APPROVED BY
BUREAU OF EXPLOSIVES

DATE 6/4/2000

LOADING AND BRACING● IN SIDE OPENING ISO CONTAINERS OF PROPELLING CHARGES PACKED IN CYLINDRICAL METAL CONTAINERS

M460 SERIES CONTAINERS (W/O PROTECTIVE COVER)

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● **LOADING AND BRACING SPECIFICATIONS SET FORTH WITHIN THIS DRAWING ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC) RAIL CARRIER SERVICE. THESE SPECIFICATIONS MAY ALSO BE USED FOR LOADS THAT ARE TO BE MOVED BY MOTOR OR WATER CARRIERS.**

U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY
INDUSTRIAL OPERATIONS COMMAND

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

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CLASS	DIVISION	DRAWING	FILE
19	48	4264/7	15PM1003

PROJECT CA 277/7-92

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 OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE FOR THE M460 SERIES PROPELLING CHARGE CONTAINER (W/O PROTECTIVE COVER) ASSEMBLED ON THE 40" X 48" 4-WAY ENTRY PALLET. SEE THE PICTORAL VIEWS ON PAGES 3 AND 4 FOR SIZES AND WEIGHTS. SEE U. S. ARMY MATERIEL COMMAND DRAWING 19-48-4042A/7-20PM1001 FOR UNITIZATION PROCEDURES FOR THE M460 SERIES CONTAINERS. CAUTION: REGARDLESS OF THE QUANTITY OF UNITS TO BE SHIPPED, THE "MAXIMUM GROSS WEIGHT" OF THE SIDE OPENING ISO CONTAINER MUST NOT BE EXCEEDED.

C. THE LOADS AS SHOWN ARE BASED ON 6,050 POUND 20' LONG BY 8' WIDE BY 8'-6" HIGH SIDE OPENING ISO CONTAINER WITH INSIDE DIMENSIONS OF 19'-4" LONG BY 89" WIDE BY 88" HIGH AND A MAXIMUM GROSS WEIGHT OF 52,910 POUNDS. THE LOAD IS DESIGNED FOR TRAILER/CONTAINER-ON-FLATCAR (T/COFC) SHIPMENT, HOWEVER, THE LOAD AS DESIGNED CAN ALSO BE MOVED BY MOTOR OR WATER CARRIERS. NOTICE: OTHER CONTAINERS OF THE SAME DESIGN CONFIGURATION CAN ALSO BE USED.

D. WHEN LOADING THE UNITS, THEY ARE TO BE POSITIONED SO AS TO ACHIEVE A TIGHT LOAD (TIGHT AGAINST THE DUNNAGE ASSEMBLIES). THE UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD BAY IS NOT TO EXCEED 1-1/2". EXCESSIVE SLACK CAN BE ELIMINATED FROM A LOAD BY LAMINATING ADDITIONAL PIECES OF APPROPRIATE THICKNESS TO THE CRIB FILL ASSEMBLIES. NAIL EACH ADDITIONAL PIECE TO THE HORIZONTAL PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE THICKNESS AND QUANTITY OF THE DUNNAGE LUMBER USED MAY BE ADJUSTED AS REQUIRED TO FACILITATE VARIANCE IN THE SIZE OF THE CONTAINER.

E. DUNNAGE LUMBER SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.

F. A STAGGERED NAILING PATTERN WILL BE USED WHENEVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES OR 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.

G. IN SOME CONTAINERS THERE IS A SLOT AT THE CORNERS OF THE ENDWALLS. PIECES OF DUNNAGE MATERIAL MUST BE LAMINATED TO THE BUFFER PIECES ON THE END BLOCKING ASSEMBLIES TO PROVIDE A FLAT SURFACE FOR THE BUFFER PIECES. A PIECE OF 2" X 4", 2" X 3" OR A SPECIAL WIDTH PIECE CUT-TO-FIT CAN BE USED. THIS FILL PIECE WILL BE NAILED WITH ONE APPROPRIATELY SIZED NAIL EVERY 12". NOTE THAT SOME CONTAINERS ARE EQUIPPED WITH "TIE-BARS" IN THE CORNER SLOT, WHICH PRECLUDE THE USE OF A FULL HEIGHT FILL PIECE. WHEN "TIE-BARS" ARE PRESENT, THE FILL PIECE MUST BE INSTALLED IN SEGMENTS DESIGNED TO FIT BETWEEN THE "TIE-BARS" VERTICALLY. THE FILL PIECE(S) IS NOT REQUIRED WHEN THE CORNER PORTIONS OF THE CONTAINER ENDWALLS ARE SMOOTH AND FLAT. DO NOT ALLOW ANY DUNNAGE ASSEMBLY TO CONTACT THE CONTAINER ENDWALLS, ONLY THE CORNER POSTS OF THE CONTAINER SHOULD BE USED FOR LONGITUDINAL BLOCKING.

H. CAUTION: DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDE DOORS, HAVE NOT BEEN SHOWN IN THE LOAD VIEW FOR CLARITY PURPOSES.

J. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM AND ONE POUND EQUALS 0.454 KG.

(GENERAL NOTES CONTINUED)

K. MAXIMUM LOAD WEIGHT CRITERIA:

THE MAXIMUM LOAD WEIGHTS ARE CONTROLLED BY EQUIPMENT CAPABILITY FACTORS. ALTHOUGH THE HEAVIEST MAXIMUM LOADS ARE DELINEATED IN THE LOAD VIEWS, PROVISIONS ARE INCLUDED WITHIN THIS DRAWING SO THAT THE BASIC LOADS CAN BE ADJUSTED TO SATISFY A LESSER QUANTITY OF LADING UNITS. DEPENDING ON TRANSPORTATION ROUTING, IT MAY BE NECESSARY TO REDUCE THE LOAD WEIGHT TO SATISFY "WEIGHT LAWS" OF CERTAIN STATES. ALSO, IT MAY BE NECESSARY TO REDUCE THE LOAD WEIGHT TO SATISFY OTHER WEIGHT RESTRICTIONS IMPOSED ON THE INTERMODAL CONTAINER SYSTEM.

L. REQUIREMENTS CITED WITHIN THE ASSOCIATION OF AMERICAN RAILROADS (AAR) INTERMODAL LOADING GUIDE APPLY WHEN THE SHIPMENT MOVES BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC). SPECIAL T/COFC NOTES FOLLOW:

1. A LOADED CONTAINER MUST BE ON A CHASSIS EQUIPPED WITH TWO BOGIE ASSEMBLIES WHEN BEING MOVED IN TOFC SERVICE.

2. THE LOAD LIMIT OF A T/COFC RAILCAR MUST NOT BE EXCEEDED, NOR WILL A CAR BE LOADED SO THAT THE TRUCK UNDER ONE END OF THE CAR CARRIES MORE THAN ONE-HALF OF THE LOAD LIMIT FOR THAT CAR.

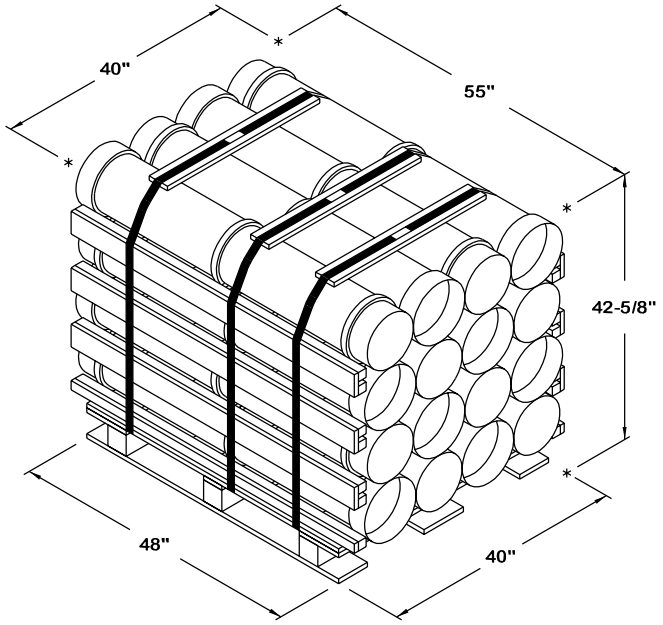
M. DURING INTRASTATE AND/OR INTERSTATE MOVES BY MOTOR CARRIER, A PROPER CHASSIS OR MODIFIED FLATBED TRAILER MUST BE USED TO PRECLUDE VIOLATION OF ONE OR MORE "WEIGHT LAWS" APPLICABLE TO THE STATE OR STATES INVOLVED.

N. WHETHER A CONTAINER IS FULL OR IS LOADED WITH A REDUCED QUANTITY OF LADING UNITS, THE LENGTHWISE CENTER OF GRAVITY OF THE LOAD MUST BE WITHIN 12", IN EITHER DIRECTION, OF THE MID-POINT OF THE CONTAINER.

O. THE QUANTITY OF PALLET UNITS SHOWN IN THE LOAD ON PAGES 6, 8, 10, 12 AND 14 MAY BE REDUCED FOR SHIPMENT, IF DESIRED. SEE THE OMITTED UNIT ASSEMBLY ON PAGE 5.

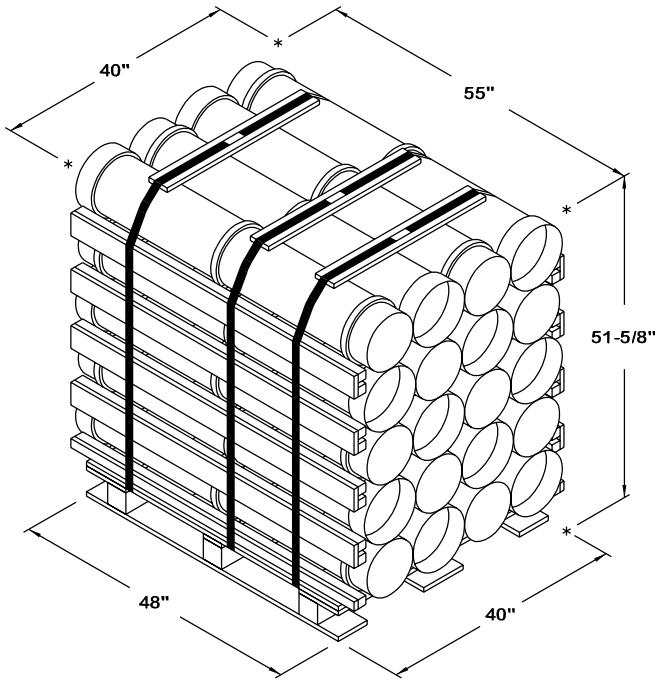
MATERIAL SPECIFICATIONS

LUMBER - - - - - - - -:	SEE TM 743-200-1 (DUNNAGE LUMBER) AND VOLUNTARY PRODUCT STANDARD PS 20.
NAILS - - - - - - - -:	ASTM F1667; COMMON STEEL NAIL (NLCMS OR NLCMMS).
PLYWOOD - - - - - -:	COMMERCIAL ITEM DESCRIPTION A-A-55057, INDUSTRIAL PLYWOOD, INTERIOR WITH EXTERIOR GLUE, GRADE C-D. IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER INTERIOR OR AN EXTERIOR GRADE MAY BE SUBSTITUTED.
WIRE, CARBON STEEL -:	ASTM A853; ANNEALED AT FINISH, BLACK OXIDE FINISH, .0800" DIA, GRADE 1006 OR BETTER.



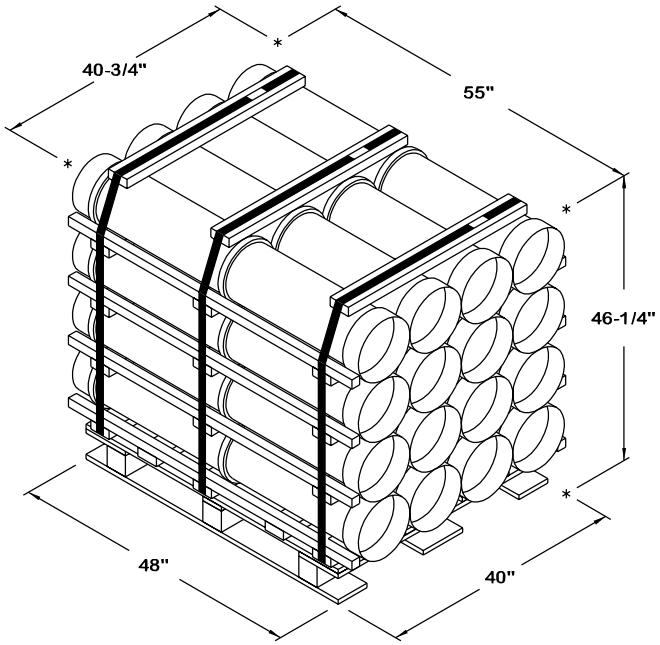
ALTERNATED CONTAINERS UNIT (BASIC HEIGHT)

CONTAINER - - - - - - - - - 16 EACH @ 106 LBS (APPROX)
CUBE - - - - - - - - - - - - 54.3 CUBIC FEET (APPROX)
GROSS WEIGHT - - - - - - - 1,907 LBS (APPROX)



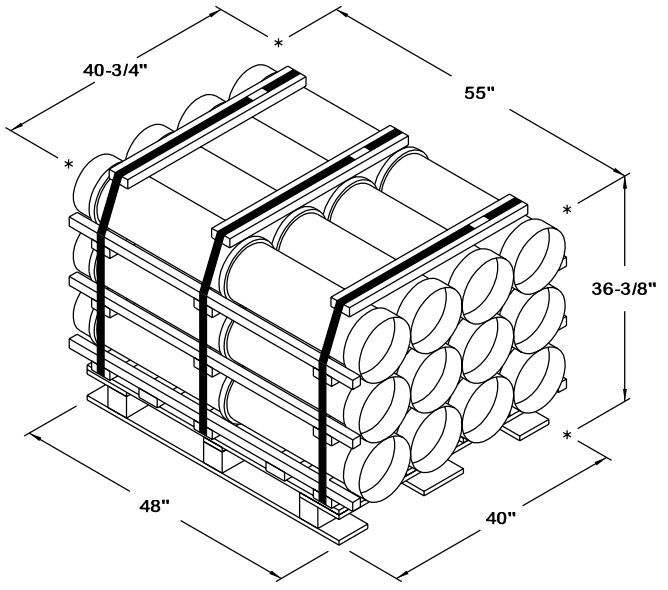
ALTERNATED CONTAINERS UNIT (INCREASED HEIGHT)

CONTAINER - - - - - - - - - 20 EACH @ 106 LBS (APPROX)
CUBE - - - - - - - - - - - - 65.7 CUBIC FEET (APPROX)
GROSS WEIGHT - - - - - - - 2,364 LBS (APPROX)



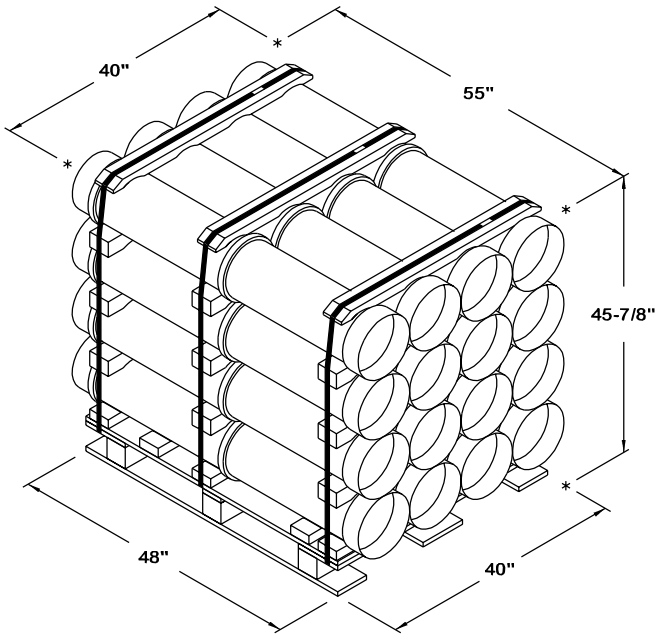
FLAT DUNNAGE METHOD UNIT (BASIC HEIGHT)

CONTAINER - - - - - - - - - 16 EACH @ 106 LBS (APPROX)
CUBE - - - - - - - - - - - - 60.0 CUBIC FEET (APPROX)
GROSS WEIGHT - - - - - - - 1,882 LBS (APPROX)



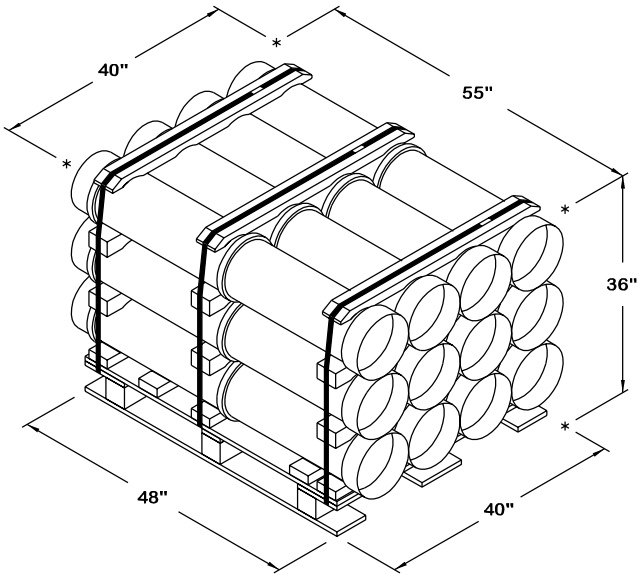
FLAT DUNNAGE METHOD UNIT (DECREASED HEIGHT)

CONTAINER - - - - - - - - - 12 EACH @ 106 LBS (APPROX)
CUBE - - - - - - - - - - - - 47.2 CUBIC FEET (APPROX)
GROSS WEIGHT - - - - - - - 1,448 LBS (APPROX)



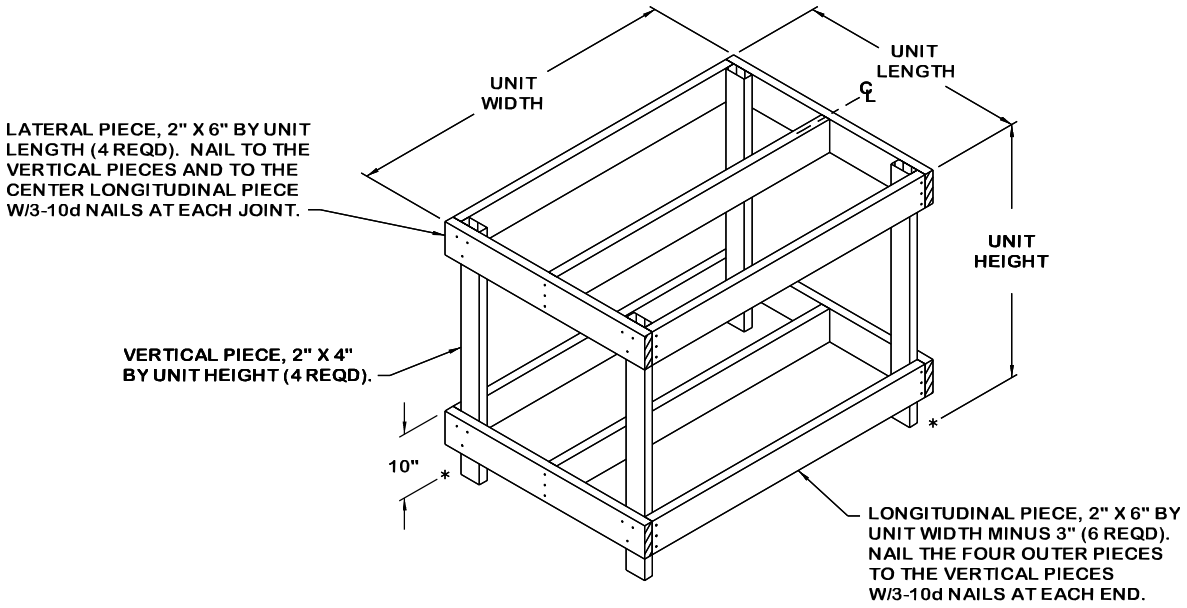
ROUTED DUNNAGE METHOD UNIT (BASIC HEIGHT)

CONTAINER - - - - - - - - - 16 EACH @ 106 LBS (APPROX)
CUBE - - - - - - - - - - - - 58.4 CUBIC FEET (APPROX)
GROSS WEIGHT - - - - - - - 1,878 LBS (APPROX)



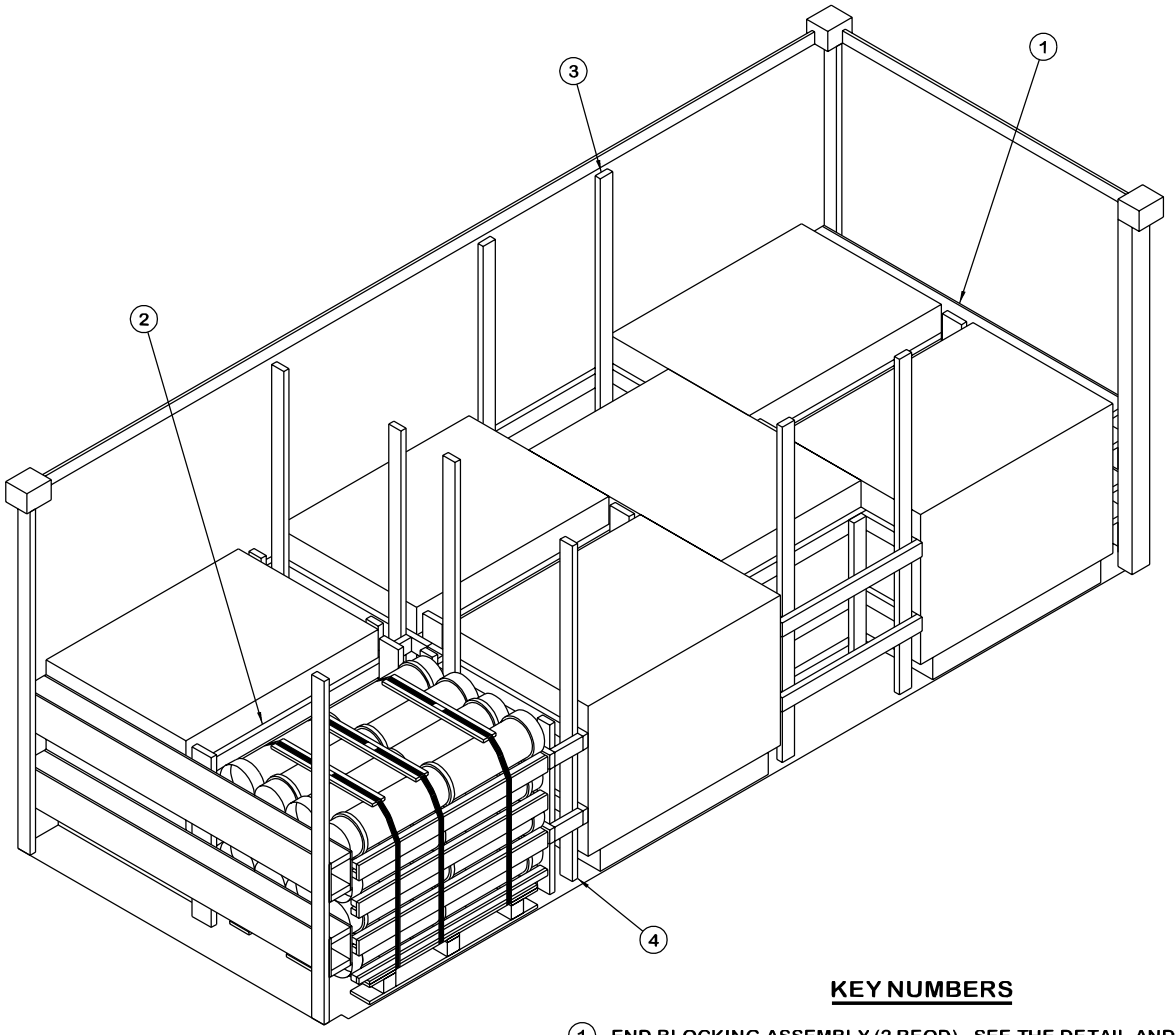
ROUTED DUNNAGE METHOD UNIT (DECREASED HEIGHT)

CONTAINER - - - - - - - - - 12 EACH @ 106 LBS (APPROX)
CUBE - - - - - - - - - - - - 45.8 CUBIC FEET (APPROX)
GROSS WEIGHT - - - - - - - 1,433 LBS (APPROX)



OMITTED UNIT ASSEMBLY

THIS ASSEMBLY IS FOR USE IN PLACE OF AN OMITTED PALLET UNIT. NO MORE THAN THREE OMITTED UNIT ASSEMBLIES MAY BE USED PER LOAD. DO NOT INSTALL AN OMITTED UNIT ASSEMBLY IMMEDIATELY ADJACENT TO ANOTHER OMITTED UNIT ASSEMBLY.



ISOMETRIC VIEW

KEY NUMBERS

1. END BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 16 AND THE "ALTERNATIVE END BLOCKING ASSEMBLY" ON PAGE 18.
2. CRIB FILL ASSEMBLY (3 REQD). SEE THE DETAIL AND CHART ON PAGE 16. WIRE TIE TO ADJACENT PALLET UNIT WITH .0800" DIA. WIRE.
3. FILLER ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.
4. CENTER FILL ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.

7-UNIT LOAD (ALTERNATED CONTAINERS)

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RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PRE-FABRICATE TWO END BLOCKING ASSEMBLIES, TWO FILLER ASSEMBLIES, AND THREE CRIB FILL ASSEMBLIES. TWO CENTER FILL ASSEMBLIES MAY BE PARTIALLY ASSEMBLED AT THIS TIME BUT CANNOT BE COMPLETED UNTIL THE LENGTH OF THE LONGITUDINAL PIECES IS DETERMINED.
2. INSTALL ONE END BLOCKING ASSEMBLY.
3. LOAD TWO PALLET UNITS AND INSTALL ONE CRIB FILL ASSEMBLY.
4. REPEAT STEPS 2 AND 3.
5. INSTALL ONE FILLER ASSEMBLY.
6. LOAD TWO PALLET UNITS.
7. MEASURE THE VOID BETWEEN THE PALLET UNITS AT THE CENTER OF THE CONTAINER AND COMPLETE THE ASSEMBLY AND INSTALLATION OF ONE CENTER FILL ASSEMBLY.
8. INSTALL THE SECOND FILLER ASSEMBLY AND LOAD ONE PALLET UNIT.
9. REPEAT STEP 7.

SPECIAL NOTE:

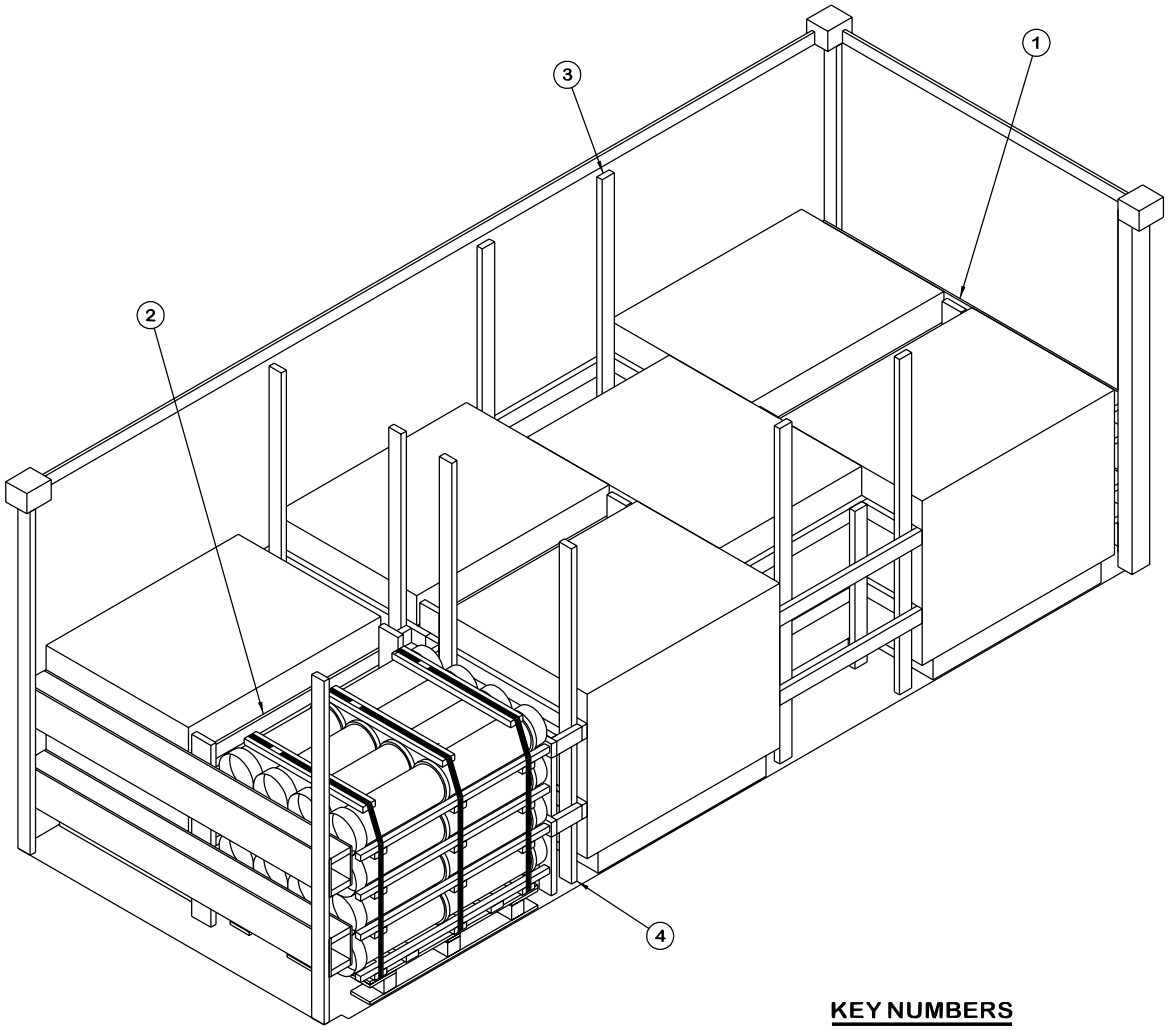
A LOAD OF INCREASED HEIGHT ALTERNATED CONTAINERS PALLET UNITS WILL BE LOADED AS SHOWN ON PAGE 6. THE WEIGHT WILL BE APPROXIMATELY 23,157 POUNDS FOR SEVEN PALLET UNITS INCLUDING DUNNAGE AND CONTAINER WEIGHT.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4" 2" X 6"	235 79	157 79
NAILS	NO. REQD	POUNDS
6d (2") 10d (3")	176 208	1-1/4 3-1/4
PLYWOOD, 1/2" - - - 45.39 SQ FT REQD - - - 62-1/2 LBS WIRE, CARBON STEEL - - - - 12' REQD - - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	7	13,349 LBS
DUNNAGE		539 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		19,938 LBS (APPROX)

7-UNIT LOAD (ALTERNATED CONTAINERS)



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2. CRIB FILL ASSEMBLY (3 REQD). SEE THE DETAIL AND CHART ON PAGE 16. WIRE TIE TO ADJACENT PALLET UNIT WITH .0800" DIA. WIRE.
3. FILLER ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.
4. CENTER FILL ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.

7-UNIT LOAD (FLAT DUNNAGE - BASIC HEIGHT)

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PRE-FABRICATE TWO END BLOCKING ASSEMBLIES, TWO FILLER ASSEMBLIES, AND THREE CRIB FILL ASSEMBLIES. TWO CENTER FILL ASSEMBLIES MAY BE PARTIALLY ASSEMBLED AT THIS TIME BUT CANNOT BE COMPLETED UNTIL THE LENGTH OF THE LONGITUDINAL PIECES IS DETERMINED.
2. INSTALL ONE END BLOCKING ASSEMBLY.
3. LOAD TWO PALLET UNITS AND INSTALL ONE CRIB FILL ASSEMBLY.
4. REPEAT STEPS 2 AND 3.
5. INSTALL ONE FILLER ASSEMBLY.
6. LOAD TWO PALLET UNITS.
7. MEASURE THE VOID BETWEEN THE PALLET UNITS AT THE CENTER OF THE CONTAINER AND COMPLETE THE ASSEMBLY AND INSTALLATION OF ONE CENTER FILL ASSEMBLY.
8. INSTALL THE SECOND FILLER ASSEMBLY AND LOAD ONE PALLET UNIT.
9. REPEAT STEP 7.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4" 2" X 4" 2" X 6"	28 211 80	10 141 80
NAILS	NO. REQD	POUNDS
6d (2") 10d (3")	200 184	1-1/4 3
PLYWOOD, 1/2" - - - 45.39 SQ FT REQD - - - 62-1/2 LBS WIRE, CARBON STEEL - - - - 12' REQD - - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	7	13,174 LBS
DUNNAGE		529 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		19,753 LBS (APPROX)

7-UNIT LOAD (FLAT DUNNAGE - BASIC HEIGHT)

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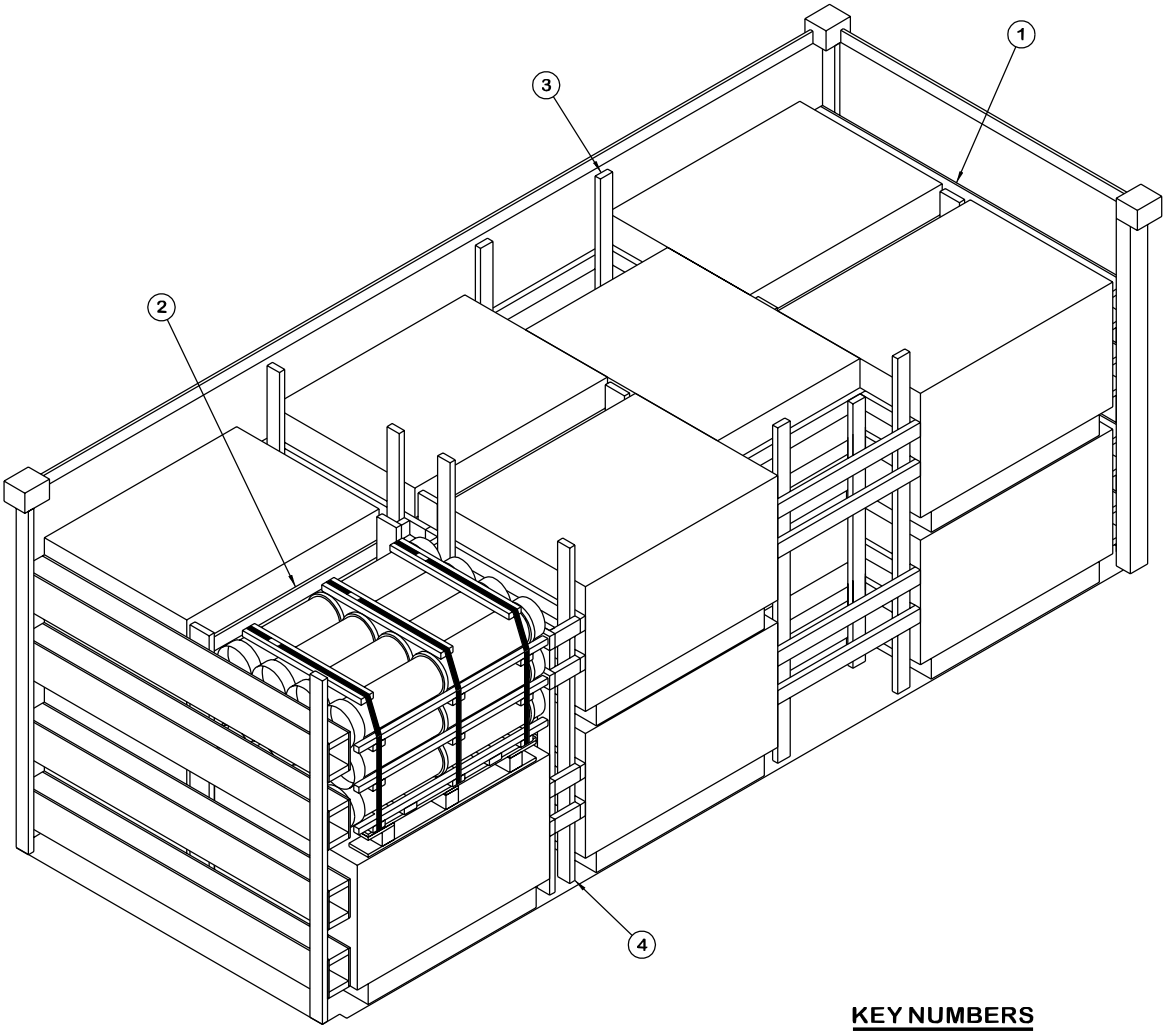

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3. FILLER ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.
4. CENTER FILL ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.

14-UNIT LOAD (FLAT DUNNAGE - DECREASED HEIGHT)

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

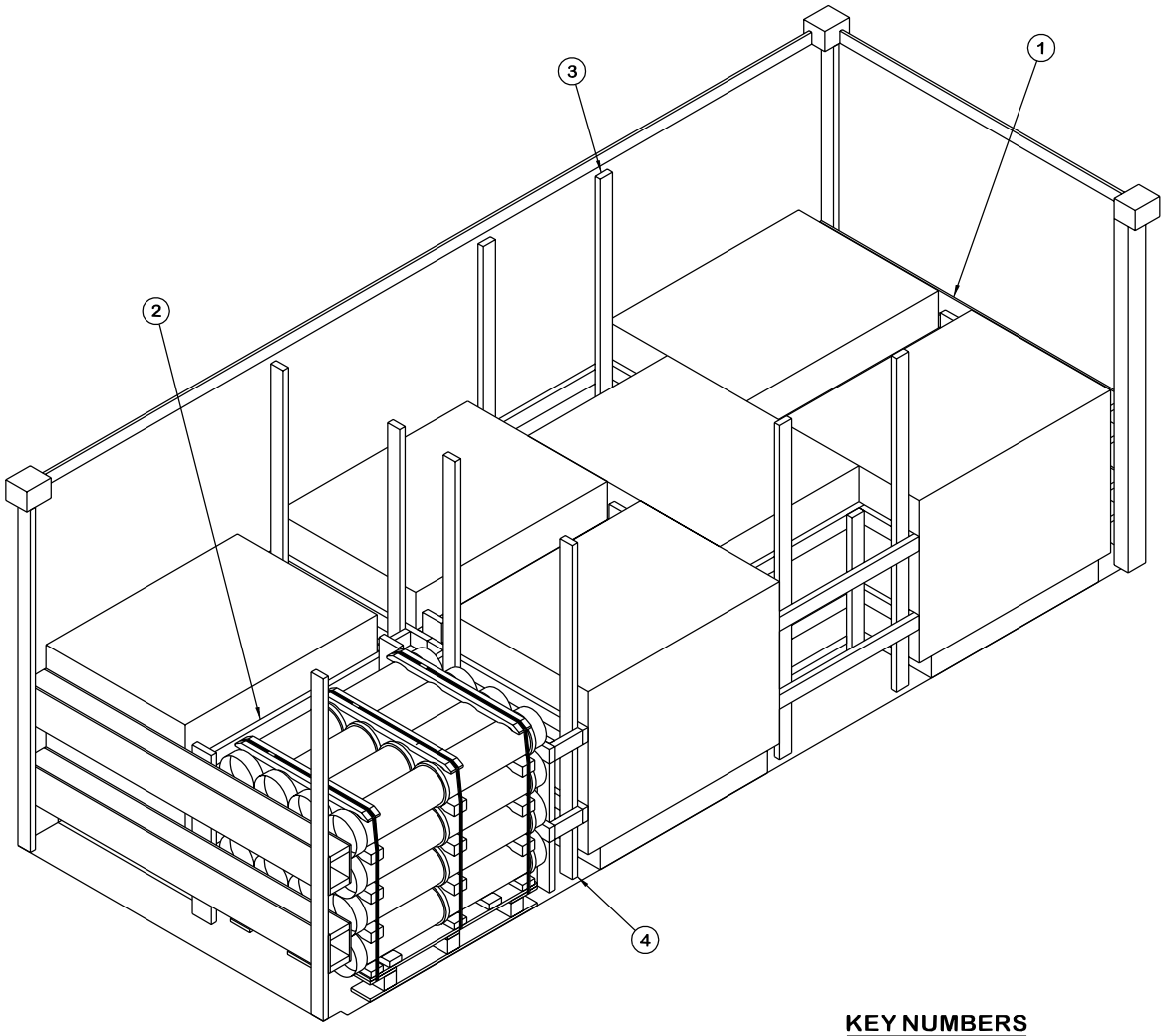
1. PRE-FABRICATE TWO END BLOCKING ASSEMBLIES, TWO FILLER ASSEMBLIES, AND THREE CRIB FILL ASSEMBLIES. TWO CENTER FILL ASSEMBLIES MAY BE PARTIALLY ASSEMBLED AT THIS TIME BUT CANNOT BE COMPLETED UNTIL THE REQUIRED LENGTH OF THE LONGITUDINAL PIECES IS DETERMINED.
2. INSTALL ONE END BLOCKING ASSEMBLY.
3. LOAD FOUR PALLET UNITS AND INSTALL ONE CRIB FILL ASSEMBLY.
4. REPEAT STEPS 2 AND 3.
5. INSTALL ONE FILLER ASSEMBLY.
6. LOAD FOUR PALLET UNITS.
7. MEASURE THE VOID BETWEEN THE PALLET UNITS AT THE CENTER OF THE CONTAINER AND COMPLETE THE ASSEMBLY AND INSTALLATION OF ONE CENTER FILL ASSEMBLY.
8. INSTALL THE SECOND FILLER ASSEMBLY AND LOAD TWO PALLET UNITS.
9. REPEAT STEP 7.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4" 2" X 4" 2" X 6"	55 327 151	19 218 151
NAILS	NO. REQD	POUNDS
6d (2") 10d (3")	400 368	2-1/2 5-3/4
PLYWOOD, 1/2" - - - 90.78 SQ FT REQD - - - - 125 LBS WIRE, CARBON STEEL - - - - 12' REQD - - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	14	20,272 LBS
DUNNAGE		910 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		27,232 LBS (APPROX)

14-UNIT LOAD (FLAT DUNNAGE - DECREASED HEIGHT)



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3. FILLER ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.
4. CENTER FILL ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PRE-FABRICATE TWO END BLOCKING ASSEMBLIES, TWO FILLER ASSEMBLIES, AND THREE CRIB FILL ASSEMBLIES. TWO CENTER FILL ASSEMBLIES MAY BE PARTIALLY ASSEMBLED AT THIS TIME BUT CANNOT BE COMPLETED UNTIL THE REQUIRED LENGTH OF THE LONGITUDINAL PIECES IS DETERMINED.
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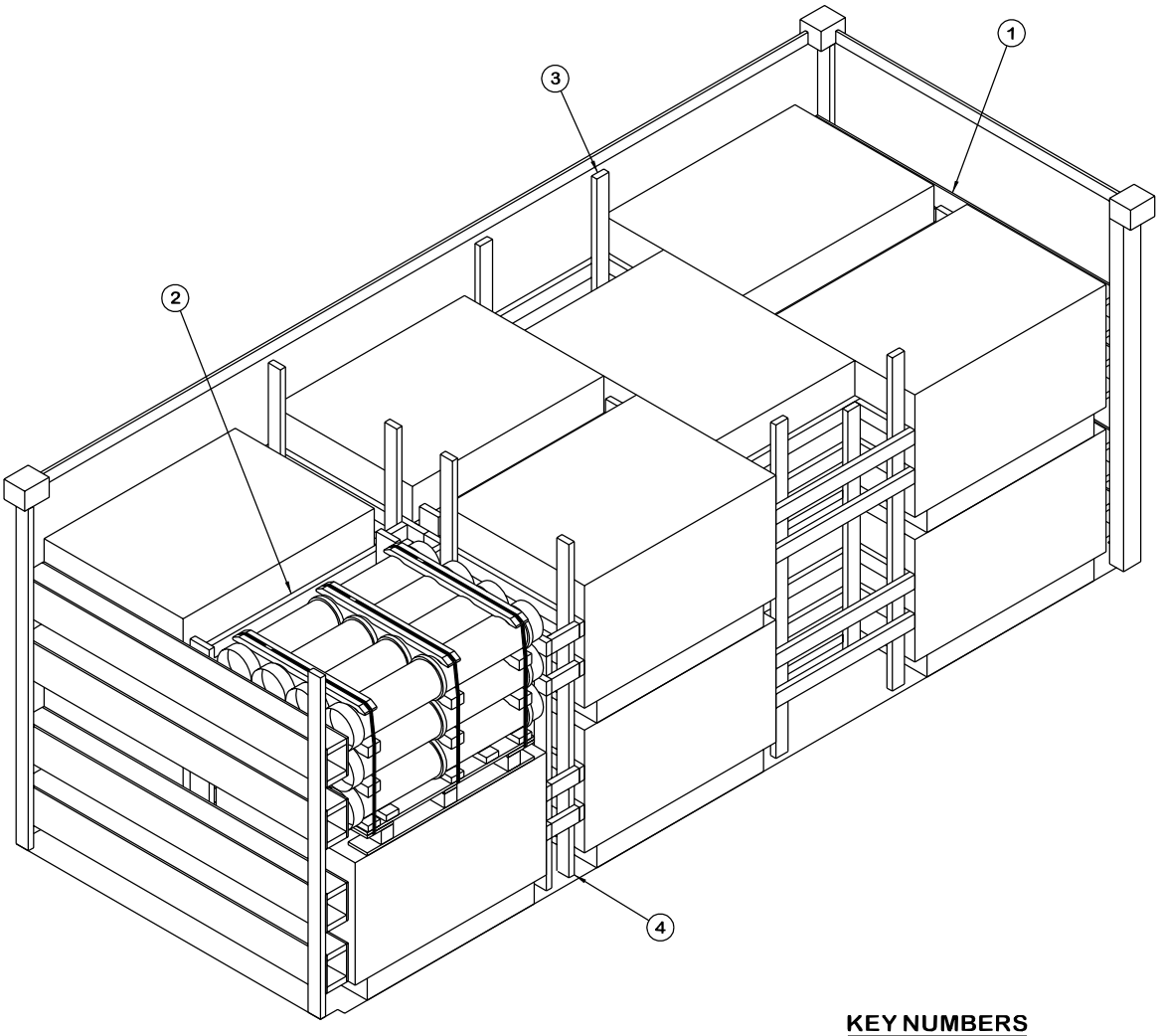
8. INSTALL THE SECOND FILLER ASSEMBLY AND LOAD ONE PALLET UNIT.
9. REPEAT STEP 7.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4" 2" X 6"	236 79	158 79
NAILS	NO. REQD	POUNDS
6d (2") 10d (3")	176 208	1-1/4 3-1/4
PLYWOOD, 1/2" - - - 45.39 SQ FT REQD - - - 62-1/2 LBS WIRE, CARBON STEEL - - - - 12' REQD - - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	7	13,146 LBS
DUNNAGE		539 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		19,735 LBS (APPROX)



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4. CENTER FILL ASSEMBLY (2 REQD). SEE THE DETAIL AND CHART ON PAGE 17.

14-UNIT LOAD (ROUTED DUNNAGE - DECREASED HEIGHT)

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

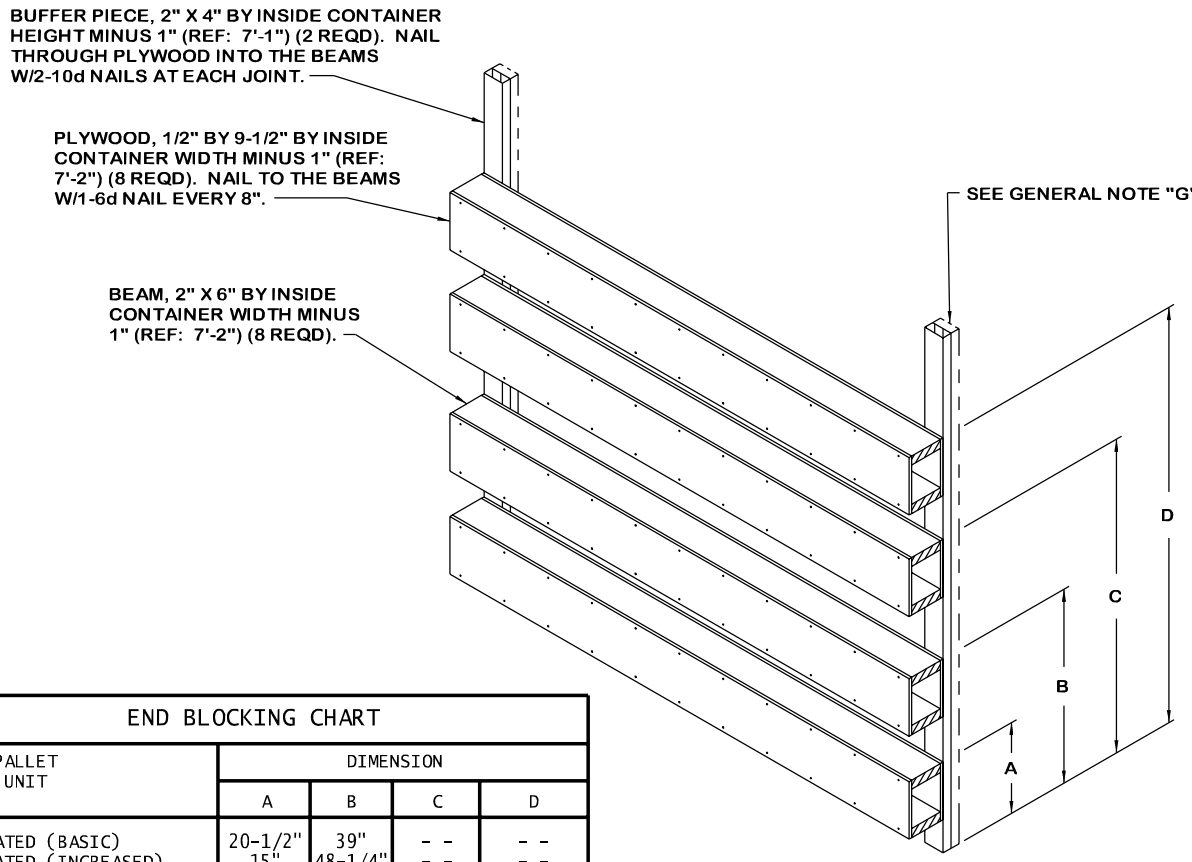
1. PRE-FABRICATE TWO END BLOCKING ASSEMBLIES, TWO FILLER ASSEMBLIES, AND THREE CRIB FILL ASSEMBLIES. TWO CENTER FILL ASSEMBLIES MAY BE PARTIALLY ASSEMBLED AT THIS TIME BUT CANNOT BE COMPLETED UNTIL THE REQUIRED LENGTH OF THE LONGITUDINAL PIECES IS DETERMINED.
2. INSTALL ONE END BLOCKING ASSEMBLY.
3. LOAD FOUR PALLET UNITS AND INSTALL ONE CRIB FILL ASSEMBLY.
4. REPEAT STEPS 2 AND 3.
5. INSTALL ONE FILLER ASSEMBLY.
6. LOAD FOUR PALLET UNITS.
7. MEASURE THE VOID BETWEEN THE PALLET UNITS AT THE CENTER OF THE CONTAINER AND COMPLETE THE ASSEMBLY AND INSTALLATION OF ONE CENTER FILL ASSEMBLY.
8. INSTALL THE SECOND FILLER ASSEMBLY AND LOAD TWO PALLET UNITS.
9. REPEAT STEP 7.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4" 2" X 6"	380 149	254 149
NAILS	NO. REQD	POUNDS
6d (2") 10d (3")	352 416	2-1/4 6-1/2
PLYWOOD, 1/2" - - - 90.78 SQ FT REQD - - - - 125 LBS WIRE, CARBON STEEL - - - - 12' REQD - - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	14	20,062 LBS
DUNNAGE		940 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		27,052 LBS (APPROX)

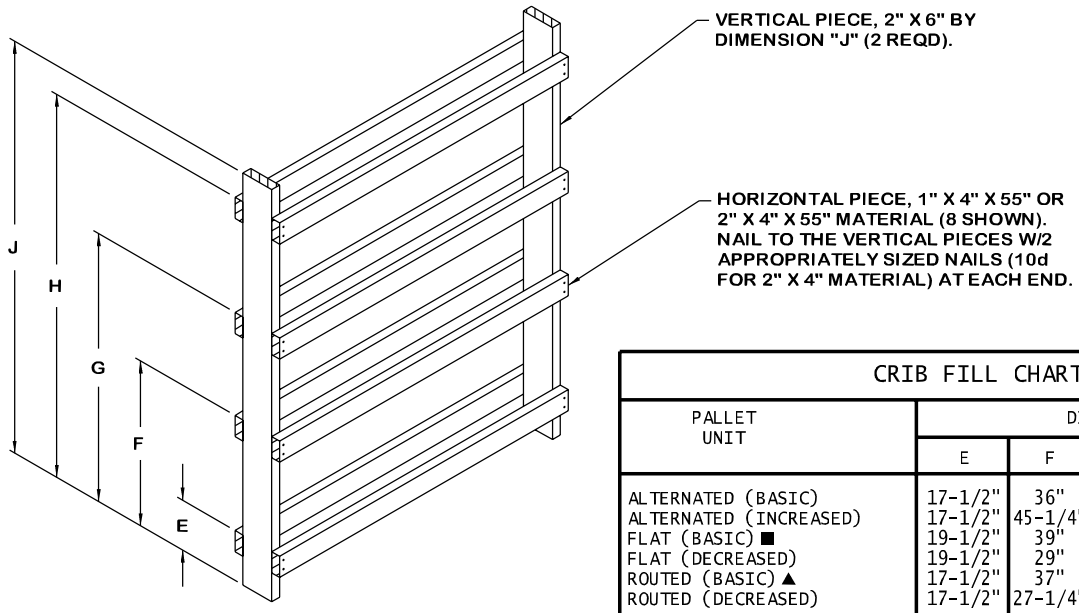
14-UNIT LOAD (ROUTED DUNNAGE - DECREASED HEIGHT)



END BLOCKING CHART				
PALLET UNIT	DIMENSION			
	A	B	C	D
ALTERNATED (BASIC)	20-1/2"	39"	- -	- -
ALTERNATED (INCREASED)	15"	48-1/4"	- -	- -
FLAT (BASIC) ■	20-1/2"	40-1/4"	- -	- -
FLAT (DECREASED)	15"	32"	51-3/4"	68-1/2"
ROUTED (BASIC) ▲	20-1/2"	40"	- -	- -
ROUTED (DECREASED)	15"	30-1/4"	51"	66-1/4"
■ BASIC W/DECREASED ON TOP	20-1/2"	40-1/4"	57-1/4"	6'-4-3/4"
▲ BASIC W/DECREASED ON TOP	20-1/2"	40"	56-1/2"	6'-4"

END BLOCKING ASSEMBLY

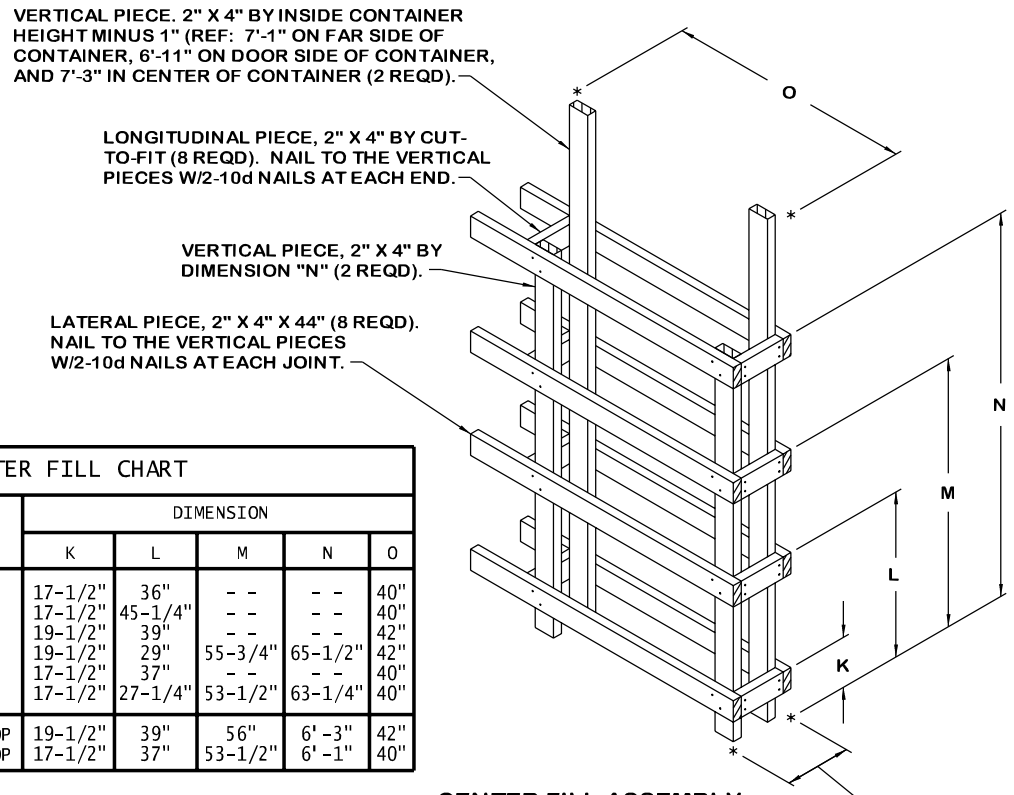
FOR A ONE-HIGH LOAD, ELIMINATE THE TOP TWO BOX BEAM ASSEMBLIES.



CRIB FILL CHART					
PALLET UNIT	DIMENSION				
	E	F	G	H	J
ALTERNATED (BASIC)	17-1/2"	36"	- -	- -	42"
ALTERNATED (INCREASED)	17-1/2"	45-1/4"	- -	- -	48"
FLAT (BASIC) ■	19-1/2"	39"	- -	- -	42"
FLAT (DECREASED)	19-1/2"	29"	55-3/4"	65-1/2"	69"
ROUTED (BASIC) ▲	17-1/2"	37"	- -	- -	42"
ROUTED (DECREASED)	17-1/2"	27-1/4"	53-1/2"	63-1/4"	66"
■ BASIC W/DECREASED ON TOP	19-1/2"	39"	56"	6'-3"	6'-6"
▲ BASIC W/DECREASED ON TOP	17-1/2"	37"	53-1/2"	6'-1"	6'-6"

CRIB FILL ASSEMBLY

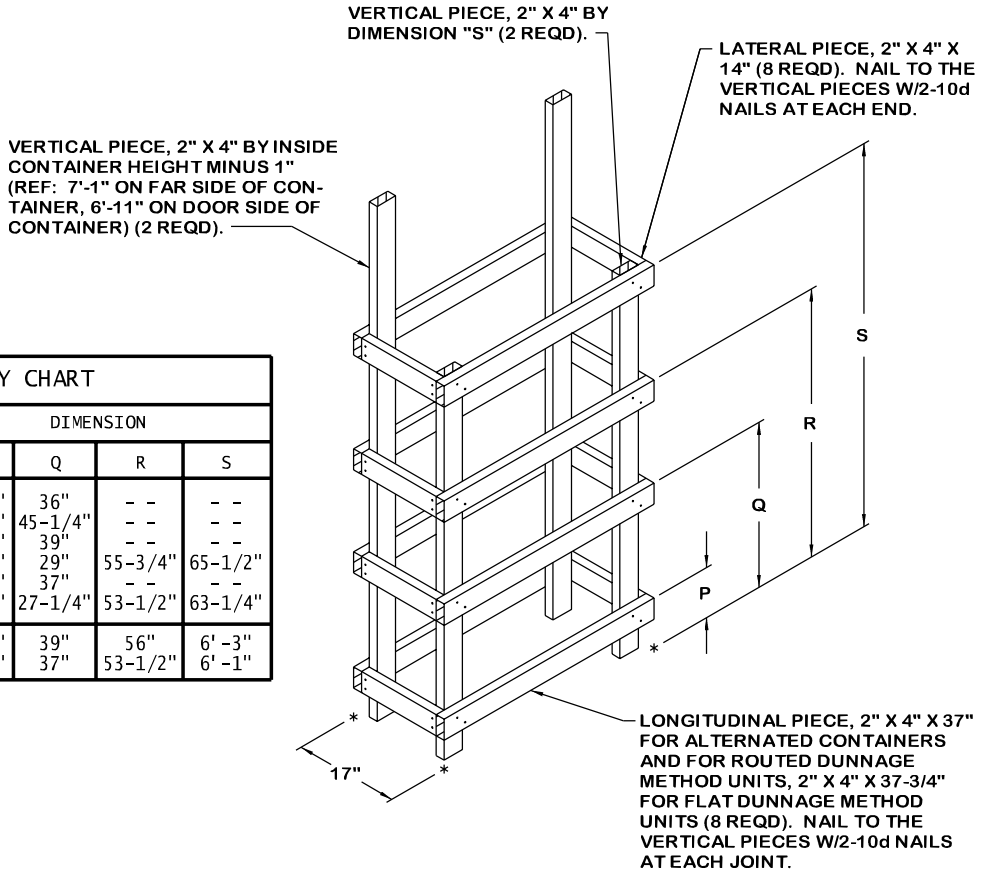
FOR A ONE-HIGH LOAD, ELIMINATE THE TOP FOUR HORIZONTAL PIECES. ADJUST THE HEIGHT OF THE VERTICAL PIECES APPROPRIATELY.



CENTER FILL CHART					
PALLET UNIT	DIMENSION				
	K	L	M	N	O
ALTERNATED (BASIC)	17-1/2"	36"	- -	- -	40"
ALTERNATED (INCREASED)	17-1/2"	45-1/4"	- -	- -	40"
FLAT (BASIC) ■	19-1/2"	39"	- -	- -	42"
FLAT (DECREASED)	19-1/2"	29"	55-3/4"	65-1/2"	42"
ROUTED (BASIC) ▲	17-1/2"	37"	- -	- -	40"
ROUTED (DECREASED)	17-1/2"	27-1/4"	53-1/2"	63-1/4"	40"
■ BASIC W/DECREASED ON TOP	19-1/2"	39"	56"	6'-3"	42"
▲ BASIC W/DECREASED ON TOP	17-1/2"	37"	53-1/2"	6'-1"	40"

CENTER FILL ASSEMBLY

FOR A ONE-HIGH LOAD, ELIMINATE THE TOP FOUR LATERAL AND LONGITUDINAL PIECES AND SHORTEN THE SHORTER VERTICAL PIECES APPROPRIATELY.

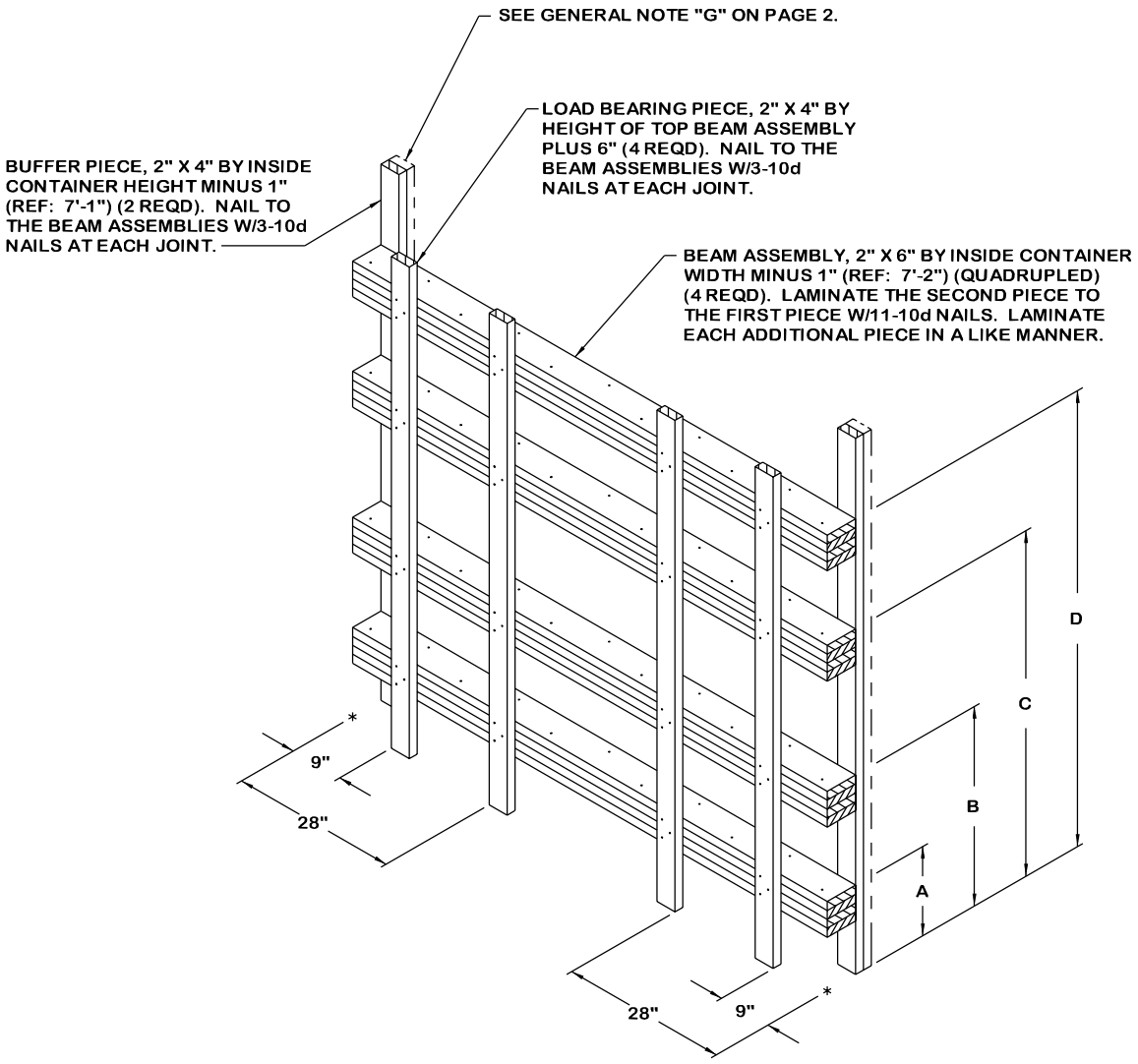


FILLER ASSEMBLY CHART				
PALLET UNIT	DIMENSION			
	P	Q	R	S
ALTERNATED (BASIC)	17-1/2"	36"	- -	- -
ALTERNATED (INCREASED)	17-1/2"	45-1/4"	- -	- -
FLAT (BASIC) ■	19-1/2"	39"	- -	- -
FLAT (DECREASED)	19-1/2"	29"	55-3/4"	65-1/2"
ROUTED (BASIC) ▲	17-1/2"	37"	- -	- -
ROUTED (DECREASED)	17-1/2"	27-1/4"	53-1/2"	63-1/4"
■ BASIC W/DECREASED ON TOP	19-1/2"	39"	56"	6'-3"
▲ BASIC W/DECREASED ON TOP	17-1/2"	37"	53-1/2"	6'-1"

FILLER ASSEMBLY

FOR A ONE-HIGH LOAD, ELIMINATE THE TOP FOUR LATERAL AND LONGITUDINAL PIECES AND SHORTEN THE SHORTER VERTICAL PIECES APPROPRIATELY.

DETAILS



ALTERNATIVE END BLOCKING ASSEMBLY

FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO BEAM ASSEMBLIES AND SHORTEN THE LOAD BEARING PIECES APPROPRIATELY. FOR THE LOCATION OF THE BEAM ASSEMBLIES, REFER TO THE "END BLOCKING CHART" ON PAGE 16 AND SUBTRACT 1-1/2" FROM EACH DIMENSION.