PROVIDED BETWEEN THE STORED SKIDDED UNITS AND THE PILASTERS OF THE MAGAZINE. AS MANY UNITS AS POSSIBLE WILL BE STORED ACROSS THE WIDTH OF THE MAGAZINE. THE EXCESS SPACE REMAINING SHOULD BE EQUALLY DIVIDED BETWEEN THE ROWS. AT LEAST ONE INCH (1") SHOULD BE MAINTAINED SO AS TO FACILITATE STORAGE PLACEMENT AND TO PROVIDE FOR LOT SEPARATION, AS APPLICABLE.
4. IN SOME INSTANCES, LOTS CONSISTING OF NARROW UNITS MUST BE STORED TWO (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE WIDTH OF THE MAGAZINE, LENGTH OR WIDTH OF THE SKIDDED UNIT AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, 2-WIDE STORING WILL NOT BE NECESSARY.
5. FOR STANDARD MAGAZINES WITH CEILINGS, THE MAXIMUM HEIGHT OF STACKS WILL BE 13'-6". SEE CHART NO. 177 ON PAGE 111 FOR GUIDANCE AS TO THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED, BASED ON THE HEIGHT OF THE UNIT. IN STANDARD MAGAZINES THAT DO NOT HAVE CEILINGS, SKIDDED UNITS MAY BE STORED BETWEEN THE TRUSSES TO WITHIN 18" OF THE ROOF RAFTERS AS LONG AS THE MAXIMUM FLOOR LOAD AS PERSCRIBED BY LOCAL STANDARDS IS NOT EXCEEDED AND THE STABILITY OF THE STACK IS MAINTAINED.

**(SPECIAL NOTES CONTINUED)**

6. SKIDDED UNITS WILL BE OMITTED WHERE NECESSARY TO CLEAR CEILING BRACES.
7. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENT/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.
8. MAXIMUM FLOOR LOADS PRESCRIBED BY THE LOCAL POST ENGINEER WILL NOT BE EXCEEDED.
9. CHARTS ARE SHOWN ON PAGE 111 WHICH CAN BE USED AS GUIDANCE IN DEVELOPING A STORAGE PATTERN AND IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. THE NUMBER OF STACKS SPECIFIED IN CHARTS NO. 178 AND 179 ARE BASED ON A MATERIALS HANDLING EQUIPMENT (MHE) AISLE OF AT LEAST 7'-7" PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40") WHICHEVER IS THE GREATEST. THE NUMBER OF STACKS AND/OR THE SIZE RANGE OF UNITS MAY VARY IF THE AVAILABLE MHE CAN OPERATE IN NARROWER AISLES.
10. THE BASIC STORAGE PATTERN AS SHOWN CAN ALSO BE USED FOR THE STORING OF MORE THAN ONE LOT. LOTS MAY BE STORED WITH ONE OR MORE ROWS FOR EACH LOT. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. A SINGLE LOT OF SKIDDED UNITS IS CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWENTY-FOUR (24) "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 SKIDDED UNITS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.

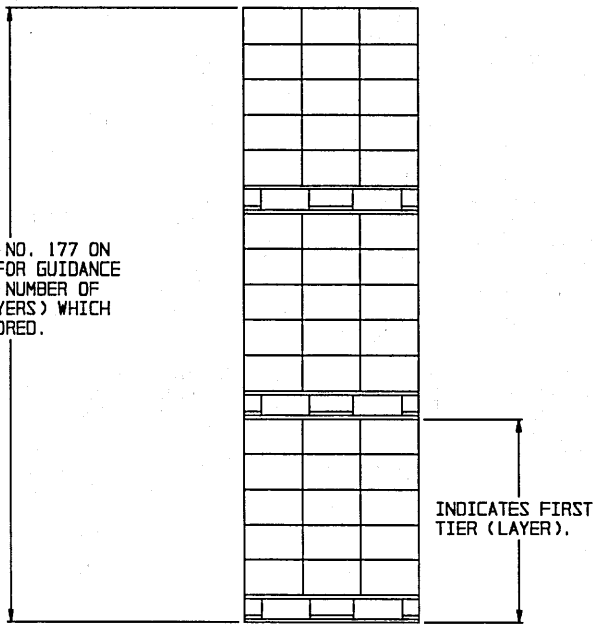
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**ISOMETRIC VIEW**

ONE-HALF OF A STANDARD MAGAZINE IS SHOWN.



**TYPICAL STACK**

SPECIAL NOTES:

1. THE CHARTS ON PAGE 111 ARE PRESENTED AS GUIDANCE IN THE DEVELOPEMENT OF A PATTERN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN STANDARD MAGAZINES. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A MAGAZINE, AS WELL AS VARIANCE IN THE INSIDE DIMENSIONS OF THE STANDARD MAGAZINE CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
2. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" BELOW.

STEP 1

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 176 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS INDICATED THE NUMBER OF ROWS WHICH CAN BE STORED ACROSS THE WIDTH OF THE MAGAZINE AT THAT DIMENSION.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 177 THE HEIGHT RANGE WHICH INCLUDES THE HEIGHT OF THE UNIT TO BE STORED. OPPOSITE THAT HEIGHT FIGURE IS INDICATED THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED BENEATH THE TRUSSES OF THE MAGAZINE.

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 178 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS INDICATED THE NUMBER OF STACKS WHICH CAN BE STORED IN THE LENGTH OF AN END AREA OF A MAGAZINE.

STEP 4

REPEAT STEP 3 FOR CHART NO. 179 TO DETERMINE THE NUMBER OF STACKS WHICH CAN BE STORED IN THE LENGTH OF A CENTER AREA OF A MAGAZINE.

EXAMPLE

THE SKIDDED UNIT SHOWN IN THE TYPICAL STORAGE VIEWS ON PAGES 108 AND 109 HAS BEEN SELECTED FOR THE EXAMPLE. THE UNIT IS 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN THE CHARTS. IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES SPECIFIED ABOVE. THE 43" TO 47" DIMENSION RANGE INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 176 INCLUDES THE 44-7/8" UNIT WIDTH. IN THE SECOND COLUMN OF THE CHART IS INDICATED THE FIGURE 12 WHICH SPECIFIES THE NUMBER OF ROWS WHICH CAN BE POSITIONED ACROSS THE WIDTH OF THE MAGAZINE. THE OVER 40" TO 54" DIMENSION RANGE INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 177 INCLUDES THE HEIGHT OF THE UNIT BEING STORED. IN THE SECOND COLUMN IS INDICATED THE FIGURE 3 WHICH SPECIFIES THE NUMBER OF TIERS (LAYERS) WHICH CAN BE POSITIONED WITHOUT EXTENDING ABOVE THE BOTTOM SURFACE OF THE TRUSSES. THE OVER 38" TO 44" DIMENSION RANGE INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 178 INCLUDES THE LENGTH OF THE UNIT. IN THE RIGHT HAND COLUMN OF THE CHART IS INDICATED THE FIGURE 6 WHICH SPECIFIES THE NUMBER OF STACKS WHICH CAN BE STORED IN THE LENGTH OF AN END AREA OF A MAGAZINE. THE OVER 37" TO 39" DIMENSION RANGE INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 179 INCLUDES THE LENGTH OF THE UNIT. IN THE RIGHT HAND COLUMN OF THE CHART IS INDICATED THE FIGURE 21 WHICH SPECIFIES THE NUMBER OF STACKS WHICH CAN BE STORED IN THE LENGTH OF A CENTER AREA OF A MAGAZINE.

FOR STORAGE WITHIN THE MHE AISLE, THE OVER 35" TO 39" DIMENSION RANGE INDICATED IN THE LEFT HAND COLUMN OF CHART NO. 180 ON PAGE 111 INCLUDES THE LENGTH OF THE UNIT BEING STORED. IN THE SECOND COLUMN IS INDICATED THE FIGURE 3 WHICH SPECIFIES THE NUMBER OF ROWS WHICH CAN BE POSITIONED IN THE AISLE WIDTH WHEN THE UNITS ARE ORIENTED THE SAME AS THE UNITS IN THE LATERALLY ADJACENT ROWS. THE 44" TO 48" DIMENSION RANGE IN CHART NO. 181 INCLUDES THE WIDTH OF THE UNIT BEING STORED. IN THE SECOND COLUMN IS INDICATED THE FIGURE 9 WHICH SPECIFIES THE NUMBER OF UNITS LONG IN EACH ROW. ADDITIONAL UNITS MAY BE POSITIONED IN ONE OR BOTH ROWS IF THE SPACE AND/OR AVAILABLE MHE PERMITS.

CHART NO. 176	
NUMBER OF ROWS ACROSS THE WIDTH	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
25'	22
OVER 25' TO 26'	21
OVER 26' TO 28'	20
OVER 28' TO 29'	19
OVER 29' TO 31'	18
OVER 31' TO 33'	17
OVER 33' TO 35'	16
OVER 35' TO 37'	15
OVER 37' TO 40'	14
OVER 40' TO 43'	13
OVER 43' TO 47'	12
OVER 47' TO 52'	11
OVER 52' TO 56'	10
OVER 56' TO 63'	9
OVER 63' TO 66'	8

CHART NO. 177	
MAXIMUM NUMBER OF TIERS UNDER TRUSSES	
UNIT HEIGHT	NUMBER OF TIERS
15' TO 16'	10
OVER 16' TO 18'	9
OVER 18' TO 20'	8
OVER 20' TO 23'	7
OVER 23' TO 27'	6
OVER 27' TO 32'	5
OVER 32' TO 40'	4
OVER 40' TO 54'	3
OVER 54' TO 56'	2

CHART NO. 178	
NUMBER OF STACKS LONG IN END AREA	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25' TO 26'	10
OVER 26' TO 29'	9
OVER 29' TO 33'	8
OVER 33' TO 38'	7
OVER 38' TO 44'	6
OVER 44' TO 52'	5
OVER 52' TO 66'	4

CHART NO. 179	
NUMBER OF STACKS LONG IN CENTER AREA	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25'	33
OVER 25' TO 26'	31
OVER 26' TO 27'	30
OVER 27' TO 28'	29
OVER 28' TO 29'	28
OVER 29' TO 30'	27
OVER 30' TO 31'	26
OVER 31' TO 33'	25
OVER 33' TO 34'	24
OVER 34' TO 36'	23
OVER 36' TO 37'	22
OVER 37' TO 39'	21
OVER 39' TO 41'	20
OVER 41' TO 43'	19
OVER 43' TO 45'	18
OVER 45' TO 48'	17
OVER 48' TO 51'	16
OVER 51' TO 54'	15
OVER 54' TO 57'	14
OVER 57' TO 62'	13
OVER 62' TO 66'	12

CHART NO. 180	
NUMBER OF ROWS WIDE IN MHE AREA	
UNIT DIM LENGTHWISE IN MAGAZINE	UNIT AT SAME POSITION
25' TO 27'	5
OVER 27' TO 29'	4
OVER 29' TO 30'	5
OVER 30' TO 32'	4
OVER 32' TO 33'	3
OVER 33' TO 35'	4
OVER 35' TO 39'	3
OVER 39' TO 40'	4
OVER 40' TO 45'	3
OVER 45' TO 46'	4
OVER 46' TO 50'	3
OVER 50' TO 51'	2
OVER 51' TO 60'	3
OVER 60' TO 62'	2
OVER 62' TO 63'	3
OVER 63' TO 64'	2
OVER 64' TO 66'	3

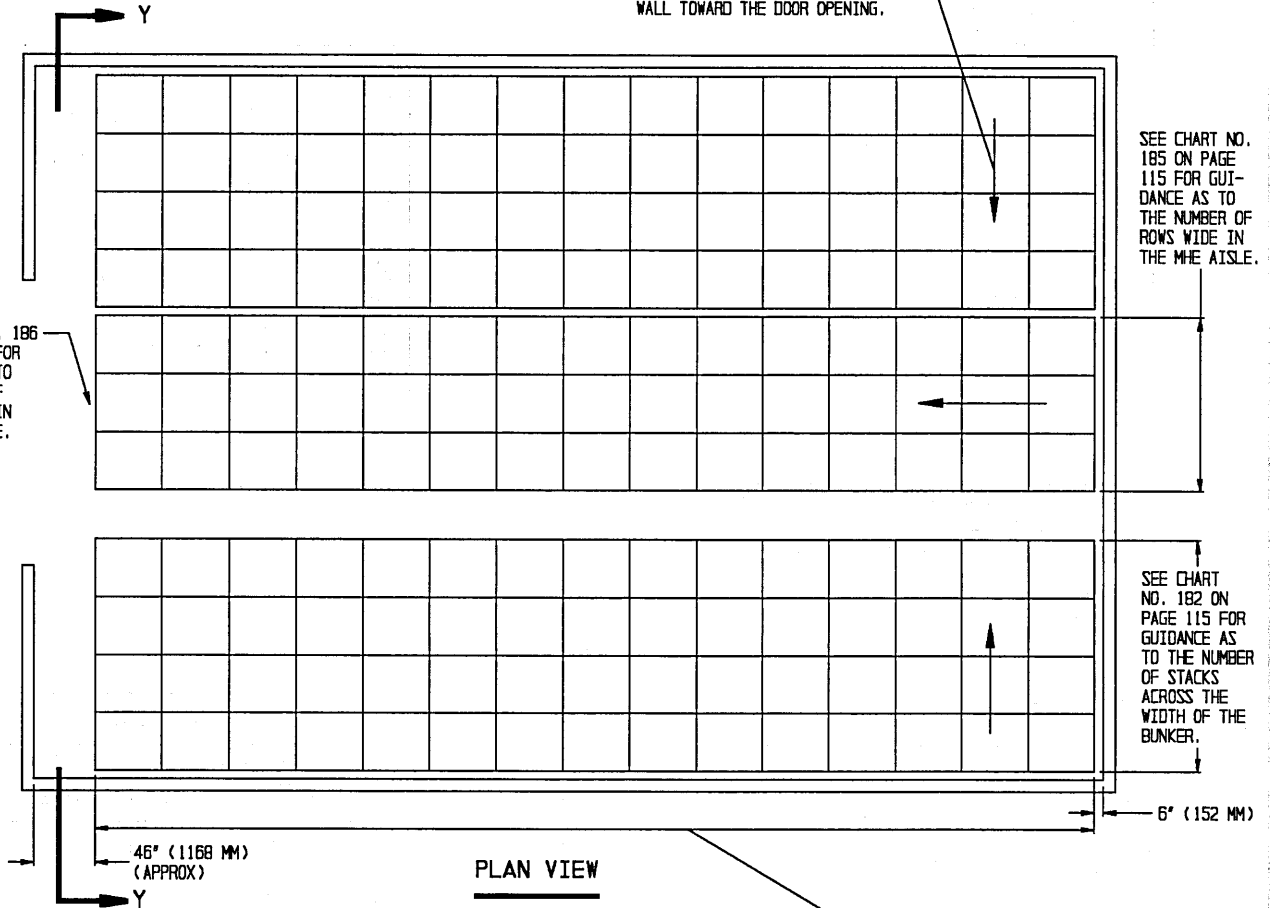
CHART NO. 181	
NUMBER OF STACKS LONG IN MHE AREA	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25'	18
OVER 25' TO 26'	17
OVER 26' TO 28'	16
OVER 28' TO 30'	15
OVER 30' TO 32'	14
OVER 32' TO 35'	13
35' TO 35'	12
OVER 38' TO 40'	11
OVER 40' TO 44'	10
OVER 44' TO 48'	9
OVER 48' TO 57'	8
OVER 57' TO 65'	7
OVER 65' TO 66'	6

ARROWS INDICATE DIRECTION OF STORAGE FROM SIDEWALLS TOWARD THE MHE AISLE AND/OR WITHIN THE MHE AISLE FROM THE REAR WALL TOWARD THE DOOR OPENING.

SEE CHART NO. 186 ON PAGE 115 FOR GUIDANCE AS TO THE NUMBER OF STACKS LONG IN THE MHE AISLE.

SEE CHART NO. 185 ON PAGE 115 FOR GUIDANCE AS TO THE NUMBER OF ROWS WIDE IN THE MHE AISLE.

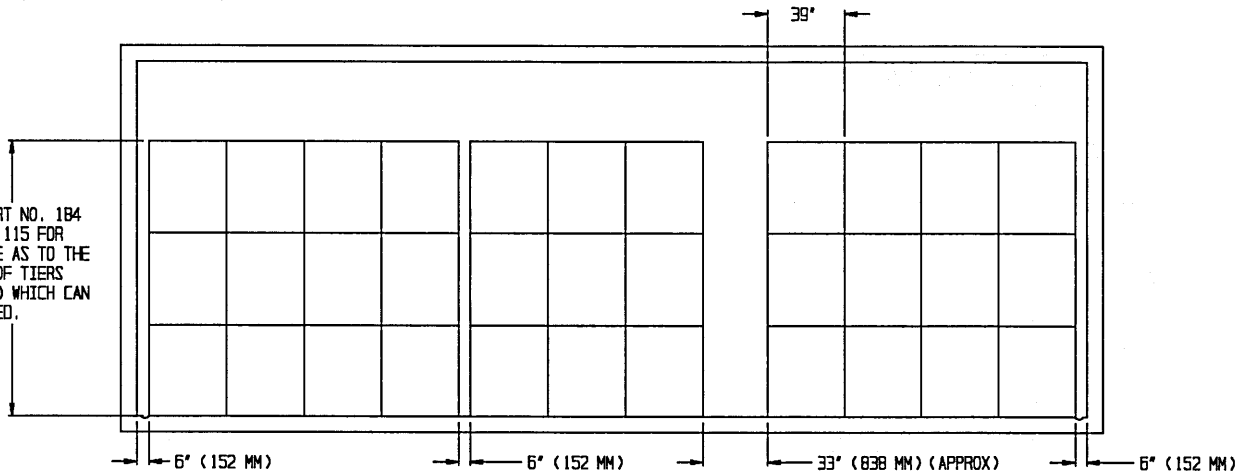
SEE CHART NO. 182 ON PAGE 115 FOR GUIDANCE AS TO THE NUMBER OF STACKS ACROSS THE WIDTH OF THE BUNKER.



PLAN VIEW

SEE CHART NO. 183 ON PAGE 115 FOR GUIDANCE AS TO THE NUMBER OF ROWS ACROSS THE LENGTH OF THE BUNKER.

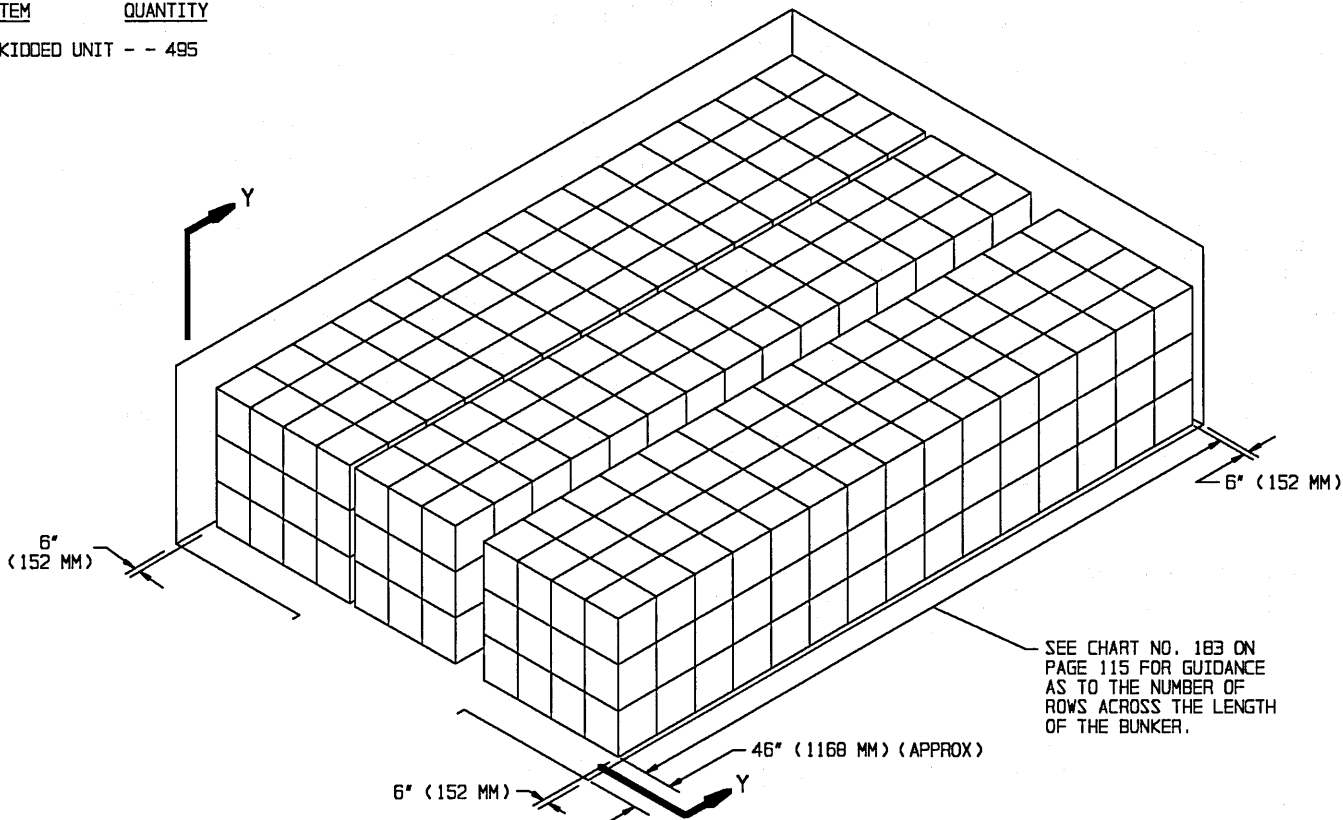
SEE CHART NO. 184 ON PAGE 115 FOR GUIDANCE AS TO THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED.



SECTION Y-Y

# STORAGE AS SHOWN

ITEM QUANTITY  
SKIDDED UNIT -- 495



ISOMETRIC VIEW

(SPECIAL NOTES CONTINUED)

7. THE NUMBER OF STACKS SPECIFIED IN CHART NO. 182 IS BASED ON A MATERIALS HANDLING EQUIPMENT (MHE) AISLE OF AT LEAST 7'-7" (2311 MM) PLUS THE LENGTH OF THE FORKLIFT TRUCK TINES (40" OR 1016 MM) WHICHEVER IS THE GREATEST. THE NUMBER OF STACKS AND/OR THE SIZE RANGE OF UNITS MAY VARY IF THE AVAILABLE MHE CAN OPERATE IN NARROWER AISLES.
8. IN SOME INSTANCES, ROWS OF NARROW UNITS MUST BE STORED TWO (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE WIDTH OF THE BUNKER LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, 2 WIDE STORING WILL NOT BE NECESSARY.
9. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE BUNKER).
10. REFER TO THE "TYPICAL MULTIPLE-LOT STORAGE FOR RECTANGULAR MAGAZINE" ON PAGE 104 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS IN A TYPE II BUNKER.
11. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE AISLE FOR ACCESSIBILITY.

SPECIAL NOTES:

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 114 AND 115 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED WITHIN THE AMMUNITION BUNKER.
2. SKIDDED UNITS WILL BE STACKED IN VERTICAL ALIGNMENT. STAGGERED STACKING AS SHOWN FOR IGLOO, ARCH TYPE, STRADLEY AND OVAL-ARCH MAGAZINE STORAGE IS NOT APPLICABLE FOR STORAGE IN AMMUNITION BUNKERS.
3. A 6" (152 MM) MINIMUM SPACE WILL BE PROVIDED BETWEEN THE REAR WALL AND/OR A SIDE WALL AND THE SKIDDED UNITS.
4. THE ARROWS ON THE PLAN VIEW ON PAGE 112 INDICATE THE DIRECTION OF STORAGE FROM THE SIDE WALLS TOWARD THE MHE AISLE, OR WITHIN THE MHE AISLE FROM THE REAR WALL TOWARD THE DOOR OPENING.
5. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN UNLESS TWO UPPER SKIDDED UNITS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST CASES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT OF ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO SKIDDED UNITS AS ONE LIFT.
6. SKIDDED UNITS ALONG EACH SIDE OF THE BUNKER MAY BE STORED WITH EITHER THE UNIT LENGTH OR THE UNIT WIDTH ACROSS THE WIDTH OF THE BUNKER. ONE POSITIONING MAY PROVIDE DENSER STORAGE THAN THE OTHER, AND THE BEST METHOD SHOULD BE PRIOR DETERMINED BY STUDYING THE CHARTS ON PAGE 115.

SPECIAL NOTES:

(SPECIAL NOTES CONTINUED)

1. THE CHARTS ON PAGE 115 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PLAN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN 60'-0" LONG BY 40'-0" WIDE TYPE II AMMUNITION BUNKERS. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A BUNKER, AS WELL AS VARIANCE IN THE INSIDE DIMENSIONS OF THE BUNKER CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
2. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" BELOW.

STEP 1

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 182 ON PAGE 115 THE LENGTH OR WIDTH DIMENSION RANGE INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 40'-0" WIDTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH FIGURE ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED BETWEEN ONE SIDEWALL AND THE MHE AISLE. THE SECOND COLUMN INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED ON THE OPPOSITE SIDE OF MHE AISLE.

STEP 2

LOCATE IN THE LEFT HAND OF CHART NO. 183 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 60'-0" LENGTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE TOTAL NUMBER OF ROWS WHICH CAN BE STORED BETWEEN THE 6" AISLE AT THE REAR OF THE BUNKER AND THE FRONT WALL.

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 184 THE HEIGHT RANGE WHICH INCLUDES THE HEIGHT OF THE UNIT TO BE STORED. OPPOSITE THAT HEIGHT FIGURE IS INDICATED THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED.

STEP 4

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 185 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT WHICH IS TO BE STORED IN THE 40'-0" WIDTH OF THE BUNKER. THE COLUMN IMMEDIATELY ADJACENT THE NUMBER OF ROWS WHICH CAN BE PLACED IN THE MHE AREA WIDTH WHEN THE UNITS ARE ORIENTED THE SAME AS THE UNITS IN THE LATERALLY ADJACENT ROWS. THE NEXT COLUMN INDICATES THE NUMBER OF ROWS AND THE LENGTH OR WIDTH DIMENSION RANGE OF THE UNITS WHEN THEY ARE ROTATED 90° TO THOSE IN THE LATERALLY ADJACENT ROWS.

STEP 5

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 186 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE LENGTH OF THE MHE AISLE. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF STACKS IN THE ROWS WITHIN THE MHE AISLE, WHEN SUFFICIENT SPACE IS ALLOWED AT THE END OF THE ROWS FOR PERSONNEL TO ENTER THE DOOR AND PROCEED TO THE ACCESS AISLE. NOTE THAT ADDITIONAL STACKS MAY BE POSITIONED IN ONE OR MORE ROWS IF SPACE PERMITS.

EXAMPLE

THE SKIDDED UNIT SHOWN IN THE VIEWS ON PAGES 112 AND 113 HAS BEEN SELECTED FOR THE EXAMPLE. THE UNIT IS 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS NO. 186 ON PAGE 115 IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES ABOVE.

TO FIND THE NUMBER OF SKIDDED UNIT STACKS IN THE 40'-0" WIDTH OF THE BUNKER, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 182 ON PAGE 115 UNDER THE UNIT LENGTH OR WIDTH. THE 39" IS WITHIN THE OVER 37" TO 42" RANGE. FOLLOWING THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT, THE FIRST COLUMN INDICATES THAT 4 STACKS CAN BE STORED ON ONE SIDE OF THE MHE AISLE AND THE SECOND COLUMN INDICATES THAT 4 STACKS CAN BE STORED ON THE OPPOSITE SIDE.

TO FIND THE NUMBER OF ROWS IN THE 60'-0" LENGTH OF THE BUNKER, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 183. THE 44-7/8" WIDTH IS WITHIN THE OVER 44" TO 46-1/2" RANGE. FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT INDICATES THAT 15 ROWS CAN BE PLACED IN THE BUNKER.

(CONTINUED AT RIGHT)

TO FIND THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED, LOCATE THE UNIT HEIGHT OF 46-5/8" WITHIN THE OVER 43-1/2" TO 56" RANGE IN CHART NO. 184 FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT WE FIND THAT 3 TIERS CAN BE STORED.

IN CHART NO. 185 THE 39" LENGTH DIMENSION WHICH IS ACROSS THE WIDTH OF THE BUNKER IS WITHIN THE OVER 38" TO 39" RANGE. THE ADJACENT COLUMN INDICATES THE NUMBER OF ROWS WIDE IN THE MHE AISLE WHEN THE SKIDDED UNITS ARE ORIENTED THE SAME AS THE LATERALLY ADJACENT ROWS. THE FIGURE 3 IN THAT COLUMN SPECIFIES THAT 3 ROWS AT 39" CAN BE POSITIONED ACROSS THE WIDTH OF THE MHE AISLE.

IN CHART NO. 186 THE 44-7/8" WIDTH DIMENSION WHICH IS POSITIONED LENGTHWISE WITHIN THE MHE AISLE IS WITHIN THE OVER 43" TO 46" RANGE. FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT INDICATES THAT 15 STACKS CAN BE POSITIONED WITHIN THE MHE AISLE. THIS ALLOWS SUFFICIENT SPACE FOR PASSAGE BETWEEN THE LAST SKIDDED UNIT STACKS AND THE DOOR.

3. THE UNIT SIZE RANGE (LENGTH OR WIDTH) AND THE UNIT HEIGHT DIMENSIONS COVER ALL THE SIZES WITHIN THE RANGE SPECIFIED.

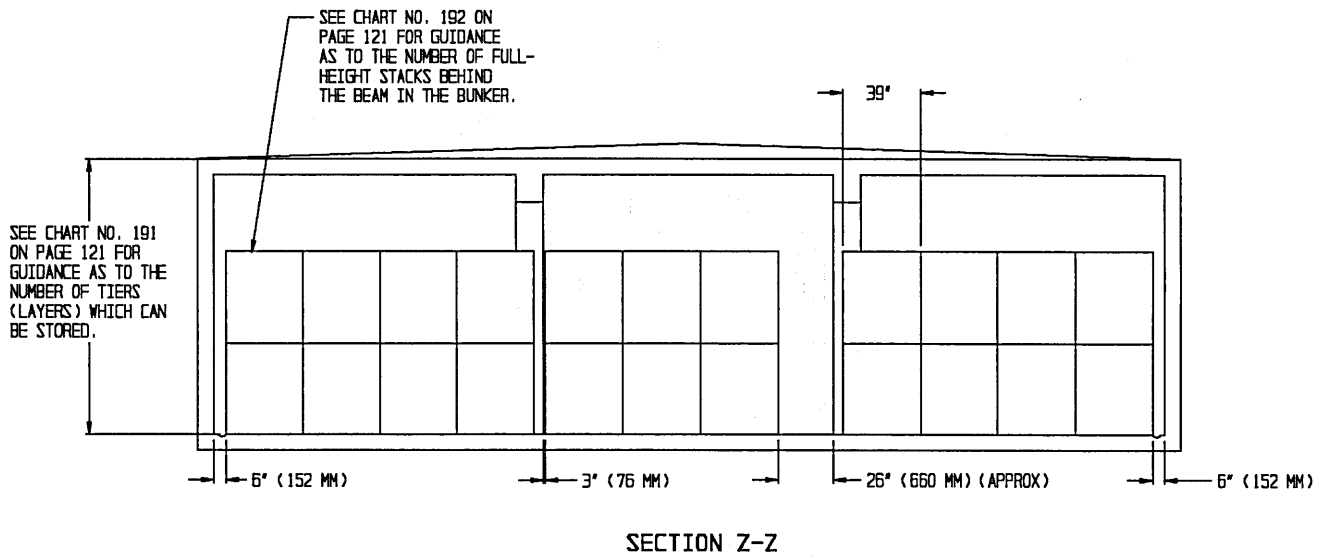
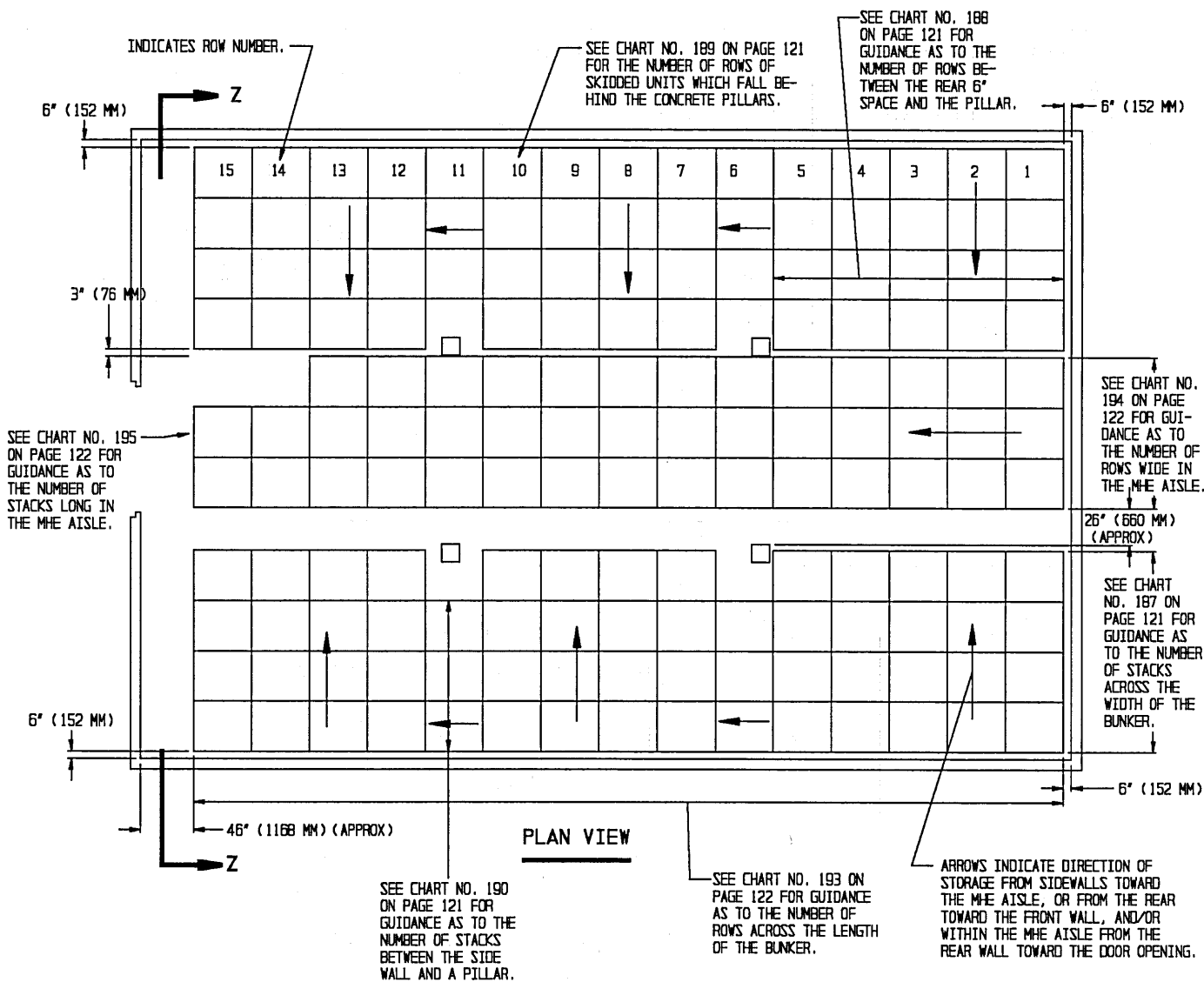
CHART NO. 182			
NUMBER OF STACKS ACROSS THE WIDTH			
UNIT LENGTH OR WIDTH	NUMBER OF STACKS		
	ONE SIDE	OPPOSITE SIDE	
25'	7	6	
OVER 25' TO 28'	6	6	
OVER 28' TO 30'	6	5	
OVER 30' TO 33'	5	5	
OVER 33' TO 34'	5	4	
OVER 34' TO 37'	5	4	
OVER 37' TO 42'	4	4	
OVER 42' TO 48'	4	3	
OVER 48' TO 54'	3	3	
OVER 54' TO 62'	3	2	
OVER 62' TO 66'	2	2	

CHART NO. 183		
NUMBER OF ROWS ACROSS THE LENGTH		
UNIT LENGTH OR WIDTH	NUMBER OF ROWS	
	25'	28
OVER 25' TO 26'	27	
OVER 26' TO 27'	26	
OVER 27' TO 28'	25	
OVER 28' TO 29'	24	
OVER 29' TO 30'	23	
OVER 30' TO 31'	22	
OVER 31' TO 33'	21	
OVER 33' TO 35'	20	
OVER 35' TO 37'	19	
OVER 37' TO 39'	18	
OVER 39' TO 41'	17	
OVER 41' TO 44'	16	
OVER 44' TO 46-1/2'	15	
OVER 46-1/2' TO 50'	14	
OVER 50' TO 54'	13	
OVER 54' TO 58'	12	
OVER 58' TO 63'	11	
OVER 63' TO 66'	10	

CHART NO. 184	
NUMBER OF TIERS	
UNIT HEIGHT	NUMBER OF TIERS
15' TO 15-3/4'	11
OVER 15-3/4'' TO 17'	10
OVER 17' TO 19'	9
OVER 19' TO 21-1/2'	8
OVER 21-1/2' TO 24-1/2'	7
OVER 24-1/2' TO 29'	6
OVER 29' TO 34-3/4'	5
OVER 34-3/4' TO 43-1/2'	4
OVER 43-1/2' TO 55'	3

CHART NO. 185			
NUMBER OF ROWS WIDE IN MHE AISLE			
UNIT DIM ACROSS WIDTH OF MAGAZINE	UNIT AT SAME POSITION	UNIT AT ALTERNATIVE POSITION (TURNED 90°)	
25'	4	2 AT 39' TO 59' OR 3 AT 29' TO 39' OR 4 AT 25' TO 29'	
OVER 25' TO 26'	5	2 AT 44' TO 66' OR 3 AT 33' TO 44' OR 4 AT 25' TO 33'	
OVER 26' TO 27'	4	2 AT 39' TO 59' OR 3 AT 30' TO 39' OR 4 AT 25' TO 30'	
OVER 27' TO 28'	3	2 AT 36' TO 54' OR 3 AT 27' TO 36' OR 4 AT 25' TO 27'	
OVER 28' TO 29'	4	2 AT 41' TO 62' OR 3 AT 31' TO 41' OR 4 AT 25' TO 31'	
OVER 29' TO 30'	3	2 AT 38' TO 57' OR 3 AT 28' TO 38' OR 4 AT 25' TO 28'	
OVER 30' TO 31'	4	2 AT 44' TO 66' OR 3 AT 33' TO 44' OR 4 AT 25' TO 33'	
OVER 31' TO 33'	3	2 AT 33' TO 57' OR 3 AT 28' TO 38' OR 4 AT 25' TO 28'	
OVER 33' TO 34'	4	2 AT 46' TO 64' OR 3 AT 34' TO 46' OR 4 AT 25' TO 34'	
35'	4	2 AT 43' TO 64' OR 3 AT 32' TO 43' OR 4 AT 25' TO 32'	
OVER 35' TO 37'	4	2 AT 37' TO 55' OR 3 AT 27' TO 37' OR 4 AT 25' TO 27'	
OVER 37' TO 38'	4	2 AT 46' TO 66' OR 3 AT 35' TO 46' OR 4 AT 25' TO 35'	
OVER 38' TO 39'	3	2 AT 44' TO 66' OR 3 AT 33' TO 44' OR 4 AT 25' TO 33'	
OVER 39' TO 41'	3	2 AT 38' TO 58' OR 3 AT 29' TO 38' OR 4 AT 25' TO 29'	
OVER 41' TO 42'	2	2 AT 36' TO 54' OR 3 AT 27' TO 36' OR 4 AT 25' TO 27'	
OVER 42' TO 43'	3	2 AT 47' TO 66' OR 3 AT 35' TO 47' OR 4 AT 25' TO 35'	
OVER 43' TO 44'	3	2 AT 44' TO 66' OR 3 AT 34' TO 45' OR 4 AT 25' TO 36'	
OVER 44' TO 45'	3	2 AT 45' TO 64' OR 3 AT 32' TO 43' OR 4 AT 25' TO 32'	
OVER 45' TO 47'	2	2 AT 38' TO 57' OR 3 AT 28' TO 38' OR 4 AT 25' TO 28'	
OVER 47' TO 48'	2	2 AT 36' TO 54' OR 3 AT 27' TO 36' OR 4 AT 25' TO 27'	
OVER 48' TO 49'	3	3 AT 37' TO 50' OR 4 AT 30' TO 37' OR 5 AT 25' TO 30'	
OVER 49' TO 50'	3	3 AT 36' TO 48' OR 4 AT 28' TO 36' OR 5 AT 25' TO 28'	
OVER 50' TO 54'	2	3 AT 30' TO 40' OR 4 AT 25' TO 30'	
OVER 54' TO 55'	3	3 AT 42' TO 55' OR 4 AT 33' TO 42' OR 5 AT 25' TO 33'	
OVER 55' TO 62'	2	3 AT 33' TO 44' OR 4 AT 26' TO 33' OR 5 AT 25' TO 26'	
OVER 62' TO 63'	3	4 AT 38' TO 48' OR 5 AT 32' TO 38' OR 6 AT 25' TO 32'	
OVER 63' TO 66'	2	4 AT 36' TO 45' OR 5 AT 30' TO 36' OR 6 AT 25' TO 30'	

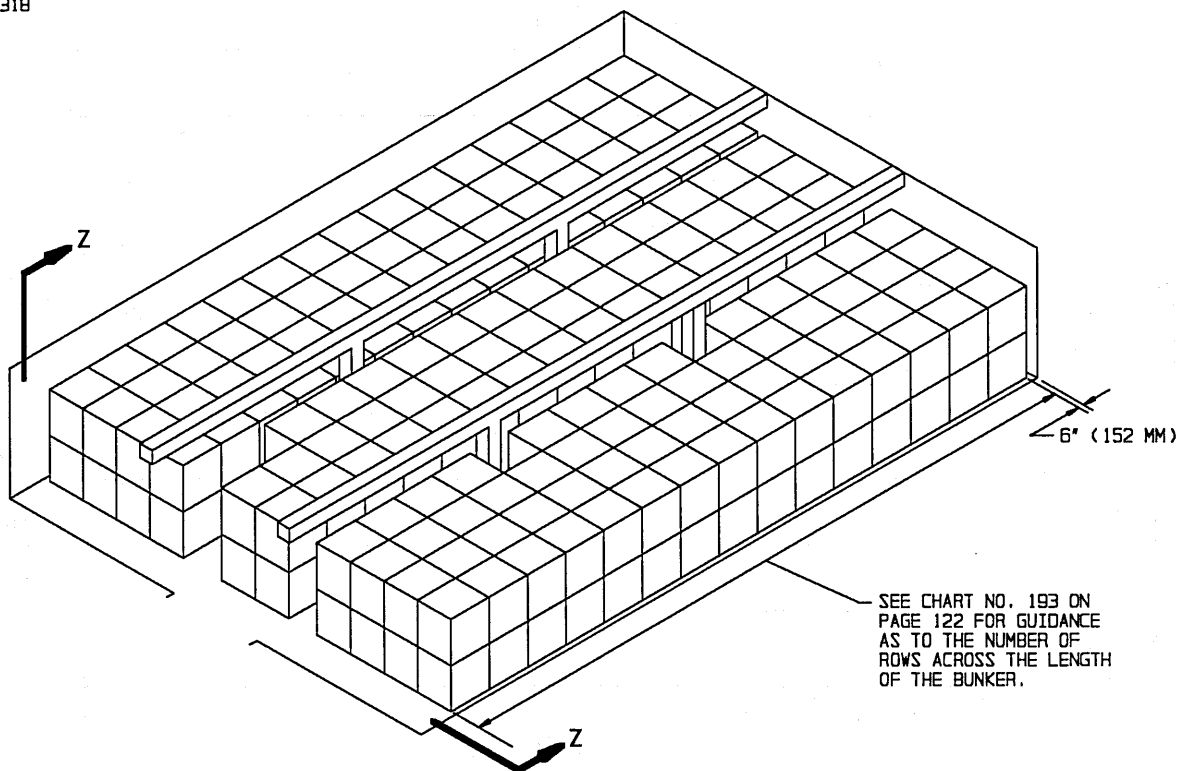
CHART NO. 186	
NUMBER OF STACKS LONG IN MHE AREA	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25'	27
OVER 25' TO 26'	26
OVER 26' TO 27'	25
OVER 27' TO 28'	24
OVER 28' TO 30'	23
OVER 30' TO 31'	22
OVER 31' TO 32'	21
OVER 32' TO 34'	20
OVER 34' TO 36'	19
OVER 36' TO 38'	18
OVER 38' TO 40-1/2'	17
OVER 40-1/2' TO 43'	16
OVER 43' TO 46'	15
OVER 46' TO 49'	14
OVER 49' TO 53'	13
OVER 53' TO 57'	12
OVER 57' TO 62'	11
OVER 62' TO 66'	10





## STORAGE AS SHOWN

ITEM            QUANTITY  
SKIDDED UNIT - - 318



ISOMETRIC VIEW

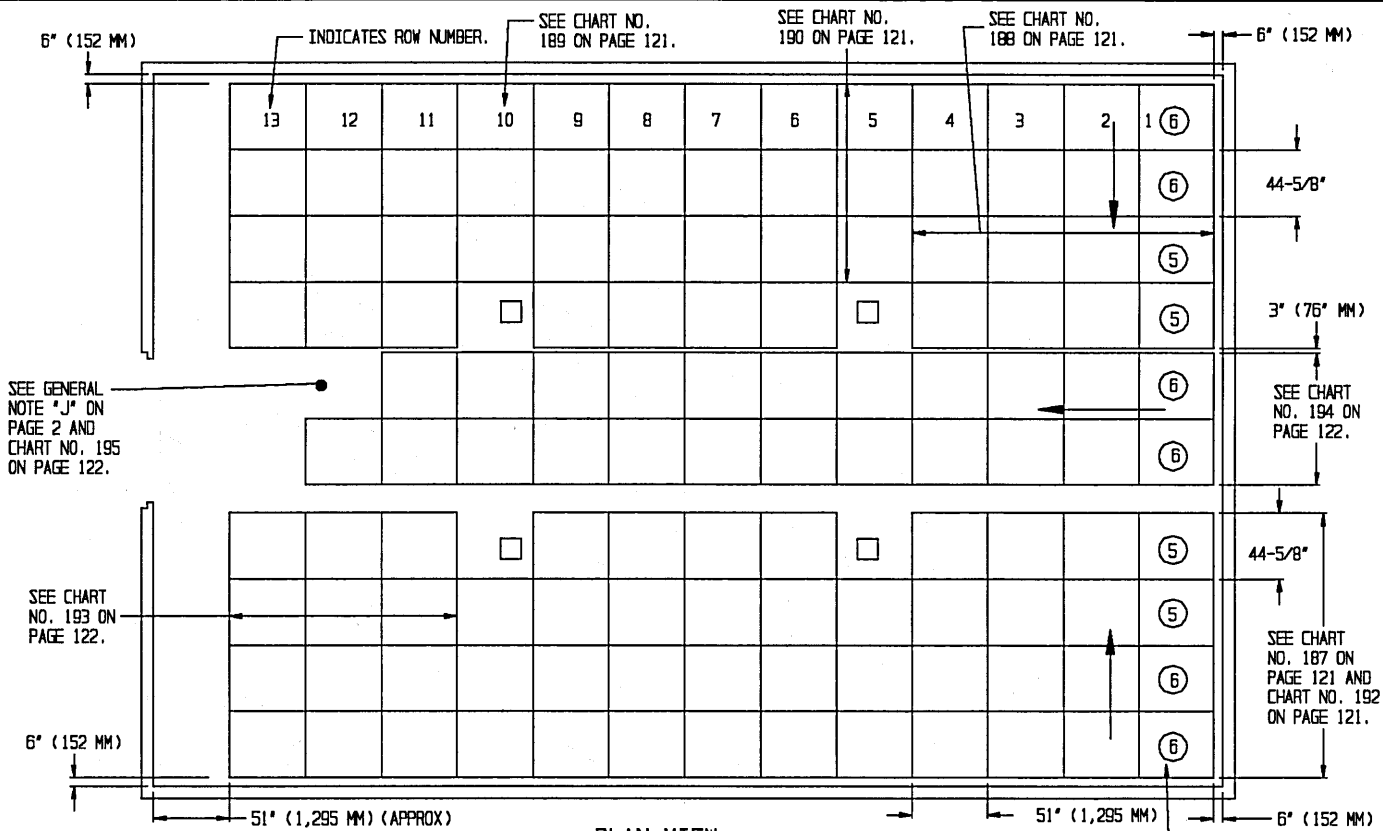
### SPECIAL NOTES:

1. THE TYPICAL SKIDDED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS, AND TIERS (LAYERS) WILL VARY, DEPENDENT UPON THE SIZE OF THE UNITS BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 120 THRU 122 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED WITHIN THE AMMUNITION BUNKER.
2. SKIDDED UNITS WILL BE STACKED IN VERTICAL ALIGNMENT. STAGGERED STACKING AS SHOWN FOR IGLOO, ARCH TYPE, STRADLEY AND OVAL-ARCH MAGAZINE STORAGE IS NOT APPLICABLE FOR STORAGE IN AMMUNITION BUNKERS.
3. A 6" (152 MM) MINIMUM SPACE WILL BE PROVIDED BETWEEN THE REAR WALL THE FRONT WALL AND/OR THE SIDEWALLS AND THE SKIDDED UNITS. CLEARANCE IS NOT REQUIRED BETWEEN THE STORED UNITS AND THE BUILDING PILLARS, ALTHOUGH A THREE INCH (3") (76 MM) SPACE IS SHOWN TO FACILITATE STORAGE OPERATIONS.
4. THE ARROWS ON THE PLAN VIEW ON PAGE 116 INDICATE THE DIRECTION OF STORAGE FROM THE SIDEWALL TOWARD THE MHE AISLE, OR FROM THE REAR TOWARD THE FRONT WALL, AND/OR WITHIN THE MHE AISLE FROM THE REAR WALL TOWARD THE DOOR OPENING.
5. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN UNLESS TWO UPPER SKIDDED UNITS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST CASES PROVIDE-ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT OF ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO SKIDDED UNITS AS ONE LIFT.
6. SKIDDED UNITS ALONG EACH SIDE OF THE BUNKER MAY BE STORED WITH EITHER THE UNIT LENGTH OR THE UNIT WIDTH ACROSS THE WIDTH OF THE BUNKER. ONE POSITIONING MAY PROVIDE DENSER STORAGE THAN THE OTHER, AND THE BEST METHOD SHOULD BE PRIOR DETERMINED BY STUDYING THE CHARTS ON PAGE 121 AND 122. FOR PLANNING PURPOSES, THE DISTANCE TO THE NEAR SIDE AND FAR SIDE OF THE FIRST COLUMN FROM THE 6" SPACE AT THE REAR IS 228" AND 242"; THE NEAR AND FAR SIDE OF THE SECOND COLUMN IS 466" AND 480" FROM THE 6" SPACE.

(CONTINUED AT RIGHT).

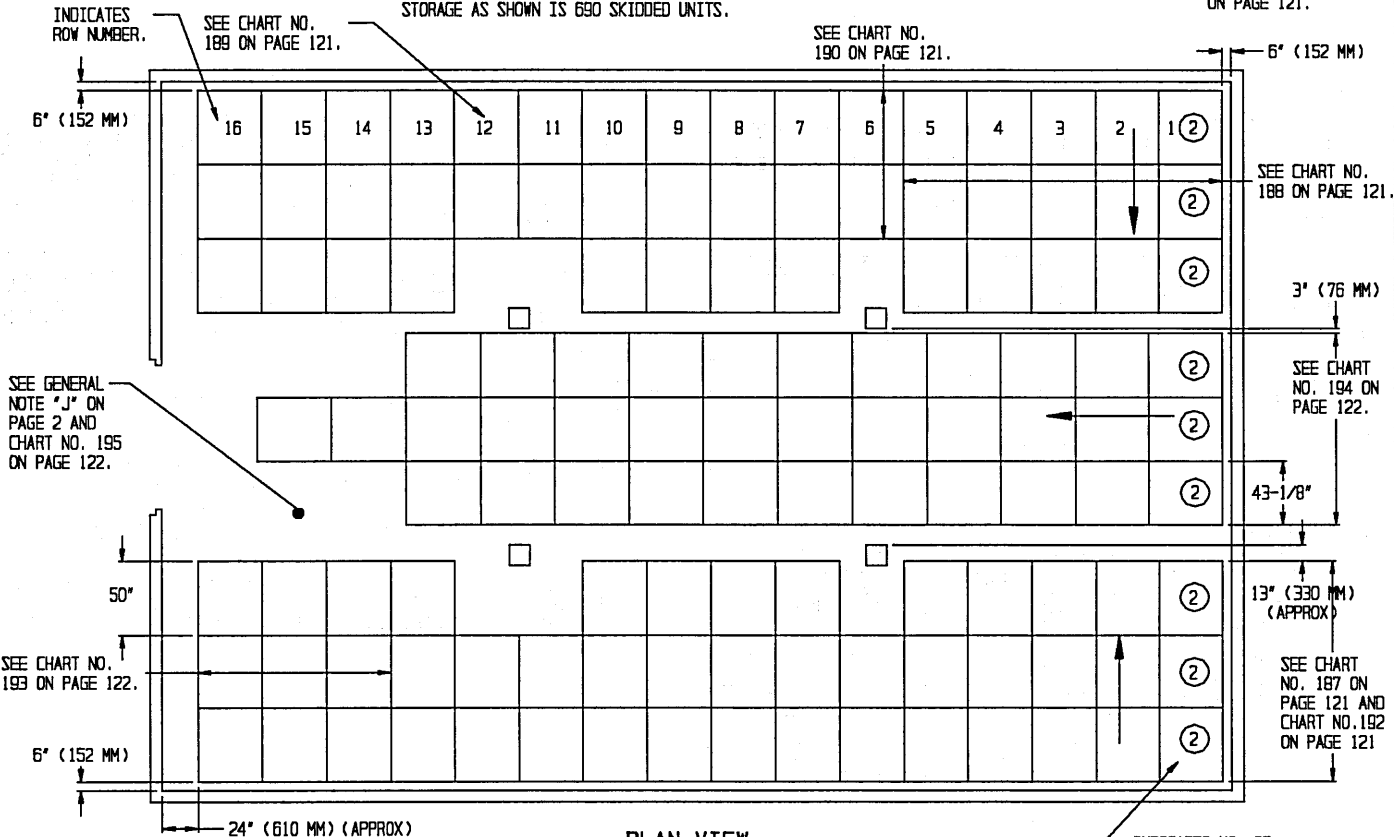
### (SPECIAL NOTES CONTINUED)

7. THE NUMBER OF STACKS SPECIFIED IN CHART NO. 187 IS BASED ON A MATERIALS HANDLING EQUIPMENT (MHE) AISLE OF AT LEAST 7'-7" (2311 MM) PLUS THE LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORLIFT TRUCK TINES (40" OR 1016 MM) WHICHEVER IS THE GREATEST. THE NUMBER OF STACKS AND/OR THE SIZE RANGE OF UNITS MAY VARY IF THE AVAILABLE MHE CAN OPERATE IN NARROWER AISLES.
8. IN SOME INSTANCES, ROWS OF NARROW UNITS MUST BE STORED TWO (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE LENGTH OF THE BUNKER, LENGTH OR WIDTH OF THE SKIDDED UNIT, AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, 2-WIDE STORAGE WILL NOT BE NECESSARY.
9. SKIDDED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE BUNKER).
10. REFER TO THE "TYPICAL MULTIPLE-LOT STORAGE FOR RECTANGULAR MAGAZINES" ON PAGE 104 FOR GUIDANCE IN THE STORAGE OF MULTIPLE LOTS IN A TYPE III BUNKER.
11. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.



**PLAN VIEW**

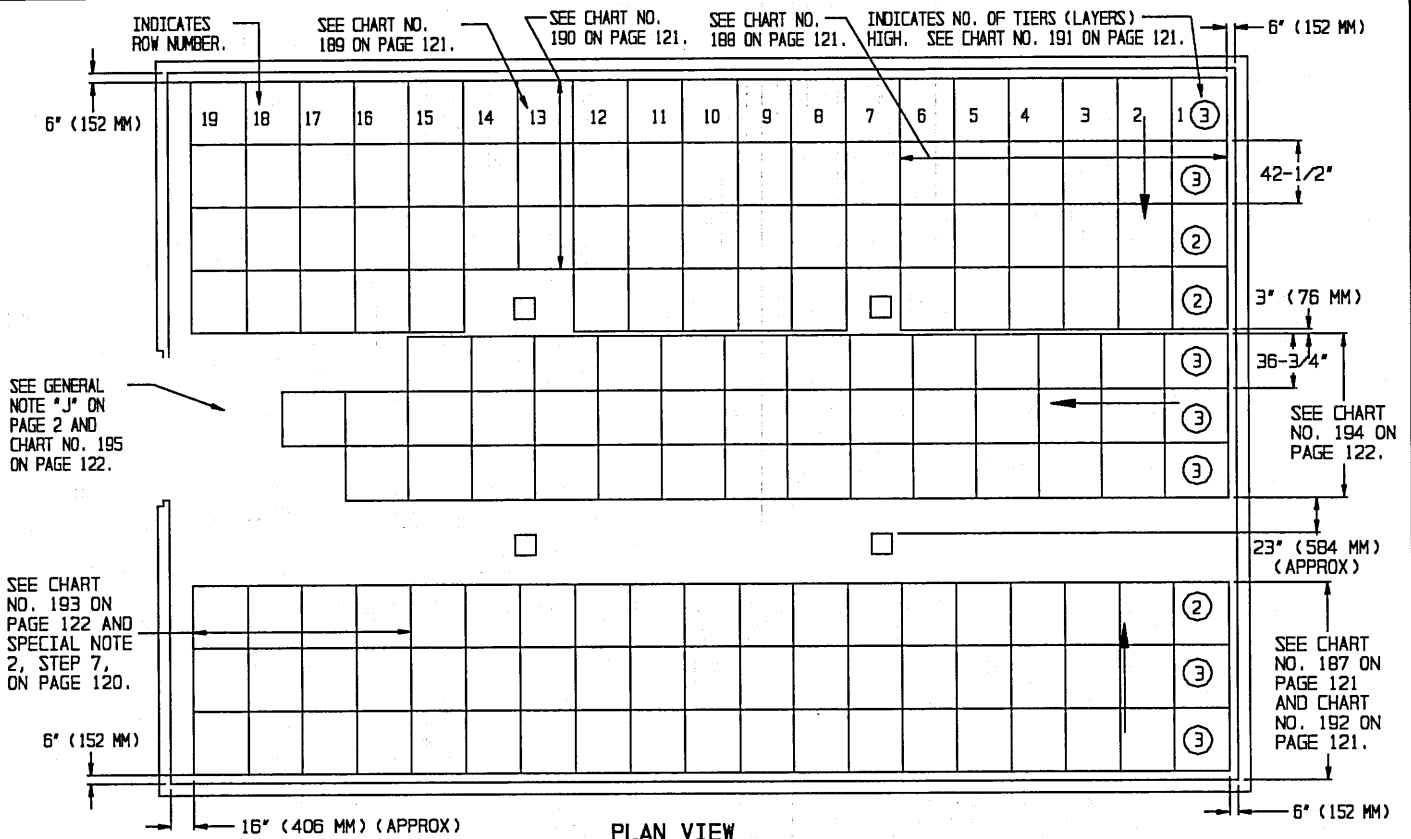
THE SKIDDED UNIT SHOWN IS 44-5/8' LONG BY 51" WIDE BY 20" HIGH. ALL STACKS ARE SIX TIERS (LAYERS) HIGH EXCEPT THOSE UNDER AND IMMEDIATELY BEHIND THE BEAMS, AND THE STACK NEAREST THE DOOR. STORAGE AS SHOWN IS 690 SKIDDED UNITS.



**PLAN VIEW**

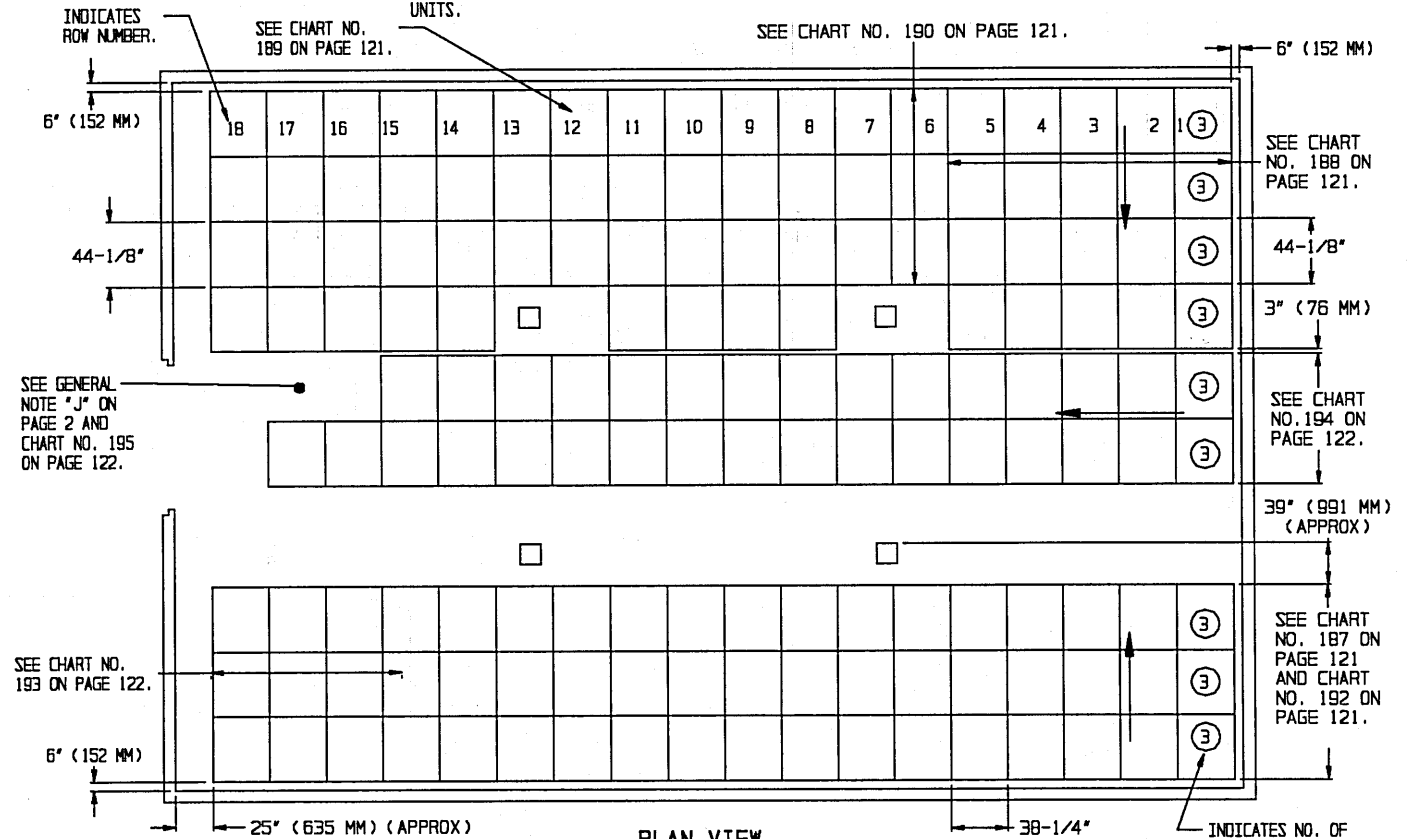
THE SKIDDED UNIT SHOWN IS 43-1/8' LONG BY 50' WIDE BY 52-1/2' HIGH. ALL STACKS ARE TWO TIERS (LAYERS) HIGH. STORAGE AS SHOWN IS 250 SKIDDED UNITS.

**TYPICAL STACKING PATTERNS IN 60'-0" L X 40'-0" W TYPE III AMMUNITION BUNKERS**



**PLAN VIEW**

THE SKIDDED UNIT SHOWN IS 36-3/4" LONG BY 42-1/2" WIDE BY 42" HIGH. ALL STACKS ARE THREE TIERS (LAYERS) HIGH EXCEPT THOSE UNDER AND IMMEDIATELY BEHIND THE BEAMS. STORAGE AS SHOWN IS 462 SKIDDED UNITS.



**PLAN VIEW**

THE SKIDDED UNIT SHOWN IS 38-1/4" LONG BY 44-1/8" WIDE BY 34" HIGH. ALL STACKS ARE THREE TIERS (LAYERS) HIGH. STORAGE AS SHOWN IS 462 SKIDDED UNITS.

1. THE CHARTS ON PAGES 121 AND 122 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PLAN FOR THE STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN 60'-0" LONG BY 40'-0" WIDE TYPE III AMMUNITION BUNKERS. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATIONS IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A BUNKER, AS WELL AS VARIANCE IN THE INSIDE DIMENSIONS OF THE BUNKER CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
2. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" AT RIGHT.

STEP 1

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 187 ON PAGE 121 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 40'-0" WIDTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH FIGURE ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED BETWEEN ONE SIDEWALL AND THE MHE AISLE. THE SECOND COLUMN INDICATES THE NUMBER OF STACKS WHICH CAN BE PLACED ON THE OPPOSITE SIDE OF THE MHE AISLE.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 188 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 60'-0" LENGTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF ROWS WHICH CAN BE PLACED BETWEEN THE REAR WALL OF THE BUNKER AND THE REAR-MOST CONCRETE PILLAR WHEN A 6" SPACE IS ALLOWED AT THE WALL.

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 189 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 60'-0" LENGTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBERS OF THE ROWS WHICH WILL BE BEHIND THE CONCRETE PILLARS WHEN ALL UNITS ARE POSITIONED IN THE SAME DIRECTION.

STEP 4

LOCATE IN THE LEFT HAND COLUMN CHART NO. 190 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 40'-0" WIDTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF STACKS WHICH CAN BE PLACED BETWEEN THE SIDEWALL OF THE BUNKER AND THE ADJACENT CONCRETE PILLAR.

STEP 5

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 191 THE HEIGHT OF THE UNIT TO BE STORED. OPPOSITE THAT FIGURE ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF TIERS (LAYERS) WHICH CAN BE POSITIONED UNDER THE BEAMS OF THE BUNKER. THAT IS ALSO THE MAXIMUM HEIGHT FOR SKIDDED UNIT STACKS WHICH ARE NOT AT LEAST 1" MORE THAN ONE FULL UNIT LENGTH OR WIDTH, AS APPLICABLE, BEHIND THE BEAM. THE SECOND COLUMN INDICATES THE NUMBER OF TIERS FOR ALL OTHER SKIDDED UNIT STACKS.

STEP 6

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 192 ON PAGE 121 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 40'-0" WIDTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF FULL-HEIGHT STACKS WHICH CAN BE PLACED BETWEEN THE SIDEWALL OF THE BUNKER AND THE BEAM.

STEP 7

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 193 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 60'-0" LENGTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF ROWS WHICH CAN BE PLACED IN THE LENGTH OF THE BUNKER, ALLOWING A 6" (152 MM) SPACE ACROSS THE REAR OF THE BUNKER. NOTE THAT THE SPECIFIED FIGURE IS ONLY APPLICABLE WHEN ALL UNITS IN THE LENGTH OF THE BUNKER ARE POSITIONED IN THE SAME DIRECTION.

STEP 8

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 194 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 40'-0" WIDTH OF THE BUNKER. THE COLUMN IMMEDIATELY ADJACENT INDICATES THE NUMBER OF ROWS WHICH CAN BE

PLACED IN THE MHE AREA WIDTH WHEN THE UNITS ARE ORIENTED THE SAME AS THE UNITS IN THE LATERALLY ADJACENT ROWS. THE NEXT COLUMN INDICATES THE NUMBER OF ROWS AND THE LENGTH OR WIDTH DIMENSION RANGE OF THE UNITS WHEN THEY ARE ROTATED 90° TO THOSE IN THE LATERALLY ADJACENT ROWS.

STEP 9

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 195 THE LENGTH OR WIDTH RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE LENGTH OF THE MHE AISLE (THE 60'-0" LENGTH OF THE BUNKER). OPPOSITE THAT LENGTH OR WIDTH DIMENSION IS INDICATED THE NUMBER OF STACKS IN THE ROWS WITHIN THE MHE AISLE, WHERE SUFFICIENT SPACE IS ALLOWED AT THE FRONT OF THE BUNKER FOR PLACEMENT OF THE UNITS WITH A FORKLIFT TRUCK. NOTE THAT ADDITIONAL STACKS MAY BE POSITIONED IN ONE OR MORE OF THE ROWS WHEN THE ROWS ARE ALIGNED WITH THE DOOR OPENING AND/OR WHEN THE AVAILABLE MHE PERMITS.

EXAMPLE

THE SKIDDED UNIT SHOWN AT THE TOP OF PAGE 118 HAS BEEN SELECTED FOR THE EXAMPLE. THE UNIT IS 41-7/8" LONG BY 51" WIDE BY 20" HIGH. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS NO. 187 THROUGH 195 IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES AT LEFT.

TO FIND THE NUMBER OF SKIDDED UNIT STACKS IN THE 40'-0" WIDTH OF THE BUNKER, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 187 ON PAGE 121 UNDER THE UNIT LENGTH OR WIDTH. THE 41-7/8" IS WITHIN THE OVER 37" TO 42" RANGE. FOLLOWING THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT, THE FIRST COLUMN INDICATES THAT 4 STACKS CAN BE STORED ON ONE SIDE OF THE MHE AISLE AND THE SECOND COLUMN INDICATES THAT 4 STACKS CAN ALSO BE STORED ON THE OPPOSITE SIDE. BY FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT FROM THE OVER 45" TO 56" RANGE IN CHART NO. 188 WE FIND THAT 4 ROWS CAN BE PLACED BETWEEN THE REAR WALL OF THE BUNKER AND THE FIRST PILLAR WHEN ALLOWING A 6" (152 MM) SPACE ACROSS THE REAR OF THE BUNKER. IN CHART NO. 189 THE 51" WIDTH DIMENSION WHICH IS POSITIONED IN THE LENGTH OF THE BUNKER IS WITHIN THE 48" THRU 51" RANGE. FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT WE FIND THAT ROW NO. 5 WILL FALL BEHIND THE FIRST PILLAR AND ROW 10 WILL FALL BEHIND THE SECOND PILLAR WHEN ALL THE UNITS ARE POSITIONED SO THE 51" WIDTH DIMENSION IS PLACED SO AS TO BE IN THE LENGTH OF THE BUNKER. TO FIND THE NUMBER OF STACKS BETWEEN THE SIDEWALL AND A PILLAR, LOCATE THE OVER 36" TO 48" DIMENSION IN THE FIRST COLUMN OF CHART NO. 190 WHICH INCLUDES THE 41-7/8" LENGTH DIMENSION THAT IS POSITIONED ACROSS THE WIDTH OF THE BUNKER. FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT, THE SECOND COLUMN INDICATES THAT 3 SKIDDED UNIT STACKS CAN BE POSITIONED.

TO FIND THE NUMBERS OF TIERS (LAYERS) WHICH CAN BE STORED, LOCATE THE UNIT HEIGHT OF 20" WITHIN THE OVER 19-1/2" TO 21-1/2" IN THE LEFT HAND COLUMN OF CHART NO. 191. FOLLOWING THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT, THE FIRST COLUMN INDICATES THAT 5 SKIDDED UNITS CAN BE STACKED UNDER THE BEAM AND ALSO JUST BEHIND THE BEAM IF THE STACK IS NOT AT LEAST 1" MORE THAN THE SKIDDED UNIT DIMENSION BEHIND THE BEAM. THE SECOND COLUMN INDICATES THAT 6 TIERS (LAYERS) CAN BE STORED IN ALL OTHER LOCATIONS WITHIN THE BUNKER, WITH THE POSSIBLE EXCEPTION OF STACKS ADJACENT TO THE DOOR OPENING WHICH MAY BE LIMITED BECAUSE OF THE DOOR HEIGHT. IN CHART NO. 192 ON PAGE 121, THE NUMBER OF FULL-HEIGHT STACKS WHICH CAN BE PLACED BETWEEN THE BEAM AND THE SIDEWALL OF THE BUNKER CAN BE DETERMINED BY LOCATING THE UNIT LENGTH OF 41-7/8" (THE DIMENSION POSITIONED ACROSS THE WIDTH) WHICH IS WITHIN THE OVER 35" TO 46" RANGE. FOLLOWING THE ARROW TO THE RIGHT WE FIND 2 FULL-HEIGHT STACKS CAN BE POSITIONED.

TO FIND THE NUMBER OF ROWS IN THE 60'-0" LENGTH OF THE BUNKER, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 193 ON PAGE 122. THE 51" WIDTH IS WITHIN THE OVER 50" TO 54" RANGE. FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT INDICATES THAT 13 ROWS CAN BE PLACED IN THE BUNKER WHEN ALLOWING A 6" (152 MM) SPACE ACROSS THE REAR. IN CHART NO. 194 THE 41-7/8" DIMENSION WHICH IS ACROSS THE WIDTH OF THE BUNKER IS WITHIN THE OVER 41" TO 42" RANGE. THE ADJACENT COLUMN INDICATES THE NUMBER OF ROWS WIDE IN THE MHE AISLE WHEN THE SKIDDED UNITS ARE ORIENTED THE SAME AS THE LATERALLY ADJACENT ROWS. THE FIGURE 2 IN THAT COLUMN SPECIFIES THAT 2 ROWS AT 41-7/8" LONG CAN BE POSITIONED ACROSS THE WIDTH OF THE MHE AISLE. HOWEVER, FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT INDICATES THAT 2 ROWS WITH THE 51" WIDTH ACROSS THE WIDTH OF THE BUNKER CAN BE POSITIONED IN THE WIDTH OF THE MHE AISLE. NOTE THAT GREATER DENSITY OF STORAGE CAN BE OBTAINED BY SELECTING THE LARGEST DIMENSION OF THE UNIT TO BE POSITIONED ACROSS THE WIDTH OF THE MHE AISLE. IN CHART NO. 195 THE 41-7/8" DIMENSION WHICH IS POSITIONED LENGTHWISE WITHIN THE MHE AISLE IS WITHIN THE OVER 41" TO 44" RANGE.

(CONTINUED AT RIGHT)

(CONTINUED ON PAGE 121)

FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT INDICATES THAT 13 STACKS CAN BE POSITIONED WITHIN THE LENGTH OF THE MHE AISLE. THIS ALLOWS SUFFICIENT SPACE INSIDE THE DOOR OPENING FOR THE FORKLIFT TRUCK OPERATING AREA. NOTE THAT ADDITIONAL STACKS MAY BE STORED IF THE ROWS ARE ALIGNED WITH THE DOOR OPENING OR IF THE AVAILABLE MHE PERMITS.

3. THE UNIT SIZE RANGE (LENGTH OR WIDTH) AND THE UNIT HEIGHT DIMENSIONS COVER ALL THE SIZES WITHIN THE RANGE SPECIFIED.

CHART NO. 190	
NUMBER OF STACKS BETWEEN SIDE WALL AND PILLAR	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25"	5
OVER 25" TO 36"	4
OVER 36" TO 48"	3
OVER 48" TO 66"	2

CHART NO. 187		
NUMBER OF STACKS ACROSS THE WIDTH		
UNIT LENGTH OR WIDTH	NUMBER OF STACKS	
	ONE SIDE	OPPOSITE SIDE
25"	7	6
OVER 25" TO 28"	6	6
OVER 28" TO 30"	6	5
OVER 30" TO 33"	5	5
OVER 33" TO 37"	5	4
OVER 37" TO 42"	4	4
OVER 42" TO 47"	4	3
OVER 47" TO 54"	3	3
OVER 54" TO 62"	3	2
OVER 62" TO 66"	2	2

CHART NO. 188	
NUMBER OF ROWS BETWEEN REAR WALL AND PILLAR	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
25"	9
OVER 25" TO 28"	8
OVER 28" TO 32"	7
OVER 32" TO 37-1/2"	6
OVER 37-1/2" TO 45"	5
OVER 45" TO 56"	4
OVER 56" TO 66"	3

CHART NO. 189	
ROWS WHICH FALL BEHIND PILLARS	
UNIT DIMENSIONS ACROSS LENGTH OF BUNKER	ROW NUMBERS
25"	10, 19 AND 20
26"	9, 10, 18 AND 19
27"	9 AND 18
28"	9, 17 AND 18
29"	8, 9 AND 17
30" AND 31"	8 AND 16
32"	8 AND 15
33"	7, 8 AND 15
34"	7, 8, 14 AND 15
35"	7 AND 14
36"	7, 13 AND 14
37"	7 AND 13
38"	6, 7 AND 13
39"	6, 7, 12 AND 13
40" AND 41"	6 AND 12
42" AND 43"	6, 11 AND 12
44"	6 AND 11
45" AND 46"	5, 6 AND 11
47"	5, 6, 10 AND 11
48" THRU 51"	5 AND 10
52"	5, 9 AND 10
53" THRU 56"	5 AND 9
57" AND 58"	4, 5 AND 9
60" THRU 66"	4 AND 8

CHART NO. 191		
NUMBER OF TIERS (LAYERS) HIGH		
UNIT HEIGHT	UNDER BEAM	ELSEWHERE
15" TO 16"	7	8
OVER 16" TO 16-1/2"	7	7
OVER 16-1/2" TO 18-1/2"	6	7
OVER 18-1/2" TO 19-1/2"	6	6
OVER 19-1/2" TO 21-1/2"	5	6
OVER 21-1/2" TO 23-1/2"	5	5
OVER 23-1/2" TO 26"	4	5
OVER 26" TO 29-1/2"	4	4
OVER 29-1/2" TO 32-1/2"	3	4
OVER 32-1/2" TO 39"	3	3
OVER 39" TO 43"	2	3
OVER 43" TO 56"	2	2

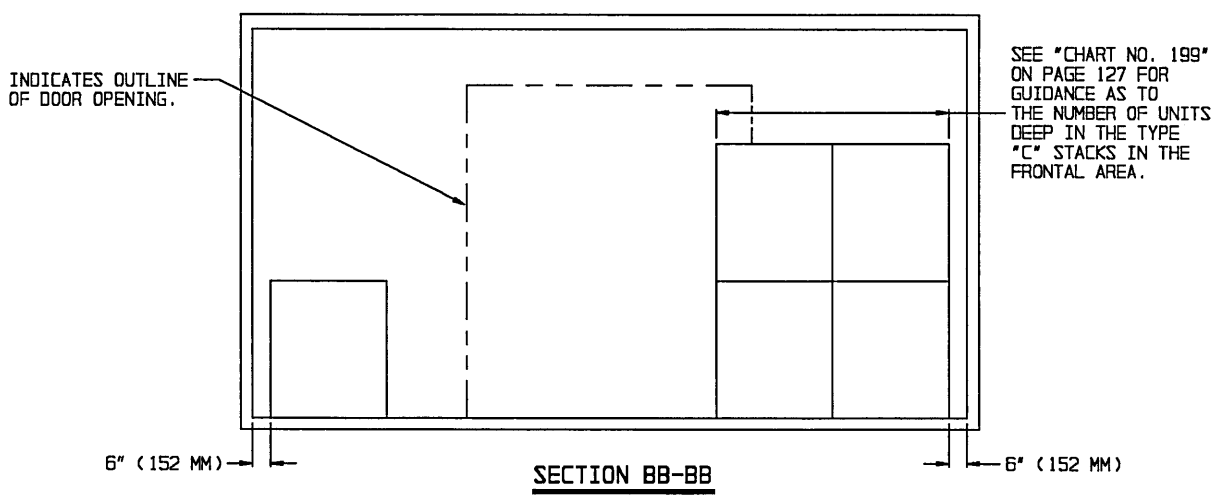
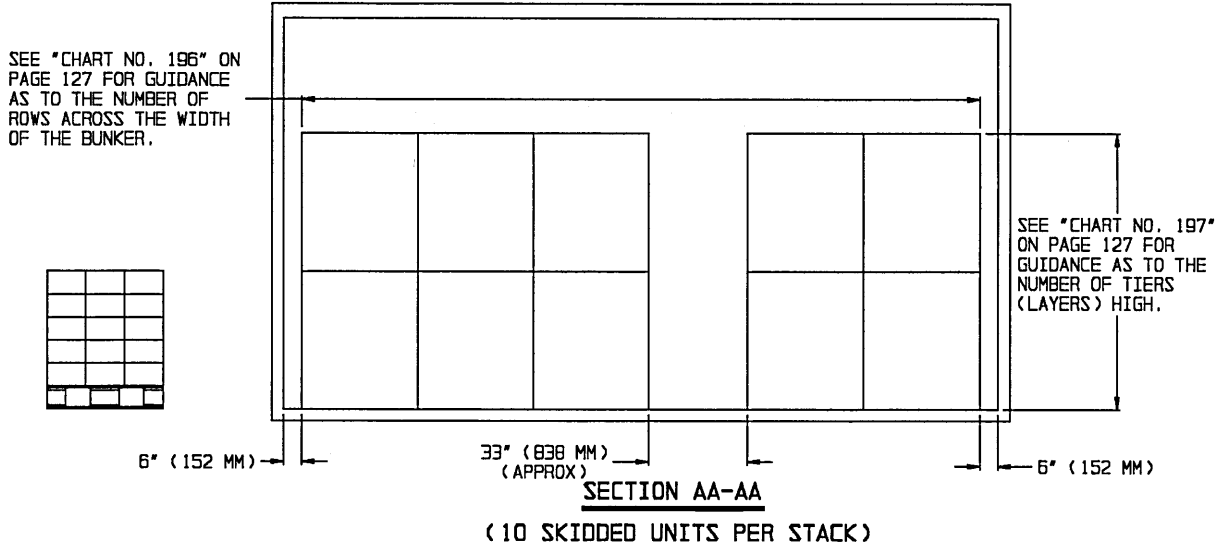
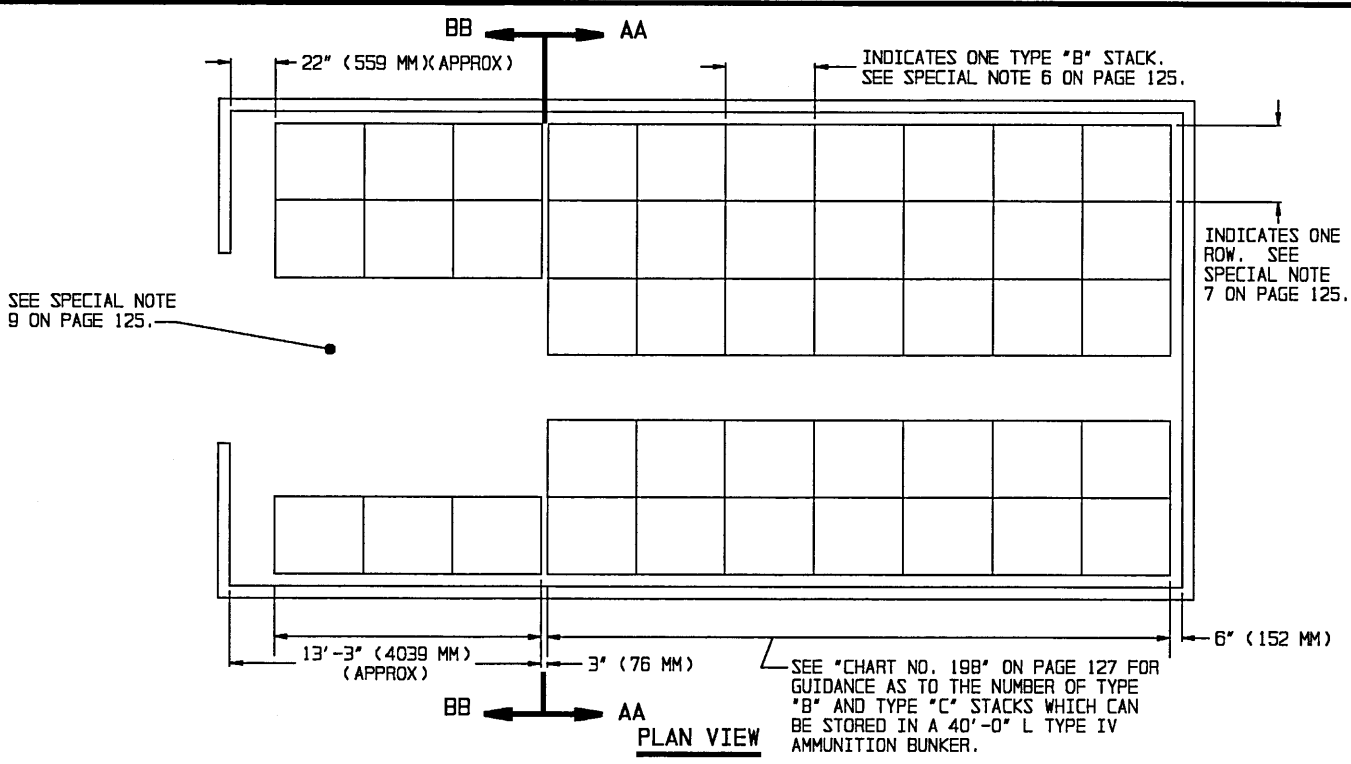
CHART NO. 192	
NUMBER OF FULL-HEIGHT STACKS BEHIND BEAM	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
25" TO 35"	3
OVER 35" TO 46"	2
OVER 46" TO 66"	1

CHART NO. 193	
NUMBER OF ROWS ACROSS THE LENGTH	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
OVER 25" TO 25"	28
OVER 25" TO 26"	27
OVER 26" TO 27"	26
OVER 27" TO 28"	25
OVER 28" TO 29"	24
OVER 29" TO 30"	23
OVER 30" TO 32"	22
OVER 32" TO 33"	21
OVER 33" TO 35"	20
OVER 35" TO 37"	19
OVER 37" TO 39"	18
OVER 39" TO 41"	17
OVER 41" TO 44"	16
OVER 44" TO 46"	15
OVER 46" TO 50"	14
OVER 50" TO 54"	13
OVER 54" TO 58"	12
OVER 58" TO 64"	11
OVER 64" TO 66"	10

CHART NO. 195	
NUMBER OF STACKS LONG IN MHE AISLE	
UNIT LENGTH OR WIDTH	NUMBER OF STACKS
OVER 25" TO 25"	23
OVER 25" TO 26"	22
OVER 26" TO 27"	21
OVER 27" TO 29"	20
OVER 29" TO 30"	19
OVER 30" TO 32"	18
OVER 32" TO 34"	17
OVER 34" TO 36"	16
OVER 36" TO 39"	15
OVER 39" TO 41"	14
OVER 41" TO 44"	13
OVER 44" TO 48"	12
OVER 48" TO 52"	11
OVER 52" TO 54"	10
OVER 54" TO 63"	9
OVER 63" TO 66"	8

CHART NO. 194		
NUMBER OF ROWS WIDE IN MHE AISLE		
UNIT DIM WIDTHWISE IN BUNKER	NUMBER OF ROWS WIDE	
	UNIT AT SAME POSITION	ALTERNATE UNIT POSITION (TURNED 90°)
OVER 25" TO 25"	4	2 AT 37" TO 55" OR 3 AT 25" TO 37"
OVER 25" TO 26"	5	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 26" TO 27"	4	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 27" TO 28"	3	2 AT 37" TO 55" OR 3 AT 27" TO 37" OR 4 AT 25" TO 27"
OVER 28" TO 29"	4	2 AT 37" TO 56" OR 3 AT 28" TO 37" OR 4 AT 25" TO 28"
OVER 29" TO 30"	3	2 AT 35" TO 53" OR 3 AT 26" TO 35" OR 4 AT 25" TO 26"
OVER 30" TO 31"	4	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 31" TO 33"	3	2 AT 39" TO 58" OR 3 AT 29" TO 39" OR 4 AT 25" TO 29"
OVER 33" TO 34"	4	2 AT 38" TO 58" OR 3 AT 29" TO 38" OR 4 AT 25" TO 29"
OVER 34" TO 37"	3	2 AT 33" TO 50" OR 3 AT 25" TO 33" OR 4 AT 25" TO 28"
OVER 37" TO 39"	3	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 39" TO 41"	3	2 AT 39" TO 59" OR 3 AT 29" TO 39" OR 4 AT 25" TO 29"
OVER 41" TO 42"	2	2 AT 37" TO 55" OR 3 AT 27" TO 37" OR 4 AT 25" TO 27"
OVER 42" TO 43"	3	2 AT 38" TO 57" OR 3 AT 28" TO 38" OR 4 AT 25" TO 28"
OVER 43" TO 44"	2	2 AT 36" TO 55" OR 3 AT 27" TO 36" OR 4 AT 25" TO 27"
OVER 44" TO 45"	2	2 AT 35" TO 53" OR 3 AT 26" TO 35" OR 4 AT 25" TO 26"
OVER 45" TO 47"	2	2 AT 32" TO 49" OR 3 AT 25" TO 32"
OVER 47" TO 48"	2	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 48" TO 54"	2	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 54" TO 55"	3	2 AT 40" TO 60" OR 3 AT 30" TO 40" OR 4 AT 25" TO 30"
OVER 55" TO 62"	2	2 AT 33" TO 50" OR 3 AT 25" TO 33" OR 4 AT 25" TO 28"
OVER 62" TO 63"	3	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"
OVER 63" TO 66"	2	2 AT 41" TO 62" OR 3 AT 31" TO 41" OR 4 AT 25" TO 31"

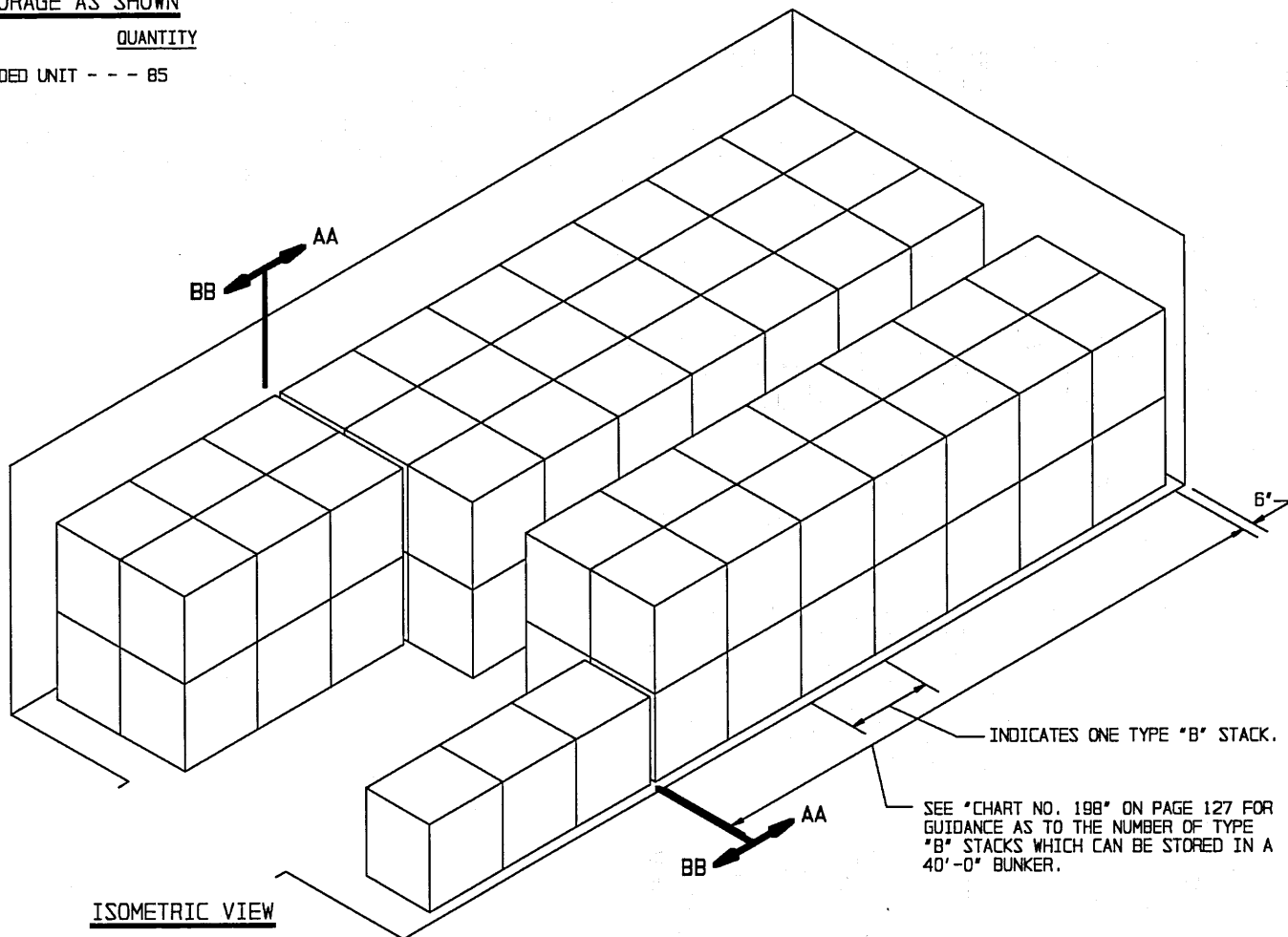
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**STORAGE AS SHOWN**

ITEM	QUANTITY
SKIODED UNIT - - -	85



**ISOMETRIC VIEW**

**SPECIAL NOTES:**

(SPECIAL NOTES CONTINUED)

1. THE TYPICAL SKIODED UNIT SHOWN HAS OVERALL DIMENSIONS OF 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. THE QUANTITY OF UNITS, THE NUMBER OF STACKS, ROWS AND TIERS (LAYERS) WILL VARY DEPENDENT UPON THE SIZE OF THE UNIT BEING STORED. SEE THE SPECIAL NOTES AND CHARTS ON PAGES 126 AND 127 FOR GUIDANCE. AS MANY UNITS AS POSSIBLE WILL BE STORED WITHIN THE AMMUNITION BUNKER.
2. SKIODED UNITS WILL BE STACKED IN VERTICAL ALIGNMENT. STAGGERED STACKING AS SHOWN FOR IGL00, ARCH TYPE, STRADLEY AND OVAL-ARCH TYPE MAGAZINE STORAGE IS NOT APPLICABLE FOR STORAGE IN AMMUNITION BUNKERS.
3. A 6" (152 MM) MINIMUM SPACE WILL BE PROVIDED BETWEEN THE REAR WALL, FRONT WALL, AND/OR SIDEWALLS AND THE SKIODED UNITS.
4. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN UNLESS TWO UPPER SKIODED UNITS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST CASES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT OF ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO SKIODED UNITS AS ONE LIFT.
5. SKIODED UNITS MAY BE STORED WITH EITHER THE UNIT LENGTH OR THE WIDTH ACROSS THE WIDTH OF THE BUNKER. ONE POSITIONING MAY PROVIDE DENSER STORAGE THAN THE OTHER, AND THE BEST METHOD SHOULD BE PRIOR DETERMINED BY STUDYING THE CHARTS ON PAGE 127.
6. THE NUMBER OF TYPE "B" STACKS SPECIFIED BY CHART NO. 198 ON PAGE 127 FOR A 40'-0" LONG BUNKER IS BASED ON HAVING A MATERIAL HANDLING EQUIPMENT AREA (DISTANCE FROM THE FACE OF THE LAST TYPE "B" STACK TO THE FRONT WALL OF THE BUNKER) OF 7'-7" (2311 MM) PLUS THE LENGTH OR WIDTH OF THE SKIODED UNIT, AS APPLICABLE, OR THE LENGTH OF THE FORKLIFT TRUCK TINES (40" OR 1,016 MM), WHICHEVER IS THE GREATEST. ADDITIONAL TYPE "B" STACKS MAY BE STORED IF THE AVAILABLE MATERIALS HANDLING EQUIPMENT PERMITS.
7. IF DESIRED, THE TYPE "C" STACKS IN THE FRONTAL AREA MAY BE OMITTED AND THE 5 ROWS SHOWN (OR OTHER ROWS AS SPECIFIED BY CHART NO. 196) FOR THE TYPE "B" STACKS EACH FORMED AS A SEPARATE LOT. A SPACE OF AT LEAST 1" SHOULD BE ALLOWED TO PROVIDE CLEARANCE FOR REMOVAL OF A LOT. IN SOME INSTANCES LOTS CONSISTING OF NARROW UNITS MUST BE STORED TWO (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE WIDTH OF THE BUNKER IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, 2-WIDE STORING WILL NOT BE NECESSARY. SEE PAGES 128 AND 129 FOR ADDITIONAL MULTIPLE-LOT STORAGE GUIDANCE.
8. SKIODED UNITS CONSISTING OF ROCKETS OR ROCKET MOTORS IN A PROPULSIVE STATE WILL BE STORED WITH ALL NOSE ENDS POINTED IN ONE DIRECTION (NOT TOWARD THE DOOR OF THE MAGAZINE).
9. IF THE AVAILABLE MHE AND/OR SPACE PERMITS, ADDITIONAL SKIODED UNITS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
10. IF DESIRED, AND IF NOT IN VIOLATION OF SURVEILLANCE REQUIREMENTS/PROCEDURES, ONE (1) SURVEILLANCE "CONTROL UNIT" SAMPLE, MAY BE WITHHELD FROM EACH STORED LOT. IF THE MAGAZINE CONTAINS ONLY ONE (1) LOT IT IS RECOMMENDED THAT THIS "CONTROL UNIT" BE PLACED JUST INSIDE THE DOOR WHERE IT IS EASILY ACCESSIBLE. IF THE MAGAZINE CONTAINS SEVERAL LOTS, THE "CONTROL UNIT" SAMPLES SHOULD BE PLACED ADJACENT TO THE MHE OPERATING AISLE FOR ACCESSIBILITY.

(CONTINUED AT RIGHT)

SPECIAL NOTES:

(SPECIAL NOTES CONTINUED)

1. THE CHARTS ON PAGE 127 ARE PRESENTED AS GUIDANCE IN THE DEVELOPMENT OF A PLAN FOR STORAGE OF SKIDDED UNITS OF AMMUNITION AND COMPONENTS IN 40'-0" LONG BY 20'-0" WIDE TYPE IV AMMUNITION BUNKERS. TO A CERTAIN EXTENT, THE CHARTS MAY ALSO BE USED IN CALCULATING THE QUANTITY OF UNITS WHICH CAN BE STORED. NOTICE: THE CHARTS ARE FOR GUIDANCE PURPOSES ONLY. VARIATION IN SKIDDED UNIT OVERALL SIZES, THE COMPACTNESS OF PLACEMENT WITHIN A BUNKER, AS WELL AS VARIANCE IN THE INSIDE DIMENSIONS OF THE BUNKER CAN CAUSE DISCREPANCIES WITHIN THE CHARTS.
2. THE FOLLOWING STEP-BY-STEP PROCEDURES ARE PRESENTED AS GUIDANCE IN USING THE DEPICTED CHARTS. SEE THE "EXAMPLE" BELOW.

STEP 1

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 196 ON PAGE 127 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 20'-0" WIDTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS A COLUMN WHICH INDICATES THE NUMBER OF STACKS OR ROWS ACROSS THE WIDTH OF THE BUNKER.

STEP 2

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 197 THE HEIGHT RANGE WHICH INCLUDES THE HEIGHT OF THE UNIT TO BE STORED. OPPOSITE THAT HEIGHT FIGURE IS INDICATED THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED.

STEP 3

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 198 THE LENGTH OR WIDTH DIMENSION NEAREST THE DIMENSION OF THE UNIT WHICH IS POSITIONED LENGTHWISE IN THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH FIGURE IS SPECIFIED THE APPROXIMATE NUMBER OF TYPE "B" STACKS (STACKS ACROSS THE BUNKER, USUALLY WITH AN AISLE BUT NOT NECESSARILY) AND THE NUMBER OF TYPE "C" STACKS (PARTIAL STACKS AT THE FRONT OF THE BUNKER) THAT CAN BE POSITIONED IN A 40'-0" LONG BUNKER. SEE SPECIAL NOTE 6 ON PAGE 125 FOR THE CRITERIA USED IN DETERMINING THE NUMBER OF TYPE "B" STACKS SPECIFIED WITHIN THE CHART.

STEP 4

LOCATE IN THE LEFT HAND COLUMN OF CHART NO. 199 THE LENGTH OR WIDTH DIMENSION RANGE WHICH INCLUDES THE DIMENSION OF THE UNIT TO BE STORED IN THE 20'-0" WIDTH OF THE BUNKER. OPPOSITE THAT LENGTH OR WIDTH FIGURE ARE TWO COLUMNS. THE FIRST COLUMN INDICATES THE NUMBER OF STACKS DEEP WHICH CAN BE POSITIONED ON ONE SIDE OF THE DOOR OPENING WITH A FORKLIFT TRUCK, TO A HEIGHT AS SPECIFIED BY CHART NO. 197. THE SECOND COLUMN INDICATES THE NUMBER OF ONE-HIGH STACKS WHICH CAN BE POSITIONED ON THE OPPOSITE SIDE BY USING A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE FIRST SIDE.

EXAMPLE

THE SKIDDED UNIT SHOWN IN THE VIEWS ON PAGES 124 AND 125 WILL BE USED FOR THE EXAMPLE. THE UNIT IS 39" LONG BY 44-7/8" WIDE BY 46-5/8" HIGH. A STORAGE PATTERN CAN BE DETERMINED BY FOLLOWING THE DOTTED-LINE EXAMPLE WITHIN CHARTS NO. 196 THROUGH 199 ON PAGE 127 IN CONJUNCTION WITH USING THE STEP-BY-STEP PROCEDURES ABOVE.

TO FIND THE NUMBER OF ROWS OR STACKS IN THE 20'-0" WIDTH OF THE BUNKER, LOOK IN THE LEFT HAND COLUMN OF CHART NO. 196 ON PAGE 127 UNDER THE UNIT LENGTH OR WIDTH. THE 39" IS WITHIN THE OVER 37" TO 44" RANGE. FOLLOWING THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT, INDICATES THAT 5 STACKS OR ROWS CAN BE STORED ACROSS THE BUNKER.

TO FIND THE NUMBER OF TIERS (LAYERS) WHICH CAN BE STORED, LOCATE THE UNIT HEIGHT OF 46-5/8" WITHIN THE OVER 43" TO 56" RANGE IN THE LEFT HAND COLUMN OF CHART NO. 197. FOLLOWING THE ARROW ALONG THE DOTTED LINE TO THE RIGHT INDICATES THAT 2 TIERS (LAYERS) CAN BE STORED IN THE BUNKER.

TO FIND THE NUMBER OF TYPE "B" AND TYPE "C" STACKS WHICH CAN BE STORED IN A BUNKER, LOOK AT CHART NO. 198. SINCE WE ARE POSITIONING THE 39" UNIT LENGTH ACROSS THE WIDTH OF THE BUNKER, WE NOW LOOK FOR THE DIMENSION NEAREST THE UNIT WIDTH OF 44-7/8" IN THE LEFT HAND COLUMN. FOLLOWING THE ARROWS TO THE RIGHT INDICATES THAT 7 TYPE "B" STACKS CAN BE STORED IN A 40'-0" LONG BUNKER, WITH A SPACE OF APPROXIMATELY 13'-3" REMAINING FOR AN MHE AREA. AFTER ALLOWING A 3" SPACE AT THE FRONT OF THE TYPE "B" STACKS, WE FIND BY FOLLOWING THE ARROW TO THE RIGHT THAT 3 TYPE "C" STACKS (POSITIONED THE SAME AS IN THE BALANCE OF THE BUNKER) CAN BE STORED, WITH APPROXIMATELY 21" OF SPACE AT THE FRONT WALL.

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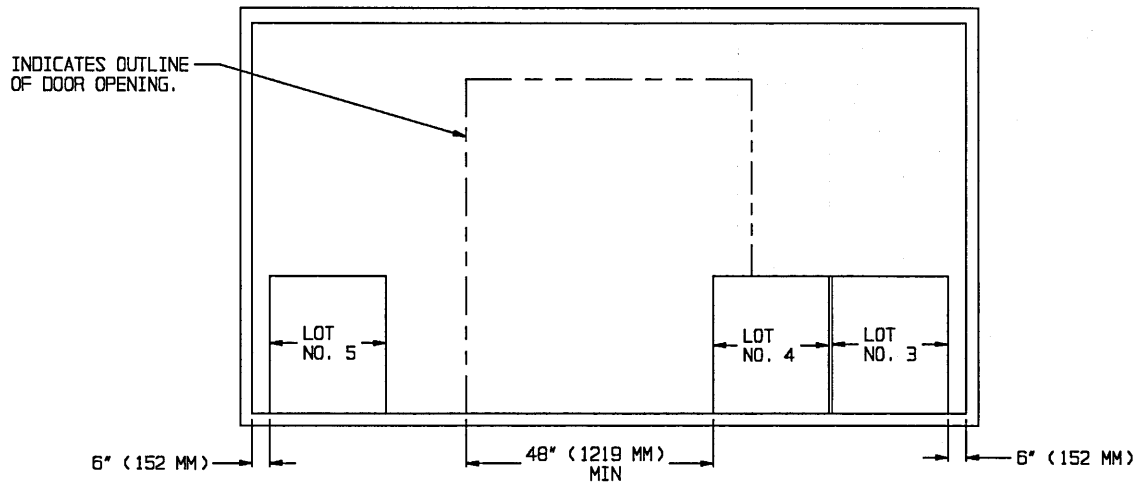
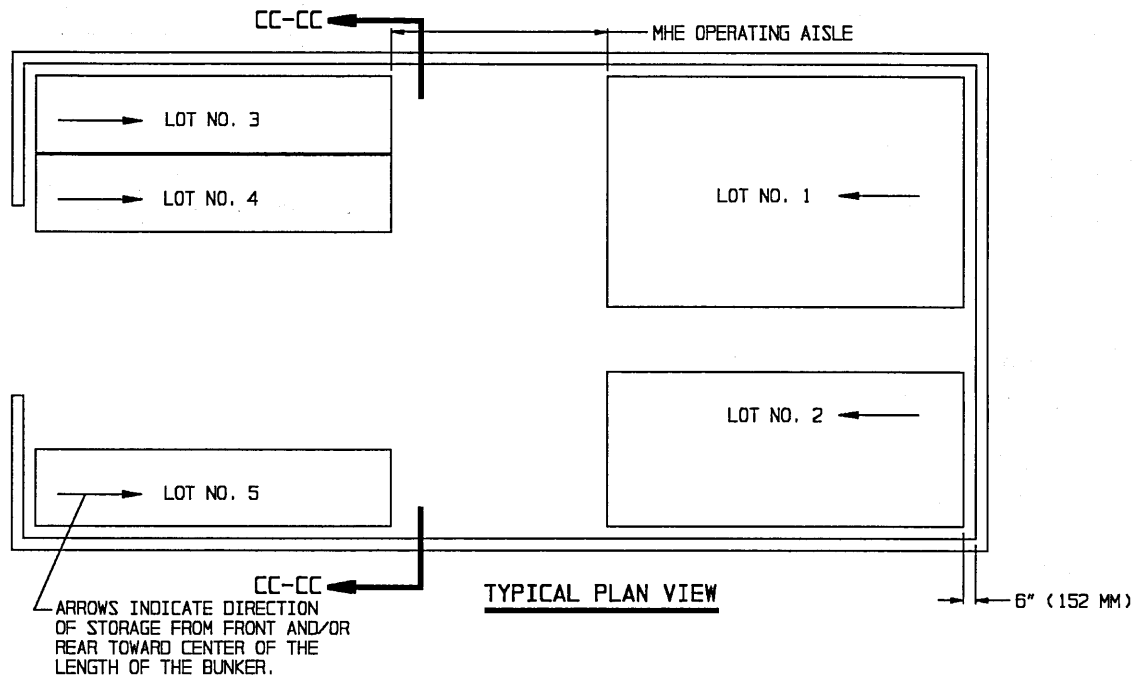
TO FIND THE NUMBER OF SKIDDED UNIT STACKS IN EACH TYPE "C" STACK LOCATE THE UNIT LENGTH OR WIDTH IN THE LEFT HAND COLUMN OF THE CHART NO. 199. FOLLOWING THE ARROWS ALONG THE DOTTED LINE TO THE RIGHT, THE FIGURE IN THE FIRST COLUMN INDICATES THAT 2 STACKS CAN BE PLACED AT THE LEFT SIDE OF THE DOOR OPENING, WITH A FORKLIFT TRUCK, TO THE NUMBER OF TIERS AS SPECIFIED BY CHART NO. 197. THE SECOND COLUMN INDICATES THAT 1 SKIDDED UNIT CAN BE PLACED ON THE OPPOSITE SIDE WITH A PALLET JACK AFTER COMPLETING ALL THE TIERS ON THE LEFT SIDE.

CHART NO. 196	
NUMBER OF ROWS ACROSS THE WIDTH	
UNIT LENGTH OR WIDTH	NUMBER OF ROWS
25"	8
OVER 25" TO 31"	7
OVER 31" TO 37"	6
OVER 37" TO 44"	5
OVER 44" TO 55"	4
OVER 55" TO 66"	3

CHART NO. 199		
NUMBER OF UNITS DEEP IN TYPE "C" STACKS		
UNIT DIMENSION CROSSWISE	ONE SIDE	OPPOSITE SIDE
25" TO 28"	4	2
OVER 28" TO 35"	3	1
OVER 35" TO 47"	2	1
OVER 47" TO 66"	1	1

CHART NO. 197	
NUMBER OF TIERS (LAYERS) HIGH	
UNIT HEIGHT	NUMBER OF TIERS
15" TO 16"	8
OVER 16" TO 18-1/2"	7
OVER 18-1/2" TO 21-1/2"	6
OVER 21-1/2" TO 26"	5
OVER 26" TO 32-1/2"	4
OVER 32-1/2" TO 43"	3
OVER 43" TO 56"	2

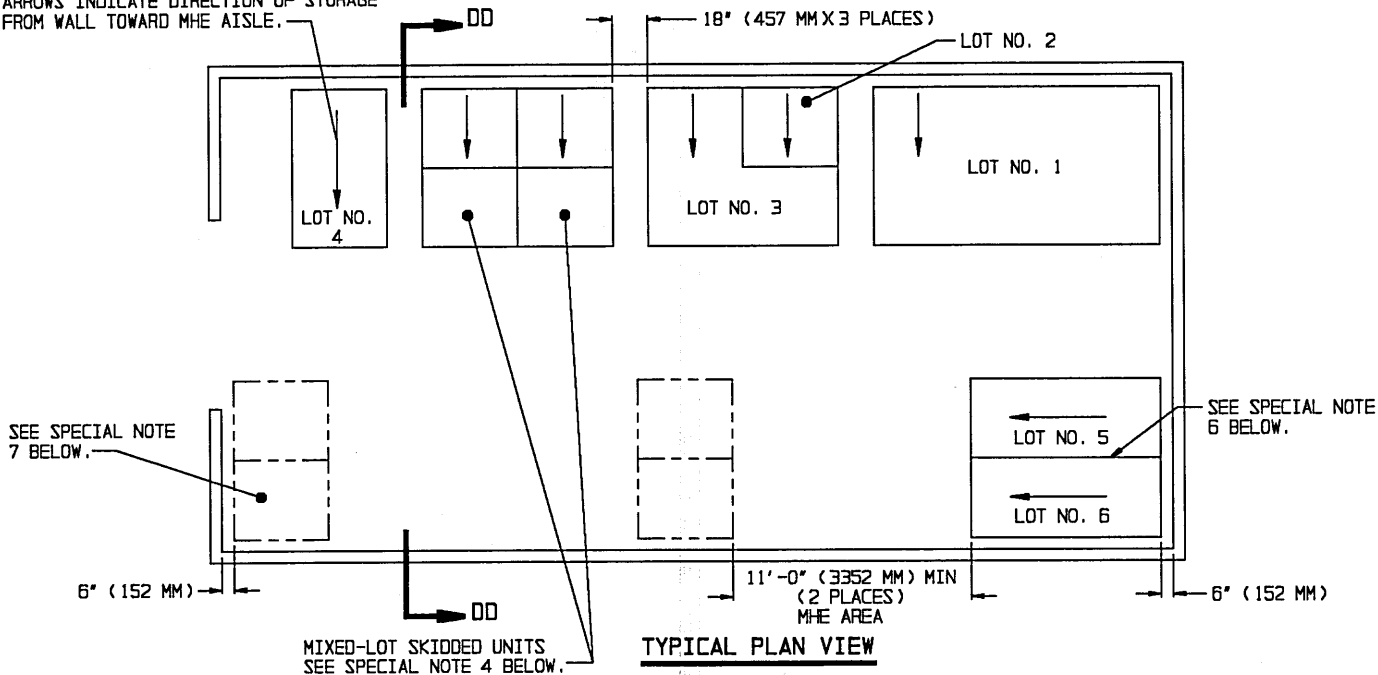
CHART NO. 198				
NUMBER OF STACKS IN BUNKER				
UNIT DIMENSIONS LENGTHWISE IN BUNKERS	"B" STACKS		"C" STACKS	
	NO.	MHE AISLE	NO.	SPACE REMAIN
66"	4	17'-6"	3	11"
65"	4	17'-10"	3	18"
64"	4	18'-2"	3	25"
63"	5	13'-3"	2	32"
62"	5	13'-8"	2	39"
61"	5	14'-1"	2	46"
60"	5	14'-6"	2	53"
59"	5	14'-11"	2	60"
58"	5	15'-4"	3	9"
57"	5	15'-9"	3	17"
56"	5	16'-2"	3	25"
55"	5	16'-7"	3	33"
54"	6	12'-6"	2	39"
53"	6	13'-0"	2	47"
52"	6	13'-6"	2	55"
51"	6	14'-0"	2	12"
50"	6	14'-6"	3	21"
49"	6	15'-0"	3	30"
48"	7	11'-6"	2	39"
47"	7	12'-1"	2	48"
46"	7	12'-3"	3	11"
45"	7	13'-3"	3	21"
44"	7	13'-10"	3	31"
43"	8	10'-10"	2	41"
42"	8	11'-6"	3	9"
41"	8	12'-2"	3	20"
40"	8	12'-10"	3	31"
39"	8	13'-6"	3	42"
38"	9	11'-0"	3	15"
37"	9	11'-9"	3	27"
36"	9	12'-6"	3	39"
35"	9	13'-3"	4	16"
34"	10	11'-2"	3	31"
33"	10	12'-9"	4	11"
32"	10	12'-10"	4	25"
31"	11	11'-1"	4	8"
30"	11	12'-0"	4	23"
29"	11	12'-11"	5	9"
28"	12	11'-6"	4	25"
27"	12	12'-6"	5	14"
26"	13	11'-4"	4	31"
25"	13	12'-5"	5	23"



**SPECIAL NOTES:**

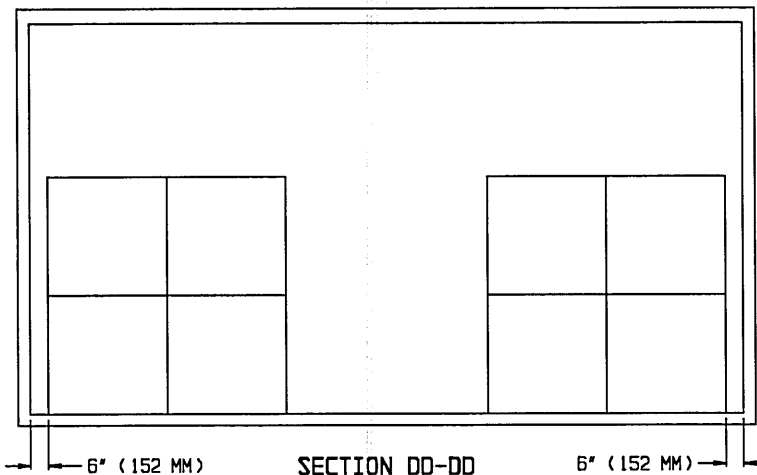
1. THE MULTIPLE LOT STORAGE PLAN SHOWN IS TYPICAL ONLY. ADAPTATIONS MAY BE MADE TO THE STORAGE PLAN AS THE NUMBER AND SIZES OF LOTS TO BE STORED IN THE BUNKER REQUIRE.
2. THE LARGEST LOT WILL BE STORED IN TYPE "B" STACKS ACROSS THE REAR OF THE BUNKER. SEE "CHART NO. 196" ON PAGE 127 FOR GUIDANCE AS TO THE NUMBER OF ROWS IN THESE STACKS. IF THE LOT OCCUPIES LESS THAN 1/4 OF THE MAGAZINE, STORAGE IN REAR OF BUNKER OF MORE THAN ONE (1) LOT MAY BE ERRECTED IN ROWS SIMILAR TO THAT SHOWN IN THE FRONTAL AREA. THE SMALLER LOTS WILL BE STORED IN ROWS RUNNING THE LENGTH OF THE BUNKER. LOTS WILL NOT BE MIXED WITHIN STORAGE STACKS, BUT ONLY TO THE EXTENT THAT ITEMS OF ONE LOT WILL NOT BE STACKED ON TOP OF ITEMS OF ANOTHER LOT.
3. EXCEPT FOR EACH ROW ADJACENT TO THE EXCESS SPACE, AT THE REAR, OR ON EITHER SIDE OF THE DOOR OPENING, LOTS CONSISTING OF NARROW UNITS MUST BE STORED TWO (2) UNITS WIDE TO PROVIDE SUFFICIENT OPERATING WIDTH FOR THE MATERIALS HANDLING EQUIPMENT (MHE). IF THE UNIT DIMENSION WHICH IS POSITIONED ACROSS THE BUNKER, LENGTH OR WIDTH, AS APPLICABLE, IS GREAT ENOUGH TO PROVIDE SUFFICIENT MHE OPERATING WIDTH, LOTS NEED NOT BE STORED IN DOUBLE ROWS.
4. FOR ADDITIONAL GUIDANCE IN THE STORAGE OF MULTIPLE LOTS, SEE THE TYPICAL PLAN VIEW AND THE SPECIAL NOTES ON PAGE 129.

ARROWS INDICATE DIRECTION OF STORAGE FROM WALL TOWARD MHE AISLE.



MIXED-LOT SKIDDED UNITS  
SEE SPECIAL NOTE 4 BELOW.

**TYPICAL PLAN VIEW**



**SECTION DD-DD**

**SPECIAL NOTES:**

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTATIONS MAY BE MADE TO SUIT DIMENSIONS OF THE SKIDDED UNIT TO BE STORED AND AS NUMBER AND SIZES OF LOTS IN BUNKER REQUIRE. THE TYPICAL SKIDDED UNIT SHOWN IS 40" LONG BY 48" WIDE BY 40" HIGH.
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 IN THE REAR OF THE BUNKER. 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 BUNKER, 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.
4. A MIXED-LOT SKIDDED UNIT MAY HAVE FROM TWO LOTS PER SKIDDED UNIT UPWARDS TO AS MANY DIFFERENT LOTS AS BOXES WITHIN THAT UNIT. HOWEVER, ALL ITEMS AND LOTS WITHIN THE SKIDDED UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE BUNKER MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. SKIDDED UNITS OF A SINGLE-LOT OR MIXED-LOT SKIDDED 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 MORE SKIDDED UNITS, PROVIDING THE

**(SPECIAL NOTES CONTINUED)**

- CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. 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. AREAS ENCLOSED 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 BUNKER. 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 UNIT LOADS 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-FOOT MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL LOCATION" BY FORKLIFT TRUCK. THIS OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS COMMONLY USED IN STORAGE BUNKERS. 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 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 BUNKER; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS IN STORAGE RESULTS.

