STORAGE IN KOREAN MAGAZINES OF 155MM AND 8" SEPARATE LOADING PROJECTILES, UNPALLETIZED AND ON PALLETS

<u>ITEM</u>	PAGE (S)
GENERAL NOTES, AND MATERIAL SPECIFICATIONS	2
DETAILS	- 3
PROJECTILES, UNPALLETIZED	,
155MM (SMALL)	- 15
155MM(LARGE)	6.7
155MM(RA)	_ 9.0
8" (SMALL)	- 10 11
8" (ARGE)	10 10
8" (RA)	14 15
PROJECTILES, ON PALLETS	14, 15
155MM (SMALL)	16
155MM (LARGE OR RA)	17
8" (SMALL)	18
8" (LARGE OR RA)	

ı	REVISIONS		FIF	Z RH					
			\top	1	GRG/	W	HORG OFFICE		
1					APPROVED, COMMAND NLH	U.S. ARRIV ARMA	MENT, MUNITIONS	AND CHEMICAL	
					Wester O. Holcomban				
ı		L			MATERIEL	OWNAMD (AMC)	MANDING COMPAN,	W.B. ARMY	
					US ARMY DEFENSE AMMUNITION CENTER AND SCHOOL				
\sqcup		! 	U.S.	ARMY	AMC D	RAWING			
ı					APRIL 1989				
ļ			<u> </u>		CLASS	DIVISION	DRAWING	FILE	
					19	48	4320	3PE 1000	

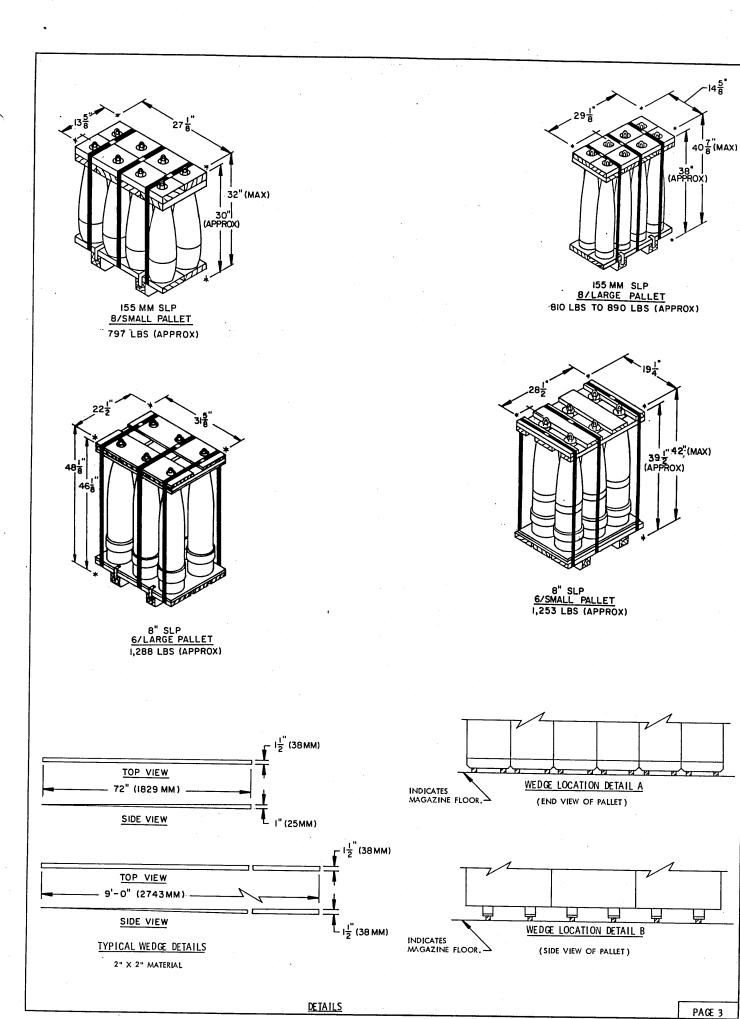
DO NOT SCALE

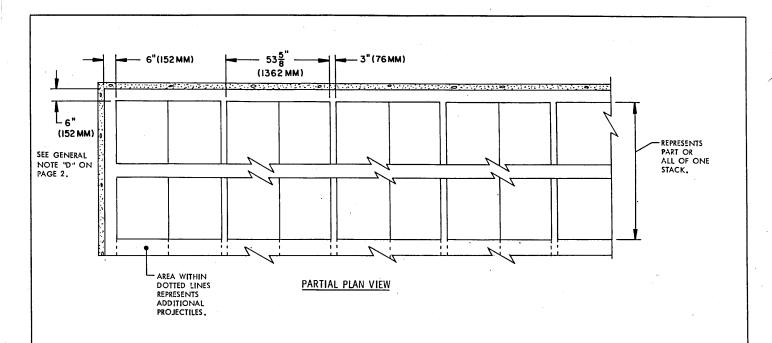
GENERAL NOTES

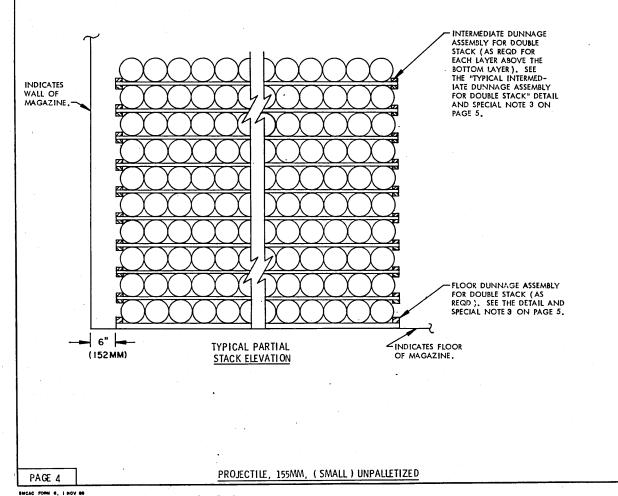
- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE STORAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS TYPES AND SIZES OF MAGAZINES. THE DIRECTION OF STORAGE WILL DEPEND ON THE MAGAZINE AVAILABLE FOR USE. THE VIEWS ARE TYPICAL ONLY, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED.
- C. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED. STORAGE OF SOME SPECIFIC TYPES OF SEPARATE LOADING PROJECTILES MUST ALSO COMPLY WITH CURRENT DIRECTIVES AND REGULATORY REQUIREMENTS OTHER THAN AS SPECIFIED IN THIS DRAWING.
- D. STORED ITEMS MUST NOT CONTACT THE WALLS OF A MAGAZINE. A MINIMUM OF SIX INCHES (6") WILL BE ALLOWED BETWEEN A SIDE WALL. AND THE STORED ITEMS. A MINIMUM OF SIX INCHES (6") WILL ALSO BE ALLOWED BETWEEN THE REAR WALL AND ITEMS.
- E. IN CONJUNCTION WITH THE SPECIFIED STACK-LEVELING WEDGES IF REQUIRED, AND THE FLOOR DUNNAGE AND INTERMEDIATE DUNNAGE ASSEMBLIES, ADDITIONAL STACK-STABILIZING DUNNAGE IN THE FORM OF "SHIMS" PROBABLY WILL BE REQUIRED TO ACHIEVE SOUND AND ACCEPTABLE STABLE STACKS
- F. AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR VARIATIONS IN PALLET UNIT DIMENSIONS.
- G. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF UNITED STATES NOMINAL SIZE. ONE-INCH (1") THICK MATERIAL IS ACTUALLY 3/4" THICK AND TWO-INCH (2") THICK MATERIAL IS ACTUALLY 1-1/2" THICK. TWO INCH (2") WIDE MATERIAL IS ACTUALLY 1-1/2" WIDE AND FOUR INCH (4") WIDE MATERIAL IS ACTUALLY 3-1/2" WIDE. WHEN CONSTRUCTING DUNNAGE ASSEMBLIES, THE AVAILABLE LUMBER WHICH IS NEAREST THE ACTUAL SIZE OF THE LUMBER SPECIFIED WILL BE USED. THE VARIOUS FLOOR DUNNAGE AND INTERMEDIATE DUNNAGE ASSEMBLIES ARE DIMENSIONED SUCH THAT SLIGHT VARIATIONS IN LUMBER SIZE WILL NOT BE CRITICAL.
- H. THE NAIL SIZES SPECIFIED HEREIN ARE 6d NAILS WHICH ARE TWO INCHES (2") (51MM) IN LENGTH AND 10d NAILS WHICH ARE THREE INCHES (3") (76MM) IN LENGTH. THE AVAILABLE NAILS WHICH ARE NEAREST THESE SIZES WILL BE USED.
- J. NOTICE: A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN LAMINATING DUNNAGE. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.
- K. NAILING THROUGH ANY PORTION OF THE STORED UNITS IS PROHIBITED.
- L. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT WHICH HAVE NOT BEEN SPECIFIED IN METRIC MAY RE COM-PUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM; WEIGHTS MAY BE COMPUTED ON THE BASIS OF ONE POUND EQUALS 0.454KG.
- M. IF MORE THAN ONE LOT IS BEING STORED, THE LARGEST LOT SHOULD BE STORED IN THE REAR OR ON ONE SIDE OF THE MAGAZINE. AN INSPECTION AISLE OF NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH LOT.

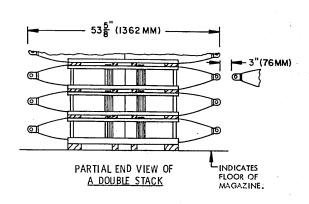
MATERIAL SPECIFICATIONS

LUMBER:	SEE TM 743-200-1, DUNNAGE LUMBER, FED SPEC MM-L-751.
NAILS:	COMMON, FED SPEC FF-N-135.
STRAPPING, STEEL-:	CLASS I, TYPE I OR IV, HEAVY DUTY, FINISH B (GRADE 2), FED SPEC QQ-S-781.



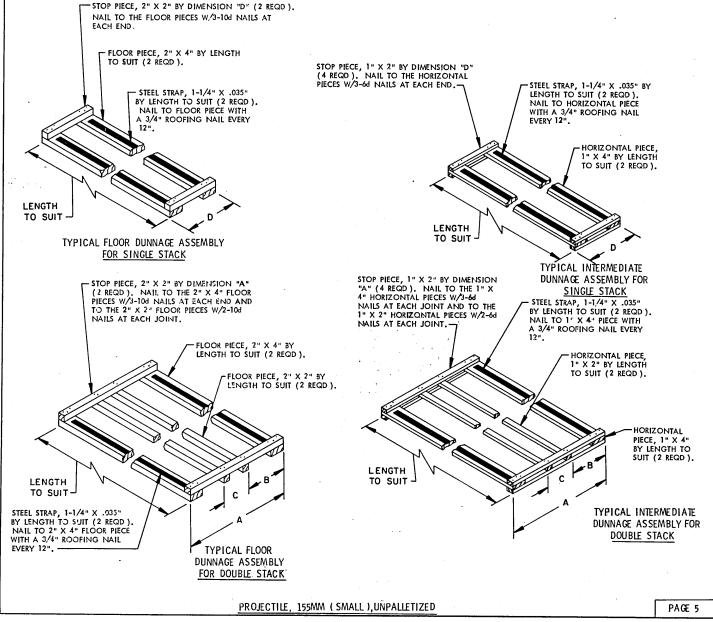


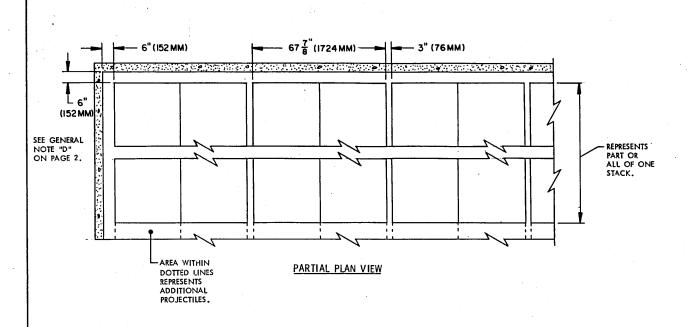


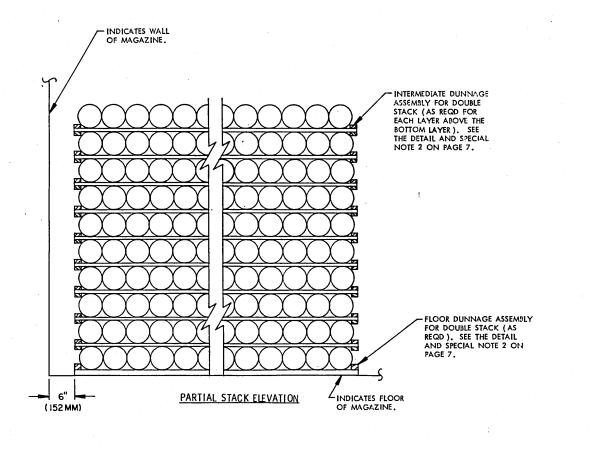


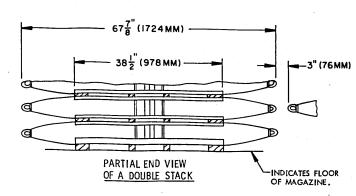
	DIMEN	SION CHART	
	HE PROJ	ILLUM PROJ	
A B C D	27" (686MM) 10" (254MM) 7" (178MM) 13-5/8" (346MM)	24" (613MM) 7-5/16" (186MM) 9-3/8" (238MM) 8-1/4" (209MM)	

- THESE PROCEDURES DEPICT PROJECTILES STORED IN A "BLOCK" PATTERN.
 IF DESIRED AISLES APPROXIMATELY: 30" WIDE MAY BE PROVIDED AT THE
 REAR AND/OR SIDE WALLS AND ALSO BETWEEN EACH DOUBLE STACK TO
 FACILITATE STACKING AND REMOVAL OF PROJECTILES.
- PROJECTILES ARE STORED BASE TO BASE IN CONTACT AND NOSE TO NOSE WITH A 3" LATERAL AISLE.
- 3. THE NUMBER OF PROJECTILES IN THE WIDTH OF THE STACK WILL VARY WITH THE SIZE OF THE MAGAZINE BEING USED AND THE DESIRED WIDTH OF THE ACCESS AISLE (S). FLOOR PIECES AND HORIZONTAL PIECES IN THE DUNNAGE ASSEMBLIES MUST NOT BE SPLICED; EACH PIECE MUST BE FULL LENGTH. MORE THAN ONE SET OF DUNNAGE ASSEMBLIES MAY BE USED PER STACK AND FER LAYER TO MEET THIS REQUIREMENT.
- 4. PROJECTILES ARE SHOWN STACKED APPROXIMATELY 5'-10" HIGH AS A RECOMMENDED MAXIMUM HEIGHT. THE HEIGHT OF THE STACKS MAY BE INCREASED OR DECREASED TO SUIT.
- PROJECTILES SHOULD BE STORED IN DOUBLE STACKS FOR BETTER STABILITY AS SHOWN BY THE "PARTIAL END VIEW OF A DOUBLE STACK".



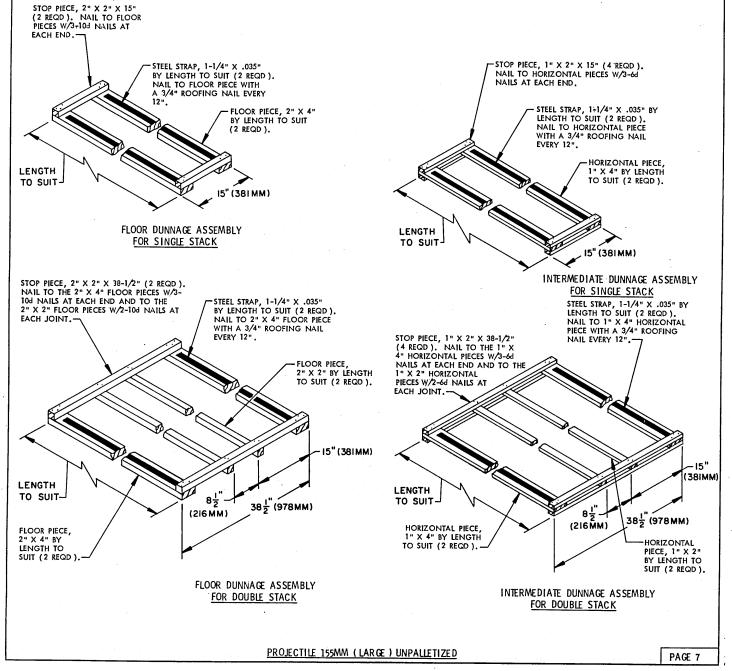


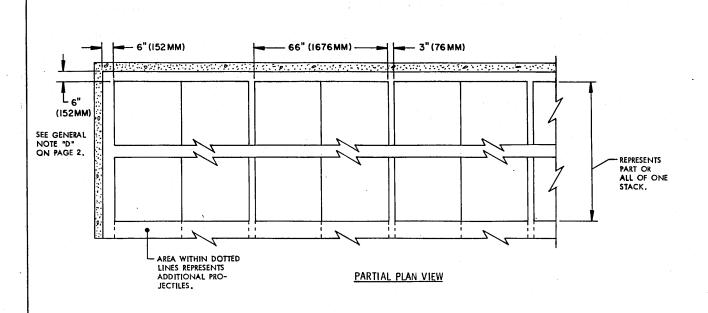


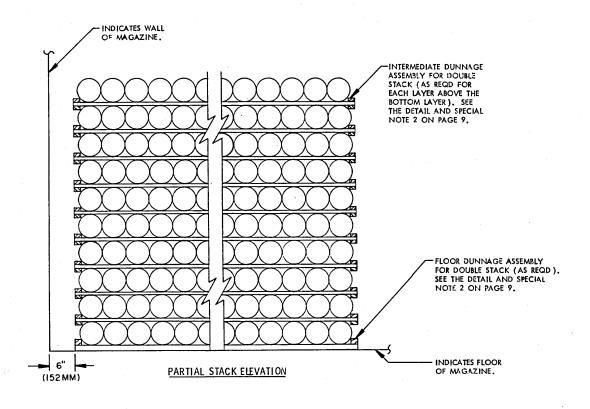


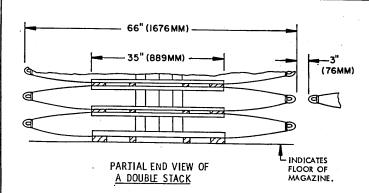
NOTE: PROJECTILES ARE STORED BASE TO BASE IN CONTACT AND NOSE TO NOSE WITH A 3" LATERAL AISLE.

- THESE PROCEDURES DEPICT PROJECTILES STORED IN A "BLOCK" PATTERN.
 IF DESIRED, AISLES APPROXIMATELY 30" WIDE MAY BE PROVIDED AT THE
 REAR AND/OR SIDE WALLS AND ALSO BETWEEN EACH DOUBLE STACK TO
 FACILITATE STACKING AND REMOVAL OF THE PROJECTILES.
- 2. THE NUMBER OF PROJECTILES IN THE WIDTH OF THE STACK WILL VARY WITH THE SIZE OF THE MAGAZINE BEING USED AND THE DESIRED WIDTH OF THE ACCESS AISLE (S). FLOOR PIECES AND HORIZONTAL PIECES IN THE DUNNAGE ASSEMBLIES MUST NOT BE SPLICED, EACH PIECE MUST BE FULL LENGTH. MORE THAN ONE SET OF DUNNAGE ASSEMBLIES MAY BE USED PER STACK AND PER LAYER TO MEET THIS REQUIREMENT.
- 3. PROJECTILES ARE SHOWN STACKED APPROXIMATELY 5'-10" HIGH AS A RECOMMENDED MAXIMUM HEIGHT. THE HEIGHT OF THE STACKS MAY BE INCREASED OR DECREASED TO SUIT.
- 4. PROJECTILES SHOULD BE STORED IN DOUBLE STACKS FOR BETTER STABILITY AS SHOWN BY THE "PARTIAL END VIEW OF A DOUBLE STACK".







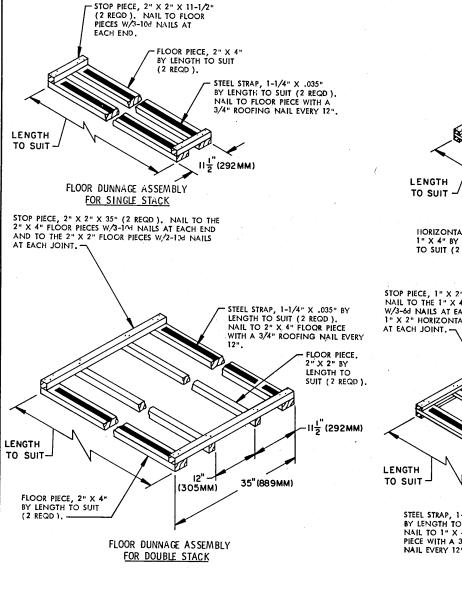


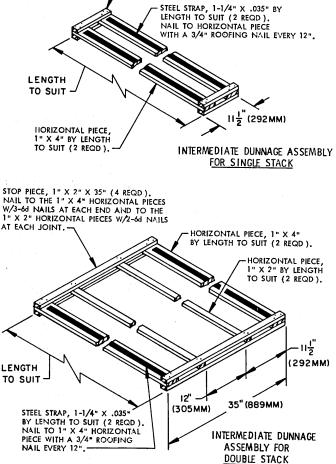
 ${\underline{\sf NOTE:}}$ PROJECTILES ARE STORED BASE TO BASE IN CONTACT AND NOSE TO NOSE WITH A 3" LATERAL AISLE.

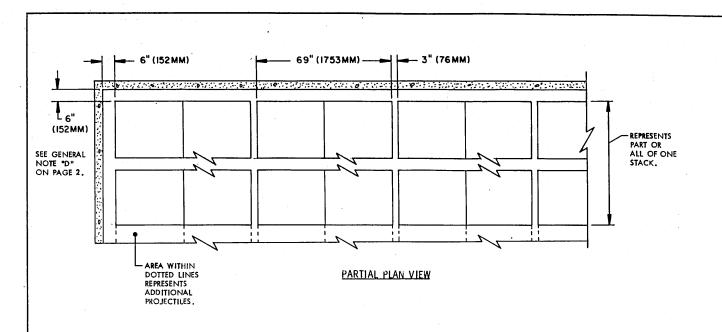
- THESE PROCEDURES DEPICT PROJECTILES STORED IN A "BLOCK" PATTERN. IF DESIRED, AISLES APPROXIMATELY 30" WIDE MAY BE PROVIDED AT THE REAR AND/ OR SIDE WALLS AND ALSO BETWEEN EACH DOUBLE STACK TO FACILITATE STACK-ING AND REMOVAL OF THE PROJECTILES.
- 2. THE NUMBER OF PROJECTILES IN THE WIDTH OF THE STACK WILL VARY WITH THE SIZE OF THE MAGAZINE SEING USED AND THE DESIRED WIDTH OF THE ACCESS AISLE (S). FLOOR PIECES AND HORIZONTAL PIECES IN DUNNAGE ASSEMBLIES MUST NOT BE SPLICED; EACH PIECE MUST BE FULL LENGTH. MORE THAN ONE SET OF DUNNAGE ASSEMBLIES MAY BE USED PER STACK AND PER LAYER TO MEET THIS REQUIREMENT.
- PROJECTILES ARE SHOWN STACKED APPROXIMATELY 5'-10" HIGH AS A RECOMMEN-DED MAXIMUM HEIGHT. THE HEIGHT OF THE STACKS MAY BE INCREASED OR DECREASED TO SUIT.

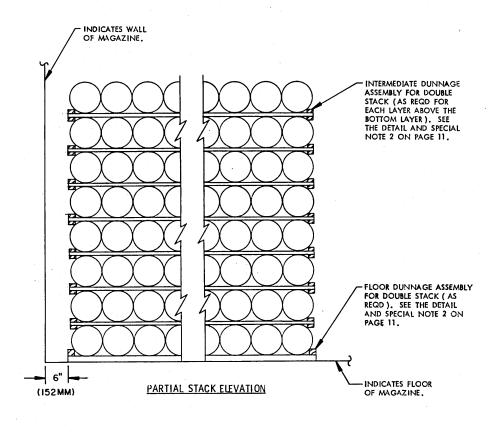
STOP PIECE, 1" X 2" X 11-1/2" (4 REQD). NAIL TO HORIZONTAL PIECES W/3-6d NAILS AT EACH END.

 PROJECTILES SHOULD BE STORED IN DOUBLE STACKS FOR BETTER STABILITY AS SHOWN BY THE "PARTIAL END VIEW OF A DOUBLE STACK".

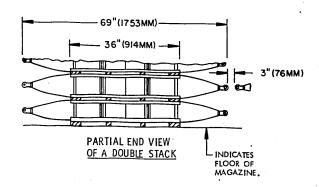






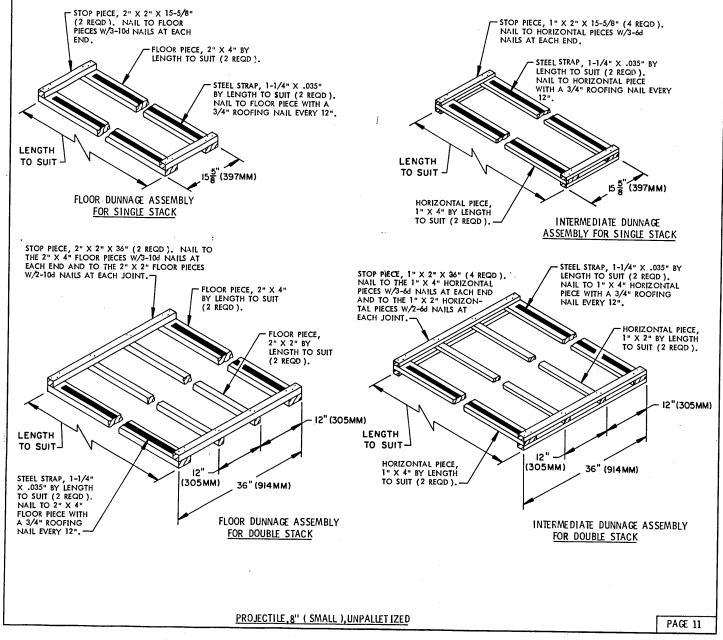


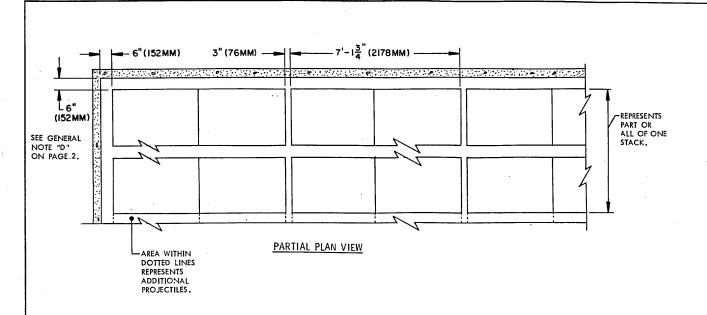
PAGE 10

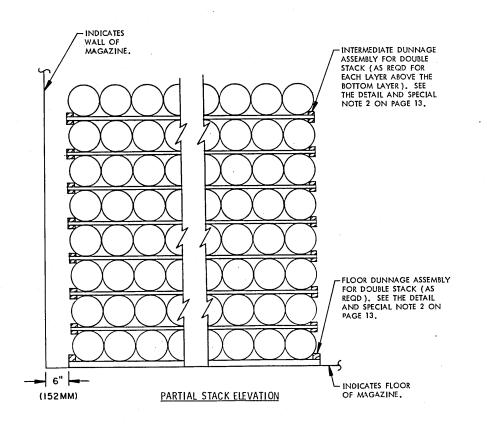


NOTE: PROJECTILES ARE STORED BASE TO BASE IN CONTACT AND MOSE TO MOSE WITH A 3" LATERAL AISLE.

- THESE PROCEDURES DEPICT PROJECTILES STORED IN A "BLOCK" PATTERN. IF DESIRED, AISLES APPROXIMATELY 30" WIDE MAY BE PROVIDED AT THE REAR AND/OR SIDE WALLS AND ALSO BETWEEN EACH DOUBLE STACK TO FACILITATE STACKING AND REMOVAL OF THE PROJECTILES.
- 2. THE NUMBER OF PROJECTILES IN THE WIDTH OF THE STACK WILL VARY WITH THE SIZE OF THE MAGAZINE BEING USED AND THE DESIRED WIDTH OF THE ACCESS AISLE (5). FLOOR PIECES AND HORIZONTAL PIECES IN THE DUNNAGE ASSEMBLIES MUST NOT BE SPLICED; EACH PIECE MUST BE FULL LENGTH. MORE THAN ONE SET OF DUNNAGE. ASSEMBLIES MAY BE USED PER STACK AND PER LAYER TO MEET THIS REQUIREMENT.
- PROJECTILES ARE SHOWN STACKED APPROXIMATELY 68" HIGH AS A RECOMMEN-DED MAXIMUM HEIGHT. THE HEIGHT OF THE STACKS MAY BE INCREASED OR DECREASED TO SUIT.
- PROJECTILES SHOULD BE STORED IN DOUBLE STACKS FOR BETTER STABILITY AS SHOWN BY THE "PARTIAL END VIEW OF A DOUBLE STACK".







PAGE 12

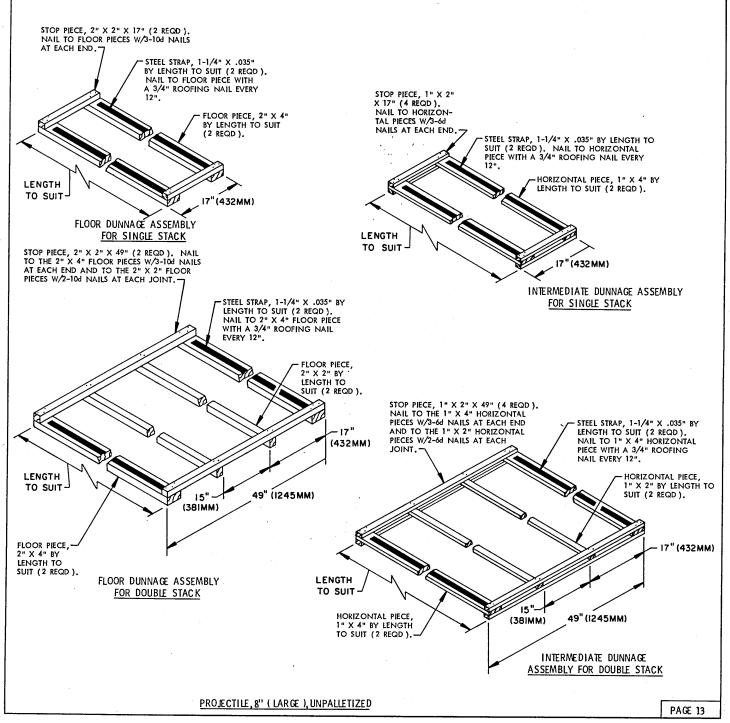
PROJECTILE, 8" (LARGE), UNPALLETIZED

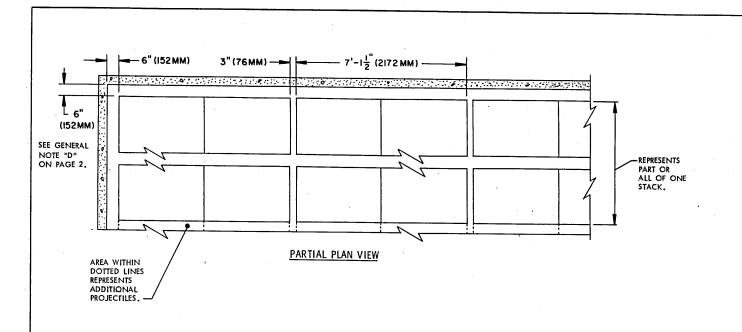
PARTIAL END VIEW OF A DOUBLE STACK 7'-1\frac{3}{4}"(2178MM) -3"(76MM) -3"(76MM)

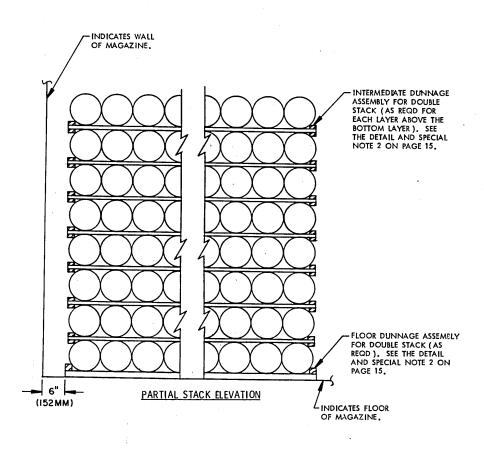
 ${\underline{\sf NOTE}}_{:}$ PROJECTILES ARE STORED BASE TO BASE IN CONTACT AND NOSE TO NOSE WITH A 3" LATERAL AISLE.

SPECIAL NOTES:

- THESE PROCEDURES DEPICT PROJECTILES STORED IN A "BLOCK" PATTERN. IF DESIRED, AISLES APPROXIMATELY 30" WIDE MAY BE PROVIDED AT THE REAR AND/OR SIDE WALLS AND ALSO BETWEEN EACH DOUBLE STACK TO FACILITATE STACKING AND REMOVAL OF THE PROJECTILES.
- 2. THE NUMBER OF PROJECTILES IN THE WIDTH OF THE STACK WILL VARY WITH THE SIZE OF THE MAGAZINE BEING USED AND THE DESIRED WIDTH OF THE ACCESS AISE (S). FLOOR PIECES AND HORIZONTAL PIECES IN DUNNAGE ASSEMBLIES MUST NOT BE SPLICED; EACH PIECE MUST BE FULL-LENGTH, MORE THAN ONE SET OF DUNNAGE ASSEMBLIES MAY BE USED PER STACK AND PER LAYER TO MEET THIS REQUIREMENT.
- PROJECTILES ARE SHOWN STACKED APPROXIMATELY 68" HIGH AS A RECOMMEN-DED MAXIMUM HEIGHT. THE HEIGHT OF THE STACKS MAY BE INCREASED OR DECREASED TO SUIT.
- PROJECTILES SHOULD BE STORED IN DOUBLE STACKS FOR BETTER STABILITY AS SHOWN BY THE "PARTIAL END VIEW OF A DOUBLE STACK".
- 5. AISLE DIMENSIONS MAY BE ADJUSTED TO SUIT.

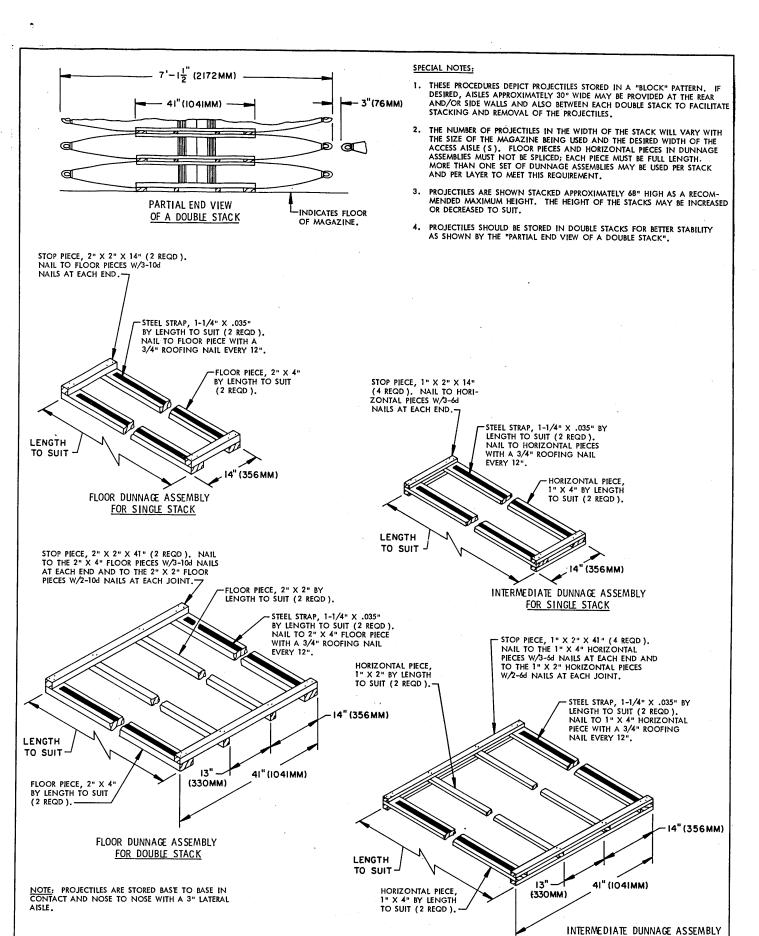






PAGE 14

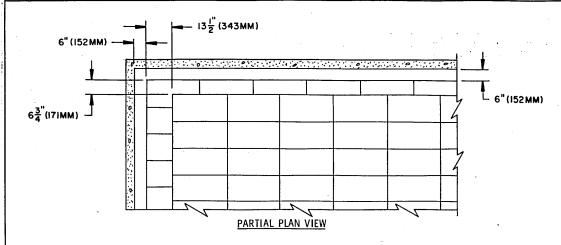
PROJECTILE,8" (RA), UNPALLETIZED



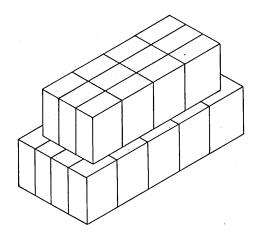
PROJECTILE, 8" (RA), UNPALLETIZED

FOR DOUBLE STACK

PAGE 15



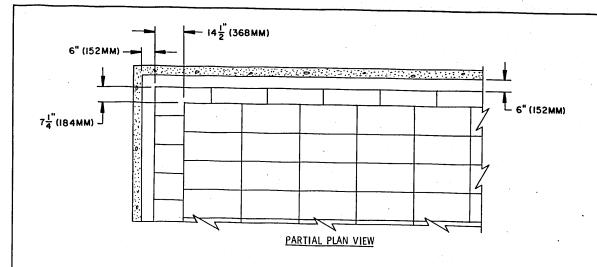
- 1. IT IS INTENDED THAT THESE PROCEDURES ARE TO BE USED AT A STORAGE LOCATION WHERE MECHANICAL HANDLING EQUIPMENT IS NOT AVAILABLE. IF PALLET UNITS ARE RECEIVED ON A VEHICLE AS STRAPPED PALLET UNITS, THE STRAPPING MUST BE CUT AND REMOVED. LIFT OFF THE PALLET COVER FROM THE UNIT AND SET ASIDE. INDIVIDUALLY REMOVE THE PROJECTIES AND EITHER SET ASIDE ON THE VEHICLE OR TEMPORARILY PLACE WITHIN THE MAGAZINE. TAKE THE NOW EMPTY PALLET BASE INTO THE MAGAZINE AND POSITION AS DEPICTED BY THE "PARTIAL PLAN VIEW", POSITIONING ON WEDGES IF REQUIRED BY SPECIAL NOTE 2, INDIVIDUALLY PLACE PROJECTILES ONTO THE PALLET BASE. REPLACE THE PALLET COVER. REPEAT THE STEP BY STEP PROCEDURES FOR THE REMAINDER OF THE PALLET UNITS IN THE FIRST LAYER.
- 2. IF THE FLOOR OF THE MAGAZINE TO BE USED FOR STORAGE OF PROJECTILES ON PALLETS IS CONSTRUCTED WITH A BUILT IN SLOPE, WEDGES MUST BE INSTALLED UNDER THE PALLET UNITS TO PROVIDE FOR A LEVEL STACK. SEE THE "TYPICAL WEDGE DETAILS" ON PAGE 3. IF THE FLOOR SLOPES OPPOSITE TO THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL A" DETAIL ON PAGE 3. IF THE FLOOR SLOPES IN THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL B" DETAIL ON PAGE 3.
- 3. THE "TYPICAL WEDGE DETAILS" ON PAGE 3 DEPICT 72" AND 9'-0" LONG WEDGES WHICH ARE DESIGNED FOR USE WHEN THE FLOOR SLOPES APPROXIMATELY ONE INCH (1") IN EVERY 72". IF THE FLOOR OF THE MAGAZINE BEING USED HAS A DIFFERENT DEGREE OF SLOPE, THE THICKNESS OF THE BASE END OF THE WEDGES SHOULD BE ADJUSTE'D SO THAT THE TAPER OF THE WEDGES WILL MATCH THE SLOPE OF THE MAGAZINE FLOOR.
- PALLET UNITS IN THE SECOND LAYER WILL BE OFFSET IN BOTH DIRECTIONS FROM THE PALLET UNITS IN THE FIRST LAYER. SEE THE "PARTIAL PLAN VIEW" ABOVE FOR PLACEMENT GUIDANCE.
- IF DESIRED, AND IF PROPER TOOLS AND STRAPPING ARE AVAILABLE, STACK STABILITY CAN BE INCREASED BY ENCIRCLING THE STORED PALLET UNITS WITH STEEL STRAPPING. TENSION AND SEAL. STRAPPING OF A 3/4" SIZE IS ADEQUATE. SEAL THE JOINT WITH ONE SEAL.
- 6. STORAGE IS LIMITED TO TWO LAYERS IN HEIGHT.



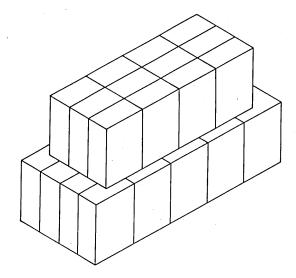
PARTIAL ISOMETRIC VIEW

(OFFSET STACKING PATTERN)

FOR PURPOSES OF CLARITY, ONLY COMPLETE PALLET UNITS HAVE BEEN DEPICTED.

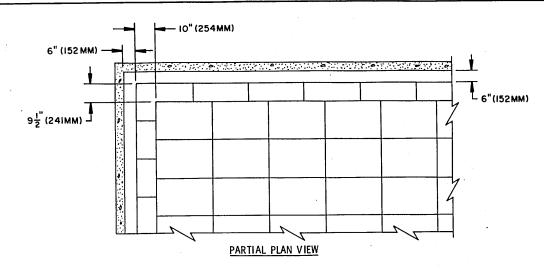


- 1. IT IS INTENDED THAT THESE PROCEDURES ARE TO BE USED AT A STORAGE LOCATION WHERE MECHANICAL HANDLING EQUIPMENT IS NOT AVAILABLE. IF PALLET UNITS ARE RECEIVED ON A VEHICLE AS STRAPPED PALLET UNITS, THE STRAPPING MUST BE CUT AND REMOVED. LIFT OFF THE PALLET COVER FROM THE UNIT AND SET ASIDE. INDIVIDUALLY REMOVE THE PROJECTILES AND EITHER SET ASIDE ON THE VEHICLE OR TEMPORARILY PLACE WITHIN THE MAGAZINE. TAKE THE NOW EMPTY PALLET BASE INTO THE MAGAZINE AND POSITION AS DEPICTED BY THE "PARTIAL PLAN VIEW", POSITIONING ON WEDGES IF REQUIRED BY SPECIAL NOTE 2. INDIVIDUALLY PLACE PROJECTILES ONTO THE PALLET BASE. REPLACE THE PALLET COVER. REPEAT THE STEP BY STEP PROCEDURES FOR THE REMAINDER OF THE PALLET UNITS IN THE FIRST LAYER.
- 2. IF THE FLOOR OF THE MAGAZINE TO BE USED FOR STORAGE OF PROJECTILES ON PALLETS IS CONSTRUCTED WITH A BUILT IN SLOPE, WEDGES MUST BE INSTALLED UNDER THE PALLET UNITS TO PROVIDE FOR A LEVEL STACK. SEE THE "TYPICAL WEDGE DETAILS" ON PAGE 3. IF THE FLOOR SLOPES OPPOSITE TO THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL A" DETAIL ON PAGE 3. IF THE FLOOR SLOPES IN THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL B" DETAIL ON PAGE 3.
- 3. THE "TYPICAL WEDGE DETAILS" ON PAGE 3 DEPICT 72" AND 9'-0" LONG WEDGES WHICH ARE DESIGNED FOR USE WHEN THE FLOOR SLOPES APPROXIMATELY ONE INCH (1") IN EVERY 72". IF THE FLOOR OF THE MAGAZINE BEING USED HAS A DIFFERENT DEGREE OF SLOPE, THE THICKNESS OF THE BASE END OF THE WEDGES SHOULD BE ADJUSTED SO THAT THE TAPER OF THE WEDGES WILL MATCH THE SLOPE OF THE MAGAZINE FLOOR.
- PALLET UNITS IN THE SECOND LAYER WILL BE OFFSET IN BOTH DIRECTIONS FROM THE PALLET UNITS IN THE FIRST LAYER. SEE THE "PARTIAL PLAN VIEW" ABOVE FOR PLACEMENT GUIDANCE.
- 5. IF DESIRED, AND IF PROPER TOOLS AND STRAPPING ARE AVAILABLE, STACK STABILITY CAN BE INCREASED BY ENCIRCLING THE STORED PALLET UNITS WITH STEEL STRAPPING. TENSION AND SEAL. STRAPPING OF A 3/4" SIZE IS ADEQUATE. SEAL THE JOINT WITH ONE SEAL.
- 6. STORAGE IS LIMITED TO TWO LAYERS IN HEIGHT.



PARTIAL ISOMETRIC VIEW

FOR CLARITY, ONLY COMPLETE PALLET UNITS HAVE BEEN SHOWN IN THIS VIEW.

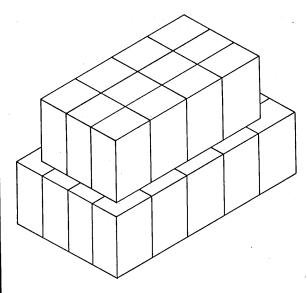


- IT IS INTENDED THAT THESE PROCEDURES ARE TO BE USED AT A STORAGE LOCATION WHERE MECHANICAL HANDLING EQUIPMENT IS NOT AVAILABLE. IF PALLET UNITS ARE RECEIVED ON A VEHICLE AS STRAPPED PALLET UNITS, THE STRAPPING MUST BE CUT AND REMOVED. LIFT OFF THE PALLET COVER FROM THE UNIT AND SET ASIDE. INDIVIDUALLY REMOVE THE PROJECTILES AND EITHER SET ASIDE ON THE VEHICLE OR TEMPORARILY PLACE WITHIN THE MAGAZINE. TAKE THE NOW EMPTY PALLET BASE INTO THE MAGAZINE AND POSITION AS DEPICTED BY THE "PARTIAL PLAN VIEW", POSITIONING ON WEDGES IF REQUIRED BY SPECIAL NOTE 2. INDIVIDUALLY PLACE PROJECTILES ONTO THE PALLET BASE. REPLACE THE PALLET COVER, REPEAT THE STEP BY STEP PROCEDURES FOR THE REMAINDER OF THE PALLET UNITS IN THE FIRST LAYER. IN THE FIRST LAYER.
- IF THE FLOOR OF THE MAGAZINE TO BE USED FOR STORAGE OF PROJECTILES ON PALLETS IS CONSTRUCTED WITH A BUILT IN SLOPE, WEDGES MUST BE INSTALLED UNDER THE PALLET UNITS TO PROVIDE FOR A LEVEL STACK. SEE THE "TYPICAL WEDGE DETAILS" ON PAGE 3. IF THE FLOOR SLOPES OPPOSITE TO THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL A" DETAIL ON PAGE 3. IF THE FLOOR SLOPES IN THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL B" DETAIL ON PAGE 3. DETAIL ON PAGE 3.

(CONTINUED AT RIGHT)

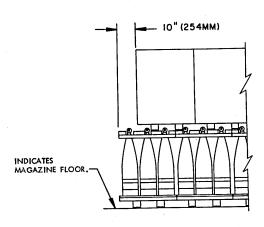
(SPECIAL NOTES CONTINUED)

- 3. THE TYPICAL WEDGE DETAILS" ON PAGE 3 DEPICT 72" AND 9"-0" LONG WEDGES WHICH ARE DESIGNED FOR USE WHEN THE FLOOR SLOPES APPROXIMATELY ONE INCH (1") IN EVERY 72". IF THE FLOOR OF THE MAGAZINE BEING USED HAS A DIFFERENT DEGREE OF SLOPE, THE THICKNESS OF THE BASE END OF THE WEDGES SHOULD BE ADJUSTED SO THAT THE TAPER OF THE WEDGES WILL MATCH THE SLOPE OF THE MAGAZINE FLOOR.
- 4. PALLET UNITS IN THE SECOND LAYER WILL BE OFFSET IN BOTH DIRECTIONS FROM THE PALLET UNITS IN THE FIRST LAYER. SEE THE "PARTIAL PLAN VIEW" ABOVE AND THE "PARTIAL ELEVATION VIEW" BELOW FOR PLACEMENT GUIDANCE.
- IF DESIRED, AND IF PROPER TOOLS AND STRAPPING ARE AVAILABLE, STACK STABILITY
 CAN BE INCREASED BY ENCIRCLING THE STORED PALLET UNITS WITH STEEL STRAPPING.
 TENSION AND SEAL. STRAPPING OF A 3/4" SIZE IS ADEQUATE. SEAL THE JOINT WITH ONE SEAL.
- 6. STORAGE IS LIMITED TO TWO LAYERS IN HEIGHT.



PARTIAL ISOMETRIC VIEW

FOR CLARITY, ONLY COMPLETE PALLET UNITS HAVE BEEN SHOWN IN THIS VIEW.

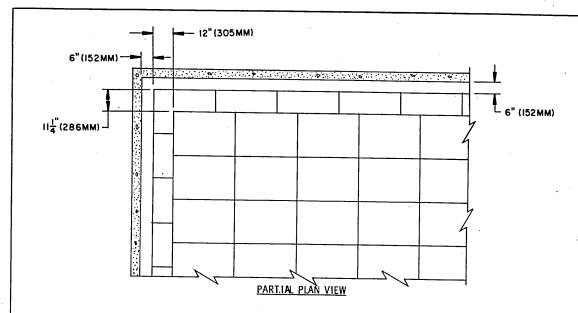


PARTIAL ELEVATION VIEW

(OFFSET STACKING PATTERN)

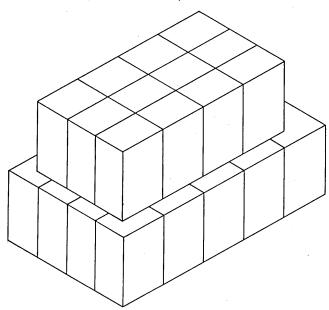
PAGE 18

PROJECTILES, 8" (SMALL) ON PALLETS



- 1. IT IS INTENDED THAT THESE PROCEDURES ARE TO BE USED AT A STORAGE LOCATION WHERE MECHANICAL HANDLING EQUIPMENT IS NOT AVAILABLE. IF PALLET UNITS ARE RECEIVED ON A VEHICLE AS STRAPPED PALLET UNITS, THE STRAPPING MUST BE CUT AND REMOVED. LIFT OFF THE PALLET COVER FROM THE UNIT AND SET ASIDE. INDIVIDUALLY REMOVE THE PROJECTILES AND EITHER SET ASIDE ON THE VEHICLE OR TEMPORARILY PLACE WITHIN THE MAGAZINE. TAKE THE NOW EMPTY PALLET BASE INTO THE MAGAZINE AND POSITION AS DEPICTED BY THE "PARTIAL PLAN VIEW", POSITIONING ON WEDGES IF REQUIRED BY SPECIAL NOTE 2. INDIVIDUALLY PLACE PROJECTILES ONTO THE PALLET BASE. REPLACE THE PALLET COVER. REPEAT THE STEP BY STEP PROCEDURES FOR THE REMAINDER OF THE PALLET UNITS IN THE FIRST LAYER.
- 2. IF THE FLOOR OF THE MAGAZINE TO BE USED FOR STORAGE OF PROJECTILES ON PALLETS IS CONSTRUCTED WITH A BUILT IN SLOPE, WEDGES MUST BE INSTALLED UNDER THE PALLET UNITS TO PROVIDE FOR A LEVEL STACK, SEE THE "TYPICAL WEDGE DETAILS" ON PAGE 3. IF THE FLOOR SLOPES OPPOSITE TO THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL A" DETAIL ON PAGE 3. IF THE FLOOR SLOPES IN THE DIRECTION OF THE SKIDS, SEE THE "WEDGE LOCATION DETAIL B" DETAIL ON PAGE 3.

(CONTINUED AT RIGHT)

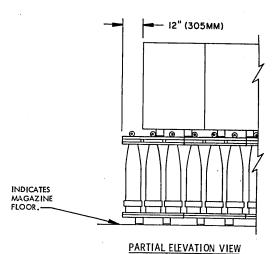


PARTIAL ISOMETRIC VIEW

FOR CLARITY, ONLY COMPLETE
PALLET UNITS HAVE BEEN SHOWN
IN THIS VIEW.

(SPECIAL NOTES CONTINUED)

- 3. THE "TYPICAL WEDGE DETAILS" ON PAGE 3 DEPICT 72" AND 9'-0" LONG WEDGES WHICH ARE DESIGNED FOR USE WHEN THE FLOOR SLOPES APPROXIMATELY ONE INCH (1") IN EVERY 72". IF THE FLOOR OF THE MAGAZINE BEING USED HAS A DIFFERENT DEGREE OF SLOPE, THE THICKNESS OF THE BASE END OF THE WEDGES SHOULD BE ADJUSTED SO THAT THE TAPER OF THE WEDGES WILL MATCH THE SLOPE OF THE MAGAZINE FLOOR.
- 4. PALLET UNITS IN THE SECOND LAYER WILL BE OFFSET IN BOTH DIRECTIONS FROM THE PALLET UNITS IN THE FIRST LAYER. SEE THE "PARTIAL PLAN VIEW" ABOVE AND THE "PARTIAL ELEVATION VIEW" BELOW FOR PLACEMENT GUIDANCE.
- 5. IF DESIRED, AND IF PROPER TOOLS AND STRAPPING ARE AVAILABLE, STACK STABILITY CAN BE INCREASED BY ENCIRCLING THE STORED PALLET UNITS WITH STEEL STRAPPING. TENSION AND SEAL. STRAPPING OF A 3/4" SIZE IS ADEQUATE. SEAL THE JOINT WITH ONE SEAL.
- 6. STORAGE IS LIMITED TO TWO LAYERS IN HEIGHT.



(OFFSET STACKING PATTERN)

PAGE 20 PROJECT CA 242-87