

STORAGE IN APPROVED MAGAZINES OF BULK EXPLOSIVES PACKED IN FIBERBOARD BOXES (NOT UNITIZED) FOR SHORT-TERM STORAGE ONLY

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U.S. ARMY MATERIEL COMMAND DRAWING			
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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 APPROVED MAGAZINES OF NUMEROUS LOTS OF BULK EXPLOSIVES PACKED IN FIBERBOARD BOXES (NOT UNITIZED) TO MEET SHORT-TERM STORAGE REQUIREMENTS AT PRODUCTION PLANTS PRIOR TO TRANSPORT TO USERS AND AT LOADING PLANTS PRIOR TO LOADING OPERATIONS. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED.
- C. IF THE MAGAZINE TO BE USED IS KNOWN TO BE "DRY" AND FREE OF CONDENSATION AND MOISTURE, SHORT-TERM STORAGE WILL BE A MAXIMUM OF 180 DAYS. HOWEVER, IF THE MAGAZINE IS KNOWN TO BE SUSCEPTIBLE TO CONDENSATION AND MOISTURE, SHORT-TERM STORAGE WILL BE REDUCED TO 120 OR 90 DAYS MAXIMUM. STACKS SHOULD BE INSPECTED PERIODICALLY TO ASSURE STABILITY IS MAINTAINED.
- D. IF IT IS EXPECTED THAT STORAGE OF BULK EXPLOSIVES MAY EXCEED 180 DAYS, THE STORAGE METHODS AS SPECIFIED IN AMC SERIES DRAWINGS 19-48-4007/1 THRU 4007/7, AS APPLICABLE, WILL BE USED.
- E. TO IMPROVE HANDLING AT PRODUCTION PLANTS AND LOADING PLANTS AND TO FACILITATE INTRAPLANT MOVEMENT BETWEEN PRODUCTION/LOADING LINES AND STORAGE SITES, FIBERBOARD BOXES OF BULK EXPLOSIVES MAY BE PLACED ON PALLETS (SLAVE PALLETS). SUGGESTED CONFIGURATIONS ARE SHOWN ON PAGE 12, AND WILL NORMALLY NOT REQUIRE BANDING OR DUNNAGE IF ADEQUATELY SIZED PALLETS ARE USED AND BOXES ARE STACKED NOT MORE THAN FIVE (5) BOXES HIGH. ALL BOXES MUST HAVE FULL BEARING ON THE PALLET DECK (NO OVERHANG). IF ADEQUATE STORAGE SPACE IS READILY AVAILABLE, PALLETS WITH LOOSE BOXES MAY BE STORED AS RECEIVED AT THE MAGAZINE, HOWEVER, SUCH PALLETS WILL NOT BE STACKED IN STORAGE OR IN INTRAPLANT MOVEMENT.
- F. THE STORAGE PROCEDURES DEPICTED HEREIN MAY ALSO BE UNITIZED TO STORE BULK EXPLOSIVES IN FIBERBOARD BOXES IN OTHER TYPES OF APPROVED MAGAZINES. MINOR ADJUSTMENTS MAY BE MADE TO FACILITAE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE COMPLIED WITH.
- G. STORED BOXES MUST NOT CONTACT THE WALLS OR COLUMNS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, BOXES MAY BE ELIMINATED FROM A DEPICTED STORAGE PATTERN AS NECESSARY.
- H. AISLE DIMENSIONS SHOWN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT.
- J. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED BY LOCAL STANDARDS WILL NOT BE EXCEEDED.
- K. THE PROCEDURES WITHIN THIS DRAWING DEPICT STORAGE OF MULTIPLE LOTS OR STORAGE OF COMPATIBLE ITEMS WITH DIFFERENT NATIONAL STOCK NUMBERS IN THE SAME MAGAZINE AND WILL REQUIRE CAREFUL PLANNING SO AS TO INSURE ACCESSIBILITY TO ANY LOT OR ITEM FOR INSPECTION/INVENTORY OR FOR REMOVAL. EACH ITEM OR LOT MUST BE ACCESSIBLE FROM AN AISLE TO PERMIT REMOVAL OF A LOT OR ITEM WITHOUT HANDLING OR RELOCATING OTHER ITEMS OR LOTS.
- L. STACK-STABILIZING DUNNAGE IN THE FORM OF "SHIMS" PROBABLY WILL BE REQUIRED, TO ACHIEVE SOUND AND ACCEPTABLE STABLE STACKS. SHIM MATERIAL OF VARIOUS THICKNESSES WILL BE USED AS REQUIRED TO GAIN LEVEL OR NEARLY LEVEL STACKS AND SOLID BEARING WITHIN A STACK FROM THE FLOOR OF A MAGAZINE TO THE TOP OF THE STACK.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER - - : SEE TM 743-200-1, DUNNAGE LUMBER, FED SPEC MM-L-751.

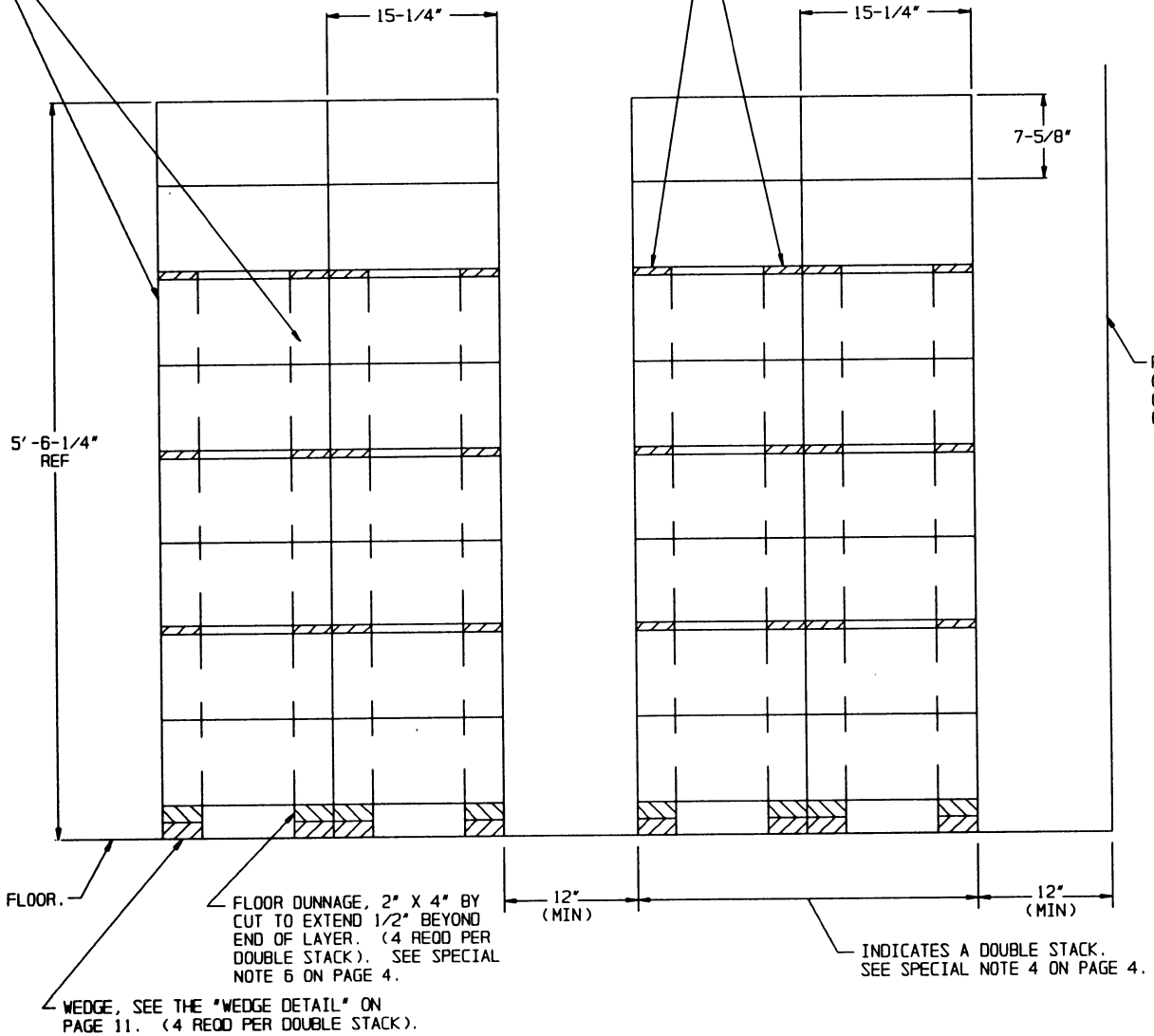
(GENERAL NOTE CONTINUED)

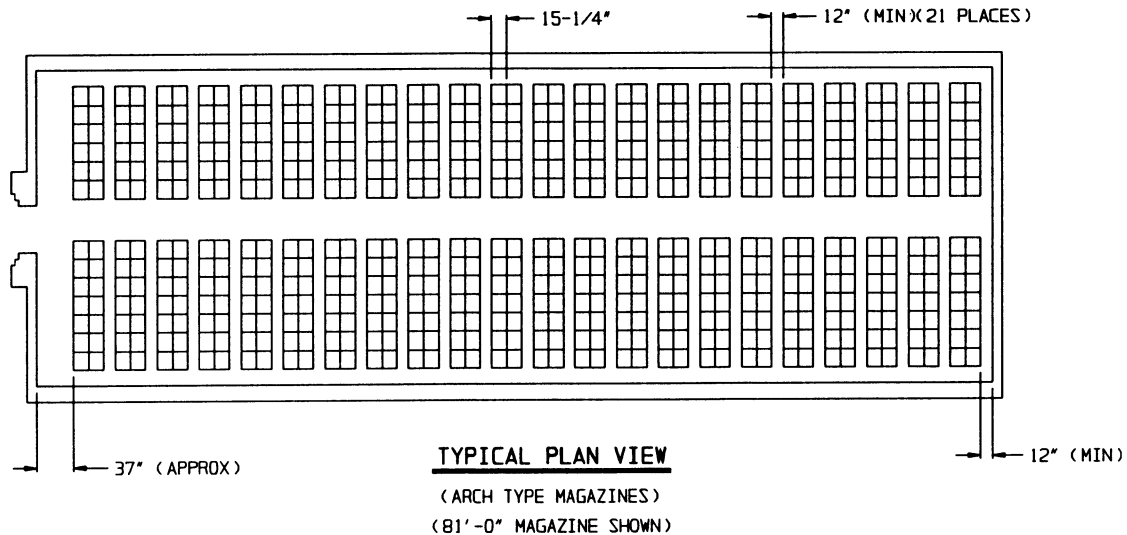
- M. BULK EXPLOSIVES IN FIBERBOARD BOXES PRESENTLY STORED IN ACCORDANCE WITH A PRIOR APPROVED DRAWING NEED NOT BE RESTORED SOLELY TO CONFORM TO THE PROCEDURES SPECIFIED IN THIS DOCUMENT.
- N. UNLESS OTHERWISE SPECIFIED, DUNNAGE LUMBER THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" WIDE AND 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE.
- O. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENT MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM, AND ONE POUND EQUALS 0.454KG.
- P. IF PALLETIZED BOXES ARE TO BE STORED, REFER TO U.S. ARMY AMC DRAWING 19-48-4097 FOR PROCEDURES TO BE USED. FOR UNITIZATION PROCEDURES OF THE STRETCH NET OR WOOD SIDE PANEL METHODS REFER TO U.S. ARMY AMC DRAWING 19-48-4177/1 AND C-AMXSV-4071, RESPECTIVELY.

WEIGHT CHART BOX NO. 4 18-3/4" L X 15-1/4" W X 7-5/8" H	
ITEM	EXPL WT/BOX
TNT	50 LBS
TNT	55 LBS
ALL COMPOSITION A	60 LBS
ALL COMPOSITION B	60 LBS
COMPOSITION C-3 AND C-4	60 LBS
EXPLOSIVE D	50 LBS
CYCLOTOL	60 LBS
OCTOL	60 LBS
PBX	50 LBS
TETRYL	60 LBS
TOVEX	50 LBS
PBXN 6	50 LBS
TNC	40 LBS
PENTOLITE	35 LBS
POTASSIUM PICRATE	35 LBS
COMPOSITION D-2	30 LBS
MAX 2	50 LBS
MOX 2B	50 LBS

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(SEE ELEVATION VIEW FOR LOCATION
AND QUANTITY RECD). SEE SPECIAL
NOTE 5 ON PAGE 4.

INTERMEDIATE DUNNAGE, 1" X 4" BY
CUT TO EXTEND 1/2" BEYOND END OF
LAYERS (12 RECD FOR DOUBLE STACK).
SEE SPECIAL NOTE 7 ON PAGE 4.





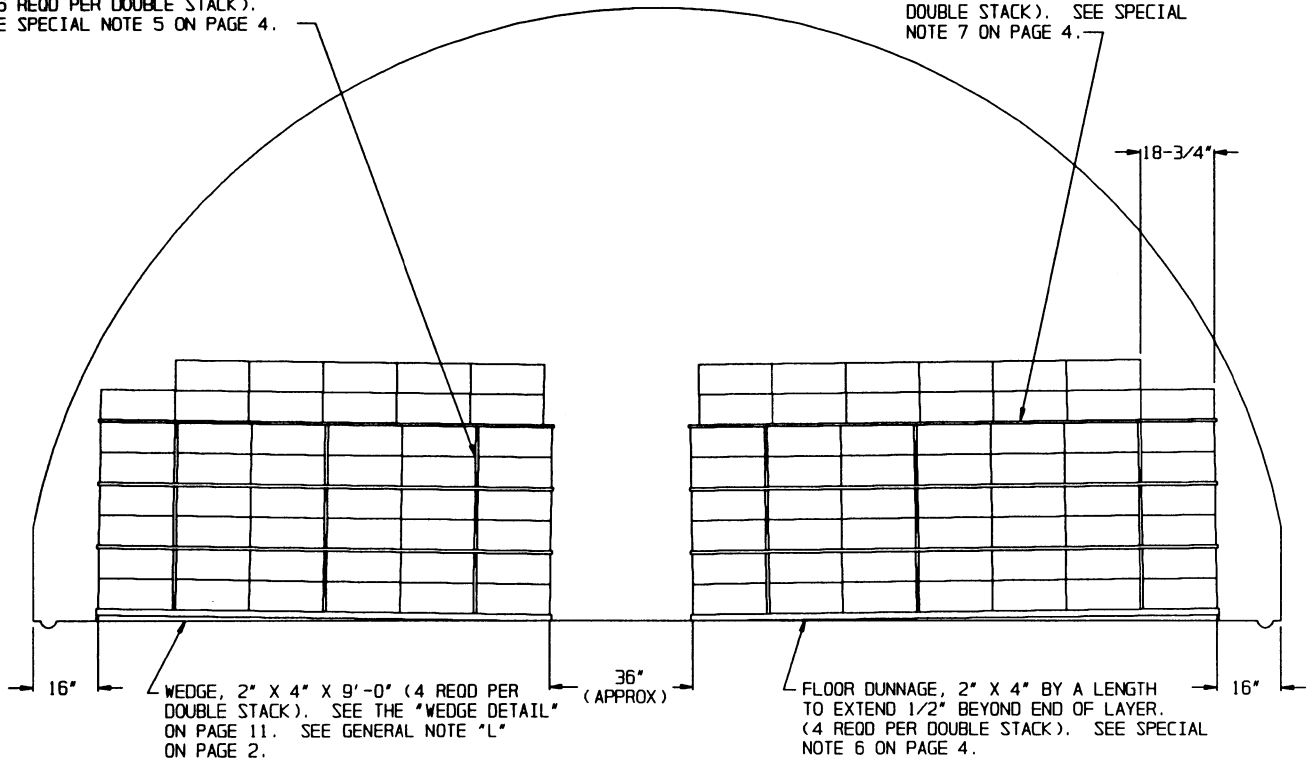
SPECIAL NOTES:

1. STORAGE AS SHOWN IS TYPICAL ONLY, AND APPLIES TO NUMEROUS SMALL LOTS OF TNT PACKED 50 POUNDS PER FIBERBOARD BOX NO. 4. FOR DETAILS OF THE BOX, SEE PICATINNY ARSENAL DRAWING NO. 7548645.
 DIMENSIONS - - - - - 18-3/4" LONG BY 15-1/4" WIDE BY 7-5/8" HIGH.
 EXPLOSIVE WEIGHT FOR TNT - - - - - 50 POUNDS.
2. FOR WEIGHT OF SIMILAR BULK EXPLOSIVES PACKED IN BOX NO. 4, SEE THE CHART ON PAGE 3. EXPLOSIVE WEIGHT MAY VARY FROM 30 TO 60 POUNDS PER BOX.
3. CAUTION: THE EXPLOSIVE LIMIT ESTABLISHED FOR A MAGAZINE MUST NOT BE EXCEEDED. TNT PACKED IN FIBERBOARD BOXES OF THE SIZE SHOWN AND SIMILAR BULK EXPLOSIVES PACKED IN FIBERBOARD BOXES WHICH ARE APPROXIMATELY THE SAME HEIGHT MUST NOT BE STACKED MORE THAN EIGHT (8) BOXES HIGH. BOXES ARE TO BE STORED WITH LABELS FACING A 12" (MIN) AISLE FOR EASIER IDENTIFICATION.
4. GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OR ON ONE SIDE OF THE MAGAZINE. A DOUBLE STACK MAY CONSIST OF EITHER ONE INDIVIDUAL LOT, OR TWO SEPARATE LOTS, AS LONG AS THE SIDE OF THE BOX DISPLAYING THE LABEL FACES THE 12" (MIN) AISLE.
5. WHEN STORING BOXES OF A HEIGHT OTHER THAN 7-5/8", THE UPRIGHT DUNNAGE PIECES MUST BE OF A LENGTH EQUAL TO THE HEIGHT OF TWO BOXES.
6. RANDOM LENGTH MATERIAL MAY BE USED FOR THE 2" X 4" FLOOR DUNNAGE PIECES. JOINTS IN LATERALLY ADJACENT FLOOR DUNNAGE PIECES NEED NOT BE STAGGERED.
7. RANDOM LENGTH MATERIAL, OF NOT LESS THAN 48" LENGTHS, MAY BE USED FOR THE 1" X 4" INTERMEDIATE DUNNAGE PIECES. THE JOINTS IN THE INTERMEDIATE DUNNAGE PIECES MUST BE LOCATED APPROXIMATELY CENTERED BETWEEN THE UPRIGHT DUNNAGE PIECES. THE JOINTS OF ADJACENT INTERMEDIATE DUNNAGE PIECES IN A LAYER WILL BE STAGGERED AT LEAST 18" FROM EACH OTHER. ALSO, THE JOINTS OF THE INTERMEDIATE DUNNAGE PIECES IN AN UPPER LAYER WILL BE STAGGERED AT LEAST 18" FROM THE JOINTS IN THE NEXT LOWER LAYER.

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

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

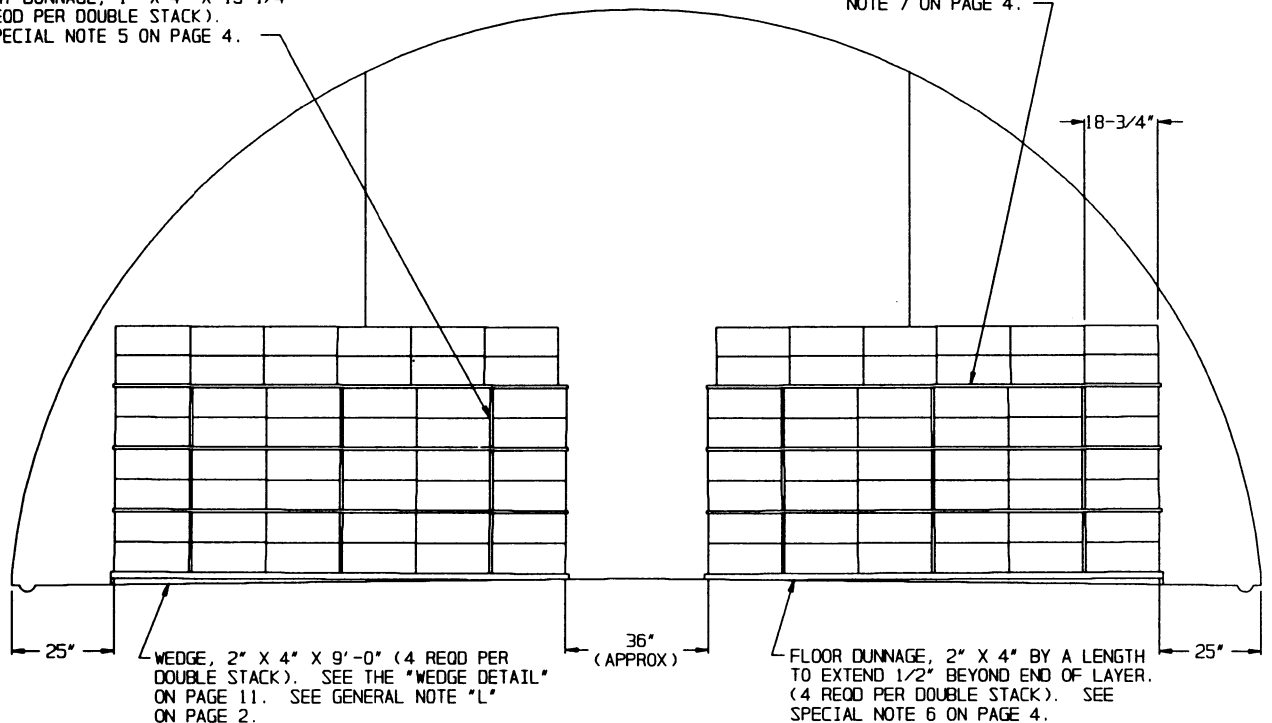
INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



81'-0" L X 26'-6" W X 12'-9" H IGLOO MAGAZINE

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

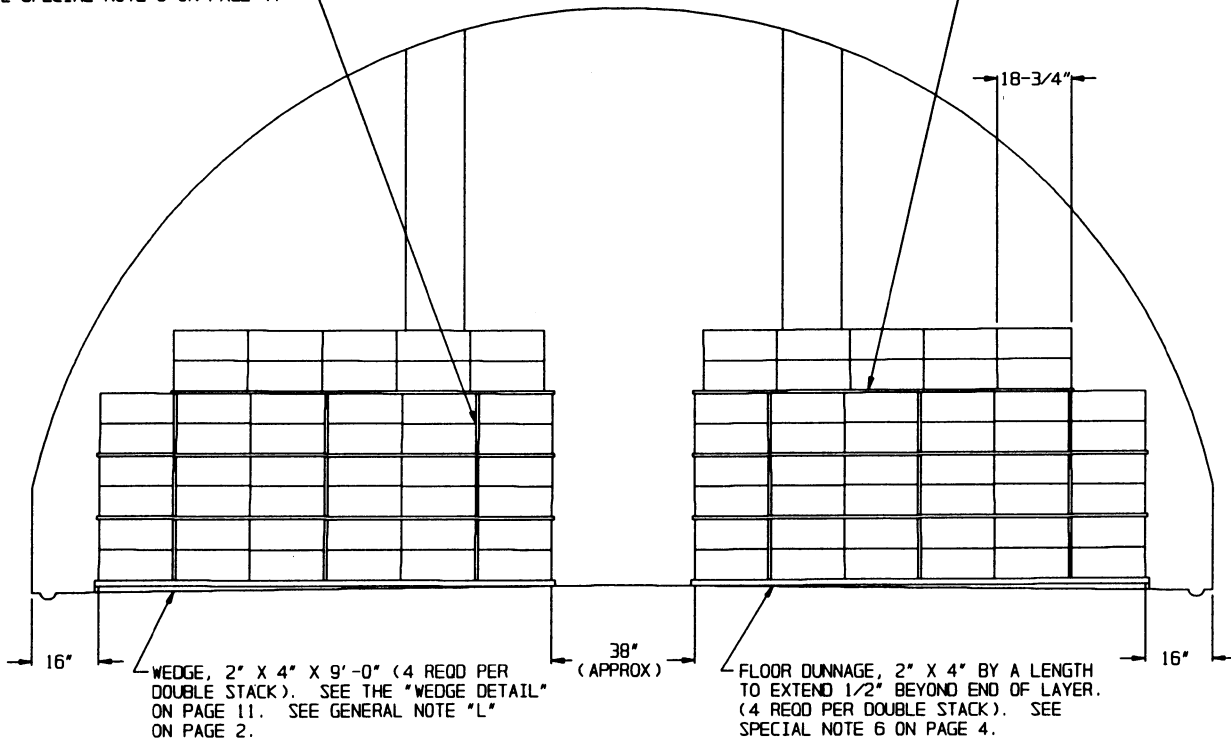
INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



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

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

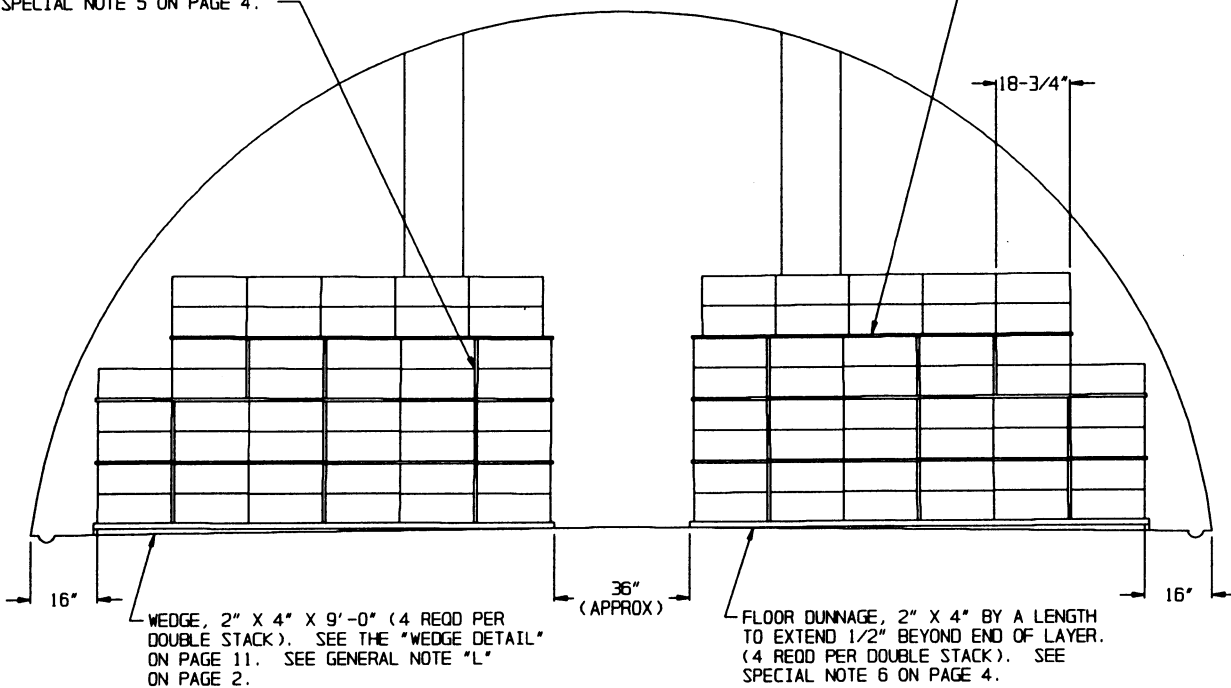
INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



80'-0" L X 25'-0" W X 12'-1-3/4" H ARCH TYPE MAGAZINE

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



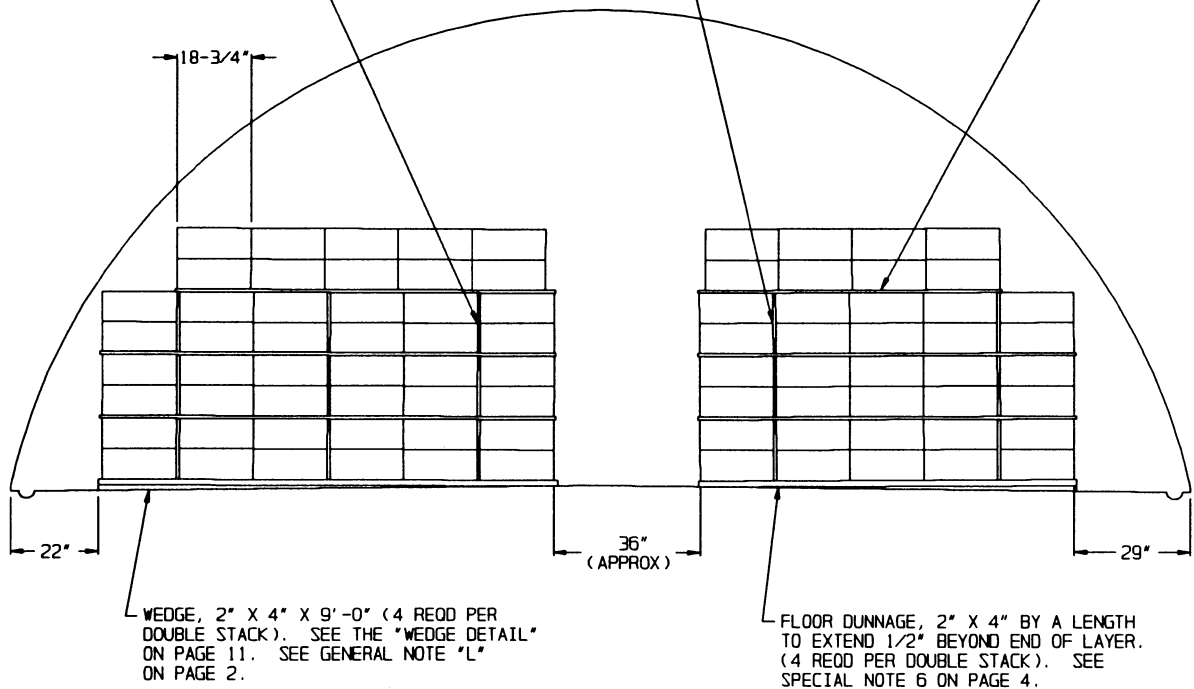
80'-0" L X 25'-0" W X 11'-0" H ARCH TYPE MAGAZINE

ELEVATION VIEWS (BOX NO. 4)

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(24 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

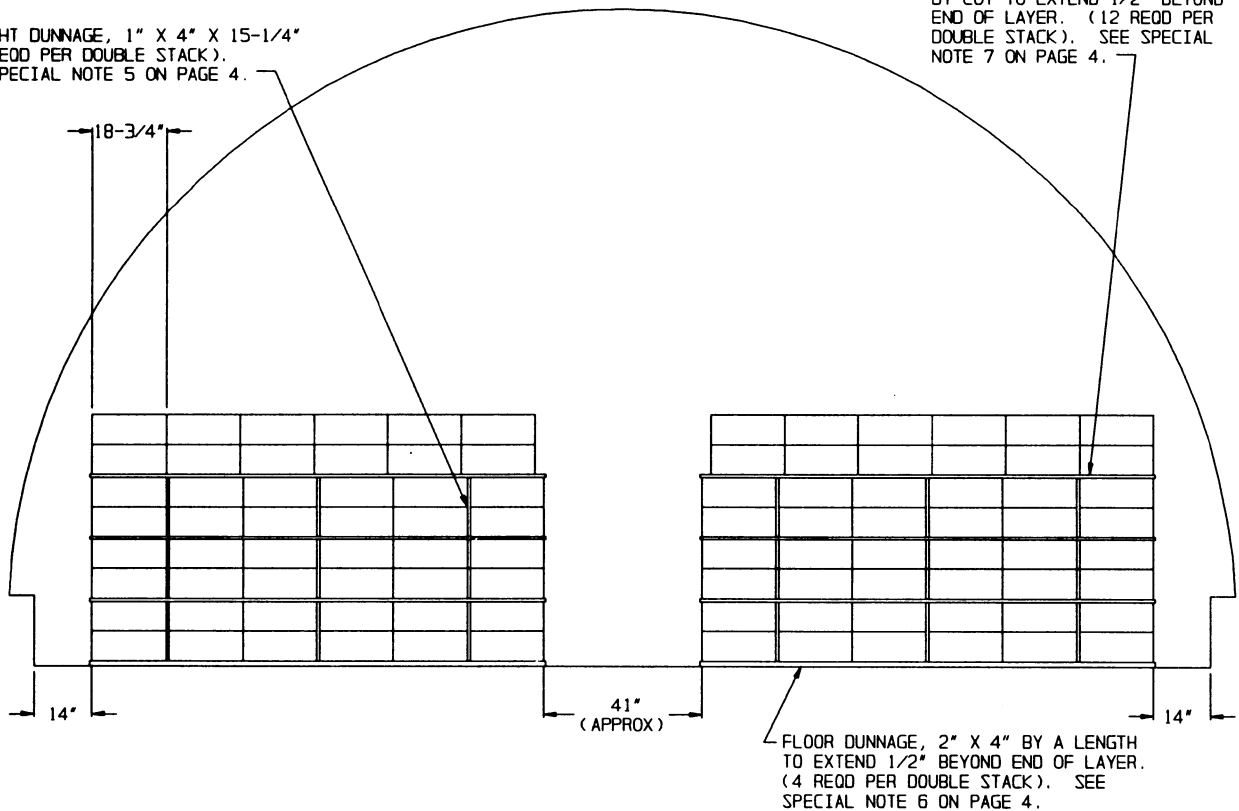
INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



80'-0" L X 25'-0" W X 10'-0" H ARCH TYPE MAGAZINE

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

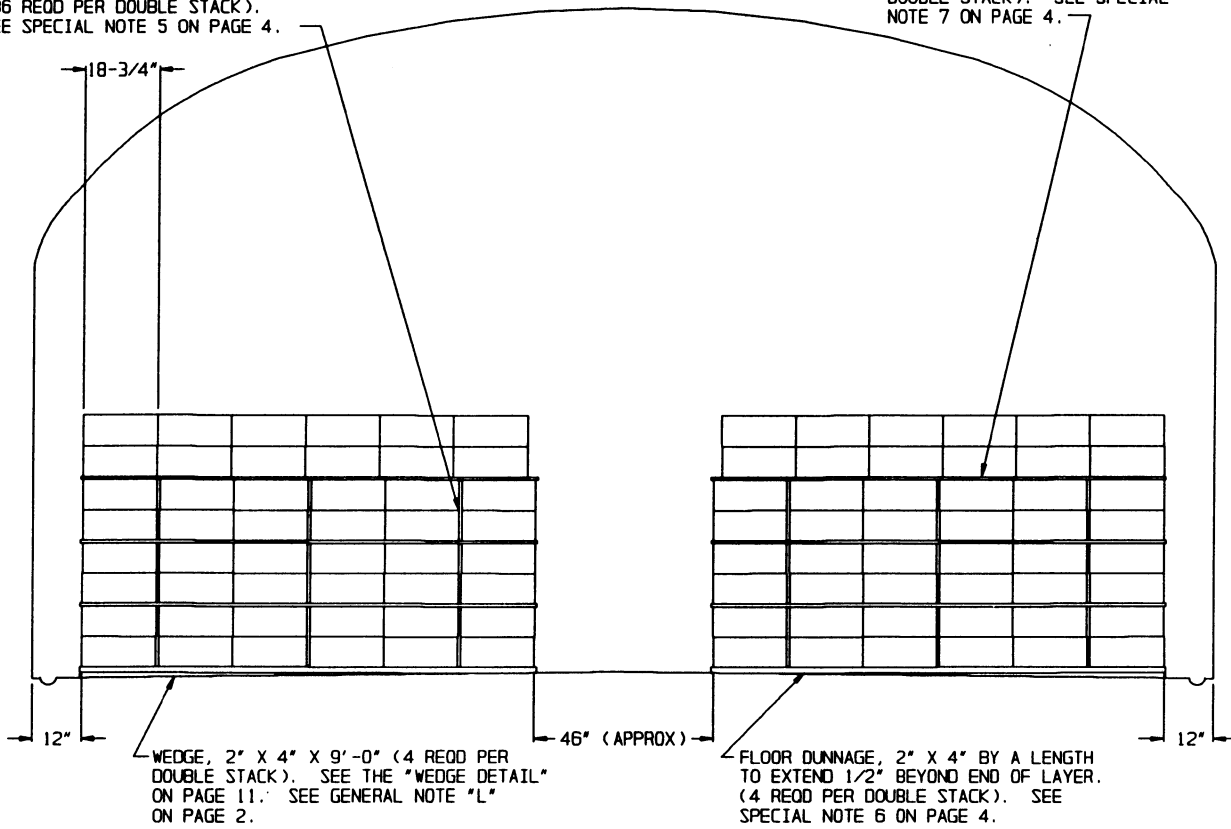
INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



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

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(36 REOD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

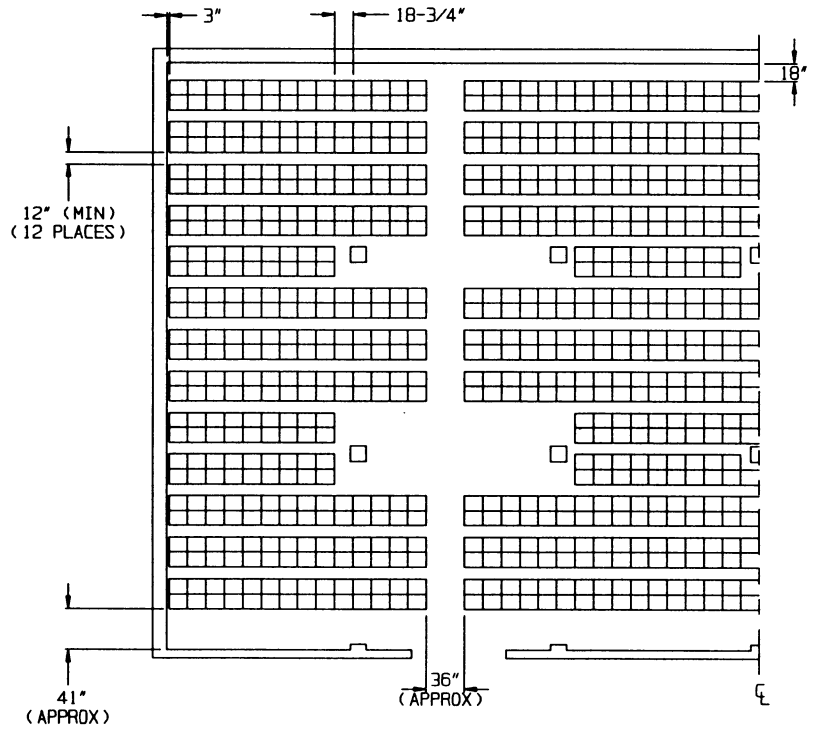
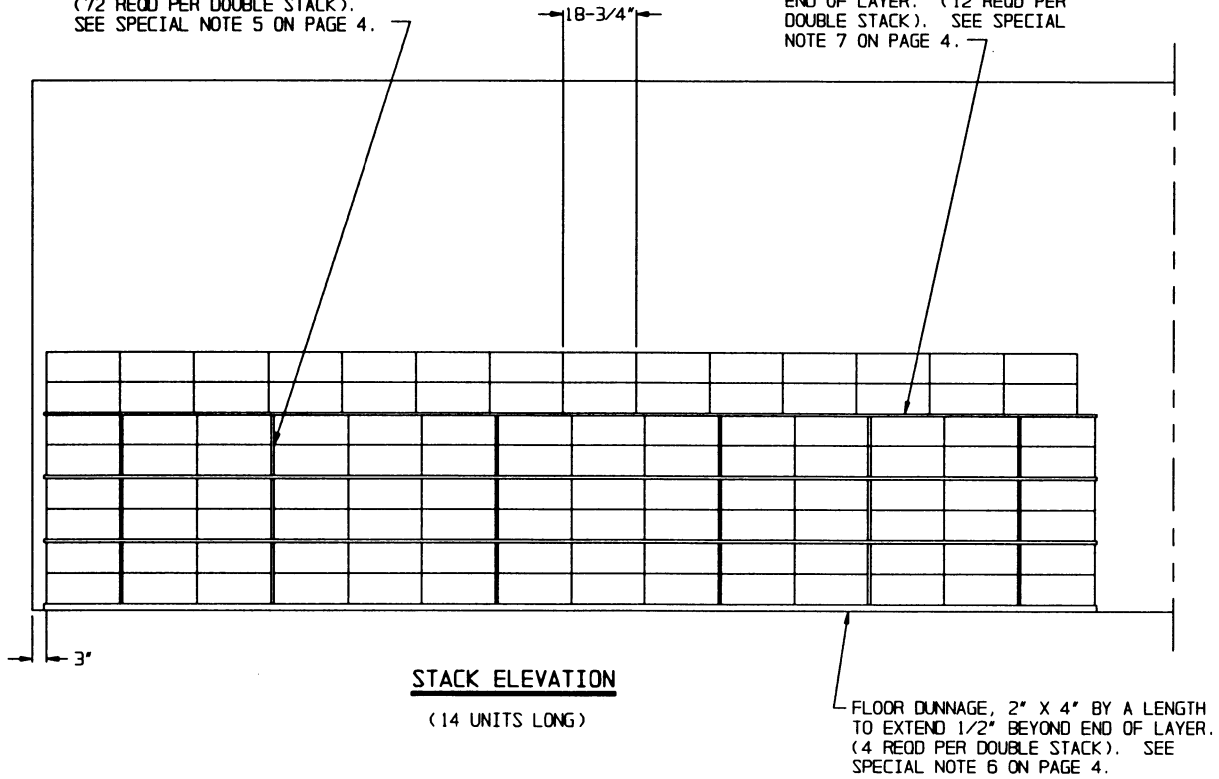
INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REOD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



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

UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(72 REQ'D PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.

INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REQ'D PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.



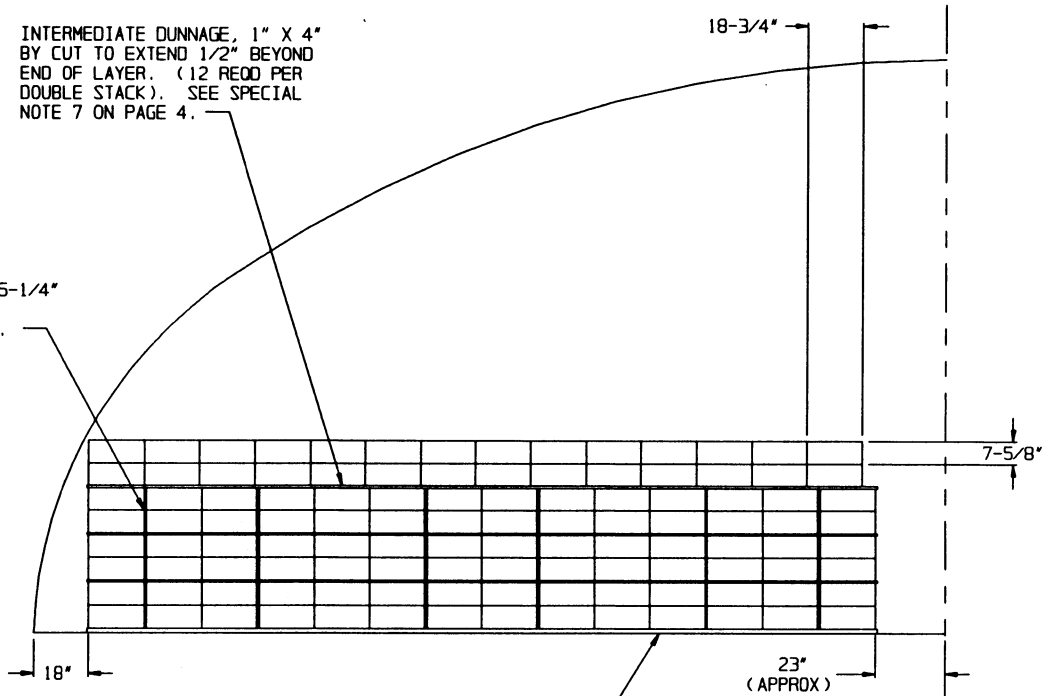
BILL OF MATERIAL		
DOUBLE STACK (14 UNITS LONG)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	361	121
2" X 4"	90	60

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

PLAN AND ELEVATION VIEWS (BOX NO. 4)

INTERMEDIATE DUNNAGE, 1" X 4"
BY CUT TO EXTEND 1/2" BEYOND
END OF LAYER. (12 REQD PER
DOUBLE STACK). SEE SPECIAL
NOTE 7 ON PAGE 4.

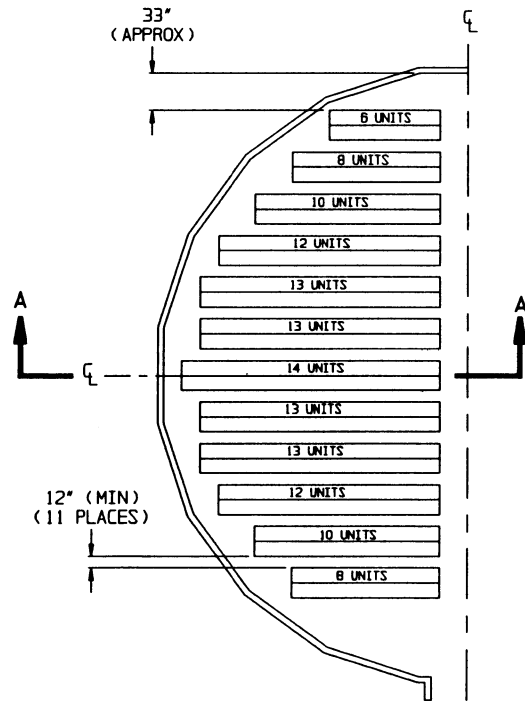
UPRIGHT DUNNAGE, 1" X 4" X 15-1/4"
(72 REQD PER DOUBLE STACK).
SEE SPECIAL NOTE 5 ON PAGE 4.



SECTION A-A
STACK ELEVATION
(14 UNITS LONG)

FLOOR DUNNAGE, 2" X 4" BY A LENGTH
TO EXTEND 1/2" BEYOND END OF LAYER.
(4 REQD PER DOUBLE STACK). SEE
SPECIAL NOTE 6 ON PAGE 4.

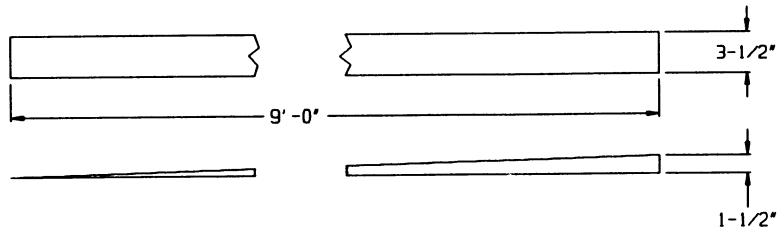
BILL OF MATERIAL		
DOUBLE STACK (14 UNITS LONG)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	361	121
2" X 4"	90	60



PLAN VIEW
(1/2 OF 52'-0" MAGAZINE)

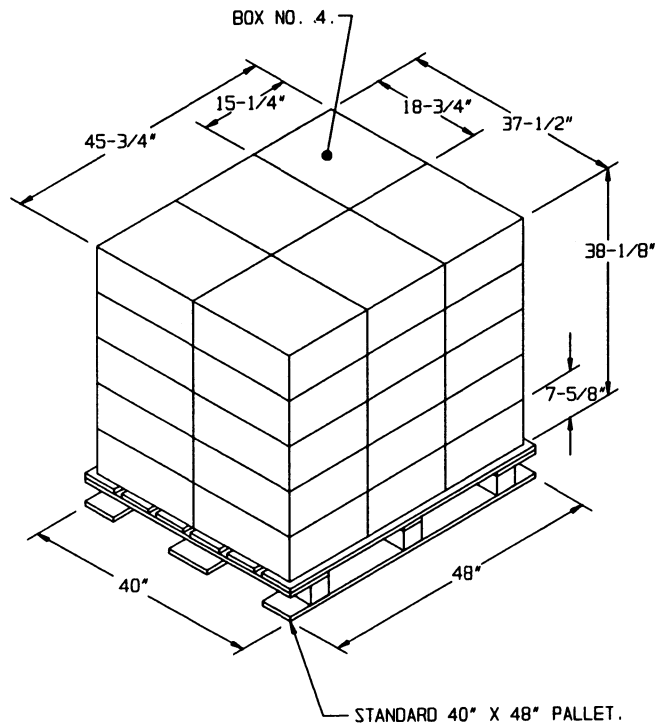
52'-0" DIA. CORBETTA MAGAZINE

PLAN AND ELEVATION VIEWS (BOX NO. 4)



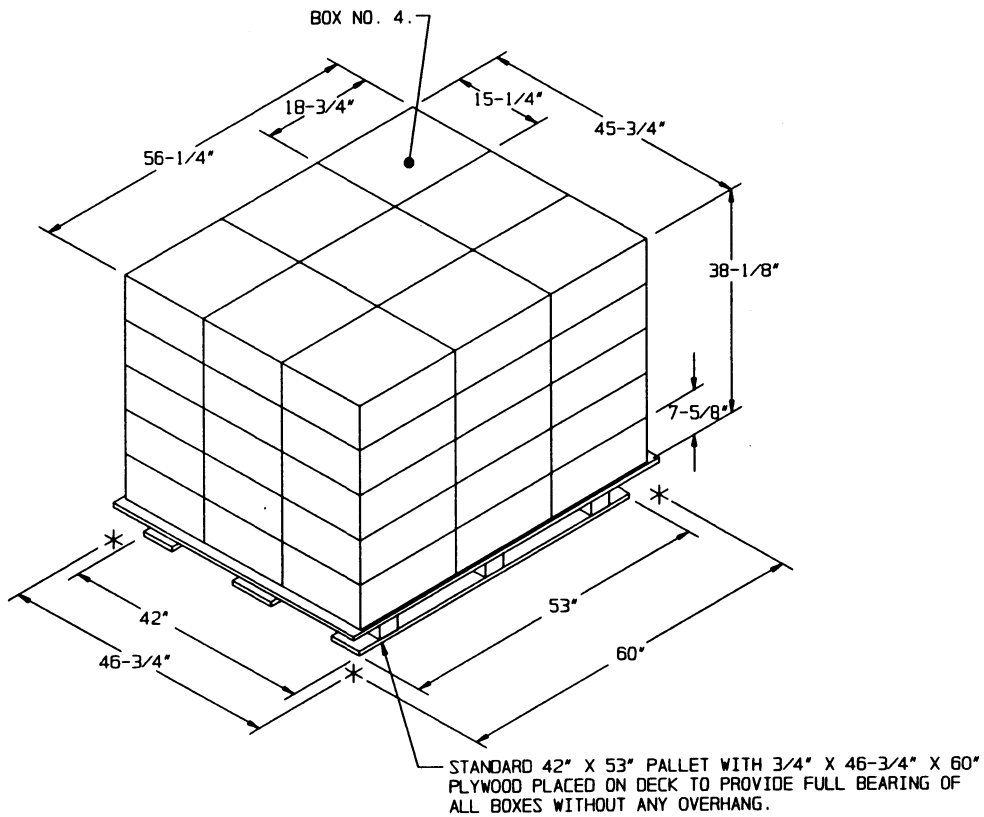
WEDGE DETAIL

NOMINAL SIZED 2" X 4" X 9'-0" MATERIAL CUT AS DETAILED.
 NOTE: IF DESIRED 9'-0" WEDGES WHICH MAY BE ON HAND MAY
 BE USED. THE QUANTITY REQUIRED IS AS SPECIFIED WITHIN
 THE SECTION VIEW.



30 BOX PALLET (BOX NO. 4)

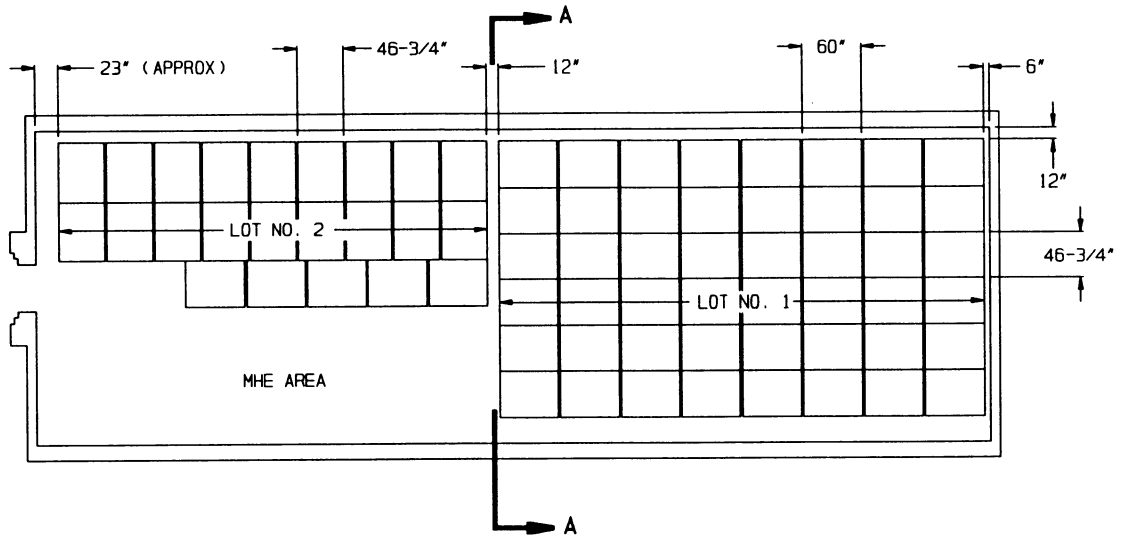
SEE GENERAL NOTE "E" ON PAGE 2.



45 BOX PALLET (BOX NO. 4)

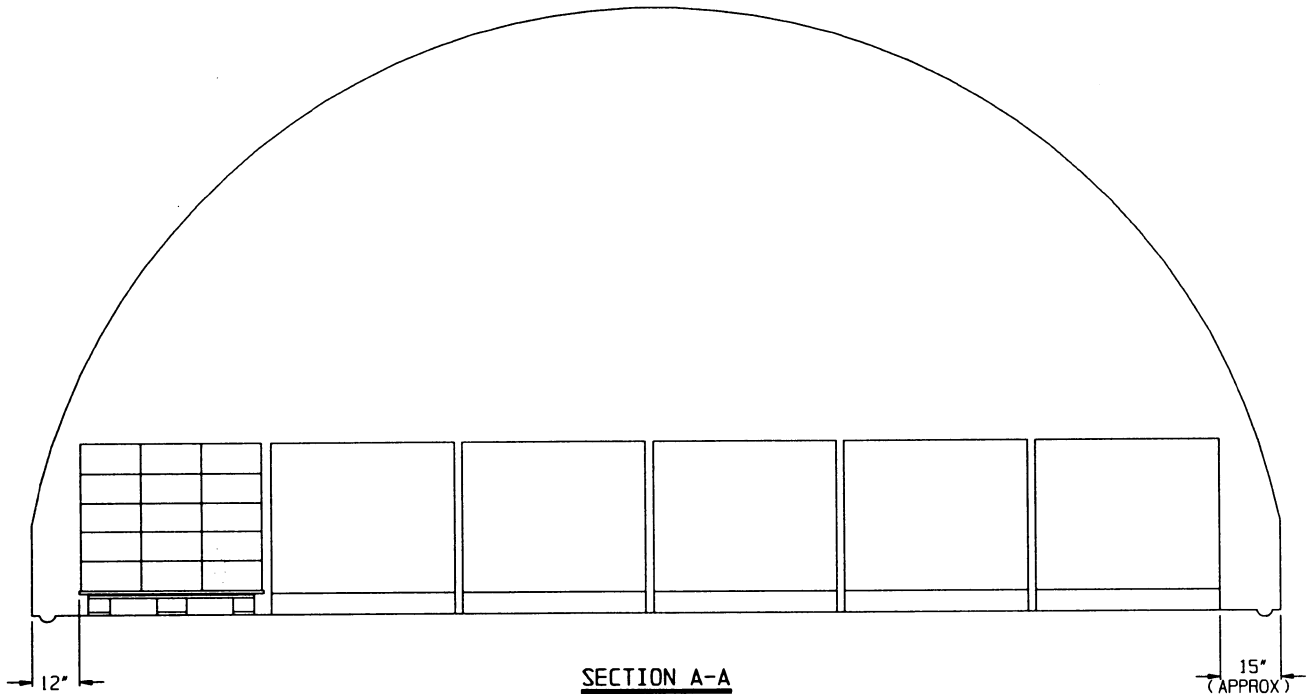
SEE GENERAL NOTE "E" ON PAGE 2.

SUGGESTED PRODUCTION (SLAVE) PALLET LOADING



TYPICAL PLAN VIEW

(81'-0" MAGAZINE SHOWN)



SECTION A-A

15" (APPROX)

SPECIAL NOTES

(SPECIAL NOTES CONTINUED)

1. STORAGE AS SHOWN IS TYPICAL ONLY, AND APPLIES TO SEVERAL LOTS OF TNT PACKED 50 POUNDS PER FIBERBOARD BOX NO. 4 AND PLACED 45 BOXES ON A PRODUCTION (SLAVE) PALLET AS SHOWN ON PAGE 12. PRODUCTION (SLAVE) PALLETS WITH LOOSE BOXES WILL NOT BE STACKED. SEE GENERAL NOTE "E" ON PAGE 2.
2. FOR DETAILS OF THE BOX, SEE PICATINNY ARSENAL DRAWING NO. 7548645. DIMENSIONS - - 18-3/4" LONG BY 15-1/4" WIDE BY 7-5/8" HIGH. EXPLOSIVE WEIGHT FOR TNT - - 50 POUNDS.
3. PALLETS SHOULD BE SPACED APPROXIMATELY 2" APART TO FACILITATE REMOVAL. STORAGE AS SHOWN CAN BE ACCOMPLISHED WITH A FORKLIFT TRUCK. IF A PALLET-JACK IS USED, ADDITIONAL PALLETS MAY BE PLACED IN THE MHE AREA. HOWEVER EACH LOT MUST BE ACCESSIBLE FOR REMOVAL.
4. FOR WEIGHT OF SIMILAR BULK EXPLOSIVES PACKED IN BOX NO. 4, SEE THE CHART ON PAGE 3. EXPLOSIVE WEIGHT MAY VARY FROM 30 TO 60 POUNDS PER BOX.

5. GENERALLY THE LARGEST LOT SHOULD BE STORED IN THE REAR OR ON ONE SIDE OF THE MAGAZINE. CAUTION: THE EXPLOSIVE LIMIT ESTABLISHED FOR A MAGAZINE MUST NOT BE EXCEEDED.
6. THE DEPICTED PROCEDURES MAY ALSO BE APPLIED TO THE STORAGE OF PRODUCTION (SLAVE) PALLETS CONTAINING 30 BOXES AS SHOWN ON PAGE 12.

(CONTINUED AT RIGHT)

PRODUCTION (SLAVE) PALLETS

TYPICAL PLAN VIEW

