

LOADING AND BRACING[⊕] IN SIDE OPENING ISO CONTAINERS OF AM- RAAM (AIM-120) MISSILES PACKED IN CNU-415 CONTAINERS AND SIDEWINDER (AIM-9X) MISSILES PACKED IN CNU-609 CONTAINERS

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WATER CARRIERS.

U.S. ARMY MATERIEL COMMAND DRAWING

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GENERAL NOTES

(GENERAL NOTES CONTINUED)

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE SPECIFIED OUTLOADING PROCEDURES ARE APPLICABLE TO LOADS OF AMRAAM (AIM-120) MISSILES PACKED IN CNU-415 CONTAINERS AND SIDE-WINDER (AIM-9X) MISSILES PACKED IN CNU-609 CONTAINERS. SUBSEQUENT REFERENCE TO THE CNU-415 AND CNU-609 CONTAINERS HEREIN MEANS THE CNU-415 AND CNU-609 CONTAINERS WITH MISSILES INSTALLED. SEE PAGES 3 AND 4 FOR DETAILS OF THE CONTAINERS. **CAUTION:** REGARDLESS OF THE QUANTITY OF CONTAINERS TO BE SHIPPED, THE "MAXIMUM GROSS WEIGHT" OF THE SIDE OPENING ISO CONTAINER MUST NOT BE EXCEEDED.
- C. THE LOAD AS SHOWN IS BASED ON A 6,050 POUND 20' LONG BY 8' WIDE BY 8'-6" HIGH SIDE OPENING ISO CONTAINER WITH INSIDE DIMENSIONS OF 19'-5-1/4" LONG BY 89'-3/4" WIDE BY 88" HIGH, WITH A MAXIMUM GROSS WEIGHT OF 52,910 POUNDS. OLDER/OTHER CONTAINERS MAY HAVE DIFFERENT INSIDE MEASUREMENTS, VERIFY INSIDE CONTAINER DIMENSIONS PRIOR TO FABRICATING DUNNAGE. THE LOAD IS DESIGNED FOR TRAILER/CONTAINER-ON-FLATCAR (T/COFC) SHIPMENT. HOWEVER, THE LOAD AS DESIGNED CAN ALSO BE MOVED BY OTHER SURFACE MODES OF TRANSPORT. **NOTICE:** OTHER CONTAINERS OF THE SAME DESIGN CONFIGURATION CAN BE USED.
- D. WHEN LOADING CNU-415 AND CNU-609 CONTAINERS, 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 HORIZONTAL PIECES AND/OR FILL PIECES ON THE CENTER FILL ASSEMBLY. NAIL EACH ADDITIONAL PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12". THE LOADS MUST BE AS TIGHT AS POSSIBLE LONGITUDINALLY, BUT THE VOID MUST NOT EXCEED 3/4" OVERALL. EXCESSIVE SLACK CAN BE ELIMINATED BY INCREASING THE LENGTH OF STRUTS.
- E. 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.
- F. IN SOME CONTAINERS THERE IS A SLOT AT THE CORNERS OF THE ENDWALL. PIECES OF DUNNAGE MATERIAL MUST BE LAMINATED TO THE BUFFER PIECES ON THE STRUT 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 FORWARD WALL 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 FORWARD LONGITUDINAL BLOCKING.
- G. 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.
- H. **CAUTION:** DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE.
- J. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDEWALL, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- 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.

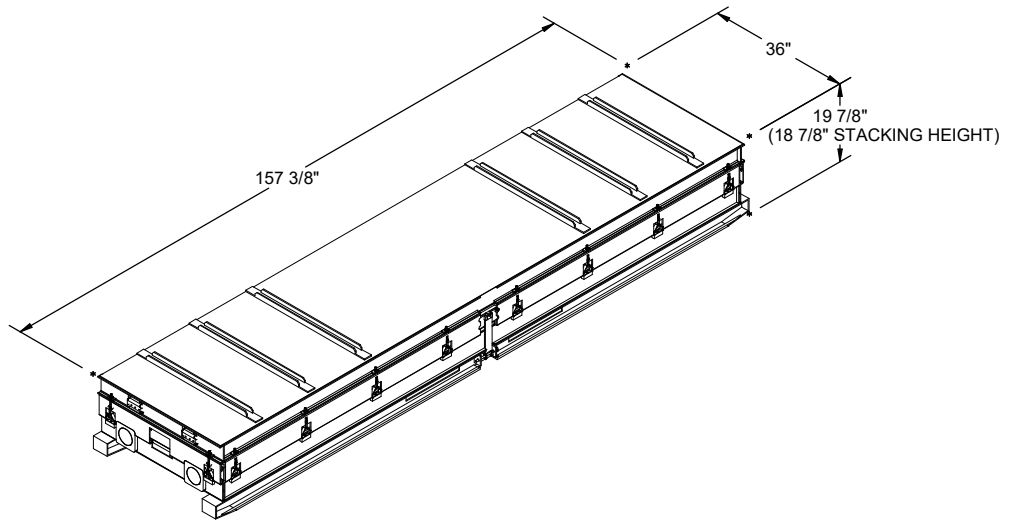
- L. REQUIREMENTS CITED WITHIN THE ASSOCIATION OF AMERICAN RAILROADS (AAR) INTERMODAL LOADING GUIDE APPLY WHEN THE SHIPMENT MOVES BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC). SPECIAL T/COFC NOTES FOLLOW:
1. A LOADED CONTAINER MUST BE ON A CHASSIS EQUIPPED WITH TWO BOGIE ASSEMBLIES WHEN BEING MOVED IN TOFC 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.

(CONTINUED AT RIGHT)

- 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. 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.
- O. THE QUANTITY OF CNU CONTAINERS SHOWN IN THE LOADS ON PAGES 6 THROUGH 8 MAY BE REDUCED FOR SHIPMENT, IF DESIRED. SEE THE "LESS-THAN-FULL LOAD PROCEDURES" ON PAGE 13.
- P. WHEN STEEL STRAPPING IS SEALED IN AN END-OVER-LAP JOINT, A MINIMUM OF ONE SEAL WITH TWO PAIR OF NOTCHES WILL BE USED TO SEAL THE JOINT WHEN A NOTCH-TYPE SEALER IS BEING USED. A MINIMUM OF TWO SEALS, BUTTED TOGETHER WITH TWO PAIR OF CRIMPS PER SEAL, WILL BE USED TO SEAL THE JOINT WHEN A CRIMP-TYPE SEALER IS BEING USED. REFER TO THE "STRAP JOINT A" AND "STRAP JOINT B" DETAILS ON PAGE 9 FOR GUIDANCE.
- Q. THE TWO CNU CONTAINER INTERLOCKS LOCATED ON EITHER SIDE OF THE CONTAINERS CAN BE UTILIZED IN PLACE OF STEEL STRAPPING WHEN UNITIZING CONTAINERS. CONTAINERS MAY BE UNITIZED TWO HIGH USING INTERLOCKS. WHEN HANDLING INTERLOCKED CONTAINERS LIFT BY BOTTOM CONTAINER ONLY. SEE THE "CONTAINER INTERLOCK DETAIL" ON PAGES 3 AND 4 AND NAVY DRAWINGS 6214480 (CNU-415) AND SPI-PHST-271 (CNU-609) FOR FURTHER DETAILS.
- M. ANTI-CHAFING MATERIAL MAY BE INSTALLED AT POINTS OF CONTACT BETWEEN CONTAINERS AND THE SIDE OPENING CONTAINER, AND BETWEEN CONTAINERS AND STEEL STRAPPING, IF DESIRED, TO PREVENT CHAFING DAMAGE TO CONTAINER PAINT AND MARKINGS.
- R. DUNNAGE LUMBER SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- S. RECOMMENDED SEQUENTIAL LOADING PROCEDURES FOR THE LOAD ON PAGE 6. SEQUENTIAL LOADING PROCEDURES ARE SIMILAR FOR THE LOADS ON PAGE 7 AND 8, DIFFERING ONLY IN THE TYPES OF CNU CONTAINERS LOADED:
1. PREFABRICATE FOUR STRUT ASSEMBLIES, TWO END BLOCKING ASSEMBLIES, TWO SIDE FILL ASSEMBLIES, TWO SPACER ASSEMBLIES, AND ONE CENTER FILL ASSEMBLY.
 2. INSTALL FOUR STRUT ASSEMBLIES AND FOUR SPREADER PIECES.
 3. INSTALL TWO END BLOCKING ASSEMBLIES.
 4. INSTALL ONE SIDE FILL ASSEMBLY.
 5. LOAD THREE CNU-415 CONTAINERS AND ONE CNU-609 CONTAINER.
 6. INSTALL ONE SPACER ASSEMBLY AND CENTER FILL ASSEMBLY.
 7. LOAD THE REMAINING THREE CNU-415 CONTAINERS AND ONE CNU-609 CONTAINER.
 8. INSTALL ANOTHER SIDE FILL ASSEMBLY.

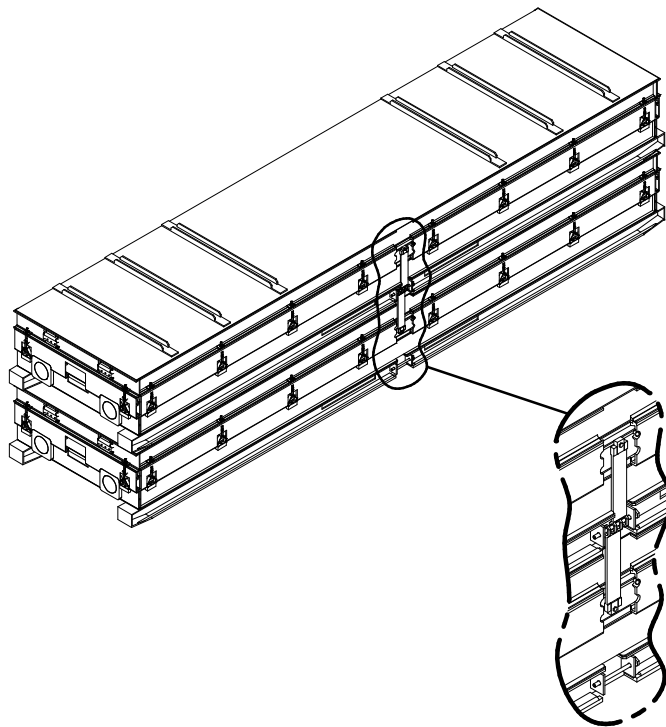
MATERIAL SPECIFICATIONS

| | | |
|------------------------------|-----------|--|
| <u>LUMBER</u> | - - - - - | : SEE TM 743-200-1 (DUNNAGE LUMBER) AND VOLUNTARY PRODUCT STANDARD PS 20. |
| <u>NAILS</u> | - - - - - | : ASTM F1667; COMMON STEEL NAIL NLCMS OR NLCMS). |
| <u>PLYWOOD</u> | - - - - - | : 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. |
| <u>STRAPPING, STEEL</u> | - - - | : ASTM D3953; FLAT STRAPPING, TYPE 1, HEAVY DUTY, FINISH A, B (GRADE 2), OR C. |
| <u>SEAL, STRAP</u> | - - - - - | : ASTM D3953; CLASS H, FINISH A, B (GRADE 2), OR C, DOUBLE NOTCH TYPE, STYLE I, II, OR IV. |
| <u>ANTI-CHAFING MATERIAL</u> | - - - - - | : MIL-PRF-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL. |



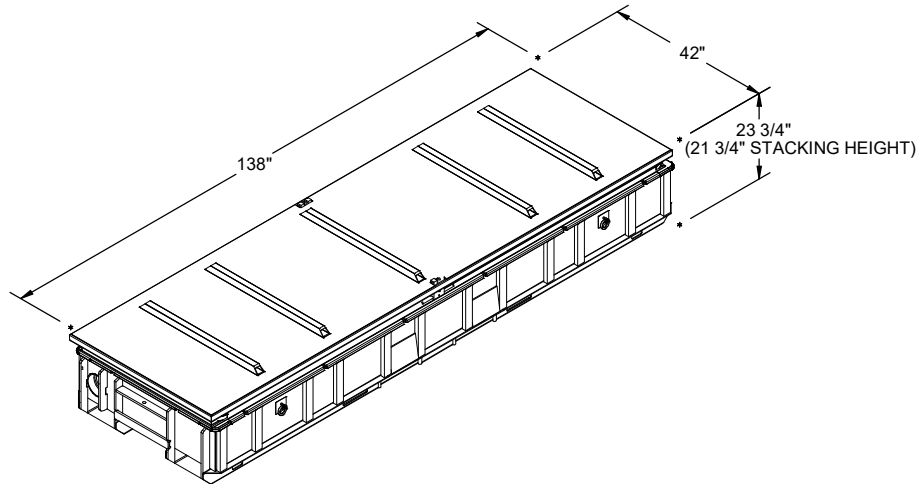
CNU-415 CONTAINER

GROSS WEIGHT - - - - - 2,075 LBS (APPROX)
 CUBE - - - - - 65.2 CU FT (APPROX)



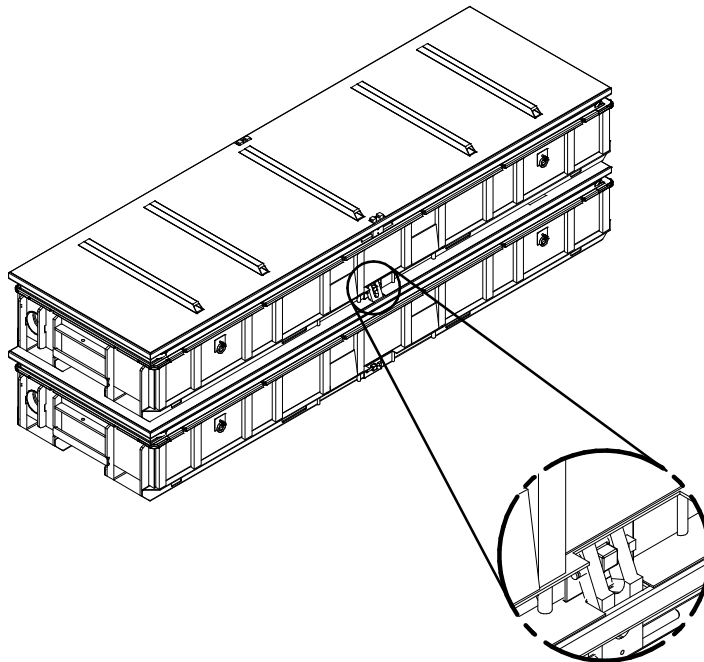
CONTAINER INTERLOCK DETAIL

CAUTION: CONTAINER INTERLOCKS ARE ONLY APPROVED FOR TWO HIGH LOADS. ADDITIONAL STEEL UNITIZING STRAPS MUST BE USED WHEN LOADING THREE LAYERS. SEE GENERAL NOTE "Q" ON PAGE 2.



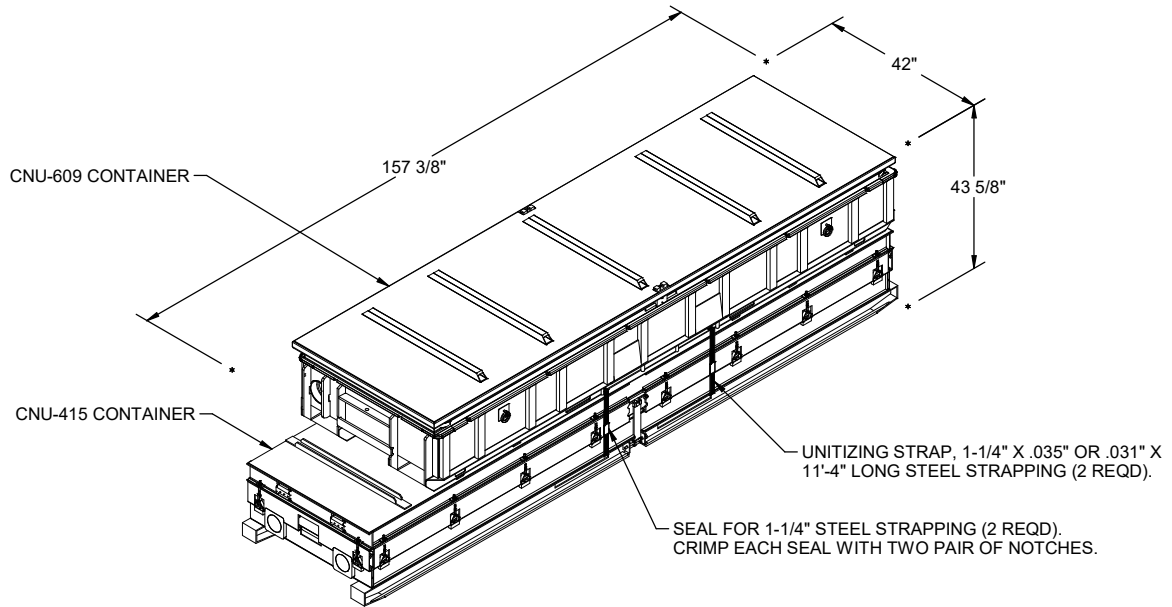
CNU-609 CONTAINER

GROSS WEIGHT - - - - - 2,949 LBS (APPROX)
 CUBE - - - - - 79.7 CU FT (APPROX)



CONTAINER INTERLOCK DETAIL

CAUTION: CONTAINER INTERLOCKS ARE ONLY APPROVED FOR TWO HIGH LOADS. ADDITIONAL STEEL UNITIZING STRAPS MUST BE USED WHEN LOADING THREE LAYERS. SEE GENERAL NOTE "Q" ON PAGE 2.



UNITIZED CNU-415 AND CNU-609 CONTAINERS

GROSS WEIGHT ----- 5,024 LBS (APPROX)
 CUBE ----- 156.7 CU FT (APPROX)

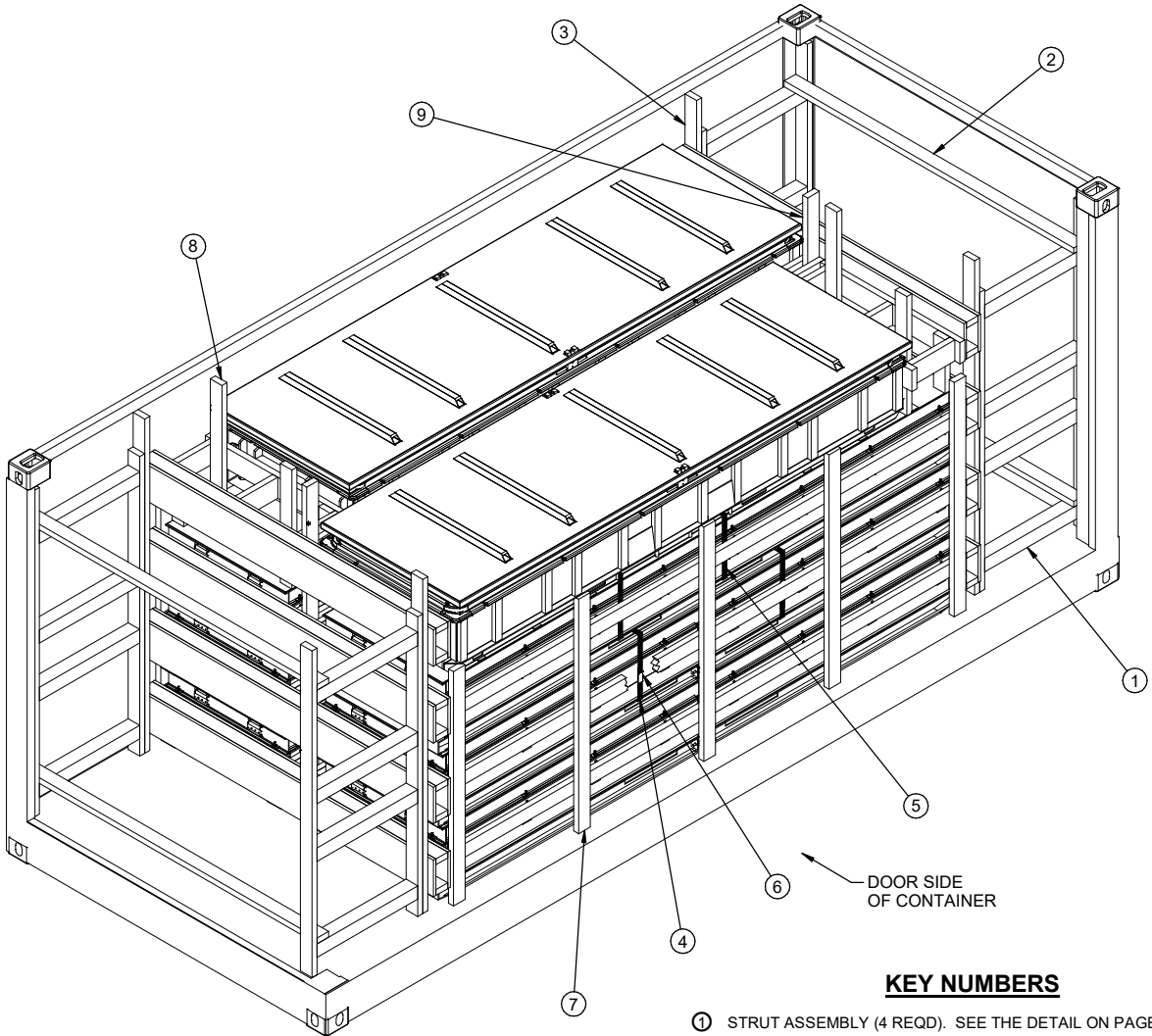
UNITIZATION AND HANDLING GUIDANCE

1. STACKING CONTAINERS FOR UNITIZING:
 - A. AN UPPER CONTAINER SHOULD BE PLACED AS CLOSE AS POSSIBLE IN VERTICAL ALIGNMENT WITH THE NEXT LOWER CONTAINER.
 - B. POSITION THE AFT END OF AN UPPER CONTAINER ABOVE THE AFT END OF THE NEXT LOWER CONTAINER.
 - C. THE CONTAINER SKIDS OF AN UPPER CONTAINER SHOULD BE FULLY SEATED AGAINST THE SKID LOCATOR PIECES ON THE COVER OF THE NEXT LOWER CONTAINER.
2. UNITIZING PROCEDURE USING PREFERRED INTERLOCKING FEATURE (SHOWN ON PAGES 3 AND 4). THE INTERLOCKING FEATURE CAN ONLY BE USED ON LIKE CONTAINERS.
 - A. DETACH QUICK RELEASE PIN (BOTH SIDES) ON CONTAINER TO BE PLACED ON TOP.
 - B. STACK TWO CONTAINERS AS SHOWN. BE SURE TO ALIGN THE STACKING FEATURES.
 - C. SECURE TOP CONTAINER TO BOTTOM CONTAINER USING INTERLOCKING FEATURE.
 - D. INSTALL QUICK RELEASE PIN (BOTH SIDES).

(CONTINUED AT RIGHT)

(UNITIZATION AND HANDLING GUIDANCE CONTINUED)

3. ALTHOUGH THE PREFERRED UNITIZING PROCEDURE UTILIZES THE INTERLOCKING PIN/BRACKET DETAIL, THE ALTERNATE UNITIZING PROCEDURE USING OPTIONAL 1-1/4" BANDING STRAPS IS AS FOLLOWS (SHOWN ABOVE).
 - A. STACK TWO CONTAINERS AS SHOWN. BE SURE TO ALIGN THE STACKING FEATURES (FOR LIKE CONTAINERS) AND SQUARE UP (CENTER) THE CONTAINERS LONGITUDINALLY AND LATERALLY.
 - B. FEED UNITIZING STRAP THROUGH FORK POCKETS OF BOTH CONTAINERS. (2 PLACES)
 - C. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.
4. CONTAINER OR CONTAINER STACK HANDLING:
 - A. ONLY APPROVED AND APPROPRIATELY SIZED MATERIAL HANDLING EQUIPMENT WILL BE USED FOR HANDLING THE DEPICTED CONTAINERS. APPROVED MATERIAL HANDLING EQUIPMENT (FORKLIFT TRUCKS, CRANES, HAND TRUCKS, DOLLIES, ROLLER ASSEMBLIES, SLINGS, SPREADER BARS, ETC.) IS SPECIFIED ELSEWHERE.
 - B. PRECAUTIONARY HANDLING TECHNIQUES NORMALLY EMPLOYED OR AS SPECIFIED FOR THE TYPE OF COMMODITY INVOLVED WILL BE OBSERVED.
 - C. IF HANDLING IS ACCOMPLISHED WITH A FORKLIFT TRUCK, THE CONTAINERS SHOULD BE HANDLED FROM A SIDE POSITION AS MUCH AS POSSIBLE. CARE MUST BE EXERCISED WHEN INSERTING FORKS UNDER A CONTAINER, TO PREVENT DAMAGE TO THE CONTAINER BY THE FORK TINES OR THE FORKLIFT PACKAGE GUARD. IF ONE CONTAINER IS HANDLED BY SLINGING, THE SLING MAY BE ATTACHED TO THE LIFTING POINTS ON THE CONTAINER. DO NOT HANDLE STACKED CONTAINERS WITH A SLING.



ISOMETRIC VIEW

KEY NUMBERS

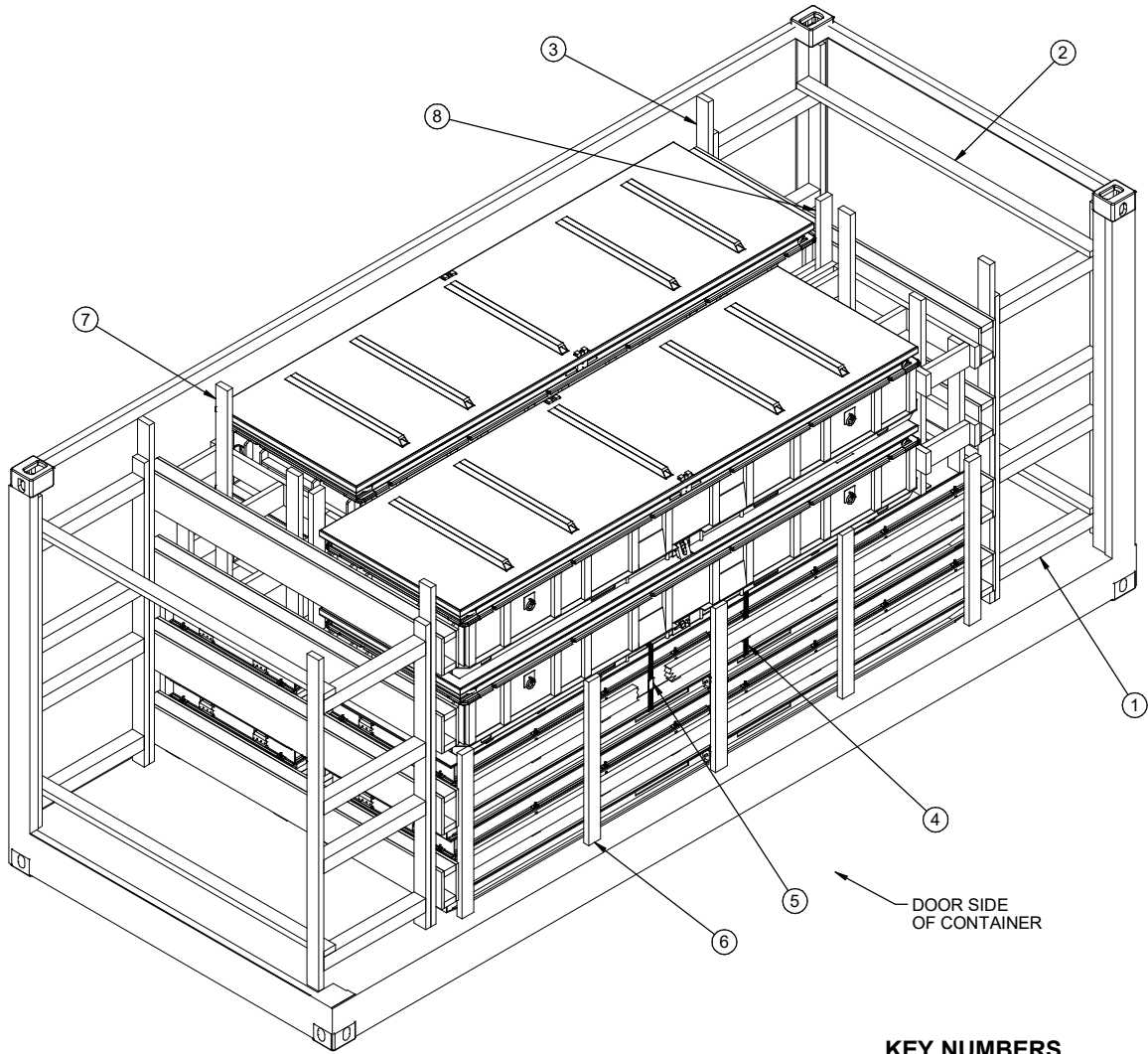
- ① STRUT ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 9.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-3") (4 REQD). NAIL TO THE STRUTS OF THE STRUT ASSEMBLY W/2-10d NAILS AT EACH END.
- ③ END BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 10. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECE OF THE STRUT ASSEMBLIES W/5-10d NAILS.
- ④ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 10'-4" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP THOUGH THE FORK-LIFT POCKETS OF CONTAINERS LOCATE IN LAYERS TWO AND THREE. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.
- ⑤ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 11'-4" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP THOUGH THE FORK-LIFT POCKETS OF CONTAINERS LOCATE IN LAYERS THREE AND FOUR. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.
- ⑥ SEAL FOR 1-1/4" STEEL STRAPPING (8 REQD). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.
- ⑦ SIDE FILL ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 11.
- ⑧ SPACER ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 10.
- ⑨ CENTER FILL ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 12.

BILL OF MATERIAL

| LUMBER | LINEAR FEET | BOARD FEET |
|---|-------------|------------|
| 2" X 4" | 663 | 442 |
| 2" X 6" | 21 | 21 |
| 4" X 4" | 41 | 54 |
| NAILS | NO. REQD | POUNDS |
| 6d (2") | 352 | 2-1/4 |
| 10d (3") | 520 | 8 |
| PLYWOOD, 3/4" - - - - 9.86 SQ FT REQD - 20.34 LBS | | |
| STEEL STRAPPING, 1-1/4" - 86.67' REQD - 12.38 LBS | | |
| SEAL FOR 1-1/4" STRAPPING - - 8 REQD - - - - NIL | | |

LOAD AS SHOWN

| ITEM | QUANTITY | WEIGHT (APPROX) |
|---------------------|----------|----------------------------|
| CNU-415 CONTAINER | 6 | 12,450 LBS |
| CNU-609 CONTAINER | 2 | 5,898 LBS |
| DUNNAGE | - | 1,077 LBS |
| CONTAINER | - | 6,050 LBS |
| TOTAL WEIGHT | | 25,475 LBS (APPROX) |



ISOMETRIC VIEW

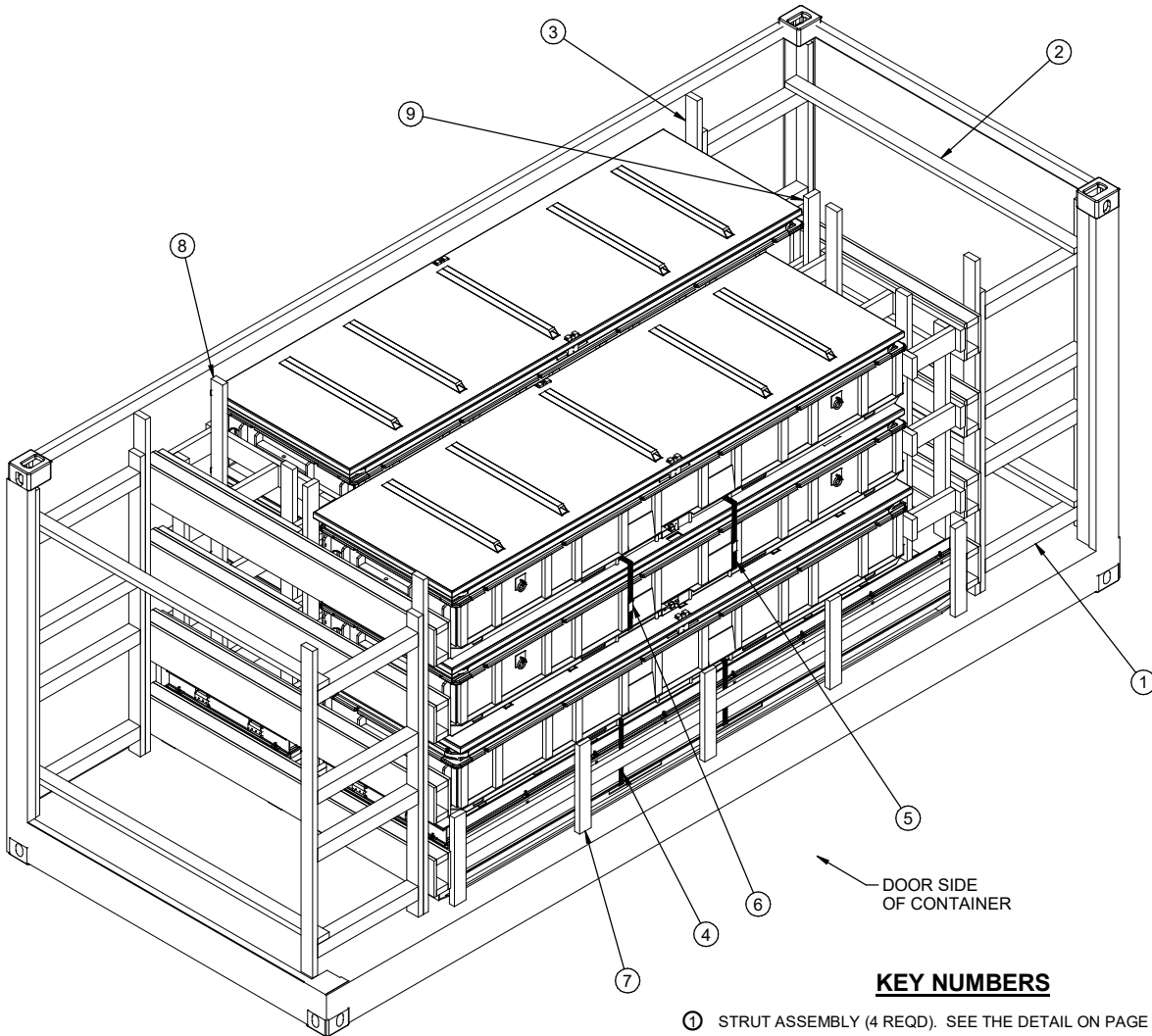
KEY NUMBERS

- ① STRUT ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 9.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-3") (4 REQD). NAIL TO THE STRUTS OF THE STRUT ASSEMBLY W/2-10d NAILS AT EACH END.
- ③ END BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 10. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECE OF THE STRUT ASSEMBLIES W/5-10d NAILS.
- ④ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 11'-4" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP THROUGH THE FORKLIFT POCKETS OF CONTAINERS LOCATE IN LAYERS TWO AND THREE. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.
- ⑤ SEAL FOR 1-1/4" STEEL STRAPPING (4 REQD). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.
- ⑥ SIDE FILL ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 11.
- ⑦ SPACER ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 10.
- ⑧ CENTER FILL ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 12.

| BILL OF MATERIAL | | |
|---|-------------|------------|
| LUMBER | LINEAR FEET | BOARD FEET |
| 2" X 4" | 582 | 388 |
| 2" X 6" | 41 | 41 |
| 4" X 4" | 41 | 54 |
| NAILS | NO. REQD | POUNDS |
| 6d (2") | 352 | 2-1/4 |
| 10d (3") | 508 | 8 |
| PLYWOOD, 3/4" - - - - 9.86 SQ FT REQD - 20.34 LBS | | |
| STEEL STRAPPING, 1-1/4" - 45.33' REQD - 6.48 LBS | | |
| SEAL FOR 1-1/4" STRAPPING - - 4 REQD - - - - NIL | | |

LOAD AS SHOWN

| ITEM | QUANTITY | WEIGHT (APPROX) |
|-------------------|----------|---------------------|
| CNU-415 CONTAINER | 4 | 8,300 LBS |
| CNU-609 CONTAINER | 4 | 11,796 LBS |
| DUNNAGE | | 1,003 LBS |
| CONTAINER | | 6,050 LBS |
| TOTAL WEIGHT | | 27,149 LBS (APPROX) |



ISOMETRIC VIEW

KEY NUMBERS

- ① STRUT ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 9.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-3") (4 REQD). NAIL TO THE STRUTS OF THE STRUT ASSEMBLY W/2-10d NAILS AT EACH END.
- ③ END BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 10. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECE OF THE STRUT ASSEMBLIES W/5-10d NAILS.
- ④ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 11'-4" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP THOUGH THE FORKLIFT POCKETS OF CONTAINERS LOCATE IN LAYERS ONE AND TWO. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.
- ⑤ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 12'-0" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP THOUGH THE FORKLIFT POCKETS OF CONTAINERS LOCATE IN LAYERS THREE AND FOUR. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.
- ⑥ SEAL FOR 1-1/4" STEEL STRAPPING (8 REQD). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.
- ⑦ SIDE FILL ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 11.
- ⑧ SPACER ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 10.
- ⑨ CENTER FILL ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 12.

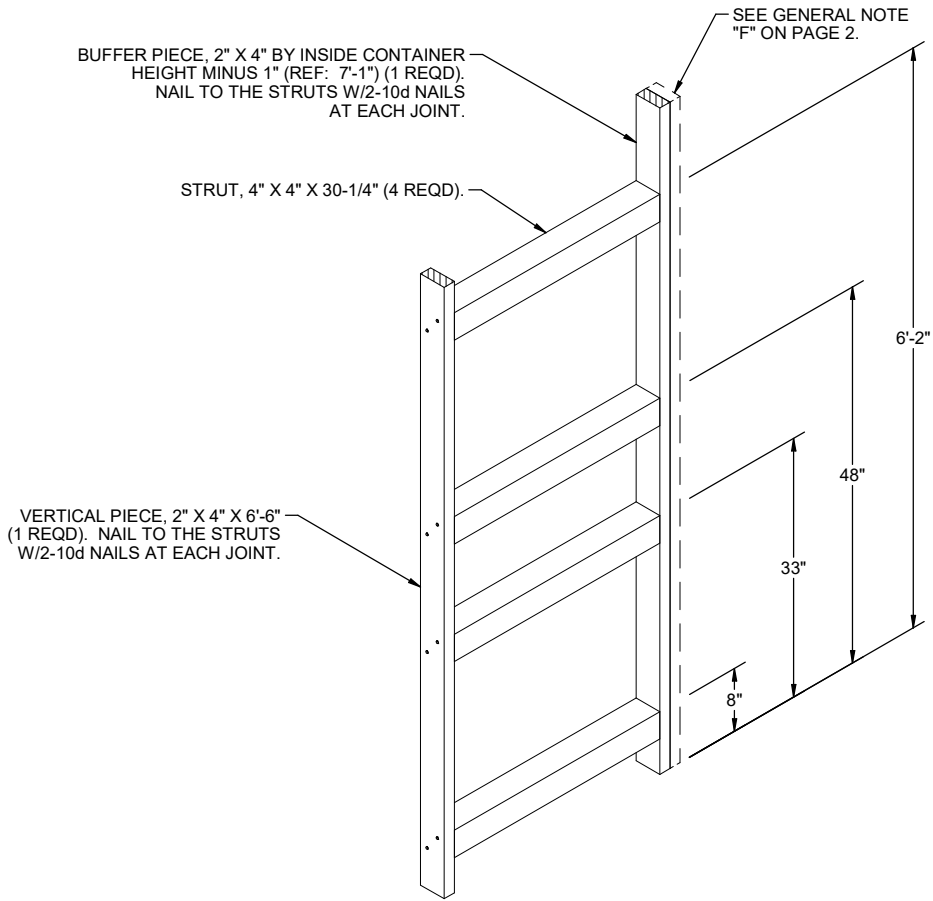
DOOR SIDE OF CONTAINER

BILL OF MATERIAL

| LUMBER | LINEAR FEET | BOARD FEET |
|---------------------------|-----------------------|-------------|
| 2" X 4" | 503 | 335 |
| 2" X 6" | 62 | 62 |
| 4" X 4" | 41 | 54 |
| NAILS | NO. REQD | POUNDS |
| 6d (2") | 352 | 2-1/4 |
| 10d (3") | 496 | 7-3/4 |
| PLYWOOD, 3/4" | - - - 9.86 SQ FT REQD | - 20.34 LBS |
| STEEL STRAPPING, 1-1/4" | - 93.33' REQD | - 13.33 LBS |
| SEAL FOR 1-1/4" STRAPPING | - 8 REQD | - - - NIL |

LOAD AS SHOWN

| ITEM | QUANTITY | WEIGHT (APPROX) |
|-------------------|-----------------|-------------------------------|
| CNU-415 CONTAINER | - - 2 - - - - - | 4,150 LBS |
| CNU-609 CONTAINER | - - 6 - - - - - | 17,694 LBS |
| DUNNAGE | - - - - - | 946 LBS |
| CONTAINER | - - - - - | 6,050 LBS |
| TOTAL WEIGHT | | - - - - - 28,840 LBS (APPROX) |



STRUT ASSEMBLY

FOR A THREE HIGH LOAD, ELIMINATE THE TOP STRUT, AND REDUCE THE LENGTH OF VERTICAL PIECE TO 52". FOR A TWO HIGH LOAD, ELIMINATE THE TOP TWO STRUTS, AND REDUCE THE LENGTH OF VERTICAL PIECE TO 37". FOR A ONE HIGH LOAD, ELIMINATE THE TOP THREE STRUTS, AND REDUCE THE LENGTH OF VERTICAL PIECE TO 12".



ONE SEAL WITH TWO PAIR OF NOTCHES.

STRAP JOINT A

METHOD OF SECURING A STRAP JOINT WHEN USING A NOTCH-TYPE SEALER.

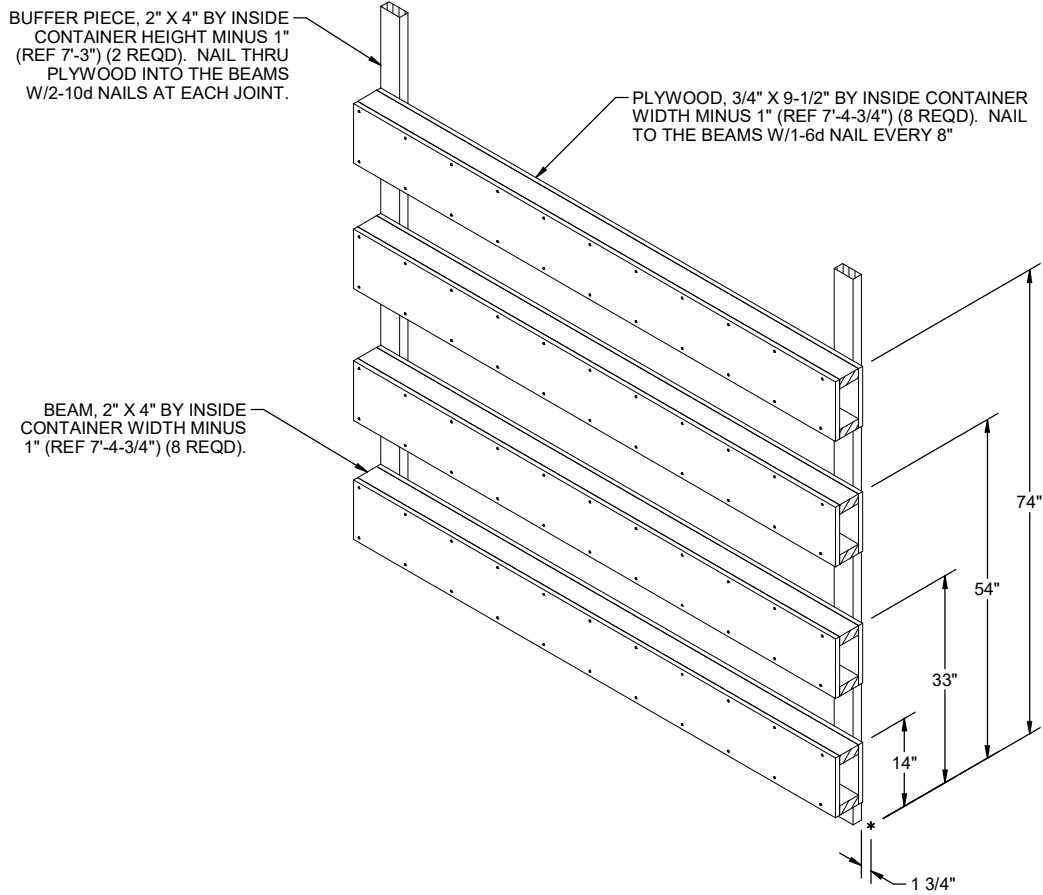


TWO SEALS, BUTTED TOGETHER, WITH TWO PAIR OF CRIMPS EACH SEAL.

STRAP JOINT B

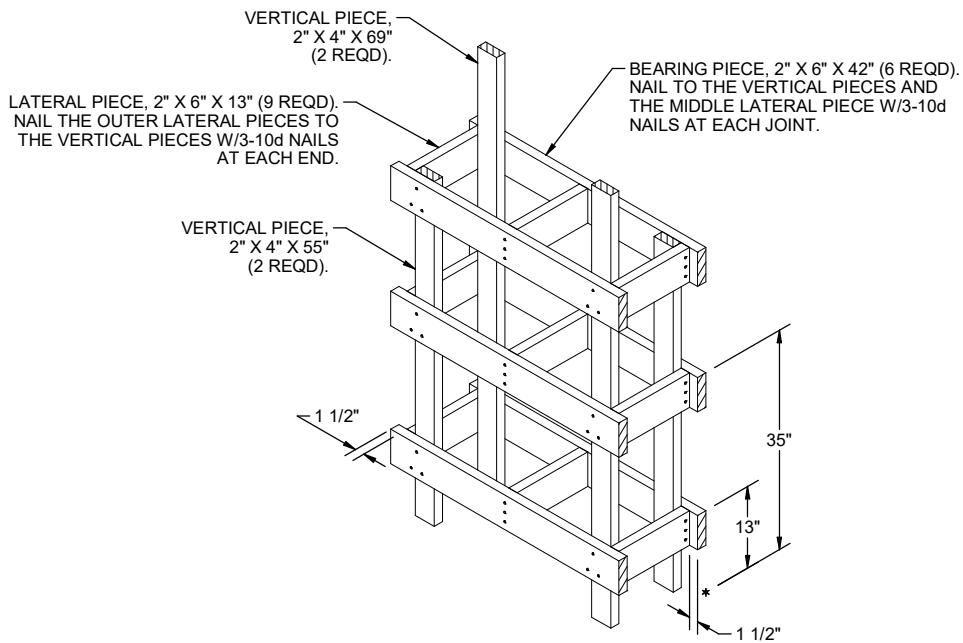
METHOD OF SECURING A STRAP JOINT WHEN USING A CRIMP-TYPE SEALER.

END-OVER-END LAP JOINT DETAILS



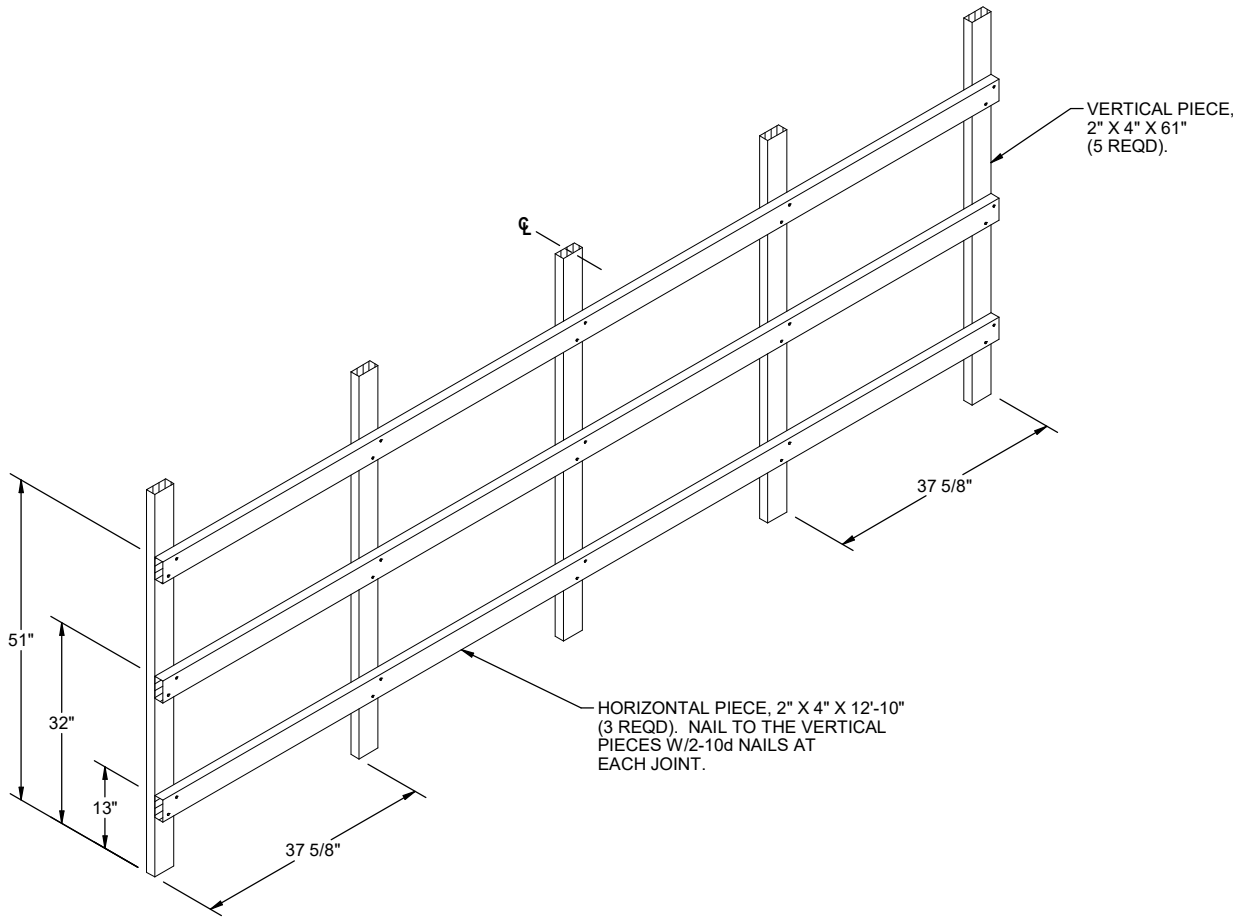
END BLOCKING ASSEMBLY

A RIGHT HAND ASSEMBLY IS DEPICTED, A LEFT HAND ASSEMBLY WILL BE CONSTRUCTED BY SHIFTING BOTH OF THE BUFFER PIECES 1-3/4" TOWARDS THE RIGHT, AS ORIENTED ABOVE. BOTH A LEFT AND A RIGHT HAND ASSEMBLY ARE REQUIRED. FOR A THREE HIGH LOAD, ELIMINATE THE TOP BOX BEAM ASSEMBLY. FOR A TWO HIGH LOAD, ELIMINATE THE TOP TWO TWO BOX BEAM ASSEMBLIES. FOR A ONE HIGH LOAD, ELIMINATE THE TOP THREE BOX BEAM ASSEMBLIES.



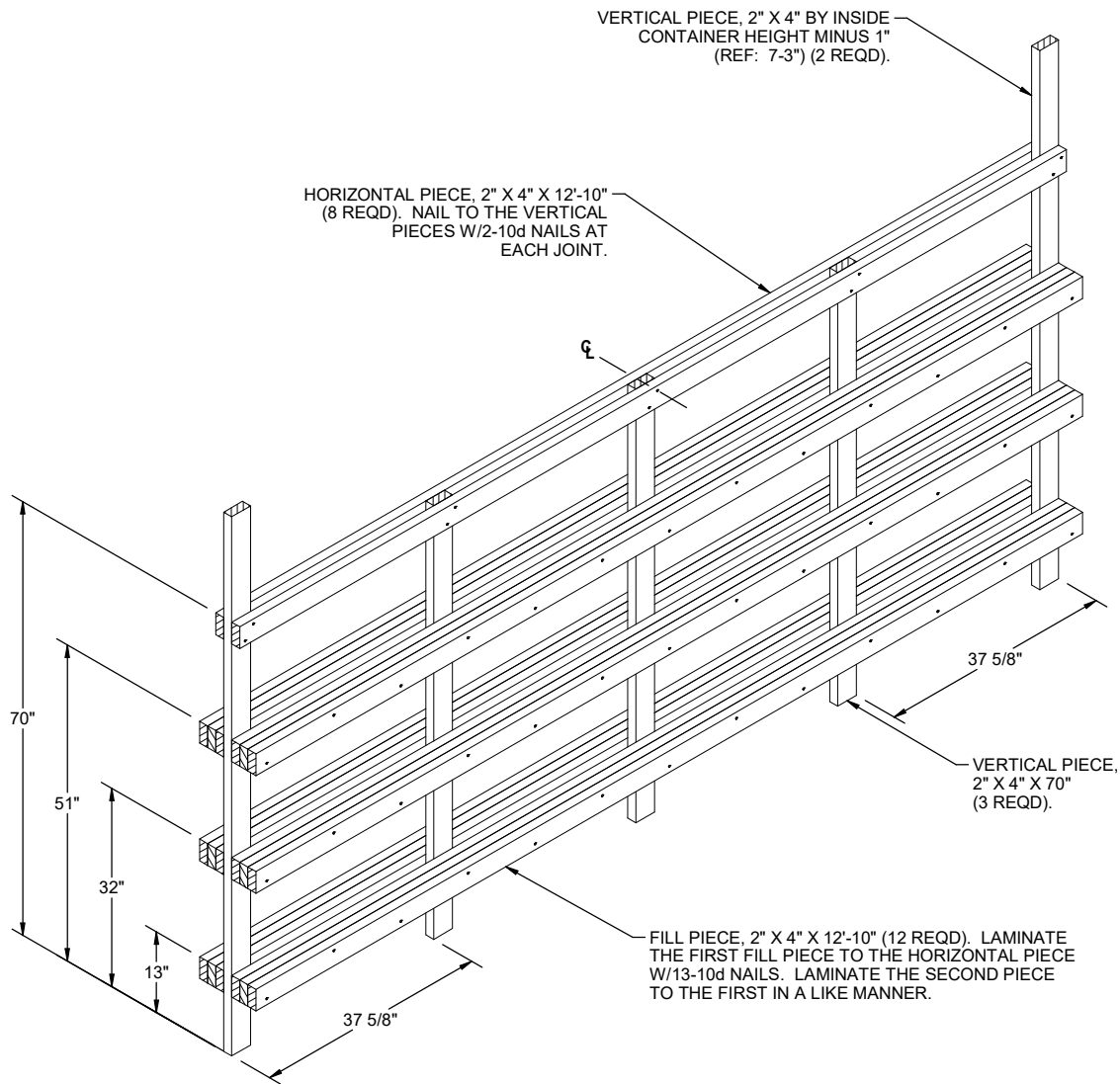
SPACER ASSEMBLY

THE ASSEMBLY DEPICTED ABOVE IS USED FOR LOAD SHOW ON PAGE 8. FOR THE LOAD SHOWN ON PAGE 7, ELIMINATE THE UPPER SET OF LATERAL PIECES AND BEARING PIECES, AND SHORTEN THE VERTICAL PIECES FROM 69" TO 50" AND 55" TO 33". FOR THE LOAD SHOWN ON PAGE 6, ELIMINATE THE TWO UPPER SETS OF LATERAL PIECES AND BEARING PIECES, AND SHORTEN THE VERTICAL PIECES FROM 69" TO 31" AND 55" TO 14".



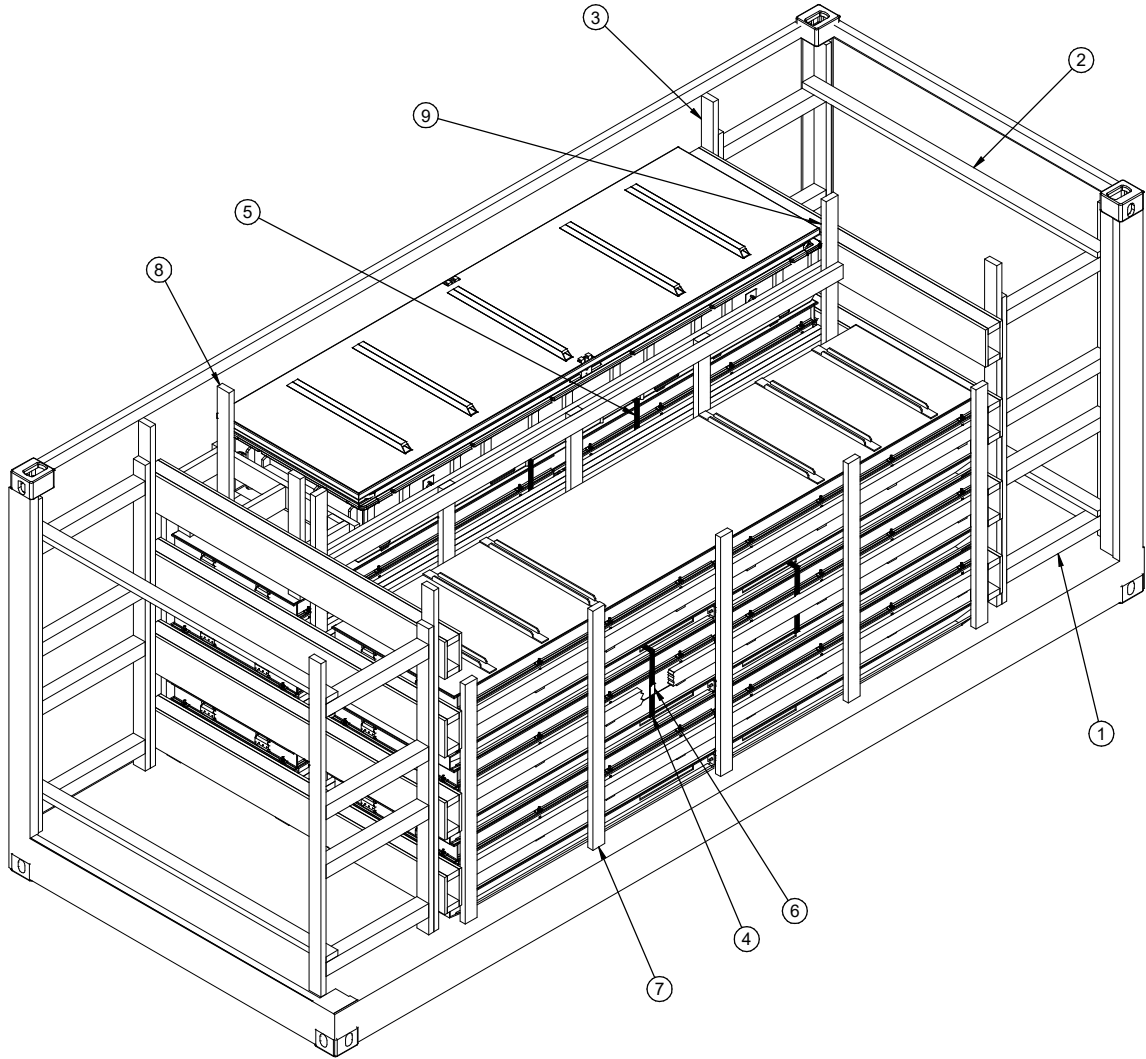
SIDE FILL ASSEMBLY

THE ASSEMBLY DEPICTED ABOVE IS USED FOR LOAD SHOW ON PAGE 6. FOR THE LOAD SHOW ON PAGE 7, ELIMINATE THE UPPER HORIZONTAL PIECE AND SHORTEN THE VERTICAL PIECES TO 42". FOR THE LOAD SHOW ON PAGE 8, ELIMINATE THE TWO UPPER HORIZONTAL PIECES AND SHORTEN THE VERTICAL PIECES TO 23". **CAUTION:** VERTICAL PIECES MUST FIT UNDER UPPER CNU-609 CONTAINERS AND MUST NOT CONTACT THESE UPPER CONTAINERS.



CENTER FILL ASSEMBLY

THE ASSEMBLY DEPICTED ABOVE IS USED FOR LOAD SHOW ON PAGE 6. FOR LOAD SHOW ON PAGE 7, ELIMINATE THE TOP SET OF FOUR FILL PIECES. FOR LOAD SHOW ON PAGE 8, ELIMINATE THE TOP TWO SETS OF FOUR FILL PIECES.



LESS-THAN-FULL LOAD PROCEDURES

KEY NUMBERS REFER TO KEY NUMBERS ON PAGE 6. THE PROCEDURES MAY ALSO BE UTILIZED WITH LOADS SIMILAR TO THE LOADS ON PAGE 7 AND 8.

